PROJECT REFERENCE NO.	SHEET NO.
R-2237B	11
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 20677 ENGINEER GREGORY A. KEMPF — 11-17-04

HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 14160 ENGINEER DOUGLAS A. BASKERVILLE — 11/16/04

HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612

TRANSITE CONSULTING ENGINEERS, INCORPORATED
1300 Paddock Drive, Suite G-10 Raleigh, N.C. 27609

8/17/99

REVISIONS

-L- CURVE LR6
PI = 87+86.86
Δ = 18° 54' 31.0" (LT)
Dc = 2° 00' 00.0"
θs = 1° 30' 00.0"
Ls = 150.00'
Ts = 552.11'
Lc = 795.43'
Rc = 2,864.79'
LT = 100.00'
ST = 50.00'
e = 0.04
DS = 50 mph

-L- CURVE LR7
PI = 103+92.34
Δ = 18° 05' 12.2" (LT)
Dc = 2° 00' 00.0"
θs = 1° 30' 00.0"
Ls = 150.00'
Ts = 531.01'
Lc = 754.34'
Rc = 2,864.79'
LT = 100.00'
ST = 50.00'
e = 0.04
DS = 50 mph

NAD 83

MATCHLINE -L- STA. 92 + 00.00 SEE SHEET NO. 10

MATCHLINE -L- STA. 105 + 00.00 SEE SHEET NO. 12

N12°10'01"W 962.01'

N03°05'34"E 962.26'

S66°21'32"E 807.73'

21 HOPE M.& HAROLD D.PATRICK DB 1291 PG 1079

26 FAITH M.& DAVID LOAKES DB 1291 PG 1084

24 DONALD WADE BENTLEY DB 0530 PG 0133

25 RICKY D.& DARITA CLINE DB 1182 PG 0754

28 DAVID & LAURA J.WARD DB 1182 PG 0517

-L- ST Sta. 93+30.18

-L- TS Sta. 98+61.33

-L- SC Sta. 100+11.33

BL-10 PINC 93+74.75

BL-11 PINC 102+07.80

+00.00 135.00 ft.

+00.00 123.00 ft.

+00.00 120.00 ft.

+50.00 70.00 ft.

+00.00 85.00 ft.

+50.00 55.00 ft.

+30.00 58.00 ft.

+93.45 127.40 ft

+37.26 164.71 ft.

+50.00 104.00 ft.

95+00

100+00

105+00

PROPOSED SLOPE LIMIT

PROPOSED SOIL DRIVE

PROPOSED GUARDRAIL

REMOVE EXIST. GUARDRAIL

PROP.R/W

EXISTING R/W

N 27° 45' 14.8" W -L-

BEGIN EXPWY. GUTTER +30

BEGIN WALL END EX.GUT. TYPE B-77 +20.95

END WALL BEG EX.GUT. TYPE B-77 +60.78

PROPOSED RETAINING WALL #3

FILL WITH FLOWABLE MATERIAL

JB W/ SLAB LID

18" CSP W/ ELBOWS

18" RCP

72" RCP

15" CSP W/ 2 ELBOWS

15" CSP

18" CSP

+80, CAT-1

+33.45, CAT-1

+50, CAT-1

+00, TYPE 350

+91, TYPE 350

+84.51

37.5 TYP.

264.00' S24°45'32"E

S54°14'28"W 228.35'

N35°48'28"E 300.00'

SPECIAL LAT "V" DITCH SEE DETAIL D EST. DDE 57 C.Y.

TOE PROTECTION SEE DETAIL B EST. 39 TONS EST. 55 SYFF

CL. 'I' RIP-RAP EST. 3 TONS EST. 7 SYFF

CL. 'I' RIP-RAP EST. 4 TONS EST. 10 SYFF

DETAIL B
TOE PROTECTION
(Not to Scale)

Natural Ground — Fill Slope — d1 — Filter Fabric — d= 1.0 Ft
Type of Liner = CL. 'I'

-L- 92+00 TO 93+00 (RT.)

DETAIL D
LATERAL 'V' DITCH
(Not to Scale)

Natural Ground — 2:1 to 2:1 — b — 8% — Fill Slope — d1 — Filter Fabric
Min. D = 1.0 Ft.
Max. d = 1.0 Ft.
b = 5.0 Ft.
Type of Liner = CLASS. 'I'

-L- 93+10 TO 94+00 (RT.)

NOTES:

1. DRIVEWAY RETURN RADII ARE 10' UNLESS OTHERWISE SHOWN
2. ALL CSP WILL BE ROD LUG AND GASKET CONNECTOR
3. NO RIP RAP TO BE PLACED IN STREAM BED/CREEK BOTTOM

REFERENCES:

1. FOR -L- PROFILE SEE SHEET 39
2. FOR RETAINING WALL DETAILS SEE SHEET W-1 THRU W-20

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