

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

SUM-8-2.91

CITY OF AKRON AND CUYAHOGA FALLS SUMMIT COUNTY

FEDERAL PROJECT NUMBER

E170106

RAILROAD INVOLVEMENT

CSXT

PROJECT DESCRIPTION

RESURFACING OF SR-8 FROM SLM 2.91 TO 7.68 IN SUMMIT COUNTY. INCLUDES MINOR BRIDGE WORK TO 13 STRUCTURES.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 2.83 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)
*ROUTINE MAINTENANCE PROJECT

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.

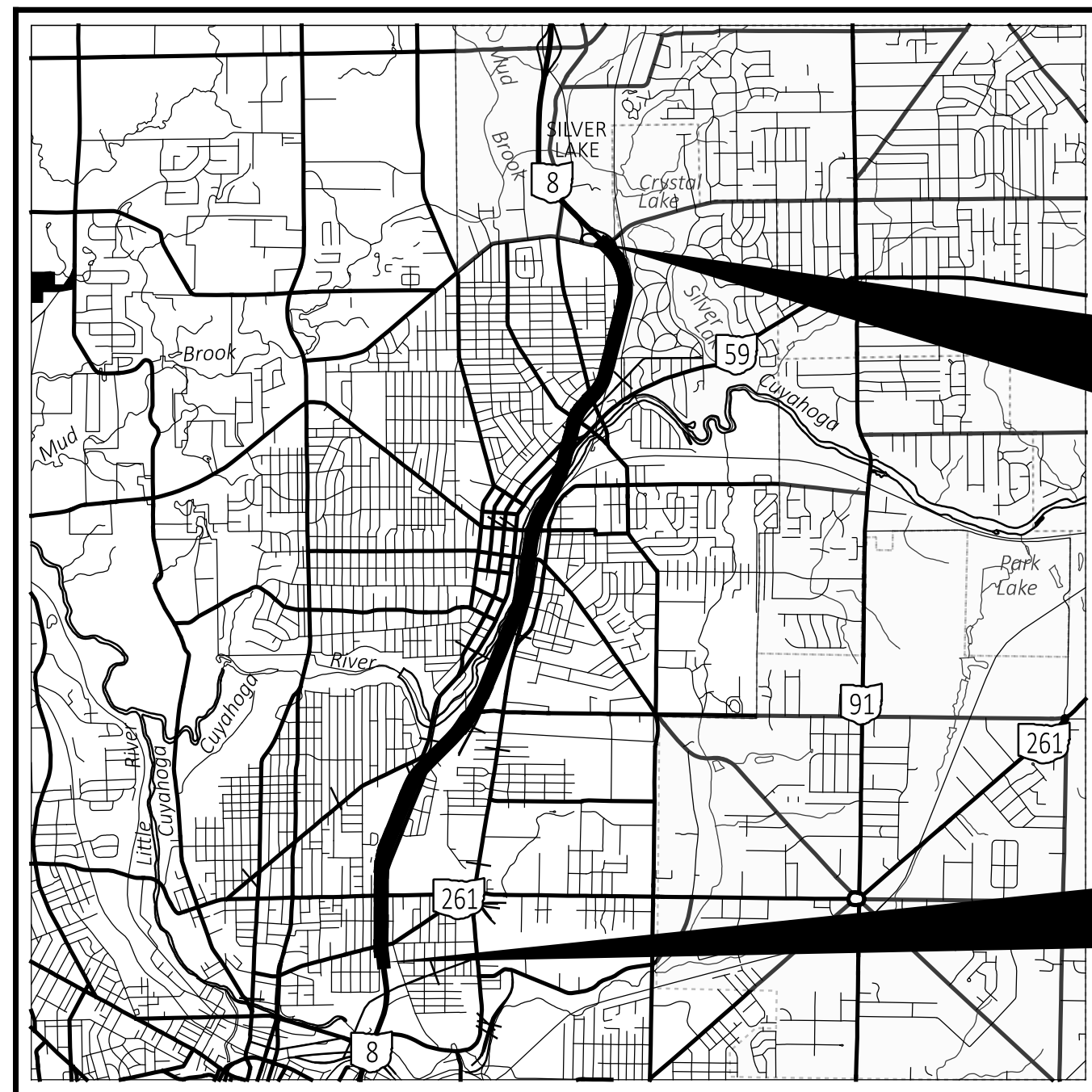
2023 SPECIFICATIONS

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 REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 10.

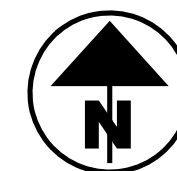

Arthur G. Noiro Jr., P.E.
District 04 Deputy Director


Jack Marchbanks, PhD
Director, Department of Transportation



LOCATION MAP

LATITUDE: 41°07'37" LONGITUDE: 81°29'01"



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

DESIGN DESIGNATION

CURRENT ADT (2022)	88,564
DESIGN HOURLY VOLUME (20)	8,414
DIRECTIONAL DISTRIBUTION	54%
TRUCKS (24 HOUR B&C)	10%
DESIGN SPEED	60
LEGAL SPEED	55

DESIGN FUNCTIONAL CLASSIFICATION:

FREEWAYS AND EXPRESSWAYS	
NHS PROJECT	YES

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

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. ALRINGTON ROAD
AKRON, OHIO 44306


INDEX OF SHEETS:

TITLE SHEET	P.1
TYPICAL SECTIONS	P.2-3
GENERAL NOTES	P.4-6
MAINTENANCE OF TRAFFIC	P.7-10
GENERAL SUMMARY	P.11-12
PAVEMENT CALCULATIONS	P.13-14
PAVEMENT MARKINGS	P.15
SIGNING SUBSUMMARY	P.16
STRUCTURES	P.17-22

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/21/22	MT-98.28	1/17/20	TC-71.10	4/21/23	800-2023	7/19/24
BP-9.1	1/18/19	MT-98.29	1/17/20	TC-72.20	7/21/23	807	1/21/22
		MT-98.30	7/16/21	TC-73.20	7/21/23	808	1/18/19
DM-4.1	7/17/20	MT-99.20	4/19/19	TC-74.10	7/21/23	821	4/20/12
DM-4.3	1/15/16	MT-101.60	4/21/23			832	7/21/23
DM-4.4	1/15/16	MT-101.90	7/17/20	MH-1	7/15/22	844	4/20/18
		MT-104.10	4/21/23			846	4/17/15
AS-1-15	1/20/23	MT-105.10	1/17/20	BP-2.5	7/19/24	850	7/21/23
				AS-2-15	7/21/23	905	4/17/20
						921	4/20/12
MT-95.31	7/19/19	TC-41.20	10/18/13				
MT-95.32	4/19/19	TC-42.10	10/18/13				
MT-95.50	7/21/17	TC-42.20	10/18/13			843	1/19/24
MT-98.10	1/17/20	TC-52.10	10/18/13				
MT-98.11	1/17/20	TC-52.20	1/15/21				
MT-98.20	4/19/19	TC-65.10	1/17/14				
MT-98.22	1/17/20	TC-65.11	7/15/22				

ENGINEER'S SEAL

ROADWAY



MARK J. ANDRASIK
E-80194
REGISTERED PROFESSIONAL ENGINEER

TITLE SHEET

DESIGN AGENCY



DESIGNER	JRF
REVIEWER	MA 01-19-24
PROJECT ID	100936
SHEET	TOTAL
P.1	22

SUM-8-2.91

MODEL: Sheet PAPER: 34x22 (in.) DATE: 12/2/2024 TIME: 8:53:30 AM USER: jltzsim pvc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 04\Summit\100936\400-Engineering\Roadway\Sheets\100936_GT001.dgn

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS 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. A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
4. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS PER STANDARD CONSTRUCTION DRAWING MT-101.90.
5. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
6. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE [1] MILE URBAN.
7. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
8. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.
9. A QUANTITY OF 20 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
10. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

11. THE CONTRACTOR SHALL INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE WORK ZONE MARKING SIGNS AND THEIR SUPPORTS WITHIN THE WORK LIMITS. THESE SIGNS INCLUDE "NO EDGE LINES", "DO NOT PASS" AND "PASS WITH CARE". ALL OTHER SIGNS WILL BE INCIDENTAL TO THE LUMP SUM PAY ITEM 614 MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLANS. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS AS PER CMS 614.04.

12. THE CONTRACTOR SHALL SET A WORK ZONE AT THE REQUEST OF THE ENGINEER TO ALLOW THE LAYOUT OF THE PARTIAL/FULL DEPTH PAVEMENT REPAIR AREAS. THIS WORK IS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

13. TO ENSURE THAT WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND AND MOVING TRAFFIC, ALL WEIGHTED CHANNELIZERS UTILIZED ON INTERSTATES AND FREEWAYS SHALL BE FROM MANUFACTURERS ON THE OHIO DEPARTMENT OF TRANSPORTATION, OFFICE OF MATERIAL MANAGEMENT'S QUALIFIED PRODUCTS LIST (QPL) WHICH UTILIZE A MINIMUM OF A 30 POUND BALLAST.

14. DRUMS UTILIZED ON THE HIGH SIDE OF A SUPERELEVATED INTERSTATE OR FREEWAYS SHALL BE FROM MANUFACTURERS ON THE OFFICE OF MATERIAL MANAGEMENT'S QUALIFIED PRODUCTS LIST (QPL) WITH A MINIMUM BALLAST WEIGHT OF 30 POUNDS. ALL BALLASTS USED SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

- PHASE I (MILLED SURFACE):
- 614, WORK ZONE LANE LINE, CLASS I, 6", 18.62 MILE
 - 614, WORK ZONE STOP LINE, CLASS I, 250 FT
 - 614, WORK ZONE CHANNELIZING LINE, CLASS I, 12", 10300 FT
 - 614, WORK ZONE MARKING SIGN,(ALL PHASES) 10 EACH

TO BE USED AS DIRECTED BY THE ENGINEER

- 614, WORK ZONE EDGE LINE, CLASS I, 6", 24.36 MILE

- PHASE II (SURFACE COURSE):
- 614, WORK ZONE LANE LINE, CLASS III, 642 PAINT, 6", 18.62 MILE
 - 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT, 250 FT
 - 614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT, 12", 10300 FT

TO BE USED AS DIRECTED BY THE ENGINEER

- 614, WORK ZONE EDGE LINE, CLASS III, 6", 24.36 MILE

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.

ADVANCED NOTICE TO PAVE

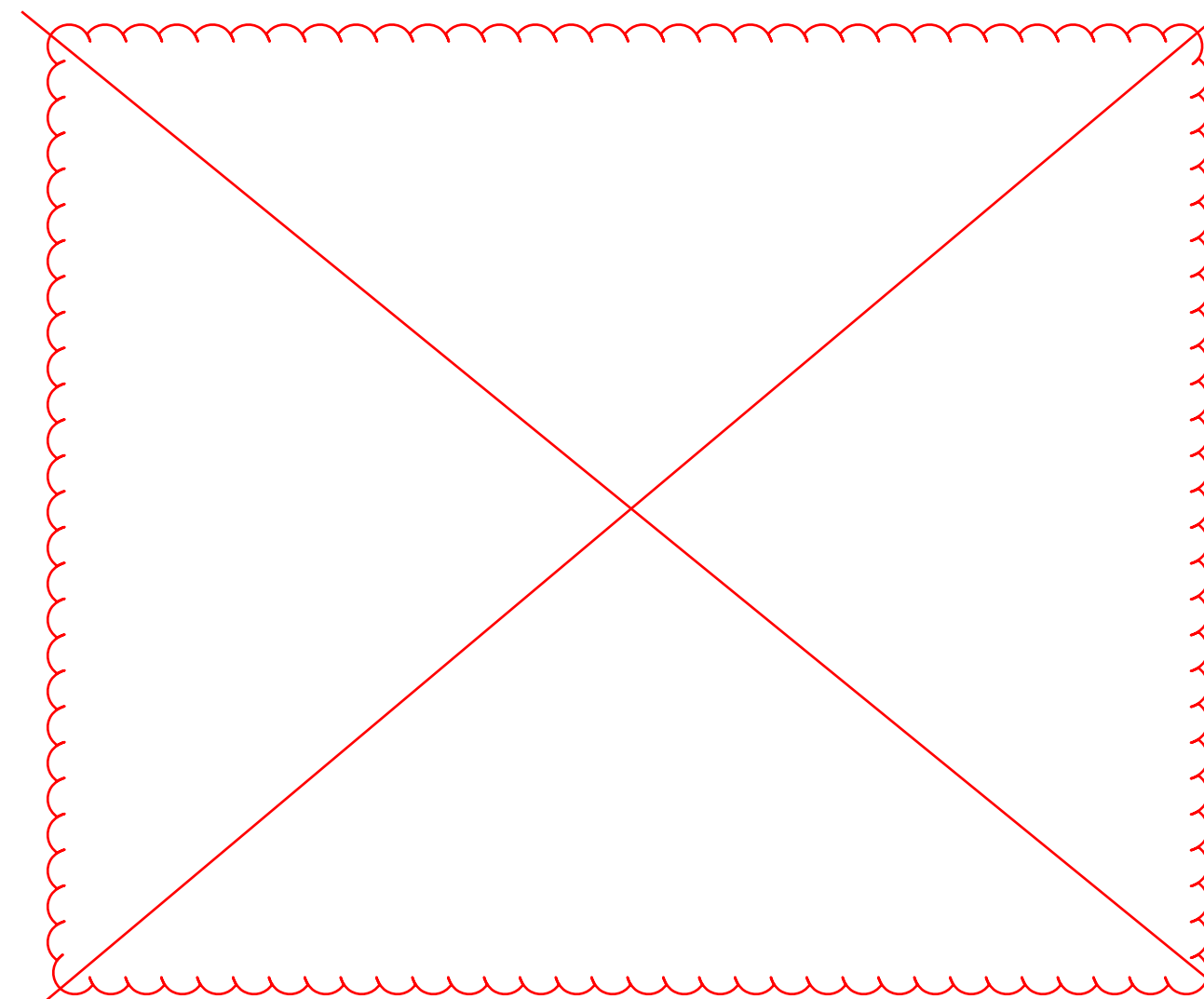
THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ASPHALT PAVING LIMITATION

THE CONTRACTOR SHALL NOT ANTICIPATE OR SCHEDULE PLACING ASPHALT (ASPHALT SURFACE COURSE, ASPHALT INTERMEDIATE COURSE, ASPHALT CONCRETE BASE, ETC.) BETWEEN NOVEMBER 1 AND APRIL 1 WHEN SUBMITTING THEIR INITIAL BAR CHART TPROGRESS SCHEDULE TO THE DISTRICT CONSTRUCTION ENGINEER (DCE) AS SPECIFIED IN CMS SECTION 108.02A. THIS LIMITATION SHALL ALSO INCLUDE INITIAL BASE LINE SCHEDULES AND ALL UPDATES IF A CPM SCHEDULE IS REQUIRED.



TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 7 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$3,000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.

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 BELOW 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.

NOTIFICATION TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD & RAMP CLOSURES	>= 2WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	4 BUSINESS 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 PATTERNS 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.

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.



Bridge Name	SFN	Feature Intersected	ASPHALT PAVING WITH MAINLINE OPERATION	POLYMER MODIFIED JOINT INSTALLATION	PARTIAL DEPTH PAVEMENT REPAIRS	PIER PATCHING	ABUTMENT PATCHING	BACKWALL PATCHING	DECK EDGE PATCHING	PARAPET PATCHING	CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED	PATCH SPALLED AREAS WITH 843, PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	DEBRIS CONTAINMENT SYSTEM REMOVAL AND REPLACEMENT	RECONSTRUCTION OF PIER CAP, FIBER WRAP ENTIRE COLUMN AND PIER CAP	ARMORLESS PREFORMED EXPANSION JOINT SEAL	CLEARING AND GRUBBING, AS PER PLAN
SUM-8-3.960	7700555	GORGE BLVD (CR-7011)	X	X						X	X	X				X
SUM-8-4.388	7700563	REL HOWE AVE (CR-602)	X	X	X				X	X	X	X				X
SUM-8-5.461	7700598	BROAD BLVD (CR-605)	X	X	X		X			X	X	X				X
SUM-8-5.660	7700636	CSXT & CUYAHOGA RIVER				X	X									X
SUM-8-5.975	7700644	CUYAHOGA RIVER	X	X												X
SUM-8-6.165	7710798	FRONT STREET				X										X
SUM-8-6.295L	7710887	2ND STREET				X										X
SUM-8-6.433	7710828	BAILEY ROAD				X	X	X								X
SUM-8-6.608	7700652	HUDSON DRIVE				X										X
SUM-8-7.408	7700679	PEDESTRIAN BRIDGE									X	X	X	X		X
SUM-261-11.882	7700423	SR 8 & SR 59				X	X									X
SUM-8-5.590J	7700628	PORTAGE TRAIL				X					X	X			X	X
SUM-8-5.610K	7700601	PORTAGE TRAIL									X	X			X	X

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):
 AS-1-15 DATED (REVISED) 1/20/2023
 AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):
 843 DATED 1/19/2024
 844 DATED 4/20/2018
 846 DATED 4/17/2015

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTION OFFICIALS, 17TH EDITION, INCLUDING THE 2012 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS

ALTHOUGH NO TREES OR STUMPS ARE SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE CMS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS.

PROPOSED WORK DESCRIPTION

ASPHALT PAVING WITH MAINLINE PAVING OPERATION
 -REMOVE AND REPLACE THE TOP COURSE (1.5") OF ASPHALT CONCRETE WEARING SURFACE WITH THE MAINLINE PAVING OPERATION, QUANTITIES HAVE BEEN INCLUDED ON SHEET 11

PARTIAL DEPTH PAVEMENT REPAIRS
 -REPAIR THE ASPHALT WEARING SURFACE WHERE DETERIORATION EXTENDS BEYOND THE 1.5" MAINLINE PAVING OPERATION
 -THE EXISTING WATERPROOFING MEMBRANE SHALL NOT BE DISTURBED

PIER PATCHING
 -PATCH ALL UNSOUND AREAS OF THE PIERS AND PIER CAPS
 -CONFINED PATCHES WITH A COMPOSITE FIBER WRAP SYSTEM
 -SEAL ALL REPAIRED AREAS WITH EPOXY-URETHANE SEALER (MATCH EXISTING COLOR)

ABUTMENT/BACKWALL PATCHING
 -PATCH ALL UNSOUND AREAS OF THE ABUTMENTS/BACKWALLS
 -SEAL ALL REPAIRED AREAS WITH EPOXY-URETHANE SEALER (MATCH EXISTING COLOR)

DECK EDGE PATCHING
 -PATCH ALL UNSOUND AREAS OF THE DECK EDGE
 -CONFINED PATCHES NEAR OR OVER TRAFFIC WITH A COMPOSITE FIBER WRAP SYSTEM
 -SEAL ALL REPAIRED AREAS WITH EPOXY-URETHANE SEALER (MATCH EXISTING COLOR)

PARAPET EDGE PATCHING
 -PATCH ALL UNSOUND AREAS OF THE PARAPETS
 -CONFINED PATCHES NEAR OR OVER TRAFFIC WITH A COMPOSITE FIBER WRAP SYSTEM
 -SEAL ALL REPAIRED AREAS WITH EPOXY-URETHANE SEALER (MATCH EXISTING COLOR)

CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED
 -REMOVE ALL SPALLED AREAS OF THE BOTTOM OF THE DECK
 -PATCH WITH ITEM 843 (TROWELABLE MORTAR)
 -CONFINED PATCHES NEAR OR OVER TRAFFIC WITH A COMPOSITE FIBER WRAP SYSTEM
 -SEAL ALL REPAIRED AREAS WITH EPOXY-URETHANE SEALER (MATCH EXISTING COLOR)

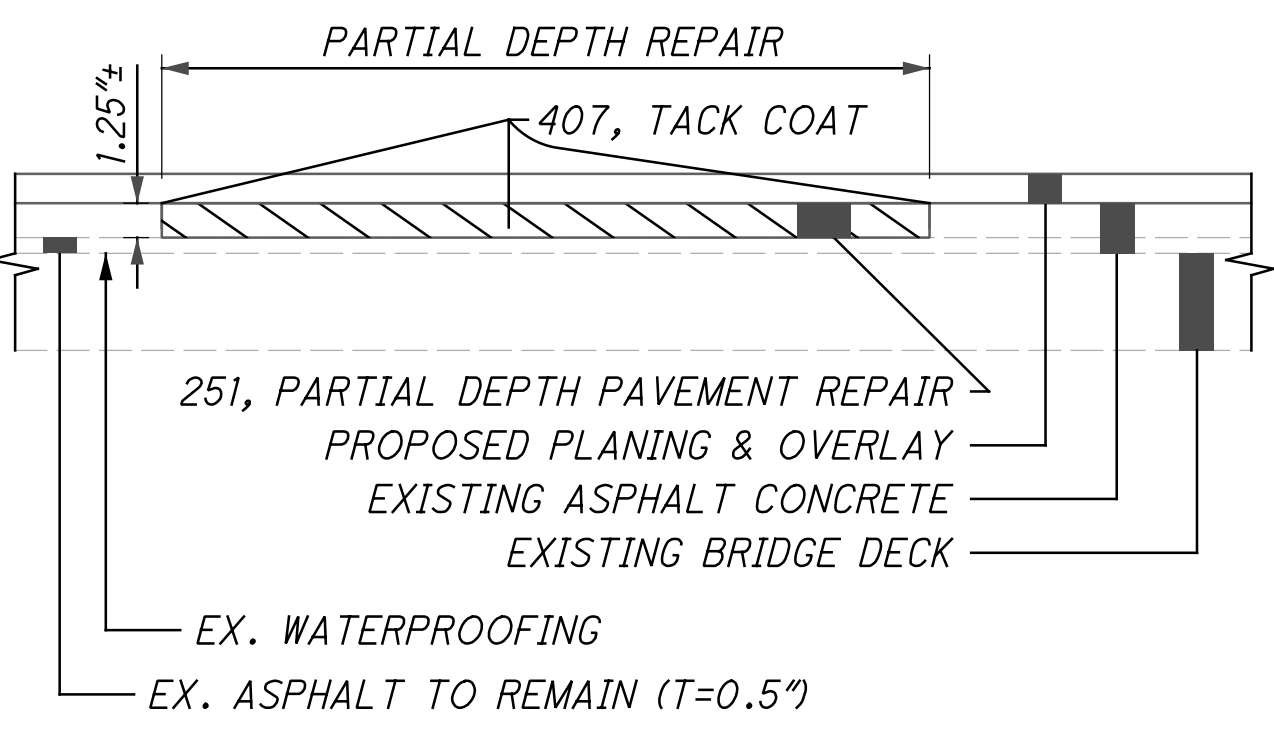
DEBRIS CONTAINMENT SYSTEM REMOVAL AND REPLACEMENT
 -REMOVE THE EXISTING DEBRIS CONTAINMENT AND REPLACE AFTER COMPLETING THE REPAIRS TO THE BOTTOM OF THE DECK

ADHESIVE EXPANSION JOINT SEAL SYSTEM (SILICONE)
 -REMOVE THE EXISTING COMPRESSION JOINT SEAL AT THE FORWARD EXPANSION JOINTS AND INSTALL AN ADHESIVE JOINT SEAL SYSTEM
 -EXISTING JOINT ARMOR SHALL REMAIN

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM WIDTH IS 2'. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR.

THE PARTIAL DEPTH REPAIRS SHALL NOT DISTURB THE EXISTING WATERPROOFING OR CONCRETE BRIDGE DECK.



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.

BELOW ARE PATCHING LOCATIONS AND QUANTITIES FOR EACH BRIDGE:

SUM-8-3.960 (PARAPETS)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	125 SF
ITEM 519, COMPOSITE FIBER WRAP SYSTEM,	138 SF
SUM-8-4.388 (DECK EDGE)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	100 SF
ITEM 519, COMPOSITE FIBER WRAP SYSTEM,	110 SF
SUM-8-5.461 (PARAPETS)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	50 SF
ITEM 519, COMPOSITE FIBER WRAP SYSTEM,	55 SF
SUM-8-5.461 (ABUTMENT)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	75 SF
SUM-8-5.660 (PIERS)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	250 SF
ITEM 519, COMPOSITE FIBER WRAP SYSTEM,	275 SF
SUM-8-5.660 (ABUTMENT)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	30 SF
SUM-8-6.433 (PIERS)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	200 SF
ITEM 519, COMPOSITE FIBER WRAP SYSTEM,	220 SF
SUM-8-6.433 (ABUTMENT/BACKWALL)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	250 SF
SUM-8-6.608 (PIERS)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	100 SF
ITEM 519, COMPOSITE FIBER WRAP SYSTEM,	110 SF
SUM-261-11.882 (PIERS)	
ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN,	300 SF
ITEM 519, COMPOSITE FIBER WRAP SYSTEM,	330 SF

STRUCTURE NOTES

SUM-8-3.960, SUM-8-4.388, SUM-8-5.461, SUM-8-5.660, SUM-8-5.975, SUM-8-6.165, SUM-8-6.295L, SUM-8-6.433, SUM-8-6.608, SUM-8-7.408, SUM-8-11.882, SUM-8-5.560J, SUM-8-5.610K

SFN
VARIOUS
DESIGN AGENCY

DESIGNER: JRF
CHECKER: MA
REVIEWER: TJP 01-19-24
PROJECT ID: 100936
SUBSET: 1 TOTAL: 6
SHEET: P.17 TOTAL: 22

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

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.

SUM-8-6.165:
 ITEM 509, EPOXY COATED STEEL REINFORCEMENT, 100 LB

SUM-8-6.295L:
 ITEM 509, EPOXY COATED STEEL REINFORCEMENT, 50 LB

SUM-8-7.408:
 ITEM 509, EPOXY COATED STEEL REINFORCEMENT, 100 LB

SUM-8-5.560J:
 ITEM 509, EPOXY COATED STEEL REINFORCEMENT, 50 LB

SUM-8-5.610K:
 ITEM 509, EPOXY COATED STEEL REINFORCEMENT, 100 LB

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-8-6.17 MAX ANODE SPACING: PIERS - 24 IN MAX C/C
 SUM-8-6.30L MAX ANODE SPACING: PIERS - 24 IN MAX C/C
 SUM-8-7.41 MAX ANODE SPACING: PIERS - 24 IN MAX C/C
 SUM-8-5.56J MAX ANODE SPACING: PIERS - 20 IN MAX C/C
 SUM-8-5.61K MAX ANODE SPACING: DECK BOTTOM - 24 IN MAX C/C

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR EACH STRUCTURE.

SUM-8-6.165 (PIERS):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 500 SQ FT
 ITEM 519, COMPOSITE FIBER WRAP SYSTEM, 550 SQ FT

SUM-8-6.295L (PIERS):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 200 SQ FT
 ITEM 519, COMPOSITE FIBER WRAP SYSTEM, 220 SQ FT

SUM-8-7.408 (PIER 6):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 35 SQ FT

SUM-8-5.560J (PIERS):
 ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 100 SQ FT
 ITEM 519, COMPOSITE FIBER WRAP SYSTEM, 110 SQ FT

ITEM SPECIAL - DEBRIS CONTAINMENT SYSTEM REMOVAL AND REPLACEMENT

THIS WORK CONSISTS OF REMOVING THE EXISTING DEBRIS CONTAINMENT SYSTEM IN ORDER TO COMPLETE THE REPAIRS TO THE BOTTOM OF THE BRIDGE DECK. ONCE THE REPAIRS TO THE BOTTOM OF BRIDGE DECK ARE COMPLETE, THE CONTRACTOR SHALL INSTALL A NEW DEBRIS CONTAINMENT SYSTEM OVER THE NORTHBOUND AND SOUTHBOUND LANES OF MAINLINE SR-8.

ITEM 516 - ARMORLESS PREFORMED STEEL JOINT SEAL (SUM-8-5.560J & SUM-8-5.610K)

THIS ITEM OF WORK SHALL INCLUDE THE REMOVAL OF THE EXISTING STRIP SEAL GLAND AND STEEL RETAINERS AND REPLACING THEM WITH ARMORLESS PREFORMED JOINT SEALS. REFER TO DETAILS IN SCD AS-2-15 (TYPE C).

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 RICH PRIMER APPLIED. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

SPALL REMOVAL ON STRUCTURES SUM-8-3.960, SUM-8-4.338, SUM-8-5.461, SUM-8-7.408, SUM-8-5.590J, & SUM-8-5.610K OVER TRAVEL LANES 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-8-3.960:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 25 SY
 ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 25 SY
 ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM, 250 SF
 ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, 225 SF

SUM-8-4.338:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 10 SY
 ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 10 SY
 ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM, 100 SF
 ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, 90 SF

SUM-8-5.461:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 15 SY
 ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 15 SY
 ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM, 150 SF
 ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, 135 SF

SUM-8-7.408:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 80 SY
 ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 80 SY
 ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM, 800 SF
 ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, 720 SF

SUM-8-5.590J:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 30 SY
 ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 30 SY
 ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM, 300 SF
 ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, 270 SF

SUM-8-5.610K:
 ITEM SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED, 30 SY
 ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 30 SY
 ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM, 300 SF
 ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, 270 SF

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN (SUM-8-7.408)

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

STRUCTURE NOTES

SUM-8-3.960, SUM-8-4.388, SUM-8-5.461, SUM-8-5.660, SUM-8-5.975, SUM-8-6.165, SUM-8-6.295L
 SUM-8-6.433, SUM-8-6.608, SUM-8-7.408, SUM-261-11.882, SUM-8-5.560J, SUM-8-5.610K

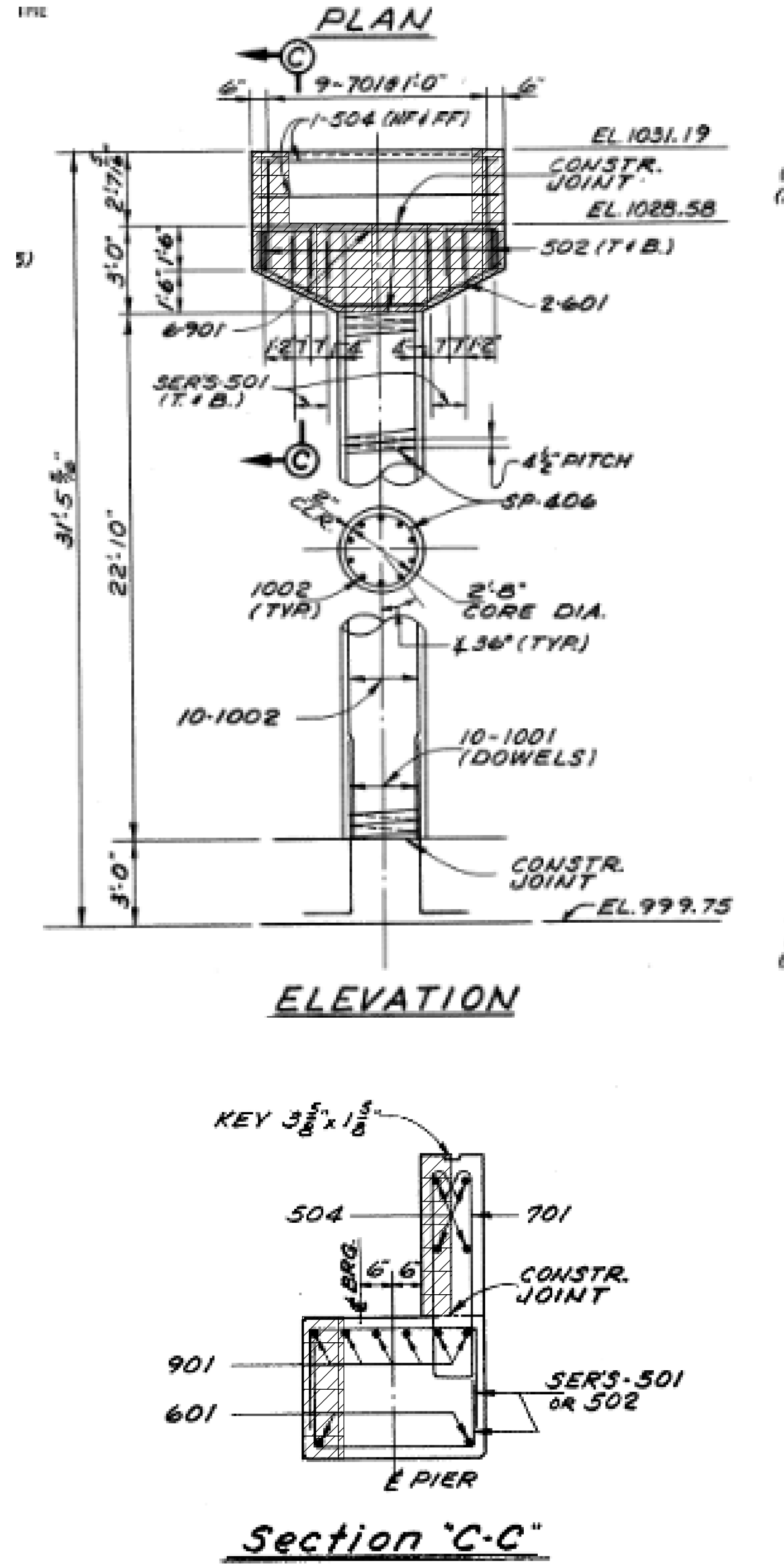
SFN	
VARIOUS	
DESIGN AGENCY	
DESIGNER	CHECKER
JRF	MA
REVIEWER	
TJP 01-19-24	
PROJECT ID	
100936	
SUBSET	TOTAL
2	6
SHEET	TOTAL
P.18	22

RECONSTRUCTION OF PIER CAP (SUM-8-7.408)

THIS WORK CONSISTS OF RECONSTRUCTING THE TOP PORTION OF PIER 6 CARRYING THE FORWARD EXPANSION JOINT. THE CONTRACTOR SHALL REMOVE ALL DAMAGED AREAS INCLUDING PREVIOUS PATCHES. TO PERFORM THIS WORK, TEMPORARILY SUPPORT AND BRACE THE STRUCTURAL STEEL AND CONCRETE SLAB RAMP. ONCE THE REPAIRS ARE COMPLETE, FIBER WRAP THE ENTIRE COLUMN/CAP AND SEAL ALL PATCHED AREAS WITH AN EPOXY-URETHANE SEALER.


- ITEM 844, CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, 35 SQ FT
- ITEM 519, COMPOSITE FIBER WRAP SYSTEM, 215 SQ FT

 = PATCHING LOCATIONS



STRUCTURE NOTES

SUM-8-3.960, SUM-8-4.388, SUM-8-5.461, SUM-8-5.660, SUM-8-5.975, SUM-8-6.165, SUM-8-6.295L
 SUM-8-6.433, SUM-8-6.608, SUM-8-7.408, SUM-8-7.882, SUM-8-11.882, SUM-8-5.560J, SUM-8-5.610K

SFN	
VARIOUS	
DESIGN AGENCY	
	
DESIGNER	CHECKER
JRF	MA
REVIEWER	
TJP 01-19-24	
PROJECT ID	
100936	
SUBSET	TOTAL
3	6
SHEET	TOTAL
P.19	22

CALC: JRF DATE: 12/18/2023
 CHECKED: MA DATE: 1/19/2024

ESTIMATED QUANTITIES															
BRIDGE NO. / STRUCTURE FILE NO.								ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SUBSET SHEET			
SUM-8-3.960 7700555 02/NHS/47								201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS	1 / 6			
	LS	LS	LS	LS	LS	LS	LS	251	01000	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	1 / 6			
	75	10						509	10000	LB	EPOXY COATED REINFORCING STEEL	2 / 6			
								512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1 / 6			
43	24	23	32					550	220	220	SPECIAL	51900100	SF	COMPOSITE FIBER WRAP SYSTEM	
385	210	205	275												
								519	11101		SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	1 / 6		
125	100	125	280					SPECIAL	53000800		SY	STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED	2 / 6		
25	10	15						844	10000		SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION	2 / 6		
								846	00110		CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM			
100	118	114		219											
								843	50000		SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR			


CALC: JRF DATE: 12/18/2023
 CHECKED: MA DATE: 1/19/2024

ESTIMATED QUANTITIES													
BRIDGE NO. / STRUCTURE FILE NO.								ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SUBSET SHEET	
SUM-8-6.608 7700652 02/NHS/47								201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS	1 / 6	
	LS	LS	LS	LS	LS			509	10000	LB	EPOXY COATED REINFORCING STEEL	2 / 6	
	100		50	100				512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1 / 6	
12	84	34	43	54				516	47001		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	2 / 6	
	LS							SPECIAL	51900100		SF	COMPOSITE FIBER WRAP SYSTEM	
110	1015	330	410	300									
								519	11101		SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	1 / 6
								843	50000		SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
								SPECIAL	53000800		SY	STRUCTURES: CONCRETE SPALL REMOVAL WITH ZINC RICH PRIMER APPLIED	2 / 6
								844	10000		SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION	2 / 6
								516	10010		FT	ARMORLESS PREFORMED JOINT SEAL	2 / 6
								SPECIAL	69098300		SY	DEBRIS CONTAINMENT SYSTEM REMOVAL AND REPLACEMENT	2 / 6
	160		26	26									

STRUCTURE ESTIMATED QUANTITIES

SUM-8-3.960, SUM-8-4.388, SUM-8-5.461, SUM-8-5.660, SUM-8-5.975, SUM-8-6.165, SUM-8-6.295L
 SUM-8-6.433, SUM-8-6.608, SUM-8-7.408, SUM-261-11.882, SUM-8-5.560J, SUM-8-5.610K

SFN
 VARIOUS
 DESIGN AGENCY



DESIGNER: JRF
 CHECKER: MA
 REVIEWER: TJP 01-19-24
 PROJECT ID: 100936
 SUBSET: 4 TOTAL: 6
 SHEET: P.20 TOTAL: 22