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5/28/99

-Y1RPB-

BEGIN GRADE
-YIRPB- STA. 10+00.00 =
-L- STA 57+18.95, 35.50' LT
ELEV = 56.48'

PI = 11+05.00
EL = 53.92'
VC = 192'
K = 119

(−)2.4381%

(−)0.8272%

36" RCP
EQ. PIPE

PROPOSED GRADE

PI = 16+20.00
EL = 49.66'
VC = 150'
K = 121

(−)0.8272%

(+)0.4137%

EXISTING GROUND

BEG SPEC LAT V-DITCH
STA 18+25 -YIRPB- LT
EL=42.69

30" RCP

(−) 0.31%

36" RCP

(+)0.36%

(−) 1.00%

BEG LAT 4' BASE DITCH
STA 20+00 -YIRPB- RT
EL=41.00

SPEC LAT V-DITCH
STA 20+60 -YIRPB- LT
EL=41.95

UNDERCUT EXCAVATION

PIPE HYDRAULIC DATA
CL III 30" RCP Sta. 18+49.3 -YIRPB-

DRAINAGE AREA	= 9.1	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 26	CFS
DESIGN HW ELEVATION	= 45.77	FT
100 YEAR DISCHARGE	= 30	CFS
100 YEAR HW ELEVATION	= 46.39	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 45	CFS
OVERTOPPING ELEVATION	= 50.78	FT

PIPE HYDRAULIC DATA
CL III 36" RCP Sta. 20+22.4 -YIRPB-

DRAINAGE AREA	= 15.52	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 39	CFS
DESIGN HW ELEVATION	= 45.04	FT
100 YEAR DISCHARGE	= 45	CFS
100 YEAR HW ELEVATION	= 45.40	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 104	CFS
OVERTOPPING ELEVATION	= 51.31	FT

SEE SHEET 6 & 7 FOR -Y1RPB- PLAN

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

DITCH LEGEND
LEFT DITCH ----------
RIGHT DITCH ----------

PROJECT REFERENCE NO.	SHEET NO.
U-4751	5I

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 043891 ENGINEER SEAN M. SHEPHERD
5/24/2017

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 029388 ENGINEER EDWARD L. NANCE
5/24/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-Y1RPB-

DITCH LEGEND
LEFT DITCH ----------
RIGHT DITCH ----------

END SPEC LAT V-DITCH
STA 23+50 -YIRPB- LT
EL=42.99

PI = 24+25.00
EL = 52.99'
VC = 150'
K = 91

(+)0.4137%

(−)1.2361%

PROPOSED GRADE

END GRADE
-YIRPB- STA. 31+46.89 =
-Y1- STA 38+71.82, 47.50' LT
ELEV = 46.49'

PI = 30+35.00
EL = 45.45'
VC = 200'
K = 92

(−)1.2361%

(+)0.9295%

(+) 0.36%

(−) 1.00%

(+) 1.50%

(+) 0.41%

(+) 0.42%

(−) 0.63%

EXISTING GROUND

LAT 4' BASE DITCH
STA 22+00 -YIRPB- RT
EL=39.00

END LAT 4' BASE DITCH
BEG LAT V-DITCH
STA 24+00 -YIRPB- RT
EL=42.00

END LAT V-DITCH
BEG SPEC CUT DITCH
STA 28+50 -YIRPB- RT
EL=43.84

SPEC CUT DITCH
STA 29+00 -YIRPB- RT
EL=44.05

END SPEC CUT DITCH
STA 32+12 -YIRPB- RT
EL=42.08

SEE SHEET 6 & 7 FOR -Y1RPB PLAN

7/14/2017
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Gamble