SCDOT STANDARD DRAWINGS 2021

THE DRAWINGS IN THIS DOCUMENT HAVE BEEN APPROVED BY THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION AND ARE EFFECTIVE AS OF THE DATES SHOWN IN THE TABLE OF CONTENTS AND THE TITLE BLOCK OF EACH DRAWING.

TABLE OF CONTENTS

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

STANDARD DRAWING

SECTION
000-000

SCDOT STANDARD DRAWINGS

ALWAYS VISIT **WWW.SCDOT.ORG** TO OBTAIN THE CURRENT SCDOT STANDARD DRAWINGS BEFORE BIDDING ON WORK WITHIN SCDOT RIGHTS-OF-WAY.

STANDARD DRAWINGS ARE IN EFFECT STARTING WITH THE LETTING SHOWN ON THE DRAWING TITLE BLOCK. USE THE VERSION OF EACH DRAWING THAT WAS CURRENT AT THE TIME OF LETTING UNLESS THE PROJECT SPECIAL PROVISIONS OR PLAN SHEETS REQUIRE THE USE OF A PREVIOUS VERSION.

THESE DRAWINGS DEPICT STANDARD DESIGN FEATURES COMMONLY USED BY SCDOT. ONLY DRAWINGS THAT CONTAIN BOTH THE SEAL AND THE SIGNATURE OF THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DRAWING ARE VALID STANDARD DRAWINGS. OMISSION OF THE P.E. SIGNATURE OR ANY OTHER MODIFICATIONS OF THESE DRAWINGS VOID THEIR STATUS AS STANDARD ITEMS.

DO NOT REPRODUCE SCDOT STANDARD DRAWINGS IN PROJECT PLANS.

DRAWINGS LISTED AS "MAINTENANCE ONLY" ARE LIMITED TO PROJECTS WHERE THE SCOPE OF WORK PREVENTS THE USE OF A SIGNED NEW STANDARD.

ANY ALTERATION TO DETAILS OR CONCEPTS OUTSIDE OF THE TOLERANCES SHOWN WITHIN THESE STANDARD DRAWINGS IS CONSIDERED A CUSTOM DESIGN AND IS SUBJECT TO A FULL REVIEW BY THE DEPARTMENT.

THESE STANDARD DRAWINGS CONSTITUTE CONTRACT DOCUMENTS IN ACCORDANCE WITH SECTION 101 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

BEGINNING WITH THE PUBLICATION OF THE 2008 BOOK, USE THE NEW DRAWING NUMBERS IN PLACE OF ALL REFERENCES TO FORMER SHEET NUMBERS. REFER TO "DRAWING NAME BEFORE 2008 BOOK" COLUMN OF THE TABLE OF CONTENTS WHEN YOU ARE LOOKING FOR REFERENCES TO OLDER DRAWING NUMBERS. PLEASE NOTE THAT NUMEROUS DRAWINGS PUBLISHED AFTER THE CREATION OF THIS TABLE DO NOT APPEAR IN THIS LIST. ARCHIVED DRAWINGS ARE AVAILABLE ON THE WEBSITE OR THROUGH EMAIL REQUEST.

ELECTRONIC CAD DRAWINGS ARE NO LONGER AVAILABLE.

STANDARD UNITS & SYMBOLS
USED WITHIN THIS BOOK ARE TO BE TAKEN AS ENGLISH/U.S. UNITS UNLESS SPECIFIED OTHERWISE ON THE DRAWING.

PAY ITEM UNITS ARE MEASURED AS FOLLOWS (UNLESS DESCRIBED OTHERWISE IN THE STANDARD SPECIFICATIONS, PLANS, SPECIAL PROVISIONS):

MEASURE OF	PAY ITEM SYMBOL	CONVERSION
AREA	ACRE ACRE	43560 SQUARE FEET
VOLUME	BAG BAG	1 BAG OF ITEM (IE 94 LB BAG OF PORTLAND CEMENT)
VOLUME	BALE BALE	1 BALE OF ITEM
VOLUME	BOARD FEET (1 CU FT OF LUMBER) BF	(LENGTH X WIDTH X THICKNESS) ALL MEASURED IN FEET
ACTION	COMPACTOR DROP DROP	1 DROP OF IMPACT COMPACTOR
VOLUME	CUBIC FEET CF	1 CUBIC FOOT
VOLUME	CUBIC YARD CY	27 CUBIC FEET
ACTION	CUBIC YARD HALF-MILE CYHM	1 CUBIC YARD OF MATERIAL HAULED OVER A DISTANCE OF 1/2 MILE
TIME	DAY DAY	24 HOURS
UNIT	DOLLARS DOL	DOLLARS (SIMILAR TO LUMP SUM)
UNIT	EACH EA	ONE UNIT FOR THE ENTIRE ITEM COMPLETE
VOLUME	GALLON GA	0.13368 CUBIC FEET
TIME	HOUR HR	1 HOUR
WEIGHT	KIP KIP	1000 POUNDS
LENGTH	LINEAR FEET LF	1 FOOT
UNIT	LUMP SUM LS	ONE UNIT FOR THE ENTIRE SYSTEM COMPLETE
ACTION	MANHOUR M-HR	ONE PERSON WORKING FOR ONE HOUR
LENGTH	MILE MI	5280 FEET
WEIGHT	POUND LB	1 POUND
UNIT	SITE SITE	PER SITE (SIMILAR TO LUMP SUM)
AREA	SQUARE FEET SF	1 SQUARE FOOT
AREA	SQUARE YARD SY	9 SQUARE FEET
LENGTH	STATION STA	100 LINEAR FEET MEASURED ALONG CENTERLINE OF ROAD
AREAxTHICK	THOUSAND BOARD FEET MBF	1000 SQUARE FEET OF TIMBER OF THE GIVEN THICKNESS
AREA	THOUSAND SQUARE FEET MSF	1000 SQUARE FEET
AREA	THOUSAND SQUARE YARD MSY	9000 SQUARE FEET
WEIGHT	TON TON	2000 POUNDS
ACTION	TRACK FEET TF	1 LINEAR FOOT OF TRACK CONSTRUCTION
LENGTH	YARD YD	3 FEET
UNUSED	UNIT	UNIT (SIMILAR TO LUMP SUM)
UNUSED	XX	XX (THIS ITEM IS NO LONGER USED - NO PAYMENT)

SCDOT STANDARD SPECIFICATION SUBSECTION 105.4, COORDINATION OF PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS. IN THE EVENT OF ANY DISCREPANCY, THE ORDER OF PRECEDENCE IS AS FOLLOWS:

GOVERNS ALL DOCUMENTS
- SPECIAL PROVISIONS
- PLAN CALCULATED DIMENSIONS (UNLESS OBVIOUSLY INCORRECT)
- PLAN SCALED DIMENSIONS
  - VOID FOR BRIDGES! DO NOT SCALE BRIDGE DRAWINGS!!!
  - **SCDOT STANDARD DRAWING CALCULATED DIMENSIONS**
  - **SCDOT STANDARD DRAWING SCALED DIMENSIONS**
    - VOID! STANDARD DRAWINGS ARE NOT CURRENTLY TO SCALE!!!
- SCDOT SUPPLEMENTAL TECHNICAL SPECIFICATIONS
- SCDOT SUPPLEMENTAL SPECIFICATIONS
- SCDOT STANDARD SPECIFICATIONS

GOVERNS WHEN NOT COVERED BY ABOVE DOCUMENTS

SCDOT STANDARD DRAWINGS

STANDARD DRAWING NUMBERING SCHEME EXAMPLES:

NEW STANDARD DRAWING SHEET NUMBERING FOLLOWS THIS FORMAT:
THE FIRST 3 DIGITS REFERENCE THE SCDOT STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION SUBSECTION / PAY ITEM
THE SECOND 3 DIGITS COMPLETE THE SHEET NUMBER FOR THE ITEM. THESE NUMBERS ARE ASSIGNED IN GROUPS BASED ON THE FUNCTION OF THE ITEM WITHIN THE SUBSECTION.
THE LAST 2 DIGITS ARE SHEETS WITHIN AN INDIVIDUAL DRAWING SERIES. NOTE THAT GAPS ARE SOMETIMES PRESENT IN THESE DIGITS TO ALLOW FOR FUTURE SHEETS.

EXAMPLE 1

SHEET NUMBER: 719-505-03

7	1	9	-	5	0	5	-	0	3
STANDARD SPECIFICATION DIVISION	STANDARD SPECIFICATION SUBSECTION	STANDARD SPECIFICATION SUBSECTION		SHEET NUMBER / GROUPING	SHEET NUMBER / GROUPING	SHEET NUMBER / GROUPING		NUMBER IN SERIES FOR THIS ITEM	NUMBER IN SERIES FOR THIS ITEM

THIS DRAWING IS IN THE DRAINAGE STRUCTURE/CATCH BASIN SUBSECTION 719.

DRAWING GROUPING 5(--) - ACCESS STRUCTURES

DRAWING SHEET NUMBER 505 - HEAVY DUTY MANHOLE

THIS IS DRAWING #3 IN A SERIES OF DRAWINGS FOR THIS PARTICULAR ITEM.

EXAMPLE 2

SHEET NUMBER: 805-120-00

8	0	5	-	1	2	0	-	0	0
STANDARD SPECIFICATION DIVISION	STANDARD SPECIFICATION SUBSECTION	STANDARD SPECIFICATION SUBSECTION		SHEET NUMBER / GROUPING	SHEET NUMBER / GROUPING	SHEET NUMBER / GROUPING		THIS IS THE ONLY DRAWING FOR THIS ITE	THIS IS THE ONLY DRAWING FOR THIS ITE

THIS DRAWING IS IN THE GUARDRAIL SUBSECTION 805.

DRAWING GROUPING 1(--) - W BEAM GUARDRAIL

DRAWING SHEET NUMBER 120 - W BEAM TL2 TRANSITION

THIS IS DRAWING IS THE ONLY DRAWING IN IT'S SERIES.

THE REFERENCES SECTION OF EACH STANDARD DRAWING HAS BEEN ADDED AS AN AID TO DESIGNERS, INSPECTORS, AND CONTRACTORS. ALL USERS OF THESE STANDARD DRAWINGS MUST STILL COMPLY WITH ALL OF THE REQUIREMENTS LISTED IN THE NOTES AND DETAILS OF THE ENTIRE DRAWING. IF SPECIFIC DOCUMENTS HAVE BEEN OMITTED FROM THE REFERENCES SECTION, PLEASE NOTIFY THE DESIGN STANDARDS OFFICE. THE PAY ITEM AND THE CORRESPONDING SECTION OF THE SCDOT STANDARD SPECIFICATIONS WILL NOT BE LISTED IN THE REFERENCES SECTION SINCE IT IS UNDERSTOOD THAT BOTH WILL ALWAYS APPLY.

THE STANDARD DRAWINGS REFLECT THE CURRENT ORGANIZATIONAL STRUCTURE OF THE DEPARTMENT. IF REFERENCES ARE FOUND TO THE OLD ORGANIZATIONAL STRUCTURE, PLEASE REFER TO THE FOLLOWING GENERAL RULES, OR CONTACT THE DESIGN STANDARDS OFFICE AT D8DESIGNSTANDARDS@SCDOT.ORG:

ISSUES FROM CONSTRUCTION OR MAINTENANCE PROJECTS THAT ARE LET TO CONTRACT

FORMER ORGANIZATION	=>	NEW ORGANIZATION
BRIDGE DESIGN ENGINEER	=>	RPG **** STRUCTURES ENGINEER
GEOTECHNICAL DESIGN ENGINEER	=>	RPG **** GEOTECHNICAL ENGINEER
HYDRAULIC DESIGN ENGINEER	=>	RPG **** HYDRAULIC ENGINEER
RESEARCH AND MATERIALS ENGINEER	=>	MATERIALS AND RESEARCH ENGINEER
ROAD DESIGN ENGINEER	=>	RPG **** ROAD ENGINEER
ROADWAY STRUCTURES ENGINEER	=>	RPG **** STRUCTURES ENGINEER
SEISMIC DESIGN ENGINEER	=>	SEISMIC DESIGN SUPPORT ENGINEER

FOR ALL OTHER ISSUES (STANDARDS, ENCROACHMENTS, TRAINING, ETC.)

FORMER ORGANIZATION	=>	NEW ORGANIZATION
BRIDGE DESIGN ENGINEER	=>	STRUCTURES SUPPORT ENGINEER
GEOTECHNICAL DESIGN ENGINEER	=>	GEOTECHNICAL SUPPORT ENGINEER
HYDRAULIC DESIGN ENGINEER	=>	HYDRAULIC DESIGN SUPPORT ENGINEER
RESEARCH AND MATERIALS ENGINEER	=>	MATERIALS AND RESEARCH ENGINEER
ROAD DESIGN ENGINEER	=>	ROADWAY SUPPORT ENGINEER
ROADWAY STRUCTURES ENGINEER	=>	STRUCTURES SUPPORT ENGINEER
SEISMIC DESIGN ENGINEER	=>	SEISMIC DESIGN SUPPORT ENGINEER

****	=>	LOWCOUNTRY, PEE DEE, MIDLANDS, OR UPSTATE
APPROVAL SHEET	=>	QUALIFIED PRODUCT LIST
APPROVAL POLICY	=>	QUALIFIED PRODUCT POLICY

SCDOT STANDARD DRAWINGS
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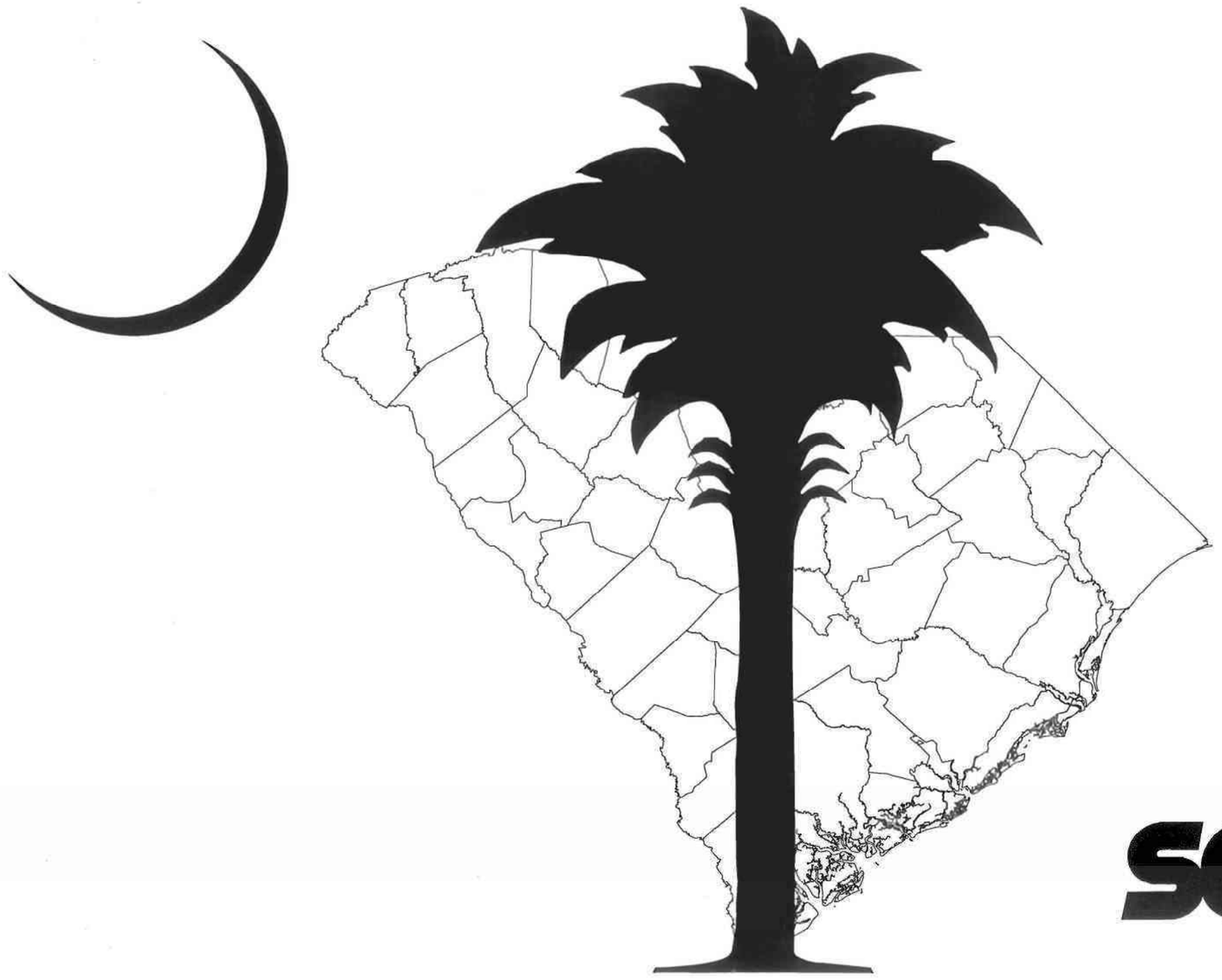
POSSIBLE SYMBOLS/ABBREVIATIONS USED WITHIN THIS BOOK

AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS		AASHTO		MANHOLE		MH	
AMERICANS WITH DISABILITY ACT		ADA		MANNING ROUGHNESS COEFFICIENT		n	
AMERICANS WITH DISABILITY ACT ACCESSIBILITY GUIDELINES		ADAAG		MAXIMUM		MAX	
ANGLE	L			MEAN RIPRAP STONE SIZE	D_{50}		
APPROXIMATELY EQUAL TO	≅ ≈			MEAN RIPRAP STONE WEIGHT	W_{50}		
				MIDWEST ROASIDE SAFETY FACILITY		MwRSF	
AVERAGE DAILY TRAFFIC		ADT		MILES PER HOUR		MPH	
AMERICAN SOCIETY OF TESTING & MATERIALS		ASTM		MINIMUM		MIN	
BASE PLATE, BEARING PAD, BRIDGE PIER		BP		NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM		NCHRP	
BENCHMARK		BM		NATURAL LOG (2.71828)	e		
CAST IN PLACE		CIP		NORMAL WATER [ELEVATION]		NW	
CATCH BASIN		CB		NOT TO SCALE		NTS	
CENTERLINE	℄			ON CENTER / CENTER TO CENTER		OC	
CLEAR COVER, CLEARANCE		CL		ONE THOUSAND SQUARE YARD		MSY	
CONTROLLED LOW STRENGTH MATERIAL (FLOWABLE FILL)		CLSM		OUTSIDE DIAMETER		OD	
CORRUGATED ALUMINUM ALLOY PIPE		CAAP		PI (3.14159)	π		
CUBIC YARD [VOLUME]	YD^3	CY	CU YD	PER FOOT DEPTH		P.F.D.	
CUBIC YARD HALF MILE		CYHM		PER FOOT LENGTH		P.F.L.	
DEGREES [ANGULAR]	°			PLATE		PL	
DEGREES [TEMPERATURE]	°F			POINT OF INTERSECTION		PI	
DIAMETER	ϕ Ø	DIA		POINT OF CURVATURE		PC	
DROP INLET		DI		POINT OF TANGENCY (END OF CURVE)		PT	
DESIGN STANDARDS OFFICE		DSO		POINT OF CURVE		POC	
EACH		EA		POINT OF TANGENT		POT	
EACH WAY		EW E.W.		POLYVINYLCHLORIDE PIPE		PVC	
EDGE OF PAVEMENT		EOP		POUNDS	#	LB	
ELEVATION	EL	ELEV.		POUNDS PER CUBIC FOOT [UNIT WEIGHT]	P/FT^3	PCF	LB/CU FT
FINISHED GRADE		FG		POUNDS PER SQUARE FOOT [PRESSURE]	$\#/FT^2$	PSF	LB/SQ FT
FACE OF CURB		FOC		POUNDS PER SQUARE INCH [PRESSURE]	$\#/IN^2$	PSI	LB/SQ IN
FEDERAL HIGHWAY ADMINISTRATION		FHWA		PRECAST		PC	
FEET [LENGTH]	'	FT		PROPERTY LINE	ℙ		
FLAT SLAB ADAPTOR		FSA		PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINE		PROWAG	
FOOTING		FTG		QUALIFIED PRODUCT LIST		QPL	
FRACTION (USUALLY IN INCHES)	½ ¼ ¾			QUALIFIED PRODUCT POLICY		QPP	
GALVANIZED		GALV		RADIUS	R	RAD	
GREATER THAN	>			PLUS OR MINUS [RANGE]	±		
GREATER THAN OR EQUAL TO	≥			RATE OF SUPERELEVATION (%)	e		
GROUNDWATER TABLE		GWT		RATIO OF HORIZONTAL (A) TO (:) VERTICAL (B) [SLOPE]		A:B	
HIGH DENSITY POLYETHYLENE PIPE		HDPE		REINFORCED CONCRETE		RC	
HIGH WATER (ELEVATION)		HW		REINFORCED CONCRETE PIPE		RCP	
HIGHWAY		HWY		RIGHT		RT	
HOT MIX ASPHALT		HMA		RIGHT-OF-WAY		R/W	ROW
				ROADSIDE DESIGN GUIDE		RDG	
INCHES [LENGTH]	"	IN		SIDEWALK		SW	
INCLUSIVE		INC		SOLID WALL [BOX]		SW [BOX]	
INSIDE DIAMETER		ID		SPACING		S	
JOINT		JT		SPIRAL RIBBED ALUMINUM PIPE		SRAP	
JUNCTION BOX		JB		SQUARE	² ^2		
KIP PER SQUARE INCH [PRESSURE]	K/IN^2	KSI	KIP/SQ IN	SQUARE FEET [AREA]	FT^2	SF	SQ FT
KNOCK OUT [BOX]		KO [BOX]		SQUARE INCHES [AREA]	IN^2	SI	SQ IN
LEFT		LT		SQUARE YARD [AREA]	YD^2	SY	SQ YD
LESS THAN	<			STATION		STA	
LESS THAN OR EQUAL TO	≤			TOP OF CURB		TOC	
LINEAR FEET [LENGTH]		LF		TOP OF WALL		TOW	
LUMP SUM		LS		TRANSPORTATION RESEARCH BOARD		TRB	
				TYPICAL		TYP	
				VARIES, VARIABLE		VAR	
				WELDED WIRE FABRIC		WWF	

THERE MAY BE ADDITIONAL ABBRVIATIONS OR SYMBOLS USED IN THIS BOOK. PLEASE CONTACT THE DESIGN STANDARDS OFFICE (D8DESIGNSTANDARDS@SCDOT.ORG) IF ANY SYMBOL IS UNDEFINED OR UNCLEAR.

SCDOT STANDARD DRAWINGS



SCDOT

TRAFFIC CONTROL

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

STANDARD DRAWING

SECTION
601-000

REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER NO. 24242 WILLIE E. McCONNELL, JR

SIGNATURE

8/2/12

DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1	2-15-11	JCS	GENERAL UPDATE
0	8-22-07	JCS	DRAWING NO. UPDATE

SCDOT

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

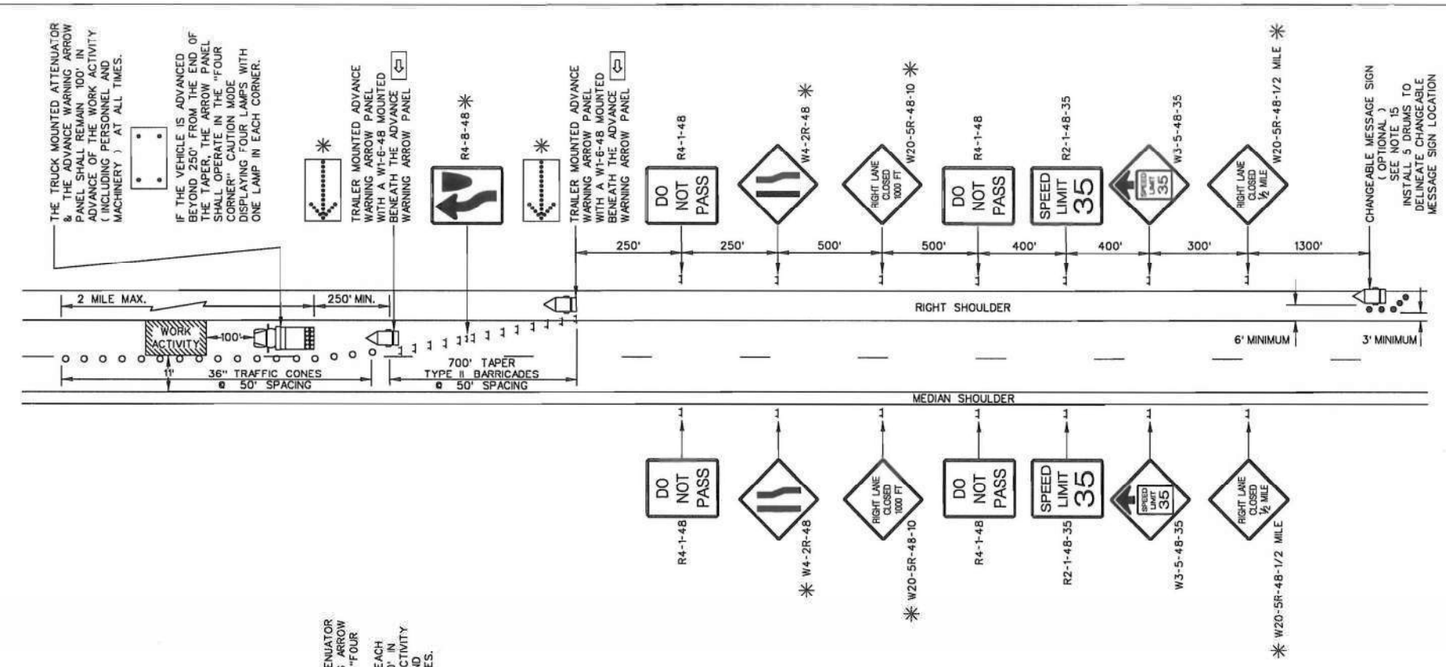
STANDARD DRAWING

LANE CLOSURE DAYTIME MULTILANE PRIMARY ROUTES

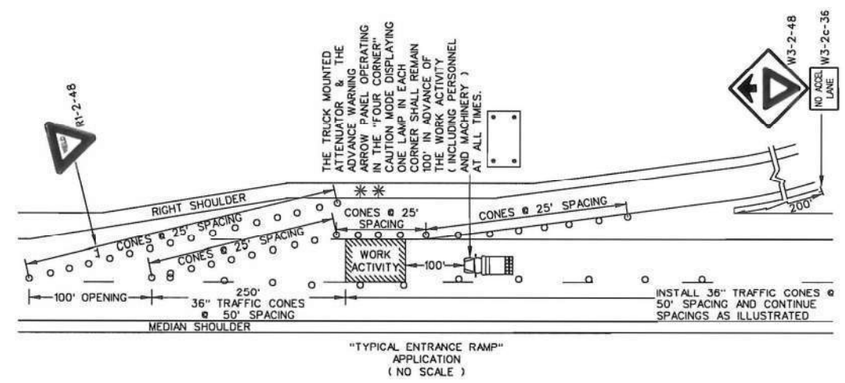
610-025-00

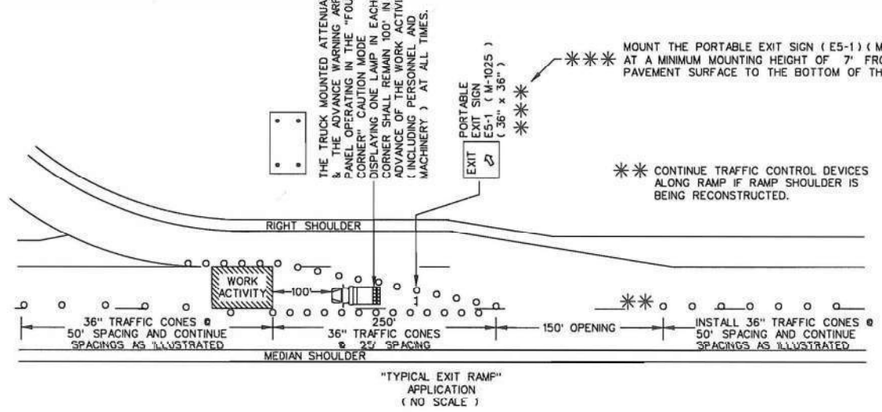
EFFECTIVE LETTING DATE JAN., 2013

THIS DRAWING IS NOT TO SCALE



"TYPICAL ENTRANCE RAMP" APPLICATION (NO SCALE)





"TYPICAL EXIT RAMP" APPLICATION (NO SCALE)

* LEFT LANE CLOSURE

1. SIGNS ILLUSTRATED ARE FOR A RIGHT LANE CLOSURE.
2. WHEN CLOSING THE LEFT TRAVEL LANE, USE THE FOLLOWING:
   2 - W20-5L-48-10 2 - W20-5L-48-1/2 MILE
   2 - W4-2L-48 1 - R4-7-48
3. THE STRIPES ON THE BARRICADES TO THE LEFT OF TRAFFIC SHALL SLOPE DOWNWARD FROM THE UPPER LEFT TO THE LOWER RIGHT.
4. THE FLASHING ARROW AND THE "LARGE ARROW" SIGN (W1-6-48) SHALL POINT TO THE RIGHT.
5. THE CHANGEABLE MESSAGE SIGN SHALL FLASH ALTERNATELY TO READ "LEFT LANE CLOSED", "MERGE RIGHT".

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.
4. DUE TO THE WEIGHT OF A TRUCK MOUNTED ATTENUATOR, THE TRUCK MOUNTED ATTENUATOR SUPPLEMENTED WITH AN ADVANCE WARNING ARROW PANEL MAY BE REPLACED WITH A TRAILER MOUNTED ADVANCE WARNING ARROW PANEL WHEN THIS TRAFFIC CONTROL SETUP IS UTILIZED FOR ASPHALT CONCRETE PAVEMENT OPERATIONS. REPLACEMENT WITH A TRAILER MOUNTED ADVANCE WARNING ARROW PANEL SHALL REQUIRE THE ENGINEER'S APPROVAL.

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. REFLECTORIZATION OF 36" TRAFFIC CONES USED DURING DAYLIGHT HOURS IS NOT REQUIRED. IF THIS TRAFFIC CONTROL SETUP 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 FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
9. REFLECTORIZE ALL BARRICADES WITH A TYPE VIII OR IX PRISMATIC RETROREFLECTIVE SHEETING ON ALL PROJECTS LET TO CONTRACT AFTER MAY 1, 2012 UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
10. TYPE II BARRICADES SHALL HAVE A MINIMUM WIDTH OF 3 FEET UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
11. CONDUCT THE WORK IN SUCH A MANNER THAT WILL MINIMIZE ENCROACHMENT OF TRAFFIC CONTROL DEVICES, EQUIPMENT, PERSONNEL, MATERIALS OR ANY WORK RELATED VEHICLES ONTO AN ADJACENT TRAVEL LANE OPEN TO TRAFFIC. INSTALL, MAINTAIN AND ADJUST THE TRAFFIC CONTROL DEVICES AS NECESSARY TO ENSURE PROPER DELINEATION OF THE WORK AREA.
12. LANE CLOSURES ARE RESTRICTED TO MAXIMUM LENGTHS OF 2 MILES UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS AND/OR THE DEPARTMENT.
13. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS WITHIN THE SAME TRAVEL LANE UNDER TWO SEPARATE LANE CLOSURES ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 2 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE.
14. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS IN THE SAME DIRECTION BUT WITHIN DIFFERENT TRAVEL LANES UNDER TWO SEPARATE LANE CLOSURES ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 4 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE.
15. UTILIZATION OF A CHANGEABLE MESSAGE SIGN IS OPTIONAL WITH THIS TRAFFIC CONTROL SETUP. HOWEVER, WHEN A CHANGEABLE MESSAGE SIGN IS UTILIZED, INSTALL THE SIGN AS ILLUSTRATED ON THIS STANDARD DRAWING UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS, THE PLANS AND/OR THE ENGINEER. INSTALL THE CHANGEABLE MESSAGE SIGN NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE ADJACENT TRAVEL LANE AND SUPPLEMENT THE SIGN LOCATION WITH NO LESS THAN 5 PORTABLE PLASTIC DRUMS FOR DELINEATION AS ILLUSTRATED. 36" STANDARD TRAFFIC CONES OR 42" OVERSIZED TRAFFIC CONES ARE PROHIBITED AS SUBSTITUTES FOR THE PORTABLE PLASTIC DRUMS IN THIS APPLICATION. DURING A RIGHT LANE CLOSURE, THE SIGN SHOULD FLASH ALTERNATELY TO READ "RIGHT LANE CLOSED", "MERGE LEFT" AT A RATE THAT WILL PERMIT MOTORISTS TO *READ BOTH MESSAGES AT LEAST ONCE.*
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 A LANE CLOSURE ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER.

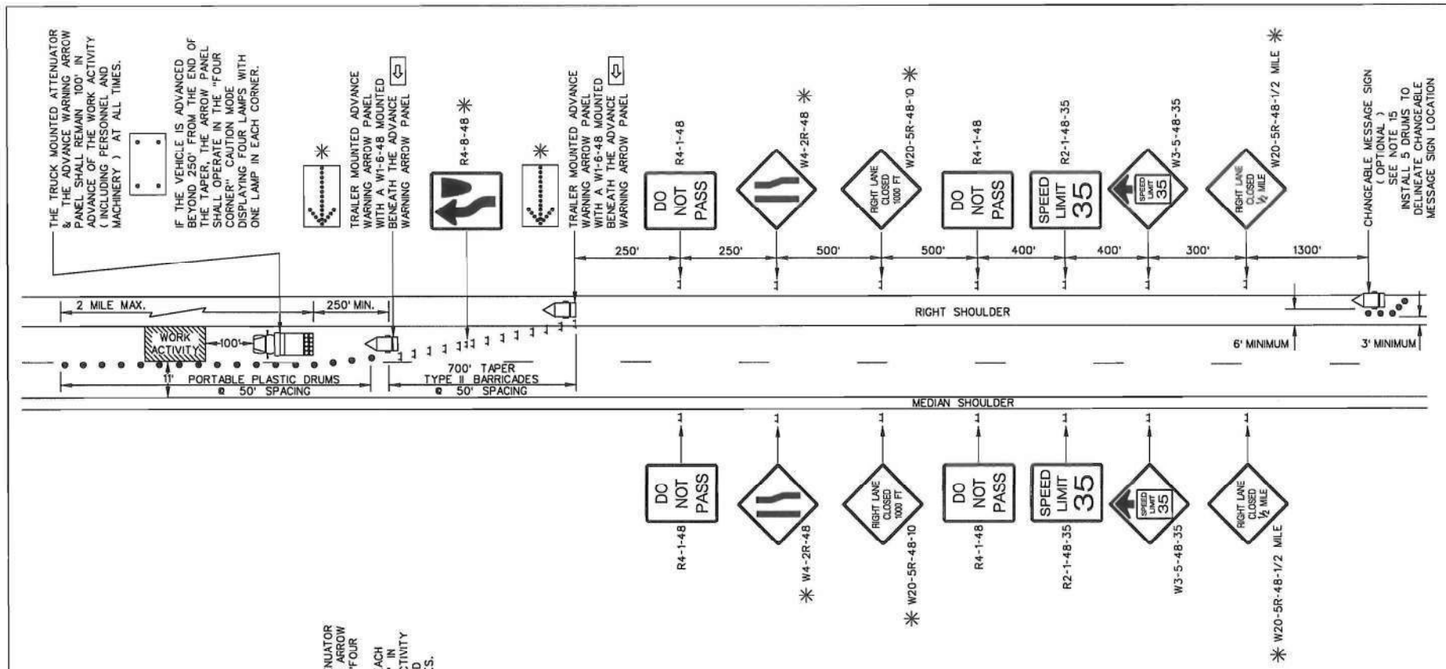
ADVANCE WARNING ARROW PANEL

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 SPECIFICATAONS 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.

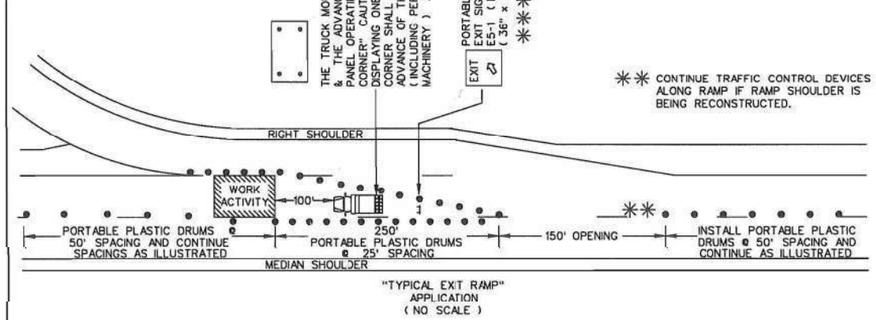
LEGEND

o 36" TRAFFIC CONES

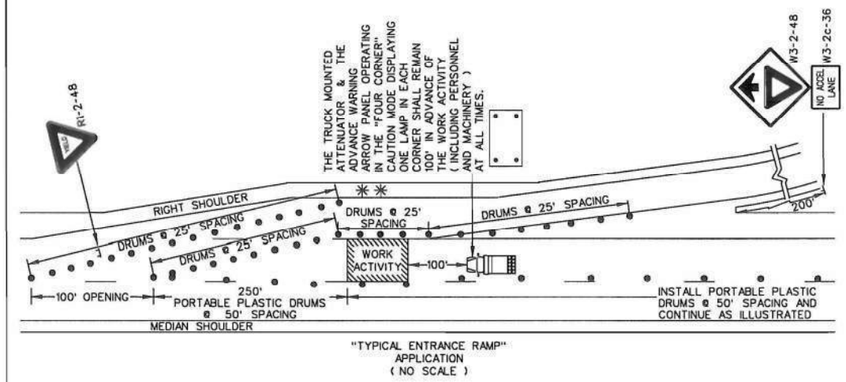


✳ LEFT LANE CLOSURE

1. SIGNS ILLUSTRATED ARE FOR A RIGHT LANE CLOSURE.
2. WHEN CLOSING THE LEFT TRAVEL LANE, USE THE FOLLOWING:
   - 2 - W20-5L-48-10
   - 2 - W20-5L-48-1/2 MILE
   - 2 - W4-2L-48
   - 1 - R4-7-48
3. THE STRIPES ON THE BARRICADES TO THE LEFT OF TRAFFIC SHALL SLOPE DOWNWARD FROM THE UPPER LEFT TO THE LOWER RIGHT.
4. THE FLASHING ARROW AND THE "LARGE ARROW" SIGN (W1-6-48) SHALL POINT TO THE RIGHT.
5. THE CHANGEABLE MESSAGE SIGN SHALL FLASH ALTERNATELY TO READ "LEFT LANE CLOSED", "MERGE RIGHT".



"TYPICAL EXIT RAMP" APPLICATION (NO SCALE)



"TYPICAL ENTRANCE RAMP" APPLICATION (NO SCALE)

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.
4. DUE TO THE WEIGHT OF A TRUCK MOUNTED ATTENUATOR, THE TRUCK MOUNTED ATTENUATOR SUPPLEMENTED WITH AN ADVANCE WARNING ARROW PANEL MAY BE REPLACED WITH A TRAILER MOUNTED ADVANCE WARNING ARROW PANEL WHEN THIS TRAFFIC CONTROL SETUP IS UTILIZED FOR ASPHALT CONCRETE PAVEMENT OPERATIONS. REPLACEMENT WITH A TRAILER MOUNTED ADVANCE WARNING ARROW PANEL SHALL REQUIRE THE ENGINEER'S APPROVAL.

THIS DRAWING IS NOT TO SCALE

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. REFLECTORIZE ALL PORTABLE PLASTIC DRUMS AND 42" OVERSIZED TRAFFIC CONES WITH TYPE III FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. 42" OVERSIZED TRAFFIC CONES MAY BE SUBSTITUTED FOR THE PORTABLE PLASTIC DRUMS IN THIS TYPICAL TRAFFIC CONTROL SETUP. THE 42" OVERSIZED TRAFFIC CONES SHALL COMPLY WITH ALL REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
9. REFLECTORIZE ALL BARRICADES WITH A TYPE VIII OR IX PRISMATIC RETROREFLECTIVE SHEETING ON ALL PROJECTS LET TO CONTRACT AFTER MAY 1, 2012 UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
10. TYPE II BARRICADES SHALL HAVE A MINIMUM WIDTH OF 3 FEET UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
11. CONDUCT THE WORK IN SUCH A MANNER THAT WILL MINIMIZE ENCROACHMENT OF TRAFFIC CONTROL DEVICES, EQUIPMENT, PERSONNEL, MATERIALS OR ANY WORK RELATED VEHICLES ONTO AN ADJACENT TRAVEL LANE OPEN TO TRAFFIC. INSTALL, MAINTAIN AND ADJUST THE TRAFFIC CONTROL DEVICES AS NECESSARY TO ENSURE PROPER DELINEATION OF THE WORK AREA.
12. LANE CLOSURES ARE RESTRICTED TO MAXIMUM LENGTHS OF 2 MILES UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS AND/OR THE DEPARTMENT.
13. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS WITHIN THE SAME TRAVEL LANE UNDER TWO SEPARATE LANE CLOSURES ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 2 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE.
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LEGEND

● PORTABLE PLASTIC DRUMS

REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
NO. 24242
WILLIE E. McCONNELL, JR

SIGNATURE

8/2/12
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1	2-15-11	JCS	GENERAL UPDATE
0	8-22-07	JCS	DRAWING NO. UPDATE

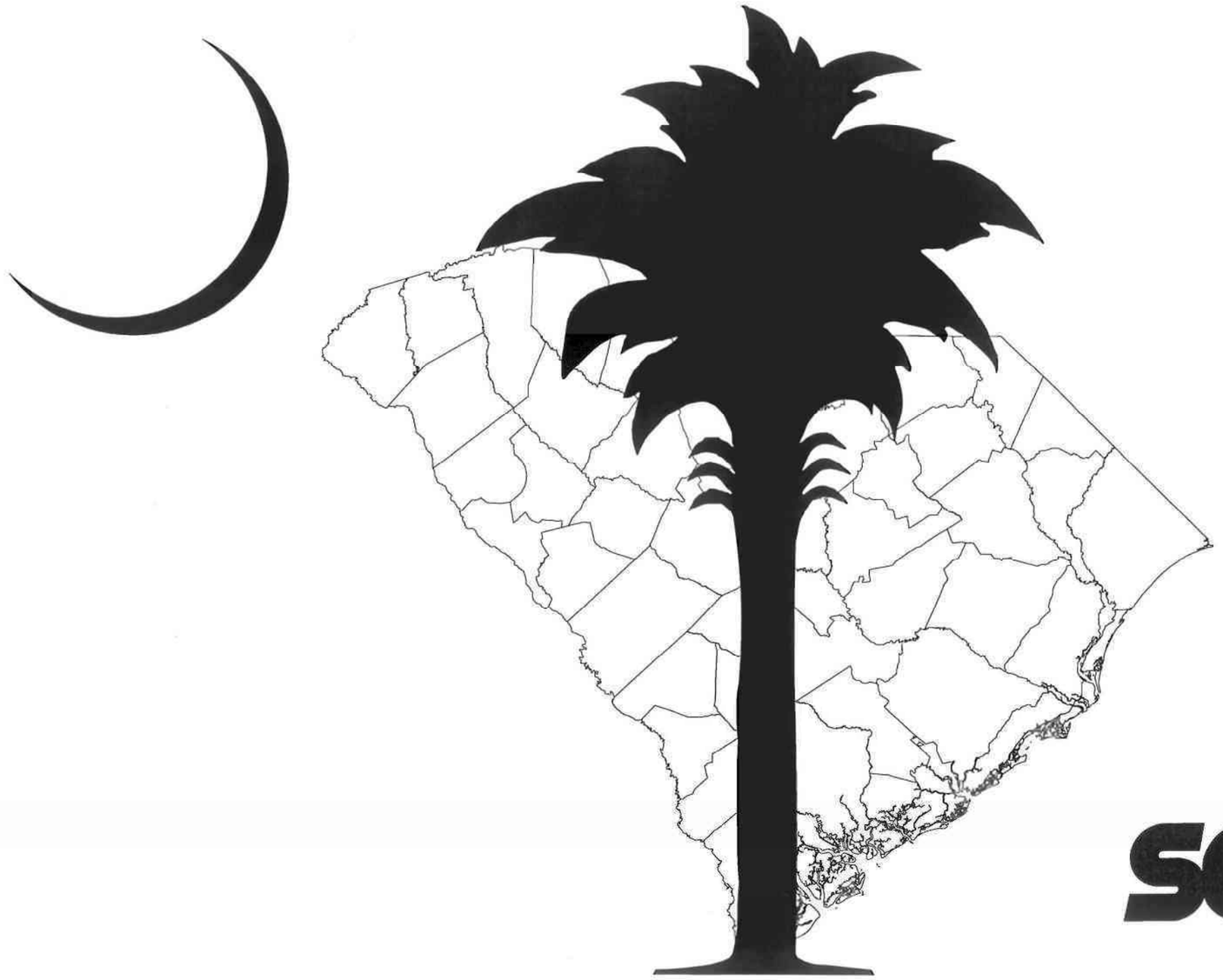
SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

LANE CLOSURE
NIGHTTIME
MULTILANE
PRIMARY ROUTES

610-030-00

EFFECTIVE LETTING DATE | JAN., 2013



SCDOT

PAVEMENT MARKINGS

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

STANDARD DRAWING

SECTION
625-000

REFERENCES

STATE TRAFFIC OPERATIONS ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 17609 JOHN N. BOOZER

SIGNATURE

8-29-2012
DATE

#	DATE	CHK	DESCRIPTION
6			
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1	10-AUG-12	GEM	CHANGE 2'/6' PATTERN TO 2'/5'
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SCDOT

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

STANDARD DRAWING

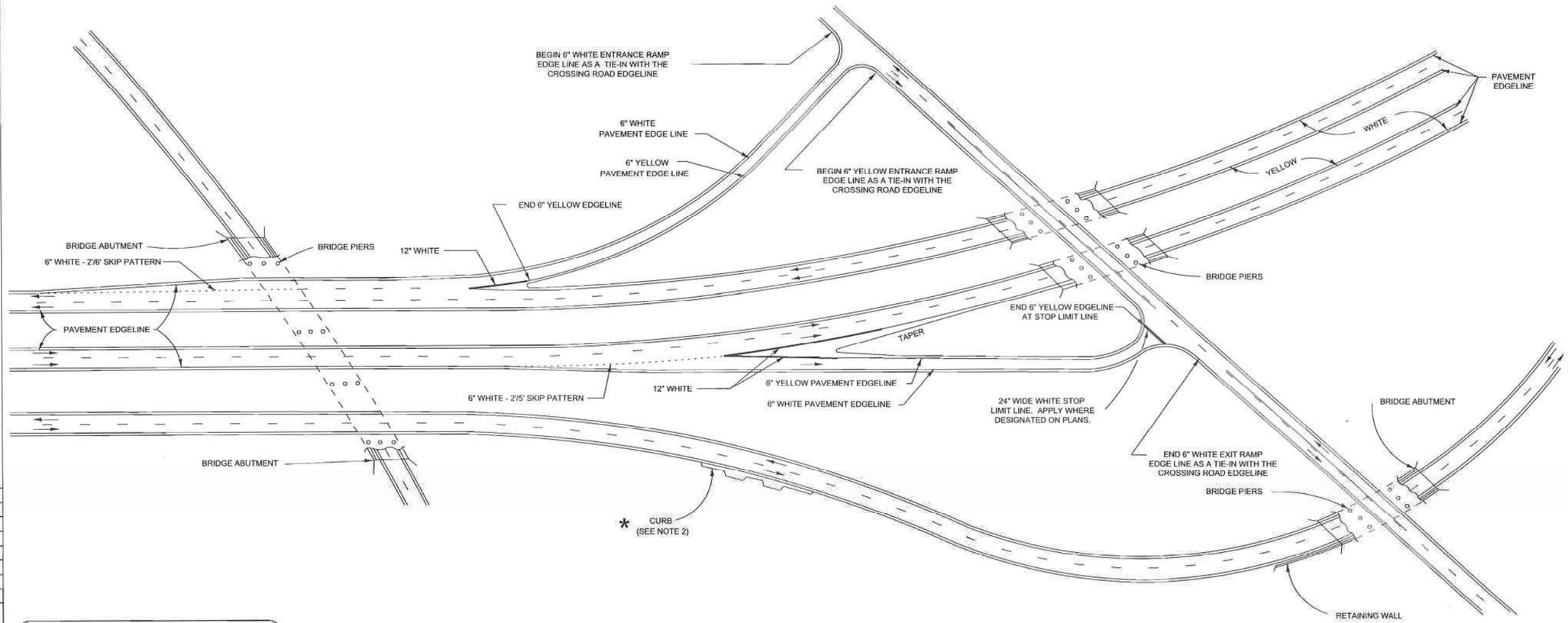
PAVEMENT EDGE MARKING AND STOP LIMITS

625-105-00

EFFECTIVE LETTING DATE JANUARY 2013

STANDARD PAVEMENT MARKINGS

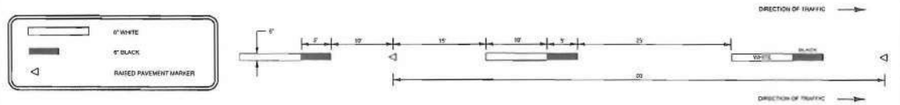
PAVEMENT EDGE MARKING AND STOP LIMITS

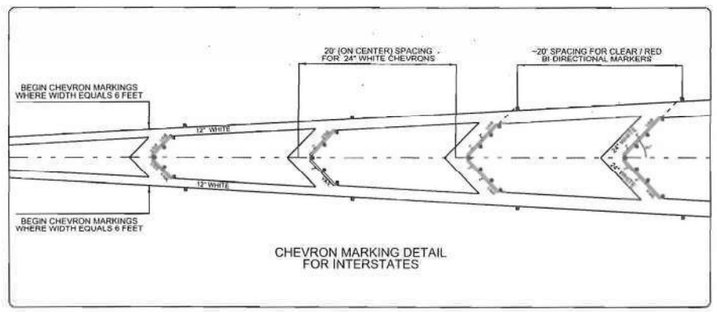


NOTES

1. All pavement edge line markings are to be continuous 6" wide reflectorized lines applied with outside edge approximately 2 inches inside the normal edge of pavement.
2. Apply pavement edge line markings on medians and outside edge of travel way throughout interstate mainline.
3. Apply pavement edge line markings on each side of ramps. See concerned interchange or rest area plan sheet.
4. Pavement edge line markings are continuous across bridges.
5. Left mainline pavement edge lines (next to median) are 6 inch wide reflectorized yellow.
6. Right mainline pavement edge lines are 6 inches wide reflectorized white.
7. On roads where the mainline travelway is asphalt, concrete bridge decks shall be marked using pre-formed tape.

INTERSTATE LANE LINES
LINE PATTERN FOR CONTRAST MARKINGS
ON CONCRETE SURFACES





CHEVRON MARKING DETAIL
FOR INTERSTATES

THIS DRAWING IS NOT TO SCALE

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 29076 CLIFTON J. SELLERS

Clifton J. Sellers 2023.02.15 13:54:36 -05'00'

SIGNATURE

DATE

#	DATE	CHK	DESCRIPTION
6			
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1	5-23-2022	GEM	MODIFIED HVC LAYOUT
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SCDOT

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

STANDARD DRAWING

STANDARD MARKINGS FOR INTERSECTIONS

625-305-00

EFFECTIVE LETTING DATE | JULY 2023

PAVEMENT MARKING TYPICAL

STANDARD MARKINGS FOR INTERSECTIONS

ADDITIONAL GUIDANCE THROUGH INTERSECTIONS

DOTTED LINES

- THE PATTERN ILLUSTRATED BELOW IS TO BE USED TO EXTEND MARKINGS THROUGH LARGE INTERSECTIONS WHERE ADDITIONAL GUIDANCE IS NEEDED.

- THE ABOVE MARKINGS SHOULD ALWAYS BE USED TO GUIDE AND SEPARATE TRAFFIC WHERE COMPOUND TURNING MANEUVERS OCCUR. SUCH MARKINGS WILL BE SHOWN ON THE PLANS WHERE NEEDED.
- THE DOTTED LINES ARE TO BE THE SAME COLOR AS THE LINE THEY EXTEND.

STOPLINES

- ALL STOPLINES ARE TO BE MARKED WITH 24" SOLID WHITE LINES.
- WHERE CROSSWALK MARKINGS EXIST, STOPLINES SHOULD BE PLACED IN ADVANCE OF, AND PARALLEL TO, THE NEAREST CROSSWALK LINE. A MINIMUM DISTANCE OF 4' SHOULD EXIST BETWEEN THE CROSSWALK AND STOPBAR.
- IN THE ABSENCE OF A MARKED CROSSWALK, THE STOPLINE SHOULD BE PLACED AT A DISTANCE OF NO LESS THAN 4 FEET AND NO MORE THAN 30 FEET FROM THE PAVEMENT EDGE OF THE INTERSECTING ROUTE. IN GENERAL, STOP LINES SHOULD BE PLACED AT A DISTANCEOF 4 TO 10 FEET IN ADVANCE OF THE MAINLINE TO MAXIMIZE SIGHT DISTANCE TO CROSSING TRAFFIC.

APPLICATION OF MARKINGS AT INTERSECTIONS

1. STOP LINES ARE TO BE APPLIED AT ALL SIGNALIZED INTERSECTIONS.
2. AT NON-SIGNALIZED INTERSECTIONS, THE ROADWAYS WHICH MUST STOP ARE TO HAVE STOPLINES.
3. WHERE STOPLINES ARE USED, LANE LINES AND CENTER LINES WILL TERMINATE AT THE STOPLINE. THEY DO NOT EXTEND ACROSS STOPLINES NOR DO THEY TERMINATE PRIOR TO STOPLINES. LOCATION OF STOPLINES SHOULD BE DETERMINED PRIOR TO MARKING LONGITUDINAL LINES.
4. LANE LINES TERMINATING AT A STOPLINE SHOULD NOT BE LESS THAN 10 FEET IN LENGTH, HOWEVER THEY MAY BE LONGER. THE LAST LANE LINE WILL BE 10-40 FEET LONG.

*** THE FOLLOWING PROCEDURE WILL AID IN THIS DETERMINATION:***

a. MARK A SPOT 50 FEET IN ADVANCE OF STOPLINE OF EACH LANE LINE APPROACH.

b. IF A LINE IS BEING APPLIED WHEN THE SPOT IS CROSSED, THE STRIPER OPERATOR PERMITS AUTOMATIC CUT-OFF AND THE FOLLOWING 30 GAP. WHEN THE NEXT LINES BEGINS, THE STRIPER OPERATOR WILL MANUALLY OVERRIDE THE AUTOMATIC CUT-OFF AND WILL EXTEND THE LINE TO THE STOPLINE.

c. IF A LINE IS NOT BEING APPLIED WHEN THE SPOT IS CROSSED, WHEN THE NEXT LINE BEGINS THE STRIPER OPERATOR WILL MANUALLY OVERRIDE THE AUTOMATIC CUT-OFF AND WILL EXTEND THE LINE TO THE STOPLINE.

5. AT ALL INTERSECTIONS, LANE LINES WILL NORMALLY BE OMITTED WITHIN THE INTERSECTION AREA WHERE TURNING VEHICLES MUST MANEUVER.

ARROWS AND WORD MESSAGES

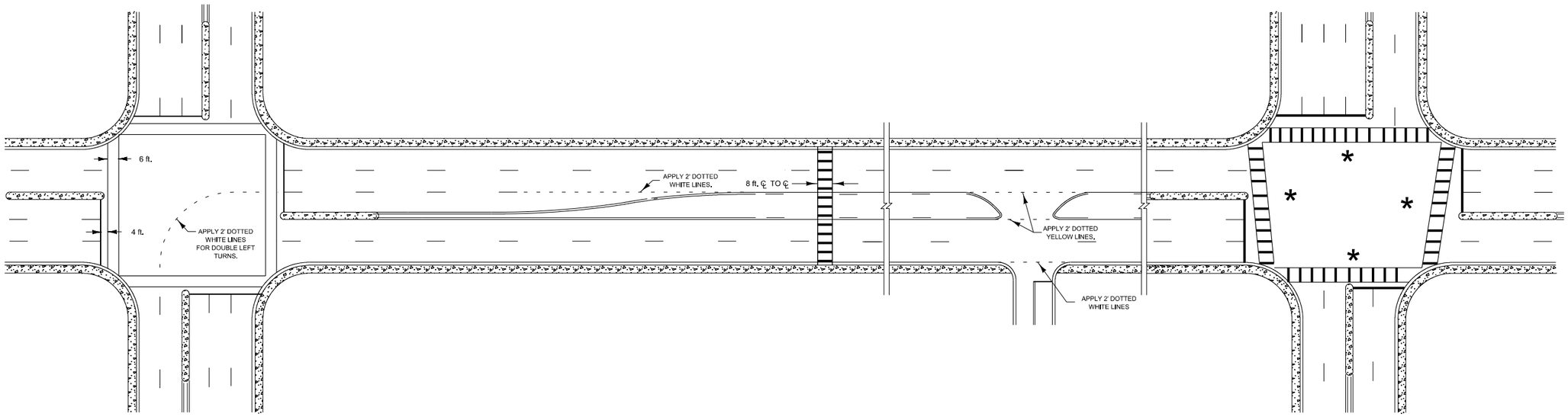
- ARROWS AND WORD MESSAGES ARE NOT TYPICAL AT ALL TURN LANES AND WILL BE PLACED ONLY AT LOCATIONS SHOWN ON THE PLANS OR WHERE DIRECTED BY THE ENGINEER.
- WHERE ARROWS SUPPLEMENT SIGNS TO PROHIBIT A MOVEMENT THAT WOULD OTHERWISE BE LEGAL FROM THAT LANE, THE ARROW MUST BE ACCOMPANIED BY THE WORD 'ONLY'.
- ALL ARROWS AND WORD MESSAGES SHALL BE AS INDICATED ON STANDARD DRAWINGS 625-410-00.

CROSSWALKS

- AT A MINIMUM, CROSSWALKS ARE TO BE MARKED WITH 8" WHITE LINES, SPACED NO LESS THAT 6' APART.
- FOR HIGH VISIBILITY CROSSWALK (HVC) LINES AT MIDBLOCK/UNCONTROLLED CROSSINGS, THE 8" WHITE LINES SHOULD BE SPACED NO LESS THAN 8' APART(CENTER TO CENTER).
- THE 24" TRANSVERSE LINES IN THE HVC MAY BE SKEWED TO PROVIDE ORIENTATION PARALLEL TO THE LANE LINES OF THE TRAVEL LANES.
- NON-INTERSECTION CROSSWALKS ARE GENERALLY UNEXPECTED BY THE ROAD USER. THEREFORE, WARNING SIGNS SHOULD BE INSTALLED FOR ALL MARKED CROSSWALKS AT NON-INTERSECTION LOCATIONS AND ADEQUATE VISIBILITY SHOULD BE PROVIDED BY PARKING PROHIBITIONS.

DOTTED EDGELINES

- DOTTED EDGELINES SHOULD BE PLACED ACROSS THE STOP CONTROLLED SIDE LEGS OF ALL INTERSECTIONS WITH PUBLIC ROADWAYS.
- DOTTED EDGELINES SHOULD ALSO BE USED FOR TURN BAY EXTENSIONS AND CHANNELIZATION AT MEDIAN OPENINGS.



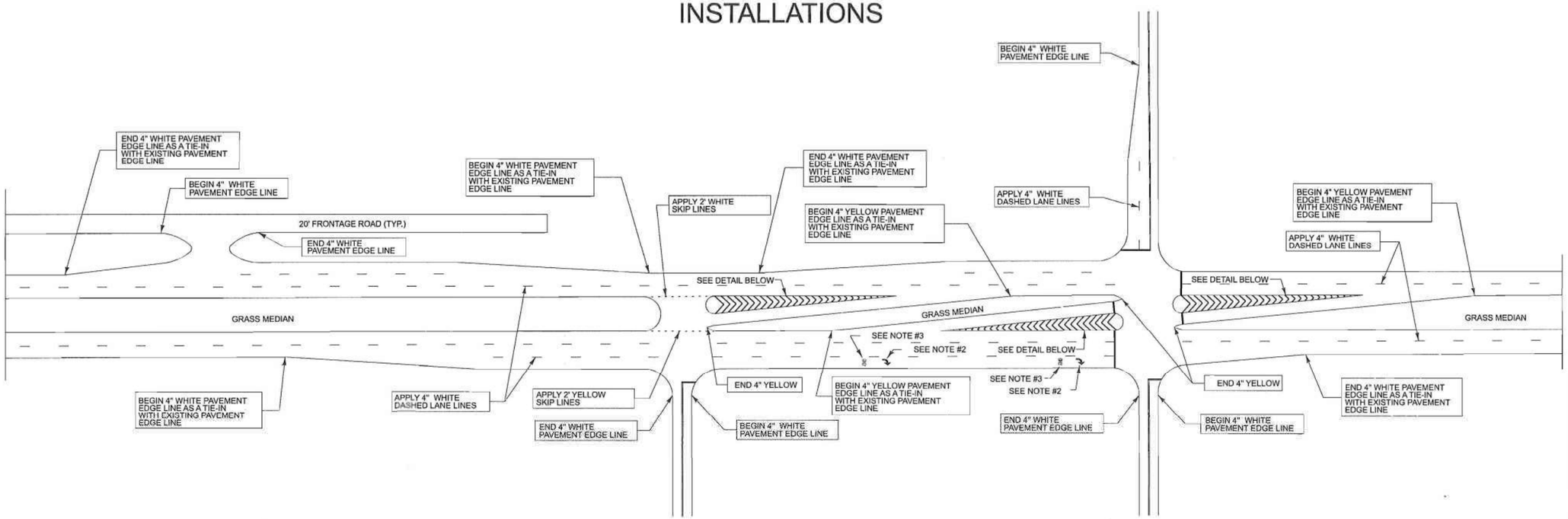
STANDARD INTERSECTION LAYOUT

SEE STD. 625-305-01 FOR HIGH VISIBILITY CROSSWALK LAYOUT DETAILS

SKEWED INTERSECTION - HIGH VISIBILTY CROSSWALK

THIS DRAWING IS NOT TO SCALE

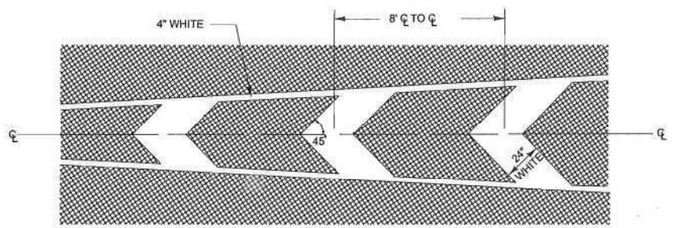
PAVEMENT MARKING TYPICAL
TYPICAL MARKINGS FOR TURN LANE INSTALLATIONS



NOTES:

1. LENGTH OF TAPERS & CHEVRONS VARY. SEE PLAN SHEETS FOR DIMENSIONS.
2. APPLY ARROWS, SEE STANDARD DRAWING NO.: 625-410-00
3. APPLY "ONLY" COPY, SEE STANDARD DRAWING NO.: 625-410-00
4. NO RAISED MARKERS ARE TO BE APPLIED ON CHEVRONS.
5. STOPLINES SHOWN ON MAINLINE ARE TO BE APPLIED ONLY AT SIGNALIZED INTERSECTIONS.

CHEVRON MARKING DETAIL



THIS DRAWING IS NOT TO SCALE

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 23845 MARK H. ANTHONY

SIGNATURE

2-5-08
DATE

#	DATE	CHK	DESCRIPTION
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SCDOT

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

STANDARD DRAWING

TYPICAL MARKINGS FOR TURN LANE INSTALLATIONS

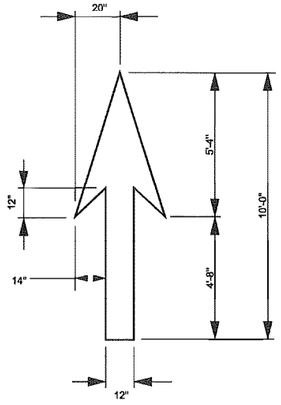
625-310-00

EFFECTIVE LETTING DATE: MAY 2008

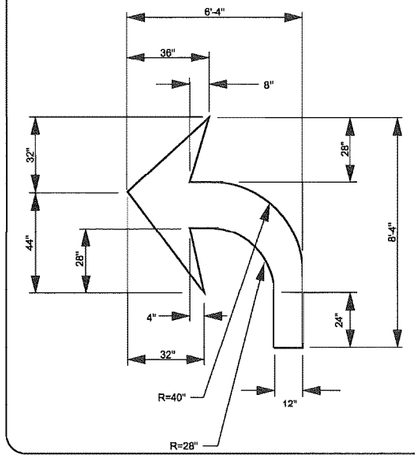
STANDARD PAVEMENT MARKINGS

FOR ARROWS & ONLY(S)

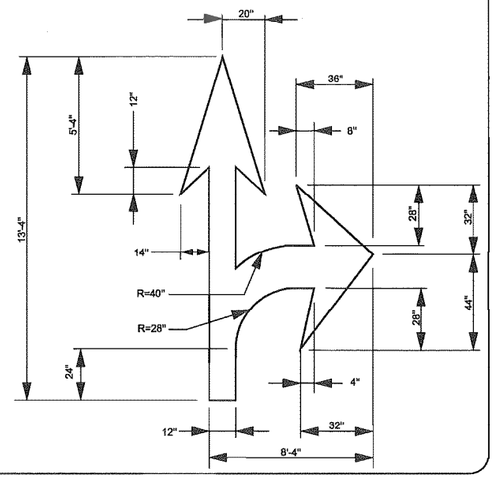
STRAIGHT ARROW



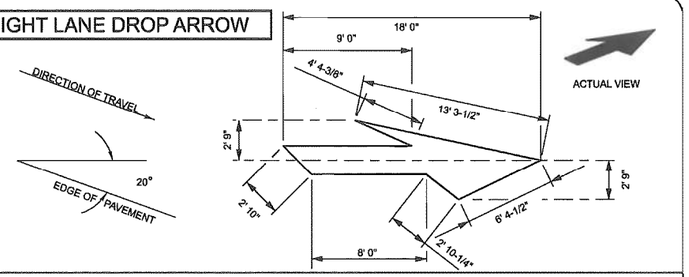
RIGHT OR LEFT TURN ARROW



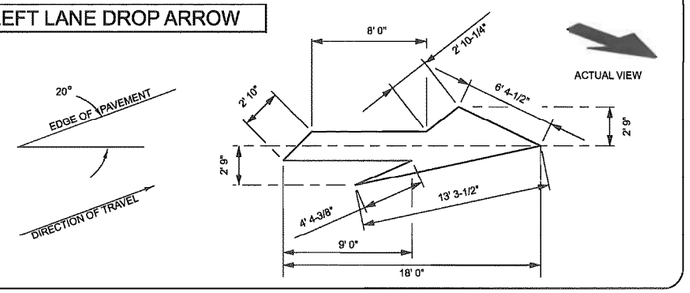
COMBINATION STRAIGHT AND LEFT OR RIGHT TURN ARROW



RIGHT LANE DROP ARROW

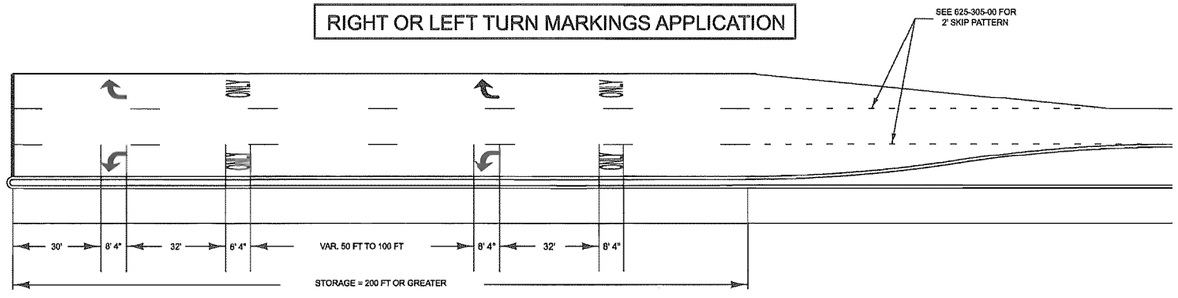


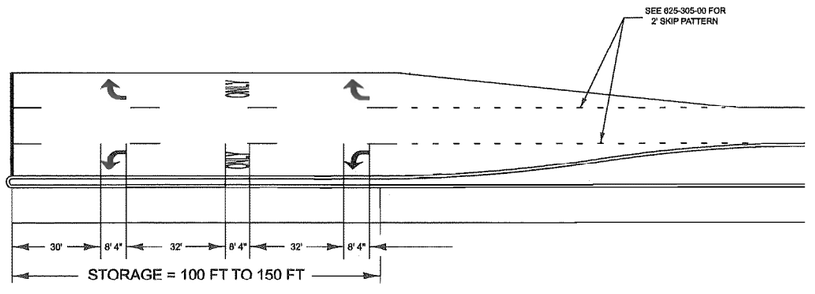
LEFT LANE DROP ARROW



"ONLY"

RIGHT OR LEFT TURN MARKINGS APPLICATION





NOTE:
LEFT TURN ARROWS MAY BE OMITTED AT THE DESCRETION OF THE ENGINEER.

THIS DRAWING IS NOT TO SCALE

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 23845 MARK H. ANTHONY

SIGNATURE

1-20-09
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

SCDOT

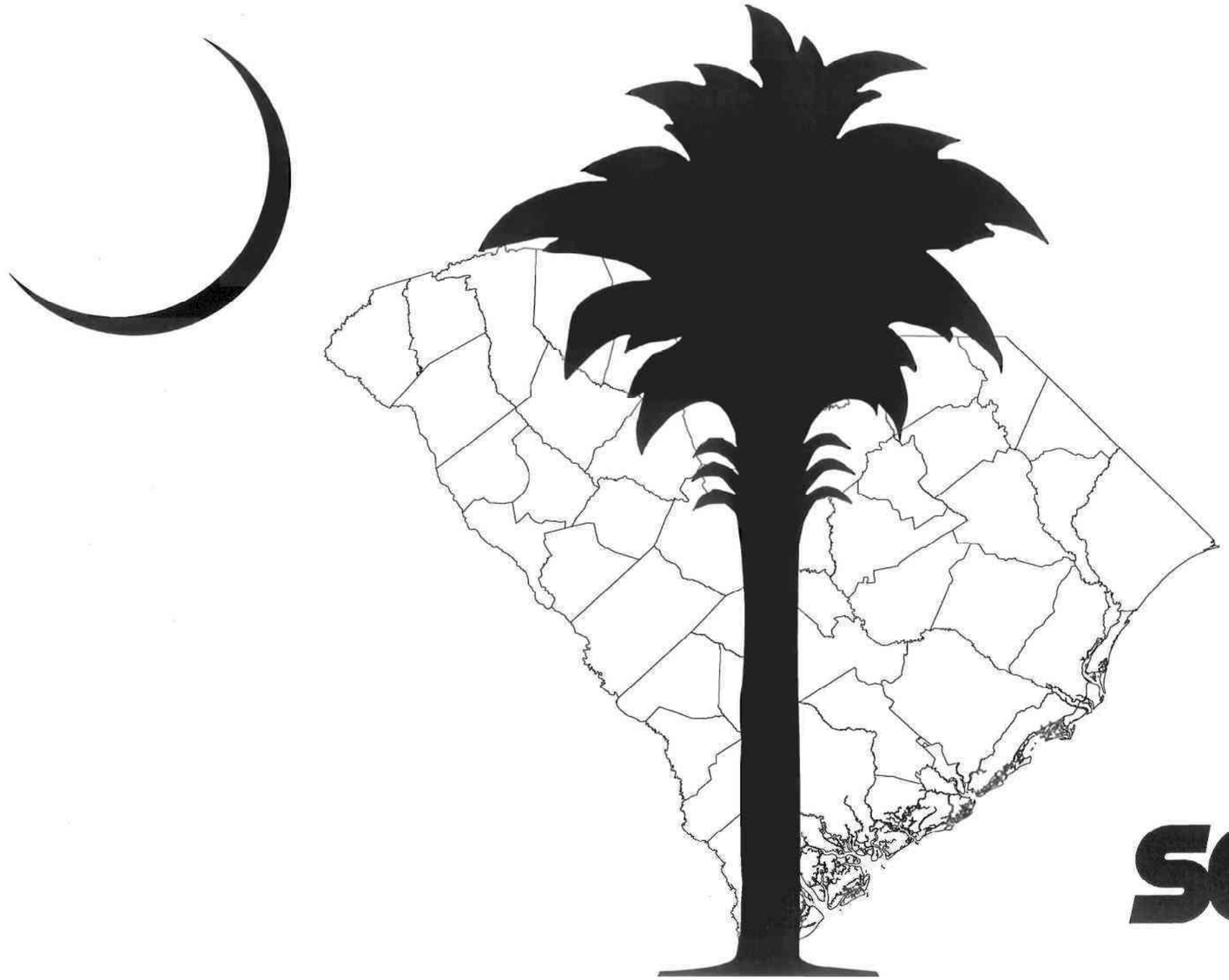
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

FOR ARROWS & ONLY(S)

625-410-00

EFFECTIVE LETTING DATE: MAY 2009



SCDOT

PERMANENT RAISED PAVEMENT MARKERS

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

STANDARD DRAWING

SECTION
630-000

CONCRETE ISLAND / MEDIAN PAVEMENT MARKER PLACEMENT

DISTANCE BETWEEN RAISED PAVEMENT MARKERS

ISLAND LENGTH	APPROACH & INTERMEDIATE	TRAILING END
** 40	--	40
* 45	25	20
* 50	25	25
* 55	25	30
* 60	25	35
* 65	25	40
70	25	20
75	25	25
80	25	30
85	25	35
90	25	40
95	25	20
100	25	25
105	25	30
110	25	35
115	25	40
120	25	20
125	25	25
130	25	30
135	25	35
140	25	40
145	25	20
150	25	25

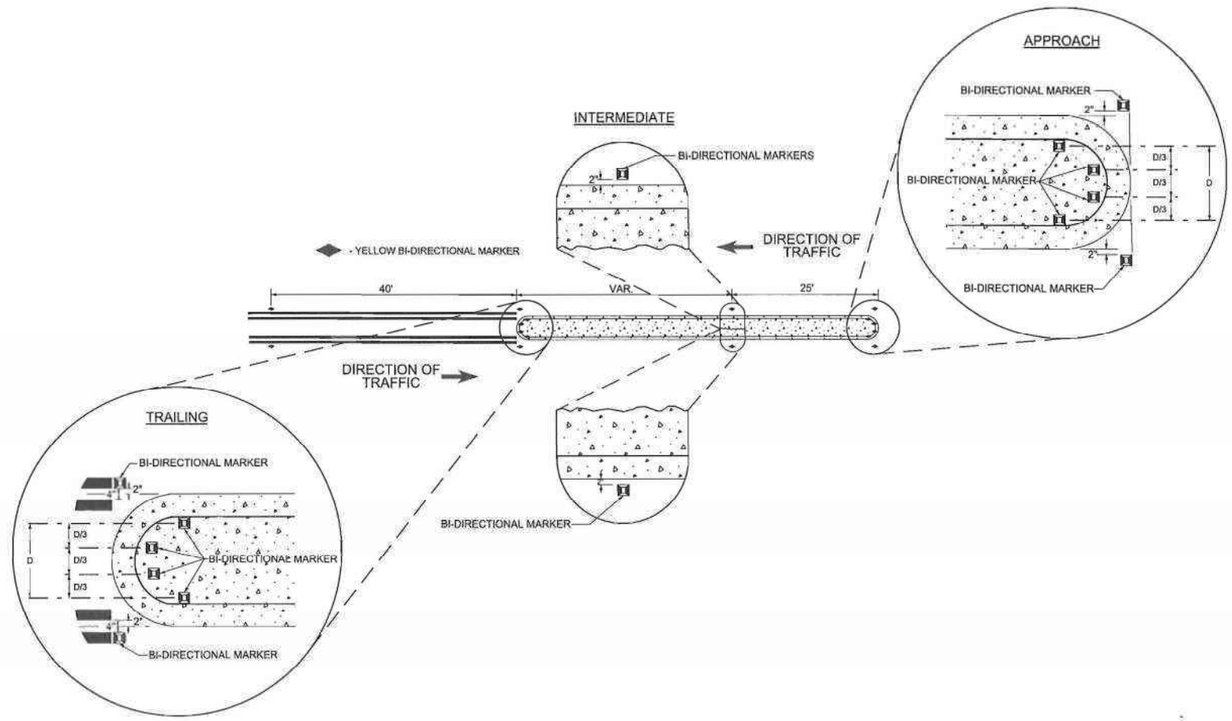
** CONCRETE ISLAND NOT SUPPLEMENTED WITH INTERMEDIATE RAISED PAVEMENT MARKERS

* CONCRETE ISLAND SUPPLEMENTED WITH ONLY ONE PAIR OF INTERMEDIATE RAISED PAVEMENT MARKERS

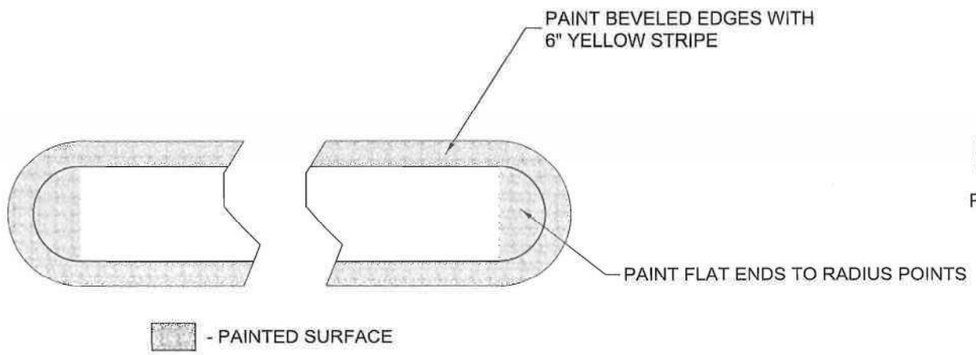
NOTES:

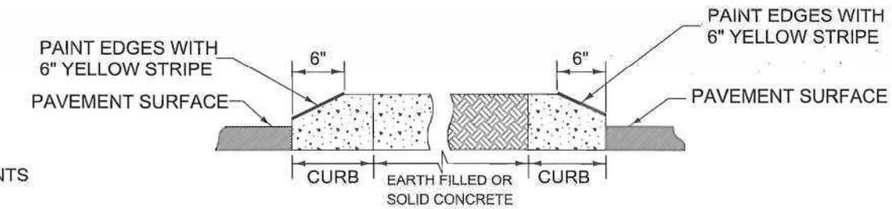
1) EACH END OF A CONCRETE ISLAND SHALL BE SUPPLEMENTED WITH RAISED PAVEMENT MARKERS.

2) RAISED PAVEMENT MARKERS SUPPLEMENTAL TO CONCRETE ISLANDS WILL BE INSTALLED AS SHOWN. VARIABLE SPACINGS SHALL NOT BE APPLIED TO AN APPROACH END OF AN ISLAND.



CONCRETE ISLAND / MEDIAN PAINTING





THIS DRAWING IS NOT TO SCALE

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 23845 MARK H. ANTHONY

SIGNATURE

10-6-10
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

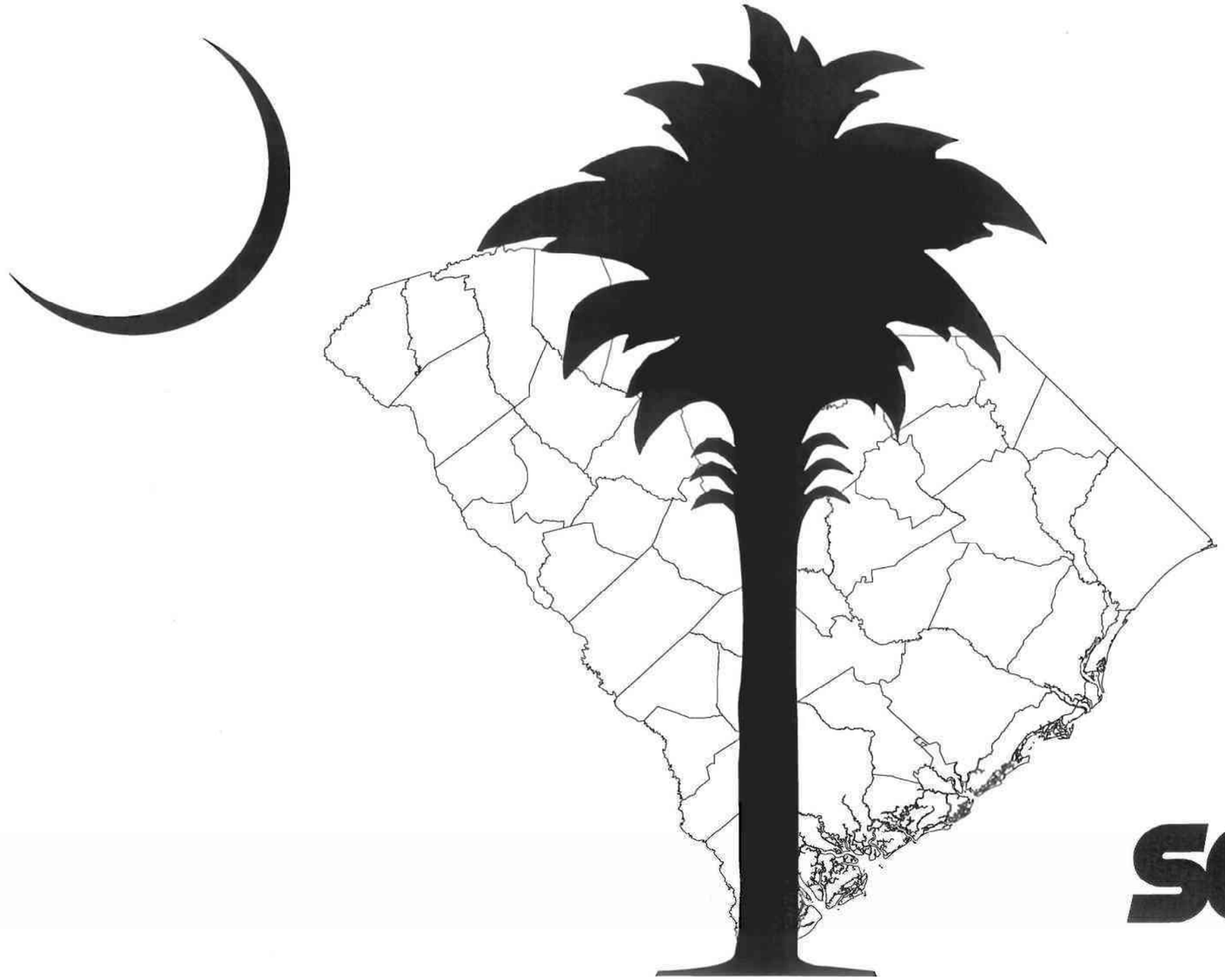
SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

PAVEMENT MARKING TYPICAL
CONCRETE ISLAND / MEDIAN
PAINTING
AND
RAISED PAVEMENT
MARKER PLACEMENT

630-215-00

EFFECTIVE LETTING DATE JANUARY 2011



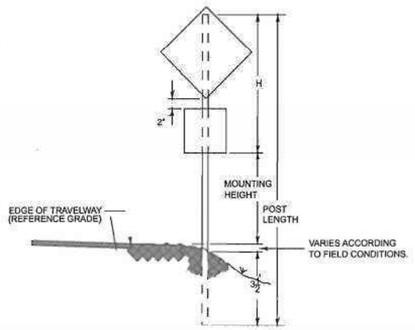
PERMANENT SIGNING
(FLAT SHEET SIGNS)

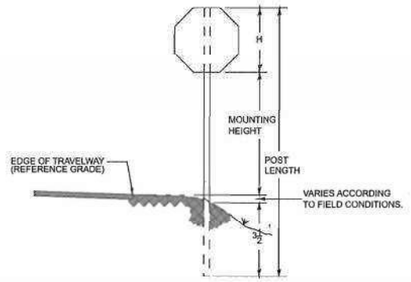
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

SECTION
651-000

FLAT SHEET SIGN MOUNTING DETAILS





SIGNS MOUNTED ON FREEWAY RAMPS AND CONVENTIONAL ROADS

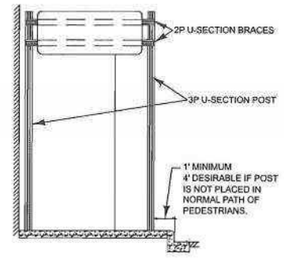
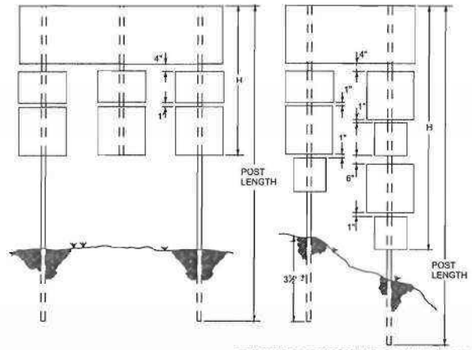


ILLUSTRATION OF SIGN ASSEMBLY SPANNING SIDEWALK

NOTE:

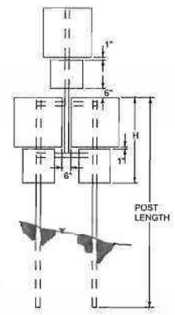
THE PURPOSE OF SPANNING THE SIDEWALK IS TO PROVIDE AN UNOBSTRUCTED WAY FOR PEDESTRIANS, AND AT THE SAME TIME LOCATE SIGNS WITHIN RIGHT-OF-WAY, WITH GOOD VISABILITY FOR TRAFFIC. EACH INSTALLATION MUST BE INDIVIDUALLY PLANNED AND CONSTRUCTED TO ACCOMPLISH THIS PURPOSE. THE PROJECT ENGINEER SHOULD APPROVE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



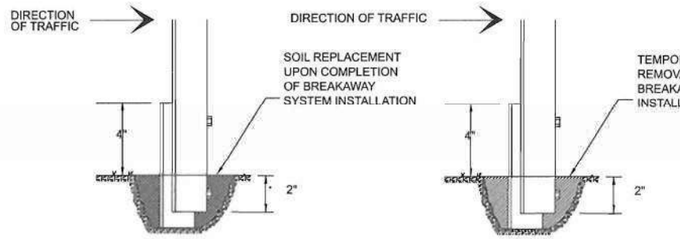
THIS TABLE GIVES APPROXIMATE POST LENGTH FOR NORMAL CONDITIONS. WHEN CUT OR FILL SECTIONS ARE SIGNIFICANT, POST LENGTH SHALL BE ADJUSTED ACCORDINGLY.

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 5' MOUNTING HGT.	9'	12'	13'	14'	H PLUS 10'

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



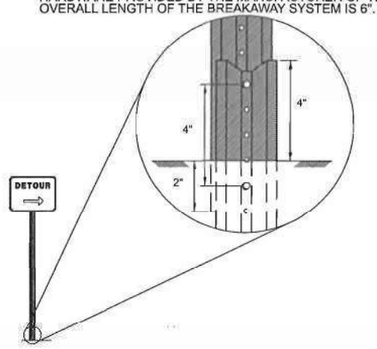
NOTE:
POST LENGTHS NOT SHOWN ON THIS SHEET ARE SHOWN ON THE PLAN SHEETS.



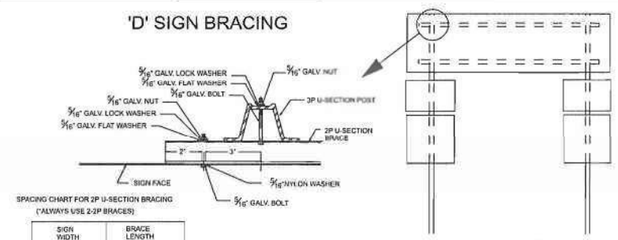
DRIVE THE GROUND SUPPORT (STUB) APPROXIMATELY 30" TO 36" INTO THE GROUND AS SPECIFIED BY THE MANUFACTURER OF THE BREAKAWAY SYSTEM SO THAT NO MORE THAN 4" OF THE GROUND SUPPORT (STUB) EXTENDS ABOVE THE GROUND. REMOVE ENOUGH SOIL FROM AROUND THE GROUND SUPPORT (STUB) TO PERMIT ACCESS TO THE HOLES FOR THE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

LAP SPLICE FOR U-SECTION POSTS

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".



'D' SIGN BRACING



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

SIGN WIDTH	BRACE LENGTH
72"	56"
78"	60"
84"	64"
90"	68"
96"	72"
102"	76"
108"	80"
114"	84"
120"	88"
126"	92"
138"	100"
144"	104"
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 5' MTG. HT. LBS./FT.	5' 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
R2-5c-24	1	3P	12	3P	14
R2-5c-48	2	3P	15	3P	17
R2-6-24	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
R5-10a-30	1	3P	13		
R6-1-36	1	3P	10	3P	12
R8-4-36	2	3P	12	3P	14
R8-8-42	2	3P	12	3P	14

SIGN NO.	NO. OF POSTS	POST SIZES 5' MTG. HT. LBS./FT.	5' MTG. HT. LGTH.	7' MTG. HT. LBS./FT.	7' MTG. HT. LGTH.
W1-1-24	1	3P	12	3P	14
W1-1-30	1	3P	14	3P	16
W1-1-36	2	3P	12	3P	14
W1-2-30	1	3P	12	3P	14
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
W1-6-48	2	3P	12	3P	14
W1-7-48	2	3P	12	3P	14
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
W2-5-30	1	3P	13	3P	15
W3-1-36	1	3P	14	3P	16
W3-3-36	1	3P	14	3P	16
W5-1-36	1	3P	14	3P	16
W9-1-36	1	3P	14	3P	16
W9-2-36	1	3P	14	3P	16
W8-3-30	1	3P	13	3P	15
W14-1-24	1	3P	12	3P	14
W14-1-30	1	3P	13	3P	15
W6-4-48	2	3P	14	3P	16
W10-1-36	1	3P	13	3P	15

SIGN NO.	NO. OF POSTS	POST SIZES 5' MTG. HT. LBS./FT.	5' MTG. HT. LGTH.	7' MTG. HT. LBS./FT.	7' MTG. HT. LGTH.
THE FOLLOWING TO BE MOUNTED AT 4' HT.					
D10-1-12-XX	1	2P	10		
D10-2-12-XX	1	2P	11		
D10-3-12-XX	1	2P	12		
THE FOLLOWING TO BE MOUNTED AT 6' HT.					
R1-2-60	2	3P			
R4-3-48	2	3P			
R8-4-48	2	3P			
R11-1-48	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 7½' LONG.

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 23845 MARK H. ANTHONY

SIGNATURE

2-11-09
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

SCDOT

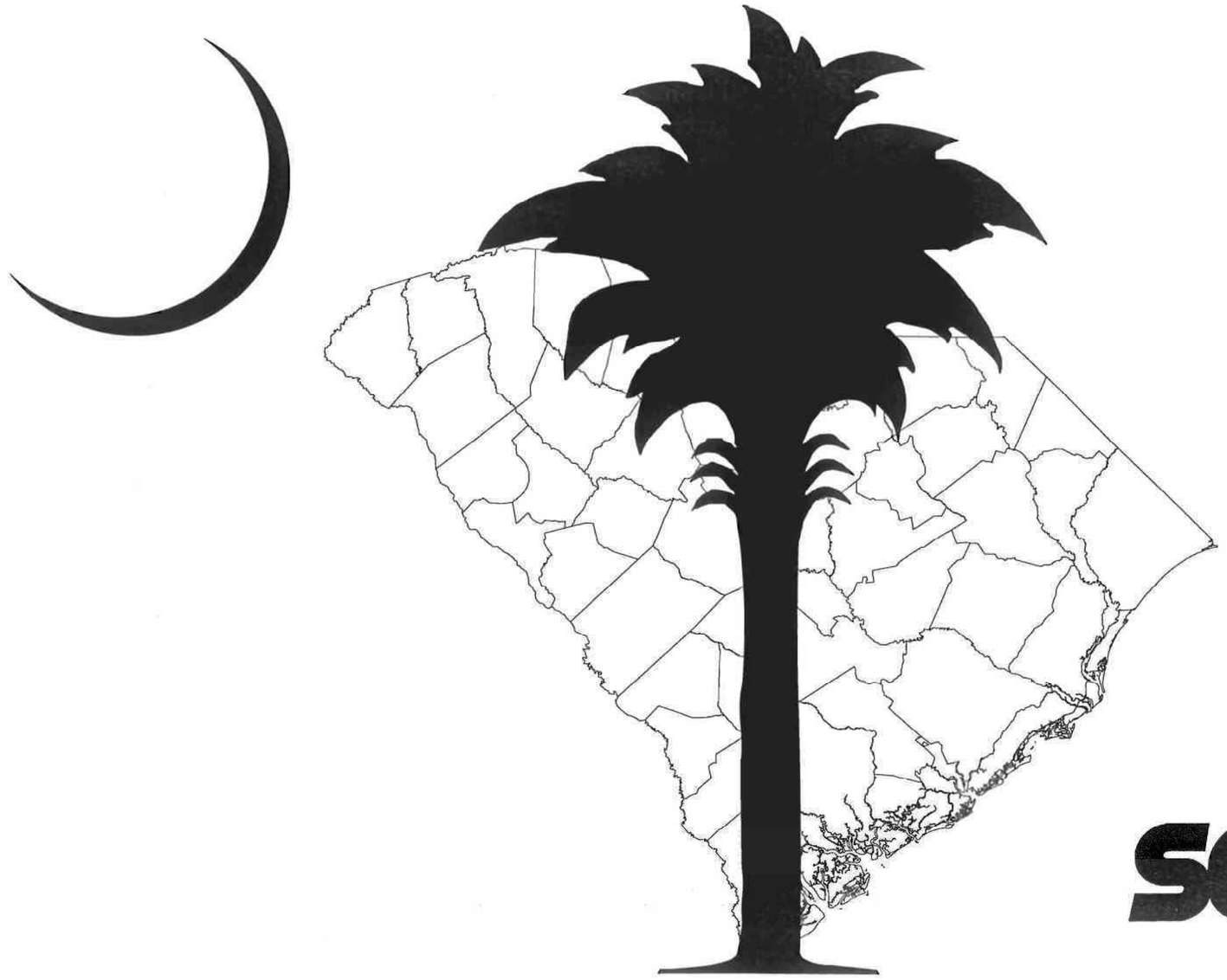
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

FLAT SHEET MOUNTING DETAILS

651-110-00

EFFECTIVE LETTING DATE: MAY 2008



CURB & GUTTER, SIDEWALKS & DRIVEWAYS

SCDOT

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

STANDARD DRAWING

SECTION
720-000

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

150-205-00, 720-905-02

PRECONSTRUCTION SUPPORT ENGINEER

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

James W. Kendall

SIGNATURE

AUGUST 23, 2012

DATE

6			
5			
4			
3			
2			
1	8/2012	DSO	REMOVED DETAIL 5
0	3/2009	DSO	GENERAL REVISIONS
#	DATE	CHK	DESCRIPTION

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

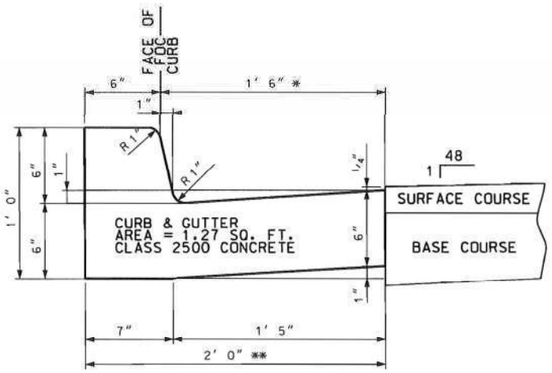
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

CURB & GUTTER (CONCRETE)

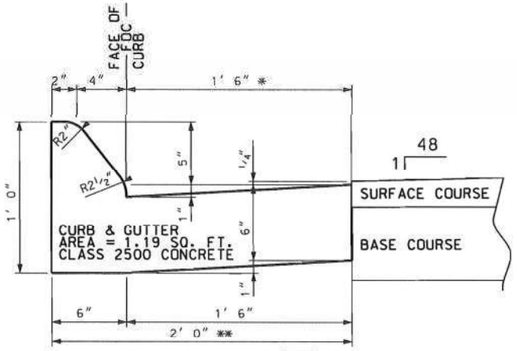
720-105-01

EFFECTIVE LETTING DATE | JAN. 2013



DETAIL 1

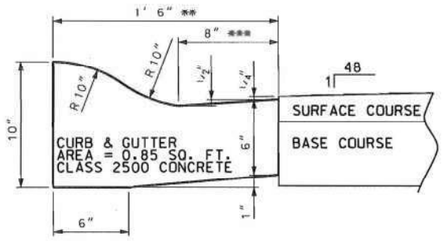
SCALE 1":1'
VERTICAL FACE
*1'-0" FOR ** 1'-6" CURB&GUTTER
*1'-6" FOR ** 2'-0" CURB&GUTTER (SHOWN)
*2'-0" FOR ** 2'-6" CURB&GUTTER
*2'-6" FOR ** 3'-0" CURB&GUTTER



DETAIL 2

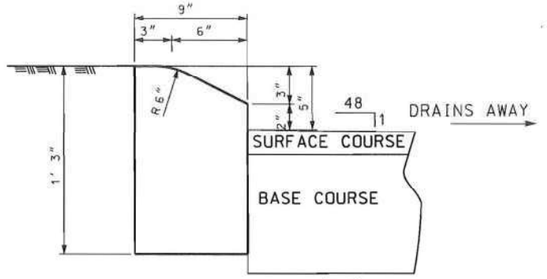
SCALE 1":1'
SLOPING FACE

[A.K.A. MOUNTABLE CURB]
(SELECT APPROPRIATE DRAINAGE STRUCTURES WHEN USING THIS CURB SYSTEM)
PREFERRED AT MAILBOXES
*1'-0" FOR ** 1'-6" CURB&GUTTER
*1'-6" FOR ** 2'-0" CURB&GUTTER (SHOWN)
*2'-0" FOR ** 2'-6" CURB&GUTTER
*2'-6" FOR ** 3'-0" CURB&GUTTER



DETAIL 3

SCALE 1":1'
OGEE
(USE ONLY WHERE CATCH BASIN STYLE DRAINAGE STRUCTURES ARE NOT PRESENT)
PREFERRED AT MAILBOXES
***0'-8" FOR ** 1'-6" CURB&GUTTER (SHOWN)
***1'-2" FOR ** 2'-0" CURB&GUTTER
***1'-8" FOR ** 2'-6" CURB&GUTTER
***2'-2" FOR ** 3'-0" CURB&GUTTER



DETAIL 4

SCALE 1":1'
9" X 15" CONCRETE CURB (USE ONLY IN MEDIAN APPLICATIONS WHERE ROADWAY CROWN DRAINS AWAY FROM MEDIAN WHEN ADJACENT TO GRASS PLOT OR CONCRETE ISLAND)

NOTES:
1. USE CONCRETE CURB AND GUTTER WITH VERTICAL FACE UNLESS OTHERWISE NOTED.

2. USE MINIMUM CLASS 2500 CONCRETE.

3. USE 3' TRANSITION AT END OF RADII ON INTERSECTING STREETS AND WHERE CURB IS 6 FEET OR GREATER FROM MAINLINE TRAVEL LANE.

4. USE 10' TRANSITION WHERE CURB IS LESS THAN 6 FEET FROM MAINLINE TRAVEL LANE.

5. INCLUDE COST OF WORK TO CONSTRUCT TRANSITIONS IN THE COST PER LF OF CURB AND GUTTER.

6. DEVELOP GUTTER SLOPE ON HIGH SIDE OF SUPERELEVATION AS SHOWN ON STANDARD DRAWING 150-205-00, EXCEPT ON OGEE CURB & GUTTER.

7. USE DETECTABLE WARNINGS AS REQUIRED ON STANDARD DRAWINGS 720-905-XX.

8. WHEN MAILBOXES ARE PRESENT, USE APPROPRIATE CURB TYPE. INSTALL MAILBOXES BEHIND CURB OR SIDEWALK AS SHOWN ON STANDARD DRAWING 203-905-00.

9. PAY ITEMS (MAY NOT BE COMPLETE LIST OF PAY ITEMS):

FOR CURB & GUTTER

7203110	CONCRETE CURB AND GUTTER (1'-6") VERTICAL FACE	------LF
7203210	CONCRETE CURB AND GUTTER (2'-0") VERTICAL FACE	------LF
7203240	CONCRETE CURB AND GUTTER (2'-6") VERTICAL FACE	------LF
7203310	CONCRETE CURB AND GUTTER (3'-0") VERTICAL FACE	------LF
7203120	CONCRETE CURB AND GUTTER (1'-6") SLOPING FACE	------LF
7203220	CONCRETE CURB AND GUTTER (2'-0") SLOPING FACE	------LF
7203245	CONCRETE CURB AND GUTTER (2'-6") SLOPING FACE	------LF
7203320	CONCRETE CURB AND GUTTER (3'-0") SLOPING FACE	------LF
7203130	CONCRETE CURB AND GUTTER (1'-6") OGEE	-----LF
7203230	CONCRETE CURB AND GUTTER (2'-0") OGEE	-----LF
7203265	CONCRETE CURB AND GUTTER (2'-6") OGEE	-----LF
7203330	CONCRETE CURB AND GUTTER (3'-0") OGEE	-----LF

FOR CURB ONLY

7201000	CONCRETE CURB (9"x 15")	----LF

FOR CONCRETE MEDIAN

7206000	CONCRETE MEDIAN	------SY
7206100	CONCRETE MEDIAN OVERLAY	------SY

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

150-205-00
720-105-01
720-905-02

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

James W. Kendall Jr.
SIGNATURE

9-27-12
DATE

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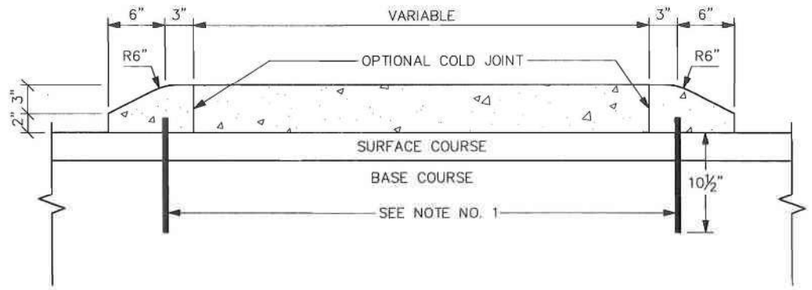
SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

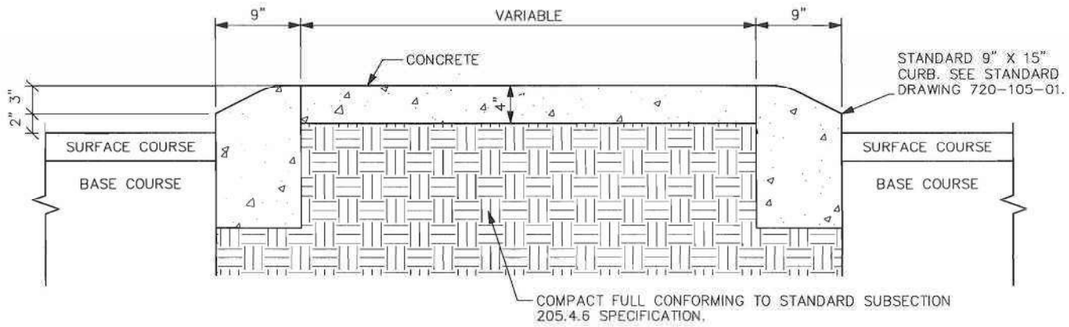
CURB & GUTTER
(CONCRETE ISLANDS)

720-105-03

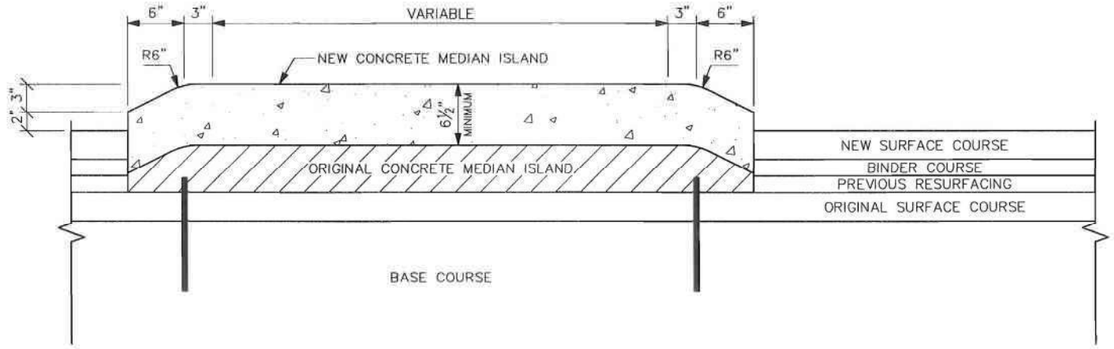
EFFECTIVE LETTING DATE | JANUARY, 2013



DETAIL 8
SCALE: 3/4" = 1'-0"
CONCRETE ISLAND SURFACE APPLIED



DETAIL 9
SCALE: 3/4" = 1'-0"
CONCRETE ISLAND WITH 9" X 15" CONCRETE CURB



DETAIL 10
SCALE: 3/4" = 1'-0"
CONCRETE ISLAND RESURFACING

NOTES:

1. WHEN DESIGN SPEED IS 45 MPH OR GREATER, USE (2) ½" DIAMETER STEEL DOWELS WITH 10½" EMBEDMENT INTO PAVEMENT AT 10 FOOT INTERVALS. STEEL DOWELS ARE NOT REQUIRED WHEN DESIGN SPEED IS LESS THAN 45 MPH.
2. TO INSURE PROPER DRAINAGE, GRADE GROUND SURFACE TOWARD STREET WITH A SLOPE OF 20:1 (H:V).
3. SEE SHEET 720-105-01 FOR ADDITIONAL NOTES.

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

James W. Kendall Jr.
SIGNATURE

10/30/2015
DATE

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0	1/2016	DSO	NEW DRAWING

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

STANDARD DRAWING

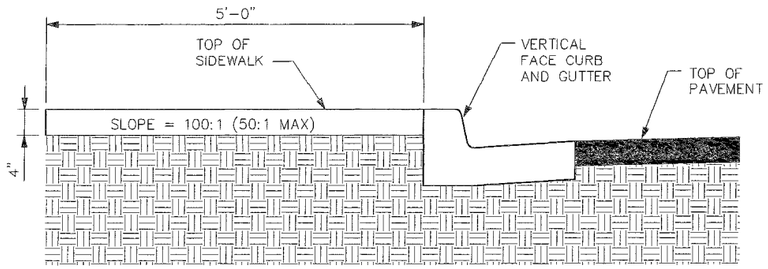
SIDEWALK ADJACENT TO CURB

720-150-00

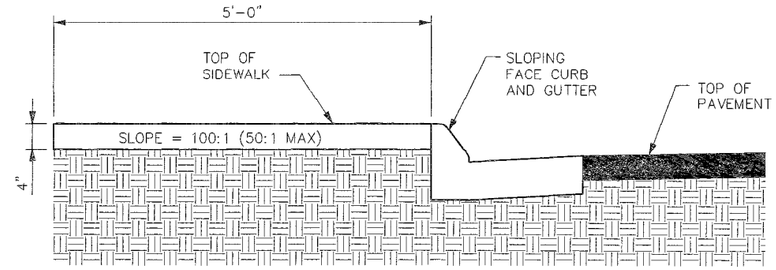
EFFECTIVE LETTING DATE: JAN., 2016

NOTES:

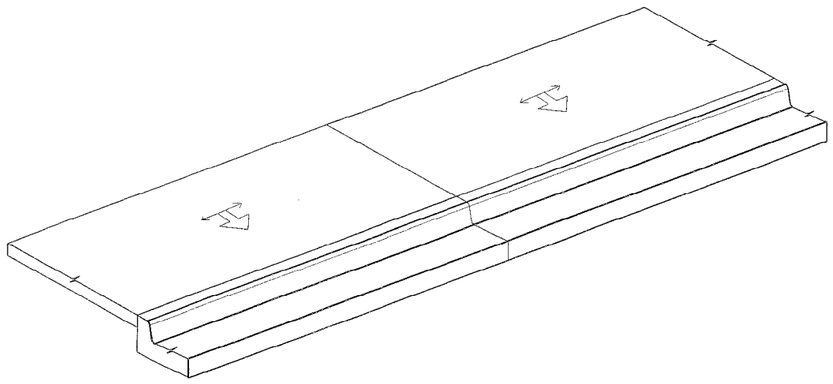
1 SEE DRAWING 720-105-01 FOR STANDARD CURB AND GUTTER DETAILS.
2 SEE DRAWING 720-901-03 FOR SYMBOLS AND CONSTRUCTION TOLERANCE.
3 PLACE TRANSVERSE EXPANSION JOINTS (FULL DEPTH ACROSS THE ENTIRE SIDEWALK WIDTH) WHEN NEAR TURNS IN THE SIDEWALK, AND IN LONG CONTINUOUS RUNS OF SIDEWALK AS DIRECTED IN THE STANDARD SPECIFICATIONS.
4 PLACE EXPANSION JOINTS BETWEEN THE SIDEWALK EDGE AND THE BACK OF CURB WHEN ALONG A RADIUS LESS THAN 100'.
5 PLACE EXPANSION JOINTS BETWEEN THE SIDEWALK EDGE AND ANY ADJACENT STRUCTURE (RETAINING WALLS, BUILDINGS, ETC.)
6 PLACE CONTRACTION JOINTS AT REGULAR INTERVALS BETWEEN EXPANSION JOINTS NOT TO EXCEED STANDARD SPECIFICATION SPACING.
7 MEASURE SIDEWALK IN SQUARE YARDS BY THE ACTUAL PLACED AREA OF CONCRETE UP TO THE ADJACENT PAY ITEM LIMITS (CURBS, PEDESTRIAN RAMPS, DRIVEWAYS, ETC.).



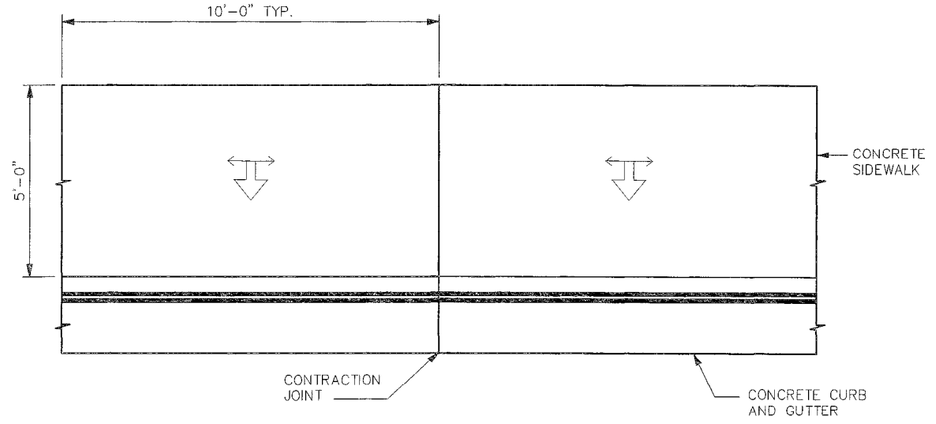
DETAIL 1
1/2" = 1'-0"
SIDE ELEVATIONS



DETAIL 2
1/2" = 1'-0"
SIDE ELEVATIONS



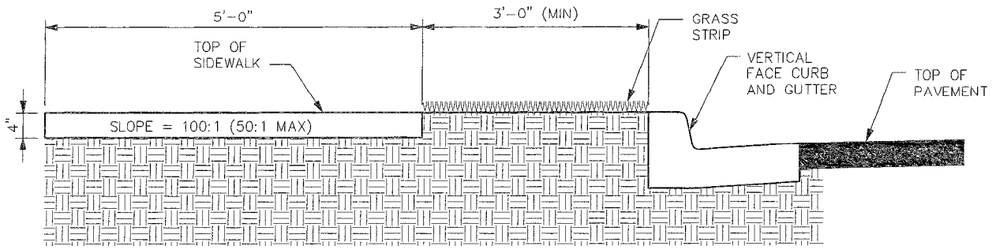
DETAIL 4
ISOMETRIC VEIW



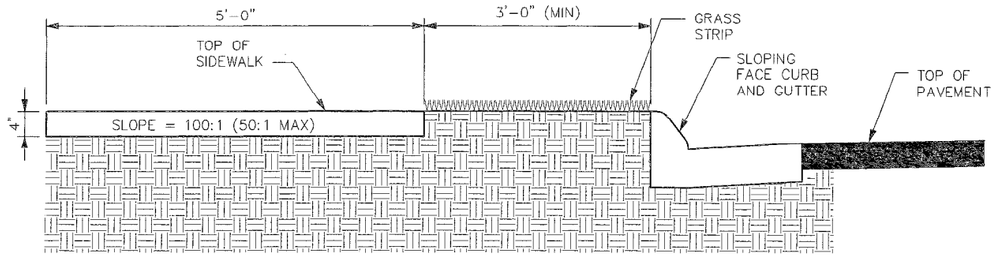
DETAIL 3
SCALE: 1/4" = 1'-0"
PLAN VEIW

NOTES:

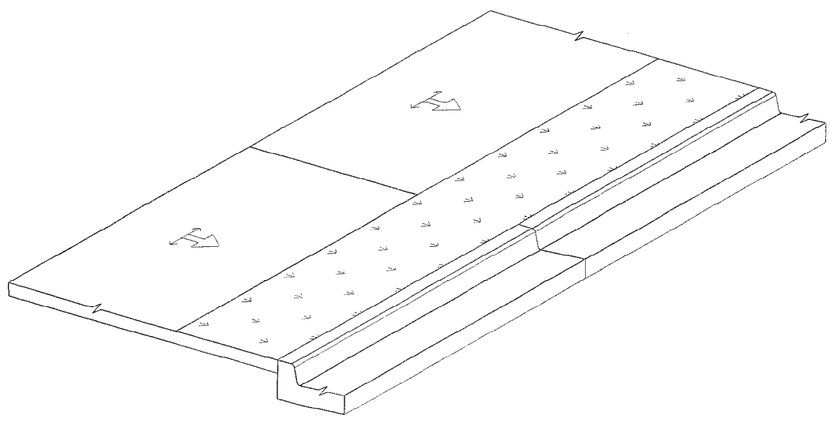
1. SEE DRAWING 720-105-01 FOR STANDARD CURB AND GUTTER DETAILS.
2. SEE DRAWING 720-901-03 FOR SYMBOLS AND CONSTRUCTION TOLERANCE.
3. PLACE TRANSVERSE EXPANSION JOINTS (FULL DEPTH ACROSS THE ENTIRE SIDEWALK WIDTH) WHEN NEAR TURNS IN THE SIDEWALK, AND IN LONG CONTINUOUS RUNS OF SIDEWALK AS DIRECTED IN THE STANDARD SPECIFICATIONS.
4. PLACE EXPANSION JOINTS BETWEEN THE SIDEWALK EDGE AND ANY ADJACENT STRUCTURE (RETAINING WALLS, BUILDINGS, ETC.)
5. PLACE CONTRACTION JOINTS AT REGULAR INTERVALS BETWEEN EXPANSION JOINTS NOT TO EXCEED STANDARD SPECIFICATION SPACING.
6. MEASURE SIDEWALK IN SQUARE YARDS BY THE ACTUAL PLACED AREA OF CONCRETE UP TO THE ADJACENT PAY ITEM LIMITS (CURBS, PEDESTRIAN RAMPS, DRIVEWAYS, ETC.).



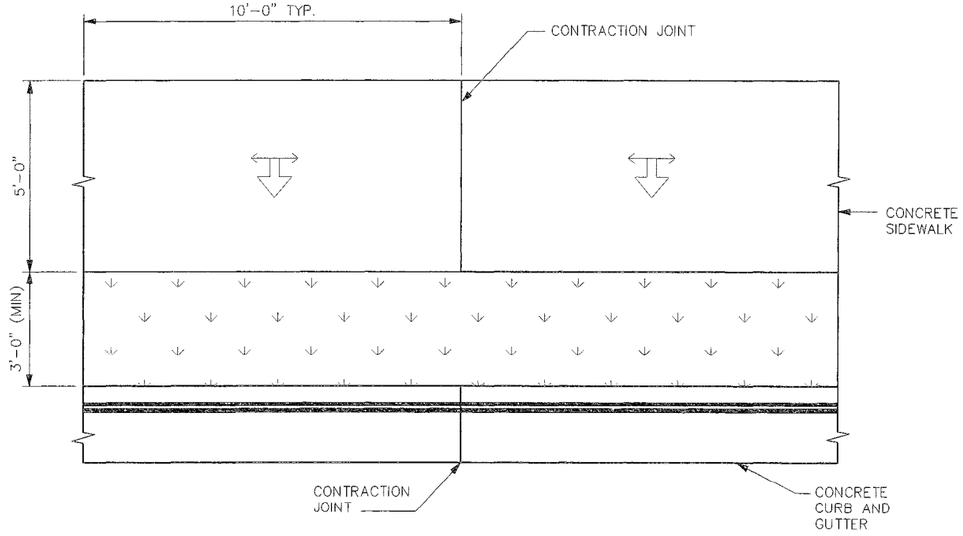
DETAIL 1
1/2" = 1'-0"
SIDE ELEVATIONS



DETAIL 2
1/2" = 1'-0"
SIDE ELEVATIONS



DETAIL 3
ISOMETRIC VEIW



DETAIL 4
SCALE: 1/4" = 1'-0"
PLAN VEIW

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

SIGNATURE

10/30/2015
DATE

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SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

SIDEWALK WITH GRASS STRIP ADJACENT TO CURB

720-155-00

EFFECTIVE LETTING DATE | JANUARY 2016

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

720-410-01, 720-905-01

PRECONSTRUCTION SUPPORT ENGINEER

EDWIN SYLVESTER EARGLE, II
REGISTERED PROFESSIONAL ENGINEER
SOUTH CAROLINA
NO. 8858

SIGNATURE

MARCH 3, 2008
DATE

#	DATE	CHK	DESCRIPTION
6			
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0	3/2008	DSO	GENERAL REVISIONS

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

STANDARD DRAWING

CURB & GUTTER AT INTERSECTIONS

720-305-00

EFFECTIVE LETTING DATE | MAY 2008

TURN ANGLE (Δ) AND LOCATE THESE POINTS USING THE FOLLOWING FORMULAS:

$AB = BC = R * TAN(\frac{1}{2}\Delta)$

$DE = DF = R' * COT(\frac{1}{2}\Delta)$

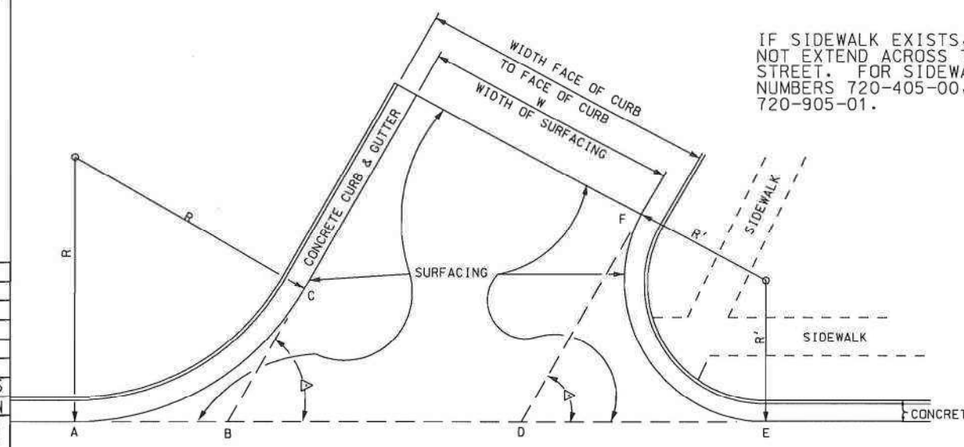
$BD = W / SIN(\Delta)$

$BG = DF + W * COT(\Delta)$

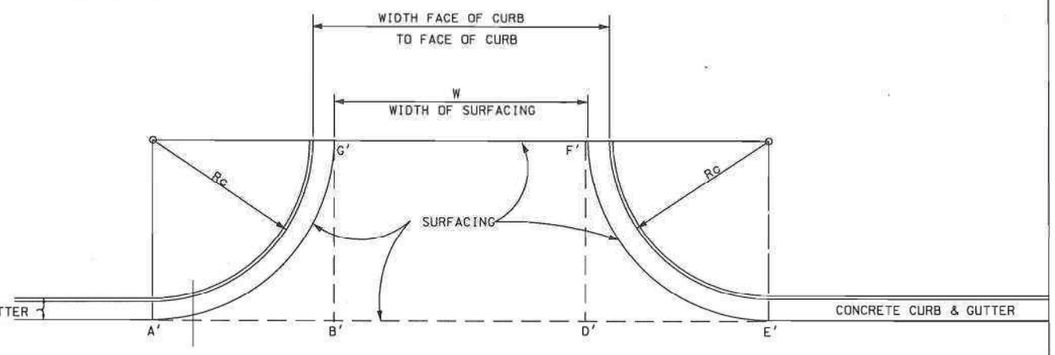
SURFACING AREA $ABC = R^2 * TAN(\frac{1}{2}\Delta - (\pi * \Delta)/360)$

SURFACING AREA $DEF = (R')^2 * COT[\frac{1}{2}\Delta - \pi * (180 - \Delta)/360]$

SURFACING AREA $BDFG = \frac{1}{2} W * (BG + DF)$



IF SIDEWALK EXISTS, THE DRIVEWAY OPENING SHOULD NOT EXTEND ACROSS THE LINE OF SIDEWALK ON EITHER STREET. FOR SIDEWALK DETAILS SEE STANDARD DRAWING NUMBERS 720-405-00, 720-410-01, 720-410-02, AND 720-905-01.



NOTES:

1. WHERE CONCRETE SIDEWALK IS CONSTRUCTED ADJACENT TO THE CURB AND GUTTER AS SHOWN ON DRAWING NO. 720-410-01, THE CONCRETE GUTTER SHALL BE MEASURED AND PAID FOR AS CONCRETE CURB AND GUTTER, WHEN SUCH CURB IS ELIMINATED FOR THE CONSTRUCTION OF DRIVEWAYS.

2. FOR INTERSECTIONS AT OR NEAR 90°, USE 30 FT. RADIUS ON FACE OF CURB, UNLESS OTHERWISE SHOWN ON PLANS.

3. CONSTRUCT CURB RAMPS AT INTERSECTIONS WHERE CONCRETE SIDEWALK IS CONSTRUCTED. SEE DRAWING NO. 720-905-01 FOR CURB RAMP DETAIL.

4. ALL STREET INTERSECTIONS TO BE STAKED OFF BEFORE CONSTRUCTION.

NOTE TO RESIDENT ENGINEER:

BEGIN MEASUREMENT OF CURB AND GUTTER ALONG FACE OF CURB USING THE CORRECT STATION NUMBER AT THE BEGINNING. CARRY A SEPERATE SET OF STATIONS ON EACH SIDE OF CENTERLINE, AND MAKE ADJUSTMENTS WITH EQUALITIES AT STREET INTERSECTIONS, OR AT THE P.T. WHEN MEASURING AROUND A CURVE. USE A SEPERATE MEASUREMENT AND SET OF STATIONS ON SIDEWALK. MAKE DEDUCTION FROM TOTAL LENGTH OF CURB AND GUTTER FOR CATCH BASINS.

THIS DRAWING IS NOT TO SCALE

REFERENCES

NATIONAL DOCUMENTS

REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER, 2005

MUTCD 2009

SCDOT DOCUMENTS

SCDOT TRANSITION PLAN

QPL 61

RELATED DRAWINGS & KEYWORDS

625-305-00

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

James W. Kendall Jr.
SIGNATURE

12/10/2014
DATE

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SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

PEDESTRIAN RAMPS GENERAL NOTES & DEFINITIONS

720-901-01

EFFECTIVE LETTING DATE: FEBRUARY, 2015

1.00 GENERAL

1.01 CONSTRUCT PEDESTRIAN RAMPS CONFORMING TO THESE STANDARD DRAWINGS. SUBMIT RAMP DESIGN DRAWINGS TO THE ENGINEER FOR REVIEW WHEN NON STANDARD RAMPS ARE USED.

1.02 USE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION), SCDOT QUALIFIED PRODUCT LIST 61 AND DETECTABLE WARNING MANUFACTURER'S INSTALLATION INSTRUCTIONS.

1.03 PROVIDE A SKID-RESISTANT BROOM FINISH ON CONCRETE WITHIN THE DESIGNATED PEDESTRIAN ACCESS ROUTE. CONSTRUCT DESIGNATED PEDESTRIAN ACCESS ROUTES LOCATED ON ASPHALT PAVEMENTS AS LEVEL AS PRACTICAL AND REMOVE LOOSE OR UNCOMPACTED ASPHALT THROUGH THE ENTIRE ACCESS ROUTE.

1.04 COORDINATE THE RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO THAT DETECTABLE WARNINGS FOR RAMPS AND REFUGE ISLANDS ARE ENTIRELY WITHIN PEDESTRIAN CROSSWALK MARKINGS.

1.05 SEE STANDARD DRAWING 626-305-00 FOR CROSSWALK MARKING STYLES.

1.06 CONSTRUCT SIDEWALK, PARALLEL RAMP, AND LANDING CROSS SLOPES AT 100H:1V [NO STEEPER THAN 50H:1V] TOWARD THE ROADWAY. CONSTRUCT CROSS SLOPE OF PERPENDICULAR RAMPS TO MATCH ROADWAY GRADE.

1.07 CONSTRUCT RUNNING SLOPE OF NEW CURB RAMPS AT A 12H:1V OR 8.33% OR FLATTER WHEN MEASURED ALONG THE DIRECTION OF PEDESTRIAN TRAVEL UP THE RAMP AND RELATIVE TO A LEVEL GRADE UNLESS FIELD CONDITIONS REQUIRE A RAMP GREATER THAN 15' LONG.

1.08 USE AT LEAST 18" CURB RADIUS AT ALL EDGES OF NEW CONCRETE ISLANDS AND AT LEAST 6" CURB RADIUS AT ALL CURB RETURNS. DO NOT SAW CUT EDGES THROUGH ISLANDS OR AT RAMPS FOR NEW CONSTRUCTION.

1.09 DO NOT CONSTRUCT STANDARD RAMP PARTITIONS OR CURB RETURNS TALLER THAN 12". IN LOCATIONS WHERE GRADE SEPARATION BETWEEN SIDEWALK AND ADJACENT PROPERTY EXCEEDS 12", SLOPE ADJACENT GRADE AS DIRECTED BY THE ENGINEER OR PROPERTY OWNER (2:1 OR FLATTER). WHERE REGRADING OF ADJACENT PROPERTY IS NOT PRACTICAL, PROVIDE A RETAINING WALL AS SHOWN IN THE PLANS, SPECIAL PROVISIONS, OR AS DIRECTED BY THE ENGINEER.

1.10 REMOVE AND DISPOSE OF ALL WASTE AND EXCESS MATERIAL FROM COMPLETED RAMP.

1.11 IN LOCATIONS WHERE ARCHITECTURAL TREATMENTS (IMPRINTED ASPHALT, ARCHITECTURAL PAVERS, STAMPED CONCRETE, ETC.) ARE INCLUDED IN THE PLANS, DO NOT PLACE THE ARCHITECTURAL TREATMENTS WITHIN THE PEDESTRIAN RAMP OR LANDING. HOWEVER, DYED OR STAINED CONCRETE MAY BE USED IN THESE AREAS IF INDICATED IN THE PLANS OR SPECIAL PROVISIONS.

1.12 WHERE PRACTICAL, LOCATE ARCHITECTURAL TREATMENTS ALONG THE BOUNDARY OF THE PEDESTRIAN ACCESS ROUTE RATHER THAN DIRECTLY WITHIN THE PEDESTRIAN ACCESS ROUTE.

5.00 REFUGE ISLANDS/RASIED MEDIANS

5.01 IN REFUGE ISLANDS, PROVIDE A MINIMUM OF 2' -0" SEPARATION BETWEEN DETECTABLE WARNINGS ON EITHER SIDE OF THE REFUGE TO DELINEATE WHERE ISLAND BEGINS AND ENDS.

5.02 USE DETECTABLE WARNINGS IN RAISED ISLANDS 6' -0" WIDE OR WIDER IN GENERAL DIRECTION OF PEDESTRIAN TRAVEL THROUGH THE RAMP.

5.03 USE ISLAND STRAIGHT CROSSING ADJACENT TO INTERSECTIONS THROUGH ANY ISLAND LESS THAN 12' WIDE.

5.04 WHEN A MID-BLOCK CROSSING IS REQUIRED, CONSIDER MID-BLOCK STAGGERED CROSSING (720-055-41) TO ENCOURAGE EYE CONTACT BETWEEN THE PEDESTRIAN AND THE ONCOMING TRAFFIC. ALWAYS ANGLE THE STAGGER SO THE PEDESTRIAN TRAVELS THROUGH THE REFUGE FACING THE ONCOMING TRAFFIC.

15.00 DRAINAGE

15.01 WHERE PRACTICAL, LOCATE DRAINAGE STRUCTURES OUTSIDE AND UPHILL OF DESIGNATED PEDESTRIAN ACCESS ROUTES.

15.02 WHEN DRAINAGE STRUCTURE MUST BE LOCATED INSIDE OF A PEDESTRIAN ACCESS ROUTE, USE ONLY ADA COMPLIANT DRAINAGE STRUCTURES. USE ADA RATED GRATE AND COVERS WHEN INSIDE PEDESTRIAN ACCESS ROUTES INCLUDING SIDEWALKS, RAMPS, LANDINGS, CROSSWALKS, AND ISLANDS. SEE STANDARD DRAWINGS FOR CATCH BASINS (719-0XX-XX), DROP INLETS (719-1XX-XX), AND TRENCH DRAINS (719-2XX-XX) FOR AVAILABLE OPTIONS.

15.03 DO NOT ELIMINATE DRAINAGE STRUCTURE WITHOUT THE CONSENT OF THE HYDRAULIC ENGINEER.

15.04 PROVIDE RAMP PARTITIONS AS NEEDED TO CONTAIN ROADWAY DRAINAGE OR IF NEEDED TO MAINTAIN GRADING ON ADJACENT PROPERTY. WHEN RAMP PARTITION IS USED, GRADE ADJACENT SOIL WITHIN 1/2" OF THE TOP OF THE RAMP PARTITION AND FLAT FOR AT LEAST 1' BEHIND THE RAMP PARTITION

20.00 DETECTABLE WARNINGS

20.01 FOR STANDARD INSTALLATIONS, USE AT LEAST A 2' -0" X 5' -0" DETECTABLE WARNING AT ALL INTERFACES BETWEEN PEDESTRIAN ACCESS ROUTE OR REFUGE ISLAND AND ADJACENT TRAFFIC. ALWAYS SUPPLY ENOUGH DETECTABLE WARNING MATERIAL TO COVER LANDING OR REFUGE BOUNDARY AS SPECIFIED IN THESE STANDARD DRAWINGS. RETROFIT RAMPS THAT DO NOT HAVE SUFFICIENT ROOM TO ACCOMMODATE STANDARD RAMPS MAY USE SMALLER DETECTABLE WARNINGS IF SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.

20.02 UNLESS SPECIFIED OTHERWISE IN THE PLANS OR SPECIAL PROVISIONS, INSTALL SAFETY YELLOW FEDERAL NUMBER 33530 DETECTABLE WARNINGS. SEE QUALIFIED PRODUCT LIST 61 FOR AVAILABLE COLORS AND USE ONLY COLORS THAT PROVIDE CONTRAST BETWEEN THE ADJACENT MATERIALS.

20.03 FOLLOW DETECTABLE WARNING MANUFACTURER'S INSTALLATION PROCEDURES AND USE ONLY MATERIALS (PRIMER, GROUT, ADHESIVES, ETC.) AND METHODS (CONTACT PREPARATION, PLACEMENT, FIELD CUTS, ETC.), THAT ARE SPECIFIED BY THE DETECTABLE WARNING MANUFACTURER AS COMPATIBLE WITH THE SELECTED WARNING PRODUCT.

20.04 SELECT DETECTABLE WARNING PRODUCT BASED ON THE FOLLOWING CONDITIONS:

a. WET INSET WITH FASTENERS OR REPLACEABLE	ANY NEW LOCATION WITH NEW CONCRETE
b. WET INSET WITHOUT FASTENERS	ANY NEW LOCATION WITH NEW CONCRETE
c. PAVER	ONLY WHEN SPECIFIED IN PLANS OR SPECIAL PROVISIONS
d. ASPHALT APPLIED	ONLY ON ASPHALT SURFACES
e. DRY BONDED	ONLY WHEN NEW CONCRETE WILL NOT BE PLACED IN RAMP

20.05 FOR RADIUS INSTALLATIONS, FIELD CUT DETECTABLE WARNING MATERIAL TO FIT BACK OF CURB RADIUS AS SHOWN OR ORDER CUSTOM FABRICATED PIECES TO MATCH CURB RADIUS. EDGE OF DETECTABLE WARNING MUST BE WITHIN 3" OF BACK OF CURB AT ANY MEASURED LOCATION FOR CURVED INSTALLATIONS. COVER ENTIRE BACK OF CURB RADIUS BOUNDARY TO WITHIN 2 INCHES OF BOTH SIDES OF THE LOWER LANDING. WHERE PRACTICAL, MINIMIZE THE NUMBER OF FIELD CUT PIECES IN RADIUS INSTALLATIONS.

20.06 DO NOT INSTALL DETECTABLE WARNINGS IN AT-GRADE MEDIANS OR IN MEDIAN LOCATIONS WHERE A RAISED MEDIAN TERMINATES ON ONE SIDE OF A CROSSWALK. NO REFUGE ISLAND IS AVAILABLE IN THESE CASES, SO PEDESTRIAN CROSSWALK SIGNAL SHOULD BE TIMED TO ALLOW THE PEDESTRIAN TO CROSS TO THE NEXT AVAILABLE REFUGE LOCATION.

20.07 PLACE ALL STYLE DETECTABLE WARNING MATERIALS FLUSH WITH TOP OF SIDEWALK (FLUSH +/- 1/8").

20.08 LOCATE ENTIRE WARNING BEHIND CURB LINE TO MINIMIZE VEHICLES RIDING OVER THIS FEATURE. LOCATE ONE EDGE OF DETECTABLE WARNING WITHIN 3 INCHES OF THE FACE OF CURB ON MEDIAN ISLANDS AND 0 TO 2 INCHES BEHIND BACK OF CURB AND GUTTER.

20.09 ALIGN TRUNCATED DOME PATTERN IN LINE WITH DIRECTION PEDESTRIAN TRAVEL ACROSS THE DETECTABLE WARNING.

20.10 GROOVE A ¼" X ¼" JOINT IN THE CONCRETE PAD DIRECTLY AROUND THE PERIMETER OF THE DETECTABLE WARNING MATERIAL FOR ALL WET INSET AND GROUTED PAVER STYLES.

20.11 APPLY SEALANT AROUND THE PERIMETER AND ALL JOINTS OF THE DETECTABLE WARNING FOR ALL GROUTED PAVER, ASPHALT APPLIED, AND DRY BONDED SURFACE APPLIED STYLE DETECTABLE WARNINGS.

25.00 RETROFIT INSTALLATIONS

25.01 WHEN RETROFITTING PEDESTRIAN RAMPS ON SIDEWALKS, RETROFIT EXISTING CONCRETE ISLANDS AT THE SAME TIME.

25.02 FOR RETROFIT RAMPS, REGARDLESS OF EXISTING SIDEWALK WIDTH; CONSTRUCT FULL SIZE RAMPS AS SHOWN IN THESE STANDARD DRAWINGS, UNLESS RIGHT OF WAY LIMITS DO NOT ACCOMMODATE STANDARD RAMPS OR SHOWN OTHERWISE IN THE PLANS OR SPECIAL PROVISIONS.

25.03 USE DRY BONDED SURFACE APPLIED DETECTABLE WARNINGS ONLY IN LOCATIONS WHERE EXISTING GEOMETRY CONFORMS TO REQUIREMENTS FOR A RETROFIT RAMP AND NO NEW CONCRETE WILL BE PLACED IN THE RAMP OR LANDING. PROVIDE A COPY OF THE LATEST VERSION OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS TO THE RESIDENT ENGINEER BEFORE INSTALLATION OF SURFACE APPLIED DETECTABLE WARNINGS.

25.04 FOR RETROFIT RAMPS, IF NEW CONCRETE IS PLACED IN THE RAMP, USE ONLY WET INSET OR PAVER STYLE DETECTABLE WARNING SYSTEMS.

25.05 FOR ISLAND RETROFITS, SAW CUT EDGES ARE ACCEPTABLE ON AT GRADE PASS THROUGHS. IF RAMPS ARE CONSTRUCTED TO DIRECT PEDESTRIANS TO THE TOP OF THE RAISED ISLAND, PROVIDE SIDE FLARE EDGES ON THE RAMP TO MINIMIZE TRIP HAZARD. DO NOT USE SAW CUT OR VERTICAL EDGES ON RETROFIT RAMPS IN SIDEWALK.

25.06 PLACE FACTORY EDGES OF THE DRY BONDED SURFACE APPLIED DETECTABLE WARNING TRANSVERSE TO THE DIRECTION OF PEDESTRIAN TRAVEL ACROSS THE DETECTABLE WARNING. FIELD CUT EDGES MAY ONLY BE PLACED AGAINST CURBS, RAMP EDGES, AND ADJACENT DETECTABLE WARNINGS. SEAL PERIMETER AND ALL EDGES OF DRY BONDED SURFACE APPLLIED DETECTABLE WARNINGS.

30.00 MEASUREMENT

30.01 FOR CURB RAMPS, MEASURE PEDESTRIAN RAMP CONSTRUCTION 7209000 IN SQUARE YARDS BASED ON THE ACTUAL AREA OF RAMPS, TAPERED AND DROPPED CURBS, RAMP PARTITIONS, CURB RETURNS, FLARES, AND GUTTERS SHOWN SHADED IN THESE STANDARD DRAWINGS.

30.01A MEASURE DETECTABLE WARNING MATERIAL 7204900 ON NEW PEDESTRIAN RAMPS IN SQUARE FEET BASED ON THE ACTUAL INSTALLED AREA OF THE DETECTABLE WARNING USED.

30.02 FOR LOCATIONS IN RAISED MEDIANS WHERE AT-GRADE PASS-THROUGH IS CONSTRUCTED, MEASURE CONCRETE MEDIAN 7206000, IN SQUARE YARDS, BY THE AREA INSIDE THE PERIMETER OF THE RAISED MEDIAN IF THE PASS-THROUGH WAS NOT PRESENT.

30.03 FOR LOCATIONS IN RAISED MEDIANS AND ON EXISTING RAMPS WHERE ONLY THE APPLICATION OF SURFACE APPLIED DETECTABLE WARNING IS REQUIRED, MEASURE SURFACE APPLIED DETECTABLE WARNING 7209100 IN SQUARE FEET BASED ON THE ACTUAL APPLIED AREA OF DETECTABLE WARNING.

30.04 FOR LOCATIONS WHERE EXISTING SIDEWALK IS TO BE REMOVED, MEASURE REMOVAL AND DISPOSAL OF EXISTING PAVEMENT 2023000, IN SQUARE YARDS, BY THE AREA OF SIDEWALK, CURB, AND GUTTER REMOVED FROM THE EXISTING INFRASTRUCTURE.

40.00 PAYMENT

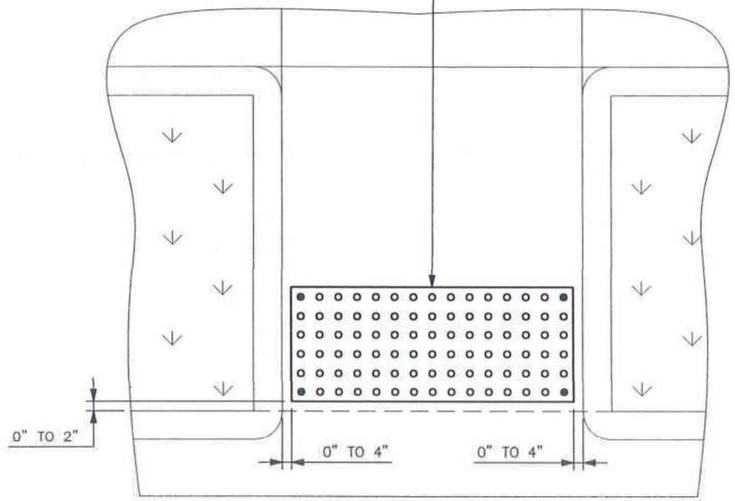
40.01 PAY FOR PEDESTRIAN RAMP CONSTRUCTION 7209000 IN SQUARE YARDS AS SHOWN IN THESE DRAWINGS. PAYMENT INCLUDES ALL MATERIALS AND LABOR TO CONSTRUCT PEDESTRIAN RAMP AS SHOWN. NO ADDITIONAL PAYMENT WILL BE MADE FOR COMPONENTS USED TO COMPLETE THE RAMP CONSTRUCTION.

40.02 PAY FOR CONCRETE MEDIAN 7206000 IN SQUARE YARDS AS SHOWN ON STANDARD DRAWINGS 720-105-XX. PAYMENT INCLUDES ALL MATERIALS AND LABOR TO CONSTRUCT PEDESTRIAN PASS THROUGH ACROSS MEDIAN ISLANDS.

40.02A PAY FOR DETECTABLE WARNING MATERIAL 7204900 IN SQUARE FEET AS SHOWN IN THESE DRAWINGS WHEN NEW CONCRETE IS PLACED. INCLUDE IN THIS QUANTITY THE MATERIALS AND LABOR TO INSTALL THE WARNING MATERIAL OF THE COLOR AND STYLE SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS, OR PROVIDE A SAFETY YELLOW WET INSET STYLE PRODUCT WHEN THE STYLE IS NOT SPECIFIED.

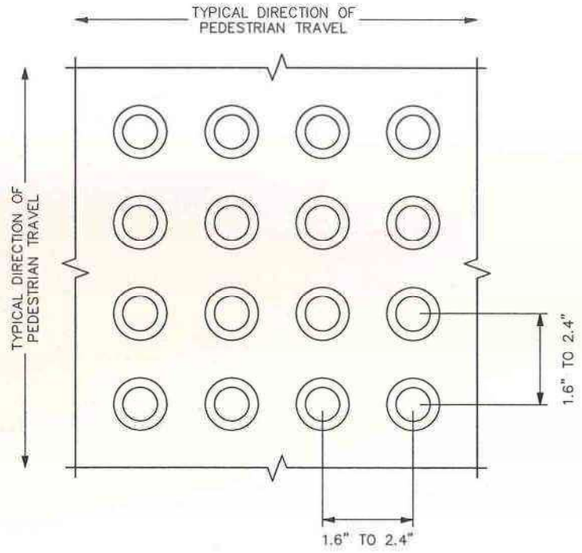
40.03 PAY FOR SURFACE APPLIED DETECTABLE WARNING 7209100 IN SQUARE FEET AS SHOWN IN THESE DRAWINGS. WHEN INSTALLING SURFACE APPLIED DETECTABLE WARNINGS ON ASPHALT OR WHEN RETROFITTING EXISTING RAMPS. PAYMENT INCLUDES ALL MATERIALS AND LABOR TO INSTALL THE SURFACE APPLIED DETECTABLE WARNING AS SHOWN.

40.04 PAY FOR REMOVAL AND DISPOSAL OF EXISTING PAVEMENT 2023000 IN SQUARE YARDS.

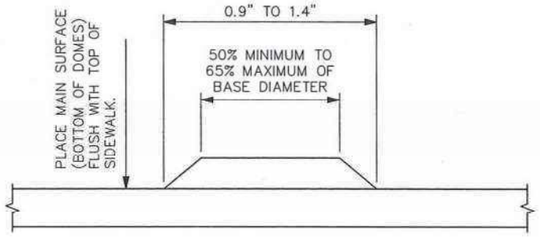


LOCATE DETECTABLE WARNING MATERIAL BETWEEN 0" TO 4" FROM CURB FACES AND 0" TO 2" FROM FLARES AND FLAT AREAS.

DETAIL 2
SCALE: 3/8" = 1'-0"
PLAN DETECTABLE WARNING PLACEMENT



DETAIL 1
SCALE: 3" = 1'-0"
DOME SPACING



DETAIL 3
SCALE: 1" = 1"
ELEVATION

REFERENCES

NATIONAL DOCUMENTS

REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER, 2005

MUTCD 2009

SCDOT DOCUMENTS

SCDOT TRANSITION PLAN

QPL 61

RELATED DRAWINGS & KEYWORDS

625-305-00

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

James W. Kendall Jr.
SIGNATURE

12/10/2014
DATE

#	DATE	CHK	DESCRIPTION
5	---	---	---
4	---	---	---
3	---	---	---
2	---	---	---
1	11/14	DSO	DETAIL 2 NOTE, CHANGE UNDERLINED
0	8/12	DSO	NEW DRAWING

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

STANDARD DRAWING

PEDESTRIAN RAMPS
GENERAL NOTES
&
DEFINITIONS

720-901-02

EFFECTIVE LETTING DATE | FEBRUARY, 2015

REFERENCES

NATIONAL DOCUMENTS

REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER, 2005

MUTCD 2009

SCDOT DOCUMENTS

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QPL 61

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SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
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3	---	---	---
2	---	---	---
1	11/14	DSO	MODIFIED DEFINITIONS
0	1/13	DSO	NEW DRAWING

SCDOT

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

STANDARD DRAWING

PEDESTRIAN RAMPS GENERAL NOTES & DEFINITIONS

720-901-03

EFFECTIVE LETTING DATE | FEBRUARY, 2015

99.00 DEFINITIONS

CHANNELIZING ISLAND – RAISED CONCRETE OR PLANTED ISLAND USED TO SEPARATE THROUGH TRAVEL LANES AT AN INTERSECTION FROM THE UNSIGNALIZED CHANNELIZED RIGHT TURN.

CURB – STANDARD 6" HIGH CONCRETE ELEMENT THAT SEPARATES SIDEWALK FROM GUTTER.

CURB RADIUS – CIRCULAR PATH OF A CURB AROUND A CORNER. CURB RADIUS IS MEASURED FROM THE FACE OF CURB TO THE CENTER OF THE CIRCLE CONSTRUCTED.

CURB RAMP – SEE "PEDESTRIAN RAMP".

CURB RETURN – A PORTION OF CURB WRAPPED ADJACENT TO A RAMP OR LANDING TO ACCOUNT FOR GRADE DIFFERENCES. CONSTRUCT CURB RETURNS ADJACENT TO GRASS OR PLANTED AREAS. ALTERNATE TO FLARE.

DETECTABLE WARNING – A SURFACE FEATURE OF TRUNCATED DOME MATERIAL BUILT IN OR APPLIED TO THE WALKING SURFACE TO ADVISE OF AN UPCOMING CHANGE FROM PEDESTRIAN TO VEHICULAR WAY.

DRIVEWAY APPROACH – A PORTION OF SIDEWALK THAT PROVIDES VEHICLE ACCESS ONTO ADJACENT PROPERTY. DRIVEWAY APPROACH MUST CONTAIN AT LEAST A 3' WIDE DRIVEWAY PEDESTRIAN PATH. NOTE THAT PORTIONS OF THE DRIVEWAY APPROACH OUTSIDE OF THE DRIVEWAY PEDESTRIAN PATH MAY BE CONSTRUCTED AS NEEDED TO FIT SITE CONDITIONS AND TO ACCOMMODATE THE VEHICLE TYPE USING THE DRIVEWAY, AND THEREFORE, MAY NOT CONFORM TO RULES FOR PEDESTRIAN ACCESSIBILITY.

DRIVEWAY PEDESTRIAN PATH – THE PORTION OF A DRIVEWAY APPROACH THAT PROVIDES A PEDESTRIAN ACCESS ROUTE.

EXISTING COMPLIANT RAMP – A RAMP THAT MEETS THE GEOMETRY REQUIREMENTS FOR NEW RAMP CONSTRUCTION. DRY BONDED DETECTABLE WARNINGS MAY BE APPLIED TO EXISTING COMPLIANT RAMP WHERE NEEDED TO PROVIDE DELINEATION BETWEEN PEDESTRIAN PATH AND VEHICULAR PATH.

FLARE – A VARIABLE TRANSITION SLOPE (NOT TO EXCEED 10H:1V) THAT ACCOUNTS FOR GRADE DIFFERENCES BETWEEN A RAMP AND ADJACENT SURFACES. ALTERNATE TO CURB RETURNS.

GUTTER – A CONCRETE EDGE TREATMENT ON THE SIDE OF A ROADWAY TO CONVEY WATER.

HANDRAIL – A HORIZONTAL OR SLOPING RAIL INTENDED FOR GRASPING BY THE HAND FOR GUIDANCE AND SUPPORT.

LANDING – MINIMUM 4' X 4' AREA AT THE TOP OR BOTTOM OF A RAMP. CONSTRUCT ALL LANDINGS SUCH THAT EITHER CROSS SLOPE OR RUNNING SLOPE IS AT 100:1 NOMINAL (NOT TO EXCEED 50H:1V).

MEDIAN – THE AREA BETWEEN TWO ROADWAYS OF A DIVIDED HIGHWAY MEASURED FROM EDGE OF TRAVELED WAY TO EDGE OF TRAVELED WAY. THE MEDIAN EXCLUDES TURN LANES. THE MEDIAN WIDTH MIGHT BE DIFFERENT BETWEEN INTERSECTIONS, INTERCHANGES, AND AT OPPOSITE APPROACHES OF THE SAME INTERSECTION.

PARALLEL RAMP – A RAMP THAT EXTENDS IN THE SAME DIRECTION AS THE FLOW OF PEDESTRIAN TRAVEL ALONG THE LENGTH OF SIDEWALK.

PEDESTRIAN – A PERSON ON FOOT, IN A WHEELCHAIR, ON SKATES, OR ON A SKATEBOARD.

PEDESTRIAN ACCESS ROUTE – A CONTINUOUS AND UNOBSTRUCTED WALKWAY WITHIN A PEDESTRIAN CIRCULATION PATH THAT PROVIDES ACCESSIBILITY

PEDESTRIAN BYPASS – PORTION OF SIDEWALK AVAILABLE FOR NAVIGATION AROUND A PERPENDICULAR RAMP. CONSTRUCT PEDESTRIAN BYPASS AT LEAST 5' WIDE.

PEDESTRIAN CIRCULATION PATH – A PREPARED EXTERIOR OR INTERIOR WAY OF PASSAGE PROVIDED FOR PEDESTRIAN TRAVEL.

PEDESTRIAN GUARD – A BOUNDARY STRUCTURE OF SPECIFIED GEOMETRY AND STRENGTH THAT IS LOCATED BETWEEN THE PEDESTRIAN ACCESS ROUTE AND A FIXED HAZARD SUCH AS A DROP OFF.

PEDESTRIAN PASS THROUGH – PATH WITHIN A RAISED MEDIAN THAT IS AT GRADE WITH ADJACENT ROADWAY. CONSTRUCT PEDESTRIAN PASS THROUGH AT LEAST 5' WIDE.

PEDESTRIAN RAMP – A COLLECTIVE TERM USED BY SCDOT TO INCLUDE CURB RAMPS AND BLENDED TRANSITIONS AS DEFINED BY THE U.S. ACCESS BOARD, AND IS INCLUSIVE OF ALL LANDINGS, PADS, AND PUSH BUTTON ACCESS PADS. PREFERRED 5' (MINIMUM 4') WIDE TRANSITION FROM AN UPPER LANDING TO A LOWER LANDING. CONSTRUCT RAMPS WITH A NOMINAL 13H:1V RUNNING SLOPE (NO STEEPER THAN 12H:1V) AND A 100H:1V CROSS SLOPE (NO STEEPER THAN 50H:1V) UNLESS SITE CONDITIONS INDICATE THE USE OF A 15' LONG RAMP. ON STEEP GRADE SECTIONS, THE "UPHILL" RAMP SHOULD BE LENGTHENED TO MAINTAIN A 12H:1V OR FLATTER RUNNING SLOPE. THE RAMP SLOPE MAY EXCEED 12H:1V ONLY IF THE REQUIRED RAMP LENGTH IS 15' OR LONGER. CONSTRUCT "DOWNHILL" RAMPS USING THE MINIMUM LENGTH SHOWN.

PERPENDICULAR RAMP – A RAMP THAT EXTENDS 90 DEGREES FROM THE FLOW OF PEDESTRIAN TRAVEL ALONG THE LENGTH OF SIDEWALK.

PROWAG – REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER 2005

PROWAAC – PUBLIC RIGHTS-OF-WAY ACCESS ADVISORY COMMITTEE

RAILROAD CONSTRUCTION ZONE – PORTION OF ROADWAY AND SIDEWALK THAT ARE CONSTRUCTED BY RAILROAD CONTRACTORS. USE MATERIALS AND METHODS SPECIFIED BY THE PROPERTY OWNER.

RAILROAD FLANGE WAY FILLER – PREFABRICATED PRODUCT USED TO MINIMIZE PHYSICAL GAPS AROUND RAILS. ANY RAILROAD FLANGE WAY FILLER USED MUST ALSO BE APPROVED BY THE OWNER OF THE RAILROAD REGARDLESS OF THE PROPERTY OWNER AT THE CROSSING.

RAILROAD SIDEWALK CONNECTION ZONE – SIDEWALK INTERFACE BETWEEN TYPICAL SIDEWALK OR RAMP AND THE RAILROAD CONSTRUCTION ZONE. THIS INTERFACE IS GENERALLY CONSTRUCTED AFTER WORK IN THE RAILROAD CONSTRUCTION ZONE IS COMPLETE. USE MATERIALS AND METHODS SPECIFIED BY THE PROPERTY OWNER.

RAMP PARTITION – A PORTION OF CURB BEHIND THE SIDEWALK THAT SEPARATES LANDING FROM ADJACENT PROPERTY. CONSTRUCT RAMP PARTITION AT ALL LOCATIONS WHERE ROADWAY DRAINAGE COULD DISCHARGE ONTO ADJACENT PROPERTY. CONSTRUCT RAMP PARTITION IF NEEDED TO RETAIN EXISTING GROUND ELEVATION ON ADJACENT PROPERTY.

REFUGE ISLAND – A RAISED CONCRETE MEDIAN OR RAISED PLANTED MEDIAN THAT IS AT LEAST 6'-0" WIDE. RAISED MEDIAN ISLANDS MUST BE PRESENT ON BOTH SIDES OF THE PEDESTRIAN PATH TO BE CONSIDERED A REFUGE.

RETROFIT RAMP – RECONSTRUCTION OF A PORTION OF EXISTING SIDEWALK TO PROVIDE MOST ACCESSIBLE PATH PRACTICAL WITHOUT IMPACTING ADJACENT PROPERTY. WHERE PRACTICAL; RECONSTRUCT RETROFIT RAMP SLOPES TO MEET CURRENT CONSTRUCTION STANDARDS.

ROUNDABOUT – A CIRCULAR INTERSECTION WITH YIELD CONTROL ENTRY, WHICH PERMITS A VEHICLE ON THE CIRCULATORY ROADWAY TO PROCEED, AND WITH DEFLECTION OF THE APPROACHING VEHICLE COUNTER-CLOCKWISE AROUND A CENTER ISLAND.

RUNNING SLOPE – THE GRADE THAT IS PARALLEL TO THE DIRECTION OF TRAVEL, EXPRESSED AS A RATIO OF RISE TO RUN OR AS A PERCENT.

SIDEWALK – THAT PORTION OF A STREET BETWEEN THE CURB LINE, OR THE LATERAL LINE OF A ROADWAY, AND THE ADJACENT PROPERTY LINE OR ON EASEMENTS OF PRIVATE PROPERTY THAT IS PAVED OR IMPROVED AND INTENDED FOR USE BY PEDESTRIANS. CONSTRUCT SIDEWALK WITH A NOMINAL 100H:1V CROSS SLOPE (NOT TO EXCEED 50H:1V) TOWARDS THE ROADWAY. WHEN CONNECTED TO THE ROADWAY BY CURB AND GUTTER, SIDEWALK SHOULD FOLLOW ROADWAY GRADE UNLESS NOTED OTHERWISE IN THE PLANS OR SPECIAL PROVISIONS.

SPLITTER ISLAND – RAISED CONCRETE OR PLANTED ISLAND AT THE APPROACHES TO ROUNDABOUTS USED TO SEPARATE TRAFFIC ENTERING THE ROUNDABOUT FROM TRAFFIC EXITING THE ROUNDABOUT.

TAPERED CURB – A PORTION OF CURB THAT TRANSITION FROM A STANDARD 6" HIGH CURB TO GUTTER ELEVATION.

WALKWAY – THE CONTINUOUS PORTION OF THE PEDESTRIAN ACCESS ROUTE THAT IS CONNECTED TO STREET CROSSINGS BY CURB RAMPS OR BLENDED TRANSITIONS.

TABLE: 720-901A

RAMP SYMBOL	USAGE	
	NOMINAL SLOPE	MAXIMUM SLOPE
←	ROAD GRADE (SITE SPECIFIC GRADE)	ROAD GRADE (SITE SPECIFIC GRADE)
⇩	*CROSS SLOPE* 100:1 (1%) (OR FLATTER)	*CROSS SLOPE* 50:1 (2%) (OR FLATTER)
⬅	RAMP 14:1 (7.1%)	RAMP 12:1 (8.3%) (OR FLATTER) **SEE NOTE 4**
◁	FLARE 11:1 (9.1%) [ADDITIONAL RETROFIT USE]	FLARE 10:1 (10%) (OR FLATTER) [ADDITIONAL RETROFIT USE]
⬅⇩	PARALLEL RAMP (RAMP & CROSS SLOPE)	
⇩	LANDING/SIDEWALK (CROSS SLOPE & ROAD GRADE)	
↓	PERPENDICULAR RAMP (RAMP & ROAD GRADE)	

1. RAMP SYMBOLS SHOWN IN TABLE 720-901A INDICATE THE NOMINAL SLOPE AND MAXIMUM ALLOWABLE SLOPE FOR PEDESTRIAN RAMP COMPONENTS. DO NOT EXCEED THE VALUES LISTED FOR MAXIMUM ALLOWABLE SLOPE UNLESS DIRECTED BY THE ENGINEER.
2. SEE ISOMETRIC VIEW SHOWN ON EACH STANDARD RAMP DETAIL FOR LOCATIONS OF RAMP SYMBOLS.
3. DIRECTION ARROWS INDICATE VERTICAL ELEVATION CHANGE FROM A POINT OF HIGH ELEVATION (TAIL) TO A POINT OF LOW ELEVATION (TIP).
4. FOR CURB RAMPS ONLY, SLOPE CAN BE EXCEEDED IF CALCULATED CURB RAMP LENGTH IS > 15'.

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

QPL 61

RELATED DRAWINGS & KEYWORDS

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

SIGNATURE

12/10/2014
DATE

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1	12/2014	JMG	MODIFIED NOTES
0	8/2012	DSO	NEW DRAWING

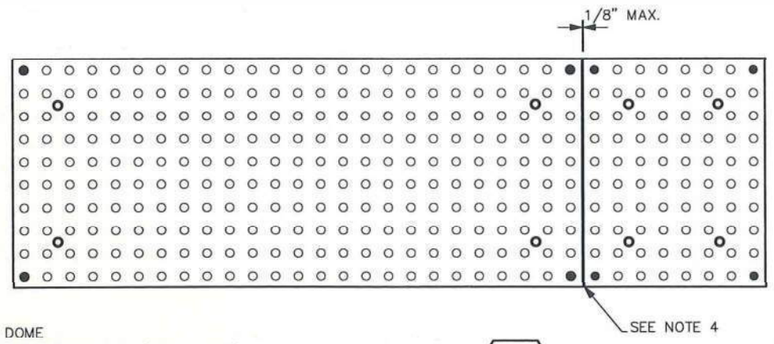
SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

DETECTABLE WARNING MATERIAL WET INSET MECHANICAL ANCHORS & THREADED INSERTS

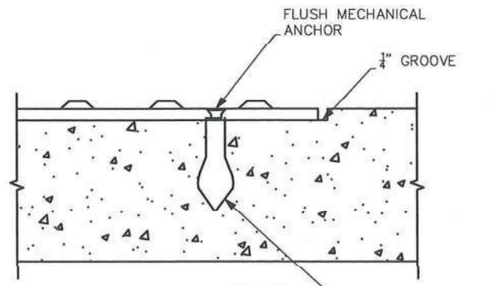
720-910-01

EFFECTIVE LETTING DATE | FEBRUARY, 2015

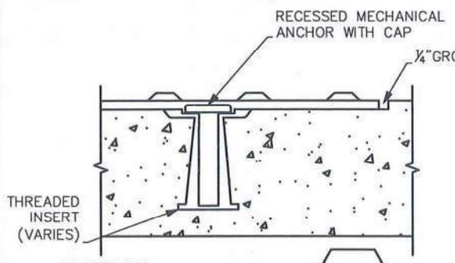


○ DOME
○ FLUSH/RECESSED (TYP, 4 MIN.)
● RAISED (TYP, 4 MIN.)

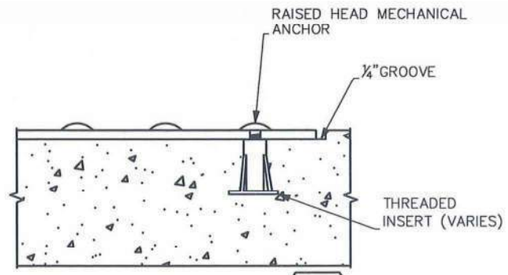
DETAIL 1
PLAN VIEW
DETECTABLE WARNING



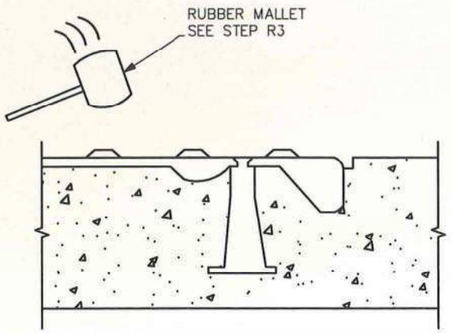
DETAIL 2
FLUSH MECHANICAL ANCHOR OPTION 1
WET INSET OR REPLACEABLE INSTALLED



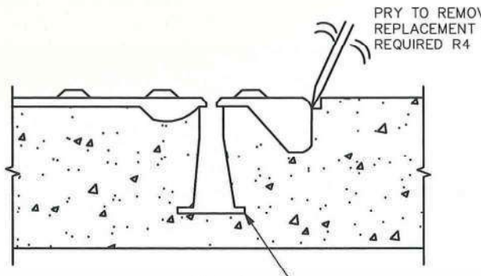
DETAIL 3
RECESSED MECHANICAL ANCHOR WITH CAP OPTION 2
(FLUSH MECHANICAL ANCHORS MUST CONFORM TO ADA REQUIREMENTS)



DETAIL 4
RAISED HEAD MECHANICAL ANCHOR OPTION 3, USE RAISED HEAD THAT MOST CLOSELY MATCHES (WITHOUT EXCEEDING THE SIZE OF THE TRUNCATED DOME, AND LOCATE HEAD IN PLACE OF A REGULAR DOME SPACING)



DETAIL 5
REPLACEABLE LOOSENING SURFACE FOR REMOVAL



DETAIL 6
REPLACEABLE PRY EXISTING SURFACE FOR REMOVAL

INSTALLATION NOTES:

1. SEE SHEETS 720-901-XX FOR GENERAL NOTES. USE WET INSET STYLE DETECTABLE WARNINGS LISTED ON SCDOT QUALIFIED PRODUCT LIST 61 ONLY IN LOCATIONS WHERE NEW CONCRETE IS BEING POURED FOR RAMPS. DETAILS SHOWN MAY INCLUDE PROPRIETARY COMPONENTS, HOWEVER, ANY SYSTEM LISTED ON QPL61 AS WET INSET OR REPLACEABLE IS ACCEPTABLE FOR USE IN THESE CONDITIONS.

2. FOLLOW DETECTABLE WARNING MATERIAL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THESE STANDARD DRAWINGS. WHERE CONFLICTS EXIST BETWEEN INSTALLATION PROCEDURES, PROVIDE A CERTIFICATION LETTER FROM THE MANUFACTURER STATING THE APPROPRIATE PROCEDURE(S) AND JUSTIFICATION THAT THE PROPOSED PROCEDURE WILL IMPROVE LONG TERM PERFORMANCE. NOTE TO RCE: SUBMIT A COPY OF THE CERTIFICATION LETTER TO THE DESIGN STANDARDS OFFICE SO THAT FUTURE DRAWINGS CAN MINIMIZE CONFLICTS.

3. HAVE ALL MATERIALS NEEDED TO COMPLETE INSTALLATION AVAILABLE BEFORE PLACING CONCRETE.

4. MINIMIZE THE USE OF FIELD CUT PIECES. UNLESS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS, INSTALL ALL FIELD CUT EDGES ALONG ONLY ONE SIDE OF THE WARNING PATTERN. CUT WARNING MATERIAL TO MEET THE REQUIRED GEOMETRY OF THE RAMP WHILE MINIMIZING THE CUTTING OF DOMES.

5. *ATTACH AND TIGHTEN AT LEAST FOUR (4) MECHANICAL ANCHORS WITH THREADED INSERTS* INTO THE DETECTABLE WARNING MATERIAL. USE ADDITIONAL MECHANICAL ANCHORS AND THREADED INSERTS IF SPECIFIED BY THE MANUFACTURER OR REQUIRED BY THE ENGINEER.

6. CONSTRUCT LANDING AS SHOWN ON APPROPRIATE STANDARD DRAWING FOR THE RAMP STYLE SELECTED.

7. WORK PANELS DOWNWARD AS NECESSARY INTO THE LOCATION SHOWN.

8. EVENLY PRESS THE ASSEMBLED WARNING MATERIAL INTO THE CONCRETE UNTIL THE TILE IS FLUSH WITH THE CONCRETE SURFACE.

9. TAP USING A RUBBER MALLET TO REMOVE AIR POCKETS. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS TO REMOVE AIR POCKETS AROUND THREADED INSERTS AND UNDER WARNING MATERIAL. FINISHED PRODUCT SHOULD HAVE NO BUBBLES OR AIR POCKETS THAT MOVE WHEN STEPPED ON.

10. SCORE A ¼" DEEP AND WIDE GROOVE AROUND THE DETECTABLE WARNING.

11. APPLY WEIGHTS IF NECESSARY TO KEEP DETECTABLE WARNING FLUSH WITH TOP OF CONCRETE.

12. CLEAN SURFACE OF LOOSE CONCRETE AND DEBRIS. IF PRESENT, REMOVE PROTECTIVE COVERING FROM DETECTABLE WARNING MATERIAL.

REPLACEMENT NOTES:

R1. VERIFY THAT EXISTING WARNING MATERIAL IS A REPLACEABLE SYSTEM. IF EXISTING WARNING MATERIAL IS DAMAGED, ORDER REPLACEMENT MATS FROM SAME MANUFACTURER AS EXISTING INSTALLATION.

R2. EXPOSE FASTENERS AND REMOVE.

R3. TAP PERIMETER OF TILE WITH A RUBBER MALLET TO LOOSEN THE BOND OF DETECTABLE WARNING MATERIAL TO THE CONCRETE.

R4. PRY DETECTABLE WARNING MATERIAL FROM CONCRETE.

R5. REPAIR ANY DAMAGED CONCRETE. IF NEEDED, REMOVE AREA LARGE ENOUGH TO INSTALL A NEW REPLACEABLE DETECTABLE WARNING MATERIAL.

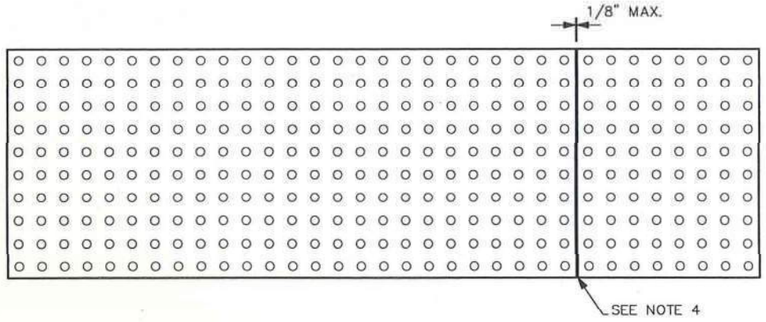
R6. VACUUM OR SWEEP ALL DEBRIS FORM CREVICES.

R7. CUT NEW DETECTABLE WARNING MATERIAL IF NEEDED TO MATCH EXISTING CUT.

R8. PLACE NEW DETECTABLE WARNING INTO EXISTING SPACE.

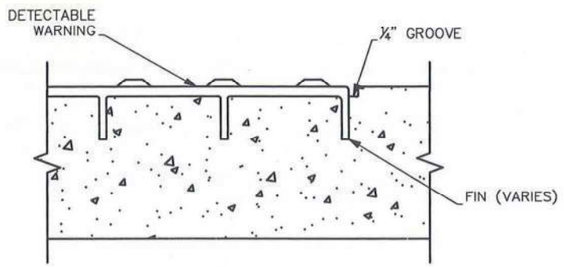
R9. INSERT REPLACEMENT ANCHORS AND HAND TIGHTEN. GENTLY APPLY PRESSURE TO SEAT TILE IN RECESS, FULLY TIGHTEN BOLTS.

R10. INSTALL BOLT COVERS IF APPLICABLE.



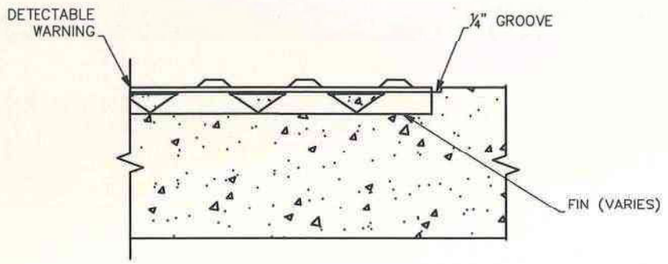
DETAIL 1

DETECTABLE WARNING PATTERN



DETAIL 2

WET INSET WITH EMBEDDED FINS



DETAIL 3

WET INSET WITH EMBEDDED FINS

NOTES:

1. SEE SHEETS 720-901-XX FOR GENERAL NOTES. USE WET INSET STYLE DETECTABLE WARNINGS LISTED ON SCDOT QUALIFIED PRODUCT LIST 61 ONLY IN LOCATIONS WHERE NEW CONCRETE IS BEING POURED FOR RAMPS. DETAILS SHOWN MAY INCLUDE PROPRIETARY COMPONENTS, HOWEVER, ANY SYSTEM LISTED ON QPL 61 AS WET INSET IS ACCEPTABLE FOR USE IN THESE CONDITIONS.
2. FOLLOW DETECTABLE WARNING MATERIAL INSTALLATION INSTRUCTIONS AND THESE STANDARD DRAWINGS. WHERE CONFLICTS EXIST BETWEEN INSTALLATION PROCEDURES, PROVIDE A CERTIFICATION LETTER FROM THE MANUFACTURER STATING THE APPROPRIATE PROCEDURE(S) AND JUSTIFICATION THAT THE PROPOSED PROCEDURE WILL IMPROVE LONG TERM PERFORMANCE. NOTE TO RCE: SUBMIT A COPY OF THE CERTIFICATION LETTER TO THE DESIGN STANDARDS OFFICE SO THAT FUTURE DRAWINGS CAN MINIMIZE CONFLICTS.
3. HAVE ALL MATERIALS NEEDED TO COMPLETE INSTALLATION AVAILABLE BEFORE PLACING CONCRETE.
4. MINIMIZE THE USE OF FIELD CUT PIECES. UNLESS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS, INSTALL ALL FIELD CUT EDGES IN THE INTERIOR OF THE WARNING PATTERN. CUT WARNING SURFACE TO MEET THE REQUIRED GEOMETRY OF THE RAMP WHILE MINIMIZING THE CUTTING OF DOMES.
5. CONSTRUCT LANDING AS SHOWN ON STANDARD DRAWING FOR THE RAMP STYLE SELECTED.
6. WORK PANELS DOWNWARD AS NECESSARY INTO THE LOCATION SHOWN ON THE STANDARD DRAWING.
7. TAP DETECTABLE WARNING MATERIAL WITH A RUBBER MALLET UNTIL AIR POCKETS ARE REMOVED. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS TO REMOVE AIR POCKETS AROUND THE FINS AND UNDER WARNING MATERIAL. FINISHED PRODUCT SHOULD HAVE NO BUBBLES OR POCKETS THAT MOVE WHEN STEPPED ON.
8. EVENLY PRESS THE ASSEMBLED WARNING MATERIAL INTO THE CONCRETE UNTIL THE TILE IS FLUSHED WITH THE CONCRETE SURFACE.
9. SCORE A ¼" DEEP AND WIDE GROOVE AROUND THE DETECTABLE WARNING.
10. CLEAN THE ENTIRE SURFACE OF DEBRIS.
11. APPLY WEIGHTS IF NECESSARY TO KEEP WARNING IN PLACE DURING CURING PROCESS.
12. REMOVE WEIGHTS (IF USED) AND PROTECTIVE COVERING WITHIN 1 WEEK.

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

QPL 61

RELATED DRAWINGS & KEYWORDS

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

James W. Kendall Jr.
SIGNATURE

12/10/2014
DATE

#	DATE	CHK	DESCRIPTION
6	---	---	---
5	---	---	---
4	---	---	---
3	---	---	---
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1	12/2014	JMG	MODIFIED NOTES
0	8/2012	DSO	NEW DRAWING

SCDOT

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

STANDARD DRAWING

DETECTABLE WARNING MATERIAL WET INSET (EMBEDDED FINS)

720-910-02

EFFECTIVE LETTING DATE: FEBRUARY, 2015

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

QPL 61

RELATED DRAWINGS & KEYWORDS

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1	12/2014	JMG	MODIFIED NOTES
0	8/2012	DSO	NEW DRAWING

SCDOT

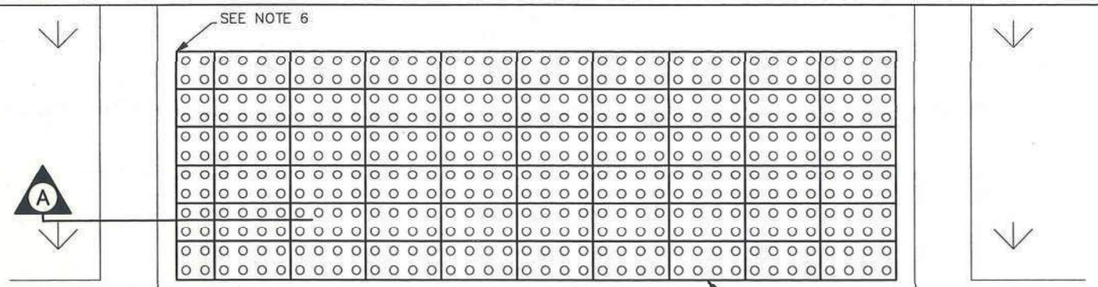
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

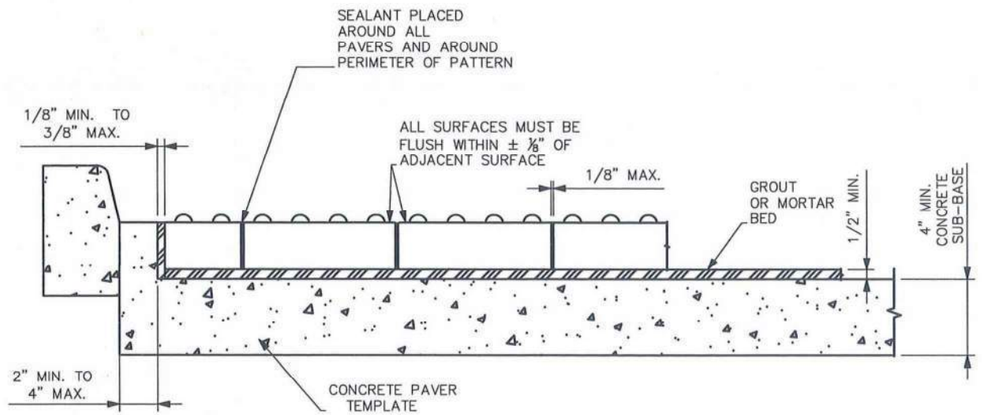
DETECTABLE WARNING MATERIAL GROUTED PAVER

720-911-01

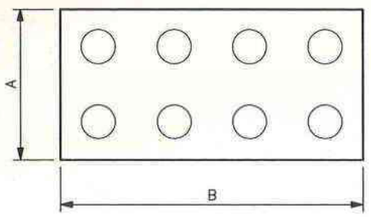
EFFECTIVE LETTING DATE: FEBRUARY, 2015



DETAIL 1
TYPICAL DETECTABLE WARNING–PAVERS



SECTION A
PAVER CROSS SECTION

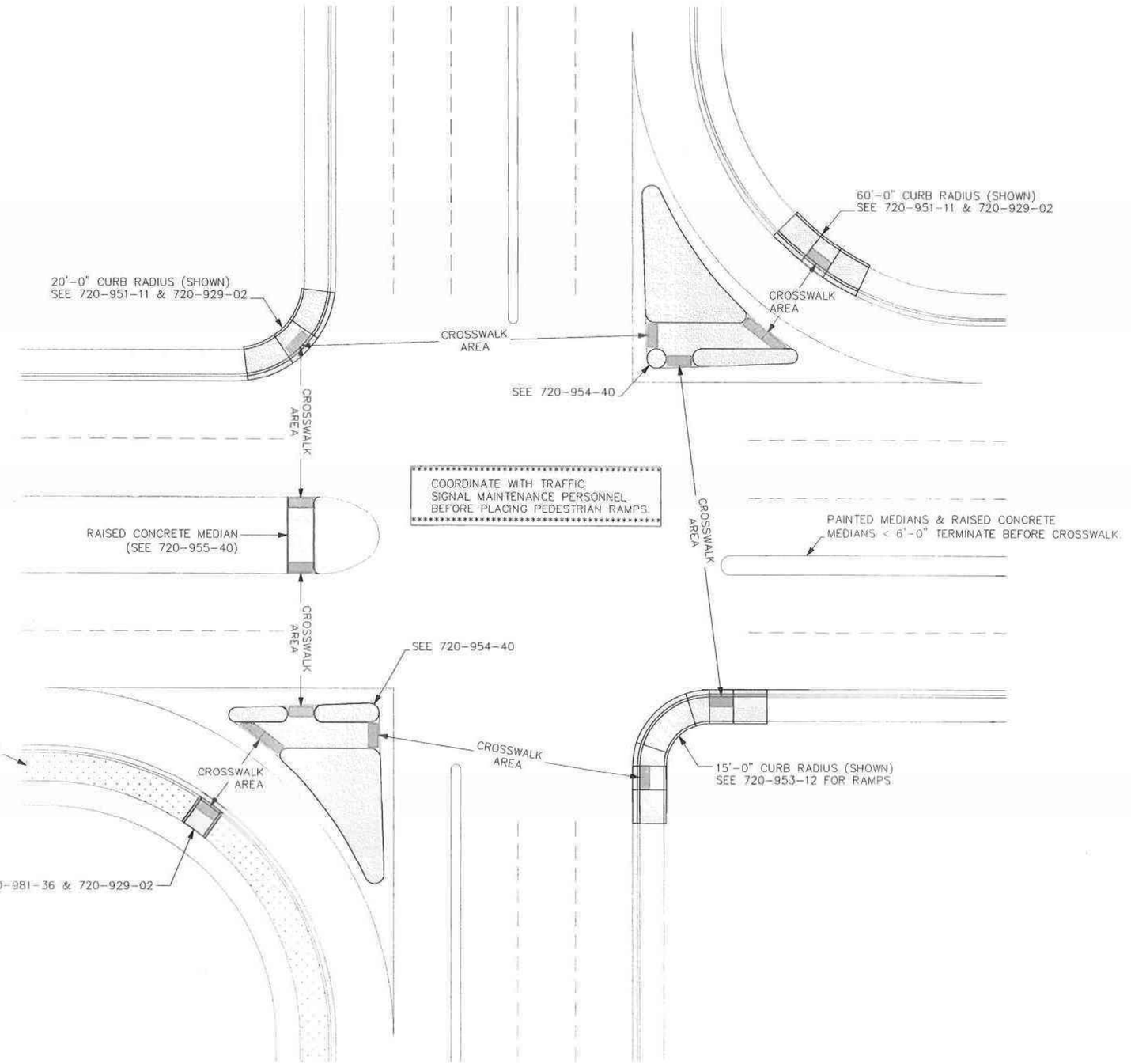


DETAIL 2
PAVER DETAIL

TABLE 720-911A	
ALLOWABLE PAVER SIZE (IN.)	
A	B
12	12
4	8

NOTES:

1. SEE SHEETS 720-901-XX FOR GENERAL NOTES. USE PAVER STYLE WARNING LISTED ON SCDOT QUALIFIED PRODUCT LIST 61 ONLY ON RECTANGULAR WARNING PATTERNS WHEN SPECIFIED IN PLANS OR SPECIAL PROVISIONS. PAVERS ARE NOT ALLOWED WHERE DETECTABLE WARNING PATTERN FOLLOWS A CURVE UNLESS PATTERN CAN BE ESTABLISHED TO CONFORM TO REQUIREMENTS OF DOME SPACING AND DOME ALIGNMENT LISTED IN THE REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS OF WAY. CONTRACTOR MUST SUPPLY PAVER PATTERN TO THE DEPARTMENT FOR REVIEW BEFORE ORDERING PAVERS.
2. FOLLOW DETECTABLE WARNING MATERIAL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THESE STANDARD DRAWINGS. WHERE CONFLICTS EXIST BETWEEN INSTALLATION PROCEDURES, PROVIDE A CERTIFICATION LETTER FORM THE MANUFACTURER STATING THE APPROPRIATE PROCEDURE(S) AND JUSTIFICATION THAT THE PROPOSED PROCEDURE WILL IMPROVE LONG TERM PERFORMANCE. NOTE TO RCE: SUBMIT A COPY OF THE CERTIFICATION LETTER TO THE DESIGN STANDARDS OFFICE SO THAT FUTURE DRAWINGS CAN MINIMIZE CONFLICTS.
3. USE PAVERS ONLY IN LOCATIONS OUTSIDE OF VEHICULAR TRAFFIC.
4. CONSTRUCT CONCRETE PAVER TEMPLATE AS DIRECTED BY THE PAVER MANUFACTURE WHILE MEETING THE MINIMUM GEOMETRY SHOWN.
5. POUR THE SURROUNDING SIDEWALK AND GUTTER APPROACH FLUSH WITH THE TOP OF THE PAVERS TEMPLATE.
6. MINIMIZE THE USE OF FIELD CUT PIECES UNLESS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS, INSTALL ALL FIELD CUT EDGES ALONG ONLY ONE SIDE OF THE WARNING PATTERN. CUT WARNING SURFACE TO MEET THE REQUIRED GEOMETRY OF THE RAMP WHILE MINIMIZING THE CUTTING OF DOMES.
7. INSTALL THE PAVERS IN A MINIMUM 1/2" THICK BED OF TYPE S MORTAR OR NON SHRINK GROUT AS DIRECTED BY THE PAVER MANUFACTURER.
8. THE BASE OF EACH BLOCK IS TO BE TIGHT AGAINST THE ADJOINING BLOCK.
9. APPLY SEALANT SPECIFIED BY MANUFACTURER AROUND ALL JOINTS AND PERIMETER OF WARNING PATTERN.



REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

720-929-02, 720-951-11, 720-953-12, 720-954-40, 720-955-40, 720-981-36

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

James W. Kendall Jr
SIGNATURE

9-27-2012
DATE

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0	1/13	DSO	NEW DRAWING

SCDOT
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DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

PEDESTRIAN RAMPS INTERSECTION

720-920-05

EFFECTIVE LETTING DATE: JANUARY, 2013

REFERENCES

NATIONAL DOCUMENTS

REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER, 2005

MUTCD 2009

SCDOT DOCUMENTS

SCDOT TRANSITION PLAN

QPL 61

RELATED DRAWINGS & KEYWORDS

720-929-02

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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
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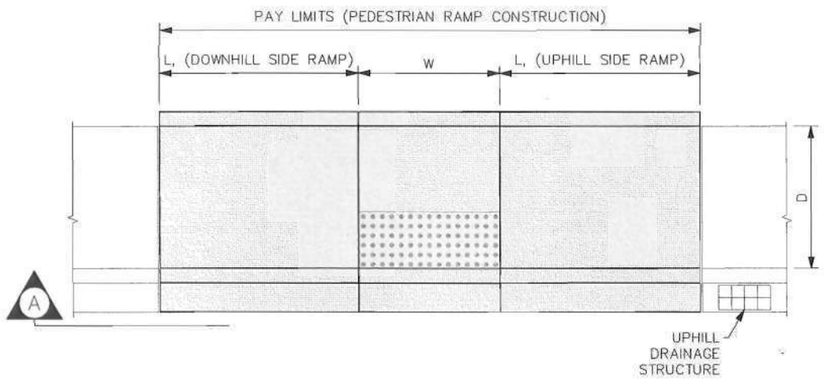
ROOM 405
COLUMBIA, SC 29201

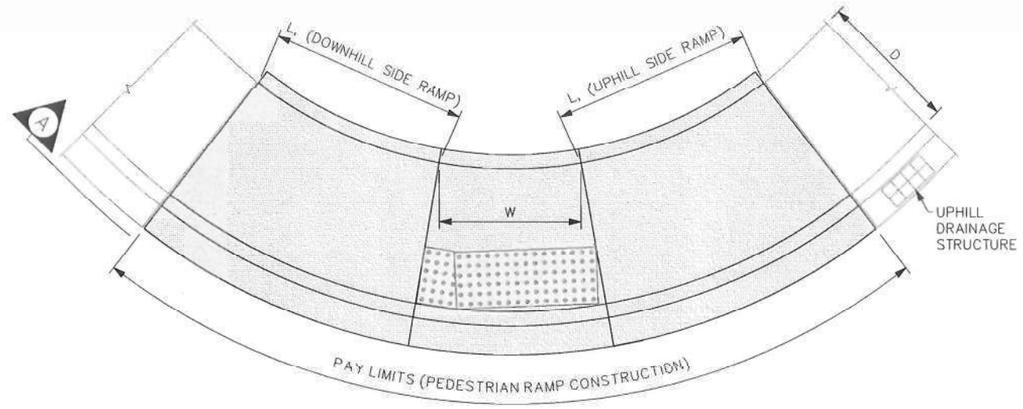
STANDARD DRAWING

PEDESTRIAN RAMP STANDARD VARIANTS

720-929-01

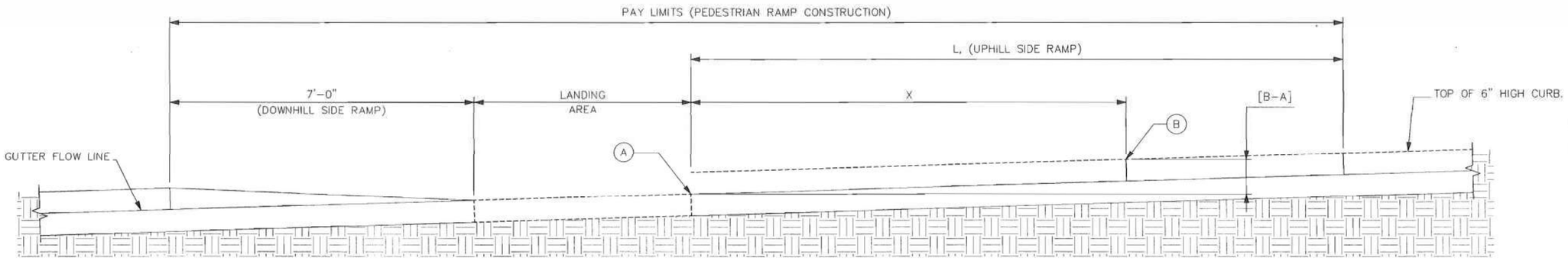
EFFECTIVE LETTING DATE JANUARY, 2013





THIS DETAIL ILLUSTRATES HOW TO USE A PEDESTRIAN RAMP (SHOWN LEFT) IN A RADIAL APPLICATION (SHOWN RIGHT). RAMP DIMENSIONS L AND W ARE MEASURED FROM THE BACK EDGE OF SIDEWALK. THIS MEASUREMENT CONCEPT APPLIES TO ALL PEDESTRIAN RAMP VARIANTS SHOWN ON STANDARD DRAWING 720-929-02. SEE INDIVIDUAL RAMP DETAILS FOR W AND L DIMENSIONS.

DETAIL 1
SCALE: 3/16" = 1'-0"
APPLICATION OF PEDESTRIAN RAMP VARIANTS

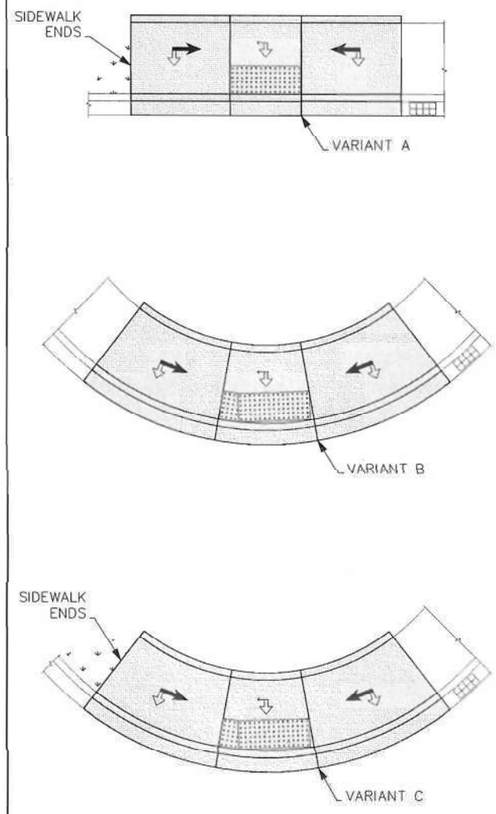


MEASURE HORIZONTALLY X (10'-0" SHOWN IN EXAMPLE) FROM POINT A (EDGE OF LANDING) TOWARDS THE UPHILL SIDE OF SIDEWALK POINT B. THEN MEASURE THE ELEVATION OF POINTS A & B. SEE TABLES ON RAMP DETAIL SHEETS FOR L (UPHILL SIDE RAMP) LENGTH.

SECTION A
SCALE: 3/8" = 1'-0"
ELEVATION VIEW DETERMINING UPHILL SIDE RAMP LENGTH

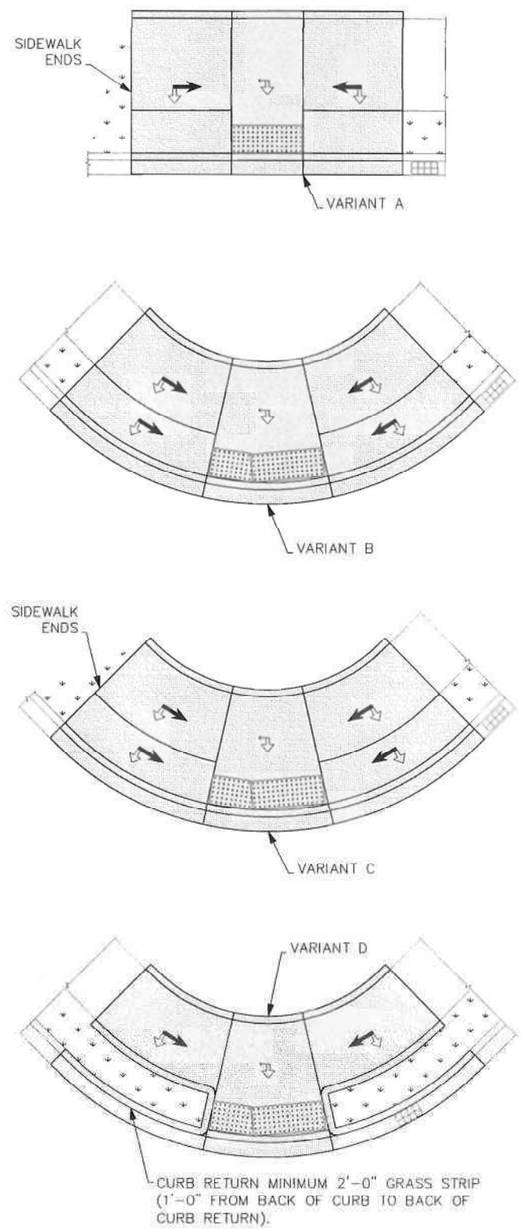
PARALLEL RAMP VARIANTS WITH 5'-0" SIDEWALK

SEE 720-951-11



DETAIL 1
SCALE: 3/32" = 1'-0"
STANDARD DRAWING 720-951-11
PARALLEL RAMP VARIANTS
NO GRASS STRIP
SEE 720-901-03 FOR SYMBOLS

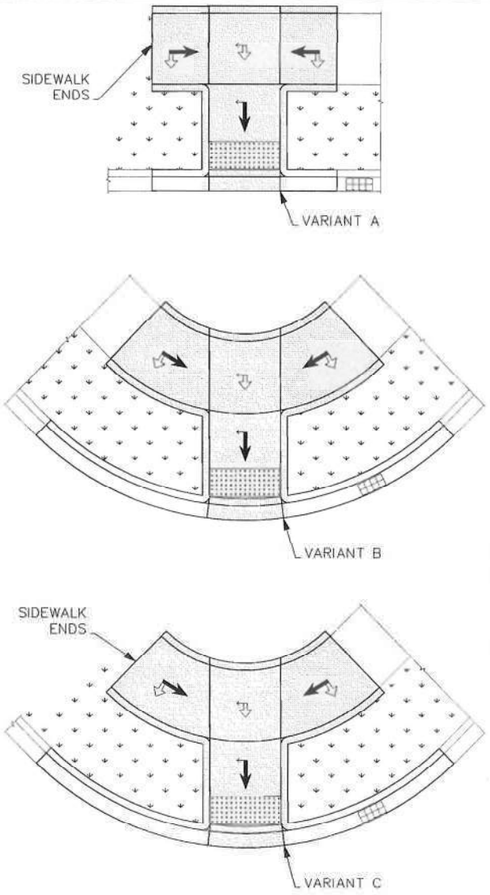
SEE 720-961-11



DETAIL 2
SCALE: 3/32" = 1'-0"
STANDARD DRAWING 720-961-11
PARALLEL RAMP VARIANTS
WITH 3'-0" MAXIMUM GRASS STRIP
SEE 720-901-03 FOR SYMBOLS

COMBINED RAMP VARIANTS WITH 5'-0" SIDEWALK

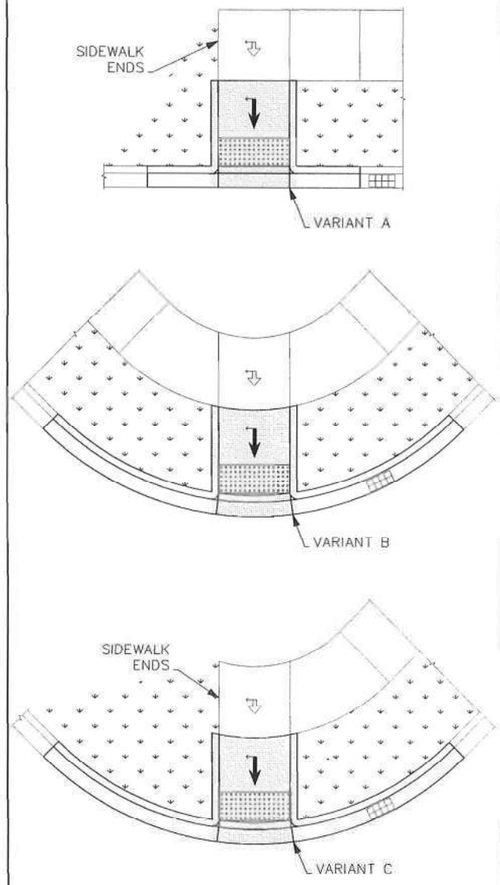
SEE 720-971-24



DETAIL 3
SCALE: 3/32" = 1'-0"
STANDARD DRAWING 720-971-24
COMBINED RAMP VARIANTS
WITH 3'-0" TO 6'-0" MAXIMUM GRASS STRIP
SEE 720-901-03 FOR SYMBOLS

PERPENDICULAR RAMP VARIANTS WITH 5'-0" SIDEWALK

SEE 720-981-36



DETAIL 4
SCALE: 3/32" = 1'-0"
STANDARD DRAWING 720-981-36
PERPENDICULAR RAMP VARIANTS
WITH 6'-0" OR LARGER GRASS STRIP
SEE 720-901-03 FOR SYMBOLS

REFERENCES

NATIONAL DOCUMENTS

REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER, 2005

MUTCD 2009

SCDOT DOCUMENTS

SCDOT TRANSITION PLAN

QPL 61

RELATED DRAWINGS & KEYWORDS

720-929-01

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

SIGNATURE

9-27-2012
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0	1/13	DSO	NEW DRAWING

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

PEDESTRIAN RAMP STANDARD VARIANTS

720-929-02

EFFECTIVE LETTING DATE: JANUARY, 2013

REFERENCES

NATIONAL DOCUMENTS

REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER, 2005.

MUTCD 2009

SCDOT DOCUMENTS

SCDOT TRANSITION PLAN

QPL 61

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

James W. Kendall
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10/30/2015
DATE

#	DATE	CHK	DESCRIPTION
6	---	---	---
5	---	---	---
4	---	---	---
3	1/16	HJC	REM DET 2, GENERAL
2	1/15	JMG	BLEND NOTES
1	10/14	JMG	REMOVED PAY ITEMS
0	1/13	DSO	NEW DRAWING

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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

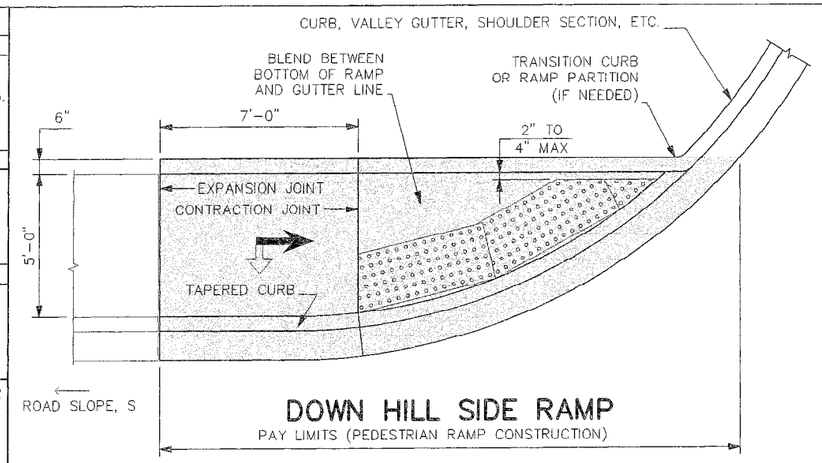
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

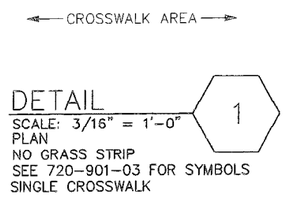
STANDARD DRAWING

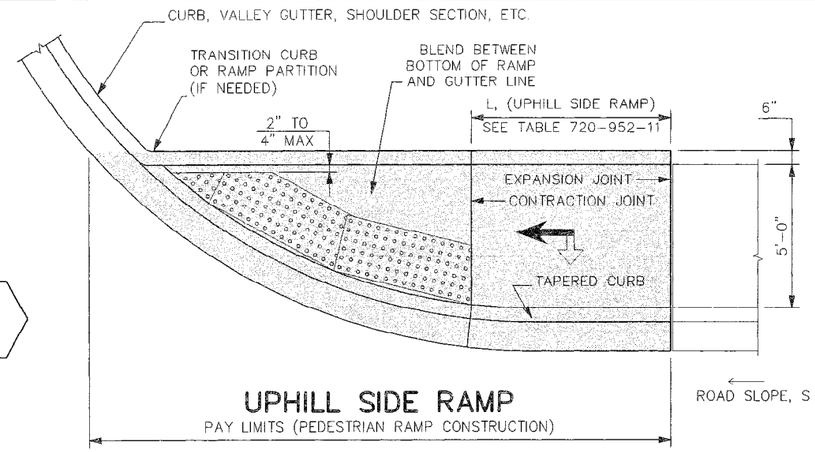
PEDESTRIAN RAMP CONDENSED TERMINAL (PARALLEL RAMP)

720-952-11

EFFECTIVE LETTING DATE JANUARY 2016



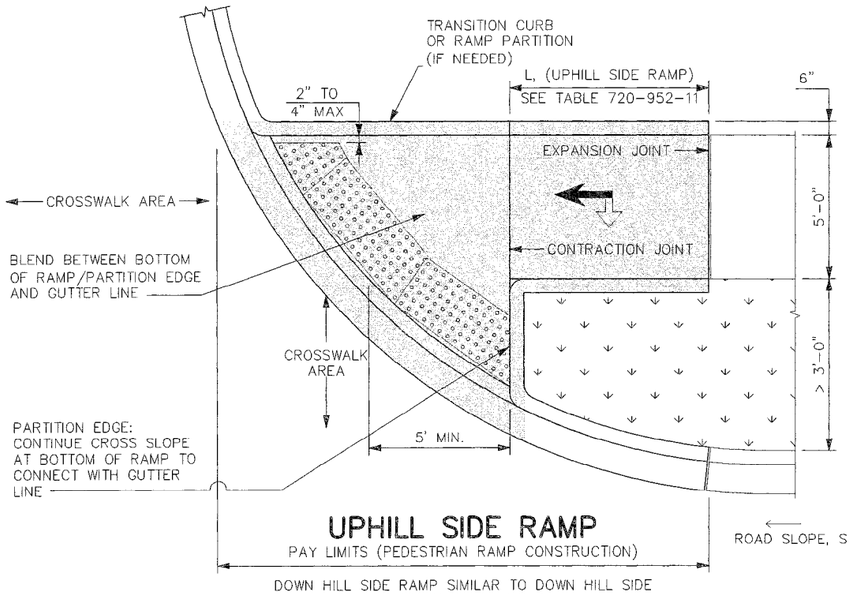




NOTES:

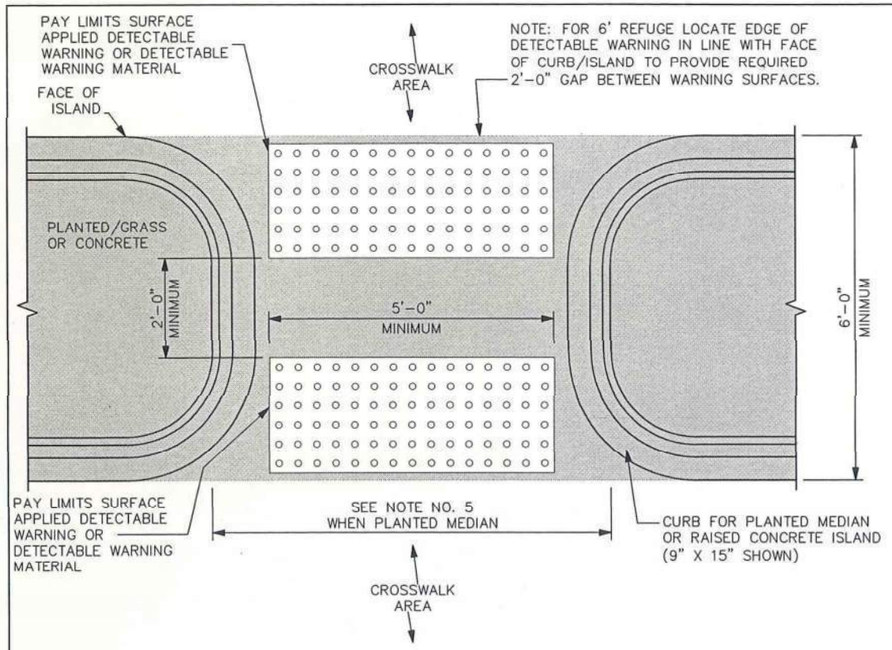
1. SEE STANDARD DRAWINGS 720-901-XX FOR GENERAL NOTES AND 720-901-03 FOR SYMBOLS.
2. SEE STANDARD DRAWINGS 720-91X-XX FOR INSTALLATION PROCEDURES FOR DETECTABLE WARNING SURFACE MATERIALS.
3. SEE STANDARD DRAWINGS 720-929-XX FOR VARIANTS TO THIS STANDARD.
4. QUANTITIES IN TABLE 720-952-11 ASSUME THAT DOWN HILL SIDE RAMP IS ALWAYS AT LEAST 7'-0" LONG.
5. CONSTRUCT RAMP PARTITION AT ALL LOCATIONS WHERE ROADWAY DRAINAGE COULD DISCHARGE ONTO ADJACENT PROPERTY. CONSTRUCT RAMP PARTITION IF NEEDED TO RETAIN EXISTING GROUND ELEVATION ON ADJACENT PROPERTY.

TABLE: 720-952-11 (SEE 720-929-01, X=10')	
ROAD SLOPE, S (%)	L, (UPHILL SIDE RAMP), [FT]
S ≤ 1%	7'-0"
1% > S ≤ 3%	10'-0"
S > 3%	15'-0"



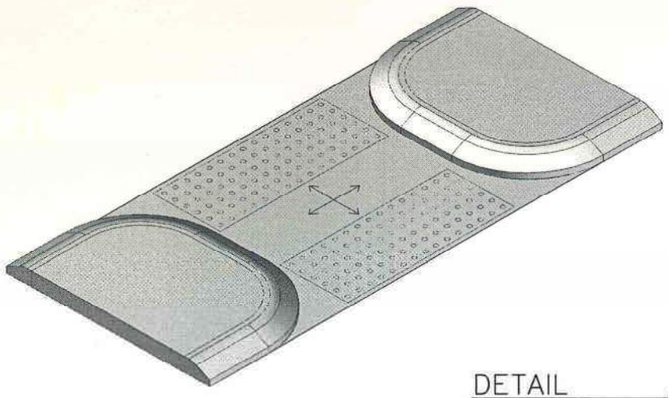
DOWN HILL SIDE RAMP SIMILAR TO DOWN HILL SIDE RAMP IN DETAIL NO. 1

DETAIL 2
SCALE: 3/16" = 1'-0"
PLAN
> 3'-0" GRASS STRIP
SEE 720-901-03 FOR SYMBOLS
CONSIDER USING PERPENDICULAR RAMP TO CROSS MAIN LINE DUAL CROSSWALK



DETAIL 1
SCALE: 3/8" = 1'-0"
MID BLOCK PEDESTRIAN REFUGE

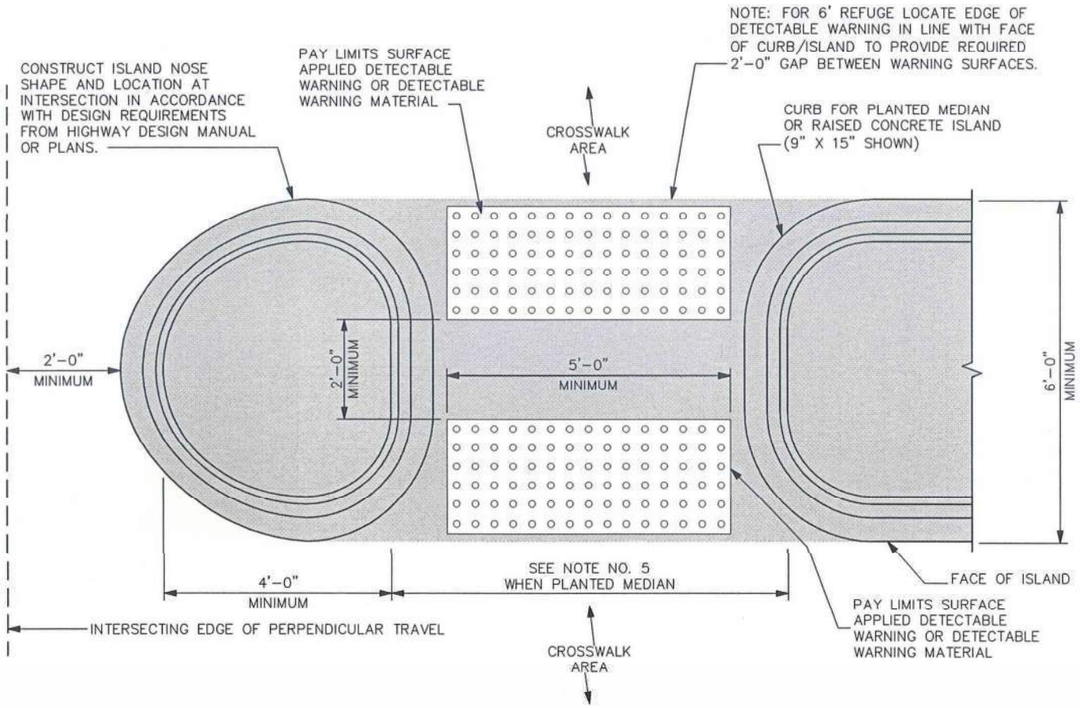
TABLE: 720-955-40		
SURFACE APPLIED DETECTABLE WARNING OR DETECTABLE WARNING MATERIAL	CONCRETE MEDIAN	PLANTED MEDIAN (SEE NOTE NO. 5)
QTY, 7209100 [SQ.FT]	QTY, 7206000 [SQ.YD]	QTY, 7201000 [LF] 9" X 15" CURB
20	VARIES	VARIES, SEE LIMITS



DETAIL 2
ISOMETRIC VIEW

NOTES:

1. SEE STANDARD DRAWINGS 720-901-XX FOR GENERAL NOTES.
2. SEE STANDARD DRAWINGS 720-91X-XX FOR INSTALLATION PROCEDURES FOR SURFACE APPLIED DETECTABLE WARNING OR DETECTABLE WARNING MATERIALS.
3. SEE STANDARD DRAWINGS 720-929-XX FOR VARIANTS TO THIS STANDARD.
4. IN LOCATIONS WHERE RAISED ISLAND DOES NOT EXTEND THROUGH BOTH SIDES OF CROSSWALK, DO NOT INSTALL DETECTABLE WARNING SURFACES OR DETECTABLE WARNING MATERIALS AT MEDIAN, AND PROVIDE CONTINUOUS CROSSWALK MARKINGS ACROSS ROADWAY WITH.
5. MEASURE AND PAY FOR PEDESTRIAN RAMP CONSTRUCTION, IN SQUARE YARDS, AT ALL CROSSINGS THROUGH PLANTED MEDIANS AS SHOWN ON THIS DRAWING. PEDESTRIAN RAMP CONSTRUCTION PAY ITEM WILL INCLUDE ALL MATERIALS AND WORK TO CONSTRUCT MEDIAN CURB RETURNS AND AT GRADE PASS THROUGH USING EITHER A 4" THICK SLAB OF CLASS 2500 CONCRETE WITH WET INSET DETECTABLE WARNINGS OR HOT MIX ASPHALT WITH SURFACE APPLIED DETECTABLE WARNINGS.



DETAIL 3
SCALE: 3/8" = 1'-0"
INTERSECTION PEDESTRIAN REFUGE

REFERENCES

NATIONAL DOCUMENTS

REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY NOVEMBER, 2005

SCDOT DOCUMENTS

SCDOT TRANSITION PLAN
QPL 61
SCDOT ARMS MANUAL
HIGHWAY DESIGN MANUAL

RELATED DRAWINGS & KEYWORDS

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

SIGNATURE

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1	12/14	DSO	MODIFIED NOTES & TABLE
0	1/13	DSO	NEW DRAWING

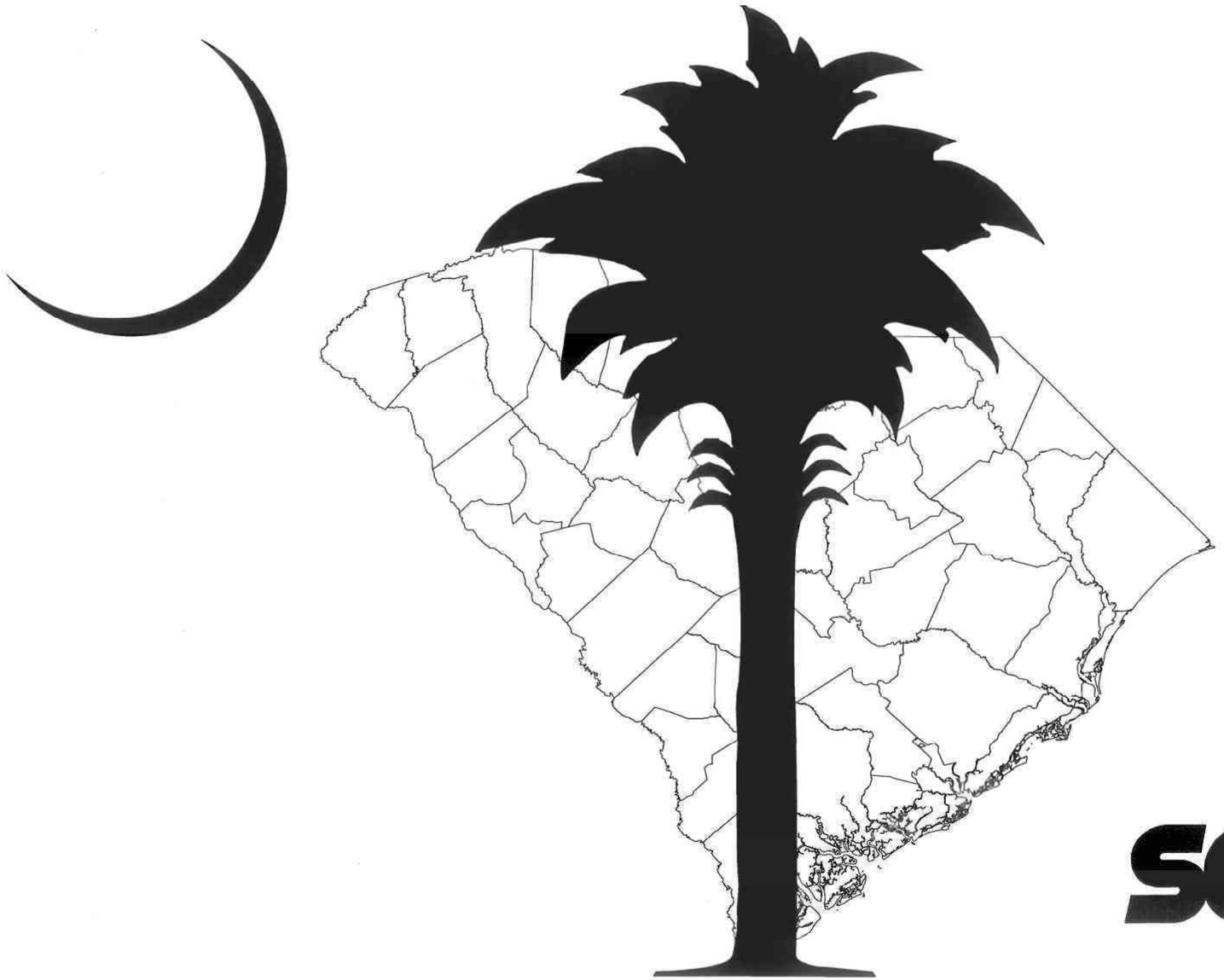
SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

PEDESTRIAN REFUGE RAISED CONCRETE ISLAND

720-955-40

EFFECTIVE LETTING DATE: FEBRUARY, 2015



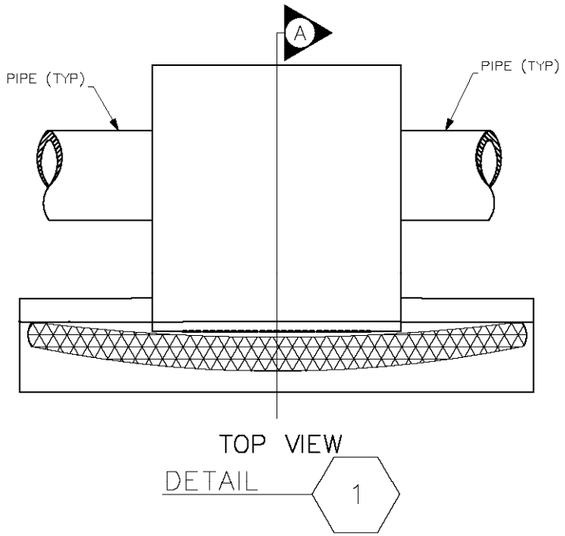
SCDOT

EROSION CONTROL

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

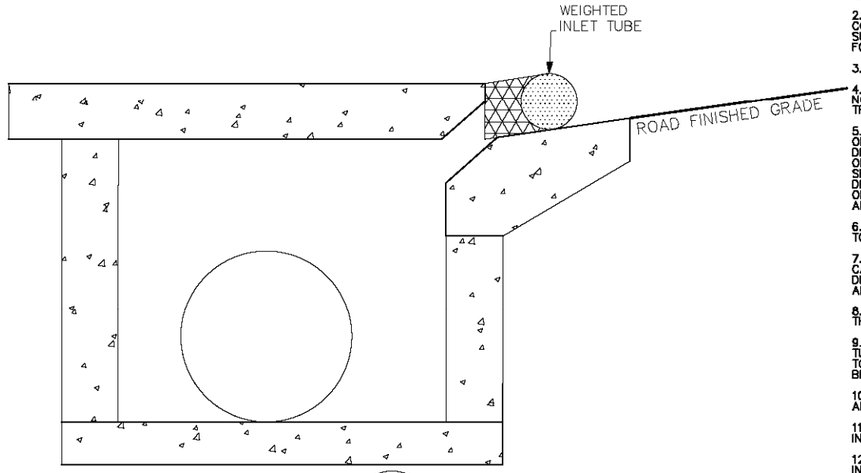
STANDARD DRAWING

SECTION
815-000



TOP VIEW

DETAIL 1



SECTION A

SIDE VIEW OF
CATCH BASIN &
TYPE F INLET STRUCTURE
FILTER

WEIGHTED INLET TUBE

NOTES:

1. DRAWING SHOWS TYPE 16 CATCH BASIN.

2. NON-WEIGHTED TUBES SHALL BE INSTALLED IMMEDIATELY AFTER GRADING AND CONSTRUCTION OF CATCH BASIN BOX. NON-WEIGHTED TUBES SHALL BE MAINTAINED DURING SUBGRADE AND BASE PREPARATION UNTIL BASE COURSE IS PLACED. THEY ARE APPLICABLE FOR CATCH BASIN TYPES 1, 16, 17, AND 18 WITH DRAINAGE AREAS LESS THAN 1 ACRE.

3. INLET TUBES MAY BE TEMPORARILY MOVED DURING CONSTRUCTION AS NEEDED.

4. CONSTRUCT A SMALL U-SHAPED TRENCH TO A DEPTH THAT IS 20% OF THE NON-WEIGHTED INLET TUBE DIAMETER. LAY THE INLET TUBE FLAT IN THE U-SHAPED TRENCH AND COMPACT THE UPSTREAM INLET TUBE SOIL INTERFACE.

5. INSTALL NON-WEIGHTED INLET TUBES USING WOODEN STAKES WITH A MINIMUM LENGTH OF 3 FEET AND A MINIMUM MEASURED DIMENSION OF 3/4" X 3/4" AND A MAXIMUM MEASURED DIMENSION 2" X 2", OR 1.25 POUNDS PER FOOT STEEL POSTS WITH A MINIMUM LENGTH OF 3 FEET. USE STEEL POSTS WITHOUT A SOIL PLATE AND PAINTING IS NOT REQUIRED. SPACE POSTS OR STAKES ON 2 FOOT CENTERS AND DRIVE THEM INTO THE GROUND TO A MINIMUM DEPTH OF 2 FEET. INSTALL NON-WEIGHTED INLET TUBES SO THAT THE TOP IS BELOW THE TOP OF THE INSTALLED CURB LINE TO ENSURE THAT ALL OVERFLOW OR OVERTOPPING WATER HAS THE ABILITY TO ENTER THE INLET UNOBSTRUCTED.

6. PLACE STAKES ON THE DOWNSTREAM SIDE OF THE NON-WEIGHTED INLET TUBE. REFER TO MANUFACTURER'S RECOMMENDATION FOR OTHER STAKING DETAILS.

7. AFTER ROAD BASE COURSE IS PLACED, WEIGHTED INLET TUBES SHALL BE PLACED FOR CATCH BASIN TYPES 1, 9, 12, 14, 15, 16, 17, & 18, DI 24 INCHES X 24 INCHES, DI 24 INCHES X 36 INCHES, MANHOLES, AND TRENCH DRAINS. WEIGHTED INLET TUBES ARE APPLICABLE WHERE CONSTRUCTION TRAFFIC MAY OCCUR AROUND THE INLET.

8. INSTALL WEIGHTED INLET TUBES LYING FLAT ON THE GROUND WITH NO GAPS BETWEEN THE UNDERLYING SURFACE AND THE TUBE.

9. DO NOT COMPLETELY BLOCK INLETS WITH INLET TUBES. INSTALL WEIGHTED INLET TUBES IN SUCH A MANNER THAT ALL OVERFLOW CAN ENTER THE INLET UNOBSTRUCTED. TO AVOID POSSIBLE FLOODING, 2 OR 3 CONCRETE CINDER BLOCKS MAY BE PLACED BETWEEN THE WEIGHTED INLET TUBE AND THE INLET.

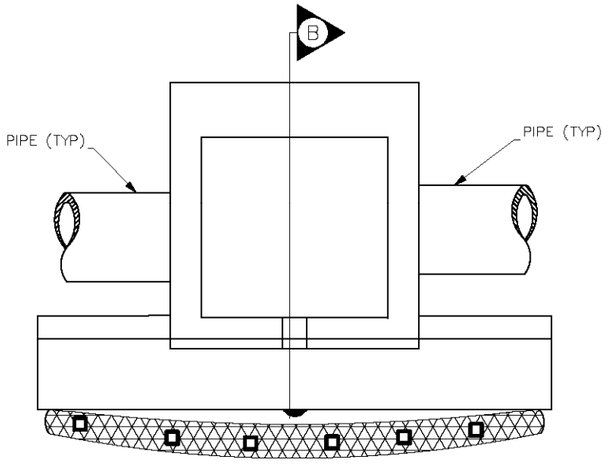
10. FOR WEEP HOLE APPLICATIONS, BOTH WEIGHTED AND NON-WEIGHTED INLET TUBES ARE APPLICABLE.

11. ALL WEIGHTED TYPE F INLET STRUCTURE FILTERS ARE APPLICABLE AS TYPE E INLET STRUCTURE FILTERS.

12. REPLACE INLET TUBES DURING INSTALLATION AS DIRECTED BY THE ENGINEER, INSPECTOR, OR MANUFACTURER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.

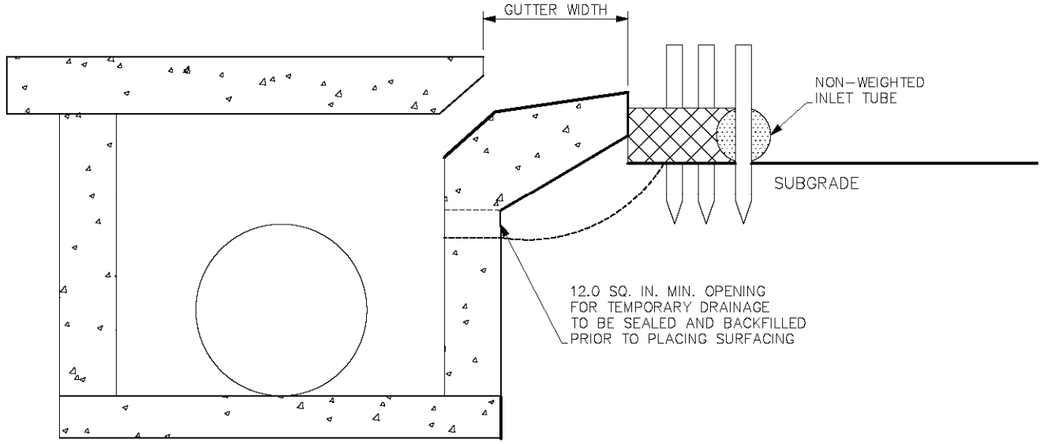
13. ALL TYPE F INLET FILTERS SHALL BE INSPECTED EVERY 7 CALENDAR DAYS.

14. THE PAY ITEMS SHALL BE:
    - 8152004 INLET STRUCTURE FILTER TYPE F (WEIGHTED)_____LF
    - 8152006 INLET STRUCTURE FILTER TYPE F (NON-WEIGHTED)_____LF
    - 8154155 CLEANING INLET STRUCTURE FILTERS_____EA



TOP VIEW

DETAIL 2



SECTION B

SIDE VIEW OF
CATCH BASIN &
TYPE F INLET STRUCTURE
FILTER

NON-WEIGHTED INLET TUBE

THIS DRAWING IS NOT TO SCALE

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

SC-M-815-8
QPL 58

RELATED DRAWINGS & KEYWORDS

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

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

James W. Kendall, Jr.

SIGNATURE

11/18/2016

DATE

#	DATE	CHK	DESCRIPTION
6	---	---	---
5	---	---	---
4	---	---	---
3	---	---	---
2	---	---	---
1	8/2016	DSO	TYPOS; PAY #
0	8/2013	DSO	UPDATED DRAWING

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

TYPE F
INLET STRUCTURE
FILTERS

815-006-00

EFFECTIVE LETTING DATE JUL 2017

TABLE 815-605A				
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 4:1 6:1	2	3	2
6–10	2:1	12*	13*	5
	4:1 6:1	3	4	3
>10	2:1	12*	13*	5
	4:1 6:1	4	5	4

*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.

SEE 815-605-10 FOR TEMPORARY DIVERSION DIKE

SEE 815-605-20 FOR TEMPORARY SILT DITCH

SEE 815-605-30 FOR ROLLED EROSION CONTROL PRODUCT

NOTES:
1. SILT FENCE CHECKS MUST BE LOCATED EVERY 100 FEET 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.

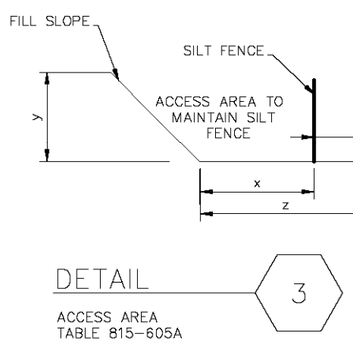
4. ATTACH FABRIC TO POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN ALL CASES TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES.

5. SILT SHALL BE REMOVED AND DISPOSED OF WHEN SILT ACCUMULATES TO ⅓ 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 REMOVAL OF SILT RETAINED BY SILT FENCE.

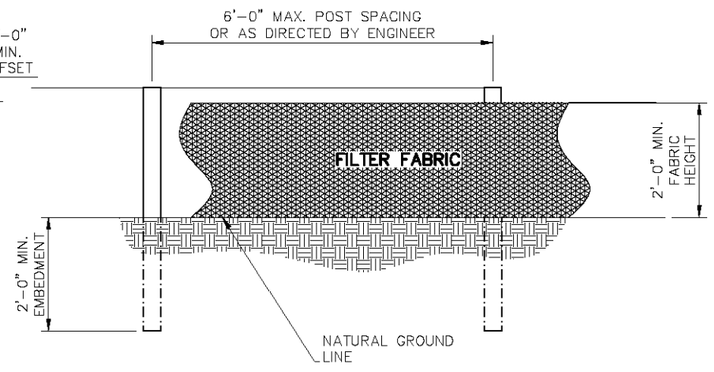
6. TYPICAL SILT FENCE APPLICATIONS REQUIRE 24 INCHES OF THE FABRIC TO BE ABOVE GROUND. WHEN NEEDED, THE HEIGHT OF SILT FENCE FABRIC ABOVE THE GROUND MAY BE GREATER THAN 24". SEE PLANS FOR APPLICATION OF HIGHER SILT FENCE, PAY ITEMS, AND INSTALLATION METHODS.

7. IN TIDAL AREAS, EXTRA SILT FENCE MAY BE REQUIRED. THE LENGTH OF POST WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING WILL REMAIN AS SHOWN HEREON. EXTRA HEIGHT FABRIC WILL BE 4, 5, OR 6 FEET TOTAL WIDTH.

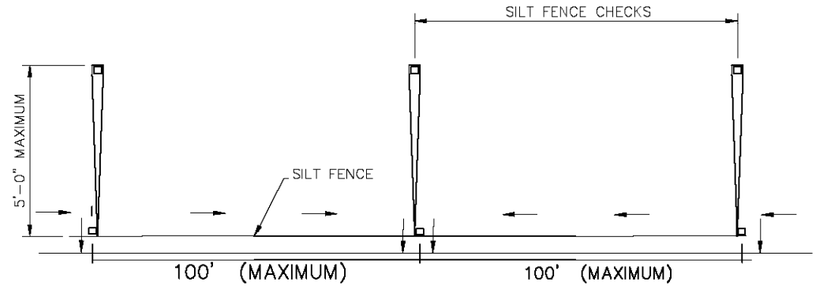
8. PAY ITEMS:
8153000 SILT FENCE _____ LF
8153005 SILT FENCE EXTRA HEIGHT _____ LF
8153090 REPLACE/REPAIR SILT FENCE _____ LF
8154050 REMOVAL OF SILT RETAINED BY SILT FENCE _____ LF



DETAIL 3
ACCESS AREA
TABLE 815-605A

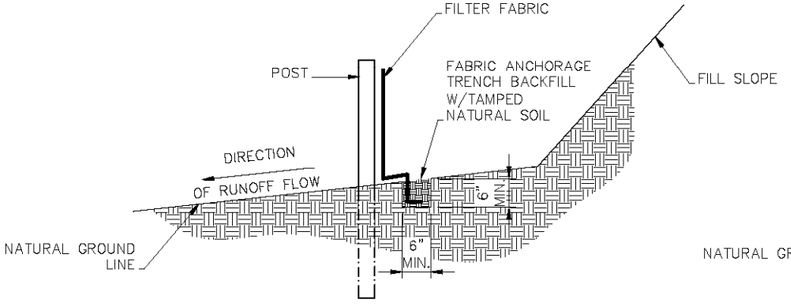


DETAIL 1
TYPICAL POST SPACING

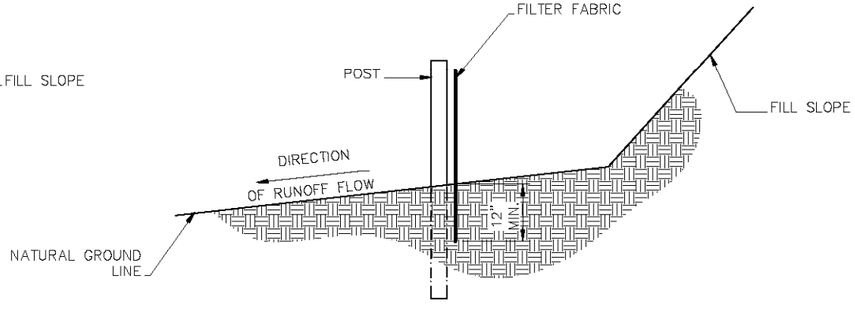


DETAIL 2
SILT FENCE CHECKS

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



DETAIL 4
TRENCH METHOD



DETAIL 5
PNEUMATIC METHOD

NOT TO SCALE

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS
SC-M-815-2, QPL 34

RELATED DRAWINGS & KEYWORDS

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

James W. Kendall, Jr.
SIGNATURE

11/10/2016
DATE

#	DATE	CHK	DESCRIPTION
5			
4			
3	11/2016	DSO	GENERAL REVISIONS
2	8/2016	DSO	GENERAL REVISIONS
1	8/2012	KNB	ADDED SCDOT DOCUMENTS, REMOVED STEEL, CHANGED NOTES
0	3/2008	DSO	GENERAL REVISIONS

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

STANDARD DRAWING

TEMPORARY SILT FENCE

815-605-00

EFFECTIVE LETTING DATE: JULY, 2017