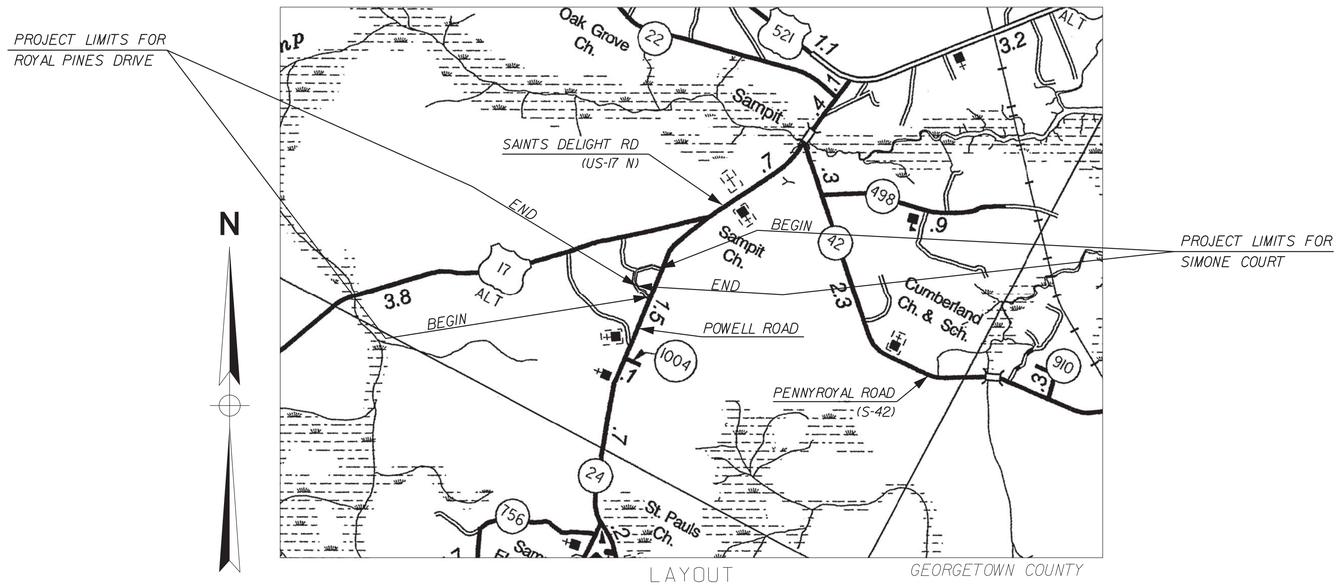
STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	ROUTE NO.	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES/SIMONE		1	28

GEORGETOWN COUNTY DEPARTMENT OF PUBLIC SERVICES
DIVISION OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENTS FOR ROYAL PINES DRIVE AND SIMONE COURT



LAYOUT
1" = 2640'

GEORGETOWN COUNTY

NPDES PERMIT INFORMATION
NPDES Disturbed Area = 1.24 Acres
Approximate Location of Roadway is: Longitude 79°28'04.42"W Latitude 33°21'28.76"N
Hydrology and NPDES Design provided by: Davis & Floyd

NET LENGTH OF ROADWAY	0.31	MILES
NET LENGTH OF OUTFALL	0.00	MILES
NET LENGTH OF PROJECT	0.31	MILES
LENGTH OF EXCEPTIONS	0.00	MILES
GROSS LENGTH OF PROJECT	0.31	MILES

NOTE: ALL WORKMANSHIP AND MATERIAL ON THIS PROJECT TO CONFORM WITH SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION), AND BOOK OF STANDARD DRAWINGS FOR ROAD CONSTRUCTION.

RAILROAD INVOLVEMENT?
YES / (NO)

INDEX OF SHEETS

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA

CALL 811

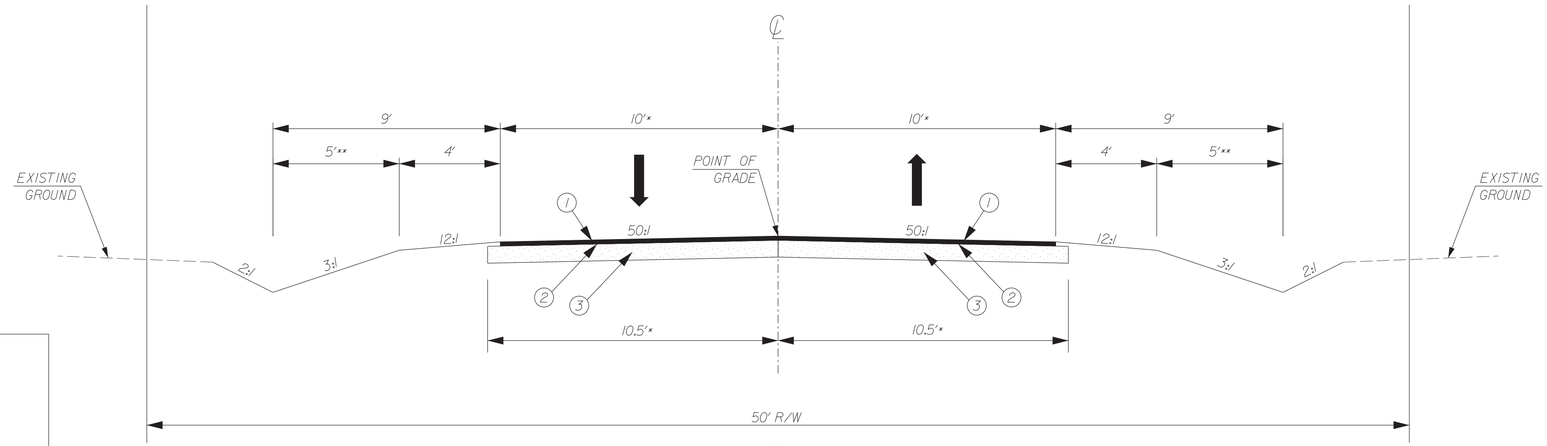
PALMETTO UTILITY PROTECTION SERVICES, INC. (PUPS)
ALL UTILITIES MAY NOT BE A MEMBER OF PUPS.

CONSULTING ENGINEERING FIRM	CONSULTANT - PROJECT ENGINEER
SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION	SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — ANDREW W. SMYRE

FOR CONSTRUCTION : 5/12/2021
DATE

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	3	

TYPICAL SECTION
ROYAL PINES DRIVE / SIMONE COURT
GEORGETOWN COUNTY



1

TWO LANE
TYPICAL SECTION
SIMONE CT. STA. 10+15.29 TO STA. 21+00.78
ROYAL PINES DR. STA. 69+76.81 TO STA. 74+88.14

*NOTE: SEE PLAN SHEETS FOR AREAS WHERE TRAVEL WAY WIDTH VARIES.

**NOTE: DITCH FORESLOPE WIDTH VARIES DUE TO SPECIAL DITCHES IN THE AREAS BELOW:

SIMONE CT:
- SPECIAL DITCH LEFT
  - STA. 10+90.16 TO STA. 17+75.75
  - STA. 18+50.00 TO STA. 20+53.00
- SPECIAL DITCH RIGHT
  - STA. 10+13.45 TO STA. 17+75.75
  - STA. 18+50.00 TO STA. 20+80.14

ROYAL PINES DR.
- SPECIAL DITCH LEFT
  - STA. 70+22.51 TO STA. 71+12.09
  - STA. 71+83.00 TO STA. 74+40.76
- SPECIAL DITCH RIGHT
  - STA. 70+11.20 TO STA. 74+35.91

SEE CROSS SECTIONS FOR MORE INFORMATION.

CONTRACTOR SHALL FOLLOW GEOTECHNICAL REPORT

WITHIN THE SCDOT R/W USE THE FOLLOWING PAVEMENT DESIGN
H/M ASPHALT CONCRETE SURFACE COURSE TYPE B (200#/SY)
H/M ASPHALT CONCRETE INTERMEDIATE COURSE TYPE B (250#/SY)
H/M ASPHALT CONCRETE BASE COURSE TYPE B (600#/SY)

PAVEMENT LEGEND
1. 2.5" H/M ASPHALT CONCRETE SURFACE COURSE TYPE C
2. PRIME COAT
3. 8" GRADED AGGREGATE BASE COURSE

SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — 4/12/2021 — ANDREW SMYTH

DAVIS & FLOYD

SINCE 1954

WWW.DAVISFLOYD.COM

3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

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

DGN. TJW DATE
R/W DATE
CHK. AMS DATE

GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

ROYAL PINES DRIVE & SIMONE COURT
TYPICAL SECTION SHEET

SCALE 1" = 3'

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	5	

GENERAL CONSTRUCTION NOTES:

THE CONTRACTOR MUST PERFORM ALL WORK IN ACCORDANCE WITH THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR ROAD CONSTRUCTION (LATEST EDITION), SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION), SCDOT TRAFFIC SIGNAL SPECIFICATIONS, AND THE MUTCD, 2009 EDITION.

THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES TO PREVENT THE TRANSFER OF SUSPENDED SOLIDS AND/OR CHEMICAL SOLUTIONS OFF-SITE, AND TO PREVENT EXCESSIVE SILTATION OF EXISTING DRAINAGE PIPES, CULVERTS, AND DITCHES. THE CONTRACTOR SHALL ROUTINELY INSPECT AND MAINTAIN THESE DEVICES. ALL CHECK DAMS AND RIPRAP SHOWN ARE CLASS B UNLESS OTHERWISE STATED.

THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE FACILITIES SHOWN ON THE PLANS ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE UTILITIES INFORMATION SHOWN ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATION OF ALL UTILITIES BEFORE CONSTRUCTION. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THAT THE PROPER COORDINATION WITH THE VARIOUS UTILITY OWNERS HAS BEEN PERFORMED. THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY DURING RELOCATION OPERATIONS.

THE LOCATION OF UTILITIES SHOWN IN THE PLANS SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS DESIGNATED BY A TEST HOLE. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.

THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, STORM DRAINS, UTILITIES AND OTHER FACILITIES TO REMAIN AND SHALL REPAIR OR COORDINATE WITH UTILITY OWNERS TO REPAIR ANY DAMAGES DUE TO CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.

THE CONTRACTOR SHALL NOT STORE ANY MATERIALS OR EQUIPMENT WITHIN 15 FT OF THE EDGE OF TRAVEL WAY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMISSION TO STORE EQUIPMENT ON ADJACENT PROPERTIES.

PIPE LENGTHS THAT ARE SHOWN ON THE PLANS ARE ROUNDED TO THE NEAREST 4' INCREMENT AND CALCULATED ALONG THE PIPE SLOPE FROM CENTER OF BOX TO CENTER OF BOX. FIELD ADJUSTMENTS OF THE ACTUAL PIPE LENGTHS MAY BE NECESSARY. ANY COSTS ASSOCIATED WITH REMOVING EXISTING PIPE SHALL BE INCLUDED IN THE COST OF PLACING NEW PIPE OR STRUCTURES ACCORDINGLY.

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN PROPER DEWATERING PROCEDURES TO PREVENT THE FLOW AND ACCUMULATION OF SURFACE AND GROUND WATER IN EXCAVATED AREAS. ALL OF THE WATER PUMPED OR DRAINED SHALL BE DISPOSED OF WITHOUT UNDUE INTERFERENCE WITH OTHER WORK OR DAMAGE TO PAVEMENTS AND OTHER SURFACES OR PROPERTY. DISCHARGED WATER FROM ALL DEWATERING OPERATIONS SHALL BE FILTERED IN ACCORDANCE WITH SCDHEC OR OCRM REGULATIONS OR AS APPROVED BY THE ENGINEER. A PLAN FOR DEWATERING SHALL BE SUBMITTED TO THE RESIDENT CONSTRUCTION ENGINEER AND OCRM FOR APPROVAL PRIOR TO ANY WORK BEING PERFORMED WHERE DEWATERING IS REQUIRED. ONCE APPROVED AN ADDITIONAL COPY OF THE PLAN SHOULD BE PROVIDED TO CHARLESTON COUNTY

THE CONTRACTOR SHALL PROVIDE A DETAILED CONTRACTOR'S EROSION CONTROL PLAN TO THE RESIDENT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO COMMENCING ANY WORK ON THE PROJECT.

THE CONTRACTOR SHALL PROVIDE A DETAILED TRAFFIC CONTROL PLAN TO THE RESIDENT CONSTRUCTION MANAGER FOR APPROVAL BEFORE STARTING ANY WORK ON THE PROJECT. THIS PLAN SHALL INCLUDE DETAILS CONCERNING PLACEMENT OF REFLECTORIZED BARRELS, CONES, AND/OR TYPE 2 BARRICADES IN ACCORDANCE WITH THE 2009 MUTCD.

THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES AND UTILITIES OR TO MINIMIZE TRENCH WIDTH AS REQUIRED. PAYMENT FOR SUCH MEASURES IS INCLUDED IN THE BID PRICE FOR THE ITEM BEING CONSTRUCTED.

WHERE STORM PIPES AND STRUCTURES ARE IDENTIFIED TO BE ABANDONED IN PLACE, THE FOLLOWING PROCEDURES SHALL BE UTILIZED:

PIPES: PLUG END(S) WITH BRICK AND GROUT.
STRUCTURES: REMOVE RIM/COVER AND CONE OR TOP SLAB.
PLUG PIPE OPENINGS WITH BRICK AND GROUT.
FILL STRUCTURE WITH FLOWABLE FILL TO BOTTOM OF PAVEMENT SECTION.
TEMPORARY ASPHALT IF NEEDED.

THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS SHOWN ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING CONSTRUCTION.

THE ENGINEER RESERVES THE RIGHT TO ADJUST THE LOCATION OF ALL PROPOSED IMPROVEMENTS TO MEET FIELD CONDITIONS IF NECESSARY.

STABILIZATION MEASURES MUST 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 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

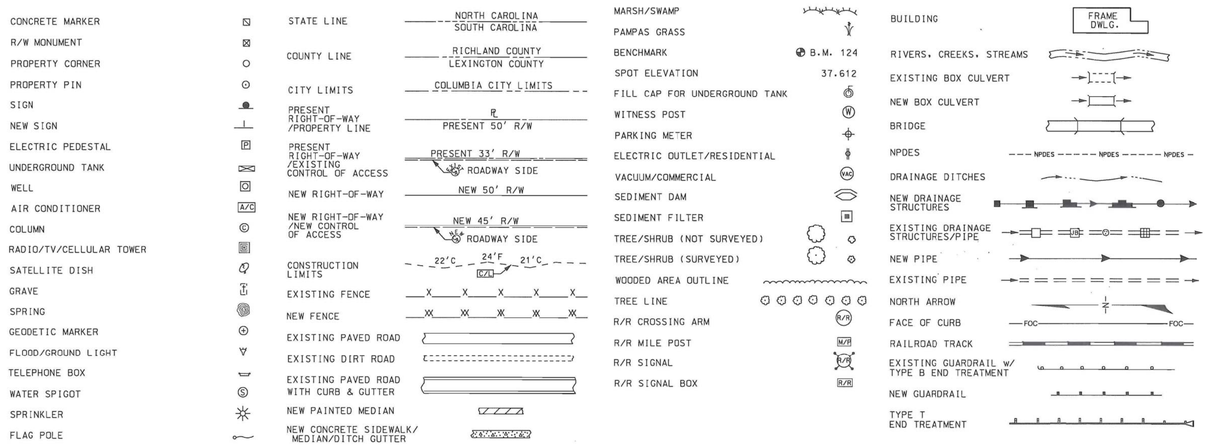
IF, DURING CONSTRUCTION, AN EXISTING MANHOLE OR VALVE IS FOUND TO BE PARTIALLY WITHIN SIDEWALK LIMITS, SIDEWALK WIDTH SHALL BE ADJUSTED TO COMPLETELY PLACE OR REMOVE MANHOLE OR VALVE WITHIN SIDEWALK LIMITS. MAXIMUM SLOPES SHOWN WITHIN PLANS AND MINIMUM 36" WIDTH MUST BE MAINTAINED.

ALL DISTURBED AREAS SHALL BE SEEDED AFTER GRADING IS COMPLETE OR WITHIN 7 DAYS AFTER WORK STOPS IN AN AREA UNLESS WORK IS TO RESUME IN THAT AREA IN LESS THAN 21 DAYS.

NOTE:
1. IF A SIGN MARKED TO BE RELOCATED IS DAMAGED BY THE CONTRACTOR, THE CONTRACTOR IS RESPONSIBLE FOR REPLACING THE SIGN.
2. CONTRACTOR IS TO SAW-CUT CONNECTIONS TO EXISTING ROADWAYS AND/OR DRIVEWAYS WHERE APPLICABLE.

PERMANENT CONSTRUCTION SIGNS:
CONSTRUCTION SIGN SETS SHALL BE PLACED AT BEGINNING OF CONSTRUCTION ON BRICK CHIMNEY RD, AT BEGINNING OF CONSTRUCTION ON JOHNSON RD, AND AT BOTH BEGINNING AND END OF CONSTRUCTION ON BROWNS FERRY RD. DISCRETION SHOULD BE USED IN PLACEMENT OF THE SIGNS, NO SIGHTLINES FROM ROADWAYS OR DRIVEWAYS SHOULD BE AFFECTED BY THE PLACEMENT OF THE SIGNS. FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR PERMANENT CONSTRUCTION SIGNS, SEE SCDOT STANDARD DRAWING 605-010-01.

STANDARD SYMBOLS



NOTE:
1. SEE SCDOT STANDARD DRAWING NO. 625-305-00 AND 625-410-00 FOR PAVEMENT MARKING DETAILS
2. SEE SCDOT STANDARD DRAWING NO. 719-016-01 AND 719-016-02 FOR CATCH BASIN TYPE 16 DETAIL
3. SEE SCDOT STANDARD DRAWING NO. 720-105-01 FOR CURB & GUTTER DETAIL
4. SEE SCDOT STANDARD DRAWING NO. 720-105-02 FOR CURB TRANSITION DETAIL

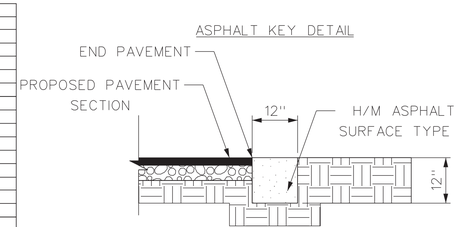
SEE DETAIL SHEETS D04-D05 FOR LANE AND SHOULDER CLOSURE DETAILS

INCLUSION ITEMS

THE FOLLOWING QUANTITIES ARE NOT SHOWN IN DETAIL ON THE PLANS BUT ARE INCLUDED IN THE SUMMARY OF ESTIMATED QUANTITIES AND MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER.

INCLUSION ITEMS			
DESCRIPTION	UNIT	QUANTITY	DESCRIPTION
MOBILIZATION	LS	NEC	PER CONTRACT DOCUMENTS
BONDS AND INSURANCE	LS	1	PER CONTRACT DOCUMENTS
CONSTRUCTION STAKES, LINES & GRADES	EA	1	PER CONTRACT DOCUMENTS
TRAFFIC CONTROL	LS	NEC	PER CONTRACT DOCUMENTS
AS-BUILT CONSTRUCTION PLANS	LS	1	PER CONTRACT DOCUMENTS
CLEARING & GRUBBING WITHIN ROADWAY	LS	NEC	FOR ALL AREAS WITHIN ROADWAY
UNCLASSIFIED EXCAVATION	CY	518	FOR STRIPPING
BORROW EXCAVATION	CY	674	FILL FOR STRIPPING
FINE GRADING	LS	NEC	WHERE DIRECTED BY THE ENGINEER
MAINTENANCE STONE	TON	100.00	WHERE DIRECTED BY THE ENGINEER
PERMANENT COVER	ACRE	1.2	FOR ALL DISTURBED AREAS
TEMPORARY COVER	ACRE	1.2	FOR ALL DISTURBED AREAS
AGRICULTURAL GRANULAR LIME	LB	2298	FOR ALL DISTURBED AREAS
FERTILIZER (NITROGEN)	LB	115	FOR ALL DISTURBED AREAS
FERTILIZER (PHOSPHORIC ACID)	LB	115	FOR ALL DISTURBED AREAS
FERTILIZER (POTASH)	LB	115	FOR ALL DISTURBED AREAS
SELECTIVE WATERING	GAL	31189	FOR ALL DISTURBED AREAS
MOWING	ACRE	5	FOR ALL DISTURBED AREAS
SEDIMENT TUBES FOR DITCH CHECKS	LF	58	WHERE DIRECTED BY THE ENGINEER
SILT FENCE	LF	200	WHERE DIRECTED BY THE ENGINEER
STABILIZED CONSTRUCTION ENTRANCE	SY	275	WHERE DIRECTED BY THE ENGINEER

ASPHALT KEY DETAIL



NOTE: ASPHALT KET SHALL BE EXTENDED ENTIRE WIDTH OF ROADWAY PAVEMENT.

SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — ANDREW SMYRE — 5/5/2021

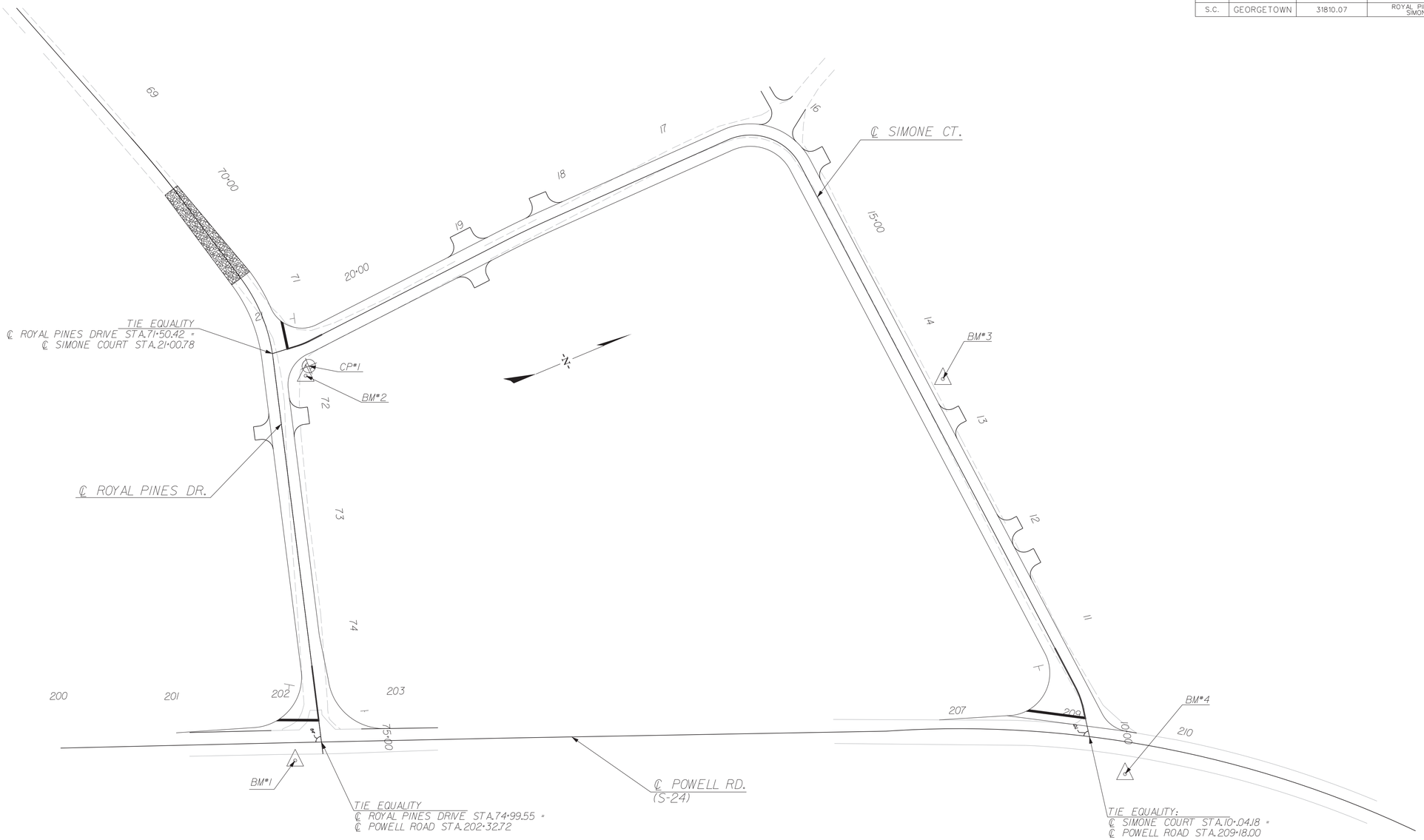
DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM
3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

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

DGN. TJW DATE
R/W DATE
CHK. AMS DATE

GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM
ROYAL PINES DRIVE & SIMONE COURT
GENERAL CONSTRUCTION NOTES SHEET
NTS

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	5A	



BENCHMARKS

ID	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET	ELEVATION
BM#1	REBAR/CAP	558046.43	2468068.43	202+09.22 (POWELL)	15.82' RT	53.59
BM#2	REBAR/CAP	558187.54	2467755.70	71+73.68 (ROYAL PINES)	26.93' LT	54.17
BM#3	REBAR/CAP	558710.64	2467977.69	13+48.43 (SIMONE)	23.59' RT	54.01
BM#4	REBAR/CAP	558724.48	2468365.39	209+54.68 (POWELL)	23.83' RT	53.49

CONTROL POINTS

ID	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET
CP#1	REBAR/CAP	558193.37	2467748.83	20+74.20 (SIMONE)	20.34' LT

0 50 100 150 200

SOUTH CAROLINA
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No. 35794
4/12/2021
ANDREW W. SMYTHE

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

DGN. TJW DATE
R/W DATE
CHK. AMS DATE

GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

ROYAL PINES DRIVE &
SIMONE COURT
REFERENCE DATA SHEET

SCALE 1" = 20' HOR. 1" = 5' VER.

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	5B	

Beginning chain SIMONE description

Point 970 N 558,707.3169 E 2,468,326.4738 Sta 10+00.00

Course from 970 to PC SIMONE1 N 79° 43' 32.50" W Dist 30.1584

Curve Data

Curve SIMONE1
P.I. Station 10+40.28 N 558,714.5005 E 2,468,286.8441
Delta = 15° 21' 54.70" (LT)
Degree = 76° 23' 39.74"
Tangent = 10.1172
Length = 20.1130
Radius = 75.0000
External = 0.6793
Long Chord = 20.0528
Mid. Ord. = 0.6732
P.C. Station 10+30.16 N 558,712.6960 E 2,468,296.7990
P.T. Station 10+50.27 N 558,713.6028 E 2,468,276.7668
C.C. N 558,638.8986 E 2,468,283.4220
Back = N 79° 43' 32.50" W
Ahead = S 84° 54' 32.80" W
Chord Bear = N 87° 24' 29.85" W

Course from PT SIMONE1 to 971 S 84° 54' 32.80" W Dist 106.2156

Point 971 N 558,704.1776 E 2,468,170.9702 Sta 11+56.49

Course from 971 to PC SIMONE2 S 84° 54' 32.80" W Dist 420.0526

Curve Data

Curve SIMONE2
P.I. Station 16+23.41 N 558,662.7451 E 2,467,705.8927
Delta = 86° 17' 41.20" (LT)
Degree = 114° 35' 29.61"
Tangent = 46.8668
Length = 75.3064
Radius = 50.0000
External = 18.5310
Long Chord = 68.3877
Mid. Ord. = 13.5202
P.C. Station 15+76.54 N 558,666.9039 E 2,467,752.5747
P.T. Station 16+51.85 N 558,615.8920 E 2,467,707.0261
C.C. N 558,617.1011 E 2,467,757.0114
Back = S 84° 54' 32.80" W
Ahead = S 1° 23' 08.41" E
Chord Bear = S 41° 45' 42.20" W

Course from PT SIMONE2 to PC SIMONE3 S 1° 23' 08.41" E Dist 174.0803

Curve Data

Curve SIMONE3
P.I. Station 18+49.61 N 558,418.1902 E 2,467,711.8083
Delta = 3° 00' 51.33" (LT)
Degree = 6° 21' 58.31"
Tangent = 23.6794
Length = 47.3479
Radius = 900.0000
External = 0.3115
Long Chord = 47.3424
Mid. Ord. = 0.3113
P.C. Station 18+25.93 N 558,441.8626 E 2,467,711.2357
P.T. Station 18+73.27 N 558,394.5805 E 2,467,713.6249
C.C. N 558,463.6265 E 2,468,610.9725
Back = S 1° 23' 08.41" E
Ahead = S 4° 23' 59.74" E
Chord Bear = S 2° 53' 34.07" E

Course from PT SIMONE3 to PC SIMONE4 S 4° 23' 59.74" E Dist 192.0051

Curve Data

Curve SIMONE4
P.I. Station 20+71.79 N 558,196.6544 E 2,467,728.8543
Delta = 9° 54' 56.64" (RT)
Degree = 76° 23' 39.74"
Tangent = 6.5061
Length = 12.9797
Radius = 75.0000
External = 0.2817
Long Chord = 12.9635
Mid. Ord. = 0.2806
P.C. Station 20+65.28 N 558,203.1413 E 2,467,728.3551
P.T. Station 20+78.26 N 558,190.1785 E 2,467,728.2289
C.C. N 558,197.3875 E 2,467,653.5762
Back = S 4° 23' 59.74" E
Ahead = S 5° 30' 56.90" W
Chord Bear = S 0° 33' 28.58" W

Course from PT SIMONE4 to 972 S 5° 30' 56.90" W Dist 22.5241

Point 972 N 558,167.7587 E 2,467,726.0639 Sta 21+00.78

Ending chain SIMONE description

Beginning chain POWELL_S24 description

Point 968 N 557,857.7042 E 2,467,977.6599 Sta 200+00.00

Course from 968 to 969 N 21° 21' 52.15" E Dist 204.1750

Point 969 N 558,047.8486 E 2,468,052.0408 Sta 202+04.17

Course from 969 to 970 N 22° 35' 39.44" E Dist 714.2912

End Region 1

Equation: Sta 209+18.47 (BK) = Sta 10+00.00 (AH)

Begin Region 2

Point 970 N 558,707.3169 E 2,468,326.4738 Sta 10+00.00

Course from 970 to PC POWELL_S241 S 25° 30' 01.86" W Dist 182.2909

End Region 2

Equation: Sta 11+82.29 (BK) = Sta 207+36.49 (AH)

Begin Region 3

Curve Data

Curve POWELL_S241
P.I. Station 209+84.68 N 558,777.7754 E 2,468,327.8494
Delta = 29° 11' 58.10" (RT)
Degree = 6° 00' 47.63"
Tangent = 248.1886
Length = 485.5871
Radius = 952.8286
External = 31.7931
Long Chord = 480.3493
Mid. Ord. = 30.7665
P.C. Station 207+36.49 N 558,542.7845 E 2,468,247.9941
P.T. Station 212+22.08 N 558,943.9476 E 2,468,512.1980
C.C. N 558,236.2093 E 2,469,150.1548
Back = N 18° 46' 08.24" E
Ahead = N 47° 58' 06.35" E
Chord Bear = N 33° 22' 07.30" E

Ending chain POWELL_S24 description

Beginning chain ROYALPINES description

Curve Data

Curve ROYALPINES7
P.I. Station 69+58.22 N 558,138.6711 E 2,467,538.1526
Delta = 4° 33' 23.19" (RT)
Degree = 5° 43' 46.48"
Tangent = 39.7834
Length = 79.5249
Radius = 1,000.0000
External = 0.7910
Long Chord = 79.5039
Mid. Ord. = 0.7904
P.C. Station 69+18.43 N 558,125.9183 E 2,467,500.4685
P.T. Station 69+97.96 N 558,148.3899 E 2,467,576.7306
C.C. N 557,178.6887 E 2,467,821.0243
Back = N 71° 18' 12.46" E
Ahead = N 75° 51' 35.64" E
Chord Bear = N 73° 34' 54.05" E

Course from PT ROYALPINES7 to PC ROYALPINES8 N 75° 51' 35.64" E Dist 78.8543

Curve Data

Curve ROYALPINES8
P.I. Station 71+16.52 N 558,177.3545 E 2,467,691.7026
Delta = 29° 39' 21.26" (RT)
Degree = 38° 11' 49.87"
Tangent = 39.7100
Length = 77.6390
Radius = 150.0000
External = 5.1673
Long Chord = 76.7752
Mid. Ord. = 4.9952
P.C. Station 70+76.81 N 558,167.6536 E 2,467,653.1958
P.T. Station 71+54.45 N 558,166.7319 E 2,467,729.9654
C.C. N 558,022.1984 E 2,467,689.8398
Back = N 75° 51' 35.64" E
Ahead = S 74° 29' 03.10" E
Chord Bear = S 89° 18' 43.73" E

Course from PT ROYALPINES8 to 205 S 74° 29' 03.10" E Dist 355.7897

Point 205 N 558,071.5566 E 2,468,072.7890 Sta 75+10.24

Ending chain ROYALPINES description

SOUTH CAROLINA
DAVIS & FLOYD, INC.
No. C00538
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SOUTH CAROLINA
PROFESSIONAL ENGINEER
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ANDREW SMITH
4/12/2021

DAVIS & FLOYD

SINCE 1954

WWW.DAVISFLOYD.COM

3209 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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DGN. TJW DATE
R/W DATE
CHK. AMS DATE

GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

ROYAL PINES DRIVE &
SIMONE COURT
REFERENCE DATA SHEET

NTS

CONSTRUCTION

FED. ROAD DIV.NO.	STATE	COUNTY	ROAD NAME	SHEET NO.	TOTAL SHEETS
3	S.C.	GEORGETOWN	ROYAL PINES & SIMONE	06	

℄ POWELL RD. (S-24)

STOP

PLACE R1-1-36 STOP SIGN

RELOCATE EXISTING STREET SIGN

TIE EQUALITY:
℄ SIMONE COURT STA.10+04.18 =
℄ POWELL ROAD STA.209+18.00

CURVE SIMONE-1
PI = 10+40.28
D = 15° 21' 55" (LT)
D = 76° 23' 40"
T = 10.12'
L = 20.11'
E = 0.68'
R = 75.00'
D.S. = 25mph
eMAX = N/A
e = N/A

CONSTRUCT SPECIAL TYPE 9 CB
ONE OPEN FACE WEIR WEST SIDE
15" DIA.ORIFICE WEST SIDE
ORIFICE INVERT = 51.59
STA.11+00.00 SIMONE CT.
OFFSET = 20.00' LT
WEIR ELEV. = 53.72
TOP ELEV. = 54.39
INSTALL INLET FILTER TYPE B

PLACE 10 TONS RIP RAP
CLASS B AND 12 SY FILTER
FABRIC TYPE D

PLACE 44 LF 15" RCP
INV.IN = 51.45
INV.OUT = 51.38

CONSTRUCT MANHOLE
STA.10+43.54
OFFSET = 19.78' LT
TOP ELEV = 53.91

PLACE 54 LF 15" RCP
INV.IN = 51.59
INV.OUT = 51.45

PLACE 10 TONS RIP RAP
CLASS B AND 12 SY FILTER
FABRIC TYPE D

PLACE 40 LF 18" RCP
INV.IN = 51.10
INV.OUT = 50.98

BEGIN CONSTRUCTION
SIMONE COURT
STA.10+15.29

PLACE 70 LF DOUBLE 4" SOLID YELLOW LINES

PLACE 54 LF 24" SOLID WHITE LINE

REMOVE EXISTING PIPES

PLACE 24 LF 15" RCP
INV.IN = 51.40
INV.OUT = 51.17

PLACE 24 LF 15" RCP
INV.IN = 51.71
INV.OUT = 51.48

PLACE 24 LF 15" RCP
INV.IN = 51.99
INV.OUT = 51.94

PLACE 8 LF SEDIMENT TUBE (TYP.)

PRESENT SCDOT 33' R/W FILE 22.322

CHRISTOPHER E.GRANT
01-0425-043-01-00
LOT 1 BERTHA WASHINGTON SUBDIVISION
PLAT BOOK Z PAGE 71
OBTAIN SLOPE PERMISSION

CHRISTOPHER E.GRANT
01-0425-043-05-00
LOT 5 BERTHA WASHINGTON SUBDIVISION
PLAT BOOK Z PAGE 71
OBTAIN SLOPE PERMISSION

CHRISTOPHER E.GRANT
01-0425-043-06-00

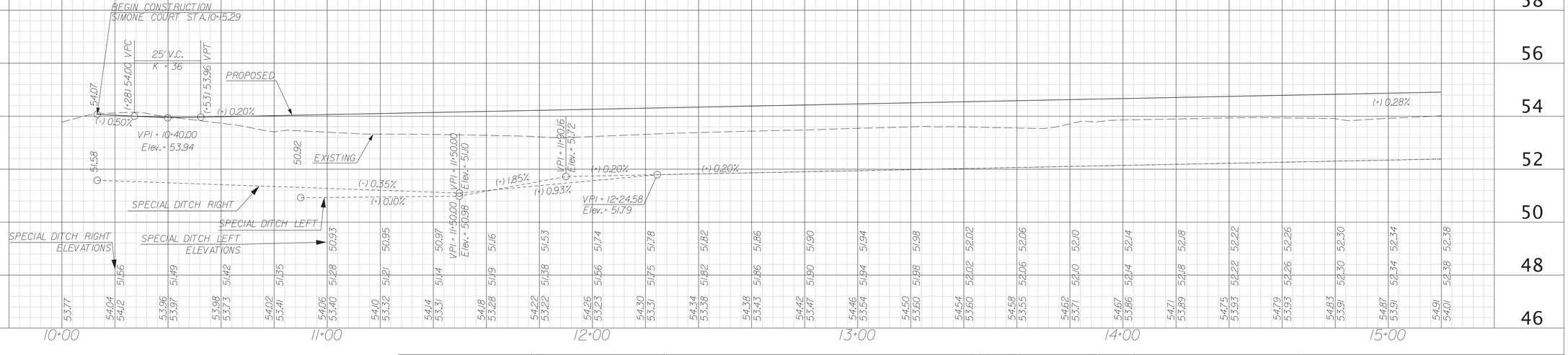
HOYT VERNON SMITH
01-0425-043-22-01
PLAT BOOK 18 PAGE 602

DARYA M.BRYANT
01-0425-043-13-00
PLAT BOOK 6 PAGE 387

CHRISTOPHER E.GRANT
01-0425-043-14-00
PLAT BOOK 7 PAGE 49

HOYT VERNON SMITH
01-0425-034-00-00

MATCHLINE STA.15+20.00
SEE SHEET 07



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5/5/2021

DAVIS & FLOYD, INC. — SOUTH CAROLINA — CERTIFICATE OF AUTHORIZATION — No. C00538

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — 5/5/2021 — ANDREW W. SMYTHE

DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM

3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

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R/W DATE
CHK. AMS DATE

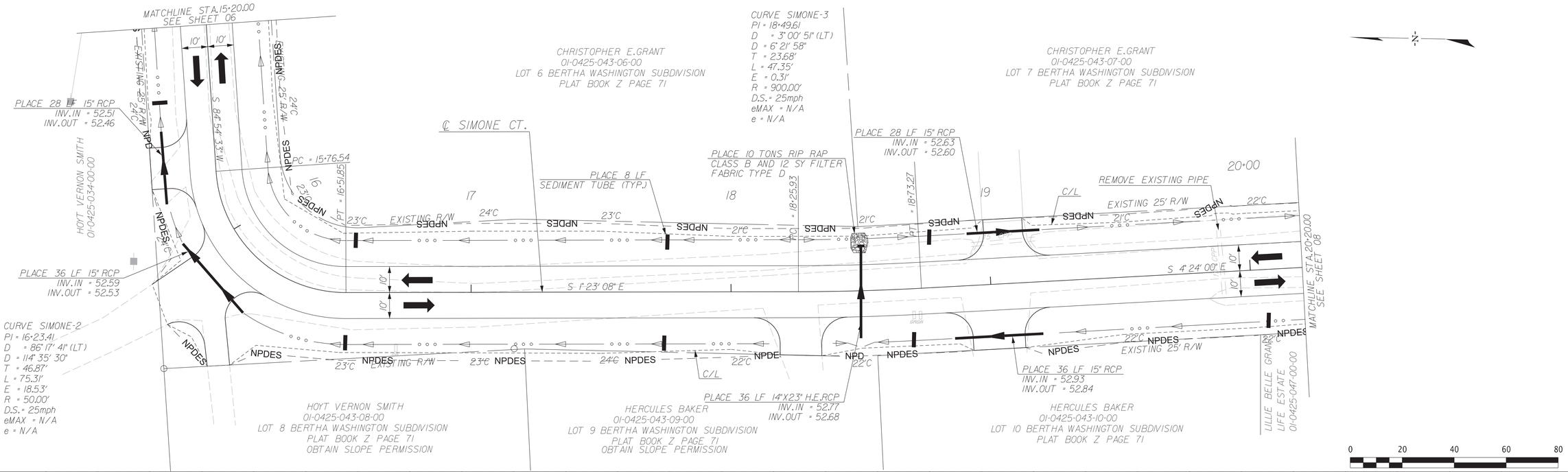
GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

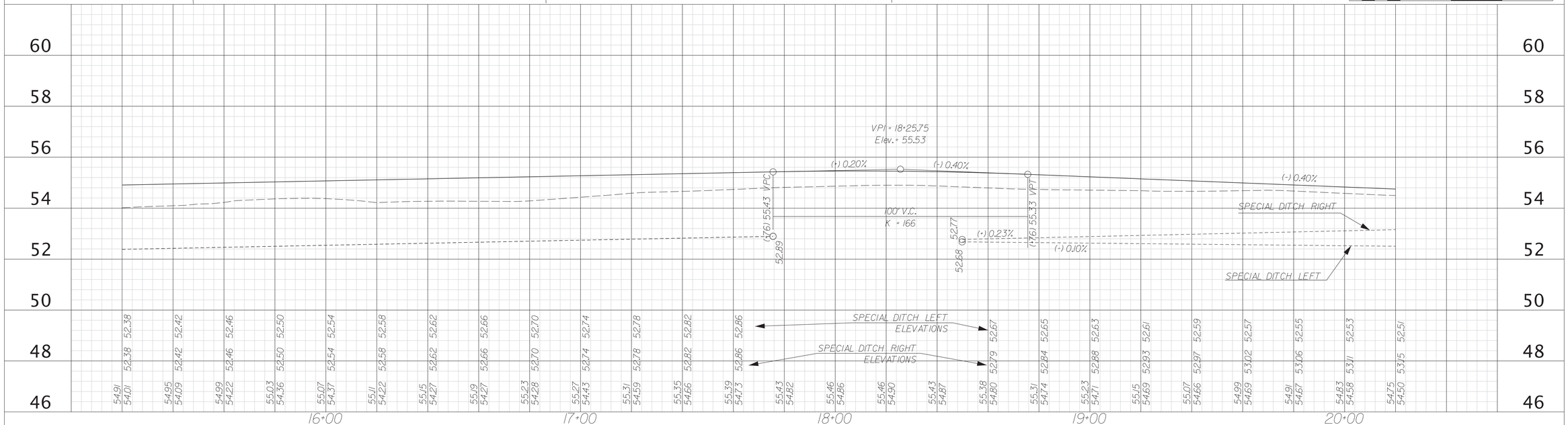
ROYAL PINES DRIVE & SIMONE COURT
STA. 10+15.29 TO STA. 15+20.00

SCALE 1" = 20' HOR. 1" = 5' VER.

CONSTRUCTION

FED. ROAD DIV.NO.	STATE	COUNTY	ROAD NAME	SHEET NO.	TOTAL SHEETS
3	S.C.	GEORGETOWN	ROYAL PINES & SIMONE	07	





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5/12/2021

SOUTH CAROLINA
DAVIS & FLOYD, INC.
No. C00538
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 35794
5/12/2021
ANDREW SMYRE

DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM

329 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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DGN. TJW DATE
R/W DATE
CHK. AMS DATE

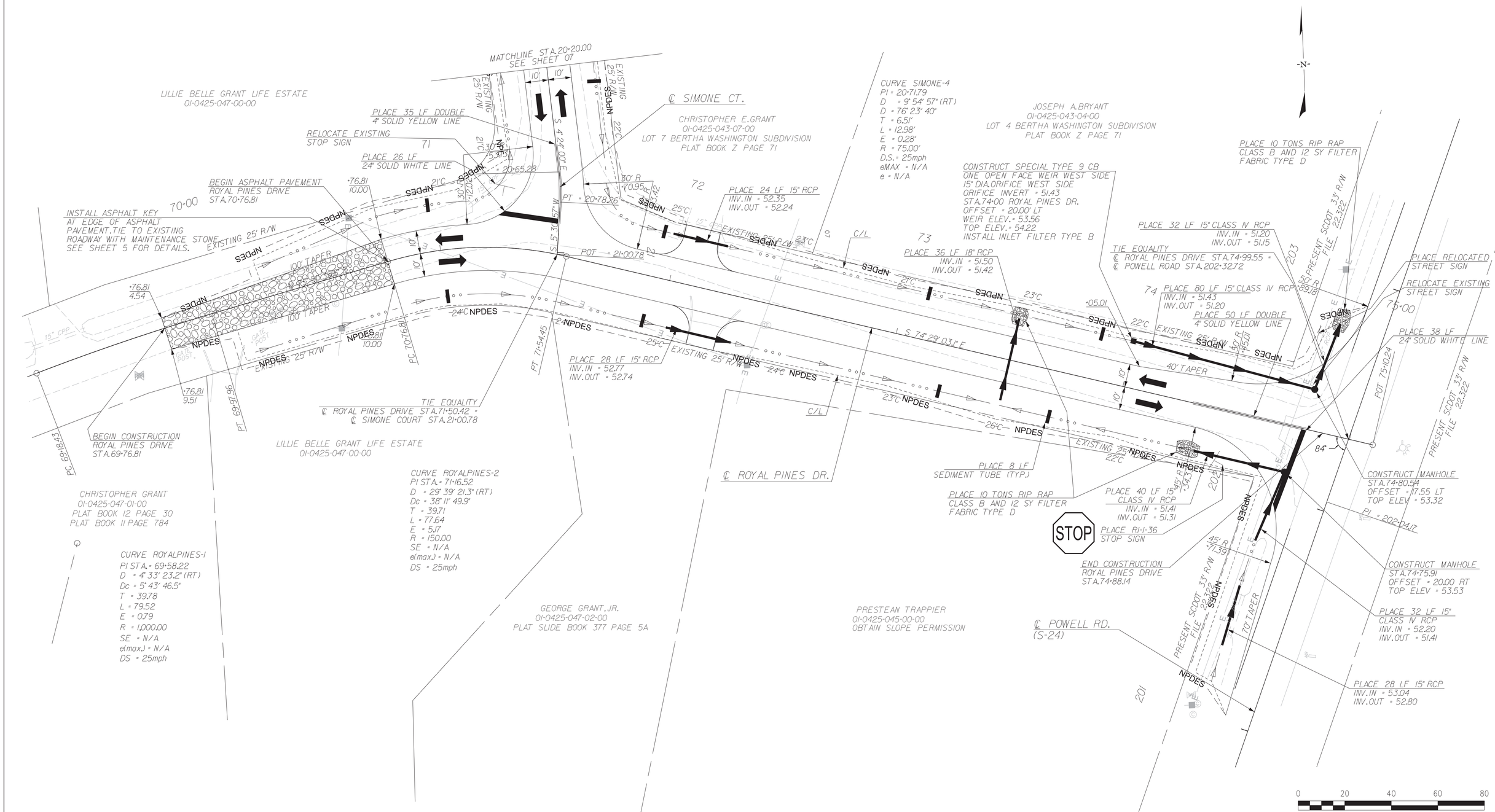
GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

ROYAL PINES DRIVE &
SIMONE COURT

STA. 15+20.00 TO STA. 20+20.00

SCALE 1"= 20' HOR. 1" = 5' VER.

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	08	



DAVIS & FLOYD, INC. — SOUTH CAROLINA — CERTIFICATE OF AUTHORIZATION — No. C00538

ANDREW W. SMYRL — SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — 5/5/2021

DAVIS & FLOYD

SINCE 1954

WWW.DAVISFLOYD.COM

3220 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

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R/W DATE
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GEORGETOWN COUNTY

ENGINEERED ROADS PROGRAM

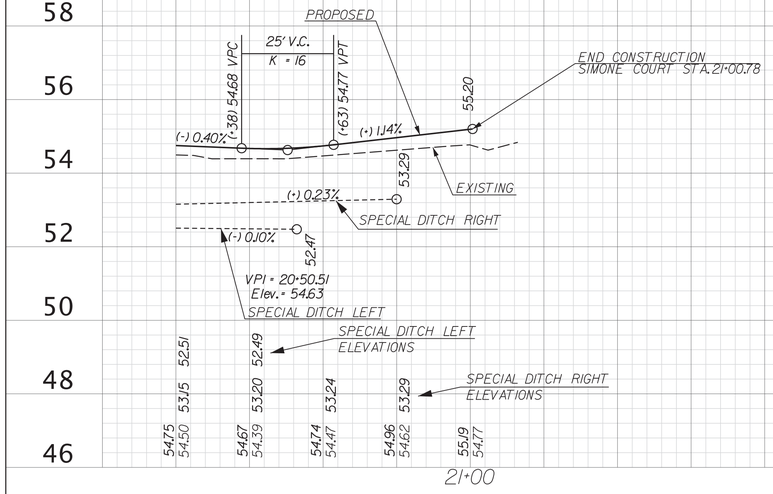
ROYAL PINES DRIVE &
SIMONE COURT
SIMONE STA. 20+20.00 TO STA. 21+00.78
ROYAL PINES STA. 69+76.81 TO
STA. 74+88.14

SCALE 1" = 20' HOR. 1" = 5' VER.

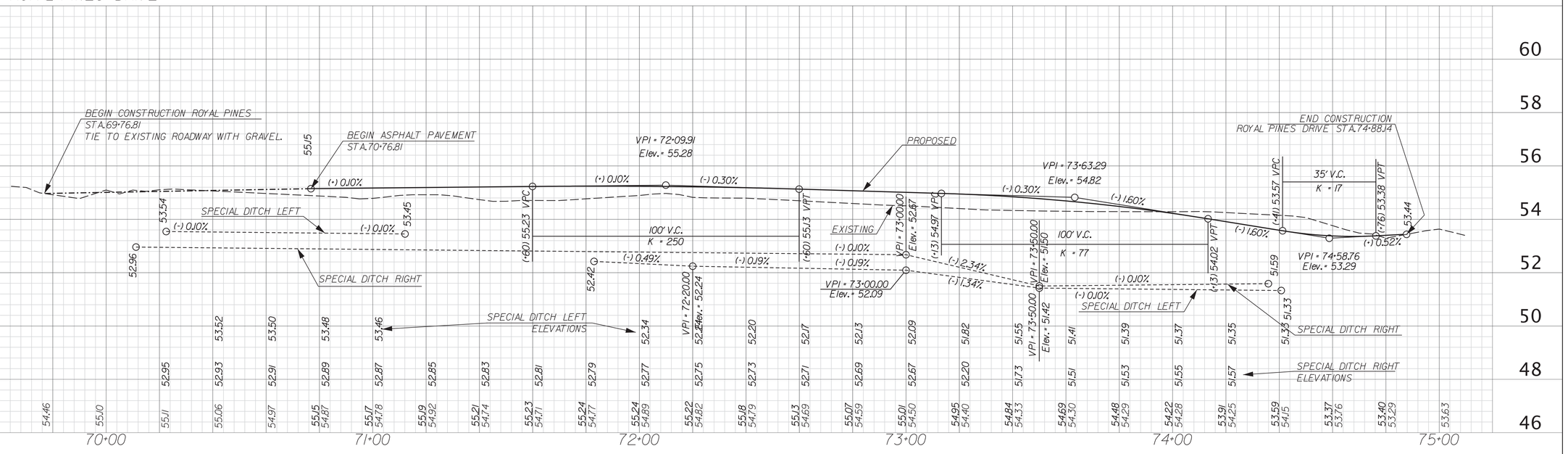
CONSTRUCTION

FED. ROAD DIV.NO.	STATE	COUNTY	ROAD NAME	SHEET NO.	TOTAL SHEETS
3	S.C.	GEORGETOWN	ROYAL PINES & SIMONE	08A	

SIMONE COURT



ROYAL PINES DRIVE



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5/5/2021

SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — 5/5/2021 — ANDREW W. SMITH

240 STONERIDGE DRIVE, SUITE 305
COLUMBIA, SC 29210
(803) 256-4121

DAVIS & FLOYD
SINCE 1954

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
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DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____

GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

ROYAL PINES DR. & SIMONE CT.
PROFILE SHEET
SIMONE STA. 20+20.00 TO STA. 21+00.78
ROYAL PINES STA. 69+76.81 TO STA 74+88.14

SCALE 1" = 5' VER. PLOT SIZE = 22" x 34"

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	EC1	

OCRM STANDARD NOTES

1. If necessary, slopes which exceed eight (8) 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 installed, 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 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 the construction area 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't 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 being a pollutant source in storm water discharges.

11. A copy of the SWPPP, inspections 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.

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 the Department has approved otherwise.

SEEDING INSTALLATION

A. Seed all disturbed areas of construction (excluding riprap lined ditches).

B. No seeding should be undertaken in windy or unfavorable weather, when the ground is too wet to rake easily, when it is in a frozen condition, or too dry.

C. The subgrade of all areas to be seeded shall be raked and all rubbish, sticks, roots, and stones larger than 2 IN shall be removed.

D. Fertilizer shall be uniformly spread and disked or roto-tilled to a depth of at least 4 IN.

E. Immediately following this preparation the seed shall be uniformly applied and lightly raked into the surface. Lightly roll the surface and water with fine spray. Seed shall be applied, depending on the period of year, at the rates indicated in Section 810 of the SCDOT Standard Specifications for Highway Construction (Edition 2007).

   All seeded areas shall be mulched with clean small-grain straw at a rate of 1½ to 2 tons per acre. Asphalt emulsion shall be applied uniformly at a rate of 300 GAL per acre to tack the mulch, unless otherwise shown on the plans. Mechanical tacking will be considered on a case-by-case basis as approved by the Engineer.

F. All seeded areas shall be watered and maintained in good condition. Reseeding shall be done if and when necessary until a good, healthy, uniform growth is established over the entire area seeded.

G. Slopes shall be protected against washouts by an approved method. Any washout which occurs shall be regraded and reseeded until good sod is established.

SEQUENCE OF CONSTRUCTION

A. Obtain all permits.

B. Contact the office of Ocean and Coastal Resource Management (OCRM) at (843)238-4528 prior to commencing construction activities.

C. Install sediment erosion controls as follows:

1. Silt Fences shall be used to prevent silt from leaving the limits of construction.
2. Stabilized Graveled Construction Entrances shall be used at locations where construction vehicles access public non-construction areas. Vehicles shall be washed down as necessary to prevent tracking of silt offsite.
3. A temporary rock filter dam or sediment tube shall be used as ditch checks as directed by the Engineer.
4. Adhere by all of the OCRM Standard Notes listed on the right of this sheet and install BMP's per the SCDOT Standard Drawings for Erosion Control.

D. A recommended sequence of construction follows:

1. Clear and grub only areas necessary for perimeter erosion and sediment control silt fence, hay bales, and temporary sediment traps.
2. Construct perimeter controls.
3. Construct new drainage appurtenances within the areas protected by perimeter controls.
4. Install protection around inlets and stabilize disturbed areas as soon as possible (within 7 calendar days).
5. Proceed with construction. Limit disturbed areas to areas with work in progress to limit disruption to traffic. Schedule work to maintain access to all driveways as long as possible.
6. Erosion controls may be removed after the area contributing flow to that particular erosion control device has been stabilized.
7. Stabilize all remaining areas.
8. Clean out temporary sediment control as needed; check controls every seven (7) days.
9. Remove sediment controls 30 days after all disturbed areas have stabilized.

SEE SHEETS DI-DIO AND SCDOT STANDARD DRAWINGS FOR EROSION CONTROL DETAILS

DRAWING NO.	DRAWING DESCRIPTION
804-305-01	RIPRAP (OUTLET PROTECTION W/ NO DEFINED CHANNEL)
804-305-02	
804-305-03	
804-310-00	RIPRAP (OUTLET PROTECTION W/ DEFINED CHANNEL)
815-205-00	SEDIMENT TUBE DITCH APPLICATION
815-505-00	STABILIZED CONSTRUCTION ENTRANCE
815-605-00	TEMPORARY SILT FENCE
815-605-30	ROLLED EROSION CONTROL PRODUCT
815-805-00	FLOATING TURBIDITY CURTAIN

Copies of SCDOT Standard Drawings are available at the following web address http://www.scdot.org/business/standard-drawings.aspx

SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — 4/12/2021 — ANDREW W. SMYRE

DAVIS & FLOYD

SINCE 1954

WWW.DAVISFLOYD.COM

3228 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

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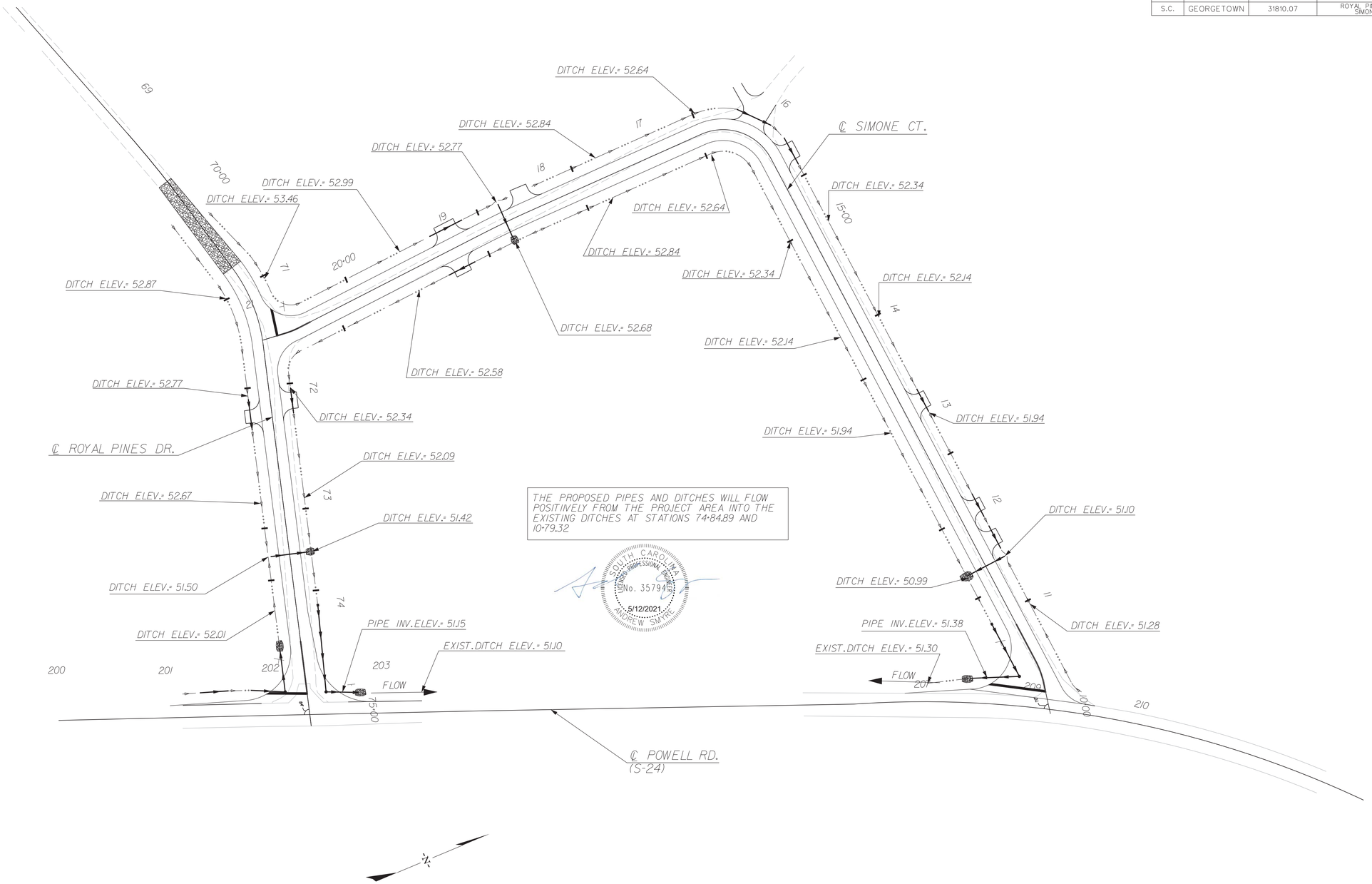
GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

ROYAL PINES DRIVE & SIMONE COURT
EROSION CONTROL NOTES

N.T.S.

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	EC2	



THE PROPOSED PIPES AND DITCHES WILL FLOW POSITIVELY FROM THE PROJECT AREA INTO THE EXISTING DITCHES AT STATIONS 74+84.89 AND 10+79.32

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 35794 ANDREW SMITH 5/12/2021

0 50 100 150 200

DAVIS & FLOYD, INC. No. C00538 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 35794 ANDREW SMITH 5/12/2021

DAVIS & FLOYD

SINCE 1954

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3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
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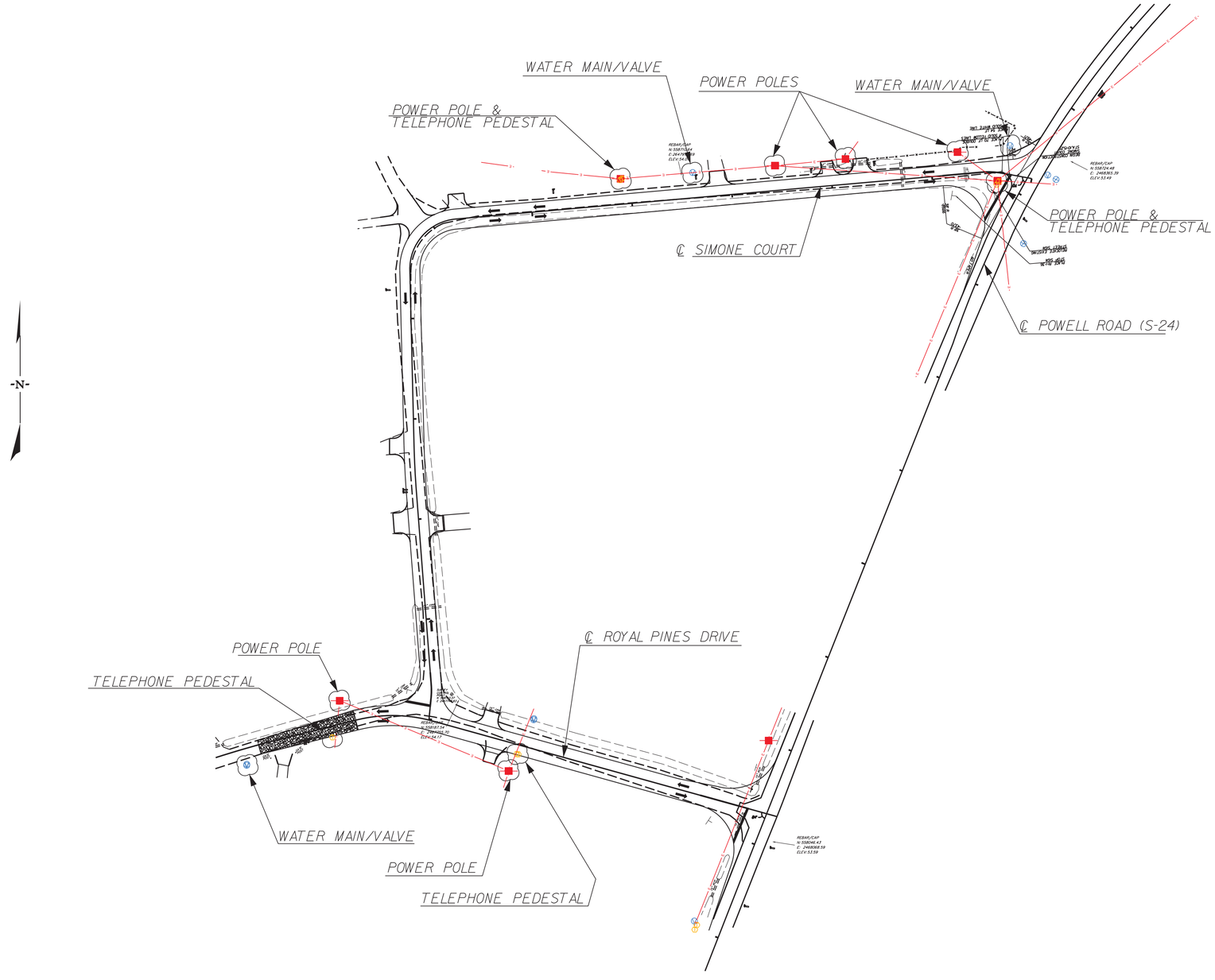
GEORGETOWN COUNTY

ENGINEERED ROADS PROGRAM

ROYAL PINES DRIVE & SIMONE COURT DITCH ELEVATION SHEET

SCALE 1" = 20' HOR. 1" = 5' VER.

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	U1	



FOR INFORMATION ONLY. CONTRACTOR SHALL CALL PUPS (811) BEFORE DIGGING

- TELEPHONE PEDESTAL
- WATER METER
- WATER VALVE
- SEWER MANHOLE
- POWER POLE
- LIGHT POLE (L/P)
- GUY WIRE
- SEWER CLEANOUT
- SEWER VALVE
- POTENTIAL CONFLICT

0 60 120 180 240

FOR UTILITY COORDINATION ONLY

DAVIS & FLOYD

SINCE 1954

WWW.DAVISFLOYD.COM

3279 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

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GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM
ROYAL PINES DRIVE & SIMONE COURT
UTILITY SHEET

SCALE 1"= 60'

CONSTRUCTION

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810-07	ROYAL PINES & SIMONE	X1	

SOUTH CAROLINA
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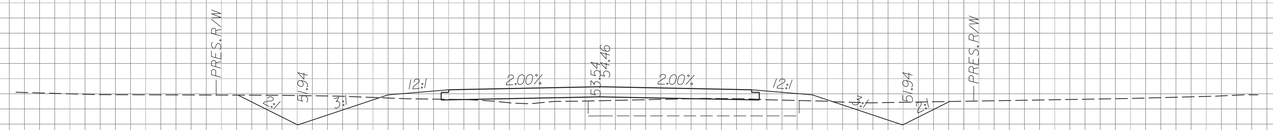
SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 35794
4/12/2021
ANDREW SMYRL



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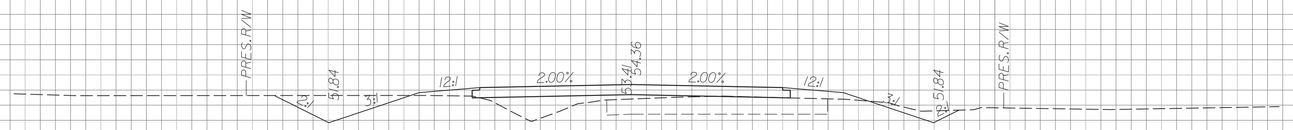

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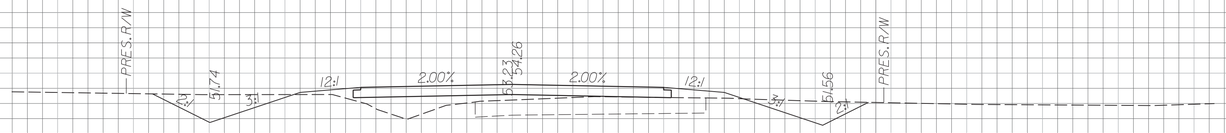

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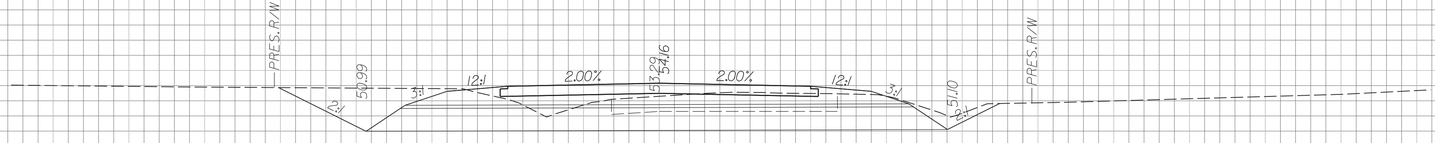
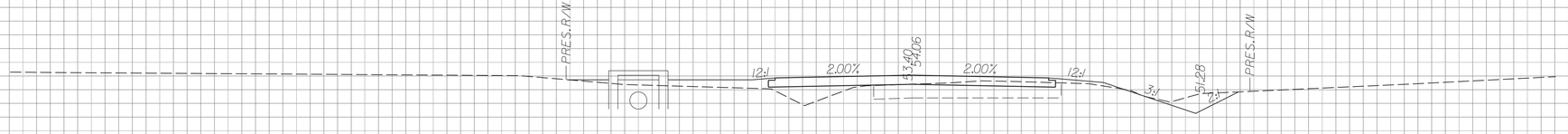


11+50.00



11+00.00

BEGIN CONSTRUCTION
STA. 10+15.29

SIMONE CT.
STA. 10+15.29

TO

STA. 13+00.00

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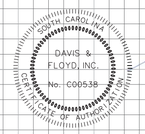
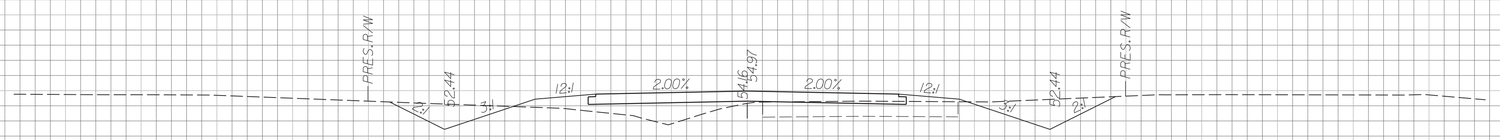
CONSTRUCTION

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810-07	ROYAL PINES & SIMONE	X2	





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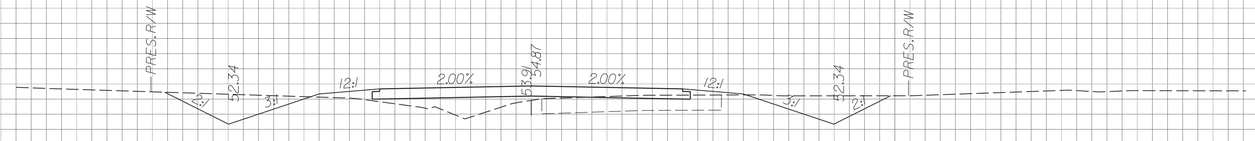

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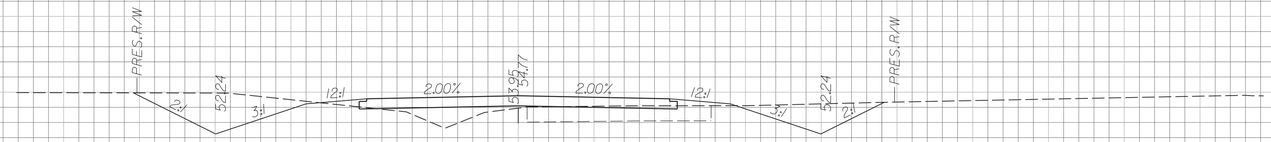

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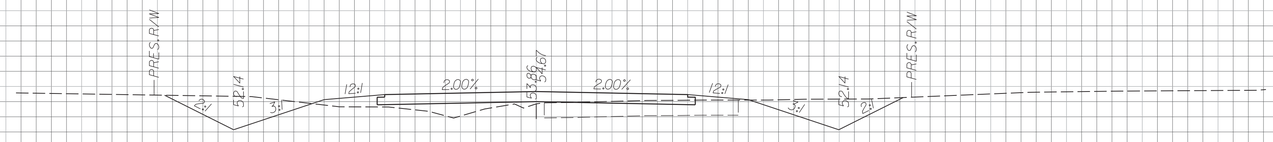

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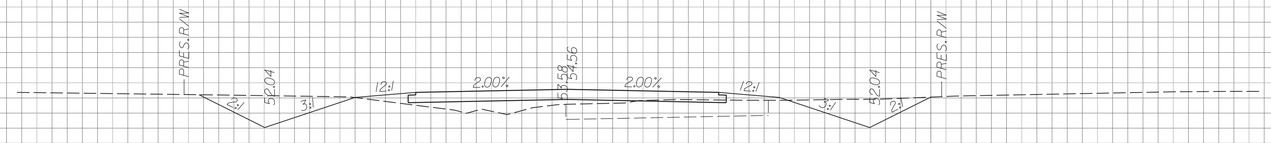

13+50.00

SIMONE CT.
STA. 13+50.00
TO
STA. 15+50.00

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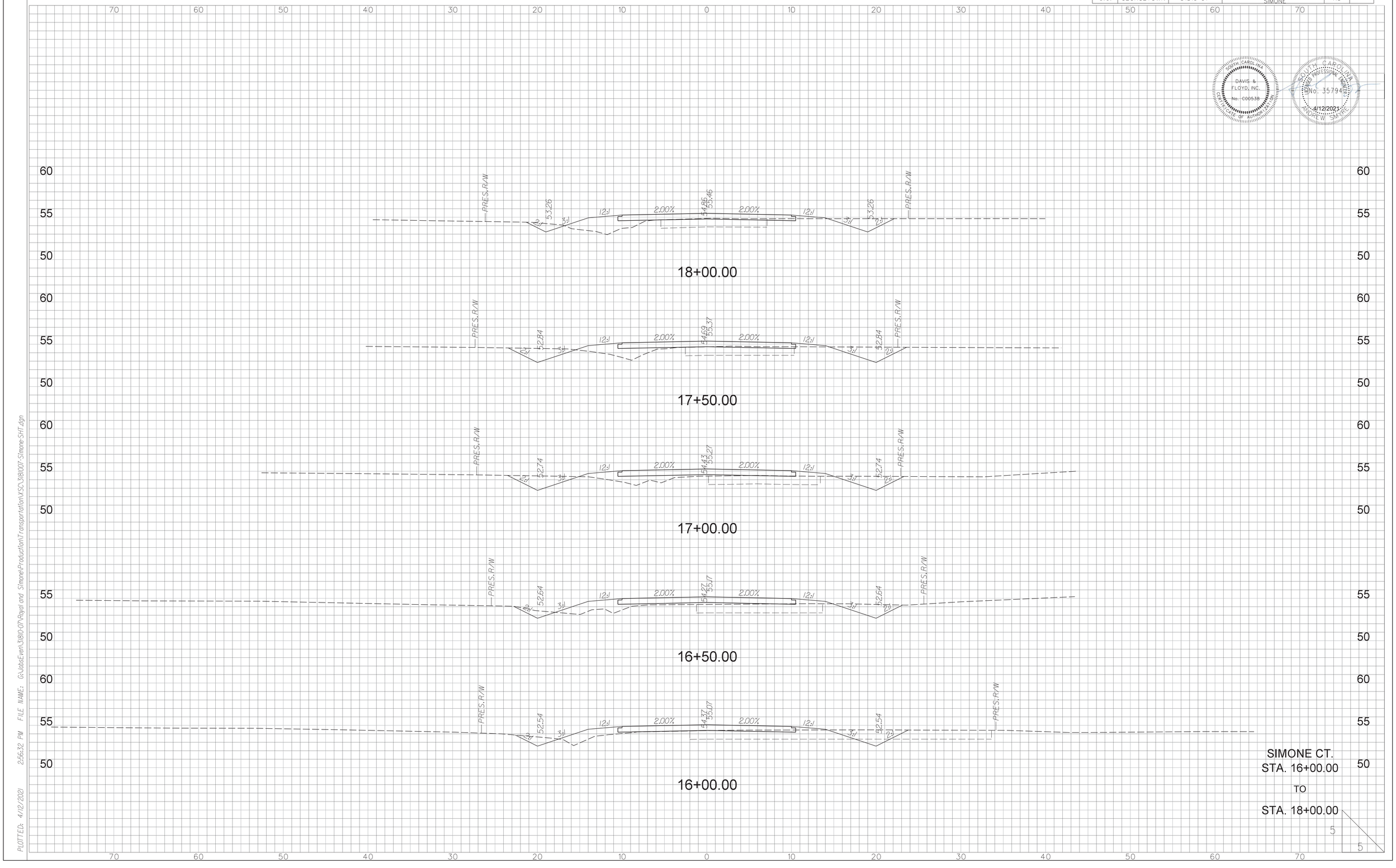
CONSTRUCTION

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810-07	ROYAL PINES & SIMONE	X3	



SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 35794 — 4/12/2021 — ANDREW M. PYRC

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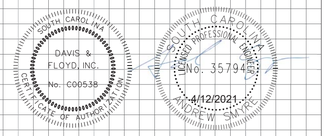
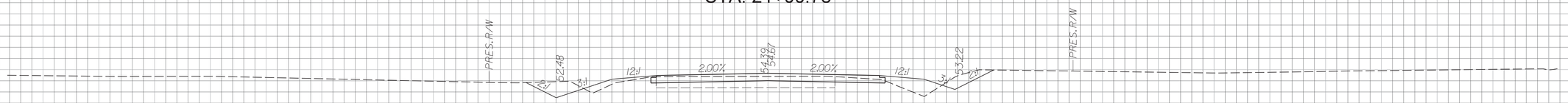
CONSTRUCTION

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810-07	ROYAL PINES & SIMONE	X4	



END CONSTRUCTION
STA. 21+00.78



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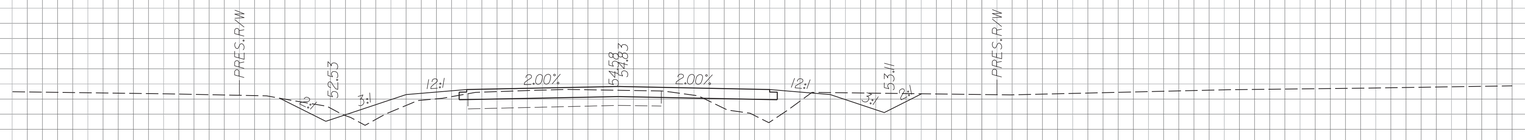

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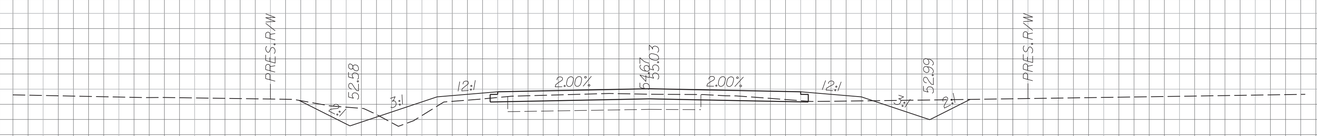
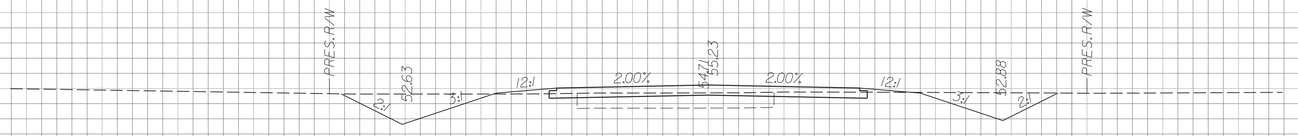
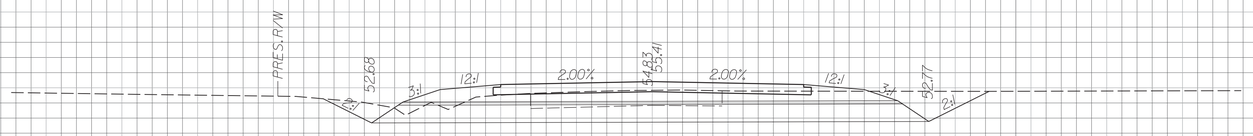


19+50.00



19+00.00



18+50.00

SIMONE CT.
STA. 18+50.00
TO
STA. 21+00.78

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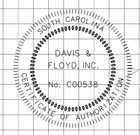
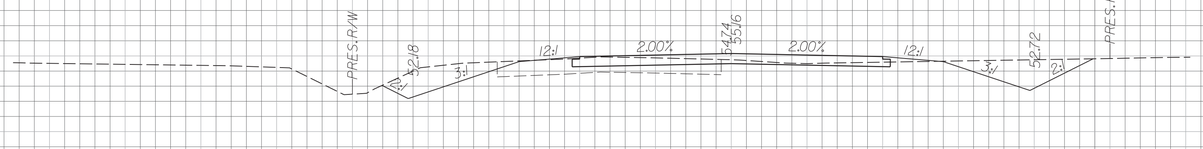
CONSTRUCTION

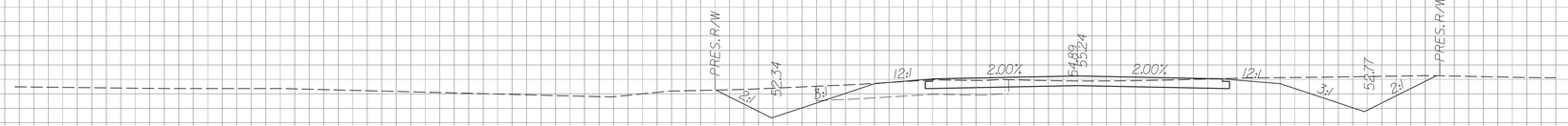
STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810-07	ROYAL PINES & SIMONE	X5	



73+00.00



72+50.00



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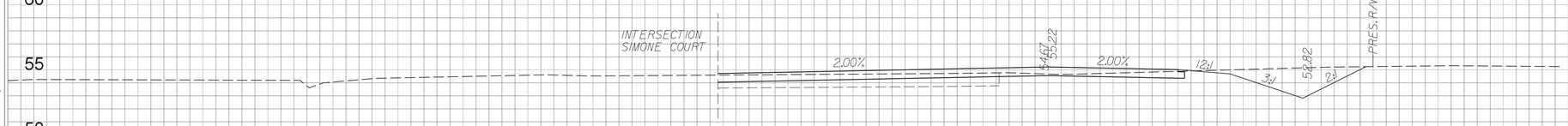
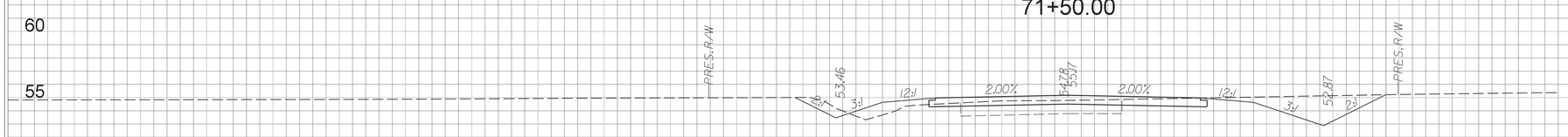


71+50.00



71+00.00

BEGIN CONSTRUCTION
STA. 69+76.81

ROYAL PINES DR.
STA. 69+76.81
TO
STA. 73+00.00

5 5

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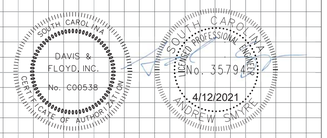
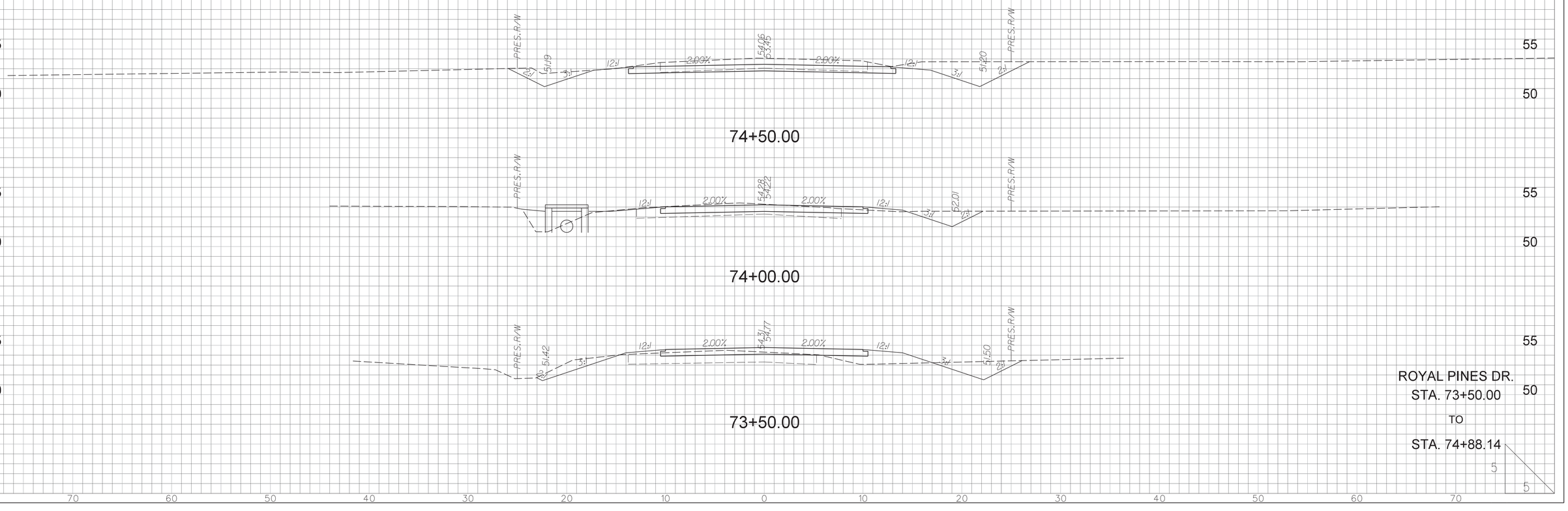
CONSTRUCTION

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810-07	ROYAL PINES & SIMONE	X6	



END CONSTRUCTION
STA. 74+88.14



ROYAL PINES DR.
STA. 73+50.00
TO
STA. 74+88.14

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PERMANENT SEEDING - COASTAL

SPECIES	LBS/Ac	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/Ac 40 LBS/Ac												
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/Ac 30 LBS/Ac 40 LBS/Ac												
BROWNTOP MILLET ATLANTIC COASTAL PANICGRASS	10 LBS/Ac 15 LBS/Ac PLS												
BROWNTOP MILLET SWITCHGRASS (ALAMO) LITTLE BLUESTEM SERICEA LESPEDEZA	10 LBS/Ac 8 LBS/Ac PLS 4 LBS/Ac 20 LBS/Ac												
BROWTOP MILLET WEEPING LOVEGRASS	10 LBS/Ac 8 LBS/Ac												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/Ac 40 LBS/Ac												
RYE, GRAIN BAHIAGRASS CLOVER, CRIMSON (ANNUAL)	10 LBS/Ac 40 LBS/Ac 5 LBS/Ac												
BROWTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/Ac 30 LBS/Ac 40 LBS/Ac												
BROWTOP MILLET BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/Ac 10 LBS/Ac 40 LBS/Ac												
BROWNTOP MILLET BERMUDA, COMMON KOBE LESPEDEZA (ANNUAL)	10 LBS/Ac 12 LBS/Ac 10 LBS/Ac												
BROWNTOP MILLET BAHIAGRASS BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/Ac 20 LBS/Ac 6 LBS/Ac 40 LBS/Ac												
BROWNTOP MILLET SWITCHGRASS LITTLE BLUESTEM INDIANGRASS	10 LBS/Ac 8 LBS/Ac PLS 3 LBS/Ac PLS 3 LBS/Ac PLS												

TEMPORARY SEEDING - COASTAL

SPECIES	LBS/Ac	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET RYE, GRAIN RYEGRASS	40 LBS/Ac 56 LBS/Ac 50 LBS/Ac												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET OR JAPANESE MILLET	40 LBS/Ac												
RYE, GRAIN OR OATS	56 LBS/Ac 75												
RYEGRASS	50 LBS/Ac												

NOTES:

1) *ANY REFERENCES TO PAYMENT IS SUPERCEDED BY PROJECT SPECIFICATIONS IN THE CONTRACT.*

2) *FIELD ADJUSTMENTS TO IMPLEMENT DETAILS MAY BE REQUIRED AND CAN BE APPROVED BY THE COUNTY RESIDENT CONSTRUCTION MANAGER OR THE PROJECT ENGINEER.*

SOUTH CAROLINA DAVIS & FLOYD, INC. No. C00538 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 35794 02/13/2020 ANDREW SMYRE

DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM
3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

SEEDING SCHEDULE

N.T.S.

NOTES:
1. GEOTEXTILE FABRIC TO BE USED UNDER RIPRAP WHEN INCLUDED IN THE PLANS

2. ALTERNATE PIPE END TREATMENTS ARE ALSO AVAILABLE. SEE STANDARD DRAWING SECTION 719-600-00.

3. PAY ITEMS:
8041xxx RIP-RAP (CLASS _) - _____ TON
8048xxx GEOTEXTILE FOR EROSION CONTROL UNDER RIPRAP(CLASS 2)TYPE _ - ____ SY

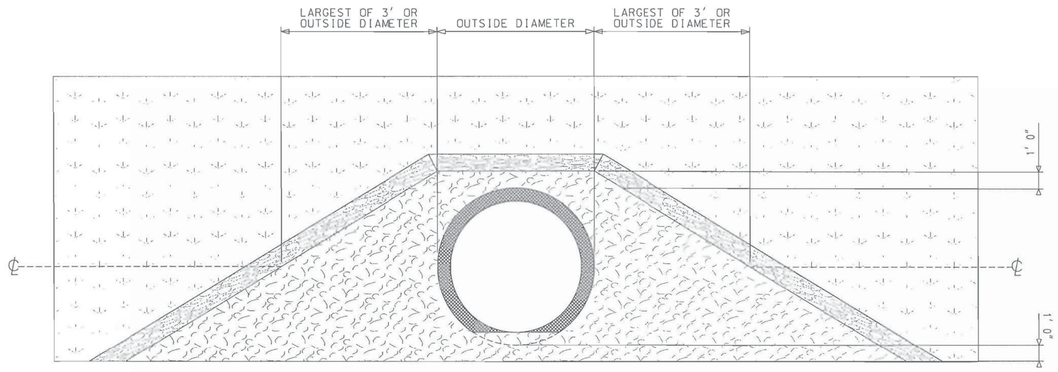
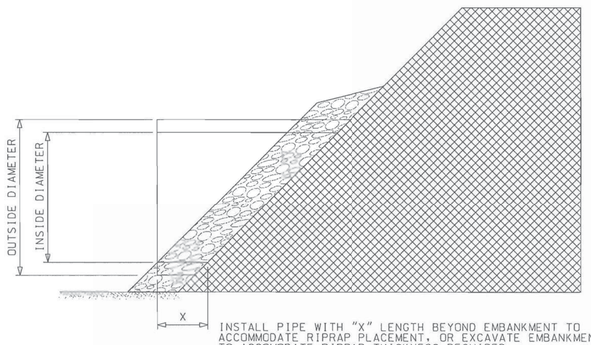
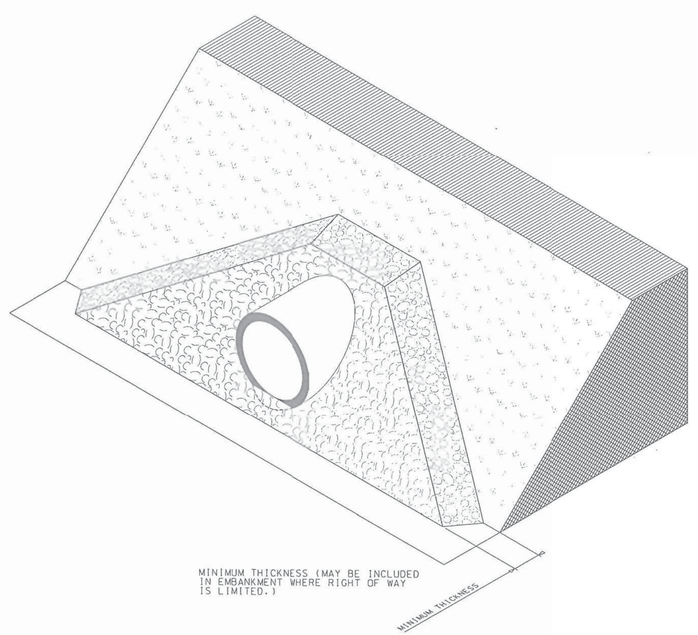


CHART 804-305A
RIPRAP PLACEMENT

MINIMUM CLASS	D_{50}(FT)	MINIMUM THICKNESS (FT)	PIPE DIAMETER
B	0.75	1.50	UP TO 84"
C	1.30	2.60	LARGER THAN 84"



INSTALL PIPE WITH "X" LENGTH BEYOND EMBANKMENT TO ACCOMMODATE RIPRAP PLACEMENT, OR EXCAVATE EMBANKMENT TO ACCOMODATE RIPRAP THICKNESS REQUIRED.



NOTES:

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DAVIS & FLOYD, INC.
No. C00538

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 35794
02/13/2020
ANDREW SMYRE

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SINCE 1954
WWW.DAVISFLOYD.COM
3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

RIPRAP PIPE DETAIL

N.T.S.

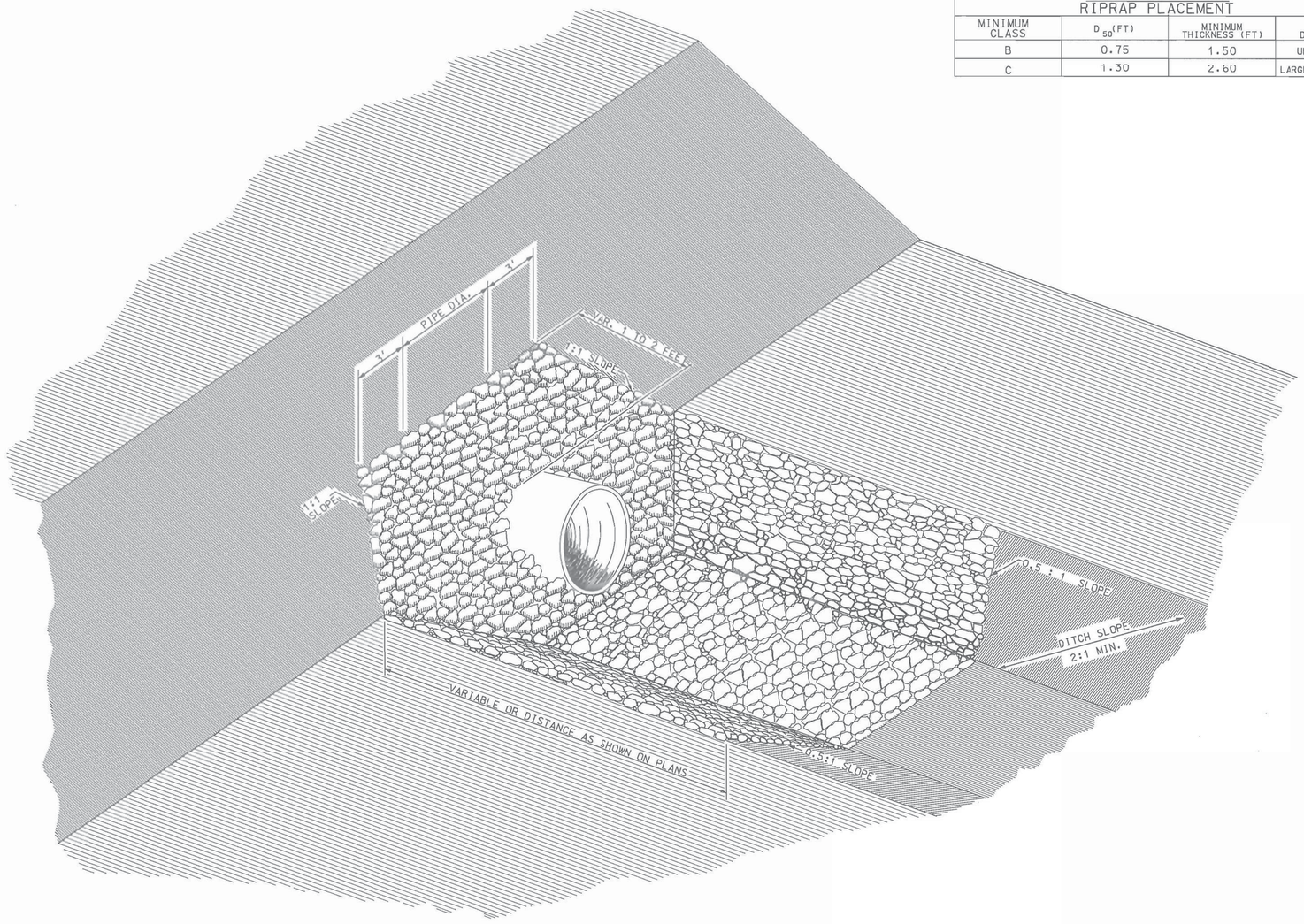
NOTES:
1. GEOTEXTILE FABRIC TO BE USED UNDER RIPRAP WHEN INCLUDED IN THE PLANS.

2. SEE STANDARD DRAWINGS SECTION 719-600-00 FOR ADDITIONAL PIPE END TREATMENT OPTIONS.

3. THE PAY ITEMS SHALL BE:
RIPRAP CLASS ___ _____TON
GEOTEXTILE FOR EROSION CONTROL UNDER RIPRAP (CLASS I) TYPE _____ S.Y.

CHART 804-310A
RIPRAP PLACEMENT

MINIMUM CLASS	D_{50}(FT)	MINIMUM THICKNESS (FT)	PIPE DIAMETER
B	0.75	1.50	UP TO 84"
C	1.30	2.60	LARGER THAN 84"



NOTES:

1) ANY REFERENCES TO PAYMENT IS SUPERCEDED BY PROJECT SPECIFICATIONS IN THE CONTRACT.

2) FIELD ADJUSTMENTS TO IMPLEMENT DETAILS MAY BE REQUIRED AND CAN BE APPROVED BY THE COUNTY RESIDENT CONSTRUCTION MANAGER OR THE PROJECT ENGINEER.

SOUTH CAROLINA
DAVIS & FLOYD, INC.
No. C00538
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
LIC. NO. 35794
02/13/2020
ANDREW SMYRE

DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM

3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

RIPRAP DITCH DETAIL

N.T.S.

NOTES:

1) ANY REFERENCES TO PAYMENT IS SUPERCEDED BY PROJECT SPECIFICATIONS IN THE CONTRACT.

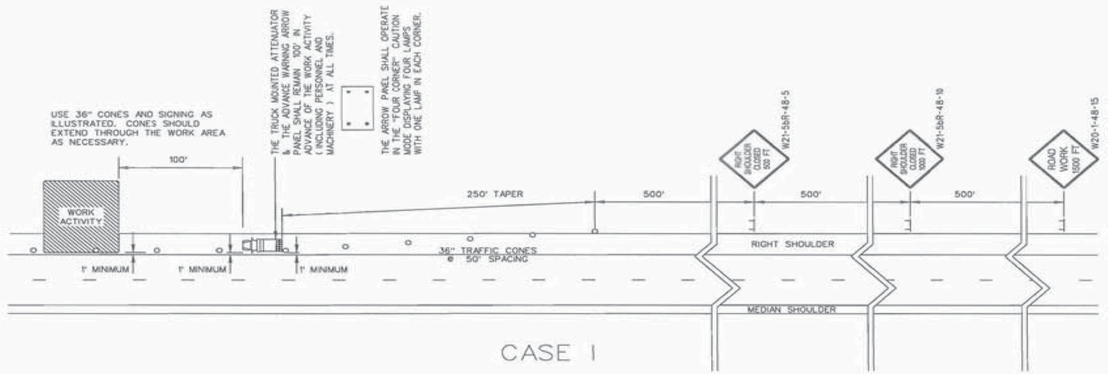
2) FIELD ADJUSTMENTS TO IMPLEMENT DETAILS MAY BE REQUIRED AND CAN BE APPROVED BY THE COUNTY RESIDENT CONSTRUCTION MANAGER OR THE PROJECT ENGINEER.

GENERAL NOTES

1. ALL SIGN LOCATIONS ARE TO BE MEASURED FROM THE WORK AREA. WORK LIMITS FOR THE PROJECT WILL BE DETERMINED BY THE ENGINEER AND AS INDICATED IN THE CONTRACT.
2. INSTALL ADVANCE WARNING SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS NO LESS THAN 4 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH EARTH SHOULDERS AND NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH PAVED SHOULDERS. WHEN CURB & GUTTER IS PRESENT, INSTALL THE SIGN NO LESS THAN 2 FEET FROM THE NEAR EDGE OF THE SIGN TO THE FACE OF THE CURB.
3. SPACINGS INDICATED ARE FOR NORMAL CONDITIONS: ADJUSTMENTS MAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS.
4. ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED U-CHANNEL POSTS OR SQUARE STEEL TUBE POSTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 7 FEET FROM THE GRADE ELEVATION OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE TO THE BOTTOM OF THE SIGN UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. MOUNT ALL SIGNS STRAIGHT AND LEVEL AND WITH THE FACE OF THE SIGNS PERPENDICULAR TO THE SURFACE OF THE ROADWAY.
5. REFLECTORIZE ORANGE ADVANCE WARNING SIGNS AND ANY ORANGE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A FLUORESCENT ORANGE COLORED PRISMATIC RETROREFLECTIVE SHEETING. REFLECTORIZE WHITE REGULATORY SIGNS AND ANY WHITE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A WHITE COLORED PRISMATIC RETROREFLECTIVE SHEETING.
6. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH ALL NCHRP REPORT 350 REQUIREMENTS AND SHALL REQUIRE APPROVAL BY THE DEPARTMENT. ONLY THOSE TRAFFIC CONTROL DEVICES INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" ARE CONSIDERED ACCEPTABLE FOR USE. THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org .
7. THE CONTRACTOR SHALL PROVIDE AND UTILIZE ANY SPECIAL SIGN MOUNTING ASSEMBLIES AND HARDWARE THAT MAY BE NECESSARY FOR INSTALLING AND MOUNTING SIGNS IN AREAS OF CONCRETE MEDIAN BARRIER, BRIDGE PARAPET WALLS OR DOUBLEFACED GUARDRAIL.
8. THE PRIMARY TRAFFIC CONTROL DEVICES UTILIZED FOR DAYTIME SHOULDER CLOSURES ARE 36" CONES. THE PRIMARY TRAFFIC CONTROL DEVICES UTILIZED FOR NIGHTTIME SHOULDER CLOSURES ARE PORTABLE PLASTIC DRUMS. DURING DAYTIME SHOULDER CLOSURES, 42" OVERSIZED CONES MAY BE SUBSTITUTED FOR 36" CONES. DURING NIGHTTIME SHOULDER CLOSURES, 42" OVERSIZED CONES ARE PROHIBITED FOR USE. IF THIS TRAFFIC CONTROL SETUP EXTENDS INTO THE HOURS OF DARKNESS, REPLACE ALL CONES, 36" OR 42" OVERSIZED, WITH PORTABLE PLASTIC DRUMS.
9. THE 36" CONES UTILIZED DURING DAYLIGHT HOURS ARE NOT REQUIRED TO BE REFLECTORIZED. REFLECTORIZE ALL 42" OVERSIZED CONES UTILIZED DURING DAYTIME SHOULDER CLOSURES WITH TYPE III FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. REFLECTORIZE ALL PORTABLE PLASTIC DRUMS WITH TYPE III FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
11. THE DEPARTMENT PROHIBITS CONDUCTING WORK ON PRIMARY AND SECONDARY ROUTES WITHIN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE UNDER A SHOULDER CLOSURE. ALL WORK THAT MAY REQUIRE THE PRESENCE OF EQUIPMENT, PERSONNEL, MATERIALS OR WORK VEHICLES WITHIN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE SHALL BE CONDUCTED UNDER A LANE CLOSURE.

    CASE I: WHENEVER ANY PORTION OF THE SHOULDER AREA WITHIN 15' BUT NOT CLOSER THAN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE MUST BE OCCUPIED BY EQUIPMENT, PERSONNEL, MATERIALS OR WORK VEHICLES TO CONDUCT THE WORK, INSTALL AND MAINTAIN THE SIGNING AND TRAFFIC CONTROL DEVICES AS ILLUSTRATED.

    CASE II: WHENEVER THE WORK IS CONDUCTED BEYOND 15' BUT WITHIN 30' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE, INCLUDING THE PRESENCE OF EQUIPMENT, PERSONNEL, MATERIALS OR WORK VEHICLES, INSTALL AND MAINTAIN THE SIGNING AND TRAFFIC CONTROL AS ILLUSTRATED.
12. CONDUCT THE WORK IN SUCH A MANNER THAT WILL NOT REQUIRE ENCROACHMENT OF TRAFFIC CONTROL DEVICES, EQUIPMENT, PERSONNEL, MATERIALS OR ANY WORK RELATED VEHICLES WITHIN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE.
13. PLACE THE TRUCK MOUNTED ATTENUATOR AT A LOCATION 100' IN ADVANCE OF THE WORK ACTIVITY AND NO CLOSER THAN 1' FROM THE NEAR EDGE OF THE ADJACENT TRAVEL LANE.
14. FOR A CASE I SCENARIO IN THE RIGHT SHOULDER AREA, ADJUST THE TAPER AS NECESSARY TO FIT THE WIDTH OF THE SHOULDER WHILE MAINTAINING THE REQUIRED 250' TAPER LENGTH.
15. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS AT THE SAME TIME UNDER CASE I SHOULDER CLOSURES, SEPARATE THE TWO LOCATIONS BY NO LESS THAN 1 MILE FROM THE END OF THE FIRST CASE I CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CASE I CLOSURE. A MINIMUM SEPARATION DISTANCE OF ONE-HALF MILE IS RECOMMENDED BETWEEN SHOULDER CLOSURES WHEN ONE OR BOTH SHOULDER CLOSURES IS A CASE II CLOSURE.
16. THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT WORK OPERATIONS AND/OR WITHHOLD THE MONTHLY ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MAINTAINED AS DIRECTED BY THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS AND/OR THE ENGINEER.
17. THIS TYPICAL TRAFFIC CONTROL SETUP APPLIES TO THE INSTALLATION OF SHOULDER CLOSURES IN THE RIGHT SHOULDER AREAS OF PRIMARY AND SECONDARY ROADWAYS.



PORTABLE TRUCK MOUNTED ATTENUATOR

1. UTILIZE A TRUCK MOUNTED ATTENUATOR ATTACHED TO THE REAR OF A TRUCK WITH A MINIMUM GROSS VEHICULAR WEIGHT (GVM) OF 15,000 POUNDS (ACTUAL WEIGHT). IF THE ADDITION OF SUPPLEMENTAL WEIGHT TO THE VEHICLE AS BALLAST IS NECESSARY, CONTAIN THE MATERIAL WITHIN A STRUCTURE CONSTRUCTED OF STEEL. CONSTRUCT THIS STEEL STRUCTURE TO HAVE A MINIMUM OF FOUR SIDES AND A BOTTOM. A TOP IS OPTIONAL. BOLT THIS STRUCTURE TO THE FRAME OF THE TRUCK. UTILIZE A SUFFICIENT NUMBER OF FASTENERS FOR ATTACHMENT OF THE STEEL STRUCTURE TO THE FRAME OF THE TRUCK TO ENSURE THE STRUCTURE WILL NOT SEPARATE FROM THE FRAME OF THE TRUCK DURING AN IMPACT UPON THE ATTACHED TRUCK MOUNTED ATTENUATOR. UTILIZE EITHER DRY LOOSE SAND OR STEEL REINFORCED CONCRETE FOR BALLAST MATERIAL WITHIN THE STEEL STRUCTURE TO ACHIEVE THE NECESSARY WEIGHT. THE BALLAST MATERIAL SHALL REMAIN CONTAINED WITHIN THE CONFINES OF THE STEEL STRUCTURE AND SHALL NOT PROTRUDE FROM THE STEEL STRUCTURE IN ANY MANNER.
2. LOCATE THE TRUCK MOUNTED ATTENUATOR 100 FEET IN ADVANCE OF THE WORK AREA UNLESS OTHERWISE SPECIFIED.
3. PROVIDE, INSTALL AND MAINTAIN THE TRUCK MOUNTED ATTENUATOR AS SPECIFIED BY THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

ADVANCE WARNING ARROW PANEL

ALL ADVANCE WARNING ARROW PANELS SHALL BE 48" x 96" WITH A MINIMUM LEGIBILITY DISTANCE OF 1 MILE. PLACEMENT OF AN ADVANCE WARNING ARROW PANEL MAY REQUIRE ADJUSTMENTS DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENT OR OTHER SIGHT DISTANCE RESTRICTIONS. THE PANEL FACE SHALL BE NONREFLECTIVE BLACK. ALL ADVANCE WARNING ARROW PANELS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

WHEN AN ADVANCE WARNING ARROW PANEL IS REQUIRED TO OPERATE IN THE CAUTION MODE, THE ADVANCE WARNING ARROW PANEL SHALL DISPLAY THE "FOUR CORNERS" CAUTION MODE, WITH ONE LAMP IN EACH CORNER. DISPLAY OF ANY OTHER TYPE OF CAUTION MODE OTHER THAN THE "FOUR CORNERS" CAUTION MODE SUCH AS THE "FLASHING BAR" OR THE "ALTERNATING DIAMOND" CAUTION MODES ARE UNACCEPTABLE AND PROHIBITED.

LEGEND

O 36" TRAFFIC CONES

DAVIS & FLOYD, INC. No. C00538 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 35794 ANDREW SMITH 02/13/2020

DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM
3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
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SHOULDER CLOSURE

N.T.S.

NOTES:

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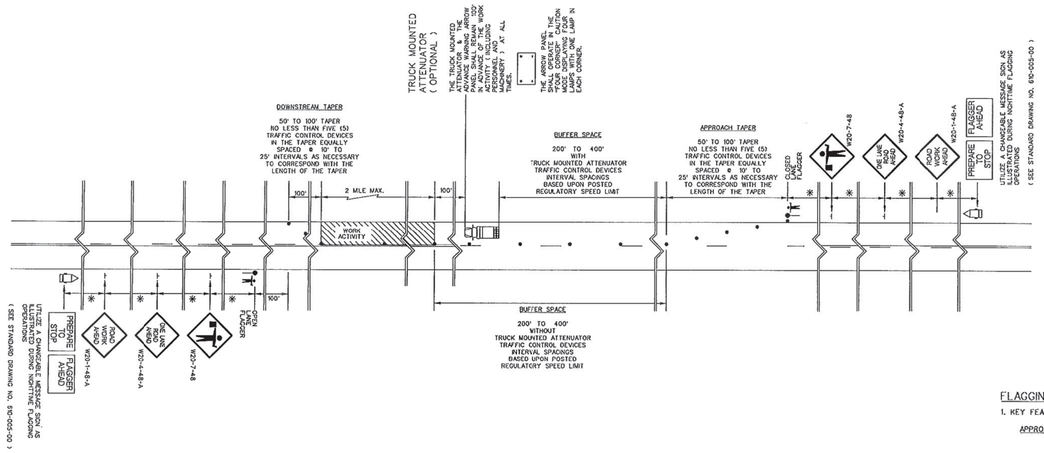

TABLE A

SIGN PLACEMENT INTERVALS	
SPEED LIMIT	*
* ≤ 35 MPH LOW SPEED	200
* 40 - 50 MPH INTERMEDIATE SPEED	350
* 55 MPH HIGH SPEED	500

* REGULATORY POSTED SPEED LIMIT PRIOR TO BEGINNING WORK

TABLE B

TRAFFIC CONTROL DEVICE SPACING INTERVALS WORK ACTIVITY / BUFFER SPACE AREAS	
SPEED LIMIT	SPACING INTERVALS
≤ 35 MPH	25 FEET
40 - 55 MPH	50 FEET

FLAGGING OPERATIONS
GENERAL NOTES

(ALL NOTES, SPECIFICATIONS AND REQUIREMENTS ON THIS STANDARD DRAWING APPLY TO ALL SUBSEQUENT STANDARD DRAWINGS REGARDING FLAGGING OPERATIONS UNLESS OTHERWISE NOTED)

FLAGGING OPERATIONS -

1. KEY FEATURES RELEVANT TO FLAGGING OPERATIONS:

APPROACH TAPER - THIS IS A ONE-LANE TWO-WAY TAPER PLACED IN THE TRAVEL LANE WHERE THE WORK ACTIVITY TAKES PLACE. THIS TAPER PRECEDES THE BUFFER SPACE AND THE WORK ACTIVITY AREA. THE LENGTH OF THIS TAPER MAY VARY FROM 50 FEET TO 100 FEET. INSTALL AND MAINTAIN NO LESS THAN FIVE (5) TRAFFIC CONTROL DEVICES EQUALLY SPACED AT 10' TO 25' INTERVALS AS NECESSARY TO CORRESPOND WITH THE LENGTH OF THE TAPER.

DOWNSTREAM TAPER - THIS TAPER, PLACED IN THE TRAVEL LANE WHERE THE WORK ACTIVITY TAKES PLACE, FOLLOWS THE WORK ACTIVITY AREA AND SERVES AS THE TERMINATION AREA FOR THE CLOSURE OF THE TRAVEL LANE. THE LENGTH OF THIS TAPER MAY VARY FROM 50 FEET TO 100 FEET. INSTALL AND MAINTAIN NO LESS THAN FIVE (5) TRAFFIC CONTROL DEVICES IN THIS TAPER.

FLAGGER STATION - THIS IS THE SPECIFIC LOCATION OF THE FLAGGER.

CLOSED LANE FLAGGER - THIS FLAGGER IS STATIONED ADJACENT TO THE FIRST TRAFFIC CONTROL DEVICE IN THE APPROACH TAPER WHO CONTROLS THE TRAFFIC THAT REQUIRES RELOCATION FROM THE TRAVEL LANE BEING CLOSED TO TRAFFIC.

OPEN LANE FLAGGER - THIS FLAGGER IS STATIONED 100 FEET BEYOND THE LAST TRAFFIC CONTROL DEVICE IN THE DOWNSTREAM TAPER WHO CONTROLS THE TRAFFIC OPERATING IN THE TRAVEL LANE REMAINING OPEN TO TRAFFIC.

BUFFER SPACE - THIS AREA IS LOCATED BETWEEN THE DOWNSTREAM END OF THE APPROACH TAPER AND THE NEAREST LIMITS OF THE WORK ACTIVITY AREA AND MAY PROVIDE SOME RECOVERY SPACE FOR AN ERRANT VEHICLE. THE PRESENCE OF PERSONNEL, TOOLS, MATERIALS, EQUIPMENT, WORK VEHICLES, ETC. WITHIN THE LIMITS OF THE BUFFER SPACE IS PROHIBITED. HOWEVER, WHEN THE MINIMUM DISTANCE REQUIREMENTS FOR THE BUFFER SPACE ARE UNAVAILABLE, A TRUCK MOUNTED ATTENUATOR MAY TEMPORARILY ENCROACH UPON THE BUFFER SPACE IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE SECTION BELOW ENTITLED, "BUFFER SPACE", WHEN APPROVED BY THE ENGINEER.

WORK ACTIVITY AREA - PERSONNEL, MATERIALS, EQUIPMENT, WORK VEHICLES, ETC. ARE PRESENT WITHIN THIS AREA TO CONDUCT THE WORK.

LIMITS of the WORK ACTIVITY AREA - THIS IS THE BOUNDARY OF THE WORK ACTIVITY AREA FIRST ENCOUNTERED, FROM EITHER DIRECTION, BY MOTORISTS PASSING BY THE WORK ACTIVITY AREA IN THE ADJACENT TRAVEL LANE OPEN TO TRAFFIC AND CONTROLLED BY THE FLAGGERS.

APPROACH LANE - TRAFFIC APPROACHES AN INTERSECTION OR A SPECIFIC LOCATION IN THIS TRAVEL LANE.

DEPARTURE LANE - TRAFFIC DEPARTS FROM AN INTERSECTION OR A SPECIFIC LOCATION IN THIS TRAVEL LANE.

MAINLINE APPROACH - THIS IS AN APPROACH TO THE WORK ACTIVITY AREA ON THE ROADWAY WHERE THE WORK ACTIVITY AREA IS LOCATED.

SIDE ROADS - THESE ROADS INTERSECT THE ROADWAY ON WHICH THE WORK ACTIVITY AREA IS LOCATED.

LIMITS of the INTERSECTION - THE LIMITS OF OR THE PHYSICAL AREA WITHIN AN INTERSECTION IS DEFINED BY THE LOCATION OF STOP BARS WHEN PRESENT, WHEN STOP BARS ARE ABSENT, THE LIMITS OF OR THE PHYSICAL AREA WITHIN AN INTERSECTION IS DEFINED BY THE LOCATION POINTS WHERE THE CORNER RADII BETWEEN ADJACENT ROADWAY APPROACHES TIE TO THE EDGE OF PAVEMENT OR THE EDGE OF TRAVEL LANE ADJACENT TO THE EDGE OF PAVEMENT OF EACH ROADWAY.

2. INSTALL, CONDUCT AND MAINTAIN FLAGGING OPERATIONS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, THE STANDARD DRAWINGS, THE MUTCD AND THE "SOUTH CAROLINA FLAGGER'S HANDBOOK" UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. INSTALL ALL SIGNS RELATIVE TO A FLAGGING OPERATION PRIOR TO INITIATION OF THE OPERATION AND REMOVE OR COVER ALL SIGNS IMMEDIATELY UPON TERMINATION OF THE OPERATION. EQUIP EACH FLAGGER WITH A 24" x 24" STOP/SLOW PADDLE MOUNTED ON A RIGID HANDLE WITH A MINIMUM LENGTH OF 7 FEET. THE DEPARTMENT PROHIBITS THE USE OF FLAGS EXCEPT DURING EMERGENCY SITUATIONS.
3. LANE CLOSURES FOR FLAGGING OPERATIONS ARE RESTRICTED TO A MAXIMUM DISTANCE OF 2 MILES UNLESS OTHERWISE APPROVED BY THE ENGINEER. THE WORK LIMITS WILL COMPLY WITH THE CONTRACT AND SHALL REQUIRE THE ENGINEER'S APPROVAL PRIOR TO BEGINNING THE WORK.
4. INSTALL AND MAINTAIN THE PROPER ARRAY OF ADVANCE WARNING SIGNS FOR EACH "MAINLINE APPROACH" WHEN A FLAGGING OPERATION IS IN PLACE AND ACTIVE. WHEN NECESSARY TO RELOCATE THE "FLAGGER STATION" WHILE ACTIVELY MAINTAINING THE FLAGGING OPERATION, INSTALL AN ADDITIONAL ARRAY OF ADVANCE WARNING SIGNS AT THE LOCATION RELATIVE TO THE NEW "FLAGGER STATION" AND REMOVE THE ORIGINAL ARRAY OF ADVANCE WARNING SIGNS IMMEDIATELY UPON COMPLETION OF THE RELOCATION OF THE FLAGGER TO THE NEW "FLAGGER STATION".
5. INSTALL ALL ADVANCE WARNING SIGNS IMMEDIATELY PRIOR TO INITIATING A FLAGGING OPERATION AND REMOVE OR COVER ALL SIGNS IMMEDIATELY UPON TERMINATION OF THE OPERATION.
6. MAINTAIN TWO-WAY RADIO COMMUNICATIONS BETWEEN ALL FLAGGERS.

NIGHTTIME FLAGGING OPERATIONS -

1. EACH FLAGGER SHALL WEAR SAFETY APPAREL IN COMPLIANCE WITH THE REQUIREMENTS OF ANSI/ ISEA 107 STANDARD PERFORMANCE FOR CLASS 3 RISK EXPOSURE, LATEST REVISION, WHEN CONDUCTING NIGHTTIME FLAGGING OPERATIONS.
2. ILLUMINATE EACH "FLAGGER STATION" WITH ANY COMBINATION OF PORTABLE LIGHTS, STANDARD ELECTRIC LIGHTS, EXISTING STREET LIGHTS, ETC. THAT WILL PROVIDE A MINIMUM ILLUMINATION LEVEL OF 108 Lx OR 10 fc WHEN CONDUCTING NIGHTTIME FLAGGING OPERATIONS.
3. SUPPLEMENT EACH ARRAY OF ADVANCE WARNING SIGNS ON EACH "MAINLINE APPROACH" WITH A TRAILER MOUNTED CHANGEABLE MESSAGE SIGN. THESE CHANGEABLE MESSAGE SIGNS ARE NOT REQUIRED ON THE "SIDE ROADS" INTERSECTING THE ROADWAY WHERE THE "WORK ACTIVITY AREA" IS LOCATED. ALSO, THESE CHANGEABLE MESSAGE SIGNS ARE NOT REQUIRED DURING DAYTIME FLAGGING OPERATIONS UNLESS OTHERWISE DIRECTED BY THE STANDARD DRAWINGS. INSTALL THE CHANGEABLE MESSAGE SIGNS IN ADVANCE OF THE ADVANCE WARNING SIGN ARRAYS. THE MESSAGES SHOULD BE "PREPARE TO STOP", "FLAGGER AHEAD". A TRUCK MOUNTED CHANGEABLE MESSAGE SIGN IS NOT AN ACCEPTABLE ALTERNATIVE TO A TRAILER MOUNTED CHANGEABLE MESSAGE SIGN DURING NIGHTTIME FLAGGING OPERATIONS.
4. UTILIZE PORTABLE PLASTIC DRUMS OR 42" OVERSIZED TRAFFIC CONES IN PLACE OF 36" STANDARD TRAFFIC CONES DURING NIGHTTIME FLAGGING OPERATIONS.

BUFFER SPACE -

1. THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" ARE BASED UPON THE LEGAL POSTED REGULATORY SPEED LIMIT OF THE ROADWAY PRIOR TO BEGINNING THE WORK.

SPEED LIMIT	DISTANCES
LOW SPEED ≤ 35 MPH	200 FEET
INTERMEDIATE SPEED 40 - 50 MPH	300 FEET
HIGH SPEED 55 MPH	400 FEET

2. THE PRESENCE OF PERSONNEL, TOOLS, MATERIALS, EQUIPMENT, WORK VEHICLES, ETC. WITHIN THE LIMITS OF THE "BUFFER SPACE" IS PROHIBITED. A TRUCK MOUNTED ATTENUATOR IS THE ONLY WORK VEHICLE THAT MAY TEMPORARILY ENCROACH UPON THE "BUFFER SPACE" IN ACCORDANCE WITH THE CONDITIONS SPECIFIED IN THE FOLLOWING NOTE WHEN APPROVED BY THE ENGINEER. SEE NOTE NO. 3.
3. WHEN THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" ARE UNAVAILABLE DUE TO FIELD CONDITIONS, IT MAY BE NECESSARY FOR A TRUCK MOUNTED ATTENUATOR TO TEMPORARILY ENCROACH UPON THE "BUFFER SPACE" WHEN APPROVED BY THE ENGINEER. A TRUCK MOUNTED ATTENUATOR IS THE ONLY VEHICLE PERMITTED TO TEMPORARILY ENCROACH UPON THE "BUFFER SPACE" AND THIS ENCROACHMENT IS ONLY PERMITTED WHEN ALL REASONABLE OPTIONS TO AVOID DOING SO HAVE BEEN EXHAUSTED. WHEN ENCROACHMENT UPON THE "BUFFER SPACE" IS APPROVED BY THE ENGINEER, MINIMIZE THE TIME DURATION OF THE ENCROACHMENT BY REMOVAL OF THE TRUCK MOUNTED ATTENUATOR FROM THE "BUFFER SPACE" AT THE FIRST OPPORTUNITY THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" BECOME AVAILABLE.

SIGNS AND TRAFFIC CONTROL DEVICES -

1. MEASURE THE ADVANCE WARNING SIGN LOCATIONS FOR EACH APPROACH FROM THE "FLAGGER STATION" LOCATED ON THAT APPROACH.
2. INSTALL THE ADVANCE WARNING SIGNS AS SPACING INTERVALS BASED UPON THE POSTED REGULATORY SPEED LIMIT OF THE ROADWAY PRIOR TO BEGINNING ANY WORK. THE ADVANCE WARNING SIGN SPACING INTERVALS INDICATED ARE FOR NORMAL CONDITIONS. ADJUSTMENTS TO THESE DISTANCES MAY BE NECESSARY DUE TO EXISTING SIGNS, INTERSECTING ROADWAYS, HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS. SEE TABLE A.
3. INSTALL ADVANCE WARNING SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS NO LESS THAN 4 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH EARTH SHOULDERS AND NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH PAVED SHOULDERS. WHEN CURB & GUTTER IS PRESENT, INSTALL THE SIGN NO LESS THAN 2 FEET FROM THE NEAR EDGE OF THE SIGN TO THE FACE OF THE CURB.
4. ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED U-CHANNEL OR SQUARE STEEL TUBE POSTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 7 FEET FROM THE GRADE ELEVATION OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE TO THE BOTTOM OF THE SIGN UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. MOUNT ALL SIGNS STRAIGHT AND LEVEL AND WITH THE FACE OF THE SIGNS PERPENDICULAR TO THE SURFACE OF THE ROADWAY.
5. REFLECTORIZE ORANGE ADVANCE WARNING SIGNS AND ANY ORANGE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A FLUORESCENT ORANGE COLORED PRISMATIC RETROREFLECTIVE SHEETING. REFLECTORIZE WHITE REGULATORY SIGNS AND ANY WHITE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A WHITE COLORED PRISMATIC RETROREFLECTIVE SHEETING.
6. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE REQUIREMENTS OF NCHRP REPORT 350 OR THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) AND SHALL REQUIRE APPROVAL BY THE DEPARTMENT. ONLY THOSE TRAFFIC CONTROL DEVICES INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" ARE CONSIDERED ACCEPTABLE FOR USE. THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org .
7. REFLECTORIZATION OF 36" TRAFFIC CONES USED DURING DAYLIGHT HOURS IS NOT REQUIRED. IN THE EVENT A DAYTIME FLAGGING OPERATION EXTENDS INTO THE NIGHTTIME HOURS, REPLACE ALL 36" TRAFFIC CONES WITH EITHER PORTABLE PLASTIC DRUMS OR 42" OVERSIZED TRAFFIC CONES. REFLECTORIZE ALL PORTABLE PLASTIC DRUMS AND 42" OVERSIZED TRAFFIC CONES WITH TYPE III OR GREATER FLEXIBLE MICROPRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
8. DELINEATE THE TANGENT AREA OF THE LANE CLOSURE WITH THE NECESSARY TRAFFIC CONTROL DEVICES TO MINIMIZE ENCROACHMENT BY MOTORISTS INTO THE CLOSED TRAVEL LANE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ON ROADWAYS WITH POSTED REGULATORY SPEED LIMITS OF 35 MPH OR LESS, INSTALL THE TRAFFIC CONTROL DEVICES AT SPACING INTERVALS OF 25 FEET. ON ROADWAYS WITH POSTED REGULATORY SPEED LIMITS OF 40 MPH OR GREATER, INSTALL THE TRAFFIC CONTROL DEVICES AT SPACING INTERVALS OF 50 FEET. SEE TABLE B.

ADVANCE WARNING ARROW PANEL -

1. DURING FLAGGING OPERATIONS, AN ADVANCE WARNING ARROW PANEL SHALL OPERATE IN THE "FOUR CORNERS" CAUTION MODE WHEN LOCATED WITHIN OR IN BETWEEN THE LIMITS OF THE ADVANCE WARNING SIGN ARRAYS SPECIFIC TO A FLAGGING OPERATION. OPERATION OF AN ADVANCE WARNING ARROW PANEL IN AN ARROW, CHEVRON OR ANY OTHER TYPE OF CAUTION MODE OTHER THAN THE "FOUR CORNERS" CAUTION MODE WHEN LOCATED WITHIN OR IN BETWEEN THE LIMITS OF THE ADVANCE WARNING SIGN ARRAYS AS SPECIFIED HEREINBEFORE IS PROHIBITED.
2. ALL ADVANCE WARNING ARROW PANELS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION. THE SPECIFIC LOCATION OF AN ADVANCE WARNING ARROW PANEL MAY REQUIRE ADJUSTMENTS DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENT OR OTHER SIGHT DISTANCE RESTRICTIONS.

TRUCK MOUNTED ATTENUATOR -

1. A TRUCK MOUNTED ATTENUATOR IS OPTIONAL. UTILIZATION OF A TRUCK MOUNTED ATTENUATOR SHOULD BE CONSIDERED WHEN THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" ARE UNAVAILABLE DUE TO FIELD CONDITIONS. HOWEVER, A TRAILER MOUNTED ADVANCE WARNING ARROW PANEL MAY BE UTILIZED IN PLACE OF A TRUCK MOUNTED ATTENUATOR DURING TRAFFIC CONTROL SETUPS FOR WORK ACTIVITIES SUCH AS ASPHALT CONCRETE PLACEMENT OPERATIONS WHEN APPROVED BY THE ENGINEER.
2. WHEN UTILIZING A TRUCK MOUNTED ATTENUATOR, ENSURE THE TRUCK HAS THE CORRECT GROSS VEHICULAR WEIGHT (GVW) REQUIRED FOR THE TYPE OF TRUCK MOUNTED ATTENUATOR BEING UTILIZED. A DIRECT TRUCK MOUNTED TRUCK MOUNTED ATTENUATOR, A UNIT MOUNTED AND ATTACHED TO BRACKETS OR SIMILAR DEVICES CONNECTED TO THE FRAME OF THE TRUCK, REQUIRES A TRUCK WITH A MINIMUM GVW OF 15,000 POUNDS (ACTUAL WEIGHT) UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. A TRAILER TOWED TRUCK MOUNTED ATTENUATOR, A TRAILER TYPE UNIT TOWED FROM BEHIND AND ATTACHED TO THE FRAME OF THE TRUCK VIA A PINTLE HOOK / HITCH, REQUIRES A TRUCK WITH A MINIMUM GVW OF 10,000 POUNDS (ACTUAL WEIGHT) UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. IF THE ADDITION OF SUPPLEMENTAL WEIGHT TO THE VEHICLE AS BALLAST IS NECESSARY, CONTAIN THE MATERIAL WITHIN A STRUCTURE CONSTRUCTED OF STEEL. CONSTRUCT THIS STEEL STRUCTURE TO HAVE A MINIMUM OF FOUR (4) SIDES AND A BOTTOM. A TOP IS OPTIONAL. BOLT THIS STRUCTURE TO THE FRAME OF THE TRUCK. UTILIZE A SUFFICIENT NUMBER OF FASTENERS FOR ATTACHMENT OF THE STEEL STRUCTURE TO THE FRAME OF THE TRUCK TO ENSURE THE STRUCTURE WILL NOT SEPARATE FROM THE FRAME OF THE TRUCK DURING AN IMPACT UPON THE TRUCK MOUNTED ATTENUATOR. UTILIZE EITHER DRY LOOSE SAND OR STEEL REINFORCED CONCRETE FOR BALLAST MATERIAL WITHIN THE STEEL STRUCTURE TO ACHIEVE THE NECESSARY WEIGHT. THE BALLAST MATERIAL SHALL REMAIN CONTAINED WITHIN THE CONFINES OF THE STEEL STRUCTURE IN ITS ENTIRETY AND SHALL NOT PROTRUDE FROM THE STEEL STRUCTURE IN ANY MANNER.
3. LOCATE THE TRUCK MOUNTED ATTENUATOR APPROXIMATELY 100 FEET IN ADVANCE OF THE "WORK ACTIVITY AREA" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. PROVIDE, INSTALL AND MAINTAIN THE TRUCK MOUNTED ATTENUATOR AS SPECIFIED BY THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

GENERAL -

1. CONDUCT THE WORK IN SUCH A MANNER SO AS NOT TO ENCROACH ONTO THE ADJACENT TRAVEL LANE OPEN TO TRAFFIC. INSTALL, MAINTAIN AND ADJUST THE TRAFFIC CONTROL DEVICES AS NECESSARY TO ENSURE PROPER DELINEATION OF THE WORK AREA.
2. IF WORK IS BEING CONDUCTED AT TWO DIFFERENT LOCATIONS AT THE SAME TIME, SEPARATE THE TWO LOCATIONS BY NO LESS THAN 2 MILES FROM THE LAST TRAFFIC CONTROL DEVICE IN THE "DOWNSTREAM TAPER" OF THE FIRST LANE CLOSURE TO THE FIRST TRAFFIC CONTROL DEVICE IN THE "APPROACH TAPER" OF THE SECOND LANE CLOSURE ENCOUNTERED BY A MOTORIST UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT WORK OPERATIONS AND/OR WITHHOLD THE MONTHLY ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MAINTAINED AS DIRECTED BY THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS AND/OR THE ENGINEER.

TABLE A

SIGN PLACEMENT INTERVALS	
SPEED LIMIT	*
* ≤ 35 MPH LOW SPEED	200
* 40 - 50 MPH INTERMEDIATE SPEED	350
* 55 MPH HIGH SPEED	500

* REGULATORY POSTED SPEED LIMIT PRIOR TO BEGINNING WORK

TABLE B

TRAFFIC CONTROL DEVICE SPACING INTERVALS WORK ACTIVITY / BUFFER SPACE AREAS	
SPEED LIMIT	SPACING INTERVALS
≤ 35 MPH	25 FEET
40 - 55 MPH	50 FEET

SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — 5/7/2020 — ANDREW SMITH

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LANE CLOSURE

N.T.S.

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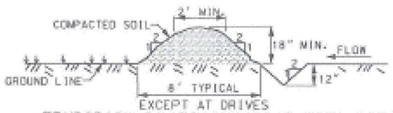


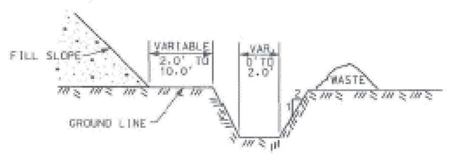
TEMPORARY DIVERSION DIKE WITH DITCH

THE PAY ITEM SHALL BE TEMPORARY DIVERSION DIKE WITH DITCH_____L.F.

TEMPORARY DIVERSION DIKE

NOTES

1. THIS ITEM IS FOR DIVERTING CLEAN WATER AROUND A CONSTRUCTION AREA.
2. CLEAR AND GRUB ALL TREES, BRUSH, STUMPS AND OTHER OBJECTIONABLE MATERIAL.
3. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DIMENSIONS SHOWN.
4. IMMEDIATELY AFTER CONSTRUCTION ESTABLISH VEGETATION. PLACING TEMPORARY EROSION CONTROL BLANKET ON THE DIKE, (AS APPLICABLE).
5. PAYMENT FOR TEMPORARY DIVERSION DIKE INCLUDES ALL MATERIALS IN PLACE, REMOVAL AND DISPOSAL OF MATERIALS AND RESHAPING DIKE TO DRAIN. SEEDING TO BE PAID FOR SEPARATELY.
6. THE PAY ITEM SHALL BE: TEMPORARY DIVERSION DIKE_____L.F.

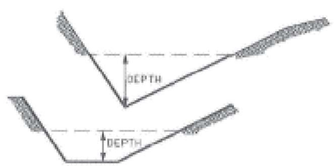


TEMPORARY SILT DITCH

NOTES

1. THIS ITEM IS TO MOVE SEDIMENT LADEN WATER FROM A CONSTRUCTION SITE TO A SEDIMENT CONTROL STRUCTURE.
2. SEED DITCH AND WASTE AREA WITH TEMPORARY SEEDING IMMEDIATELY AFTER CONSTRUCTION.
3. IMMEDIATELY AFTER CONSTRUCTION ESTABLISH VEGETATION. PLACING TEMPORARY EROSION CONTROL BLANKET ON THE DITCH (AS APPLICABLE).
4. THE PAY ITEM SHALL BE: SILT DITCHES_____C.Y.

ROLLED EROSION CONTROL PRODUCT



NOTES

1. THE DEPTH OF THE EROSION CONTROL PRODUCTS ARE TO BE DETERMINED BY DESIGN AND PLACED ON PLAN SHEETS.
2. INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
3. COST OF INSTALLATION AND MATERIALS SHALL BE INCLUDED IN THE PAY ITEM FOR ROLLED EROSION CONTROL PRODUCT.
4. PAY ITEMS:
TEMPORARY EROSION CONTROL BLANKET _____SY
PERMANENT TURF REINFORCEMENT MAT_____SY

THIS DRAWING IS NOT TO SCALE

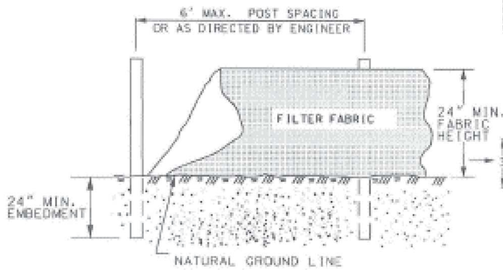
SILT FENCE

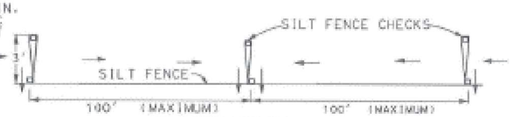
HEIGHT OF FILL (y) IN FEET	FILL SLOPE	MINIMUM SILT FENCE OFFSET FROM TOE OF SLOPE (x) IN FEET	MINIMUM RIGHT OF WAY OFFSET FROM TOE OF SLOPE (NPDES LINE) (z) IN FEET	CHECK LENGTH IN FEET##
<6	2:1	2	3	2
	4:1			
	6:1			
6-10	2:1	12#	13#	5
	4:1	3	4	3
	6:1			
>10	2:1	12#	13#	5
	4:1	4	5	4
	6:1			

#THESE MINIMUM OFFSETS MAY BE REDUCED WHEN CURB AND GUTTER OR SOME OTHER FEATURE REDUCES THE FLOW OF WATER DOWN THE SLOPE. THE SMALL OFFSETS OF EACH GROUP OF HEIGHT OF FILL CANNOT BE REDUCED.

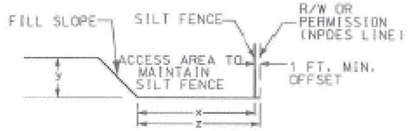
##SILT FENCE CHECKS WILL HAVE A MAXIMUM LENGTH OF FIVE (5) FEET OR UNTIL THEY TIE BACK INTO THE SLOPE.

NOTES
1. SILT FENCE CHECKS MUST BE LOCATED EVERY 100 FT. MAXIMUM AND AT LOW POINTS. FILTER FABRICS SHALL CONFORM TO SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
2. USE POSTS CONFORMING TO SCDOT STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS. POSTS SHALL BE A MINIMUM OF 5 FEET LONG AND INSTALLED TO A MINIMUM DEPTH OF 24 INCHES WITH NO MORE THAN 3 FEET OF THE POST ABOVE GROUND. AT LEAST 1 TO 2 INCHES OF THE POSTS SHALL EXTEND ABOVE THE TOP OF THE FABRIC. POST SPACING WILL BE A MAXIMUM OF 6 FEET ON CENTER.
3. POSTS SHALL HAVE PROJECTIONS FOR FASTENING THE FABRIC TO THE POST. POSTS SHALL ALSO HAVE A SOIL PLATE NEAR THE BOTTOM OF THE POST, EXCEPT WHEN HEAVY CLAY SOILS ARE PRESENT ON-SITE.
4. ATTACH FABRIC TO POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN ALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES.
5. SILT SHALL BE REMOVED AND DISPOSED OF WHEN SILT ACCUMULATES TO 1/3 THE HEIGHT OF THE FENCE. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON-SITE. MAINTENANCE OF SILT FENCE WILL BE MEASURED AND PAID FOR BY THE ITEM OF SILT BASIN.
6. TYPICAL SILT FENCE APPLICATIONS REQUIRE 24 INCHES OF THE FABRIC TO BE ABOVE GROUND. WHEN NEEDED, THE HEIGHT OF SILT FENCE FABRIC ABOVE THE GROUND MAY BE GREATER THAN 24". SEE PLANS FOR APPLICATION OF HIGHER SILT FENCE, PAY ITEMS AND INSTALLATION METHODS.
7. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE LENGTH OF POST WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING AND BURIED DEPTHS WILL REMAIN AS SHOWN HEREON. EXTRA HEIGHT FABRIC WILL BE 4, 5 OR 6 FEET TOTAL WIDTH.
8. FOLLOW SPECIFICATIONS WHEN USING ALTERNATE SILT FENCE (BSRF) DETAILS.
9. THE PAY ITEMS SHALL BE: SILT FENCE_____L.F.
SILT BASIN_____C.Y.

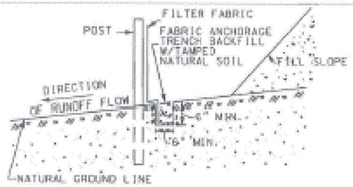




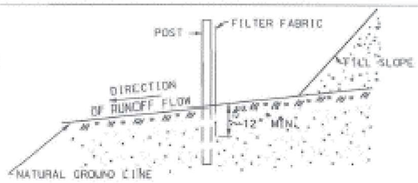
SILT FENCE CHECKS



STANDARD SILT FENCE

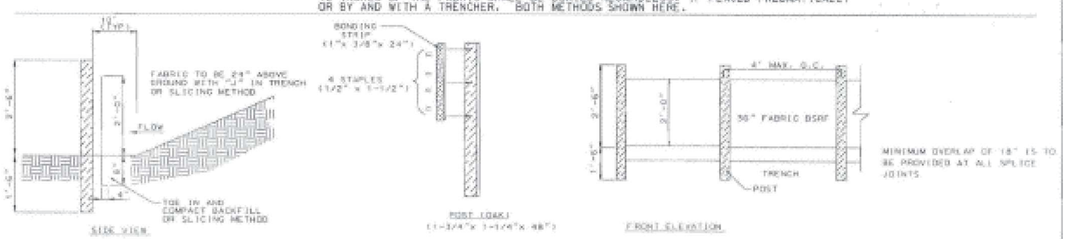


TRENCH METHOD



PNEUMATIC METHOD

12 INCHES OF THE FABRIC SHALL BE BURIED REGARDLESS, IF PLACED PNEUMATICALLY OR BY AND WITH A TRENCHER. BOTH METHODS SHOWN HERE.



ALTERNATE SILT FENCE - BELTED SILT RETENTION FENCE (BSRF)

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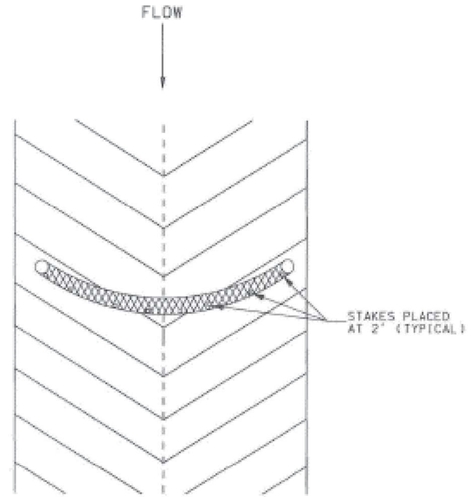
SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 35794 ANDREW SIMPKINS

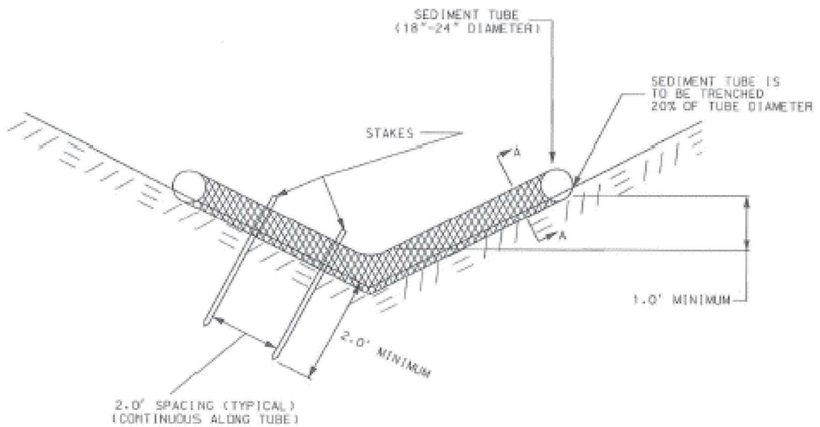
DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM
3229 W. MONTAGUE AVENUE CHARLESTON, SC 29418 (843) 554-8602

EROSION CONTROL DETAILS

N.T.S.



TOP VIEW
OF DITCH



END VIEW
OF DITCH

NOTES:

1. SEDIMENT TUBE SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 815 OF THE SCDOT STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION (LATEST EDITION), AND MUST BE LISTED ON SCDOT QUALIFIED PRODUCT LIST NUMBER 57. SEDIMENT TUBES MUST MEET THE CRITERIA OUTLINED IN THE SUPPLEMENTAL SPECIFICATIONS BEFORE BEING LISTED ON QPL, AND BE FREE FROM DEFECTS OR TRANSPORTATION DAMAGE.

2. PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE SEDIMENT TUBES ARE IN COMPLETE CONTACT WITH UNDERLYING SOIL. SEDIMENT TUBES ARE TO BE 18-24 INCHES IN DIAMETER AND ARE TO BE TRENCHED TO A DEPTH OF 20% OF TUBE DIAMETER. LAY THE SEDIMENT TUBE FLAT IN THE U-SHAPED TRENCH AND COMPACT THE UPSTREAM SEDIMENT TUBER SOIL INTERFACE. PLACE AND ANCHOR THE SEDIMENT TUBE ENDS SO THEY ARE POSITIONED UPSTREAM OF THE SEDIMENT TUBE CENTER POINT. SEDIMENT TUBES FOR DITCH CHECKS WEIGHING MORE THAN 18 POUNDS PER FOOT DO NOT REQUIRE TRENCHING.

3. SEDIMENT TUBE SHALL BE INSTALLED IMMEDIATELY AFTER GRADING AND CONSTRUCTION. SEDIMENT TUBE SHALL BE MAINTAINED DURING SUBGRADE AND BASE PREPERATION UNTIL BASE COURSE IS COMPLETE. SEDIMENT TUBES MAY BE TEMPORARILY MOVED DURING CONSTRUCTION.

4. SEDIMENT TUBES ARE TO BE INSTALLED PERPENDICULAR TO WATER FLOW AND EXTEND UP SIDE SLOPES A MINIMUM OF 1 FOOT ABOVE DESIGN FLOW DEPTH. SPACE TUBES ACCORDING TO THE FOLLOWING TABLE:

SLOPE	MAXIMUM 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

5. STAKE SEDIMENT TUBES FOR DITCH CHECKS USING STAKES WITH A MINIMUM MEASURED DIMENSION OF ¾" X ¾" AND A MAXIMUM MEASURED DIMENSION OF 2" X 2", OR USING STEEL POSTS(1.25lbs/linear foot)A MINIMUM OF 4' IN LENGTH. USE STEEL POSTS WITHOUT A KICK PLATE AND PAINTING IS NOT REQUIRED. SPACE POSTS OR STAKES ON 2' CENTERS AND DRIVE THEM INTO THE GROUND TO A DEPTH OF 2' OR TO THE MAXIMUM EXTENT PRACTICLE. INSTALL THE STAKES ON THE DOWNSTREAM THIRD OF THE SEDIMENT TUBE. SEDIMENT TUBES FOR DITCH CHECKS WEIGHING MOR THEN 18 POUNDS PER FOOT DO NOT REQUIRE STAKING.

6. SELECT PROPER LENGTH OF TUBE TO MINIMIZE THE NUMBER NEEDED TO SPAN THE WIDTH OF DRAINAGE AREA. ONE CONTINUOUS LENGTH IS PREFERRED COMPARED TO TWO OVERLAPPING TUBES. IF NECESSARY, SEDIMENT TUBES CAN BE LAPPED A MINIMUM OF 6 INCHES TO PREVENT PASSAGE OF FLOW AND SEDIMENT THROUGH FIELD JOINT.

7. INSTALL SEDIMENT TUBES FOR DITCH CHECKS OVER BARE SOIL, MULCHED AREAS, OR EROSION CONTROL BLANKETS. KEEP SEDIMENT TUBES FOR DITCH CHECKS IN PLACE UNTIL FULLY ESTABLISHED VEGETATION AND ROOT SYSTEMS HAVE COMPLETELY DEVELOPED AND CAN SURVIVE ON THEIR OWN.

8. INSPECT SEDIMENT TUBES AFTER INSTALLATION FOR GAPS UNDER THE SEDIMENT TUBES AND FOR GAPS BETWEEN THE JOINTS OF ADJACENT ENDS OF SEDIMENT TUBES. INSPECT SEDIMENT TUBES EVERY 7 DAYS. REPAIR ALL RILLS, GULLIES, AND UNDERCUTTING NEAR SEDIMENT TUBES. 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.

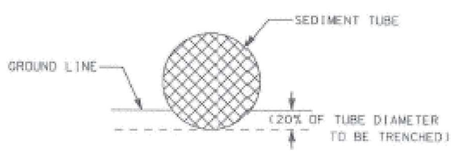
9. REMOVE AND/OR REPLACE INSTALLED SEDIMENT TUBES AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS. REMOVE SEDIMENT TUBES WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS DETERMINED BY THE ENGINEER, INSPECTOR, OR MANFACTURER'S REPRESENTATIVE. GATHER SEDIMENT TUBES AND DISPOSE OF THEM IN REGULAR MEANS AS NON-HAZARDOUS, INERT MATERIAL.

10. PRIOR TO FINAL STABILIZATION, BACKFILL ALL TRENCHES, DEPRESSIONS, AND OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF SEDIMENT TUBES.

11. CLEAN OUT OF TUBES WILL BE PAID FOR AS SILT BASIN IN C.Y.

12. PAYMENT SHALL INCLUDE ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, MAINTENANCE, AND INCEDENTALS NECESSARY TO COMPLETE WORK.

13. PAY ITEM SHALL BE:
SEDIMENT TUBE ..... LF



SECTION A-A

NOTES:

1) ANY REFERENCES TO PAYMENT IS SUPERCEDED BY PROJECT SPECIFICATIONS IN THE CONTRACT.

2) FIELD ADJUSTMENTS TO IMPLEMENT DETAILS MAY BE REQUIRED AND CAN BE APPROVED BY THE COUNTY RESIDENT CONSTRUCTION MANAGER OR THE PROJECT ENGINEER.

SOUTH CAROLINA
DAVIS & FLOYD, INC.
No. C00538
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 35794
ANDREW SMYRE

DAVIS & FLOYD
SINCE 1954
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3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
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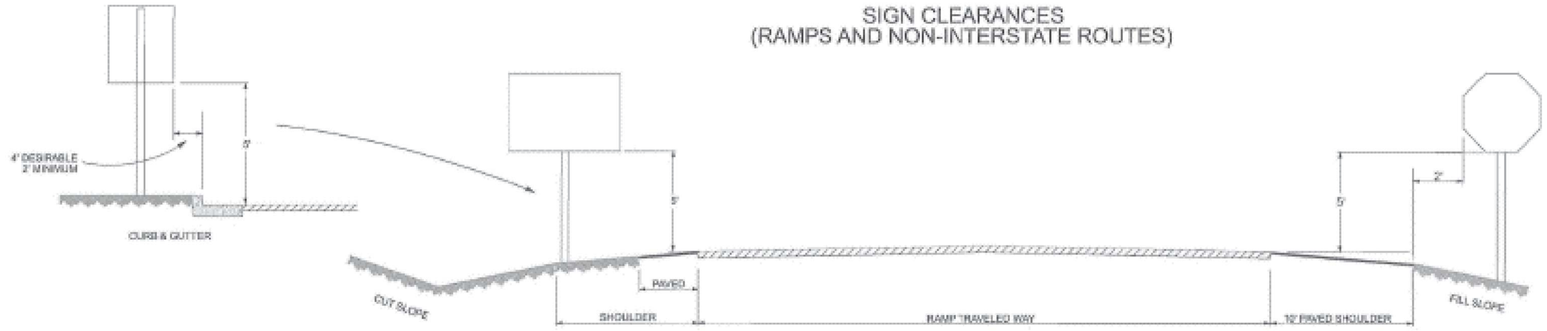
SEDIMENT TUBE DETAIL

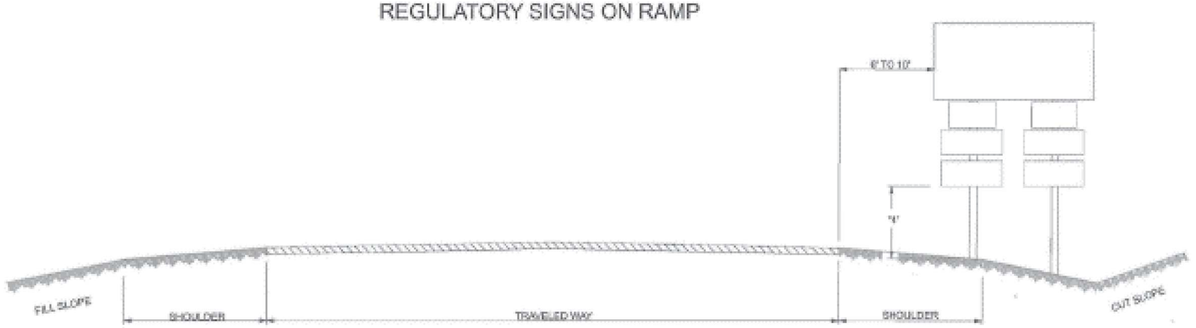
N.T.S.

TYPICAL INSTALLATION GUIDE (2)

SIGN CLEARANCES
(RAMPS AND NON-INTERSTATE ROUTES)

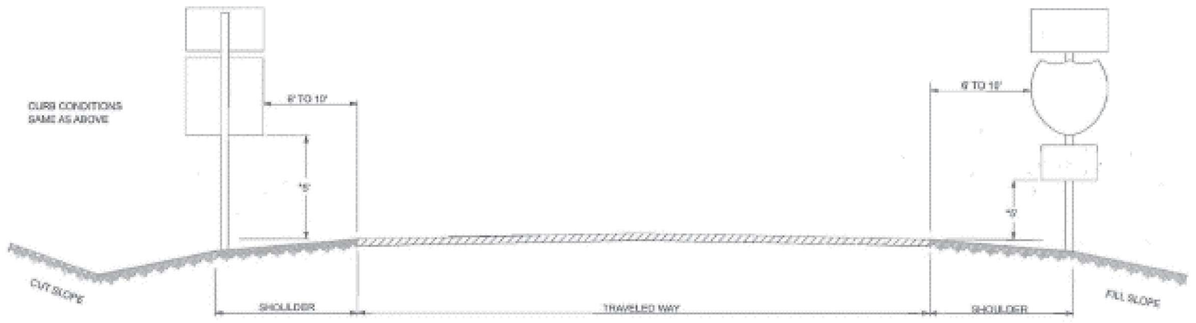


REGULATORY SIGNS ON RAMP



(1) USE 4' VERTICAL CLEARANCE WHERE A PLATE (EITHER SUPPLEMENTARY, DISTANCE, ADVISORY SPEED, ETC.) IS USED UNDER A SIGN.

DESTINATION SIGNS ON RAMPS



(1) USE 7' VERTICAL CLEARANCE WHERE PARKING OR PEDESTRIAN TRAFFIC IS PREVALENT.

(2) USE 4' VERTICAL CLEARANCE WHERE A PLATE (EITHER SUPPLEMENTARY, DISTANCE, ADVISORY SPEED, ETC.) IS USED UNDER A SIGN.

CROSS ROADS AND FRONTAGE ROADS

NOTES:

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SIGN INSTALLATION DETIAL

N.T.S.

NOTES:

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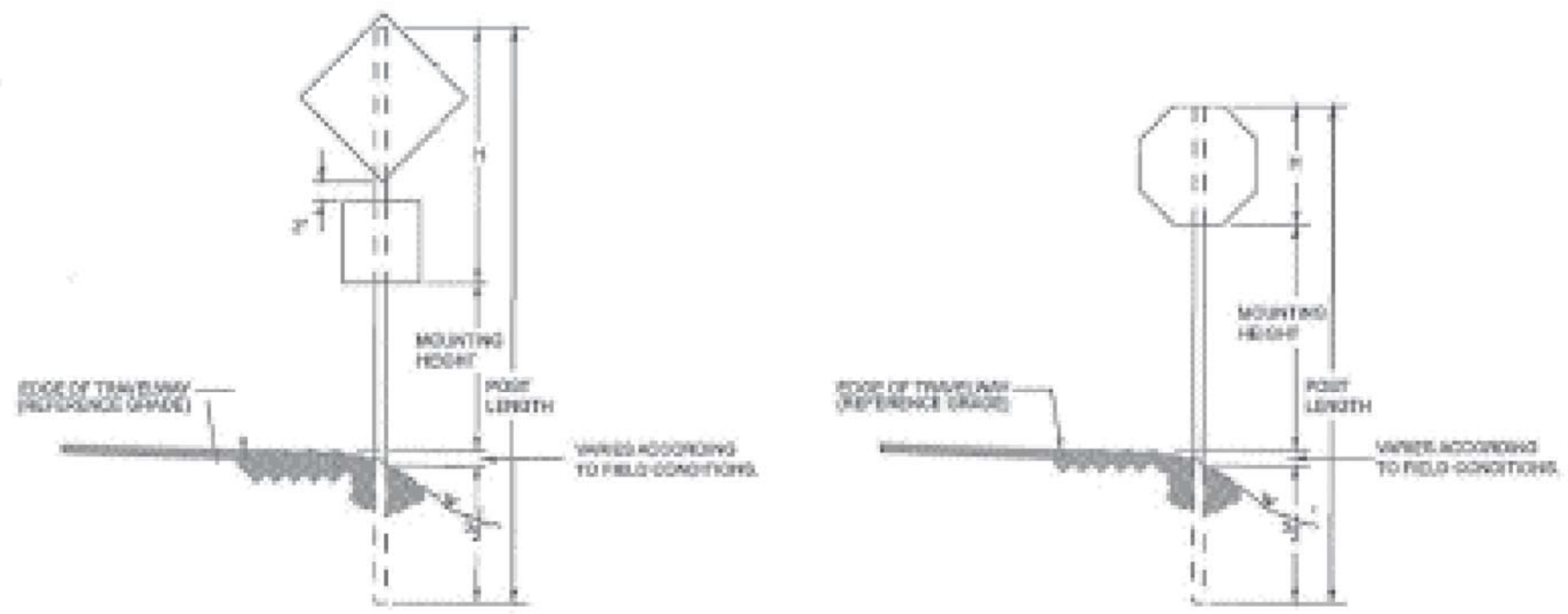
FLAT SHEET SIGN MOUNTING DETAILS



SIGNS MOUNTED ON FREEWAY RAMPS AND CONVENTIONAL ROADS

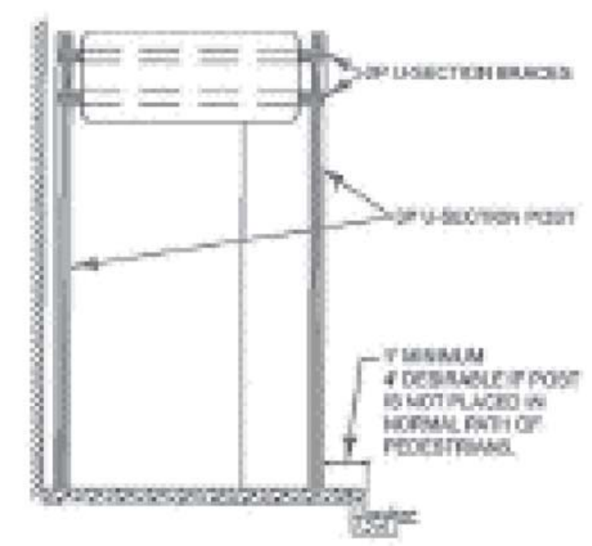
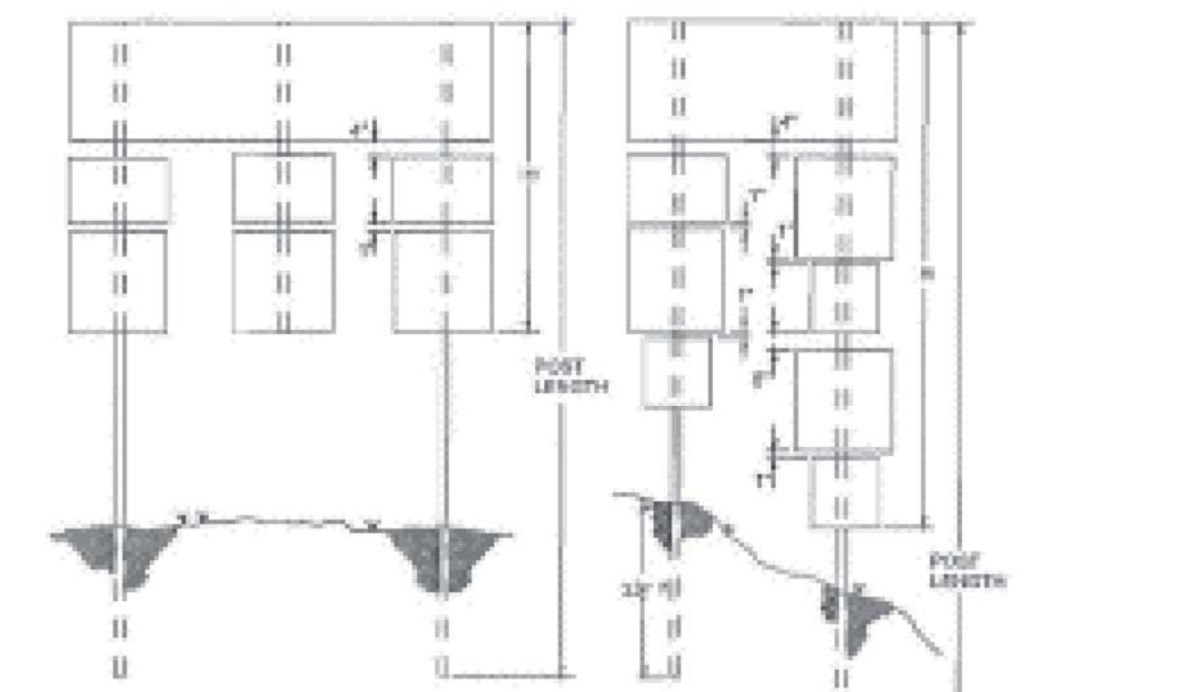


ILLUSTRATION OF SIGN ASSEMBLY SPANNING SIDEWALK

NOTE:

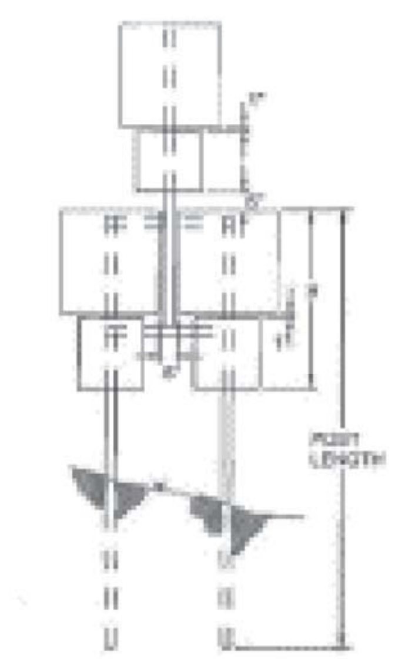
THE PURPOSE OF SPANNING THE SIDEWALK IS TO PROVIDE AN UNOBSTRUCTED WAY FOR PEDESTRIANS, AND AT THE SAME TIME LOCATE SIGNS WITHIN RIGHT-OF-WAY, WITH GOOD VISIBILITY FOR TRAFFIC. EACH INSTALLATION MUST BE INDIVIDUALLY PLANNED AND CONSTRUCTED TO ACCOMPLISH THIS PURPOSE. THE PROJECT ENGINEER SHOULD APPROVE THE CONTRACTORS PLAN FOR SUPPORTING SIGNS SPANNING SIDEWALKS BEFORE THEY ARE ERECTED.



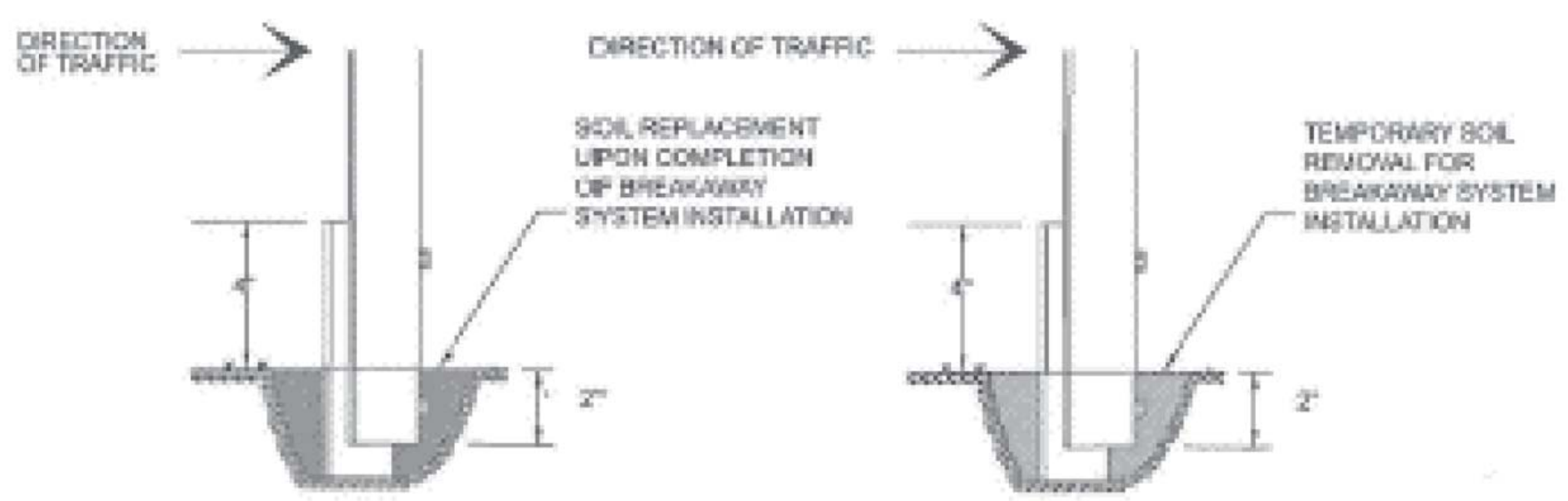
THIS TABLE GIVES APPROXIMATE POST LENGTH FOR NORMAL CONDITIONS. WHEN CUT OR FILL SECTIONS ARE SIGNIFICANT, POST LENGTH SHALL BE ADJUSTED ACCORDINGLY.

WHEN H IS LESS THAN 2'	2' TO 2'-11"	3' TO 3'-11"	4' TO 4'-11"	5' AND LONGER
POST LENGTH (FT.) FOR 8' MOUNTING HGT.	12'	13'	14'	H PLUS 10'

NOTE: ADD 2' TO POST LENGTH FOR 7' MOUNTING HEIGHT.

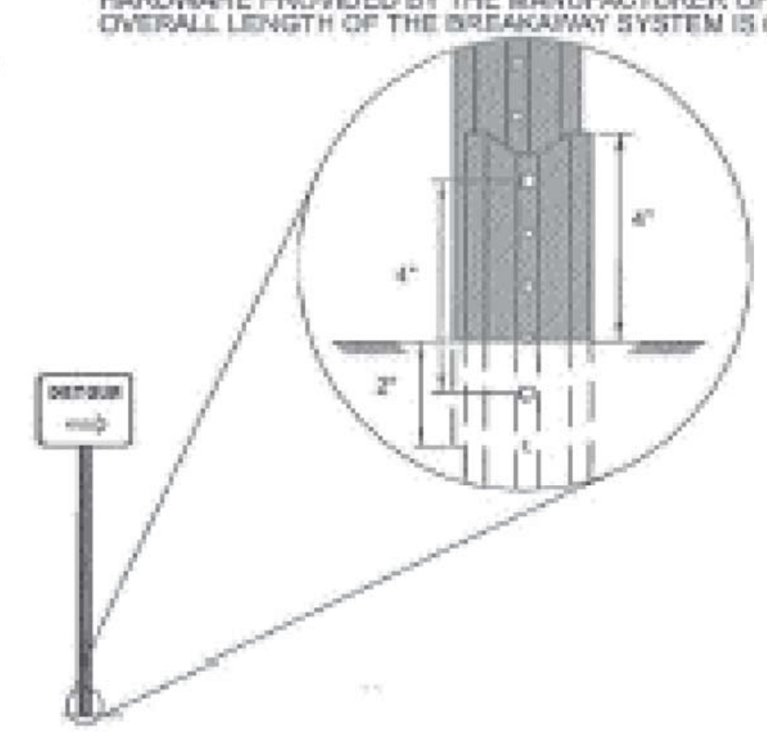


NOTE:
POST LENGTHS NOT SHOWN ON THIS SHEET ARE SHOWN ON THE PLAN SHEETS.



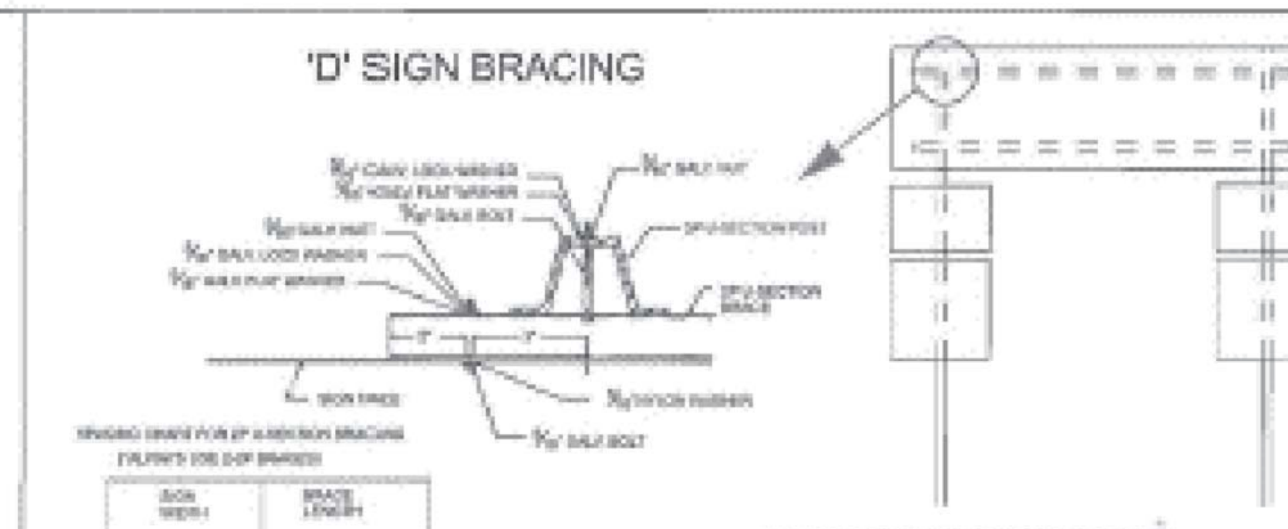
DRIVE THE GROUND SUPPORT (STUB) APPROXIMATELY 30" TO 36" INTO THE GROUND AS SPECIFIED BY THE MANUFACTURER OF THE BREAKAWAY SYSTEM SO THAT NO MORE THAN 4" OF THE GROUND SUPPORT (STUB) EXTENDS ABOVE THE GROUND. REMOVE ENOUGH SOIL FROM AROUND THE GROUND SUPPORT (STUB) TO PERMIT ACCESS TO THE HOLES FOR THE INSERTION AND TIGHTENING OF THE LOWER BOLT OF THE BREAKAWAY SYSTEM. UPON COMPLETING THE INSTALLATION OF THE BREAKAWAY SYSTEM, REPLACE THE SOIL AND TAMP.

BOLTS MUST BE 4" APART. THE GROUND SUPPORT (STUB) SHALL NOT EXTEND HIGHER THAN 4" ABOVE THE GROUND. ATTACH THE SIGN SUPPORT TO THE BACK OF THE GROUND SUPPORT (STUB) WITH THE APPROPRIATE HARDWARE PROVIDED BY THE MANUFACTURER OF THE BREAKAWAY SYSTEM. OVERALL LENGTH OF THE BREAKAWAY SYSTEM IS 6'.



LAP SPLICE FOR U-SECTION POSTS

'D' SIGN BRACING



BRACING CHART FOR 2P U-SECTION BRACING (ALWAYS USE 2-2P BRACES)

SIGN WIDTH	BRACE LENGTH
72"	36"
78"	48"
84"	54"
90"	60"
96"	72"
102"	78"
108"	80"
114"	84"
120"	90"
126"	92"
132"	100"
144"	108"
150"	108"
156"	112"

1.) ALL "D" TYPE SIGNS ARE TO BE SUPPORTED BY 2 VERTICAL U-SECTION POSTS. ALL "D" TYPE SIGNS WHICH ARE 6' WIDE OR WIDER WILL BE HORIZONTALLY BRACED WITH 2, 2P U-SECTION POSTS. ADDITIONALLY, ANY ASSEMBLY OF SIGNS ATTACHED BETWEEN VERTICAL SUPPORTS WILL BE ATTACHED WITH A PRESCRIBED LENGTH OF U-SECTION POST.

2.) ALL 2P POSTS USED AS CENTER VERTICAL MEMBERS IN SIGN ASSEMBLIES SHALL HAVE HOLES ON 1" CENTERS FOR ENTIRE LENGTH.

SIZE & LENGTH OF U-SECTION POSTS FOR SINGLE SIGNS

POST QUANTITY, SIZE & LENGTH FOR INSTALLATIONS HAVING MORE THAN ONE SIGN ARE SHOWN ON THE PLANS.

SIGN NO.	NO. OF POSTS	POST SIZES 8' MTG. HT. LBS./FT.	8' MTG. HT. LGTH.	7' MTG. HT. LBS./FT.	7' MTG. HT. LGTH.
R1-1-24	1	3P	12	3P	14
R1-1-30	1	3P	12	3P	14
R1-1-48	2	3P	14	3P	16
R1-2-36	1	3P	12	3P	14
R1-2-48	2	3P	13	3P	15
R2-1-24	1	3P	12	3P	14
R3-5a-24	1	3P	12	3P	14
R3-5a-48	2	3P	15	3P	17
R3-8-24	1	3P	12	3P	14
R4-1-24	1	3P	12	3P	14
R4-2-24	1	3P	12	3P	14
R4-3-24	1	3P	12	3P	14
R4-3-36	2	3P	14	3P	16
R4-4-42	2	3P	14	3P	16
R5-1-30	1	3P	12	3P	14
R5-1-36	2	3P	13	3P	15
R5-1a-36	2	3P	12	3P	14
R5-1a-30	1	3P	12		
R6-1-36	1	3P	11	3P	13
R6-4-36	2	3P	12	3P	14
R6-5-42	2	3P	12	3P	14

SIGN NO.	NO. OF POSTS	POST SIZES 8' MTG. HT. LBS./FT.	8' MTG. HT. LGTH.	7' MTG. HT. LBS./FT.	7' MTG. HT. LGTH.
R11-1-24	1	3P	13	3P	14
R11-1-36	3	3P	14	3P	16
R11-1-48	3	3P	13	3P	14
R11-3-36	3	3P	12	3P	14
R11-4-48	3	3P	13	3P	14
R11-2-30	1	3P	13	3P	14
R20-1-30	1	3P	13	3P	15
W1-1-30	1	3P	13	3P	15
W1-1-36	1	3P	14	3P	16
W1-2-30	1	3P	13	3P	15
W1-2-36	1	3P	14	3P	16
W1-3-30	1	3P	13	3P	15
W1-3-36	1	3P	14	3P	16
W1-4-30	1	3P	13	3P	15
W1-4-36	1	3P	14	3P	16
W1-6a-30	1	3P	11	3P	13
W1-6-48	3	3P	11	3P	14
W1-7-48	3	3P	11	3P	14

SIGN NO.	NO. OF POSTS	POST SIZES 8' MTG. HT. LBS./FT.	8' MTG. HT. LGTH.	7' MTG. HT. LBS./FT.	7' MTG. HT. LGTH.
W2-1-24	1	3P	12	3P	14
W2-1-30	1	3P	13	3P	15
W2-1-36	1	3P	14	3P	16
W2-2-24	1	3P	12	3P	14
W2-2-30	1	3P	13	3P	15
W5-1-36	1	3P	14	3P	16
W5-2-36	1	3P	14	3P	16
W6-1-36	1	3P	14	3P	16
W8-1-36	1	3P	14	3P	16
W8-2-36	1	3P	14	3P	16
W8-3-30	1	3P	13	3P	15
W11-1-24	1	3P	12	3P	14
W11-1-30	1	3P	13	3P	15
W16-1-60	1	3P	14	3P	16
W16-1-30	1	3P	13	3P	11

SIGN NO.	NO. OF POSTS	POST SIZES 8' MTG. HT. LBS./FT.	8' MTG. HT. LGTH.	7' MTG. HT. LBS./FT.	7' MTG. HT. LGTH.
THE FOLLOWING TO BE MOUNTED AT 4' HT.					
D10-1/2-XXX	1	3P	10		
D10-2-12-XXX	1	3P	11		
D10-3-12-XX	1	3P	12		
THE FOLLOWING TO BE MOUNTED AT 8' HT.					
R1-2-60	2	3P			
R8-5-48	2	3P			
R8-4-48	2	3P			
W11-1-48	2	3P			
W13-2-48	2	3P			

NOTE:

POST LENGTHS SHOWN IN THIS CHART ARE GENERAL AND SHOULD BE USED FOR BID PURPOSES ONLY. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS TO DETERMINE EXACT LENGTHS OF POSTS NEEDED.

DELINEATOR POSTS SHALL BE 2P U-SECTION POST 7.5' LONG.

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No. C00538
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 35794
ANDREW SMYRE

DAVIS & FLOYD
SINCE 1954
WWW.DAVISFLOYD.COM
3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

SIGN MOUNTING DETIAL

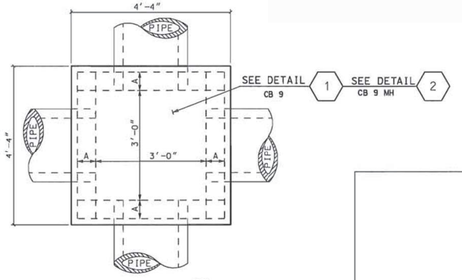
N.T.S.

STATE	COUNTY	D&F PROJECT NO.	ROAD NAME	SHEET NO.	TOTAL SHEETS
S.C.	GEORGETOWN	31810.07	ROYAL PINES & SIMONE	D10	

NOTES:

1) *ANY REFERENCES TO PAYMENT IS SUPERCEDED BY PROJECT SPECIFICATIONS IN THE CONTRACT.*

2) *FIELD ADJUSTMENTS TO IMPLEMENT DETAILS MAY BE REQUIRED AND CAN BE APPROVED BY THE COUNTY RESIDENT CONSTRUCTION MANAGER OR THE PROJECT ENGINEER.*

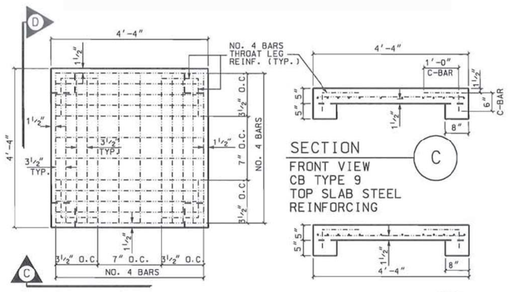


SECTION
PLAN — A

CONTRACTOR MAY USE PRECAST OR BUILT IN PLACE CONSTRUCTION NOTED ABOVE OR COMBINE OPTIONS AS DESIRED.

SEE QUALIFIED PRODUCT LIST 14 FOR MANUFACTURERS OF PRECAST ITEMS.

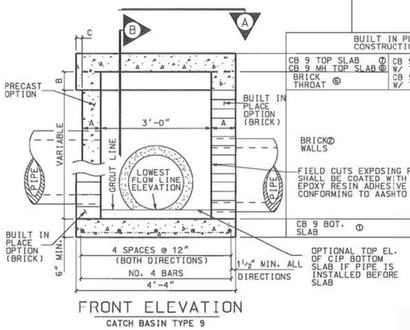
BUILT IN PLACE	① CB 9 BOTTOM SLAB (PC OR CIP 52"X52"X6") AND ② BRICK WALLS (8") AND ④ CB 9 PC TOP SLAB WITH THROAT LEGS (52"X52"X10") OR ⑤ CB 9 MH PC TOP SLAB WITH THROAT LEGS (52"X52"X10")
ALTERNATE BUILT IN PLACE	① CB 9 BOTTOM SLAB (PC OR CIP 52"X52"X6") AND ② BRICK WALLS (8") AND ⑥ BRICK THROAT (2 COARSE) AND ⑦ CB 9 PC TOP SLAB WITHOUT THROAT LEGS (52"X52"X5") OR ⑧ CB 9 MH PC TOP SLAB WITHOUT THROAT LEGS (52"X52"X5")
PRECAST	③ PC DRAINAGE BOX CONFORMING TO 719-310-00 OR 719-305-00 (3'X3'X__) (MAX 12' DEPTH) AND ④ CB 9 PC TOP SLAB WITH THROAT LEGS (52"X52"X10") OR ⑤ CB 9 MH PC TOP SLAB WITH THROAT LEGS (52"X52"X10")



DETAIL
PLAN VIEW
CB TYPE 9
TOP SLAB STEEL
REINFORCING — 1

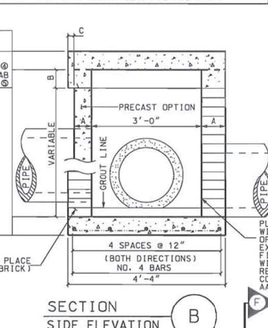
SECTION
FRONT VIEW
CB TYPE 9
TOP SLAB STEEL
REINFORCING — C

SECTION
SIDE VIEW
CB TYPE 9
TOP SLAB STEEL
REINFORCING — D



BUILT IN PLACE CONSTRUCTION	PRECAST CONSTRUCTION
CB 9 TOP SLAB ⑦ / CB 9 MH TOP SLAB ⑧	CB 9 TOP SLAB W/ THROAT LEGS ④ / CB 9 MH TOP SLAB W/ THROAT LEGS ⑤
BRICK THROAT ⑥	CB 9 TOP SLAB W/ THROAT LEGS ④ / CB 9 MH TOP SLAB W/ THROAT LEGS ⑤
BRICK② WALLS	PC BOX③
FIELD CUTS EXPOSING REBAR SHALL BE COATED WITH AN EPOXY RESIN ADHESIVE CONFORMING TO AASHTO M 235	
CB 9 BOT. SLAB ①	

FRONT ELEVATION
CATCH BASIN TYPE 9



SECTION
SIDE ELEVATION — B

DETAIL
ALTERNATE
CB 9 MH TOP SLAB WITHOUT THROAT LEGS (ALLOWED ONLY ON BRICK BOXES) — 3

PRECAST ITEMS
CB 9 BOTTOM SLAB (52"X52"X6")
CB 9 TOP SLAB WITH THROAT LEGS (52"X52"X10")
CB 9 MH TOP SLAB WITH THROAT LEGS (52"X52"X10")
ALTERNATE CB 9 TOP SLAB WITHOUT THROAT LEGS (52"X52"X5")
SEE ALSO STD. DRAWING 719-310-00 & 719-305-00

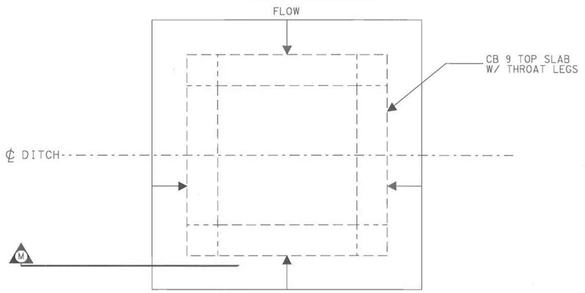
TABLE 719-009A

DIMENSION LABEL	PRECAST OPTION	BUILT IN PLACE OPTION
A	6"	8"
B	5"	2 COURSE OF BRICK
C	2"	0

DETAIL
PLAN VIEW
CB TYPE 9 MH
TOP SLAB STEEL
REINFORCING — 2

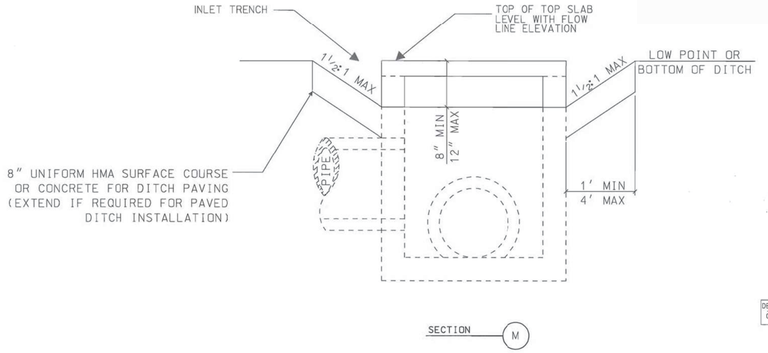
SECTION
SIDE VIEW
CB TYPE 9 MH
TOP SLAB STEEL
REINFORCING — F

USE SHEETS 719-009-01 THROUGH 719-009-05 FOR THIS ITEM
THIS DRAWING IS NOT TO SCALE



DETAIL
PLAN VIEW
DITCH OR DRAINAGE AREA INSTALLATION — 5

NOTES:
1. FOLLOW MATERIAL AND DIMENSION REQUIREMENTS OF CATCH BASIN TYPE 9 (719-009-01 AND 719-009-02).
2. CATCH BASIN TYPE 9 DITCH INSTALLATION MAY BE USED IN LIEU OF OLD STYLE CATCH BASIN TYPE 14 MODIFIED.



SECTION — M

DESCRIPTION	ADA	NON ADA BICYCLE	VEHICLE
CB TYPE 9	NO	NO	NO

USE WHERE PROTECTED FROM TRAFFIC.

USE SHEETS 719-009-01 THROUGH 719-009-05 FOR THIS ITEM
THIS DRAWING IS NOT TO SCALE

SOUTH CAROLINA — DAVIS & FLOYD, INC. — No. C00538 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 35794 — ANDREW SMYTH — 11/4/2020

DAVIS & FLOYD

SINCE 1954

WWW.DAVISFLOYD.COM

3229 W. MONTAGUE AVENUE
CHARLESTON, SC 29418
(843) 554-8602

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

DGN. TJW DATE
R/W DATE
CHK. AMS DATE

GEORGETOWN COUNTY
ENGINEERED ROADS PROGRAM

ROYAL PINES DRIVE & SIMONE COURT
TYPE 9 CATCH BASIN

N.T.S.