

**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS**

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

STANDARD DRAWING	REVISED	SUPPLEMENTAL SPECIFICATION	REVISED
TST-2-21	7/16/2021	800	4/21/2023
DS-1-92	7/15/2022	832	7/15/2022

**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.

**EXISTING PLANS**

THE FOLLOWING EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 3 OFFICE IN ASHLAND, OHIO:

PLANS	DATED
HUR-303-1.72	1953
HUR-303-1.87	1983
D03-BH-FY2009(A)	2008

**DESIGN SPECIFICATIONS**

THESE STRUCTURES CONFORM TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

**DESIGN LOADING**

DESIGN LOADING: N/A – REFER TO EXISTING PLANS LISTED IN THE "EXISTING PLANS" NOTE ON THIS SHEET FOR ORIGINAL DESIGN LOADING IF NECESSARY.

**DESIGN DATA**

CONCRETE CLASS QC2 – COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)  
UNCOATED STEEL REINFORCEMENT – MINIMUM YIELD STRENGTH 60 KSI (BRIDGE DECK)

**UTILITIES**

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

**IN-STREAM WORK RESTRICTION**

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID CONSTRUCTION IN AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING STREAMS OR WETLANDS. ANY MATERIAL THAT DOES FALL INTO STREAMS OR WETLANDS SHALL BE REMOVED AS SOON AS POSSIBLE.

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF THE UNITED STATES (STREAMS, RIVERS, NON-ISOLATED WETLANDS) AND/OR ISOLATED WETLANDS ARE SUBJECT TO REGULATION UNDER SECTIONS 404 AND 401 OF THE CLEAN WATER ACT, AND POSSIBLY OHIO EPA ISOLATED WETLAND LAW. IT IS ANTICIPATED THAT NO IN-STREAM WORK, OR WORK UNDER THE STREAM'S ORDINARY HIGH WATER MARK (OHWM) WILL BE NEEDED. THEREFORE NO WATERWAY PERMITS HAVE BEEN GRANTED AND NO IN-STREAM WORK IS ALLOWED.

SHOULD WORK (EITHER TEMPORARY OR PERMANENT) IN THE STREAM BE NEEDED; IT WILL REQUIRE A PERMIT AND AUTHORIZATION BY THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE). THE CONTRACTOR SHALL NOT UTILIZE FILLS BELOW OHWM UNTIL SUCH ACTIVITY IS AUTHORIZED BY THE USACE. DETAILS OF THIS REQUIREMENT ARE DESCRIBED IN ODOT'S SUPPLEMENTAL SPECIFICATION 832.09.

USAGE DEFINITION OF OHWM – THE ORDINARY HIGH WATER MARK IS THE LINE ON THE SHORES ESTABLISHED BY THE FLUCTUATIONS OF WATER AND INDICATED BY PHYSICAL CHARACTERISTICS SUCH AS A CLEAR, NATURAL LINE IMPRESSED ON THE BANKS; SHELVING; CHANGES IN THE CHARACTER OF THE SOIL; DESTRUCTION OF TERRESTRIAL VEGETATION; THE PRESENCE OF LITTER AND DEBRIS; OR THE APPROPRIATE MEANS THAT CONSIDER THE CHARACTERISTICS OF THE SURROUNDING AREAS.

**PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES**

SPECIAL CARE SHALL BE TAKEN WHEN PLACING THE ASPHALT CONCRETE BUTT JOINT TO CREATE A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK OR APPROACH SLAB. THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES.

**ITEM 202 – PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (DECK EDGE)**

REMOVE THE PORTION OF THE STRUCTURE INDICATED IN THE PLANS IN ITS ENTIRETY USING METHODS AS APPROVED BY THE ENGINEER. UPON REMOVAL, THE REMOVED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR. ALL REMOVED MATERIAL SHALL BE DISPOSED OF PROPERLY. THE DEPARTMENT WILL PAY FOR THIS WORK ON A LUMP SUM BASIS FOR WORK ACTUALLY PERFORMED AND WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE WORK AS DETAILED IN THESE PLANS.

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSSFRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

THE BRIDGE JOINT END DAMS ARE TO BE CAREFULLY PRESERVED FOR REUSE.

**REMOVAL METHODS:**

THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAM STEEL GIRDER, ETC.), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (I.E., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

**CUT LINE CONSTRUCTION JOINT PREPARATION:**

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 2.5 INCHES DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING PROPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT 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 STEEL REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

**ITEM 509 – UNCOATED STEEL REINFORCEMENT, AS PER PLAN**

IN ADDITION TO THE PROVISION 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.

PROVIDE CONTINUITY BETWEEN SEGMENTS OF EXISTING AND NEW REINFORCING STEEL BY MEANS OF A LAP SPLICE (28" MINIMUM FOR #4 BAR, 36" MINIMUM FOR #5 BAR) OR METHOD APPROVED BY THE ENGINEER.

PAYMENT FOR THE ABOVE SHALL BE MADE AT THE UNIT BID PRICE PER POUND FOR ITEM 509 – UNCOATED STEEL REINFORCEMENT, AS PER PLAN, AND WILL INCLUDE ALL LABOR EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK.

**ITEM 509 – CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN**  
**ITEM 510 – DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT**

QUANTITIES OF ITEM 509 – CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN, AND ITEM 510 – DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, ARE CARRIED TO THE STRUCTURE ESTIMATED QUANTITIES. THE INTENT OF THESE QUANTITIES IS, AT THE DIRECTION OF THE ENGINEER, TO REPLACE ANY EXISTING STEEL INTENDED FOR REUSE, THAT IS FOUND TO BE UNSERVICABLE FOR REASONS OTHER THAN DAMAGE CAUSED BY THE CONTRACTOR. STEEL INSTALLED UNDER THIS ITEM SHALL BE OF THE SAME SIZE AND COATING AS THE STEEL BEING REPLACED. REPLACEMENT SHALL INCLUDE THE REMOVAL OF ANY ADDITIONAL CONCRETE REQUIRED TO POSITION THE NEW REINFORCING STEEL AT THE CORRECT HEIGHT AND TO SUPPLY THE REQUIRED LAP SPLICE LENGTHS AS DEFINED IN 509. THE DEPARTMENT WILL PAY FOR THIS WORK BY THE CONTRACT BID PRICE PER LB FOR STEEL ACTUALLY INSTALLED, AND NUMBER OF DOWEL HOLES ACTUALLY DRILLED AND PREPARED, AND WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE WORK AS DIRECTED BY THE ENGINEER.

**02/STR/13:**

ITEM 509 – CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN	100 LB
ITEM 510 – DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	10 EACH

**ITEM 517 – RAILING (THREE STEEL TUBE BRIDGE RAILING), AS PER PLAN**


THE CONTRACTOR SHALL INSTALL THE PROPOSED THREE STEEL TUBE BRIDGE RAILING IN ACCORDANCE WITH STANDARD BRIDGE DRAWING TST-2-21, WITH THE FOLLOWING EXCEPTIONS:

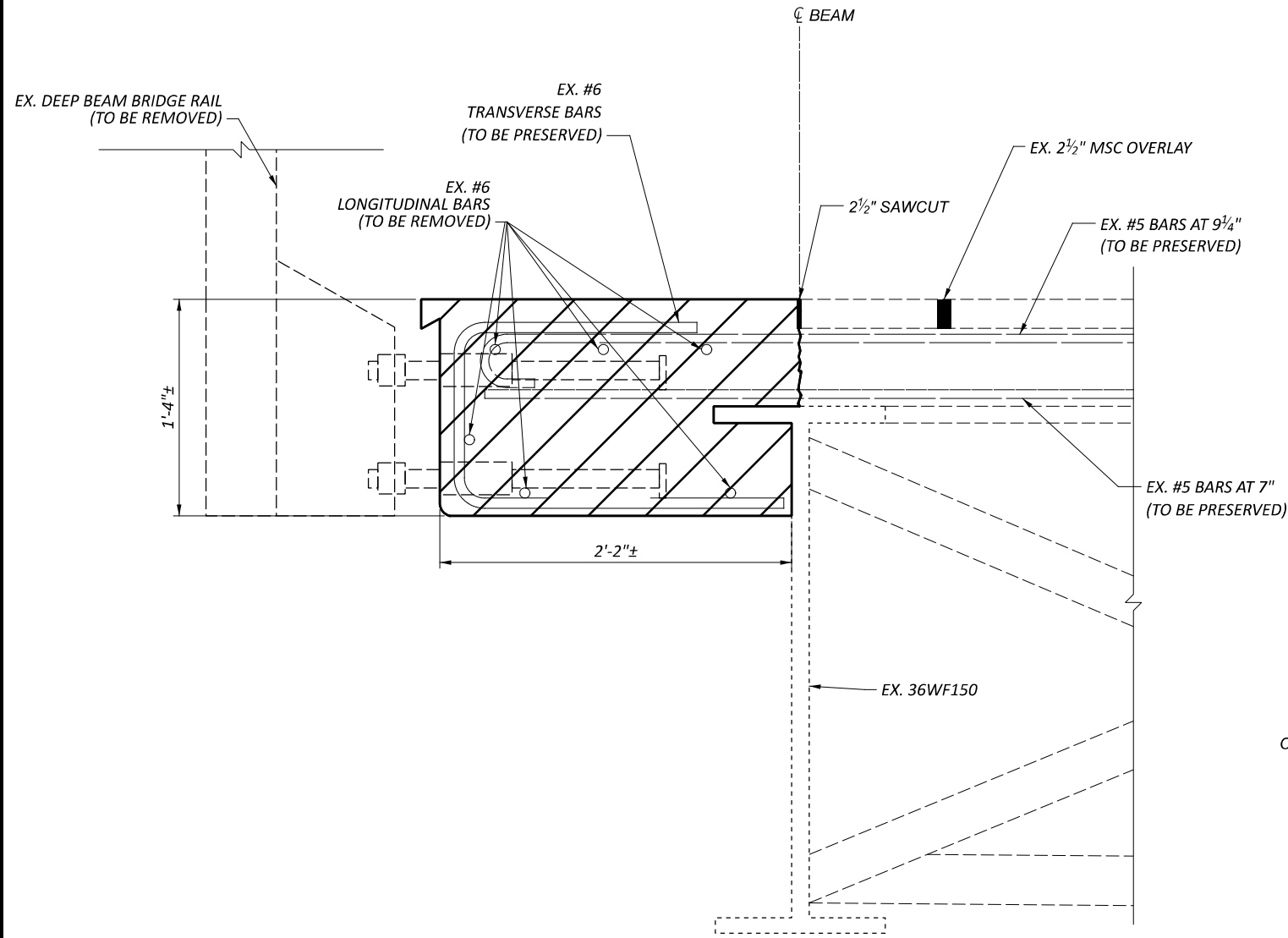
IN LIEU OF THE 2'-8" TOP ANCHOR RODS (PART F5), AS SHOWN ON THE STANDARD DRAWING, THE CONTRACTOR SHALL INSTALL 1'-10" TOP ANCHOR RODS AT EACH RAIL POST LOCATION.

HUR-303-0.00

MODEL: Sheet PAPER: 34x22 (in.) DATE: 6/15/2023 TIME: 9:09:55 AM USER: jlowery  
pw:\ohiodot-pw-beentley.com\ohiodot-pw-02\Documents\01\_Active Projects\District 03\Huron\116943\Roadway\Sheets\116943\_SN001.dgn

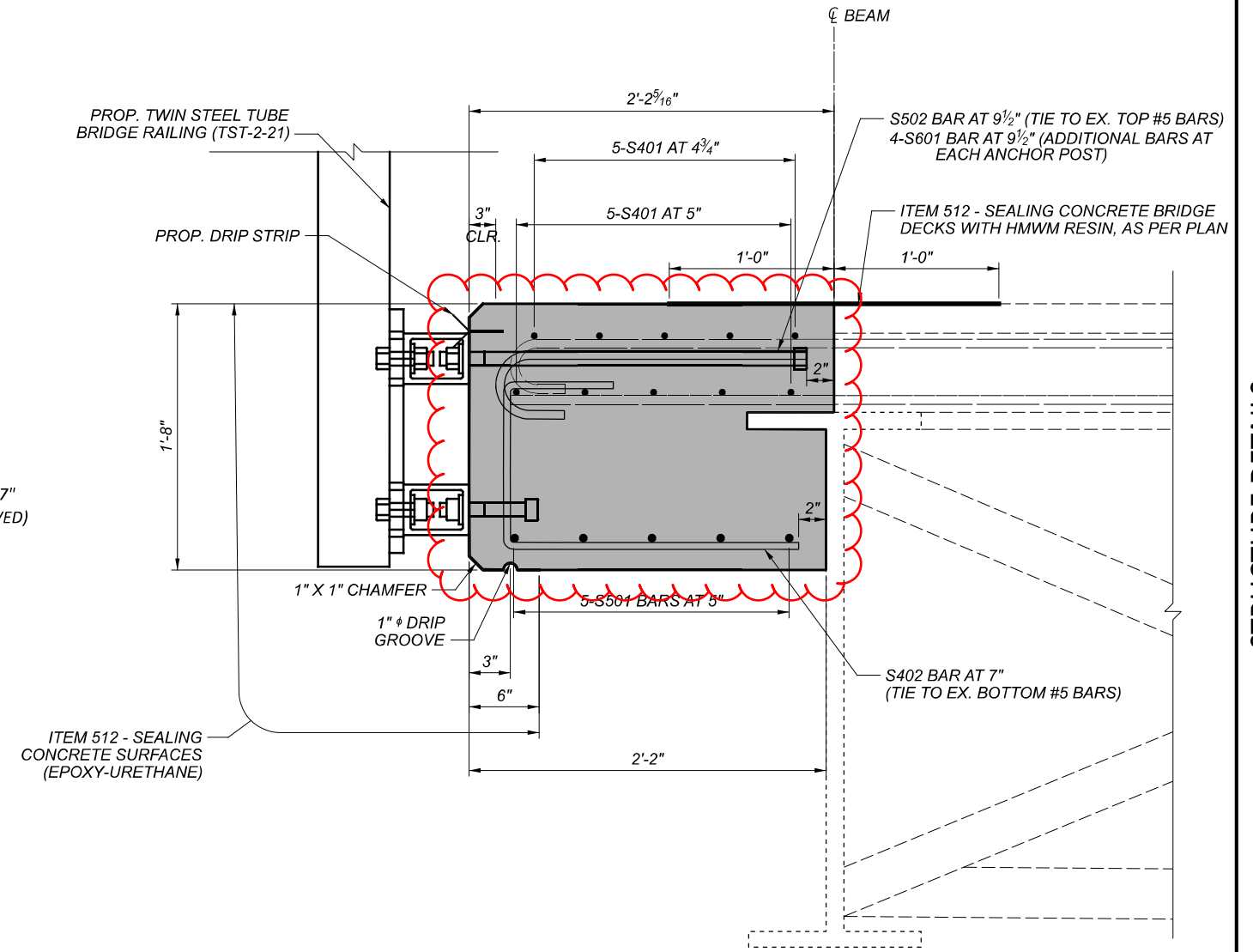
STRUCTURE NOTES  
NOTES APPLYING TO ALL  
STRUCTURES LOCATED ON THIS PROJECT

SFN	3904083
DESIGN AGENCY	DISTRICT 3
	
ENGINEERING TEAM ONE	
DESIGNER	CHECKER
JLL	KRB
REVIEWER	
KAK	5-5-23
PROJECT ID	
116943	
SUBSET	TOTAL
1	1
SHEET	
TOTAL	
P.21	33



**TYPICAL DECK EDGE REMOVAL**

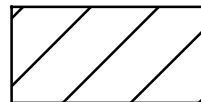
BOTH SIDES SIMILAR



**PROPOSED DECK EDGE**

BOTH SIDES SIMILAR

**LEGEND**



ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN



ITEM 511 - CLASS QC2 CONCRETE, SUPERSTRUCTURE (REPAIR OR RECONSTRUCTION)

STRUCTURE DETAILS  
 HUR-303-0197  
 OVER THE VERMILION RIVER

SFN	
3904083	
DESIGN AGENCY	
DISTRICT 3	
ENGINEERING TEAM ONE	
DESIGNER	CHECKER
JLL	KRB
REVIEWER	
KAK 5-5-23	
PROJECT ID	
116943	
SUBSET	TOTAL
2	4
SHEET	TOTAL
P.23	33