

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-15	DATED/REVISED: 01/20/2023
AS-2-15	DATED/REVISED: 07/21/2023
DS-1-92	DATED/REVISED: 07/15/2022
HL-50.21	DATED/REVISED: 01/16/2026
PSBD-1-25	DATED/REVISED: 01/16/2026
SICD-1-21	DATED/REVISED: 01/19/2024
TST-2-21	DATED/REVISED: 01/17/2025

AND SUPPLEMENTAL SPECIFICATIONS:

800	DATED/REVISED: 01/16/2026
832	DATED/REVISED: 07/18/2025

REFERENCE

EXISTING BRIDGE PLANS MAY BE INSPECTED AND ARE PROVIDED WITH THIS PROJECT'S BIDDING DOCUMENTS.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 10TH EDITION, AND THE ODOT BRIDGE DESIGN MANUAL, JANUARY 2025.

DESIGN LOADING

VEHICULAR LIVE LOAD: HL-93
 FUTURE WEARING SURFACE (FWS) OF 60 LBS./SQ. FT.

DESIGN DATA

CONCRETE, CLASS QC1 (SUBSTRUCTURE)
 - COMPRESSIVE STRENGTH = 4.0 KSI
 CONCRETE, CLASS QC2 (SUPERSTRUCTURE, BRIDGE DECK)
 - COMPRESSIVE STRENGTH = 4.5 KSI
 REINFORCING STEEL - ASTM A615 OR A996, GRADE 60
 - MINIMUM YIELD STRENGTH = 60 KSI

PRESTRESSED CONCRETE BOX BEAM DESIGN

PRESTRESSED CONCRETE:
 - F'c = 7,000 PSI (28-DAY/FINAL)
 - F'ci = 5,000 PSI (INITIAL RELEASE)
 CAST-IN-PLACE CONCRETE:
 - F'c = 4,500 PSI
 REINFORCING STEEL:
 - MIN. YIELD STRENGTH = 60,000 PSI
 - ALL REINFORCING STEEL IN THE COMPOSITE SLAB AND BARS PROJECTING FROM THE PRESTRESSED BOX BEAMS SHALL CONFORM TO CMS 709.00.
 PRESTRESSING STRAND:
 - FURNISH MATERIAL CONFORMING TO C&MS 711.27 (ASTM A416), GRADE 270, LOW RELAXATION, UNCOATED SEVEN WIRE STRAND. STRANDS SHALL BE 0.5 INCH DIAMETER WITH A TOTAL CROSS-SECTIONAL AREA OF 0.167 SQ. IN.

DECK PROTECTION METHOD

GALVANIZED REINFORCING STEEL
 2 1/2" CONCRETE COVER
 STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

REMOVALS OVER WATER

REASONABLE CARE SHOULD BE USED WHEN REMOVING MATERIAL OVER WATER. ANY MATERIAL DROPPED SHALL BE IMMEDIATELY REMOVED FROM THE WATER AND DISPOSED OF AWAY FROM THE SITE EXCEPT FOR MASONRY MATERIAL WHICH MAY BE USED FOR BANK PROTECTION AS APPROVED BY THE ENGINEER.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, SUBSTRUCTURE

THIS WORK CONSISTS OF THE REMOVAL OF THE EXISTING ABUTMENTS AS INDICATED IN THE PLANS AND THAT ARE NOT SEPERATELY LISTED FOR PAYMENT. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

ALL CONCRETE SHALL BE REMOVED BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMER WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVALS WITHIN 18 INCHES OF PORTIONS OF THE STRUCTURE TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

CUT LINE CONSTRUCTION JOINT PREPARATION:

FOR PROPOSED SUBSTRUCTURE REMOVALS SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL IN PLACE IF REQUIRED BY THE PLANS. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND RUST. THOROUGHLY CLEAN JOINT SURFACE OF ALL DIRT, DUST, RUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK RUST AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING MATERIALS FROM BEHIND THE EXISTING BACKWALL IN ORDER TO PERFORM ITEM 202 PORTIONS OF STRUCTURE REMOVED, AS PER PLAN. LIMITS OF THIS EXCAVATION SHALL BE BETWEEN THE ENDS OF THE PROPOSED WINGWALLS AND EXTENDING TO THE CONTRACTOR'S EXCAVATION LIMITS UNDERNEATH THE PROPOSED APPROACH SLABS AS DETAILED.

THE BACKFILL MATERIAL FOR EXCAVATION BEHIND THE ABUTMENTS AND UNDER THE APPROACH SLABS SHALL BE LOW STRENGTH MORTAR BACKFILL (LSM) TYPE 1. LSM TYPE 1 SHALL CONFORM TO CMS SECTION 613. IT MAY ALSO BE USED TO CONSTRUCT THE SLOPES IN THE APPROACH SLAB AREA AS LONG AS IT IS COVERED WITH AT LEAST ONE FOOT OF SOIL TO MATCH THE PROPOSED GRADE. THE POROUS BACKFILL AREA BEHIND THE PROPOSED ABUTMENTS SHALL BE FORMED PRIOR TO PLACING THE LSM, AND GEOTEXTILE FABRIC SHALL BE PLACED AFTER THE LSM HAS CURED AND FORMS HAVE BEEN REMOVED.

PAYMENT FOR THE LUMP SUM BID FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO PERFORM THE WORK OUTLINED ABOVE.

ITEM 515 - PRESTRESSED COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48, AS PER PLAN (LENGTH = 53'-3")

THE DISTRICT WILL FURNISH THE PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS. THE PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS WILL BE AVAILABLE FOR DELIVERY AFTER **AUGUST 1, 2026** UPON PROPER NOTIFICATION. THE BEAMS MUST BE INSTALLED BY **AUGUST 31, 2026**. THE CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLATION AND ALL ITEMS BELOW RELATED TO INSTALLATION.

THE BOX BEAMS WILL BE MANUFACTURED BY CXT INCORPORATED, AN L.B. FOSTER COMPANY OUT OF WILLIAMSTOWN, WEST VIRGINIA.

CONTACT INFO:
 BRANDON KRING, PROJECT MANAGER
 304-850-6307
 bkring@lbfoster.com

THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWENTY-ONE (21) DAYS ADVANCE NOTICE TO THE MANUFACTURER PRIOR TO DELIVERY OF THE PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS TO PROVIDE THE MANUFACTURER TIME TO SCHEDULE THE DELIVERY.

THOUGH THE PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS ARE SET UP FOR INSTALLATION ONLY, THE CONTRACTOR IS STILL RESPONSIBLE FOR VERIFYING THE CAMBER OF EACH BEAM PRIOR TO SHIPMENT AS PER CMS 515.18. THE CONTRACTOR SHALL VERIFY THE BEAM CAMBER PRIOR TO POURING THE ABUTMENT BEAM SEATS IN CASE ADJUSTMENTS ARE NEEDED DUE TO THE CAMBER BEING ABOVE OR BELOW THE DESIRED CAMBER (DI).

FILL UNDER APPROACH SLABS

ITEM 304, AGGREGATE BASE SHALL BE USED TO BRING THE SUBBASE TO GRADE FOR THE NEW APPROACH SLABS AS DETAILED ON THE APPROACH SLAB DETAIL SHEETS AND SHALL EXTEND 1'-6" ON BOTH SIDES OF EACH APPROACH SLAB.

ABUTMENT CONCRETE

DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT UNTIL THE PRESTRESSED CONCRETE BOX BEAMS HAVE BEEN ERECTED.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN

FURNISH APPROACH SLABS CONFORMING TO CMS 526. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, CURBS, REINFORCING STEEL, JOINT FILLERS, JOINT SEALS, WATERPROOFING, AND ANY OTHER INCIDENTALS SHOWN ON THE APPROACH SLAB DETAIL SHEETS. THE DEPARTMENT WILL MEASURE APPROACH SLABS BY THE NUMBER OF SQUARE YARDS.

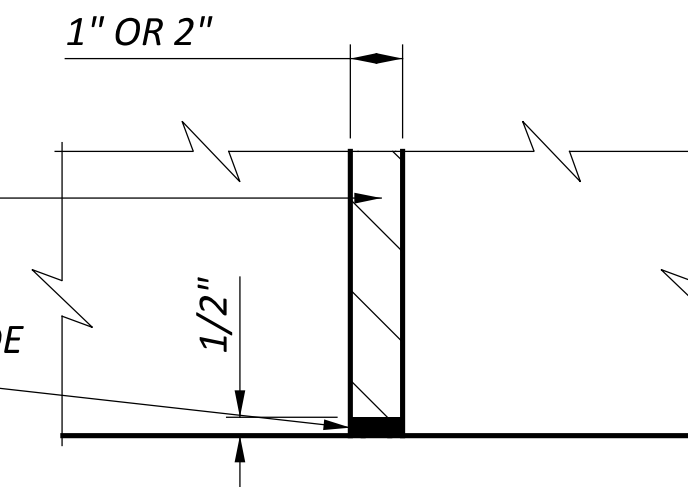
ITEM 516 - 1/2", 1", OR 2" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN

ALL 1" & 2" P.E.J.F. CALLED FOR IN THE PLANS SHALL BE NOMAFLEX EXPANSION JOINT FILLER. RECESS JOINT FILLER 1/2" FOR ALL JOINTS (SEE DETAIL). THE "NOMAFLEX CUTTER" IS A RECOMMENDED REMOVAL METHOD TO ACHIEVE 1/2" RECESS. SEAL ALL JOINTS WITH DECK-O-SEAL GUN GRADE JOINT SEALANT OR AN APPROVED EQUAL. THE COLOR SHALL BE STONE GRAY. APPROVED MANUFACTURER'S APPLICATION METHODS SHALL BE FOLLOWED DURING SURFACE PREPARATION AND APPLICATION FOR MAXIMUM EFFECTIVENESS.

NOMACO HEADQUARTERS & MANUFACTURING FACILITY
 501 INNOVATIVE WAY
 ZEBULON, NC 27597
<https://www.nomaco.com/product/nomaflex/>

DECK-O-SEAL 1" OR 2" PREFORMED
 P.O. BOX 397 EXPANSION JOINT FILLER
 HAMPSHIRE, IL 60140
 PHONE: 800-542-7665

1/2" DECK-O-SEAL GUN GRADE
 JOINT SEALANT
 OR APPROVED EQUAL



PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 516 - 1", OR 2" PEJF, APP, SQ. FT., AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK DESCRIBED.

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: TEAR WEB WATERSTOP WITH SLEEPER SLAB

THIS WORK CONSISTS OF FURNISHING AND INSTALLING A PVC TEAR WEB WATERSTOP, INCLUDING FINE AGGREGATE AND HOT APPLIED JOINT SEALER AT THE ENDS OF THE APPROACH SLABS IN ACCORDANCE WITH ODOT CMS ITEM 516 AND THE DETAILS HEREIN.

THE EXPANSION JOINT SYSTEM SHALL BE WATER TESTED AFTER INSTALLATION. LEAKS SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER

PVC TEAR-WEB WATERSTOP:
 FURNISH FLEXIBLE PVC TEAR WEB WATERSTOPS THAT CONFORM TO U.S. ARMY CORPS OF ENGINEERS SPECIFICATION CRD-C 572-74 AND THAT CAN WITHSTAND 2" OF MOVEMENT. PVC TEARWEB WATERSTOPS SHALL BE SIKA GREENSTREAK, BOMETALS INC., OR EARTH SHIELD BY J.P. SPECIALTIES, INC. THE SEAL CONFIGURATION SHOULD BE SIMILAR TO THE DETAILS SHOWN HEREIN. INSTALL THE SEAL ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND UNDER THE SUPERVISION OF THE MANUFACTURER'S DESIGNATED REPRESENTATIVE.

FURNISH WATERSTOPS IN ONE CONTINUOUS PIECE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

FINE AGGREGATE:
 AFTER THE PVC TEAR WEB WATERSTOP AND CONCRETE SLEEPER SLAB HAVE BEEN CONSTRUCTED, PLACE 3" OF FINE AGGREGATE, CMS 703.03, ALONG THE ENTIRE LENGTH OF THE APPROACH SLAB.

HOT APPLIED JOINT SEALER:
 AFTER THE PVC TEAR WEB WATERSTOP, FINE AGGREGATE, AND CONCRETE SLEEPER SLAB HAVE BEEN CONSTRUCTED, PLACE HOT APPLIED JOINT SEALER, CMS 705.04, ALONG THE ENTIRE LENGTH OF THE APPROACH SLAB.

BOND BREAKER:
 A BOND BREAKER CONSISTING OF TWO 4 FOOT SHEETS OF CLEAR OR OPAQUE POLYETHYLENE FILM, ITEM 705.06, SHALL BE CENTERED ON THE SLEEPER SLAB AND BELOW THE APPROACH SLAB, WHERE NOTED. CARE SHALL BE TAKEN IN THE AREA BENEATH THE POLYETHYLENE FILM TO ENSURE THE SURFACE OF THE SLEEPER SLAB IS FINISHED SMOOTH. THE FILM SHALL HAVE A NOMINAL THICKNESS OF 4 MILS.

UNDERDRAINS:
 THE UNDERDRAINS SHALL BE INSTALLED PER CMS 605.03 - 6" UNDERDRAIN (707.31) AND WILL INCLUDE THE NECESSARY GRANULAR MATERIAL.

PAYMENT:
 MEASUREMENT OF THE EXPANSION JOINT FOR PAYMENT PURPOSES SHALL BE ALONG THE CENTERLINE OF THE SLEEPER SLAB, BETWEEN THE OUTER EDGES OF THE SLAB. PAYMENT SHALL BE PER FOOT OF ITEM 516, STRUCTURAL JOINT OR JOINT SEALER, MISC.: TEAR WEB WATERSTOP, FINE AGGREGATE, HOT APPLIED JOINT SEALER, CONCRETE, RESTEEL, PIPE UNDERDRAINS, AND OUTLETS, AND ALL LABOR, MATERIALS, AND INCIDENTALS NEEDED TO CONSTRUCT THE JOINT AS SHOWN.

ITEM 516-ELASTOMERIC BEARING WITH INTERNAL LAMINATES, AS PER PLAN (7"x11"x1.4")

THE DISTRICT WILL FURNISH THE ELASTOMERIC BEARING PADS. THE BEARING PADS WILL BE AVAILABLE FOR DELIVERY AFTER **AUGUST 1, 2026** UPON PROPER NOTIFICATION.

THE BEARING PADS WILL BE AVAILABLE BY STATE HIGHWAY SUPPLY.

CONTACT INFO:
 Tony Gerschutz
 P.O. Box 3098
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 Dublin, OH 43016
 Phone: 614-799-9811 Fax: 614-799-9794
www.statehighwaysupply.com

THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOURTEEN (14) DAYS ADVANCE NOTICE TO THE SUPPLIER PRIOR TO DELIVERY OF THE ELASTOMERIC BEARING PADS.

THE BID PRICE FOR THE ITEM 516 - ELSTOMERIC BEARING WITH INTERNAL LAMINATES, AS PER PLAN (7"x11"x1.4") WILL BE FOR ANY PLACEMENT AND ADJUSTMENT DURING THE BOX BEAM PLACEMENT.

BRIDGE NOTES
 BRIDGE NO. PER-345-06.489
 OVER BUCKEYE FORK

SFN	
6402666	
DESIGN AGENCY	
DESIGNER	CHECKER
ELJ	TAG
REVIEWER	
TDF	04-08-26
PROJECT ID	
117969	
SUBSET	TOTAL
3	20
SHEET	
P.29	TOTAL 46

