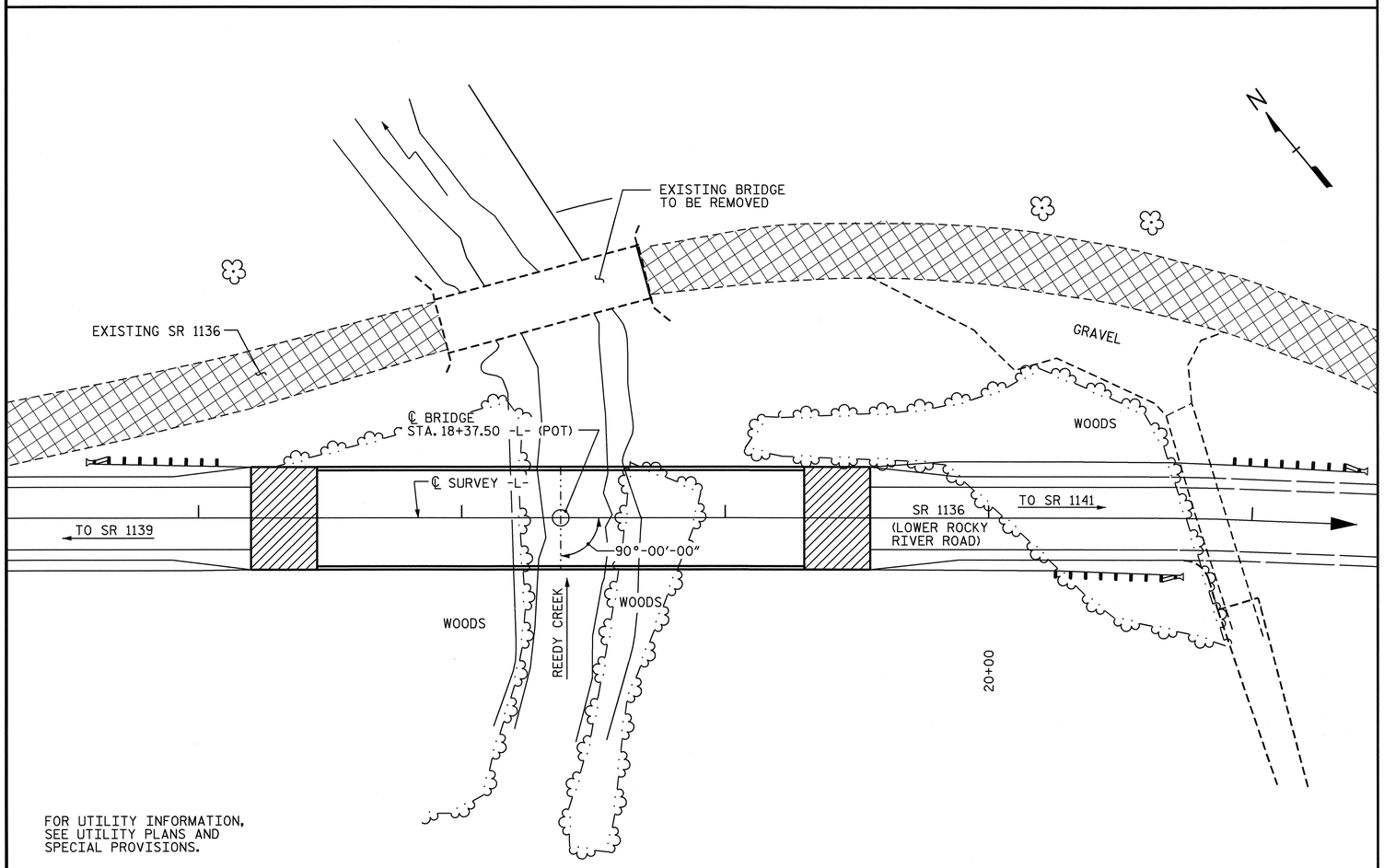
BENCH MARK: RR SPIKE IN BASE OF TREE 148.1 FEET LT. BL STA. 12+24.33 EL. 539.49 NAVD 88



FOR UTILITY INFORMATION,
SEE UTILITY PLANS AND
SPECIAL PROVISIONS.

LOCATION SKETCH

NOTES: (CONTINUED FROM SHEET 1 OF 3)

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

PILES FOR END BENT No. 1 AND 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.

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 18+37.50 -L-".

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

THE DRILLED PIERS AT BENT No. 1 AND 2 HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 25 TSF.

THE REQUIRED TIP BEARING CAPACITY AT BENT No. 1 AND 2 SHALL BE VERIFIED.

DRILLED PIERS FOR BENT No. 1 AND 2 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 282 TONS EACH AT THE TOP OF THE COLUMN.

DRILLED PIERS FOR BENT No. 1 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 513.5 FT. (LEFT) AND 515.5 FT. (RIGHT) AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

DRILLED PIERS FOR BENT No. 2 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 516 FT. (LEFT) AND 512 FT. (RIGHT) AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIER IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND LINE ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1'-0" BELOW THE GROUND LINE.

PERMANENT STEEL CASING MAY BE REQUIRED FOR DRILLED PIERS AT BENT No. 1. IF REQUIRED THE CASING SHALL NOT EXTEND BELOW ELEVATION 520 FT. (LEFT PIER) AND 524 FT. (RIGHT PIER) WITHOUT THE ENGINEERS PERMISSION. THE NEED FOR PERMANENT STEEL CASING WILL BE DETERMINED BY THE ENGINEER.

PERMANENT STEEL CASING MAY BE REQUIRED FOR DRILLED PIERS AT BENT No. 2. IF REQUIRED THE CASING SHALL NOT EXTEND BELOW ELEVATION 524 FT. (LEFT PIER) AND 520 FT. (RIGHT PIER) WITHOUT THE ENGINEERS PERMISSION. THE NEED FOR PERMANENT STEEL CASING WILL BE DETERMINED BY THE ENGINEER.

FOR PERMANENT STEEL CASING, SEE SPECIAL PROVISIONS FOR DRILLED PIERS.

SPT TESTING IS NOT REQUIRED TO DETERMINE THE TIP BEARING CAPACITY OF THE DRILLED PIERS AT BENTS No. 1 AND 2.

SID INSPECTIONS ARE NOT REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT BENTS No. 1 AND 2.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT BENTS No. 1 AND 2. SEE SPECIAL PROVISIONS FOR CROSSHOLE SONIC LOGGING.

FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE_____= 5900 CFS.
FREQUENCY OF DESIGN FLOOD_____= 25 YRS.
DESIGN HIGH WATER ELEVATION_____= 544.3
DRAINAGE AREA_____= 30.9 SQ. MI.
BASIC DISCHARGE(Q100)_____= 8430 CFS.
BASIC HIGH WATER ELEVATION_____= 545.8

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE_____= 12,340+ CFS.
FREQUENCY OF OVERTOPPING FLOOD____= 500 YRS.+
OVERTOPPING FLOOD ELEVATION_____= 559.07

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	4'-0" Ø DRILLED PIERS IN SOIL	4'-0" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	CROSSHOLE SONIC LOGGING	CSL TUBES	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	45" PRESTRESSED CONCRETE GIRDERS		HP 12 X 53 STEEL PILES		TWO BAR METAL RAIL	1'-2" X 30" CONCRETE PARAPET	PLAIN RIP RAP CLASS II (2'-0" THICK)	FILTER FABRIC FOR DRAINAGE	ELASTOMERIC BEARINGS	EVAZOTE JOINT SEALS
	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	LIN. FT.	SQ. FT.	SQ. FT.	CU. YDS.	LUMP SUM	LBS.	LBS.	NO.	LIN. FT.	NO.	LIN. FT.	LIN. FT.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	LUMP SUM
SUPERSTRUCTURE							7,789	8,537		LUMP SUM			15	903.34			350.67	365.67			LUMP SUM	LUMP SUM
END BENT No. 1									26.9		3,899				9	300			500	556		
BENT No. 1		29.0	12.0	25.6	1	184.0			39.2		10,049	1,861										
BENT No. 2		26.0	14.0	24.0		180.0			39.5		10,050	1,868										
END BENT No. 2									26.8		3,899				9	270			640	711		
TOTAL	LUMP SUM	55.0	26.0	49.6	1	364.0	7,789	8,537	132.4	LUMP SUM	27,897	3,729	15	903.34	18	570	350.67	365.67	1140	1267	LUMP SUM	LUMP SUM

NORTH CAROLINA PROFESSIONAL SEAL 11268 ENGINEER BETSY S. COX
Betsy Cox 6-25-09

DRAWN BY : P.C. BREWER DATE : 3/13/03
CHECKED BY : S.B. WILLIAMS DATE : 3/27/03

PROJECT NO. B-3623
CABARRUS COUNTY
STATION: 18+37.50 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE OVER REEDY CREEK
ON SR 1136 BETWEEN
SR 1139 AND SR 1141

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			34