SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
Encroachment Permit

Permit No : 250140
Permit Decision Date : 11/24/2021
Expiration Date : 11/24/2022

Type
Permit :MUNICIPALITY / LOCAL FUNDED PROJECT

Location:

District	Work County	Type	Route	Aux	Begin MP	End MP
3	Greenville, SC	US	276	None	25.203	25.167
3	Greenville, SC	US	276	None	25.191	25.190
3	Greenville, SC	US	276	None	25.190	25.191

Contact Information

Applicant: CityofTravelersRestcoSynTerraCorp Phone:
Contact: Brian Green, P.E.
Address: 148 River St,220
City: Greenville State: SC Zip: 29601

Comments

oDiagonal crosswalk and sidewalk expansion are located at intersection of McElhaney Road, Center Street, North Main Street, and South Main Street. Sidewalk expansion is proposed in turn radius between Center Street and North Main Street on Northeast corner of intersection.oNew road markings to be installed on Center Street beginning at intersection with North Main Street and continuing 400 linear feet Northeast.oAdditional resealing of crosswalks at following intersections -South Main Street and Church Street -South Main Street and South Poinsett Highway -South Main Street and Old Buncombe Road -South Main Street and Roe Road

Special Provisions:

0004 - SCDOT SHALL BE NOTIFIED WHEN WORK DEFINED IN THE PERMIT STARTS AS WELL AS WHEN THE WORK IS COMPLETED. REFERENCE SHALL BE MADE BY PERMIT NUMBER.

0104 - ALL VALVES AND MANHOLES SHALL CONFORM TO THE EXISTING ELEVATION OF THE ROADWAY OR SHOULDER AND CONFORM TO THE ACCEPTED STANDARD. THE VALVES WILL BE LOCATED OUT OF THE PAVEMENT. THEY SHALL NOT BE PLACED IN A DITCH FLOW LINE.

0105 - ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE SIDE OF THE

TRENCH AWAY FROM THE TRAVELED ROADWAY, AND SHALL BE NO CLOSER THAN FIFTEEN (15) FEET TO THE EDGE OF PAVEMENT.

0123 - ALL WORK PERFORMED IN CONNECTION WITH THIS PERMIT SHALL CONFORM TO THE SCDOT "A POLICY FOR ACCOMODATING UTILITIES ON HIGHWAY RIGHT-OF-WAY" MOST CURRENT EDITION.

0203 - ENTIRE WIDTH OF SIDEWALK TO BE REMOVED AND DISPOSED OF OFF RIGHT-OF-WAY. SIDEWALK TO BE REPLACED USING CLASS 2500 CONCRETE, 4" THICK, AND FINISHED TO SCDOT SPECIFICAIONS.

0204 - SIDEWALK OR CURB AND GUTTER REMOVAL SHALL BE REPLACED FROM JOINT TO JOINT.

0209 - DISTURBED VEGETATION SHALL BE RESEEDED ACCORDING TO THE SPECIFICAION FOR HIGHWAY CONSTRUCTION.

0210 - ALL SIDEWALKS TO INCLUDE AT DRIVEWAY RADIUS SHALL MEET (ADAAG) AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.

0303 - THE ENTIRE DISTURBED AREA SHALL BE TOP-SOILED USING 3" OF SELECTED MATERIAL AND RE-GRASSED TO SCDOT SPECIFICATIONS.

0304 - PAVEMENT MARKINGS ALTERED DURING THIS INSTALLATION SHALL BE RESTORED BY THE APPLICANT.

0306 - TRAFFIC CONTROL, LIGHTS, SIGNS AND FLAG-MEN WILL BE FURNISHED BY APPLICANT AND WILL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

0308 - WORK SHALL NOT BE PERFORMED DURING THE HOURS OF 7-9 AM OR 4-6 PM.

0310 - FIELD CHANGES, IF NECESSARY, MUST BE APPROVED IN WRITING BEFORE ACTUAL CONSTRUCTION OF PROPOSED CHANGES.

0311 - SEDIMENT AND EROSION CONTROL DEVICES SHALL BE USED TO MINIMIZE THE MOVEMENT OF SEDIMENT.

0312 - THE PERMITTEE SHALL HOLD THE DEPARTMENT HARMLESS FOR DAMAGES TO BOTH UPSTREAM AND DOWNSTREAM PROPERTIES.

0316 - ALL NON-PERMITTED OBJECTS ON THE RIGHT-OF-WAY, WHICH MUST BE REMOVED, SHALL NOT BE REPLACED ON THE RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION OF THE DEPARTMENT.

0317 - THE APPLICANT IS TO PROVIDE ALL THE NECESSARY MAINTENANCE TO THE AREA BEAUTIFIED.

0318 - THE APPLICANT SHALL BE RESPONSIBLE FOR IMMEDIATE REMOVAL OF SUCH TRAFFIC HAZARDS AS MUD, DEBRIS, LOOSE STONE, AND TRASH AS MAY BE WASHED OR SPILLED ON THE TRAVELED ROADWAY AS A RESULT OF THE PROPOSED WORK.

0320 - ALL DEBRIS TO BE CLEARED FROM THE RIGHTS-OF-WAY WITHIN TEN (10) DAYS.

Drawing No. 405-01-C(2)

FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
TRAFFIC SIGNAL CONTROLLED
INTERSECTION
FLAGGERS

1. See "Work Zone Traffic Control Procedures, Flagging Operations" for standard requirements regarding all flagging operations.

2. In accordance with this traffic control setup, when the work zone proceeds through or encroaches upon the Limits of the Intersection of a "traffic signal controlled" intersection, place the traffic signal on "normal flashing operations". Utilize Side Road Flaggers on the Side Road approaches of the intersection to control the traffic from the Side Roads. Clear communications by radio or other effective method between the Side Road Flaggers and the Open Lane Flagger and the Closed Lane Flagger of the lane closure is required to ensure safe and efficient control of all traffic approaching the intersection. Upon clearance of the Limits of the Intersection by the work train and all portions of the lane closure, ensure the traffic signal is returned to normal operational status and is operating in accordance with all operational functions prior to initiation of the "normal flashing operations".

3. When the work zone proceeds through a "traffic signal controlled" intersection, do not allow the Approach Taper or the Downstream Taper of the lane closure to encroach upon the limits of the intersection. Only the Buffer Space or the Work Activity Area of the lane closure may encroach upon the Limits of the Intersection.

4. When the work zone proceeds through a "traffic signal controlled" intersection, continue the work operations through the intersection to a specific location point within the Departure Lane no less than 300 feet to 500 feet beyond the Limits of the Intersection to allow the work train and all portions of the lane closure to clear the intersection.

DRAWING 405-01-C(2)
FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
TRAFFIC SIGNAL CONTROLLED INTERSECTION
FLAGGERS

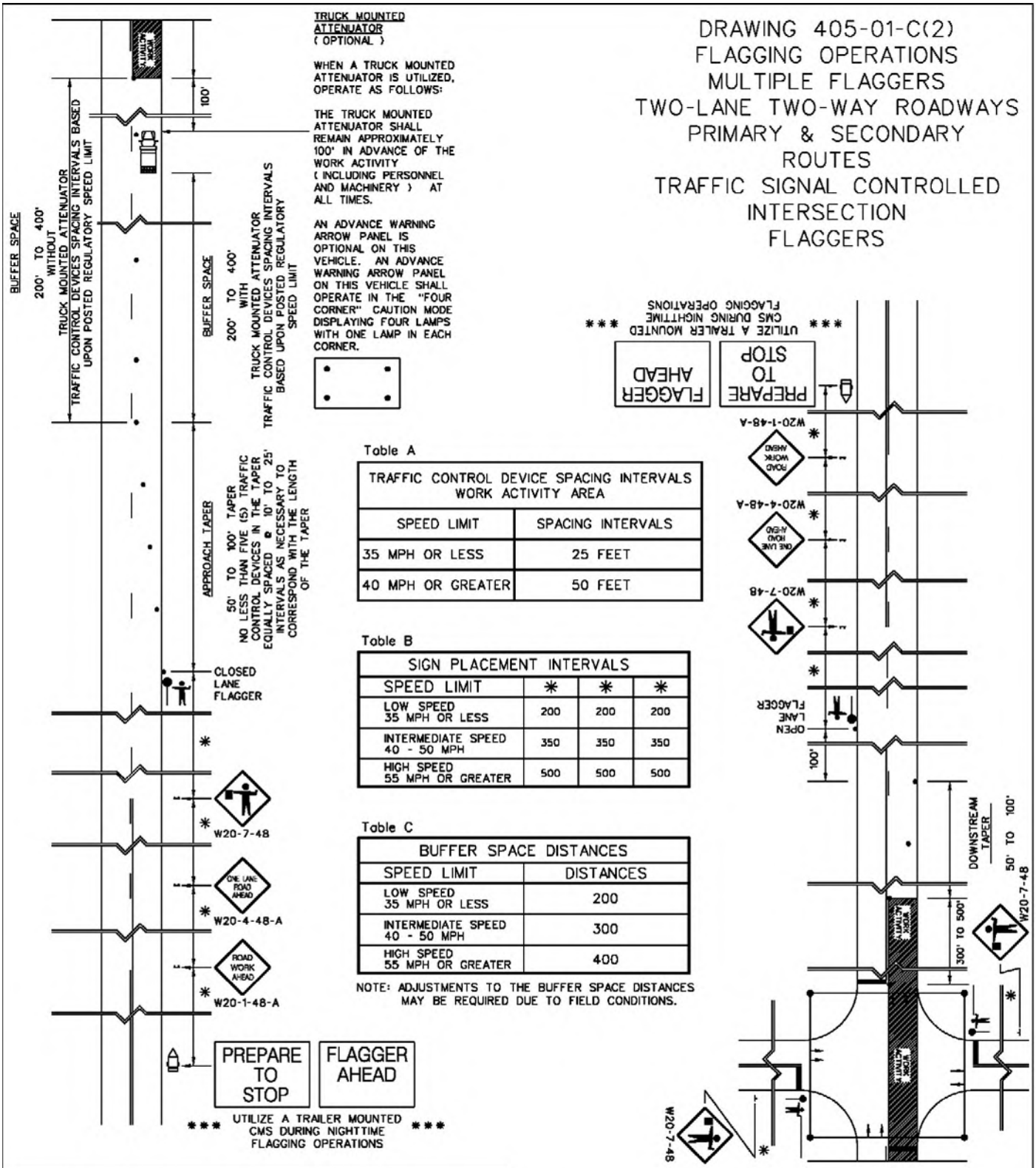


Table A

TRAFFIC CONTROL DEVICE SPACING INTERVALS WORK ACTIVITY AREA	
SPEED LIMIT	SPACING INTERVALS
35 MPH OR LESS	25 FEET
40 MPH OR GREATER	50 FEET

Table B

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

Table C

BUFFER SPACE DISTANCES	
SPEED LIMIT	DISTANCES
LOW SPEED 35 MPH OR LESS	200
INTERMEDIATE SPEED 40 - 50 MPH	300
HIGH SPEED 55 MPH OR GREATER	400

NOTE: ADJUSTMENTS TO THE BUFFER SPACE DISTANCES MAY BE REQUIRED DUE TO FIELD CONDITIONS.

NIGHTTIME FLAGGING OPERATIONS

ALL FLAGGERS SHALL WEAR CLASS 3 HIGH VISIBILITY SAFETY APPAREL MEETING ANSI/ISEA 107 REQUIREMENTS.

UTILIZE CHANGEABLE MESSAGE SIGNS ON EACH ROADWAY APPROACH DURING ALL PLANNED NIGHTTIME WORK ACTIVITIES THAT REQUIRE FLAGGING OPERATIONS.

ILLUMINATE EACH FLAGGER STATION.

UTILIZE PORTABLE PLASTIC DRUMS OR 42" OVERSIZED CONES INSTEAD OF STANDARD TRAFFIC CONES.

SPECIAL NOTE:

DURING UNPLANNED NIGHTTIME EMERGENCY OPERATIONS, THE CHANGEABLE MESSAGE SIGNS MAY BE OMITTED. THE REQUIREMENT FOR THE CHANGEABLE MESSAGE SIGNS SHALL BE MAINTAINED FOR ALL PLANNED NIGHTTIME WORK ACTIVITIES THAT REQUIRE FLAGGING OPERATIONS.

Drawing No. 505-01

LANE CLOSURE
LOW SPEED MULTILANE
< / = 35 MPH
PRIMARY & SECONDARY ROUTES

1. These lane closures are restricted to maximum distances of 2 miles unless otherwise directed by the District Engineering Administrator.

2. Measure all advance warning sign locations from the beginning of the taper.

3. Install advance warning signs mounted on portable sign supports no less than 4 feet from the near edge of the sign to the near edge of an adjacent travel lane on roadways with grass 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 a curb & gutter is present, install the sign no less than 2 feet from the near edge of the sign to the face of the curb.

4. On primary and secondary routes, the minimum mounting height of signs mounted on portable sign supports is 1 foot during this traffic control setup.

5. The advance warning sign placement intervals illustrated are for normal conditions. Adjustments to the distance intervals between the signs may be necessary due to sight distance restrictions such as curves and hills.

6. Install and operate a trailer mounted advance warning arrow panel within the taper of a single lane closure. Place the advance warning arrow panel on the roadway shoulder at the beginning of the taper. However, where the shoulders are narrow or site conditions restrict the use of the shoulder areas adjacent to the beginning of the taper, place the advance warning arrow panel behind the channelizing devices as close as practical to the beginning of the taper. Placement of the advance warning arrow panel at the beginning of the taper is preferred.

7. During daytime hours, 28” or 36” standard traffic cones may be utilized for delineation of the lane closure. The 28” and 36” standard traffic cones used during daytime hours are not required to be reflectorized.

8. During nighttime hours, portable plastic drums or 42” oversized traffic cones are required for delineation of the lane closure.

9. If a daytime work operation extends into the nighttime hours, replace 28” or 36” standard traffic cones with portable plastic drums or 42” oversized traffic cones.

10. Reflectorize all portable plastic drums and 42” oversized traffic cones with Type III flexible microprismatic retroreflective sheeting.

11. If work is being conducted at two different locations at the same time in the same travel lane on a low speed roadway, ≤ 35 MPH, separate the two locations by no less than 1 mile from the end of the first lane closure to the beginning of the taper of the second lane closure.

12. If work is being conducted at two different locations at the same time in different travel lanes on a low speed roadway, ≤ 35 MPH, separate the two locations by no less than 2 miles from the end of the first lane closure to the beginning of the taper of the second lane closure.

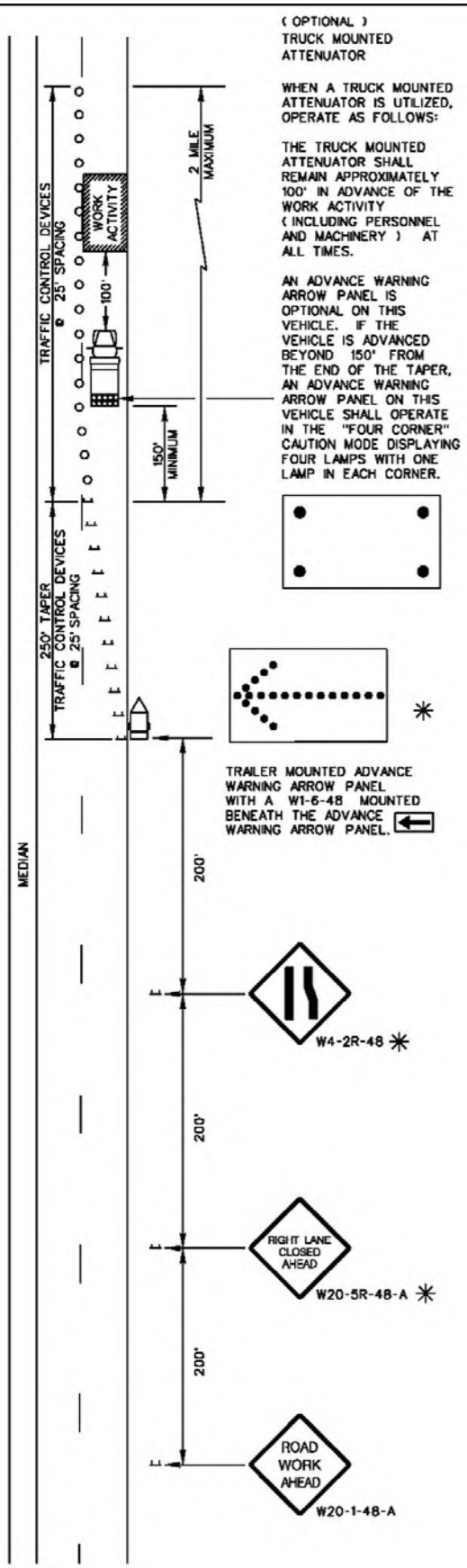
13. When a truck mounted attenuator is used, maintain the truck mounted attenuator approximately 100 feet in advance of the work activities.

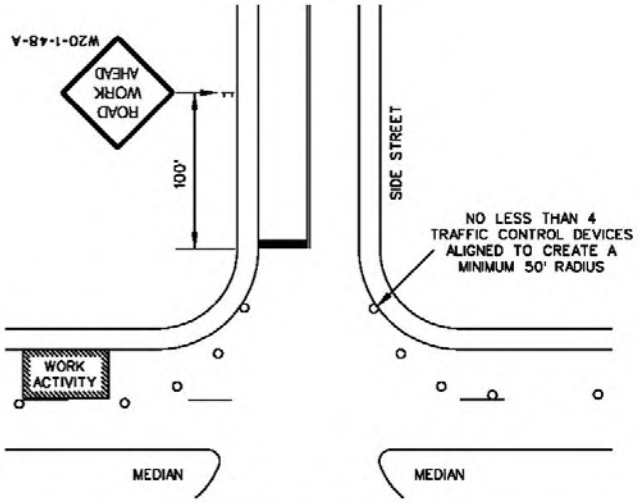
14. Conduct the work in such a manner to avoid encroaching into the adjacent travel lane open to traffic.

15. A trailer mounted changeable message sign is not required but is optional. When a trailer mounted changeable message sign is utilized, install the changeable message sign on the shoulder of the roadway no less than 6 feet from the near edge of the sign to the near edge of the adjacent travel lane when space is available. When the 6 foot space or right-of-way is unavailable, place the trailer mounted changeable message sign at the greatest possible distance up to 6 feet from the near edge of the adjacent travel lane. When a trailer mounted changeable message sign is placed within the limits of a paved shoulder or remains in place adjacent to a travel lane regardless of shoulder type when inoperative, supplement the trailer mounted changeable message sign location with no less than 5 portable plastic drums placed between the sign and the adjacent travel lane for delineation of the sign location. This requirement for delineation of the sign location applies at all times under the aforementioned conditions during which the sign is within 15 feet of the near edge of a travel lane open to traffic. Use of 28" or 36" standard traffic cones or 42" oversized traffic cones as substitutes for the portable plastic drums in this application is PROHIBITED. The sign shall flash alternately to read "RIGHT LANE CLOSED", "MERGE LEFT" or "LEFT LANE CLOSED", "MERGE RIGHT" as necessary. Also, the messages shall flash at a rate to permit motorists to read both messages at least once.

16. This traffic control setup for a lane closure is only acceptable on low speed roadways with a posted regulatory speed of 35 MPH or less.

DRAWING 505-01
LANE CLOSURE
LOW SPEED MULTILANE
≤ 35 MPH
PRIMARY & SECONDARY ROUTES





"TYPICAL SIDE STREET" APPLICATION

* LEFT LANE CLOSURE

1.) SIGNS ILLUSTRATED ARE FOR A RIGHT LANE CLOSURE.

2.) WHEN CLOSING THE LEFT TRAVEL LANE, USE THE FOLLOWING:

1 - W4-2L-48
1 - W20-5L-48-A

3.) THE FLASHING ARROW AND W1-6-48 SHALL POINT TO THE RIGHT.

CITY OF TRAVELERS REST

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS MAIN STREET, CENTER STREET AND McELHANEY ROAD

GENERAL NOTES:

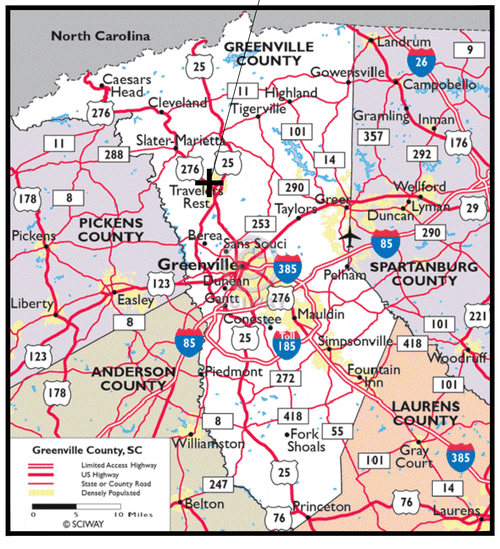
1. Field verify location and depth of all existing underground utilities prior to commencing work.
2. All equipment and material to be utilized by the contractor shall be included in the bid.
3. All construction shall conform, but not limited, to Greenville County Stormwater regulations, SCDOT regulations, and ADA standards.
4. Fill material shall be placed in 6" lifts (maximum) and 95% maximum dry density by the Standard Proctor Method, ASTM D-698.
5. All fill material shall be clean dirt free from roots, rocks, other organic material, construction/demolition debris and trash.
6. Dispose of all materials in a SCDHEC approved landfill.
7. All marking to be 90 Mil thermoplastic to be in accordance with SCDOT 2007 Standard Specification Section 627.

DRAWING INDEX

SOUTH CAROLINA VICINITY MAP

NOT TO SCALE

PROJECT LOCATION



Location Map

NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA — SYNTERRA CORPORATION NO. C00623 — CERTIFICATE OF AUTHORIZATION

CAUTION

South Carolina 811 — Call 811 Before you Dig

A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

synTerra
148 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/23/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

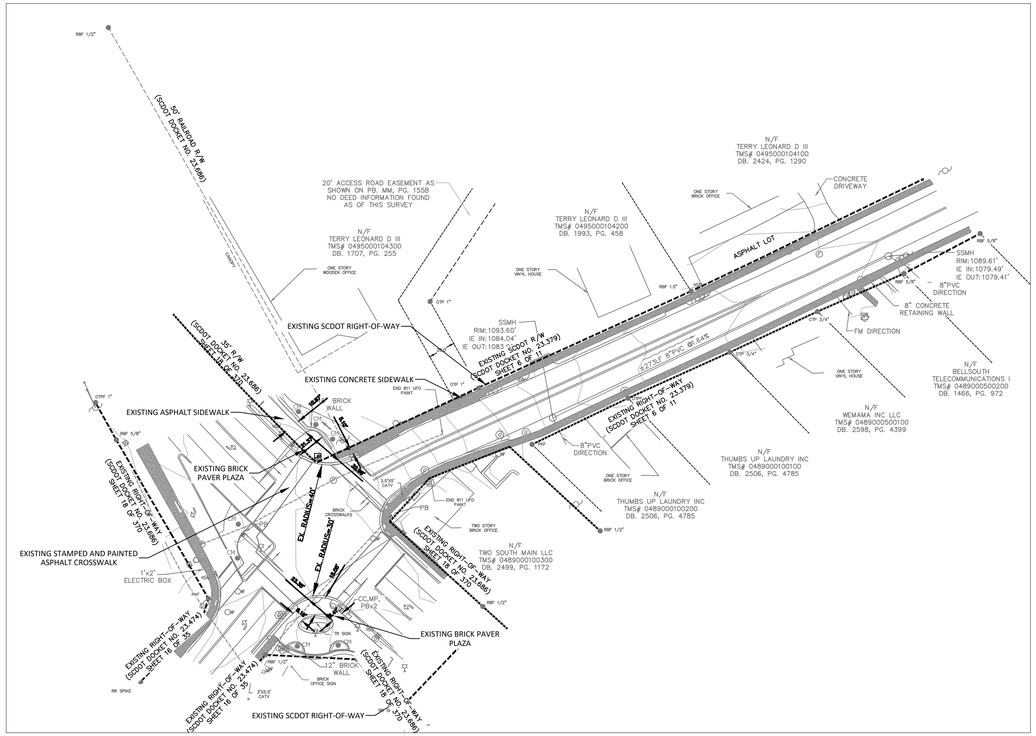
TOLERANCES–UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

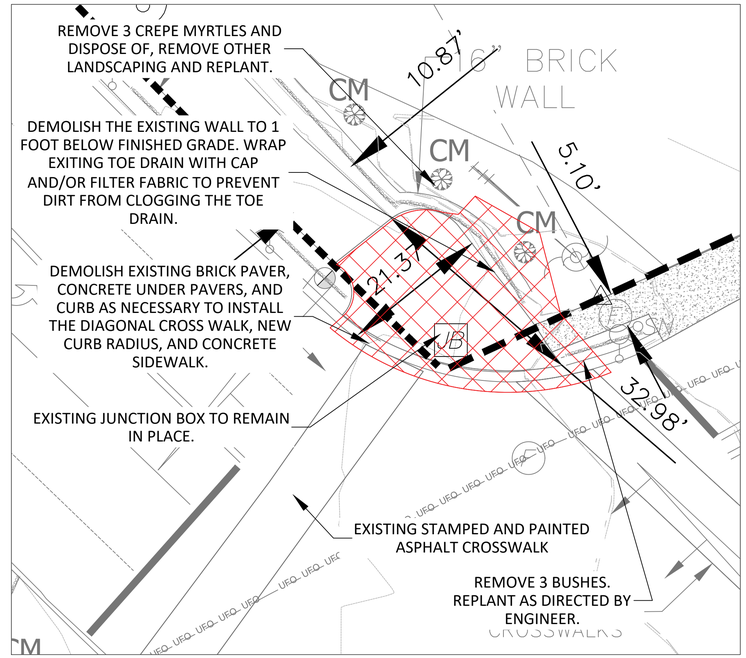
Tr Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS
COVER SHEET

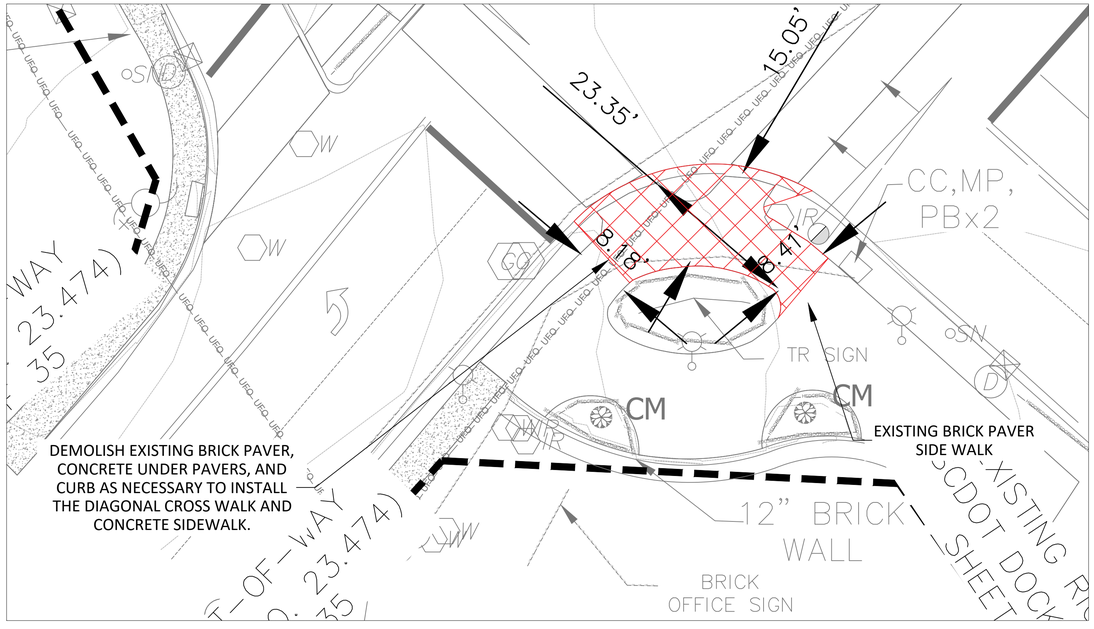
DIVISION	N/A	PLANT	N/A
DRAWN BY	T. COLTON	CHECKED BY	B. GREEN
DRAWN DATE	10/18/2021	CHECKED DATE	10/18/2021
PROJ. NO.	1454.01.02	FILE SERVER	N/A
SCALE	N.T.S.		SHEET 1 OF 13
DWG. NO.	C01	REV.	D





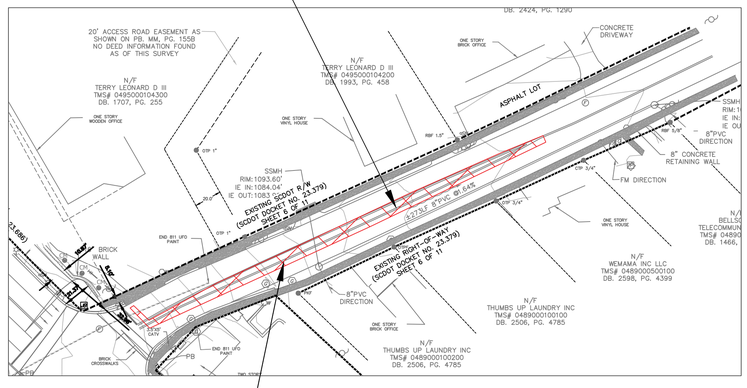
LEGEND

- CM CRAPE MYRTLE
- JB JUNCTION BOX
- IR IRRIGATION METER
- SN SIGN
- D STORM DRAIN MANHOLE
- W WATER METER
- CC CONTROL CABINET
- MP METER PEDESTAL
- PB PULL BOX
- DEMOLITION
- SIDEWALK
- SF SILT FENCE
- LOD LIMITS OF DISTURBANCE



DEMOLITION DETAILS
SCALE: 1"=10'

EXISTING PAVEMENT MARKINGS TO BE REMOVED BY SAND BLASTING METHOD OR PRESSURIZED WATER TO SCDOT STANDARDS.



DEMOLISH EXISTING CENTER LINE PAVEMENT MARKINGS AND STOP BAR TO SCDOT STANDARDS

DEMOLITION DETAILS
SCALE: 1"=50'

PRELIMINARY NOT FOR CONSTRUCTION

SYNTERRA CORPORATION NO. C00625

CAUTION

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synterra
158 River Street, Suite 220
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www.synterracorp.com

				TOLERANCES–UNLESS NOTED
E				
D	10/18/2021	FOR AGENCY REVIEW	GTC	FRACTIONAL ± 1/16" DECIMAL ± 0.010" ANGLE ± 0.1°
C	09/23/2021	FOR AGENCY REVIEW	GTC	
B	08/10/2021	FOR AGENCY REVIEW	GTC	
A	07/08/2021	FOR AGENCY REVIEW	GTC	
	DATE	REVISION	BY	

Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS EXISTING CONDITIONS AND DEMOLITION

DIVISION	N/A	PLANT	N/A
DRAWN BY	T. COLTON	CHECKED BY	B. GREEN
DATE	10/18/2021	DATE	10/18/2021
PROJ. NO.	1454.01.02	FILE SERVER	N/A
SCALE	VARIES	SHEET 2 OF 13	
DWG. NO.	C02	REV.	D

P:\City of Travelers Rest.1454\01. Travelers Rest - Gateway park\02. Phase 2 Signal Design for Center_Main_McElhaney\CAD\CAD - SCDOT\1454.01.02-BASE.dwg 1/25/2021 2:09:31 PM

N/F
TERRY LEONARD D III
TMS# 0495000104100
DB. 2424, PG. 1290

20' ACCESS ROAD EASEMENT AS SHOWN ON PB. MM, PG. 155B NO DEED INFORMATION FOUND AS OF THIS SURVEY

N/F
TERRY LEONARD D III
TMS# 0495000104300
DB. 1707, PG. 255

N/F
TERRY LEONARD D III
TMS# 0495000104200
DB. 1993, PG. 458

ONE STORY BRICK OFFICE

CONCRETE DRIVEWAY

ONE STORY WOODEN OFFICE

ONE STORY VINYL HOUSE

A
C03 C06

B
C03 C06

INSTALL INLET PROTECTION AT CATCH BASIN 1700 FEET DOWN CENTER ST

EXISTING JUNCTION BOX TO BE FLUSH WITH FINISHED GRADE

SILT FENCE

LIMITS OF DISTURBANCE

35' R/W (SCDOT DOCKET NO. 23,686) SHEET 18 OF 370

EXISTING SCDOT RIGHT OF WAY

SAW CUT ASPHALT. EXTEND EXISTING ASPHALT TO NEW SIDEWALK. 10 INCHES OF CRUSH RUN UNDER 2 INCH ASPHALT SURFACE COARSE. MATCH EXISTING SURFACE AND GRADE.

SAW CUT EXISTING SIDE WALK

FILL AS NECESSARY. FILL TO TIE INTO EXISTING GRADE ON ADJACENT PROPERTY LINE

EXISTING SCDOT RIGHT OF WAY

OTP 1"

100 FEET 90 MIL SOLID WHITE THERMOPLASTIC.

20.0'

SSMH
RIM: 1093.60'
IE IN: 1084.04'
IE OUT: 1083.9?

150 FEET 90 MIL 2' BROKEN WHITE SKIP LINE THERMOPLASTIC.

EXISTING SCDOT R/W (SCDOT DOCKET NO. 23,379) SHEET 6 OF 11

±273LF 8"PVC @1.64%

OTP 3/4"

RBF 1.5"

RBF 5/8"

SSMH
RIM: 1089.61'
IE IN: 1079.49'
IE OUT: 1079.41'

8"PVC DIRECTION

8" CONCRETE RETAINING WALL

FM DIRECTION

ONE STORY VINYL HOUSE

N/F
BELLSOUTH TELECOMMUNICATIONS I
TMS# 0489000500200
DB. 1466, PG. 972

N/F
WEMAMA INC LLC
TMS# 0489000500100
DB. 2598, PG. 4399

N/F
THUMBS UP LAUNDRY INC
TMS# 0489000100100
DB. 2506, PG. 4785

N/F
THUMBS UP LAUNDRY INC
TMS# 0489000100200
DB. 2506, PG. 4785

OTPF 1"

RBF 5/8"

16" BRICK WALL

CM

14.67'

BRICK BANDING

33.26'

4.66'

3.5'X5' CATV

UFO

END 811 UFO

90 MIL SOLID DOUBLE YELLOW THERMOPLASTIC CENTER LINE.

DRAWING 625-410-00

90 MIL SOLID WHITE THERMOPLASTIC TURN ARROW

90 MIL WHITE THERMOPLASTIC STOP BAR

NOTE 1

RADIUS=35'

BRICK CROSSWALKS

PB

TWO STORY BRICK OFFICE

ONE STORY BRICK OFFICE

RBF 1/2"

EXISTING RIGHT-OF-WAY (SCDOT DOCKET NO. 23,686) SHEET 18 OF 370

N/F
TWO SOUTH MAIN LLC
TMS# 0489000100300
DB. 2499, PG. 1172

DRAWING 720-105-01 DETAIL 1

SAW CUT ROAD. INSTALL CURB AND GUTTER WITH 35 FOOT RADIUS. MINIMUM OF 12 INCH OF CRUSH AND RUN UNDER CURB AND GUTTER. MATCH EXISTING SURFACE AND GRADE.

DRAWING 720-911-01 DETAILS 1 & 2

DRAWING 720-952-36 DETAILS 1 & 2

10 INCH OF CRUSH AND RUN UNDER 6 INCHES OF 3500 PSI CONCRETE WITH BRICK BANDING. REUSE EXISTING BRICK FOR BANDING. INSTALL HANDICAP RAMP WITH TRUNCATED BRICK AS DETECTABLE WARNING. TRUNCATED BRICK TO MATCH ADJACENT BRICK AND TO BE APPROVED BY ENGINEER. MATCH EXISTING SURFACE AND GRADE.

10.00'

29.12'

10 FOOT WIDE CROSS WALK. MARKING TO BE 90 MIL WHITE THERMOPLASTIC

DRAWING 625-305-00

13.15'

DRAWING 720-105-01 DETAIL 1

PLACE NEW CURB IN THE SAME LOCATION WITH THE SAME RADIUS AS THE EXISTING CURB.

CONNECT TO NEW SIDEWALK BY USING EXISTING BRICK PAVERS. INSTALL A MINIMUM OF 6 INCHES OF CRUSH AND RUN AND 6 INCHES OF CONCRETE UNDER THE BRICK PAVERS. CONNECT CONCRETE SLABS WITH DOWELS 6 INCHES DEEP, 12 INCHES ON CENTER. DOWELS SHOULD BE #4 REBAR. USE SAND TO LEVEL THE BRICK PAVERS. MATCH EXISTING SURFACE AND GRADE.

R SIGN

12" BRICK WALL

BRICK OFFICE SIGN

LIMITS OF DISTURBANCE EXISTING SCDOT RIGHT OF WAY

RR SPIKE

INSTALL INLET PROTECTION AT CATCH BASIN 600 FEET DOWN MCELHANEY RD

B
C03 C06

EXISTING RIGHT-OF-WAY (SCDOT DOCKET NO. 23,474) SHEET 16 OF 370

EXISTING RIGHT-OF-WAY (SCDOT DOCKET NO. 23,379) SHEET 18 OF 370

RR SPIKE

GENERAL NOTES

NOTE 1: MAXIMUM CROSS-SLOPE TO BE 2%

NOTE 2: NO IRRIGATION HAS BEEN ADDED IN THE ROW

NOTE 3: ALL BRICK BANDING WITHIN SCDOT ROW SHALL BE NO MORE THAN 1 STANDARD BRICK WIDTH.

NOTE 4: ALL SIDEWALK SHALL MEET ADA STANDARDS.

NOTE 5: ALL SIDEWALK SHALL MEET MINIMUM SCDOT SIDEWALK STANDARD WIDTHS, SLOPES, AND JOINT SPACING.

NOTE 6: USE 2500 PSI OR HIGHER MASONRY UNITS CONFORMING TO ASTM C55 GRADE S-II FOR CONCRETE BRICK OR AASHTO M 114 GRADE SW FOR CLAY BRICK.

NOTE 7: USE TYPE S OR M MORTAR FOR MASONRY CONSTRUCTION. USE ONLY NON-SHRINK GROUT

PRELIMINARY NOT FOR CONSTRUCTION

SYNTERRA CORPORATION NO. C000623 STATE OF SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION

CAUTION

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synterra
218 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/23/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

TOLERANCES–UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS
SITE PLAN

DIVISION	N/A	PLANT	N/A
DRAWN BY	T. COLTON	CHECKED BY	B. GREEN
DATE	10/18/2021	DATE	10/18/2021
PROJ. NO.	1454.01.02	FILE SERVER	N/A
SCALE	1"=20'	SHEET 3 OF 13	
DWG. NO.	C03	REV.	D

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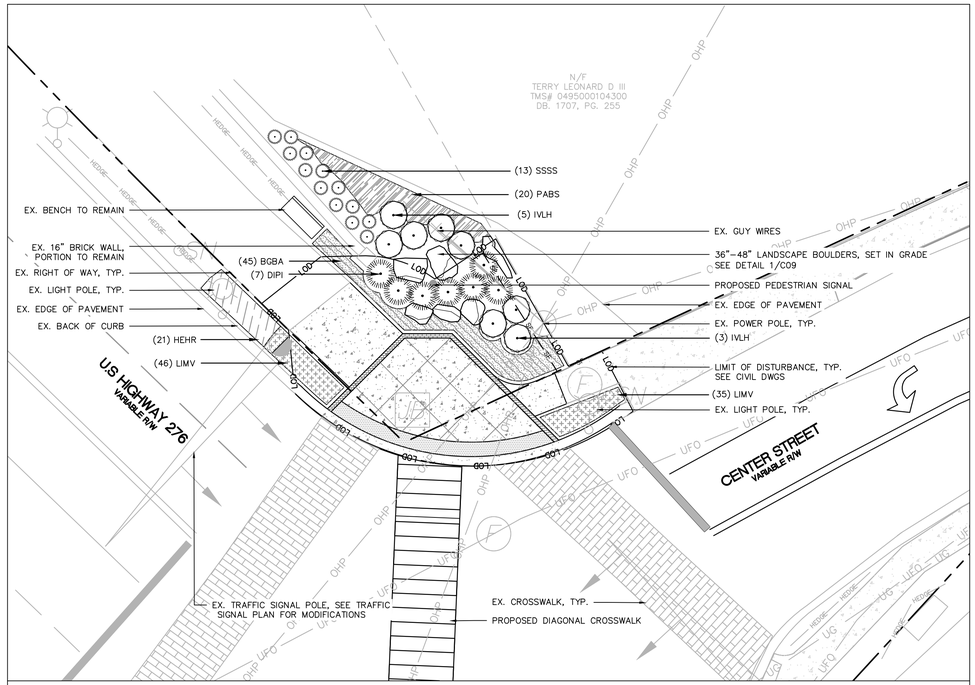
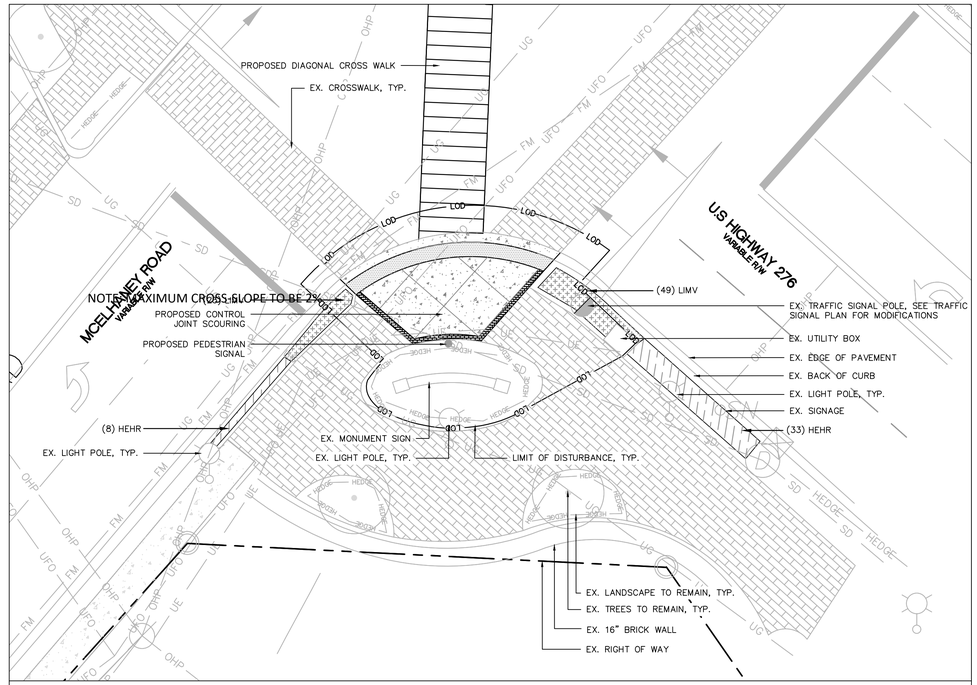


CROSSWALK PLANTING PLAN - NORTH SCALE: 1" = 10'



CROSSWALK PLANTING PLAN - SOUTH SCALE: 1" = 10'

PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL / COMMON NAME	CONT	SIZE	SPAC
DIPI	7	DISTYLIUM 'PIIDIST-V' / DISTYLIUM CINNAMON GIRL	CONT.	20"-22" HT./32"-36" SPR.	A.I.
IVLH	8	ITEA VIRGINICA 'LITTLE HENRY' / LITTLE HENRY DWARF SWEETSPIRE	CONT.	12"-15" HT./SPR.	30" O.C.
SSSS	13	SCHIZACHYRIUM SCOPARIUM 'SMOKE SIGNALS' / LITTLE BLUESTEM SMOKE SIGNALS	CONT.	16-18" HT	18" O.C.
GROUND COVERS	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**	**SIZE**	
BGBA	45	BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA	CONT.	8"-10" HT.	18" O.C.
HEHR	62	HEMEROCALLIS X 'HAPPY RETURNS' / HAPPY RETURNS DAYLILY	CONT.	12"-15" HT.	18" O.C.
LIMV	153	LIRIOPE MUSCARI 'VARIEGATA' / VARIEGATED LILYTURF	CONT.	6" - 12" HT	12" O.C.
PABS	20	PEROVSKIA ATRIPLICIFOLIA 'BLUE STEEL' / BLUE STEEL RUSSIAN SAGE	CONT.	12"-15" HT.	24" O.C.

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
SCALE: 1" = 10'

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
BOLTON & MENK SOUTHEAST, LLC
No. 6475

CAUTION

South Carolina 811 Call 811 Before you Dig

A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

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NOTE: NO IRRIGATION TO BE INSTALLED IN RIGHT OF WAY

ColeJenest&Stone BOLTON & MENK, INC.
200 S. Tryon St, Suite 1400
Charlotte, North Carolina 28202
704-376-1555
www.colejeneststone.com

synTerra
148 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
E			
D			
C			
B			
A	08/03/2021	PROGRESS SET	PK

TOLERANCES-UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS PLANTING PLAN

DIVISION N/A | PLANT N/A
DRAWN BY PK | CHECKED BY MG | PROJ. NO. 1454.01.02 | FILE SERVER N/A
DRAWN DATE 08/03/2021 | CHECKED DATE 08/03/2021 | SCALE 1" = 10' | SHEET 4 OF 9
DWG. NO. C04 | REV. A

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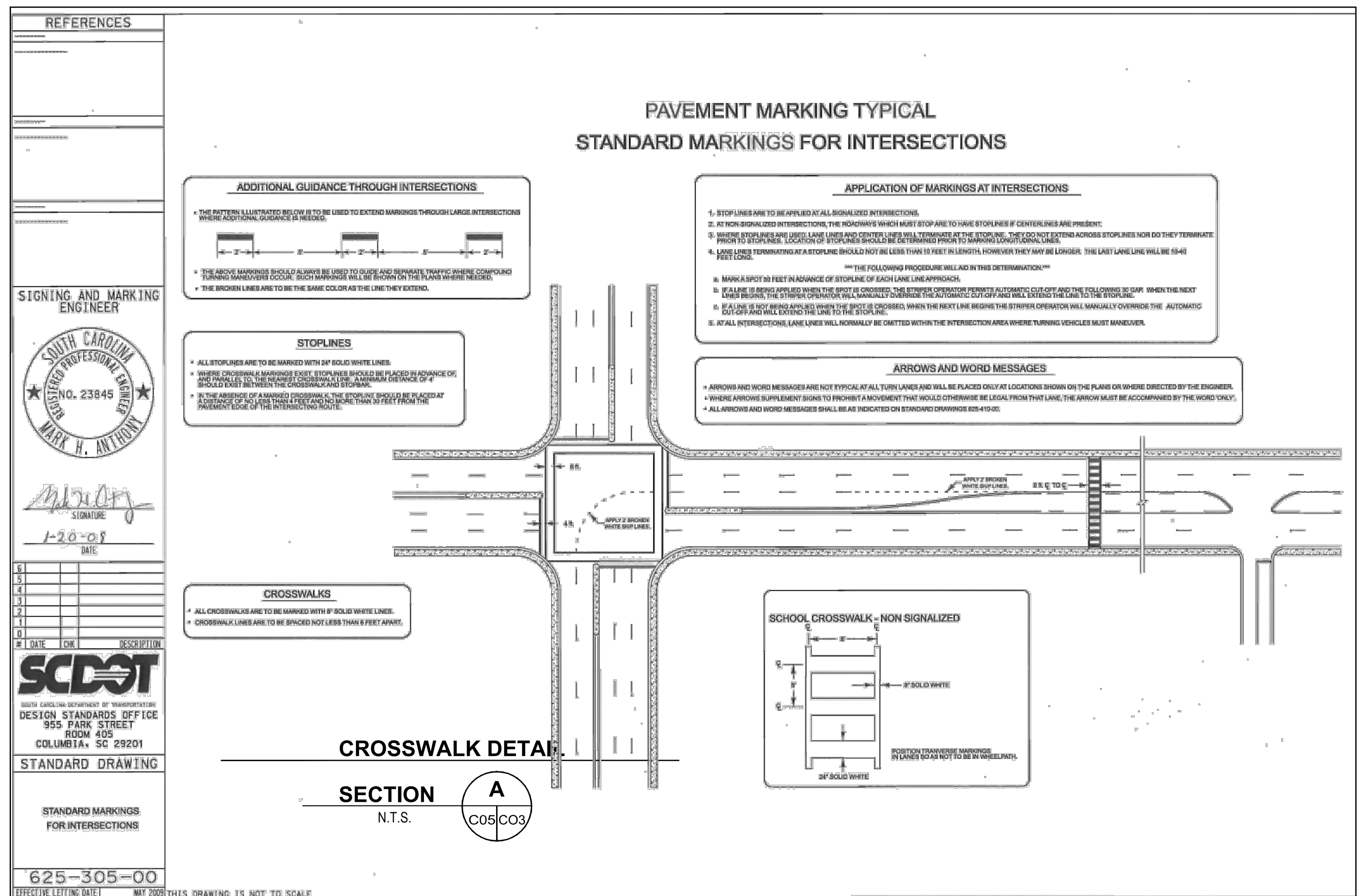
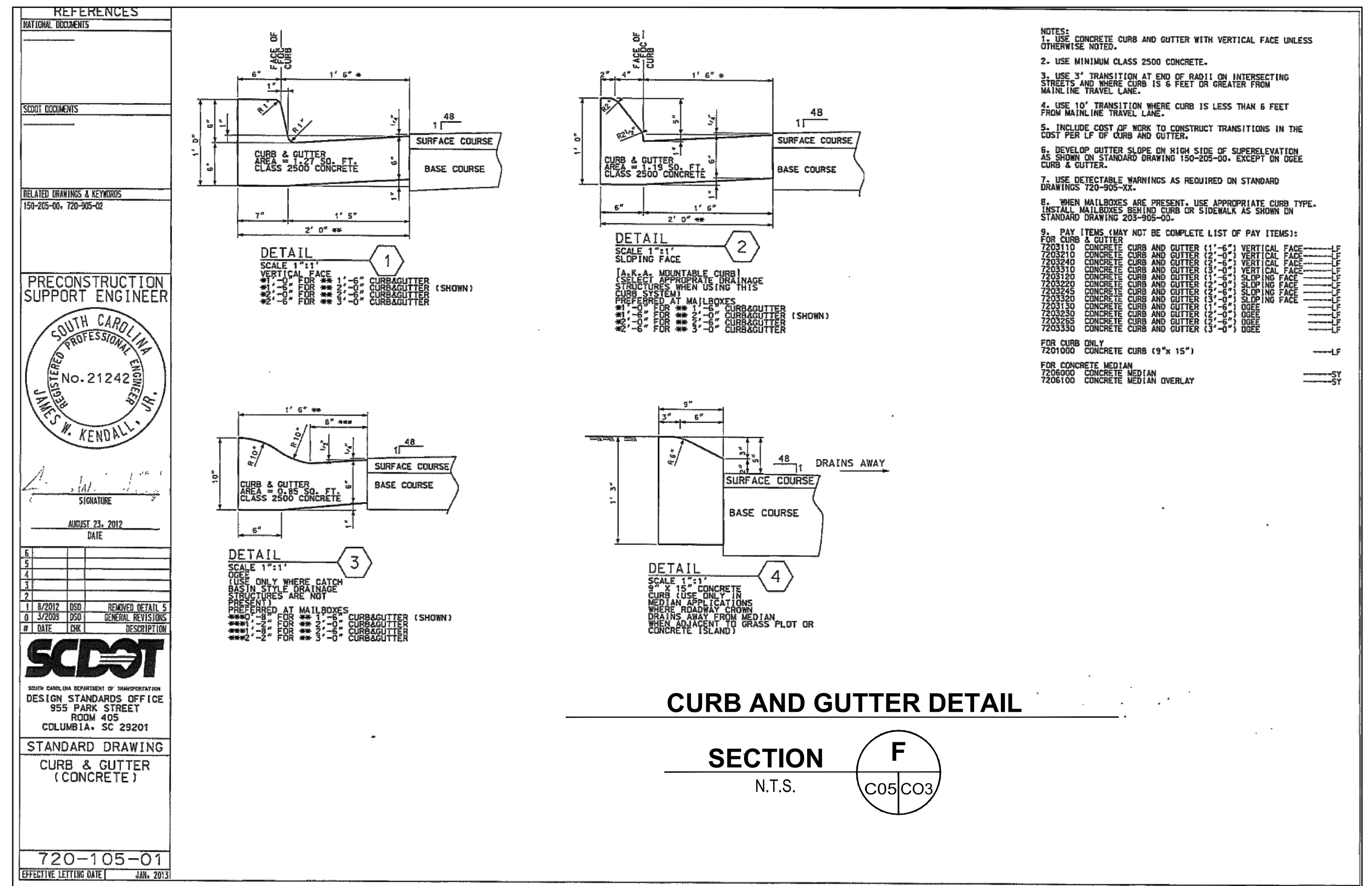
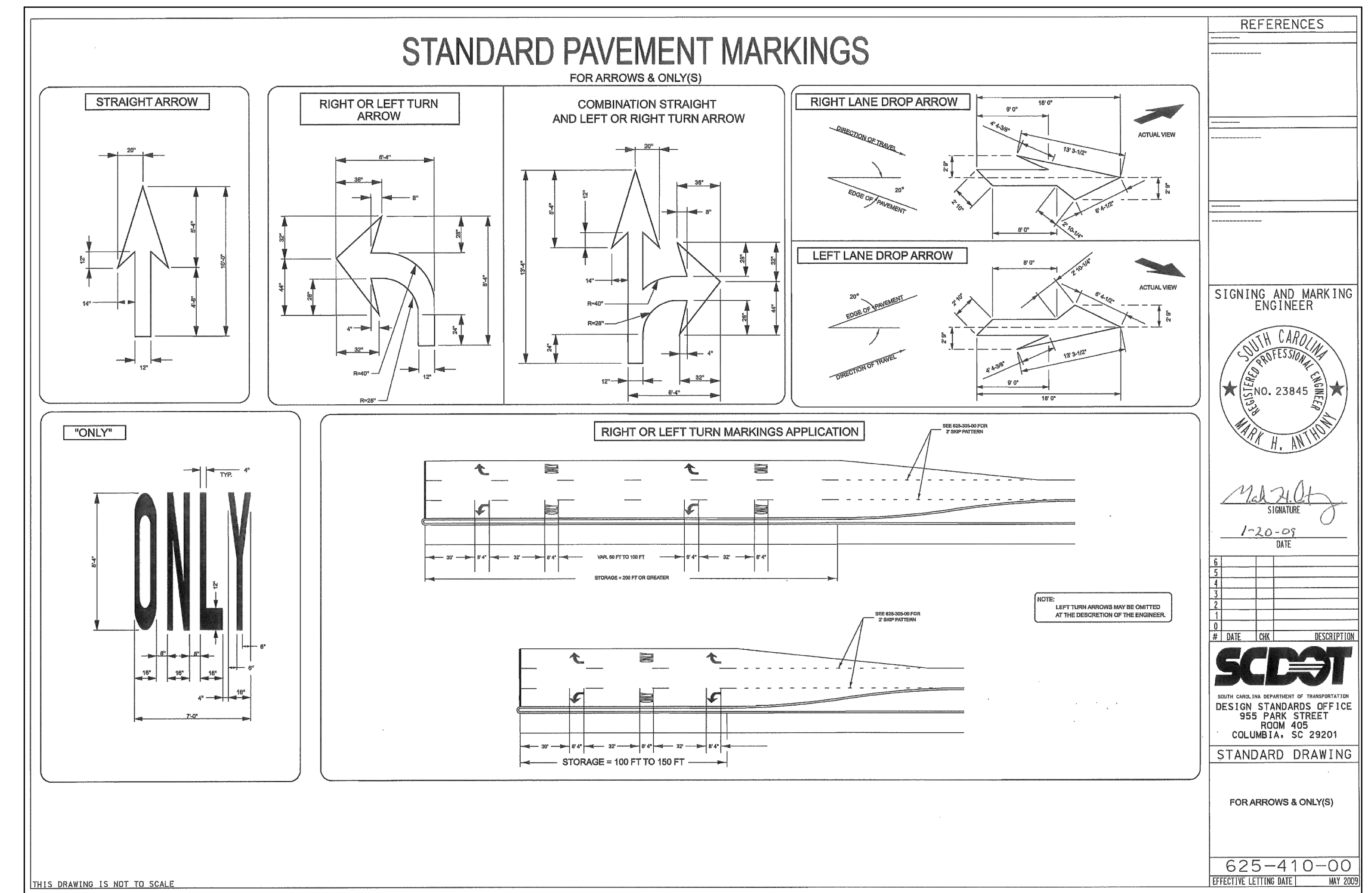
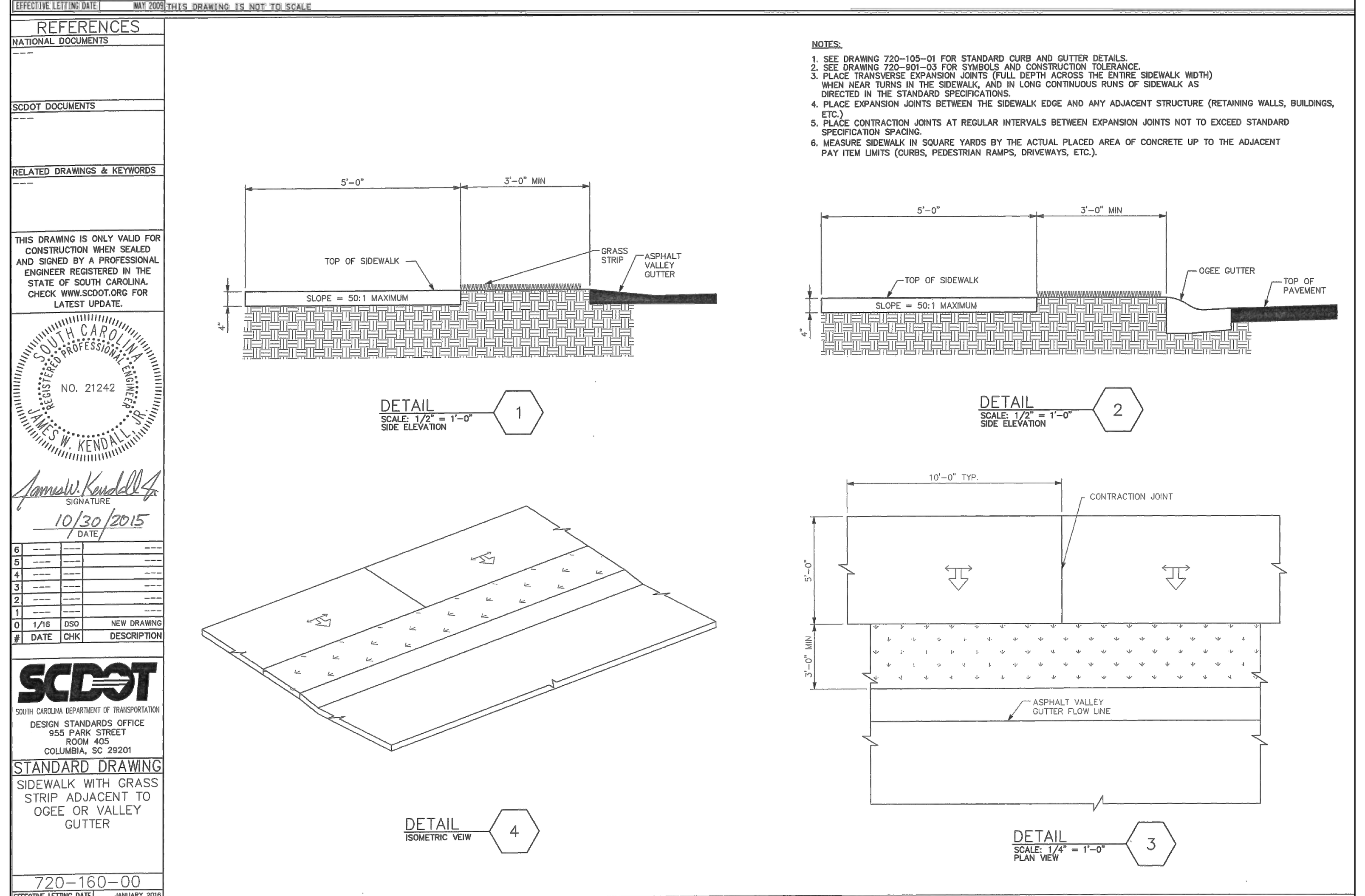
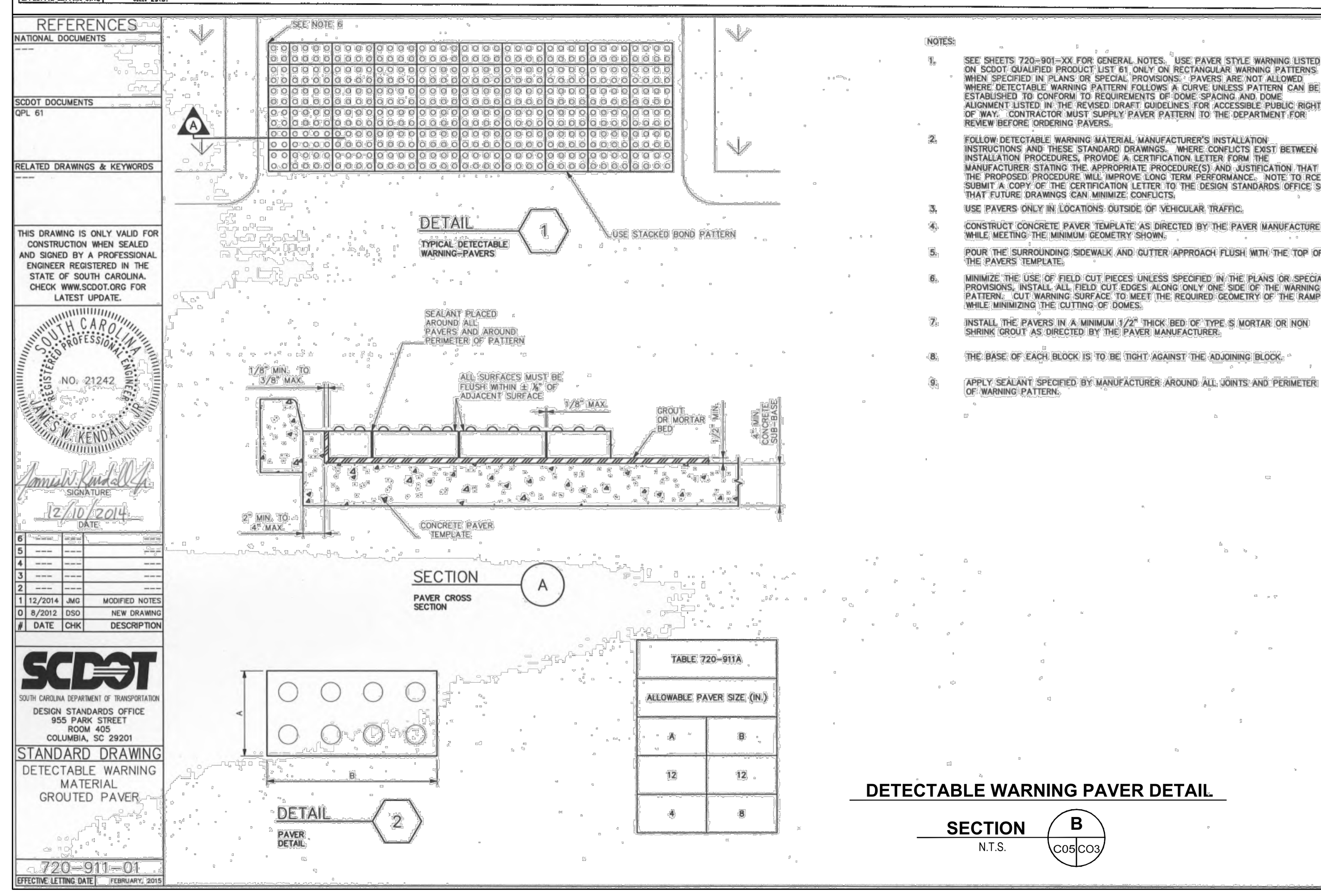










SUPPLEMENTAL SPECIFICATION

July 1, 2020

APPROVED:
Division Administrator
By: THADDEUS W KITOWICZ (Digitally signed by THADDEUS W KITOWICZ Date: 2020.05.28 15:53:28 -04'00')
FEDERAL HIGHWAY ADMINISTRATION

SECTION 627 THERMOPLASTIC PAVEMENT MARKINGS

General

Delete section 627.4.4 entirely and replace with the following:

627.4.4 Application of the Thermoplastic Pavement Marking Material

1. Except when directed or approved by the RCE, place all longitudinal markings with a truck-mounted applicator in conformance with the requirements of Subsection 627.3. Such an exception may occur where the length of a particular marking is too short or the curvature too great to permit efficient use of the truck-mounted liner. Transverse markings may be applied with a portable unit.
2. Ensure that the markings are straight or uniform in curvature and conform uniformly to tangents, curves, and transitions. Make certain that symbols are of the dimensions shown in the *SCDOT Standard Drawings*. Ensure that markings are of the dimensions and are placed as shown on the *Pavement Marking Plans* or as directed by the RCE. Provide sufficient control points to serve as guides for the application of markings at no additional expense to the Department.
3. Ensure that the finished line pavement markings are free from waviness and lateral deviation does not exceed 2 inches in 15 feet. Any greater deviation is sufficient cause for removal and correction of such markings at no additional expense to the Department. Remove and correct symbol pavement markings not meeting the dimensional requirements shown in the *SCDOT Standard Drawings*. Protect the pavement markings until dry by placing guarding or warning devices as necessary. If a vehicle crosses the wet marking, remove the pavement marking and any tracking lines made by the moving vehicle and apply new markings at no additional expense to the Department.
4. Place pavement markings only when the pavement is dry as determined by visual inspection or other approved method and the pavement temperature is 50ºF or greater. No work is allowed when any moisture is visible on the pavement surface or pavement is wet. Provide each work crew with a hand-held infrared non-contact thermometer with a temperature range of 0ºF to 1000ºF to verify the minimum surface temperature. Measure pavement temperature away from heat generating equipment.
5. In Districts 2, 3, and 4, do not apply thermoplastic pavement markings between December 15 and March 15 unless approved by the RCE. Additionally, the RCE may disallow application on any day when the weather is cold and/or rainy and there is some question as to whether the surface temperature will be above 50ºF for a period adequate to obtain quality pavement markings. Application may also be disallowed on any day when, in the opinion of the RCE, moisture conditions are not satisfactory for obtaining quality pavement markings.
6. Ensure that new asphalt concrete surfaces are in place a minimum of 7 days before application of thermoplastic pavement markings. Remove the curing compound on new Portland cement concrete surfaces before application of pavement markings.
7. Have on hand an adequate number of personnel experienced in the handling and application of this type of material to ensure that the work is done properly. Run the marking machine only in the direction of normal traffic flow during marking operations.
8. Perform work only during daylight hours unless specified otherwise. Ensure that all markings are sufficiently dry before sunset to permit crossing by traffic. Remove all protective devices before sunset to allow free movement of traffic at night.
9. Apply the thermoplastic pavement marking material at a temperature between 390ºF and 420ºF that provides the best adhesion to the pavement as recommended by the manufacturer. Heat the material uniformly throughout, and ensure that it has a uniform disbursement of binder, pigment, and glass beads when applied to the surface of the pavement.

SC File No. Page 1 of 2

SUPPLEMENTAL SPECIFICATION

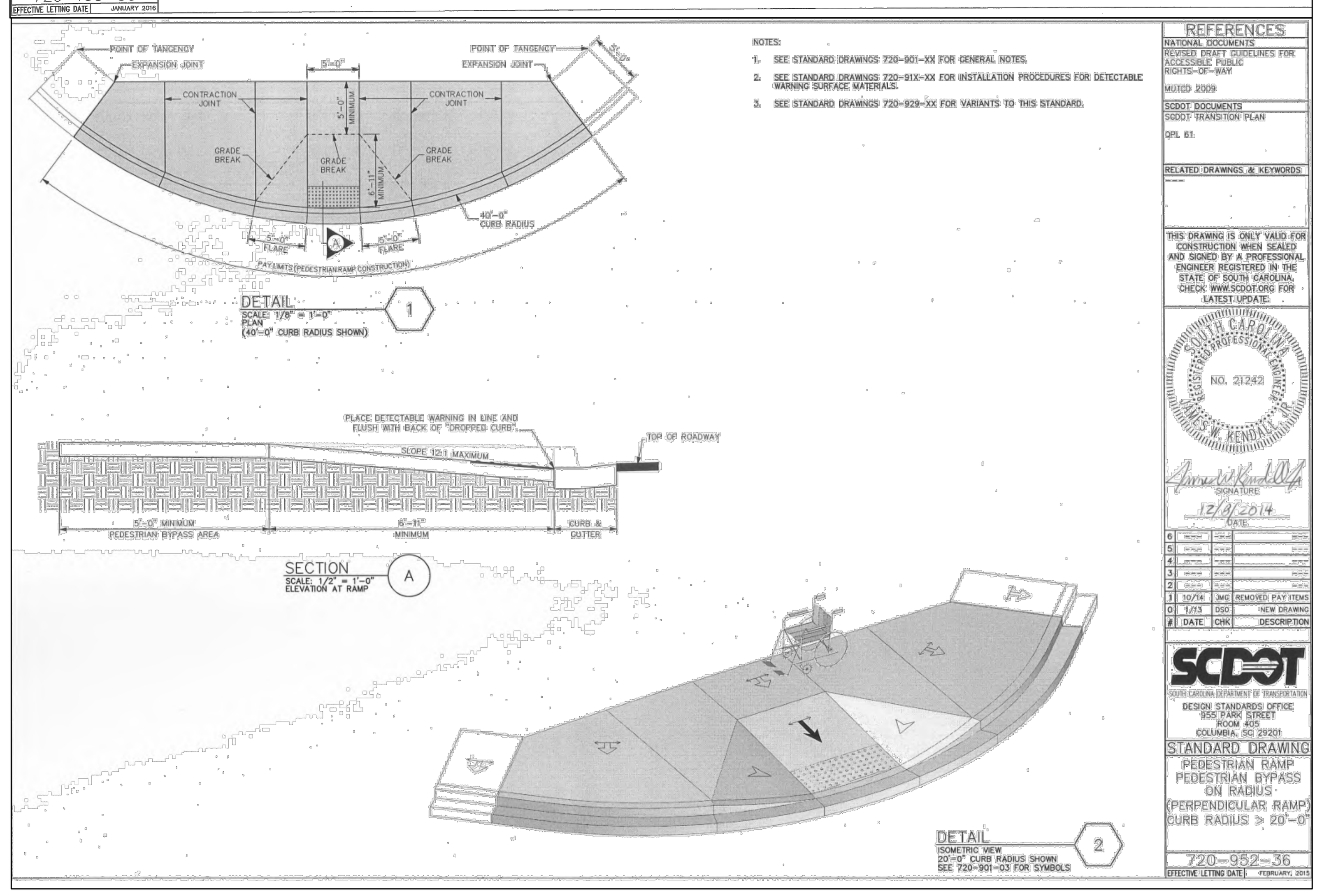
10. Apply extruded lines 12 inches or less in width with a die that equals the width of the line. Extruded lines greater than 12 inches may be applied with two dies whose combined width is equal to the width of the line.

THERMOPLASTIC MARKING DETAIL

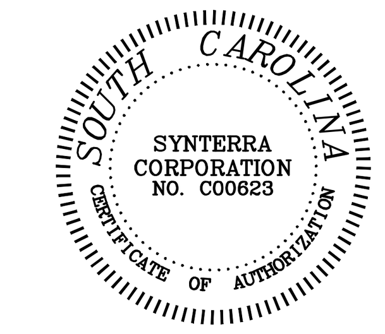
SECTION G (C05 / CO3)

N.T.S.

SC File No. Page 2 of 2



PRELIMINARY NOT FOR CONSTRUCTION



CAUTION

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synTerra
148 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/23/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

TOLERANCES—UNLESS NOTED
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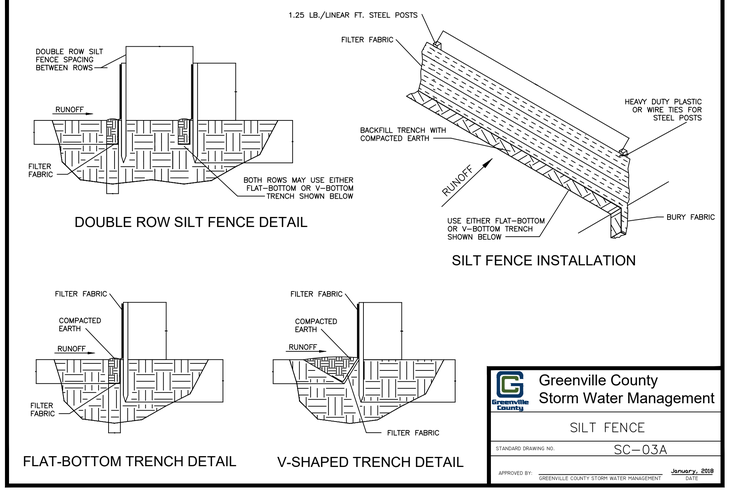
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS SITE PLAN DETAILS

DIVISION: N/A		PLANT: N/A	
DRAWN BY: T. COLTON	CHECKED BY: B. GREEN	PROJ. NO.: 1454.01.02	FILE SERVER: N/A
DATE: 10/18/2021	DATE: 10/18/2021	SCALE: N.T.S.	SHEET 5 OF 13
DWG. NO.: C05			REV.: D



Greenville County
Storm Water Management

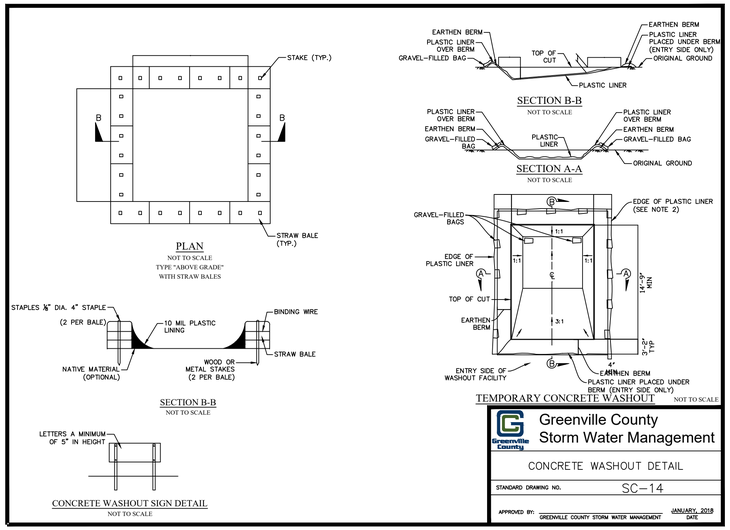
SILT FENCE

STANDARD DRAWING NO. SC-03A

APPROVED BY: GREENVILLE COUNTY STORM WATER MANAGEMENT — January, 2018 DATE

SILT FENCE DETAIL

SECTION A — N.T.S. — C06|CO3



Greenville County
Storm Water Management

CONCRETE WASHOUT DETAIL

STANDARD DRAWING NO. SC-14

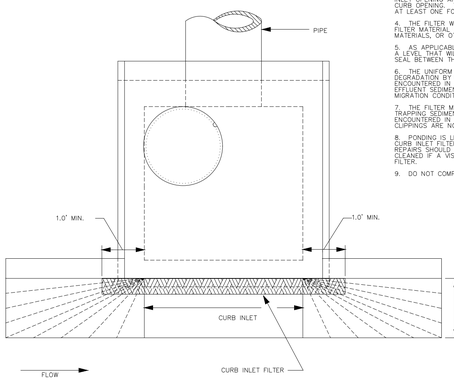
APPROVED BY: GREENVILLE COUNTY STORM WATER MANAGEMENT — JANUARY, 2018 DATE

CONCRETE WASHOUT DETAIL

SECTION C — N.T.S. — C06|CO3

NOTES:

1. DRAWING SHOWS TYPE 16 CATCH BASIN. TYPE E INLET STRUCTURE FILTERS ARE APPLICABLE FOR CATCH BASIN TYPE 1, 16, 17, AND 18 AFTER THE ROAD SURFACE COURSE IS PLACED.
2. PLACE CURB INLET FILTER AS SHOWN IN AREA WHERE SILT MAY SPILL OVER SIDEWALK AND CURB AFTER BASE IS PLACED.
3. CURB INLET FILTER WILL BE INSTALLED IN FRONT OF THE CURB INLET OPENING. THE FILTER WILL HAVE A MAXIMUM HEIGHT THAT DOES NOT COMPLETELY BLOCK THE INLET OPENING AND A MINIMUM LENGTH 2 FEET LONGER THAN THE LENGTH OF THE CURB OPENING. THIS WILL ALLOW FOR SUFFICIENT LENGTH TO COVER THE INLET WITH AT LEAST ONE FOOT BEYOND THE INLET ON BOTH ENDS.
4. THE FILTER WILL BE COMPOSED OF A UNIFORM FILTER FABRIC COVERING AN INTERNAL FILTER MATERIAL WHICH HAS COMPARTMENTS FOR STONE, SAND OR OTHER WEIGHTED MATERIALS, OR OTHER PHYSICAL MECHANISMS TO HOLD THE UNIT IN PLACE.
5. AS APPLICABLE, UTILITE MECHANISMS AND/OR FILL AGGREGATE COMPARTMENTS TO A LEVEL THAT WILL KEEP THE SURFACE COURSE INLET FILTER IN PLACE AND CREATE A SEAL BETWEEN THE SURFACE COURSE INLET FILTER AND THE ROAD SURFACE.
6. THE UNIFORM FILTER FABRIC IS NON-BIODEGRADABLE AND RESISTANT TO DEGRADATION BY ULTRAVIOLET EXPOSURE AND RESISTANT TO CONTAMINANTS COMMONLY ENCOUNTERED IN STORM WATER. USE FILTER FABRIC THAT IS CAPABLE OF REDUCING EFFLUENT SEDIMENT CONCENTRATIONS BY NO LESS THAN 80% UNDER TYPICAL SEDIMENT MIGRATION CONDITIONS.
7. THE FILTER MATERIAL WILL ALLOW STORM WATER TO FREELY FLOW THROUGH WHILE TRAPPING SEDIMENT AND DEBRIS AND BE RESISTANT TO CONTAMINANTS COMMONLY ENCOUNTERED IN STORM WATER. MATERIALS SUCH AS HAY, STRAW BALES, LEAF MULCH, AND GRASS CLIPPINGS ARE NOT PERMISSIBLE FILTER MATERIALS.
8. PONDING IS LIKELY IF SEDIMENT IS NOT REMOVED REGULARLY. INSPECTION OF CURB INLET FILTER SHOULD BE MADE EVERY SEVEN (7) CALENDAR DAYS. ANY NEEDED REPAIRS SHOULD BE HANDLED IMMEDIATELY. THE CURB INLET FILTER SHOULD BE CLEANED IF A VISUAL INSPECTION SHOWS SILT AND DEBRIS BUILT UP AROUND THE FILTER.
9. DO NOT COMPLETELY BLOCK INLET OPENING WITH THE CURB INLET FILTER.



Greenville County
Storm Water Management

INLET FILTER TYPE E

STANDARD DRAWING NO. SC-07E

APPROVED BY: GREENVILLE COUNTY STORM WATER MANAGEMENT — January, 2018 DATE

INLET PROTECTION DETAIL

SECTION B — N.T.S. — C06|CO3

NOTES:

PLEASE REFER TO GREENVILLE COUNTY TECHNICAL SPECIFICATION EC-03: SEEDING & STABILIZATION FOR MORE DETAILS IN STABILIZATION, SEEDING, SEEDING AMENDMENTS, EROSION PREVENTION PRACTICES, SEEDING CONSTRUCTION REQUIREMENTS, SOD, PERMANENT GROUND COVER PLANTS, INSPECTION AND MAINTAINCE, AND DEAILED SEEDING TABLES.

MONTH			WORK DESCRIPTION
1.	2-4	5	
■			Install sediment control devices.
■			Demo existing brick pavers and curb.
■	■	■	Begin construction. Establish vegetation.
		■	Remove temporary sediment control devices.
		■	Final inspection with agency.

SCDHEC STANDARD NOTES

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.

2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
- Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
- Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.

3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.

4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.

5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.

6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.

7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.

8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.

9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.

10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.

11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.

12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
Standard NotesFebruary 2017
13. Minimize soil compaction and, unless infeasible, preserve topsoil.

14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).

16. The following discharges from sites are prohibited:
- Wastewater from washout of concrete, unless managed by an appropriate control;
- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- Soaps or solvents used in vehicle and equipment washing.

17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.

18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.

19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA — SYNTERRA CORPORATION NO. C00623 — CERTIFICATE OF AUTHORIZATION

CAUTION

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synterra
148 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
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D	10/18/2021	FOR AGENCY REVIEW	GTC
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B	08/10/2021	FOR AGENCY REVIEW	GTC
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125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS E&SC DETAILS

DIVISION: N/A — PLANT: N/A
DRAWN BY: T. COLTON — DATE: 10/18/2021
CHECKED BY: B. GREEN — DATE: 10/18/2021
PROJ. NO.: 1454.01.02 — FILE SERVER: N/A
SCALE: N.T.S. — SHEET 6 OF 13
DWG. NO.: C06 — REV.: D

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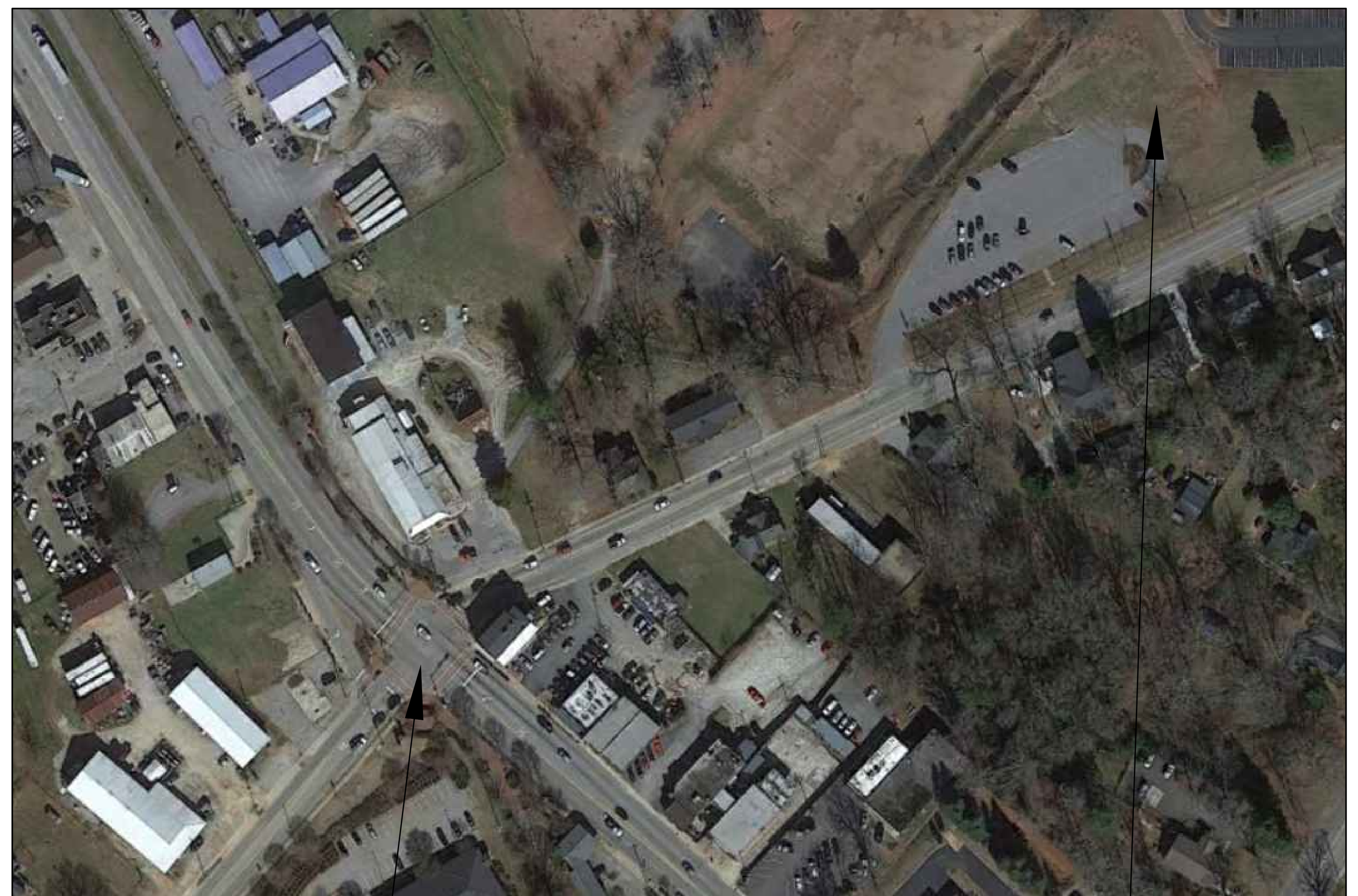

PROJECT LOCATION

LOCATION OF CONCRETE WASHOUT

Temporary Stabilization

Temporary Stabilization is defined as a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non–vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re–disturb this area.

Initiating Temporary Stabilization

Initiate temporary stabilization by mulch or temporary stabilization by seeding within 7 calendar days where land disturbing activities have temporarily ceased on the Project and will not resume for a period exceeding 14 calendar days. Where land disturbing activities on a portion of the Project are temporarily ceased, and the land disturbing activities are resumed within 14 days, temporary stabilization measures are not required to be initiated on that portion of the Project.

Temporary stabilization by seeding is required if the Project will not be worked for a period longer than 60 days.

Initiate temporary stabilization measures as soon as practicable for areas where initiating temporary stabilization measures within 7 days is infeasible (e.g., where snow cover, frozen ground, or drought conditions preclude stabilization).

Greenville County Standard Notes

Temporary Stabilization

Acceptance of Temporary Stabilization

Before acceptance of temporary stabilization by the regulatory agency and the Design Engineer or Landscape Architect, temporary stabilization is required that is sufficient to control erosion for a given area and length of time before the next phase of construction or the establishment of permanent seeding is to commence. A satisfactory stand of temporary stabilization meeting the requirements of this Specification is required regardless of the time of the year the work is performed.

Temporary Cover by Mulch

Use temporary cover by mulch where it is not feasible or practicable to bring an area to final slope and grade. Finish the surface so that permanent seeding can be performed without subsequent disturbance by additional grading.

Temporary Cover by Seeding

Following the preparation of the seedbed, sow seed per the seeding Tables and apply an appropriate Mulch prior to a rainfall event that compacts the seedbed. The CONTRACTOR may add granular lime and fertilizer as necessary to enhance growth.

Final Stabilization

Final Stabilization is defined that all land–disturbing activities at the construction site have been completed and that on all areas not covered by permanent structures, either

(1) A uniform (e.g., evenly distributed, without large bare areas) permanent vegetative cover with a density of 70 percent has been established, or

(2) Equivalent permanent stabilization measures (such as the use of landscaping mulch, riprap, pavement, and gravel) have been implemented to provide effective cover for exposed portions of the construction site not stabilized with permanent vegetation.

Final stabilization by vegetation must be achieved with permanent perennial vegetation prior to issuing the Notice of Termination (NOT).

Permanent Seeding

Initiate permanent seeding within 7 calendar days where land disturbing activities have permanently ceased on the Project. Where land disturbing activities are resumed within 14 days, stabilization measures are not required to be initiated on that portion of the Project. Initiate permanent seeding measures as soon as practicable for areas where initiating permanent seeding measures within 7 days is infeasible (e.g., where snow cover, frozen ground, or drought conditions preclude stabilization).

When performing permanent seeding for permanent detention ponds, ensure that the detention pond is cleaned of any deposited sediment and graded to the required permanent detention basin configuration. Ensure the seedbed for the permanent seeding is established in accordance with this Specification.

Acceptance of Permanent Seeding

Before acceptance, a uniform perennial vegetative cover with a density of 70% of each square yard of the seeded area is required. A well developed root system must be established to sufficiently survive dry periods and winter weather and be capable of reestablishment in the spring.

Permanent Seeding Installation

Following the preparation of the seedbed, perform permanent seeding per the seeding Tables and apply an appropriate Mulch within 5 working days and/or prior to a rainfall event that compacts the prepared seedbed. If a rain event occurs that compacts or erodes the seedbed prior to performing permanent seeding, the seedbed must be re–prepared prior to conducting permanent seeding. Add fertilizer and lime as required by a soil test.

Sod

Initiate Sod applications within 7 calendar days where land disturbing activities have permanently ceased on the Project. Initiate Sod applications measures as soon as practicable for areas where initiating Sod applications within 7 days is infeasible (e.g., where snow cover, frozen ground, or drought conditions preclude stabilization). Use Sod on slopes less than 2H:1V.

Acceptance of Sod

Acceptance is contingent on establishing a satisfactory stand of perennial grass. Sod application areas are acceptable when all requirements including maintenance are met and a healthy, evenly colored, viable stand of grass is established. A satisfactory stand of grass must have a root system that is sufficient to survive dry periods and winter weather and is capable of re–establishing in the spring.

Sod

Do not use sodding on slopes steeper than 2H:1V, and if sodding is mowed, do not place on slopes greater than 3H:1V. Install Warm Season Sod between March 1st and September 1st. Install Cool Season Sod anytime during the year as long as the soil is not frozen. Do not place Sod on:

- Soil that is frozen and/or when the 10–day forecasted low temperature remains below 35 degrees Fahrenheit;
- Soil that is excessively wet;
- Soil that is excessively dry (periods of heat or drought) unless watering is specified;
- Soil that is composed of compacted clay; and
- Soil than has been treated with pesticides.

Sod Bed Preparation

- Ensure the Sod bed is uniform and conforms to the finished grade of the Project.
- Loosen the Sod Bed to a minimum depth of 3 inches before placing Sod.
- Furnish and place topsoil or compost in the Sod Bed in areas where the existing Sod Bed has little or no topsoil,
- Lay Sod when Sod Bed is moist. Moisten dry Sod Beds before sod is laid.

Sod Material

Provide Sod with living, well–established growth, with a dense root mat of predominant grass Specified. Provide vigorous, well rooted, healthy turf, free from disease, insect pests, weeds, other grasses, stones, and any other harmful or detrimental materials.

Sod Installations

Ensure Sod is not installed until the end of the project or when final stabilization is achieved on adjacent areas of the project that drain or discharge to the Sod application.

Amendments

Lime

Agricultural Granular Lime

Use agricultural grade, standard ground limestone for all permanent seeding applications and Sodding applications.

Applying Granular Lime

A soil analysis is recommended prior to application. Apply at a rate within ±10% of weight recommendation of soil analysis. Do not apply more than 2,500 lbs/acre of in a single application.

Fast Acting Lime

Use fast acting liquid and/or dry forms of lime for all temporary seeding and permanent seeding applications.

Fertilizer

Granular Fertilizer

Use for all permanent seeding applications and all Sodding applications. Proper mixture is dependent on the existing soil conditions and it is recommended that a soil analysis be performed if the soil conditions are uncertain in the area of fertilizer application.

Use fertilizer that incorporates a minimum of 50% water insoluble (slow release) nitrogen. Animal by–product or municipal waste fertilizers are not acceptable under this Specification.

Unless a soil analysis is performed to determine otherwise, a good rule of thumb granular fertilizer to apply in the Upstate of South Carolina is 10–10–10. In no case should a 20–20–20 fertilizer be used due to the potential burning of the seedbed.

Compost Soil Amendment

For seedbeds that have little or no topsoil, are highly acidic, or are lacking sufficient nutrients to sustain a health stand of grass place, and mix certified weed free compost into the seedbed to ensure a good stand of grass.

Biological Growth Stimulant

Use for all permanent seeding, Sodding, and temporary seeding applications. Animal by–products or municipal waste products are not acceptable. Liquid fertilizers are not acceptable, and can cause burning of the seedbed if applied as such.

Greenville County
Storm Water Management

Seeding / Stabilization

STANDARD DRAWING NO. EC–03A

APPROVED BY: GREENVILLE COUNTY STORM WATER MANAGEMENT — January 2018 DATE

Greenville County Standard Notes

Seeding Dates and Rates of Application

Perform seeding during the periods and at the rates specified in the seeding tables. Do not use temporary cover by seeding or permanent seeding for projects when:
- The ground is frozen and/or when the 10–day forecasted low temperature remains below 35 degrees Fahrenheit;
- The ground is excessively wet; or
- The ground is excessively dry (periods of drought) unless watering is specified.

During periods of adverse conditions, use temporary cover by mulch.

Seedbed Preparation

- Ensure that the areas receiving permanent seeding are uniform and conform to the finished grade of the Project.
- Perform minor shaping and evening of uneven and rough areas outside of the graded area in order to provide for more effective erosion control and for ease of subsequent mowing operations.
- Loosen the seedbed (including cut slopes) to a minimum depth of three (3) inches before initiating permanent seeding and temporary seeding.
- An acceptable method of preparing the seedbed on slopes is vertically tracking the seedbed up and seedbed up and down the slope with proper equipment.
- Remove stones larger than two and one–half (2½) inches in any dimension, large dirt clods, roots, or other debris brought to the surface.
- Use compost if good seedbed material is not located on site or results of the soil test show the seedbed is excessively nutrient deficient to the extent of requiring costly fertilizer additions and or have excessively low pH values (lower than 5.0).
- Consider the use of mechanical seed drills to perform permanent seeding on areas where temporary seeding or temporary cover by mulch was previously utilized.

Mulch

Required for all permanent seeding, temporary seeding, and temporary cover applications. Do not use Mulch in areas where concentrated flow is expected. Use HECP Mulch for temporary seeding and temporary cover applications when the application area will require additional grading prior to permanent seeding. Do not use Erosion Control Blankets (ECB) or Turf Reinforcement Matting (TRM) in this situation.

Wood Chip Mulch

Wood chip mulch is not acceptable for seeding applications. If wood chip mulch is used for temporary cover by mulch, it must be removed prior to performing permanent seeding

Straw or Hay Mulch with Tackifier

Use material that is certified weed. Do not use on slopes steeper than 4H:1V. Anchor using one of the following tacking agents:
- Organic or Chemical Tackifier
- Hydraulic Straw Tackifiers
- Emulsified Asphalt

Applying Straw or Hay Mulch

Uniformly apply material at the rate of 2,000 pounds per acre.

Compost Mulch

Only use from producer that participates in the USCC STA program. Do not use materials that have been treated with chemical preservatives as a compost mulch. Do not use mixed municipal solid waste compost.

Hydraulic Erosion Control Products (HECPs)

Use as an allowable mulch for temporary cover by mulch, temporary cover by seeding or permanent cover by seeding applications. Do not use as a channel liner or for areas receiving concentrated flow.

Temporary Erosion Control Blankets (ECB) and Turf Reinforcement Matting (TRM)

Consider for permanent seeding application areas with steep slopes or areas where there is a significant erosion problem or potential for erosion. Use in areas where concentrated flow is expected. Do not use for temporary seeding applications when the application areas will require additional grading or modifications prior to permanent seeding.

Protection of Structures

Cover any parts of bridges, culverts, guardrails, signs, sidewalks, curb and gutters, catch basins, pipe ends, and other structures as necessary to prevent discoloration before spraying HECPs, organic or chemical tackifiers.

Slope Interruption Devices

The maximum allowable continuous slope length for straw or hay mulch, hecps, compost and ecb applications is 50 feet. Slope interruption devices (such as sediment tubes) or terms are required for continuous slope length longer than 50 feet.

Non Slope Areas

Spring / Summer Non Slope Areas (during establishment, mow when Millet reaches 18-inches in height)

Common Name[4]	Botanical Name	Planting Rate (lbs/acre)	Planting Rate (lbs/1000sf)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Common Bermudagrass[1] (hulled = hull absent)	Cynodon dactylon	50	1.15				•	•	•	•					
White Clover	Trifolium repens	5	0.11			•	•				•				
Browntop Millet	Panicum ramosum	10	0.23				•	•	•	•	•				

Fall / Winter Non Slope Areas (during establishment, mow when Rye reaches 6 to 8-inches in height)

Common Name[4]	Botanical Name	Planting Rate (lbs/acre)	Planting Rate (lbs/1000sf)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Tall Fescue (KY-31)	Festuca arundinacea	50	1.15	•	•	•	•					•	•	•	•
Common Bermudagrass[1] (unhulled = hull present)	Cynodon dactylon	15	0.34	•	•	•					•	•	•	•	•
White Clover	Trifolium repens	5	0.11		•	•	•					•	•	•	
Crimson Clover[2]	Trifolium incarnatum	20	0.46	•	•	•	•					•	•	•	•
Rye Grain[3]	Secale cereale	15	0.34	•	•	•	•					•	•	•	•

[1] Common Bermudagrass: Do not use Giant Bermudagrass(NK-37).
[2] Only use pre-inoculated legumes or use an appropriate inoculant with the seed at planting.
[3] Mow Rye Grain (no lower than 3 inches) once it reaches a height of 6-8 inches to reduce competitiveness with permanent vegetation.
[4] If the Common Name of the seed listed in the Tables is not available, use seed with the listed Botanical Name.

Road Medians & Shoulders

Spring / Summer Road Median & Shoulders (during establishment, mow when Millet reaches 18-inches in height)

Common Name[4]	Botanical Name	Planting Rate (lbs/acre)	Planting Rate (lbs/1000sf)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Common Bermudagrass[1] (hulled = hull absent)	Cynodon dactylon	25	0.57				•	•	•	•					
Browntop Millet	Panicum ramosum	10	0.23				•	•	•	•	•				

Fall / Winter Road Median & Shoulders (during establishment, mow when Rye reaches 6 to 8-inches in height)

Common Name[4]	Botanical Name	Planting Rate (lbs/acre)	Planting Rate (lbs/1000sf)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Tall Fescue (KY-31)	Festuca arundinacea	50	1.15	•	•	•	•					•	•	•	•
Common Bermudagrass[1] (unhulled = hull present)	Cynodon dactylon	15	0.34	•	•	•						•	•	•	•
Crimson Clover[2]	Trifolium incarnatum	20	0.46	•	•	•					•	•	•	•	•
Rye Grain[3]	Secale cereale	15	0.34	•	•	•					•	•	•	•	•

[1] Common Bermudagrass: Do not use Giant Bermudagrass(NK-37).
[2] Only use pre-inoculated legumes or use an appropriate inoculant with the seed at planting.
[3] Mow Rye Grain (no lower than 3 inches) once it reaches a height of 6-8 inches to reduce competitiveness with permanent vegetation.
[4] If the Common Name of the seed listed in the Tables is not available, use seed with the listed Botanical Name.

Slopes & Buffers

Spring / Summer Slopes (during establishment, mow when Millet reaches 18-inches in height. After establishment, only mow at end of winter season)

	Common Name[4]	Botanical Name	Planting Rate (lbs/acre)	Planting Rate (lbs/1000sf)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pick 1	Tall Fescue (KY-31)	Festuca arundinacea	50	1.15			•	•								
Pick 1	Bahiagrass	Paspalum notatum	30	0.69			•	•	•	•	•					
Pick 1	Common Bermudagrass[1] (hulled = hull absent)	Cynodon dactylon	15	0.34				•	•	•	•					
	White Clover	Trifolium repens	5	0.11			•	•				•				
	Weeping Lovegrass	Eragrostis curvula	5	0.11			•	•	•	•	•	•				
	Hairy Vetch[2]	Vicia villosa	10	0.23				•								
	Browntop Millet	Panicum ramosum	10	0.23				•	•	•	•	•				

Fall / Winter Slopes (during establishment, mow when Rye reaches 6 to 8-inches in height. After establishment, only mow at end of winter season)

	Common Name[4]	Botanical Name	Planting Rate (lbs/acre)	Planting Rate (lbs/1000sf)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Tall Fescue (KY-31)	Festuca arundinacea	50	1.15	•	•	•						•	•	•	•
	Common Bermudagrass[1] (unhulled = hull present)	Cynodon dactylon	15	0.34	•	•	•						•	•	•	•
	White Clover[2]	Trifolium repens	5	0.11		•	•						•	•	•	
	Weeping Lovegrass	Eragrostis curvula	5	0.11	•	•	•						•	•	•	•
Pick 1	Crimson Clover[2]	Trifolium incarnatum	20	0.46	•	•	•						•	•	•	•
Pick 1	Hairy Vetch[2]	Vicia villosa	10	0.23	•	•	•						•	•	•	•
	Rye Grain[3]	Secale cereale	15	0.34	•	•	•						•	•	•	•

[1] Common Bermudagrass: Do not use Giant Bermudagrass(NK-37).
[2] Only use pre-inoculated legumes or use an appropriate inoculant with the seed at planting.
[3] Mow Rye Grain (no lower than 3 inches) once it reaches a height of 6-8 inches to reduce competitiveness with permanent vegetation.
[4] If the Common Name of the seed listed in the Tables is not available, use seed with the listed Botanical Name.

Inspection

Ensure that all seed, Sod, fast acting lime, biological growth stimulants, agricultural granular lime, granular fertilizer, straw and hay mulch, HECPs, compost mulch, and ECBs are applied as Specified. The Design Engineer or Landscape Architect, or member of the Design Engineer or Landscape Architect staff must document on–site that these materials are applied correctly by completing and signing proper forms.

Maintenance

Perform all maintenance necessary to keep Stabilization areas in a satisfactory condition until the work is finally accepted. This includes mowing, repairing areas of erosion and washes, and applying additional seed, fertilizer, and mulch to areas where a satisfactory stand of grass has not been achieved.

Mowing

Mow road shoulders and medians when vegetation reaches a height of approximately 18 to 24 inches. Do not perform excessive mowing of Slopes resulting in ruts, furrows or grooves. Do not perform excessive mowing of Slopes that inhibits the establishment of the slope vegetation.Do not perform mowing when soil and weather conditions are such that rutting or other damage to the Project may occur.

Ensure mowing results in a uniform vegetation height of 4 to 6 inches, unless otherwise directed. When utilizing a nurse crop for permanent seeding, mow Millet (no lower than 3 inches) once it reaches a height of 18 inches to reduce competitiveness with the permanent vegetation. Mow Wheat and Rye Grain (no lower than 3 inches) once they reach a height of 6–8 inches to reduce competitiveness with permanent vegetation.

MULCH APPLICATION TABLE

Mulch	Applicable Slopes (H:V)[1]	Minimum Application Rate (lbs/acre -dry)[2]
Wood Chips	≤ 4:1	500 CY/acre
Straw or Hay with Tackifier	≤ 4:1	2,000
HECP Type 1	≤ 4:1	2,000
HECP Type 2	4:1< S ≤ 3:1	2,500
HECP Type 3	3:1< S ≤ 2:1	3,000
HECP Type 4	2:1< S ≤ 1:1	3,500
HECP Type 4	>1:1	4,000 (temp cover only)[3]
Compost Mulch	≤ 2:1	200 CY/acre

1 The maximum allowable continuous slope length for all mulch applications is 50 feet. Slope interruption devices or TRMs are required for continuous slope length longer than 50 feet.
2 Strictly comply with the manufacturer's mixing recommendations for the actual slope steepness and the actual continuous slope length of the application.
3 HECP Type 4 may be used for permanent cover applications on slopes 1:1 or greater at a minimum rate of 4,500 pounds per acre.

ECB and TRM APPLICATION TABLE

ECB/TRM Type[1]	Slope (H:V)[2]	Minimum Slope Length (ft)
Temporary ECB or Type 1 TRM	≤ 2:1	5
Type 2 TRM	≤ 1.5:1	5
Type 3 TRM	≤ 1:1	5

1 Strictly comply with the manufacturer's specifications.
2 The maximum allowable continuous slope length for ECBs is 50 feet. Slope interruption devices or TRMs are required for continuous slope length longer than 50 feet.

Greenville County
Storm Water Management

Seeding / Stabilization

STANDARD DRAWING NO. EC–03B

APPROVED BY: GREENVILLE COUNTY STORM WATER MANAGEMENT — January 2018 DATE

Greenville County Technical Specification

SC-14: CONCRETE WASHOUT

1.0 Construction Dewatering

1.1 Description

These procedures and practices are designed to minimize or eliminate the discharge of concrete waste materials to storm drain systems or to waterbodies.

1.2 Applications

Concrete waste management procedures and practices are implemented on construction projects where:

- Concrete or mortar is used as a construction material or where concrete dust and debris result from demolition activities.
- Slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from saw cutting, coring, grinding, grooving, and hydro-concrete demolition.
- Concrete trucks and other concrete-coated equipment are washed on-site. Where mortar-mixing stations exist.

1.3 Concrete Slurry Wastes

- PCC and AC waste are not allowed to enter storm drains or waterbodies.
- Collect and properly place PCC and AC waste in a temporary concrete washout facility.
- Disposal of hardened PCC and AC waste in conformance with the Project Standard Specifications.
- Place a sign within 30 feet of each temporary concrete washout facility to inform concrete equipment operators to utilize the proper facilities.
- The contractor will monitor on-site concrete working tasks, such as saw cutting, coring, grinding, and grooving to ensure proper methods are implemented.
- Saw-cut PCC slurry is not be allowed to enter storm drains or waterbodies. Residue from grinding operations will be picked up by means of a vacuum attachment to the grinding machine. Saw cutting residue is not allowed to flow across the pavement and shall not be left on the surface of the pavement.
- Slurry residue is vacuumed, disposed in a temporary facility, and allowed to dry. Dry slurry residue is removed and disposed of in conformance with the provisions in the Project Standard Specifications.
- Residue from grooving and grinding operations is collected and disposed in accordance with the Project Standard Specifications.

1.4 Concrete Transit Truck Washout Procedures

- Temporary concrete washout facilities are located a minimum of 50 feet from storm drain inlets, open drainage facilities, waterbodies, creek banks, or perimeter control unless determined infeasible by the Design Engineer. Each facility is located away from construction traffic or access areas to prevent disturbance or tracking.

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- Install sign within 30 feet each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Temporary concrete washout facilities are constructed above grade or below grade at the option of the Contractor. Temporary concrete washout facilities will be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.
- Temporary washout facilities have a temporary pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.
- Washout of concrete mixer trucks are performed in designated areas only.
- Concrete is washed only from mixer truck chutes into an approved concrete washout facility. Washout may be collected in an impermeable bag for disposal.
- Excess concrete is pumped in concrete pump bin back into concrete mixer truck.
- Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and discharged into designated washout area or properly disposed offsite.
- Once concrete wastes are washed into the designated area and allowed to harden, the concrete will be broken up, removed and disposed.

1.5 Above Grade Temporary Concrete Washout Facility

- Above Grade Temporary concrete washout facilities are constructed, with a minimum length of 10 feet and minimum width of 10 feet, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, upon approval from the Design Engineer.
- Plastic lining material is a minimum of ***10-millimeter polyethylene sheeting*** and is free of holes, tears, or other defects that compromise the impermeability of the material.
- Portable delineators are applied only to a clean, dry surface.

1.6 Below Grade Temporary Concrete Washout Facility

- Below Grade Temporary concrete washout facilities are constructed, with a recommended minimum length and minimum width of 10 feet. The quantity and volume is sufficient to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, upon approval of the Design Engineer. Lath and flagging shall be commercial type.
- Plastic lining material is a minimum of ***10-millimeter polyethylene sheeting*** and is free of holes, tears or other defects that compromise the impermeability of the material.
- The soil base is prepared free of rocks or other debris that may cause tears or holes in the plastic lining material.

1.7 Maintenance

Clean out all temporary concrete washout facilities when they are 50% full.

1.8 Removal

- When temporary concrete washout facilities are no longer required for the work, as determined by the Design Engineer, the hardened concrete shall be removed and disposed of in conformance with the provisions in the Project Standard Specifications.

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- Materials used to construct temporary concrete washout facilities shall be removed from the site of the work.
- Holes, depressions, or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and stabilized.

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Greenville County Technical Specification for:

SC-03 SILT FENCE

1.0 Silt Fence

1.1 Description

Silt Fence is used as a temporary sediment control measure around sites where there will be soil disturbance due to construction activities. Silt Fence consists of filter fabric stretched across posts. The lower edge of the fence is vertically trenched into the ground and covered by compacted backfill. Silt Fence is classified as either without reinforcement or with reinforcement.

1.2 Design Requirements

1.2.1 General Design Requirements

- Design Silt Fence with an 80% design removal efficiency goal of the total suspended solids (TSS) in the inflow.
- Do not use Silt Fence for concentrated flows greater than 0.5 cfs.
- Do not place Silt Fence across channels.
- Do not use Silt Fence as Porous Baffles in Sediment Basins or Sediment Traps.
- The Design Aid located in Figure 8-17 in Appendix K may be used to properly design Silt Fence.

Ensure the Silt Fence designs adhere to the following requirements:

- Minimum 80% design removal efficiency goal for TSS
- Maximum Sheet Flow or Overland Slope Length: 100 feet
- Maximum Slope Gradient (perpendicular to the Silt Fence line): 2H:1V
- Minimum Installed Fence Fabric Height: 18 inches
- Maximum Installed Fence Fabric Height: 24 inches
- Minimum Post Bury Depth: 18 inches
- Maximum Non-reinforced Post and Reinforced Fence Post Spacing: 6 feet

1.2.2 Specific Design Requirements

Use standard non-reinforced Silt Fence when the contributing slope is less than or equal to 3% **and** the design life of the Silt Fence is less than 6 months.

Use reinforced Silt Fence when the contributing slope is greater than 3% (regardless of design life) **or** the design life of the Silt Fence is greater than 6 months (regardless of contributing slope).

When a double row of Silt Fence is called for on the Plans, the two rows shall have a minimum spacing of 3 feet and a maximum spacing of 5 feet.

The allowable Silt Fence land slope to allowable flow length ratio is shown in Table 1.

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Table 1: Silt Fence Land Slope to Flow Length Ratio

Land Slope	Maximum Sheet Flow Slope Distance to Fence
3% - 5%	100-ft.
5% - 10%	75-ft.
10% - 20%	50-ft.
20% - 50%	25-ft.

1.3 Materials

Provide material for Silt Fence complying with the requirements of this Specification, on the Plans and details, or as approved by the Engineer.

1.3.1 Non-reinforced Silt Fence

The non-reinforced Silt Fence system is composed of geotextile filter fabric and steel posts.

1.3.1.1 Steel Posts

Furnish steel posts meeting the following minimum physical requirements:
- Minimum length of 5 feet.
- Composed of high strength steel with minimum yield strength of 50,000 psi.
- Standard "T" section with a nominal face width of 1.38 inches and nominal "T" length of 1.48 inches.
- Weighs 1.25 pounds per foot (± 8%).
- Painted with a water based baked enamel paint.

1.3.1.2 Geotextile Filter Fabric

Provide a geotextile filter fabric meeting the requirements of Table 2.

Ensure the filter fabric is composed of fibers consisting of long chain synthetic polymers composed of at least 85% by weight of polyolefins, polyesters, or polyamides. Ensure that the fibers are formed into a network so that the filaments or yarns retain dimensional stability relative to each other. Do not treat or coat the filter fabric with materials which might adversely alter its physical properties after installation. Do not use fabric with defects or flaws that significantly affect its physical and/or filtering properties.

Provide a filter fabric with a minimum roll width of 36 inches.

Protect the filter fabric with a suitable wrapping for protection against moisture and extended ultraviolet exposure before placement.

Table 2: Minimum Geotextile Filter Fabric Performance and Physical Requirements

Physical Property*	Test Method	Required Value
Filtering Efficiency Performance*	ASTM D 5141 or Equivalent	80% Total Suspended Solids (TSS)
Tensile Strength	ASTM D 4632	90 lbs
Ultraviolet Stability (retained strength after 500 hrs of ultraviolet exposure)	ASTM D 4355	70%

*Unless otherwise indicated, numerical values represent the MARV.

1.3.2 Reinforced Silt Fence

The reinforced Silt Fence system is composed of steel or other approved posts, geotextile filter fabric, and of 6-inch by 6-inch 14-gage wire mesh. Use steel posts and geotextile materials specified in Section 1.3.1.

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1.4 Construction Requirements

1.4.1 General Installation

Construct Silt Fence in accordance with the Plans or as approved by the Engineer. Install Silt Fence before major land disturbing activities begin.

Install Silt Fence across the slope along a line of uniform elevation (perpendicular to the direction of flow).

Install Silt Fence a minimum 10 feet from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.

Do not place Silt Fence across channels.

In areas where conditions warrant, larger posts or reduced post spacing may be required to provide an adequate fence to handle the stress from sediment loading.

Where applicable or as directed by the Engineer, install Silt Fence checks every 100 feet at a maximum and at low points.

1.4.2 Non-reinforced Silt Fence Installation

1. Excavate a trench approximately 4 inches wide and 8 inches deep and place 12 inches of geotextile fabric into the 8-inch deep trench, extending 4 inches towards the upslope side of the trench.
2. Backfill the trench with soil or gravel and compact.
3. Bury 12 inches of fabric into the ground when pneumatically installing Silt Fence with a slicing method.
4. Purchase geotextile fabric in continuous rolls and cut to the length of the barrier to avoid joints. When joints are necessary, wrap the fabric together at a support post with both ends fastened to the post, with a 6-inch minimum overlap.
5. On the downslope side of the trench, install steel posts to a minimum depth of 18 inches. Install posts protrude 1 to 2 inches minimum above the fabric, with no more than 3 feet of the post protruding above the ground.
6. Space posts on a maximum of 6-foot centers.
7. Attach fabric to the steel posts using heavy-duty plastic or wire ties that are evenly spaced and placed in a manner to prevent sagging or tearing of the fabric. In all cases, affix ties in no less than 4 places spaced a maximum of 6 inches apart.
8. Install the fabric to a minimum height of 18 inches and maximum of 24 inches above the ground. When necessary, the height of the fence above ground may be greater than 24 inches.

1.4.3 Reinforced Silt Fence Installation

1. Excavate a trench approximately 4 inches wide and 8 inches deep and place 12 inches of geotextile fabric into the 8-inch deep trench, extending 4 inches towards the upslope side of the trench.
2. Extend the **6-inch by 6-inch 14-gage wire mesh** into the trench to a minimum depth of 8 inches.
3. Backfill the trench with soil or gravel and compact.
4. Purchase geotextile fabric and wire mesh in continuous rolls and cut to the length of the barrier to avoid joints. When joints are necessary, wrap the fabric together at a support post with both ends fastened to the post, with a 6-inch minimum overlap.
5. On the downslope side of the trench, install steel posts to a minimum depth of 18 inches. Install posts protrude 1 to 2 inches minimum above the fabric, with no more than 3 feet of the post protruding above the ground.

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6. Space posts on a maximum of 6-foot centers.
7. Attach fabric and wire mesh to the steel posts using heavy-duty plastic or wire ties that are evenly spaced and placed in a manner to prevent sagging or tearing of the fabric and wire mesh. In all cases, affix ties in no less than 4 places spaced a maximum of 6-inches apart.
8. Install the filter fabric and wire mesh fabric to a minimum height of 18 inches and maximum of 24 inches above the ground. When necessary, the height of the fence above ground may be greater than 24 inches.

1.4.4 Double Row Silt Fence

When double row Silt Fence is specified on the Plans, the same design, material, and construction requirements are applicable. Double row Silt Fence shall have a minimum spacing of 3 feet and a maximum spacing of 5 feet between the two rows.

1.4.5 Inspection and Maintenance

Inspect Silt Fence every seven (7) days and inspections are recommended within 24-hours after each rainfall event that produces ½-inches or more of precipitation until final stabilization is achieved. Immediately correct any deficiencies. Check for sediment buildup and fence integrity. Check where runoff has eroded a channel beneath the Silt Fence, or where the Silt Fence has sagged or collapsed by fence overtopping.

Remove fabric and replace whenever it has deteriorated to such extent that it reduces the effectiveness of the Silt Fence system. In addition, review daily the location of Silt Fence in area where construction activities have changed the natural contour and drainage runoff to ensure that the Silt Fence is properly located for effectiveness. Install additional Silt Fence as directed by the Engineer where deficiencies exist.

Maintain Silt Fence until its capacity has been reached or erosion activity in the area has been stabilized. Remove sediment accumulated along the fence when it reaches approximately one-third (1/3) the height of the Silt Fence, especially if heavy rains are expected. Remove trapped sediment or stabilize on site.

If Silt Fence is located in an area where removing the sediment is not possible, install a second Silt Fence, if necessary, at the direction of the Engineer.

Remove Silt Fence within 30 days after final stabilization is achieved or after temporary Best Management Practices (BMPs) are no longer needed. Permanently stabilize disturbed areas resulting from Silt Fence removal.

1.4.6 Acceptance

The Engineer will approve all Silt Fence installations.

January 2018 Page 4

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA — SYNTERRA CORPORATION NO. C00623 — CERTIFICATE OF AUTHORIZATION

CAUTION

South Carolina 811 — Call 811 Before you Dig

A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

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synTerra
148 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/23/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

TOLERANCES–UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS
E&SC DETAILS

DIVISION: N/A | PLANT: N/A
DRAWN BY: T. COLTON | DATE: 10/18/2021
CHECKED BY: B. GREEN | DATE: 10/18/2021
PROJ. NO. 1454.01.02 | FILE SERVER: N/A
SCALE: N.T.S. | SHEET 7 OF 13
DWG. NO. C07 | REV. D

—SIGNAL EQUIPMENT—

ONE (1) 8 PHASE FULLY ACTUATED STANDARD 2070 CONTROLLER WITH FLASHER, SIGNAL MONITOR UNIT, AND ~~POLE~~ (BASE)-MOUNTED ~~3336~~ (332A) CABINET. EXT. ☐ PROP. ■

6 MODEL 222, (2)-CHANNEL VEHICLE DETECTOR UNITS

PEDESTRIAN SIGNALS: EXT. P PROP. P W/ACT. & SIGN

VEHICLE SIGNALS: EXT. ○→▷ PROP. ●→

DETECTORS: EXT. ⬚ PROP. ▭ *NEW

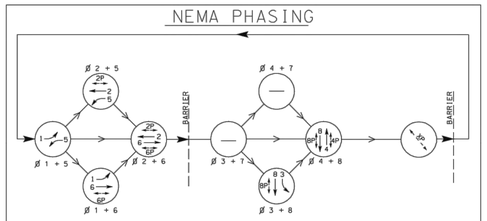
SIGNAL NUMBER	1,6	2	3,8	4	5,2	6	8	2P	4P	6P	8P	XP
LENS	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	12"	12"	12"	12"	12"
PHASE	1,6	2	3,8	4	5,2	6	8	2P	4P	6P	8P	XP
SIZE	12"	12"	12"	12"	12"	12"	12"	12"	16"	16"	16"	16"
QUANTITY	1	1	1	2	1	1	1	2	2	2	2	2

EXISTING MAST ARM POLES: ●

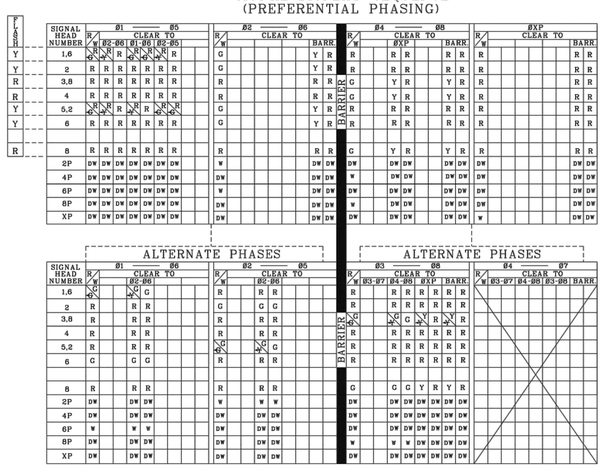
SIGNAL HEADS TO BE LED WITH BACKPLATES AND RETROREFLECTIVE BORDERS

PED HEADS TO BE COUNT DOWN

NEMA PHASING



SIGNAL DISPLAY SEQUENCE (PREFERENTIAL PHASING)

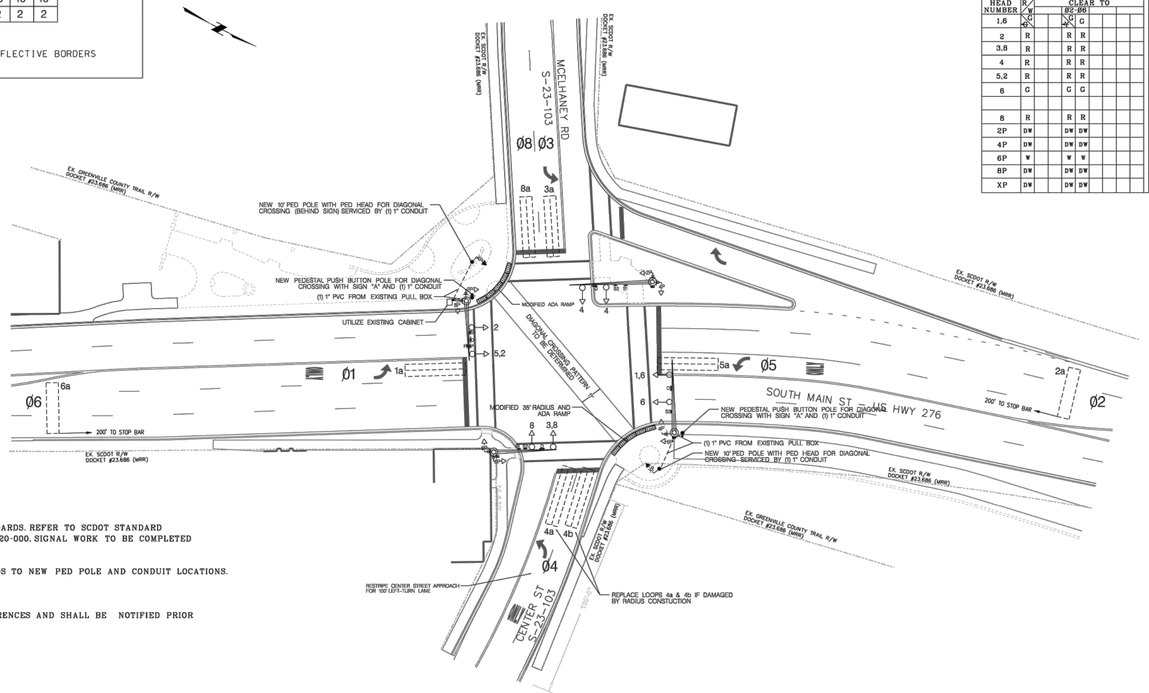


EXISTING SIGNS TO BE RETAINED

"D" = EXISTING D SPEC STREET NAME SIGN

"P" = EXISTING PARKING GUIDE SIGN

INSTALL NEW PEDESTRIAN PUSH BUTTON SIGN "A"



GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL MEET CURRENT SCDOT STANDARDS. REFER TO SCDOT STANDARD DRAWINGS SECTION 675-000. FOR HANDICAP RAMPS REFER TO SECTION 720-000. SIGNAL WORK TO BE COMPLETED BY APPROVED SCDOT CONTRACTOR.
2. CONTRACTOR SHALL COORDINATE WITH EXISTING UTILITIES WITH REGARDS TO NEW PED POLE AND CONDUIT LOCATIONS.
3. ALL WORK TO BE PERFORMED WITHIN SCDOT RIGHT-OF-WAY.
4. SCDOT DISTRICT 3 TO BE INCLUDED IN ANY PRE-CONSTRUCTION CONFERENCES AND SHALL BE NOTIFIED PRIOR TO ANY SIGNAL WORK.

TRAFFIC SIGNAL SETTINGS

*SUBJECT TO ADJUSTMENT BY SCDOT

FUNCTIONS	SECONDS Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	ØXP
MIN GREEN	4	15	3	6	4	15		6	
ADDED INIT (SEC/ACT)									
MAX INITIAL									
PASSAGE	3.0	4.0	3.0	3.0	3.0	4.0		3.0	
TIME BEFORE REDUCE									
TIME TO REDUCE									
MIN GAP									
MAXIMUM I	15	35	15	25	15	35		25	
MAXIMUM II									
YELLOW CHANGE	3.0	3.0	3.0	3.7	3.0	3.0		3.7	
RED CLEAR	3.2	2.5	3.2	2.1	3.1	2.5		2.1	
RECALL	OFF	MIN	OFF	OFF	OFF	MIN		OFF	OFF
DET. MEMORY	N	L	N	N	N	L		N	
L-LOCK, N-NON-LOCK									
DET. DELAY				8					
DET. MODE	PR	PR	PR	PR	PR	PR		PR	
P-PULSE PR-PRESENCE									
WALK		7.0		7.0		7.0		7.0	7.0
PEDESTRIAN CLEAR		14.0		18.0		14.0		18.0	28.0

ROUTE NUMBER	US 276		S-103	
APPROACH DIRECTION	NB	SB	EB	WB
SIGNAL DESIGN SPEED	25	25	35	35
GRADE (%)	+0.9	-1.0	-1.0	+4.6

* ESTIMATED

—LOOP DETECTOR INSTALLATION CHART—

PHASE/ LOOP LTR#	EXISTING OR PROPOSED	DETECTOR AMP NO.	DETECTOR CHAN NO.	WIRED TO PHASE(S)	LOCK	NON-LOCK	PULSE	PRES	OPERATION DELAY SEC	OPERATION EXT SEC	SPECIAL FEATURES TIME OF DAY-TOD, SWITCHING, etc.	LOOP DESIGN SIZE X	NO. OF TURNS	DIST. FROM $
1a	EXISTING			1		X		X			QUADRUPOLE	6' X 30'	EXIST	0'
2a	EXISTING			2	X			X				6' X 25'	EXIST	200'
3a	EXISTING			3		X		X			QUADRUPOLE	6' X 30'	EXIST	+5'
4a	EXISTING			4		X		X			QUADRUPOLE	6' X 30'	EXIST	+5'
4b	EXISTING			4		X		X	8.0		QUADRUPOLE	6' X 30'	EXIST	+5'
5a	EXISTING			5		X		X			QUADRUPOLE	6' X 30'	EXIST	0'
6a	EXISTING			6	X			X				6' X 25'	EXIST	200'
8a	EXISTING			8		X		X			QUADRUPOLE	6' X 30'	EXIST	+5'

TRAFFIC SIGNAL DESIGN ENGINEER

SOUTH CAROLINA — RIDGEWAY TRAFFIC CONSULTING NO. C05628 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — 05628 — REGISTERED PROFESSIONAL ENGINEER — MICHAEL R. RIDGEWAY

6-3-21

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

SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION
CITY OF TRAVELERS REST

TRAFFIC SIGNAL DESIGN PLANS
US 276 AT CENTER STREET (S-23-103)/
MCELHANEY ROAD (S-23-103)

SCALE 1"=30' RTE. US 276 DWG. NO. TS1

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA — SYNTERRA CORPORATION NO. C00623 — CERTIFICATE OF AUTHORIZATION

CAUTION

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TOLERANCES—UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest

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125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS TRAFFIC SIGNAL DESIGN

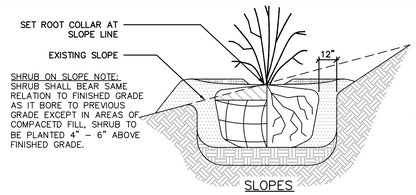
DIVISION N/A | PLANT N/A

DRAWN BY T. COLTON | CHECKED BY B. GREEN | PROJ. NO. 1454.01.02 | FILE SERVER N/A

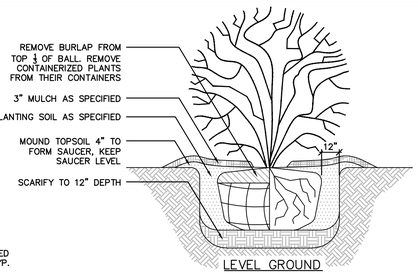
DATE 10/18/2021 | DATE 10/18/2021 | SCALE N.T.S. | SHEET 8 OF 13

DWG. NO. C08 | REV. D

P:\City of Travelers Rest.1454\01. Travelers Rest - Gateway park\02. Phase 2 Signal Design for Center_Main_McElhaney\CAD\CAD - SCDOT\CO-8.dwg 1/25/2021 2:09:31 PM



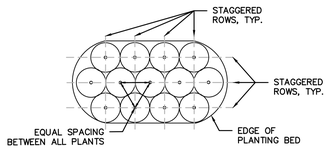
SLOPES



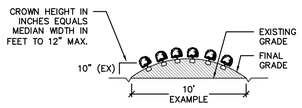
LEVEL GROUND

NOTES:

1. SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
2. INSTALL CONTAINERIZED PLANTS AT FINISHED GRADE, NO HIGHER THAN 2" ABOVE GRADE, AND NEVER BELOW GRADE. SHRUB SHALL BE SET PLUMB.
3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
4. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
5. MULCH TO BE 2"–3" AWAY FROM STEM.
6. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.

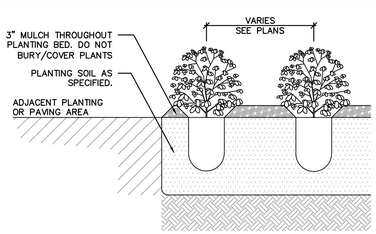


TYPICAL PLANTING BED PLAN

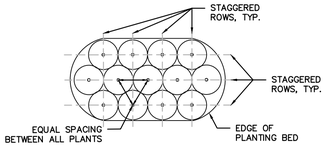


TYPICAL BED MOUNDING

SHRUB PLANTING N.T.S. 4

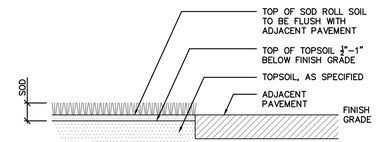


TYPICAL PLANT INSTALLATION
SECTION VIEW

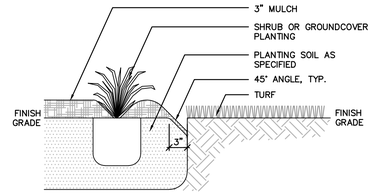


TYPICAL PLANTING BED PLAN
PLAN VIEW

GROUNDCOVER PLANTING N.T.S. 3

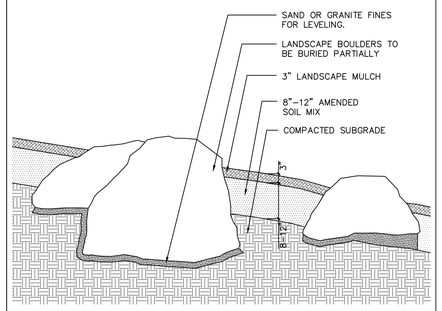


SOD AT PAVEMENT EDGE



PLANTER EDGE AT TURF

LANDSCAPE EDGES N.T.S. 2



LANDSCAPE BOULDER N.T.S. 1

PLANTING NOTES

1. SIZE AND GRADING STANDARDS OF PLANT MATERIAL SHALL CONFORM TO THE LATEST EDITION OF "AMERICAN STANDARDS FOR NURSERY STOCK", BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION, INC.
2. HEIGHT AND WIDTH SPECIFICATIONS INDICATED ON PLANT SCHEDULE SHALL TAKE PRECEDENCE OVER CONTAINER SIZE AND CALIPER.
3. ALL ANNUAL/PERENNIAL BEDS SHALL BE AMENDED BY THE CONTRACTOR PER THE SPECIFICATIONS AND RAISED 8" ABOVE EXISTING OR PROPOSED GRADE. CONTRACTOR SHALL PROVIDE TOPSOIL AS REQUIRED TO RAISE GRADES.
4. CONTRACTOR SHALL MULCH ALL SHRUB BEDS WITH 3" AGED SHREDDED HARDWOOD BARK. CONTRACTOR SHALL MULCH ALL ANNUAL/PERENNIAL BEDS WITH 1" PINE BARK FINES.
5. CONTRACTOR SHALL RESEED/RESOD LAWN AREAS DAMAGED DUE TO PLANT MATERIAL INSTALLATION.
6. ALL DISTURBED AREAS NOT INDICATED TO RECEIVE SOD OR MULCH SHALL BE SEEDED BY THE CONTRACTOR.
7. CONTRACTOR SHALL REMOVE ALL HARD LUMPS OF CLAY, STONES OVER 1" IN DIAMETER, AND ALL CONSTRUCTION DEBRIS INCLUDING GRAVEL, ROOTS, LIMBS AND OTHER DELETERIOUS MATTER WHICH WOULD BE HARMFUL, OR PREVENT PROPER ESTABLISHMENT AND/OR MAINTENANCE OF LAWN AND PLANTING AREAS.
8. IN AREAS WHERE CONSTRUCTION GRAVEL IS EMBEDDED IN THE SOIL, CONTRACTOR SHALL REMOVE CONTAMINATED SOIL TO A DEPTH OF 8" AND FILL WITH CLEAN TOPSOIL. CONTRACTOR SHALL IMPORT TOPSOIL AT NO CHARGE TO OWNER IF REQUIRED TO FILL THESE EXCAVATIONS.
9. CONTRACTOR SHALL COORDINATE ALL PLANTING IN THE RIGHT-OF-WAY WITH THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION OR LOCAL TRANSPORTATION DEPARTMENT.
10. ALL STRAPPING AND TOP 2/3 OF WIRE BASKET SHALL BE CUT AWAY AND REMOVED BY THE CONTRACTOR FROM ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. CONTRACTOR SHALL REMOVE TOP 1/3 OF THE BURLAP FROM ROOT BALL.
11. LARGE MATURING TREES SHALL BE A MINIMUM 25 TO 30 FEET FROM OVERHEAD DISTRIBUTION OR TRANSMISSION LINES. IF TREES CONFLICT WITH POWER LINES OR SIGNS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO RESOLVE BEFORE PLANTING.
12. CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT AND OR PROJECT ENGINEER IF ANY OF THE SPECIFIED PLANT MATERIAL LOCATIONS CONFLICT WITH PROPOSED IMPROVEMENTS.
13. INSTALLER SHALL BE RESPONSIBLE TO REPAIR OR REPLACE PLANTINGS THAT FAIL IN MATERIALS, WORKMANSHIP, OR GROWTH WITHIN SPECIFIED WARRANTY PERIOD (ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER).
14. STREETSCAPE DOES NOT INCLUDE EXISTING OR PROPOSED IRRIGATION. INSTALLER SHALL BE RESPONSIBLE FOR PROVIDING WATERING SERVICE THROUGH INITIAL GROWING SEASON.
15. FOR SEEDED AREAS, AN ACCEPTABLE LAWN AT THE END OF THE MAINTENANCE PERIOD SHALL CONSIST OF A HEALTHY, UNIFORM, CLOSE STAND OF GRASS, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH TOTAL GRASS COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES, WITH AT LEAST 85% OF THE TOTAL GRASS COVERAGE CONSISTING OF THE SPECIFIED GRASS SPECIES.

SOIL SPECIFICATIONS

1. PLANTING MIX SHALL BE NATURAL, FERTILE, AGRICULTURAL TOPSOIL CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT MAY BE DEVELOPED BY AMENDING THE EXISTING SOIL OR REMOVING THE EXISTING SOIL AND REPLACING WITH NEW SOIL. IT SHALL BE OF UNIFORM COMPOSITION THROUGHOUT, WITH ADMIXTURE OF SUBSOIL. IT SHALL BE FREE OF STONES, LUMPS, LIVE PLANTS AND THEIR ROOTS, STICKS, AND OTHER EXTRANEOUS MATTER. PLANTING MIX SHALL NOT BE USED WHILE IN A FROZEN OR MUDDY CONDITION. UNLESS OTHERWSE SPECIFIED IN THE CONTRACT DOCUMENTS, THE PLANTING MIX SHALL CONTAIN THE FOLLOWING SPECIFIED PERCENTAGES OF CONSTITUENTS:

   CLAY – MINIMUM 10% / MAXIMUM 30% CLAY (RED CLAY, WELL PULVERIZED); CLAY SHALL BE STERILE

   SILT – MINIMUM 30% / MAXIMUM 50%

   COARSE SAND – MINIMUM 30% / MAXIMUM 45% COARSE SAND AND FREE OF ROCK, 1.0mm TO 0.5mm IN DIAMETER.

   ORGANIC MATERIAL – MINIMUM 5% ORGANIC MATERIAL IS DEFINED AS COMPOST/ HUMUS SUCH AS SAWDUST OR LEAF MOLD THAT HAS COMPLETED THE DECOMPOSITION PROCESS. PERCENTAGE OF ORGANIC MATERIAL SHALL BE DETERMINED BY LOSS ON IGNITION, OF MOISTURE FREE SAMPLES DRIED AT 65 DEGREES.

   ACIDITY RANGE – PH 5.5 TO PH 7.0.

   ELEMENTS – THE PLANTING MIX SHALL HAVE THE FOLLOWING NUTRIENTS AT THE SPECIFIED PERCENTAGE BASE SATURATION, TO BE DETERMINED BY SOIL TEST REQUIRED BY THE CITY OF CHARLOTTE: CALCIUM: 55% TO 80%; MAGNESIUM: 10% TO 30%; POTASSIUM: 5% TO 8%

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
BOLTON & MENK SOUTHEAST, LLC No. 6475

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ColeJenest&Stone BOLTON & MENK, INC.
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864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
E			
D			
C			
B			
A	08/03/2021	PROGRESS SET	PK

TOLERANCES–UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest
CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS
PLANTING NOTES + DETAILS

DIVISION	N/A	PLANT	N/A
DRAWN BY	PK	CHECKED BY	MG
PROJ. NO.	1454.01.02	FILE SERVER	N/A
DATE	08/03/2021	DATE	08/03/2021
SCALE	N.T.S.	SHEET	9 OF 9
DWG. NO.	C09	REV.	A

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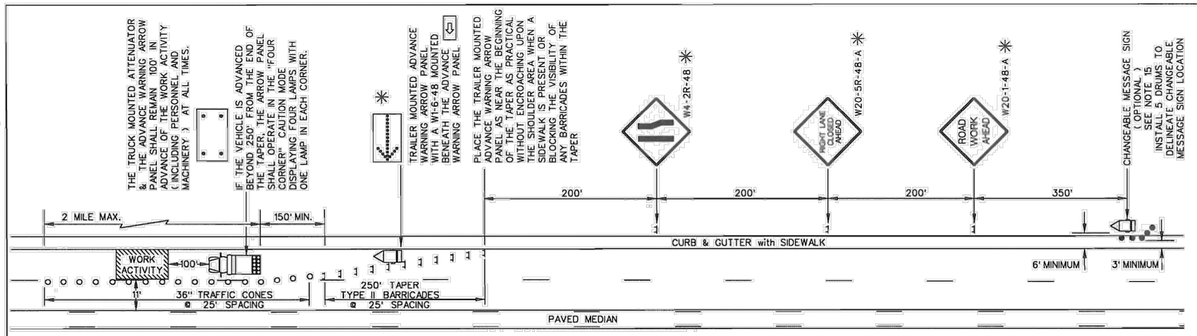
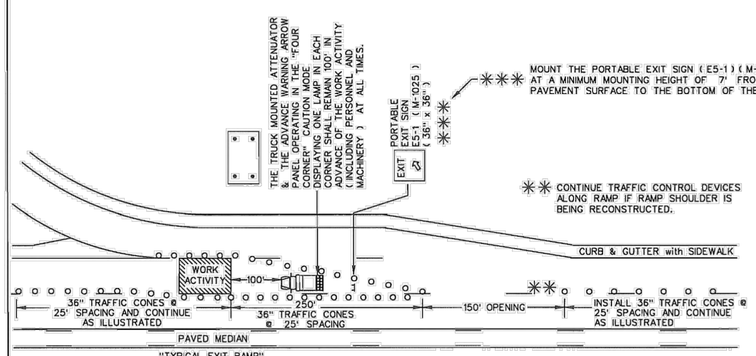
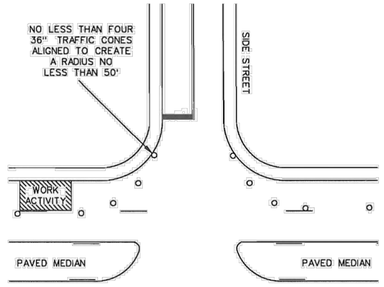
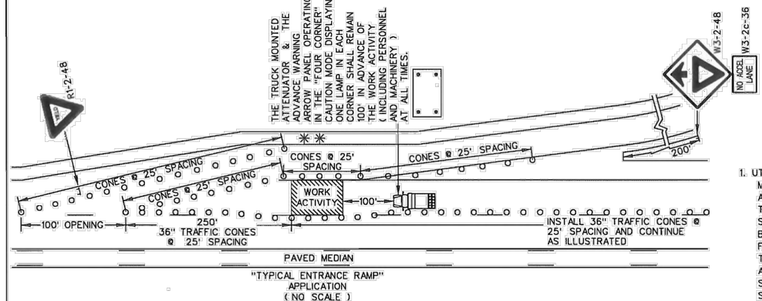




"TYPICAL EXIT RAMP" APPLICATION (NO SCALE)



"TYPICAL SIDE STREET" APPLICATION (NO SCALE)



"TYPICAL ENTRANCE RAMP" APPLICATION (NO SCALE)

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 SPECIFICATONS 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

○ 36" TRAFFIC CONES

THIS DRAWING IS NOT TO 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.

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 LOW SPEED URBAN ROADWAY, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 1 MILE 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 LOW SPEED URBAN ROADWAY, 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.
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 AN URBAN ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 35 MPH OR LESS.

✳ LEFT LANE CLOSURE

1. SIGNS ILLUSTRATED ARE FOR A RIGHT LANE CLOSURE.
2. WHEN CLOSING THE LEFT TRAVEL LANE, USE THE FOLLOWING:
   1 - W4-2L-48
   1 - W20-5L-48-A
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".

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	2-11-11	JCS	GENERAL UPDATE
1	5-28-10	JCS	CORRECTION
0	8-21-07	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
URBAN LOW SPEED
< / = 35 MPH

610-010-00

EFFECTIVE LETTING DATE: JAN, 2013

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA SYNTERRA CORPORATION NO. C00623 CERTIFICATE OF AUTHORIZATION

CAUTION

South Carolina 811 Call 811 Before you Dig

A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

synterra
148 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

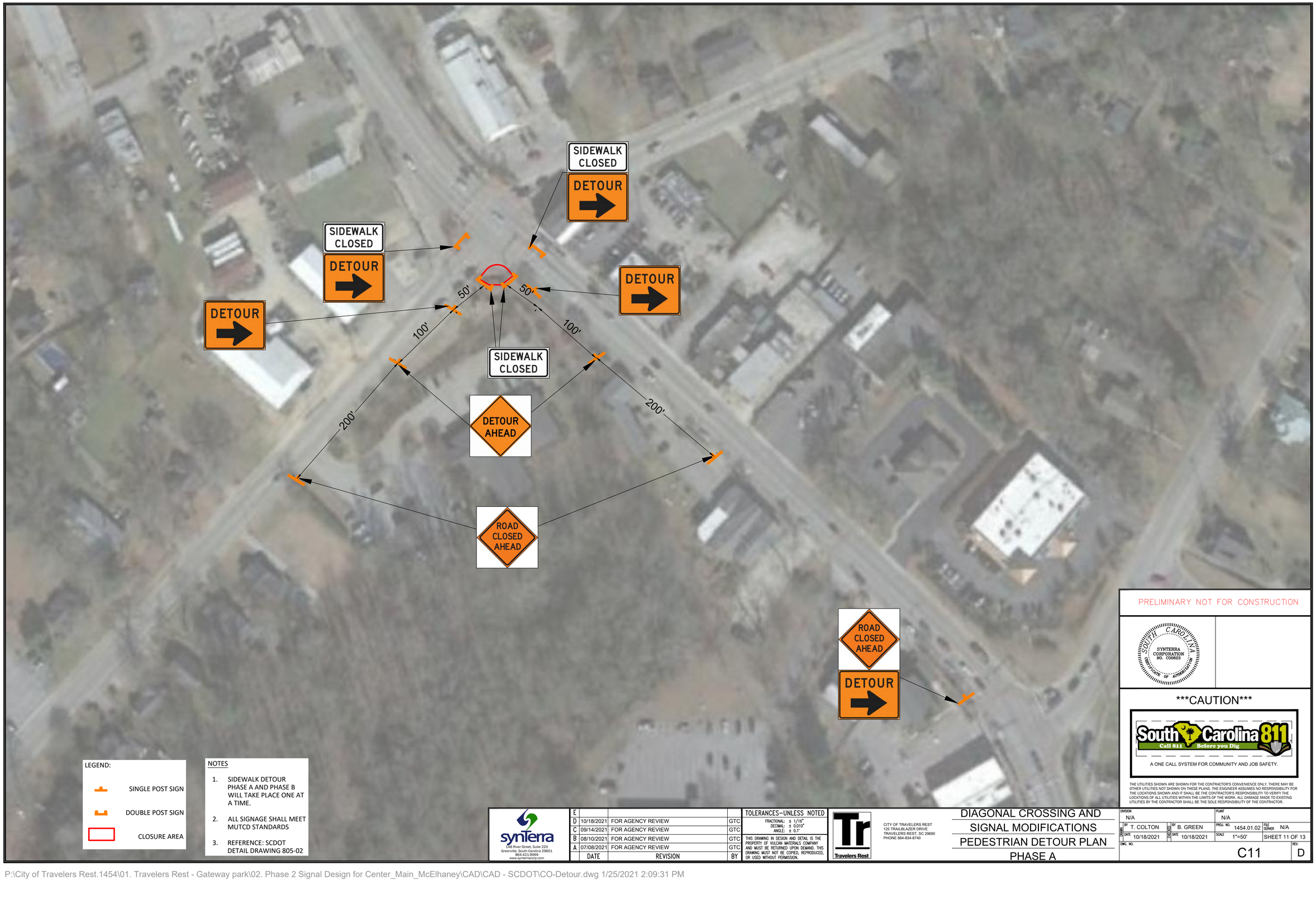
	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/23/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

TOLERANCES-UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest
CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS
SCDOT TRAFFIC CONTROL PLAN

DIVISION: N/A
PLANT: N/A
DESIGN: BY T. COLTON DATE 10/18/2021
DRAWN: BY B. GREEN DATE 10/18/2021
CHECKED:
PROJ. NO. 1454.01.02
FILE SERVER: N/A
SCALE: N.T.S.
SHEET 10 OF 13
DWG. NO. C10
REV. D



LEGEND:

- SINGLE POST SIGN
- DOUBLE POST SIGN
- CLOSURE AREA

NOTES

1. SIDEWALK DETOUR PHASE A AND PHASE B WILL TAKE PLACE ONE AT A TIME.
2. ALL SIGNAGE SHALL MEET MUTCD STANDARDS
3. REFERENCE: SCDOT DETAIL DRAWING 805-02

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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
SYNTERRA CORPORATION NO. C00623

CAUTION

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	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/14/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

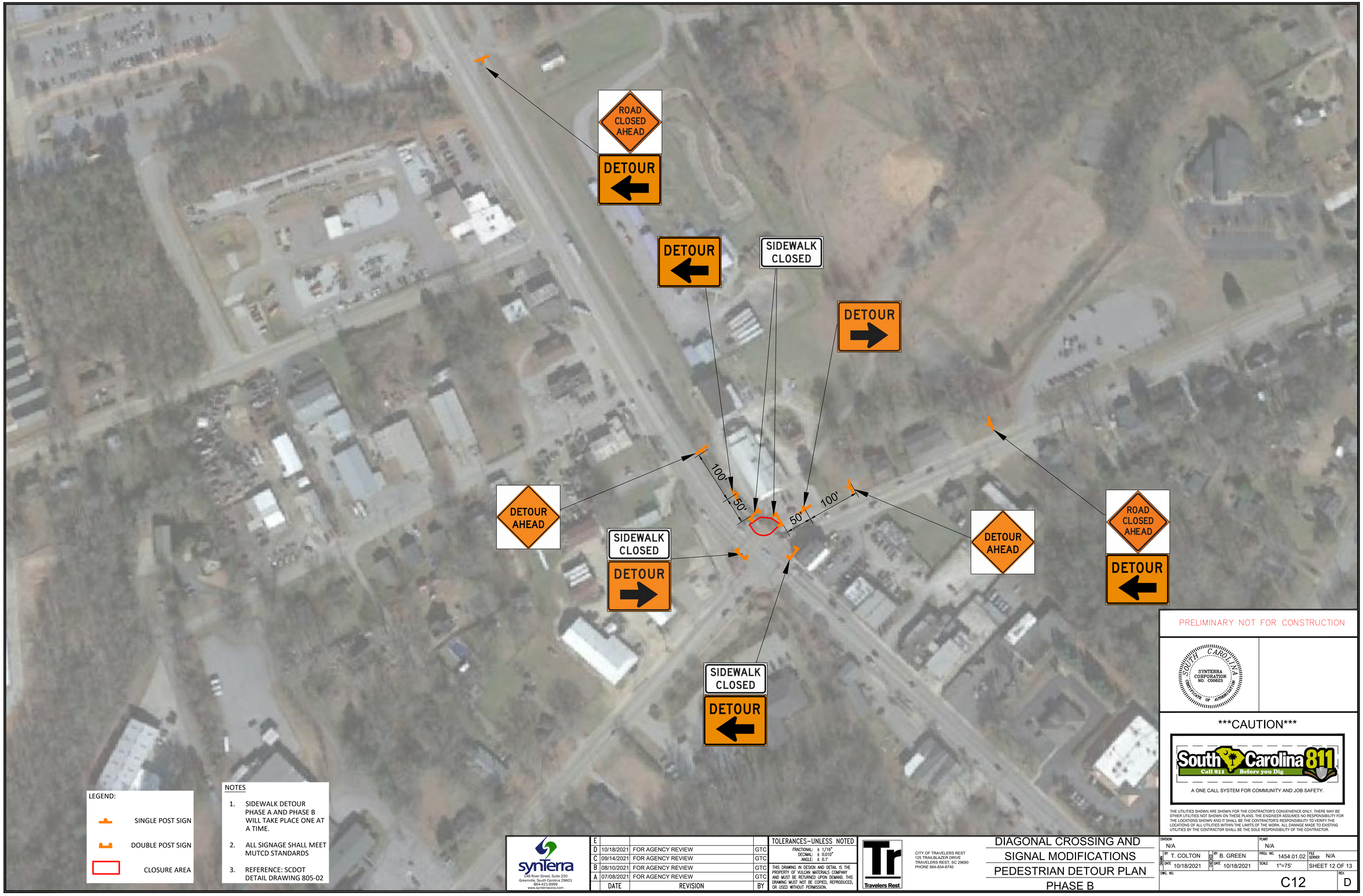
TOLERANCES–UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest
CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS
PEDESTRIAN DETOUR PLAN
PHASE A

DIVISION	N/A	PLANT	N/A
DRAWN BY	T. COLTON	CHECKED BY	B. GREEN
DATE	10/18/2021	DATE	10/18/2021
PROJ. NO.	1454.01.02	FILE NUMBER	N/A
SCALE	1"=50'	SHEET	11 OF 13
DWG. NO.	C11	REV.	D

P:\City of Travelers Rest.1454\01. Travelers Rest - Gateway park\02. Phase 2 Signal Design for Center_Main_McElhaney\CAD\CAD - SCDOT\CO-Detour.dwg 1/25/2021 2:09:31 PM



LEGEND:

- SINGLE POST SIGN
- DOUBLE POST SIGN
- CLOSURE AREA

NOTES

1. SIDEWALK DETOUR PHASE A AND PHASE B WILL TAKE PLACE ONE AT A TIME.
2. ALL SIGNAGE SHALL MEET MUTCD STANDARDS
3. REFERENCE: SCDOT DETAIL DRAWING 805-02

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA
SYNTERRA CORPORATION
NO. C000223
CERTIFICATE OF AUTHORIZATION

CAUTION

South Carolina 811 Call 811 Before you Dig

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	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/14/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

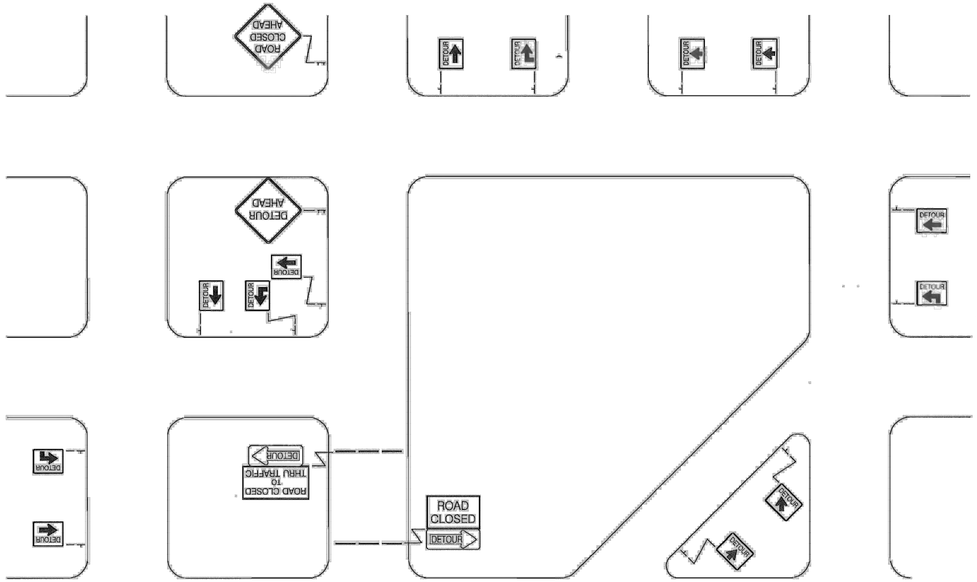
TOLERANCES–UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

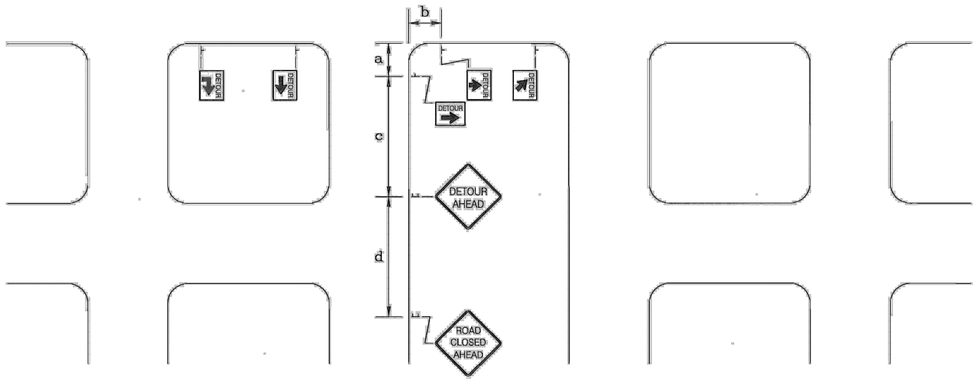
Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS
PEDESTRIAN DETOUR PLAN
PHASE B

DIVISION	N/A			PLANT	N/A
DRAWN BY	T. COLTON	CHECKED BY	B. GREEN	PROJ. NO.	1454.01.02
DRAWN DATE	10/18/2021	CHECKED DATE	10/18/2021	SCALE	1"=75'
				FILE SERVER	N/A
				SHEET	12 OF 13
DWG. NO.	C12			REV.	D





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.) IN AREAS WITH PAVED SHOULDERS OR CURB & GUTTER, GROUND MOUNT ALL DETOUR SIGN ASSEMBLIES 2 FEET FROM EITHER THE PAVEMENT EDGE OF A PAVED SHOULDER OR THE FACE OF A CURB. IN AREAS WITH NO PAVED SHOULDERS OR CURB & GUTTER, GROUND MOUNT ALL DETOUR SIGN ASSEMBLIES 6-12 FEET FROM THE NEAR EDGE OF AN ADJACENT TRAVEL LANE TO THE NEAREST EDGE OF THE SIGN ASSEMBLY. MOUNT EACH DETOUR SIGN ASSEMBLY SO THE BOTTOM EDGE OF THE BOTTOM SIGN HAS A MINIMUM MOUNTING HEIGHT OF NO LESS THAN 5 FEET ABOVE THE NEAR EDGE OF THE ADJACENT TRAVEL LANE.

3.) SPACINGS INDICATED ARE FOR NORMAL CONDITIONS; ADJUSTMENTS MAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS.

4.) MOUNT ALL SIGNS SUCH THAT THEY ARE STRAIGHT AND LEVEL AND THE FACE OF THE SIGNS ARE PERPENDICULAR TO THE SURFACE OF THE ROADWAY.

5.) REFLECTORIZE ALL DETOUR MARKERS, DETOUR SIGNS, AND DETOUR ARROW SIGNS WITH A FLUORESCENT ORANGE COLORED PRISMATIC REFLECTIVE SHEETING.

6.) ALL TRAFFIC CONTROL DEVICES, INCLUDING TYPE III BARRICADES, PORTABLE SIGN SUPPORTS, SIGN SUBSTRATUMS, BREAKAWAY SYSTEMS FOR GROUND MOUNTED SIGN SUPPORTS, WARNING LIGHTS, ETC., SHALL COMPLY WITH ALL NCHRP REPORT 350 REQUIREMENTS AND SHALL BE APPROVED BY THE DEPARTMENT. ALL APPROVED TRAFFIC CONTROL DEVICES ARE INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES". THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org .

7.) SPECIAL SIGN MOUNTING ASSEMBLIES MAY BE NECESSARY IN AREAS OF CONCRETE MEDIAN BARRIER, BRIDGE PARAPET WALLS, OR DOUBLEFACED GUARDRAIL AND SHALL BE PROVIDED BY THE CONTRACTOR.

8.) REFLECTORIZE ALL BARRICADES WITH A TYPE III HIGH INTENSITY REFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.

9.) ALL SUPPLEMENTAL SIGNS ATTACHED TO TYPE III BARRICADES SHALL BE CONSTRUCTED OF AN APPROVED REFLECTIVE ROLL-UP MATERIAL OR AN APPROVED ALUMINUM COMPOSITE MATERIAL. ONLY THOSE ALUMINUM COMPOSITE MATERIALS INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" SUCH AS "ALPOLIC", "DIBOND", OR "REYNOLITE" ARE APPROVED. ALL OTHER RIGID SIGN SUBSTRATUMS, INCLUDING .08 AND .10 ALUMINUM SIGN BLANKS, ARE PROHIBITED FOR ATTACHMENT TO A TYPE III BARRICADE.

10.) THE TRAFFIC CONTROL SETUP SHOWN IS A TYPICAL INSTALLATION FOR A SECONDARY ROADWAY. SPECIFIC SIGNING WILL BE BASED ON SITE CONDITIONS AND SHALL REQUIRE THE ENGINEER'S APPROVAL PRIOR TO INSTALLATION. ROAD AND STREET NAMES MAY ALSO BE USED.

11.) THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT CONSTRUCTION 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.

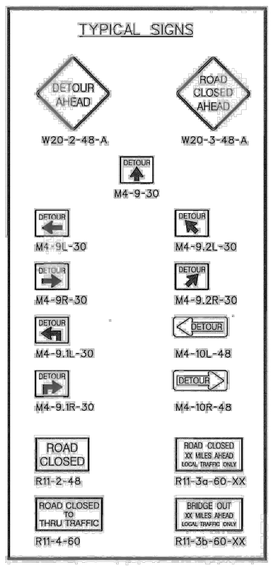
12.) THE TRAFFIC CONTROL SETUP ILLUSTRATED ON THIS STANDARD DRAWING, INCLUDING INSTALLATION AND MAINTENANCE OF THE DETOUR SIGNING AND ALL TRAFFIC CONTROL DEVICES PERTINENT TO THE DETOUR, SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID ITEM FOR TRAFFIC CONTROL.

13.) COORDINATE THE SIGNS IN EACH SIGN ASSEMBLY ACCORDING TO LOCATION, ROUTE, DIRECTION, SIZE, AND COLOR.

SIGN PLACEMENT AND SPACING INTERVALS

SPEED LIMIT	a	b	c	d
35 mph OR LESS	50'	100'	200'	200'
40 mph TO 50 mph	75'	150'	350'	350'
55 mph OR GREATER	100'	200'	500'	500'

TYPICAL SIGNS



LEGEND

TYPE III BARRICADE (6 FEET)

SINGLE POST SIGN ASSEMBLY

DUAL POSTS SIGN ASSEMBLY

REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

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

SIGNATURE

1-30-2008

DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0	8-30-07	JCS	DRAWING NO. UPDATE

SCDOT

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

STANDARD DRAWING

DETOUR SIGNING FOR SECONDARY ROUTES

610-610-00

EFFECTIVE LETTING DATE: MAY 2008

PRELIMINARY NOT FOR CONSTRUCTION

SOUTH CAROLINA SYNTERRA CORPORATION NO. C00623 CERTIFICATE OF AUTHORIZATION

CAUTION

South Carolina 811 Call 811 Before you Dig

A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

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syntera
148 River Street, Suite 220
Greenville, South Carolina 29601
864-421-9999
www.synterracorp.com

	DATE	REVISION	BY
E			
D	10/18/2021	FOR AGENCY REVIEW	GTC
C	09/23/2021	FOR AGENCY REVIEW	GTC
B	08/10/2021	FOR AGENCY REVIEW	GTC
A	07/08/2021	FOR AGENCY REVIEW	GTC

TOLERANCES-UNLESS NOTED
FRACTIONAL: ± 1/16"
DECIMAL: ± 0.010"
ANGLE: ± 0.1°

Travelers Rest

CITY OF TRAVELERS REST
125 TRAILBLAZER DRIVE
TRAVELERS REST, SC 29690
PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS PEDESTRIAN DETOUR PLAN DETAIL

DIVISION	N/A	PLANT	N/A
DRAWN BY	T. COLTON	CHECKED BY	B. GREEN
DRAWN DATE	10/18/2021	CHECKED DATE	10/18/2021
PROJ. NO.	1454.01.02	FILE SERVER	N/A
SCALE	N/A		SHEET 13 OF 13
DWG. NO.	C13	REV.	D

P:\City of Travelers Rest.1454\01. Travelers Rest - Gateway park\02. Phase 2 Signal Design for Center_Main_McElhaney\CAD\CAD - SCDOT\CO-Detour.dwg 1/25/2021 2:09:31 PM