

RIGHT ANGLE SECTION OF BARREL
There Are 32 #4 Bars In Section of Barrel.

REINFORCING STEEL BAR SCHEDULE

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
A1	98	4	6	4'-3"	278
A2	98	5	6	3'-11"	400
A3	5	5	6	3'-11"	21
A100	62	4	STR	5'-11"	245
A101	4	4	STR	4'-0"	11
A102	4	4	STR	2'-3"	6
A200	68	4	STR	5'-11"	269
A701	6	4	STR	3'-4"	13
B1	70	4	STR	7'-11"	370
B2	98	4	STR	6'-4"	415
C1	64	4	STR	17'-8"	755
D1	14	6	STR	2'-6"	53
D2	4	6	STR	0'-7"	4
J1	4	4	STR	6'-11"	18
J1	6	5	STR	8'-6"	53
K1	9	5	STR	5'-2"	48
H1	5	5	STR	6'-11"	36
S2	12	8	STR	6'-11"	227
TOTAL					3216

SPLICE LENGTHS

NO. 4	1'-4"
NO. 5	1'-8"
NO. 8	3'-8"

NOTES

ASSUMED LIVE LOAD HS20-44 OR ALTERNATE LOADING

DESIGN FILL 5.21 FT.

3" Ø WEEP HOLES INDICATED TO BE IN ACCORD WITH THE SPECIFICATIONS.

CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:

1. WING FOOTINGS AND FLOOR SLAB INCLUDING 3 1/2" OF ALL VERTICAL WALLS.
2. THE REMAINING PORTIONS OF THE WALLS AND THE WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.

THE CONTRACTOR SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.

ALL REINFORCING STEEL SHALL BE GRADE 60

AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACES OF THE EXTERIOR WALL AND BOTH FACES OF THE INTERIOR WALLS ABOVE LOWER WALL CONNECTION. THE SPLICE LENGTH SHALL BE AS PROVIDED IN THE SPLICE LENGTH CHART AS SHOWN IN THE PLANS. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.

FOR REMOVAL OF EXISTING CONCRETE AND BONDING OF NEW CONCRETE TO OLD CONCRETE, SEE STANDARD SPECIFICATIONS FOR "BONDING". EXISTING REINFORCING STEEL EXPOSED BY THE REMOVAL OF OLD CONCRETE SHALL BE LEFT IN PLACE TO EXTEND INTO NEW CONCRETE.

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

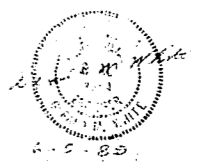
REPAIR TO END OF EXISTING BARREL SHALL BE COMPLETED BEFORE CULVERT IS EXTENDED.

FOR REPAIR OF CRACKED EXTERIOR WALL AT END OF EXISTING CULVERT, SEE DETAILS SHEET 5 OF 5.

ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CURRENT NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAYS AND STRUCTURES, AND THE CURRENT A.A.S.H.T.O. SPECIFICATIONS.

STRUCTURE QUANTITIES

CLASS 'A' CONCRETE:	
BARREL @ 0.682 CY/FT	23.5 CY.
WING, ETC.	9.7 CY.
EDGE BEAM	0.3 CY.
END OF EXISTING BARREL REPAIR	1.8 CY.
TOTAL	35.3 CY.
REINFORCING STEEL:	
BARREL	3266 LBS.
WING, ETC.	514 LBS.
TOTAL	3780 LBS.
FOUND. COND. NAT'L.	9 TONS
CULV. EXCAV. LUMP SUM	



NC 55 WIDENING

HUGH J. GILLEECE & ASSOC.
104 FOUNTAINBROOK CIRCLE SUITE C CARY N.C. 27511 (919) 469-1101

REVISIONS Approved 7/1/85

DESIGNER DATE 6-5-87 SHEET C-3
DRAWN BY SCALE
CHECKED BY JOB NO. OF 5