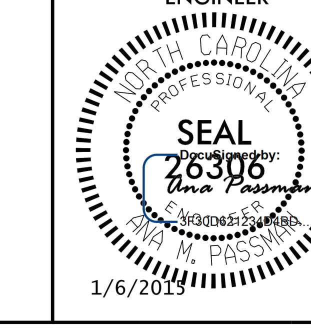
DocuSign Envelope ID: 66FE2E43-08C4-4A36-8136-AF9ECFFCE9CE

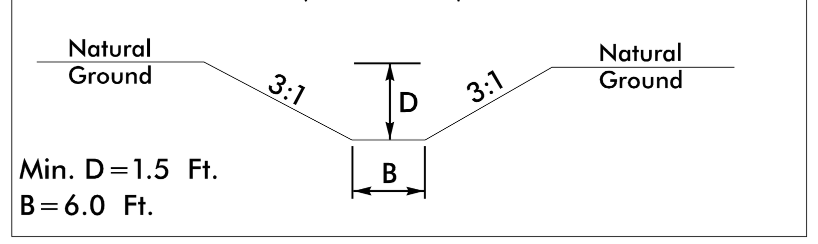
5/14/99

PROJECT REFERENCE NO.	SHEET NO.
W-5107	2D-1

HYDRAULICS ENGINEER

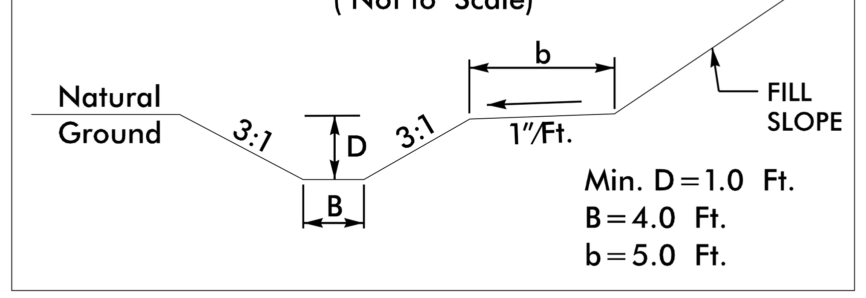


DETAIL A
STANDARD BASE DITCH
(Not to Scale)



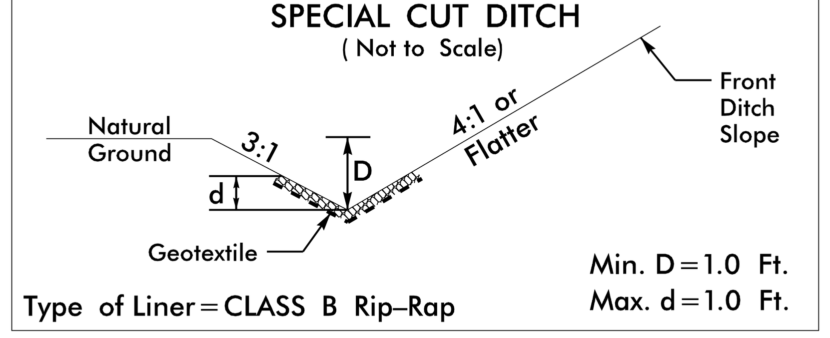
STA. 23+00 –Y1– LT
STA. 14+72 –Y6– RT

DETAIL E
LATERAL GRASSED SWALE
(Not to Scale)



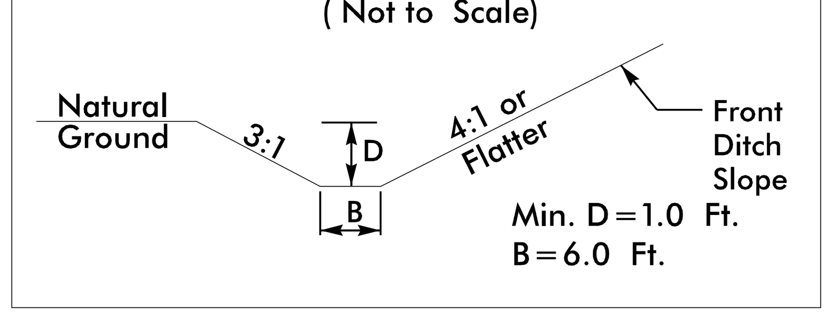
FROM STA. 12+60 TO STA. 14+37 –SR2– RT
FROM STA. 19+00 TO STA. 21+70 –Y6– LT

DETAIL J
SPECIAL CUT DITCH
(Not to Scale)



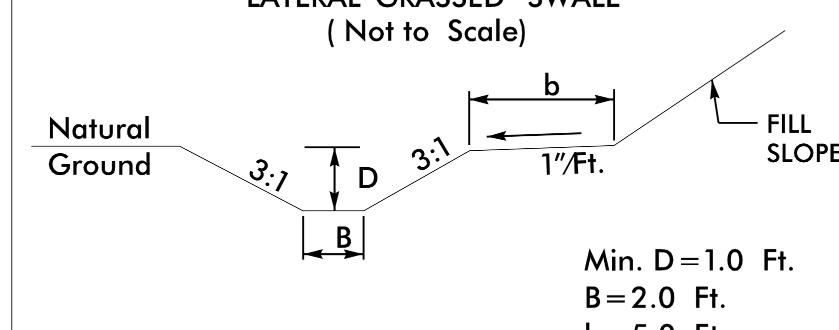
FROM STA. 102+65 TO STA. 103+00 –L– RT
FROM STA. 14+50 TO STA. 15+50 –Y3– RT
FROM STA. 14+00 TO STA. 14+72 –Y6– RT
FROM STA. 18+50 TO STA. 19+00 –Y6LPB– LT
FROM STA. 17+00 TO STA. 18+50 –Y6LPC– LT
FROM STA. 16+50 TO STA. 17+00 –Y6LPC– RT
FROM STA. 12+20 TO STA. 12+60 –SR2– RT
FROM STA. 19+62 TO STA. 21+15 –SR2– RT

DETAIL N
SPECIAL CUT GRASSED SWALE
(Not to Scale)



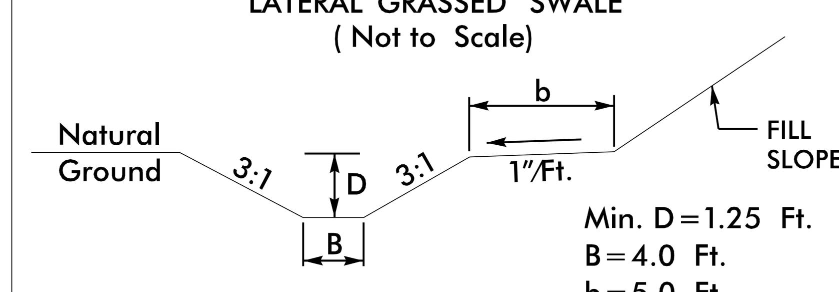
FROM STA. 111+50 TO STA. 114+18 –L– RT
FROM STA. 12+50 TO STA. 16+50 –Y6LPB– RT

DETAIL S
LATERAL GRASSED SWALE
(Not to Scale)



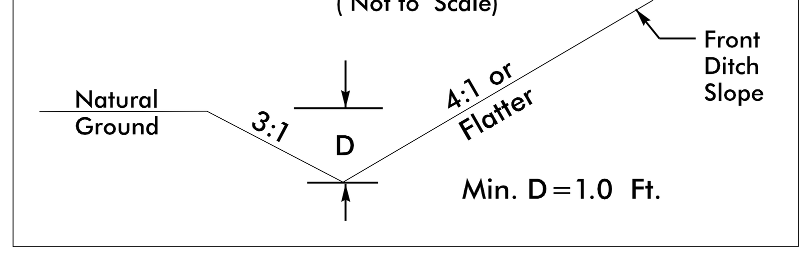
FROM STA. 26+00 TO STA. 29+50 –Y6– RT

DETAIL P
LATERAL GRASSED SWALE
(Not to Scale)



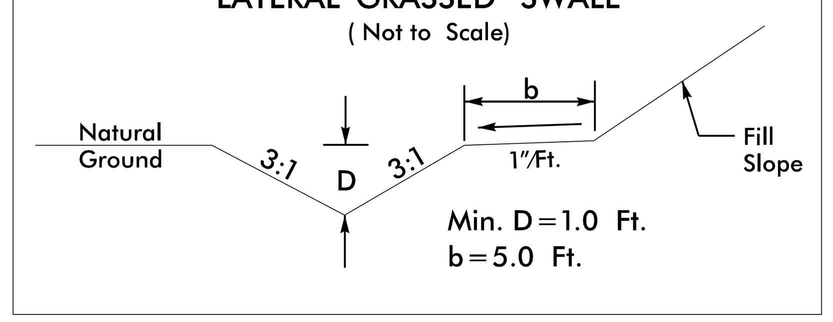
FROM STA. 19+00 TO STA. 21+70 –Y6– LT

DETAIL B
SPECIAL CUT GRASSED SWALE
(Not to Scale)



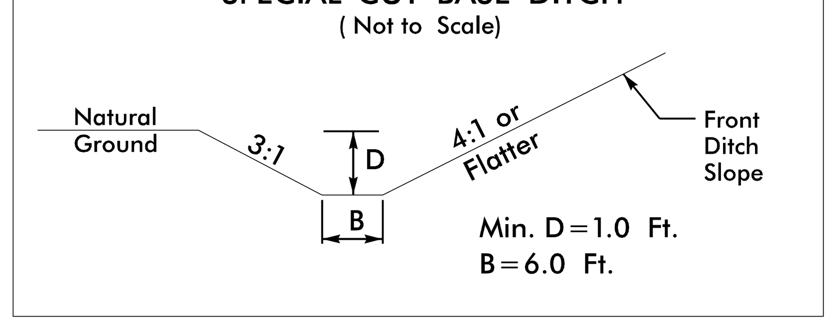
FROM STA. 18+00 TO STA. 19+00 –Y1– LT
FROM STA. 14+89 TO STA. 15+25 –Y1LPC– RT
FROM STA. 17+00 TO STA. 18+00 –Y1RPC– LT
FROM STA. 14+11 TO STA. 15+10 –Y1RPD– LT
FROM STA. 13+00 TO STA. 14+00 –Y3– RT
FROM STA. 18+50 TO STA. 19+00 –Y6– LT
FROM STA. 17+32 TO STA. 18+00 –Y6– RT
FROM STA. 30+00 TO STA. 33+00 –Y6– RT
FROM STA. 31+08 –Y6– LT TO STA. 20+50 –Y6LPB– LT
FROM STA. 19+00 TO STA. 20+50 –Y6LPB– LT
FROM STA. 16+52 TO STA. 17+76 –SR1– LT
FROM STA. 17+35 TO STA. 17+76 –SR1– RT
FROM STA. 17+76 TO STA. 18+26 –SR1– RT
FROM STA. 10+49 TO STA. 12+75 –SR2– LT

DETAIL K
LATERAL GRASSED SWALE
(Not to Scale)



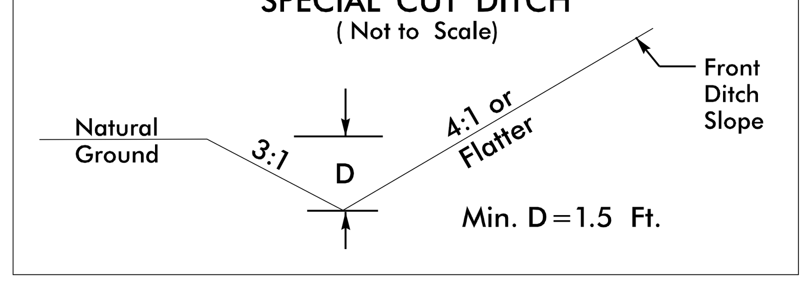
FROM STA. 24+89 TO STA. 26+35 –Y6– LT
FROM STA. 29+50 TO STA. 30+00 –Y6– RT
FROM STA. 20+00 –Y6LPB– RT TO STA. 27+50 –Y6– LT
FROM STA. 10+50 TO STA. 11+50 –SR1– LT
FROM STA. 11+50 TO STA. 12+61 –SR1– LT
FROM STA. 18+45 TO STA. 19+62 –SR2– RT

DETAIL O
SPECIAL CUT BASE DITCH
(Not to Scale)



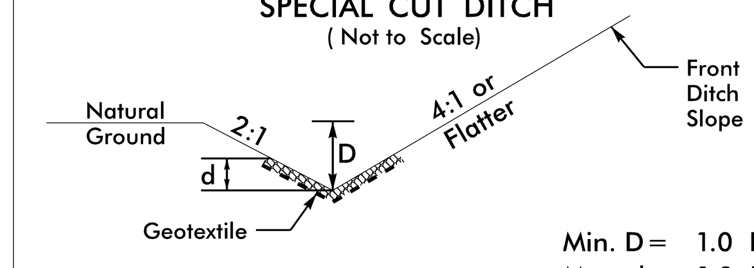
FROM STA. 114+18 –L– RT TO STA. 22+00 –Y6– LT
FROM STA. 12+00 TO STA. 12+50 –Y6LPB– RT

DETAIL T
SPECIAL CUT DITCH
(Not to Scale)



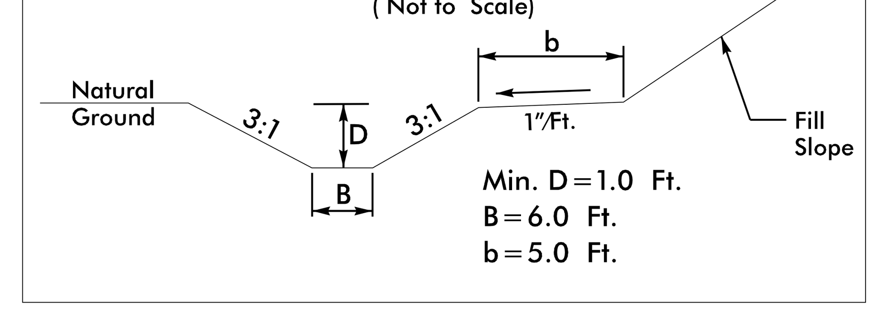
FROM STA. 44+50 TO STA. 49+00 –L– LT
FROM STA. 100+00 TO STA. 102+25 –L– LT
FROM STA. 38+07 TO STA. 41+50 –L– RT
FROM STA. 36+70 TO STA. 38+00 –Y1– RT
FROM STA. 11+35 TO STA. 12+98 –Y1LPA– LT
FROM STA. 15+40 TO STA. 16+83 –Y1RPA– LT
FROM STA. 13+97 TO STA. 16+19 –Y1RPA– RT
FROM STA. 26+72 TO STA. 27+31 –SR2– RT

DETAIL I
SPECIAL CUT DITCH
(Not to Scale)



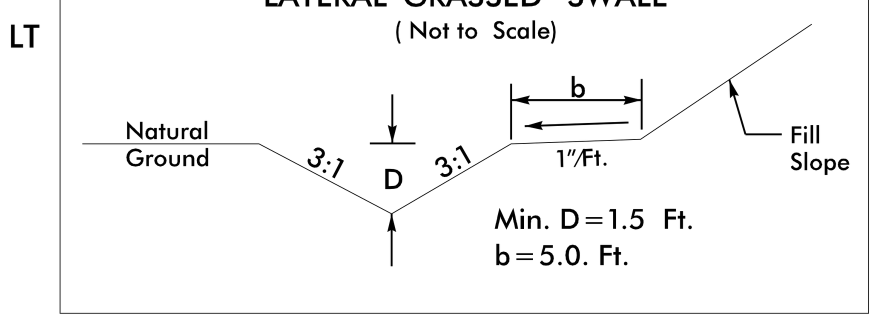
FROM STA. 11+00 –SR3– LT TO STA. 10+50 –SR4– LT

DETAIL C
LATERAL BASE DITCH
(Not to Scale)



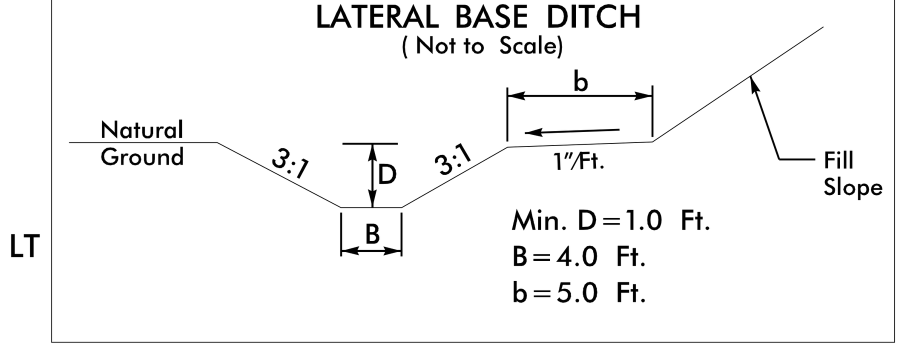
FROM STA. 121+00 TO STA. 121+50 –L– RT
FROM STA. 17+41 TO STA. 19+00 –Y6LPB– RT

DETAIL G
LATERAL GRASSED SWALE
(Not to Scale)



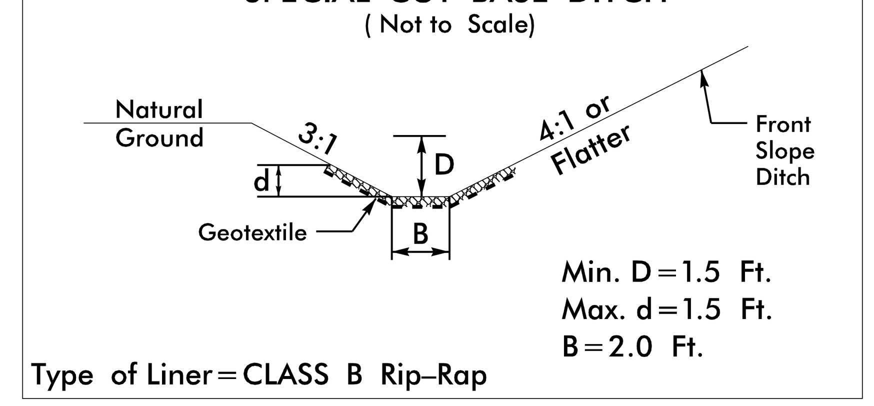
FROM STA. 16+10 TO STA. 19+10 –Y1RPD– LT
FROM STA. 16+11 TO STA. 18+45 –SR2– RT

DETAIL L
LATERAL BASE DITCH
(Not to Scale)



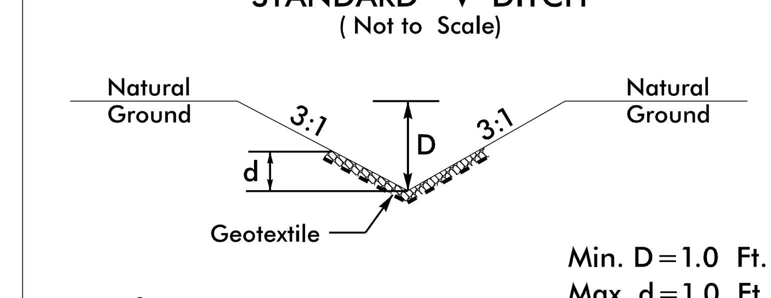
FROM STA. 21+70 TO STA. 22+00 –Y6– LT

DETAIL Q
SPECIAL CUT BASE DITCH
(Not to Scale)



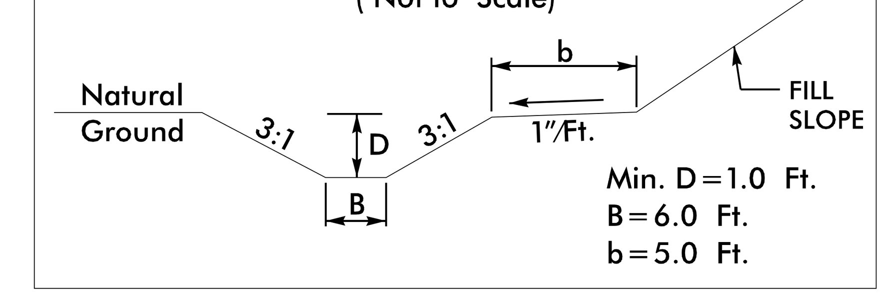
FROM STA. 116+72 TO STA. 117+00 –L– RT
FROM STA. 19+00 –Y1– LT TO STA. 20+40 –Y1RPC– RT

DETAIL V
STANDARD 'V' DITCH
(Not to Scale)



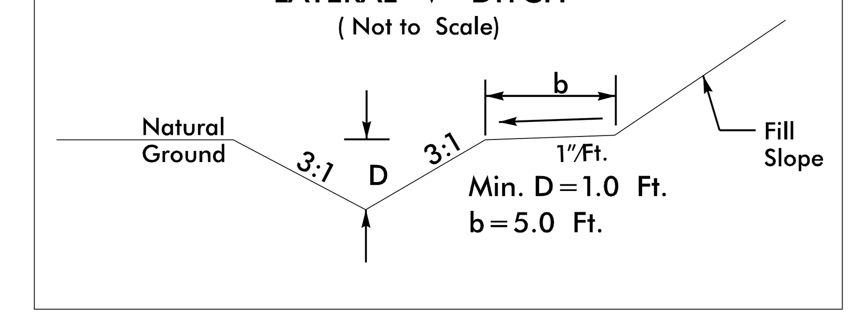
FROM STA. 115+00 –L– LT TO STA. 24+70 –Y6– LT

DETAIL D
LATERAL GRASSED SWALE
(Not to Scale)



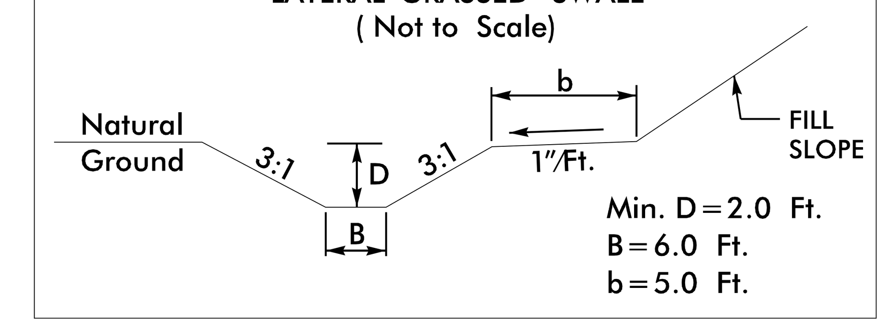
FROM STA. 119+96 TO STA. 121+00 –L– RT
FROM STA. 29+49 TO STA. 32+50 –Y1– LT
FROM STA. 26+74 TO STA. 27+50 –Y6– LT
FROM STA. 16+50 TO STA. 17+26 –Y6LPB– RT
FROM STA. 14+51 TO STA. 16+11 –SR2– RT

DETAIL H
LATERAL 'V' DITCH
(Not to Scale)



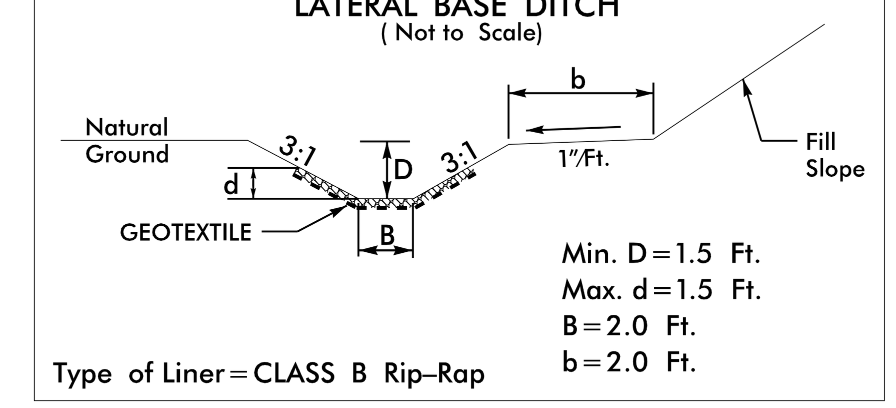
FROM STA. 32+11 –Y1– RT TO STA. 36+50 –L– LT
FROM STA. 32+11 TO STA. 34+50 –Y1– RT
FROM STA. 19+50 TO STA. 20+00 –Y6LPB– RT

DETAIL M
LATERAL GRASSED SWALE
(Not to Scale)



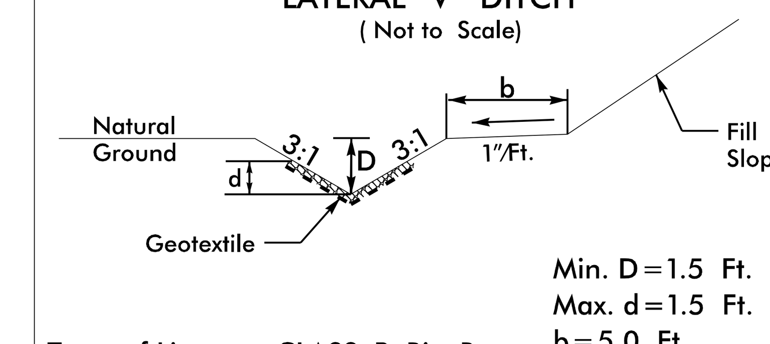
FROM STA. 119+00 TO STA. 119+75 –L– RT

DETAIL R
LATERAL BASE DITCH
(Not to Scale)



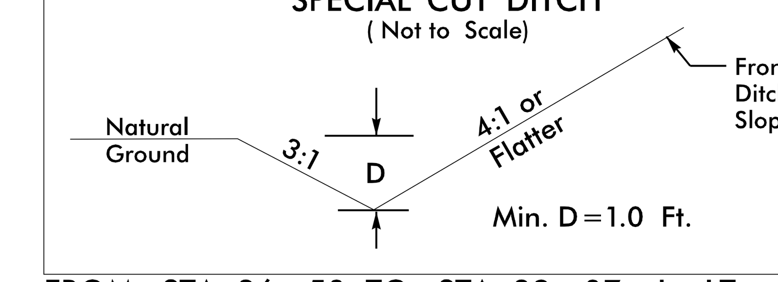
FROM STA. 22+50 –Y6– RT TO STA. 116+72 –L– RT

DETAIL X
LATERAL 'V' DITCH
(Not to Scale)



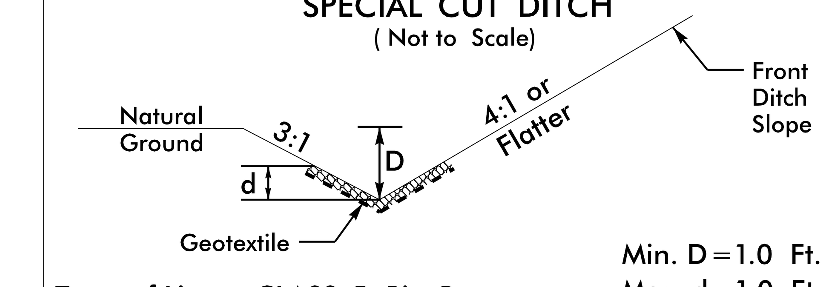
FROM STA. 24+70 TO STA. 24+89 –Y6– LT
FROM STA. 22+00 TO STA. 22+50 –Y6– RT
FROM STA. 19+00 TO STA. 19+50 –Y6LPB– RT

DETAIL U
SPECIAL CUT DITCH
(Not to Scale)



FROM STA. 36+50 TO STA. 38+07 –L– LT
FROM STA. 38+90 TO STA. 39+57 –L– LT
FROM STA. 108+00 TO STA. 109+16 –L– LT
FROM STA. 41+50 TO STA. 44+50 –L– RT
FROM STA. 101+50 TO STA. 102+65 –L– RT
FROM STA. 103+00 TO STA. 105+00 –L– RT
FROM STA. 106+50 TO STA. 107+50 –L– RT
FROM STA. 36+21 TO STA. 37+00 –Y1– LT
FROM STA. 37+00 TO STA. 39+80 –Y1– LT
FROM STA. 39+80 TO STA. 41+50 –Y1– LT
FROM STA. 34+50 TO STA. 35+03 –Y1– RT
FROM STA. 39+29 TO STA. 41+00 –Y1– RT
FROM STA. 12+98 TO STA. 15+26 –Y1LPA– LT
FROM STA. 16+19 TO STA. 19+00 –Y1RPA– RT
FROM STA. 15+10 TO STA. 16+10 –Y1RPD– LT
FROM STA. 13+00 TO STA. 14+75 –Y2– LT
FROM STA. 18+00 –Y1– RT TO STA. 15+00 –Y3– LT
FROM STA. 14+00 TO STA. 14+70 –Y6– LT
FROM STA. 14+70 TO STA. 15+50 –Y6– LT
FROM STA. 17+82 TO STA. 18+50 –Y6– LT
FROM STA. 14+72 TO STA. 16+38 –Y6– RT
FROM STA. 15+50 –Y6– LT TO STA. 18+50 –Y6LPC– RT
FROM STA. 32+00 –Y6– LT TO STA. 12+20 –SR2– RT
FROM STA. 11+00 TO STA. 12+00 –Y6LPB– RT
FROM STA. 10+00 TO STA. 11+30 –Y6LPBA– LT
FROM STA. 11+30 TO STA. 12+00 –Y6LPBA– LT
FROM STA. 10+00 TO STA. 11+75 –Y6LPC– LT
FROM STA. 13+50 TO STA. 15+42 –Y6LPC– LT
FROM STA. 15+42 TO STA. 17+00 –Y6LPC– LT
FROM STA. 12+41 TO STA. 15+42 –Y6LPC– RT
FROM STA. 15+42 TO STA. 16+50 –Y6LPC– RT
FROM STA. 17+00 TO STA. 17+70 –Y6LPC– RT
FROM STA. 17+70 TO STA. 18+50 –Y6LPC– RT
FROM STA. 10+43 TO STA. 11+29 –Y6LPCA– RT
FROM STA. 11+29 TO STA. 12+23 –Y6LPCA– RT
FROM STA. 21+15 TO STA. 23+42 –SR2– RT
FROM STA. 25+36 TO STA. 26+55 –SR2– RT
FROM STA. 10+75 TO STA. 11+00 –SR3– LT
FROM STA. 10+75 TO STA. 11+86 –SR3– RT
FROM STA. 10+50 TO STA. 11+97 –SR4– LT
FROM STA. 10+50 TO STA. 11+97 –SR4– RT
FROM STA. 10+50 –SR4– RT TO STA. 10+25 –DW7– LT
FROM STA. 10+25 TO STA. 10+50 –DW7– RT
FROM STA. 11+00 TO STA. 11+50 –DW7– RT
FROM STA. 10+25 TO STA. 11+00 –DW7– LT
FROM STA. 17+32 –Y6– RT TO STA. 10+75 –SR3– LT

DETAIL Y
SPECIAL CUT DITCH
(Not to Scale)



FROM STA. 16+83 TO STA. 17+36 –Y1RPA– LT
FROM STA. 14+53 TO STA. 14+89 –Y1LPC– RT
FROM STA. 10+25 TO STA. 11+00 –Y6LPB– RT

1/6/2015
R:\Roadway\Proj\W-5107_rdy_ditch_details.dgn
CADIS G&M of NC,Inc.::ssmallwood