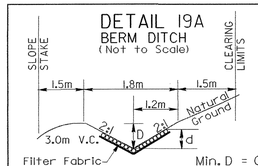
PROJECT REFERENCE NO.	SHEET NO.
R-2911A	EC-20/CONST.19
R /W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
R /W REV.	

METRIC

5 0 10

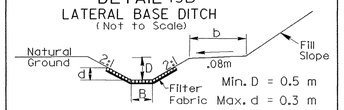
DETAIL 19A
BERM DITCH
(Not to Scale)



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

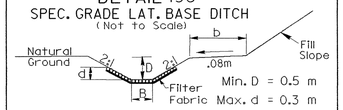
DETAIL 19B
LATERAL BASE DITCH
(Not to Scale)



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

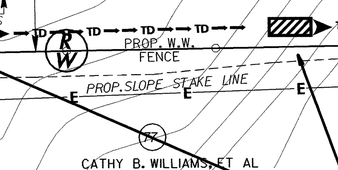
DETAIL 19C
SPEC. GRADE LAT. BASE DITCH
(Not to Scale)



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

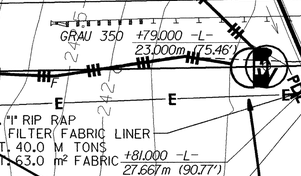
DETAIL 19D
LATERAL 'V' DITCH
(Not to Scale)



Min. D = 0.5 m
b = 1.5 m

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

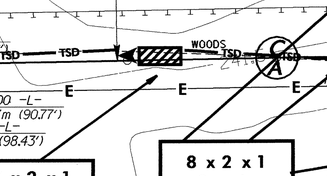
DETAIL 19E
BASE DITCH CLEANOUT
(Not to Scale)



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

NAD 83

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE- B AND TEMPORARY ROCK SILT CHECKS TYPE-A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 19

MATCHLINE STA. 62+00 -L- SEE SHEET 18

MATCHLINE STA. 65+60 -L- SEE SHEET 20

(77) CATHY B. WILLIAMS, ET AL

STD. BERM DITCH
W/ CL. "B" RIP RAP &
FILTER FABRIC LINER
EST. 176.0 M TONS
EST. 448.0 m² FABRIC
SEE DETAIL 19A

+00.000 -L-
38.500m (126.3')

+80.000 -L-
37.000m (121.39')

0.6m-1.2m LAT. BASE DITCH
W/ CL. "B" RIP RAP &
FILTER FABRIC LINER
EST. 30.0 M TONS
EST. 75.0 m³ DDE
EST. 75.0 m² FABRIC
SEE DETAIL 19B
NOTE: TRANSITION
BASE WIDTH FROM
0.6m TO 1.2m

+16.629 -L-
32.000m (104.99')

CL. "B" RIP RAP
W/ FILTER FABRIC LINER
EST. 7.5 M TONS
EST. 18.0 m² FABRIC

6 x 2 x 1
2 weir

SPEC. GRADE LAT. BASE DITCH
W/ CL. "I" RIP RAP &
FILTER FABRIC LINER
EST. 65 M TONS
EST. 110 m³ DDE
EST. 25.3 m² FABRIC
SEE DETAIL 19C

8 x 2 x 1
2 weir

+52.000 -L-
32.000m (104.99')

LAT. "V" DITCH
EST. 100 m³ DDE
SEE DETAIL 19D

+52.000 -L-
28.000m (91.86')

+52.000 -L-
23.000m (75.46')

PROP. W.W. FENCE

PROP. SLOPE STAKE LINE

600 RCP

2-GI, TYPE A

F.S.

750 RCP

HEADWALL

375 RCP

1500 RCP

825mm C&G

1050 RCP

CAT-1

PROP. GUARDRAIL

50m TAPER

100m FULL LANE

S 81° 58' 16.8" E -L-

12m FDPS

7.2m

9.0m

23m

WOODS

2-GI, TYPE D

GRAU 350 +79.000 -L-
23.000m (75.46')

+86.000 -L-
23.000m (75.46')

CL. "I" RIP RAP
W/ FILTER FABRIC LINER
EST. 40.0 M TONS
EST. 63.0 m² FABRIC

+81.000 -L-
27.667m (90.77')

+82.000 -L-
30.000m (98.43')

+87.000 -L-
27.667m (90.77')

+88.000 -L-
30.000m (98.43')

6 x 2 x 1

8 x 2 x 1
2 weir

+00.000 -L-
23.000m (75.46')

+00.000 -L-
28.000m (91.86')

+00.000 -L-
30.000m (98.43')

DITCH CLEANOUT
W/ CL. "I" RIP RAP &
FILTER FABRIC LINER
EST. 55.0 M TONS
EST. 91.0 m² FABRIC
EST. 50 m³ DDE
SEE DETAIL 19E

+00.000 -L-
40.000m (131.23')

+14.545 -L-
30.000m (98.42')

+08.000 -L-
42.000m (137.80')

ENDWALL

CL. "I" RIP RAP
W/ FILTER FABRIC LINER
EST. 20.0 M TONS
EST. 33.0 m² FABRIC

1200 AS ELEC

LAT. "V" DITCH
W/ CL. "B" RIP RAP &
FILTER FABRIC LINER
EST. 126.0 M TONS
EST. 60 m³ DDE
EST. 321.0 m² FABRIC
SEE DETAIL 19F

8 x 2 x 1

6 x 2 x 1

BL-77
-L- 62+89.339 (70.37 RT)

BL-78 ELEV=240.158
-L- 64+09.398 (67.720 RT)

BL-79
-L- 64+89.094 (65.936 RT)

SEE SHEET 41 FOR -L- PROFILE