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5/28/99

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

ECOLOGICAL ENGINEERING, LLP
1151 SE CARY PARKWAY
CARY, NC 27518
NC License Number F-1148

PROJECT REFERENCE NO.	SHEET NO.
R-5523	8

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 25523 ENGINEER
DOCUSIGNED BY: BRIAN W. EASON
9AF015AD7ACC48F...
7/28/2014

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 20147 ENGINEER
DocuSigned by: FRANKLIN L. FLEMING JR.
B75CA0B6B6D4AB...
7/28/2014

-Y1-

BEGIN GRADE
-Y1- STA. 10+30.20
EL = 306.73'

PI = 11+20.00
EL = 306.37'
VC = 175'
K = 117

PIPE HYDRAULIC DATA
24" RCP-III Sta. 10+97.5 -Y1-

DRAINAGE AREA	= 15.6	AC
DESIGN FREQUENCY	= 50	YR
DESIGN DISCHARGE	= 15.0	CFS
DESIGN HW ELEVATION	= 303.8	FT
100 YEAR DISCHARGE	= 20.0	CFS
100 YEAR HW ELEVATION	= 304.4	FT
OVERTOPPING FREQUENCY	= 500 (+)	YR
OVERTOPPING DISCHARGE	= 30 (+)	CFS
OVERTOPPING ELEVATION	= 306.5	FT

-Y1- STA. 14+90.45
-L- STA. 10+00.00

PI = 19+00.00
EL = 314.90'
VC = 312'
K = 152

PROPOSED GRADE LINE
EXISTING GROUND PROFILE

(-)10.4009%
(+)1.0936%
(-)2.7500% (LT)
(+)1.4000% (LT)
(+)1.2000% (LT)
(+)0.8800% (LT)
(+)1.0936%
(-)10.9636%
(-)1.2000% (RT)

24" RCP INV. =

BEGIN DITCH LT STA 10+00 -Y1- EL=304.75
PI =11+00 EI = 302.00
PI =13+50 EI = 305.50
PI =16+00 EI = 308.50
END DITCH LT STA 18+50 -Y1- EL=310.70
BEGIN DITCH RT STA 23+00 -Y1- EL=308.20
PI =24+00 EI = 307.00

LEFT DITCH — · · — ·
RIGHT DITCH - - - - -
SEE SHEET 4 AND 6 FOR -Y1- PLAN VIEW

-Y1-

-Y1- STA. 24+46.02
-Y5- STA. 10+00.00

PIPE HYDRAULIC DATA
24" RCP Sta. 27+76 -Y1-

DRAINAGE AREA	= 11.1	AC
DESIGN FREQUENCY	= 50	YR
DESIGN DISCHARGE	= 10.0	CFS
DESIGN HW ELEVATION	= 303.9	FT
100 YEAR DISCHARGE	= 12.0	CFS
100 YEAR HW ELEVATION	= 304.1	FT
OVERTOPPING FREQUENCY	= 500	YR
OVERTOPPING DISCHARGE	= 18	CFS
OVERTOPPING ELEVATION	= 307.2	FT

PI = 27+60.00
EL = 306.61'
VC = 250'
K = 148

END GRADE
-Y1- STA. 29+00
EL = 307.83'

PROPOSED GRADE LINE
EXISTING GROUND PROFILE

(-)0.8600 (RT)%
(-)10.9636%
(+)10.7266%
(+)1.6000 (RT)%
(-)0.3300(RT)%

24" RCP INV. =

PI =24+00 EI = 307.00
END DITCH RT STA 25+50 -Y1- EL=305.71
BEGIN DITCH RT STA 27+00 -Y1- EL=302.45
PI =27+75.000 EI = 302.20
END DITCH RT STA 30+50 -Y1- EL=306.60

LEFT DITCH — · · — ·
RIGHT DITCH - - - - -
SEE SHEET 6 FOR -Y1- PLAN VIEW

SYTIME
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$$$$USERNAME$$$$