PROJECT REFERENCE NO.	SHEET NO.
R-513C	135

ROADWAY DESIGN ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 12300 ENGINEER CHARLES LEE FLOWE 7/16/04

HYDRAULICS ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 20754 ENGINEER THOMAS T. STEPHENS, JR. 7/16/04

METRIC 5 0 10

CONST.REV.

R/W REV.

TGS ENGINEERS
975 WALNUT STREET, SUITE 141
CARY, NC 27511
PH (919) 319-8850

BM #6 RR SPIKE IN BASE OF 550mm WILD CHERRY
33.415 RT OF -L- STA.311+67.690 EL= 43.801

L = 100.000
K = 149

(-) 0.3000%

(-) 0.8000%

PI = 26+40.000
El = 45.558

PI = 27.400
El = 44.40

PROP.GRADE

(-) 0.3000%

(-) 0.8333%

EXIST.PROFILE

28+41+/- BEGIN LAT. DITCH.RT
GR EL 40.20

1800 RCP

28+44+/- END LAT. DITCH.LT
GR EL 40.20

28+46+/- BEGIN LAT. DITCH.LT
GR EL 40.20

(-) 0.3000%

(+) 0.5252% LT

(+) 0.5142% RT

-Y9-

DESIGN DATA
FOR DRAINAGE STRUCTURE AT
STA.28+41

DRAINAGE AREA	= 7.3 HA
DESIGN FREQUENCY	= 50 YRS
DESIGN DISCHARGE	= 21 cms
DESIGN HW ELEVATION	= 40.57 m
100 YEAR DISCHARGE	= 25 cms
100 YEAR HW ELEVATION	= 40.75 m
OVERTOPPING FREQUENCY	= 500+ YRS
OVERTOPPING DISCHARGE	= 5.5 cms
OVERTOPPING	= 42.66 m

SEE SHEETS NO.23 & NO.50
FOR -Y9- PLAN

26+20 27+00 28+00 29+00 29+80

L = 50.000
K = 658

STA 30+80.000
END GR EL 42.257

PROP.GRADE

(-) 0.3000%

(-) 0.22400%

(+) 0.5252% LT

(+) 0.5142% RT

PI = 30+55.000
El = 42.313

EXIST.PROFILE

30+80+/- END LAT DITCH.RT GR EL 41.43
30+80+/- END LAT DITCH.LT GR EL 41.43

-Y9-

SEE SHEETS NO.23 & NO.24
FOR -Y9- PLAN

29+80 30+00

STA 10+03.642 -Y9A-=
STA 2+19.276 -Y9- 3.6 RT
BEGIN GR EL = 42.830

PI = 10+20.000
El = 42.830

0.0000%

(-) 0.7699%

L = 45.000
K = 40

PROP.GRADE

(+) 0.7498%

STA 10+80.000 -Y9A-=
END GR EL = 42.820

L = 30.000
K = 39

EXIST.PROFILE

PI = 10+57.500
El = 42.541

-Y9A-

SEE SHEET NO.47 FOR -Y9A- PLAN

10+00 11+00

6/09/03

$$$$SYSTIME$$$$
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