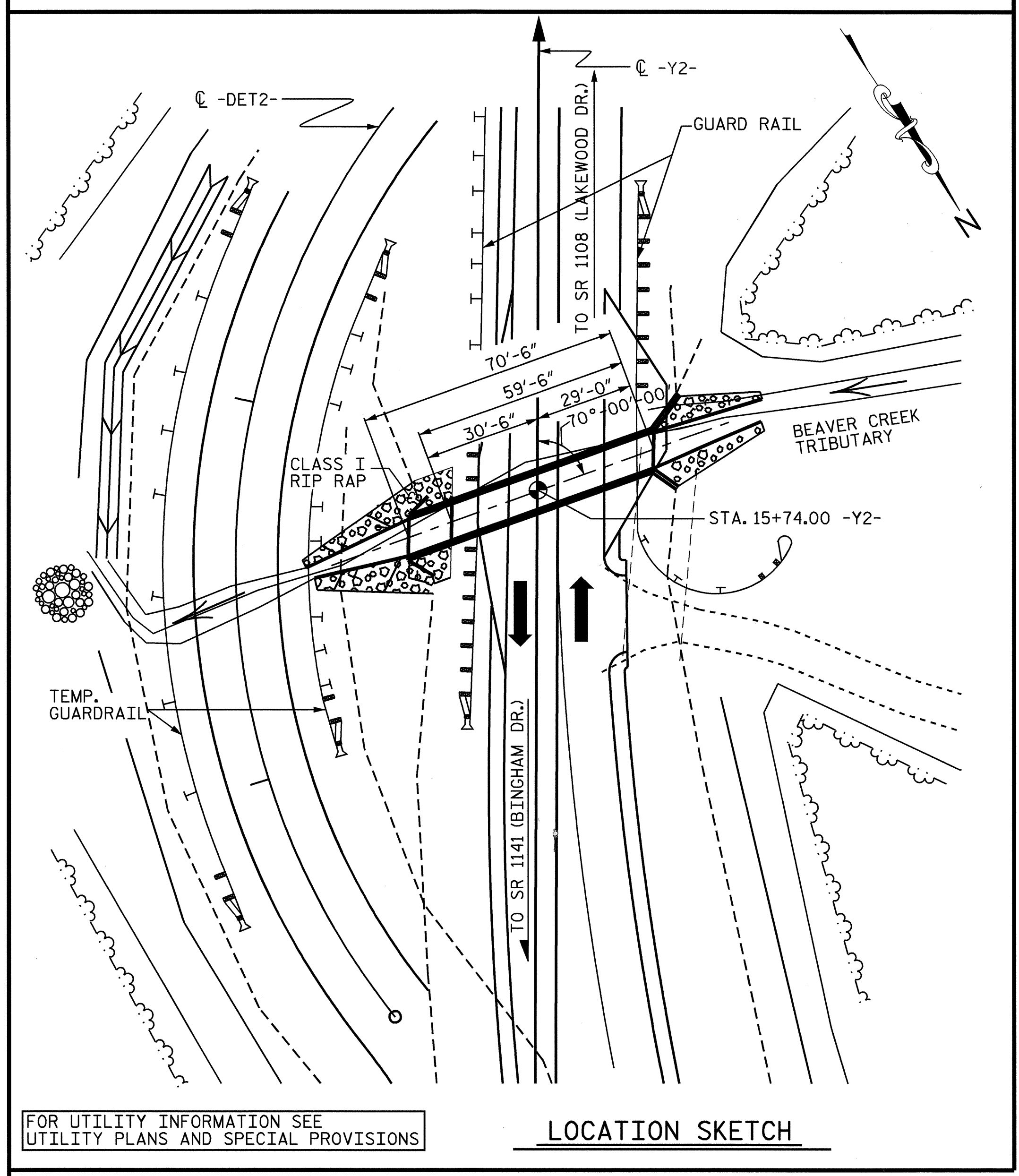


B.M. #100 CUT IN CONCRETE ON BRIDGE END BENT 50.52' LEFT OF
STA. 32+54.64 -L- @ EL. 125.63

F.A. PROJECT NO. STP-0622 (5)



FOR UTILITY INFORMATION SEE
UTILITY PLANS AND SPECIAL PROVISIONS

LOCATION SKETCH

ROADWAY DATA

GRADEPOINT ELEVATION
AT STATION 15+74.00 -Y2- = 126.22'
BED ELEVATION
@ STATION 15+74.00 -Y2- = 117.72'
ROADWAY SLOPE = 2 : 1

HYDRAULIC DATA

DESIGN DISCHARGE _____ 1000 CFS
FREQUENCY OF DESIGN FLOOD _____ 25 YEARS
DESIGN HIGH WATER ELEVATION _____ 127.23
DRAINAGE AREA _____ 2.70 SQ. MI.
BASIC DISCHARGE (Q100) _____ 1300 CFS
BASIC HIGH WATER ELEVATION _____ 127.55

OVERTOPPING FLOOD DATA

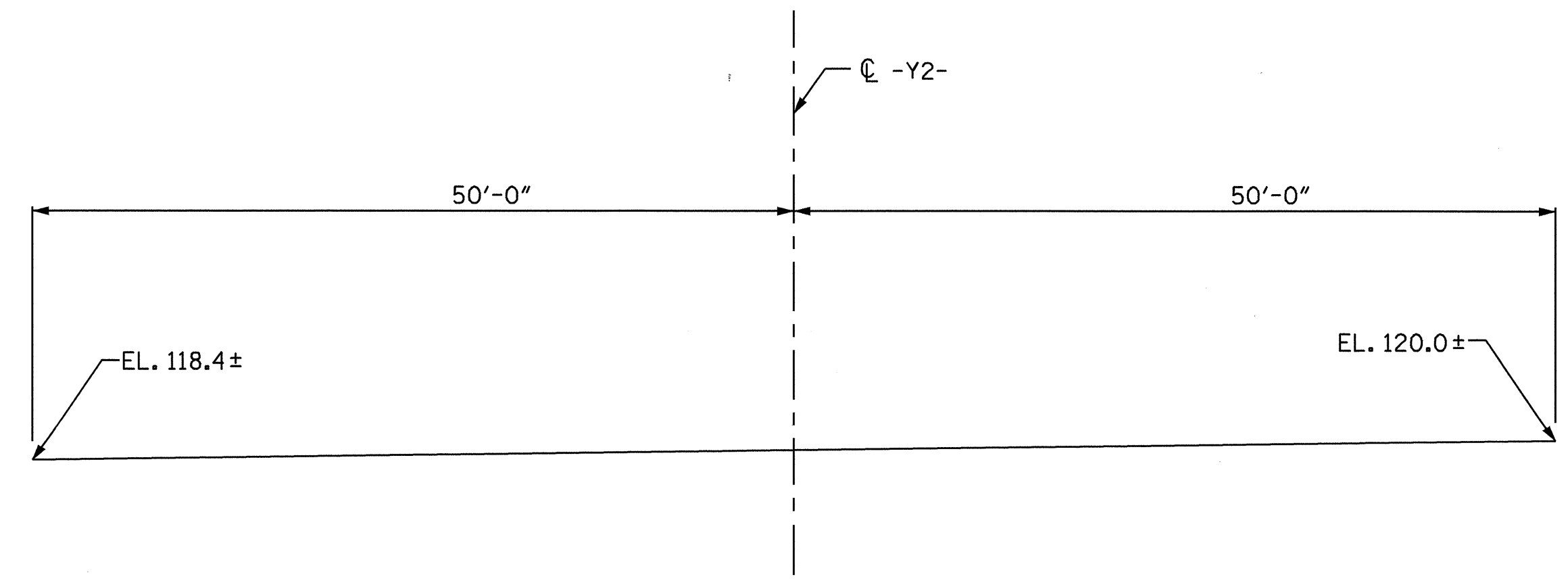
OVERTOPPING DISCHARGE _____ 470 CFS
FREQUENCY OF OVERTOPPING FLOOD _____ 5 YRS.-
OVERTOPPING FLOOD ELEVATION _____ 124.25

TOTAL STRUCTURE QUANTITIES

CLASS A CONCRETE		
BARREL @ .793	CY/FT	47.2 C.Y.
INLET WING		7.1 C.Y.
OUTLET WING		5.8 C.Y.
TOTAL		60.1 C.Y.
REINFORCING STEEL		
BARREL & OUTLET WINGS		8432 LBS.
WINGS ETC.		375 LBS.
TOTAL		8807 LBS.
CULVERT EXCAVATION		LUMP SUM
FOUNDATION	CONDITIONING MAT'L	51 TONS
FILTER FABRIC		31 YDS. ²
PLAIN RIP RAP CLASS I		24 TONS

NOTES

- ASSUMED LIVE LOAD -----HS20-44 OR ALTERNATE LOADING.
- DESIGN FILL-----3.01'
- FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.
- 3" Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:
 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 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.
- A 3 FOOT STRIP OF FABRIC SHALL BE ATTACHED TO THE FILL FACE OF THE WING COVERING THE ENTIRE LENGTH OF THE EXPANSION JOINT.

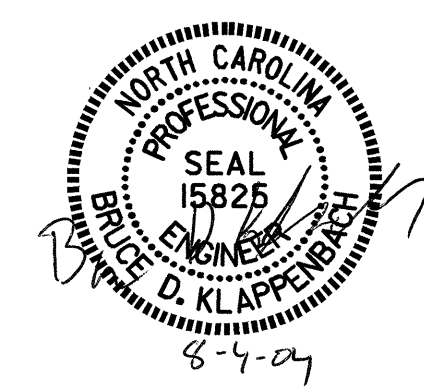


PROFILE ALONG CULVERT

REVISED 11-13-91 BY E.L.R. CHECKED BY G.R.P.
ADDED 8-22-89

ASSEMBLED BY : J.B. WILSON DATE : 9/03
CHECKED BY : D.A. GLADDEN DATE : 9/03
DRAWN BY : R.W. WRIGHT DATE : AUG. 1989
CHECKED BY : A.R. BISSETTE DATE : AUG. 1989

SPECIAL
STANDARD



PROJECT NO. U-0620
CUMBERLAND COUNTY
STATION: 15+74.00 -Y2-

SHEET 1 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
BARREL STANDARD
SINGLE 9 FT. X 5 FT.
CONCRETE BOX CULVERT
70° SKEW

AUGUST		1989	
REVISIONS			
NO.	BY:	DATE:	NO.
1			3
2			4
TOTAL SHEETS			SHEET NO.
23			C-1