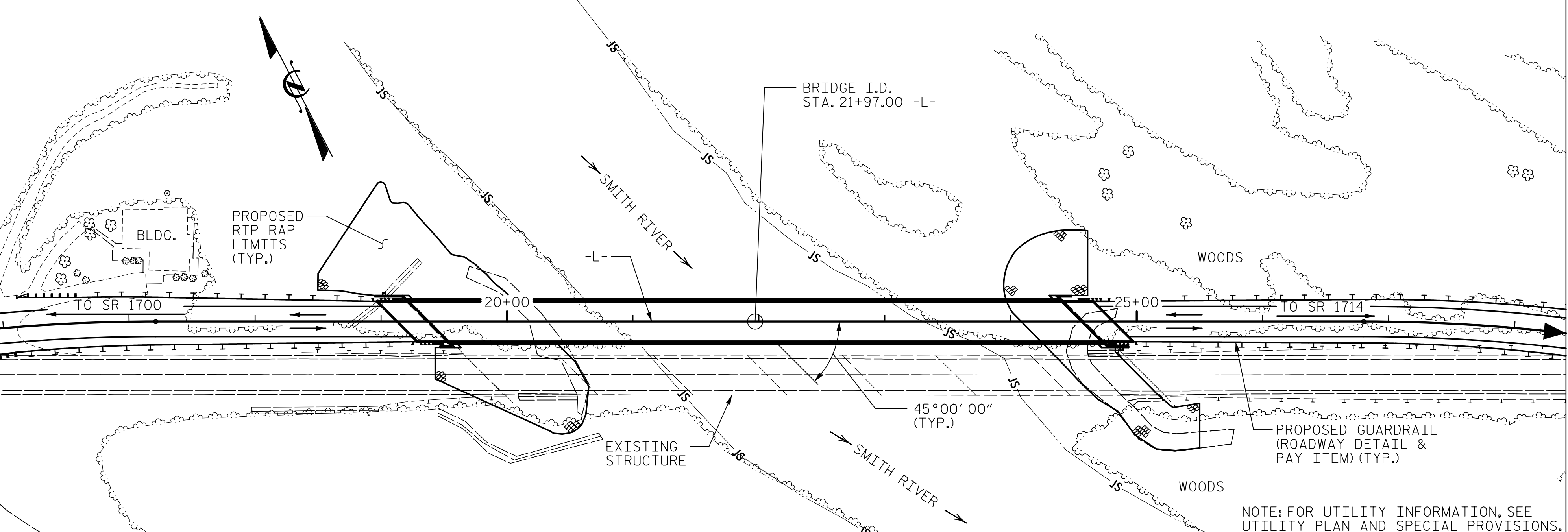


B.M. #2: CHISELED SQUARE ON A CONCRETE SIGN BASE, -L- STA. 31+02.44, OFFSET 78.93' LT., N 1011660' E 1775161' EL. 572.78'



LOCATION SKETCH

**NOTES:**

ASSUMED LIVE LOAD = HL 93 OR ALTERNATE LOADING.  
 FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.  
 FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.  
 THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.  
 THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.  
 REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.  
 AFTER SERVING AS A TEMPORARY STRUCTURE, THE EXISTING STRUCTURE CONSISTING OF SEVEN SPANS (7 @ 75') WITH ASPHALT WEARING SURFACE ON REINFORCED CONCRETE DECK AND STEEL I-BEAMS AND A CLEAR ROADWAY WIDTH OF 32'-0" ON REINFORCED CONCRETE SPILL-THRU ABUTMENTS AND CONCRETE BENT CAPS ON CONCRETE COLUMNS AND SPREAD FOOTINGS, AND LOCATED APPROX. 40 FT. DOWNSTREAM FROM PROPOSED STRUCTURE 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.  
 THE SUBSTRUCTURE OF THE EXISTING BRIDGES 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.  
 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 MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEETS S-01 & S-02 SHALL BE EXCAVATED FOR A DISTANCE OF 18 FT. EACH SIDE 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.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD FOR THE EXISTING STRUCTURE, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 21+97.00 -L-".

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18 - EVALUATING SCOUR AT BRIDGES." FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.  
 NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS INCLUDED ON THE PLANS OR APPROVED BY THE ENGINEER.  
 FOR FOUNDATION NOTES, SEE "FOUNDATION LAYOUT" SHEET.

AT THE CONTRACTOR'S OPTION, AND UPON REMOVAL OF THE CAUSEWAY, THE CLASS II RIP RAP USED IN THE CAUSEWAY MAY BE PLACED AS RIP RAP SLOPE PROTECTION. SEE SPECIAL PROVISIONS FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS AT STATION 21+97.00 -L-.

THE CLASS AA CONCRETE IN THE BRIDGE DECK SHALL CONTAIN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG AT THE SUBSTITUTION RATE SPECIFIED IN ARTICLE 1024-1 AND IN ACCORDANCE WITH ARTICLES 1024-5 AND 1024-6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE COST OF THE REINFORCED CONCRETE DECK SLAB.

TEMPORARY SHORING WILL BE REQUIRED IN THE AREAS INDICATED IN THE PLAN VIEW.  
 FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS. FOR PAY ITEM FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PLANS.

THE SCOUR CRITICAL ELEVATION FOR BENTS NO. 1, 2, 3, 4 ARE ELEVATIONS 532.3, 529.2, 533.0, AND 527.8, RESPECTIVELY. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE CONTRACTORS ATTENTION SHALL BE DRAWN TO THE FACT THAT ONLY 50% OF THE CHANNEL WILL BE ALLOWED TO BE BLOCKED AT ANY TIME. NO MORE THAN ONE TEMPORARY ACCESS CAUSEWAY MAY BE INSTALLED AT ANY ONE TIME. DEWATERING FOR REMOVAL OF EXISTING STRUCTURE IS PERMITTED ONLY WITHIN THE TEMPORARY ACCESS LIMITS SHOWN.

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

PROJECT NO. BR-0044  
ROCKINGHAM COUNTY  
 STATION: 21+97.00 -L-

SHEET 4 OF 4

TOTAL BILL OF MATERIAL												
	CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS AT STA. 21+97.00 -L-	REMOVAL OF EXISTING STRUCTURE AT STA. 21+97.00 -L-	ASBESTOS ASSESSMENT	4'-6" Ø DRILLED PIERS IN SOIL	4'-6" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 4'-6" Ø DRILLED PIER	PDA TESTING	SID INSPECTION	SPT TESTING	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB
	LUMP SUM	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	LUMP SUM	SQ. FT.
SUPERSTRUCTURE												18,270
END BENT 1												
BENT 1				69.5	25	46.5						
BENT 2				26.8	40	24.4						
BENT 3				15.8	42	15.4						
BENT 4				96.8	30	54.0						
END BENT 2												
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	208.9	137	140.3	2	4	4	4	LUMP SUM	18,270

TOTAL BILL OF MATERIAL													
	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	MODIFIED 63" PRESTRESSED CONCRETE GIRDER	PILE DRIVING EQUIPMENT SETUP FOR HP 12x53 STEEL PILES	HP 12x53 STEEL PILES	CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	STRIP SEAL EXPANSION JOINTS
	SQ. FT.	CU. YDS.	LUMP SUM	LBS.	LBS.	NO. LIN. FT.	EACH	NO. LIN. FT.	LIN. FT.	TON	SQ. YDS.	LUMP SUM	LUMP SUM
SUPERSTRUCTURE	16,363					20 2,056.38			1,076.6			LUMP SUM	LUMP SUM
END BENT 1		78.7		8,936			15	15 615		1,946	2,162		
BENT 1		84.5		17,784	5,741								
BENT 2		91.5		17,050	5,406								
BENT 3		85.5		15,826	4,738								
BENT 4		69.5		17,702	5,657								
END BENT 2		75.4		9,009			15	15 615		1,075	1,194		
TOTAL	16,363	485.1	LUMP SUM	86,307	21,542	20 2,056.38	30	30 1,230	1,076.6	3,021	3,356	LUMP SUM	LUMP SUM

DRAWN BY : D.R. DRUM      DATE : 12/2019  
 CHECKED BY : G.R. COLS      DATE : 12/2019  
 DESIGNED BY : D.R. DRUM      DATE : 12/2019  
 DESIGN CHECKED BY : G.R. COLS      DATE : 12/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



STATE OF NORTH CAROLINA  
**DEPARTMENT OF TRANSPORTATION**  
 RALEIGH

**GENERAL DRAWING**  
 FOR BRIDGE ON NC 14/87  
 OVER SMITH RIVER  
 BETWEEN SR 1700  
 AND SR 1714

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-04
1			3			TOTAL SHEETS
2			4			39

DATE: 4/15/2022 TIME: 3:44:57 PM  
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