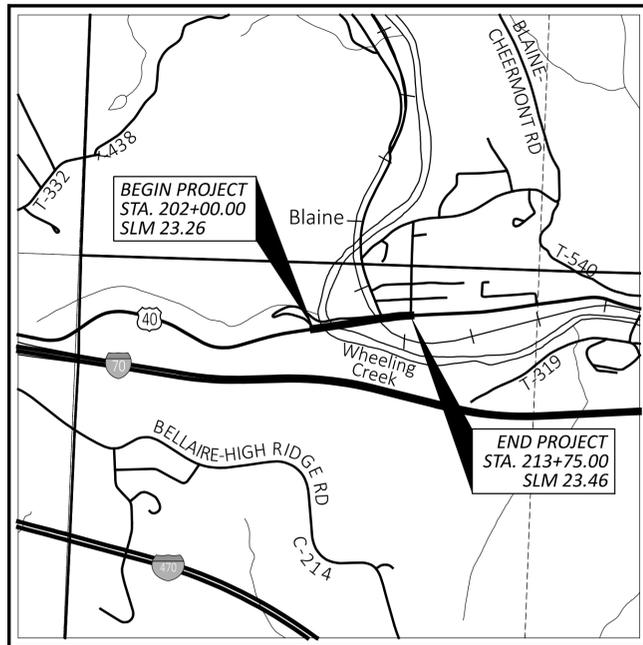


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BEL-40-23.26

PEASE TOWNSHIP
BELMONT COUNTY



LOCATION MAP

LATITUDE: N 40°04'00" LONGITUDE: W 80°49'15"



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

DESIGN DESIGNATION

CURRENT ADT (2026)	4,538
DESIGN YEAR ADT (2046)	4,538
TRUCKS (24 HOUR B&C)	11%
DESIGN SPEED	40 MPH
LEGAL SPEED	40 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	MINOR ARTERIAL (URBAN)
NHS PROJECT	NO

DESIGN EXCEPTIONS

DESIGN LOADING STRUCTURAL CAPACITY
APPROVED: 03/27/2025

ADA DESIGN WAIVERS

NONE REQUIRED

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:

Michael Baker
INTERNATIONAL

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FEDERAL PROJECT NUMBER

E230 (194)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

0.24 MILES OF WORK THAT INCLUDES US 40 BRIDGE OVER WHEELING CREEK SUPERSTRUCTURE REPLACEMENT, PARTIAL FLOORBEAM REPLACEMENTS, AND STRUCTURAL PATCHING, WITH MINOR PAVEMENT REPLACEMENT AND RESURFACING AT BOTH APPROACHES. WORK ALSO INCLUDES GUARDRAIL REPLACEMENT AND EROSION REMEDIATION ON WEST END OF BRIDGE APPROACH.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.4 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	1.0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	1.4 ACRES

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 ON SHEETS P.13 - P.15

Thomas D. Corey
District 11 Deputy Director

Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-2.2	1/15/21	EXJ-5-93	1/19/24	TC-42.20	10/18/13	800-2023	1/17/25	ASBESTOS REPORT	9/12/23
BP-2.3	7/18/14	PCB-91	7/17/20	TC-52.10	10/18/13	832	7/19/24		
		PSBD-2-07	7/20/18	TC-52.20	1/15/21	844	1/17/25	WATERWAY PERMIT	
CB-6	7/19/24	SBR-3-20	7/19/24			902	7/19/19	CONDITIONS	4/17/25
DM-1.1	1/17/25	MT-96.11	7/21/23						
DM-1.2	1/17/25	MT-96.20	1/17/25						
DM-2.1	1/18/13	MT-96.26	1/17/25						
DM-4.3	1/15/16	MT-97.10	4/19/19						
DM-4.4	1/15/16	MT-101.60	1/17/25						
		MT-101.70	7/19/24						
A-1-20	7/19/24	MT-101.90	7/17/20						
AS-1-15	1/20/23	MT-102.10	7/21/23						
AS-2-15	7/21/23								
BD-1-11	7/20/18	TC-41.20	10/18/13						
BR-2-15	7/19/24	TC-41.30	4/21/23						

<p>ENGINEER'S SEAL</p> <p>BRIDGE</p>	<p>ENGINEER'S SEAL</p> <p>ROADWAY</p>
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TITLE SHEET

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER
CRK

REVIEWER
GSH 03/07/25

PROJECT ID
114388

SHEET	TOTAL
P.01	P.182

BEL-40-23.26

MODEL: Sheet PAPER: 34x22 (in.) DATE: 4/17/2025 TIME: 1:33:15 PM USER: Gregory.Hertler p:\vmb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District11\114388\400-Engineering\Roadway\Sheets\114388_GT001.dgn

MAINTENANCE OF TRAFFIC (CONT.)

ADVANCE WORK ZONE INFORMATION

ADVANCE WORK ZONE INFORMATION SIGNS, AS USED IN THIS NOTE, ARE FIXED MESSAGE TYPES. THE SIGNS ARE TO BE LOCATED AT EXTREME DISTANCE FROM THE WORK AREA, AS SHOWN IN THE PLANS.

THE SIGNS SHALL BE BLACK ON ORANGE (INCLUDING A BLACK BORDER). THE LAYOUT SHALL BE IN CONFORMANCE WITH TEM CHAPTER 211.

WHEN REGULATORY INFORMATION IS PROVIDED, IT SHALL BE DISPLAYED SEPARATELY AS A STANDARD BLACK-ON-WHITE SIGN. MIXING OF BLACK-ON WHITE REGULATORY INFORMATION ON A BLACK-ON-ORANGE INFORMATION SIGN IS PROHIBITED.

IF THE MOTORIST IS BEING DETOURED OR IF AN ALTERNATE ROUTE IS PROVIDED, THE ROUTE SHOULD BE SIGNED WITH ASSEMBLIES CONSISTING OF THE APPROPRIATE BLACK-ON-ORANGE DETOUR OR ALT MARKER WITH A STANDARD ROUTE MARKER AND ARROW PLATE. IF MORE TARGET VALUE IS DESIRED, THIS TRAIL BLAZER INFORMATION MAY BE SHOWN ON AN ORANGE PANEL (OMUTCD SECTION 2D.32).

ROUTE SIGN ASSEMBLIES SHALL BE SIZED ACCORDING TO THE TYPE OF ROAD ON WHICH THEY ARE LOCATED IN ACCORDANCE WITH THE OMUTCD.

SUPPORTS FOR SIGN INSTALLATIONS SHALL CONFORM TO ALL EXISTING STANDARDS FOR PERMANENT SIGNS. THESE SIGNS SHOULD NOT BE ATTACHED TO EXISTING SUPPORTS.

WHERE THE PLANS CALL FOR AN OVERLAY TO COVER A PORTION OF AN EXISTING SIGN, THE OVERLAY SHALL BE BLACK-ON-ORANGE. LETTER SIZES SHOULD BE THE SAME AS ON THE EXISTING SIGNS. WHEN LANE ARROWS ARE TO BE COVERED, A BLANK OVERLAY SHOULD BE PLACED OVER EACH OF THE AFFECTED ARROWS. WHEN A RAMP IS BEING CLOSED, RATHER THAN USING A BLANK OVERLAY TO COVER THE ENTIRE SIGN, THE LEGEND "EXIT CLOSED" (W20-H15) SHOULD BE USED ON A DIAGONAL OVERLAY (LOWER LEFT TO UPPER RIGHT) ON THE SIGN. THE SIZE OF LETTERING ON OVERLAYS AND THE SIZE OF THE OVERLAY ARE INDICATED IN THE PLANS. THE MINIMUM LETTER SIZE FOR THE DIAGONAL "EXIT CLOSED" (W20-H15) OVERLAY SHALL BE 12" C.

ALL ADVANCE WORK ZONE INFORMATION SIGN INSTALLATIONS LOCATED OUTSIDE OF THE PROJECT WORK LIMITS SHALL BE PAID FOR UNDER LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

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 OR PERMANENT BARRIER (INCLUDING BRIDGE PARAPETS) CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

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

- ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE WAY) 123 EACH**
- ITEM 614- OBJECT MARKER, ONE WAY 123 EACH**

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

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 OF TRAFFIC RESTRICTIONS TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	≥ 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	≤ 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
		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.

BEL-40 CRITICAL DATES

BEL-40 OPEN TO TRAFFIC LUMP SUM INCENTIVE - SPECIAL

THE CONTRACTOR WILL RECEIVE A LUMP SUM INCENTIVE OF \$100,000 FOR COMPLETING THE BEL-40 OPEN TO TRAFFIC CRITICAL WORK BY MAY 1, 2026 (REFERRED TO AS THE BEL-40 OPEN TO TRAFFIC DATE).

"BEL-40 OPEN TO TRAFFIC CRITICAL WORK" IS DEFINED AS HAVING TWO (2) 11-FOOT LANES OPEN TO TRAFFIC - ONE LANE IN EACH DIRECTION - WITH TEMPORARY CONCRETE BARRIERS, TEMPORARY PAVEMENT MARKINGS, AND INSTALLED SAFETY FEATURES.

THE LUMP SUM INCENTIVE WILL DECREASE BY \$3,333.33 FOR EACH CALENDAR DAY THE BEL-40 OPEN TO TRAFFIC CRITICAL WORK IS NOT COMPLETED, UNTIL THE INCENTIVE AMOUNT REACHES ZERO.

IF THE CONTRACTOR RECEIVES THE LUMP SUM INCENTIVE (OR ANY PORTION THEREOF) AND SUBSEQUENTLY IMPEDES THE FLOW OF TRAFFIC, A PENALTY OF \$3,000 WILL BE ASSESSED FOR EACH DAY TRAFFIC IS IMPEDED.

THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE OF \$5,000 PER CALENDAR DAY THE BEL-40 OPEN TO TRAFFIC CRITICAL WORK IS NOT COMPLETED AFTER JULY 1, 2026.

EXTENSIONS OF TIME FOR THE COMPLETION OF THE BEL-40 OPEN TO TRAFFIC CRITICAL WORK WILL BE GRANTED ON A CALENDAR-DAY BASIS AND CALCULATED IN ACCORDANCE WITH C&MS 108.06 EXCEPT AS MODIFIED BY THE BEL-40 TIME EXTENSION C&MS MODIFICATIONS.

FINAL COMPLETION DATE - SPECIAL

FINAL COMPLETION DATE SHALL BE OCTOBER 31, 2026. THE CONTRACTOR SHALL COMPLETE ALL WORK BY THIS DATE.

EXTENSIONS OF TIME WILL BE GRANTED ON A CALENDAR DAY BASIS AND CALCULATED IN ACCORDANCE WITH C&MS 108.06, EXCEPT AS MODIFIED BY THE BEL-40 TIME EXTENSION C&MS MODIFICATIONS.

LIQUIDATED DAMAGES WILL BE ASSESSED IN ACCORDANCE WITH C&MS 108.07.

BEL-40 TIME EXTENSION C&MS MODIFICATIONS

FROM CONTRACT EXECUTION UNTIL THE BEL-40 OPEN TO TRAFFIC CRITICAL WORK IS ACHIEVED, EXTENSIONS OF TIME WILL BE CALCULATED IN ACCORDANCE WITH C&MS 108.06, EXCEPT AS MODIFIED BELOW. ONCE THE BEL-40 OPEN TO TRAFFIC CRITICAL WORK IS ACHIEVED, EXTENSIONS OF TIME WILL BE CALCULATED IN ACCORDANCE WITH UNMODIFIED C&MS 108.06.

108.06.A 4TH PARAGRAPH SHALL BE REVISED AS FOLLOWS:

TIME EXTENSIONS FOR THE BEL-40 OPEN TO TRAFFIC DATE AND FINAL COMPLETION DATE (COLLECTIVELY KNOWN AS THE CRITICAL DATES) WILL BE GRANTED IN CALENDAR DAYS. TIME EXTENSIONS FOR THE CRITICAL DATES WILL BE DETERMINED BY MULTIPLYING THE DEMONSTRATED NUMBER OF WORKDAY DELAY DAYS IMPACTING THE CRITICAL DATES (EXCLUDING NON-WORK PERIODS) BY:

- 1.4 FOR A 5-DAY WORK WEEK OR LESS
- 1.2 FOR A 6-DAY WORK WEEK
- 1.0 FOR A 7-DAY WORK WEEK

THE RESULTING CALENDAR DAYS, PLUS ANY HOLIDAYS THE CONTRACTOR DOES NOT NORMALLY WORK DURING THE EXTENSION IMPACT PERIOD, WILL BE ADDED TO THE CRITICAL DATE(S). IF THE CONVERSION OF WORKDAYS TO CALENDAR DAYS RESULTS IN A DECIMAL OF 0.5 OR GREATER, THE ENGINEER WILL ROUND THE NUMBER OF CALENDAR DAYS TO THE NEXT HIGHEST WHOLE NUMBER. IF THE CONVERSION RESULTS IN A DECIMAL LESS THAN 0.5, THE ENGINEER WILL DISREGARD THE DECIMAL PORTION OF THE CALENDAR DAYS. THE ADDITIONAL CALENDAR DAYS WILL BE ADDED TO THE CRITICAL DATE(S) ON A DAY-FOR-DAY BASIS, REGARDLESS OF ANY NON-WORK PERIODS INDICATED IN THE CONTRACTOR'S SCHEDULE, OR ANY CPM SCHEDULE CALCULATED DATES IN THE CONTRACTOR'S SCHEDULE, OR ANY TIME-IMPACT ANALYSIS SCHEDULE.

108.06.C (EXTENSION TO THE COMPLETION DATE FOR WEATHER OR SEASONAL CONDITIONS) SHALL BE REVISED AS FOLLOWS:

A WEATHER DAY IS DEFINED AS A WORKDAY WHERE WEATHER OR SEASONAL CONDITIONS REDUCE PRODUCTION BY MORE THAN 50 PERCENT ON CRITICAL PATH ITEMS OF WORK. THE CONTRACTOR MUST SUBMIT THE DATES AND NUMBER OF WEATHER DAYS TO THE ENGINEER IN WRITING WITHIN TWO (2) WORKING DAYS OF OCCURRENCE. IF THE CONTRACTOR FAILS TO SUBMIT THE WEATHER DAYS WITHIN THE REQUIRED TIME FRAME, THE ENGINEER WILL DETERMINE THE DATES AND NUMBER OF WEATHER DAYS BASED ON PROJECT RECORDS.

DELAYS CAUSED BY WEATHER AND SEASONAL CONDITIONS SHOULD BE ANTICIPATED. EXTENSIONS WILL BE CONSIDERED FOR WORK ON THE CRITICAL PATH, PROVIDED THAT THE ACTUAL WORKDAYS LOST EXCEED SIXTY (60) CUMULATIVE WORKDAYS.

WEEKENDS AND HOLIDAYS WILL NOT BE CONSIDERED LOST WORKDAYS UNLESS THE CONTRACTOR NORMALLY WORKS THOSE DAYS OR THE ENGINEER DIRECTS THE CONTRACTOR TO WORK THOSE DAYS.

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER
RBK

REVIEWER
GSH 03/07/25

PROJECT ID
114388

SHEET TOTAL
P.10 P.182

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN (FLOORBEAM)

CAST-IN-PLACE OR PRECAST FLOORBEAMS ARE ACCEPTABLE FOR THIS ITEM.

PRECAST FLOORBEAMS SHALL MEET ALL REQUIREMENTS OF ITEM 515 EXCEPT SUPPLEMENT 1079 MAY BE WAIVED.

POLYMER CONCRETE USED FOR LEVELING COLUMN SEATS SHALL BE A PRE-PACKAGED POLYMER CONCRETE SUCH AS:

1. EMACO 2020 AS MANUFACTURED BY MASTER BUILDERS, INC. 23700 CHAGRIN BLVD., CLEVELAND OHIO 44122
2. FX-826, POLYMER CONCRETE AS MANUFACTURED BY FOX INDUSTRIES, INC. 3100 FALLS CLIFF ROAD, BALTIMORE, MD, 21211
3. POLYQUICK FASTPATCH 5000 AS MANUFACTURED BY WILLIAMETTE VALLEY COMPANY, 1075 ARROWSMITH STREET, EUGENE, OR 97402.
4. OR APPROVED EQUAL

SURFACE PREPARATION, MIXING AND PLACING SHALL BE DONE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS. POLYMER CONCRETE SHALL BE EXTENDED BY THE INCLUSION OF ADDITIONAL AGGREGATE TO THE LIMITS RECOMMENDED BY THE MANUFACTURER. SUCH AGGREGATE SHALL CONFORM TO ALL RECOMMENDATIONS OF THE POLYMER CONCRETE MANUFACTURER. POLYMER CONCRETE SHALL BE USED BETWEEN THE PRECAST CONCRETE FLOORBEAM AND THE EXISTING SPANDREL COLUMN AT THE LOCATIONS SHOWN IN THE PLANS. THE EXISTING CONCRETE BEARING SURFACE SHALL BE INSPECTED AND DETERIORATED CONCRETE SHALL BE REMOVED PRIOR TO PLACING POLYMER CONCRETE.

MEASUREMENT AND PAYMENT: POLYMER CONCRETE SHALL NOT BE MEASURED FOR PAYMENT. ALL COST ASSOCIATED WITH POLYMER CONCRETE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN (FLOORBEAMS) FOR PAYMENT, WHICH SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED TO PERFORM POLYMER CONCRETE WORK TO THE LIMITS SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER.

ITEM 516 - ELASTOMERIC BEARING PAD, MISC.: 2" x 6" PLAIN ELASTOMERIC PAD

THIS ITEM OF WORK SHALL INCLUDE FURNISHING AND PLACING THE PLAIN ELASTOMERIC BEARING PAD AS PER THE PLAN DETAILS AND C&MS 516. PADS SHALL BE INSTALLED AT PIER 1 AS SHOWN IN THE PLANS. THE OVERALL LENGTH OF THE BEARING STRIPS, AS MEASURED ALONG THE @ BEARING SHALL BE AS SHOWN IN THE PLANS. BEARING STRIPS MAY BE PLACED IN INDIVIDUAL ABUTTING SECTIONS OF 18" MINIMUM LENGTHS.

THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARING PADS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.

PAYMENT WILL BE BASED ON THE OVERALL LENGTH OF BEARING STRIP PLACED AND ACCEPTED BY THE ENGINEER.

ITEM 516 - ELASTOMERIC BEARING PAD, MISC.: 16" x 18" PLAIN ELASTOMERIC PAD

THIS ITEM OF WORK SHALL INCLUDE FURNISHING AND PLACING THE PLAIN ELASTOMERIC BEARING PAD AS PER THE PLAN DETAILS AND C&MS 516. PADS SHALL BE INSTALLED AT EXISTING RETAINING WALL MOMENT SLAB INTERFACES AS SHOWN IN THE PLANS.

THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARING PADS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.

PAYMENT WILL BE BASED ON THE OVERALL LENGTH OF BEARING STRIP PLACED AND ACCEPTED BY THE ENGINEER.

BEARING PAD SHIMS:

PLACE 1/8" THICK PREFORMED BEARING PAD SHIMS, PLAN AREA 11 INCHES BY 7 INCHES, UNDER THE ELASTOMERIC BEARING PADS WHERE REQUIRED FOR PROPER BEARING. FURNISH TWO SHIMS PER BEAM. THE DEPARTMENT WILL MEASURE THIS ITEM BY THE TOTAL NUMBER SUPPLIED. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516 - 1/8" PREFORMED BEARING PADS. ANY UNUSED SHIMS WILL BECOME THE PROPERTY OF THE STATE.

ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM

PERFORM ALL WORK PER PN 519 07/21/2017 - COMPOSITE FIBER WRAP SYSTEM AND PER THE MANUFACTURER'S REQUIREMENTS. REMOVAL OF ALL EXISTING BOND-INHIBITING MATERIALS, INCLUDING EXISTING CONCRETE SEALER, IS CONSIDERED INCIDENTAL TO THIS ITEM.

COATING SYSTEM APPLICATION: A FINAL URETHANE TOP COATING IS REQUIRED. THE URETHANE TOP COAT SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM FOR PAYMENT.

**ITEM SPECIAL - PATCHING CONCRETE STRUCTURES: TYPE 1 REPAIR
 ITEM SPECIAL - PATCHING CONCRETE STRUCTURES: TYPE 2 REPAIR**

TYPE 1 REPAIRS CONSIST OF CONCRETE PATCHING TO ALL VERTICAL AND HORIZONTAL TOP SURFACES. TYPE 2 REPAIRS CONSIST OF ALL CONCRETE PATCHING TO ALL HORIZONTAL BOTTOM SURFACES.

THIS ITEM OF WORK SHALL BE PER ITEM 519 WITH THE FOLLOWING MODIFICATIONS:

- IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.
- PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.
- ALL CONCRETE REPAIRS REQUIRE 3/4" SAW CUTS ALONG THE LIMITS OF REMOVAL BEFORE CHIPPING. WELDED WIRE FABRIC SHALL BE USED ON HORIZONTAL SURFACES AS SHOWN IN THE DETAILS. CONCRETE PATCHING AREAS MUST BE INSPECTED AFTER SAW CUTTING AND AGAIN AFTER DETERIORATED CONCRETE IS REMOVED.
- FOR TYPE 2 REPAIRS, SUBMIT CONCRETE PUMPING PROCEDURE FOR APPROVAL PRIOR TO STARTING WORK AND ORDERING MATERIAL. SUBMIT ANY CHANGES IN CONCRETE MIX DESIGN WITH SMALL AGGREGATE FOR PUMPING PROCEDURE FOR APPROVAL PRIOR TO STARTING WORK.
- SUBMIT FORM WORK AND PUMPING PROCEDURE FOR CONCRETE PATCHING FOR APPROVAL PRIOR TO STARTING WORK. THIS SUBMISSION SHALL INCLUDE STEPS FOR INSTALLATION OF FORMS, PUMPING PATCHING MATERIAL, REMOVAL OF FORM WORK AND METHOD IN PREVENTING VOIDS WITHIN THE PATCHING AREAS. FINISHED PATCHING MUST BE INSPECTED FOR SURFACE PROFILE AND QUALITY OF PATCH WITHOUT VOIDS IN THE CONCRETE PATCHES.

ITEM SPECIAL 530E00200 - STRUCTURE MISC.: ARCH SPANS ERECTION ENGINEERING

THIS ITEM INCLUDES THE PREPARATION AND SUBMITTAL OF ENGINEERED DRAWINGS FOR ERECTION OF PRECAST BOX BEAM SUPERSTRUCTURE ACROSS THE ARCH SPANS. IF ELECTING TO USE THE CONCEPTUAL ARCH SPANS SUPERSTRUCTURE CONSTRUCTION SEQUENCE SHOWN ON THE PLANS, ASCERTAIN FOR YOURSELF THE PRACTICALITY THEREOF AND ASSUME COMPLETE RESPONSIBILITY FOR THE MEANS AND METHODS, DETAILED ANALYSIS OF THE STRUCTURE AND ENGINEERED DRAWINGS. IN ADDITION TO THE REQUIREMENTS OF 501.05B, INCLUDE THE FOLLOWING:
 ERECTION SEQUENCE FOR THE ARCH SPAN, INCLUDING EQUIPMENT LOADS AND LOCATION PLACED ON THE STRUCTURE AND TEMPORARY WORKS TO SUPPORT, BRACE, AND/OR PROTECT STRUCTURE COMPONENTS. PROVIDE DETAILED CALCULATIONS TO SUPPORT THE ENGINEERED DRAWINGS. DESIGN AN ERECTION SEQUENCE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. EVALUATE THE EXISTING ARCH SPANS (STRESSES AND DEFORMATIONS) DURING EACH CONSTRUCTION PHASE FOR THE NEW PRECAST BOX BEAM SUPERSTRUCTURE. BASIS OF PAYMENT: PAYMENT IS FULL COMPENSATION FOR DESIGN, PREPARATION AND SUBMITTAL OF ENGINEERED DRAWINGS. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE, LUMP SUM, FOR ITEM 530E00200 - STRUCTURE, MISC.: ARCH SPANS ERECTION ENGINEERING.

ITEM 601 - DUMPED ROCK FILL, TYPE C, AS PER PLAN

PLACED FIVE (5) FOOT DIAMETER AREA OF DUMPED ROCK CENTERED BELOW EACH OF THE EIGHT SCUPPERS, AS DIRECTED BY ENGINEER. INCLUDED FOR PAYMENT WITH ITEM 601 - DUMPED ROCK FILL, TYPE C, AS PER PLAN.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

PROVIDE CONSTRUCTION SURVEY OF EXISTING ELEMENTS DESCRIBED ON SHEET 26 / 126 AND 85 / 126 .

STENCIL FLOORBEAM NUMBER AT BOTTOM FACE OF ALL EXISTING AND PROPOSED FLOORBEAMS AS DIRECTED BY THE ENGINEER.

INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS FOR THIS WORK WITH ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN FOR PAYMENT.

ABBREVIATIONS

- BOT. = BOTTOM
- BRGS. = BEARINGS
- C.J. = CONSTRUCTION JOINT
- CLR. = CLEAR
- CONST. = CONSTRUCTION
- DIA. = DIAMETER
- E.F. = EACH FACE
- ELEV. = ELEVATION
- EX. = EXISTING
- F.A. = FORWARD ABUTMENT
- F.F. = FAR FACE
- HORIZ. = HORIZONTAL
- I.R. = INTERSTATE ROUTE
- LT = LEFT
- MAX. = MAXIMUM
- MIN. = MINIMUM
- N.F. = NEAR FACE
- PR. = PROPOSED
- R.A. = REAR ABUTMENT
- RT = RIGHT
- SER. = SERIES
- S.O. = SERIES OF
- SPA. = SPACED / SPACING / SPACES
- S.R. = STATE ROUTE
- TYP. = TYPICAL
- U.N.O. = UNLESS NOTED OTHERWISE
- VERT. = VERTICAL
- W.P. = WORK POINT
- W.W. = WING WALL

SECTION / DETAIL / VIEW CALLOUTS



(SEE SECTION A ON SHEET 10)



(SECTION A CUT FROM SHEET 9)

SFN 0701599	
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER CDC	CHECKER ETB
REVIEWER JWB 03/07/25	
PROJECT ID 114388	
SUBSET 5	TOTAL 126
SHEET P.61	TOTAL P.182

ESTIMATED QUANTITIES

CALCULATED BY: CDC DATE: 03/07/25
 CHECKED BY: KAG DATE: 03/07/25

PARTICIPATION	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	SHEET REF.
01/BRO/13	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	4
01/BRO/13	202	22900	184	SY	APPROACH SLAB REMOVED				184	
01/BRO/13	503	21301	LS		UNCLASSIFIED EXCAVATION, AS PER PLAN				LS	4
01/BRO/13	509	10000	323,582	LB	EPOXY COATED STEEL REINFORCEMENT	4,601	2,717	268,410	47,854	
01/BRO/13	509	20001	500	LB	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN				500	4
01/BRO/13	509	27000	16,475	LB	CHROMIUM STEEL REINFORCEMENT			16,475		
01/BRO/13	509	30020	11,611	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			9,155	2,456	
01/BRO/13	510	10000	112	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	112				
01/BRO/13	511	31612	713	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			713		
01/BRO/13	511	33412	44	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE			44		
01/BRO/13	511	34413	138	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN (FLOORBEAM)			138		5
01/BRO/13	511	41510	66	CY	CLASS QC1 CONCRETE, PIER ABOVE FOOTINGS		66			
01/BRO/13	511	44110	23	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	23				
01/BRO/13	511	51512	99	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK			99		
01/BRO/13	511	53010	140	CY	CLASS QC1 CONCRETE, MISC.: MOMENT SLAB				140	122
01/BRO/13	511	53012	274	CY	CLASS QC2 CONCRETE, MISC.: BRIDGE DECK (PARAPET) WITH MACRO-SYNTHETIC FIBERS			214	60	4
01/BRO/13	512	10050	435	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			435		
01/BRO/13	512	10100	12,574	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	884	2,503	8,954	233	
01/BRO/13	512	10600	793	FT	CONCRETE REPAIR BY EPOXY INJECTION		699	6	88	
01/BRO/13	515	12000	26	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-36 (14.00 FT LENGTH)			26		
01/BRO/13	515	12000	3	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-36 (14.25 FT LENGTH)			3		
01/BRO/13	515	12000	2	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-36 (16.25 FT LENGTH)			2		
01/BRO/13	515	12000	3	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-36 (20.25 FT LENGTH)			3		
01/BRO/13	515	12010	20	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-48 (14.00 FT LENGTH)			20		
01/BRO/13	515	12010	260	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-48 (14.25 FT LENGTH)			260		
01/BRO/13	515	12010	30	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-48 (16.25 FT LENGTH)			30		
01/BRO/13	515	12010	30	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB12-48 (20.25 FT LENGTH)			30		
01/BRO/13	515	12040	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36 (31.23 FT LENGTH)			1		
01/BRO/13	515	12040	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36 (33.17 FT LENGTH)			1		
01/BRO/13	515	12040	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36 (37.15 FT LENGTH)			1		
01/BRO/13	515	12040	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36 (44.09 FT LENGTH)			1		
01/BRO/13	515	12040	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36 (45.40 FT LENGTH)			1		
01/BRO/13	515	12040	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-36 (46.17 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (23.50 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (24.17 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (25.99 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (27.81 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (29.25 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (29.52 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (29.64 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (30.47 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (31.41 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (32.34 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (32.82 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (34.00 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (34.65 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (34.94 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (35.88 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (36.47 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (36.82 FT LENGTH)			1		
01/BRO/13	515	12050	8	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (37.15 FT LENGTH)			8		
01/BRO/13	515	12050	3	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (37.25 FT LENGTH)			3		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (38.29 FT LENGTH)			1		
01/BRO/13	515	12050	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (39.00 FT LENGTH)			1		

ESTIMATED QUANTITIES (1 OF 2)

BEL-40-23.265

U.S. 40 OVER WHEELING CREEK, C.R. 10 AND ABANDONED R.R.

SFN	0701599
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER	CDC
CHECKER	KAG
REVIEWER	JWB 03/07/25
PROJECT ID	114388
SUBSET	6
TOTAL	126
SHEET	P.62
TOTAL	P.182