

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CENTURYLINK
 20 N MECHANIC ST
 LEBANON, OH 45036
 (513) 933-3502 (JORDAN LANGSTON)
 JORDAN.LANGSTON@CENTURYLINK.COM
 NATIONALRELO@CENTURYLINK.COM

CENTURYLINK
 9490 MERIDIAN WAY
 WEST CHESTER, OH 45069
 (513) 644-8943 (BRUCE MILLER)
 BRUCE.MILLER@CENTURYLINK.COM

DAYTON POWER AND LIGHT
 1900 DRYDEN RD
 DAYTON, OH 45439
 (937) 554-9063 (WILLIAM WARD)
 WILLIAM.WARD@AES.COM

VECTREN (CENTERPOINT ENERGY COMPANY)
 CENTERVILLE, OH
 (937) 312-2521 (GREGORY FISHMAN)
 GREG.FISHMAN@CENTERPOINTENERGY.COM

WARREN COUNTY WATER & SEWER
 406 JUSTICE DRIVE
 LEBANON, OH 45036
 (513) 695-1377 (CHRIS BRAUSCH)
 CHRIS.BRAUSCH@CO.WARREN.OH.US

EXISTING PLANS

EXISTING PLANS ENTITLED: WAR-73-(14.58)(14.82), WAR-73-14.58/14.82, WAR-73-(6.16-17.35), WAR-73-(15.01-15.15), WAR-73-15.01, MAY BE INSPECTED IN THE ODOT DISTRICT 8 OFFICE IN LEBANON, OHIO

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	3	0	3

NATIONAL GEODETIC SURVEY (NGS) BENCHMARKS

NOTIFY THE DISTRICT SURVEYOR, BY PHONE AT (513) 933-6627 AT LEAST THREE (3) WEEKS PRIOR TO REMOVAL OF THE STRUCTURE THAT THE NATIONAL GEODETIC SURVEY (NGS) DISK WILL BE REMOVED. REMOVE THE NGS DISK WITHOUT DAMAGING THE FACE AND SUBMIT IT TO THE DISTRICT SURVEYOR. ALL COSTS ASSOCIATED WITH THE REMOVAL AND SALVAGE OF THE NGS DISK ARE INCLUDED IN THE PAYMENT FOR ITEM 202 STRUCTURE REMOVED, OR ITEM 202, PORTIONS OF STRUCTURE REMOVED.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS.

BM-1 - NORTHING: 558404.9931, EASTING:1521686.3306,
 ELEVATION: 753.1588
 BRASS DISK NOTE: ODOT C-615

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
 POSITIONING METHOD: GPS (VRS)
 MONUMENT TYPE: 5/8" IRON PINS

VERTICAL POSITIONING
 ORTHOMETRIC HEIGHT DATUM: NAVD88
 GEOID: GEOID12B

HORIZONTAL POSITIONING
 REFERENCE FRAME: NAV83 (2011)
 ELLIPSOID: GRS80
 MAP PROJECTION: LAMBERT CONFORMAL CONIC
 COORDINATE SYSTEM: OHIO STATE PLANE, SOUTH ZONE
 COMBINED SCALE FACTOR: 1.0000915680

ORIGIN OF COORDINATE SYSTEM:
 1 METER = OHIO STATE PLAN, SOUTH ZONE (0,0)

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659, SOIL ANALYSIS TEST	2	EACH
ITEM 659, TOPSOIL	51	CY
ITEM 659, SEEDING AND MULCHING	459	SY
ITEM 659, REPAIR SEEDING AND MULCHING	23	SY
ITEM 659, INTER-SEEDING	23	SY
ITEM 659, COMMERCIAL FERTILIZER	0.08	TON
ITEM 659, LIME	0.10	ACRE
ITEM 659, WATER	4	MGAL
ITEM 659, MOWING	2	MSF

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ENVIRONMENTAL COMMITMENTS

THIS PROJECT IS LOCATED IN OR NEAR A SOLE SOURCE AQUIFER. IN ORDER TO MINIMIZE THE POTENTIAL FOR CONTAMINATION, THE CONTRACTOR SHALL NOT PERFORM PROJECT RELATED REFUELING AND VEHICLE MAINTENANCE ACTIVITIES FROM WAR-73 14.20-14.80. THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO THE WARREN COUNTY EMERGENCY WATER TREATMENT PLANT IN WAYNESVILLE AT (513)-897-3200. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), THE CONTRACTOR SHALL CONTACT THE WAYNE TOWNSHIP FIRE DEPARTMENT AT (513)-897-3010 OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL.

THIS PROJECT IS LOCATED IN OR NEAR A DRINKING WATER PROTECTION AREA. IN ORDER TO MINIMIZE THE POTENTIAL FOR CONTAMINATION, THE CONTRACTOR SHALL NOT PERFORM PROJECT RELATED REFUELING AND VEHICLE MAINTENANCE ACTIVITIES FROM WAR-73 14.20-14.80. THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO THE WARREN COUNTY EMERGENCY WATER TREATMENT PLANT IN WAYNESVILLE AT (513)-897-3200. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), THE CONTRACTOR SHALL CONTACT THE WAYNE TOWNSHIP FIRE DEPARTMENT AT (513)-897-3010 OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL.

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. THE CONTRACTOR SHALL NOT REMOVE TREES UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THE CONTRACTOR SHALL DEMARCATÉ CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

ACCESS TO THE LITTLE MIAMI SCENIC TRAIL STATE PARK SHALL BE RESTRICTED TO TEMPORARY CLOSURES DURING BRIDGE DEMOLITIONS AND BEAM ERECTION DUE TO SAFETY CONCERNS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE EXTENT AS REASONABLY POSSIBLE AT THE DIRECTION OF THE ENGINEER. ANY ADDITIONAL COSTS INCURRED FOR THE MAINTENANCE OF PEDESTRIAN TRAFFIC DURING THESE RESTRICTIVE TIMES OF BRIDGE DEMOLITION AND BEAM ERECTION SHALL BE COMPENSATED PER CMS 109.05. ACCESS TO THE TRAIL SHALL BE PROVIDED AT ALL OTHER TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL NOT STORE OR STAGE CONSTRUCTION EQUIPMENT OR MATERIALS WITHIN THE LITTLE MIAMI SCENIC TRAIL STATE PARK BOUNDARIES, OUTSIDE OF PROPOSED CONSTRUCTION LIMITS.

TO PROTECT THE LITTLE MIAMI SCENIC TRAIL STATE PARK AND THE PUBLIC, THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY CONSTRUCTION FENCING ALONG THE KNOWN BOUNDARIES OF THE LITTLE MIAMI SCENIC TRAIL STATE PARK WITHIN THE PROJECT CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL SIGNAGE APPROVED BY THE ENGINEER TO ALERT THE LITTLE MIAMI SCENIC TRAIL STATE PARK USERS OF CONSTRUCTION ACTIVITIES AND ACCESS RESTRICTIONS OR CLOSURES, AND TO DIRECT USERS TO THE DETOUR OR ALTERNATIVE ACCESS POINTS.

THE CONTRACTOR SHALL PROVIDE THE CONSTRUCTION SCHEDULE TO ODOT, RONALD KRAMER, PROJECT MANAGER (513-933-6610) AND THE OHIO DEPARTMENT OF NATURAL RESOURCES, AARON ROURKE (614-230-8534) 30 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

THE CONTRACTOR SHALL FULLY RESTORE ANY LAND TO BE DISTURBED AND RETURNED IT TO A CONDITION WHICH IS AT LEAST AS GOOD AS THAT WHICH EXISTED PRIOR TO THE PROJECT.

THE CONTRACTOR SHALL NOT DISCHARGE TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND TO A SCENIC RIVER, ITS TRIBUTARIES, OR DRAINAGE WAYS. IF REFUELING OF IMMOBILE EQUIPMENT IS NECESSARY WITHIN THE FLOODPLAIN OR NEAR ANY TRIBUTARY DRAINAGE WAYS, DITCHES, OR STREAM, THE CONTRACTOR SHALL PROVIDE SECONDARY CONTAINMENT WITH ENOUGH CAPACITY TO COMPLETELY CONTAIN AND COLLECT ALL POTENTIAL LIQUID WASTES IN THE EVENT OF A SPILL.

ANY AND ALL CONSTRUCTION DEBRIS, EARTHEN DEBRIS, EXCESS ASPHALT OR CONCRETE, WOOD DEBRIS FROM CLEARING, EXCESS FILL MATERIAL, AND TRASH SHOULD BE DISPOSED OF AT AN APPROVED UPLAND SITE OR LAND FILL ABOVE FEMA 100-YEAR FLOOD ELEVATIONS. DISPOSAL OF ANY SUCH MATERIALS WITHIN 1000 FEET OF THE LITTLE MIAMI RIVER IS PROHIBITED.

IN ACCORDANCE WITH ORC 3750.06, REPORTABLE SPILLS MUST BE REPORTED TO THE LOCAL FIRE DEPARTMENT (911); AND THE OHIO SPILL LINE (1-800-282-9378).

THE CONTRACTOR SHALL KEEP ALL IDLE EQUIPMENT, FUELS, LUBRICANTS, AND ANY STORAGE FOR/OF POTENTIALLY TOXIC OR HAZARDOUS MATERIALS OUT OF THE FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA AND NOT WITHIN 1000 FEET OF THE LITTLE MIAMI RIVER.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER 40 DAYS PRIOR TO WORK WITHIN 1000 FEET OF THE LITTLE MIAMI RIVER. THE PROJECT ENGINEER SHALL NOTIFY THE DISTRICT ENVIRONMENTAL COORDINATOR 35 DAYS PRIOR TO WORK WITHIN 1000 FEET OF THE SCENIC RIVER. IF COORDINATION WITH ODNR HAS NOT ALREADY OCCURRED, AND THE PROJECT REQUIRES NOTIFICATION TO THE SCENIC RIVER MANAGER PRIOR TO CONSTRUCTION PER THE SCENIC RIVER MOA, THE DISTRICT ENVIRONMENTAL COORDINATOR SHALL COORDINATE WITH ODNR SCENIC RIVERS 30 DAYS PRIOR TO ANY WORK WITHIN 1000 FEET OF THE LITTLE MIAMI RIVER.

IF ANY PAINTING, WELDING, SAND AND/OR WATER BLASTING (CLEANING) AT OR OVER THE LITTLE MIAMI RIVER, THEN THE CONTRACTOR SHALL UTILIZE APPROPRIATE APRONS TO PROVIDE FOR COMPLETE CONTAINMENT OF ALL PAINT, WELDING SLAG AND/OR SEALANT OVER SPRAY AND OTHER DEBRIS. APRONS, APPROPRIATE FALSEWORK, OR OTHER BARRIERS SHALL BE UTILIZED ON ALL DECK REPLACEMENT PROJECTS TO PREVENT THE DISCHARGE OF CONCRETE, ASPHALT, OR OTHER DEBRIS TO A DESIGNATED SCENIC RIVER. ALL DEBRIS COLLECTED SHALL BE DISPOSED OF AT AN APPROVED UPLAND SITE OR LAND FILL ABOVE FEMA 100-YEAR FLOOD ELEVATIONS. DISPOSAL OF ANY SUCH MATERIALS WITHIN 1000 FEET OF THE LITTLE MIAMI RIVER IS PROHIBITED.

ITEM 614, MAINTAINING TRAFFIC

TRAFFIC ON S.R. 73 WILL BE DETOURED FOR 10 DAYS DURING THE OVERLAY AND PATCHING OF WAR-73-1458. TRAFFIC WILL BE MAINTAINED BY A ONE LANE, TWO-WAY TEMPORARY TRAFFIC SIGNAL SYSTEM THROUGHOUT THE CONSTRUCTION OF WAR-73-1462 AND APPROACH WORK. SMITH ROAD WILL BE DETOUR THROUGHOUT THE DURATION CONSTRUCTION.

ALL WORK REQUIRED TO MAINTAIN THE ROADWAYS AND DETOURS, UNLESS OTHERWISE PROVIDED IN THESE PLANS, SHALL BE INCLUDED IN ITEM 614 MAINTAINING TRAFFIC. PAYMENT FOR THIS ITEM SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC (LUMP) AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

COMPLETE CLOSURES OF S.R. 73, CORWIN ROAD, AND SMITH ROAD SHALL NOT OCCUR DURING THESE SPECIFIED TIME FRAMES AND THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS. THE TEMPORARY SIGNALIZED LANE CLOSURE MAY REMAIN IN PLACE ONCE CONSTRUCTED.

HOLIDAYS

CHRISTMAS	FOURTH OF JULY	MEMORIAL DAY
NEW YEAR'S EVE	LABOR DAY	THANKSGIVING
SAUERKRAUT FESTIVAL	RENAISSANCE FESTIVAL	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY TIME ALL LANES MUST BE OPEN TO TRAFFIC

SUNDAY	12:00 NOON	FRIDAY	THROUGH	6:00 AM	MONDAY
MONDAY	12:00 NOON	FRIDAY	THROUGH	6:00 AM	TUESDAY
TUESDAY	12:00 NOON	TUESDAY	THROUGH	6:00 AM	WEDNESDAY
WEDNESDAY	12:00 NOON	WEDNESDAY	THROUGH	6:00 AM	THURSDAY
THURSDAY	12:00 NOON	WEDNESDAY	THROUGH	6:00 AM	FRIDAY
THANKSGIVING	6:00 AM	WEDNESDAY	THROUGH	6:00 AM	MONDAY
FRIDAY	12:00 NOON	THURSDAY	THROUGH	6:00 AM	MONDAY
SATURDAY	12:00 NOON	FRIDAY	THROUGH	6:00 AM	MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

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 CHANGABLE 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.

NOTIFICATION TIME FRAME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAY TO PUBLIC
RAMP & ROAD CLOSURES	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<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.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN IN THE PLANS.

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.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:
ITEM 616, WATER 4 MGAL

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON MAINTENANCE OF TRAFFIC PLAN SHEETS AND TRAFFIC SCDS MT- 96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

	PHASE			
	1 (ALL RED) DUMMY PHASE	2 MAINLINE (WESTBOUND)	3 (ALL RED) DUMMY PHASE	4 MAINLINE (EASTBOUND)
MIN. GREEN		10		10
EXTENSION		4		4
MAX. GREEN		36.5		36.5
YELLOW		3.5		3.5
ALL RED	35		35	
RECALL	ON	OFF	OFF	OFF

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

MAINTENANCE OF LITTLE MIAMI SCENIC TRAIL TRAFFIC

TRAIL TRAFFIC SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION OF THE PROJECT EITHER THROUGH EXISTING TRAIL OR THROUGH AN ALTERNATE ROUTE APPROVED BY THE ENGINEER.

ADEQUATE SIGNING BOTH BEFORE AND AFTER WORK ZONE SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE FOLLOWING TYPE SIGNS ARE CONSIDERED TO BE MINIMUM TREATMENT:

1. ADVANCED WARNING TYPE SIGNS FOR TRAIL USERS APPROXIMATELY ONE-QUARTER MILE BEFORE WORK ZONE ON BOTH APPROACHES;
2. SIGNS SPECIFYING ACTIONS REQUIRED OF TRAIL USERS APPROXIMATELY 300 FEET BEFORE WORK ZONE ON BOTH APPROACHES.

THE ABOVE SIGNING SHALL BE MOUNTED IN SUCH A WAY AS TO BE UNOBSTRUCTED BY TREE BRANCHES, AND PROPERLY ANGLED FOR MAXIMUM VISIBILITY FROM THE TRAIL. THE METHOD OF SUPPORTING THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. UPON COMPLETION OF THE PROJECT, THE SIGNS AND SUPPORT SYSTEMS SHALL BE COMPLETELY REMOVED FROM THE TRAIL. TEMPORARY TRAILS IF USED SHALL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR WITH THE LEAST POSSIBLE DISTURBANCE TO THE SURROUNDING AREA.

2 THE TRAIL SHALL BE ADEQUATELY MARKED IN BOTH DIRECTIONS.

LANE VALUE CONTRACT

DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
S.R. 73 (BRIDGE WAR-73-1458)	21-DAY CLOSURE	DAY	\$11,900
PHASE 1 MOT - CORWIN RD (O'NEALL RD TO SMITH RD)	10- & 3-DAY CLOSURES	DAY	\$260
PHASE 2 MOT - CORWIN RD (O'NEALL RD TO SMITH RD)	10- & 3-DAY CLOSURES	DAY	\$260

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.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. 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.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	NOTE DELETION & NOTE REVISIONS
1	7/12/23	
2	7/21/23	UPDATED NOTES

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, APP CONT.
 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 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 (ASSUMING 3 PCMS SIGNS FOR 1 MONTH) 3 SNMT

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT- 101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) 91 EACH
 ITEM 614, OBJECT MARKER, TWO-WAY 91 EACH
 ITEM 614, INCREASED BARRIER DELINEATION 475 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

OVERHEAD-MOUNTED WORK ZONE SIGNALS

SIGNALS SHALL BE OVERHEAD MOUNTED IN ACCORDANCE WITH THE DETAILS SHOWN ON TRAFFIC SCD MT-96.20.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL) 8 EACH
 ITEM 614, OBJECT MARKER, TWO-WAY 8 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

SEQUENCE OF CONSTRUCTION

S.R. 73 DETOUR PHASE

FOR CLOSURE DETAILS SEE S.R. 73 DETOUR PLAN. DURING A 21-DAY CLOSURE, PERFORM THE FOLLOWING WORK ON WAR-73-14.58: REPLACE THE ELASTOMERIC BEARINGS, PERFORM ALL SUBSTRUCTURE PATCHING THAT REQUIRES JACKING, AND AFTER ALL JACKING PROCEDURES ARE COMPLETE, PERFORM THE DECK OVERLAY. ANY REMAINING PATCHING MAY BE COMPLETED AFTER S.R. 73 HAS BEEN REOPENED. SET UP TEMPORARY SIGNAL SYSTEM FOR PHASE 1 INCLUDING CONTROLLER TIMING. ESTABLISH MOT PHASE 1 TRAFFIC CONFIGURATION INCLUDING STRIPING, PORTABLE BARRIER PLACEMENT, SMITH ROAD DETOUR SIGNING, AND S.R. 73 ADVANCED WORK ZONE SIGNING TO ENABLE DEMOLITION AND RECONSTRUCTION OF NORTH SIDE OF WAR-73-1462.

WAR-73-1462 PHASE 1

DETOUR CORWIN ROAD TRAFFIC ONLY AFTER S.R. 73 HAS BEEN REOPENED TO THROUGH TRAFFIC (FOR CLOSURE DETAILS SEE CORWIN ROAD DETOUR PLAN). DURING A 10-DAY CLOSURE, PERFORM ALL PHASE 1 DEMOLITION ACTIVITIES FOR APPLICABLE PORTION OF WAR-73-1462. FOLLOWING THE 10-DAY CLOSURE, TRAFFIC MAY BE MAINTAINED ON CORWIN ROAD PER MT-96.11 TO FACILITATE CONSTRUCTION OF AND AROUND THE FORWARD ABUTMENT. TEMPORARY PORTABLE SIGNALS ARE ACCEPTABLE DUE TO OVERHEAD CONSTRUCTION CONSTRAINTS. THE CONTRACTOR IS TO USE REMOVABLE TAPE (CMS 740.06, TYPE 1) IN LIEU OF WORK ZONE PAINT OPTIONS ON CORWIN ROAD. THE STOP BAR FOR THE SOUTHBOUND DIRECTION ON CORWIN ROAD SHALL BE PLACED 160 FEET OFF THE LEFT OUTSIDE BEAM OF THE PROPOSED BRIDGE. THE STOP BAR FOR THE NORTHBOUND DIRECTION ON CORWIN ROAD SHALL BE PLACED BEFORE THE INTERSECTION WITH O'NEALL ROAD. O'NEALL ROAD'S TRAFFIC MOVEMENTS SHALL BE INCLUDED IN THE TEMPORARY SIGNAL'S TIMING AND APPROVED BY THE ENGINEER. THE PORTABLE SIGNAL FOR O'NEALL ROAD SHALL BE PLACED ON A STABLE AGGREGATE PAD CREATED ON THE FAR SIDE OF THE INTERSECTION FROM O'NEALL ROAD.

AN ADDITIONAL 3-DAY CLOSURE (WITH THE SAME SET-UP CONDITIONS AS THE 10-DAY CLOSURE) IS PERMITTED TO ERECT PHASE 1 BEAMS.

CONTINUING PHASE 1 WORK, CONSTRUCT REMAINING STRUCTURE COMPONENTS, ROADWAY APPROACH AND SHOULDER PAVEMENT, GUARDRAIL, PERMANENT SIGNING, CONCRETE BARRIER, DRAINAGE AND GRADING ON THE NORTH SIDE OF STRUCTURE. DO NOT PAVE FINAL SURFACE COURSE ON APPROACHES AND SHOULDERS.

UPON COMPLETION OF ALL PHASE 1 CONSTRUCTION ACTIVITIES, USE SHORT TERM WEEKEND CLOSURES PER MT-97.10 TO SET UP PHASE 2 MOT LAYOUT. SHIFT TRAFFIC ONTO THE NEWLY CONSTRUCTED NORTH SIDE OF THE BRIDGE.

WAR-73-1462 PHASE 2

DETOUR CORWIN ROAD TRAFFIC (FOR CLOSURE DETAILS SEE CORWIN ROAD DETOUR PLAN). DURING ANOTHER 10-DAY CLOSURE, PERFORM ALL PHASE 2 DEMOLITION ACTIVITIES FOR THE REMAINING PORTION OF WAR-73-1462. FOLLOWING THE 10-DAY CLOSURE, TRAFFIC MAY AGAIN BE MAINTAINED PER MT-96.11 TO FACILITATE CONSTRUCTION OF AND AROUND FORWARD ABUTMENT. THE CONTRACTOR IS TO USE THE SAME SET UP AS DESCRIBED IN PHASE 1.

AN ADDITIONAL 3-DAY CLOSURE IS ALLOWED TO ERECT THE REMAINING BEAMS. CONTINUING PHASE 2 WORK, CONSTRUCT REMAINING STRUCTURE COMPONENTS, ALL LAYERS OF ROADWAY APPROACH AND SHOULDER PAVEMENT, GUARDRAIL, PERMANENT SIGNING, CONCRETE BARRIER, DRAINAGE, GRADING AND FINAL PAVEMENT MARKINGS ON THE SOUTH SIDE OF STRUCTURE.

UPON COMPLETION OF ALL PHASE 2 CONSTRUCTION ACTIVITIES, USE SHORT TERM WEEKEND CLOSURES PER MT-97.10 TO REMOVE THE PHASE 2 MOT SCHEME. REMOVE TEMPORARY PAVEMENT MARKINGS, PORTABLE CONCRETE BARRIER, ADVANCED WORK ZONE SIGNING, AND TEMPORARY TRAFFIC SIGNALS. UPON REMOVAL OF ALL PHASE 2 MOT ITEMS, USE SHORT TERM WEEKEND CLOSURES PER MT-97.11 TO PAVE THE REMAINING FINAL SURFACE COURSE AND PLACE PERMANENT PAVEMENT MARKINGS ON THE NORTH SIDE OF WAR-73-1462.

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 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.
- 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 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) 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 100 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 AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	
1	7/12/23	REVISED QUANTITIES & ADDITIONS
2	7/21/23	UPDATED QUANTITIES

PARSONS
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SHEET NUM.			PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	3	4	01/NHS/10	02/NHS/13						
									ROADWAY	
			LS		201	11000	LS		CLEARING AND GRUBBING	
			43	43	202	32000	43	FT	CURB REMOVED	
			665	665	202	38000	665	FT	GUARDRAIL REMOVED	
			4	4	202	47000	4	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
		349		349	203	10000	349	CY	EXCAVATION	
		1,572		1,572	203	20000	1,572	CY	EMBANKMENT	
			889	889	204	10000	889	SY	SUBGRADE COMPACTION	
			250	250	606	15050	250	FT	GUARDRAIL, TYPE MGS	
			37.5	37.5	606	15100	37.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
			1	1	606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E (NCHRP 350 OR MASH 2016)	
			2	2	606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
			5	5	606	35002	5	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
			38	38	622	24000	38	FT	CONCRETE BARRIER, TYPE D	
			1	1	622	25000	1	EACH	CONCRETE BARRIER END SECTION, TYPE D	
			1	1	622	25050	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
		1		1	623	40501	1	EACH	REFERENCE MONUMENT, TYPE A, AS PER PLAN	4
			LS		878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
			3	3	601	32200	3	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
		2		2	659	00100	2	EACH	SOIL ANALYSIS TEST	
		51		51	659	00300	51	CY	TOPSOIL	
		459		459	659	10000	459	SY	SEEDING AND MULCHING	
		23		23	659	14000	23	SY	REPAIR SEEDING AND MULCHING	
		23		23	659	15000	23	SY	INTER-SEEDING	
		0.08		0.08	659	20000	0.08	TON	COMMERCIAL FERTILIZER	
		0.1		0.1	659	31000	0.1	ACRE	LIME	
		4		4	659	35000	4	MGAL	WATER	
		2		2	659	40000	2	MSF	MOWING	
			5,000		832	30000	5,000	EACH	EROSION CONTROL	
			0.54	0.54	602	20000	0.54	CY	CONCRETE MASONRY	
		43		43	605	31100	43	FT	AGGREGATE DRAINS	
			161	161	611	06700	161	FT	15" CONDUIT, TYPE F, 707.05 TYPE C	
			2	2	611	99114	2	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
			498	498	202	23000	498	SY	PAVEMENT REMOVED	
			484	484	254	01000	484	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5')	
			4,184	4,184	254	01000	4,184	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=3')	
			204	204	301	56000	204	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
			209	209	304	20000	209	CY	AGGREGATE BASE	
			1,807	1,807	407	20000	1,807	GAL	NON-TRACKING TACK COAT	
			232	232	441	50000	232	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
			261	261	441	50300	261	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
			4	4	441	70000	4	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
			146	146	609	24510	146	FT	CURB, TYPE 4-C	
									EROSION CONTROL	
									DRAINAGE	
									PAVEMENT	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	DESCRIPTION
1	7/12/23	REVISED QUANTITIES & ADDITIONS
2	7/21/23	REVISED OVERLAY AND JACKING FRAME ITEM

SHEET NUM.					PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
16	28	30	31	42	01/NHS/10	02/NHS/13						
TRAFFIC CONTROL												
							621	00100	26	EACH	RPM	
							621	54000	26	EACH	RAISED PAVEMENT MARKER REMOVED	
							626	00102	3	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	
							626	00110	14	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)	
							630	03100	73	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
							630	04100	35	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
							630	08600	1	EACH	SIGN POST REFLECTOR	
							630	80100	6	SF	SIGN, FLAT SHEET	
							630	84900	2	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
							630	85100	7	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
							630	86002	8	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
							644	00104	0.16	MILE	EDGE LINE, 6"	
							644	00300	0.34	MILE	CENTER LINE (BROKEN & SOLID, DOUBLE)	
							644	00300	0.05	MILE	CENTER LINE (SOLID, DOUBLE)	
							644	00500	21	FT	STOP LINE	
							645	00117	0.06	MILE	EDGE LINE, 6", TYPE A3, AS PER PLAN (WHITE)	4
							645	00311	0.03	MILE	CENTER LINE, TYPE A3, AS PER PLAN	4
							646	10010	0.11	MILE	EDGE LINE, 6" (WHITE)	
							646	10200	0.06	MILE	CENTER LINE	
							646	10600	6	FT	TRANSVERSE/DIAGONAL LINE (YELLOW)	
STRUCTURE OVER 20 FOOT SPAN (SFN 8302855)												
							512	10100	29	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
							512	74000	29	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
							513	10001	LS		STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	31
							516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN	37
							516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	31
							519	11101	254	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	31
							848	10201	112	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 1.75" APPR. SLAB)	31
							848	10201	960	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 3.50" DECK)	31
							848	20000	1,072	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
							848	30200	9	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	
							848	50000	16	SY	HAND CHIPPING	
							848	50100	LS		TEST SLAB	
							848	50320	960	SY	EXISTING CONCRETE OVERLAY REMOVED (THICKNESS 3.00")	
							848	50340	144	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	
STRUCTURE OVER 20 FOOT SPAN (SFN 8302945)												
							202	11202	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN	
							202	22900	97	SY	APPROACH SLAB REMOVED	
							202	23500	97	SY	WEARING COURSE REMOVED	
							203	35111	723	CY	GRANULAR MATERIAL, TYPE B, AS PER PLAN	41
							503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	40
							505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
							507	00600	1,190	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	
							507	00650	1,330	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	
							509	10000	90,968	LB	EPOXY COATED STEEL REINFORCEMENT	
							511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	
							511	43510	104	CY	CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING	
							511	53012	252	CY	CLASS QC2 CONCRETE, MISC.:MOMENT SLAB/PARAPET WITH QC/QA	41
							511	53014	213	CY	CLASS QC3 CONCRETE, MISC.:WITH QC/QA, BRIDGE DECK, AS PER PLAN	41
							511	53014	29	CY	CLASS QC3 CONCRETE, MISC.:WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN	41

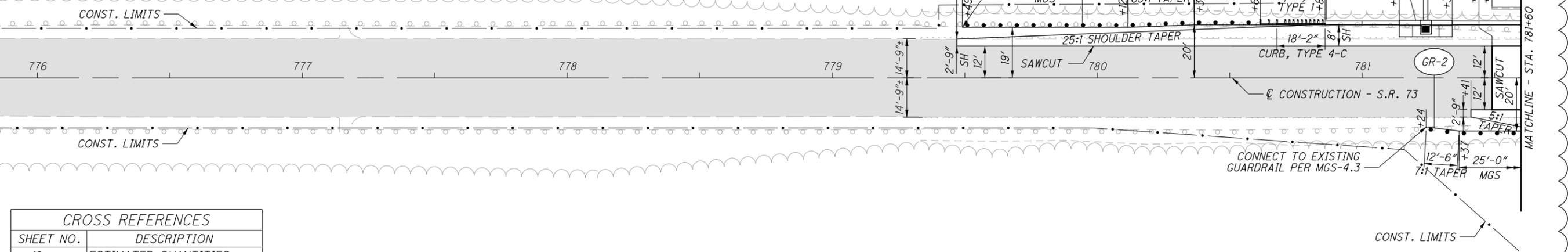
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D-1 INLET NO. 3, TYPE D
 GRATE ELEV. = 747.89
 15" INV. ELEV. = 742.89
 82' - 15", TYPE F, 707.05 TYPE C

BEGIN WORK
 STA. 772+37.00
 S.L.M. 13.20

BEGIN RESURFACING AT END OF FORWARD APPROACH
 SLAB OF WAR-73-1458 OVER LITTLE MIAMI RIVER.
 NOTE STA. 772+37.00 IS EQUAL TO STA. 109+60.25
 SHOWN ON SHEET 30.

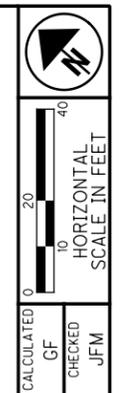
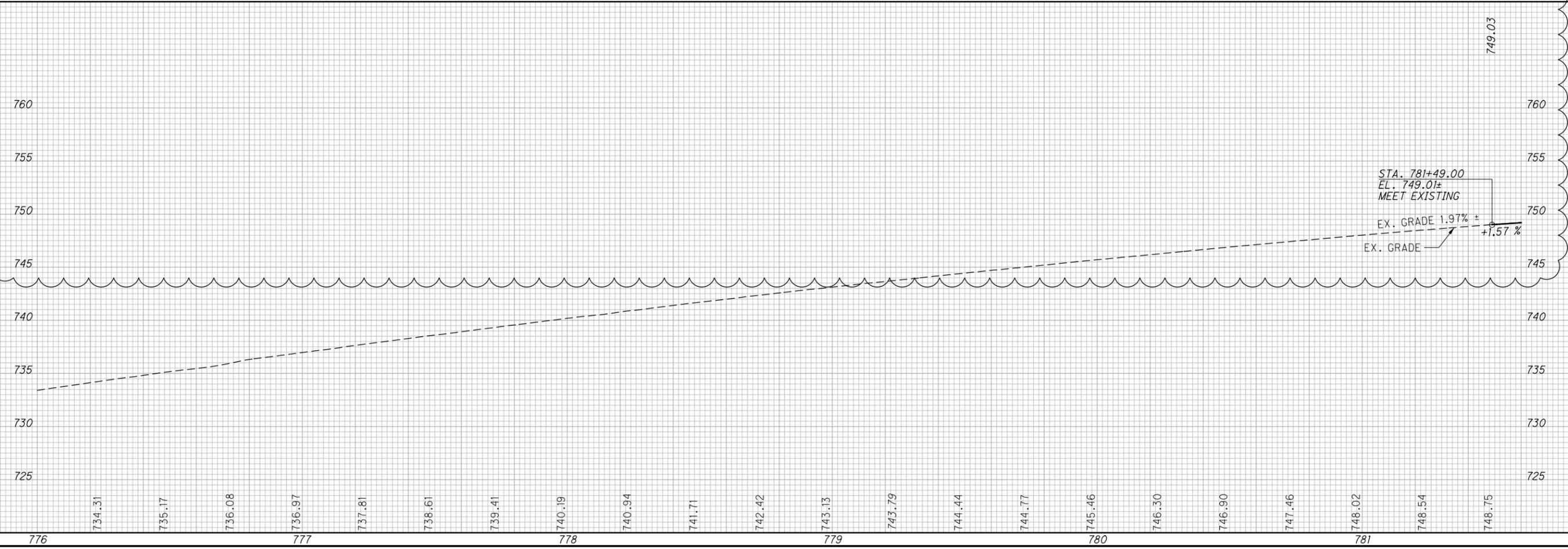
BEGIN PROJECT
 STA. 779+47.00
 S.L.M. 13.33



CROSS REFERENCES	
SHEET NO.	DESCRIPTION
16	ESTIMATED QUANTITIES
19 - 27	CROSS SECTIONS

RESURFACING AREA

NOTE
 SAWCUTS SHOWN IN PLANS SHALL BE TO A SOUND EDGE.

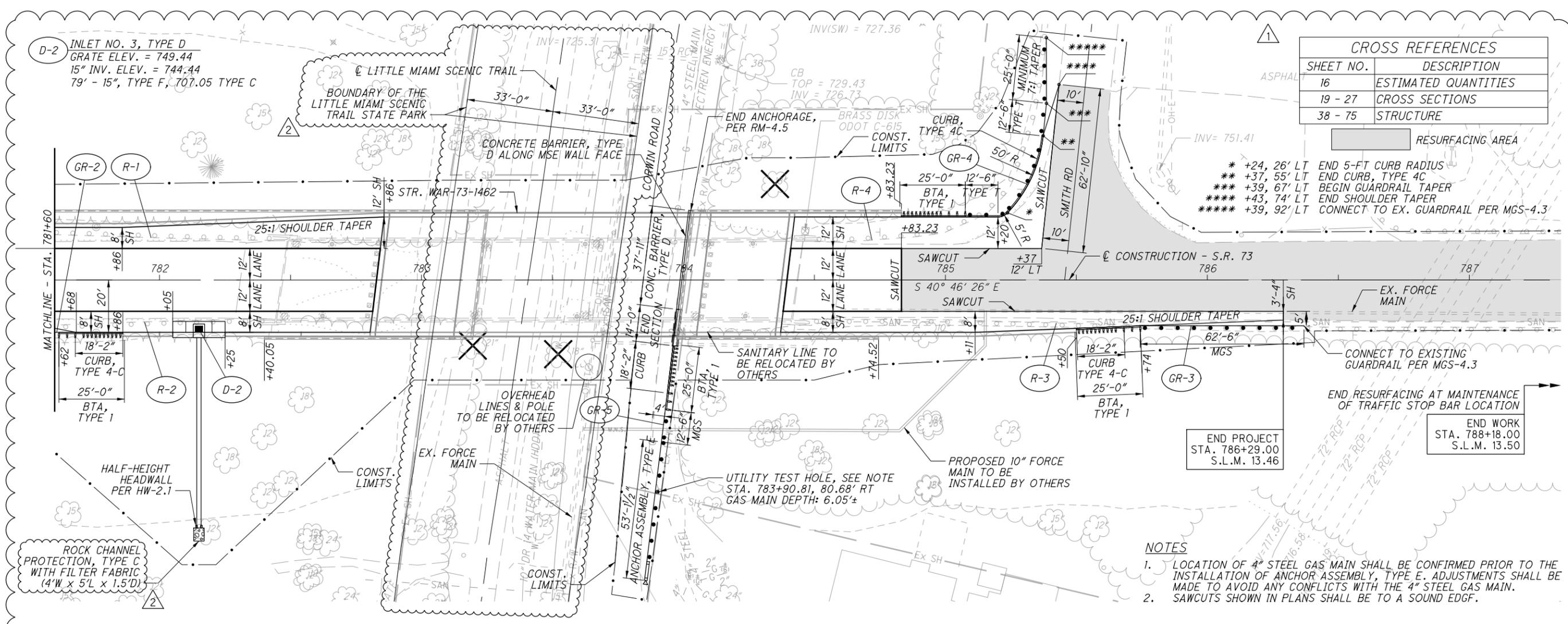


CALCULATED GF CHECKED JFM

PLAN AND PROFILE
STA. 776+00.00 TO STA. 781+60.00

WAR-73-14.58 / 14.62

ISSUE RECORD:	NO.	DATE	DESCRIPTION
	1	7/12/23	REVISED PROJECT LIMITS & ADDITIONS
	2	7/21/23	UPDATED RCP & TRAIL LIMITS

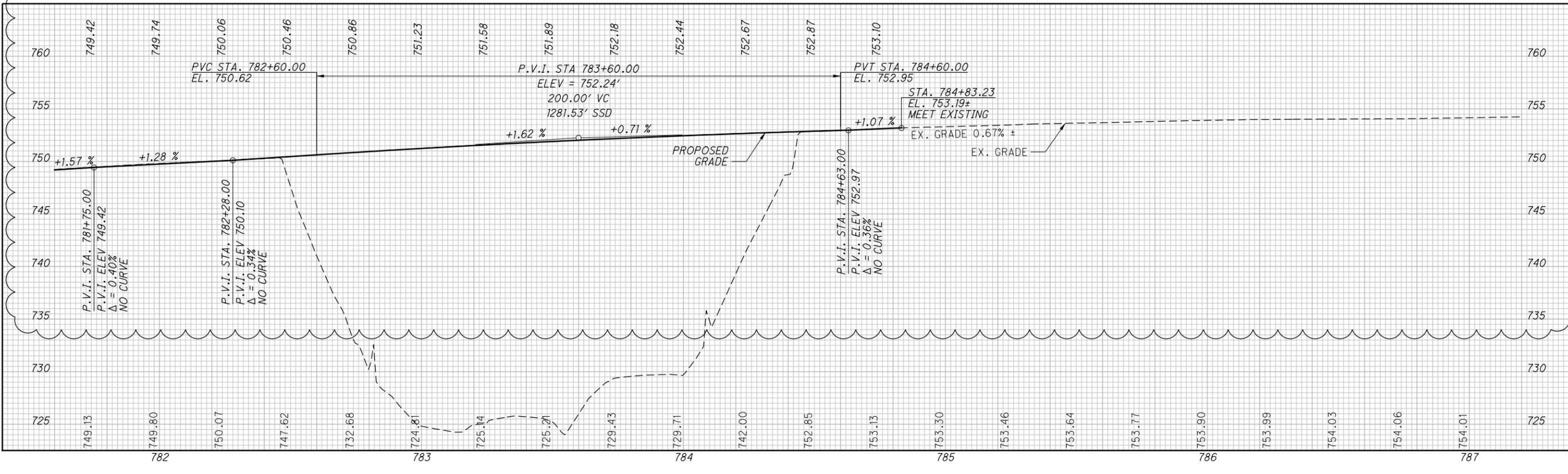


CROSS REFERENCES	
SHEET NO.	DESCRIPTION
16	ESTIMATED QUANTITIES
19 - 27	CROSS SECTIONS
38 - 75	STRUCTURE

- * +24, 26' LT END 5-FT CURB RADIUS
- ** +37, 55' LT END CURB, TYPE 4C
- *** +39, 67' LT BEGIN GUARDRAIL TAPER
- **** +43, 74' LT END SHOULDER TAPER
- ***** +39, 92' LT CONNECT TO EX. GUARDRAIL PER MGS-4.3

NOTES

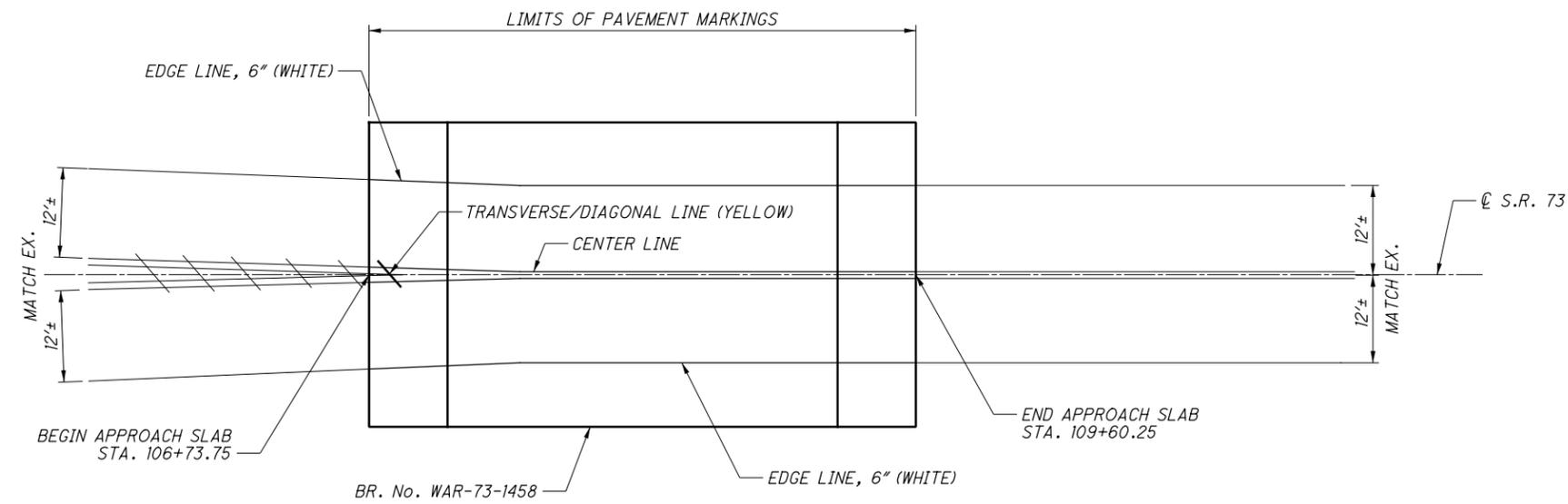
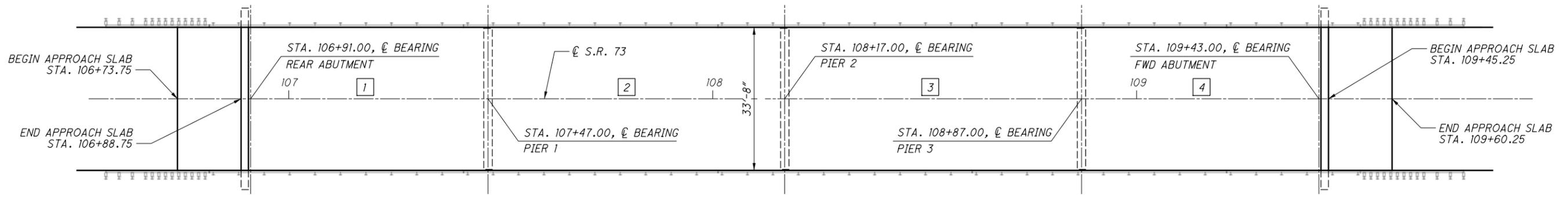
1. LOCATION OF 4" STEEL GAS MAIN SHALL BE CONFIRMED PRIOR TO THE INSTALLATION OF ANCHOR ASSEMBLY, TYPE E. ADJUSTMENTS SHALL BE MADE TO AVOID ANY CONFLICTS WITH THE 4" STEEL GAS MAIN.
2. SAWCUTS SHOWN IN PLANS SHALL BE TO A SOUND EDGE.



PARSONS
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ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/21/23	REVISED OVERLAY



LEGEND
 1 = SPAN NUMBER

NOTES:
 100 YEAR FLOOD ELEVATIONS:
 ELEV. 721.9 (UPSTREAM)
 ELEV. 721.3 (DOWNSTREAM)

EXISTING STRUCTURE DATA

SFN: 8302855
 TYPE: FOUR SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND CONCRETE SUBSTRUCTURE.
 SPANS: 56'+/-, 70'+/-, 70'+/-, 56' +/-, C/C BEARINGS
 ROADWAY: 33'-8" F/F RAILS
 LOADING: S-15
 WEARING SURFACE: CONCRETE OVERLAY
 APPR. SLABS: 15' LONG
 ALIGNMENT: TANGENT

PROPOSED STRUCTURE

PROPOSED WORK: REMOVE EXISTING 3" OVERLAY AND 1/2" ORIGINAL DECK AND REPLACE WITH 3 1/2" SUPERPLASTICIZED DENSE CONCRETE (SDC) OVERLAY ON DECK. REMOVE 1 3/4" OF EXISTING APPROACH SLABS AND REPLACE WITH 1 3/4" OF SUPERPLASTICIZED DENSE CONCRETE (SDC) OVERLAY. REPLACE ABUTMENT BEARINGS WITH NEW ELASTOMERIC BEARINGS. PATCH SUBSTRUCTURE WITH 519 PATCHING.

SFN: 8302855
 TYPE: FOUR SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND CONCRETE SUBSTRUCTURE.
 SPANS: 56'+/-, 70'+/-, 70'+/-, 56' +/-, C/C BEARINGS
 ROADWAY: 33'-8" F/F RAILS
 LOADING: HS-15
 WEARING SURFACE: 3 1/2" CONCRETE OVERLAY (MACRO-FIBERS)
 APPR. SLABS: 15' LONG
 ALIGNMENT: TANGENT

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 646	EDGE LINE, 6" (WHITE)	2(STA. 106+73.75 TO STA. 109+60.25) ÷ 5280	= 0.11 MILE
ITEM 646	CENTER LINE	(STA. 106+73.75 TO STA. 109+60.25) ÷ 5280	= 0.06 MILE
ITEM 646	TRANSVERSE/DIAGONAL LINE (YELLOW)	STA. 106+73.75 TO STA. 106+78.00	= 6 FEET

PARSONS
 100 East Campus View Boulevard, Suite 250
 Columbus, OH 43235

DATE: 1-20
 REVIEWED: RWB
 DRAWN: EMG
 DESIGNED: JRE
 CHECKED: JLW

WARREN COUNTY
 STA. 106+88.75
 STA. 109+45.25

SITE PLAN
 BRIDGE NO. WAR-73-1458
 S.R. 73 OVER LITTLE MIAMI RIVER

WAR-73-14.58 / 14.62
 PID No. 100827

1 / 8

30 / 81

GENERAL NOTES

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFERENCE SHALL BE MADE TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:
 800 DATED 04-21-23
 848 DATED 01-15-21

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN LOADING (ABUTMENT BEARINGS)

DESIGN LOADING: HL-93
 FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SF

DECK PROTECTION METHOD

SUPERPLASTICIZED DENSE CONCRETE OVERLAY

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UP, AS PER PLAN

ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06 TO THE ENGINEER. PROVIDE THE ENGINEER "AS-BUILT" DRAWINGS ACCORDING TO C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS ACCORDING TO S1002 TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: JACKING FRAME.

ITEM 516. JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

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 THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. 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.

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.

ITEM 848 SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN:

THIS ITEM SHALL CONFORM TO SS 848 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

THE OVERLAY MATERIAL SHALL MEET THE FOLLOWING CRITERIA:

MINIMUM 4 LBS/CY MACRO-SYNTHETIC FIBERS (1.5 IN. MIN. TO 2.25 IN. MAX.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

THE MACRO-SYNTHETIC FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, AND MACRO-SYNTHETIC FIBERS PRIOR TO THE ADDITION OF WATER AND ADMIXTURES. PROVIDE MACRO-SYNTHETIC FIBERS THAT ARE MONOFILAMENT FIBERS MADE FROM VIRGIN POLYPROPYLENE, POLYETHYLENE, OR CO-POLYMERS THAT ARE INERT TO ALKALI ATTACK. ENSURE THE MACRO-SYNTHETIC FIBERS HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI, A MINIMUM MODULUS OF ELASTICITY OF 800 KSI, A MINIMUM FILAMENT DIAMETER OF 0.012 INCHES, AND ASPECT RATIO BETWEEN 60 AND 100, AND ARE BETWEEN 1.5 AND 2.25 INCHES IN LENGTH. FIBERS WITH AN ASPECT RATIO GREATER THAN 60 REQUIRES A BLOWER TO INHIBIT BALLING AND MATTING OF FIBERS (ACI 544.3R-08). STORE THE MACRO-SYNTHETIC FIBERS ACCORDING TO THE MANUFACTURE'S RECOMMENDATION AND KEEP THE MATERIAL FREE FROM DUST, DIRT AND MOISTURE.

USE A MINIMUM DOSAGE RATE OF MACRO-SYNTHETIC FIBERS OF 4.0 LBS/CY OF CONCRETE. DETERMINE THE FINAL PROPOSED DOSAGE RATE THROUGH MIX TESTING. ENSURE THE FIBER REINFORCED CONCRETE MEETS OR EXCEEDS A MINIMUM EQUIVALENT FLEXURAL STRENGTH RATIO OF 25% ACCORDING TO ASTM C 1609. MACRO-SYNTHETIC FIBERS IS TO BE USED AS AN ADMIXTURE TO CONTROL CRACKING AND IS NOT TO BE USED TO SUPPLEMENT OR REPLACE REINFORCING STEEL IN THE DESIGN. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER. UTILIZE A LABORATORY REGULARLY INSPECTED BY THE CEMENT AND CONCRETE REFERENCE LABORATORY (CCRL) OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, OR OTHER APPROVED REFERENCE LABORATORY, TO PERFORM THE TESTING. BEFORE USE, SUBMIT DOCUMENTATION TO THE PROJECT ENGINEER CERTIFYING BOTH THE MACRO-SYNTHETIC FIBERS AND THE MIX MEET OR EXCEED THE REQUIRED PROPERTIES. SAMPLING WILL BE ALLOWED FOR TESTING PURPOSES. A DEMONSTRATION OF THE MIX PRODUCTION OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

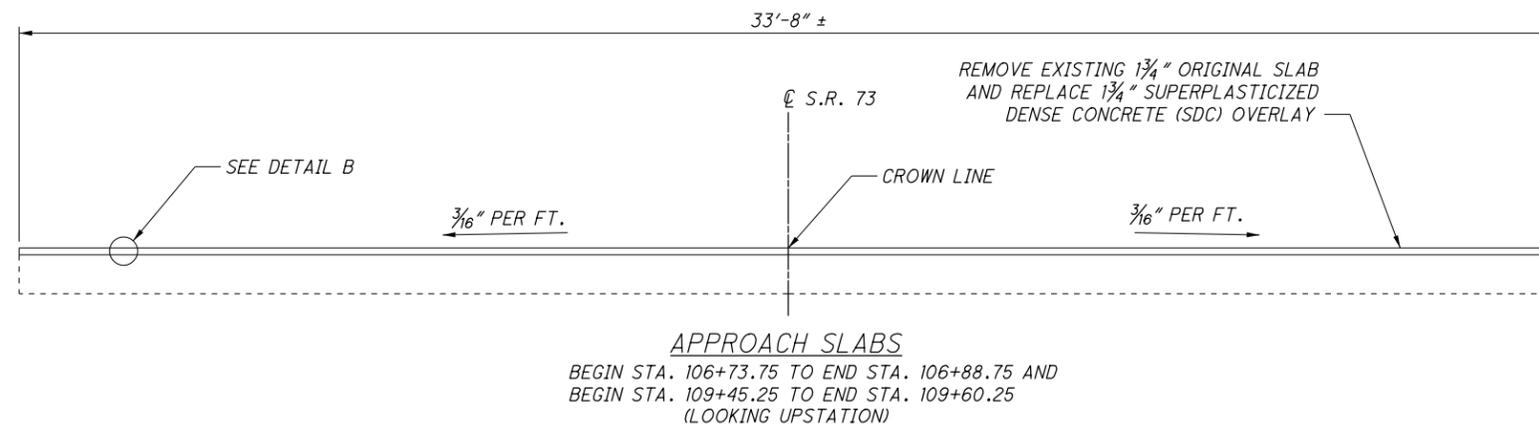
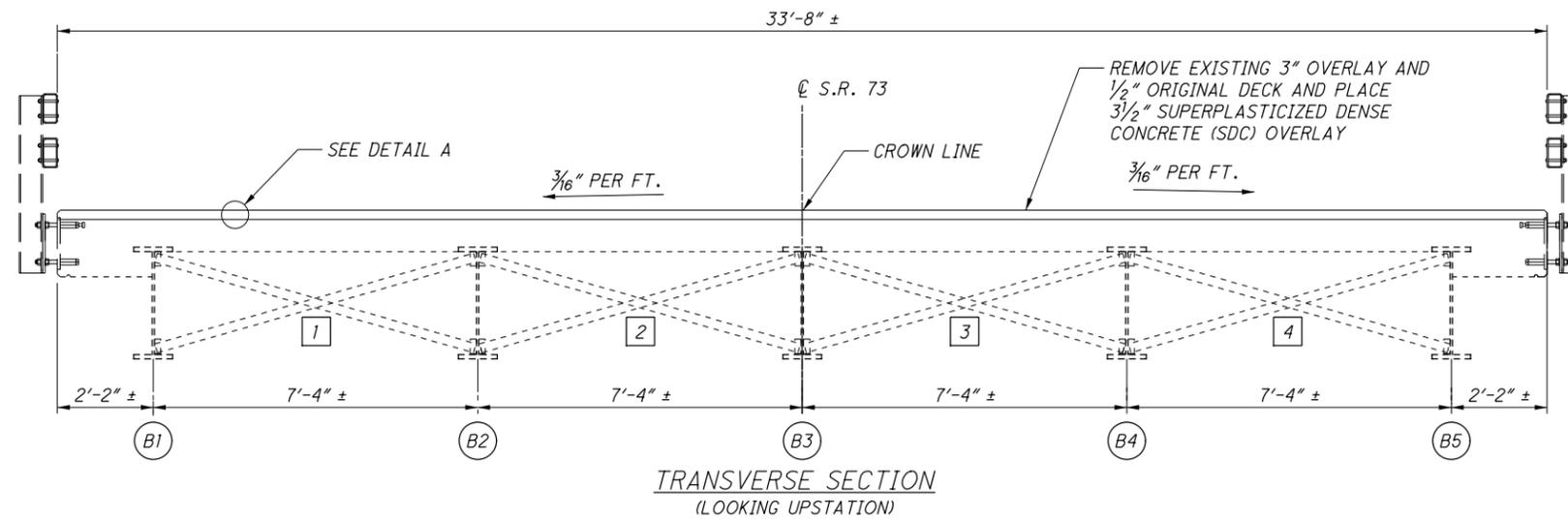
THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CONCRETE SUPPLIERS CHOICE OF ONE OF THESE ADMIXTURES DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS.

ISSUE RECORD:

NO.	DATE	DESCRIPTION
1	7/12/23	UPDATED QUANTITIES
2	7/21/23	REVISED OVERLAY AND JACKING FRAME ITEM

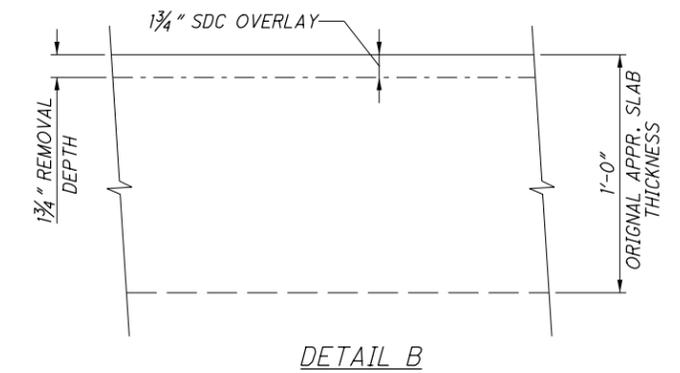
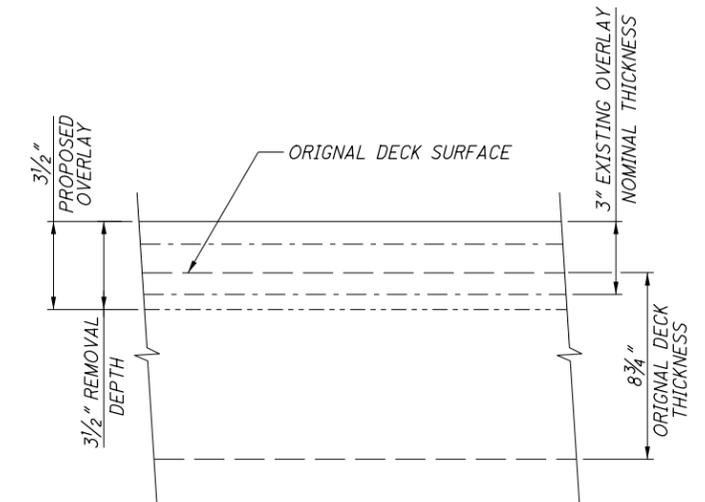
ESTIMATED QUANTITIES (02/NHS/13)										
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET	
512	10100	29	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	8	21				
512	74000	29	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	8	21				
513	10001	LS		STRUCTURAL STEEL MEMBERS, LEVEL UP, AS PER PLAN		LUMP			6/8	
516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 12" x 2.02" WITH 16.5" x 14.5" x 1.0" PLATE)			10		8/8	
516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LUMP	2/8	
519	11101	254	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	69	185			2/8	
848	10201	960	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 3.50" DECK)			960		2/8	
848	10201	112	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 1.75" APPR. SLAB)				112	2/8	
848	20000	1072	SY	SURFACE PREPARATION USING HYDRODEMOLITION			960	1		
848	30200	9	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			8	1		
848	50000	16	SY	HAND CHIPPING			14	2		
848	50100	LS		TEST SLAB				LUMP		
848	50320	960	SY	EXISTING CONCRETE OVERLAY REMOVED (THICKNESS 3.00")			960			
848	50340	144	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY			144			



ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/21/23	REVISED OVERLAY

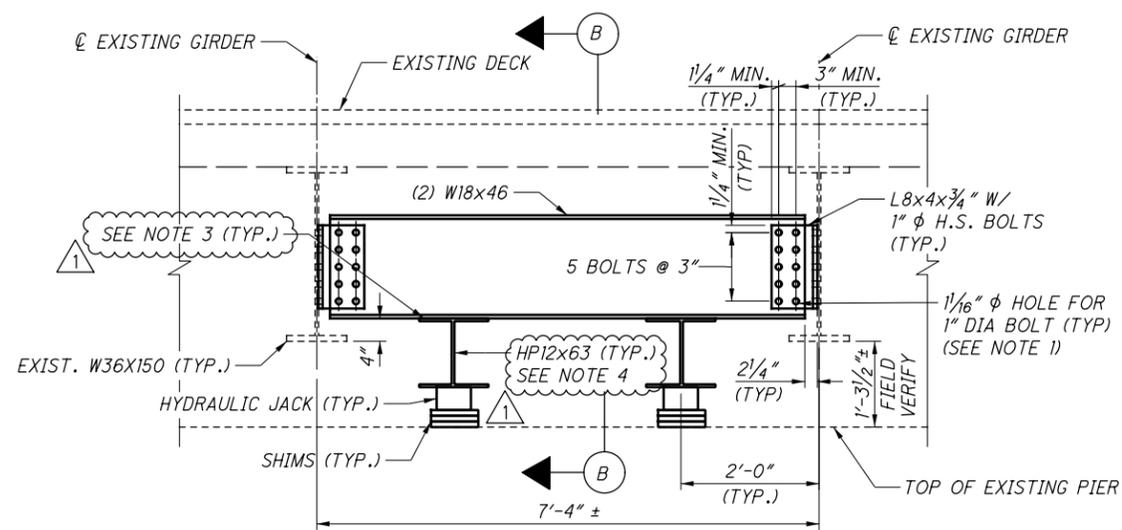
NOTES:

- CONTRACTOR SHALL PROTECT THE EXISTING EXPANSION JOINT GLAND AND JOINT ARMOR DURING THE REMOVAL OF EXISTING 3" DECK OVERLAY AND 1/2" OF APPROACH SLAB AND PLACEMENT OF NEW OVERLAY. ANY DAMAGE TO THE EXPANSION JOINT GLAND AND/OR EXPANSION JOINT ARMOR SHALL BE REPAIRED OR REPLACED AT NO EXPENSE TO THE DEPARTMENT.

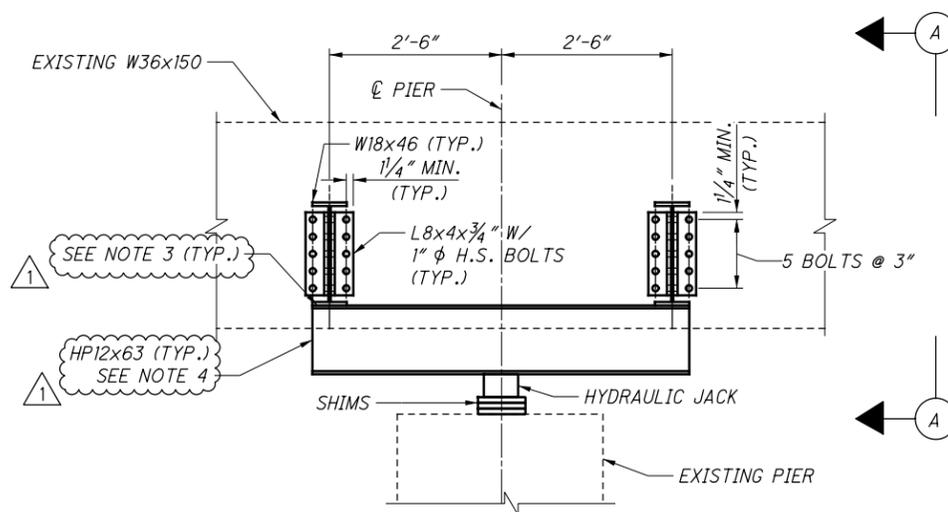


LEGEND

1 = BAY #



(A) JACKING FRAME ELEVATION
 (EXTERIOR BAY SHOWN, INTERIOR BAYS SIMILAR)



(B) SECTION

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	ADDED BOLT LOCATIONS AND NOTES
1	7/21/23	UPDATED NOTE 4

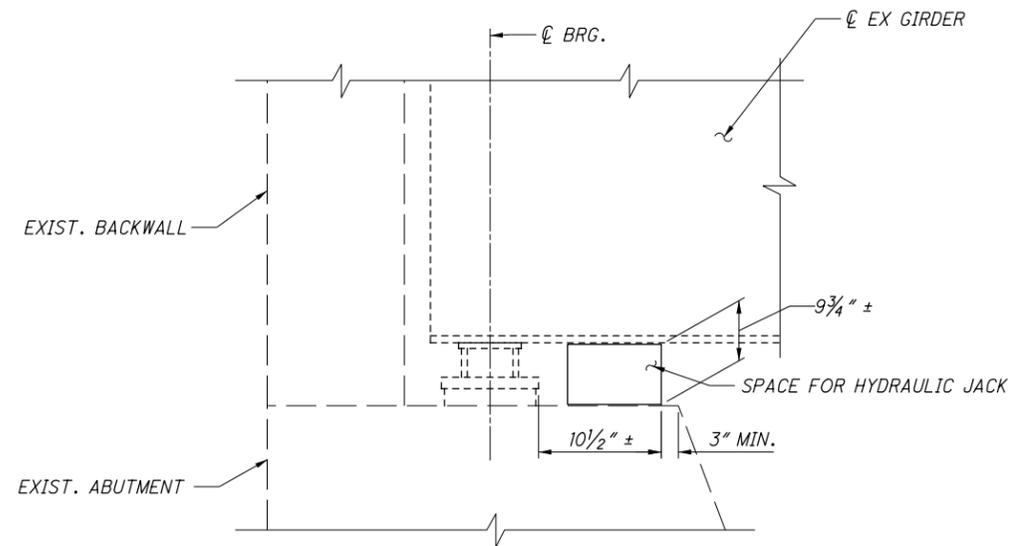
DESIGN LOAD		WEIGHT OF STEEL PER JACKING FRAME (LBS)
DL (KIPS)	LL+I (KIPS)	
57	57	1,467

NOTE: DESIGN LOADS ARE UNFACTORED AT EACH JACKING POINT.

NOTES:

- MATCH FIELD DRILL HOLES ARE REQUIRED ON ONE END OF THE W18x46 WEB TO ACCOUNT FOR FIELD CONDITIONS.
- SEE SHEET **7/8**, FOR NOTES.

- THE CONTRACTOR SHALL USE C CLAMPS TO TEMPORARILY FASTEN THE HP12x63 SUPPORTS TO THE W18x46 FRAME.
- THE HP12x63 SHALL BE REMOVED AT THE COMPLETION OF JACKING PROCEDURE. HP12x63 SHALL BE REMOVED BY AND REMAIN PROPERTY OF THE CONTRACTOR.



HYDRAULIC JACK AT ABUTMENTS
 CAPACITY OF JACK SHALL BE A MIN. OF 30 TONS

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	UPDATED NOTES
2	7/21/23	UPDATED NOTES

NOTES:

- ALL STEEL FOR JACKING FRAMES AND CONNECTIONS SHALL BE 50 KSI STEEL AND SHALL BE GALVANIZED PER C&MS 711.02.
- CONTRACTOR MAY USE SHIM PLATES AS NEEDED TO MAKE CONNECTION FIT UP.
- EXISTING CROSSFRAMES ADJACENT TO JACKING FRAMES MAY BE TEMPORARILY REMOVED AND REINSTALLED AT THE APPROVAL OF THE ENGINEER. ANY REMOVED CROSSFRAMES SHALL BE REINSTALLED BEFORE JACKING OPERATIONS MAY COMMENCE. THE COST OF REMOVING AND REINSTALLING ADJACENT EXISTING CROSSFRAMES SHALL BE INCIDENTAL TO ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UP, AS PER PLAN.
- ALL BOLTS SHALL BE 1" DIA A325, TYPE 1, HIGH STRENGTH. PROVIDE PER C&M 513.20. ALL HOLES SHALL BE 1 1/16" DIA. ALL BOLTS SHALL BE GALVANIZED PER C&MS 711.02.
- THE CONTRACTOR IS TO SUBMIT A JACKING PLAN TO THE ENGINEER PER C&MS 501.05. THE CONTRACTOR MAY SUBMIT AN ALTERNATE SEQUENCE OF CONSTRUCTION FOR APPROVAL.
- ALTERNATIVE PERMANENT JACKING FRAME DESIGNS CAN BE SUBMITTED AFTER SALE AND WILL FOLLOW THE VALUE ENGINEERING PROCESS.

SEQUENCE OF CONSTRUCTION:

WORKING ONE PIER AT A TIME:

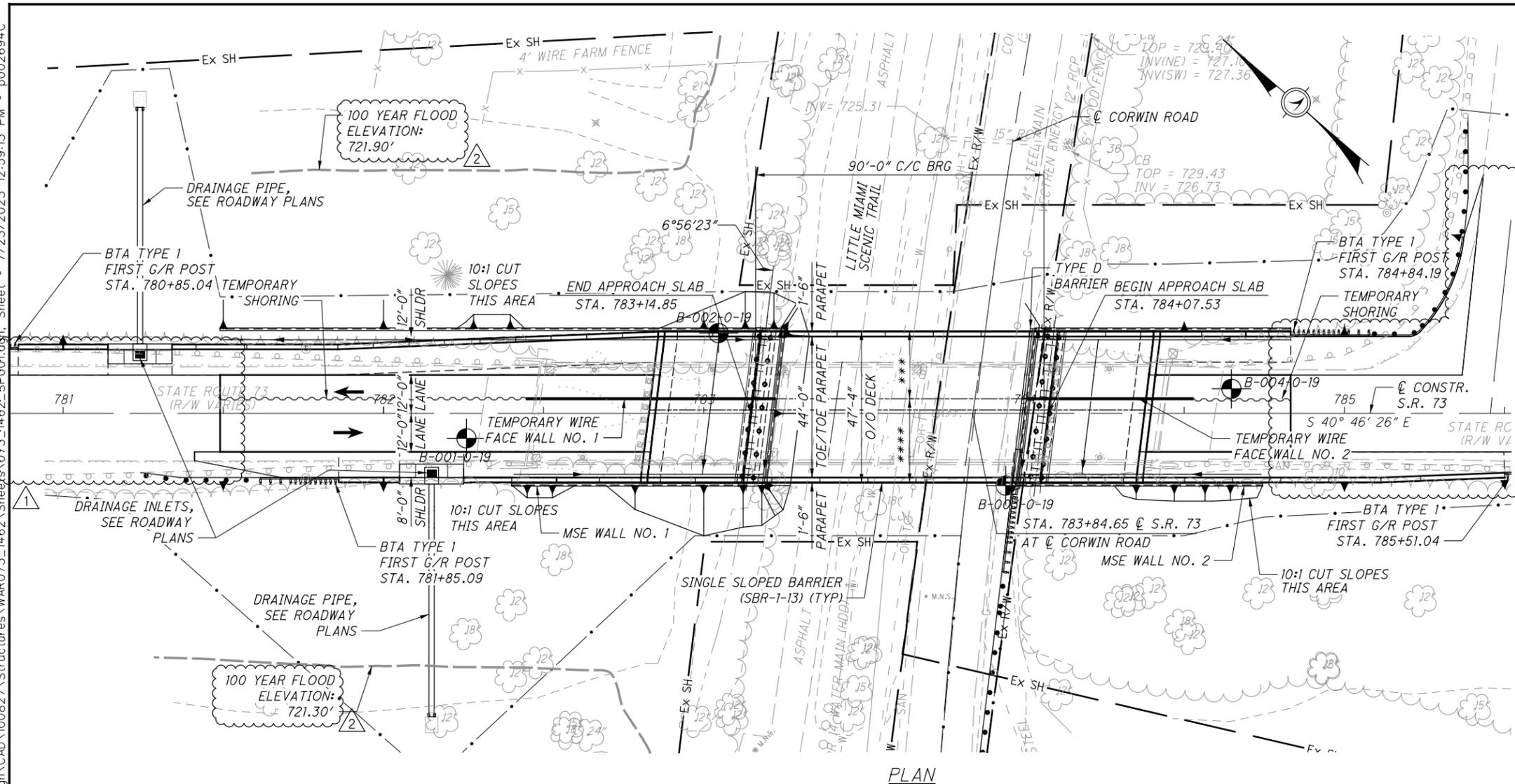
- REMOVE EXISTING CROSSFRAMES, AS REQUIRED. SEE NOTE 3 ABOVE.
- PREPARE SURFACE OF EXISTING BEAMS AT BOLTED CONNECTIONS TO PROVIDE CLASS A SLIP RESISTANCE (FAYING SURFACE).
- INSTALL PERMANENT JACKING FRAMES IN THE INTERIOR BAYS (1 AND 4) PER JACKING FRAME DETAILS.
- REPEAT STEPS 1-3 AT OTHER PIERS, ONE PIER AT A TIME, PRIOR TO PERFORMING ANY JACKING PROCEDURES.

SEE SHEET [6/8], FOR JACKING FRAME DETAILS.

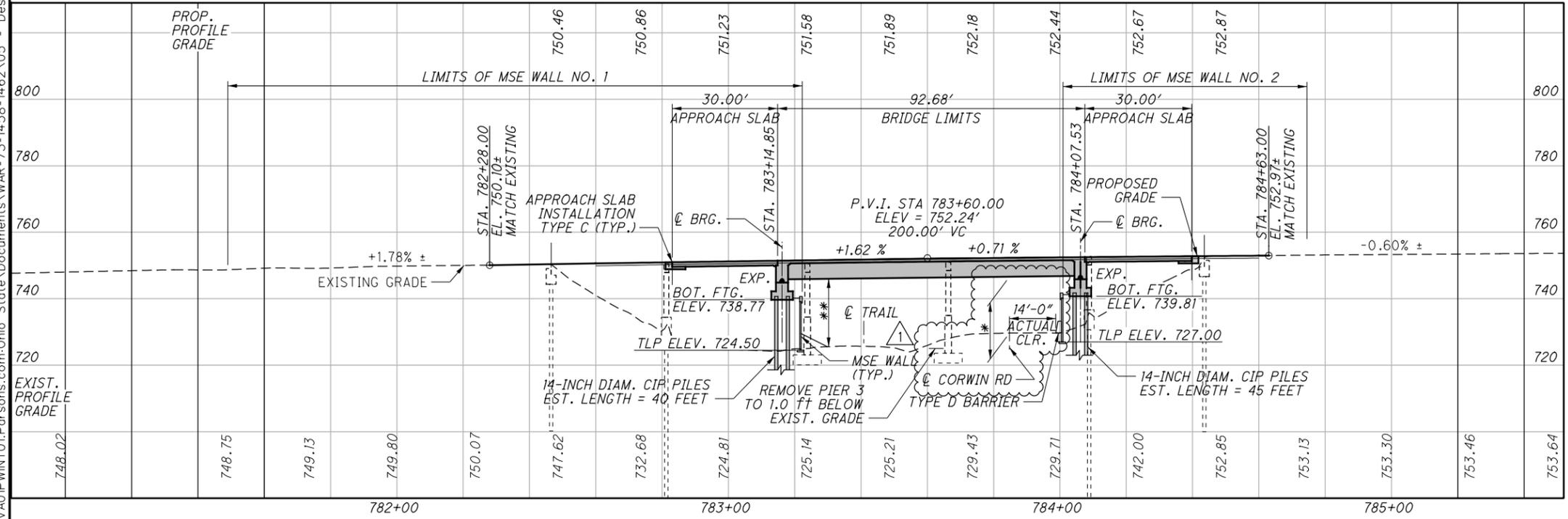
PARSONS 445 Hutchinsan Avenue, Suite 950 Columbus, OH 43235	DATE 1-20
	REVIEWED RWB
DRAWN MTW	STRUCTURE FILE NUMBER 8302855
DESIGNED JRE	CHECKED JLW
JACKING FRAME DETAILS - 2 BRIDGE NO. WAR-73-1458 OVER S.R. 73 OVER LITTLE MIAMI RIVER	
WAR-73-14.58 / 14.62 PID No. 100827	7 / 8
36 81	

PARSONS
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ISSUE RECORD	
NO.	DATE
1	7/12/23
2	7/21/23



PLAN



PROFILE

BENCHMARK DATA	
BM #1 STA. 784+46.45, ELEV. 753.11, OFFSET 18.61' LT, BRASS DISK-ODOT C-615	

NOTES
 EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS. ALL SLOPES ARE 2:1 UNLESS OTHERWISE NOTED

DESIGN TRAFFIC SR73:
 2022 ADT = 8,000 2022 ADTT = 480
 2042 ADT = 12,000 2042 ADTT = 720
 DIRECTIONAL DISTRIBUTION = 60%
 CORWIN RD. ADT = 191

LEGEND
 ◆ BORING LOCATION

* 14'-6" REQUIRED MINIMUM VERTICAL CLEARANCE - CORWIN ROAD
 17'-2" ACTUAL MINIMUM VERTICAL CLEARANCE - CORWIN ROAD

** 10'-0" REQUIRED MINIMUM VERTICAL CLEARANCE - TRAIL
 20'-7" ACTUAL MINIMUM VERTICAL CLEARANCE - TRAIL

*** STAGE 1 CONSTRUCTION
 **** STAGE 2 CONSTRUCTION

EXISTING STRUCTURE

TYPE: 5-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH REINFORCED CONCRETE SUBSTRUCTURE.

SPANS: 34'-0"±, 42'-6"±, 42'-6"±, 42'-6"±, 34'-0"± C/C BRG.
 ROADWAY: 28'-11"± F/F PARAPETS
 LOADING: HS-15
 SKEW: 08° 19' 30" LEFT FORWARD
 APPROACH SLABS: 15'-0" LONG
 ALIGNMENT: TANGENT
 WEARING SURFACE: 2 1/4" CONCRETE OVERLAY
 STRUCTURAL FILE NUMBER: 8302944
 DATE BUILT: 1952
 DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN PRESTRESSED CONCRETE I-BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON REINFORCED CONCRETE SEMI-INTEGRAL MSE ABUTMENTS ON PILE FOUNDATION

SPANS: 90'-0" C/C BRG.
 ROADWAY: 44'-0" TOE/TOE PARAPET
 LOADING: HL-93 AND 60PSF FUTURE WEARING SURFACE
 SKEW: 06° 56' 23" LEFT FORWARD
 WEARING SURFACE: 1" MONOLITHIC CONCRETE (MACRO-FIBERS)
 APPROACH SLABS: 30'-0" LONG (AS-1-15)
 ALIGNMENT: TANGENT
 CROWN: 0.16 FT/FT

COORDINATES: LATITUDE 39° 31' 21.00"
 LONGITUDE 84° 05' 05.68"

PARSONS
 100 East Campus View Boulevard, Suite 250
 Columbus, OH 43235

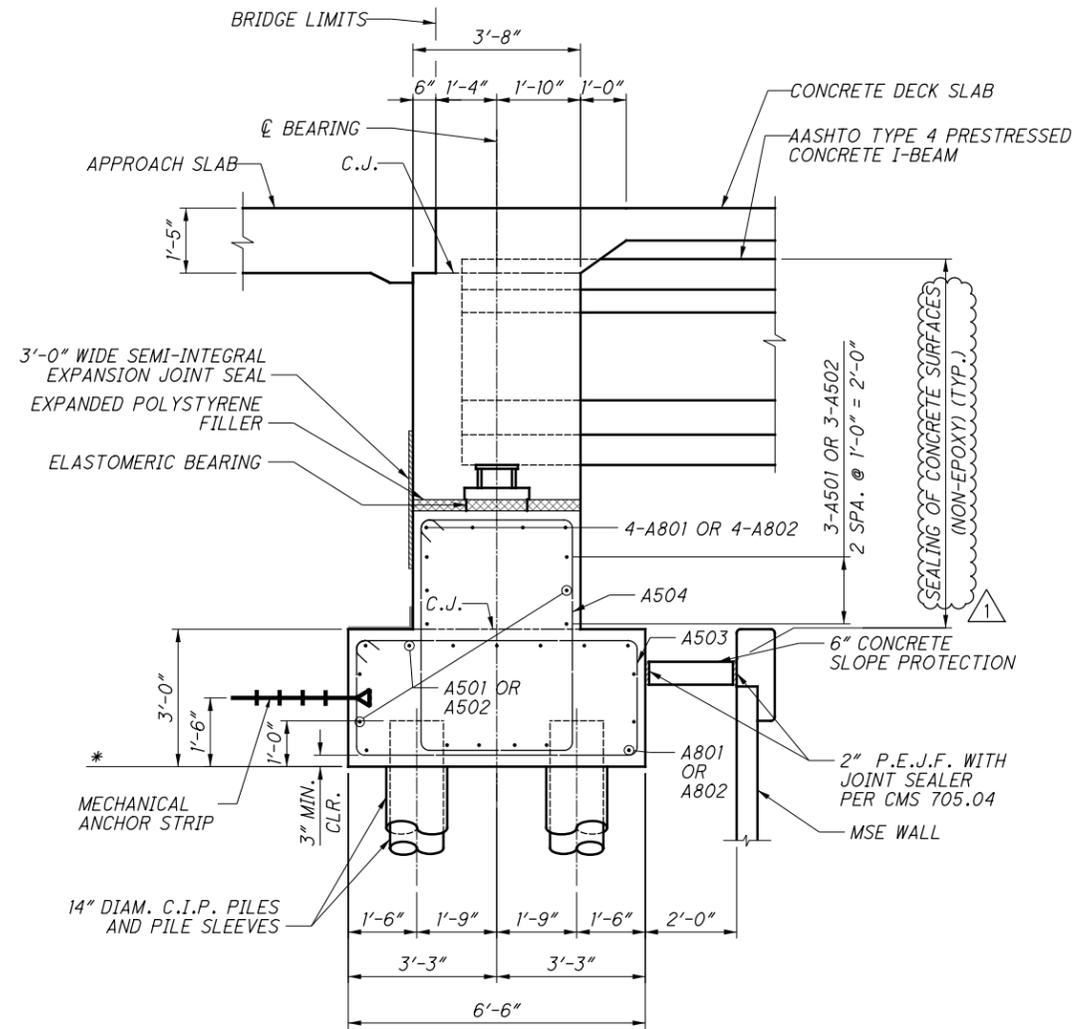
DATE: 1-20
 REVIEWED: RWB
 DRAWN: MTW
 DESIGNED: JRE
 CHECKED: JLW

WARREN COUNTY
 STA. 783+14.85
 STA. 784+07.53

SITE PLAN
 BRIDGE NO. WAR-73-1462
 S.R. 73 OVER CORWIN ROAD

WAR-73-14.58
 / 14.62
 PID No. 100827

1 / 38
 38
 81



SECTION A-A

* ELEV. 738.77 (REAR)
 ELEV. 739.81 (FORWARD)

NOTES:

- FOR MSE WALL DETAILS, SEE SHEETS 28/38 - 32/38.
- FOR END DIAPHRAGM DETAILS, SEE SHEET 17/38.
- THE PREFIX "RA" SHALL BEE ADDED TO ALL REINFORCING BAR MARKS IN THE REAR ABUTMENT. THE PREFIX "FA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE FORWARD ABUTMENT UNLESS OTHERWISE NOTED

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/21/23	UPDATED SEALING TYPE

DESIGNED	DRAWN	REVIEWED	DATE
JRE	EMG	RWB	1-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JLW		8302945	

ABUTMENT DETAILS
 BRIDGE NO. WAR-73-1462
 S.R. 73 OVER CORWIN ROAD

WAR-73-14.58
14.62
 PID No. 100827

