DocuSign Envelope ID: 4633A49D-9137-4E1D-BA8F-80AB46B80CF9

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
R-3620	24

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 25873 ENGINEER GARY R. LOVERING
DocuSigned by: Gary Lovering 4/3/2014
DFD78F34A6B0426...

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 22000 ENGINEER GALEN CAIL
DocuSigned by: Galen Cail 4/7/2014
D275B26E60EC454...

DITCH LEGEND
LEFT DITCH
RIGHT DITCH
UNDERCUT

-L-

BM #15 RR SPIKE IN 36" GUM
-L- STA. 158+84.19, 101.69' RIGHT
ELEV. = 11.57'

PI = 153+00.00
EL = 10.00'
VC = 180'
K = 158

PI = 164+00.00
EL = 19.09'
VC = 250'
K = 153

(-)0.3127%
(+)0.8264%
(+)0.8264%
(+) 0.5400%
(+) 0.4632%
(+) 0.3333%

36" RCP IV EQUALIZER PIPE
36" RCP IV EQUALIZER PIPE
36" RCP IV EQUALIZER PIPE

BEGIN DITCH
STA. 158+00-L-RT
ELEV. 6.20'

PI = 163+00-L-RT
El = 8.90

BEGIN DITCH
STA. 157+50-L-LT
ELEV. 5.50'

FOR -L- ALIGNMENT, SEE SHEET NO. 14

20 10 0

150 151 152 153 154 155 156 157 158 159 160 161 162 163 164

-L-

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NOS. 1501 & 1502

DRAINAGE AREA	= 37	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 44	CFS
DESIGN HW ELEVATION	= 7.5	FT
100 YEAR DISCHARGE	= 70	CFS
100 YEAR HW ELEVATION	= 8.7	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	=	CFS
OVERTOPPING ELEVATION	= 11.0	FT

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NOS. 1503 & 1504

DRAINAGE AREA	= 4.0	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 10.4	CFS
DESIGN HW ELEVATION	= 7.5	FT
100 YEAR DISCHARGE	= 12.3	CFS
100 YEAR HW ELEVATION	= 7.75	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	=	CFS
OVERTOPPING ELEVATION	= 11.0	FT

PI = 164+00.00
EL = 19.09'
VC = 250'
K = 153

PI = 174+00.00
EL = 11.00'
VC = 180'
K = 158

-L- STA.176+32.87 = -Y1- STA.20+01.64

(-)0.8090%
(-)0.8090%
(+)0.3333%
(+)0.3333%
(+) 0.4632%
(-) 0.9762%
(+) 0.0000%
(+) 0.1600%

STA. 166+00-L-RT
ELEV. 9.90'

48" RCP IV
24" RCP IV

END DITCH
STA. 170+20-L-RT
ELEV. 5.80'

END DITCH
STA. 167+00-L-LT
ELEV. 9.90'

BEGIN DITCH
STA. 169+45-L-LT
ELEV. 3.50'

END DITCH
STA. 172+50-L-LT
ELEV. 3.50'

BEGIN DITCH
STA. 173+00-L-RT
ELEV. 5.00'

END DITCH
STA. 175+50-L-RT
ELEV. 5.40'

FOR -L- ALIGNMENT, SEE SHEET NO. 15

20 10 0

164 165 166 167 168 169 170 171 172 173 174 175 176 177 178

17-MAR-2014 14:53
R:\Roadway\Proj\R3620_Rdy_pf1.dgn
$$$$USERNAME$$$$