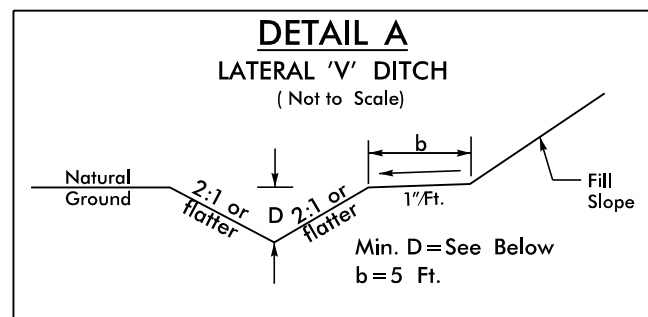
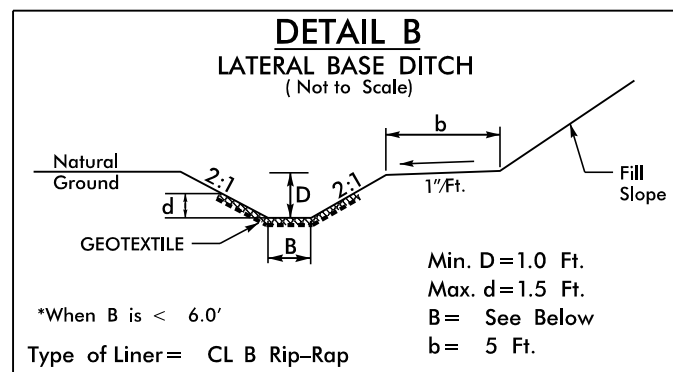
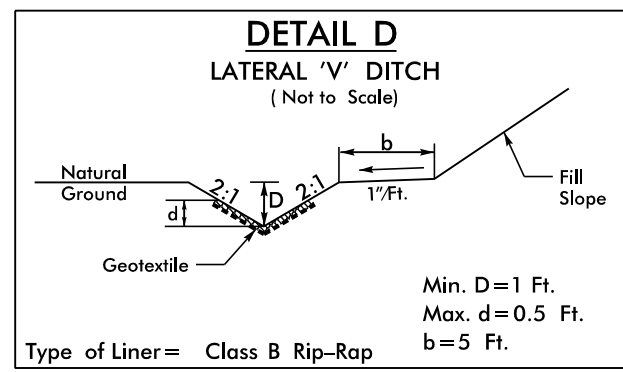




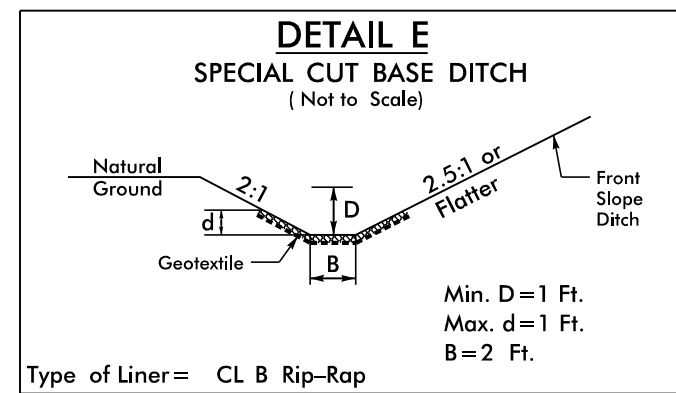
-L- STA. 55+45 TO STA. 56+50 RT, D=2.0'; DDE=205 CY
-L- STA. 58+85 TO STA. 60+00 RT, D=1.5'; DDE=67 CY
-L- STA. 63+00 TO STA. 64+73 RT, D=1.0'; DDE=144 CY
-L- STA. 72+00 TO STA. 72+78 RT, D=1.0'; DDE=46 CY



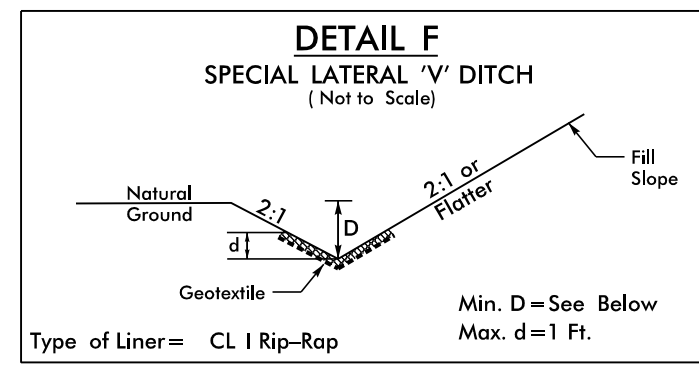
Type of Liner= CL B Rip-Rap
-L- STA. 55+00 TO STA. 56+25 LT, B=4'
RIPRAP=53 TONS; DDE=19 CY; GEOTEXTILE=118 SY
-L- STA. 87+05 TO STA. 90+00 RT, B=4'
RIPRAP=125 TONS; DDE=562 CY; GEOTEXTILE=278 SY
-RAB2- STA. 12+42 TO STA. 13+00 RT, B=4'
RIPRAP=125 TONS; DDE=34 CY; GEOTEXTILE=55 SY
-Y1- STA. 18+22 TO STA. 19+50 RT, B=4'
RIPRAP=54 TONS; DDE=769 CY; GEOTEXTILE=120 SY
-Y7- STA. 18+50 TO STA. 20+30 RT, B=2'
RIPRAP=58 TONS; DDE=53 CY; GEOTEXTILE=129 SY



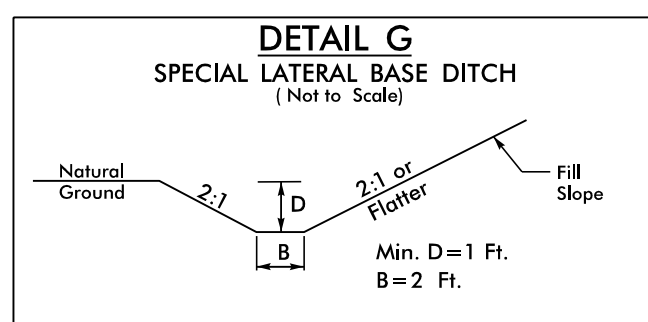
Type of Liner= Class B Rip-Rap
-L- STA. 54+24 TO STA. 55+45 RT
RIPRAP=27 TONS; DDE=70 CY; GEOTEXTILE=60 SY
-RAB2- STA. 11+50 TO STA. 11+75 RT
RIPRAP=6 TONS; DDE=8 CY; GEOTEXTILE=12 SY
-Y8A- STA. 10+40 TO STA. 11+40 LT
RIPRAP=22 TONS; DDE=120 CY; GEOTEXTILE=50SY



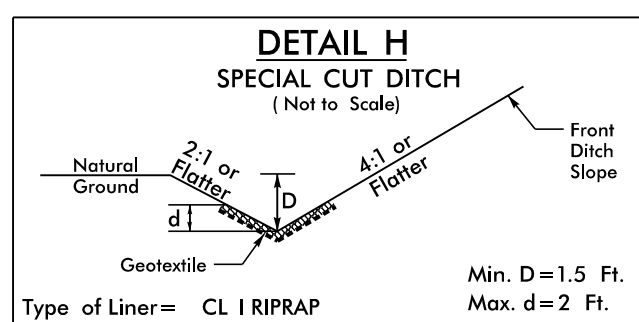
Type of Liner= CL B Rip-Rap
-L- STA. 11+87 TO STA. 12+50 RT
RIPRAP=23 TONS; GEOTEXTILE=52 SY



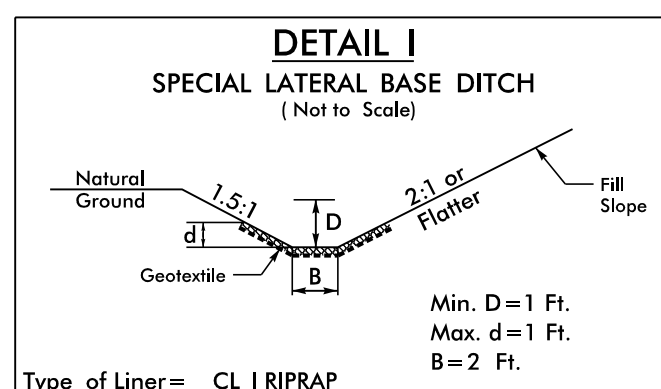
Type of Liner= CL I Rip-Rap
-L- STA. 16+40 TO STA. 19+50 RT, D=1.0'
RIPRAP=73 TONS; GEOTEXTILE=154 SY
-RAB3- STA. 12+75 TO STA. 13+25 RT, D=1.0'
RIPRAP=16 TONS; GEOTEXTILE=34 SY
-Y9- STA. 10+44 TO STA. 11+25 LT, D=1.0'
RIPRAP=19 TONS; GEOTEXTILE=40 SY
-Y9- STA. 10+30 TO STA. 11+20 RT, D=1.0'
RIPRAP=21 TONS; GEOTEXTILE=45 SY



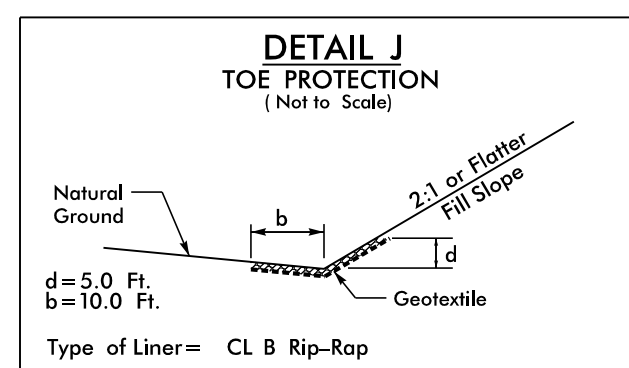
-DR8- STA. 11+24 TO STA. 12+46 RT
-Y11- STA. 10+50 TO STA. 10+80 RT
-Y11- STA. 12+10 TO STA. 13+50 RT
-Y11- STA. 14+50 TO STA. 14+85 RT



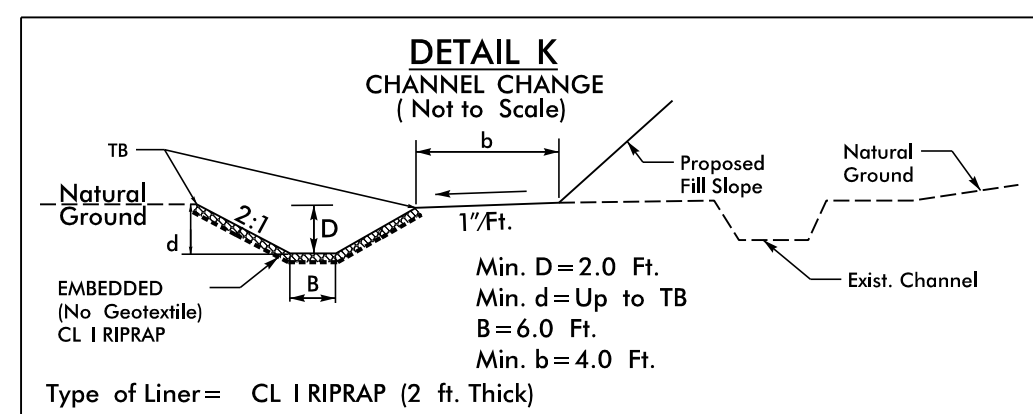
Type of Liner= CL I RIPRAP
-DR101 2- STA. 10+25 TO STA. 10+75 RT
RIPRAP=32 TONS; GEOTEXTILE=69 SY
-Y11 DET- STA. 13+00 TO STA. 14+30 RT
RIPRAP=84 TONS; GEOTEXTILE=179 SY



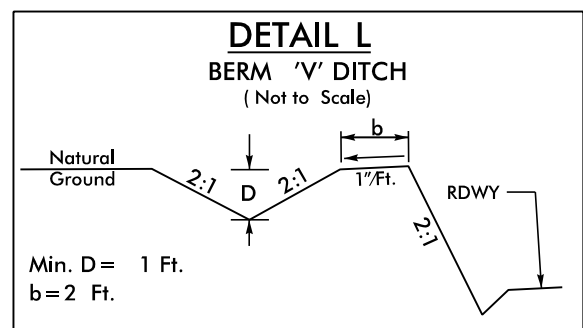
Type of Liner= CL I RIPRAP
-L- STA. 24+34 TO STA. 25+00 RT
RIPRAP=22 TONS; GEOTEXTILE=47 SY
-L- STA. 47+00 TO STA. 47+37 LT, B=2'
RIPRAP=12 TONS; GEOTEXTILE=27 SY
-Y3- STA. 11+00 TO STA. 14+00 LT
RIPRAP=102 TONS; GEOTEXTILE=216 SY
-DET- STA. 11+97 TO STA. 14+00 LT
RIPRAP=69 TONS; GEOTEXTILE=146 SY
-DET- STA. 14+97 TO STA. 15+90 LT
RIPRAP=32 TONS; GEOTEXTILE=67 SY
-DET- STA. 17+28 TO STA. 18+50 LT
RIPRAP=41 TONS; GEOTEXTILE=88 SY



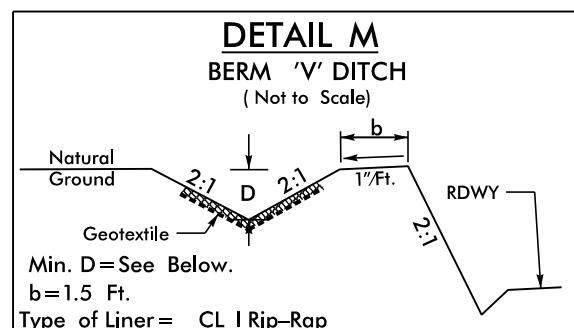
Type of Liner= CL B Rip-Rap
-L- STA. 29+50 TO STA. 30+00 LT
RIPRAP=36 TONS; GEOTEXTILE=80 SY
-L- STA. 36+50 TO STA. 38+00 LT
RIPRAP=109 TONS; GEOTEXTILE=241 SY
-L- STA. 41+80 TO STA. 42+00 LT
RIPRAP=14 TONS; GEOTEXTILE=32 SY
-L- STA. 43+50 TO STA. 44+14 LT
RIPRAP=46 TONS; GEOTEXTILE=103 SY
-L- STA. 45+00 TO STA. 45+70 LT
RIPRAP=51 TONS; GEOTEXTILE=113 SY
-L- STA. 80+40 TO STA. 80+80 LT
RIPRAP=29 TONS; GEOTEXTILE=64 SY
-DR4- STA. 10+35 TO STA. 10+92 LT
RIPRAP=41 TONS; GEOTEXTILE=92 SY
-DR5- STA. 10+89 TO STA. 11+00 LT
RIPRAP=8 TONS; GEOTEXTILE=18 SY
-DR8- STA. 12+70 TO STA. 13+00 LT
RIPRAP=6 TONS; GEOTEXTILE=13 SY
-RAB2- STA. 11+25 TO STA. 11+50 RT
RIPRAP=18 TONS; GEOTEXTILE=40 SY
-Y3- STA. 14+00 TO STA. 15+00 LT
RIPRAP=72 TONS; GEOTEXTILE=161 SY
-Y4- STA. 12+16 TO STA. 13+10 LT
RIPRAP=68 TONS; GEOTEXTILE=151 SY
-Y4- STA. 11+00 TO STA. 11+31 RT
RIPRAP=22 TONS; GEOTEXTILE=50 SY
-Y6- STA. 11+05 TO STA. 12+04 LT
RIPRAP=72 TONS; GEOTEXTILE=159 SY
-Y8A- STA. 12+60 TO STA. 13+05 RT
RIPRAP=33 TONS; GEOTEXTILE=72 SY
-DET- STA. 14+50 TO STA. 18+00 RT
RIPRAP=253 TONS; GEOTEXTILE=563 SY



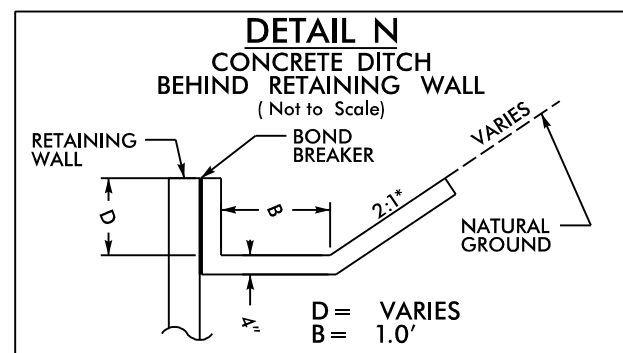
-Y1- STA. 18+40 LT TO STA. 20+00 LT, MIN. D=2.25'
L=205', S=2.6%, BEG. EL=3169.3', END EL=3163.0'
RIPRAP=126 TONS; DDE=583 CY; GEOTEXTILE= 266 SY



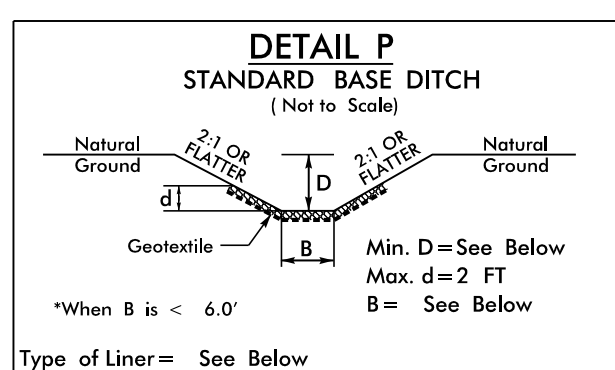
-L- STA. 60+00 TO STA. 61+25 RT
-L- STA. 61+58 TO STA. 63+00 RT
-L- STA. 64+73 TO STA. 66+50 RT
-L- STA. 70+00 TO STA. 72+00 RT
-L- STA. 73+60 TO STA. 75+00 RT



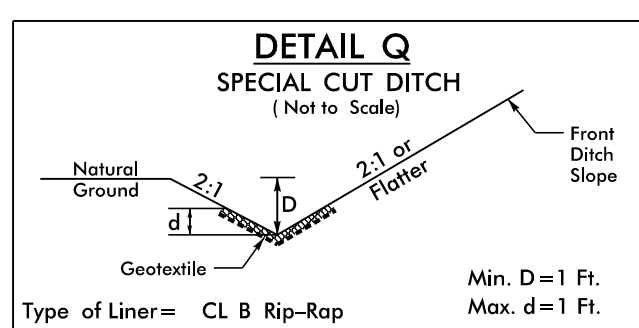
-L- STA. 19+50 TO STA. 20+50 RT, D=1.5'
RIPRAP=35 TONS; GEOTEXTILE=75 SY
-L- STA. 75+00 TO STA. 76+00 RT, D=1.0'
RIPRAP=23 TONS; GEOTEXTILE=50 SY
-L2- STA. 77+50 TO STA. 79+00 RT, D=1.0'
RIPRAP=35 TONS; GEOTEXTILE=75 SY



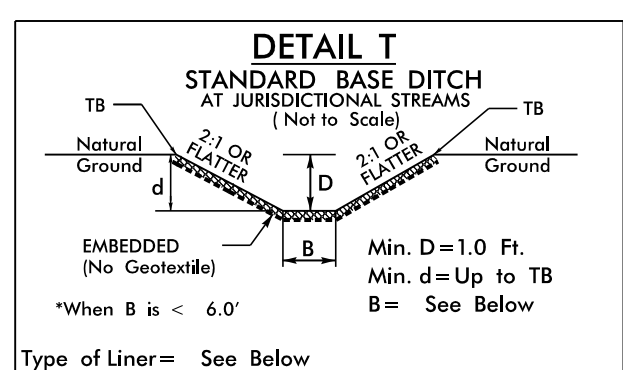
-L- STA. 49+00 TO STA. 50+50 LT
-L- STA. 66+50 TO STA. 70+00 RT
-L- STA. 93+25 TO STA. 100+40 RT (*1.5:1)



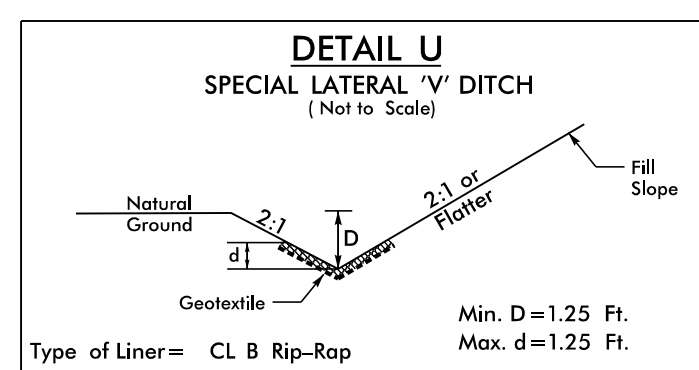
Type of Liner= See Below
-L- STA. 11+85 LT, MIN. D=2.0', B=6', CL I Rip-Rap
L=53', S=5.7%, BEG. EL=3173.0', END EL=3173.0'
(CL I RIPRAP=27 TONS; DDE=19 CY; GEOTEXTILE=58 SY)
-L- STA. 45+35 LT, MIN. D=1.0', B=6', CL II Rip-Rap
L=48', S=22.9%, BEG. EL=3167.0', END EL=3158.8'
(CL I RIPRAP=26 TONS; DDE=12 CY; GEOTEXTILE=56 SY)
-L- STA. 47+00 LT, MIN. D= 1.0' B=2', CL B Rip-Rap
L=115', S=4.1%, BEG. EL=3154.0', END EL=3120.7'
(CL B RIPRAP=17 TONS; DDE=5 CY; GEOTEXTILE=38 SY)
-L- STA. 47+05 RT, MIN. D= 2.0' B=2', CL I Rip-Rap
L=115', S=4.1%, BEG. EL=3143.5', END EL=3104.0'
(CL I RIPRAP=90 TONS; DDE=67 CY; GEOTEXTILE=191 SY)
-L- STA. 52+50 RT, D=3.0', B=6', CL I Rip-Rap
L=92', S=2.5%, BEG. EL=3123.1', END EL=3120.7'
(CL I RIPRAP=94 TONS; DDE=112 CY; GEOTEXTILE=198 SY)
-L- STA. 67+42 LT, MIN. D=2.0', B=4', CL B Rip-Rap
L=125', S=2.8%, BEG. EL=3107.5', END EL=3104.0'
(CL B RIPRAP=81 TONS; DDE=47 CY; GEOTEXTILE=180 SY)



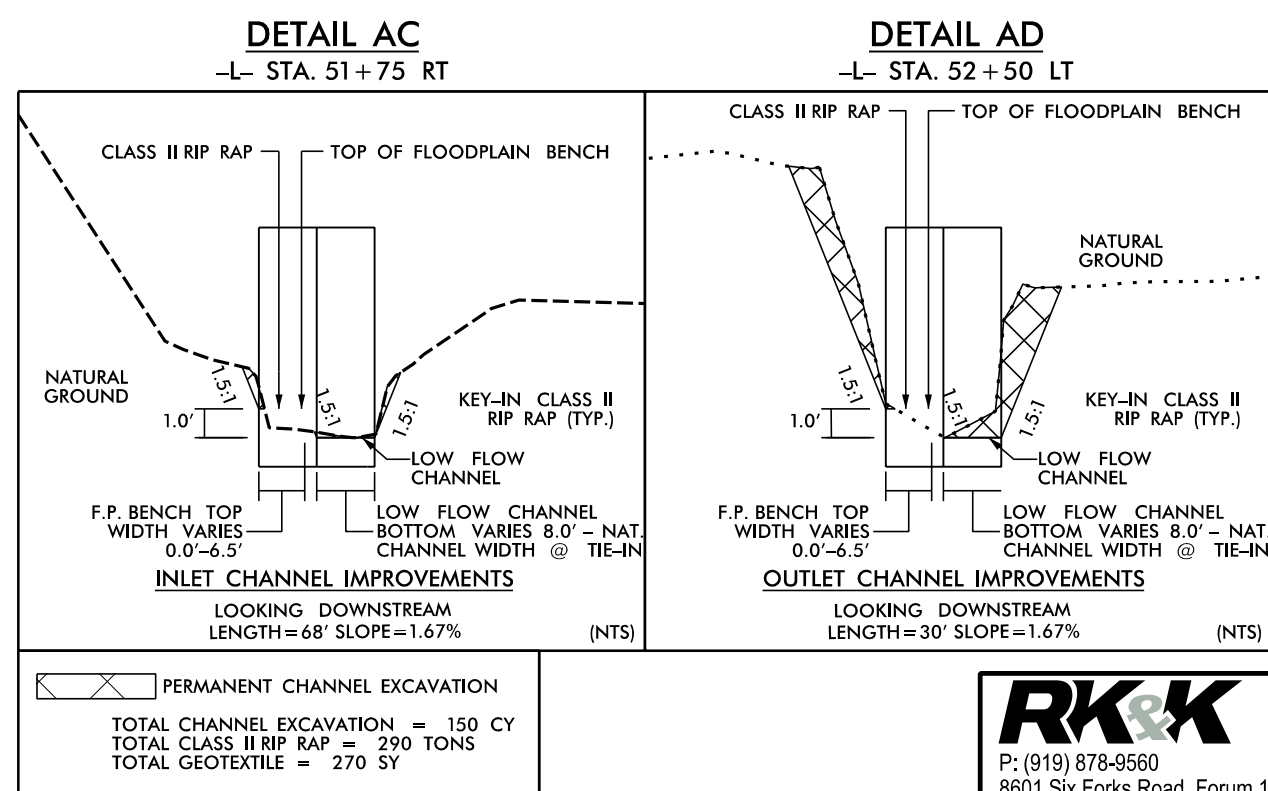
-L- STA. 25+00 TO STA. 26+50 RT
RIPRAP=34 TONS; GEOTEXTILE=75 SY



Type of Liner= See Below
-Y1- STA. 18+21 RT, MIN. D=3.0', B=4', CL I Rip-Rap
L=40', S=0.7%, BEG. EL=3157.7', END EL=3157.5'
(CL I RIPRAP=39 TONS; DDE=25 CY)
-L- STA. 58+46 LT, MIN. D=2.0', B=4', CL B Rip-Rap
L=39', S=2.7%, BEG. EL=3120.0', END EL=3118.9'
(CL B RIPRAP=25 TONS; DDE=15 CY)
-L- STA. 64+82 LT, MIN. D=2.5', B=6', CL I Rip-Rap
L=50', S=7.3%, BEG. EL=3107.5', END EL=3110.0'
(CL I RIPRAP=45 TONS; DDE=34 CY)



Type of Liner= CL B Rip-Rap
-DR5- STA. 11+00 TO STA. 12+00 LT
RIPRAP=28 TONS; GEOTEXTILE=62 SY



PERMANENT CHANNEL EXCAVATION
TOTAL CHANNEL EXCAVATION = 150 CY
TOTAL CLASS II RIP RAP = 290 TONS
TOTAL GEOTEXTILE = 270 SY

RKK
P: (919) 878-8500
8601 Six Forks Road, Forum 1, Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112

Engineers | Construction Managers | Planners | Scientists
www.rkk.com

Responsive People | Creative Solutions