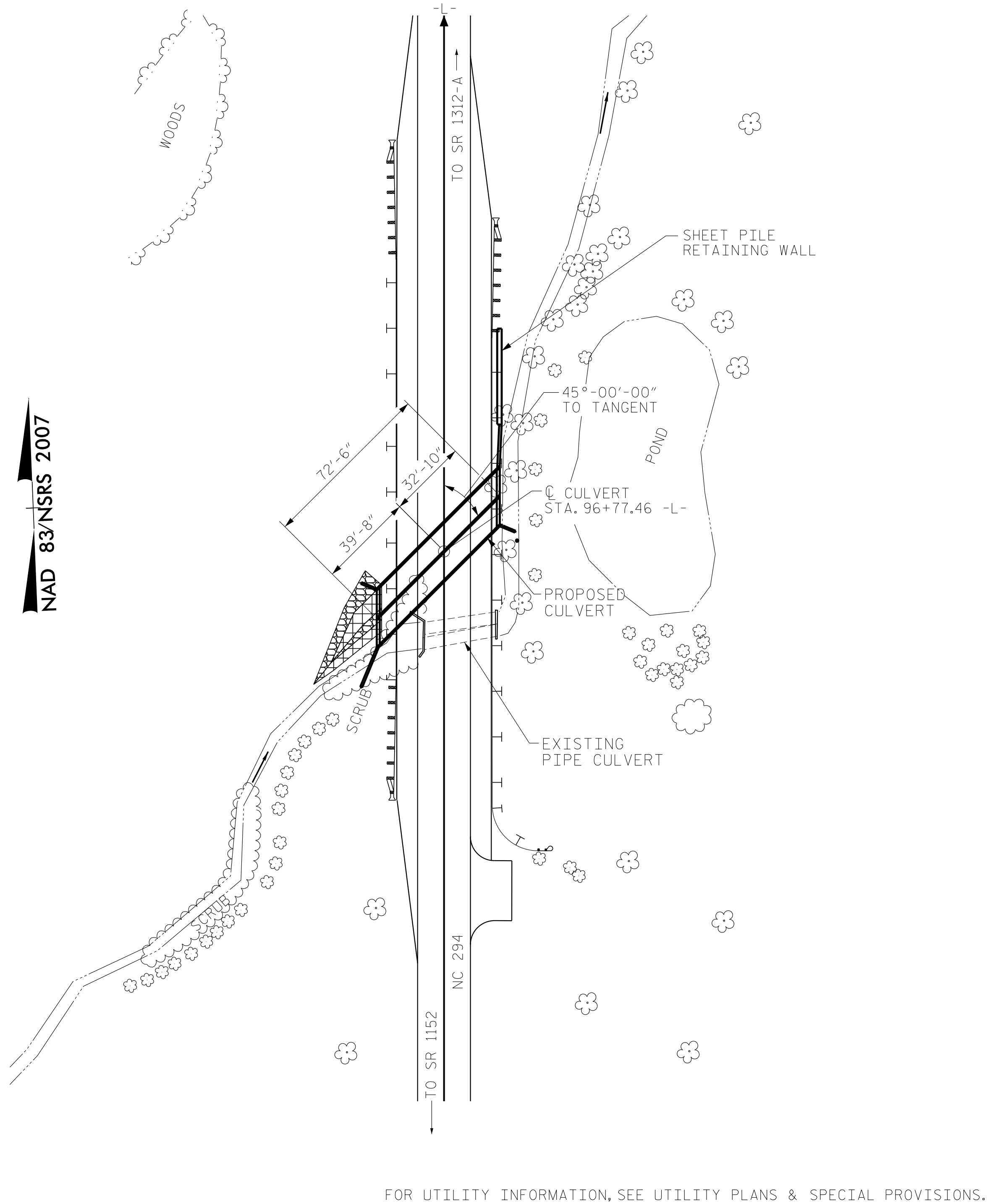


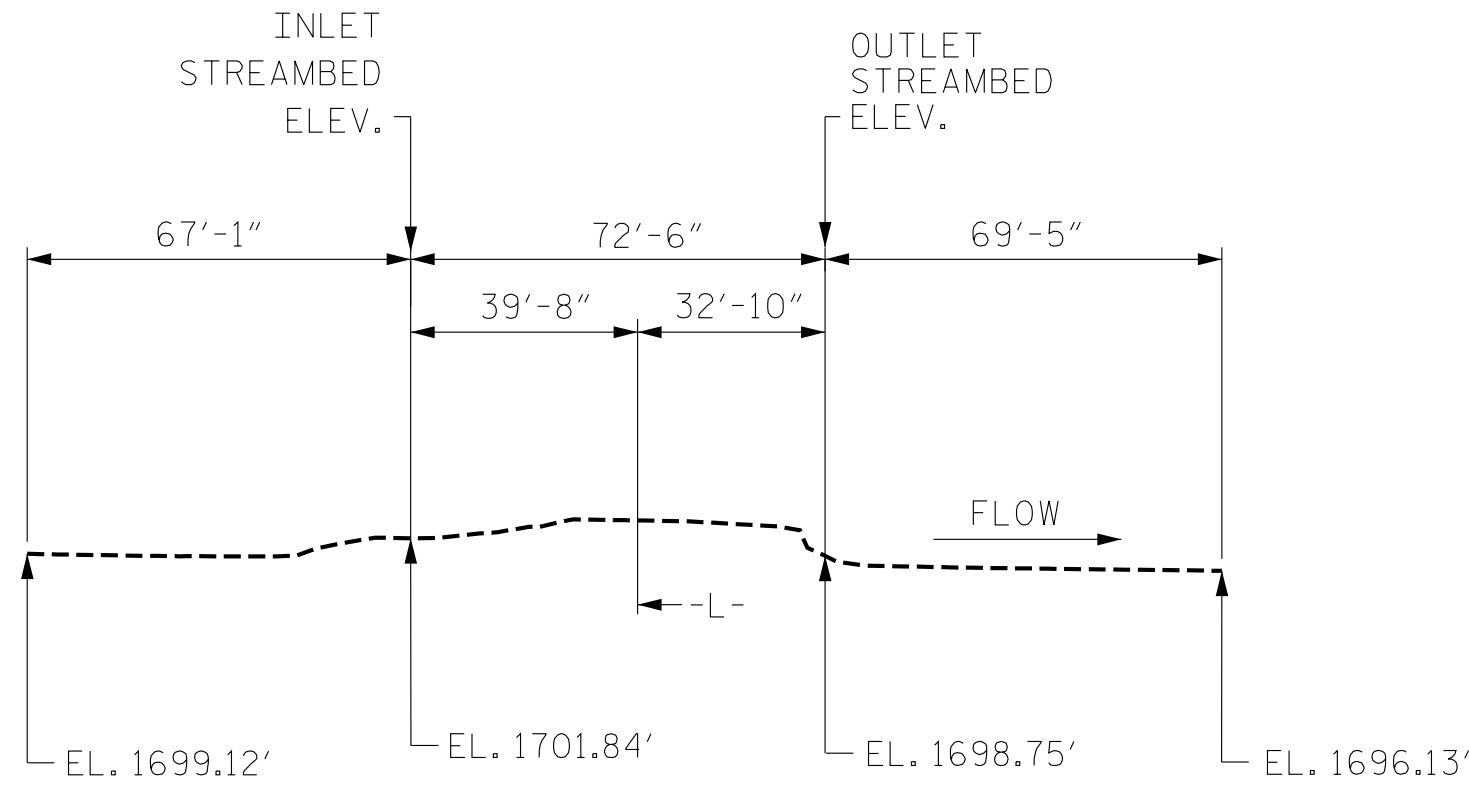
BM #9: RR SPIKE IN TRIPLE 36' POPLAR TREE, STA. 101+25.00 -L- 225' RT.
N 524326 E446532, EL. 1702.98



LOCATION SKETCH

FOR UTILITY INFORMATION, SEE UTILITY PLANS & SPECIAL PROVISIONS.

NAD 83/NSRS 2007



PROFILE ALONG \odot CULVERT

HYDRAULIC DATA	
DESIGN DISCHARGE	400 CFS
FREQUENCY OF DESIGN FLOOD	50 YRS
DESIGN HIGH WATER ELEVATION	1703.1 FT
BASE DISCHARGE	480 CFS
BASE FREQUENCY	100 YRS
BASE HW ELEVATION	1703.38 FT
DRAINAGE AREA	0.89 SQ. MI.
OVERTOPPING FLOOD DATA	
OVERTOPPING DISCHARGE	550 CFS
FREQUENCY OF OVERTOPPING FLOOD	100 + YRS
OVERTOPPING FLOOD ELEVATION	1703.9 FT
GRADE DATA	
GRADE POINT ELEV. @ STA. 96+77.46 -L-	1706.61 FT
BED ELEV. @ STA. 96+77.46 -L-	1696.89 FT
ROADWAY SLOPES	2:1

TOTAL STRUCTURE QUANTITIES	
CLASS A CONCRETE	TOTAL 160.9 C.Y.
REINFORCING STEEL	TOTAL 22,405 LBS.
STEEL SHEET PILING	TOTAL 400 SO. FT.
CULVERT EXCAVATION	LUMP SUM
GEOTEXTILE FABRIC	245 SO. YD.
FOUNDATION CONDITIONING MATERIAL	276 TONS
REMOVAL OF EXISTING STRUCTURE	LUMP SUM
RIP RAP CLASS II	30 TONS

NOTES:

- ASSUMED LIVE LOAD -----HL-93
- DESIGN FILL-----MAX. = 3.40' MIN. = 1.40'
- FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.
- 3" \varnothing WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER (STAGE 1 & 2):
 1. WING FOOTINGS AND FLOOR SLAB INCLUDING 4" OF ALL VERTICAL WALLS.
 2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.
- THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.
- DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.
- AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACE OF EXTERIOR WALL AND BOTH FACES OF INTERIOR WALLS ABOVE LOWER WALL CONSTRUCTION JOINT. THE SPLICE LENGTH SHALL BE AS PROVIDED IN THE SPLICE LENGTH CHART SHOWN ON THE PLANS. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.
- AT THE CONTRACTOR'S OPTION, HE MAY SUBMIT TO THE ENGINEER FOR APPROVAL DESIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL PROVIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE DESIGN. FOR OPTIONAL PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL PROVISIONS.
- FOR CULVERT DIVERSION DETAILS AND PAY ITEM, SEE EROSION CONTROL PLANS
- EXCAVATE THREE FEET BELOW THE BOTTOM OF CULVERT AND WING FOOTING ELEVATIONS. PLACE A LAYER OF GEOTEXTILE FABRIC, COVERING THE ENTIRE AREA, IN ACCORDANCE WITH SECTION 270 OF THE STANDARD SPECIFICATIONS. THEN BACKFILL UP TO BOTTOM OF CULVERT WITH FOUNDATION CONDITIONING MATERIAL IN ACCORDANCE WITH SECTION 414 OF THE STANDARD SPECIFICATIONS.
- 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.
- THE EXISTING STRUCTURE CONSISTING OF 2 @ 66" CORRUGATED METAL PIPE AND STONE HEADWALLS LOCATED AT THE PROPOSED STRUCTURE SHALL BE REMOVED. REFER TO TRAFFIC CONTROL PLANS FOR PHASING NOTES.
- REMOVAL OF THE EXISTING CULVERT 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.

PROJECT NO. R-3622B
CHEROKEE COUNTY
 STATION: 96+77.46 -L-

SHEET 1 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

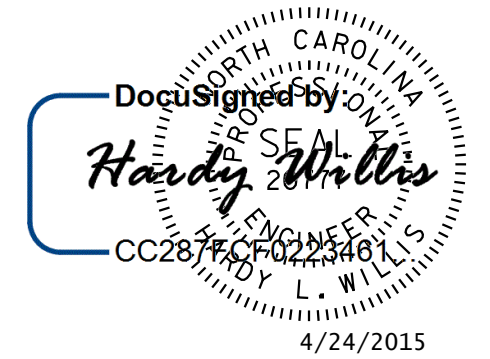
DOUBLE 8' X 6'
 CONCRETE BOX CULVERT
 45° SKEW

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Vaughn & Melton
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DWN. BY: RWW DATE: MAR 2015
 CHKD. BY: HLW DATE: MAR 2015
 DES. EGR. OF RECORD: CBC DATE: MAR 2015

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