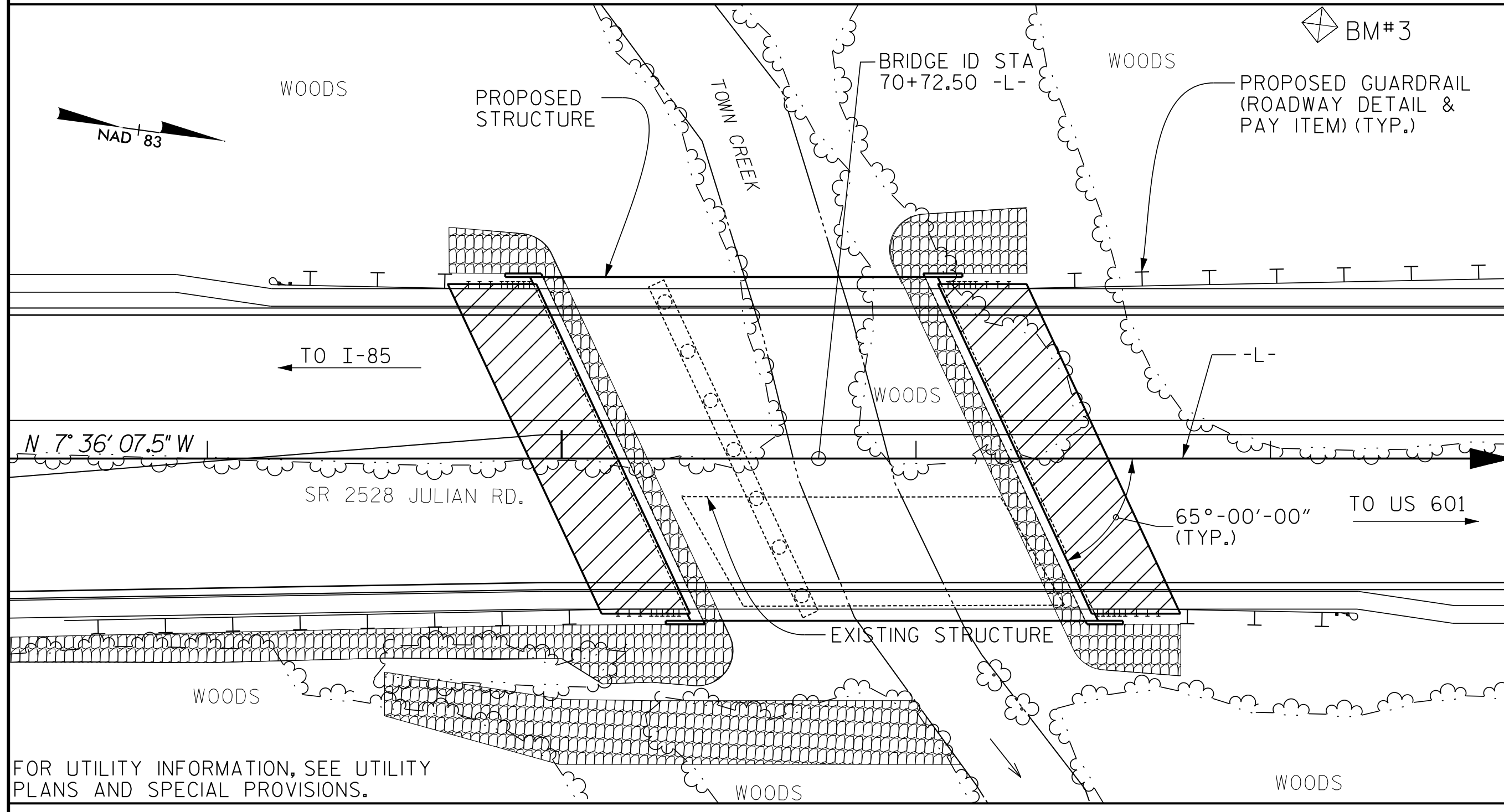


BM #3: RR SPIKE IN EASTERN FACING BASE OF 18" SWEET GUM, 122.47' LEFT OF STA. 72+13.98 -L-, ELEV. 717.28, N 693351, E 1555918



LOCATION SKETCH

FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

GENERAL 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.
 FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.
 FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

THE EXISTING STRUCTURE CONSISTING OF 3 CORED SLAB SPANS AT 60° SKEW; 1 @ 31'-2", 1 @ 30'-1", 1 @ 31'-2" WITH PPC CAPS ON STEEL PILES, ASPHALT DECK WITH A CLEAR ROADWAY WIDTH OF 30'-11" AND STEEL BARRIER RAILS, LOCATED AT THE PROPOSED SITE 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, THE LOAD LIMIT MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION 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. SINCE 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.

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.

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.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 50W AND PAINTED IN ACCORDANCE WITH SYSTEM 5 OR SYSTEM 6 OF THE STRUCTURAL STEEL SHOP COATINGS PROGRAM AND SECTION 442-8 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED AS SHOWN ON THE PLANS 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.

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

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH 'HEC 18-EVALUATING SCOUR AT BRIDGES'.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.

HYDRAULIC DATA	
DESIGN DISCHARGE	= 3000 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 718.5 FT
BASE DISCHARGE	= 3400 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 719.6 FT
DRAINAGE AREA	= 8.01 SQ. MI.
OVERTOPPING FLOOD DATA	
OVERTOPPING DISCHARGE	= 4200 CFS
OVERTOPPING FREQUENCY	= 500± YRS
OVERTOPPING ELEVATION	= 720.5* FT

* OVERTOPPING AT LOW ELEVATION IN SAG IN MEDIAN MONOLITHIC ISLAND AT STA. 67+65.85 -L-

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESSMENT	3'-6" Ø DRILLED PIERS IN SOIL	3'-6" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 3'-6" Ø DRILLED PIERS	PDA TESTING	SID INSPECTIONS	SPT TESTING	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS
	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	LUMP SUM	SQ. FT.	SQ. FT.	CU. YARDS	LUMP SUM
SUPERSTRUCTURE											10,491	10,918		LUMP SUM
END BENT 1										LUMP SUM			82.6	
BENT 1			88.5	62.0	70.0								84.9	
END BENT 2										LUMP SUM			82.6	
TOTAL	LUMP SUM	LUMP SUM	88.5	62.0	70.0	1	4	7	1	LUMP SUM	10,491	10,918	250.1	LUMP SUM

	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	APPROX. 325,000 LBS. STRUCTURAL STEEL	PILE DRIVING EQUIP. SETUP FOR HP 12x53 STEEL PILES	HP 12 X 53 STEEL PILES	STEEL PILE POINTS	THREE BAR METAL RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	FOAM JOINT SEALS
	LBS.	LBS.	LUMP SUM	NO.	NO.	LIN. FT.	EACH	TONS	SQ. YARDS	LUMP SUM	LUMP SUM
SUPERSTRUCTURE			LUMP SUM					209.2		LUMP SUM	LUMP SUM
END BENT 1	10,241			13	13	220	13	210	235		
BENT 1	19,223	3,841									
END BENT 2	10,175			13	13	220	13	250	275		
TOTAL	39,639	3,841	LUMP SUM	26	26	440	26	209.2	460	510	LUMP SUM

PROJECT NO. U-5738
 ROWAN COUNTY
 STATION: 70+72.50 -L-



12/13/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING

FOR BRIDGE OVER TOWN CREEK ON SR 2528 BETWEEN I-85 AND US 601

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

DWN. BY: FRJ DATE: 11/18
 CHKD. BY: CDB DATE: 11/18
 DES. EGR. OF RECORD: CDB DATE: 11/18