PROJECT REFERENCE NO.	SHEET NO.
R-977A	57

METRIC

CONST.REV.

R/W REV.

HIGHWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 15759 ENGINEER STEPHEN C. BROWN
12/13/04

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 20137 ENGINEER JONATHAN KEVIN SCARCE
12/9/04

BM#28 STANDARD DISK STAMPED "THEATER 1978" SET IN THE TOP OF A 250 CONCRETE CYLINDER, 150 BELOW GROUND SURFACE AT 206.6m LT. OF -L- STA 78+02.976 ELEV. = 502.789

PVI = 14+60.000
ELEV = 499.910
LVC = 80.000
K = 196
V = 120

+3.5667%
+3.1595%
+2.8504%
+5.1751%
+3.33%
LT. DITCH
+4.00%
+3.50%
+2.50%
+1.50%
+4.50%
+5.67%
+7.8290%
450 RCP

15+05 LT 503.00 -Y6- STA. 15+23.977
-L REV- STA. 76+57.040
END PROPOSED GRADE PI= 15+30.265 (-L REV- EOP) EI= 502.131
-L REV- STA. 76+57.040 =
PI= 15+32.446 EI= 502.244
BEGIN PROPOSED GRADE PI= 15+43.383 (-L REV- EOP) EI= 502.810
FUTURE PAV'T.
15+20 LT 503.50
15+90 LT 501.75
16+00 LT 502.10
16+20 LT 502.90
16+40 LT 503.40
16+60 LT 503.70
16+80 LT 504.60
16+95 LT 505.45

PVI = 16+40.000
ELEV = 505.564
LVC = 170.000
K = 34
V = 80

EXISTING GRADE
PROPOSED GRADE
END PROPOSED GRADE STA. 17+40.000 ELEV = 513.393 (INCLUDES 30mm RESURF.)

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 216

DRAINAGE AREA	=	0.69 Ha
DESIGN DISCHARGE	=	0.09 m^3/s
DESIGN FREQUENCY	=	10 YRS
DESIGN HIGH WATER ELEV.	=	506.43 m
BASE DISCHARGE	=	0.16 m^3/s
BASE FREQUENCY	=	100 YRS
BASE HIGH WATER ELEV.	=	506.70 m
OVERTOPPING DISCHARGE	=	0.16 m^3/s
OVERTOPPING FREQUENCY	=	100 YRS
OVERTOPPING FLOOD ELEV.	=	506.7 m

SEE SHEET 22 & 29 FOR -Y6- PLAN

-Y6-

14+50 15+00 15+50 16+00 16+50 17+00 17+50

PVI = 10+00.000
ELEV = 493.700
LVC = 20.000
K = 10
V = 45

BEGIN PROPOSED GRADE STA. 9+90.000 ELEV = 493.640

EXISTING GRADE
+0.6000%
+2.5617%
+2.0504%
PROPOSED GRADE

END PROPOSED GRADE PI= 10+69.251 (-Y6REV- EOP) EI= 495.474
-Y6REV- STA. 12+20.000 =
PI= 10+75.396 EI= 495.600

EXIST. 1500 CSP
1200 RCP

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 214

DRAINAGE AREA	=	94 Ha
DESIGN DISCHARGE	=	4.8 m^3/s
DESIGN FREQUENCY	=	10 YRS
DESIGN HIGH WATER ELEV.	=	493.36 m
BASE DISCHARGE	=	11 m^3/s
BASE FREQUENCY	=	100 YRS
BASE HIGH WATER ELEV.	=	493.94 m
OVERTOPPING DISCHARGE	=	6.8 m^3/s
OVERTOPPING FREQUENCY	=	25± YRS
OVERTOPPING FLOOD ELEV.	=	493.67 m

SEE SHEET 28 FOR -Y10- PLAN

-Y10-

10+00 10+50 11+00 11+50 12+00 12+50 13+00

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

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