

SEE P.2-3 FOR LOCATION MAPS

STRUCTURE	NHS	FUNCTIONAL CLASSIFICATION
POR-43-14.309	YES	URBAN PRINCIPAL ARTERIAL
POR-82-0.736	NO	URBAN MINOR ARTERIAL
POR-82-3.448	NO	URBAN MINOR ARTERIAL
SUM-76-5.500	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-77-8.843	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-77-10.220	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-480-0.034L	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-224-10.616	YES	URBAN PRINCIPAL ARTERIAL
SUM-224-11.063	YES	URBAN PRINCIPAL ARTERIAL
SUM-8-8.428	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-8-9.071	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-8-14.360	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-8-14.921	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-21-8.629	YES	URBAN FREEWAYS AND EXPRESSWAYS
SUM-82-4.221	NO	URBAN MINOR ARTERIAL
SUM-82-10.140	NO	URBAN MINOR ARTERIAL
SUM-91-20.072	YES	URBAN PRINCIPAL ARTERIAL
SUM-93-9.535	NO	URBAN MINOR ARTERIAL
SUM-241-6.055	YES	URBAN PRINCIPAL ARTERIAL
SUM-241-6.837	YES	URBAN PRINCIPAL ARTERIAL
SUM-261-9.066	NO	URBAN MINOR ARTERIAL
SUM-261-12.440	YES	URBAN PRINCIPAL ARTERIAL
SUM-303-7.200	NO	RURAL MAJOR COLLECTOR
SUM-59-2.310A	YES	URBAN FREEWAYS AND EXPRESSWAYS

UNDERGROUND UTILITIES
 Contact Two Working Days
 Before You Dig

OHIO811.org
 Before You Dig

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

PLAN PREPARED BY:
 ODOT DISTRICT 4, CAPITAL PLANNING
 2088 S. ARLINGTON ROAD
 AKRON, OHIO 44306

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

D04-BH-FY2025 (WEST)

CITY OF AURORA

FRANKLIN TOWNSHIP

PORTAGE COUNTY

CITY OF AKRON, BARBERTON, MACEDONIA,

STOW AND TWINSBURG

VILLAGE OF BOSTON HEIGHTS AND PENINSULA

COPLEY, COVENTRY, SPRINGFIELD

AND TWINSBURG TOWNSHIP

SUMMIT COUNTY

INDEX OF SHEETS:

TITLE SHEET	P.1
LOCATION MAPS	P.2-P.3
GENERAL NOTES	P.4
MAINTENANCE OF TRAFFIC	P.5-P.10B
GENERAL SUMMARY	P.11-P.12
PAVEMENT MARKINGS	P.13-P.14
STRUCTURES	P.15-29

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
DM-4.3	1/15/16	TC-41.20	10/18/13	800-2023	7/19/24
DM-4.4	1/15/16	TC-52.10	10/18/13	809	7/19/24
		TC-52.20	1/15/21	821	4/20/12
AS-2-15	7/21/23	TC-71.10	4/21/23	832	7/21/23
NBS-1-09	7/19/24			844	4/20/18
		MT-98.29	1/17/20	848	1/15/21
DS-1-92	7/15/22	MT-98.30	7/16/21	921	4/20/12
MT-95.30	7/19/19			961	4/17/20
MT-95.31	7/19/19				
MT-96.11	7/21/23				
MT-96.20	7/21/23				
MT-97.10	4/19/19				
MT-99.20	4/19/19				
MT-101.60	4/21/23				
MT-101.90	7/17/20				
MT-105.10	1/17/20				

ENGINEER'S SEAL

BRIDGE

FEDERAL PROJECT NUMBER

E240586

RAILROAD INVOLVEMENT

NORFOLK SOUTHERN, W&LE AND MRTA

PROJECT DESCRIPTION

BRIDGE MAINTENANCE ON STRUCTURES
 LOCATED ON VARIOUS ROUTES WITHIN
 PORTAGE AND SUMMIT COUNTIES.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)

LIMITED ACCESS (I-76, I-77, I-480, US-224, SR-8, SR-21, SR-59)

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.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON 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 EXCEPT AS NOTED ON SHEET P.7, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Arthur G. Noiro Jr., P.E.
 District 04 Deputy Director

Jack Marchbanks, PhD
 Director, Department of Transportation

DESIGN AGENCY



DESIGNER
 JF

REVIEWER
 MJA 07-15-24

PROJECT ID
 113163

SHEET TOTAL
 P.1 29

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.

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.) 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 16 SIGN MONTH

SUM-303-7.200 RAILROAD RIGHT-OF-WAY

THE CONTRACTOR SHALL NOT ENCROACH ON RAILROAD RIGHT-OF-WAY TO COMPLETE THE WORK AT THE SUM-303-7.200 LOCATION.

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).

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.

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 150 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.

DESIGN AGENCY



DESIGNER
JF

REVIEWER
LB 07-15-24

PROJECT ID
113163

SHEET TOTAL
P.6 | 29

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP 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/RAMP 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. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE
ITEM DURATION SIGN DISPLAYED
OF CLOSURE TO PUBLIC

RAMP & >=2 WEEKS 14 CALENDAR DAYS
PRIOR TO CLOSURE

ROAD > 12 HOURS 7 CALENDAR DAYS
& < 2 WEEKS PRIOR TO CLOSURE

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

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT PROJECT POR-82-3.448 (PID 105212) MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. IN ACCORDANCE WITH 105.08, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVALS FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

SIGNALIZED CLOSURES (SUM-91-20.072)

FOR AREAS WITH 2-LANE HIGHWAYS THAT WILL BE REDUCED TO A SINGLE BI-DIRECTIONAL LANE, THE CONTRACTOR IS PERMITTED TO USE SIGNALIZED CLOSURES AS PER SCD MT-96.11, AT THE DISCRETION OF THE PROJECT ENGINEER, FOR A PERIOD NOT TO EXCEED 10 CONSECUTIVE CALENDAR DAYS PER SIDE. QUEUE BACKUPS AND IMPACTS TO NEARBY DRIVEWAYS WILL BE KEPT TO A MINIMUM. ALL WORK, MATERIALS, SIGNAGE, AND EQUIPMENT WILL BE INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC.

SUM-91-20.072 AND SUM-76-5.500 INTERIM COMPLETION DATES

ALL WORK AT THE SUM-91-20.072 AND SUM-76-5.500 LOCATIONS MUST BE COMPLETED BETWEEN 5/1/2025 AND 7/31/2025.

RAMP CLOSURES AND DETOURS FOR WORK AT SUM-224-10.616 OVER ARLINGTON STREET (EASTBOUND)

WHEN WORKING ON THE US-224 EASTBOUND BRIDGE OVER ARLINGTON STREET, THE CONTRACTOR SHALL REDUCE US-224 EASTBOUND TO A SINGLE LANE IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE SCHEDULE (PLCS) UNLESS WRITTEN PERMISSION IS RECEIVED FROM THE PROJECT ENGINEER. WORK TO EASTBOUND AND WESTBOUND US-224 SHALL NOT BE PERFORMED CONCURRENTLY.

WHEN THE US-224 EASTBOUND BRIDGE OVER ARLINGTON STREET IS REDUCED TO A SINGLE LANE, THE I-77 SOUTHBOUND AND THE I-77 NORTHBOUND RAMPS TO US-224 EASTBOUND SHALL BE CLOSED. THE CONTRACTOR IS PERMITTED TWO WEEKEND CLOSURES OF THE I-77 SOUTHBOUND AND THE I-77 NORTHBOUND RAMPS. WEEKEND RAMP CLOSURES AT THIS LOCATION SHALL BE DEFINED AS 7:00 PM FRIDAY THROUGH 6:00 AM MONDAY.

A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$10,000 PER DAY OR PORTION THEREOF FOR EACH CALENDAR DAY THE RAMPS REMAIN CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

WHEN WORKING ON THE US-224 BRIDGE OVER ARLINGTON STREET, CHANNELIZING DEVICES USED TO IDENTIFY LANE SHIFTS AND TO SEPARATE TRAFFIC FROM THE WORK ACTIVITY AREA SHALL NOT EXCEED 40' ON-CENTER SPACING.

THE RAMP DETOUR ROUTES SHALL BE IDENTIFIED USING PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WITH LOCATIONS AND MESSAGES AS APPROVED BY THE ENGINEER. THE PROPOSED DETOUR FOR THIS WORK SHALL ROUTE I-277 TRAFFIC WESTWARD TO THE SOUTH MAIN STREET INTERCHANGE AND BACK TOWARDS US-224 EASTBOUND. THE CONTRACTOR SHALL ANTICIPATE USING FOUR PORTABLE CHANGEABLE MESSAGE SIGNS TO ADVISE TRAFFIC OF THE RAMP CLOSURES AND OF THE SUGGESTED DETOUR ROUTE. PCMS QUANTITY FOR THIS WORK HAS BEEN CARRIED TO THE GENERAL SUMMARY.

RAMP CLOSURES AND DETOURS FOR WORK AT SUM-224-10.616 OVER ARLINGTON STREET (WESTBOUND)

WHEN WORKING ON THE US-224 WESTBOUND BRIDGE OVER ARLINGTON STREET, THE CONTRACTOR SHALL REDUCE US-224 WESTBOUND TO A SINGLE LANE IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE SCHEDULE (PLCS) UNLESS WRITTEN PERMISSION IS RECEIVED FROM THE PROJECT ENGINEER. WORK TO EASTBOUND AND WESTBOUND US-224 SHALL NOT BE PERFORMED CONCURRENTLY.

WHEN THE US-224 WESTBOUND BRIDGE OVER ARLINGTON STREET IS REDUCED TO A SINGLE LANE, THE RAMP FROM KELLY AVENUE TO US-224 WESTBOUND SHALL BE CLOSED. THE CONTRACTOR IS PERMITTED TWO WEEKEND CLOSURES OF THE KELLY AVENUE RAMP. WEEKEND RAMP CLOSURES AT THIS LOCATION SHALL BE DEFINED AS 7:00 PM FRIDAY THROUGH 6:00 AM MONDAY. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$4,000 PER DAY OR PORTION THEREOF FOR EACH CALENDAR DAY THE RAMPS REMAIN CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

WHEN WORKING ON THE US-224 BRIDGE OVER ARLINGTON STREET, CHANNELIZING DEVICES USED TO IDENTIFY LANE SHIFTS AND TO SEPARATE TRAFFIC FROM THE WORK ACTIVITY AREA SHALL NOT EXCEED 40' ON-CENTER SPACING.

THE RAMP DETOUR ROUTE SHALL BE IDENTIFIED USING PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WITH LOCATIONS AND MESSAGES AS APPROVED BY THE ENGINEER. THE PROPOSED DETOUR FOR THIS WORK SHALL ROUTE TRAFFIC WESTWARD FROM THE KELLY AVE / E. WATERLOO RD INTERSECTION. THE DETOUR SHALL FOLLOW E. WATERLOO RD TO THE S. MAIN STREET INTERSECTION AND TOWARDS THE S. MAIN / I-277 INTERCHANGE. THE CONTRACTOR SHALL ANTICIPATE USING SIX PORTABLE CHANGEABLE MESSAGE SIGNS TO ADVISE TRAFFIC OF THE RAMP CLOSURES AND OF THE SUGGESTED DETOUR ROUTE. PCMS QUANTITY FOR THIS WORK HAS BEEN CARRIED TO THE GENERAL SUMMARY.

RESTRICTIONS AND DETOURS FOR WORK AT SUM-76-5.500 STATE STREET OVER I-76).

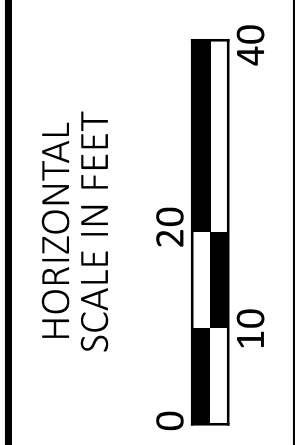
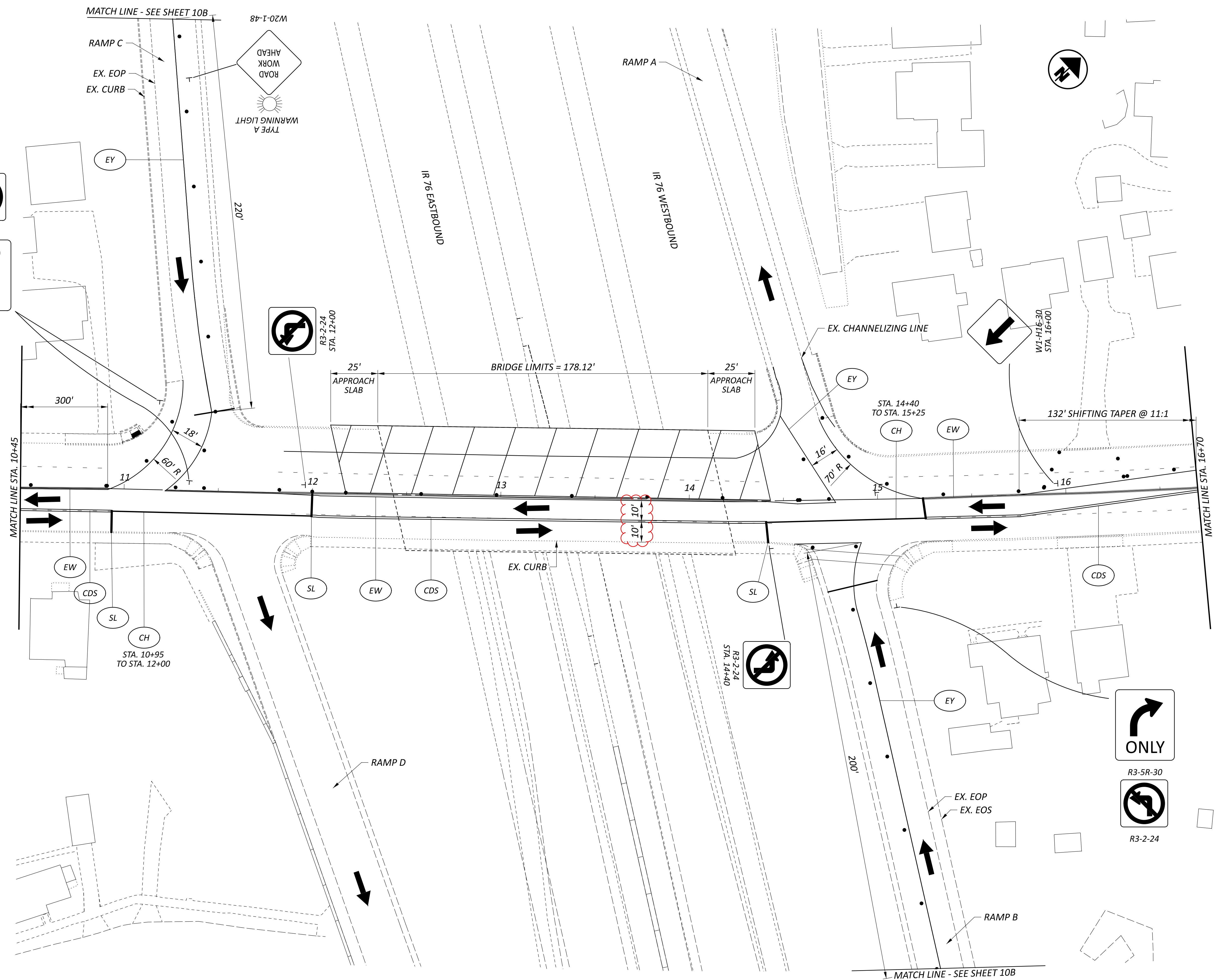
WHEN WORKING ON THE SUM-76-5.500 BRIDGE OVER I-76 THE CONTRACTOR SHALL REDUCE STATE STREET TO ONE NORTHBOUND LANE AND ONE SOUTHBOUND LANE FOR A DURATION NOT TO EXCEED 7 CONSECUTIVE CALENDAR DAYS. INTERSECTION RESTRICTIONS AFFECTING STATE STREET AND THE RAMPS FROM I-76 ARE AS INDICATED IN THE DETAILED MAINTENANCE OF TRAFFIC PLANS.

TO ADVISE TRAFFIC OF STATE STREET RESTRICTIONS AND DETOURS, THE CONTRACTOR SHALL PROVIDE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) IN ADVANCE OF THE WORK AREA.

- PROVIDE ONE PCMS ALONG THE I-76 EB EXIT RAMP.
- PROVIDE ONE PCMS IN ADVANCE OF THE I-76 EB EXIT RAMP.
- PROVIDE ONE PCMS ALONG THE I-76 WB EXIT RAMP.
- PROVIDE ONE PCMS IN ADVANCE OF THE I-76 WB EXIT RAMP.
- PROVIDE TWO PCMS FOR STATE STREET NORTHBOUND.
- PROVIDE TWO PCMS FOR STATE STREET SOUTHBOUND.

THE LOCATIONS AND MESSAGES FOR EACH PCMS INSTALLATION SHALL BE AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ANTICIPATE USING EIGHT PORTABLE CHANGEABLE MESSAGE SIGNS TO ADVISE TRAFFIC OF THE SUGGESTED DETOUR ROUTES FOR THIS WORK. PCMS QUANTITY FOR THIS WORK HAS BEEN CARRIED TO THE GENERAL SUMMARY.





MAINTENANCE OF TRAFFIC SCHEMATIC PLAN
SUM-76-5.500 -- STATE ST OVER IR 76

DESIGN AGENCY



DESIGNER
JF


REVIEWER
LB 09-19-24

PROJECT ID
113163

SHEET	TOTAL
P.10	29

SHEET NUM.							PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	6	13	14	15	16	01/IMS/47	02/NHS/47	03/NHS/04	04/S>2/47	05/S>2/04	06/STR/47	07/NHS/20						
		150					30	20	60	10	10	10	10	614	11110	150	HOUR	MAINTENANCE OF TRAFFIC LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
							LS		LS					614	12420	LS		DETOUR SIGNING	
	20						20							614	12460	20	EACH	WORK ZONE MARKING SIGN	
		16					8	8						614	18601	16	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
	0.77							0.77						614	20560	0.77	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
	0.68						0.13	0.55						614	21550	0.68	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
	1.77						0.56	1.21						614	22360	1.77	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
	986							986						614	23690	986	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
	500						500							614	24612	500	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
	44						44							614	26610	44	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
	190						190							614	40000	190	FT	LONGITUDINAL CHANNELIZER	
							LS							614	11000	LS		INCIDENTALS MAINTAINING TRAFFIC	
							LS							623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
							LS							624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY

 DESIGNER
 JF
 REVIEWER
 MJA 07-15-24
 PROJECT ID
 113163
 SHEET TOTAL
 P.12 | 29

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN (POR-76-16.106, SUM-82-4.221, & SUM-93-9.535)

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW REINFORCING STEEL OF THE SAME SIZE AND COATING AT NO COST TO THE DEPARTMENT.

*A QUANTITY OF EPOXY COATED REINFORCING STEEL HAS BEEN PROVIDED FOR STRUCTURES POR-76-16.106, SUM-82-4.221, AND SUM-93-9.535 TO BE USED WITH ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION.

ITEM 516 - ARMORLESS PREFORMED JOINT SEAL (POR-43-14.309 & SUM-241-6.837)

THIS ITEM OF WORK CONSISTS OF CLEANING, INSPECTING, AND INSTALLING NEW ARMORLESS PREFORMED JOINT SEALS. PRIOR TO REMOVING THE EXISTING SEAL THE CONTRACTOR SHALL CLEANOUT AND INSPECT EACH JOINT. ALL DAMAGED OR TORN JOINT SEALS SHALL BE REPLACED UPON THE DIRECTION OF THE ENGINEER. FOR ADDITIONAL NOTES AND DETAILS, SEE SCD AS-2-15.

SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED

THIS WORK WILL CONSIST OF REMOVING ALL VISIBLY SPALLED AREAS OF THE UNDERSIDE OF THE DECK WITHOUT SOUNDING.

AFTER SPALLED CONCRETE IS REMOVED THE EXISTING EXPOSED REINFORCING STEEL SHALL BE BLAST CLEANED. ACCEPTABLE METHODS INCLUDE HIGH PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVES WITH CONTAINMENT, OR VACUUM BLASTING. APPLY A ZINC RICH PRIMER, PER CMS 708.02.B, OVER ALL EXPOSED STEEL SURFACES. THE APPLICATION OF THE PRIMER SHALL FOLLOW CMS 514 AND ALL MANUFACTURER REQUIREMENTS.

THE DEPARTMENT WILL MEASURE THIS WORK AS THE ACTUAL AREA IN SQUARE YARDS OF CONCRETE SPALLS REMOVED.

CONCRETE SPALL REMOVAL WILL BE PAID AT THE UNIT BID PRICE FOR SPECIAL - STRUCTURE MISC.: CONCRETE SPALL REMOVAL WITH ZINC PRICH PRIMER APPLIED. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

SPALL REMOVAL ON STRUCTURE SUM-82-4.221 AND SUM-91-20.072 NOT OVER TRAVEL LANES AND PAVED SHOULDERS

THE FOLLOWING WORK AND QUANTITIES SHALL BE USED ON THIS STRUCTURE TO REPAIR THE CONCRETE SPALLS NOT OVER TRAVEL LANES AND PAVED SHOULDERS:

SUM-82-4.221:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 5 SY

SUM-91-20.072:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 10 SY

SPALL REMOVAL ON STRUCTURE SUM-93-9.535 OVER TRAVEL AND PAVED SHOULDERS

THE FOLLOWING WORK AND QUANTITIES SHALL BE USED ON THIS STRUCTURE TO REPAIR THE CONCRETE SPALLS OVER TRAVEL LANES AND PAVED SHOULDERS:

SUM-93-9.535:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 2 SY
 ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 2 SY
 ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM, 20 SF

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE: HIGH-PRESSURE WATER BLASTING WITH, OR WITHOUT, ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING.

POR-43-14.309 (CONCRETE RAILING)
 -ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN 25 SF
 POR-43-14.309 (ABUTMENTS/PIERS)
 -ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN 50 SF

SUM-91-20.072 (PIER CAPS)
 -ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN 20 SF

SUM-93-9.535 (CONCRETE RAILING)
 -ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN 150 SF
 SUM-93-9.535 (PIERS)
 -ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN 30 SF

SPECIAL - PATCHING CONCRETE STRUCTURE, CURB REPAIR (SUM-93-9.535)

THIS ITEM WILL BE USED TO REPAIR THE DETERIORATED FACE OF THE CURB ON THE BRIDGE DECK AND/OR APPROACH SLABS. THIS WORK WILL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR AND WILL BE PAID FOR PER FOOT.

-SPECIAL, PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR 75 FT

ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION

THIS WORK CONSISTS OF CONCRETE PATCHING AT THE SUBSTRUCTURE PER SUPPLEMENTAL SPECIFICATION 844. USE THE FOLLOWING ANODE SPACING FOR EACH LOCATION DETAILED BELOW OR AS DIRECTED BY THE ENGINEER.

SUM-82-4.221 MAX ANODE SPACING: BOTTOM OF DECK - 30 IN MAX C/C
 SUM-91-20.072 MAX ANODE SPACING: BOTTOM OF DECK - 30 IN MAX C/C
 SUM-93-9.535 MAX ANODE SPACING: ABUTMENTS - 24 IN MAX C/C

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR EACH STRUCTURE.

POR-43-4.309 (CONCRETE RAILING, ABUTMENTS AND PIERS):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 50 SQ FT

SUM-82-4.221 (BOTTOM OF DECK):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 270 SQ FT

SUM-91-20.072 (BOTTOM OF DECK):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 40 SQ FT

SUM-93-9.535 (ABUTMENTS):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 25 SQ FT

CATCH BASIN ADJUSTED TO GRADE (SUM-241-6.055)

AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR ADJUSTING CATCH BASINS TO GRADE.

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF REQUIRED TYPE, SIZE AND STRENGTH. ENSURE ALL MATERIAL MEETS CMS ITEM 611 AND HAS PRIOR APPROVAL OF THE ENGINEER.

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE, 1 EACH
 ITEM SPECIAL - MISCELLANEOUS METAL, 450 LB

ITEM 518 - SCUPPER, LENGTHENING, AS PER PLAN

THIS WORK WILL CONSIST OF REPAIRING THE ENDS OF ALL EXISTING SCUPPERS OF STRUCTURE POR-43-14.309 TO A MINIMUM OF 8" BELOW THE EXISTING STEEL BEAMS.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR ITEM 518 - SCUPPER, LENGTHENING, AS PER PLAN.

SECTION 4(F) PUBLIC PARKS AND RECREATIONAL TRAILS - AVOIDANCE AND ACCESS

THIS PROJECT IS SUBJECT TO THE REQUIREMENTS OF SECTION 4(F) OF THE DEPARTMENT OF TRANSPORTATION (DOT) ACT OF 1966, WHICH AFFORDS PROTECTION TO PUBLICALLY OWNED PARKS AND RECREATION TRAILS. WHILE THE PROJECT WILL BE CONSTRUCTED ENTIRELY WITHIN EXISTING ROAD RIGHTS-OF-WAY, THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT ADJACENT SECTION 4(F) PROPERTIES AND THE PUBLIC. STAGING ON ADJACENT PARKLANDS AND ON/ALONG ANY RECREATIONAL TRAILS WITHIN ROAD RIGHT-OF-WAY IS PROHIBITED. RESTRICTING PUBLIC ACCESS TO PARK AND RECREATIONAL TRAILS IS PROHIBITED. STREET SIDEWALK CLOSURES MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO IMPLEMENTATION.

SUM-76-5.500 CONSTRUCTION JOINTS

THE ONLY CONSTRUCTION JOINT PERMITTED FOR THE SUM-76-5.500 CONCRETE OVERLAY SHALL BE ALONG THE CENTERLINE OF STATE STREET.

