ARCADIS
G & M of North Carolina, Inc.
WWW.ARCADIS-US.COM
801 Corporate Center Drive, Suite 300
Raleigh, NC 27607-5073
Tel: 919/854-1282 Fax: 919/854-5448

METRIC
5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2911A	19
R /W SHEET NO.	

CONST.REV.

R /W REV.

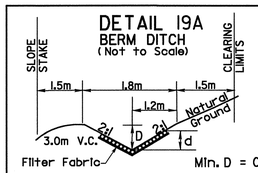
ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 028434 ENGINEER BRYON M. PALMER 3-12-04
SEAL NOT VALID UNLESS SIGNED AND DATED

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 12786 ENGINEER STEVEN M. BONDOR 3-12-04
SEAL NOT VALID UNLESS SIGNED AND DATED

NAD 83

REVISIONS

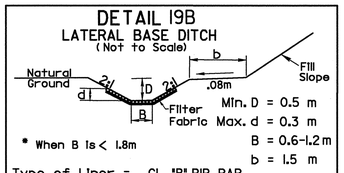
DETAIL 19A
BERM DITCH
(Not to Scale)



Min. D = 0.5 m
Max. d = 0.5 m
Type of Liner = CL. "B" RIP RAP

STA. 62+00 -L- TO STA. 63+20 -L- LT

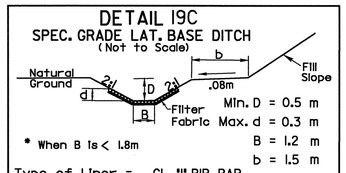
DETAIL 19B
LATERAL BASE DITCH
(Not to Scale)



Min. D = 0.5 m
Max. d = 0.3 m
B = 0.6-1.2 m
b = 1.5 m
* When B is < 1.8m
Type of Liner = CL. "B" RIP RAP

STA. 63+20 -L- TO STA. 63+40 -L- LT

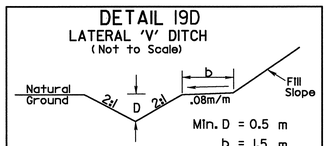
DETAIL 19C
SPEC. GRADE LAT. BASE DITCH
(Not to Scale)



Min. D = 0.5 m
Max. d = 0.3 m
B = 1.2 m
b = 1.5 m
* When B is < 1.8m
Type of Liner = CL. "I" RIP RAP

STA. 63+40 -L- TO STA. 63+63 -L- LT

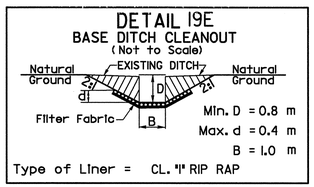
DETAIL 19D
LATERAL 'V' DITCH
(Not to Scale)



Min. D = 0.5 m
b = 1.5 m

STA. 64+60 -L- TO STA. 65+49 -L- LT

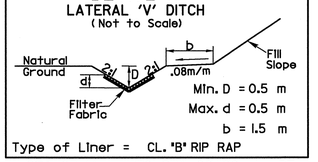
DETAIL 19E
BASE DITCH CLEANOUT
(Not to Scale)



Min. D = 0.8 m
Max. d = 0.4 m
B = 1.0 m
Type of Liner = CL. "I" RIP RAP

NOTE: TRANSITION TOP WIDTH TO MATCH EXISTING
STA. 64+88 -L- TO STA. 65+14 -R- RT

DETAIL 19F
LATERAL 'V' DITCH
(Not to Scale)



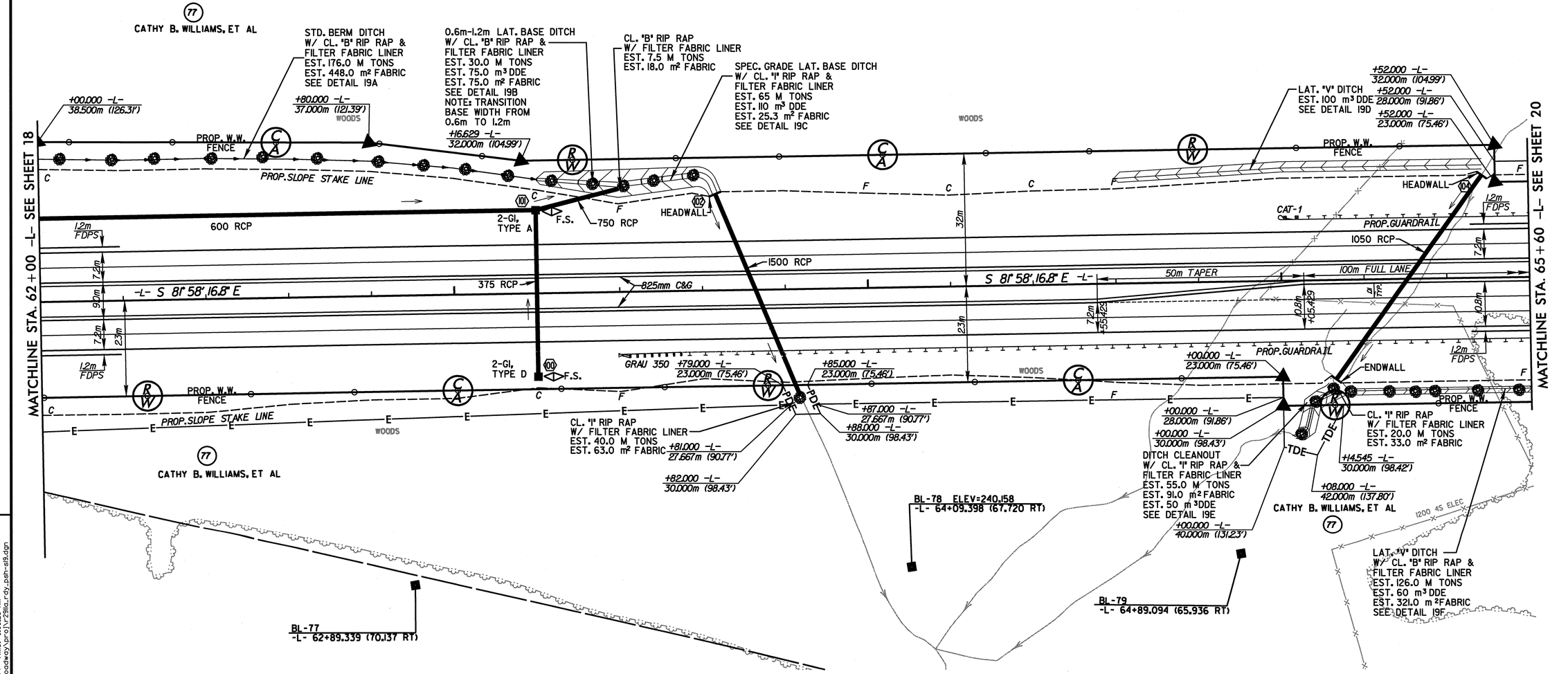
Min. D = 0.5 m
Max. d = 0.5 m
b = 1.5 m
Type of Liner = CL. "B" RIP RAP

STA. 65+14 -L- TO STA. 66+00 -L- RT

63 64 65

(77) CATHY B. WILLIAMS, ET AL

(77) CATHY B. WILLIAMS, ET AL



SEE SHEET 41 FOR -L- PROFILE

ARCADIS G&M
Date:3/12/2004 Time: 8:09:26 AM
Filename:r:\roadway\proj\r-2911a_rdy_psht-sl9.dgn