

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	01/20/2023
BR-2-15	DATED	07/19/2024
EXJ-4-87	REVISED	01/19/2024
GSD-1-19	DATED	07/19/2024
SBR-1-20	REVISED	07/19/2024

REFER TO THE FOLLOWING SPECIFICATIONS:

800	DATED	07/18/2025
-----	-------	------------

DESIGN SPECIFICATIONS:

ALL NEW COMPONENTS OF THIS STRUCTURE CONFORM TO THE 9TH EDITION OF THE "LFRD BRIDGE DESIGN SPECIFICATION" OPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 9th EDITION, 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING INCLUDES:

DECK:	VEHICULAR LIVE LOAD: HL-93 FUTURE WEARING SURFACE (FWS) OF 0.06 KIPS/SQ.FT.
EXISTING BEAMS:	LOAD RATED WITH VEHICULAR LIVE LOAD: HL-93 FUTURE WEARING SURFACE (FWS) OF 60 KIPS/SQ.FT.
EXISTING SUBSTRUCTURE:	VEHICULAR LIVE LOAD: CF-400 (57) FUTURE WEARING SURFACE (FWS) OF 0.00 KIPS/SQ.FT.
EXISTING FOUNDATION:	VEHICULAR LIVE LOAD: CF-400 (57) FUTURE WEARING SURFACE (FWS) OF 0.00 KIPS/SQ.FT.

DESIGN DATA:

CONCRETE, QC/QA CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)  
CONCRETE, CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)  
CONCRETE REINFORCEMENT - EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI (ABUTMENT, DECK, BRIDGE RAILING, APPROACH SLAB, SIDEWALK)  
GFRP REINFORCEMENT (BRIDGE RAILING)  
EXISTING STRUCTURAL STEEL - ASTM A709, GRADE 33, MINIMUM YIELD STRENGTH 33 KSI  
PROPOSED STRUCTURAL STEEL - ASTM A709, GRADE 50, MINIMUM YIELD STRENGTH 50 KSI

OPERATIONAL IMPORTANCE:

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

MONOLITHIC WEARING SURFACE:

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

MAINTENANCE OF TRAFFIC:

FOR INFORMATION OF TRAFFIC PLANS, SEE ROADWAY SHEETS.

UTILITIES:

FOR UTILITY NOTES, SEE ROADWAY SHEETS.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS 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 THAT HAVE BEEN VERIFIED IN THE FIELD.

INSPECTION OF EXISTING STRUCTURAL STEEL:

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THE WELDS, PLATES AND BEAMS ARE FREE OF DEFECTS AND CRACKS. IF NECESSARY, REMOVE ALL DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS THAT MAY INTERFERE WITH THE ENGINEER'S INSPECTION. THE INSPECTION WILL NOT TAKE PLACE UNTIL THE TOP FLANGES ARE CLEANED ACCORDING TO C&MS 511.07, BUT IT WILL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE DEPARTMENT WILL PAY FOR THE COST ASSOCIATED WITH THIS INSPECTION WITH ITEM 511-CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN. THE ENGINEER WILL REPORT ALL CRACKS FOUND TO THE OFFICE OF CONSTRUCTION ADMINISTRATION, BRIDGE CONSTRUCTION SPECIALIST, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHING WITH A MAXIMUM WHEEL LOAD OF 2.26 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA BEAM TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ASBESTOS NOTIFICATION:

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE STRUCTURE.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT <http://www.epa.ohio.gov/asbestos> AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW

ASBESTOS PROGRAM  
OHIO EPA, DAPC  
P.O. BOX 1049  
COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM  
OHIO EPA, DAPC  
50 W. TOWN ST., SUITE 700  
COLUMBUS, OH 43215

THE FORM SHALL INCLUDE:

1. THE CONTRACTORS NAME AND ADDRESS
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 – PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

GAS LINE SUPPORT INSTALLATION NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL PIPE SUPPORT LOCATIONS AND ALL OTHER DIMENSIONS BEFORE PERFORMING ANY WORK.
2. PIPE SUPPORT LOCATIONS SHALL ADHERE TO THE FOLLOWING:
  - 2.1. DISTANCE BETWEEN SUPPORTS SHALL NOT EXCEED 11'-0" BY GREATER THAN 0'-6".
  - 2.2. PIPE SUPPORTS SHALL BE INSTALLED AT 14 LOCATIONS ALONG THE LENGTH OF THE BRIDGE. WITHOUT WRITTEN DOCUMENTATION APPROVAL FROM THE ENBRIGE GAS OHIO REPRESENTATIVE IN CHARGE, THE QUANTITY OF PIPE SUPPORTS INSTALLED SHALL NOT BE LESS THAT THE QUANTITY SPECIFIE HERE.
  - 2.3. PIPE SUPPORTS SHALL BE ADJUSTED FOR EACH CROSSFRAME ALONG THE TOP ANGLE SLOTTED HOLE TO KEEP THE PIPELINE STRAIGHT ACROSS THE BRIDGE (SEE FRAMING PLAN). MAX 2' OFFSET FROM MIDPOINT TO AVOID DIAGONAL BRACE INTERFERENCE.
3. NON-CONDUCTIVE ROLLER HANGER SUPPORTS AND ALL ASSOCIATED HARDWARE NEEDED TO INSTALL SUPPORTS WILL BE PURCHASED FROM LB&A BY ENBRIDGE GAS OHIO AND SUPPLIED TO THE CONTRACTOR.
4. THE PVC CASING SHALL BE INSTALLED BY THE CONTRACTOR THROUGH THE PROPOSED BACKWALL AND EXTENDED 6" BEHIND THE ABUTMENT BACKWALLS IN ORDER TO ACCOMODATE LINK-SEAL AND END SEAL. PVC PIPE CAN BE CUT TO LENGTH BY ENBRIDGE CONTRACTOR, IF EXCESS REMAINS AFTER SEALS ARE INSTALLED.
5. GAS MAINS AND SUPPORTS ARE DESIGNED FOR PNEUMATIC TESTING. IF HYDROTESTING IS REQUIRED, PLEASE CONSULT ENBRIDGE GAS OHIO PRIOR TO INSTALLATION.
6. ALL PIPE SUPPORT STEEL WILL BE HOT DIPPED GALVANIZED BY THE SUPPLIER PRIOR TO BEING SHIPPED TO THE SITE.
7. ANY DAMAGE TO THE HOT DIPPED GALVANIZED COATING, FIELD CUTS, OR WELDS SHALL BE REPAIRED WITH A COATING OF ZINC RICH PAINT MANUFACTURED BY ZRC, OR APPROVED EQUAL, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS, IN ORDER TO RESTORE FULL INTEGRITY OF THE PROTECTIVE GALVANIZED COATING. THE COST OF THIS WORK SHALL BE AT THE CONTRACTORS EXPENSE.
8. ENBRIDGE GAS SHALL INSTALL THE GAS MAIN AFTER THE CONTRACTOR HAS INSTALLED THE SUPPORTS. THE CONTRACTOR SHALL COORDINATE WITH ENBRIDGE GAS FOR THIS WORK.
9. HOLES/SLOTS FOR PIPE SUPPORTS SHOULD BE PROVIDED BY BRIDGE FABRICATOR. IF DRILLING HOLES IN CROSSFRAME MEMBERS IS REQUIRED, ADHERE TO THE FOLLOWING:
  - 9.1. EDGE DISTANCE FROM CENTER OF DRILLED HOLE TO EDGE OF CONNECTED PART SHALL BE NO LESS THAN 7/8".
  - 9.2. DISTANCE FROM CENTER OF DRILLED HOLE TO FACE OF PERPENDICULAR LEG OF ANGLE SHALL BE 1".
  - 9.3. IF CONTRACTOR IS DRILLING NEW HOLE, REPLACE THE SPECIFIED CORROSION RESISTANT COATING.
- 10.THE REMOVAL OF EXISTING HANGERS/OVERHANG BRACKETS SUPPORTING THE GAS LINE AND INTERMEDIATE CROSS FRAMES ARE PAID UNDER THE LUMP SUM ITEM 513 - STRUCTURAL STEEL, MISC.: GAS MAIN SUPPORTS. THE LIMITS OF REMOVAL PAID FOR UNDER THIS ITEM ARE FROM THE BACK OF BACKWALL OF THE REAR ABUTMENT TO THE BACK OF THE FORWARD ABUTMENT.
- 11.PROPOSED CROSSFRAMES HAVE BEEN DESIGNED FOR PROPOSED GAS MAIN AND HANGER SUPPORTS.

GENERAL NOTES (1 OF 3)  
BRIDGE NO. SUM-00091-07.880  
S.R. 91 OVER CUYAHOGA RIVER

SFN	
7707142	
DESIGN AGENCY	
<div><div>BG</div><div>www.bggengrroup.com</div><div>5960 WILCOX PLACE, SUITE C DUBLIN, OHIO 43016</div></div>	
DESIGNER	CHECKER
RG	CCJ
REVIEWER	
GTB 02-25-25	
PROJECT ID	
113201	
SUBSET	TOTAL
3	30
SHEET	TOTAL
P.35	62