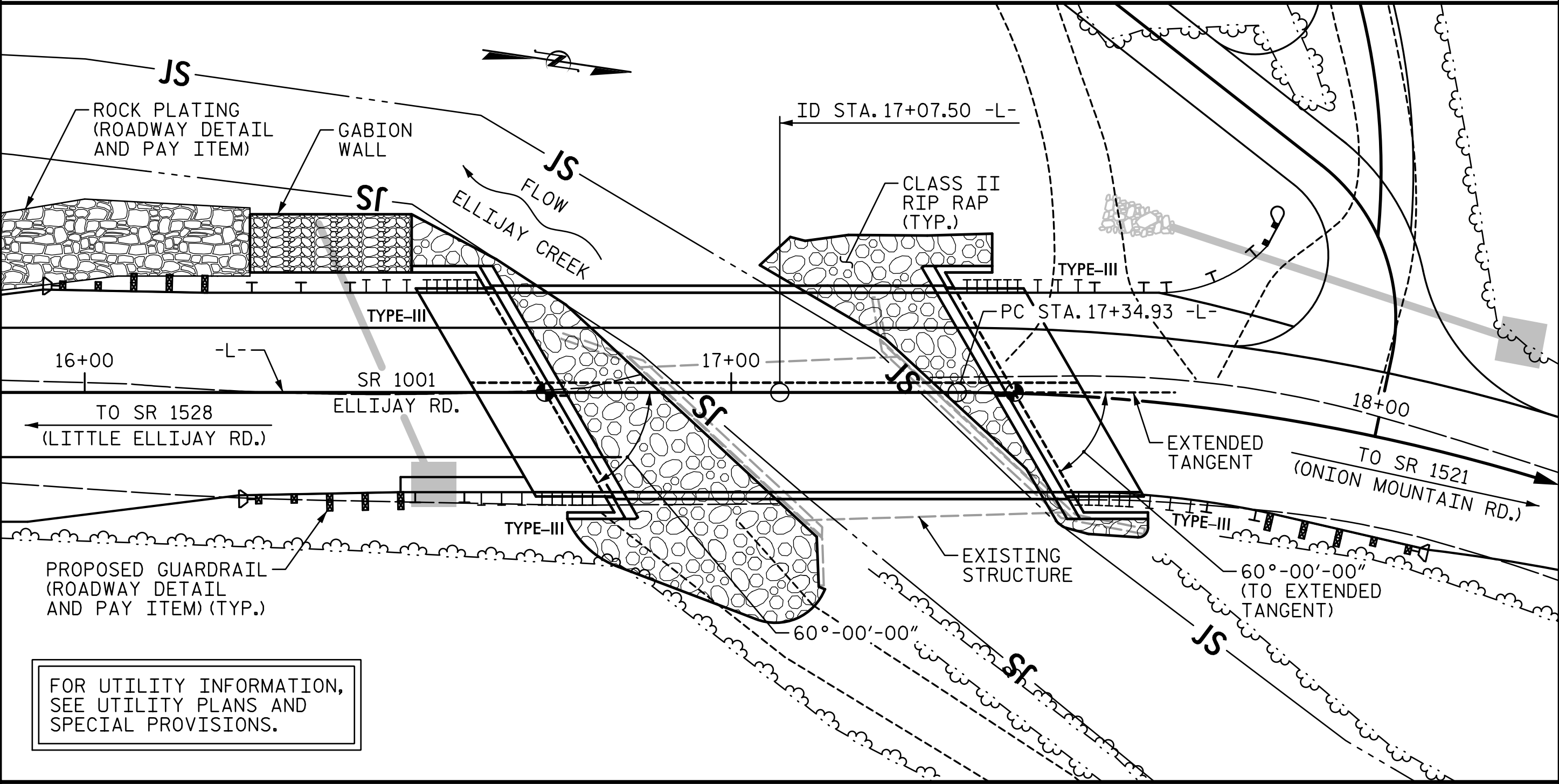


BENCHMARK BM-1: RAILROAD SPIKE IN BASE OF 20" WALNUT, STA. 16+23.10 -L-, 74.33' RT., ELEV. 2280.26, N 556767.330, E 725531.098



LOCATION SKETCH

GENERAL NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE "STANDARD NOTES" SHEET.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

THE EXISTING STRUCTURE CONSISTING OF (1) 41'-0"± TIMBER FLOOR ON STEEL I-BEAMS SPAN WITH A CLEAR ROADWAY WIDTH OF 24'-0 1/2" ON YOUNT MASONRY ABUTMENTS AND LOCATED AT THE PROPOSED STRUCTURE SHALL BE REMOVED IN STAGES. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR LOAD LIMIT.

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 FOR REVIEW IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS. SEE PLAN AND ELEVATION FOR ADDITIONAL NOTE.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, 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 17+07.50 -L-."

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA (ON SHEET 1 OF 2) SHALL BE EXCAVATED FOR A DISTANCE FROM THE CENTERLINE OF ROADWAY OF APPROXIMATELY 20 FT± (LEFT) AND 30 FT± (RIGHT) AT END BENT 1 AND 24 FT± (LEFT) AND 20 FT± (RIGHT) AT END BENT 2 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 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.

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.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.

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.

FOR ASBESTOS ASSESSMENT, SEE SPECIAL PROVISIONS.

FOUNDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 95 TONS PER PILE.

DRILLED-IN PILES ARE REQUIRED FOR END BENT 1. EXCAVATE HOLES AT PILE LOCATIONS TO ELEV. 2256.4 FEET. FOR PILE EXCAVATION, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.

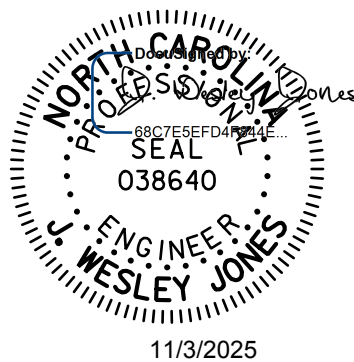
PILES AT END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 95 TONS PER PILE.

DRILLED-IN PILES ARE REQUIRED FOR END BENT 2. EXCAVATE HOLES AT PILE LOCATIONS TO ELEV. 2259.2 FEET. FOR PILE EXCAVATION, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.

CONCRETE IS REQUIRED TO FILL HOLES FOR PILE EXCAVATION AT END BENT 1 AND END BENT 2.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 20,000 TO 30,000 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT END BENT 1 AND END BENT 2. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUBARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.



TOTAL BILL OF MATERIAL

TOTAL BILL OF MATERIAL																			
		REMOVAL OF EXISTING STRUCTURE AT STA. 17+07.50 -L-	ASBESTOS ASSESSMENT	PILE EXCAVATION IN SOIL	PILE EXCAVATION NOT IN SOIL	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	HP 12 X 53 STEEL PILES	VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 2'-0" PRESTRESSED CONCRETE CORED SLABS	GABION RETAINING WALLS		
		LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LUMP SUM	CU. YD.	LUMP SUM	LBS.	EA.	NO.	LIN. FT.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN. FT.	SQ. FT.
SUPER- STRUCTURE	STAGE 1												70.0				5	350.0	
	STAGE 2												70.0				6	420.0	
END BENT 1	STAGE 1				40.0		19.6		1,922	4	4	60.0							262.5
	STAGE 2				30.0		21.1		1,988	3	3	45.0		115	125				
END BENT 2	STAGE 1			4.0	36.0		18.8		1,850	4	4	60.0							
	STAGE 2			3.0	27.0		21.9		2,060	3	3	45.0		60	70				
TOTAL		LUMP SUM	LUMP SUM	7.0	133.0	LUMP SUM	81.4	LUMP SUM	7,820	14	14	210.0	140.0	175	195	LUMP SUM	11	770.0	262.5

PROJECT NO. B-6029

MACON COUNTY

STATION: 17+07.50 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON SR 1001
(ELLIJAY ROAD) OVER
NORTH PRONG ELLIJAY CREEK
BETWEEN SR 1528 AND SR 1521

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S-2
2			4			TOTAL SHEETS 17

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

DRAWN BY : LEM DATE : 7-17
CHECKED BY : JTG DATE : 11-17
DESIGN ENGINEER OF RECORD : JWJ DATE : 10-25