DocuSign Envelope ID: AAAA777E-5DE0-46FA-9A4B-2B5018BFA916

5/14/99

–Y8_DET–

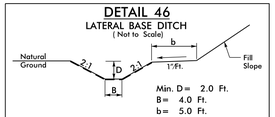
NOTE:

SEE SHEET 2B-6 FOR -Y8_DET- PROFILE.

SEE SHEET 2A-10 FOR TYPICAL SECTION & PAVEMENT DESIGN.

SEE SHEETS TMP-14 & TMP-16 FOR PHASING OVERVIEW AND SHEETS TMP-15 & TMP-17 FOR SECTION VEIWS.

DETAIL 46
LATERAL BASE DITCH
(Not to Scale)

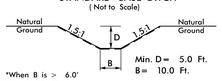


Min. D= 2.0 Ft.
B= 4.0 Ft.
b= 5.0 Ft.

Type of Liner= Soil Stabilization Geotextile

FROM –Y8_DET– STA. 17+78 TO STA. 17+87 LT

DETAIL 45
STANDARD BASE DITCH
(Not to Scale)



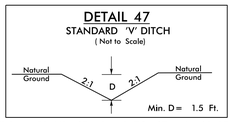
Min. D= 5.0 Ft.
B= 10.0 Ft.

*When B is > 6.0' Std. No. 876.01

Type of Liner= Soil Stabilization Geotextile

–Y8_DET– STA. 17+56 LT

DETAIL 47
STANDARD 'V' DITCH
(Not to Scale)



Min. D= 1.5 Ft.

FROM –RPAY8– STA. 9+70 TO STA. 12+68 RT

CLASS 'I' RIP-RAP
EST. 75 TONS
EST. 120 SYGF

RIP-RAP AT EMBANKMENT
SEE DETAIL 21
EST. 15 TONS
EST. 25 SYGF

3' LAT. BASE DITCH
SEE DETAIL 19

CLASS 'B' RIP-RAP
EST. 11 TONS
EST. 30 SYGF

REMOVE 62' OF EXISTING 30" CMP

OTCB

REMOVE TEMP. 18" PIPE WITH DETOUR REMOVAL

RETENTION POND

10' STANDARD BASE DITCH
SEE DETAIL 45
EST. 1225 SYGF
EST. 2350 CY DDE

CLASS 'I' RIP-RAP
EST. 100 TONS
EST. 155 SYGF

4' LAT. BASE DITCH
SEE DETAIL 46

1 @ 10' x 7' RCBC (NOT BURIED)
1 @ 10' x 7' RCBC (NOT BURIED)

–Y8 DET– POT Sta 12+00.00 = BEGIN DETOUR CONSTRUCTION

PC Sta. 12+79.30

STANDARD 'V' DITCH
SEE DEATIL 47
EST. 20 CY DDE

INSTALL BARRIER W/ DRAINAGE SLOT (STD. 1170.01) –Y8_DET– 17+90 TO 18+40 ℄

RIP-RAP AT EMBANKMENT
SEE DETAIL 21
EST. 15 TONS
EST. 25 SYGF

1 @ 54" x 100' SPRA

CAT-1 GTD

RIP-RAP AT EMBANKMENT
SEE DETAIL 21
EST. 10 TONS
EST. 15 SYGF

PRC Sta. 15+43.74

S 13°40' 55.4" E

BEGIN PCB (ANCHORED) +53 –Y8_DET

RIP-RAP AT EMBANKMENT
SEE DETAIL 21
EST. 5 TONS
EST. 10 SYGF

SPECIAL CUT DITCH
SEE DETAIL 22

PC Sta. 21+08.34

PRC Sta. 20+93.26

PRC Sta. 23+08.15

–Y8 DET– POC Sta.24+00.00= END DETOUR CONSTRUCTION

END PCB (ANCHORED) +41 –Y8 DET–

END PCB (ANCHORED) +55 –Y8 DET–

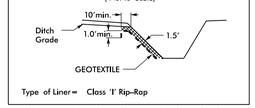
EQUATION:
ST Sta 502+99.94 –LREV BK =
POT Sta 503+00.89 –L– AH

NAD 83

–Y8_DET–

PI Sta 14+15.46	PI Sta 18+58.62	PI Sta 22+02.78
△ = 33° 40' 09.3" (LT)	△ = 69° 57' 45.1" (RT)	△ = 27° 21' 53.0" (LT)
D = 12° 43' 56.6"	D = 12° 43' 56.6"	D = 12° 43' 56.6"
L = 264.44'	L = 549.48'	L = 214.92'
T = 136.16'	T = 314.87'	T = 109.55'
R = 450.00'	R = 450.00'	R = 450.00'
e = 0.02	e = 0.03	e = 0.02
DS = 25 MPH	DS = 25 MPH	DS = 25 MPH
Runoff = 26.00'	Runoff = 78.00'	Runoff = 56.00'

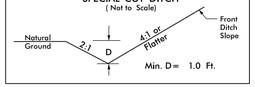
DETAIL 21
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of Liner= Class 'I' Rip-Rap

FROM –RPAY8– STA. 6+50 TO STA. 6+65 RT
FROM –Y8DET– STA. 18+05 TO STA. 18+15 LT
FROM –Y8DET– STA. 18+30 TO STA. 18+55 RT
FROM –Y8DET– STA. 18+62 TO STA. 18+75 RT

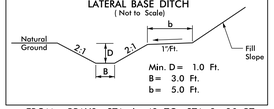
DETAIL 22
SPECIAL CUT DITCH
(Not to Scale)



Min. D= 1.0 Ft.

FROM –Y8DET– STA. 18+10 TO STA. 19+00 LT

DETAIL 19
LATERAL BASE DITCH
(Not to Scale)



Min. D= 1.0 Ft.
B= 3.0 Ft.
b= 5.0 Ft.

FROM –RPAY8– STA. 6+42 TO STA. 8+20 RT

HNTB
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No. C-1554

PLANS PREPARED BY :
PARSONS
RALEIGH, NORTH CAROLINA, (919) 854-1345
NC LICENSE NO. F-0246
FOR NORTH CAROLINA DEPT. OF TRANSPORTATION

PROJECT REFERENCE NO.	SHEET NO.
U-2524D	2B-4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 47874 ENGINEER TIMOTHY D. GRAINS
DocuSigned by: Timothy D. Grains
6/23/2016

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 15764 ENGINEER James A. Bass
DocuSigned by: James A. Bass
6/23/2016

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

20-JUN-2016 16:49
J:\U-2524D_RDY_PSH_02B-4.dgn
$$$$USERNAME$$$$