PROJECT REFERENCE NO.	SHEET NO.
B-3623	EC-3 /CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 4

DETAIL 3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground, 2:1, D, 4:1 or Flatter, Fill Slope
Min. D = 1 Ft.
STA 14+50 - 16+50 LT

DETAIL 5
LATERAL 'V' DITCH
(Not to Scale)
Natural Ground, 2:1, D, 2:1, T, 1':1Ft., Fill Slope, Filter Fabric
Min. D = 1 Ft.
Max. d = 1 Ft.
b = 5 Ft.
Type of Liner = CLASS 'B' RIPRAP
STA 18+60 - 19+80 LT

DETAIL 4
LATERAL 'V' DITCH
(Not to Scale)
Natural Ground, 2:1, D, 2:1, T, 1':1Ft., Fill Slope
Min. D = 1 Ft.
b = 5 Ft.
STA 19+80 - 21+00 LT
EST. 146 CY DDE

DETAIL 1
SPECIAL LATERAL BASE DITCH
(Not to Scale)
Natural Ground, 2:1, D, d, 4:1 or Flatter, Fill Slope, Filter Fabric, B
Min. D = 1 Ft.
Max. d = 1 Ft.
B = 2 Ft.
Type of Liner = CLASS 'B' RIPRAP
STA 14+30 - 15+50 RT

DETAIL 2
LATERAL BASE DITCH
(Not to Scale)
Natural Ground, 2:1, D, d, 2:1, b, 1':1Ft., Fill Slope, Filter Fabric, B
Min. D = 1 Ft.
Max. d = 1 Ft.
B = 2 Ft.
b = 5 Ft.
* When B Is < 6.0'
Type of Liner = CLASS 'B' RIPRAP
STA 15+50 - 18+00 RT
EST. 53 CY DDE

B623-1
PINC 16+24.47
STA. 21+85.77 -L-
81.52' LT.

EDNA ALICE HILL
DB 456 PG 187

EXCAVATE EXISTING ROADWAY FILL (STRUCTURE PAY ITEM)
BL-3 -
-BL- PINC 13+07.08=
-T- PINC 11+09.76
ELEV=546.36'
STA. 19+79.82 -L-
77.03' LT.

T-5 10+00.00
ELEV=537.02'
REBAR & CAP SET
STA. 19+10.88 -L-
161.79' LT.

LAT 'V' DITCH W/ 42 TONS CL 'B' RIPRAP AND 125 SY FF (DETAIL #5)
CLASS 'B' RIPRAP + 2" STONE + SY FILTER FABRIC
LAT 'V' DITCH (DETAIL #4)

TEMPORARY PAVEMENT

15" CSP W/ 2 ELBOWS

SHOULDER BERM GUTTER STA END BRIDGE 19+87 LT & RT

Sta. 19+41.00 -L-
End Appr. Slab
Sta. 19+30.00 -L-
End Bridge
PCSta. 20+64.19 -L-

CLASS II RIPRAP AND FILTER FABRIC (STRUCTURE PAY ITEM)
-T- 12+25.60
ELEV=534.80'
REBAR & CAP SET
STA. 19+63.12 -L-
37.60' LT.

PCSta. 10+00.00
TEMPORARY SHIFT 2
PI Sta 22+57.03
Δ = 26° 00' 30.2" (RT)
D = 6° 51' 42.4"
L = 379.03'
T = 192.84'
R = 835.00'
DS = 50
SE = 0.06
PI Sta 10+52.25
-L-

MATCHLINE STA 22+00.00
SEE SHEET 5

PT Sta. 11+00.54
POT Sta. 8+00.00
PC Sta. 8+24.80
-L-
PI Sta 9+63.21
Δ = 12° 24' 30.2" (LT)
D = 4° 30' 00.0"
L = 275.74'
T = 138.41'
R = 1,273.24'

BL-7
PINC 5+00.00
STA. 10+64.14 -L-
34.14' LT.

B3623-2
PINC 7+63.94
STA. 13+29.10 -L-
25.56' LT.

PT Sta. 10+55.83
PC Sta. 10+10.80
POT Sta. 10+00.00
TEMPORARY SHIFT 1

S 28° 03' 52" E
S 40° 28' 22.9" E
-L-

BEGIN TIP PROJECT B-3623
POT Sta. 12+30.00 -L-

BEGIN CONSTRUCTION
POT Sta. 12+54.11 -L-

TEMPORARY SHIFT 1
PI Sta 10+33.34
Δ = 6° 45' 13.3" (LT)
D = 14° 59' 56.0"
L = 45.03'
T = 22.54'
R = 382.00'

TEMPORARY SHIFT 1
PI Sta 12+58.00
Δ = 10° 24' 24.0" (LT)
D = 14° 59' 56.0"
L = 69.38'
T = 34.79'
R = 382.00'

TEMPORARY SHIFT 1
PI Sta 14+93.16
Δ = 8° 55' 20.1" (LT)
D = 14° 59' 56.0"
L = 59.49'
T = 29.80'
R = 382.00'

JERRY WAYNE LINKER
DB 757 PG 383 WOODS

EDDYNE McKENZIE STARCHER
DB 1348 PG 002

PT Sta. 15+22.84
TEMPORARY SHIFT 1
-L-
PI Sta 15+32.16
Δ = 10° 39' 01.8" (LT)
D = 6° 51' 42.4"
L = 155.22'
T = 77.83'
R = 835.00'
DS = 50
SE = 0.06

EXISTING R/W TO BE ABANDONED

PT Sta. 12+92.59
PT Sta. 16+09.54 -L-

REMOVE BRIDGE

PC Sta. 14+63.35
PC Sta. 14+54.33 -L-
PC Sta. 12+23.21

TEMPORARY PAVEMENT

REMOVE AND RESET (DETAIL #3) 48" WW FENCE

SPECIAL DITCH (DETAIL #3)

TEMP. SHORING

REMOVE

2' BASE SPECIAL DITCH W/ 42 TONS CL 'B' RIPRAP AND 153 SY FF (DETAIL #1)

2' BASE SPECIAL DITCH W/ 42 TONS CL 'B' RIPRAP AND 318 SY FF (DETAIL #2)

60' TAPER

** NOTE: THIS PROPERTY IS SHOWN ON CABARUS COUNTY TAX MAPPING AS PART OF THE LAND OWNED BY LINKER. MR. LINKER STATES THAT HE DOES NOT OWN THIS LAND AND HIS DEED AGREES WITH THIS STATEMENT. W.K. ALEXANDER SOLD THE LAND ON THE OTHER SIDE OF THE ROAD TO MEDLIN, WHO SOLD IT TO STARCHER. ALEXANDER'S ORIGINAL DEED AGREED WITH LINKER'S DEED BUT THE PARCELS HE SOLD TO MEDLIN ONLY WENT TO THE CENTER OF THE CURRENT ROAD, LEAVING THE TRIANGLE SHOWN HERE.

W. K. ALEXANDER, ESTATE
** SEE NOTE TO LEFT
DB 158 PG 301

DOROTHY G. SNYDER
WB 1998-E-258
DB 264 PG 272

14 x 7 x 3
4' weir

TEMPORARY SHIFT 2
PI Sta 10+11.05
Δ = 2° 55' 39.8" (RT)
D = 13° 15' 00.0"
L = 22.10'
T = 11.05'
R = 432.42'

TEMPORARY SHIFT 2
PI Sta 10+38.88
Δ = 4° 00' 49.0" (LT)
D = 14° 59' 56.0"
L = 26.76'
T = 13.39'
R = 382.00'

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 5900
DESIGN FREQUENCY	= 25
DESIGN HW ELEVATION	= 544.4
BASE DISCHARGE	= 8430
BASE FREQUENCY	= 100
BASE HW ELEVATION	= 546.0
OVERTOPPING DISCHARGE	= 12340
OVERTOPPING FREQUENCY	= 500
OVERTOPPING ELEVATION	= 559.07
DATE OF SURVEY	= 10/08/02
W.S.ELEVATION AT DATE OF SURVEY	= 52970

SEE STRUCTURE PLANS S-1 THRU S-34

PI = 21+01.37
EL = 558.37'
K = 49*
VC = 302.43'
DS = 35 mph
-L-

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B3623-1" WITH NAD 1983/95 STATE PLANE GRID COORDINATES OF NORTHING: 569011.966(ft) EASTING: 1524557.358(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987300 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B3623-1" TO -L- STATION 22+00.00 IS 82.87'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

BEGIN RESURFACING STA. 12+65.00 EL = 579.31
STA. 12+90.00 EL = 577.73
END RESURF. BEGIN GRADE STA. 13+50.00 EL = 573.75
25' TAPER TO EXIST.

BM*2
-BL- STA 5+09.32
81.6' LEFT
ELEV. 591.02'

BM*3
-BL- STA 12+24.33
48.1' LEFT
ELEV. 539.49'

* DESIGN EXCEPTION REQUIRED FOR SAG VERTICAL CURVE K VALUE AND VERTICAL STOPPING SIGHT DISTANCE.

PROPOSED GRADE
EXISTING GROUND
SPECIAL DITCH RT.
SPECIAL DITCH LT.
LAT. DITCH RT.
LAT. 'V' DITCH W/ CL B RIP-RAP LT.
BEGIN BRIDGE STA. 17+45.00
END BRIDGE STA. 19+30.00
℄ BENT #1 STA. 18+05.00
℄ BENT #1 STA. 18+70.00
10.0000%
6.0000%
(-)5.9989%
7.5000%
8.5300%
6.0000%
10.4000%
3.6000%
0.5000%
13.8500%
8.0000%
(-)10.5008%
(+)5.6712%
+00.00 RT. EL = 568.00
+50.00 RT. EL = 563.00
+00.00 RT. EL = 560.00
+00.00 LT. EL = 560.50
+00.00 LT. EL = 555.00
+50.00 RT. EL = 547.20
+50.00 LT. EL = 550.00
+50.00 RT. EL = 538.80
+00.00 RT. EL = 535.00
+00.00 LT. EL = 533.80
+00.00 LT. EL = 534.00
+50.00 LT. EL = 540.80
+00.00 LT. EL = 562.80

610 600 590 580 570 560 550 540 530 520
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22