SHEET NO.	TOTAL SHEETS
1	27

INDEX OF SHEETS		
SHEET NO.	DESCRIPTION	SHEET SUB-TOTALS
1	TITLE SHEET	1
2	QUANTITY SHEET	1
3	TYPICAL SECTIONS	1
4	RIGHT OF WAY DATA SHEET	1
4A	PROPERTY LAYOUT SHEET	1
5	REFERENCE DATA SHEET	1
6-11	PLAN AND PROFILE SHEETS	6
EC1 - EC6	EROSION CONTROL SHEETS	6
X1-X9	CROSS SECTION SHEETS	9
TOTAL		27

CHESTERFIELD COUNTY

PROPOSED PLANS FOR

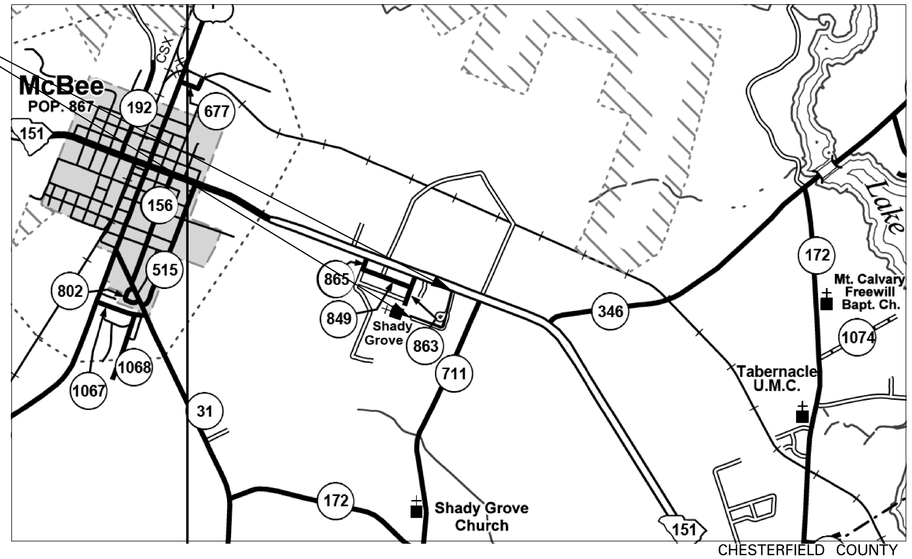
CHESTERFIELD COUNTY

RICK HENRY ROAD

FROM: SC RTE. 151 TO: TERMINI

RICK HENRY ROAD

FROM STA. 10+00.00 TO STA. 38+32.56



N

LAYOUT

SCALE 1 INCH = 1320 FEET

NET LENGTH OF ROADWAY	0.536	MILES
NET LENGTH OF BRIDGES		MILES
NET LENGTH OF PROJECT	0.536	MILES
LENGTH OF EXCEPTIONS		MILES
GROSS LENGTH OF PROJECT	0.536	MILES

EQUALITIES IN STATIONING

NONE

NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

NPDES PERMIT INFORMATION

NPDES Disturbed

Area = 1.421 Acre(s)

Approximate Location of Roadway is

Begin
Latitude 34^27' 19.55"
Longitude 80^13' 02.47"

End
Latitude 34^27' 08.79"
Longitude 80^13' 22.31"

Hydraulic and NPDES Design provided by:

Johnson, Mirmiran & Thompson

Designs may be obtained from the

Hydraulic Design Reference for these plans is the:

2009

Edition of SCDOT's "Requirements for Hydraulic Design Studies"

ENVIRONMENTAL PERMIT INFORMATION

USACE PERMIT	___YES	_X_NO	
NEPA DOCUMENT	___YES	_X_NO	
401 CERTIFICATION	___YES	_X_NO	
OCRM CAP	___YES	_X_NO	
NAVIGABLE WATERS	___SC	___USCG	___USACE _X_N/A

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA

CALL 811

SOUTH CAROLINA 811 (SC811)
WWW.SC811.COM
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

RAILROAD INVOLVEMENT?
YES / (NO)

TRAFFIC DATA

N/A ADT _____

_____ ADT _____

TRUCKS _____%

SOUTH CAROLINA — JOHNSON, MIRMIRAN & THOMPSON, INC. — No. 3943 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 21591 — DAVID R. RUSSELL

PLANS PREPARED BY:

3600 FOREST DRIVE
SUITE 102
COLUMBIA, SC 29204
(803) 626-1747

JMT

CHESTERFIELD COUNTY
SUMMARY OF ESTIMATED QUANTITIES

FED. RD. DIV.NO.	STATE	COUNTY	PROJECT ID		NO.	SHEET NO.	
3	S.C.	CHESTERFIELD	21-04464-001			2	

Rick Henry Road

ITEM NO.	PAY ITEM	QUANTITY	PAY UNIT
1031000	MOBILIZATION	1.000	L.S.
1071000	TRAFFIC CONTROL	1.000	L.S.
2011000	CLEARING AND GRUBBING WITHIN RIGHT OF WAY	1.000	L.S.
2031000	UNCLASSIFIED EXCAVATION	1394.000	CY
2033000	BORROW EXCAVATION	3716.000	CY
3051200	MACADAM BASE COURSE (6" UNIFORM)	7070.000	SY
3063306	CEMENT MODIFIED RECYCLED BASE (6" UNIFORM)	7070.000	SY
3069900	MAINTENANCE STONE	100.000	TON
4010005	PRIME COAT	1909.000	GAL.
4030340	HOT MIX ASPHALT SURFACE COURSE TYPE C	600.000	TON
4037220	DRIVEWAY PAVING -SURFACE TYPE C	40.000	TON
6021120	PERMANENT CONSTRUCTION SIGNS (GROUND MOUNTED)	96.000	SF
6250025	24" WH SLD,LINE-PVT,EDGE-F.D.PNT	30.000	LF
6271005	4" WHITE BROKEN LINES(GAPS EXCL.)THERMOPLASTIC- 90 MIL.	100.000	LF
6510105	FLAT SHEET TYPE III, FIXED SIZE	18.000	SF
6531210	U-SEC. POST FOR SIGN SUPP. 3P	24.000	LF
7141112	15" RC PIPE CUL.-CLASS III	232.000	LF
7141113	18" RC PIPE CUL.-CLASS III	88.000	LF
7141114	24" RC PIPE CUL.-CLASS III	40.000	LF
8041010	RIPRAP CLASS "A" FOR DITCH CHECKS	60.000	TON
8041020	RIPRAP CLASS "B"	16.000	TON
8042800	GEO/TEX. FOR EROSION CONTROL UNDER RIPRAP (CLASS 2)	32.000	SY
8100001	PERMANENT VEGATATION	6.878	MSY
8103100	TEMPORARY VEGATATION	3.439	MSY
8151110	TEMP. EROSION CONTROL BLANKET	307.000	SY
8152007	SEDIMENT TUBES FOR DITCH CHECKS	460.000	LF
8153000	SILT FENCE	5670.000	LF
8153090	REPLACE/REPAIR SILT FENCE	567.000	LF
8154050	REM./SILT RETAIN BY SILT FENCE	1416.000	LF
8156490	STABILIZED CONSTRUCTION ENTRANCE	550.000	SY

SOUTH CAROLINA
JOHNSON, MIRMIRAN & THOMPSON, INC.
No. 3943
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

PLANS PREPARED BY:
3600 FOREST DRIVE
SUITE 102
COLUMBIA, SC 29204
(803) 626-1747

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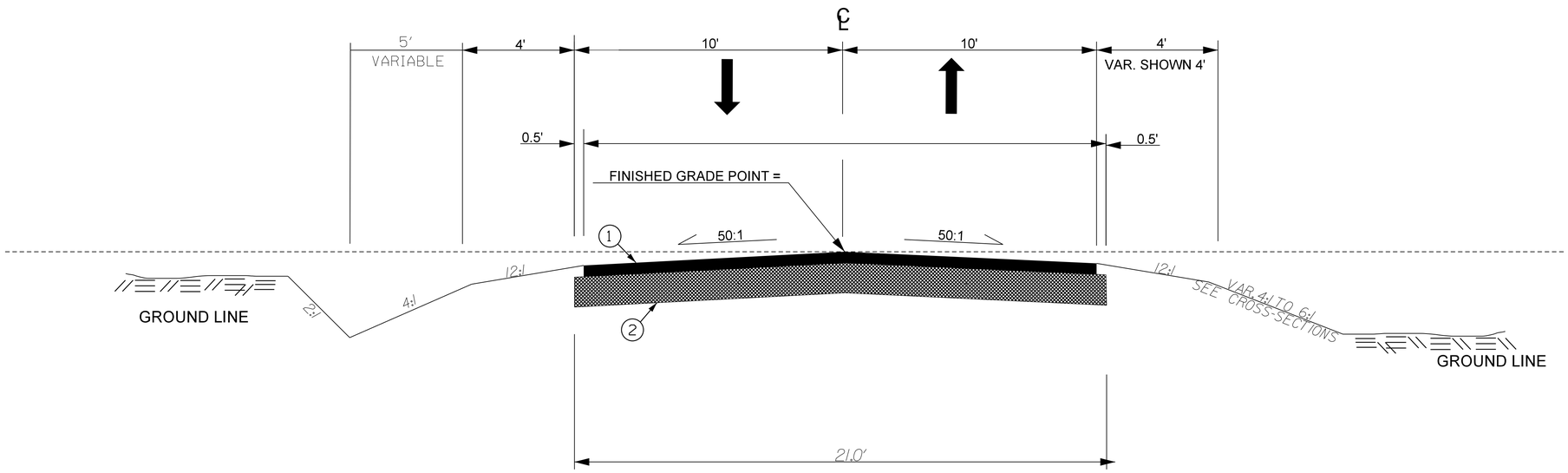
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD/ROUTE NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		3

RICK HENRY RD.

TYPICAL SECTION OF IMPROVEMENT
CHESTERFIELD COUNTY



USE THIS SECTION ON RICK HENRY ROAD

STA. 10+00.00 TO STA. 38+32.56

① ■ HOT MIX ASPHALT SURFACE COURSE TYPE C 175 PSY

② ▩ *ALT. NO. 1 CEMENT MODIFIED RECYLCED BASE (6" UNIFORM)
ALT. NO. 2 MACADAM BASE (6" UNIFORM)

*NOTE: IF CEMENT MODIFIED RECYLCED BASE IS USED ADD A LEVELING LIFT OF ASPHALT SURFACE COURSE TYPE E @ 45 PSY

DETERMINATION OF SOIL CEMENT

MOISTURE-DENSITY RELATIONS OF SOIL-CEMENT MIXTURES (AASHTO T-134)

PERCENTAGE OF CEMENT USED ___3___ %

OPTIMUM MOISTURE CONTENT ___10.6___ %

METHOD OF MAKING, CURING AND TESTING OF SOIL-CEMENT COMPRESSION SPECIMENS (SC-T-38)

MAXIMUM DRY DENSITY ___116.4___ *per cubic foot*

SOIL CEMENT APPLICATION RATE AT ___3___ *% AT* ___175___ *lbs/sq.yd AT* ___6___ *in DEPTH*

NOTE: SOME SHOULDER MAINTENANCE MAY BE REQUIRED

USE EXCESS "FLUFF" MATERIAL FOR DRIVEWAYS AND SHOULDERS.

Road group designation
for this FAS Rural Route
or State "C" Road
per EDM PC-3 is
Group 1

SOUTH CAROLINA — JOHNSON, MIRMIRAN & THOMPSON, INC. — No. 3943 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 21591 — DAVID R. RUSSELL

PLANS PREPARED BY: 3600 FOREST DRIVE SUITE 120 COLUMBIA, SC 29204 (803) 626-1747

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RICK HENRY RD. DESIGN SPEED		
MPH	FROM STA.	TO STA.
30	10+00.00	38+32.56
EXCEPTIONS TO DESIGN SPEED		

ROAD DESIGN CHESTERFIELD COUNTY

TYPICAL SECTION

SCALE 1"V=NTS SCALE 1"H=NTS RTE./RD.

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5/10/2023

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FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID		RD NO.	SHEET NO.	
3	S.C.	CHESTERFIELD	21-04464-001			4	

RICK HENRY ROAD

CHESTERFIELD COUNTY
RIGHT-OF-WAY DATA SHEET

TRACT NO.	PROPERTY OWNER	TAX MAP REFERENCE	TOTAL TRACT ACRES	A OBTAIN OUTFALL DITCH ACRES	A OBTAIN LEFT	A OBTAIN RIGHT	A OBTAIN TOTAL	REMAINDER LEFT B ACRES	REMAINDER RIGHT B ACRES	DATE ACQUIRED	TYPE OF INSTRUMENT	OUTFALL DITCH PERMISSION (YES)	SLOPE PERMISSION (YES)	DRAINAGE STRUCTURE PERMISSION (YES)	EROSION CONTROL PERMISSION (YES)	ENTRANCE CONSTRUCTION PERMISSION (YES)	REMARKS
1	HCJ INC.	122-000-000-060															
2	NANCY ALDRICH HENRY & JAMES RICHARD HENRY	122-000-000-056															
3	CLARA B.PETTUS LIFE ESTATE	122-000-000-059															
4	CLEATUS PETTUS JR.	122-000-000-108															
5	ALMOND FOREST PRODUCTS INC.	122-000-000-128															
6	CLEATUS PETTUS JR.	122-000-000-108															
7	ANDREW HARPER JR.	122-000-000-127															
8	ALPHONSO MURPHY & HATTIE MURPHY	122-000-000-109															
9	HELEN M.JOHNSON & TARA M.JOHNSON	122-000-000-126															
10	JIMMY PETTUS.ETAL	122-000-000-110															
11	JARRETT WILLIAMS	122-000-000-125															
12	GLORIA GODINEZ & DOMINGUEZ GODINEZ	122-000-000-111															
13	RONNIE BRISTER	122-000-000-124															
14	ANTONIO W.BRISTER	122-000-000-112															
15	FLORENCE V.BRISTER	122-000-000-123															
16	ANDRIA HUNTER & BORIS HUNTER	122-000-000-113															
17	WILLIE MAE PRICE	122-000-000-114															
18	GARY HODNETT & DEBORAH HODNETT	122-000-000-122															
19	GARY HODNETT & DEBORAH HODNETT	122-000-000-121															
20	JAMES W.BRISTER & JOANNE AUSTIN BRISTER	122-000-000-115															
21	NED ROGERS JR.	122-000-000-116															
22	MARTIN PALACIOS	122-000-000-120															
23	HCJ INC.	122-000-000-119															
24	ADAN N.MENDOZA	122-000-000-118															
25	NED ROGERS JR.	122-000-000-117															

NOTES:

A TOTAL OBTAIN INCLUDES HIGHLAND, MARSH AND OUTFALL DITCHES.
OBTAINS WILL BE SHOWN IN SQUARE FEET AND ACRES. ACRES WILL BE SHOWN IN PARENTHESES UNDER SQUARE FEET. IN RURAL AREAS OBTAINS MAY BE SHOWN IN ACRES ONLY. OUTFALL DITCHES WILL BE SHOWN IN ACRES ONLY.

B SHOW REMAINDER IN SQUARE FEET WHEN LESS THAN 0.25 ACRE.

REVISIONS

DATE	TRACT NO.	REMARKS	DATE	TRACT NO.	REMARKS

RWDATA3.DGN

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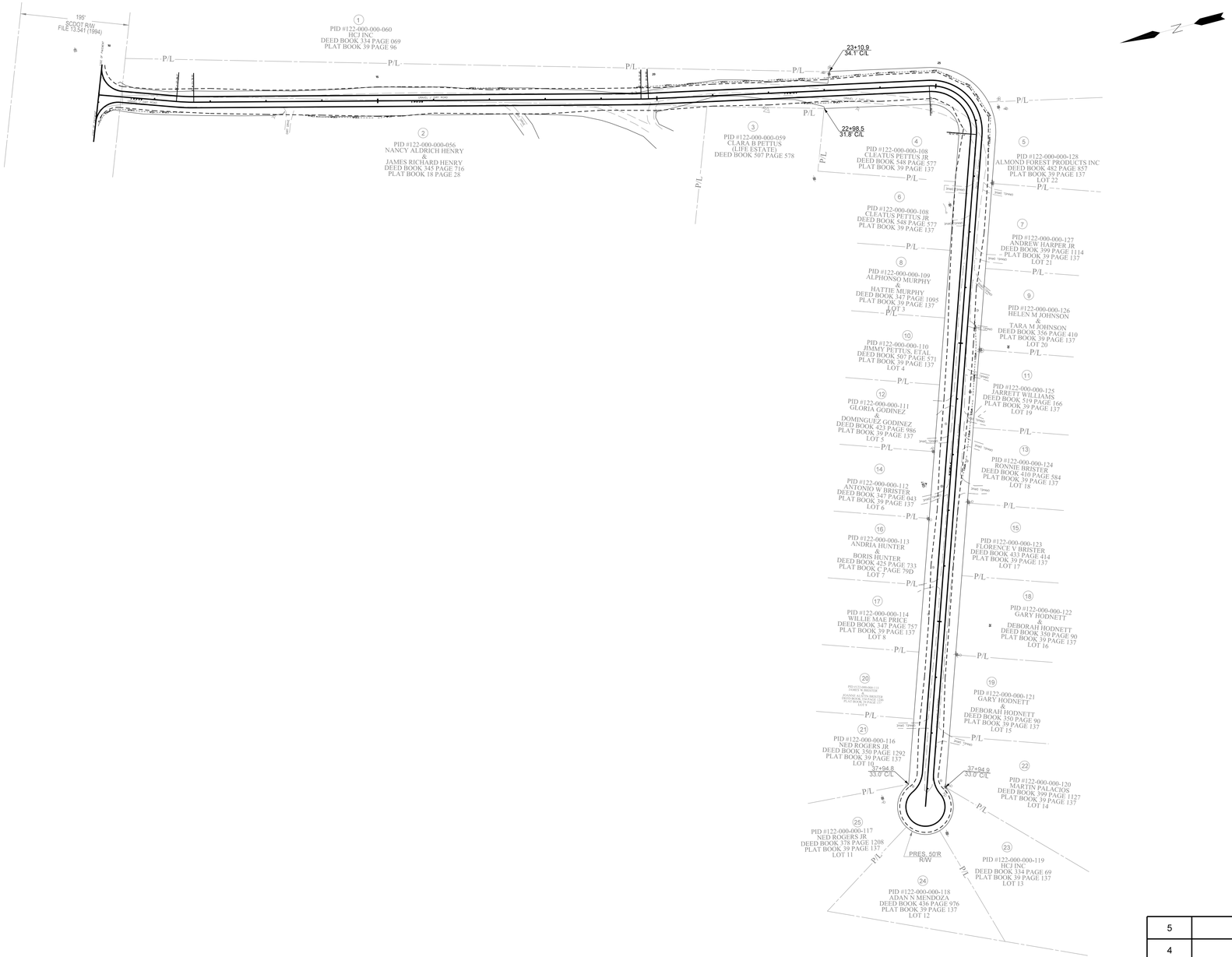
KMarpe
5/10/2023

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		4A

RICK HENRY ROAD



REV. NO.	BY	DATE	DESCRIPTION OF REVISION	SCALE 1" = 100'
5				CHESTERFIELD COUNTY
4				
3				PROPERTY STRIP MAP
2				
1				

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5/10/2023

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-002	_____	5

Rich Henry Road

Chain RICK_HENRY contains:
14 CUR RICK_HENRY1 CUR RICK_HENRY2 CUR RICK_HENRY3 15

Beginning chain RICK_HENRY description
==========

Point 14 N 954,914.0217 E 2,235,919.1868 Sta 10+00.00

Course from 14 to PC RICK_HENRY1 S 19° 31' 14.60" W Dist 139.2745

Curve Data

Curve RICK_HENRY1
P.I. Station 11+54.91 N 954,768.0129 E 2,235,867.4229
Delta = 5° 16' 01.36" (LT)
Degree = 16° 51' 06.12"
Tangent = 15.6386
Length = 31.2553
Radius = 340.0000
External = 0.3595
Long Chord = 31.2443
Mid. Ord. = 0.3591
P.C. Station 11+39.27 N 954,782.7526 E 2,235,872.6485
P.T. Station 11+70.53 N 954,752.8557 E 2,235,863.5724
C.C. N 954,669.1424 E 2,236,193.1056
Back = S 19° 31' 14.60" W
Ahead = S 14° 15' 13.24" W
Chord Bear = S 16° 53' 13.92" W

Course from PT RICK_HENRY1 to PC RICK_HENRY2 S 14° 15' 13.24" W Dist 800.9645

Curve Data

Curve RICK_HENRY2
P.I. Station 19+78.15 N 953,970.1015 E 2,235,664.7248
Delta = 2° 14' 30.01" (LT)
Degree = 16° 51' 06.12"
Tangent = 6.6520
Length = 13.3023
Radius = 340.0000
External = 0.0651
Long Chord = 13.3015
Mid. Ord. = 0.0651
P.C. Station 19+71.49 N 953,976.5488 E 2,235,666.3626
P.T. Station 19+84.80 N 953,963.5952 E 2,235,663.3404
C.C. N 953,892.8355 E 2,235,995.8957
Back = S 14° 15' 13.24" W
Ahead = S 12° 00' 43.23" W
Chord Bear = S 13° 07' 58.23" W

Course from PT RICK_HENRY2 to PC RICK_HENRY3 S 12° 00' 43.23" W Dist 503.3933

Curve Data

Curve RICK_HENRY3
P.I. Station 25+79.71 N 953,381.7047 E 2,235,539.5282
Delta = 96° 58' 52.19" (RT)
Degree = 70° 44' 07.91"
Tangent = 91.5235
Length = 137.1039
Radius = 81.0000
External = 41.2193
Long Chord = 121.3132
Mid. Ord. = 27.3178
P.C. Station 24+88.19 N 953,471.2242 E 2,235,558.5758
P.T. Station 26+25.29 N 953,411.4915 E 2,235,452.9875
C.C. N 953,488.0817 E 2,235,479.3494
Back = S 12° 00' 43.23" W
Ahead = N 71° 00' 24.58" W
Chord Bear = S 60° 30' 09.32" W

Course from PT RICK_HENRY3 to 15 N 71° 00' 24.58" W Dist 1,207.2696

Point 15 N 953,804.4040 E 2,234,311.4448 Sta 38+32.56

==========
Ending chain RICK_HENRY description

RICK HENRY Survey Control List

SURVEY GROUP:
ROAD/ROUTE: RICK HENRY
PIN / PRJ ID: 21-04464-001
CHARGE CODE:
COUNTY: CHESTERFIELD

	NORTHING	EASTING	ELEV	DESC
1	953793.653	2234322.537	387.053	PSC
2	953654.4730	2234769.3970	395.87	PSC
3	953393.5630	2235439.5560	395.23	PSC
4	953896.9090	2235677.7800	402.64	PSC
5	954422.9960	2235763.0320	399.76	PSC
6	954890.3440	2235950.7840	410.08	PSC

CURVE DATA

P.I. = 11+54.91
Δ = 5^ 16' 01" (LT)
D = 16^ 51' 06"
T = 15.64'
L = 31.26'
E = 0.36'
R = 340.00'
D.S. = 30 MPH
eMAX = 0.060
e = 0.41
P.C. - LG% = 0.50
P.T. - LG% = 0.50

P.I. = 19+78.15
Δ = 2^ 14' 30" (LT)
D = 16^ 51' 06"
T = 6.65'
L = 13.30'
E = 0.07'
R = 340.00'
D.S. = 30 MPH
eMAX = 0.060
e = 0.39
P.C. - LG% = 0.50
P.T. - LG% = 0.50

P.I. = 25+79.71
Δ = 96^ 58' 52" (RT)
D = 70^ 44' 08"
T = 91.52'
L = 137.10'
E = 41.22'
R = 81.00'
D.S. = 30 MPH
eMAX = 0.060
e = 0.60
P.C. - LG% = 0.50
P.T. - LG% = 0.50

SOUTH CAROLINA — JOHNSON, MIRMIRAN & THOMPSON, INC. — No. 3943 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 21591 — DAVID R. RUSSELL

PLANS PREPARED BY:
3600 FOREST DRIVE
SUITE 102
COLUMBIA, SC 29204
(803) 626-1747

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CHESTERFIELD COUNTY

REFERENCE DATA

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5/10/2023

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		6

RICK HENRY RD

SC HWY 151
AKA W. BOBO NEWSOM HWY
SCDOT PROJECT ID # 13.541

STA. 10+00.00 BEGIN
RICK HENRY ROAD.

DROP INLET ELEV
18" RCP
EDGE OF PAVEMENT
10
18"RCP INV:406.68'
SIGN RICK HENRY ST
P/L
18"RCP INV:405.47'
PC = 11+39.27
PT = 11+70.53
19'C
24'C
20'C
21'C
25'C
15
1
PID #122-000-000-060
HCJ INC
DEED BOOK 334 PAGE 069
PLAT BOOK 39 PAGE 96
10.0'
10.0'
10.0'
S 19° 31' 15" W
GRAVEL / DIRT ROAD
NPDES
NPDES
NPDES
NPDES
NPDES
NPDES
20'F
20'C
23'C
25'F
28'F
18"RCP INV:403.59'
EDGE OF PAVEMENT
SIGN BILLBOARD
12"RCP INV:399.58'
DIRT DRIVE
12"RCP INV:399.52'
2
PID #122-000-000-056
NANCY ALDRICH HENRY
&
JAMES RICHARD HENRY
DEED BOOK 345 PAGE 716
PLAT BOOK 18 PAGE 28
PLACE 20'-15" SWP
INV.IN 399.58'
INV.OUT 399.52'

ALIGNMENT CONTROL CAN BE FOUND ON REFERENCE SHEET

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21591 DAVID R. RUSSELL

10+00.00

K = 34
200' V.C.

408.46 VPC
403.15 VPT
403.75 VPC

(-) 5.56%
(-) 2.68% LT
(-) 0.41% LT
(+) 0.25%
(-) 0.30%
(-) 0.30% LT
(-) 0.82% LT

VPI = 11+36
Elev. = 402.90

FINISHED GRADE
SPECIAL DITCH LT

SPECIAL DITCH LEFT
STA.11+00 ELEV.404.21
STA.12+00 ELEV.401.53
STA.13+00 ELEV.401.12
STA.14+00 ELEV.400.82
STA.15+00 ELEV.400.00

	10+00	11+00	12+00	13+00	14+00	15+00
	410.46	404.36	402.48	401.83	401.36	400.77
	410.46	405.50	403.25	403.31	403.57	403.82

420 410 400 390 380 370 360

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5/10/2023

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		7

RICK HENRY RD

PLAT BOOK 39 PAGE 96

P/L

P/L

N

1

25'C 25'C 24'C 19'F NPDES NPDES 20'C 20'C NPDES NPDES 19'F

PVC = 19+71.49

PVT = 19+84.80

10.0' 10.0' 10.0' 10.0'

GRAVEL / DIRT ROAD

S 14° 15' 13" W

DIRT DRIVE

DAVE THOMAS RD

21'F

20'C

23'C 25'C 25'C 27'C 28'F

PLACE 36'-18" SWP
INV.IN 399.80'
INV.OUT 398.62'

2

PID #122-000-000-056
NANCY ALDRICH HENRY
&
JAMES RICHARD HENRY
DEED BOOK 345 PAGE 716
PLAT BOOK 18 PAGE 28

PLACE 24'-15" SWP
INV.IN 401.66'
INV.OUT 401.36'

ALIGNMENT CONTROL CAN BE FOUND ON REFERENCE SHEET

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21591 DAVID R. RUSSELL

EXC. = 231 CY
BORR: EXC. = 3157 CY
SUB TOT. = 3388 CY
LESS BORR EXC = 3157 CY
TOTAL = 231 CY

EMB. = 2420 CY
40% = 968 CY
SUB TOT. = 3388 CY
LESS BORR EXC = 3157 CY
TOTAL = 231 CY

420 410 400 390 380 370 360

K = 1330
200' V.C.

404.40 VPT

(+) 0.25%

(+) 0.40%

FINISHED GRADE

(+) 0.40%

VPI = 19+92
Elev. = 405.69

VPI = 15+72
Elev. = 404.00

(+) 1.37% LT
(+) 1.00% RT

(+) 1.04% LT
(+) 1.25% RT

(+) 0.98% LT
(+) 1.84% RT

SPECIAL DITCH RT

SPECIAL DITCH LEFT
STA.16+00 ELEV.400.12
STA.17+00 ELEV.401.49
STA.18+00 ELEV.402.53
STA.19+00 ELEV.403.51

SPECIAL DITCH RIGHT
STA.16+00 ELEV.400.00
STA.17+00 ELEV.401.00
STA.18+00 ELEV.402.26
STA.19+00 ELEV.404.09

SPECIAL DITCH LT

405.47 VPC

K = 52
110' V.C.

400.77 400.80 401.49 403.26 404.28 403.51
403.82 404.13 404.52 404.92 405.32 405.34

15+00 16+00 17+00 18+00 19+00 20+00

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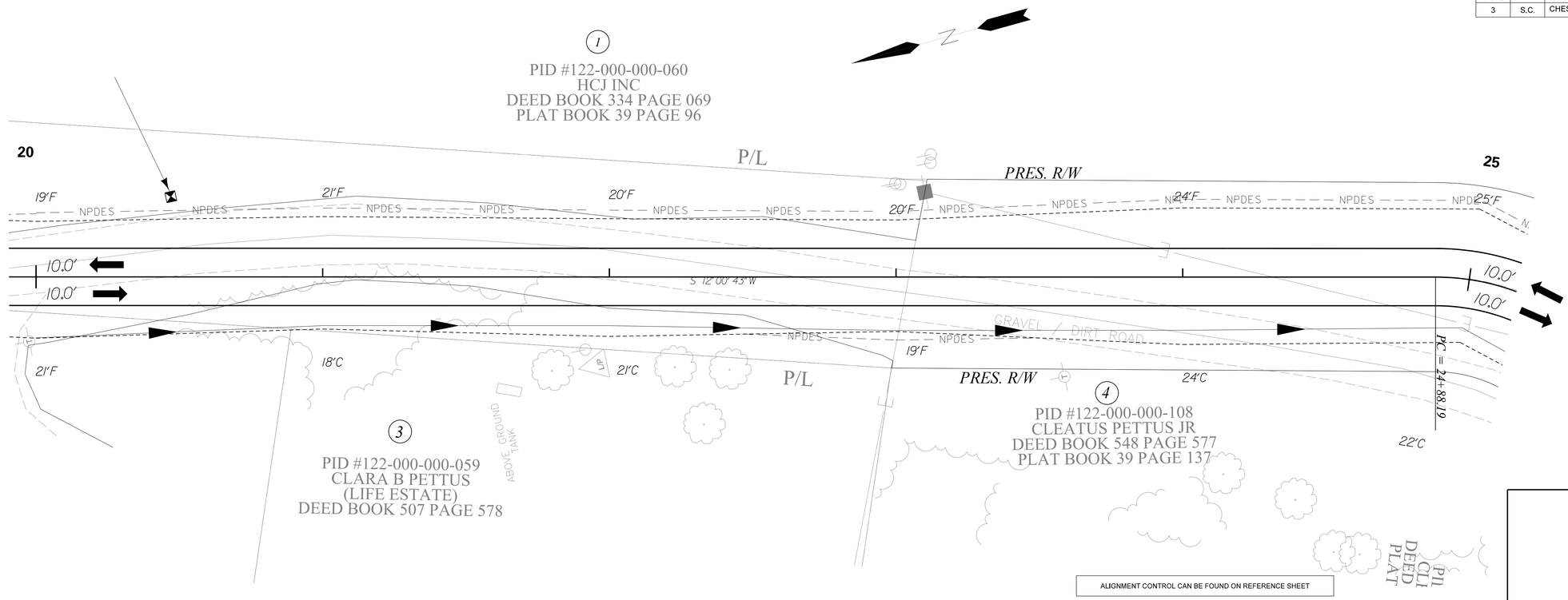
5/10/2023

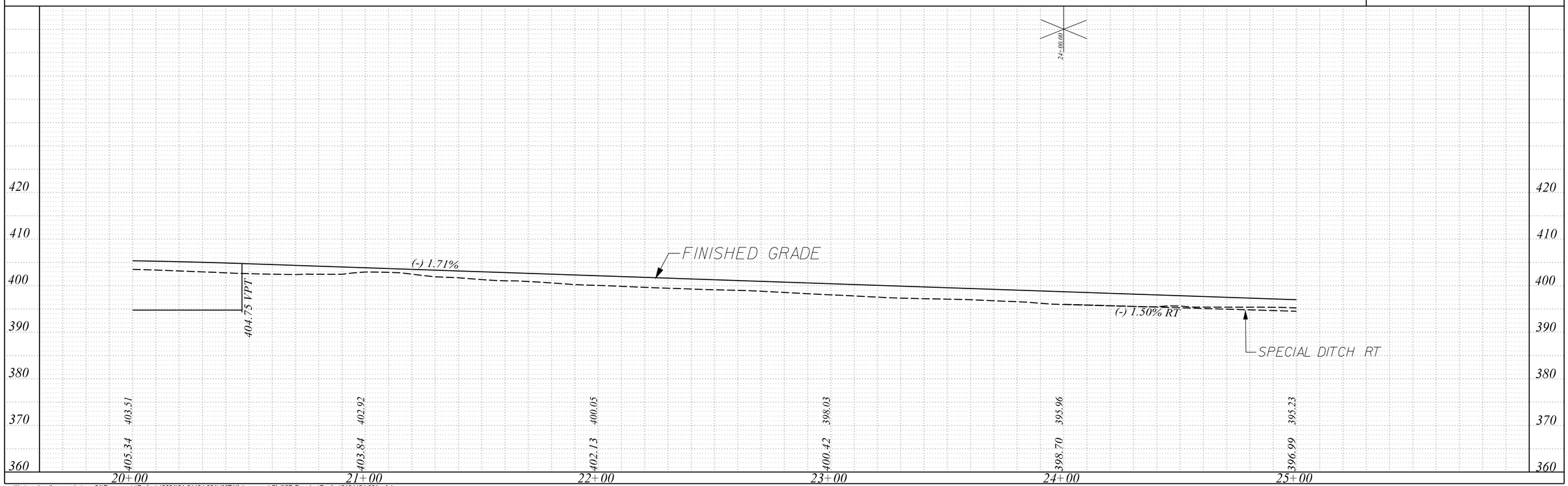
06_Plan_Profile_Sheet_20

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		8

RICK HENRY RD



SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21591 DAVID R. RUSSELL



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KMarpe
5/10/2023

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		9

RICK HENRY RD

N

P/L

PLACE 48'-24" SWP
INV.IN 392.00'
INV.OUT 391.60'

PLACE 20'-15" SWP
INV.IN 393.82'
INV.OUT 393.33'

PLACE 24'-15" SWP
INV.IN 394.27'
INV.OUT 394.14'

PLACE 20'-15" SWP
INV.IN 392.68'
INV.OUT 392.57'

PLACE 20'-15" SWP
INV.IN 392.97'
INV.OUT 392.87'

(5)
PID #122-000-000-128
ALMOND FOREST PRODUCTS INC
DEED BOOK 482 PAGE 857
PLAT BOOK 39 PAGE 137
LOT 22

(7)
PID #122-000-000-127
ANDREW HARPER JR
DEED BOOK 399 PAGE 1114
PLAT BOOK 39 PAGE 137
LOT 21

(9)
PID #122-000-000-126
HELEN M JOHNSON
&
TARA M JOHNSON
DEED BOOK 356 PAGE 410
PLAT BOOK 39 PAGE 137
LOT 20

(4)
PID #122-000-000-108
CLEATUS PETTUS JR
DEED BOOK 548 PAGE 577
PLAT BOOK 39 PAGE 137

(6)
PID #122-000-000-108
CLEATUS PETTUS JR
DEED BOOK 548 PAGE 577
PLAT BOOK 39 PAGE 137

(8)
PID #122-000-000-109
ALPHONSO MURPHY
&
HATTIE MURPHY
DEED BOOK 347 PAGE 1095

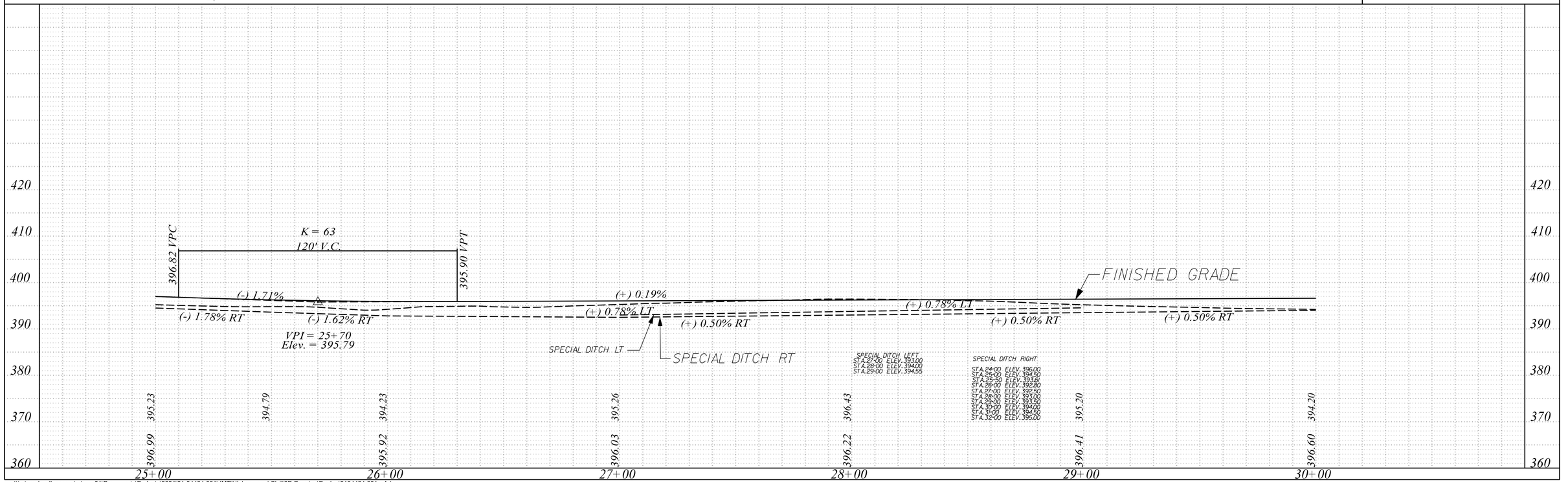
(10)
PID #122-000-000-110
JIMMY PETTUS, ETAL
DEED BOOK 507 PAGE 571
PLAT BOOK 39 PAGE 137
LOT 4

GRAVEL / DIRT ROAD
GRAVEL DRIVE
SPOIL
NPDES
PRES. R/W
25'F
23'F
21'C
27'C
26'C
24'C
23'C
22'C
32'C
30'C
28'C
10.0'
PC = 24+88.19
PT = 26+32.29

ALIGNMENT CONTROL CAN BE FOUND ON REFERENCE SHEET

SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

25



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KMarpe
5/10/2023

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		10

RICK HENRY RD

30

35

N

(11)
PID #122-000-000-125
JARRETT WILLIAMS
DEED BOOK 519 PAGE 166
PLAT BOOK 39 PAGE 137
LOT 19

(13)
PID #122-000-000-124
RONNIE BRISTER
DEED BOOK 410 PAGE 584
PLAT BOOK 39 PAGE 137
LOT 18

(15)
PID #122-000-000-123
FLORENCE V BRISTER
DEED BOOK 433 PAGE 414
PLAT BOOK 39 PAGE 137
LOT 17

(18)
PID #122-000-000-122
GARY HODNETT
&
DEBORAH HODNETT
DEED BOOK 350 PAGE
PLAT BOOK 39 PAGE
LOT 16

PRES. R/W

23'F NPDES — NPDES — 24'F NPDES — NPDES — 21'F NPDES

GRAVEL DRIVE

GRAVEL / DIRT ROAD

N 71°00'25" W

10.0' 10.0' 13.0' 10.0'

23'C PRES. R/W 22'C 22'C 19'C 23'C 17'C 18'C 18'C PRES. R/W 19'C

IP REBAR 1/2"

PLACE 20'-15" SWP
INV.IN 394.61'
INV.OUT 394.51'

PLACE 20'-15" SWP
INV.IN 394.93'
INV.OUT 394.83'

PLACE 20'-15" SWP
INV.IN 393.69'
INV.OUT 393.27'

(10)
PID #122-000-000-110
JIMMY PETTUS, ETAL
DEED BOOK 507 PAGE 571
PLAT BOOK 39 PAGE 137
LOT 4

(12)
PID #122-000-000-111
GLORIA GODINEZ
&
DOMINGUEZ GODINEZ
DEED BOOK 423 PAGE 986
PLAT BOOK 39 PAGE 137
LOT 5

(14)
PID #122-000-000-112
ANTONIO W BRISTER
DEED BOOK 347 PAGE 043
PLAT BOOK 39 PAGE 137
LOT 6

(16)
PID #122-000-000-113
ANDRIA HUNTER
&
BORIS HUNTER
DEED BOOK 425 PAGE 733
PLAT BOOK C PAGE 79D
LOT 7

(17)
PID #122-000-000-114
WILLIE MAE PRICE
DEED BOOK 347 PAGE 757
PLAT BOOK 39 PAGE 137
LOT 8

P/L

ALIGNMENT CONTROL CAN BE FOUND ON REFERENCE SHEET

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

EXC. = 1163 CY
BORR. EXC. = 559 CY
SUB TOT. = 1722 CY
LESS BORR EXC = 559 CY
TOTAL = 1163 CY

EMB. = 1230 CY
40% = 492 CY
SUB TOT. = 1722 CY
LESS BORR EXC = 559 CY
TOTAL = 1163 CY

420 410 400 390 380 370 360 350

FINISHED GRADE

(+) 0.19%

(+) 0.50% RT

(+) 0.50% RT

SPECIAL DITCH RT

VPI = 33+56
Elev. = 397.27

(-) 1.07% LT

(-) 1.57% RT

(-) 2.69%

(-) 2.10% RT

(-) 2.60% LT

SPECIAL DITCH LT

K = 52
150' V.C.

397.13 VPC

395.25 VPT

SPECIAL DITCH RT

394.20 396.60
394.29 396.79
395.11 396.98
396.01 397.13
394.87 395.99
392.79 393.39

30+00 31+00 32+00 33+00 34+00 35+00

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KMarpe
5/10/2023

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FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		11

RICK HENRY RD

35

(18) PID #122-000-000-122
GARY HODNETT
&
DEBORAH HODNETT
DEED BOOK 350 PAGE 90
PLAT BOOK 39 PAGE 137
LOT 16

(19) PID #122-000-000-121
GARY HODNETT
&
DEBORAH HODNETT
DEED BOOK 350 PAGE 90
PLAT BOOK 39 PAGE 137
LOT 15

(22) PID #122-000-000-120
MARTIN PALACIOS
DEED BOOK 399 PAGE 1127
PLAT BOOK 39 PAGE 137
LOT 14

(23) PID #122-000-000-119
HCJ INC
DEED BOOK 334 PAGE 69
PLAT BOOK 39 PAGE 137
LOT 13

(24) PID #122-000-000-118
ADAN N MENDOZA
DEED BOOK 436 PAGE 976
PLAT BOOK 39 PAGE 137
LOT 12

(25) PID #122-000-000-117
NED ROGERS JR
DEED BOOK 378 PAGE 1208
PLAT BOOK 39 PAGE 137
LOT 11

(21) PID #122-000-000-116
NED ROGERS JR
DEED BOOK 350 PAGE 1292
PLAT BOOK 39 PAGE 137
LOT 10

(20) PID #122-000-000-115
JAMES W BRISTER
&
JOANNE AUSTIN BRISTER
DEED BOOK 354 PAGE 1246
PLAT BOOK 39 PAGE 137
LOT 9

(17) PID #122-000-000-114
WILLIE MAE PRICE
DEED BOOK 347 PAGE 757
PLAT BOOK 39 PAGE 137
LOT 8

PRES. R/W
PRES. 50'R R/W
18'C
19'C
22'C
10.0'
GRAVEL / DIRT ROAD
GRAVEL DRIVE
P/L
50.0'R
35.0'R
ELEV. 384.00'
TOP OF BANK
ELEV. 386.00'
PLACE 36'-I5" SWP
INV. IN 386.00'
INV. OUT 384.50'
PLACE 32'-I5" SWP
INV. IN 386.25'
INV. OUT 385.00'
PLACE 3' BOTTOM WIDTH
DITCH WITH 2:I SIDE SLOPES
REBAR
12" WOOD POST
6" CHAIN LINK FENCE

ALIGNMENT CONTROL CAN BE FOUND ON REFERENCE SHEET

STA. 38+32.56 END
RICK HENRY ROAD.

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

38+32.56

VPI = 35+00
Elev. = 392.11
393.39
(-) 2.69%
(-) 3.11% RT
(-) 3.11% LT
391.54 VPC
K = 88
114' V.C.
389.21 VPT
(-) 1.39%
(-) 4.00% RT
(-) 4.50% LT
VPI = 36+26
Elev. = 390.00
(-) 0.30% RT
(-) 0.50% LT
FINISHED GRADE
SPECIAL DITCH LT
SPECIAL DITCH RT

SPECIAL DITCH LEFT
STA 33+00 ELEV. 395.78
STA 34+00 ELEV. 394.71
STA 35+00 ELEV. 392.11
STA 36+00 ELEV. 389.00
STA 37+00 ELEV. 384.59
STA 38+00 ELEV. 384.00

SPECIAL DITCH RIGHT
STA 33+00 ELEV. 395.78
STA 34+00 ELEV. 394.28
STA 35+00 ELEV. 392.11
STA 36+00 ELEV. 389.00
STA 37+00 ELEV. 385.00
STA 38+00 ELEV. 384.7

392.79
393.39
390.39
390.75
388.74
388.97
387.48
387.57

420 410 400 390 380 370 360 350 340

35+00 36+00 37+00 38+00

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KMarpe
5/10/2023

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EROSION AND SEDIMENTATION CONTROL NOTES

FED.RD. DIV.NO	STATE	COUNTY	PROJECT ID	ROAD/ROUTE NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		EC-1

RICK HENRY ROAD

EROSION AND SEDIMENTATION CONTROL GENERAL NOTES

1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
   ? WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
   ? WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY CONSTRUCTED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C REG. 72-300 ET SEQ. AND SCR100000.
8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN NOT BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
11. A COPY OF THE SWPPP, INSPECTION RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. UPDATED 2/6/13
14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE;
15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED: WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL; WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS; FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS CHESTERFIELD COUNTY HAS APPROVED OTHERWISE.
20. CONTRACTORS ARE REQUIRED TO HAVE RAIN GAUGES AT THE CONSTRUCTION SITE AND THE RAIN TOTALS DOCUMENTED FOR REVIEW BY CHESTERFIELD COUNTY AND SCDHEC.
21. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD WITH CHESTERFIELD COUNTY AT LEAST 48 HOURS PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES. THE OWNER, DESIGN ENGINEER AND CONTRACTOR MUST BE PRESENT AND HAVE OBTAINED THE STORMWATER PERMIT, STAMPED APPROVED PLANS AND THE N.O.I APPROVAL LETTER FROM SCDHEC BEFORE CALLING CHESTERFIELD COUNTY AT 843-623-2464 TO SCHEDULE THIS MEETING.
22. PORTABLE TOILET FACILITIES SHALL NOT BE LOCATED WITHIN 20 FEET OF ANY STORM WATER STRUCTURE AND/OR 50 FEET OF ANY WATER COURSE, WETLAND AREA, STREAM, FLOODPLAIN, OR LAKE.

CONSTRUCTION SEQUENCE

CONSTRUCTION SEQUENCE

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE UNITED TO THOSE AREAS DESCRIBED IN EACH STAGE.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
BEFORE IMPLEMENTING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, OR REVISIONS TO THE OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EROSION AND SEDIMENT POLLUTION CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISION FROM THE JURIDICTIONAL CONSERVATION DISTRICT. RUNOFF ACCUMULATING IN EXCAVATED AREAS SHALL EITHER REMAIN IN THE EXCAVATED AREA IN ORDER TO INFILTRATE THE RUNOFF, OR BE DIRECTED TO AN APPROVED E&S CONTROL MEASURE TO ENSURE RUNOFF IS TREATED BEFORE LEAVING THE DISTURBED SITE OR WILL BE INFILTRATED BACK INTO THE GROUND. E&S CONTROL BMPS WILL BE MAINTAINED TO PERFORM AS DESIGNED IN THESE INSTANCES. CONSTRUCTION ACTIVITIES WITHIN EACH STAGE MAY OVERLAP IF WORK WITHIN EACH AREA IS CARRIED OUT IN SEQUENCE.
EACH STAGE OF THE SEQUENCE OF CONSTRUCTION MUST BE COMPLETED PRIOR TO INITIATION OF THE NEXT STAGE OF THE SEQUENCE OF CONSTRUCTION.

NOTE: PRIOR TO ANY GRADING, CREEK BOUNDARIES AND TOP OF BANK ARE TO BE FIELD DELINEATED AND STAKED WITH ORANGE CONSTRUCTION FENCE TO AVOID DISTURBANCE.

ALL BLASTING ACTIVITY, IF REQUIRED, SHOULD BE DONE IN ACCORDANCE WITH THE LOCAL, STATE AND FEDERAL REGULATIONS. CONTRACTOR SHOULD NOTIFY OWNER AND ALL REGULATORY AGENCIES IN WRITING AND OBTAIN ANY NECESSARY PERMITS PRIOR TO ANY BLASTING ACTIVITIES.
SITE CONSTRUCTION - GENERAL

1. CONDUCT PRE-CONSTRUCTION MEETING. LOCAL DHEC EQC OFFICE SHALL BE NOTIFIED 48 HOURS PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES.
2. FIELD MARK EXISTING UTILITIES AND LIMITS OF DISTURBANCE PRIOR TO EARTH DISTURBANCE.
3. INSTALL ROCK CONSTRUCTION ENTRANCE BEFORE INITIAL DISTURBANCES. ALL VEHICLES ENTERING THE SITE SHALL DO SO VIA THE ROCK CONSTRUCTION ENTRANCE.
4. INSTALL PERIMETER SUPPORTED SILT FENCE DOWNSLOPE OF PROPOSED CONSTRUCTION ACTIVITY AT LOCATIONS INDICATED. PLACE SILT FENCE ON LEVEL GRADE WHERE POSSIBLE. CARE SHOULD BE TAKEN TO PROTECT THE STREAM AND WETLANDS FROM ANY SEDIMENT POLLUTION. THE CONTRACTOR SHALL MAINTAIN THE SILT FENCE IN WORKING ORDER THROUGHOUT THE COURSE OF CONSTRUCTION, MAKING INSPECTIONS AFTER EACH RAINFALL EVENT AND MAKING ANY NECESSARY REPAIRS.
5. EARTH AND TOPSOIL TO BE RETAINED ON THE SITE SHALL BE STOCKPILED IN THE WITHIN THE LIMITS OF DISTURBANCE AS APPROVED BY THE ENGINEER OR OFF-HAULED. IMMEDIATELY INSTALL SILT FENCE AROUND STOCKPILES, SOW TEMPORARY SEED AND MULCH STOCKPILES TO ENSURE PROTECTION AGAINST SEDIMENT RUNOFF FROM THE TOPSOIL STOCKPILE.
6. LIMIT CLEARING, GRUBBING AND RAINFALL TOPSOIL STRIPPING TO THE IMMEDIATE AREA REQUIRED TO CONSTRUCT ROADSIDE DITCHES AND INSTALL STORM SEWER SYSTEM.
7. EXCAVATE AND CONSTRUCT ROADSIDE DITCHES AND STONE TRENCHES WHERE SHOWN ON THE PLANS. IMMEDIATELY ADD PERMANENT TOPSOIL, AND SEED. STABILIZE IMMEDIATELY WITH DITCH LINING AND PLACEMENT OF TEMPORARY SEDIMENT TUBES AND ROCK SEDIMENT DIKE AS SHOWN ON THE PLANS. PROTECT STONE TRENCH FROM SILT BUILD-UP AND COMPACTION. CONSTRUCT STORM SEWER SYSTEM, DRIVEWAY CULVERTS AND OUTLET PROTECTION TO LINES AND GRADES AS SHOWN ON THE PLANS. WORK SHALL BEGIN AT THE OUTLET AND WORK UPSTREAM. REMOVE EXISTING CULVERTS WHERE SHOWN ON THE PLANS.
8. AT ALL TIMES, MAINTAIN TEMPORARY INGRESS AND EGRESS ACCESS TO ADJACENT PROPERTIES.
9. ROUGH GRADE SUBGRADE TO PLAN LINE AND GRADES. EXCESS MATERIAL TO BE HAULED OFF-SITE.
10. PLACE AND COMPACT BASE MATERIAL AND INSTALL PAVING FABRIC, IF CALLED FOR IN THE PLANS.
11. PLACE ASPHALT CONCRETE SURFACE COURSE ON ROAD AND AT EXISTING DRIVEWAYS. DRIVEWAYS TO MAINTAIN EXISTING WIDTH AND BE PAVED TO THE RIGHT-OF-WAY-LINE.
12. FINAL GRADE SHOULDER AND RELOCATE MAIL BOXES AS NEEDED.
13. PROVIDE REMAINING PERMANENT SEEDING AND MULCHING.
14. COMPLETE ALL ON-SITE IMPROVEMENTS AND PERFORM AND CLEANUP.
15. UNTIL SUCH TIME AS THE SITE IS PERMANENTLY STABILIZED, ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN WORKING ORDER. MAINTENANCE SHALL INCLUDE INSPECTION OF ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS.
16. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS.
17. CONTACT CHESTERFIELD COUNTY FOR FINAL INSPECTION AND CLOSE OUT OF PROJECT.
18. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, REMOVE THE TEMPORARY BMPS.
19. IMMEDIATELY REPAIR AND STABILIZE ANY AREAS DISTURBED DURING REMOVAL OF THE TEMPORARY BMPS.

INSPECTION AND MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. CONSTRUCTION EQUIPMENT SHALL NOT BE STORED OVERNIGHT OR FUELED ON SITE WITHOUT THE CONSENT OF THE COUNTY.

INSPECTION AND MAINTENANCE

SILT FENCE.
a. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ¾ -INCHES OR MORE OF PRECIPITATION. CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING.
b. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY.
c. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED.
d. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE.
e. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BEST MANAGEMENT PRACTICES (BMPS) ARE NO LONGER NEEDED.
f. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.

ROCK DITCH CHECK.
a. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ¾ -INCHES OR MORE OF PRECIPITATION.
b. INSPECT FOR SEDIMENT AND DEBRIS ACCUMULATION.
c. INSPECT ROCK CHECK DAM EDGES FOR EROSION AND REPAIR PROMPTLY AS REQUIRED.
d. REMOVE SEDIMENT WHEN IT REACHES 1/3 THE ORIGINAL CHECK HEIGHT.
e. IN THE CASE OF GRASS-LINED DITCHES AND SWALES, REMOVE ROCK CHECK DAMS WHEN THE GRASS HAS MATURED SUFFICIENTLY TO PROTECT THE DITCH OR SWALE UNLESS THE SLOPE OF THE SWALE IS GREATER THAN 4 PERCENT.
f. AFTER CONSTRUCTION IS COMPLETE, REMOVE STONE IF VEGETATION IS USED FOR PERMANENT STABILIZATION.
g. SEED AND MULCH THE AREA BENEATH THE ROCK DITCH CHECKS IMMEDIATELY AFTER DAM REMOVAL.

SEDIMENT TUBES
a. INSPECT SEDIMENT TUBES AFTER INSTALLATION FOR GAPS UNDER THE SEDIMENT TUBES AND FOR GAPS BETWEEN THE JOINTS OF ADJACENT ENDS OF SEDIMENT TUBES.
b. INSPECT EVERY 7-DAYS AND WITHIN 24-HOURS OF A RAINFALL EVENT OF 0.5-INCHES OR GREATER.
c. REPAIR ALL RILLS, GULLIES, AND UNDERCUTTING NEAR SEDIMENT TUBES.
d. REMOVE ALL SEDIMENT DEPOSITS THAT IMPAIR THE FILTRATION CAPABILITY OF SEDIMENT TUBES WHEN THE SEDIMENT REACHES 1/3 THE HEIGHT OF THE EXPOSED SEDIMENT TUBE.
e. REMOVE AND/OR REPLACE INSTALLED SEDIMENT TUBES AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS.
f. REMOVE SEDIMENT TUBES FROM THE SITE WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS DETERMINED BY THE ENGINEER, INSPECTOR OR MANUFACTURER'S REPRESENTATIVE. GATHER SEDIMENT TUBES AND DISPOSE OF THEM IN REGULAR MEANS AS NON-HAZARDOUS, INERT MATERIAL.
g. PRIOR TO FINAL STABILIZATION, BACKFILL ALL TRENCHES, DEPRESSIONS AND OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF SEDIMENT TUBES.

STABILIZED CONSTRUCTION ENTRANCE.
a. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ¾ -INCHES OR MORE OF PRECIPITATION, OR AFTER HEAVY USE.
b. CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY.
c. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
d. WASH OR REPLACE STONES AS NEEDED.

TEMPORARY SEDIMENT TRAP
a. REMOVE SEDIMENT WHEN IT REACHES 50 PERCENT OF STORAGE VOLUME OR TOP OF CLEANOUT STAKE.
b. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ¾ -INCHES OR MORE OF PRECIPITATION.
c. REMOVE ALL TEMPORARY SEDIMENT TRAPS WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER IT IS NO LONGER NEEDED.
d. REMOVE TRAPPED SEDIMENT FROM THE SITE, OR STABILIZED ON SITE.
e. PERMANENTLY STABILIZED DISTURBED AREAS RESULTING FROM THE REMOVAL OF SEDIMENT TRAPS.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES. ANY CLEARING AND GRUBBING, EXCEPT WHAT IS NECESSARY TO ESTABLISH SEDIMENT CONTROL DEVICES SHALL NOT BEGIN UNTIL ALL SEDIMENT CONTROL DEVICES HAVE BEEN INSTALLED AND HAVE BEEN STABLIZED. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS.

NPDES PERMIT REQUIREMENTS

1. THE PERMITTEE OR CO-PERMITTEE SHALL CONTACT THE PERMIT ISSUING AGENCY AT LEAST SEVEN DAYS PRIOR TO THE START OF CONSTRUCTION TO DETERMINE IF A PRE-CONSTRUCTION MEETING IS REQUIRED.
2. THE PERMITTEE AND THE CO-PERMITTEE MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND AFTER EACH PRECIPITATION EVENT BY QUALIFIED PERSONNEL TOASSURE THE EFFECTIVE OPERATION OF BMP'S. A WRITTEN ACCOUNT OF EACH INSPECTION AND THE CORRECTIVE ACTION TAKEN MUST BE KEPT ON SITE.
3. WHERE BMP'S ARE FOUND TO BE INOPERATIVE OR HAVE FAILED THE PERMITTEE OR CO- PERMITTEE SHALL CONTACT THE PERMIT ISSUING AGENCY IMMEDIATELY, FOLLOWED BY A WRITTEN REPORT WITHIN FIVE DAYS OF INITIAL CONTACT.
4. THE PERMITTEE AND CO-PERMITTEE SHALL RETAIN RECORDS OF ALL MONITORING INFORMATION INCLUDING INSPECTION REPORTS AS REQUIRED BY THIS PERMIT FOR A PERIOD OF THREE YEARS FROM THE DATE OF THE TERMINA TION OF COVERAGE UNDER THIS PERMIT.
5. THE PERMITTEE AND CO- PERMITTEE SHALL TAKE ALL REASONABLE STEPS TO MINIMIZE OPPREVENT ANY DISCHARGE THAT HAS REASONABLE LIKELIHOOD OF ADVERSELY AFFECTING HUMAN HEALTH OR THE ENVIRONMENT IN VIOLATION OF THIS PERMIT.
6. UPON REDUCTION, LOSS OR FAILURE OF A BMP, THE PERMITTEE AND CO-PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMP TO NORMAL OPERAT ION OR PROVIDE AN ALTERNATIVE BMP SHALL BE EMPLOYED AND THE PERMIT ISSUING AGENCY CONTACTED
7. THE PERMITTEE AND CO-PERMITTEE MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THE NPDES PERMIT. ANY PERMIT NONCOMPLIANCE MAY BE GROUNDS FOR ENFORCEMENT ACTION. THE PERMITTEE AND CO-PERMITTEE MAY BE SUBJECT TO CRIMINAL AND/OR CIVIL PENALTIES FOR VIOLATIONS OF THE TERMS AND CONDITIONS OF THIS PERMIT
8. THE OWNER OR OPERATOR OF THIS FACILITY COVERED BY THIS PERMIT SHALL MAKE THE PLANS AVAILABLE TO THE PUBLIC IF REQUESTED. EROSION AND SEDIMENT CONTROL PLANS MUST BE MADE AVAILABLE AT THE SITE AT ALL TIMES.
9. THE STAGING OF EARTH DISTURBANCE ACTIVITIES AND MAINTENANCE REQUIREMENTS CONTAINED IN THE E&S PLAN MUST BE FOLLOWED. UNLESS AMENDED AND APPROVED BY THE COUNTY OR DEP.
10. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE SOLID WASTE MANAGEMENT REGULATIONS. NO MATERIALS MAY BE BURIED, DUMPED, OR DISCHARGED ON SITE.
11. AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN SHALL BE DEVELOPED AND IMPLEMENTED FOR ALL OFF- SITE SPOILS AND BORROW AREAS. AREAS THAT ARE OUTSIDE OF THE ORIGINAL PERMIT BOUNDARIES OR NOT COVERED BY ANOTHER NPDES PERMIT WILL BE CONSIDERED A MAJOR REVISION TO THE PERMIT.

EROSION AND SEDIMENTATION CONTROL LEGEND

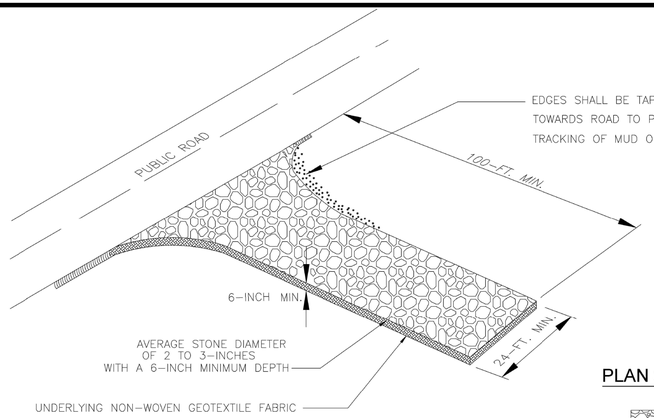
DESCRIPTION	SYMBOL
NPDES BOUNDARY = LIMITS OF DISTURBANCE	— — — NPDES — — —
SILT FENCE:	
NAG S75 DITCH LINING, OR APPROVED EQUIVALENT	
SEDIMENT TUBE:	

DESCRIPTION	SYMBOL
DITCH CHECK	
CONSTRUCTION ENTRANCE:	
OUTLET PROTECTION	

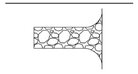
EROSION AND SEDIMENTATION CONTROL DETAILS

FED.RD. DIV.NO	STATE	COUNTY	PROJECT ID	ROAD/ROUTE NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		EC-2

RICK HENRY ROAD



PLAN SYMBOL



SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2-3 INCHES

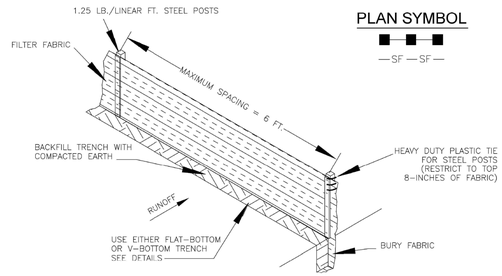
South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06 PAGE 1 of 2

NOT TO SCALE FEBRUARY 2014 DATE

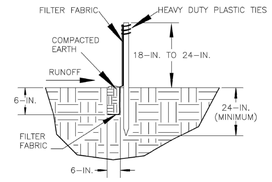
SILT FENCE INSTALLATION



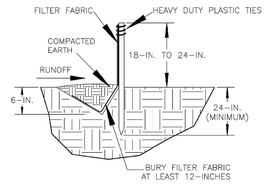
PLAN SYMBOL

—SF—SF—

FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



SILT FENCE – GENERAL NOTES

1. Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
2. Maximum sheet or overland flow path length to the silt fence shall be 100-feet.
3. Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
4. Silt fence joints, when necessary, shall be completed by one of the following options:
   - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap;
   - Overlap silt fence by installing 3-feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties; or,
   - Overlap entire width of each silt fence roll from one support post to the next support post.
5. Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
6. Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
7. Install Silt Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

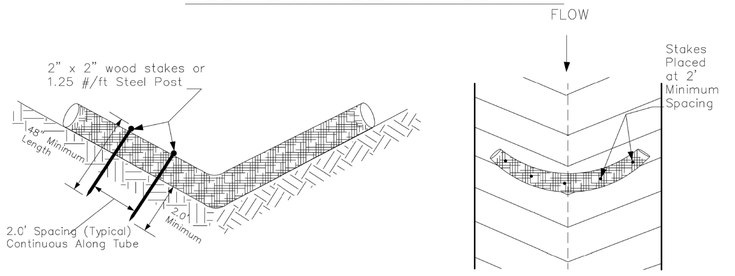
South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 Page 1 of 2

NOT TO SCALE FEBRUARY 2014 DATE

SEDIMENT TUBE INSTALLATION



SEDIMENT TUBE SPACING

SLOPE	MAX. SEDIMENT TUBE SPACING
LESS THAN 2%	150-FEET
2%	100-FEET
3%	75-FEET
4%	50-FEET
5%	40-FEET
6%	30-FEET
GREATER THAN 6%	25-FEET

PLAN SYMBOL

South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

STANDARD DRAWING NO. SC-05 PAGE 1 of 2

NOT TO SCALE FEBRUARY 2014 DATE

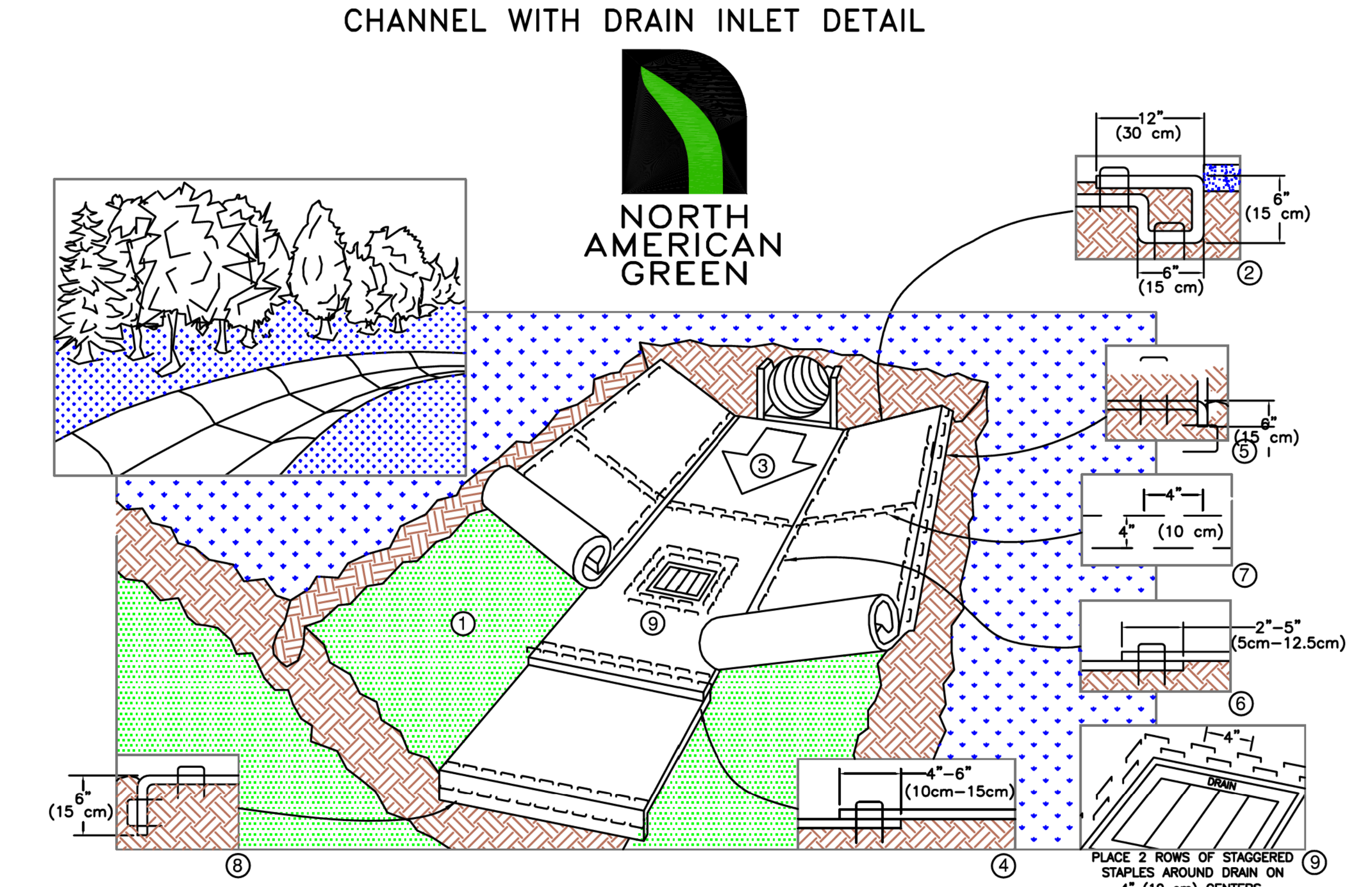
EROSION AND SEDIMENTATION CONTROL DETAILS

FED.RD. DIV.NO	STATE	COUNTY	PROJECT ID	ROAD/ROUTE NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		EC-3

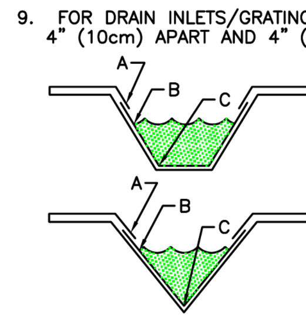
RICK HENRY ROAD

CHANNEL WITH DRAIN INLET DETAIL

NORTH AMERICAN GREEN



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5cm-12.5cm) (DEPENDING ON BLANKET TYPE) AND STAPLED. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH™ ON THE BLANKET BEING OVERLAPPED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m-12m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
9. FOR DRAIN INLETS/GRATING FIXTUREs LOCATED IN THE CHANNEL BOTTOM USE A DOUBLE ROW OF STAPLES/STAKES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER AROUND THE ENTIRE DRAIN INLET STRUCTURE.



CRITICAL POINTS

A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
800-772-2040
www.nagreen.com

REV. 012004

Permanent Seeding - Upstate

Species	Lbs/Ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bahia Grass (Alone)	40												
Bahia Grass (Mix)	30												
Bermuda Grass (hulled) (Alone)	8-12												
Bermuda Grass (hulled) (Mix)	4-6												
Fescue, Tall (KY31) Alone	40												
Fescue, Tall (KY31) mix	20												
Sericea Lespedeza (Scarified) Alone or Mix (inoculate with EL Innoculant	40												
Ladino Clover (mix only) Innoculate with AB Innoculant	2												
For Steep Slopes/Cut Slopes													
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												
Crownvetch (Mix) (Inoculate with Type M Innoculant	8-10												

NOTE: PER SC-DHEC PERMANENT SEEDING RATE TABLE FOR UPSTATE, NO PERMANENT SEEDING IS RECOMMENDED BETWEEN MID-DECEMBER AND MID-APRIL.

Temporary Seeding - Upstate

Species	lbs./ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browntop Millet (Alone)	40												
Browntop Millet (Mix)	10												
Rye Grain (Alone)	56												
Rye Grain (Mix)	10												
Rye Grass (Alone)	50												
Rye Grass (Mix)	8												
For Steep Slopes/Cut Slopes													
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												

REFERENCES

NATIONAL DOCUMENTS
USDA NRCS ENGINEERING FIELD MANUAL

SCDOT DOCUMENTS
WQM

RELATED DRAWINGS & KEYWORDS

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 21242 JAMES W. KENDALL, JR.

SIGNATURE

11/18/2016
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

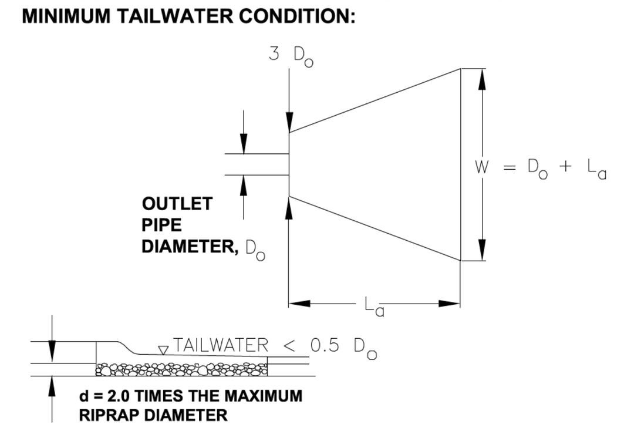
STANDARD DRAWING

OUTLET PROTECTION WITH NO DEFINED CHANNEL

804-305-03

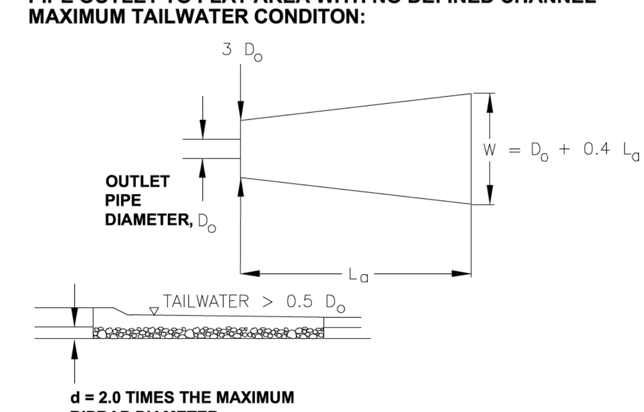
EFFECTIVE LETTING DATE JULY 2017

PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL MINIMUM TAILWATER CONDITION:



PIPE INSIDE DIAMETER (D_I) (FT)	MAX PIPE SLOPE	OUTLET PROTECTION DIMENSIONS			MIN RIPRAP CLASS	RIPRAP DEPTH (d) (FT)
		$3D_O$ (FT)	L_a (FT)	W (FT)		
1.5	≤ 1%	6	10	12	A	1.5
1.5	2%	6	14	16	A	1.5
1.5	5%	6	19	21	B	2.7
2.0	≤ 1%	8	14	17	A	1.5
2.0	2%	8	19	22	B	2.7
2.0	5%	8	26	29	B	2.7
2.5	≤ 1%	10	18	21	A	1.5
2.5	2%	10	25	28	B	2.7
2.5	5%	10	34	37	C	3.6
3.0	≤ 1%	12	24	28	B	2.7
3.0	2%	12	32	36	B	2.7
3.0	5%	12	42	46	C	3.6
3.5	≤ 1%	14	28	33	B	2.7
3.5	2%	14	37	42	C	3.6
3.5	5%	14	48	53	C	3.6
4.0	≤ 1%	16	33	38	B	2.7
4.0	2%	16	43	48	C	3.6

PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL MAXIMUM TAILWATER CONDITON:



PIPE INSIDE DIAMETER (D_I) (FT)	MAX PIPE SLOPE	OUTLET PROTECTION DIMENSIONS			MIN RIPRAP CLASS	RIPRAP DEPTH (d) (FT)
		$3D_O$ (FT)	L_a (FT)	W (FT)		
1.5	≤ 1%	6	8	6	A	1.5
1.5	2%	6	23	11	A	1.5
1.5	5%	6	40	18	A	1.5
2.0	≤ 1%	8	14	8	A	1.5
2.0	2%	8	30	15	A	1.5
2.0	5%	8	55	25	B	2.7
2.5	≤ 1%	10	20	11	A	1.5
2.5	2%	10	39	19	A	1.5
2.5	5%	10	66	30	B	2.7
3.0	≤ 1%	12	27	15	A	1.5
3.0	2%	12	55	26	A	1.5
3.0	5%	12	91	40	C	3.6
3.5	≤ 1%	14	33	18	A	1.5
3.5	2%	14	66	31	B	2.7
3.5	5%	14	106	47	C	3.6
4.0	≤ 1%	16	42	22	A	1.5
4.0	2%	16	78	37	B	2.7

NOTES:

1) THESE TABLES ARE ONLY APPLICABLE FOR THE PIPE SIZES AND MAXIMUM PIPE SLOPES LISTED.

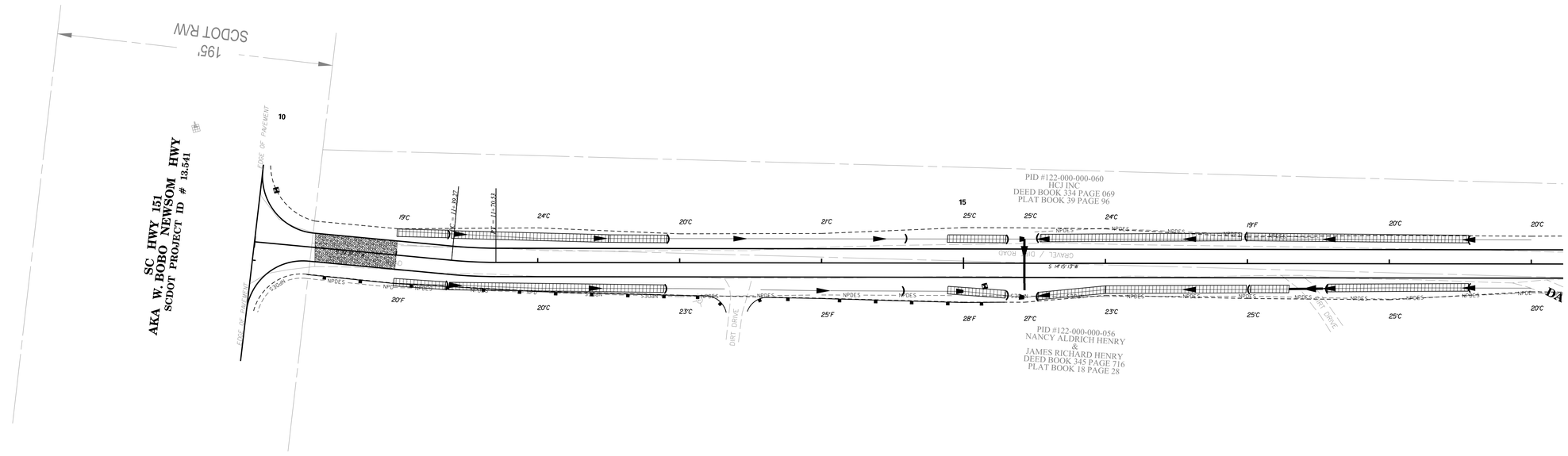
2) LARGER PIPES OR GREATER SLOPES REQUIRE ALTERNATIVE OUTLET PROTECTION DESIGN.

3) WHEN PLANS SPECIFY LARGER OR DIFFERENT OUTLET PROTECTION THAN SHOWN IN TABLES, INSTALL OUTLET PROTECTION PER THE PLANS.

4) SEE DRAWING # 804-305-02 FOR MORE INFORMATION ON OUTLET PROTECTION DIMENSIONS.

THIS DRAWING IS NOT TO SCALE

FED. ROAD DIV. NO.	STATE	COUNTY	PROJECT ID	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHESTERFIELD	23-04464-001	__	___	EC-4	_



KMarpe
Documents\Projects\2021\21-04464-001\JMT\Highway and Civil\2D Drawing\Design\EC_SHEETS
5/10/2023

SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4	----------	------	----------
3	----------	------	----------
2	----------	------	----------
1	----------	------	----------

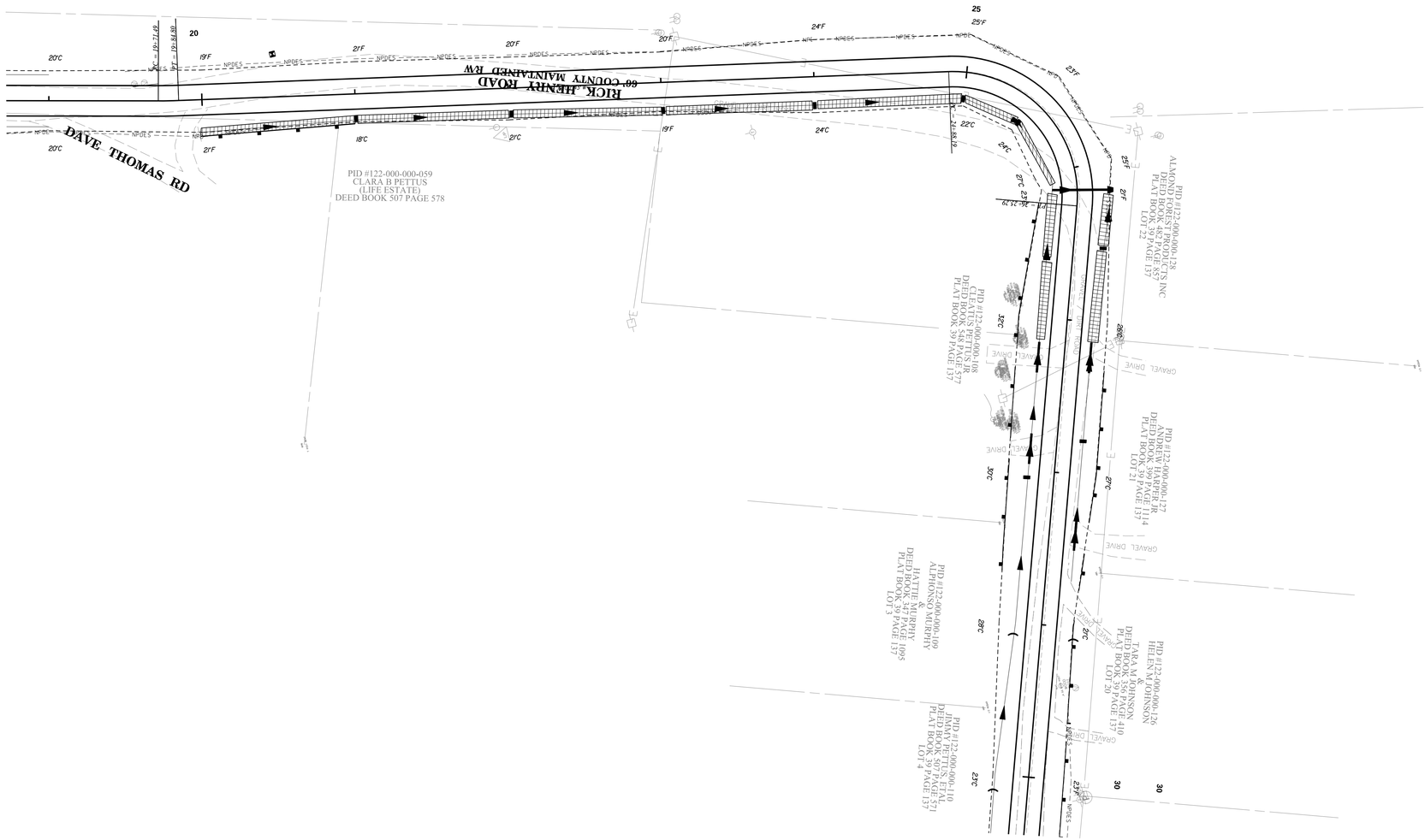
TOPO. ..... DATE .....
DWG. ..... DATE .....
R/W ..... DATE .....

CHESTERFIELD COUNTY

EROSION CONTROL SHEET

SCALE 1"= 40' RTE. __ DWG. NO. __

FED. ROAD DIV. NO.	STATE	COUNTY	PROJECT ID	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHESTERFIELD	21-04464-001	___	___	EC-5	_



SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOPO. ____ DATE ____
DWG. ____ DATE ____
R/W ____ DATE ____

CHESTERFIELD COUNTY

EROSION CONTROL SHEET

SCALE 1"= 40' RTE. ___ DWG. NO. ___

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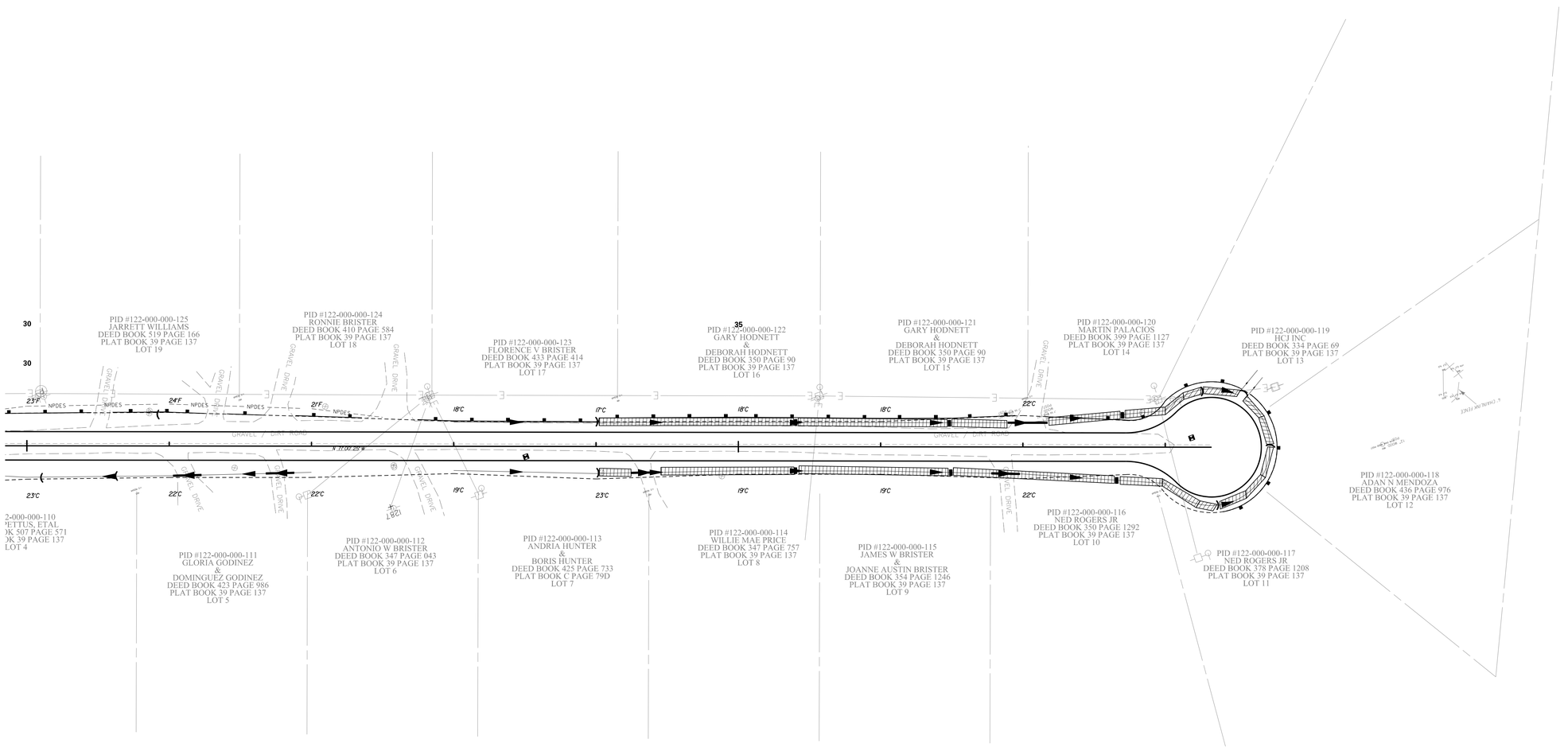
5/10/2023

FED. ROAD DIV. NO.	STATE	COUNTY	PROJECT ID	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHESTERFIELD	21-04464-001	___	___	EC-6	_



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5/10/2023

SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4	.....	.....	.....
3	.....	.....	.....
2	.....	.....	.....
1	.....	.....	.....

TOPO. ..... DATE .....
DWG. ..... DATE .....
R/W ..... DATE .....

CHESTERFIELD COUNTY

EROSION CONTROL SHEET

SCALE 1"= 40' RTE. ___ DWG. NO. ___

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X1

RICK HENRY RD.

EX. R/W
401.12
401.83
403.31
12:1
0.020 FT./FT.
0.020 FT./FT.
12:1
3:1
2:1
400.50
EX. R/W

5
31
13+00.00

STA.12+12.53
END SE
37
EX. R/W
401.53
402.48
403.25
3:1
4:1
12:1
0.026 FT./FT.
0.026 FT./FT.
38.6:1
4:1
402.20
EX. R/W
STA.12+92.53
END SE
85

15
15
STA.11+70.53
MAX.SE
30
STA.11+63.50
MAX.SE
12+00.00
STA.11+70.53
MAX.SE
78
STA.11+63.50
MAX.SE
EX. R/W
404.21
404.36
405.50
4:1
3:1
12:1
0.014 FT./FT.
0.009 FT./FT.
110.9:1
4:1
404.10
EX. R/W

1
27
43
11+00.00
50
STA.10+00.00
MATCH EXISTING SE
STA.10+00.00
MATCH EXISTING SE
409.88
410.46
410.46
4:1
3:1
84.7:1
0.012 FT./FT.
0.010 FT./FT.
12:1
4:1
3:1
409.28
22
0
10+00.00
0
0

STA. 10+00.00 BEGIN
RICK HENRY ROAD

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

5'
5'

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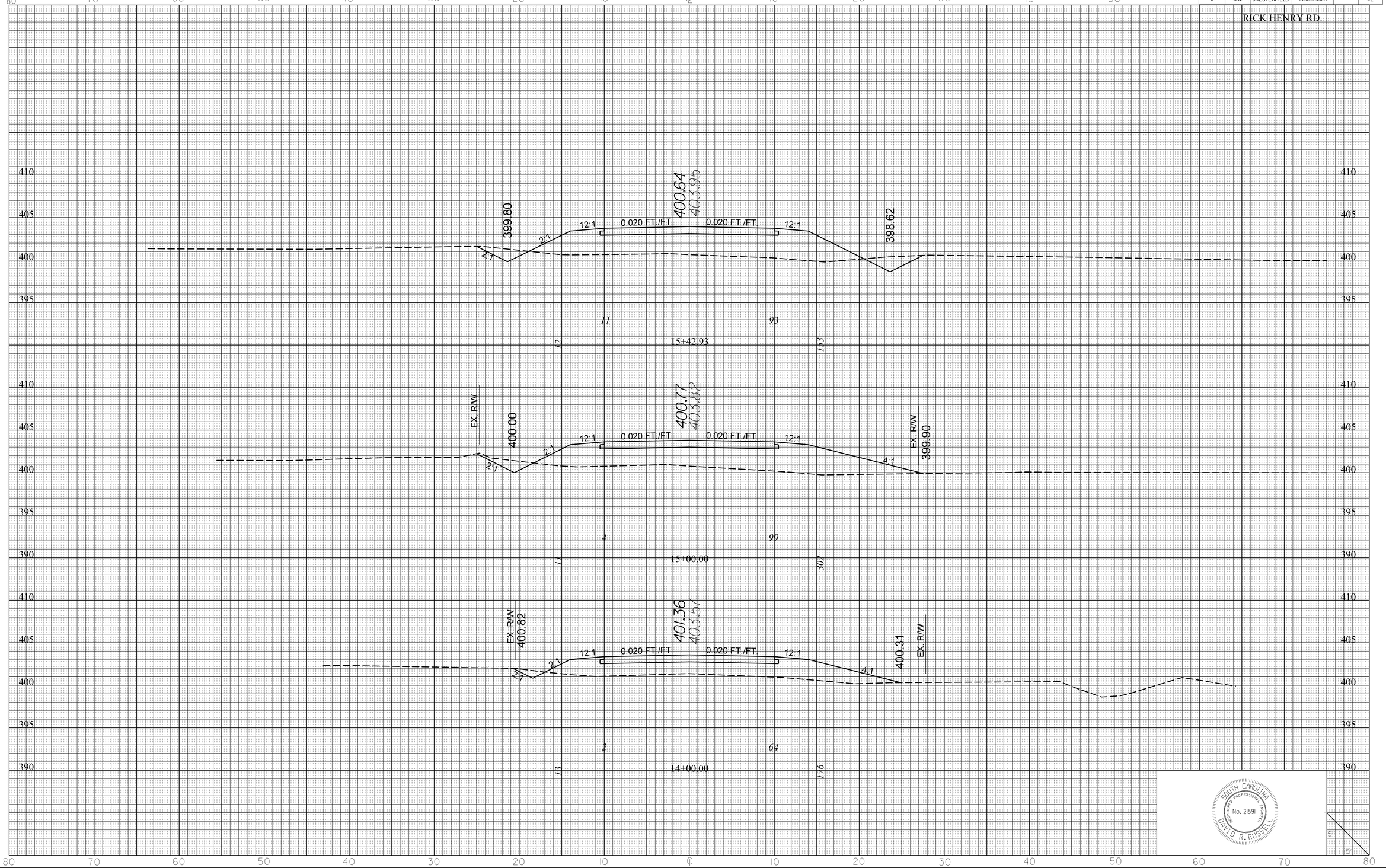
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X2

RICK HENRY RD.



FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X3

RICK HENRY RD.

STA 19+84.80
MAX. SE

STA 19+71.50
MAX. SE

STA 19+33.50
BEGIN SE

EX. R/W

403.40

404.28

405.32

12:1

0.020 FT./FT.

0.004 FT./FT.

283.7:1

4:1

404.09

3:1

2

14

19+00.00

19

93

STA 18+52.50
BEGIN SE

EX. R/W

402.53

403.26

404.92

12:1

0.020 FT./FT.

0.020 FT./FT.

12:1

3:1

402.25

EX. R/W

8

36

18+00.00

17

226

EX. R/W

401.60

401.49

404.52

12:1

0.020 FT./FT.

0.020 FT./FT.

12:1

3:1

401.00

EX. R/W

1

86

17+00.00

9

337

EX. R/W

400.12

400.80

404.13

12:1

0.020 FT./FT.

0.020 FT./FT.

12:1

3:1

400.00

EX. R/W

4

96

16+00.00

16

200

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 21591
DAVID R. RUSSELL

5'
5'

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

410 405 400 395

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FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X4

RICK HENRY RD.

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FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X5

RICK HENRY RD.

EX. R/W

18.7:1 4:1 0.053 FT./FT 0.053 FT./FT 12:1 4:1 2:1

394.33 395.92 392.80

EX. R/W

14 42

18 71

26+00.00

EX. R/W

16.7:1 4:1 0.060 FT./FT 0.060 FT./FT 12:1 4:1 2:1

394.78 396.26 393.61

EX. R/W

5 35

6 76

STA 25+86.90 MAX. SE

STA 25+29.90 MAX. SE

25+50.00

EX. R/W

22.2:1 4:1 0.045 FT./FT 0.053 FT./FT 12:1 4:1 2:1

395.23 396.99 394.50

EX. R/W

2 47

6 223

25+00.00

EX. R/W

STA 24+49.90 BEGIN SE

12:1 4:1 0.005 FT./FT 0.028 FT./FT 12:1 4:1

395.96 398.70 396.00

EX. R/W

1 73

2 228

24+00.00

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21591 DAVID R. RUSSELL

5°

5'

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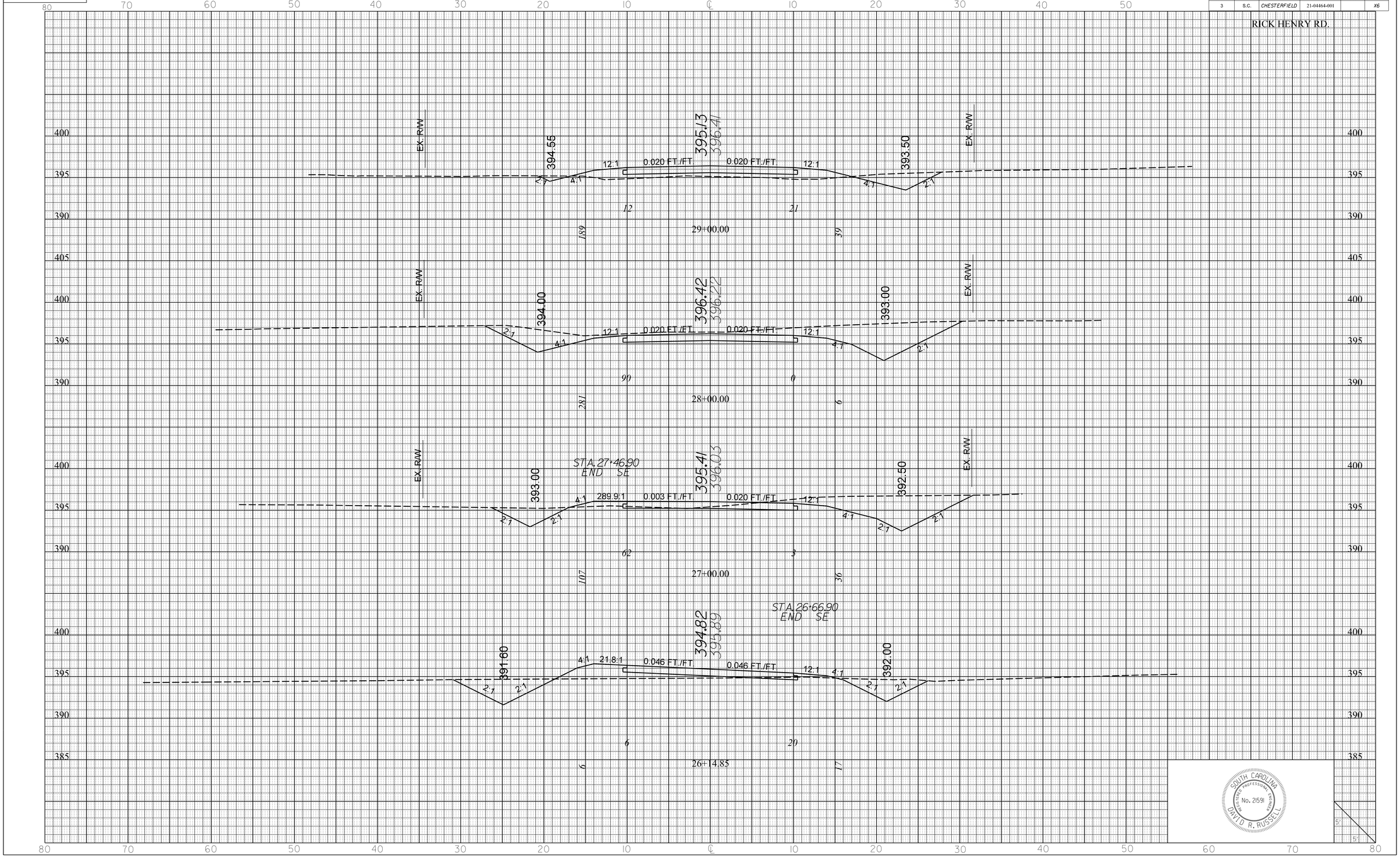
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X6

RICK HENRY RD.

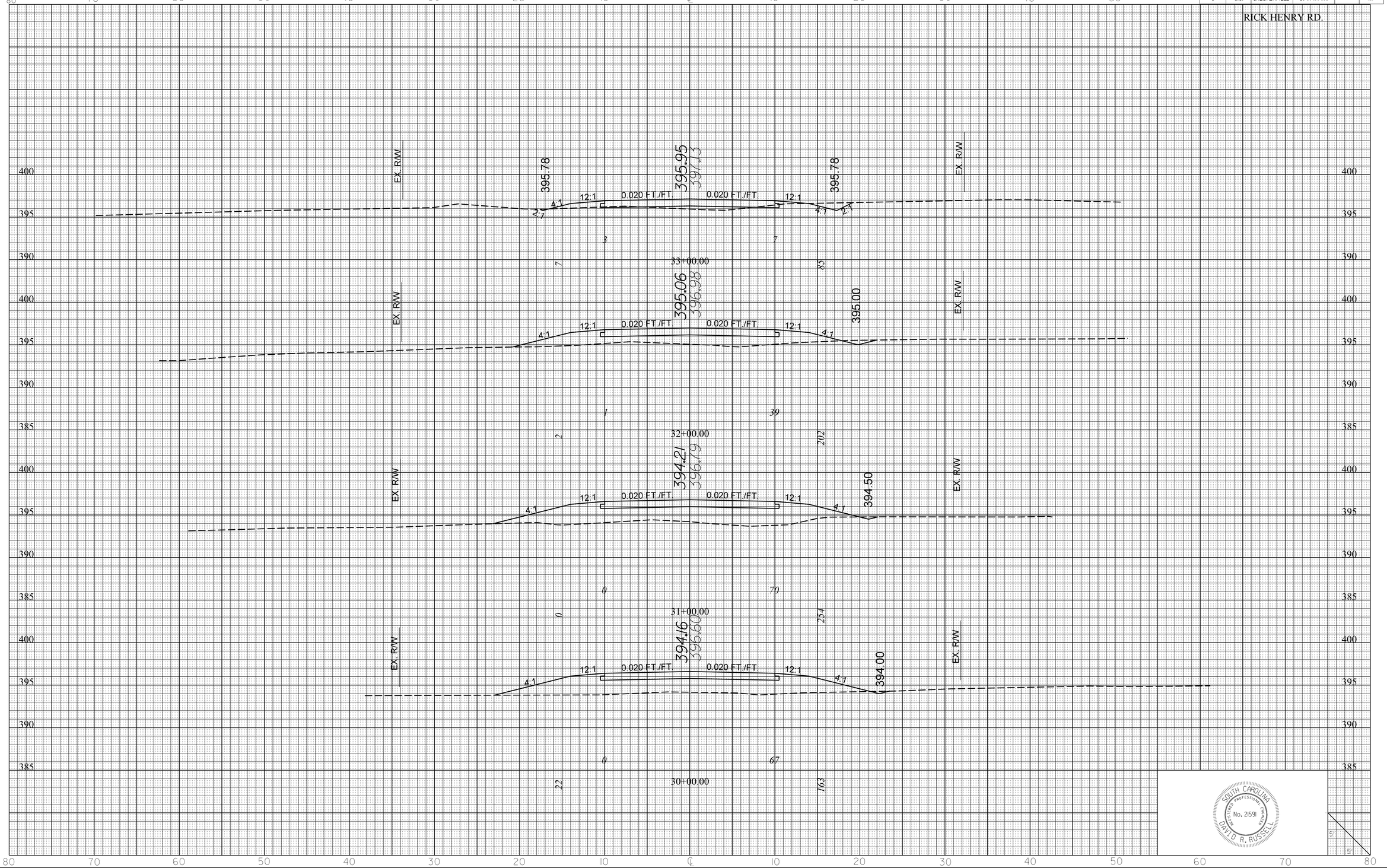


SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21591 DAVID R. RUSSELL

5
51

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X7

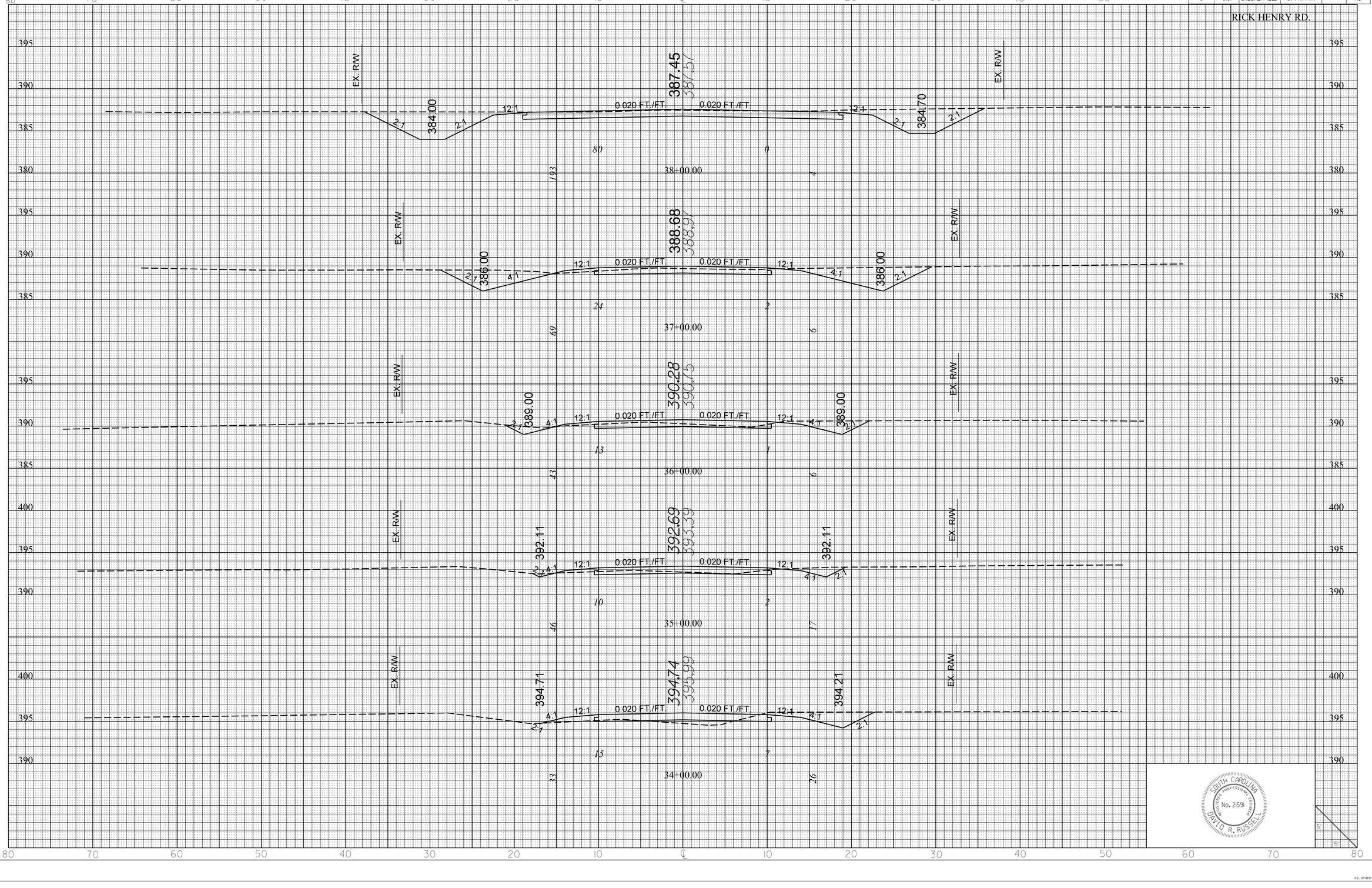
RICK HENRY RD.



SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 21591 DAVID R. RUSSELL

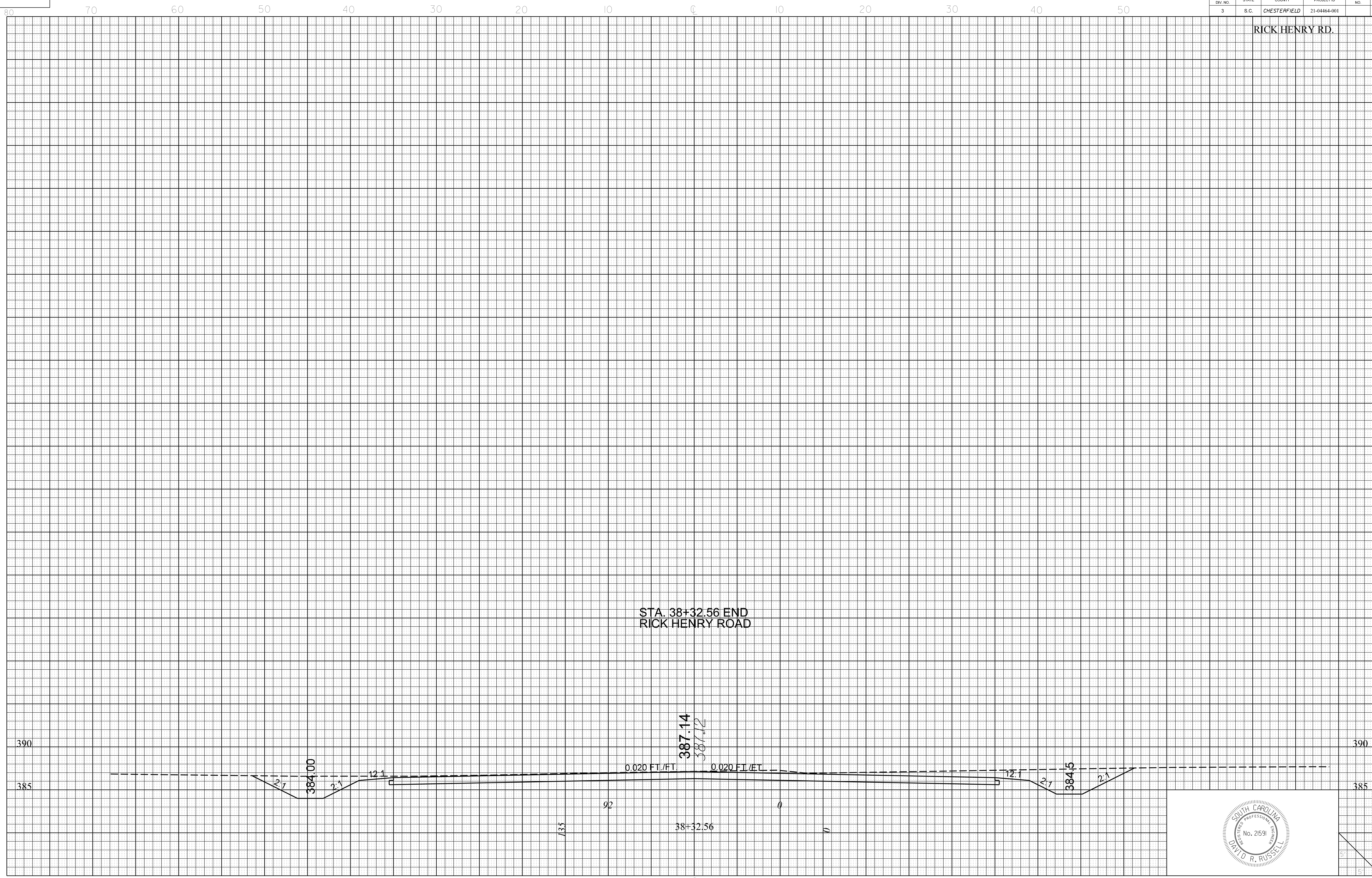
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		XB

RICK HENRY RD.



FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	RD NO.	SHEET NO.
3	S.C.	CHESTERFIELD	21-04464-001		X9

RICK HENRY RD.



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