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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-5752	2D-1
R/W SHEET NO.	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 18533 ENGINEER A.T. NOTTINGHAM

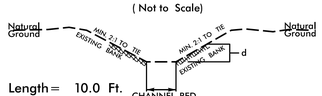
9/13/2017

DocuSigned by: Andrew T. Nottingham

E9C204F94D42451...

MI Engineering, PLLC
1011 Schaub Drive
Suite 100
Raleigh, NC 27606
NC COA No.

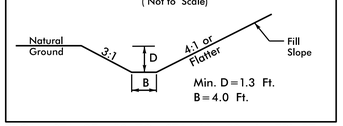
DETAIL A
PIPE OUTLET CHANNEL
(Not to Scale)



Length = 10.0 Ft.
d = 2.5 Ft.
Est. = 7 TONS OF CLASS I Rip-Rap
16 S.Y. GEOTEXTILE

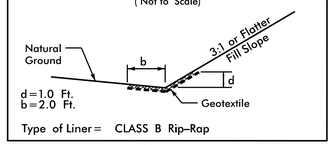
STA. 56+05 –L– WBL LT

DETAIL B
SPECIAL LATERAL BASE DITCH
(Not to Scale)



FROM STA. 37+50 TO STA 40+00 –L– EBL RT
FROM STA. 58+50 TO STA. 60+50 –L– EBL RT

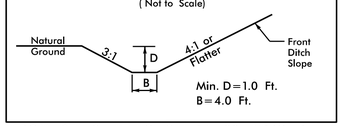
DETAIL C
TOE PROTECTION
(Not to Scale)



Type of Liner = CLASS B Rip-Rap

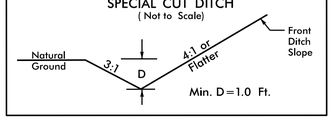
FROM STA. 34+00 TO STA. 35+00 –L– EBL RT

DETAIL D
SPECIAL CUT BASE DITCH
(Not to Scale)



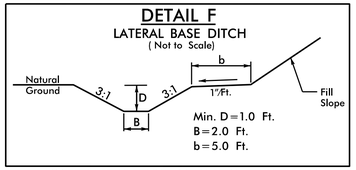
FROM STA. 9+57 TO STA 14+00 –YRPC– RT

DETAIL E
SPECIAL CUT DITCH
(Not to Scale)



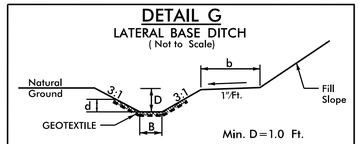
FROM STA. 17+00 TO STA. 25+50 –YRPC– LT
FROM STA. 14+00 TO STA. 17+00 –YRPC– RT
FROM STA. 15+50 TO STA. 18+00 –YRPB– LT
FROM STA. 15+50 TO STA. 18+00 –YRPB– RT
FROM STA. 10+50 TO STA. 11+50 –YRPB– LT
FROM STA. 11+50 TO STA. 12+50 –YRPC– LT
FROM STA. 18+00 TO STA. 21+00 –YRPA– RT
FROM STA. 17+50 TO STA. 21+50 –YRPA– LT

DETAIL F
LATERAL BASE DITCH
(Not to Scale)



FROM STA. 25+20 TO STA. 27+50 –Y– RT
FROM STA. 25+20 TO STA. 28+50 –Y– LT
FROM STA. 31+25 TO STA. 35+75 –Y– RT

DETAIL G
LATERAL BASE DITCH
(Not to Scale)

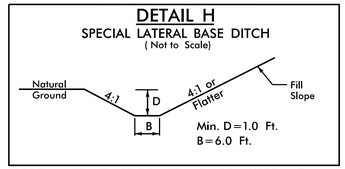


*When B is < 6.0'

Type of Liner = CLASS I Rip-Rap

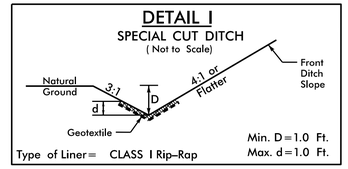
FROM STA. 27+50 TO STA. 28+80 –Y– RT
FROM STA. 28+50 TO STA. 29+58 –Y– LT

DETAIL H
SPECIAL LATERAL BASE DITCH
(Not to Scale)



FROM STA. 7+11 TO STA. 9+20 –YRPB– LT

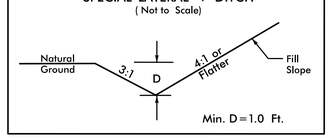
DETAIL I
SPECIAL CUT DITCH
(Not to Scale)



Type of Liner = CLASS I Rip-Rap

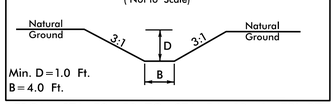
FROM STA. 15+50 TO STA. 17+00 –YRPC– LT

DETAIL J
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



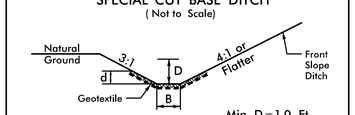
FROM STA. 19+50 TO STA. 23+50 –Y– RT
FROM STA. 20+00 TO STA. 23+50 –Y– LT
FROM STA. 37+50 TO STA. 40+50 –Y– RT
FROM STA. 37+50 TO STA. 40+50 –Y– LT
FROM STA. 18+00 TO STA. 19+00 –YRPB– LT
FROM STA. 18+00 TO STA. 19+00 –YRPB– RT
FROM STA. 11+00 TO STA. 13+00 –YRPB– RT
FROM STA. 23+50 TO STA. 27+00 –YRPC– RT
FROM STA. 13+25 TO STA. 20+00 –YRPD– RT
FROM STA. 21+00 TO STA. 23+50 –YRPA– RT
FROM STA. 21+50 TO STA. 23+50 –YRPA– LT

DETAIL K
STANDARD BASE DITCH
(Not to Scale)



FROM STA. 53+50 TO STA. 54+10 –L– EBL RT
FROM STA. 56+56 TO STA. 58+00 –L– EBL RT

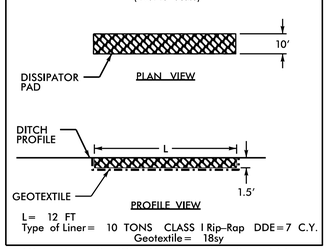
DETAIL L
SPECIAL CUT BASE DITCH
(Not to Scale)



Type of Liner = CLASS I Rip-Rap

FROM STA. 14+30 TO STA 15+50 –YRPA– RT
FROM STA. 15+00 TO STA 16+50 –YRPA– LT

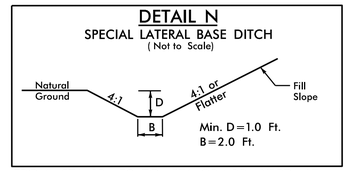
DETAIL M
ENERGY DISSIPATOR PAD
(Not to Scale)



L = 12 FT
Type of Liner = 10 TONS CLASS I Rip-Rap DDE = 7 C.Y.
Geotextile = 18sy

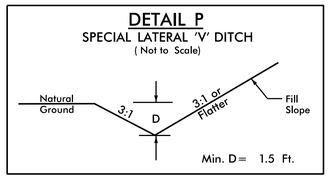
FROM STA. 12+38 TO STA. 12+50 –YRPD– LT
FROM STA. 13+25 TO STA. 13+37 –YRPD– RT
FROM STA. 14+18 TO STA. 14+30 –YRPA– RT
STA. 11+70 –YRPD– LT
STA. 13+25 –YRPA– RT

DETAIL N
SPECIAL LATERAL BASE DITCH
(Not to Scale)



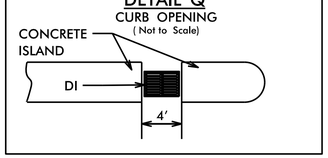
FROM STA. 12+50 TO STA. 20+00 –YRPD– LT

DETAIL P
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



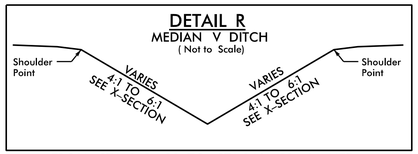
FROM STA. 146+50 TO STA. 147+00 –L– WBL LT

DETAIL Q
CURB OPENING
(Not to Scale)



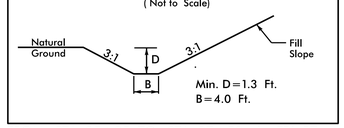
STA. 139+64 –L– MED

DETAIL R
MEDIAN V DITCH
(Not to Scale)



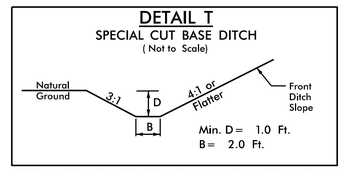
FROM STA. 140+00 TO STA.146+50 –L– MED

DETAIL S
SPECIAL LATERAL BASE DITCH
(Not to Scale)



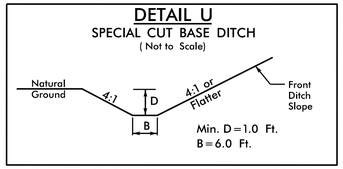
FROM STA. 35+25 TO STA. 37+50 –L– EBL RT
FROM STA. 130+00 TO STA. 130+50 –L– EBL RT

DETAIL T
SPECIAL CUT BASE DITCH
(Not to Scale)



FROM STA. 15+50 TO STA. 16+00 –YRPA– RT
FROM STA. 16+50 TO STA. 17+50 –YRPA– LT

DETAIL U
SPECIAL CUT BASE DITCH
(Not to Scale)



FROM STA. 9+20 TO STA 10+50 –YRPB– LT

invalid expression
Usr: Path: R5752_Hyd_DRN.dgn