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5/28/99

BM #16 ELEVATION = 1048.33'
N = 562057.22 E = 1042728.02
-RP_F- STATION 11+01.39
366.04' LEFT
BRIDGE SPIKE IN BASE 30" POPLAR

-RP_F-

BM #6 ELEVATION = 1080.99'
N = 561443.04 E = 1041924.09
-RP_F- STATION 18+44.38
577.68' RIGHT
RR SPIKE IN BASE 20" WHITE OAK

PLANS PREPARED BY :
PARSONS
RALEIGH, NORTH CAROLINA, (919) 854-1345
NC LICENSE NO. F-0246
FOR NORTH CAROLINA DEPT. OF TRANSPORTATION

SUNGATE DESIGN GROUP, P.A.
905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6058
ENG FIRM LICENSE NO. C-690

PROJECT REFERENCE NO.	SHEET NO.
I-4729A	8

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 37950 ENGINEER JASON M. EVERETT
8/14/2017

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 026971 ENGINEER JOSHUA C. LABASTIDA
8/14/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PI = 20+90.00
EL = 1,095.81'
VC = 815'
K = 61
DS = 45 MPH

BEGIN BRIDGE
-RP_F- STA. 20+52 +/-

END BRIDGE
-RP_F- STA. 22+47 +/-

(-)16.6000%

1074.57

EXISTING US-74 EB BRIDGE

BEGIN GRADE
STA.10+00.00 -RP_F-
EL.= 1038.67

PI = 12+00.00
EL = 1,035.65'
VC = 310'
K = 31
DS = 30 MPH

BEG LAT DITCH
3' BASE
PI STA=12+80 RPF- RT
ELEV=1028.00

END LAT DITCH
3' BASE
PI STA=51+20 RPF- RT
ELEV=1026.80

(+)16.7600%

PROPOSED GRADE

(-)11.5100%

EXISTING GROUND

PROPOSED CULVERT

(-)10.5000%

2@10'x7' RCBC W/SILLS

CULVERT HYDRAULIC DATA

DRAINAGE AREA	= 1.4 SQ MI
DESIGN FREQUENCY	= 50 YRS
DESIGN DISCHARGE	= 700 CFS
DESIGN HW ELEVATION	= 1029.6 FT
100 YEAR DISCHARGE	= 800 CFS
100 YEAR HW ELEVATION	= 1030.1 FT
OVERTOPPING FREQUENCY	= +500 YRS
OVERTOPPING DISCHARGE	= 1100+ CFS
OVERTOPPING ELEVATION	= 1037.6 FT

BM #23 ELEVATION = 1089.08'
N = 560452.96 E = 1042369.13
-RP_F- STATION 25+80.91 12.91' RIGHT
NCGS TRAVERSE DISC IN CONC. MON.
STAMPED "SAM 1974"

-RP_F-

1074.57

EXISTING GROUND

(-)16.6000%

PROPOSED GRADE

PI = 30+40.00
EL = 1,033.11'
VC = 580'
K = 97
DS = 50 MPH

END LAT DITCH
3' BASE
PI STA=31+50 RP F- LT
ELEV=1031.20

(+) 3.9400%

BEG SPEC DITCH GRADE
PI STA=30+50 -RP F- LT
ELEV=1033.47

(-) 0.6600%

PI STA=31+00 -RP F- LT
ELEV=1031.50

(-)10.6100%

PI = 34+75.00
EL = 1,030.46'
VC = 100'
K = 370
DS = 75 MPH

BEG SPEC DITCH GRADE
PI STA=34+00
RPF- RT
ELEV=1026.38

PI STA=34+8 -RPF- RT
ELEV=1025.10

END SPEC DITCH GRADE
PI STA=35+50
RPF- RT
ELEV=1025.34

(-)10.8800%

END GRADE
STA.36+28.38 -RP_F-
EL.= 1029.11

(-) 1.6000%

(+) 0.3429%

NOTE:
SEE SHEETS 5 & 6 FOR -RP_F- PLAN

14-AUG-2017 10:25
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$$$$USERNAME$$$$