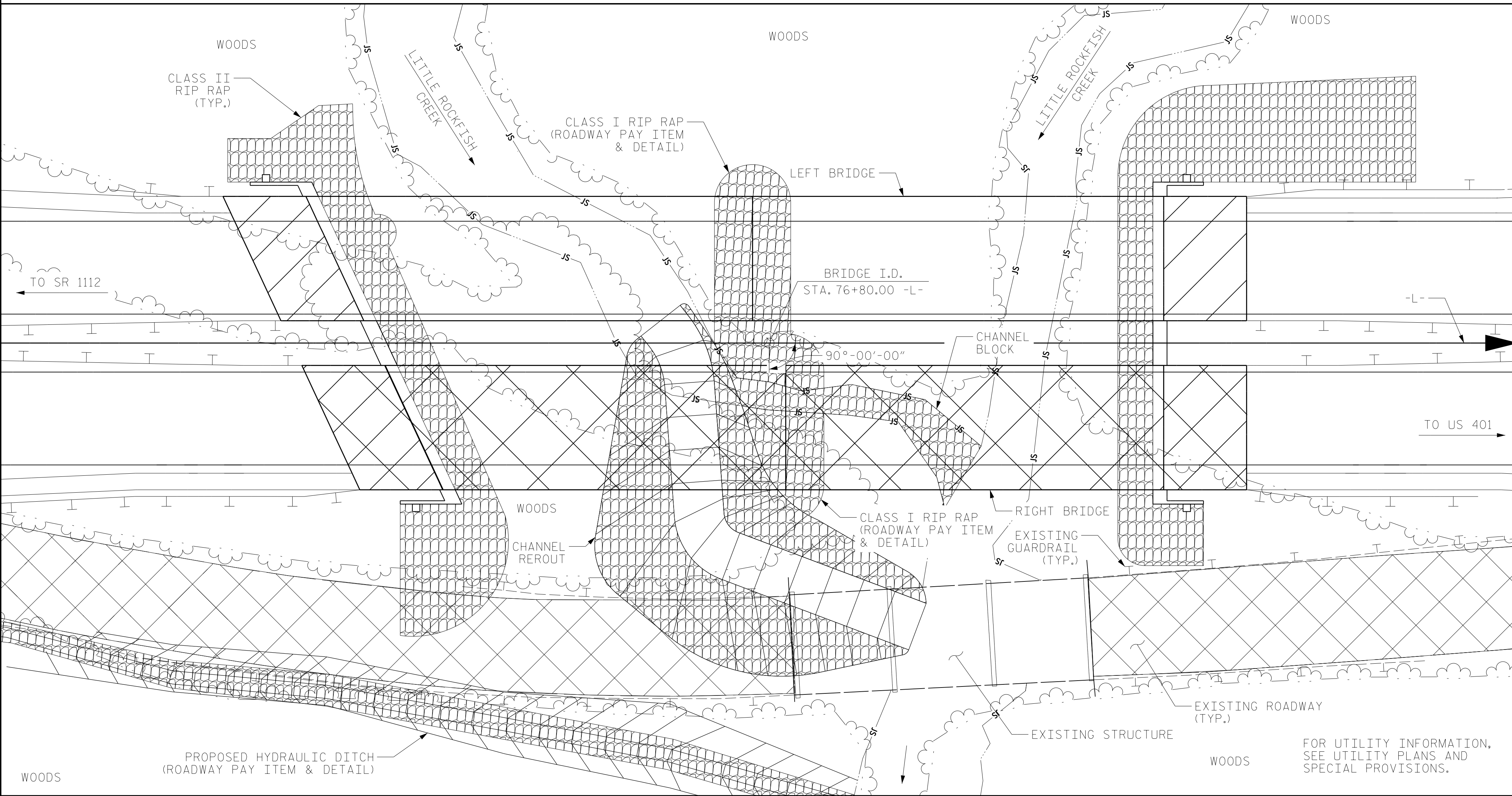


BENCH MARK #9: 239.95' RT. OF -L- STA. 75+65.88, EL. 163.00'



LOCATION SKETCH

NOTES

- ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.
- THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
- THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.
- REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED IN A MANNER THAT PREVENTS DEBRIS FROM FALLING INTO THE WATER. THE CONTRACTOR SHALL SUBMIT DEMOLITION PLANS FOR REVIEW AND REMOVE THE BRIDGE IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.
- THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.
- PRESTRESSED CONCRETE DECK PANELS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.
- THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18 - EVALUATING SCOUR AT BRIDGES."
- FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
- FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.
- FOR INTERIOR BENT NO. 1, ONLY PARTIAL GALVANIZING OF THE PILES IS REQUIRED. SEE INTERIOR BENT SHEETS FOR REQUIRED GALVANIZING LENGTHS. PAYMENT FOR PARTIALLY GALVANIZED PILES WILL BE MADE UNDER THE CONTRACT UNIT PRICE FOR GALVANIZED STEEL PILES.
- THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S1-1 SHALL BE EXCAVATED FOR A DISTANCE OF 47 FT LEFT AND 26 FT RIGHT OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.
- THE EXISTING STRUCTURE CONSISTING OF THREE SPANS, ONE SPAN AT 30'-2", ONE SPAN AT 30'-1" AND ONE SPAN AT 30'-2" ON PRESTRESSED CONCRETE CORED SLABS, 32'-0" CLEAR ROADWAY WIDTH ON STEEL PILES AND LOCATED APPROXIMATELY 100' DOWNSTREAM FROM THE PROPOSED BRIDGE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

TOTAL BILL OF MATERIALS

	REMOVAL OF EXISTING STRUCTURE @ STA. 76+80.00 -L-	ASBESTOS ASSESMENT	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	63" F.I.B. PRESTRESSED CONCRETE GIRDERS	PILE DRIVING EQUIPMENT SETUP FOR HP 14X73 STEEL PILES	
	LUMP SUM	LUMP SUM	EACH	LUMP SUM	SO. FT.	SO. FT.	CU. YDS.	LUMP SUM	LBS.	NO.	LIN. FT.	EACH
SUPERSTRUCTURE					10,090	8,635				8	988.2	12
END BENT NO. 1							68.7		9,183			
BENT NO. 1							45.3		5,056			
END BENT NO. 2							56.4		7,552			10
TOTAL	LUMP SUM	LUMP SUM	2	LUMP SUM	10,090	8,635	170.4	LUMP SUM	21,791	8	988.2	22

	PILE DRIVING EQUIPMENT SETUP FOR PP 36" Ø X 0.5" GALVANIZED STEEL PILES	HP 14X73 STEEL PILES	PP 36" Ø X 0.5" GALVANIZED STEEL PILES	PILE REDRIVES	TWO BAR METAL RAIL	CONCRETE BARRIER RAIL	1'-2" X 3'-3" CONCRETE PARAPET	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	EXPANSION JOINT SEAL
	EACH	NO.	LIN. FT.	EACH	LIN. FT.	LIN. FT.	LIN. FT.	TONS	SO. YDS.	LUMP SUM	LUMP SUM
SUPERSTRUCTURE											
END BENT NO. 1		12	720.0			251.0	260.8	167	185		
BENT NO. 1	5			3	650.0						
END BENT NO. 2		10	700.0	5				365	405		
TOTAL	5	22	1,420.0	14	650.0	251.0	260.8	532	590	LUMP SUM	LUMP SUM

HYDRAULIC DATA

DESIGN DISCHARGE	= 710 CFS
FREQUENCY OF DESIGN DISCHARGE	= 25 YRS
DESIGN HIGH WATER ELEVATION	= 152.1'
DRAINAGE AREA	= 16.1 SQ. MI.
BASE DISCHARGE (Q100)	= 970 CFS
BASE HIGH WATER ELEVATION	= 153.6'

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 1,300+ CFS
FREQUENCY OF OVERTOPPING	= 500+ YRS
* OVERTOPPING ELEVATION	= 163.44'
	* SAG @ STA. 80+55.33 -L-

PROJECT NO. U-5798A  
CUMBERLAND COUNTY  
 STATION: 76+80.00 -L-

SHEET 3 OF 3



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STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 GENERAL DRAWING  
 LEFT LANE BRIDGE ON SR 1102  
 OVER LITTLE ROCKFISH CREEK  
 BETWEEN SR 1112 AND US 401  
 LEFT LANE

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-3
1	NSC	03/2022	3			TOTAL SHEETS 43
2			4			

DRAWN BY : NSC DATE : 03/2020  
 CHECKED BY : MKO DATE : 04/2021  
 DESIGN ENGINEER OF RECORD: RLB DATE : 09/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

△ REVISED HP 14X73 STEEL PILE COUNT AND LENGTH