TIP PROJECT: U-5798B

CONTRACT: C205076

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

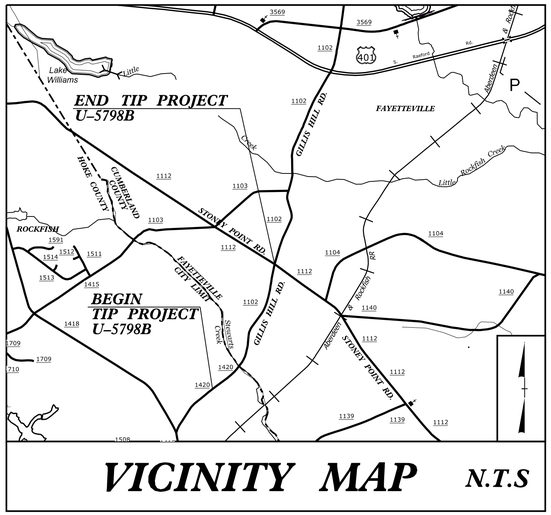
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

HOKE AND CUMBERLAND COUNTIES

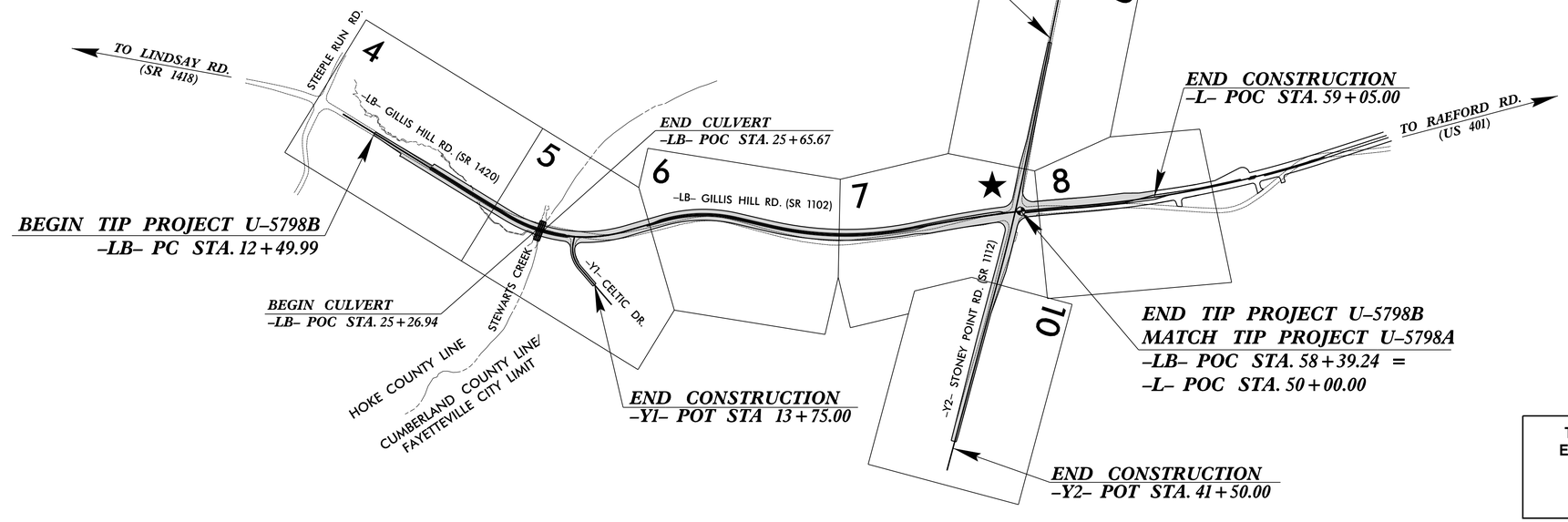
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5798B	EC-1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
	N/A	PE	

LOCATION: SR 1102 (GILLIS HILL ROAD) FROM SR 1418 (LINDSAY ROAD) TO NORTH OF SR 1112 (STONEY POINT ROAD). WIDEN TO MULTI-LANES.

TYPE OF WORK: PAVING, GRADING, DRAINAGE, CULVERT, WALLS, AND SIGNALS.



VICINITY MAP N.T.S



NAD 83/ NA 2011

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

GRAPHIC SCALE

50 25 0 50 100

PLANS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

RS&H

Prepared In the Office of:

RS&H

8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE NO: F-0493

Designed by:

LILY MCKINNEY *4559*

NAME *LEVEL III CERTIFICATION NO.*

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-02

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

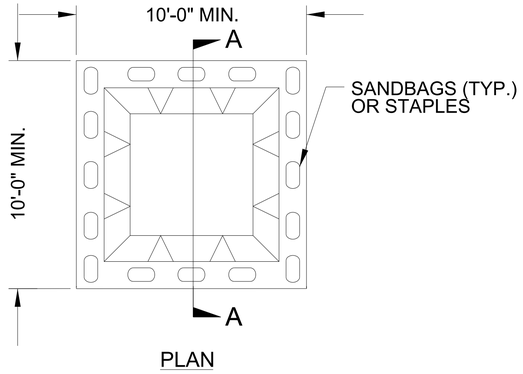
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

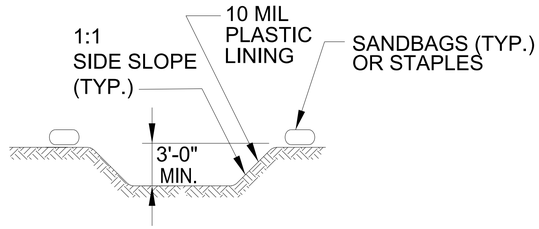
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	—EW—EW—EW—
1636.03	Coir Fiber Wattle Barrier	—CFW—CFW—CFW—

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-2A

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN



SECTION A-A

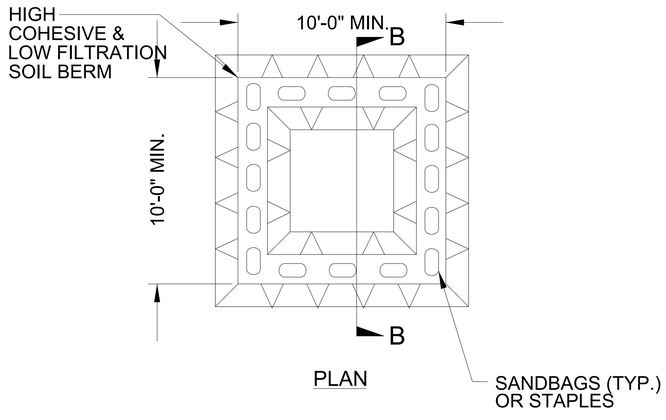
NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

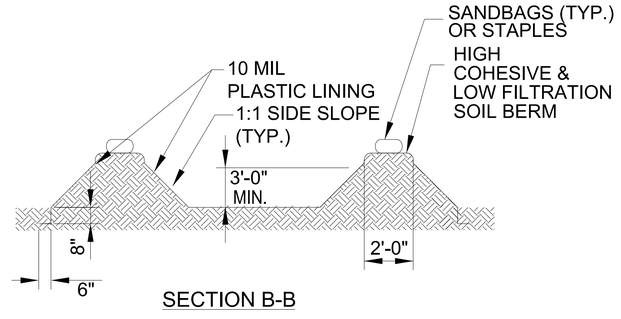
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



PLAN



SECTION B-B

NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

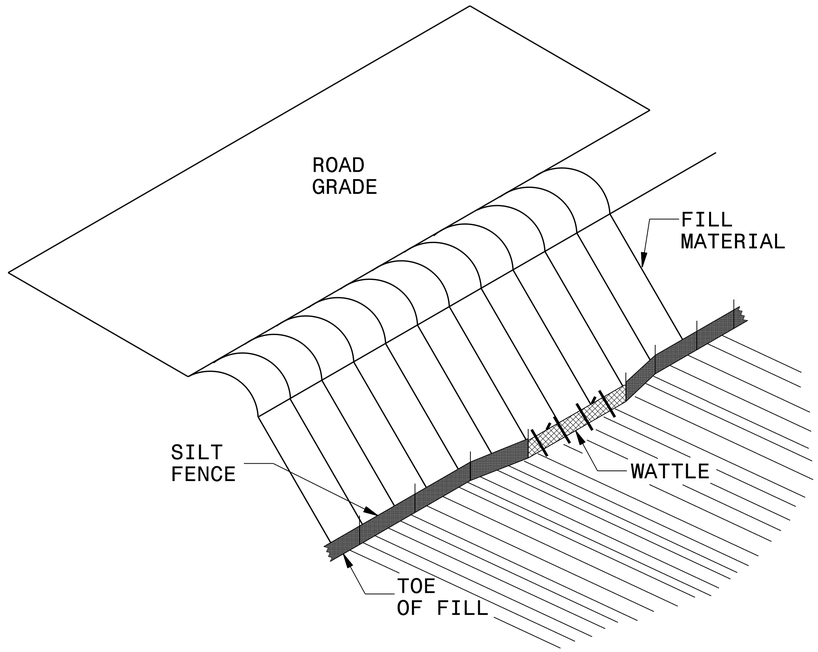
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-2B

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

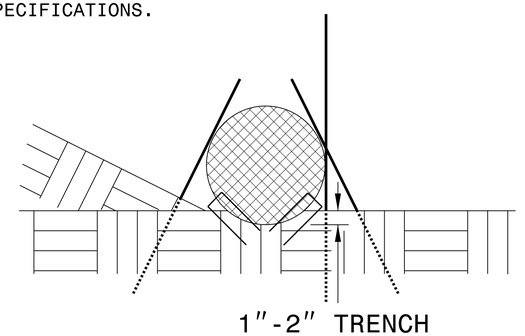
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

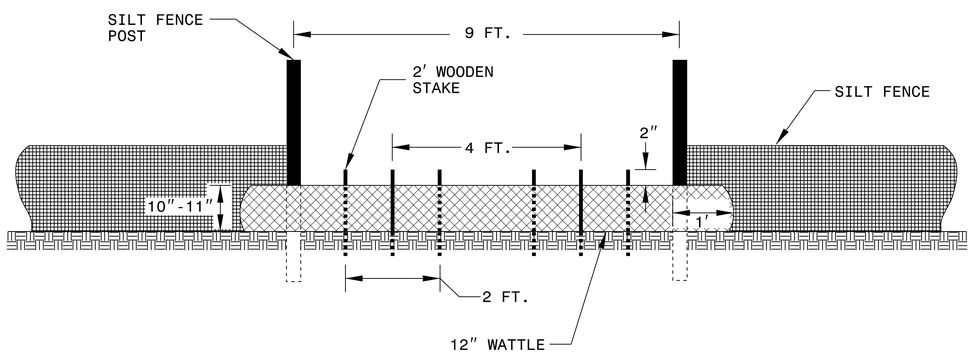
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

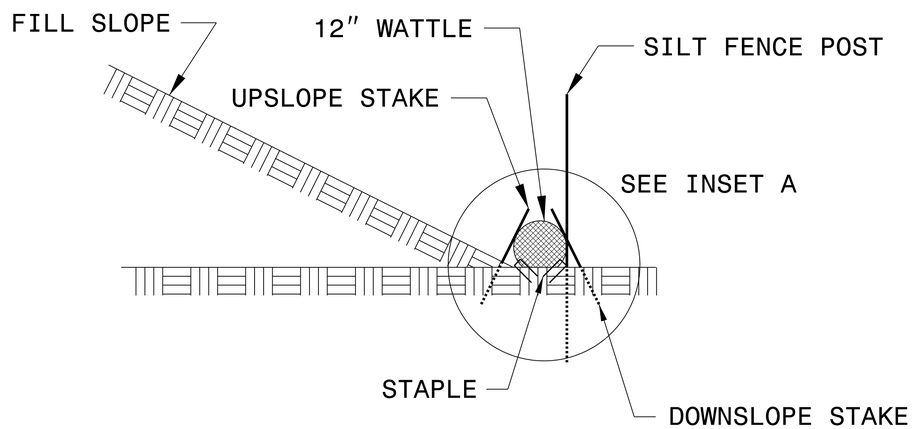
INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A





VIEW FROM SLOPE



SIDE VIEW

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-3

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

STRAW MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L0-	13+00	20+50	RT	575
4	-L0-	20+00	20+50	LT	40
4	-L0-	21+00	22+00	LT	55
5	-L0-	30+50	31+00	RT	40
5	-L0-	31+00	32+00	RT	80
6	-L0-	35+50	37+50	RT	155
6	-L0-	42+67	43+15	LT	125
7	-L0-	56+36	57+65	LT	100
10	-Y2-	32+00	37+00	LT	620
10	-Y2-	32+00	39+65	RT	945
10	-Y2-	39+65	41+50	RT	230
10	-Y2-	39+70	41+50	LT	225
				SUBTOTAL	3,190
	MISC DITCH MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER				775
				TOTAL	3,965
			TOTAL STRAW MATTING		3,965
			TOTAL EXCELSIOR MATTING		155
			DITCHLINE MATTING GRAND TOTAL		4,120
				SAY	4,200
	MISC MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER				10,160
			MATTING GRAND TOTAL		14,360

EXCELSIOR MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-L0-	22+00	22+50	LT	30
5	-L0-	22+50	23+92	LT	110
				SUBTOTAL	140
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					15
				TOTAL	155

TYPE 2 PSRM MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L0-	20+50	21+00	LT	30
				SUBTOTAL	30
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					20
				TOTAL	50
				SAY	50

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-3A

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-4/CONST.4

RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

NAD 83/NA 2011

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

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

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

REVISIONS
8/17/99

-LB- CURVE DATA

PI Sta 13+21.11	PI Sta 14+55.41
△ = 0° 48' 53.5" (RT.)	△ = 0° 43' 26.9" (LT.)
D = 0° 34' 22.6"	D = 0° 34' 22.6"
L = 142.22'	L = 126.38'
T = 71.11'	T = 63.19'
R = 10,000.00'	R = 10,000.00'
SE = NC	SE = NC

NOTE:
THE PARALLEL JS IS STABLE, BUT IS LINED WITH ROCK ALONG THE MCMILLAN PROPERTY AND SHOWS SIGNS OF SCOUR AT THE TWO EXISTING 24" RCPs. THE OUTFALL OF THE 24" RCP UNDER GILLIS HILL ROAD IS BURIED. THE OTHER DRIVEWAY PIPES AND DITCHES ARE IN GOOD CONDITION.

0401
TOP=186.72'
INV OUT=186.72'

0402
TOP=189.10'
INV IN=182.85'
INV OUT=182.85'

0403
TOP=188.28'
INV IN=182.50'
INV OUT=182.50'

0404
TOP=192.98'
INV OUT=189.98'

0405
TOP=188.28'
INV IN=184.53'
INV OUT=184.53'

0406
TOP=187.28'
INV IN(0403)=182.03'
INV IN(0405)=184.16'
INV OUT=182.03'

0407
TOP=186.33'
INV IN=181.75'
INV OUT=181.75'

MICAHEL LAWRENCE BROWNE JR
MICHELLE WEESE BROWNE
DB 647 PG 678
PB 2046 PG 2

CRA COMMERCIAL DEV. INC
DB 459 PG 306
PB 2046 PG 2

WILLIAM A ROBBINS, ETAL
DB 1213 PG 863

WADE K WAHL
DB 805 PG 563
PB 3063 PG 3

WADDELL HARVEY
DB 1069 PG 295
PB 3063 PG 3

GEORGE WAYNE DAVIS
DB 337 PG 372
PB 367 PG 2

GILLIS DEVELOPMENT INC.
DB 322 PG 549

JOSEPH H. AND BETTY H. GILLIS
DB 799 PG 917
PB 367 PG 2

JACQUELINE S MCMILLAN
NORMAN MCMILLAN
DB 331 PG 407
PB 355 PG 8

DB 1236 PG 330
PB 355 PG 8
JULIA MONTOYA

ALBERT. L HALEY
THERESA HALEY
DB 864 PG 614

ELIZABETH HALEY
DB 118 PG 551

HOUSE MONEY, LLC
DB 1338 PG 798

-LB- PT Sta. 15+18.60

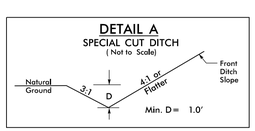
-LB- PRC Sta. 13+92.21

BEGIN TIP PROJECT U-5798B
BEGIN PROPOSED GRADE
-LB- PC Sta.12+49.99

-LB- POT Sta. 10+00.00

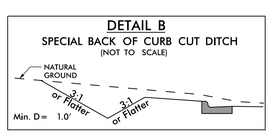
MATCHLINE SHEET 5 -LB- STA. 22+00.00

DETAIL A
SPECIAL CUT DITCH
(Not to Scale)



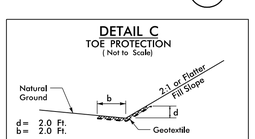
FROM -LB- STA. 13+00 TO STA. 15+00 RT

DETAIL B
SPECIAL BACK OF CURB CUT DITCH
(NOT TO SCALE)



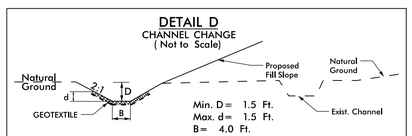
FROM -LB- STA. 15+00 TO STA. 20+50 RT

DETAIL C
TOE PROTECTION
(Not to Scale)



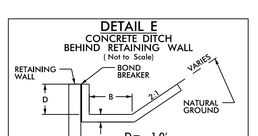
FROM -LB- STA. 20+50 TO STA. 22+00 RT
EST 84 TONS CLASS "B" RIP RAP
EST 150 SY GEOTEXTILE

DETAIL D
CHANNEL CHANGE
(Not to Scale)



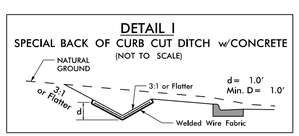
FROM -LB- STA. 18+20 TO STA. 19+40 LT
EST 81 TONS CLASS "B" RIP RAP
EST 143 SY GEOTEXTILE

DETAIL E
CONCRETE DITCH
BEHIND RETAINING WALL
(Not to Scale)



FROM -LB- STA. 20+20 TO STA. 22+90 LT

DETAIL I
SPECIAL BACK OF CURB CUT DITCH w/CONCRETE
(NOT TO SCALE)



FROM -LB- STA. 20+00 TO STA. 20+20 LT

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PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-5/CONST.5

RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

8/17/99

REVISIONS

NAD 83/NA 2011

MATCHLINE SHEET 4 -LB- STA. 22+00.00

MATCHLINE SHEET 6 -LB- STA. 33+00.00

-LB- CURVE DATA
PI Sta 27+42.62
△ = 47° 45' 00.0" (LT.)
D = 5° 43' 46.5"
L = 833.39'
T = 442.62'
R = 1,000.00'
SE = 04
RO = 192'

-YI- CURVE DATA
PI Sta 11+37.48
△ = 53° 40' 22.7" (LT.)
D = 28° 38' 52.4"
L = 187.35'
T = 101.19'
R = 200.00'
SE = RC
RO = 36'

-LB- PC Sta. 23+00.00

-LB- POC Sta. 27+83.87 =
-YI- POT Sta. 10+00.00
S 55° 53' 07.9" E

-LB- PT Sta. 31+33.39

-YI- PT Sta. 12+23.65

-YI- PC Sta. 10+36.30

END CONSTRUCTION
-YI- POT Sta. 13+75.00

-YI- POT Sta. 15+52.63

N 52° 54' 01.9" E

N 70° 26' 29.4" E

9 DIANE HARRELL TRUSTEE DB 1352 PG 740

11 HOKE COUNTY DB 440 PG 64, DB 5266 PG 286, PG 76

17 NEILL MALCOLM MCINNIS, III DB 386 PG 142 PB 84 PG 163

17A NEILL MALCOLM MCINNIS, III DB 386 PG 142 PB 84 PG 163

13 JOE A JOHNSON & WIFE PATRICIA E DB 4519 PG 59 PB 74 PG 76

16 ERNEST W JONES & WIFE CYNTHIA M DB 4901 PG 371 PB 92 PG 82

WILLIAM RONALD LEE DB 1037 PG 583 PB 92 PG 82

8 DONALD L. THIEL, JUDITH M THIEL DB 629 PG 685

10

12 GILLIS DEVELOPMENT CORP. DB 3493 PG 759 PB 74 PG 76

14 JAMES W THOMAS & WIFE DEBBIE S DB 7042 PG 388 PB 74 PG 76

15 CLARA B ROBINSON DB 4017 PG 300 PB 74 PG 76

CONCRETE DITCH BEHIND RETAINING WALL SEE DETAIL E

EST 2 TON CL B RIP RAP
EST 7 SY GEOTEXTILE

EST 274 TONS OF CLASS "I" RIP RAP
EST 290 SY GEOTEXTILE (OR AS DIRECTED BY THE ENGINEER

15" ALT CARE TO BE TAKEN AROUND EXISTING WATERLINES

GRADE TO DRAIN

SPECIAL BACK OF CURB CUT DITCH SEE DETAIL B

TOE PROTECTION SEE DETAIL C

EST 13 TON CL I RIP RAP
EST 30 SY GEOTEXTILE
TOE PROTECTION SEE DETAIL C

EST 2 TON CL B RIP RAP
EST 7 SY GEOTEXTILE

EST 226 TONS OF CLASS "I" RIP RAP
EST 239 SY GEOTEXTILE (OR AS DIRECTED BY THE ENGINEER

TOE PROTECTION SEE DETAIL K
EST 3 TON CL B RIP RAP
EST 11 SY GEOTEXTILE

SPECIAL BACK OF CURB CUT DITCH SEE DETAIL B

DETAIL C
TOE PROTECTION
(Not to Scale)
Natural Ground, b, d, 2:1 or Flatter Fill Slope, Geotextile
d= 2.0 Ft.
b= 2.0 Ft.
Type of Liner= Class "B" Rip-Rap

FROM -LB- STA. 22+00 TO STA. 22+08 RT
EST 5 TONS CLASS "B" RIP RAP
EST 8 SY GEOTEXTILE
FROM -LB- STA. 24+00 TO STA. 25+15 RT
EST 65 TONS CLASS "B" RIP RAP
EST 115 SY GEOTEXTILE

DETAIL K
TOE PROTECTION
(Not to Scale)
Natural Ground, 2:1 or Flatter Fill Slope, d, Geotextile
d= 2.0 Ft.
Type of Liner= Class "B" Rip-Rap

FROM -LB- STA. 25+68 TO STA. 26+77 RT
EST 31 TONS CLASS "B" RIP RAP
EST 55 SY GEOTEXTILE

DETAIL B
SPECIAL BACK OF CURB CUT DITCH
(NOT TO SCALE)
NATURAL GROUND, 2:1 or Flatter, 2:1 or Flatter
Min. D= 1.0'

FROM -LB- STA. 22+90 TO STA. 23+70 LT
FROM -LB- STA. 31+00 TO STA. 32+00 RT

DETAIL E
CONCRETE DITCH BEHIND RETAINING WALL
(Not to Scale)
RETAINING WALL, BOND BREAKER, VARIES, NATURAL GROUND, D, B, 2:1, 4"
D= 1.0'
B= 1.0' (0' TO 2.0')

FROM -LB- STA. 20+20 TO STA. 22+90 LT

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

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RS&H

8/17/99

STEWARTS CREEK
CULVERT CONSTRUCTION SEQUENCE

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-6/CONST.5

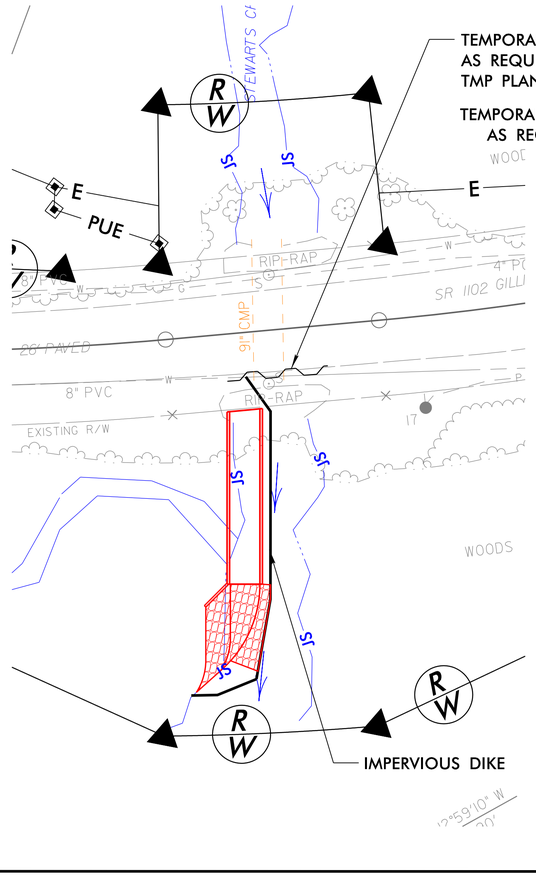
RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

STREAM AND CULVERT PHASING TO BE USED IN CONJUNCTION WITH TMP PHASING PLANS.
UTILIZE PUMPS AND SPECIAL STILLING BASINS AS NEEDED TO DEWATER CULVERT WORK AREAS.

NAD 83/2011

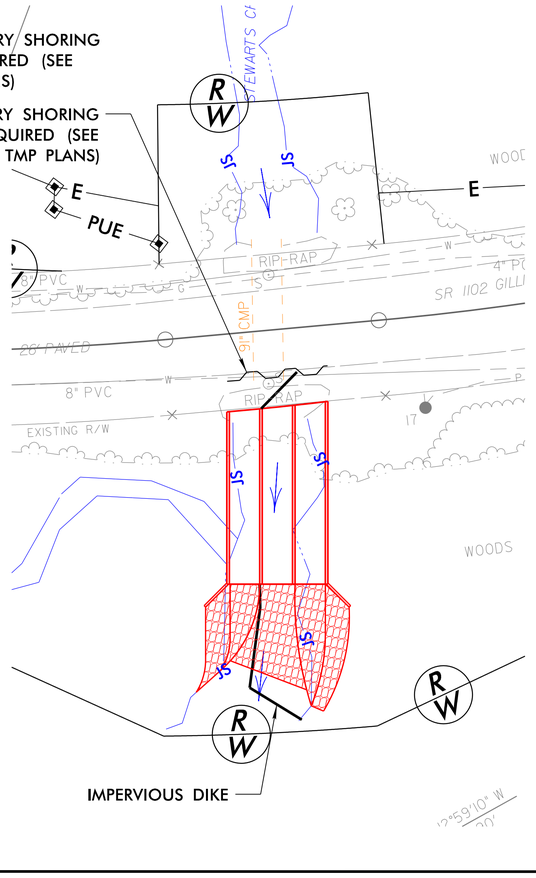
PHASE 1

1. UTILIZE TEMPORARY SHORING ALONG EXISTING ROAD AND REMOVE APPROXIMATELY 16′ OF EXISTING 90″ CMP.
2. USE IMPERVIOUS DIKES TO DIVERT WATER AROUND THE WORK AREA FOR THE DOWNSTREAM PORTION OF THE PROPOSED SOUTHERN 12′x8′ RCBC BARREL.
3. CONSTRUCT 70′ OF THE PROPOSED SOUTHERN 12′x8′ RCBC BARREL AND CHANNEL IMPROVEMENTS.



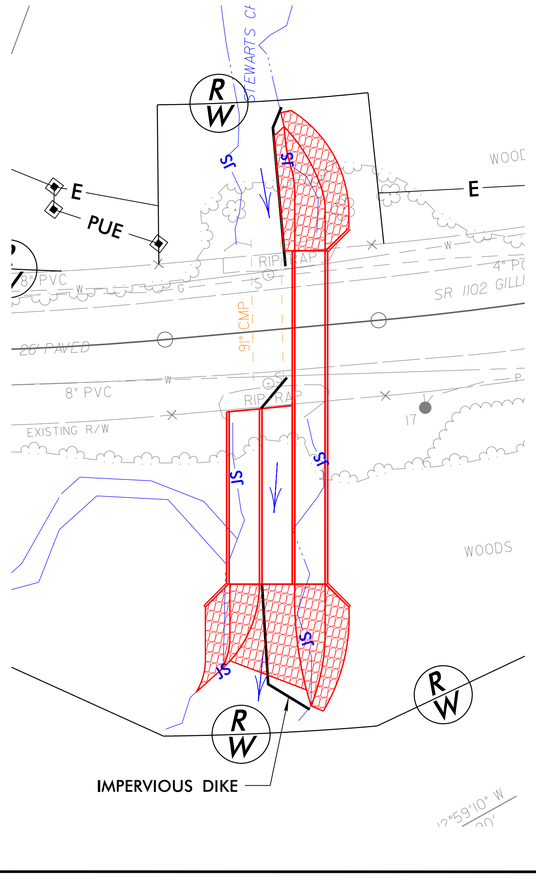
PHASE 2

1. USE IMPERVIOUS DIKES TO DIVERT WATER THROUGH THE SOUTHERN PROPOSED 12′x8′ RCBC BARREL.
2. CONSTRUCT THE REMAINING TWO DOWNSTREAM 12′x8′ RCBC BARRELS AND CHANNEL IMPROVEMENTS.



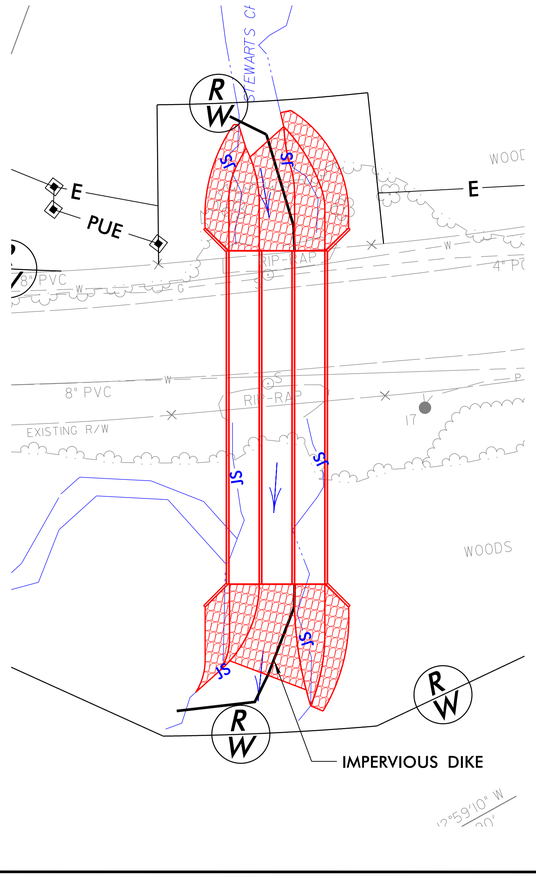
PHASE 3

1. USE IMPERVIOUS DIKES TO DIVERT WATER AROUND THE WORK AREA FOR THE PROPOSED NORTHERN 12′x8′ RCBC BARREL.
2. CONSTRUCT THE FULL LENGTH OF THE PROPOSED NORTHERN 12′x8′ RCBC BARREL AND CHANNEL IMPROVEMENTS.



PHASE 4

1. USE IMPERVIOUS DIKES TO DIVERT WATER THROUGH THE PROPOSED NORTHERN 12′x8′ RCBC BARREL.
2. CONSTRUCT THE REMAINDER OF THE PROPOSED 3@12′x8′ RCBC AND CHANNEL IMPROVEMENTS.
3. REMOVE ALL IMPERVIOUS DIKES AND ANY REMAINING SPECIAL STILLING BASIN(S).
4. COMPLETE ROADWAY.



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PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-7/CONST.6

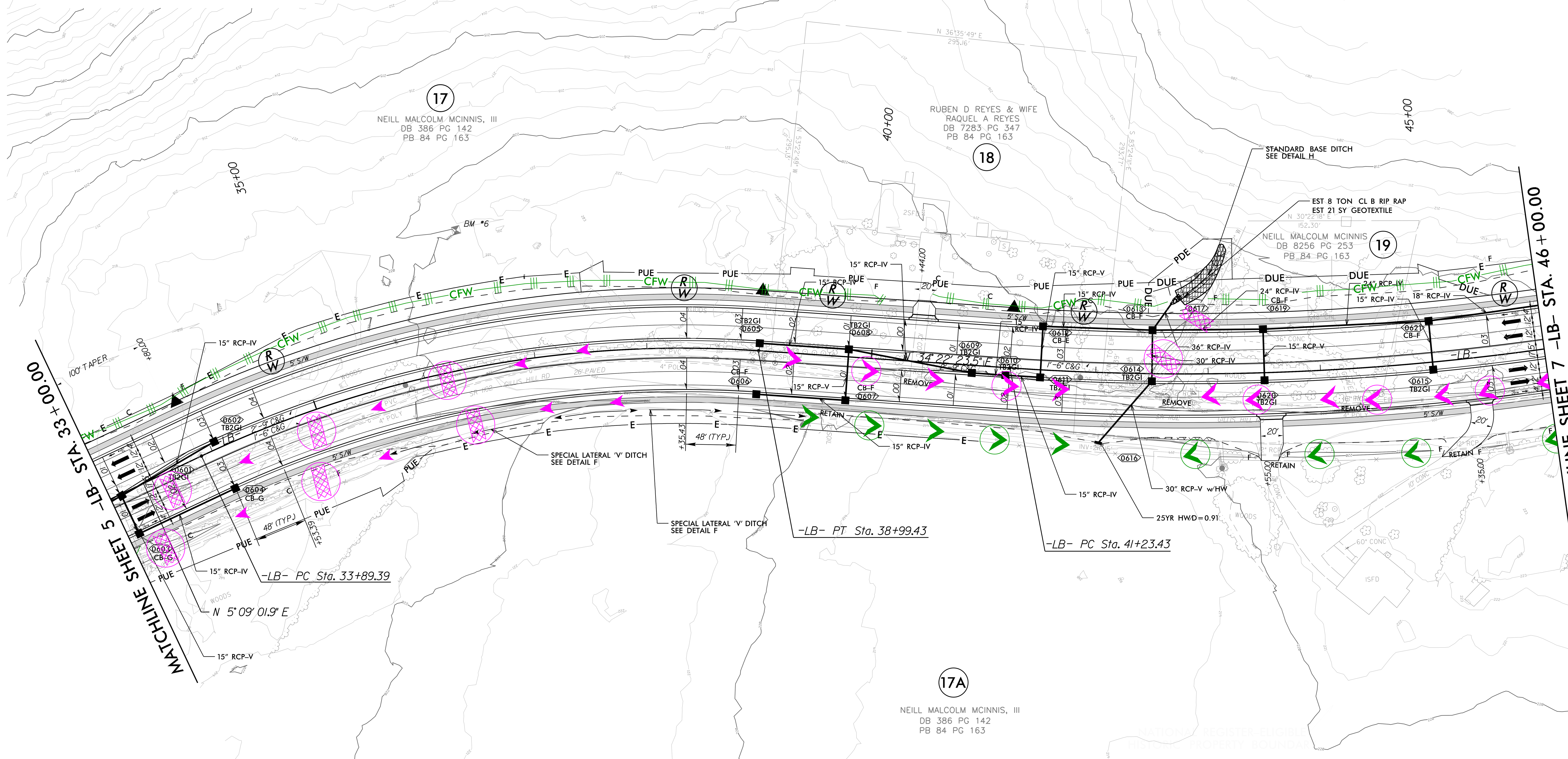
RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

REVISIONS

8/17/99

-LB- CURVE DATA

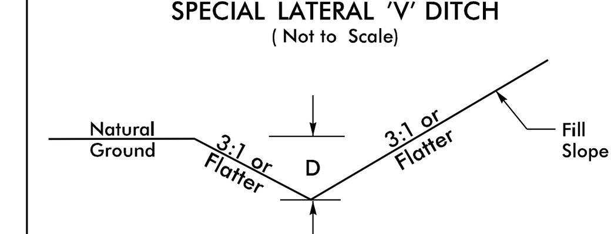
PI Sta 36+50.09	PI Sta 46+22.93
△ = 29° 13' 21.6" (RT.)	△ = 24° 30' 21.9" (LT.)
D = 5° 43' 46.5"	D = 2° 29' 28.0"
L = 510.03'	L = 983.74'
T = 260.69'	T = 499.51'
R = 1,000.00'	R = 2,300.00'
SE = .04	SE = .03
RO = 192'	RO = 144'



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

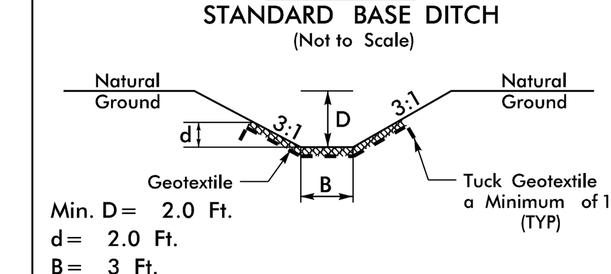
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

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



FROM -LB- STA. 35+50 TO STA. 37+50 RT
FROM -LB- STA. 37+50 TO STA. 39+50 RT

DETAIL H
STANDARD BASE DITCH
(Not to Scale)



FROM -LB- STA. 42+67 TO STA. 43+15 LT
EST 64 TONS CLASS "B" RIP RAP
EST 114 SY GEOTEXTILE
DDE = 40CY

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

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PROJECT REFERENCE NO. U-5798B
SHEET NO. EC-8/CONST.7
RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493
NAD 83/NA 2011
-LB- CURVE DATA
PI Sta 46+22.93
Δ = 24° 30' 21.9" (LT.)
D = 2° 29' 28.0"
L = 983.74'
T = 499.51'
R = 2,300.00'
SE = .03
RO = 144'
PI Sta 54+73.43
Δ = 4° 56' 04.9" (RT.)
D = 0° 40' 26.6"
L = 732.08'
T = 366.26'
R = 8,500.00'
SE = NC
-Y2- CURVE DATA
PI Sta 25+46.54
Δ = 3° 41' 18.7" (RT.)
D = 0° 30' 58.2"
L = 714.58'
T = 357.41'
R = 11,100.00'
SE = NC
NEILL MALCOLM MCINNIS, III
DB 386 PG 142
PB 84 PG 163
JOHN MCNATT GILLIS, MARY ALMA GILLIS, COLM D GILLIS HEIRS ET AL, MALCOLM GILLIS HEIRS, JDY GILLIS MCKETHAN
4093 PG 287 (TRACT 6C)
MALCOLM R. GILLIS, JUDY GILLIS MCKETHAN, JOHN MCNATT GILLIS JR., JOSEPH H. GILLIS, BETTY GILLIS, JIM GILLIS LLC, SOUTHERN GIN INVESTMENTS LLC.
DB 4093 PG 287 (TRACT 6C)
SPECIAL LATERAL 'V' DITCH SEE DETAIL G
COLLAR AND EXTEND EXISTING 30" RCP-IV w/HW
END TIP PROJECT U-5798B
MATCH TIP PROJECT U-5798A
-LB- PT Sta. 58+39.24 =
-L- PT Sta. 50+00.00
-LB- POC Sta. 58+00.54 =
-Y2- POC Sta. 24+97.02
SPECIAL LATERAL 'V' DITCH SEE DETAIL F
-LB- PRC Sta. 51+07.16
MATCHLINE SHEET 9 -Y2- STA. 22+00.00
MATCHLINE SHEET 6 -LB- STA. 46+00.00
MATCHLINE SHEET 8 -L- STA. 51+20.00
MATCHLINE SHEET 10 -Y2- STA. 30+00.00
500' TRANSITION LT.
300' TRANSITION RT.
100' TAPER RT.
515' TURN LANE
200' TURN LANE
325' TURN LANE
300' TAPER RT.
-Y2- PT Sta. 29+03.71
SPECIAL LATERAL 'V' DITCH SEE DETAIL G
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 7
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.
ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.
JOHN MCNATT GILLIS, MARY ALMA GILLIS, MALCOLM D GILLIS HEIRS ET AL, MALCOLM GILLIS HEIRS, JUDY GILLIS MCKETHAN
DB 4093 PG 287 (TRACT 6C)
END PROPOSED GRADE RT.
END CONSTRUCTION RT.
-L- POT Sta. 50+96.00
ROBERT LEWIS GILLIS
DB 11672 PG 0692
WILLIAM K GILLIS
DB 3752 PG 333
TRAFFIC VOLUME DATA
STONEY POINT RD.
8,100
12,000
900
1,300
2,100
4,800
10,700
17,500
21,000
33,000
GILLIS HILL RD.
400
300
9,500
12,000
2025
2045
15,100
18,200
DETAIL G
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Min. D = SEE BELOW
FROM -Y2- STA. 19+00 TO STA. 23+98 RT (MIN D=1.5')
FROM -Y2- STA. 26+50 TO STA. 39+65 RT (MIN D=1.0')
FROM -Y2- STA. 29+50 TO STA. 39+65 LT (MIN D=1.0')
DETAIL F
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Min. D = 1.0'
FROM -LB- STA. 47+50 TO STA. 52+50 RT
FROM -LB- STA. 56+36 TO STA. 57+65 LT
MILL AND OVERLAY LIMITS
U-5798A DRAINAGE
PROPOSED SIGNAL
NOTE: U-5798A DESIGN FILE USED IN CONJUNCTION WITH FINAL SURVEY.
REVISIONS
8/17/99
05-JUN-2025 19:05

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-9/CONST.8

RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

NAD 83/NA 2011

8/17/99

REVISIONS

-L- CURVE DATA

PI Sta 48+37.98	PI Sta 62+27.11
△ = 7° 01' 28.2" (RT)	△ = 13° 43' 19.0" (LT)
D = 0° 40' 26.6"	D = 0° 47' 36.9"
L = 1,042.10'	L = 1,729.14'
T = 521.71'	T = 868.73'
R = 8,500.00'	R = 7,220.00'
SE = NC	SE = NC

55+00

60+00

JOHN D GILLIS
DB 4810 PG 586

JOHN D GILLIS
DB 4810 PG 586

MATCHLINE SHEET 7 -L- STA. 51+20.00

END OVERLAY LT.
END CONSTRUCTION LT.
TIE TO EXISTING
-L- POT Sta.59+05.00

END PROPOSED GRADE RT.
END CONSTRUCTION RT.
TIE TO EXISTING
-L- POC Sta.51+44.00

END 2'-6" C&G
END 5' SIDEWALK
END 4' CONC. MONOLITHIC ISLAND
TIE TO EXISTING
-L- Sta.51+44.00 RT.

ROBERT LEWIS GILLIS
DB 11672 PG 0692

25

ROBERT. LEWIS GILLIS
& WIFE JUNE
MONTGOMERY
DB 6959 PG 374

FRANCIS GILLIS DINKINS
DB 2749 PG 304

JOHN DAVIS II
DAVID MILLER GILLIS
DB 8113 PG 669

BM #8

BM8 ELEVATION = 216.02'
N 460221 E 1983941
BL STATION 76+96.13 228.76' RIGHT
BENCHTIE IN 36" S. GUM

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8

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

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

25A

WILLIAM K GILLIS
DB 3752 PG 333

NOTE: U-5798A DESIGN USED IN CONJUNCTION WITH FINAL SURVEY

MILLING LIMITS

U-5798A DRAINAGE

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PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-10/CONST.9

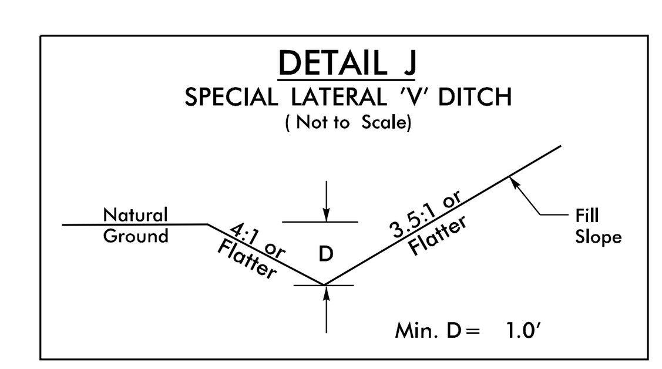
RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

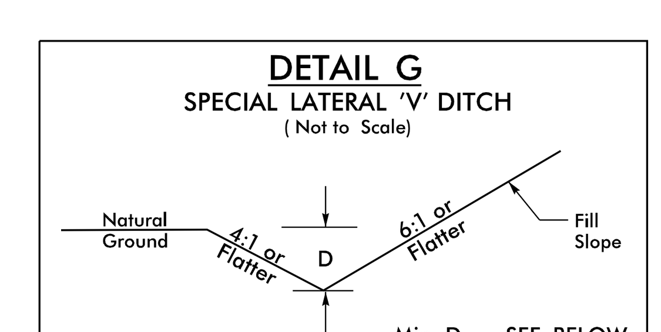
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.



FROM –Y2– STA. 13+00 TO STA. 16+00 LT



FROM –Y2– STA. 16+00 TO STA. 21+50 LT (MIN D=1.0')
FROM –Y2– STA. 13+00 TO STA. 19+00 RT (MIN D=1.0')
FROM –Y2– STA. 19+00 TO STA. 23+98 RT (MIN D=1.5')

REVISIONS

8/17/99

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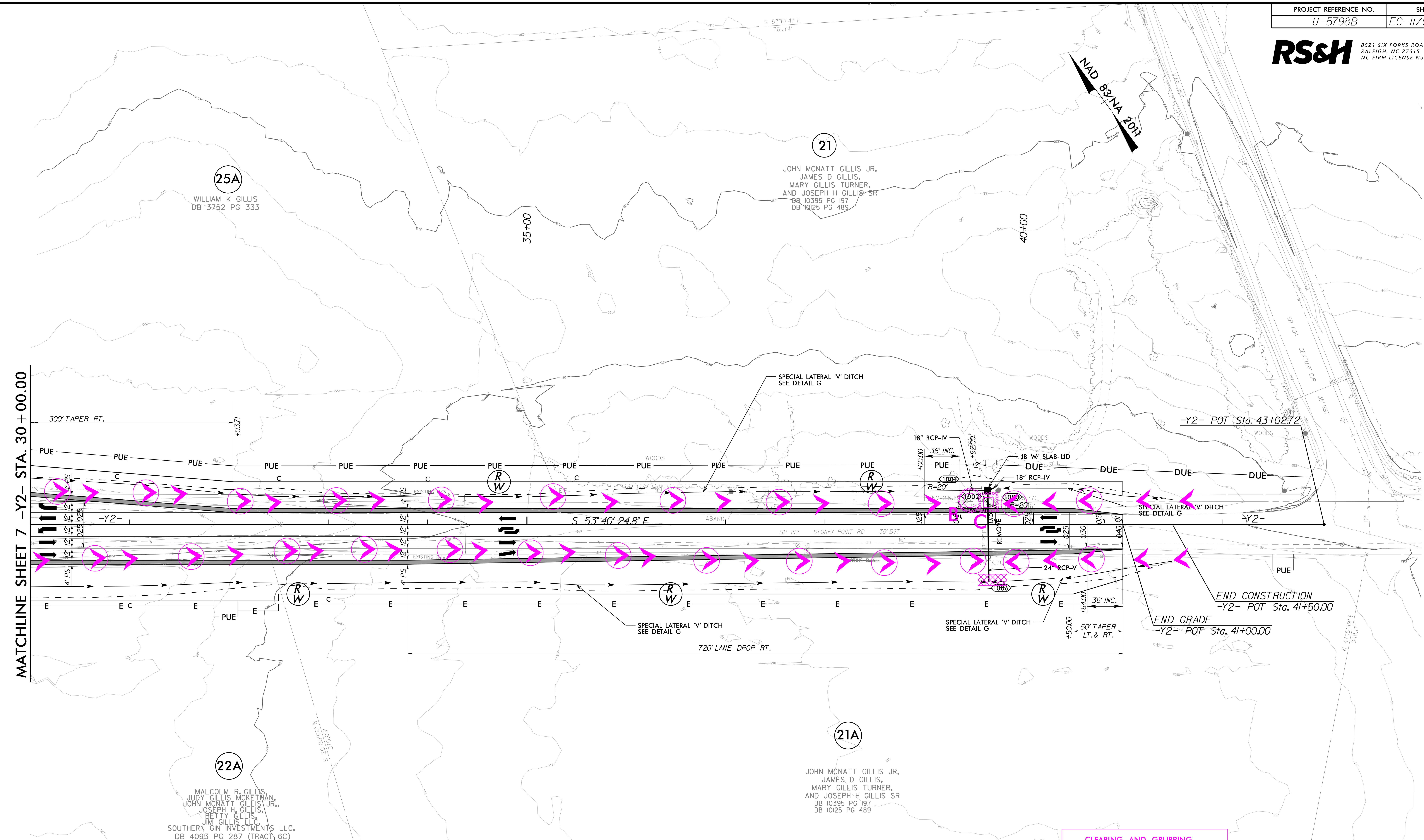
PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-II/CONST.IO

RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493



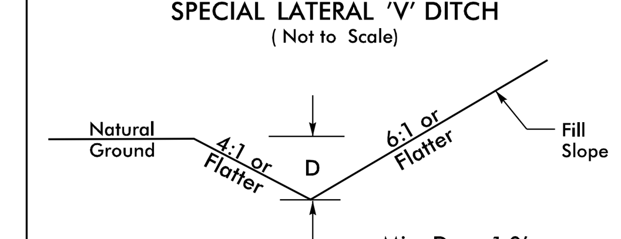
REVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

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

DETAIL G

SPECIAL LATERAL 'V' DITCH
(Not to Scale)



FROM -Y2- STA. 26+50 TO STA. 39+65 RT
FROM -Y2- STA. 29+50 TO STA. 39+35 LT
FROM -Y2- STA. 39+65 TO STA. 41+50 RT
FROM -Y2- STA. 39+70 TO STA. 41+50 LT

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

8/17/99

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RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

NAD 83/NA 2011

Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

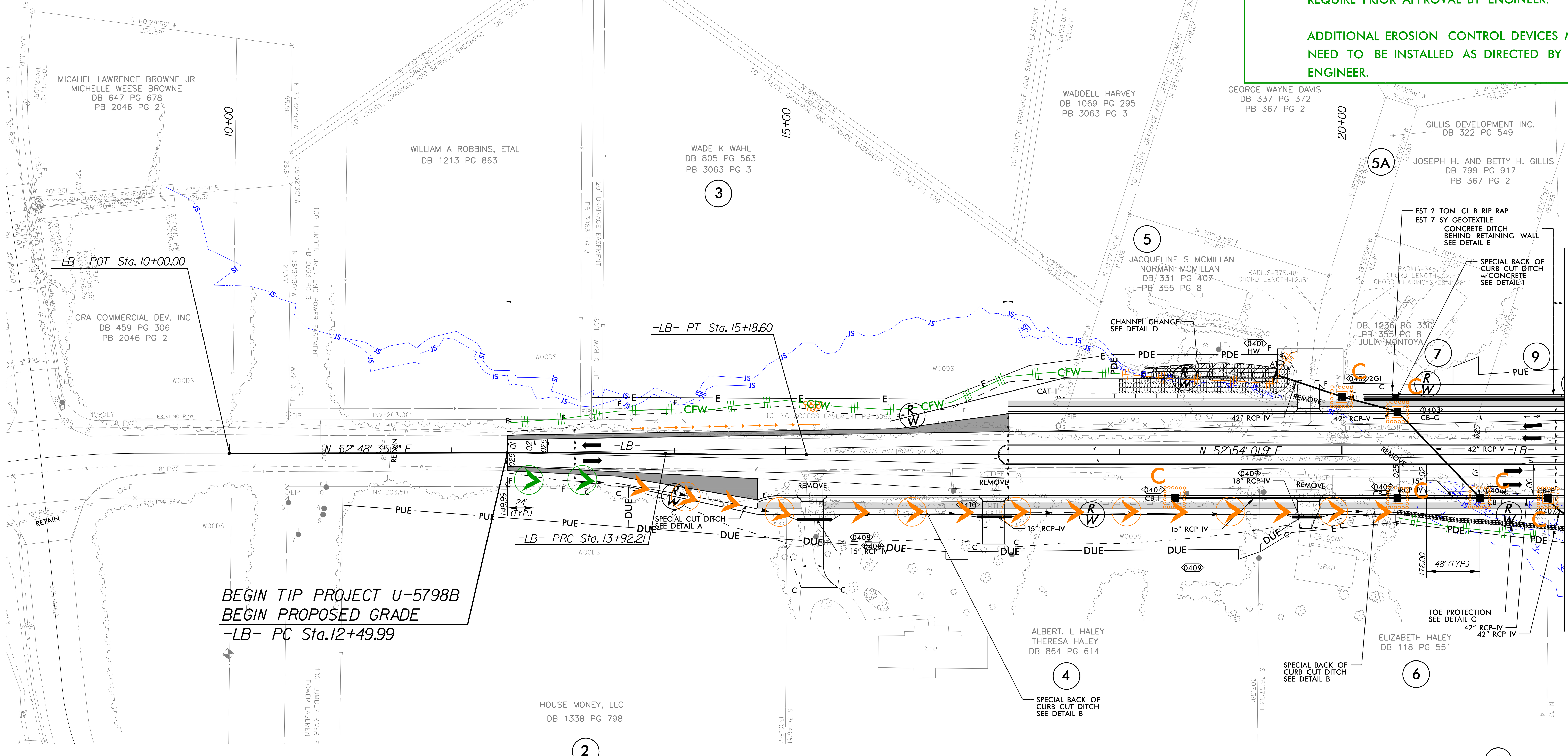
ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

-LB- CURVE DATA

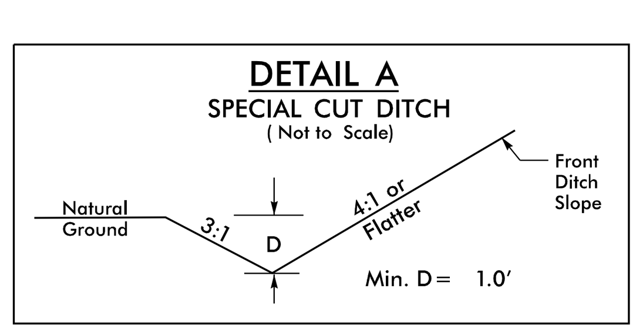
PI Sta 13+21.11	PI Sta 14+55.41
Δ = 0° 48′ 53.5″ (RT.)	Δ = 0° 43′ 26.9″ (LT.)
D = 0° 34′ 22.6″	D = 0° 34′ 22.6″
L = 142.22′	L = 126.38′
T = 71.11′	T = 63.19′
R = 10,000.00′	R = 10,000.00′
SE = NC	SE = NC

NOTE:

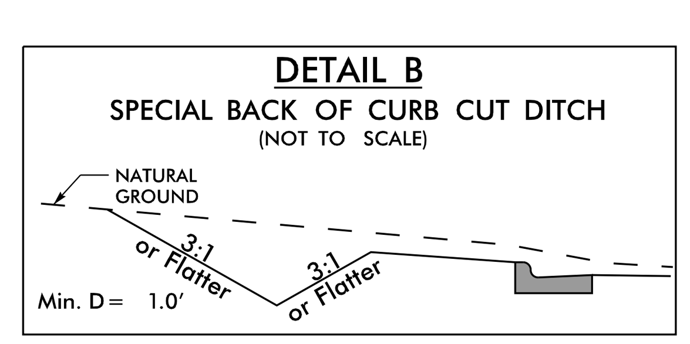
THE PARALLEL JS IS STABLE, BUT IS LINED WITH ROCK ALONG THE MCMILLAN PROPERTY AND SHOWS SIGNS OF SCOUR AT THE TWO EXISTING 24″ RCPs. THE OUTFALL OF THE 24″ RCP UNDER GILLIS HILL ROAD IS BURIED. THE OTHER DRIVEWAY PIPES AND DITCHES ARE IN GOOD CONDITION.



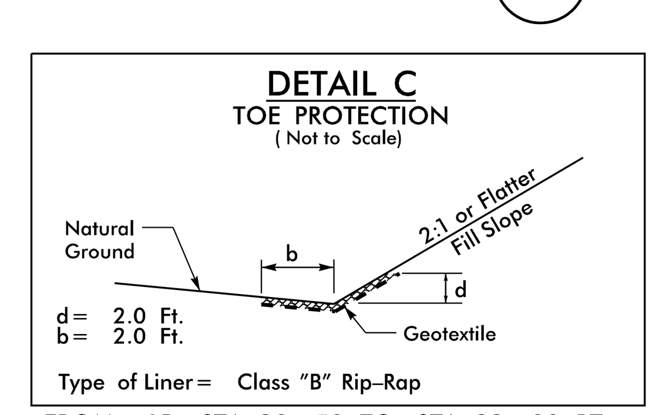
MICAHEL LAWRENCE BROWNE JR
MICHELLE WEESE BROWNE
DB 647 PG 678
PB 2046 PG 2
WILLIAM A ROBBINS, ETAL
DB 1213 PG 863
WADE K WAHL
DB 805 PG 563
PB 3063 PG 3
WADDELL HARVEY
DB 1069 PG 295
PB 3063 PG 3
GEORGE WAYNE DAVIS
DB 337 PG 372
PB 367 PG 2
GILLIS DEVELOPMENT INC.
DB 322 PG 549
JOSEPH H. AND BETTY H. GILLIS
DB 799 PG 917
PB 367 PG 2
CRA COMMERCIAL DEV. INC
DB 459 PG 306
PB 2046 PG 2
JACQUELINE S MCMILLAN
NORMAN MCMILLAN
DB 331 PG 407
PB 355 PG 8
DB 1236 PG 330
PB 355 PG 8
JULIA MONTOYA
ALBERT. L HALEY
THERESA HALEY
DB 864 PG 614
ELIZABETH HALEY
DB 118 PG 551
HOUSE MONEY, LLC
DB 1338 PG 798
-LB- POT Sta. 10+00.00
-LB- PT Sta. 15+18.60
-LB- PRC Sta. 13+92.21
BEGIN TIP PROJECT U-5798B
BEGIN PROPOSED GRADE
-LB- PC Sta.12+49.99
N 52° 48′ 35.2″ E
N 52° 54′ 01.9″ E
10+00
15+00
20+00
CHANNEL CHANGE
SEE DETAIL D
EST 2 TON CL B RIP RAP
EST 7 SY GEOTEXTILE
CONCRETE DITCH
BEHIND RETAINING WALL
SEE DETAIL E
SPECIAL BACK OF
CURB CUT DITCH
w/CONCRETE
SEE DETAIL I
SPECIAL CUT DITCH
SEE DETAIL A
SPECIAL BACK OF
CURB CUT DITCH
SEE DETAIL B
TOE PROTECTION
SEE DETAIL C
23' PAVED GILLIS HILL ROAD SR 1420
MATCHLINE SHEET 5 -LB- STA. 22+00.00



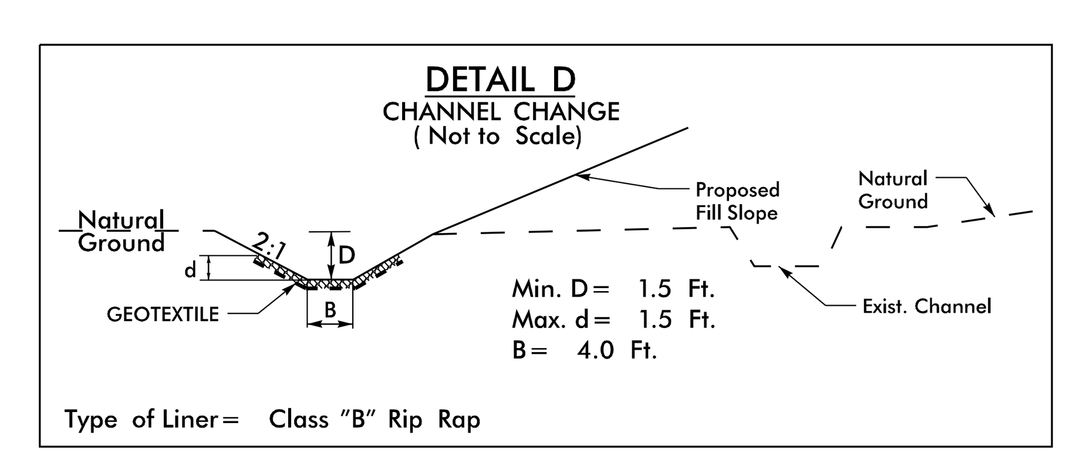
FROM -LB- STA. 13+00 TO STA. 15+00 RT



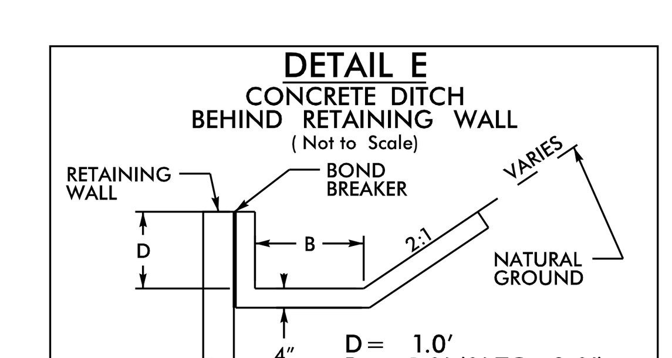
FROM -LB- STA. 15+00 TO STA. 20+50 RT



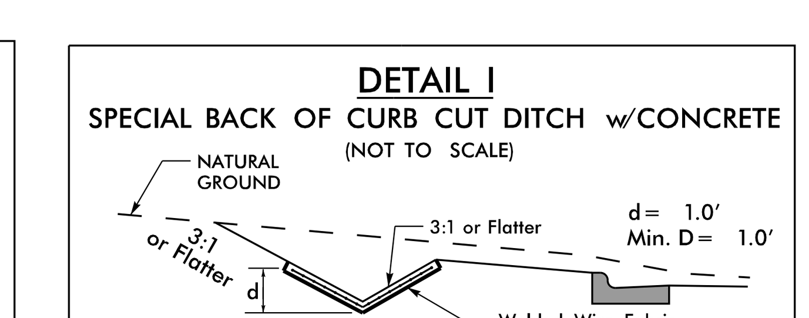
FROM -LB- STA. 20+50 TO STA. 22+00 RT
EST 84 TONS CLASS "B" RIP RAP
EST 150 SY GEOTEXTILE



FROM -LB- STA. 18+20 TO STA. 19+40 LT
EST 81 TONS CLASS "B" RIP RAP
EST 143 SY GEOTEXTILE



FROM -LB- STA. 20+20 TO STA. 22+90 LT



FROM -LB- STA. 20+00 TO STA. 20+20 LT

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-13/CONST.5

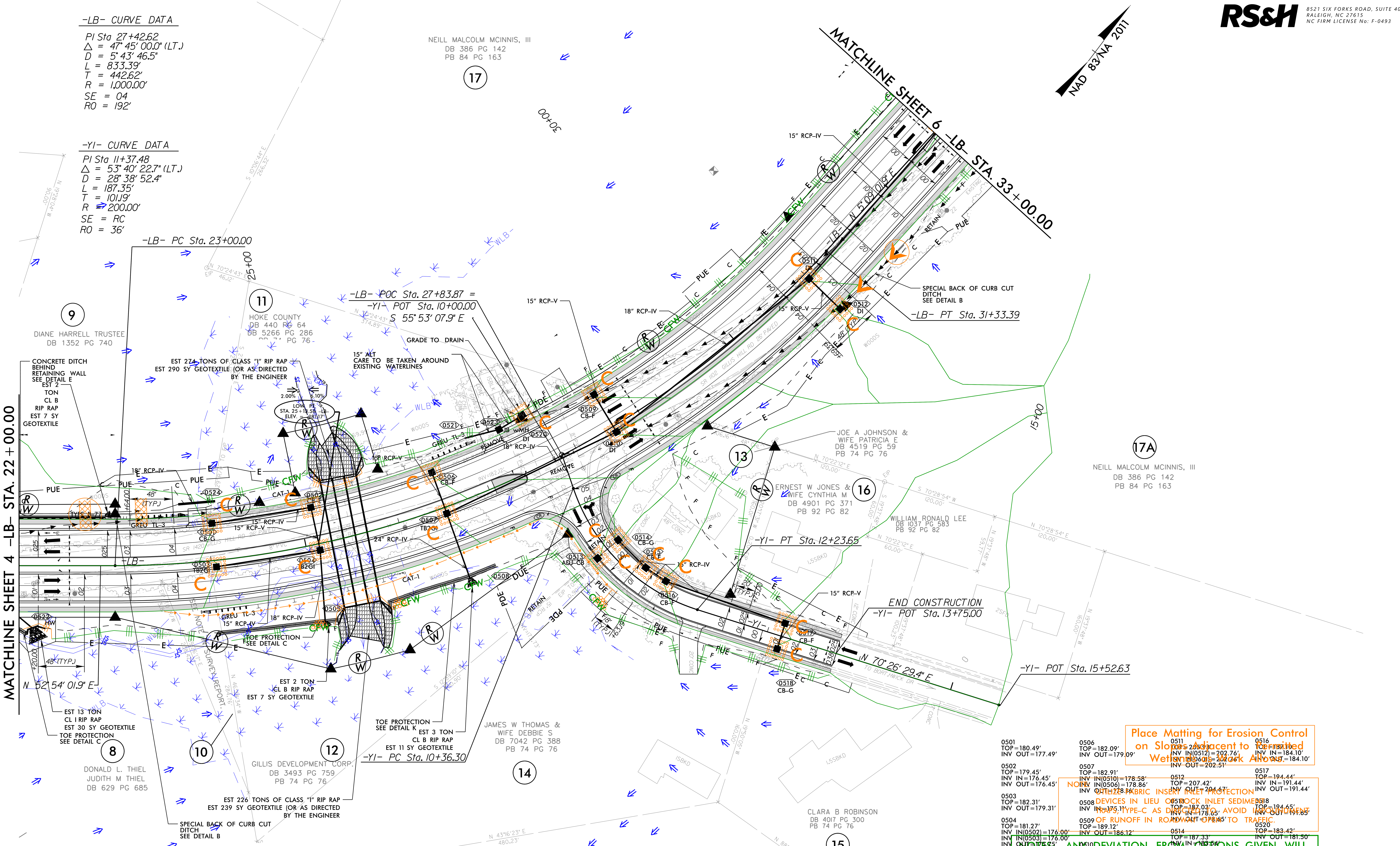
RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

-LB- CURVE DATA

PI Sta 27+42.62
Δ = 47° 45' 00.0" (LT.)
D = 5° 43' 46.5"
L = 833.39'
T = 442.62'
R = 1,000.00'
SE = 04
RO = 192'

-Y1- CURVE DATA

PI Sta 11+37.48
Δ = 53° 40' 22.7" (LT.)
D = 28° 38' 52.4"
L = 187.35'
T = 101.19'
R = 200.00'
SE = RC
RO = 36'



Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

0501 TOP=180.49' INV OUT=177.49'	0506 TOP=182.09' INV OUT=179.09'	0511 TOP=205.93' INV IN(0512)=202.76' INV IN(0601)=202.76' INV OUT=202.51'	0516 TOP=187.10' INV IN=184.10' INV OUT=184.10'
0502 TOP=179.45' INV IN=176.45' INV OUT=176.45'	0507 TOP=182.91' INV IN(0510)=178.58' INV IN(0506)=178.86' INV OUT=178.56'	0512 TOP=207.42' INV OUT=204.67'	0517 TOP=194.44' INV IN=191.44' INV OUT=191.44'
0503 TOP=182.31' INV OUT=179.31'	0508 INV IN=175.11'	0513 TOP=187.03' INV IN=178.65' INV OUT=178.65'	0518 TOP=194.65' INV OUT=191.65'
0504 TOP=181.27' INV IN(0502)=176.00' INV IN(0503)=176.00' INV OUT=175.75'	0509 TOP=189.12' INV OUT=186.12'	0514 TOP=187.33' INV IN=183.54' INV OUT=179.00'	0520 TOP=183.42' INV OUT=181.50'
0505 INV IN=174.50'	0510 TOP=191.11' INV IN(0509)=185.89' INV IN(0511)=185.89' INV OUT=185.89'	0515 TOP=186.77' INV IN=183.77' INV OUT=183.77'	0521 INV IN=181.00'
			0522 INV OUT=181.65'
			0523 TOP=183.40' INV IN=181.25'
			0524 INV IN=180.92' INV OUT=179.58'

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

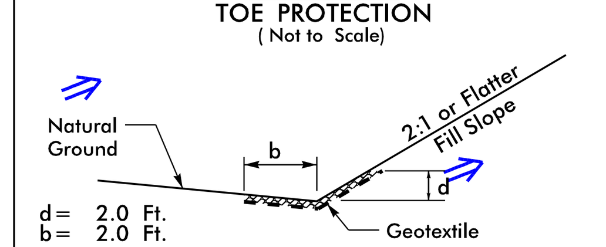
NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

NOTE:

THE PARALLEL JS BECOMES UNDEFINED AS IT APPROACHES STEWARTS CREEK. ADDITIONALLY, THE PARALLEL JS WILL BE INUNDATED BY THE 2YR EVENT BY THE TIME IT INTERSECTS WITH THE PROPOSED ROADWAY FILL SLOPE, THEREFORE VELOCITIES WILL BE NON EROSIVE. WE HAVE DEEMED IT LESS IMPACTFUL TO USE TOE PROTECTION THAN PROVIDE A SHALLOW (1.0') CHANNEL RELOCATION, BUT WILL ENSURE THAT THE DIVISION ENVIRONMENTAL OFFICERS DO NOT HAVE ANY ISSUE WITH THIS APPROACH.

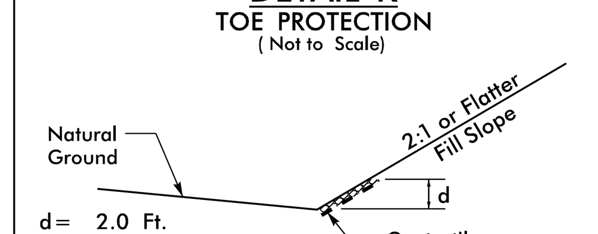
DETAIL C
TOE PROTECTION
(Not to Scale)



d = 2.0 Ft.
b = 2.0 Ft.
Type of Liner = Class "B" Rip-Rap

FROM -LB- STA. 22+00 TO STA. 22+08 RT
EST 5 TONS CLASS "B" RIP RAP
EST 8 SY GEOTEXTILE
FROM -LB- STA. 24+00 TO STA. 25+15 RT
EST 65 TONS CLASS "B" RIP RAP
EST 115 SY GEOTEXTILE

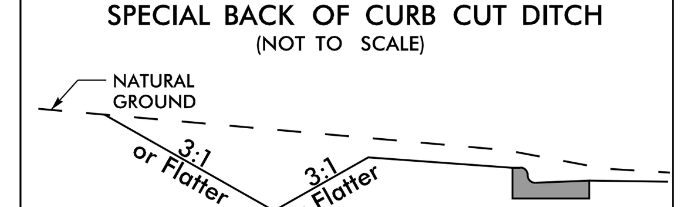
DETAIL K
TOE PROTECTION
(Not to Scale)



d = 2.0 Ft.
Type of Liner = Class "B" Rip-Rap

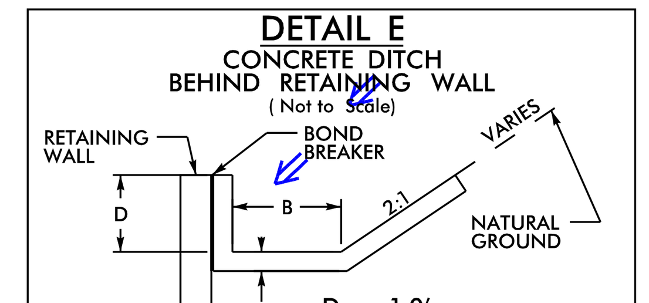
FROM -LB- STA. 25+68 TO STA. 26+77 RT
EST 31 TONS CLASS "B" RIP RAP
EST 55 SY GEOTEXTILE

DETAIL B
SPECIAL BACK OF CURB CUT DITCH
(NOT TO SCALE)



FROM -LB- STA. 22+90 TO STA. 23+70 LT
FROM -LB- STA. 31+00 TO STA. 32+00 RT

DETAIL E
CONCRETE DITCH
BEHIND RETAINING WALL
(Not to Scale)



D = 1.0'
B = 1.0' (0' TO 2.0')

FROM -LB- STA. 20+20 TO STA. 22+90 LT

REVISIONS

8/17/99
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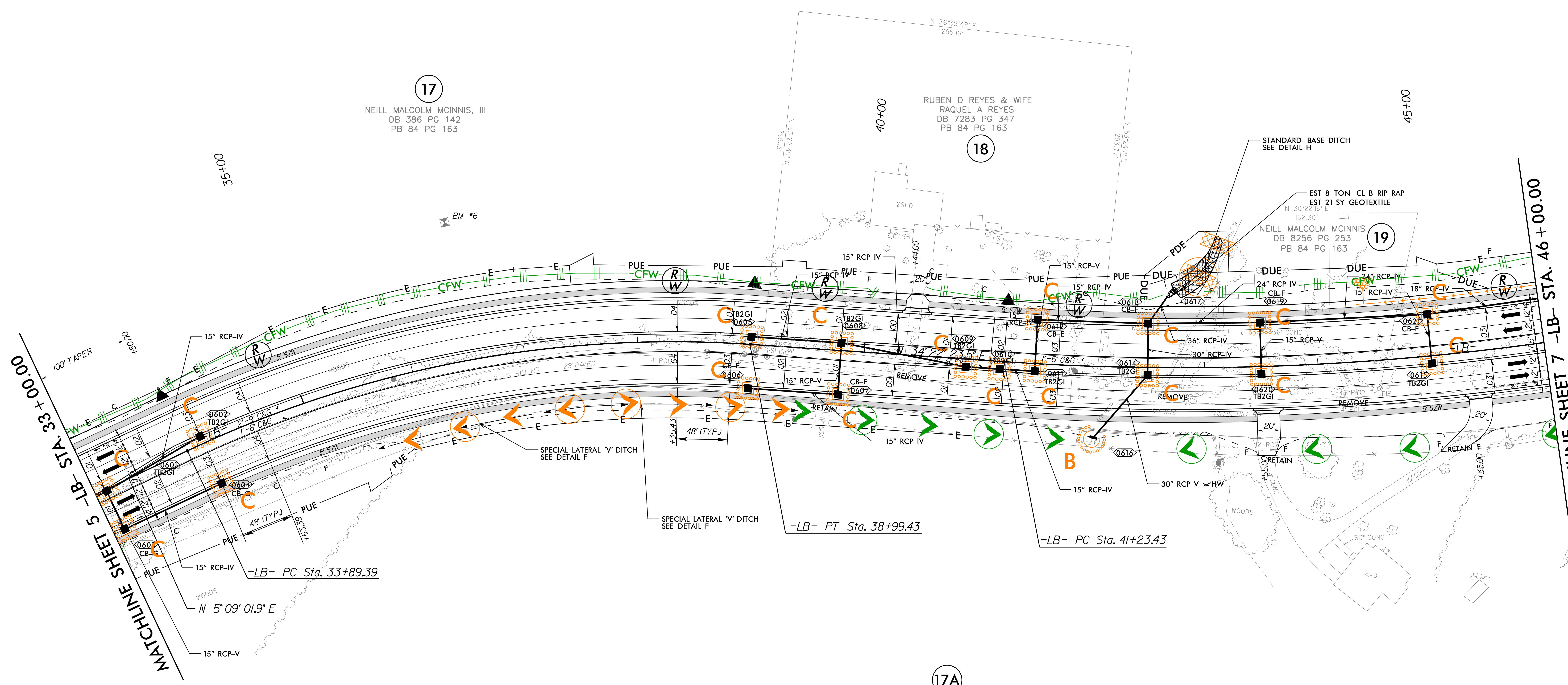
RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

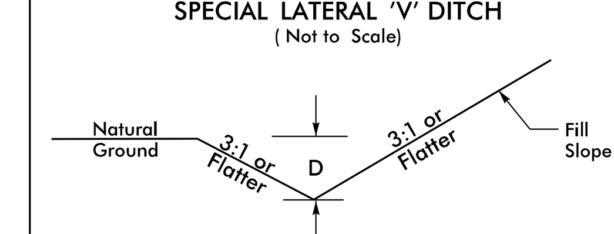
-LB- CURVE DATA

PI Sta 36+50.09	PI Sta 46+22.93
Δ = 29° 13′ 21.6″ (RT.)	Δ = 24° 30′ 21.9″ (LT.)
D = 5° 43′ 46.5″	D = 2° 29′ 28.0″
L = 510.03′	L = 983.74′
T = 260.69′	T = 499.51′
R = 1,000.00′	R = 2,300.00′
SE = .04	SE = .03
RO = 192′	RO = 144′



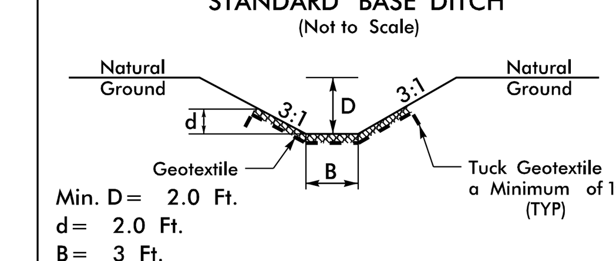
NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

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



FROM -LB- STA. 35+50 TO STA. 37+50 RT
FROM -LB- STA. 37+50 TO STA. 39+50 RT

DETAIL H
STANDARD BASE DITCH
(Not to Scale)



FROM -LB- STA. 42+67 TO STA. 43+15 LT
EST 64 TONS CLASS "B" RIP RAP
EST 114 SY GEOTEXTILE
DDE = 40CY

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-15/CONST.7

RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

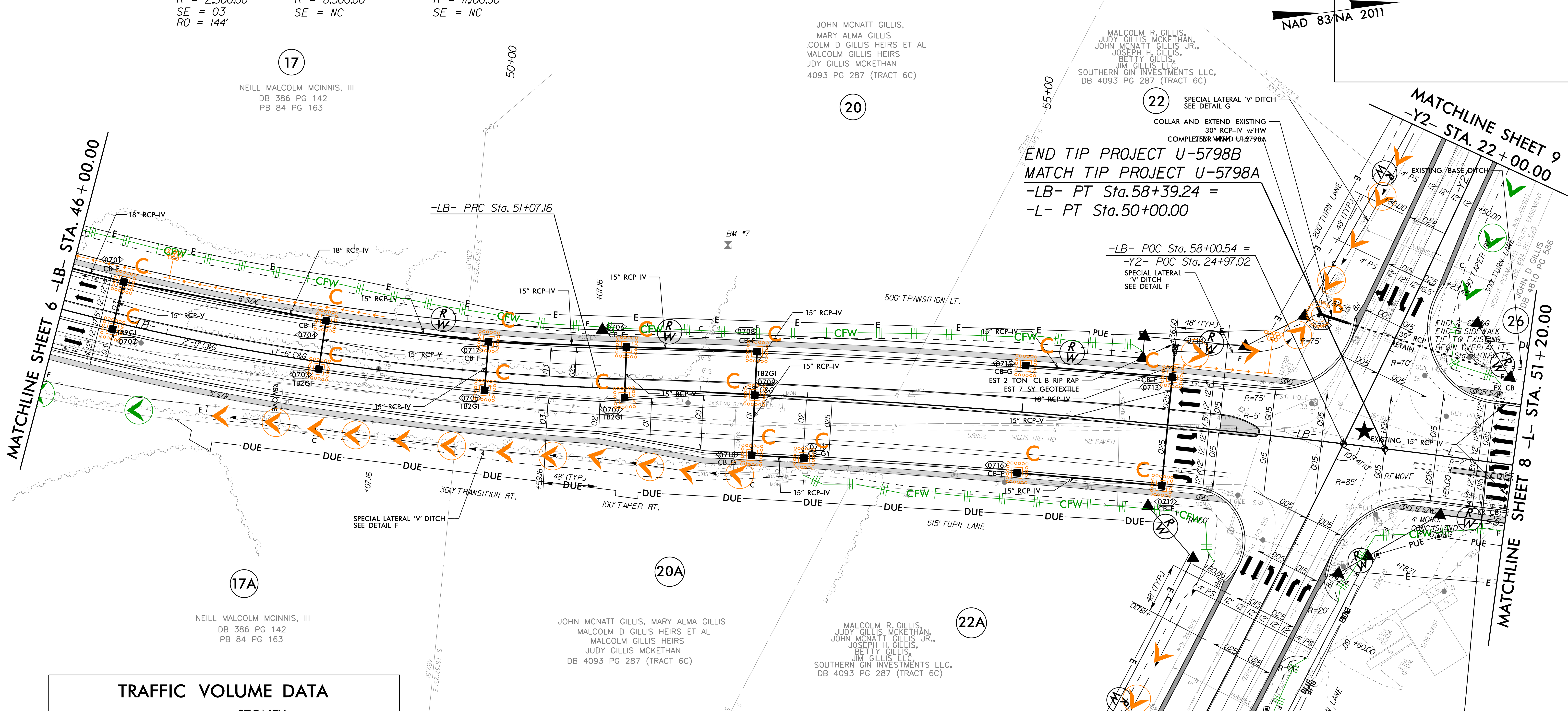
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

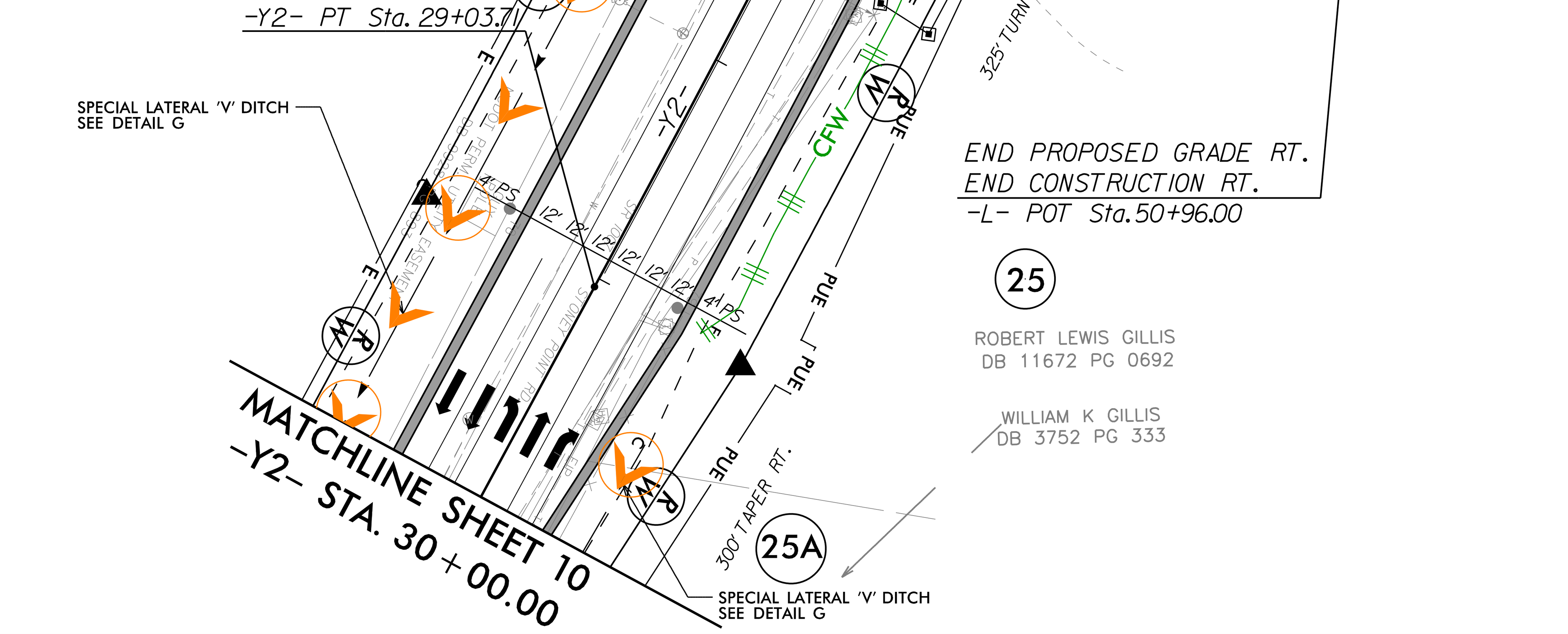
-LB- CURVE DATA

PI Sta 46+22.93	PI Sta 54+73.43
△ = 24° 30′ 21.9″ (LT.)	△ = 4° 56′ 04.9″ (RT.)
D = 2° 29′ 28.0″	D = 0° 40′ 26.6″
L = 983.74′	L = 732.08′
T = 499.51′	T = 366.26′
R = 2,300.00′	R = 8,500.00′
SE = 03	SE = NC
RO = 144′	

-Y2- CURVE DATA

PI Sta 25+46.54
△ = 3° 41′ 18.7″ (RT.)
D = 0° 30′ 58.2″
L = 714.58′
T = 357.41′
R = 11,100.00′
SE = NC


NAD 83/NA 2011
17
NEILL MALCOLM MCINNIS, III
DB 386 PG 142
PB 84 PG 163
20
JOHN MCNATT GILLIS,
MARY ALMA GILLIS
COLM D GILLIS HEIRS ET AL
MALCOLM GILLIS HEIRS
JDY GILLIS MCKETHAN
4093 PG 287 (TRACT 6C)
22
MALCOLM R. GILLIS,
JUDY GILLIS MCKETHAN,
JOHN MCNATT GILLIS JR.,
JOSEPH H. GILLIS,
BETTY GILLIS,
JIM GILLIS LLC,
SOUTHERN GIN INVESTMENTS LLC.
DB 4093 PG 287 (TRACT 6C)
MATCHLINE SHEET 9 -Y2- STA. 22+00.00
MATCHLINE SHEET 6 -LB- STA. 46+00.00
MATCHLINE SHEET 8 -L- STA. 51+20.00
MATCHLINE SHEET 10 -Y2- STA. 30+00.00
END TIP PROJECT U-5798B
MATCH TIP PROJECT U-5798A
-LB- PT Sta.58+39.24 =
-L- PT Sta.50+00.00
-LB- PRC Sta. 51+07.16
-LB- POC Sta. 58+00.54 =
-Y2- POC Sta. 24+97.02
SPECIAL LATERAL 'V' DITCH SEE DETAIL G
SPECIAL LATERAL 'V' DITCH SEE DETAIL F
COLLAR AND EXTEND EXISTING 30" RCP-IV w/HW
EST 2 TON CL B RIP RAP
EST 7 SY GEOTEXTILE
500' TRANSITION LT.
300' TRANSITION RT.
100' TAPER RT.
515' TURN LANE
200' TURN LANE
325' TURN LANE
300' TAPER RT.
-Y2- PT Sta. 29+03.71
END PROPOSED GRADE RT.
END CONSTRUCTION RT.
-L- POT Sta.50+96.00
17A
NEILL MALCOLM MCINNIS, III
DB 386 PG 142
PB 84 PG 163
20A
JOHN MCNATT GILLIS, MARY ALMA GILLIS
MALCOLM D GILLIS HEIRS ET AL
MALCOLM GILLIS HEIRS
JUDY GILLIS MCKETHAN
DB 4093 PG 287 (TRACT 6C)
22A
MALCOLM R. GILLIS,
JUDY GILLIS MCKETHAN,
JOHN MCNATT GILLIS JR.,
JOSEPH H. GILLIS,
BETTY GILLIS,
JIM GILLIS LLC,
SOUTHERN GIN INVESTMENTS LLC.
DB 4093 PG 287 (TRACT 6C)
25
ROBERT LEWIS GILLIS
DB 11672 PG 0692
WILLIAM K GILLIS
DB 3752 PG 333
25A
26
BM #7
GILLIS HILL RD

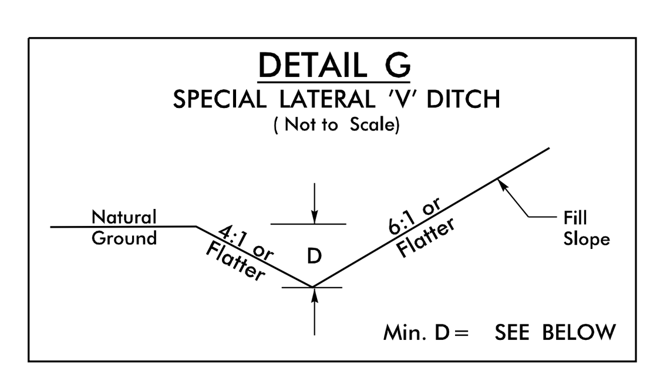


TRAFFIC VOLUME DATA

STONEY POINT RD.: 8,100 / 12,000

GILLIS HILL RD.

	2025	2045
Stoney Point Rd. (north approach)	8,100	12,000
North leg, left	900	1,300
North leg, right	2,100	4,800
West (Gillis Hill Rd.)	10,700	17,500
East (Gillis Hill Rd.)	21,000	33,000
South leg, left	400	300
South leg, right	9,500	12,000
South (approach)	15,100	18,200

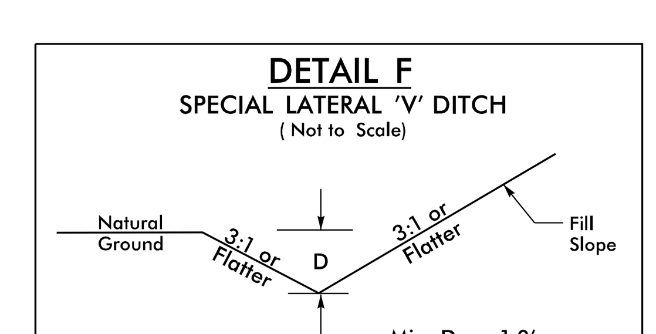


FROM -Y2- STA. 19+00 TO STA. 23+98 RT (MIN D=1.5′)
FROM -Y2- STA. 26+50 TO STA. 39+65 RT (MIN D=1.0′)
FROM -Y2- STA. 29+50 TO STA. 39+65 LT (MIN D=1.0′)

MILL AND OVERLAY LIMITS

- - - - - - - - - - U-5798A DRAINAGE

★ PROPOSED SIGNAL



FROM -LB- STA. 47+50 TO STA. 52+50 RT
FROM -LB- STA. 56+36 TO STA. 57+65 LT

NOTE: U-5798A DESIGN FILE USED IN CONJUNCTION WITH FINAL SURVEY.

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-16/CONST.8

RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493

NAD 83/NA 2011

8/17/99

REVISIONS

-L- CURVE DATA

PI Sta 48+37.98	PI Sta 62+27.11
△ = 7° 01' 28.2" (RT)	△ = 13° 43' 19.0" (LT)
D = 0° 40' 26.6"	D = 0° 47' 36.9"
L = 1,042.10'	L = 1,729.14'
T = 521.71'	T = 868.73'
R = 8,500.00'	R = 7,220.00'
SE = NC	SE = NC

55+00

60+00

JOHN D GILLIS
DB 4810 PG 586

JOHN D GILLIS
DB 4810 PG 586

MATCHLINE SHEET 7 -L- STA. 51+20.00

END OVERLAY LT.
END CONSTRUCTION LT.
TIE TO EXISTING
-L- POT Sta.59+05.00

END PROPOSED GRADE RT.
END CONSTRUCTION RT.
TIE TO EXISTING
-L- POC Sta.51+44.00

END 2'-6" C&G
END 5' SIDEWALK
END 4' CONC.MONOLITHIC ISLAND
TIE TO EXISTING
-L- Sta.51+44.00 RT.

ROBERT LEWIS GILLIS
DB 11672 PG 0692

25

25A

WILLIAM K GILLIS
DB 3752 PG 333

ROBERT. LEWIS GILLIS
& WIFE JUNE
MONTGOMERY
DB 6959 PG 374

JOHN DAVIS II
DAVID MILLER GILLIS
DB 8113 PG 669

FRANCIS GILLIS DINKINS
DB 2749 PG 304

BM #8

BM8 ELEVATION = 216.02'
N 460221 E 1983941
BL STATION 76+96.13 228.76' RIGHT
BENCHTIE IN 36" S. GUM

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

NOTE: U-5798A DESIGN USED IN CONJUNCTION WITH FINAL SURVEY

MILLING LIMITS

U-5798A DRAINAGE

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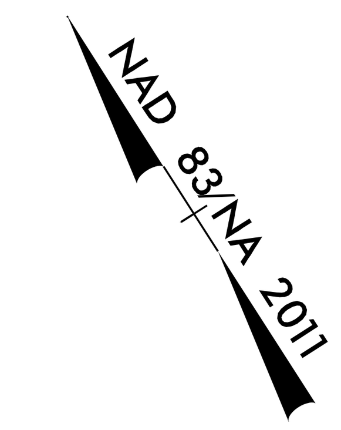
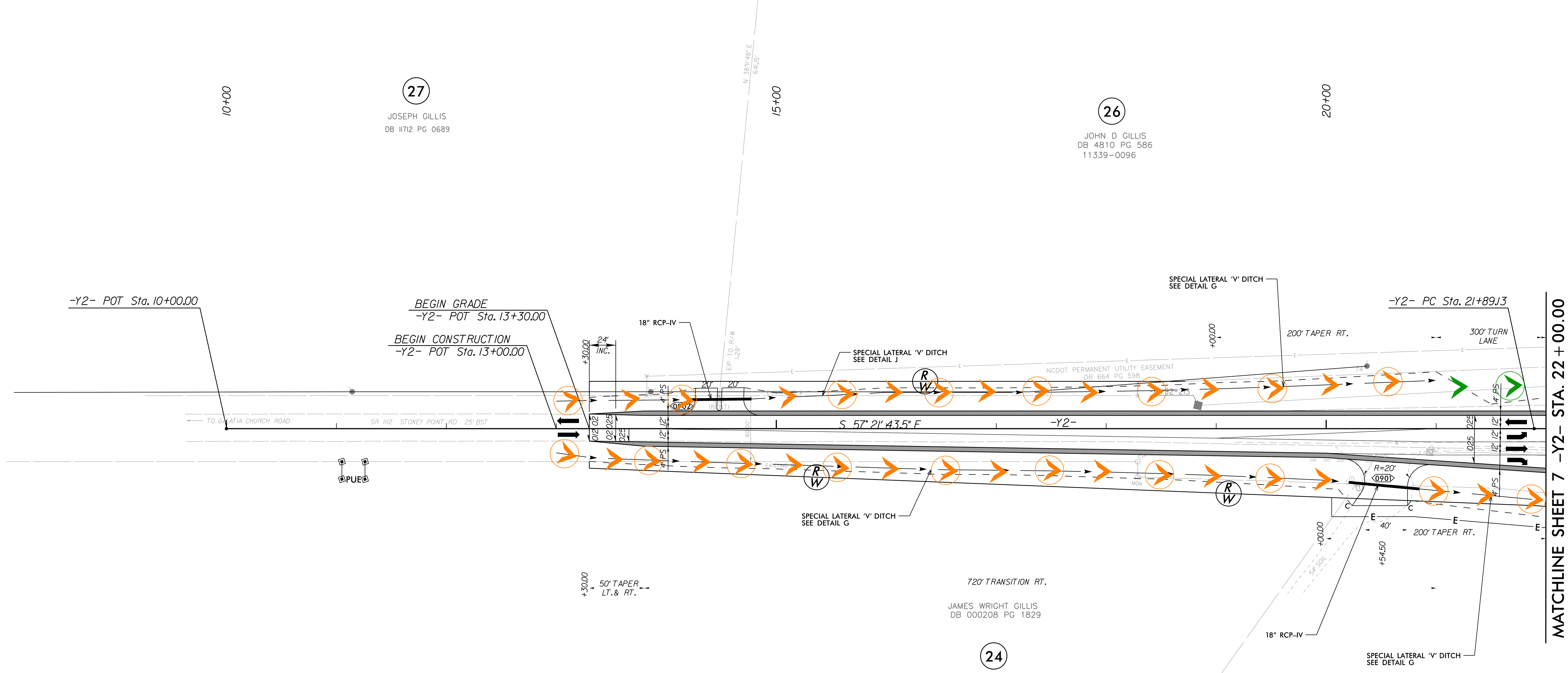
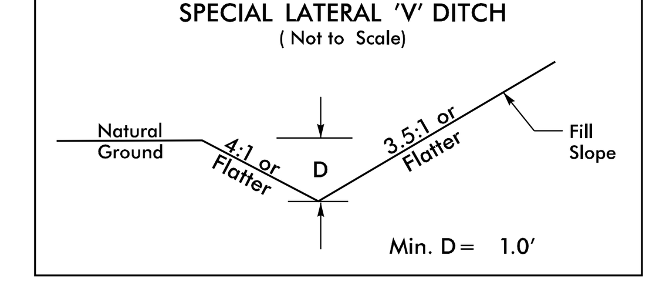
PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-17/CONST.9

RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493



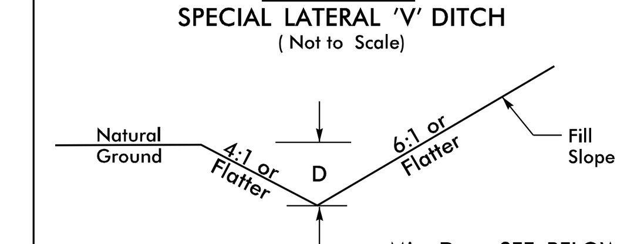


DETAIL J
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



FROM -Y2- STA. 13+00 TO STA. 16+00 LT

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



FROM -Y2- STA. 16+00 TO STA. 21+50 LT (MIN D=1.0')
FROM -Y2- STA. 13+00 TO STA. 19+00 RT (MIN D=1.0')
FROM -Y2- STA. 19+00 TO STA. 23+98 RT (MIN D=1.5')

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

REVISIONS

8/17/99

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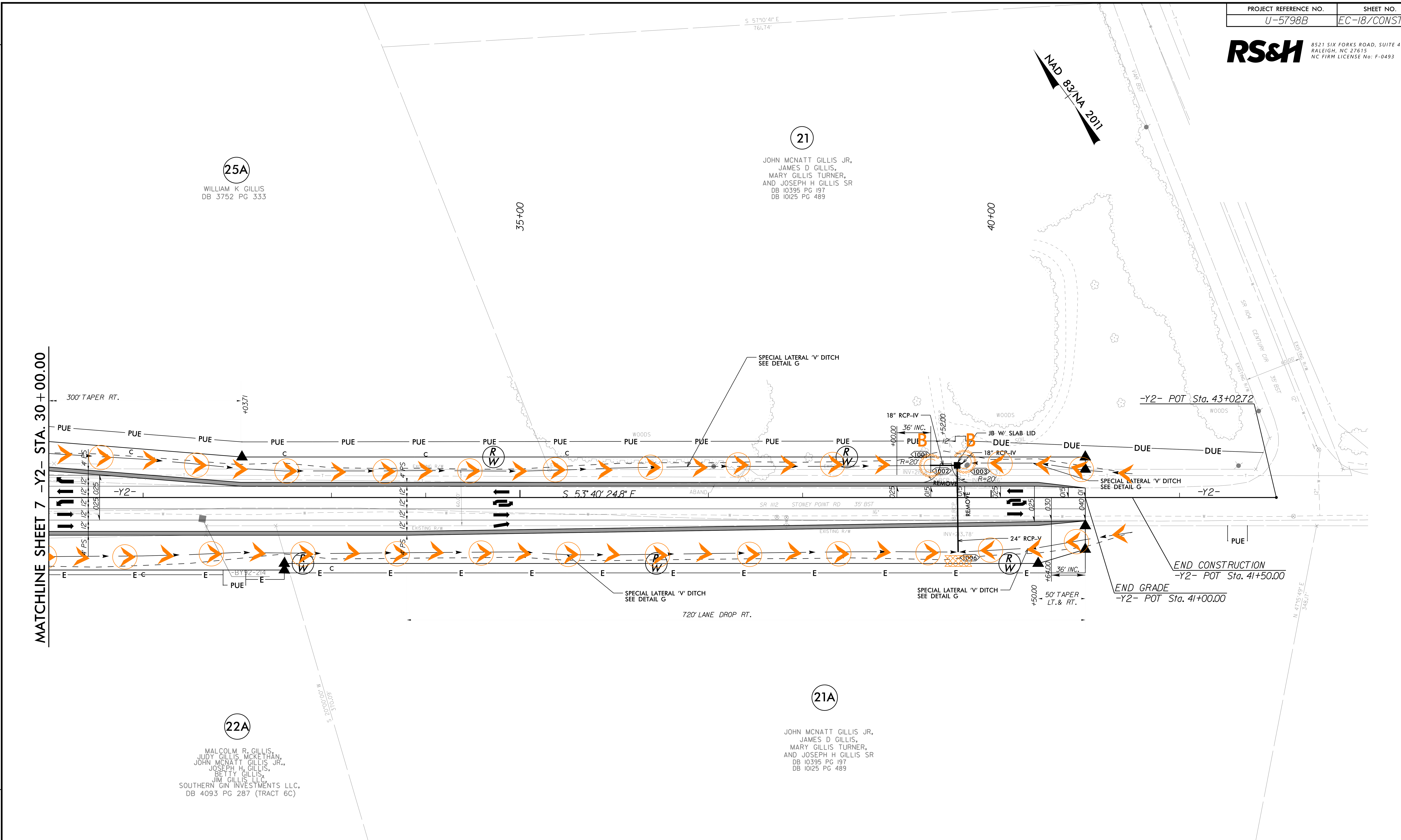
PROJECT REFERENCE NO.	SHEET NO.
U-5798B	EC-18/CONST.10

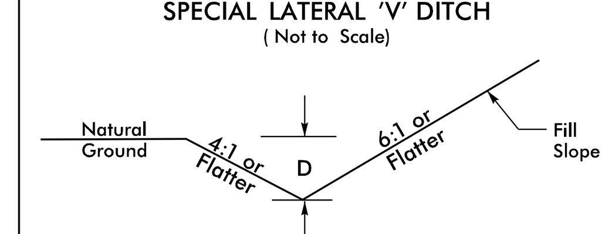
RS&H
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No: F-0493



NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

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



FROM -Y2- STA. 26+50 TO STA. 39+65 RT
FROM -Y2- STA. 29+50 TO STA. 39+35 LT
FROM -Y2- STA. 39+65 TO STA. 41+50 RT
FROM -Y2- STA. 39+70 TO STA. 41+50 LT

REVISIONS

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