

**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

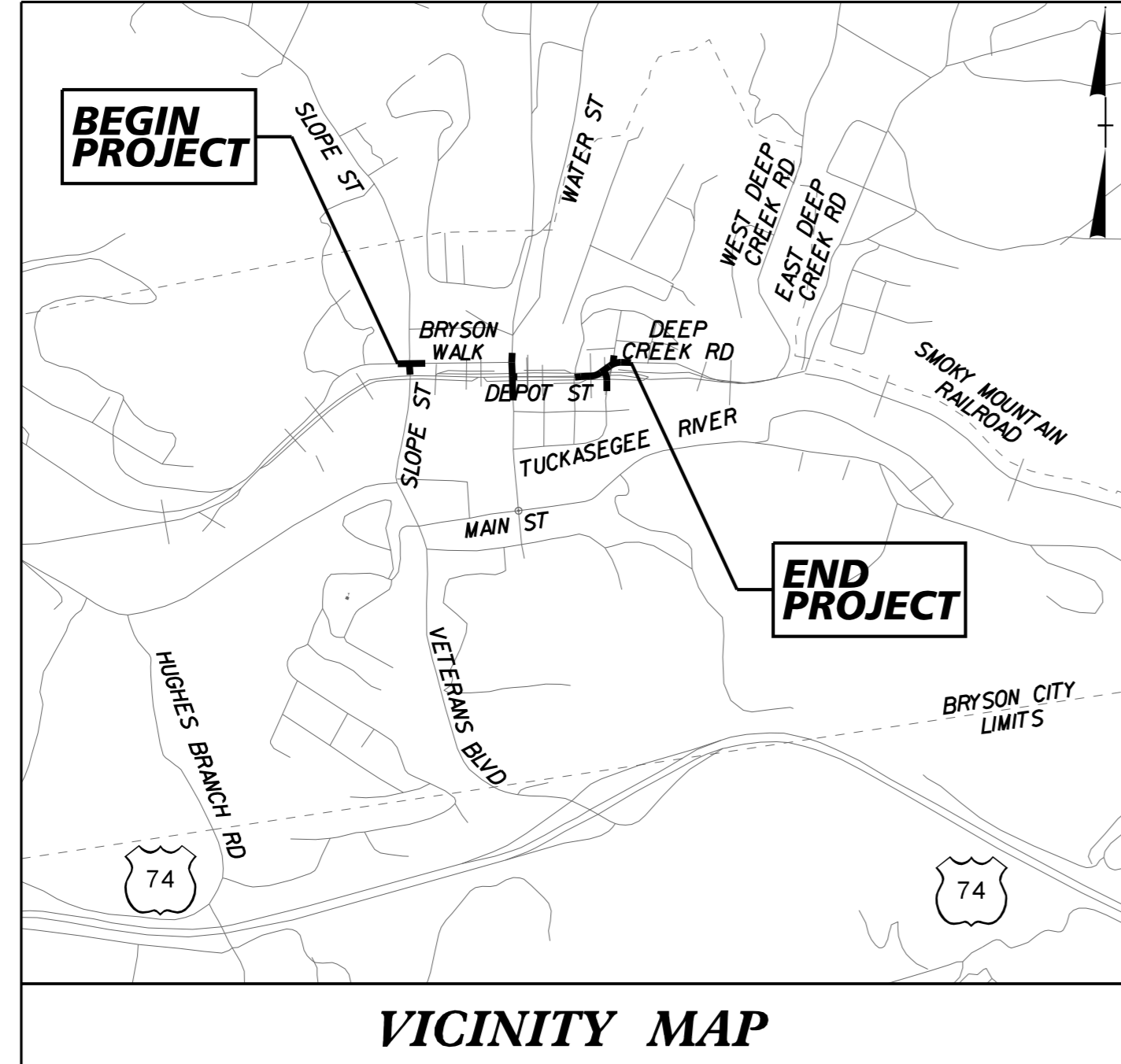
**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**

TIP PROJECT: R-5843

CONTRACT: DN00709

See Sheet 1-B For Conventional Symbols



VICINITY MAP

FINAL PLANS

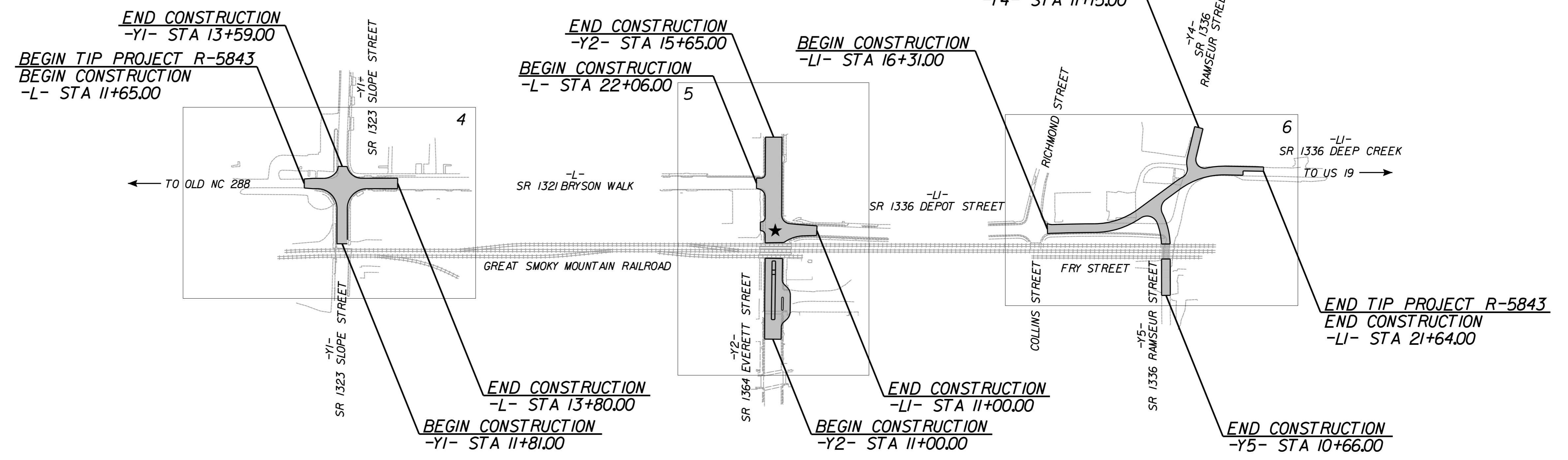
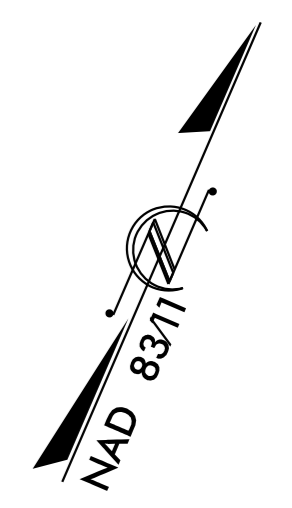
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SWAIN COUNTY

**LOCATION: INTERSECTIONS: SLOPE STREET (SR 1323)/BRYSON WALK (SR 1321)
EVERETT STREET (SR 1364)/DEPOT STREET (SR 1336)
DEPOT STREET (SR 1336)/RAMSEUR STREET (SR 1336)
DEEP CREEK ROAD (SR 1336)/RAMSEUR STREET (SR 1336)**

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS

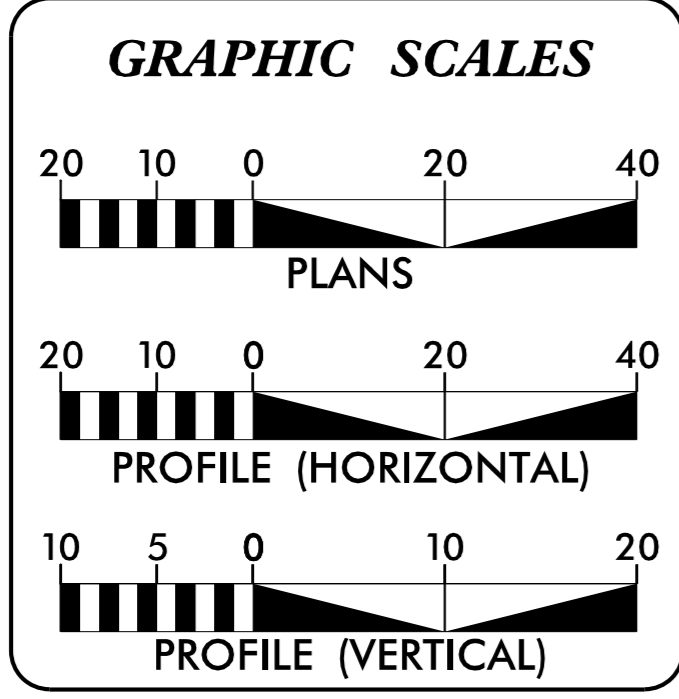
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5843	1	97
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
47085.1.1		P.E.	
47085.2.1		RIGHT-OF-WAY	
47085.2.1		UTILITIES	
47085.3.1		CONSTRUCTION	

Kimley»Horn



★ TRAFFIC SIGNAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5843 = 0.343 MILES
TOTAL LENGTH TIP PROJECT R-5843 = 0.343 MILES

PLANS PREPARED FOR THE NCDOT BY: **Kimley»Horn**

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JUNE 15, 2018

LETTING DATE: JANUARY 11, 2021

CHARLES NUCKOLS, P.E.
PROJECT ENGINEER

CALEB LOWMAN, P.E.
PROJECT DESIGN ENGINEER

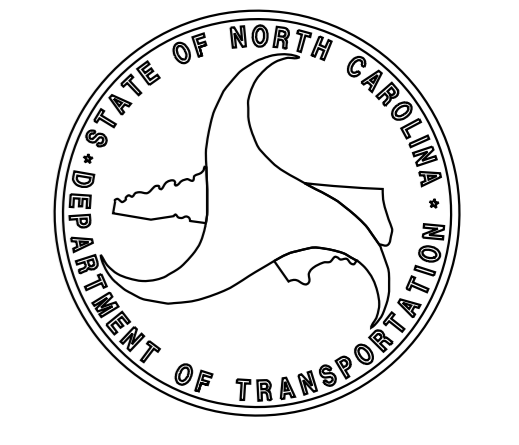
ANDREW BUCHANAN
NCDOT CONTACT

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

SIGNATURE: *[Signature]* 11/11/2021 P.E.

SIGNATURE: *[Signature]* 11/11/2021 P.E.



STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
R-5843	1A

11/11/2021

<u>SHEET NUMBER</u>	<u>INDEX OF SHEETS</u>	<u>SHEET DESCRIPTION</u>
I	TITLE SHEET	
IA	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARDS	
IB	CONVENTIONAL SYMBOLS	
2A-I THRU 2A-2	PAVEMENT SCHEDULE AND TYPICAL SECTIONS	
2B-1	ROADWAY DETAILS	
2C-I THRU 2C-3	CURB RAMP DETAILS	
3B-1	SUMMARY OF EARTHWORK AND REMOVAL OF EXISTING ASPHALT PAVEMENT	
3D-I THRU 3D-2	SUMMARY OF DRAINAGE QUANTITIES	
3G-1	SUMMARIES OF SUBSURFACE DRAINAGE AND AGGREGATE SUBGRADE/STABILIZATION	
3P-1	PARCEL INDEX SHEET	
4 THRU 6	PLAN SHEETS	
7	PROFILE SHEET	
RW0-I THRU RW06	SURVEY CONTROL SHEETS AND R/W PLAN SHEETS	
TMP-I THRU TMP-8	TRANSPORTATION MANAGEMENT PLANS	
PMP-I THRU PMP-5	PAVEMENT MARKING PLANS	
EC-I THRU EC-6	EROSION CONTROL PLANS	
SIGN-I THRU SIGN-6	SIGNING PLANS	
SIG-I THRU SIG-5	SIGNAL PLANS	
UC-I THRU UC-7	UTILITY CONSTRUCTION PLANS	
UO-I THRU UO-5	UTILITY BY OTHER PLANS	
X-0	CROSS SECTION INDEX	
X-I THRU X-24	CROSS SECTIONS	

GENERAL NOTES

2018 SPECIFICATIONS

EFFECTIVE: 01-16-18

EFF. 01-16-2018

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

SUBSURFACE DRAINS:

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADIUS OR RADIUS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE:
 BALSAM WEST FIBER NET
 BRYSON CITY - WATER AND SEWER
 DUKE ENERGY
 FRONTIER COMMUNICATIONS
 DOMINION ENERGY
 ZITO MEDIA

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06. DETECTABLE DOME COLOR SHALL BE FEDERAL YELLOW (FS 33538)

2018 ROADWAY ENGLISH STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" HIGHWAY DESIGN BRANCH - N. C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N. C., DATED JANUARY, 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO. TITLE

DIVISION 2 - EARTHWORK

- 200.02 Method of Clearing - Method II
- 225.02 Guide for Grading Subgrade - Secondary and Local
- 225.04 Method of Obtaining Superelevation - Two Lane Pavement
- 225.06 Method of Grading Sight Distance at Intersections

DIVISION 3 - PIPE CULVERTS

- 300.01 Method of Pipe Installation

DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

- 560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method I

DIVISION 6 - ASPHALT BASES AND PAVEMENTS

- 654.01 Pavement Repairs

DIVISION 8 - INCIDENTALS

- 806.01 Concrete Right-of-Way Marker
- 815.02 Subsurface Drain
- 840.00 Concrete Base Pad for Drainage Structures
- 840.01 Brick Catch Basin - 12" thru 54" Pipe
- 840.02 Concrete Catch Basin - 12" thru 54" Pipe
- 840.03 Frame, Grates and Hood - for Use on Standard Catch Basin
- 840.04 Concrete Drop Inlet - 12" thru 30" Pipe
- 840.05 Brick Drop Inlet - 12" thru 30" Pipe
- 840.06 Drop Inlet Frame and Grates - for use with Std. Dwg 840.04 and 840.05
- 840.08 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
- 840.09 Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
- 840.20 Frames and Wide Slot Flat Grates
- 840.24 Frames and Narrow Slot Sag Grates
- 840.25 Anchorage for Frames - Brick or Concrete or Precast
- 840.27 Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
- 840.28 Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
- 840.31 Concrete Junction Box - 12" thru 66" Pipe
- 840.32 Brick Junction Box - 12" thru 66" Pipe
- 840.45 Precast Drainage Structure
- 840.54 Manhole Frame and Cover
- 840.66 Drainage Structure Steps
- 846.01 Concrete Curb, Gutter and Curb & Gutter
- 848.01 Concrete Sidewalk
- 848.02 Driveway Turnout - Radius Type
- 848.04 Street Turnout
- 848.05 Curb Ramp - Proposed Curb & Gutter
- 852.01 Concrete Islands
- 876.01 Rip Rap in Channels
- 876.04 Drainage Ditches with Class 'B' Rip Rap

K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int)\Roadway\Proj\R-5843_rdy_tsh.dgn

11/11/2021

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale *S.U.E. = Subsurface Utility Engineering

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EP
Computed Property Corner	-----
Property Monument	□ ECM
Parcel/Sequence Number	⑫3
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	----- WLB
Proposed Wetland Boundary	----- WLB
Existing Endangered Animal Boundary	----- EAB
Existing Endangered Plant Boundary	----- EPB
Existing Historic Property Boundary	----- HPB
Known Contamination Area: Soil	☠ -s- ☠
Potential Contamination Area: Soil	☠ -s- ☠
Known Contamination Area: Water	☠ -w- ☠
Potential Contamination Area: Water	☠ -w- ☠
Contaminated Site: Known or Potential	☠ ?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	○ W
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	□
Building	□
School	□
Church	□
Dam	□

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	-----
Jurisdictional Stream	----- JS
Buffer Zone 1	----- BZ 1
Buffer Zone 2	----- BZ 2
Flow Arrow	-----
Disappearing Stream	-----
Spring	○
Wetland	-----
Proposed Lateral, Tail, Head Ditch	-----
False Sump	-----

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	◆
Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	●
Exist Permanent Easment Pin and Cap	◇
New Permanent Easment Pin and Cap	◆
Vertical Benchmark	⊠
Existing Right of Way Marker	△
Existing Right of Way Line	-----
New Right of Way Line	----- RW
New Right of Way Line with Pin and Cap	----- RW
New Right of Way Line with Concrete or Granite R/W Marker	----- RW
New Control of Access Line with Concrete C/A Marker	----- C/A
Existing Control of Access	-----
New Control of Access	----- CA
Existing Easement Line	----- E
New Temporary Construction Easement	----- E
New Permanent Sidewalk Easement	----- SWE
New Permanent Drainage Easement	----- PDE
New Permanent Retaining Wall Easement	----- RWE
New Permanent Utility Easement	----- PUE
New Temporary Utility Easement	----- TUE
New Aerial Utility Easement	----- AUE

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- C
Proposed Slope Stakes Fill	----- F
Proposed Curb Ramp	○ CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	⊠

VEGETATION:

Single Tree	○
Single Shrub	○

Hedge	-----
Woods Line	-----
Orchard	○
Vineyard	□ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	CONC
Bridge Wing Wall, Head Wall and End Wall	CONC WW
MINOR:	
Head and End Wall	CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	⊕
Storm Sewer	----- S

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊠
Power Transformer	⊠
U/G Power Cable Hand Hole	-----
H-Frame Pole	●
U/G Power Line LOS B (S.U.E.*)	----- P
U/G Power Line LOS C (S.U.E.*)	----- P
U/G Power Line LOS D (S.U.E.*)	----- P

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Pedestal	⊠
Telephone Cell Tower	⊠
U/G Telephone Cable Hand Hole	-----
U/G Telephone Cable LOS B (S.U.E.*)	----- T
U/G Telephone Cable LOS C (S.U.E.*)	----- T
U/G Telephone Cable LOS D (S.U.E.*)	----- T
U/G Telephone Conduit LOS B (S.U.E.*)	----- TC
U/G Telephone Conduit LOS C (S.U.E.*)	----- TC
U/G Telephone Conduit LOS D (S.U.E.*)	----- TC
U/G Fiber Optics Cable LOS B (S.U.E.*)	----- T FO
U/G Fiber Optics Cable LOS C (S.U.E.*)	----- T FO
U/G Fiber Optics Cable LOS D (S.U.E.*)	----- T FO

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line LOS B (S.U.E.*)	-----
U/G Water Line LOS C (S.U.E.*)	-----
U/G Water Line LOS D (S.U.E.*)	-----
Above Ground Water Line	----- A/G Water

TV:

TV Pedestal	⊠
TV Tower	⊗
U/G TV Cable Hand Hole	-----
U/G TV Cable LOS B (S.U.E.*)	----- TV
U/G TV Cable LOS C (S.U.E.*)	----- TV
U/G TV Cable LOS D (S.U.E.*)	----- TV
U/G Fiber Optic Cable LOS B (S.U.E.*)	----- TV FO
U/G Fiber Optic Cable LOS C (S.U.E.*)	----- TV FO
U/G Fiber Optic Cable LOS D (S.U.E.*)	----- TV FO

GAS:

Gas Valve	◇
Gas Meter	⊕
U/G Gas Line LOS B (S.U.E.*)	----- G
U/G Gas Line LOS C (S.U.E.*)	----- G
U/G Gas Line LOS D (S.U.E.*)	----- G
Above Ground Gas Line	----- A/G Gas

SANITARY SEWER:

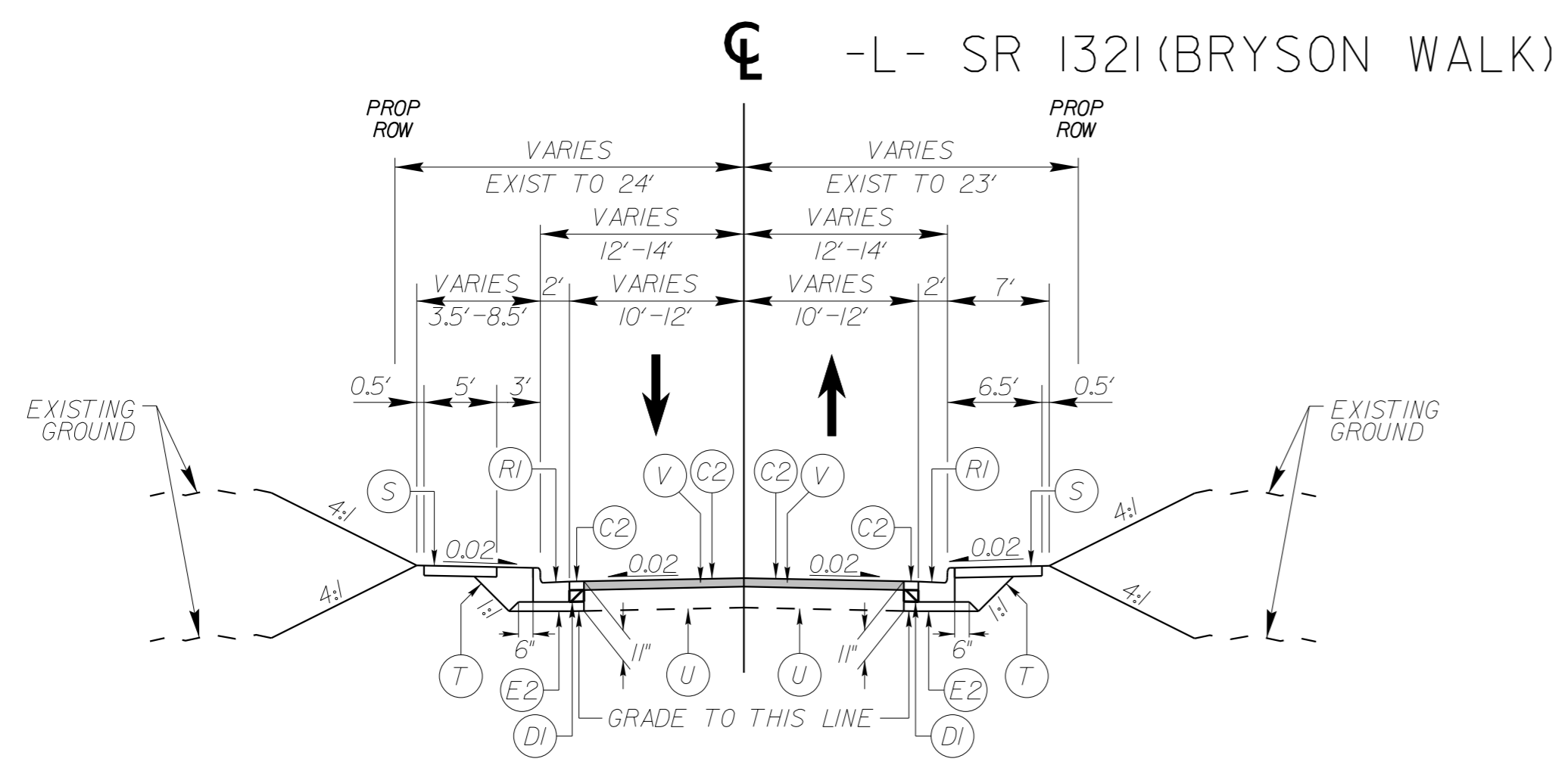
Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	----- SS
Above Ground Sanitary Sewer	----- A/G Sanitary Sewer
SS Forced Main Line LOS B (S.U.E.*)	----- FSS
SS Forced Main Line LOS C (S.U.E.*)	----- FSS
SS Forced Main Line LOS D (S.U.E.*)	----- FSS

MISCELLANEOUS:

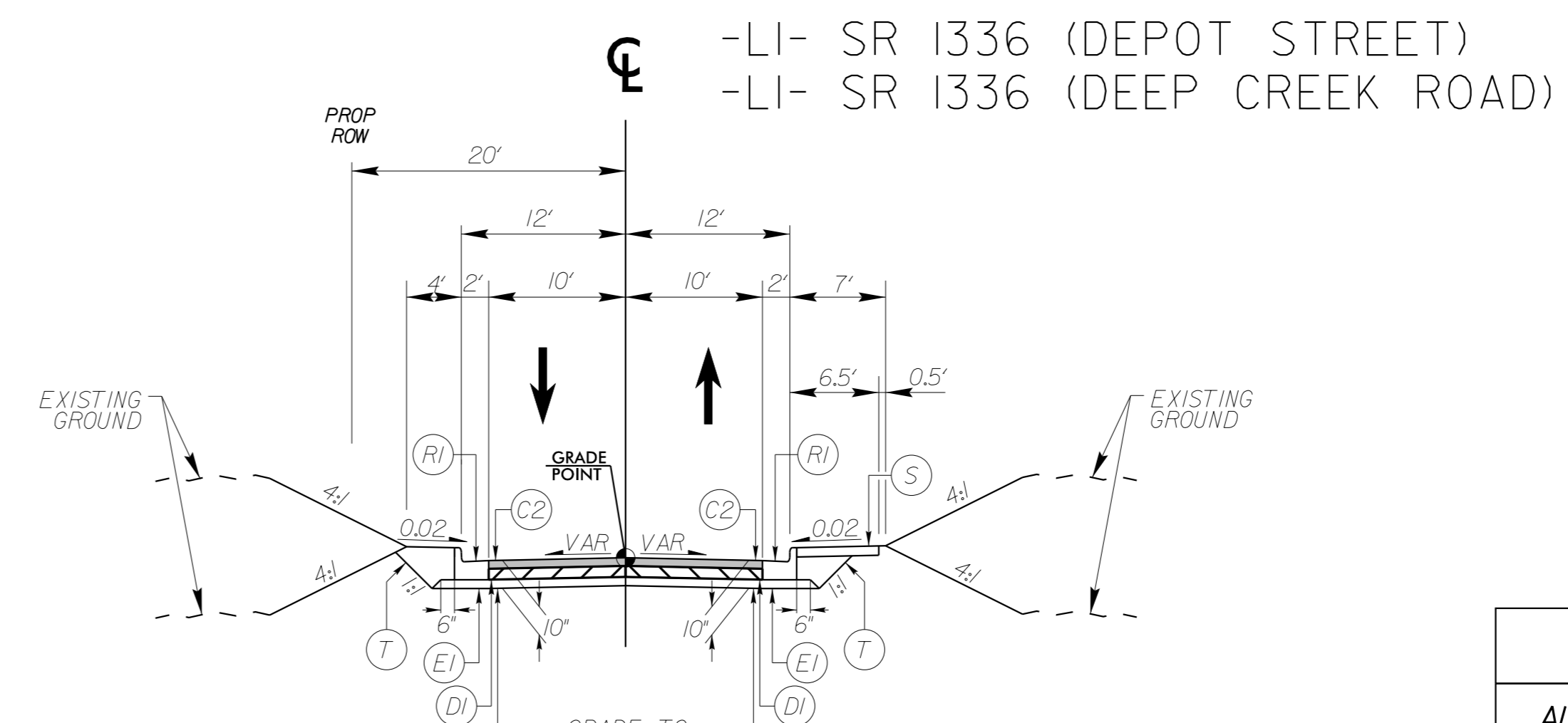
Utility Pole	●
Utility Pole with Base	⊠
Utility Located Object	○
Utility Traffic Signal Box	⊠
Utility Unknown U/G Line LOS B (S.U.E.*)	----- ZUL
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	⊕
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole LOS A (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

PROJECT REFERENCE NO. R-5843	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER

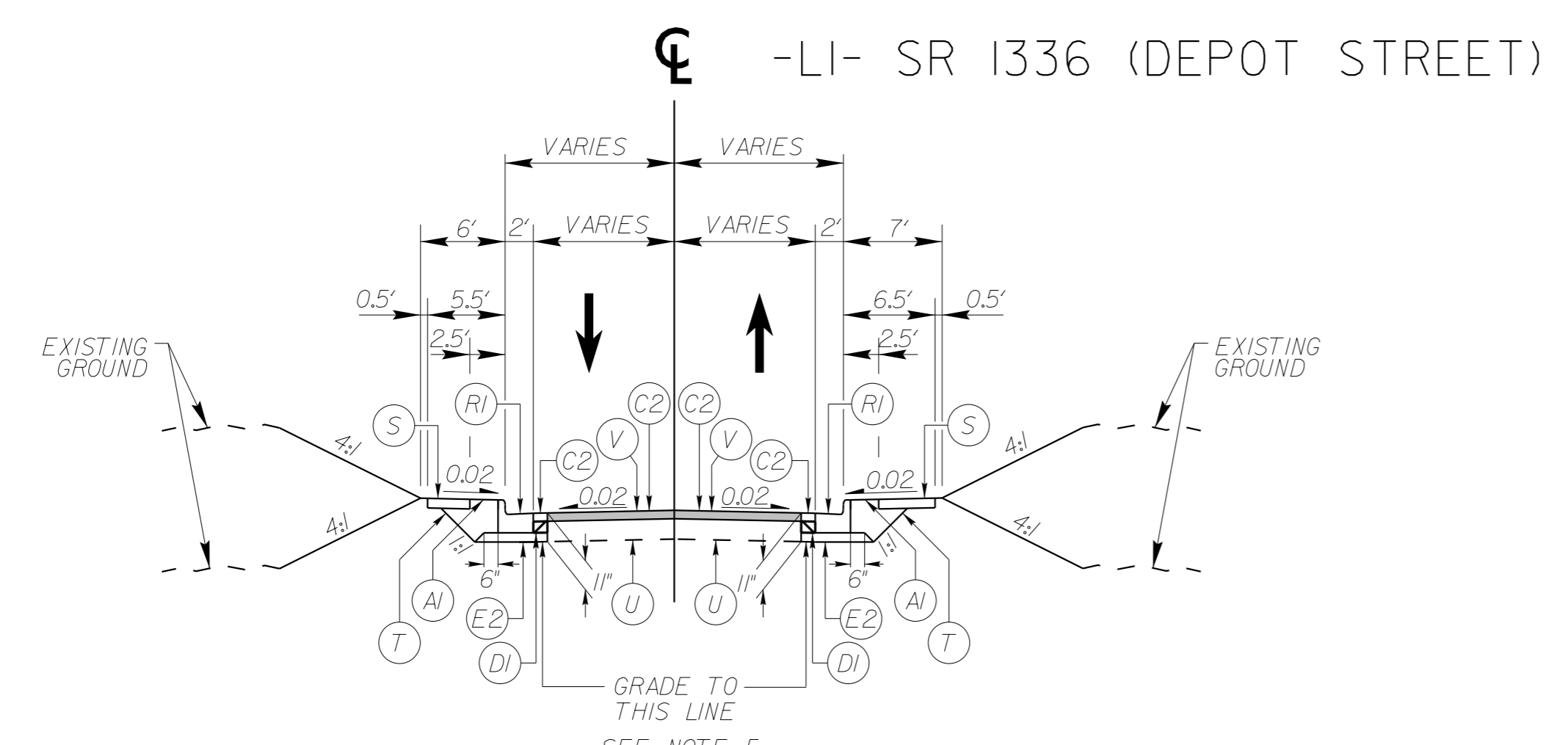
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



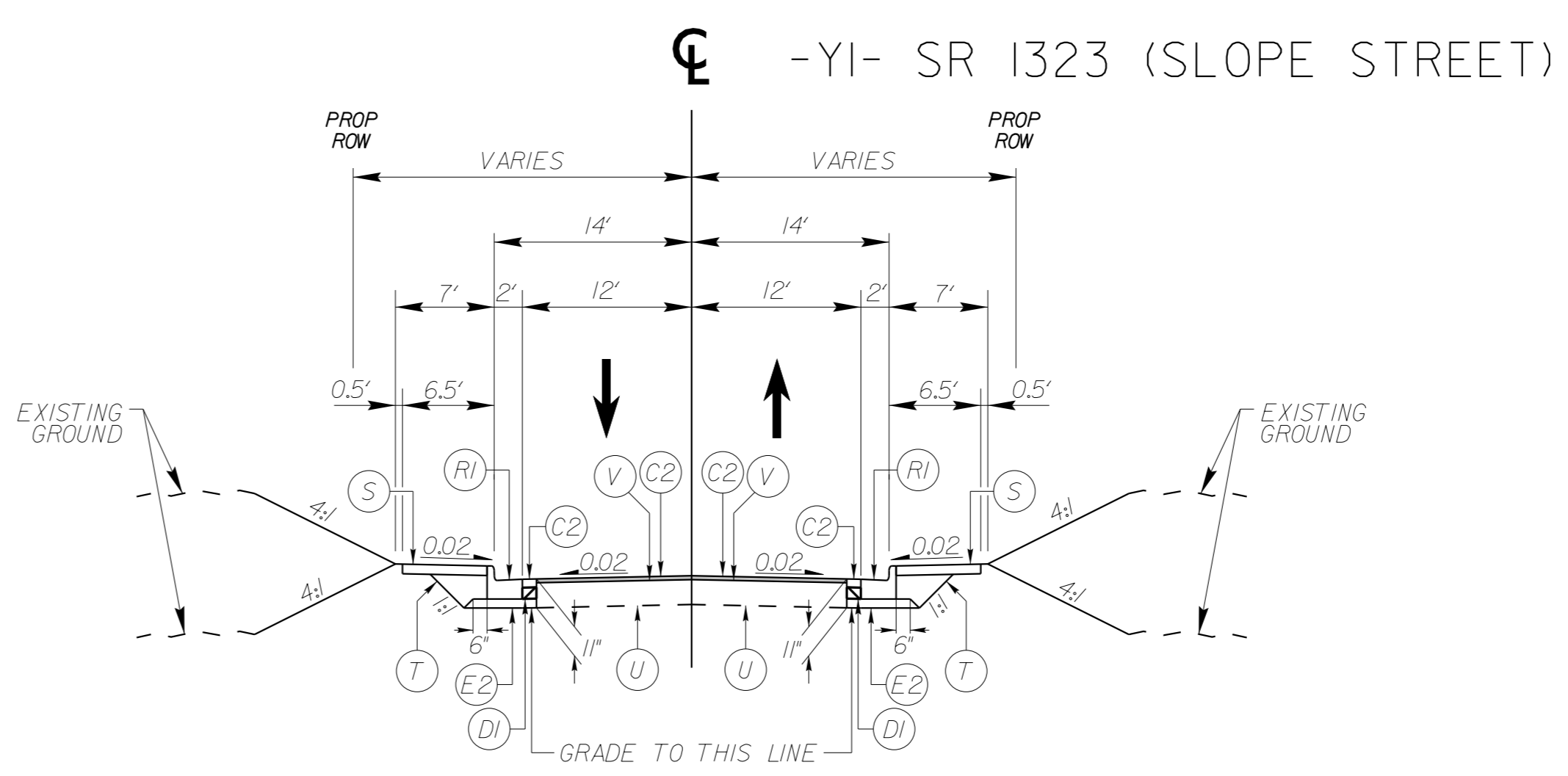
SEE NOTE 1
TYPICAL SECTION NO. 1
-L- STA 11+65.00 TO 13+80.00
-L- STA 22+06.00 TO 22+26.04



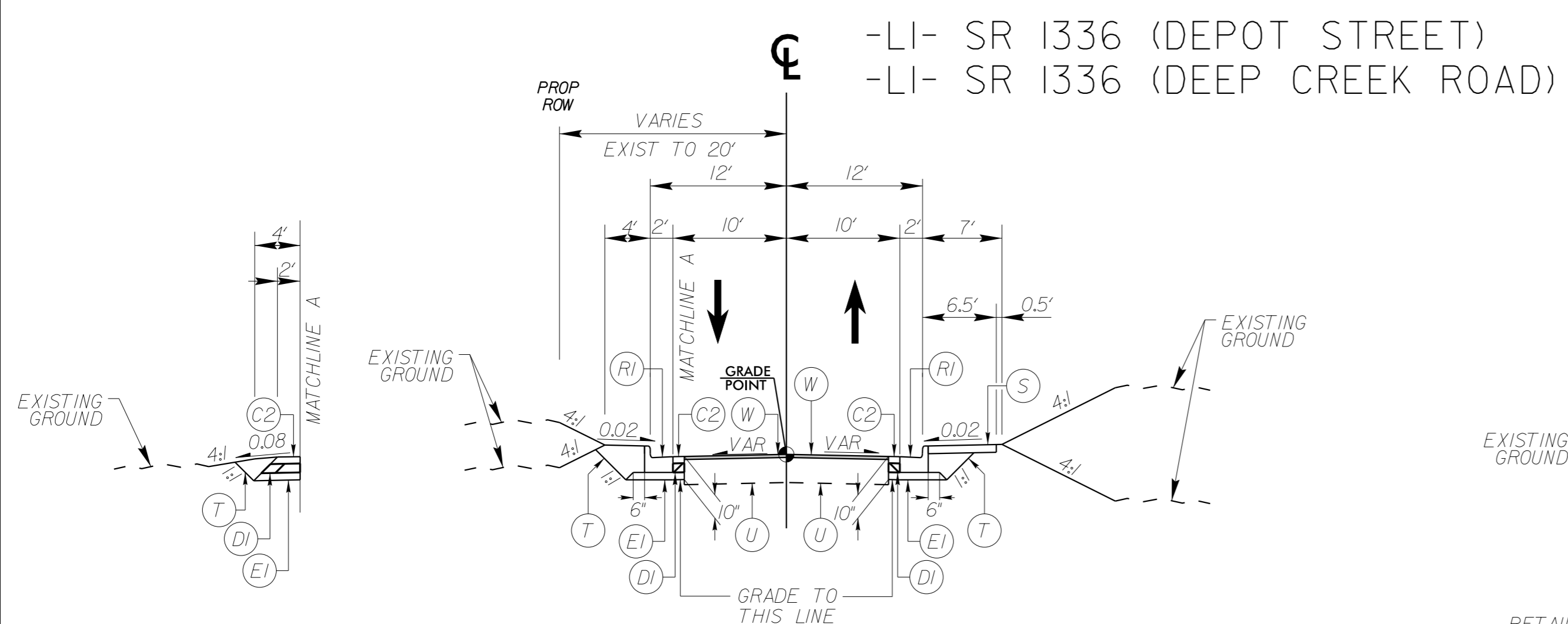
TYPICAL SECTION NO. 4
-LI- STA 18+02.69 TO 19+69.86



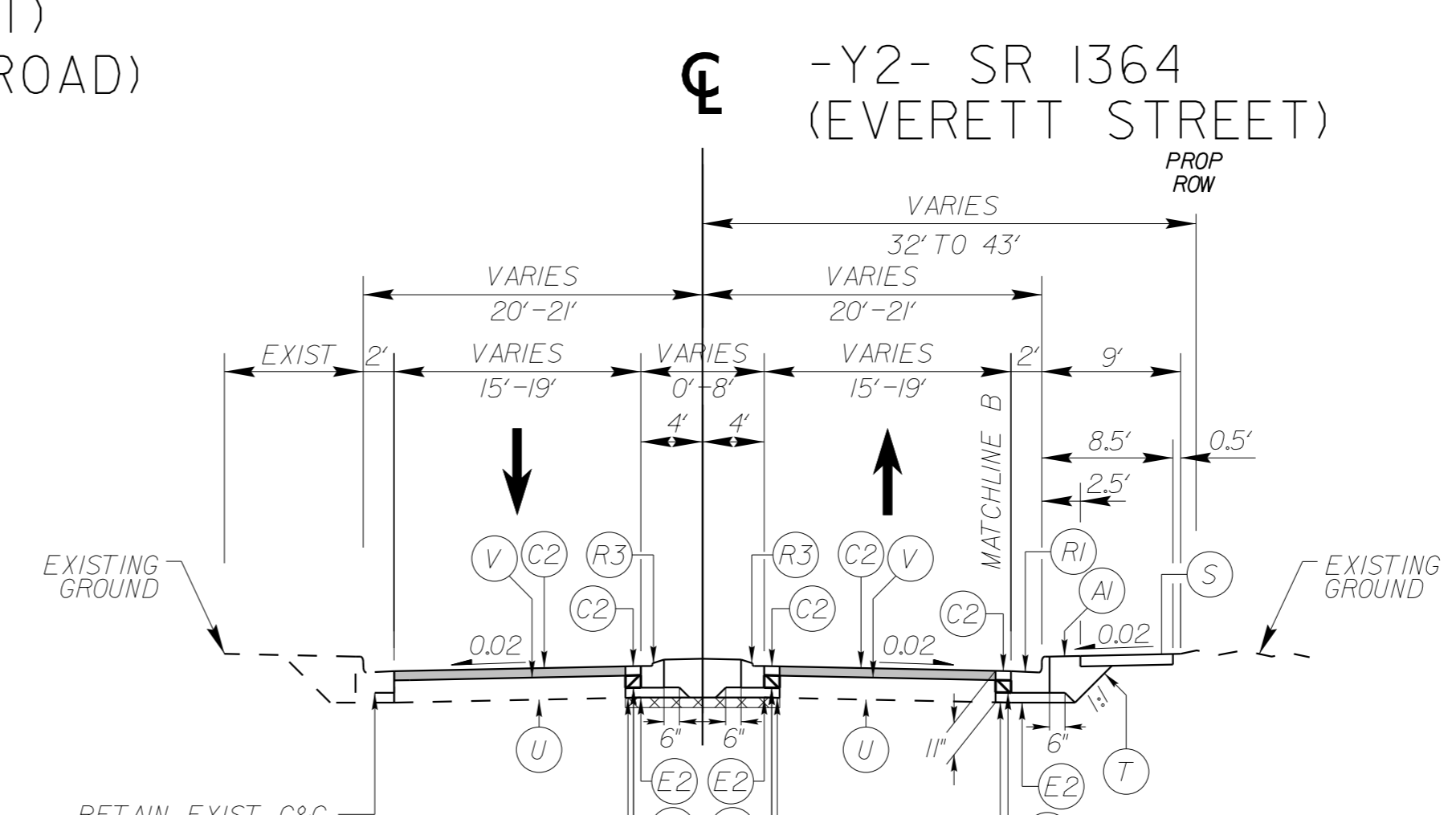
SEE NOTE 5
TYPICAL SECTION NO. 2
-LI- STA 10+17.85 TO 11+00.00



SEE NOTE 2
TYPICAL SECTION NO. 5
-YI- STA 11+81.00 TO 13+07.76
-YI- STA 13+31.52 TO 13+59.00



TYPICAL SECTION NO. 3
-LI- STA 16+31.00 TO 18+02.69
-LI- STA 19+69.86 TO 21+17.00
-LI- STA 21+17.00 TO 21+64.00 LT



SEE NOTES 3, 4, 5 & 6
TYPICAL SECTION NO. 6
-Y2- STA 11+00.00 TO 11+27.90
-Y2- STA 12+37.05 TO 12+86.00

PAVEMENT SCHEDULE
(FINAL PAVEMENT DESIGN)

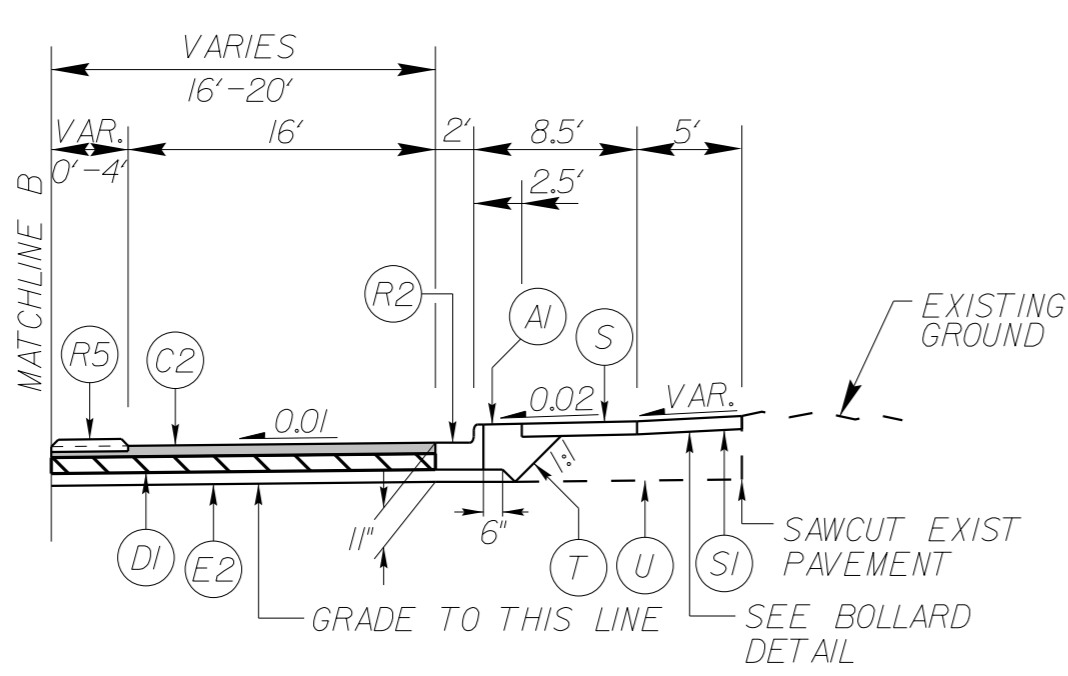
A1	BRICK PAVER (SEE DETAIL SHEET 2B-1)
C1	PROPOSED APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S95C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROPOSED APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S95C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S95C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROPOSED APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I90C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROPOSED VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I90C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2" OR GREATER THAN 4" IN DEPTH.
E1	PROPOSED APPROX. 3" ASPHALT CONCRETE BASE COURSE, TYPE B25DC, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E2	PROPOSED APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25DC, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E3	PROPOSED VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25DC, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.
R1	PROPOSED 2'-6" CONCRETE CURB & GUTTER
R2	SPECIAL 2'-6" CONCRETE CURB & GUTTER (SPILL CURB) (SEE SHEET 2C-1)
R3	PROPOSED 1'-6" CONCRETE CURB & GUTTER
R4	PROPOSED 6' x 18" CONCRETE CURB
R5	PROPOSED 5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	PROPOSED 4" CONCRETE SIDEWALK
SI	PROPOSED 4" CONCRETE
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING DETAIL FOR RESURFACING
V	MILLING EXISTING PAVEMENT (VAR)

NOTES:
1. FOR -L- STA 11+65.00 TO 13+50.00 LT AND STA 11+65.00 TO 13+80.00 RT MAINTAIN CENTERLINE ELEVATION, VAR. DEPTH MILLING TO ESTABLISH 0.02 CROSS SLOPE.
2. FOR -YI- STA 11+81.00 TO 13+07.75 AND STA 13+31.75 TO 13+59.00 MAINTAIN CENTERLINE ELEVATION, VAR. DEPTH MILLING TO ESTABLISH 0.02 CROSS SLOPE.
3. FOR -Y2- STA 11+27.90 TO 12+62.50 MAINTAIN CENTERLINE ELEVATION, VAR. DEPTH MILLING TO ESTABLISH 0.02 CROSS SLOPE.
4. SAWCUTS OF EXISTING PAVEMENT TO BE 1" (MINIMUM).
5. SEE PLAN VIEW FOR SPECIFIC LOCATIONS OF PROPOSED CURB AND GUTTER.
6. CONTRACTOR TO REMOVE ALL EXISTING PAVEMENT TO THE SUBGRADE WITHIN MEDIAN ISLAND AND REPLACE WITH TOPSOIL.
7. PAVEMENT EDGE SLOPES 1:1 UNLESS OTHERWISE INDICATED.

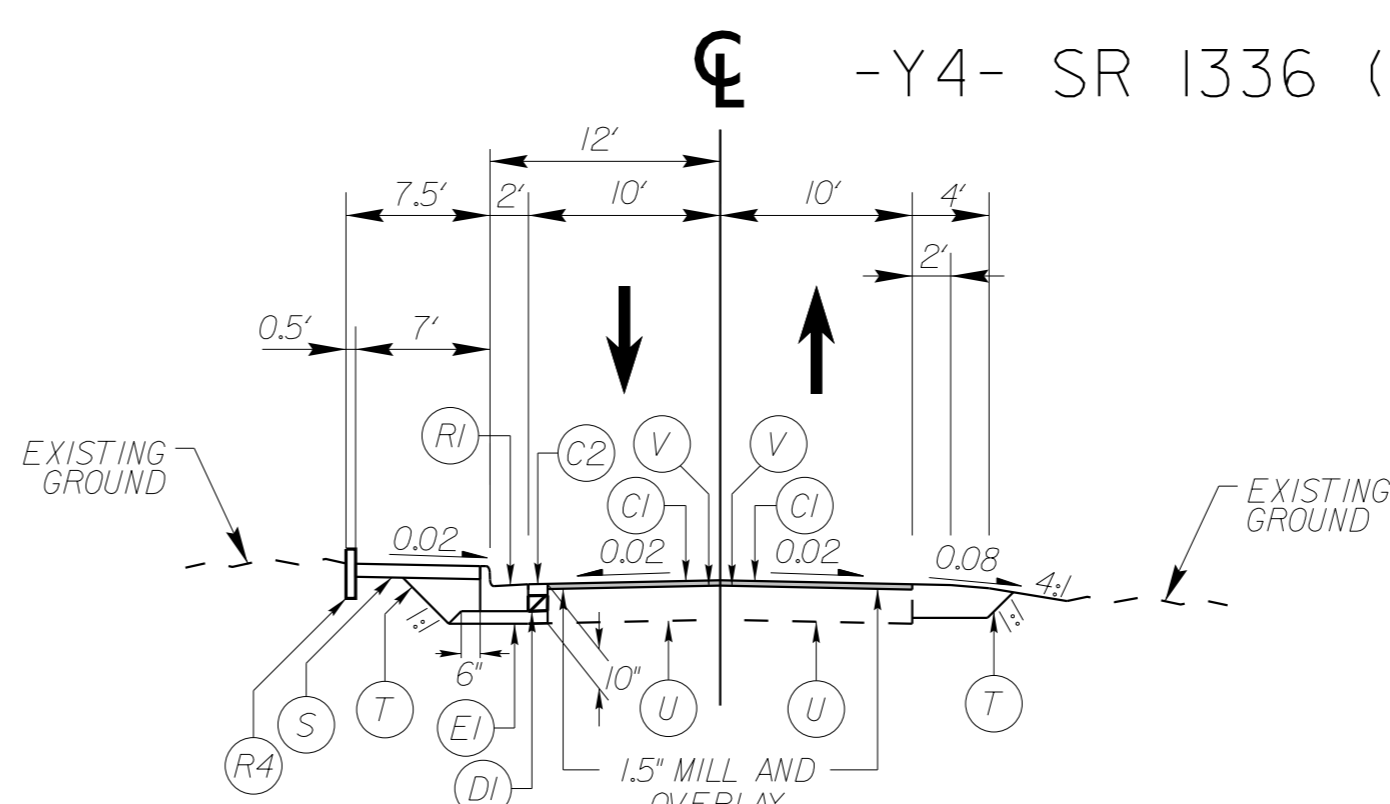
K:\RAL_Roadway\101036387 - Div 14 IR-5843 Bryson Int\Roadway\Pro\IR-5843_rdy_typedgn 3/16/2020

PROJECT REFERENCE NO. R-5843	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER

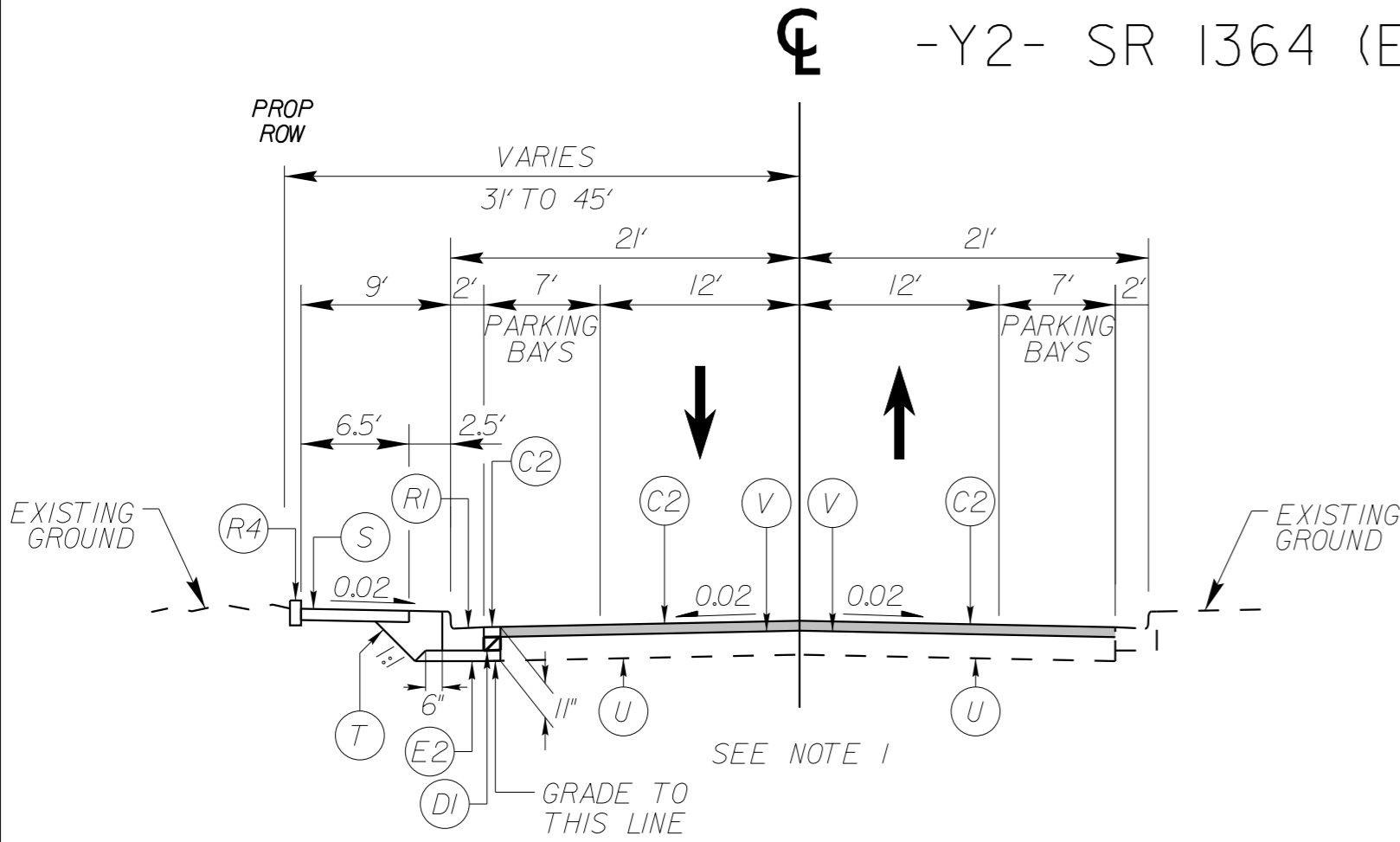
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



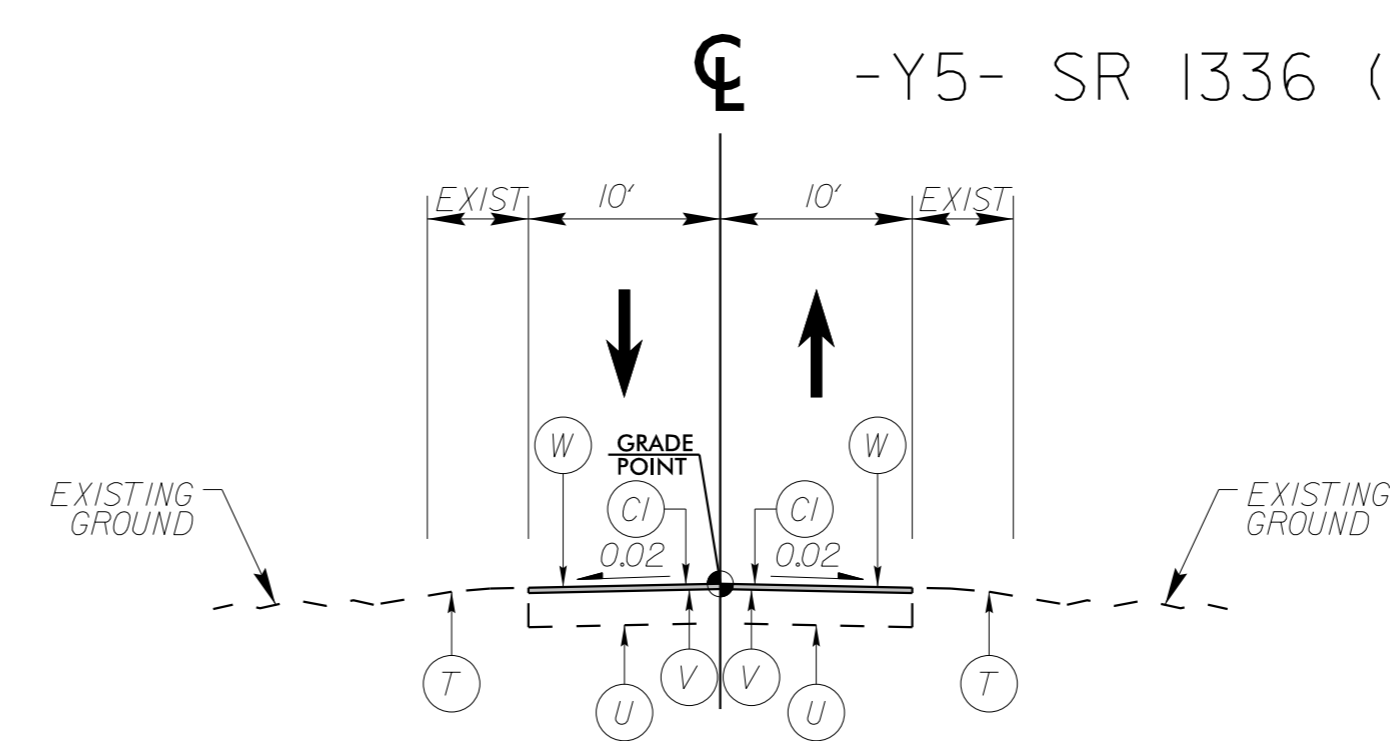
TYPICAL SECTION NO. 6A
-Y2- STA 11+27.90 TO 12+37.05 RT



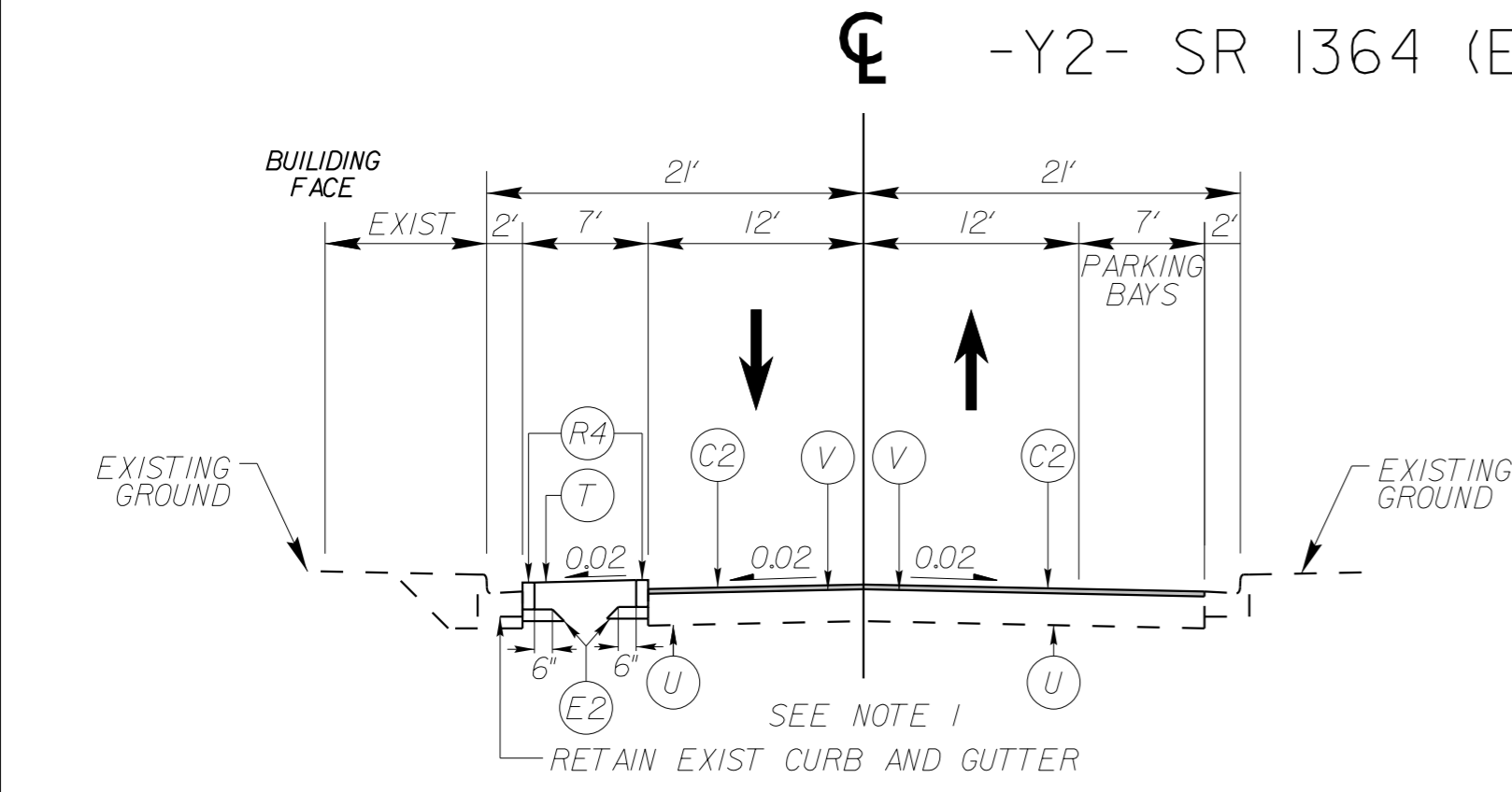
TYPICAL SECTION NO. 9
-Y4- STA 10+90.00 TO 11+15.00



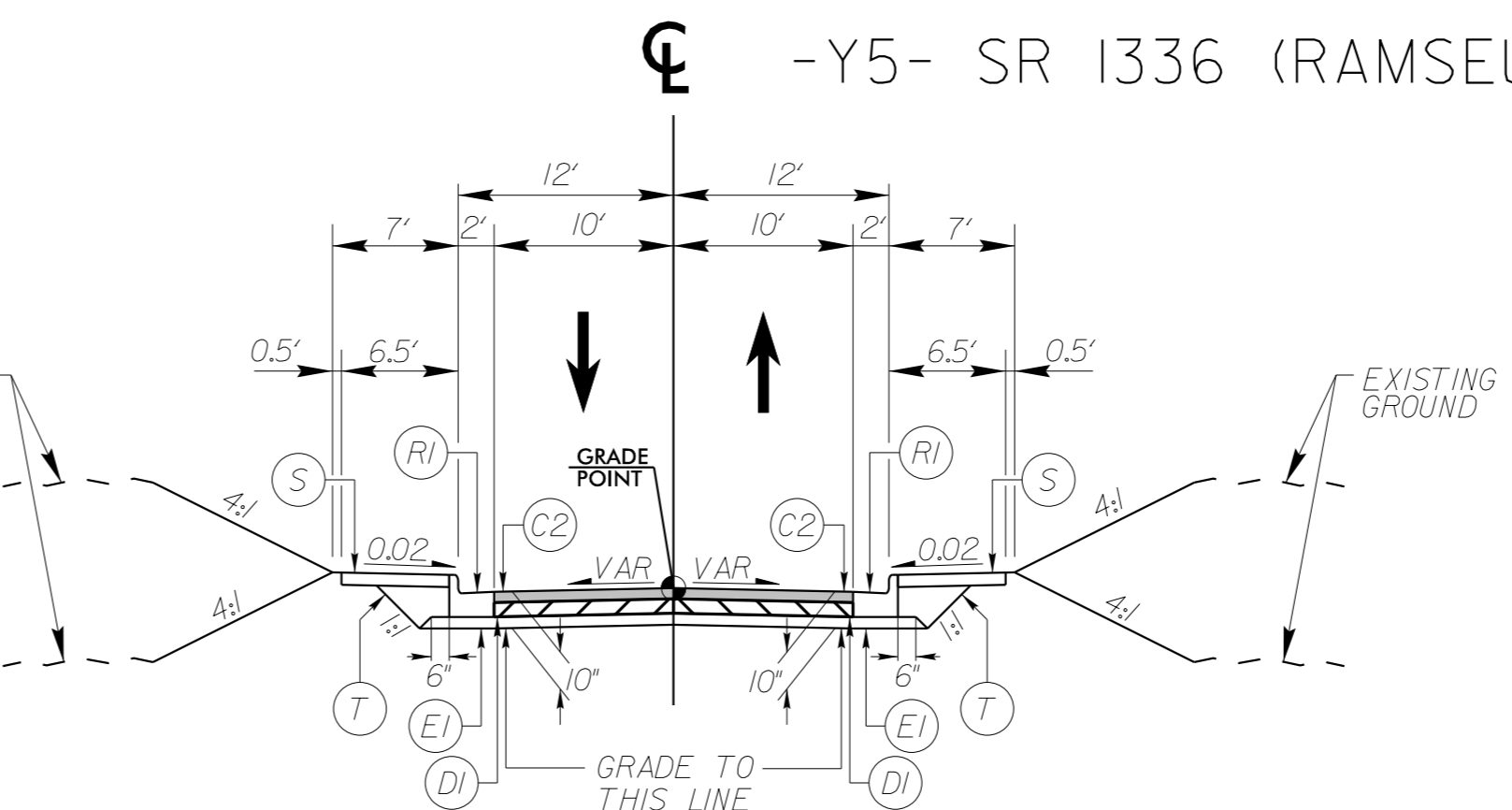
TYPICAL SECTION NO. 7
-Y2- STA 13+22.00 TO 14+89.00



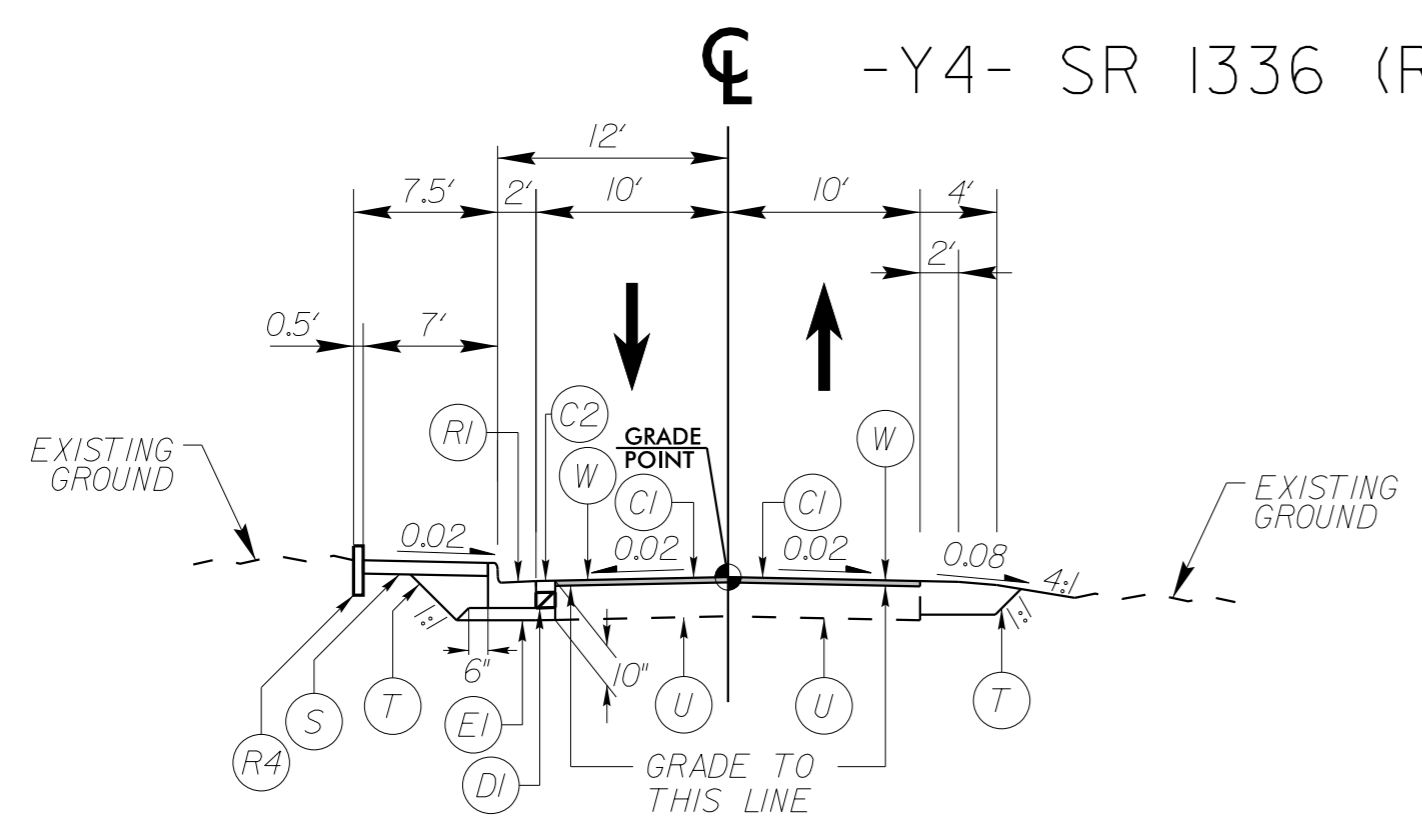
TYPICAL SECTION NO. 10
-Y5- STA 10+66.00 TO 11+49.74



TYPICAL SECTION NO. 7A
-Y2- STA 14+89.00 TO 15+65.00



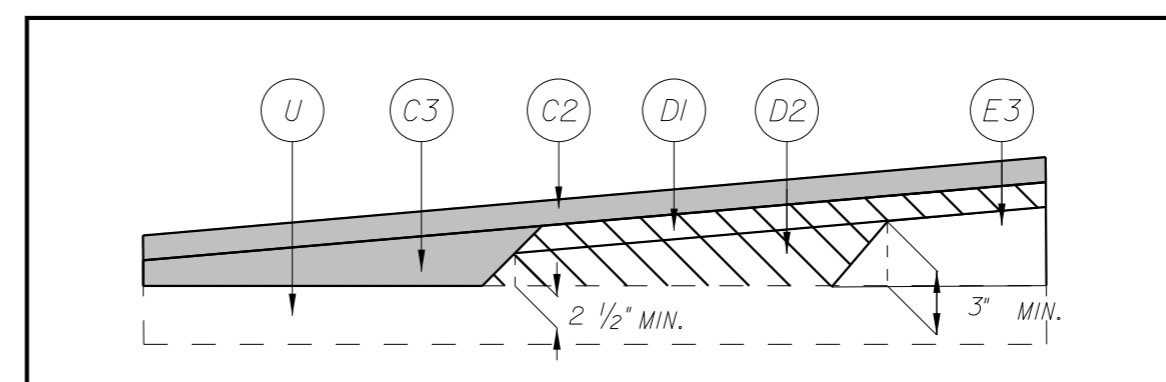
TYPICAL SECTION NO. 12
-Y5- STA 11+84.43 TO 12+72.18



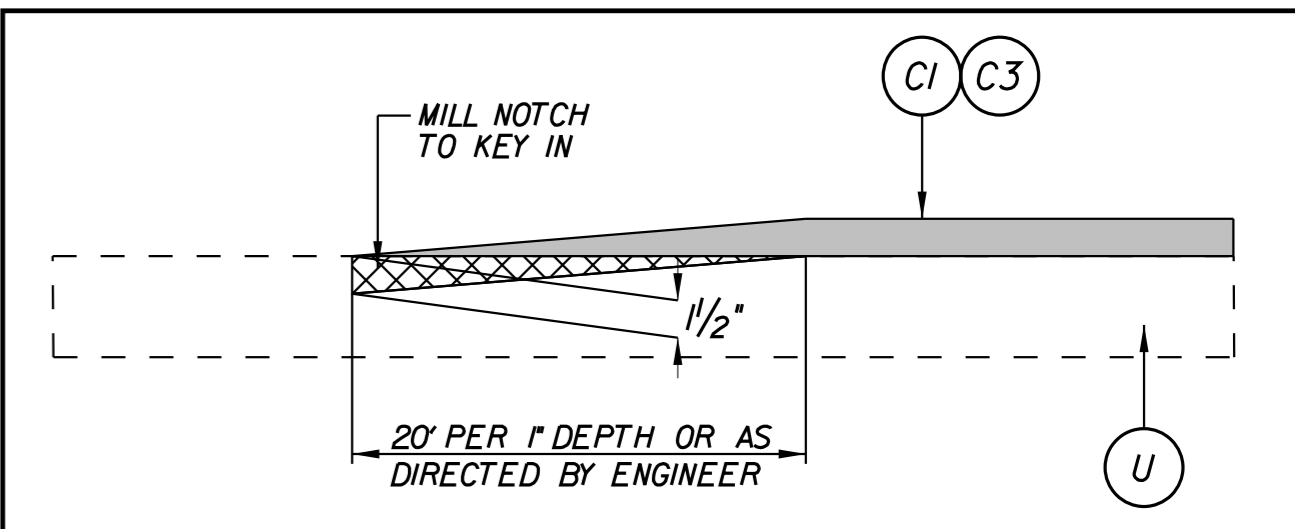
TYPICAL SECTION NO. 8
-Y4- STA 10+10.00 TO 10+90.00

PAVEMENT SCHEDULE (FINAL PAVEMENT DESIGN)	
A1	BRICK PAVER (SEE DETAIL SHEET 2B-11)
C1	1.5" S9.5C
C2	3" S9.5C
C3	VAR. DEPTH S9.5C
D1	4" 119.0C
D2	VAR. DEPTH 119.0C
E1	3" B25.0C
E2	4" B25.0C
E3	VAR. DEPTH B25.0C
R1	2'-6" CONCRETE CURB & GUTTER
R2	SPECIAL 2'-6" CONCRETE CURB & GUTTER (SPILL CURB) (SEE SHEET 2C-1)
R3	1'-6" CONCRETE CURB & GUTTER
R4	6" x 18" CONCRETE CURB
R5	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	4" CONCRETE SIDEWALK
SI	4" CONCRETE
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING DETAIL FOR RESURFACING
V	MILLING EXISTING PAVEMENT (VAR.)

NOTES:
 1. FOR -Y2- STA 11+27.90 TO 12+62.50 MAINTAIN CENTERLINE ELEVATION, VAR. DEPTH MILLING TO ESTABLISH 0.02 CROSS SLOPE.
 2. FOR -Y2- STA 13+22.00 TO 15+48.00 MAINTAIN CENTERLINE ELEVATION, VAR. DEPTH MILLING TO ESTABLISH 0.02 CROSS SLOPE.
 3. SAWCUTS OF EXISTING PAVEMENT TO BE 1" (MINIMUM).
 4. SEE PLAN VIEW FOR SPECIFIC LOCATIONS OF PROPOSED CURB AND GUTTER.
 5. PAVEMENT EDGE SLOPES 1:1 UNLESS OTHERWISE INDICATED.
 6. SAWCUTS OF EXISTING PAVEMENT TO BE 1" (MINIMUM).



WEDGING DETAIL (W) FOR RESURFACING



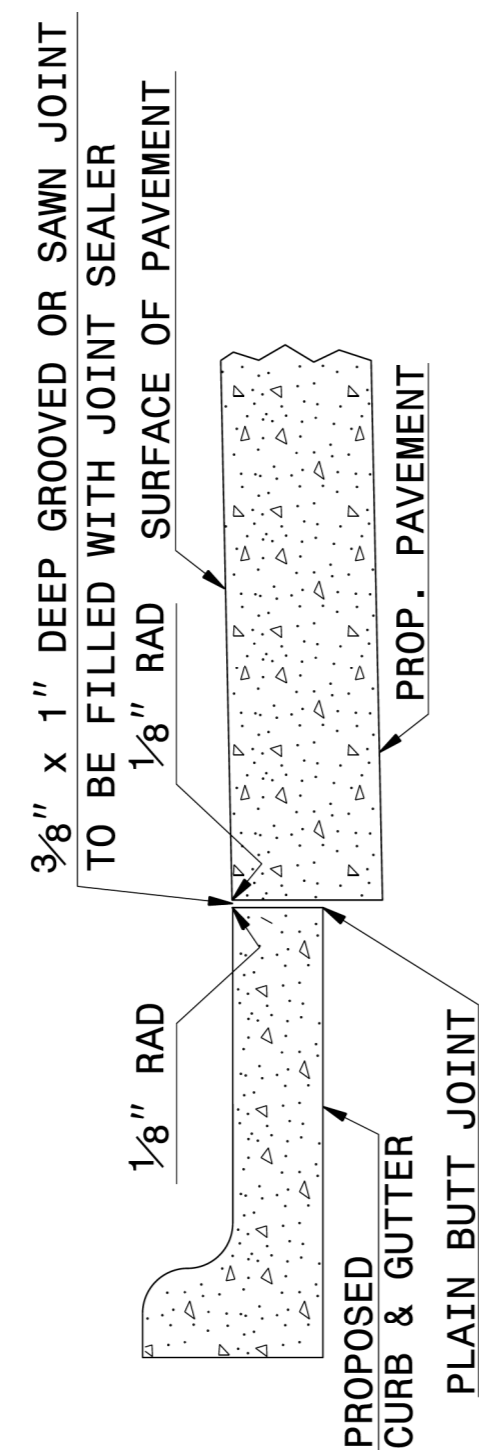
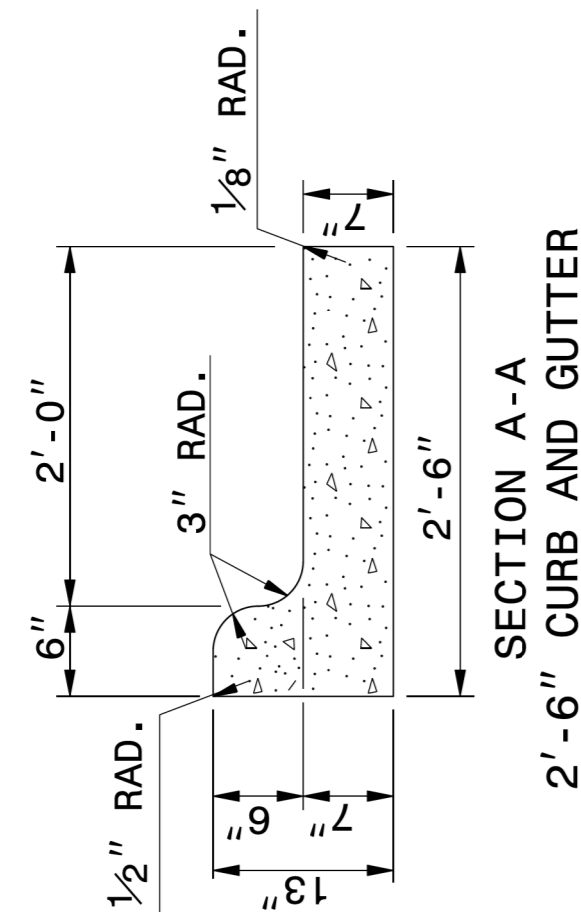
PROFILE KEY-IN DETAIL

K:\RAL_Roadway\01036387 - Div 14 IR-5843 Bryson Int\Roadway\Proj\AR-5843_rdy_typ.dgn 3/16/2020

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

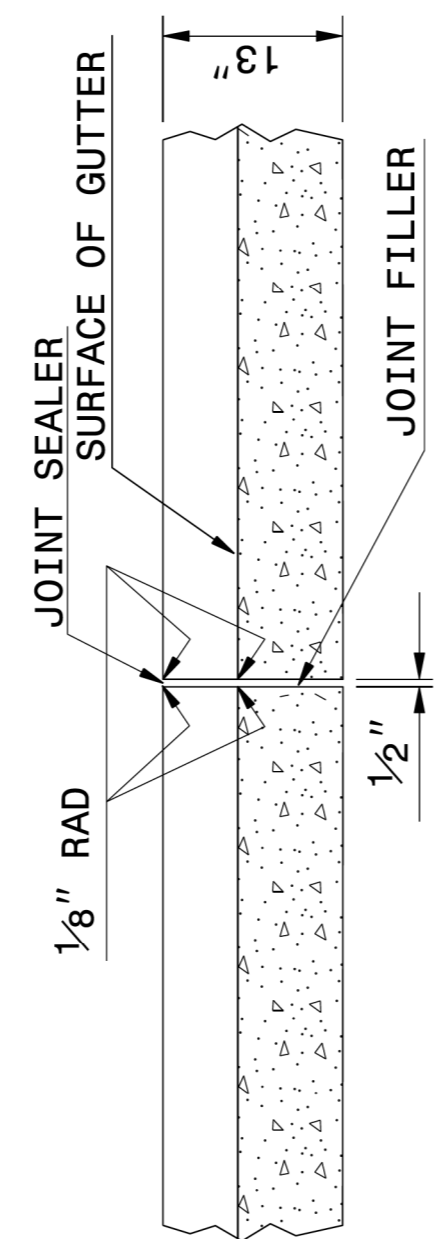
ENGLISH DETAIL DRAWING FOR
SPECIAL CURB & GUTTER
2'-6"

SHEET 1 OF 1
846d01



GENERAL NOTES:

- PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
- JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
- CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS.
- CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1 1/2" DEEP.
- FILL ALL CONSTRUCTION JOINTS, WITH JOINT FILLER AND SEALER.
- SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.

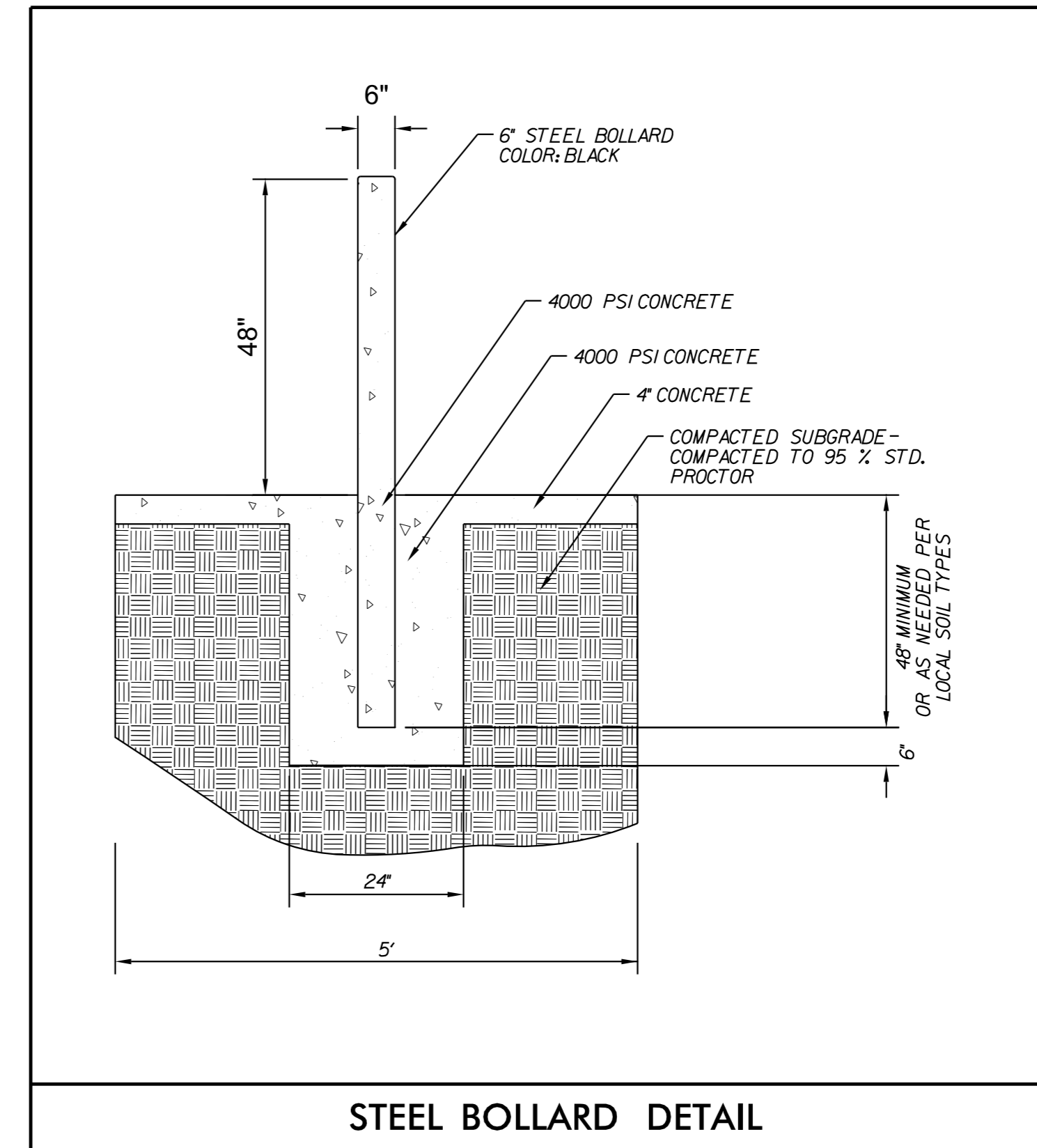


TRANSVERSE EXPANSION JOINT
IN CURB AND GUTTER

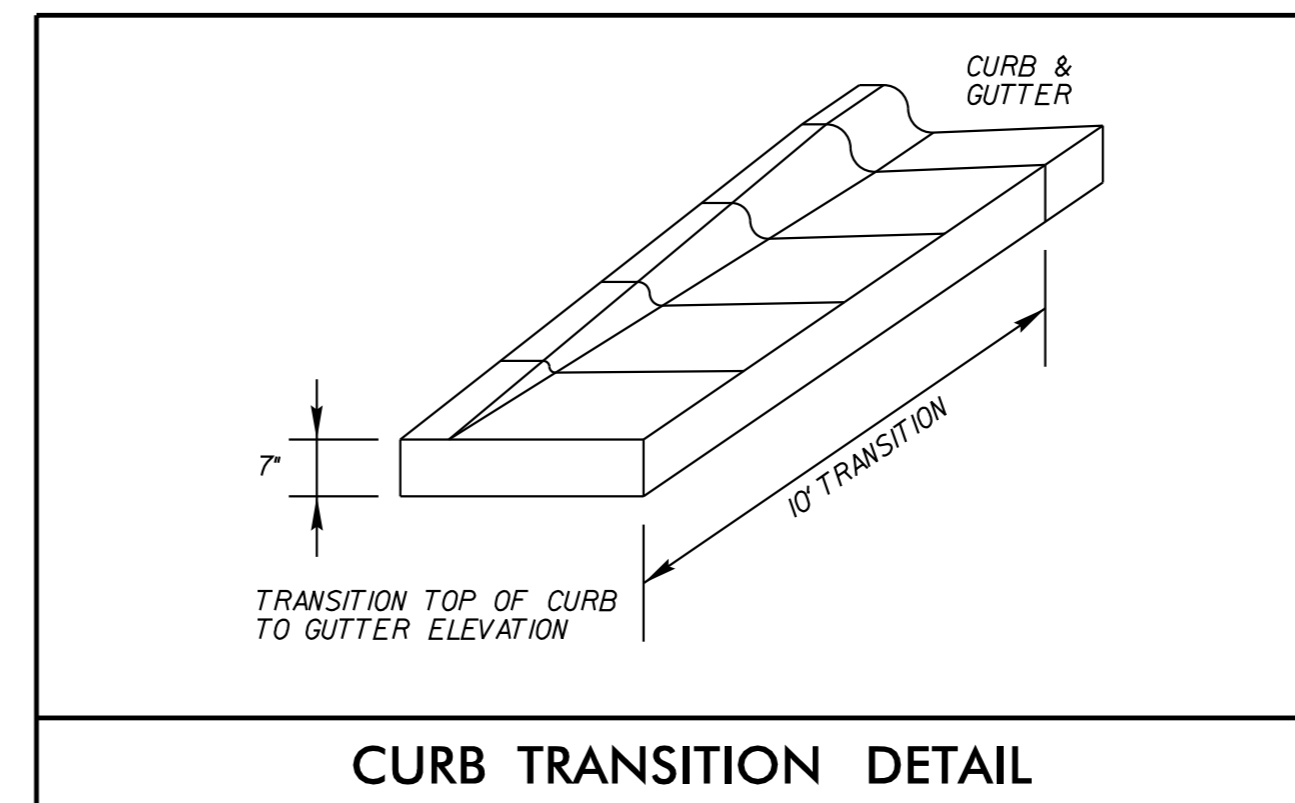
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
SPECIAL CURB & GUTTER
2'-6"

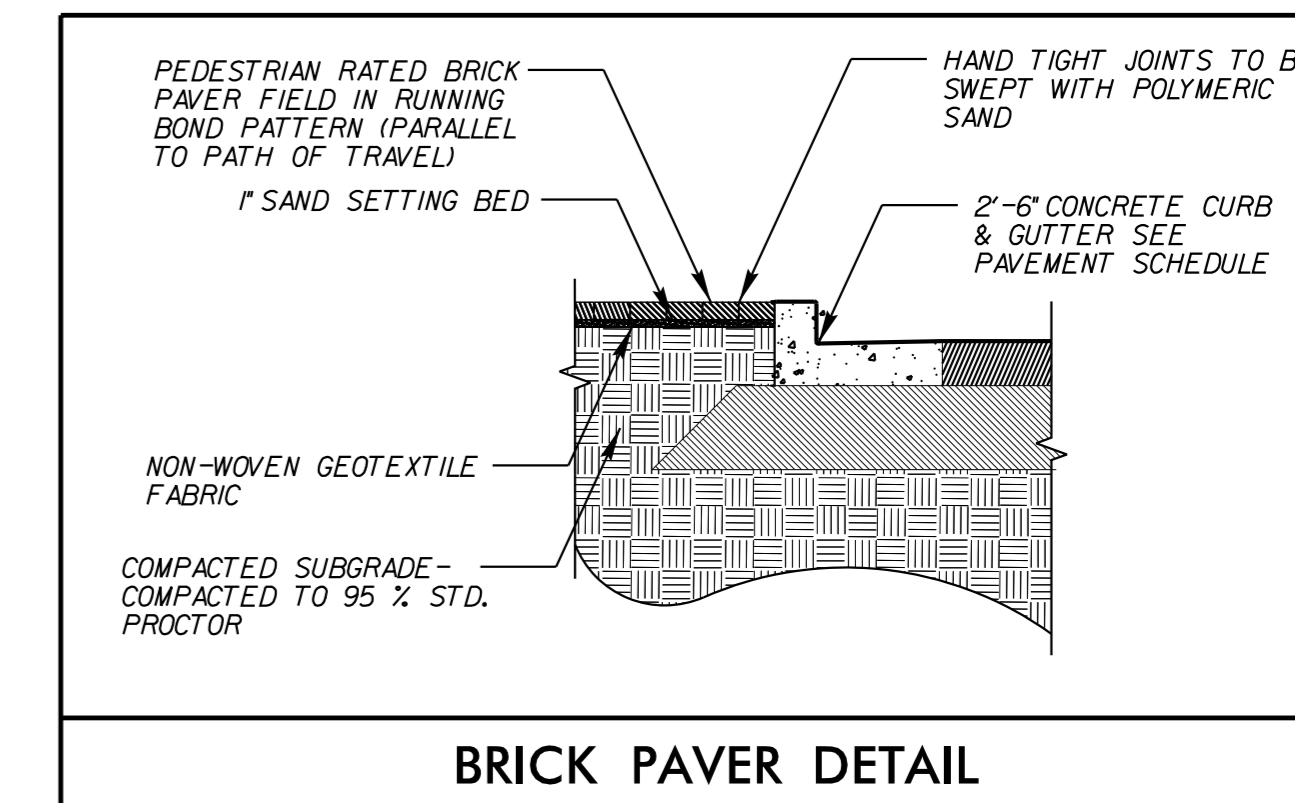
SHEET 1 OF 1
846d01



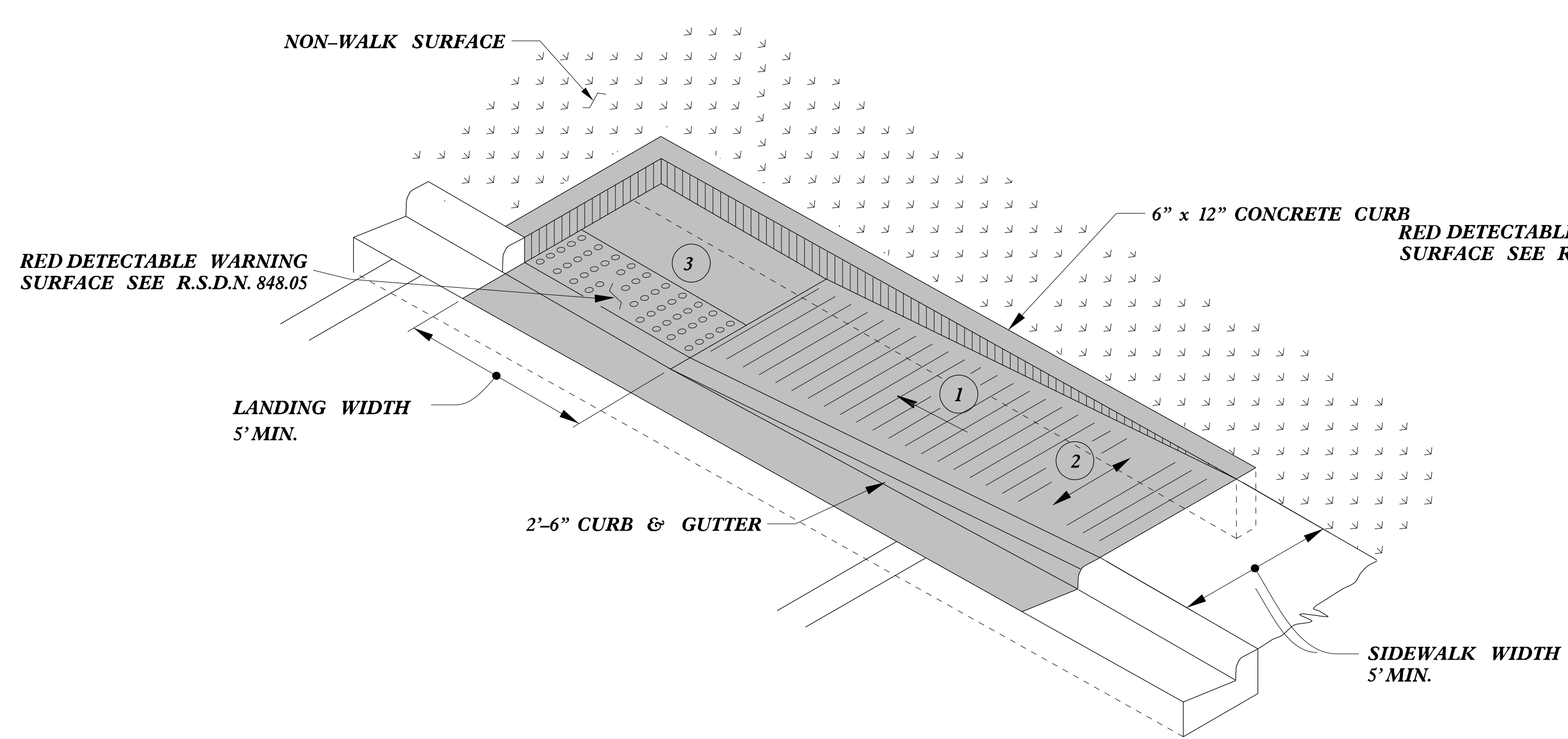
STEEL BOLLARD DETAIL



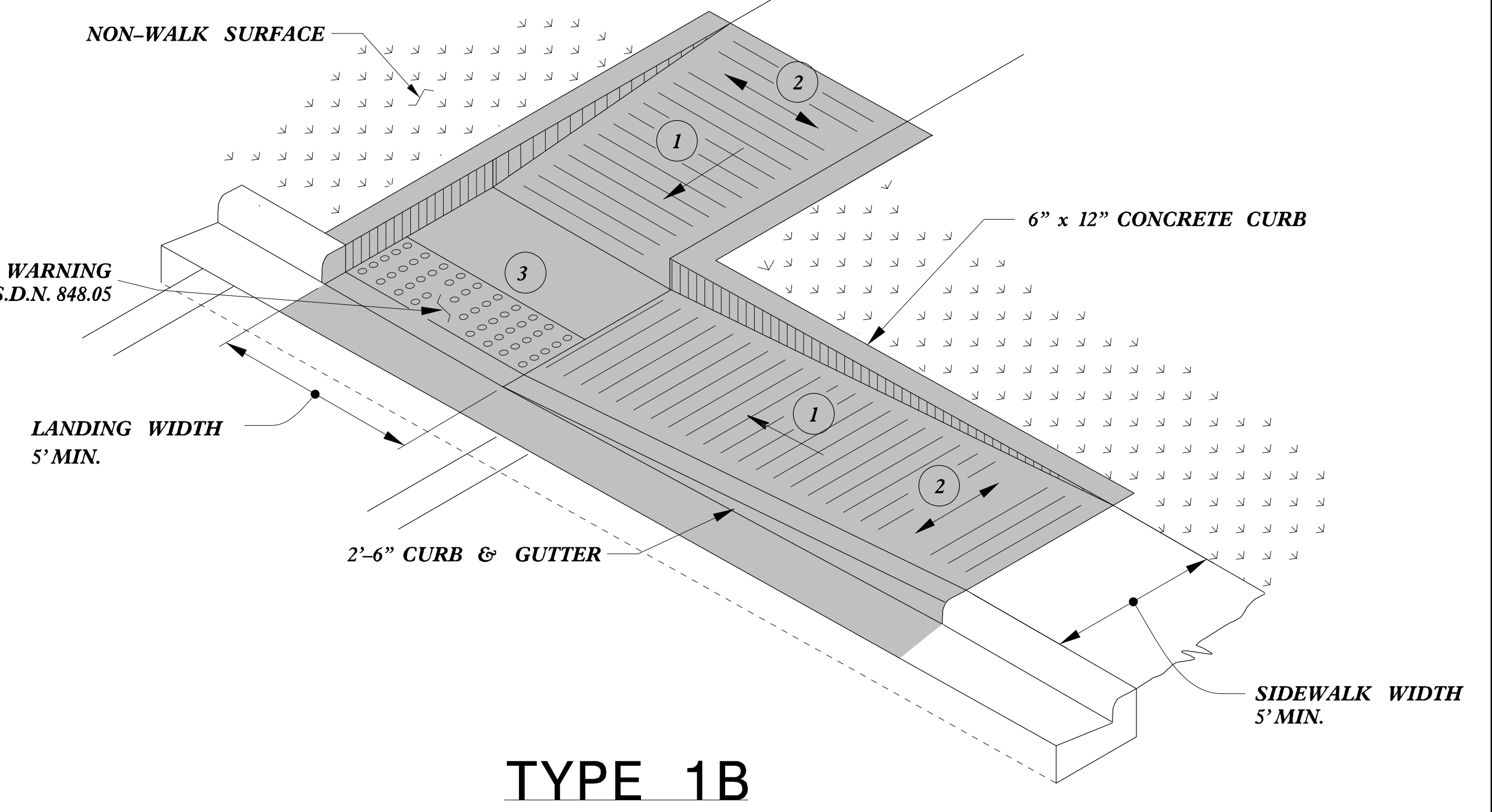
CURB TRANSITION DETAIL



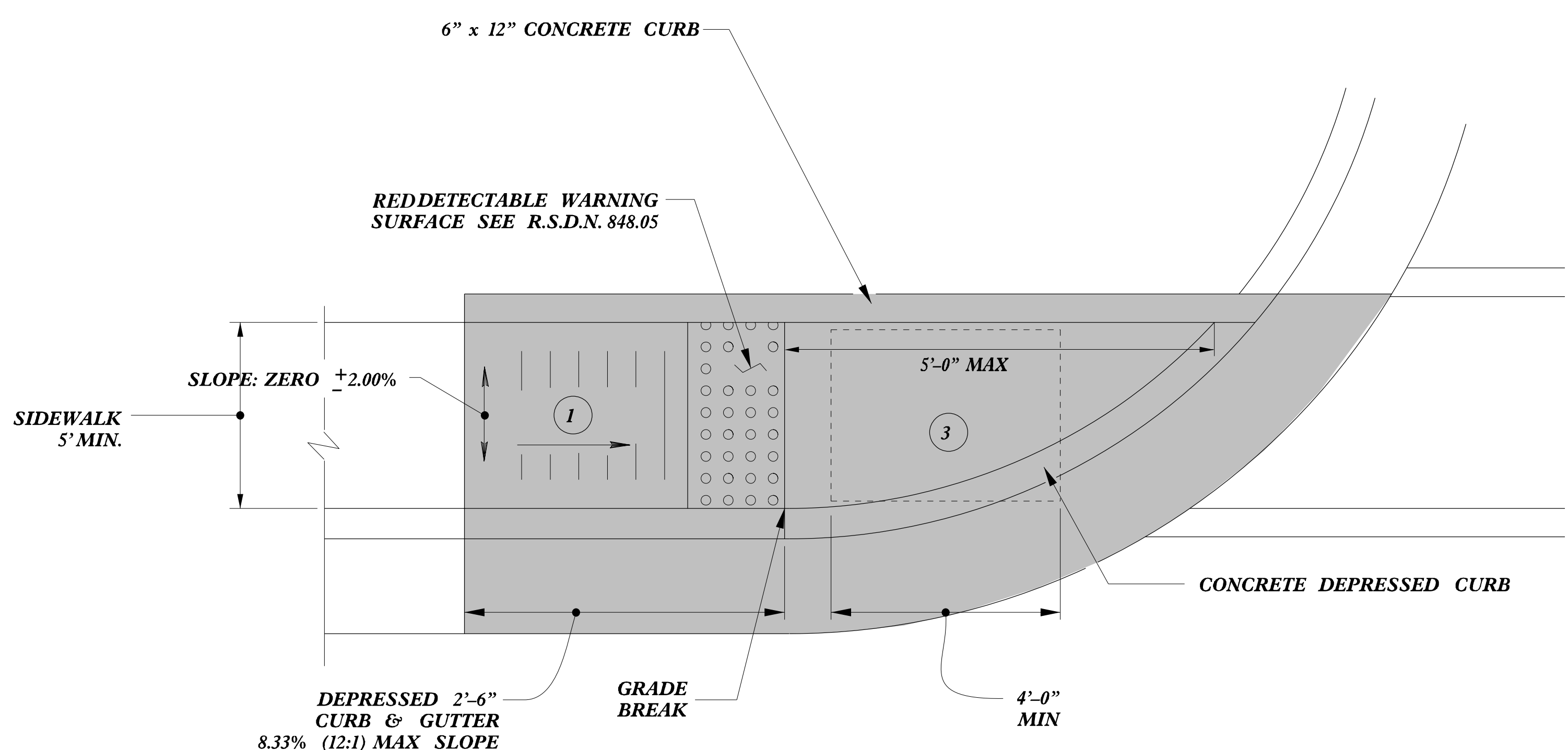
BRICK PAVER DETAIL



TYPE 1A



TYPE 1B



TYPE 1

PAY LIMITS FOR 1 CURB RAMP

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

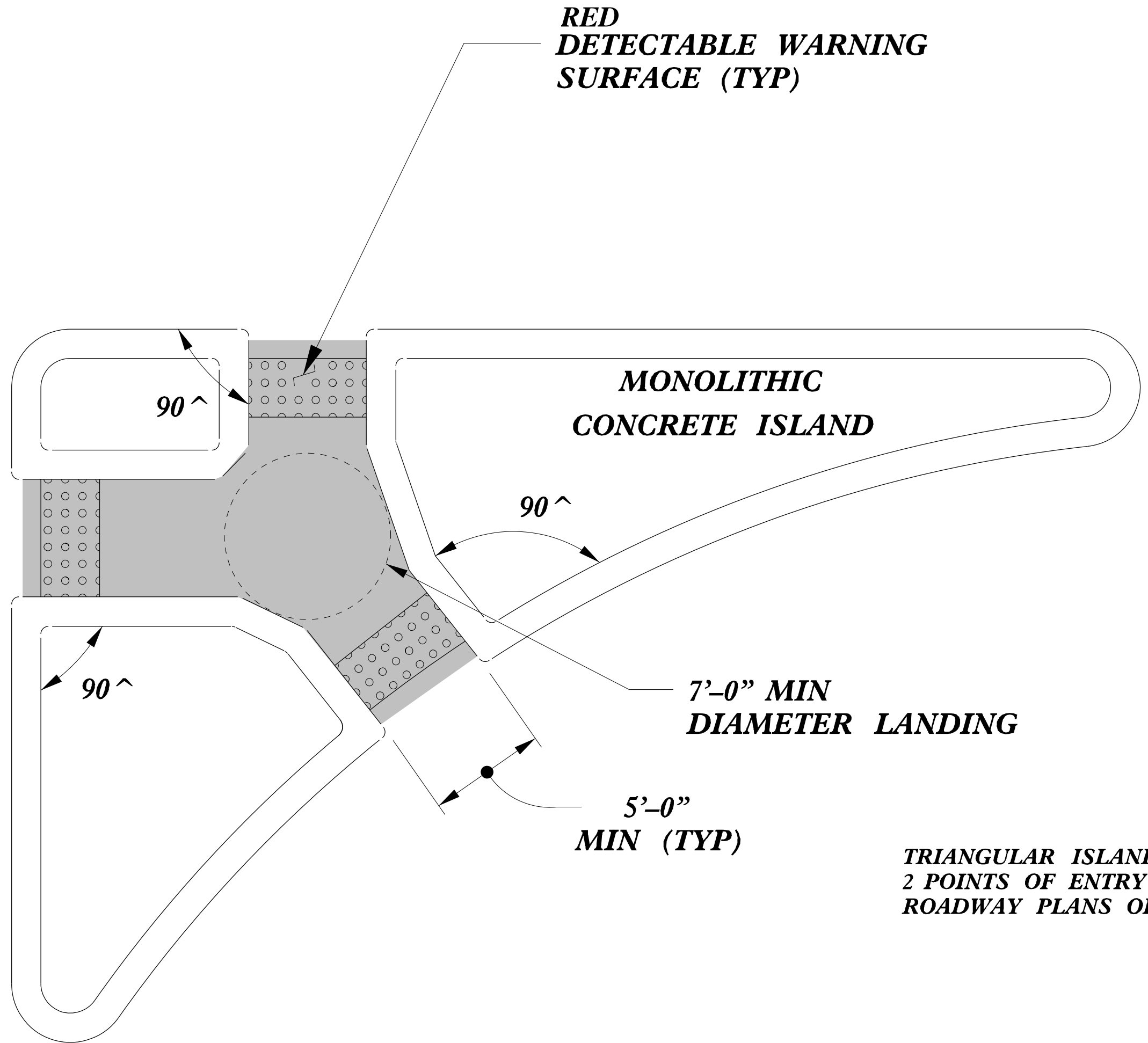
CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS
Directional Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
 MODIFIED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn

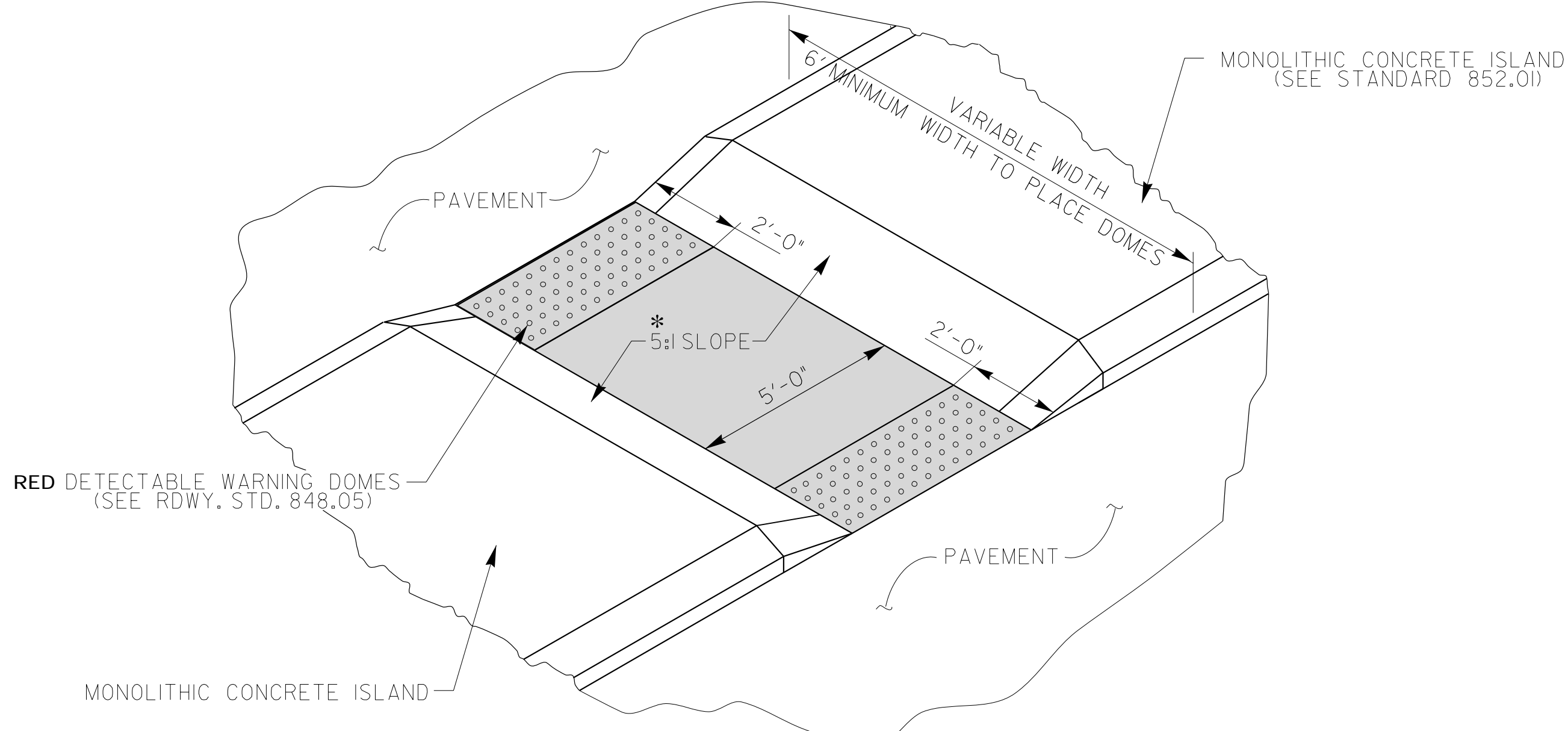
5/14/99

PAY LIMITS FOR 2 OR 3 CURB RAMPS (CALCULATE BASED ON NUMBER OF SETS OF TRUNCATED DOMES)



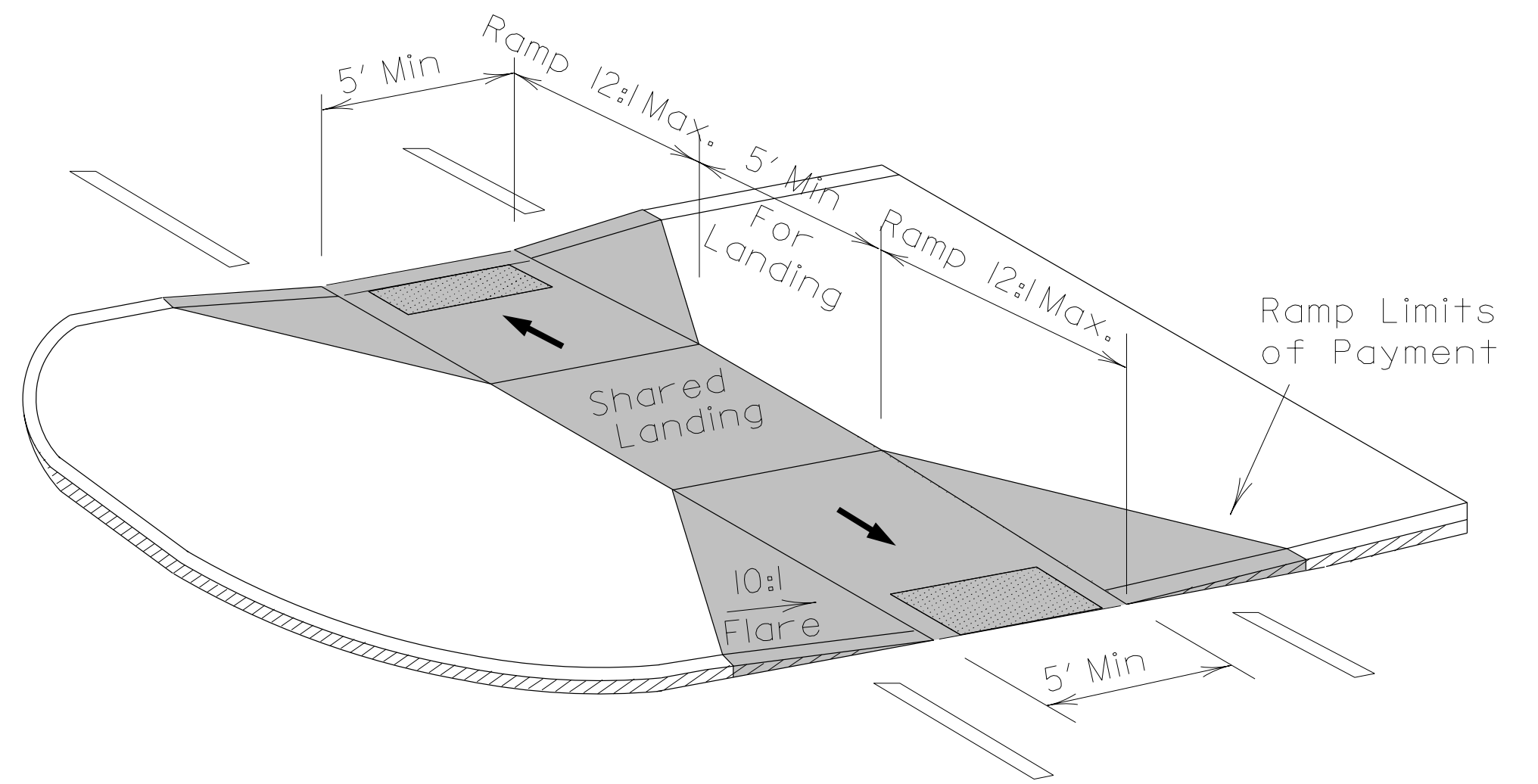
TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY 2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

TRIANGULAR ISLAND WITH CUT THROUGH



* USE 8:1 SLOPES ON OUTER TRUCK APRON ON SW CORNER OF THE ROUNDABOUT

MEDIAN ISLAND WITH CUT THROUGH



MEDIAN ISLAND CURB RAMPS

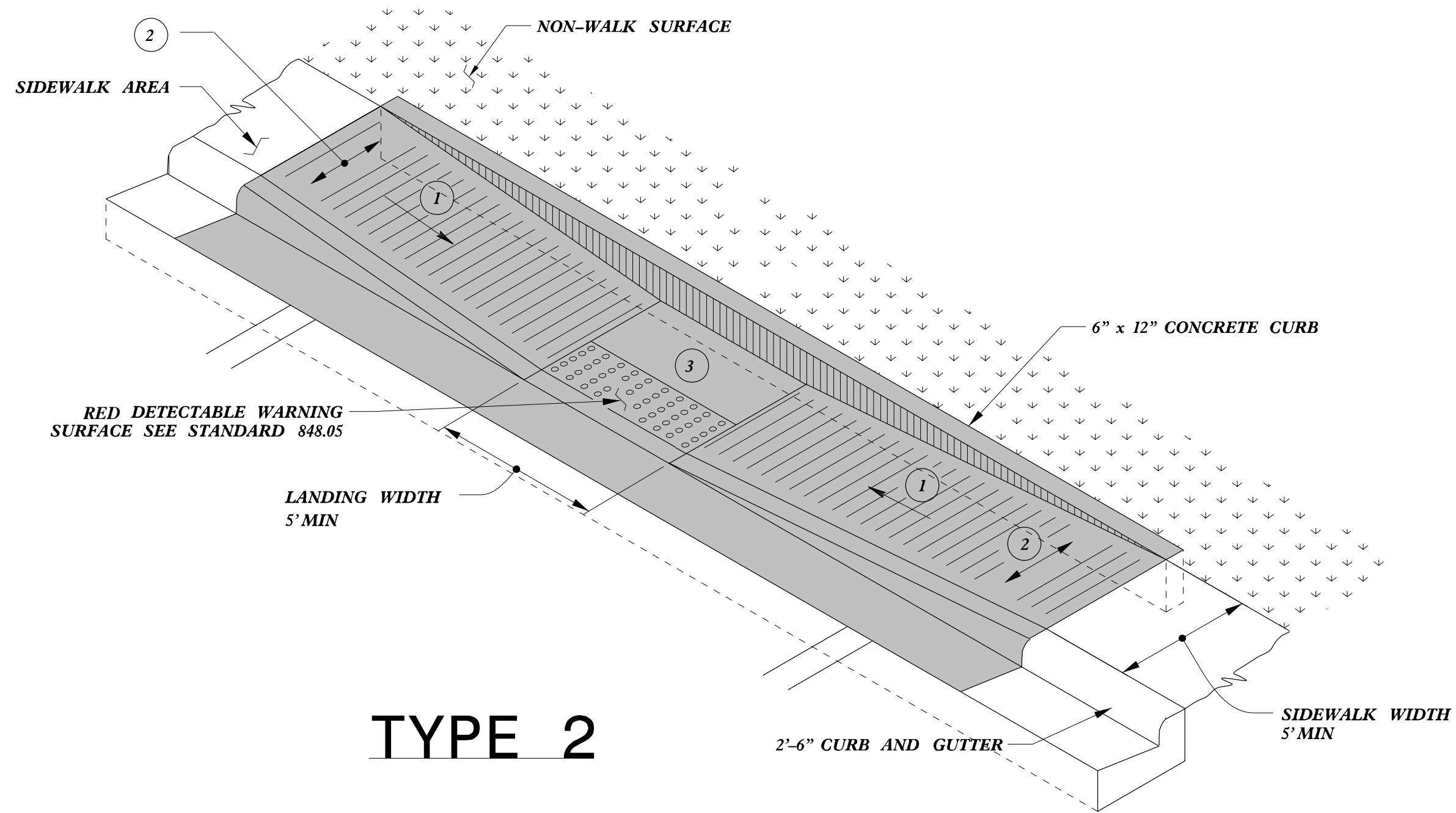
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119

CURB RAMPS Median or Turn Lane Islands

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC: .stds/2012CurbRamp/CurbRampDetails.dgn

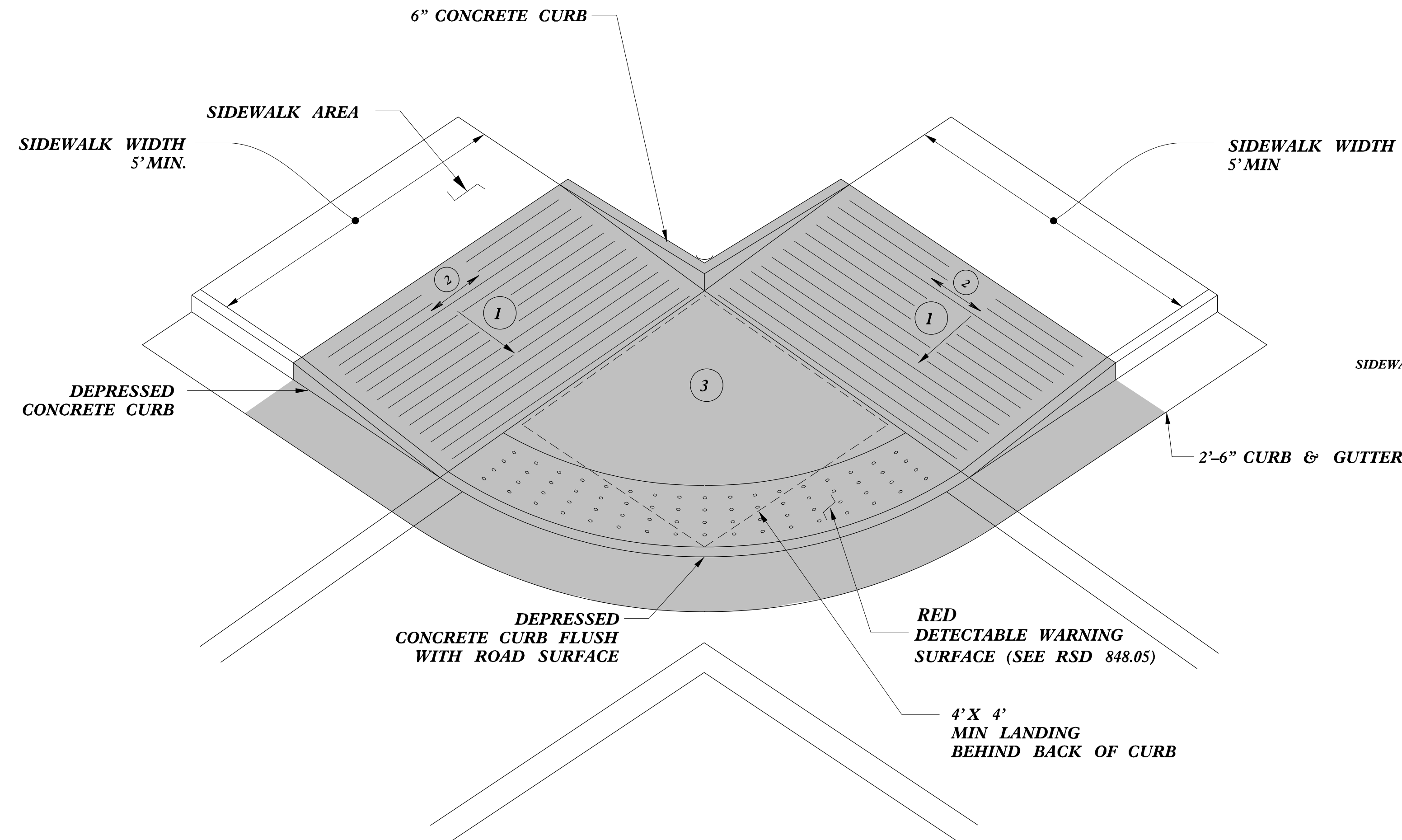
5/14/99
SYSTEMS
DESIGN
US
D



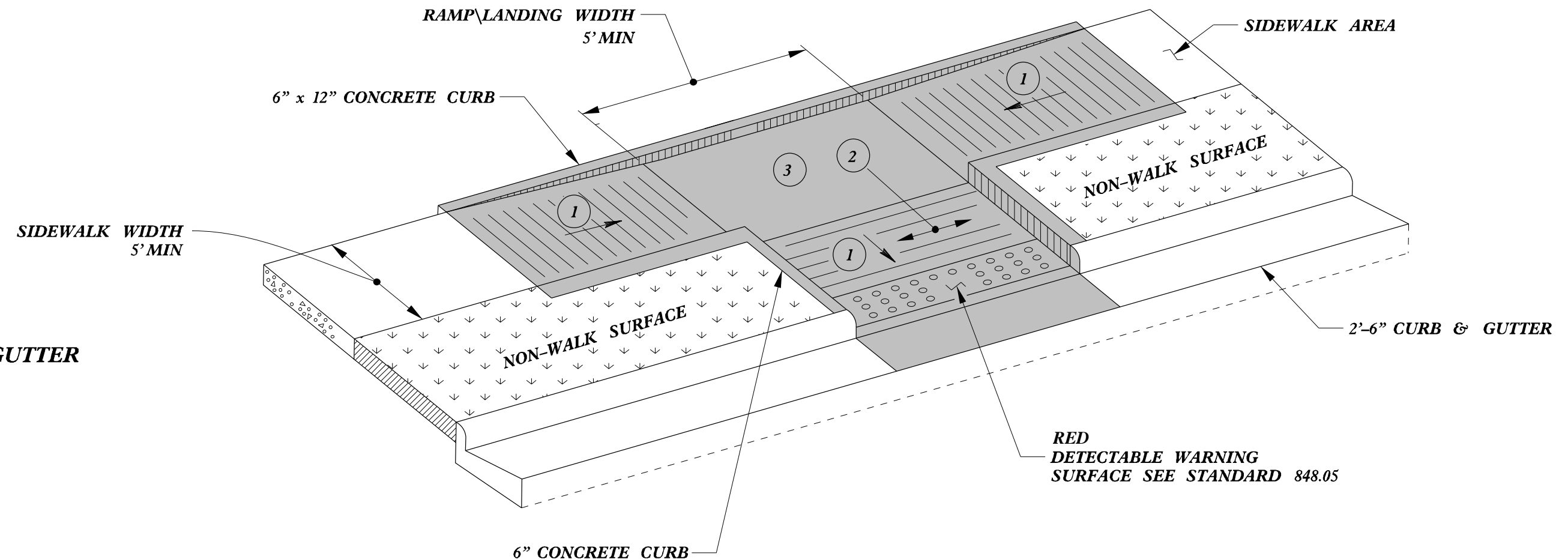
TYPE 2

PAY LIMITS FOR 1 CURB RAMP

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 2A



TYPE 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS
Parallel Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
 MODIFIED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 FILE SPEC: .stds/2012CurbRamp/CurbRampDetails.dgn

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99
SYTIME/STON
C:\STDS\STANDARDS\848.05\848.05.dgn

COMPUTED BY: CDL DATE: 3/16/2020
 CHECKED BY: CAN DATE: 3/16/2020

PROJECT REFERENCE NO. SHEET NO.
 R-5843 3B-1



SUMMARY OF EARTHWORK IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT EXCAVATION	EMBANKMENT +15%	BORROW	TOTAL WASTE
SECTION 1					
-L- 11+65.00 TO 13+80.00	57		28		29
-L1- 10+17.85 TO 21+64.00	298	958	373	75	958
-Y1- 11+81.00 TO 13+59.00	61		23		38
-Y2- 11+00.00 TO 15+65.00	140		54		86
-Y4- 10+10.00 TO 11+15.00	9		17	8	
-Y5- 10+66.00 TO 12+69.44	32	242	44	12	242
TOTAL	597	1200	538	94	1353
WASTE IN LIEU OF BORROW				-94	-94
PROJECT TOTALS	597	1200	538		1259
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT					
GRAND TOTALS	597	1200	538		1259
SAY	600	1200			1260
EST SHALLOW UNDERCUT	250 CY				

REMOVAL OF EXISTING ASPHALT PAVEMENT			
LINE	STATION TO STATION	LOCATION	SQ. YDS.
-L1-	18+13 TO 18+56	RT	76
-L1-	18+98 TO 19+75	RT	155
-Y1-	11+90 TO 12+23	LT	34
-Y1-	12+59 TO 12+65	LT	4
TOTAL			269

NOTE: APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, FINE GRADING, CLEARING AND GRUBBING, AND REMOVAL OF EXISTING PAVEMENT, WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR "GRADING."
 NOTE: ESP HAS DETERMINED THAT THERE IS NO PETROLEUM CONTAMINATED SOIL WITHIN THE PROJECT LIMITS.
 NOTE: THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY ESP.

3/17/2020 K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int)\Roadway\Pro\NR-5843_rdy_sum.dgn

COMPUTED BY: CDL DATE: 6/26/18
CHECKED BY: BTV DATE: 6/26/18

PROJECT NO. R-5843 SHEET NO. 3D-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Table with columns for Line & Station, Offset, Structure Number, Top Invert Elevation, Invert Elevation, Minimum Required Slope, Pipe Size (12-24 inches), Pipe Material (C.S. PIPE, R.C. PIPE CLASS III, IV, V), Endwalls, Reinforced Endwalls, Drainage Structure, Quantities for Drainage Structures, Frame, Grates, and Hood, Concrete Transitional Section, and Remarks. Includes a 'SHEET TOTALS' row at the bottom.

COMPUTED BY: _____	CDL	DATE: 3/16/2020
CHECKED BY: _____	CAN	DATE: 3/16/2020

PROJECT REFERENCE NO.	SHEET NO.
R-5843	3G-1



SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LTRT	Drain Type* UD/BD/SD	LF
-L1-	18 + 03	19 + 69	LT	SD	180
-Y5-	12 + 35	12 + 92	LT	SD	60
CONTINGENCY				SD	200
TOTAL LF					440
SAY					440

- *UD = Underdrain
- *BD = Blind Drain
- *SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE / STABILIZATION


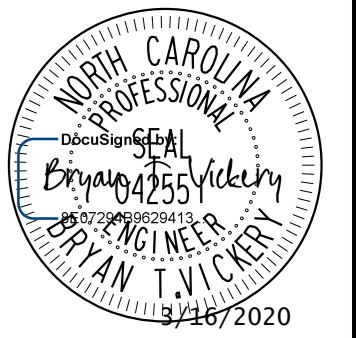

LINE	Station	Station	Aggregate Type* ASU(1/2) /AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
-L1-	17 + 85	18 + 30			80	80	56		
-L1-	18 + 30	19 + 50					592		
-L1-	19 + 50	20 + 75			35	35	156		
-Y4-	10 + 10	10 + 40			35	35	38		
-Y5-	12 + 35	12 + 67					158		
CONTINGENCY					100	100	300		
TOTAL CY/TONS/SY					250	250**	1300**	0	0
SAY					250	250**	1300**		

*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)
 *AST = Aggregate Stabilization
 **Total tons of "Geotextile for Class IV Subgrade Stabilization" and total square yards of "Geotextile for Soil Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the geotextile quantity shown in the Item Sheets of the Proposal.

THE FOLLOWING QUANTITIES ARE PER THE "GEOTECHNICAL REPORT - RECOMMENDATIONS" LETTER (DATED JUNE 2018)

- ESTIMATED SHALLOW UNDERCUT = 250 CY
- ESTIMATED CLASS IV SUBGRADE STABILIZATION = 250 TONS
- ESTIMATED UNDERCUT EXCAVATION = 1,200 CY
- ESTIMATED SELECT GRANULAR MATERIAL = 950 CY

3/17/2020 K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int)\Roadway\Proj\R-5843_rdy_sum.dgn

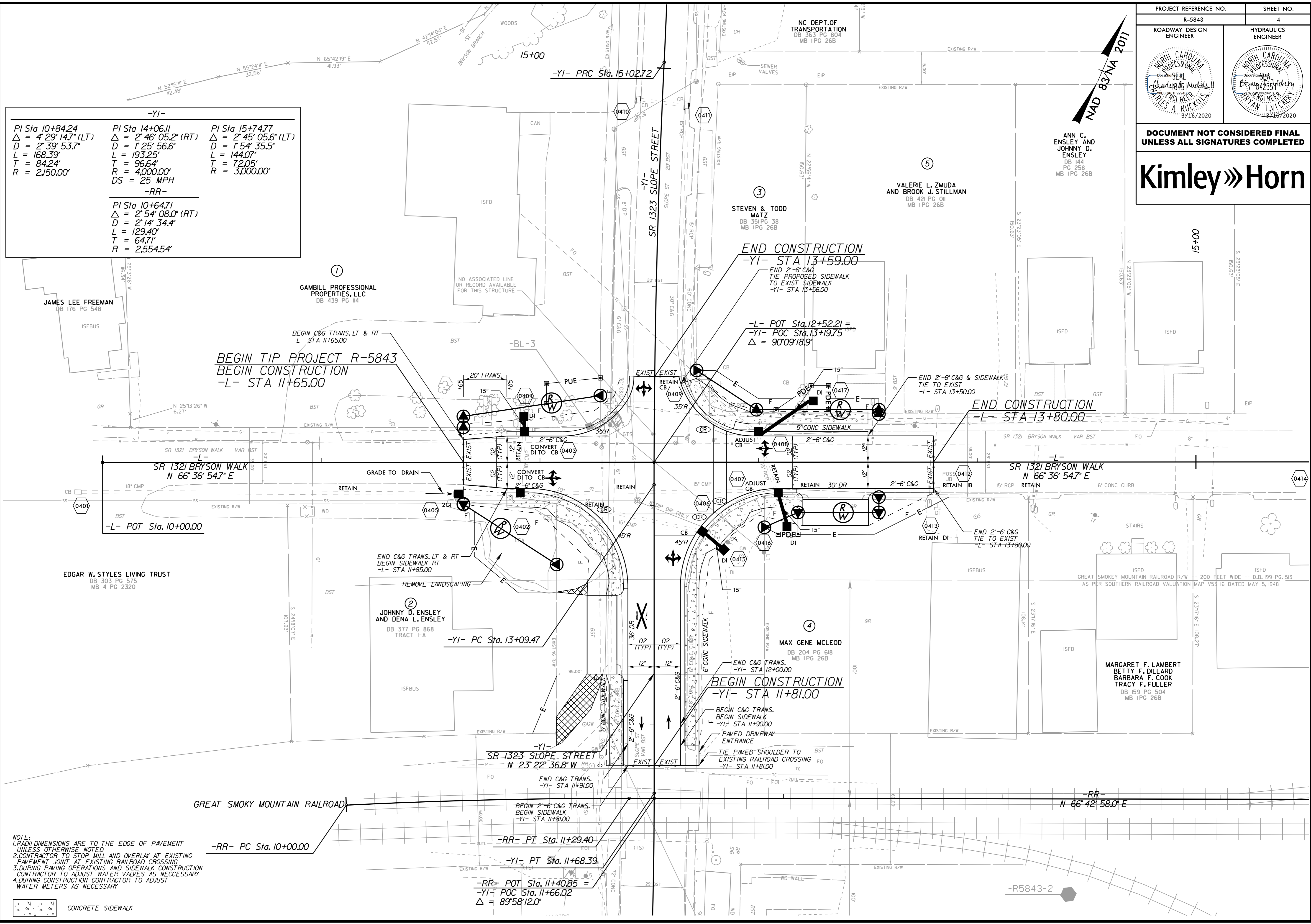
PROJECT REFERENCE NO.		SHEET NO.	
R-5843		4	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
			

-YI-

PI Sta 10+84.24 Δ = 4' 29" 14.7" (LT) D = 2' 39" 53.7" L = 168.39' T = 84.24' R = 2,150.00'	PI Sta 14+06.11 Δ = 2' 46" 05.2" (RT) D = 1' 25" 56.6" L = 193.25' T = 96.64' R = 4,000.00' DS = 25 MPH	PI Sta 15+74.77 Δ = 2' 45" 05.6" (LT) D = 1' 54" 35.5" L = 144.07' T = 72.05' R = 3,000.00'
--	---	--

-RR-

PI Sta 10+64.71 Δ = 2' 54" 08.0" (RT) D = 2' 14" 34.4" L = 129.40' T = 64.71' R = 2,554.54'
--



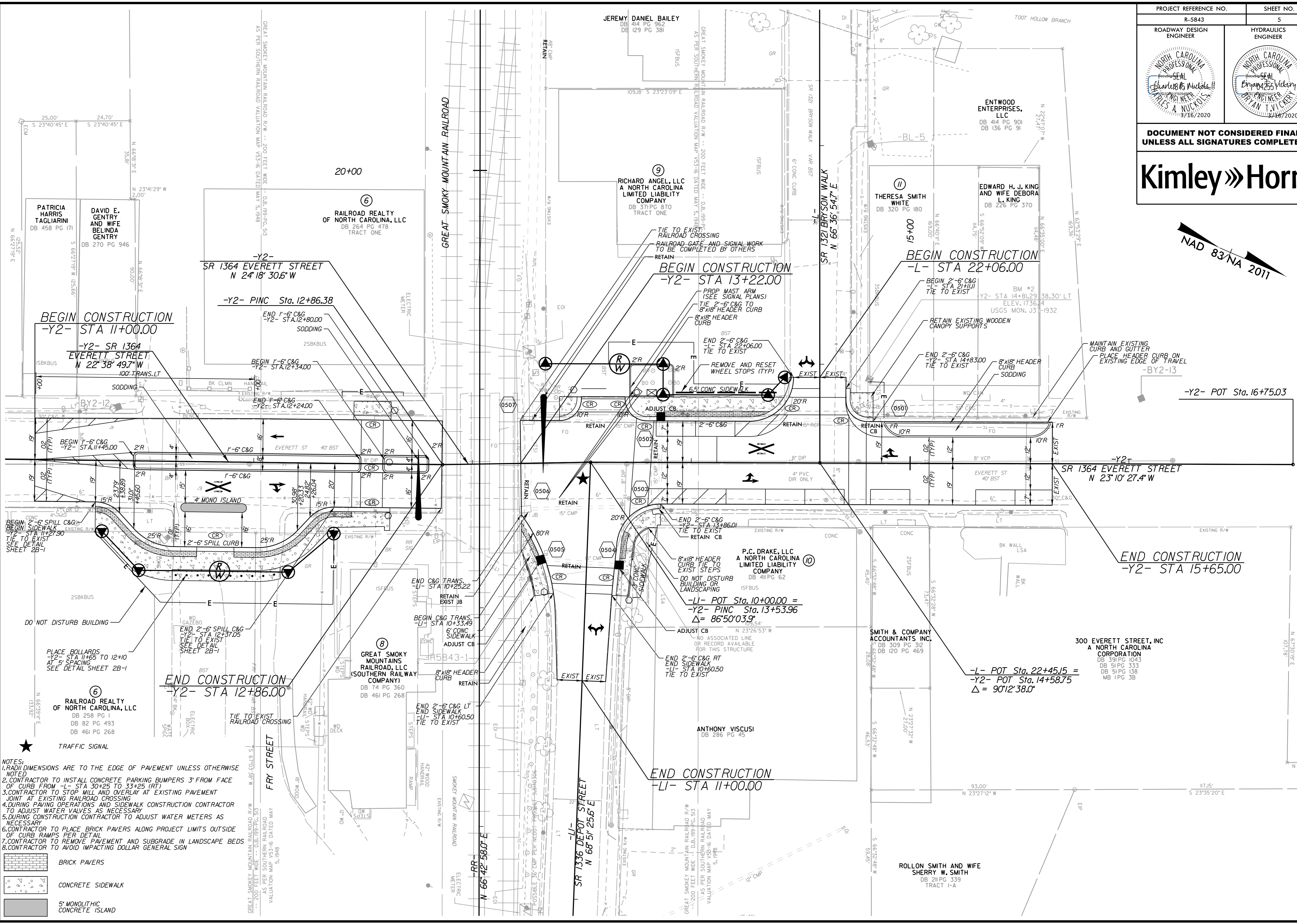
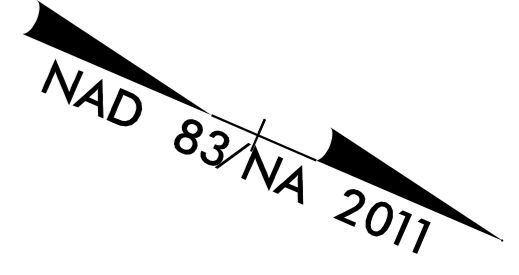
NOTE:
 1. RADIUS DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
 2. CONTRACTOR TO STOP MILL AND OVERLAY AT EXISTING PAVEMENT JOINT AT EXISTING RAILROAD CROSSING.
 3. DURING PAVING OPERATIONS AND SIDEWALK CONSTRUCTION CONTRACTOR TO ADJUST WATER VALVES AS NECESSARY.
 4. DURING CONSTRUCTION CONTRACTOR TO ADJUST WATER METERS AS NECESSARY.

 CONCRETE SIDEWALK

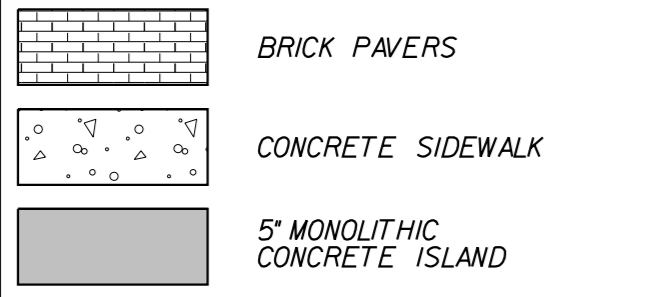
-R5843-2

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

Kimley»Horn



- NOTES:
1. RADI DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED
 2. CONTRACTOR TO INSTALL CONCRETE PARKING BUMPERS 3' FROM FACE OF CURB FROM -L- STA 30+25 TO 33+25 (RT)
 3. CONTRACTOR TO STOP MILL AND OVERLAY AT EXISTING PAVEMENT JOINT AT EXISTING RAILROAD CROSSING
 4. DURING PAVING OPERATIONS AND SIDEWALK CONSTRUCTION CONTRACTOR TO ADJUST WATER VALVES AS NECESSARY
 5. DURING CONSTRUCTION CONTRACTOR TO ADJUST WATER METERS AS NECESSARY
 6. CONTRACTOR TO PLACE BRICK PAVERS ALONG PROJECT LIMITS OUTSIDE OF CURB RAMP PER DETAIL
 7. CONTRACTOR TO REMOVE PAVEMENT AND SUBGRADE IN LANDSCAPE BEDS
 8. CONTRACTOR TO AVOID IMPACTING DOLLAR GENERAL SIGN


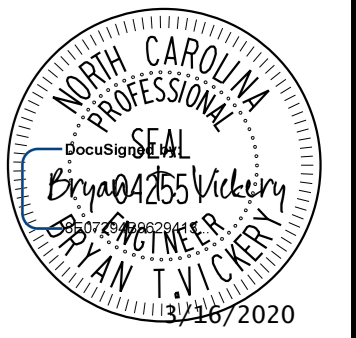



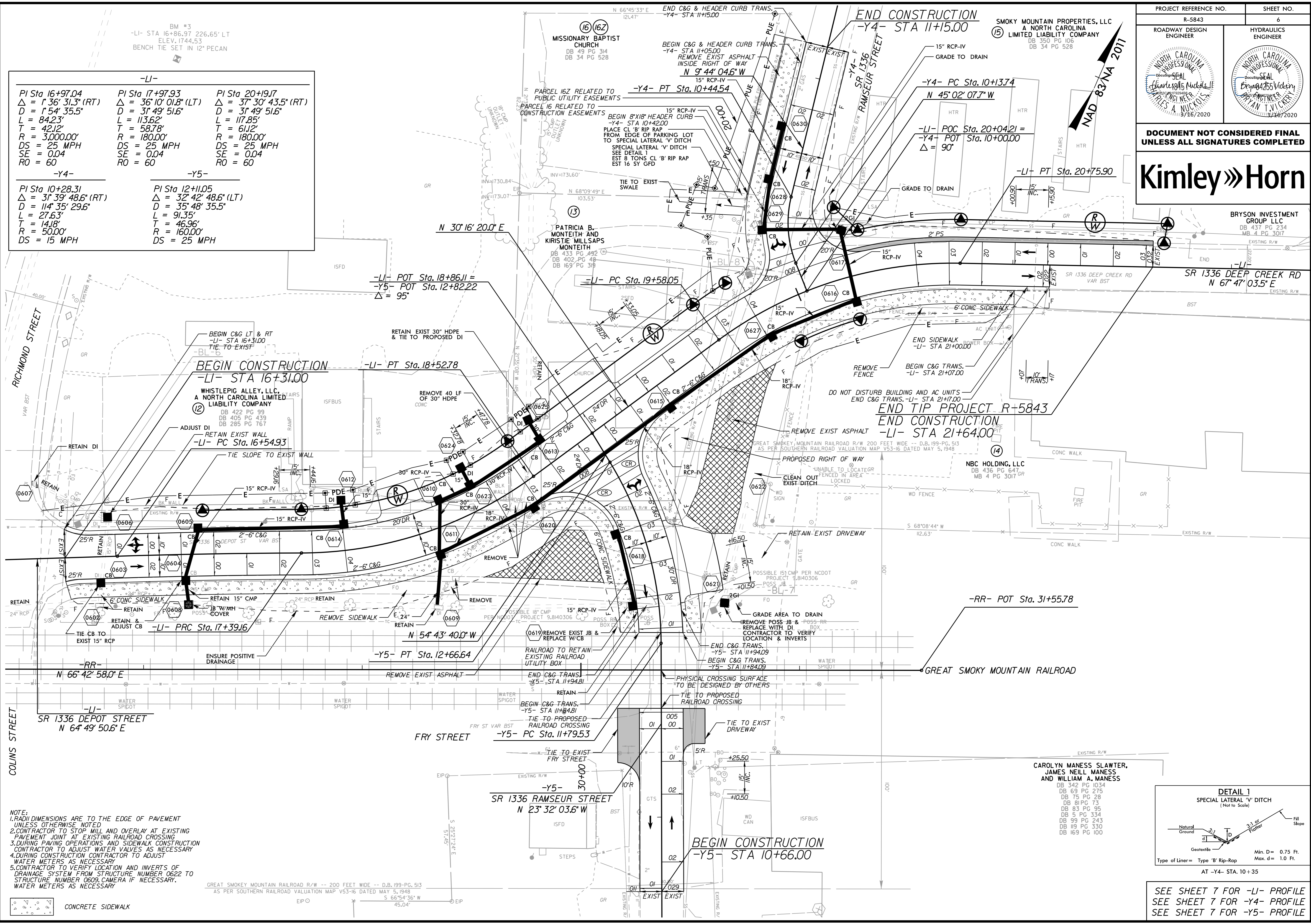
GREAT SMOKEY MOUNTAIN RAILROAD R/W -- 200 FEET WIDE -- D.B. 09-99-PC-513
AS PER SOUTHERN RAILROAD VALUATION MAP V53-16 DATED MAY 5, 1948

POSSIBLE 35' CMP PER NCDOT PROJECT 9010196-9-01
-- 200 FEET WIDE -- D.B. 09-99-PC-513
AS PER SOUTHERN RAILROAD VALUATION MAP V58-16 DATED MAY 5, 1948

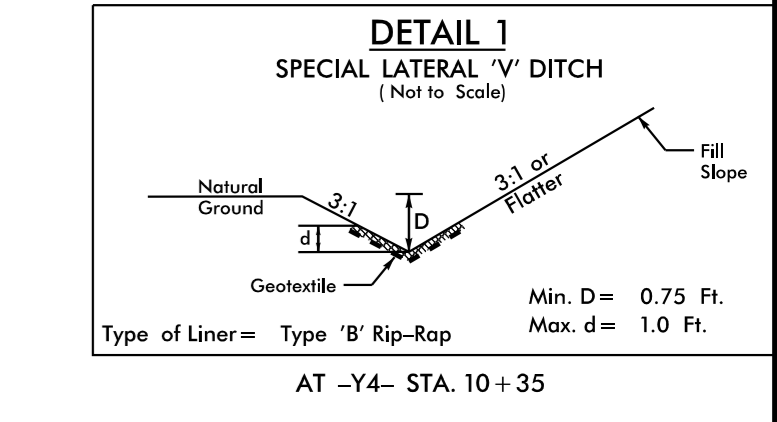
BM #3
-LI- STA 16+86.97 226.65' LT
ELEV. 1744.53
BENCH TIE SET IN 12" PECAN

-LI-		
PI Sta 16+97.04 Δ = 1° 36' 31.3" (RT) D = 1° 54' 35.5" L = 84.23' T = 42.12' R = 3,000.00' DS = 25 MPH SE = 0.04 RO = 60	PI Sta 17+97.93 Δ = 36° 10' 01.8" (LT) D = 3° 49' 51.6" L = 113.62' T = 58.78' R = 180.00' DS = 25 MPH SE = 0.04 RO = 60	PI Sta 20+19.17 Δ = 37° 30' 43.5" (RT) D = 3° 49' 51.6" L = 117.85' T = 61.12' R = 180.00' DS = 25 MPH SE = 0.04 RO = 60
-Y4-		
PI Sta 10+28.31 Δ = 3° 39' 48.6" (RT) D = 114° 35' 29.6" L = 27.63' T = 1418' R = 50.00' DS = 15 MPH	-Y5-	
	PI Sta 12+11.05 Δ = 32° 42' 48.6" (LT) D = 35° 48' 35.5" L = 91.35' T = 46.96' R = 160.00' DS = 25 MPH	

PROJECT REFERENCE NO. R-5843	SHEET NO. 6
ROADWAY DESIGN ENGINEER SMOKY MOUNTAIN PROPERTIES, LLC A NORTH CAROLINA LIMITED LIABILITY COMPANY DB 359 PG 106 DB 34 PG 528	HYDRAULICS ENGINEER SMOKY MOUNTAIN PROPERTIES, LLC A NORTH CAROLINA LIMITED LIABILITY COMPANY DB 359 PG 106 DB 34 PG 528
 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
	



- NOTE:
1. RADI DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED
 2. CONTRACTOR TO STOP MILL AND OVERLAY AT EXISTING PAVEMENT JOINT AT EXISTING RAILROAD CROSSING
 3. DURING PAVING OPERATIONS AND SIDEWALK CONSTRUCTION CONTRACTOR TO ADJUST WATER VALVES AS NECESSARY
 4. DURING CONSTRUCTION CONTRACTOR TO ADJUST WATER METERS AS NECESSARY
 5. CONTRACTOR TO VERIFY LOCATION AND INVERTS OF DRAINAGE SYSTEM FROM STRUCTURE NUMBER 0622 TO STRUCTURE NUMBER 0609, CAMERA IF NECESSARY, WATER METERS AS NECESSARY



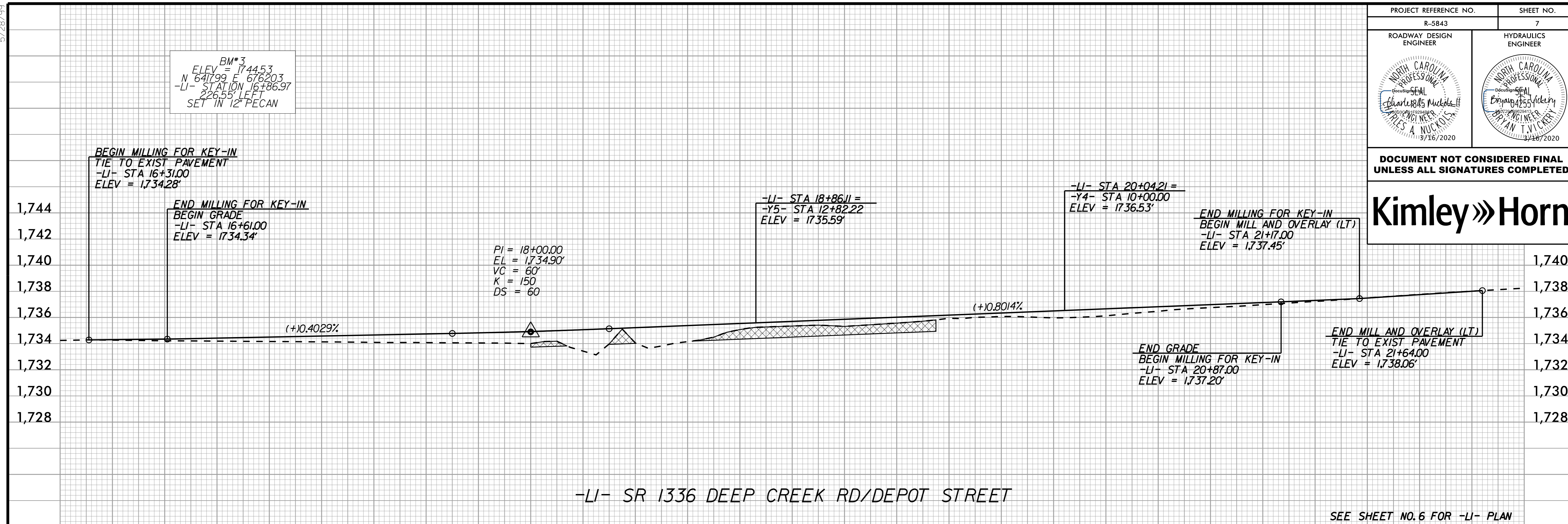
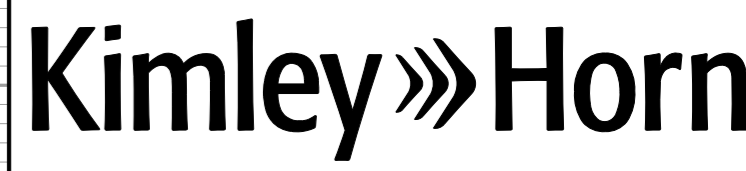
AT -Y4- STA. 10+35

SEE SHEET 7 FOR -LI- PROFILE
SEE SHEET 7 FOR -Y4- PROFILE
SEE SHEET 7 FOR -Y5- PROFILE

5/28/99

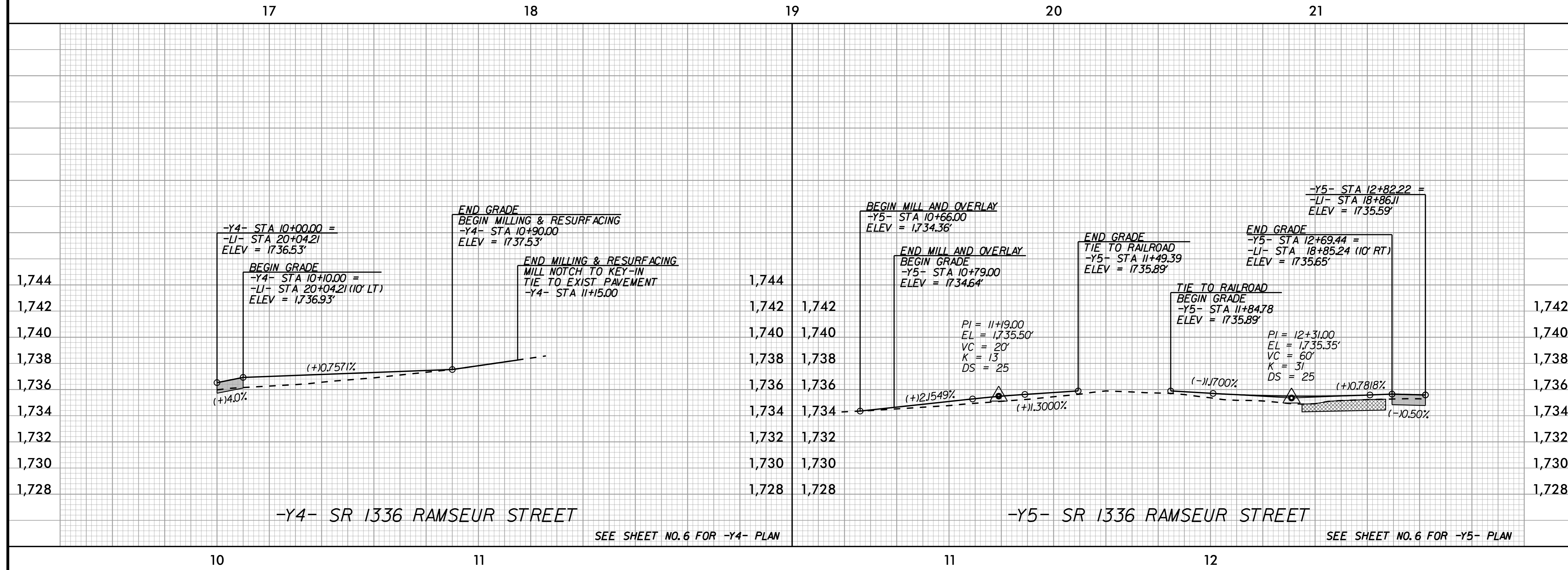
PROJECT REFERENCE NO. R-5843	SHEET NO. 7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



-LI- SR 1336 DEEP CREEK RD/DEPOT STREET

SEE SHEET NO. 6 FOR -LI- PLAN



-Y4- SR 1336 RAMSEUR STREET

-Y5- SR 1336 RAMSEUR STREET

SEE SHEET NO. 6 FOR -Y4- PLAN

SEE SHEET NO. 6 FOR -Y5- PLAN

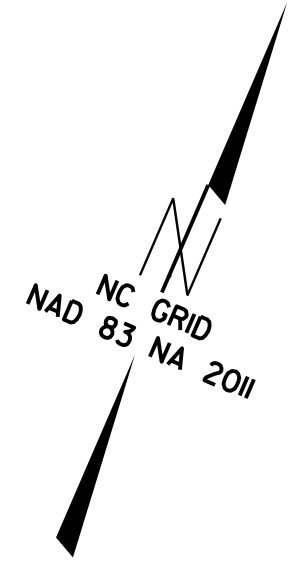
09/08/99

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

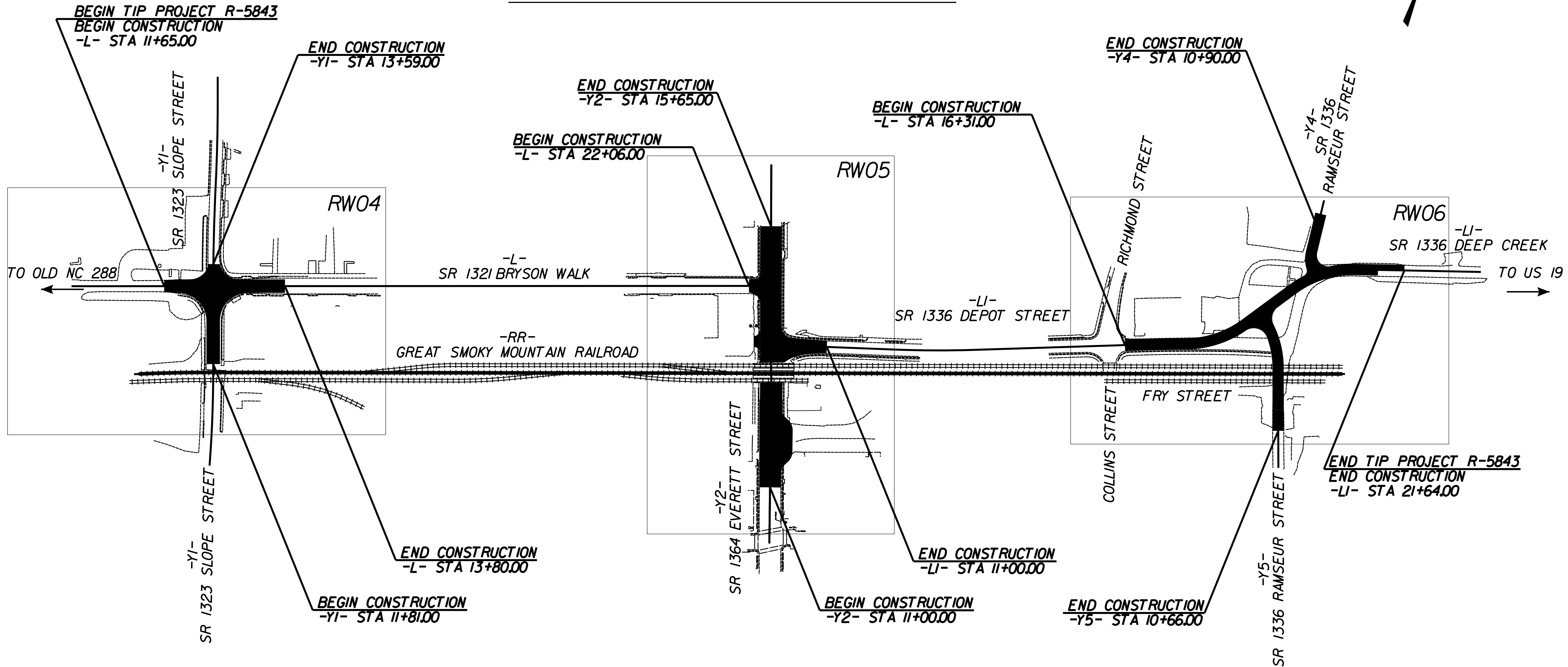
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5843	RW01	

SURVEY CONTROL, EXISTING CENTERLINES,
RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

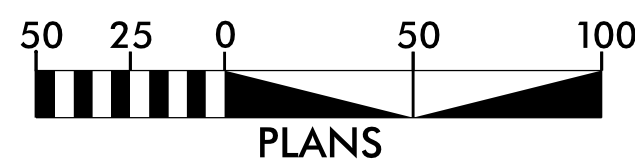
SWAIN COUNTY



TIP PROJECT: R-5843



GRAPHIC SCALE



PLANS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "R5843-1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
 NORTHING: 641,315.6552(ft) EASTING: 675,727.5648(ft)
 ELEVATION: 1,732.55(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999799256
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R5843-1" TO -L- STATION 11+65.00 IS
 S 73°17'12" W 1,140.69(ft)
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

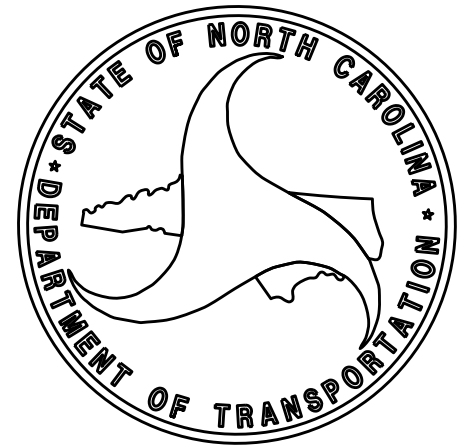
Prepared in the Office of:
DIVISION OF HIGHWAYS
 1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

PROFESSIONAL LAND SURVEYOR



SIGNATURE: *Jeffrey D. Akers* Date: 5/3/2019

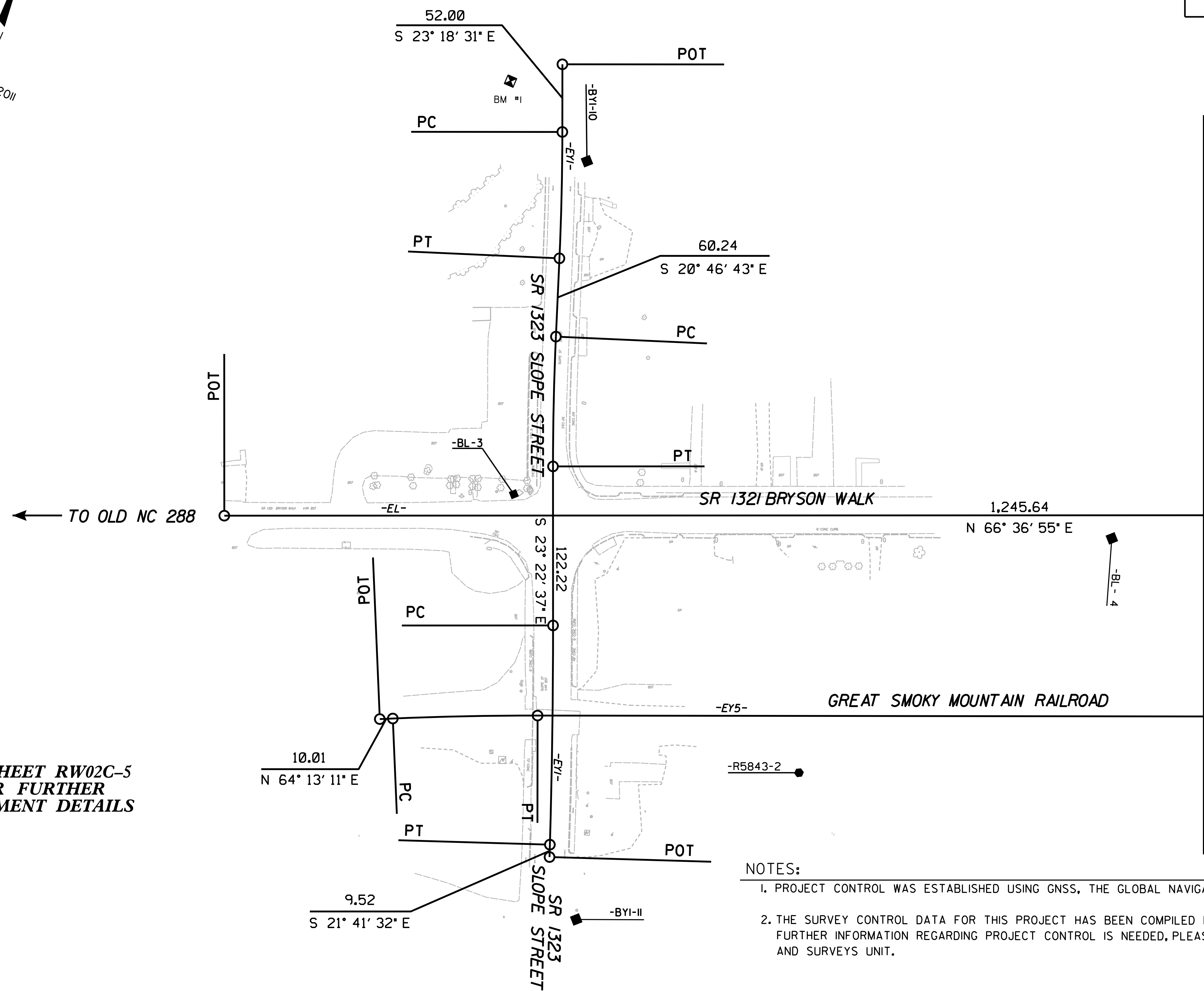
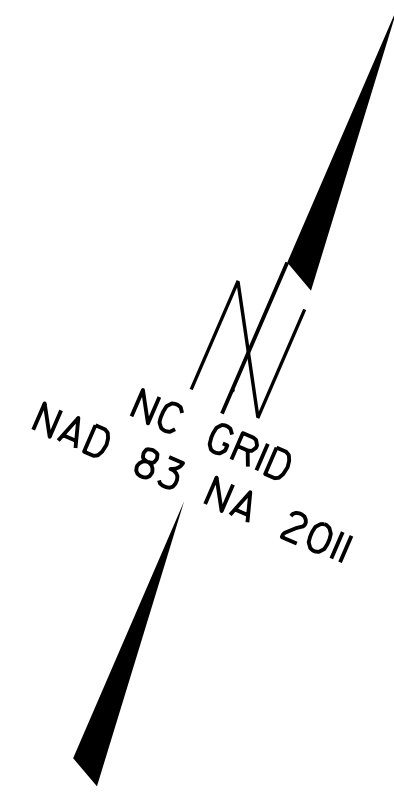
\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DCN\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

PROJECT REFERENCE NO.	SHEET NO.
R-5843	RW02C-1
Location and Surveys	



SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



**SEE SHEET RW02C-5
FOR FURTHER
ALIGNMENT DETAILS**

- NOTES:**
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
 2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

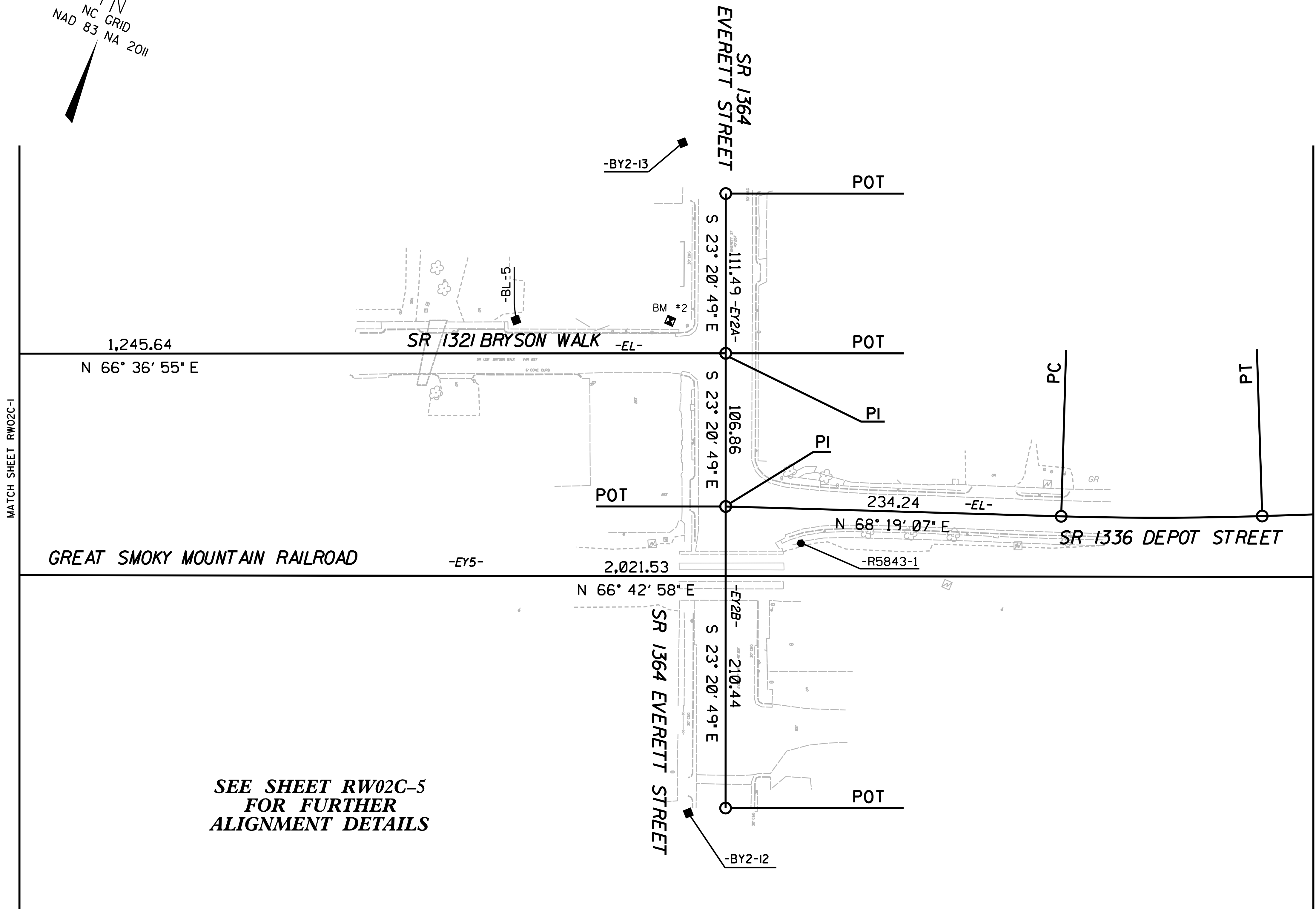
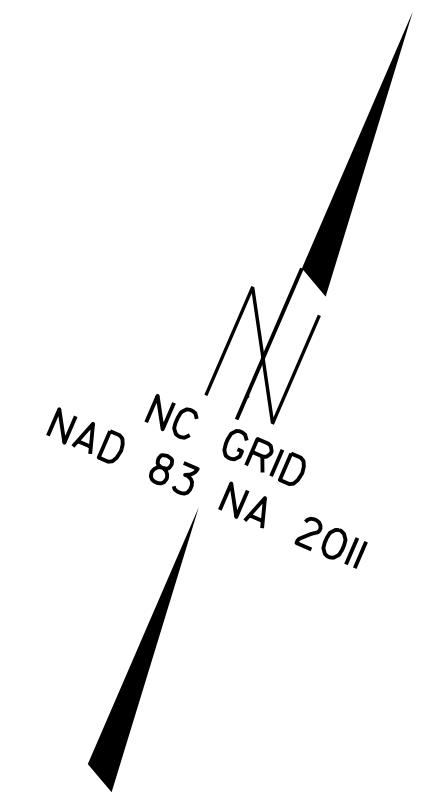
14-MAY-2019 11:50 AM C:\sg\work\5843\5843\RW Sheets\5843 MCK\5843-1-1s.rw02c-1.dgn

MATCH SHEET RW02C-2



SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



MATCH SHEET RW02C-1

MATCH SHEET RW02C-3

**SEE SHEET RW02C-5
FOR FURTHER
ALIGNMENT DETAILS**

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

6/2/19

REVISIONS

14-MAY-2019 11:32
C:\sgd\work\190511\190511.dwg
Checked Work\NRW Sheets\5843 MCK\5843-1s.rw02c-2.dgn

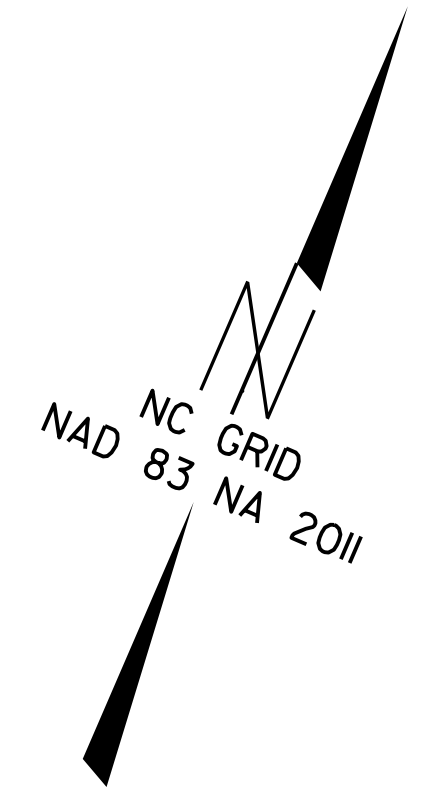
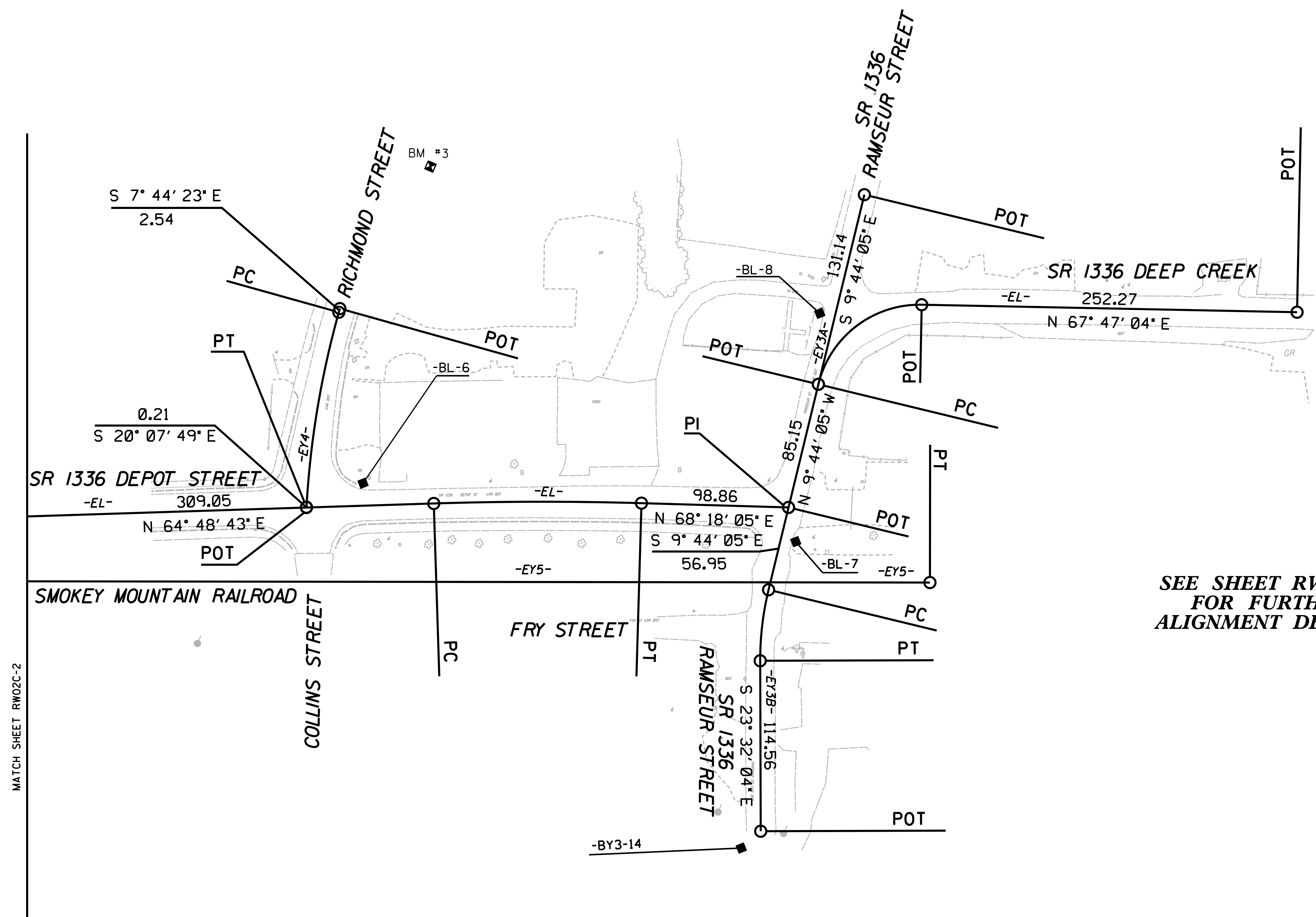
6/2/19

PROJECT REFERENCE NO.	SHEET NO.
R-5843	RW02C-3
Location and Surveys	



SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-5 FOR FURTHER ALIGNMENT DETAILS

- NOTES:**
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
 - THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

14-MAY-2019 11:36
 C:\sg\work\190511\190511.dwg
 190511.dwg
 Checked Work\NRW Sheets\5843 MCK\5843-1s.rw02c-3.dgn

MATCH SHEET RW02C-2



SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

6/2/99

REVISIONS

BL	POINT	DESC.	NORTH	EAST	ELEVATION
2		(R5843-2)	640915.9105	674967.4137	1731.53
3		(BL-3)	641025.5050	674681.2920	1728.80
4		(BL-4)	641176.5690	675116.7280	1730.09
5		(BL-5)	641379.7530	675483.3260	1731.65
1		(R5843-1)	641315.6552	675727.5648	1732.55
6		(BL-6)	641585.8750	676246.2530	1734.13
7		(BL-7)	641665.1280	676528.7370	1736.13
8		(BL-8)	641812.4260	676482.7280	1735.96
9		(BL-9)	641953.2050	676838.9290	1739.43

BY3	POINT	DESC.	NORTH	EAST	ELEVATION
A7		(BL-7)	641665.1280	676528.7370	1736.13
14		(BY3-14)	641461.5380	676576.8000	1733.39

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
10		(BY1-10)	641282.7070	674631.4570	1731.92
A3		(BL-3)	641025.5050	674681.2920	1728.80
11		(BY1-11)	640744.4700	674854.9180	1730.93

BY2	POINT	DESC.	NORTH	EAST	ELEVATION
13		(BY2-13)	641539.4770	675541.1290	1732.86
A1		(R5843-1)	641315.6552	675727.5648	1732.55
12		(BY2-12)	641111.7350	675730.1180	1729.03

.....
 BM1 ELEVATION = 1733.14
 N 641316 E 674553
 BENCH TIE SET IN 18" HICKORY

.....
 BM2 ELEVATION = 1736.14
 N 641422 E 675582
 USGS MON J37-1932

.....
 BM3 ELEVATION = 1744.53
 N 641799 E 676203
 BENCH TIE SET IN 12" PECAN

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

14-MAY-2019 11:38 AM C:\sgd\work\14-05-19\14-05-19-001.dwg 14-MAY-2019 11:38 AM C:\sgd\work\14-05-19\14-05-19-001.dwg

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. R-5843	SHEET NO. RW02C-5
Location and Surveys	

EL									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	640922.122	674483.615							
LINE			N 66°36'54.7" E	1245.64					
POT	641416.523	675626.939							
LINE			S 23°20'48.9" E	106.86					
POT	641318.411	675669.288							
LINE			N 68°19'07.2" E	234.24					
PC	641404.949	675886.954							
CURVE			N 66°33'54.9" E	140.26	03°30'24.6(LT)	02°29'59.7"	140.28	70.16	2291.91
PT	641460.729	676015.641							
LINE			N 64°48'42.6" E	309.05					
PC	641592.258	676295.305							
CURVE			N 66°33'24.0" E	139.57	03°29'22.8(RT)	02°29'59.7"	139.59	69.82	2291.91
PT	641647.785	676423.354							
LINE			N 68°18'05.4" E	98.86					
POT	641684.337	676515.212							
LINE			N 09°44'04.6" W	85.15					
PC	641768.260	676500.815							
CURVE			N 29°01'29.5" E	87.65	77°31'08.1(RT)	81°51'04.0"	94.71	56.20	70.00
PT	641844.899	676543.340							
LINE			N 67°47'03.5" E	252.27					
POT	641940.283	676776.887							

EY1									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	641343.613	674584.626							
LINE			S 23°18'30.8" E	52.00					
PC	641295.855	674605.202							
CURVE			S 22°02'36.8" E	97.14	02°31'48.0(RT)	02°36'15.7"	97.15	48.58	2200.00
PT	641205.819	674641.659							
LINE			S 20°46'42.8" E	60.24					
PC	641149.500	674663.028							
CURVE			S 22°04'39.8" E	99.76	02°35'54.0(LT)	02°36'15.7"	99.77	49.89	2200.00
PT	641057.055	674700.524							
LINE			S 23°22'36.8" E	122.22					
PC	640944.865	674749.019							
CURVE			S 22°32'04.3" E	168.47	01°41'05.2(RT)	01°00'00.0"	168.48	84.24	5729.58
PT	640789.257	674813.584							
LINE			S 21°41'31.7" E	9.52					
POT	640780.410	674817.103							

EY2A				
POINT	N	E	BEARING	DIST
POT	641518.886	675582.755		
LINE			S 23°20'48.9" E	111.49
POT	641416.523	675626.939		

EY2B				
POINT	N	E	BEARING	DIST
POT	641318.411	675669.288		
LINE			S 23°20'48.9" E	210.44
POT	641125.201	675752.685		

EY3A				
POINT	N	E	BEARING	DIST
POT	641897.516	676478.640		
LINE			S 09°44'04.6" E	131.14
POT	641768.260	676500.815		

EY3B									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	641684.337	676515.212							
LINE			S 09°44'04.6" E	56.95					
PC	641628.211	676524.841							
CURVE			S 16°38'04.1" E	48.05	13°47'59.0(LT)	28°38'52.4"	48.17	24.20	200.00
PT	641582.168	676538.597							
LINE			S 23°32'03.6" E	114.56					
POT	641477.138	676584.340							

EY4									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	641687.477	676185.437							
LINE			S 07°44'22.7" E	2.54					
PC	641684.958	676185.779							
CURVE			S 13°56'05.9" E	132.85	12°23'26.4(LT)	09°18'32.4"	133.10	66.81	615.49
PT	641556.022	676217.771							
LINE			S 20°07'49.1" E	0.21					
POT	641555.827	676217.843							

EY5									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	640826.014	674655.303							
LINE			N 64°13'10.8" E	10.01					
PC	640830.366	674664.314							
CURVE			N 65°28'04.4" E	111.30	02°29'47.3(RT)	02°14'34.4"	111.31	55.66	2554.54
PT	640876.577	674765.563							
LINE			N 66°42'58.0" E	2021.53					
POT	641675.662	676622.456							

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

14-MAY-2019 11:40 AM C:\sgd\work\190511\5843 MCK\5843-1s-rw02c-5.dgn

PROPOSED ALIGNMENT CONTROL SHEET

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	640922.1222	674483.6151
POT	22+45.15	641416.3292	675626.4912

Y1

TYPE	STATION	NORTH	EAST
PC	10+00.00	640726.2546	674835.8457
PT	11+68.39	640883.2775	674775.1510
PC	13+09.47	641012.7764	674719.1738
PRC	15+02.72	641191.9464	674646.8105
PT	16+46.79	641325.5288	674592.8815
POT	16+92.72	641367.6991	674574.6674

L1

TYPE	STATION	NORTH	EAST
POT	10+00.00	641319.9951	675667.7288
PC	12+21.88	641400.0264	675874.6732
PT	13+62.43	641455.2836	676003.8712
PC	16+54.93	641579.6810	676268.5974
PRC	17+39.16	641614.4292	676345.3241
PT	18+52.78	641688.6844	676428.8300
PC	19+58.05	641779.6018	676481.8987
PT	20+75.90	641855.5002	676569.2969
POT	23+00.14	641940.2827	676776.8875

Y2

TYPE	STATION	NORTH	EAST
POT	10+00.00	640994.1070	675805.8207
POT	12+86.38	641258.4023	675695.5500
POT	13+53.96	641319.9951	675667.7288
POT	16+75.03	641615.1531	675541.3808

RR

TYPE	STATION	NORTH	EAST
PC	10+00.00	640822.4407	674648.0519
PT	11+29.40	640876.5769	674765.5633
POT	31+55.78	641677.5793	676626.9116

Y4

TYPE	STATION	NORTH	EAST
POT	10+00.00	641816.0626	676509.9960
PC	10+13.74	641825.7703	676500.2763
PT	10+44.54	641852.6932	676486.3296
POT	11+10.00	641917.2077	676475.2619

Y5

TYPE	STATION	NORTH	EAST
POT	10+00.00	641477.1379	676584.3401
PC	11+79.53	641641.7320	676512.6553
PT	12+66.64	641708.4710	676458.3579
POT	12+82.22	641717.4714	676445.6330

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

6/2/09

14-MAY-2019 11:41
 C:\sg\work\Projects\Checked Work\RW Sheets\5843 MCK\5843-1-1s-rw02d-1.dgn
 15:31

6/27/09

RIGHT OF WAY AND PERMANENT EASEMENT CONTROL SHEET

PROJECT REFERENCE NO. R-5843 SHEET NO. RW03E-1



I, Jeffrey D. Aker, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work items (Base map Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 26th day of April, 2009.

DocuSigned by:

 Jeffrey D. Aker, L-4234
 13883A59F70E41D...

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	11-65.00	19.23	640969.9630	674642.6986
L	11-65.00	-16.00	641002.2980	674628.7134
L	11-65.00	-21.00	641006.8886	674626.7303
L	11-65.00	19.00	640970.1712	674642.6009
L	12-99.00	-24.00	641062.8253	674748.5295
L	13-17.99	23.00	641027.2232	674784.6143
L	13-55.00	-22.00	641083.2163	674800.7234
L	13-55.00	-24.00	641085.0520	674799.9296
L	13-55.00	16.00	641048.3376	674815.8058
L	13-55.00	23.00	641041.9126	674818.5842
L	22-06.00	16.00	641386.1034	675596.9046

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L1	16-94.23	-20.00	641614.3727	676296.0068
L1	19-74.09	-20.00	641804.6497	676474.2796
L1	20-33.00	-20.00	641850.9300	676520.1617
L1	21-70.39	-20.00	641909.7403	676649.2074
L1	20-75.90	-20.00	641874.0156	676561.7351
L1	18-52.78	-20.00	641698.7666	676411.5572
L1	17-39.16	-20.00	641632.7620	676337.3298
L1	20-24.30	20.00	641813.8362	676537.4465
L1	19-91.92	20.00	641793.9463	676516.7001
L1	21-68.96	-11.00	641900.8695	676651.2906
L1	19-58.05	-20.00	641789.6840	676464.6259

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	13-50.00	-24.76	641040.4705	674680.4574
Y1	13-62.00	19.11	641068.4839	674716.2875
Y1	12-73.00	-44.55	640961.6259	674692.7502
Y1	12-90.00	50.45	641014.9243	674773.2069

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	13-34.08	-45.40	641283.1858	675634.5361
Y2	12-37.00	32.12	641225.2009	675744.2062
Y2	12-16.38	50.00	641213.0555	675768.6473
Y2	11-48.00	50.00	641149.9481	675794.9773
Y2	11-31.00	32.35	641127.4626	675785.2341
Y2	13-87.00	-31.00	641338.1685	675626.2285
Y2	13-87.00	-45.00	641332.6591	675613.3581
Y2	14-35.00	-31.00	641382.2955	675607.3391

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y4	10-44.54	20.00	641856.0749	676506.0417

NOTES:

- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	12-03.00	-36.00	641035.7368	674655.6521
L	12-03.00	-26.76	641027.2578	674659.3186
L	13-08.00	-24.00	641066.3975	674756.7902
L	13-09.00	33.00	641014.4801	674780.3286
L	13-17.99	33.00	641018.0437	674788.5791
L	13-24.00	-35.00	641082.8444	674767.1100
L	13-32.00	-35.00	641086.0197	674774.4529
L	13-32.00	-24.00	641075.9232	674778.8189

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L1	17-52.00	-20.00	641637.6946	676347.6228
L1	17-52.00	-27.00	641643.8953	676344.3745
L1	17-67.00	-27.00	641650.2754	676355.4091
L1	17-67.00	-20.00	641644.3666	676359.1623
L1	18-20.00	-20.00	641675.0752	676394.6651
L1	18-20.00	-27.00	641679.6405	676389.3586
L1	18-30.00	-27.00	641686.2347	676394.7203
L1	18-30.00	-20.00	641681.9711	676400.2721
L1	18-60.00	-20.00	641705.0028	676415.1973
L1	18-60.00	-27.00	641708.5316	676409.1518
L1	18-70.00	-27.00	641717.1680	676414.1929
L1	18-70.00	-20.00	641713.6392	676420.2384
L1	19-68.00	-20.00	641799.0718	676470.4592

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	13-58.00	-24.85	641047.8599	674677.2634

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y4	10-29.00	-37.00	641820.9139	676458.4718
Y4	10-32.00	-49.00	641820.7104	676445.2447
Y4	10-42.00	-43.50	641840.6735	676444.3789
Y4	10-42.00	-35.00	641842.5348	676452.6726
Y4	11-24.24	-26.93	641926.6859	676446.3088

REVISIONS

SYSTEMS ADDENDUM

I, Jeffrey D. Aker, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work (Items) (Base map, Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

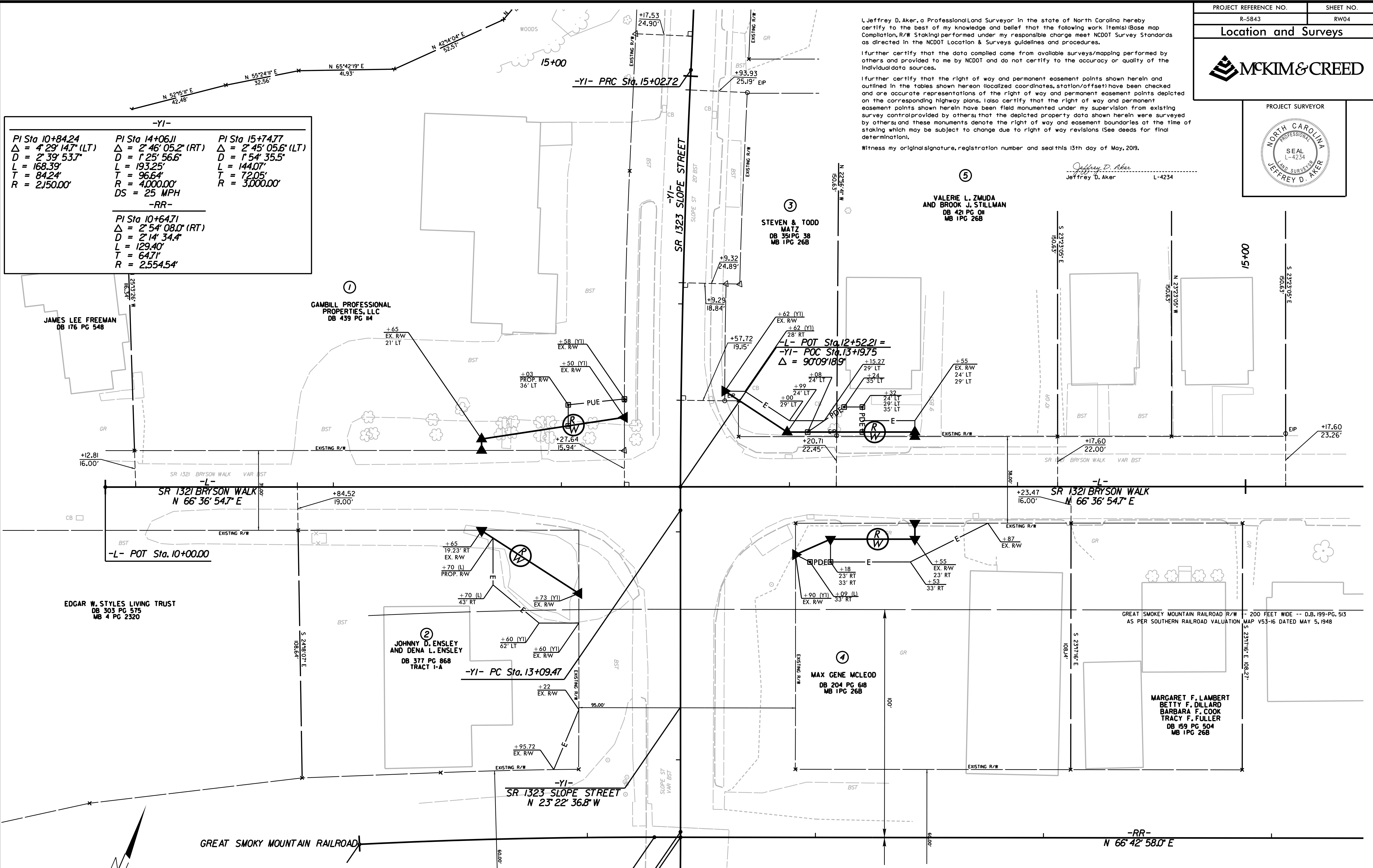
I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. Also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 13th day of May, 2019.

Jeffrey D. Aker
Jeffrey D. Aker L-4234

-YI-		
PI Sta 10+84.24	PI Sta 14+06.11	PI Sta 15+74.77
$\Delta = 4' 29' 14.7''$ (LT)	$\Delta = 2' 46' 05.2''$ (RT)	$\Delta = 2' 45' 05.6''$ (LT)
D = 2' 39' 53.7"	D = 1' 25' 56.6"	D = 1' 54' 35.5"
L = 168.39'	L = 193.25'	L = 144.07'
T = 84.24'	T = 96.64'	T = 72.05'
R = 2,150.00'	R = 4,000.00'	R = 3,000.00'
-RR-		
PI Sta 10+64.71		
$\Delta = 2' 54' 08.0''$ (RT)		
D = 2' 14' 34.4"		
L = 129.40'		
T = 64.71'		
R = 2,554.54'		



NOTES:

- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

6/2/19
 B:\MA\2019\1306_5843_Rev1\Drawings\5843_1s_rw04.dgn
 13:44:26 05/13/2019 AT 11:08:22
 JDA



PROJECT SURVEYOR



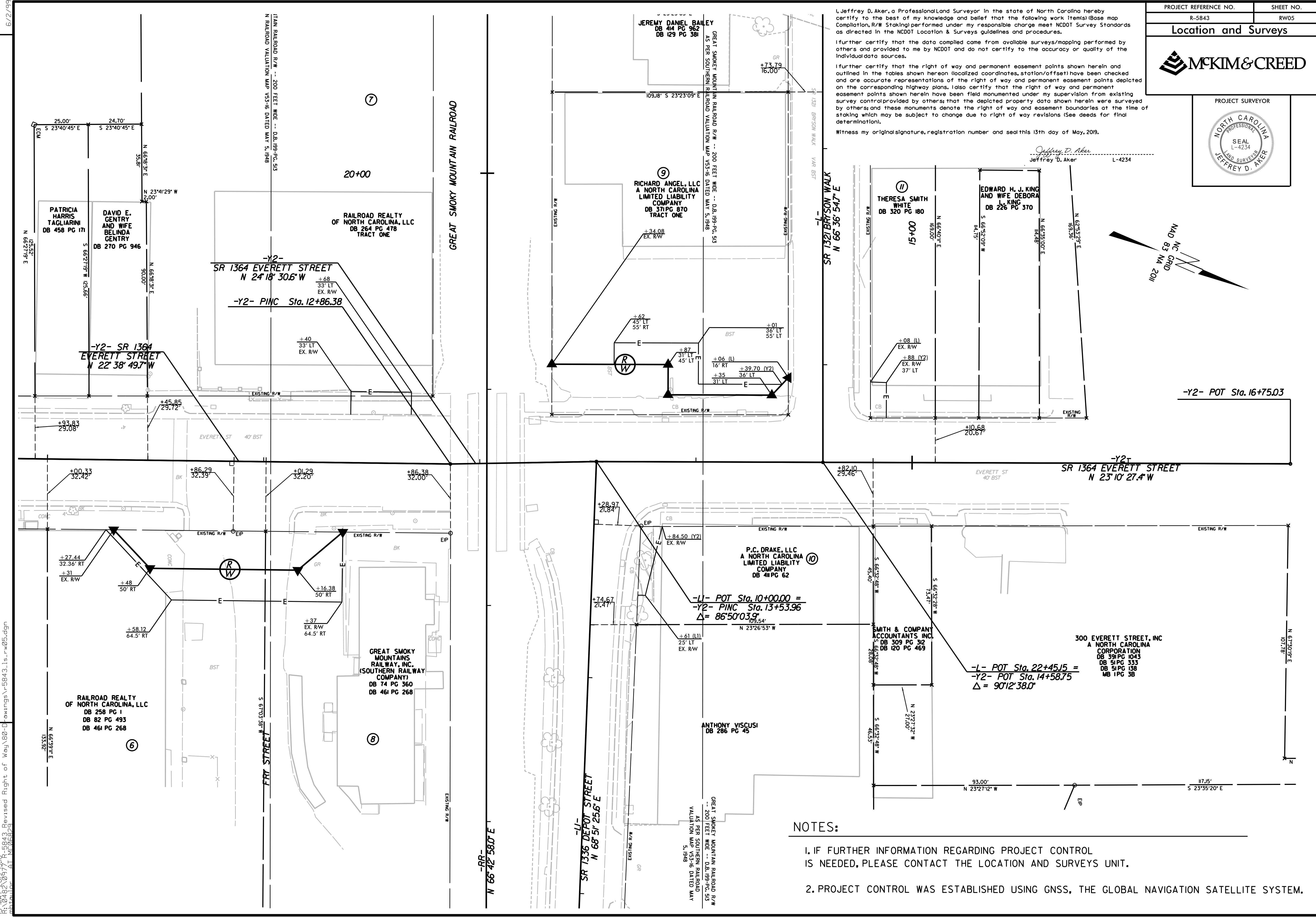
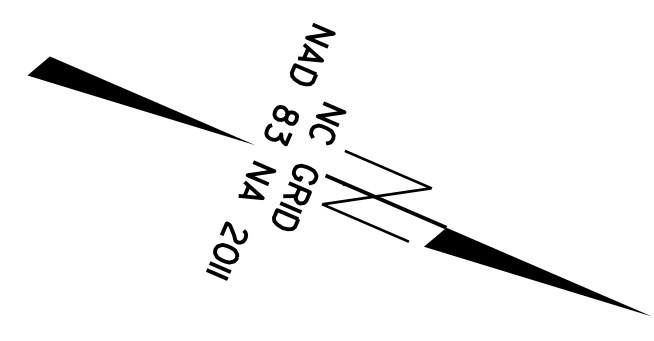
I, Jeffrey D. Aker, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work items (Base map Completion, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 13th day of May, 2019.

Jeffrey D. Aker
Jeffrey D. Aker L-4234



NOTES:

- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

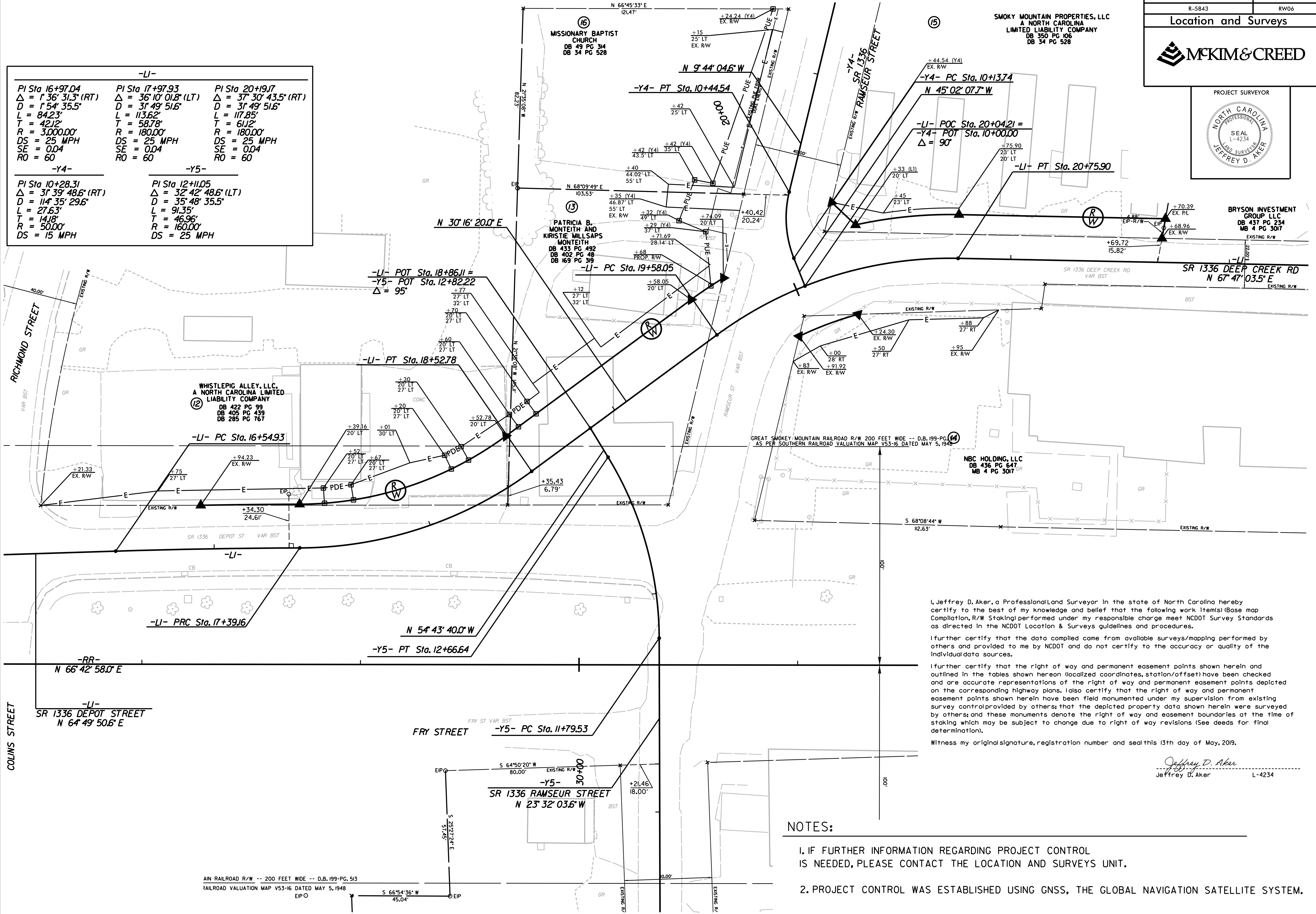
REVISIONS

13-MAY-2019 13:10 - F843-Revised Right of Way 80-Drawings-v5843-1s-rw05.dgn
 13-MAY-2019 13:05 - F843-Location and Surveys-v5843-1s-rw05.dgn
 13-MAY-2019 12:55 - F843-Location and Surveys-v5843-1s-rw05.dgn



6/2/09

-LI-		
PI Sta 16+97.04 Δ = 1° 36' 31.3" (RT) D = 154' 35.5" L = 84.23' T = 42.12' R = 3,000.00' DS = 25 MPH SE = 0.04 RO = 60	PI Sta 17+97.93 Δ = 36° 10' 01.8" (LT) D = 31' 49' 51.6" L = 113.62' T = 58.78' R = 180.00' DS = 25 MPH SE = 0.04 RO = 60	PI Sta 20+19.17 Δ = 37° 30' 43.5" (RT) D = 31' 49' 51.6" L = 117.85' T = 61.12' R = 180.00' DS = 25 MPH SE = 0.04 RO = 60
-Y4-		-Y5-
PI Sta 10+28.31 Δ = 31° 39' 48.6" (RT) D = 114' 35' 29.6" L = 27.63' T = 14.18' R = 50.00' DS = 15 MPH	PI Sta 12+11.05 Δ = 32° 42' 48.6" (LT) D = 35' 48' 35.5" L = 91.35' T = 46.96' R = 160.00' DS = 25 MPH	



I, Jeffrey D. Aker, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (Base map Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 13th day of May, 2019.

Jeffrey D. Aker
Jeffrey D. Aker L-4234

NOTES:

- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

RAILROAD R/W -- 200 FEET WIDE -- D.B. 199-PG. 513
RAILROAD VALUATION MAP V53-16 DATED MAY 5, 1948
EIP O

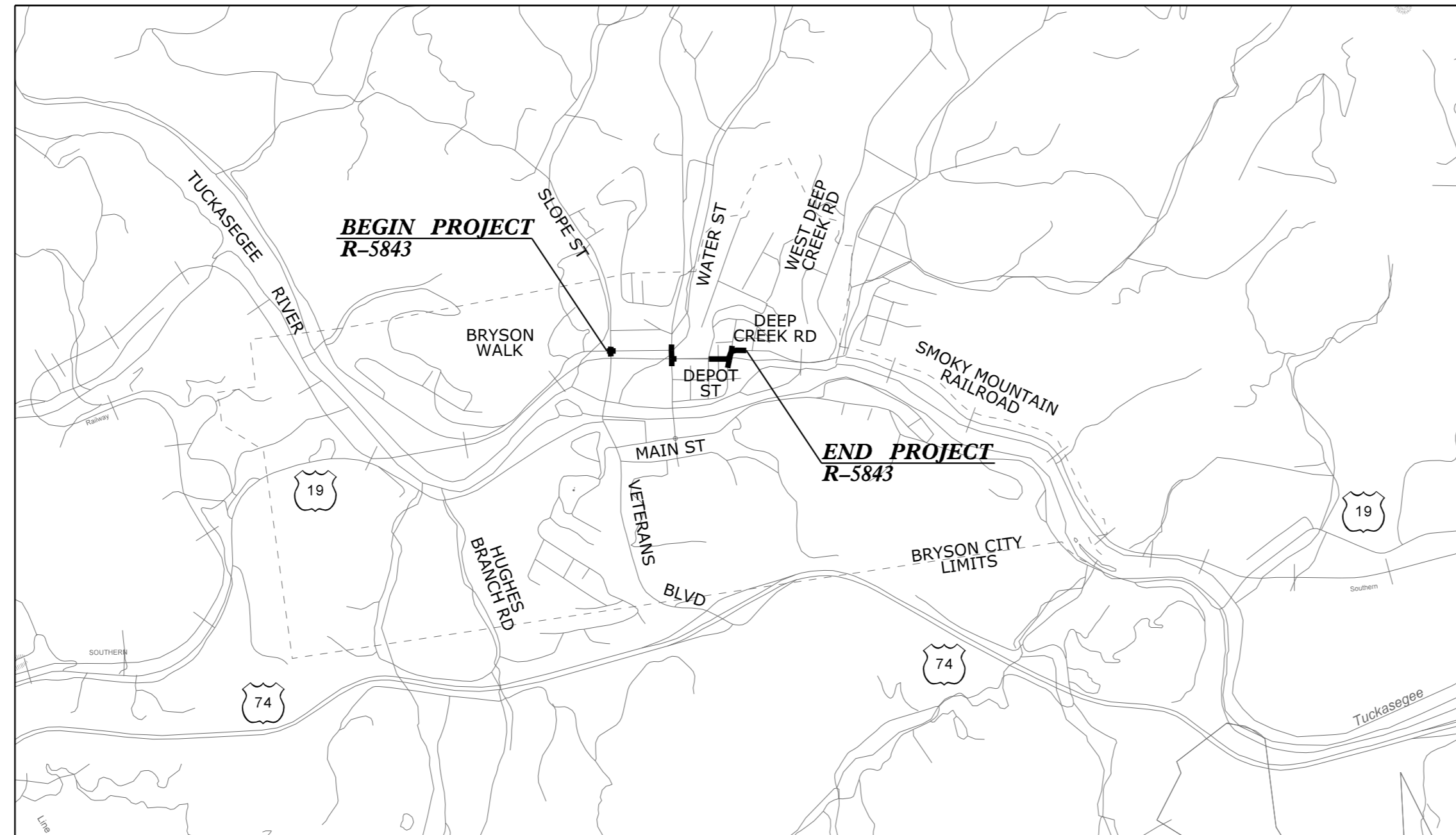
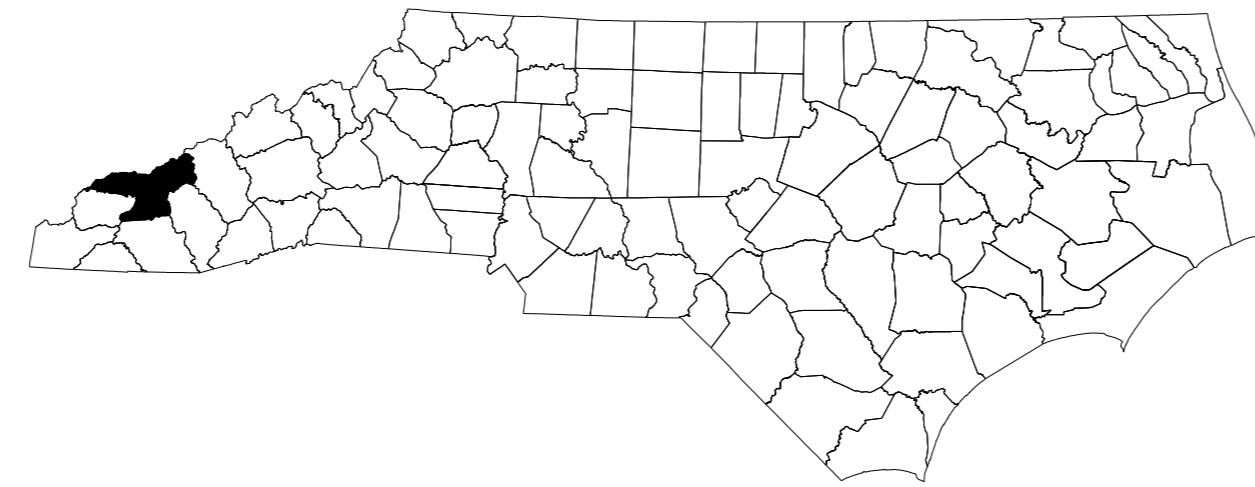
B:\VA\2019\1317-F843-Revised Right of Way\80-Drawings\F843-1s-rw06.dgn

REVISIONS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

SWAIN COUNTY



VICINITY MAP

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>TITLE</u>
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A TO TMP-1C	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, TEMPORARY PAVEMENT MARKING, AND GENERAL NOTES
TMP-2	N/A
TMP-3	PHASING
TMP-4	PHASE I DETAILS
TMP-5	PHASE II DETAILS
TMP-6 TO TMP-8	PHASE III DETAILS

07/19/19 DATE SUBMITTED

SUBMITTAL:

STAGING CONCEPT

MIDPOINT

PRE-FINAL

FINAL

DO NOT USE FOR CONSTRUCTION

Kimley»Horn

CHUCK NUCKOLS, P.E. *TRAFFIC CONTROL PROJECT ENGINEER*

CALEB LOWMAN, P.E. *TRAFFIC CONTROL PROJECT DESIGN ENGINEER*

APPROVED: _____
DATE: _____



K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson IntTrafficControlTCP-Plan Sheets\R-5843_tcp_1shdgn

7/17/2019



N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

JOSEPH E. HUMMER *STATE TRAFFIC MANAGEMENT ENGINEER*

DON PARKER, P.E. *TRAFFIC CONTROL PROJECT ENGINEER*

KENNETH THORNEWELL, P.E. *TRAFFIC CONTROL PROJECT DESIGN ENGINEER*



SHEET NO.
TMP-1

CONTRACT: DN00709 TIP PROJECT: R-5843

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES - TYPE III
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION - REFLECTION END TREATMENT
1165.01	TRUCK MOUNTED ATTENUATOR - DELINEATION
1170.01	POSITIVE PROTECTION - PORTABLE CONCRETE BARRIER
1180.01	SKINNY DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - DIVIDED AND UNDIVIDED ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- WORK AREA
- REMOVAL

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW PANEL (TYPE C)
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

- CRYSTAL / CRYSTAL
- CRYSTAL / RED
- YELLOW / YELLOW

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

PAVEMENT MARKING LINES

- PA - PAINT (4" WHITE, 2X) EDGELINE
- PB - PAINT (4" YELLOW, 2X) EDGELINE
- PE - PAINT (4" WHITE, 2X) SOLID LANE LINE
- PI - PAINT (4" YELLOW, 2X) DOUBLE CENTER LINE
- PP - PAINT (8" YELLOW, 2X) DIAGONAL
- PQ - PAINT (8" WHITE, 2X) CROSSWALK LINE
- P2 - PAINT (24" WHITE, 2X) STOPBAR
- P3 - PAINT (24" WHITE, 2X) CROSSWALK LINE

PAVEMENT MARKING SYMBOLS

- QF - PAINT 2X (COMBINATION LEFT & RIGHT TURN ARROW)
- QG - PAINT 2X (COMBINATION STRAIGHT, RIGHT, & LEFT TURN ARROW)

7/16/2019 K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson IntTrafficTrafficControlTCP-Plan Sheets\R-5843_Tcp_Ishdgn

Kimley»Horn

APPROVED: _____ DATE: _____			<p>ROADWAY STANDARD DRAWINGS & LEGEND</p>

MANAGEMENT STRATEGIES

PROPOSED IMPROVEMENTS IN BRYSON CITY WILL BE CONSTRUCTED WHILE MAINTAINING TRAFFIC AND USING TEMPORARY TRAFFIC PATTERNS TEMPORARY LANE CLOSURES. LOCAL ACCESS TO RESIDENTS AND BUSINESSES WILL BE MAINTAINED AT ALL POSSIBLE TIMES DURING CONSTRUCTION.

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRABLE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
-L- SR 1321 BRYSON WALK	MONDAY THRU FRIDAY
-L1- SR 1336 DEPOT STREET / DEEP CREEK ROAD	6:00 AM TO 9:00 AM
-Y1- SR 1323 SLOPE STREET	AND 2:30 PM TO 6:00 PM
-Y2- SR 1364 EVERETT STREET	
-Y4- SR 1364 RAMSEUR STREET	
-Y5- SR 1364 RAMSEUR STREET	

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

<u>ROAD NAME</u>
-L- SR 1321 BRYSON WALK
-L1- SR 1336 DEPOT STREET
-Y1- SR 1323 SLOPE STREET
-Y2- SR 1364 EVERETT STREET
-Y4- SR 1364 RAMSEUR STREET
-Y5- SR 1364 RAMSEUR STREET

TIME RESTRICTIONS (CONT.)

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- EVERETT STREET FOR ALL GREAT SMOKY MOUNTAIN RAILROAD ANNUAL EVENTS AND ALL OTHER SPECIAL EVENTS OCCURRING IN DOWNTOWN BRYSON CITY OR AT THE GREAT SMOKY MOUNTAIN RAILROAD DEPOT BETWEEN 3 HOURS BEFORE THE START AND 3 HOURS AFTER THE END OF THE EVENT.

C) DO NOT CLOSE ROADS AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
-L- SR 1321 BRYSON WALK	ANYTIME
-L1- SR 1336 DEPOT STREET	
-Y1- SR 1323 SLOPE STREET	
-Y2- SR 1364 EVERETT STREET	
-Y4- SR 1364 RAMSEUR STREET	
-Y5- SR 1364 RAMSEUR STREET	

D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.**
- F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.**

- G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.**

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.**

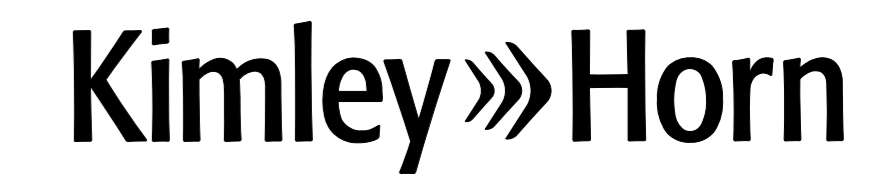
- I) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.**

- J) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON:**

<u>ROAD NAME</u>
-L- SR 1321 BRYSON WALK
-L1- SR 1336 DEPOT STREET
-Y1- SR 1323 SLOPE STREET
-Y2- SR 1364 EVERETT STREET
-Y4- SR 1364 RAMSEUR STREET
-Y5- SR 1364 RAMSEUR STREET

- K) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.**

K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int'l Traffic Control Plan Sheets\R-5843_Tcp_1shdgn 11/29/2021



APPROVED: _____ DATE: _____		TRANSPORTATION OPERATIONS PLAN

GENERAL NOTES (CONT.)

PAVEMENT EDGE DROP OFF REQUIREMENTS

L) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

M) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

N) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

O) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

P) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

Q) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500' IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

R) PROVIDE PERMANENT SIGNING.

TRAFFIC CONTROL DEVICES

S) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

T) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

V) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMPORARY

W) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

X) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

Y) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

Z) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 500' AND 1000' RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

AA) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

BB) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).

LOCAL NOTES

CC) THE CONTRACTOR SHALL COORDINATE WITH THE BRYSON CITY SPECIAL EVENTS OFFICE FOR EVENTS OCCURING ON OR NEAR EVERETT STREET. WORK ZONE ACCOMMODATIONS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.

SPECIAL ANNUAL EVENTS INCLUDE BUT ARE NOT LIMITED TO:

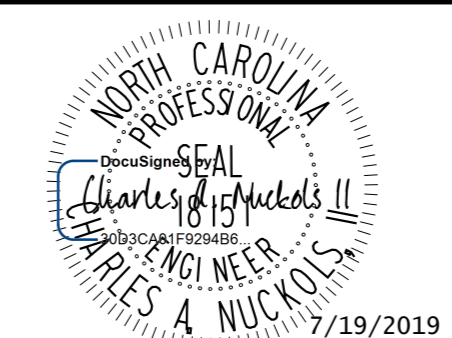

ARTS & CRAFTS STUDIO TOUR
 JULY 4 FREEDOM FEST
 FALL IN THE SMOKIES
 SMOKY MOUNTAIN FLY FISHING FESTIVAL
 CHRISTMAS IN THE SMOKIES

THE CONTRACTOR SHALL MINIMIZE IMPACTS TO BUSINESS ENTRANCES AND DRIVEWAYS. MAINTAIN ACCESS AT ALL POSSIBLE TIMES AND COORDINATE ANY ACCESS RESTRICTION TO OCCUR WHILE BUSINESS IS CLOSED. IN THE EVENT A BUSINESS ACCESS IS TEMPORARILY RELOCATED, PROVIDE SIGNING INDICATING THAT THE BUSINESS IS OPEN AND DIRECTING PEDESTRIANS ACCORDINGLY.

DD) THE CONTRACTOR SHALL COORDINATE WITH THE GREAT SMOKY MOUNTAIN RAILROADS LOCAL RAILMASTER OR TRACK SUPERVISOR FOR THE SCHEDULE OF SLOW MOVING OR STOPPED EQUIPMENT OVER AT-GRADE CROSSINGS ALONG THE PROJECT CORRIDOR.

K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int)TrafficControlTCP-Plan Sheets\R-5843_Tcp_1shdgn 7/17/2019

Kimley»Horn

APPROVED: _____	DATE: _____			<h2 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h2>
-----------------	-------------	---	---	--

PHASING

NOTES:

- WORK IN ONE INTERSECTION AT A TIME, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE AVAILABILITY DATE OF TREE CLEARING OPERATIONS AND PHASE 1 STEP 1 IS FEBRUARY 7, 2022. THE AVAILABILITY DATE FOR ALL OTHER WORK REQUIRED OF THE CONTRACT IS JUNE 1, 2022.
- COMPLETE ALL WORK REQUIRED OF PHASE 1 STEP 1, AS DESCRIBED BELOW AND IN ICT#1 OF THE CONTRACT PROPOSAL, BY FEBRUARY 28, 2022.

PHASE I

STEP 1: TEMPORARY CLOSE -Y5- SR 1336 RAMSEUR STREET IN ACCORDANCE WITH RSD 1101.03 USING LOCAL DETOUR ALONG FRY STREET AND COLLINS STREET TO DIRECT TRAFFIC BACK TO -L1- SR 1336 (DEPOT STREET). MAINTAIN TRAFFIC ON LOCAL DETOUR OF FRY STREET AND COLLINS STREET WHILE WORK IS COMPLETED TO INSTALL RAIL CROSSING BY RAIL CONTRACTOR.

STEP 2: PRIOR TO BEGINNING CONSTRUCTION, INSTALL ADVANCE WARNING SIGNS ALONG -L- SR 1321 (BRYSON WALK), -L1- SR 1336 (DEPOT STREET), -Y1- (SLOPE STREET), -Y2- (EVERETT STREET), -Y4- SR 1364 (RAMSEUR STREET), -Y5- SR 1364 (RAMSEUR STREET) IN ACCORDANCE WITH RSD 1101.01

STEP 3: WHILE MAINTAINING TRAFFIC USING RSD 1101.04 FOR SHOULDER CLOSURES AND RSD 1101.02 FOR LANE CLOSURES AS NECESSARY, CONSTRUCT THE FOLLOWING AWAY FROM TRAFFIC AS SHOWN ON SHEET TMP-4;

- NEW LOCATION -L1- SR 1336 DEPOT STREET - NEW LOCATION -Y5- SR 1336 RAMSEUR STREET

STEP 4: WHILE MAINTAINING TRAFFIC USING RSD 1101.02 FOR FLAGGER OPERATIONS, WEDGE AS NEEDED FOR POSITIVE DRAINAGE AND TO ENSURE SMOOTH TRANSITIONS. TIE IN NEW LOCATION AREAS AND WIDENING TO EXISTING.

NOTE: MAINTAIN ACCESS TO EXISTING DRIVEWAYS AT ALL TIMES. CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES DURING CONSTRUCTION.

PHASE II

WHILE MAINTAINING TRAFFIC USING RSD 1101.02 FOR TEMPORARY LANE CLOSURES, AND RSD 1101.03 FOR TEMPORARY ROAD CLOSURES PERFORM THE FOLLOWING AS SHOWN ON SHEETS TMP-5.

STEP 1: WHILE MAINTAINING TRAFFIC USING RSD 1101.02 FOR FLAGGER OPERATIONS, INSTALL TEMPORARY PAVEMENT MARKINGS AND SHIFT TRAFFIC ONTO NEWLY CONSTRUCTED -L1- SR 1336 DEPOT STREET AND -Y5- SR 1336 RAMSEUR STREET

STEP 2: AWAY FROM TRAFFIC REMOVE EXISTING PAVEMENT ALONG -L1- SR 1336 DEPOT STREET AND -Y5- SR 1336 RAMSEUR STREET. CONSTRUCT REMAINING PORTIONS OF -L1- SR 1336 DEPOT STREET AND -Y5- SR 1336 RAMSEUR STREET WITH EXCEPTION TO THE RAILROAD CROSSING.

NOTE: MAINTAIN ACCESS TO EXISTING DRIVEWAYS AT ALL TIMES. CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES DURING CONSTRUCTION.

PHASE III

WHILE MAINTAINING TRAFFIC USING RSD 1101.02 FOR TEMPORARY LANE CLOSURES, PERFORM THE FOLLOWING AS SHOWN ON SHEETS TMP-6 THRU TMP-8.

STEP 1: INSTALL CURB AND GUTTER, SHOULDER, SIDEWALK, DRAINAGE AND DRIVEWAYS:

- L- SR 1321 BRYSON WALK
- L1- SR 1336 DEPOT STREET
- Y1- SR 1323 SLOPE STREET
- Y2- SR 1364 EVERETT STREET
- Y4- SR 1336 RAMSEUR STREET

STEP 2: COMPLETE MEDIAN CONSTRUCTION ALONG -Y2- SR 1364 EVERETT STREET.

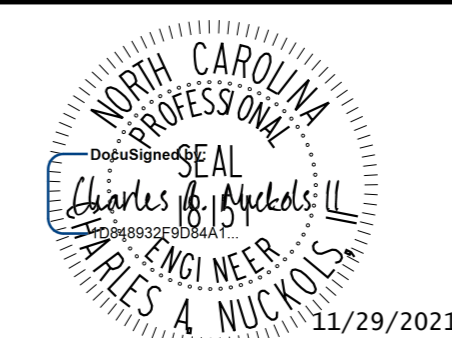
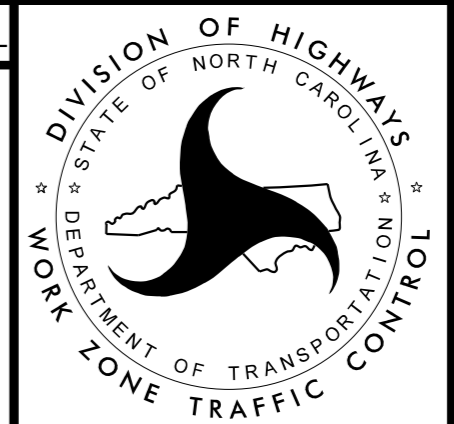
STEP 4: INSTALL FINAL SIGNALS AT THE INTERSECTION OF -L1- SR 1336 DEPOT STREET AND -Y2- SR 1364 EVERETT STREET, DO NOT ACTIVATE.

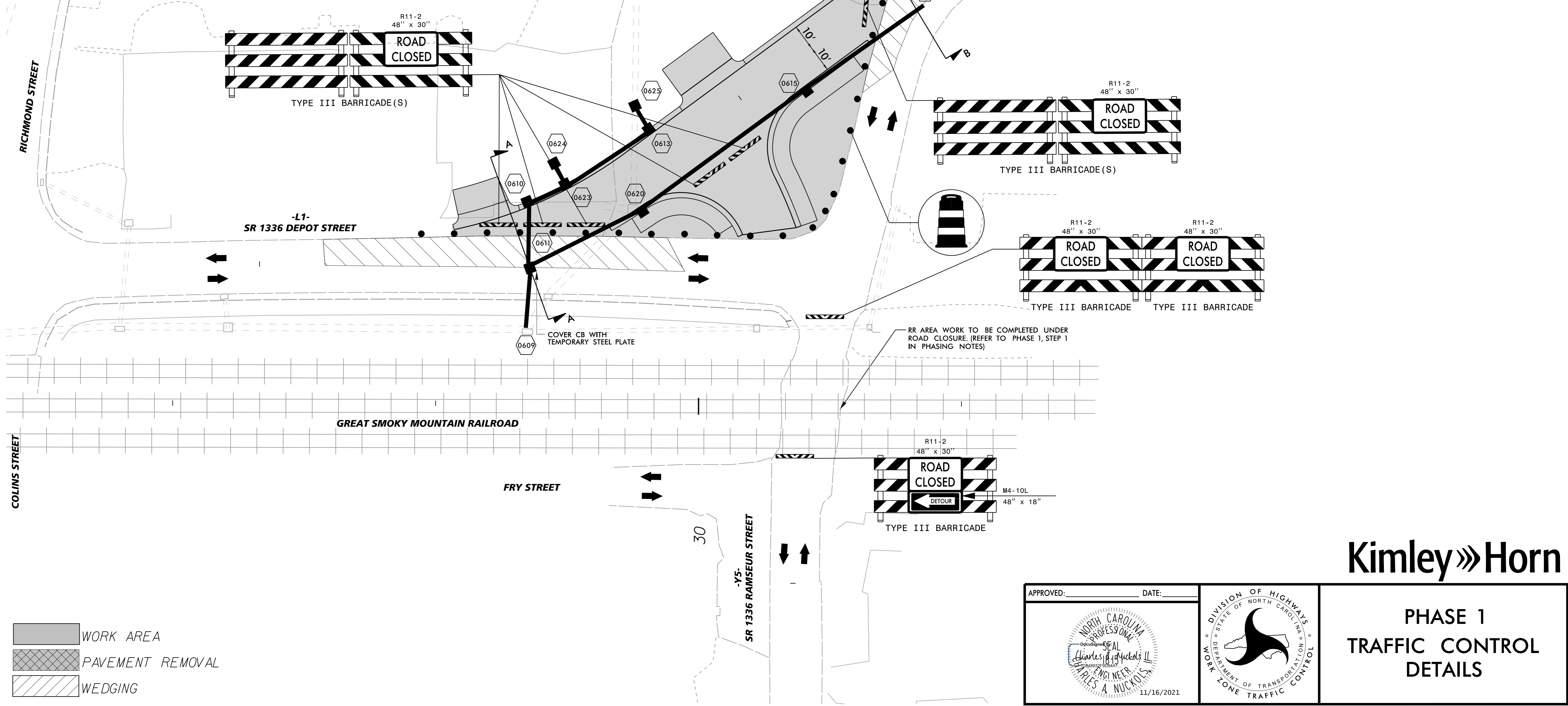
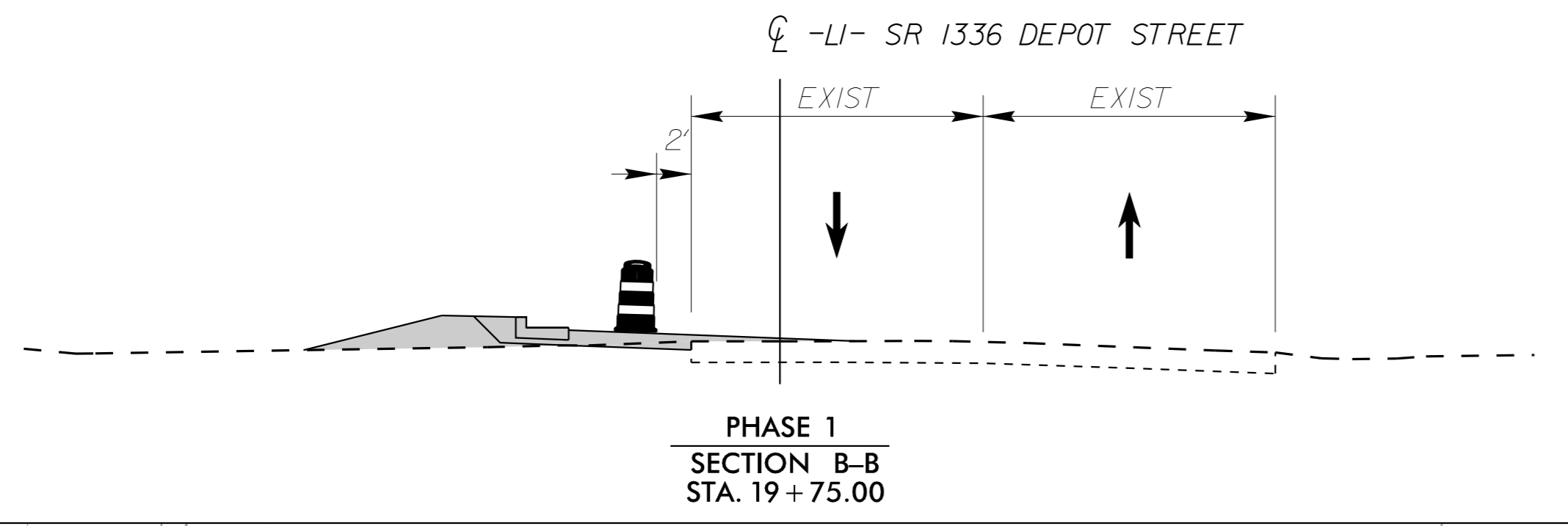
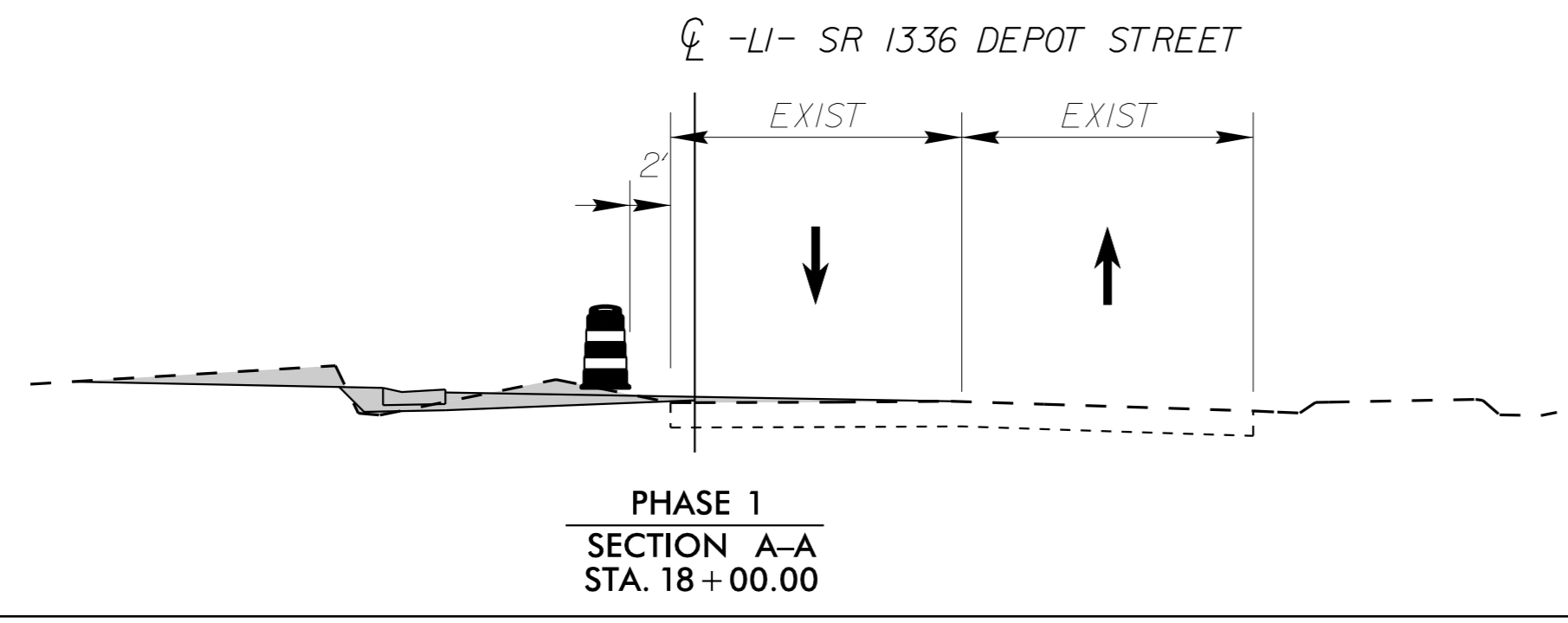
STEP 5: WHILE MAINTAINING TRAFFIC USING RSD 1101.02 FOR FLAGGER OPERATIONS, PLACE FINAL LIFT OF ASPHALT AND FINAL PAVEMENT MARKINGS. ACTIVATE SIGNAL. REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN ALL LANES TO TRAFFIC.

NOTE: MAINTAIN ACCESS TO EXISTING DRIVEWAYS AT ALL TIMES. CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES DURING CONSTRUCTION.

K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int)TrafficControlPlan Sheets\R-5843_Tcp_1shdgn 11/29/2021



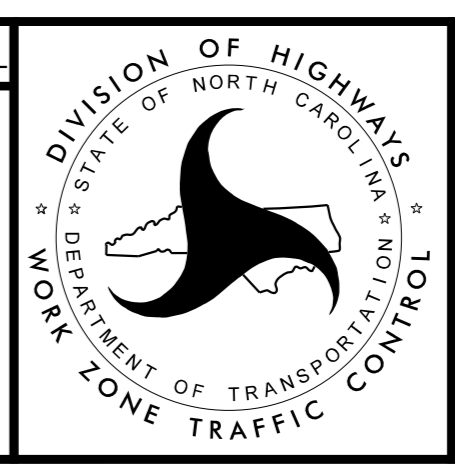
APPROVED: _____	DATE: _____			<h1 style="margin: 0;">PHASING</h1>
-----------------	-------------	---	---	-------------------------------------



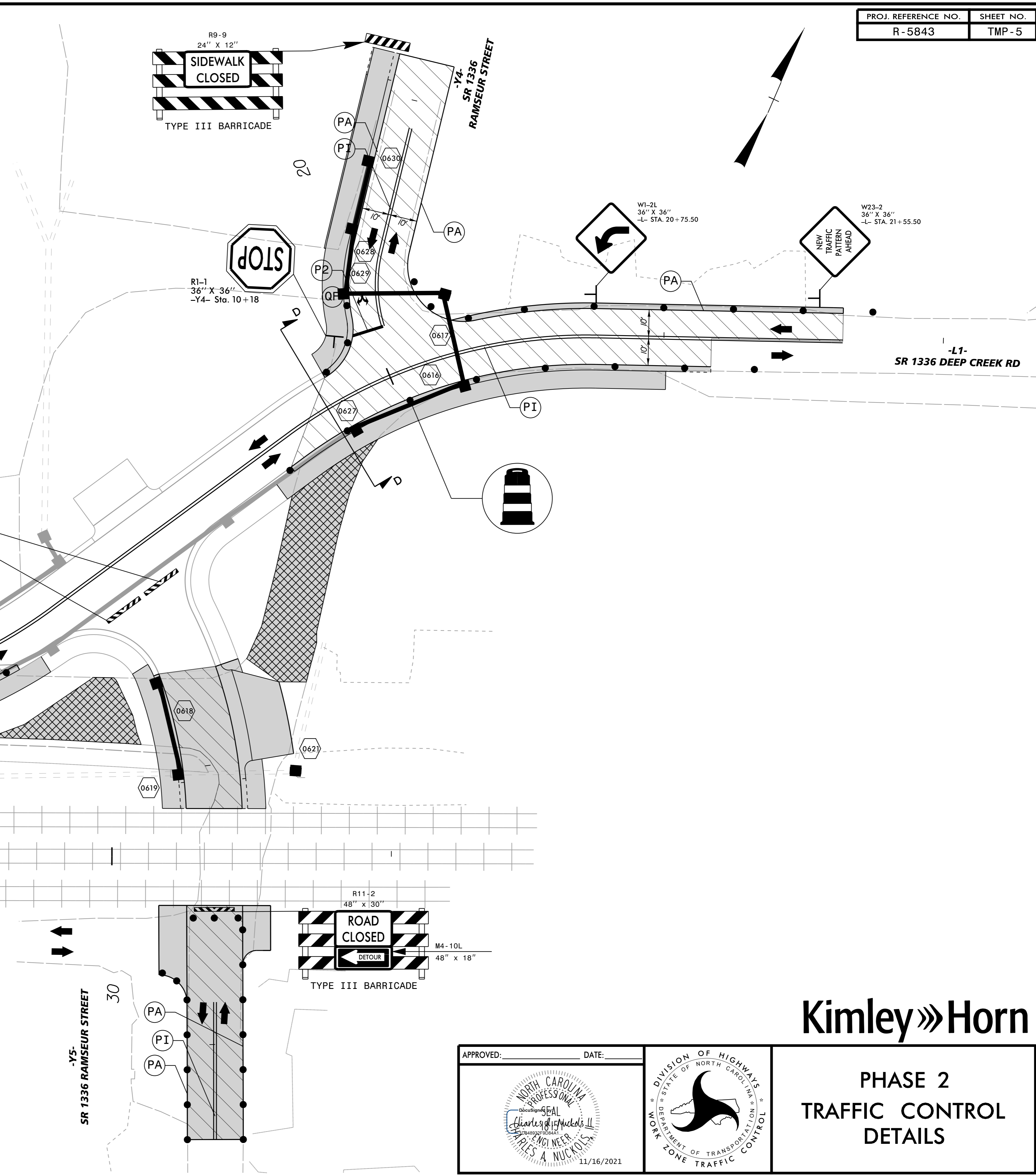
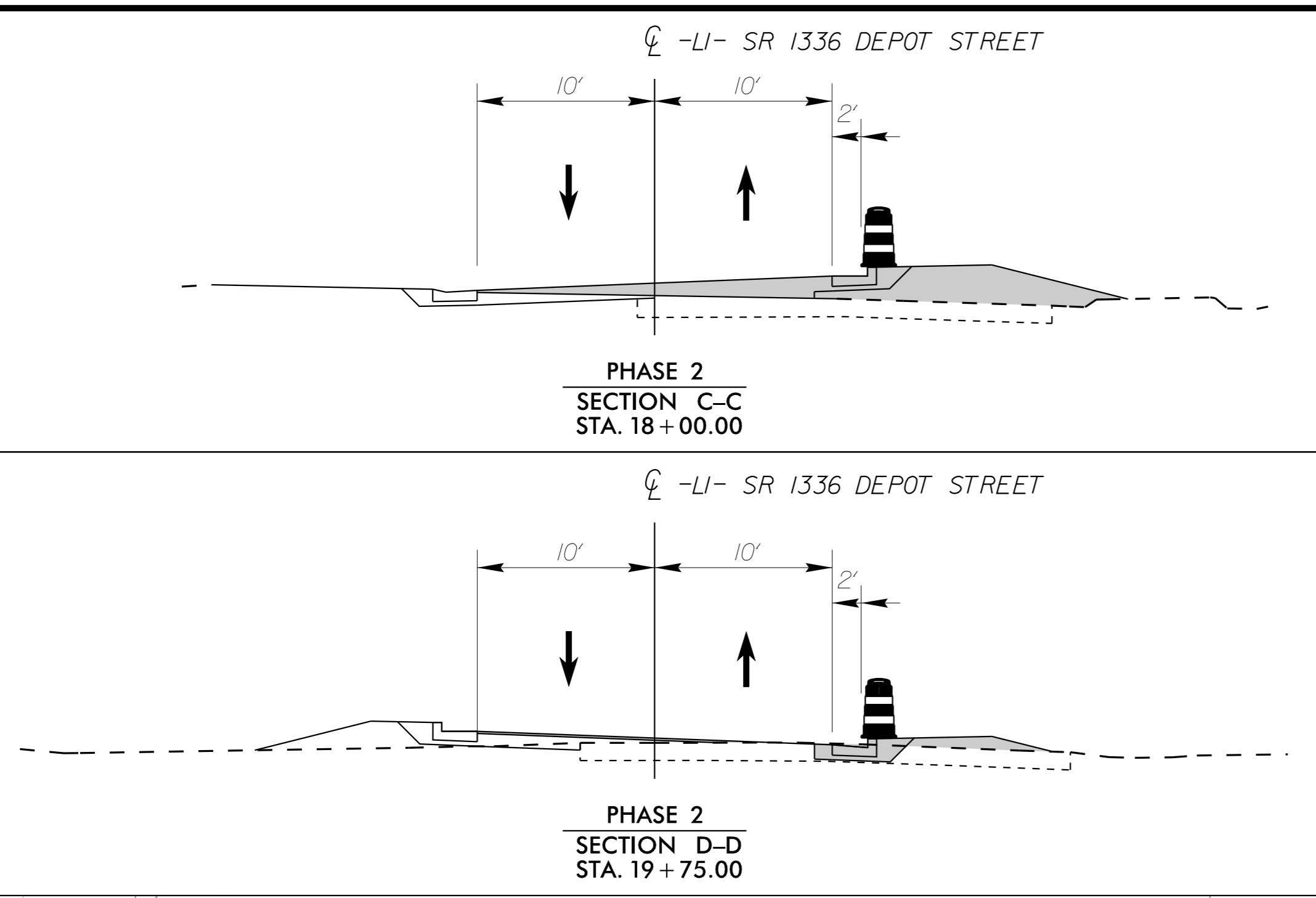
K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson IntTrafficControlPlan Sheets\R-5843_tcp_psh_4.dgn 11/16/2021

Kimley»Horn

APPROVED: _____ DATE: _____



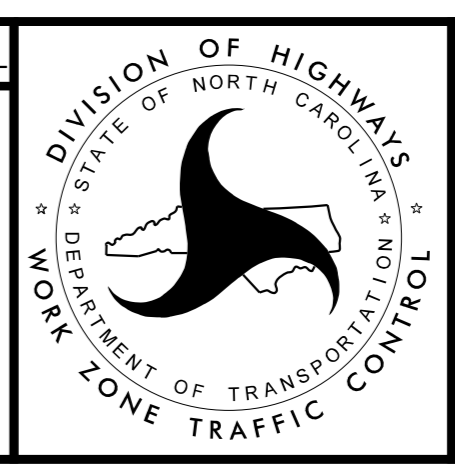
**PHASE 1
TRAFFIC CONTROL
DETAILS**



K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int)TrafficTrafficControlTCP-Plan Sheets\R-5843_tcp_psh_5.dgn 11/16/2021

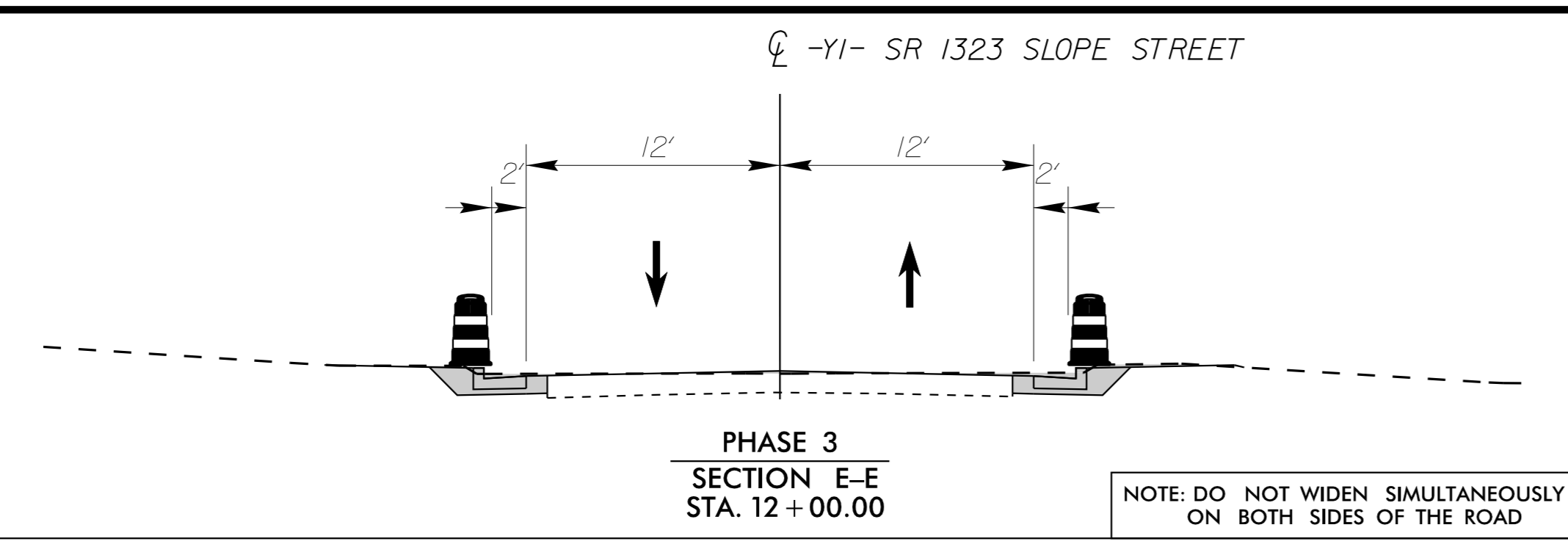


APPROVED: DATE: 11/16/2021

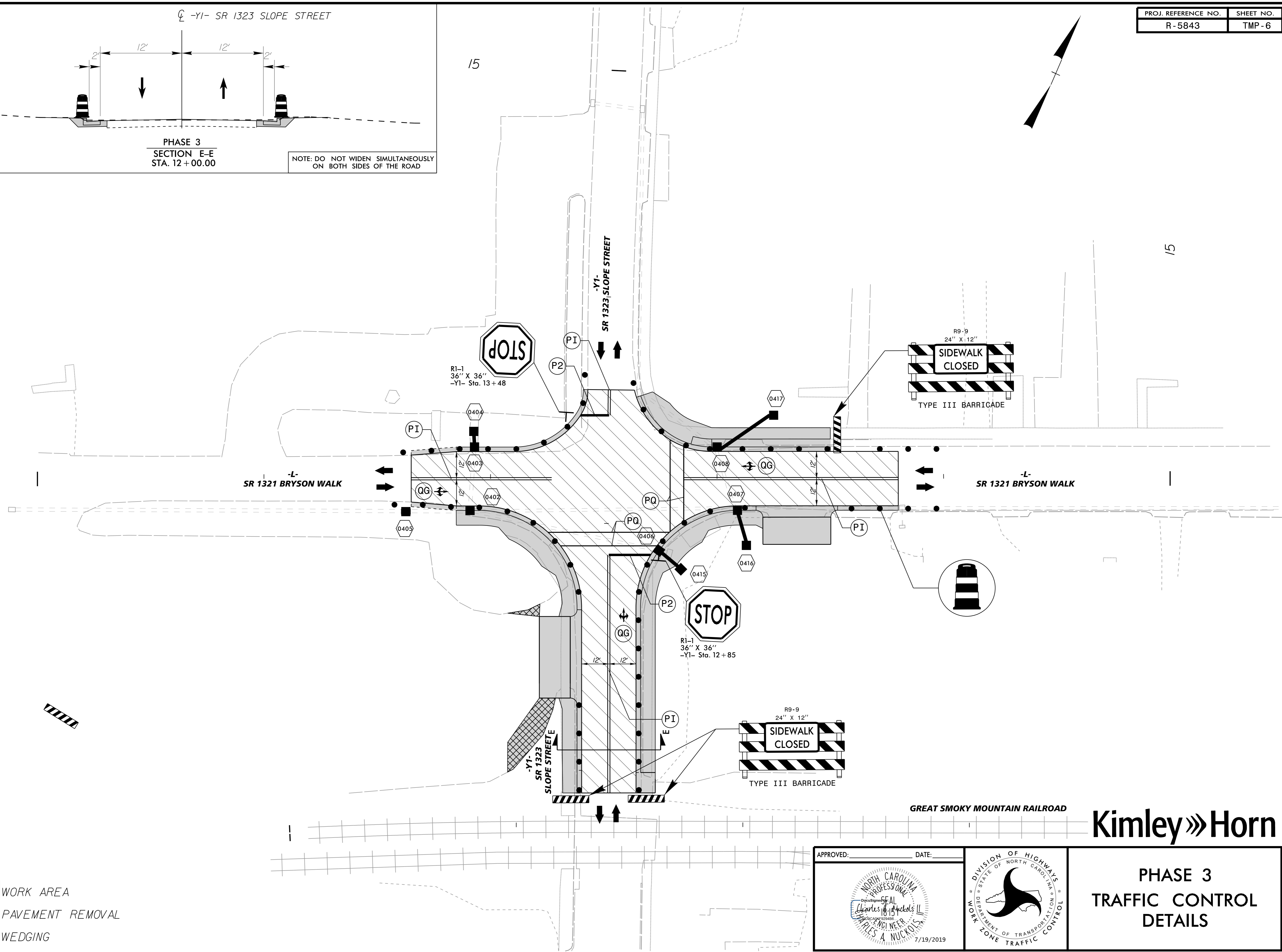


Kimley»Horn

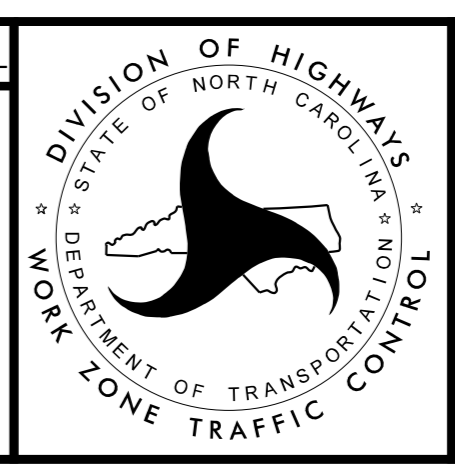
PHASE 2 TRAFFIC CONTROL DETAILS



K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson IntTrafficControl)CP-Plan Sheets\R-5843_tcp_psh_6.dgn 7/17/2019

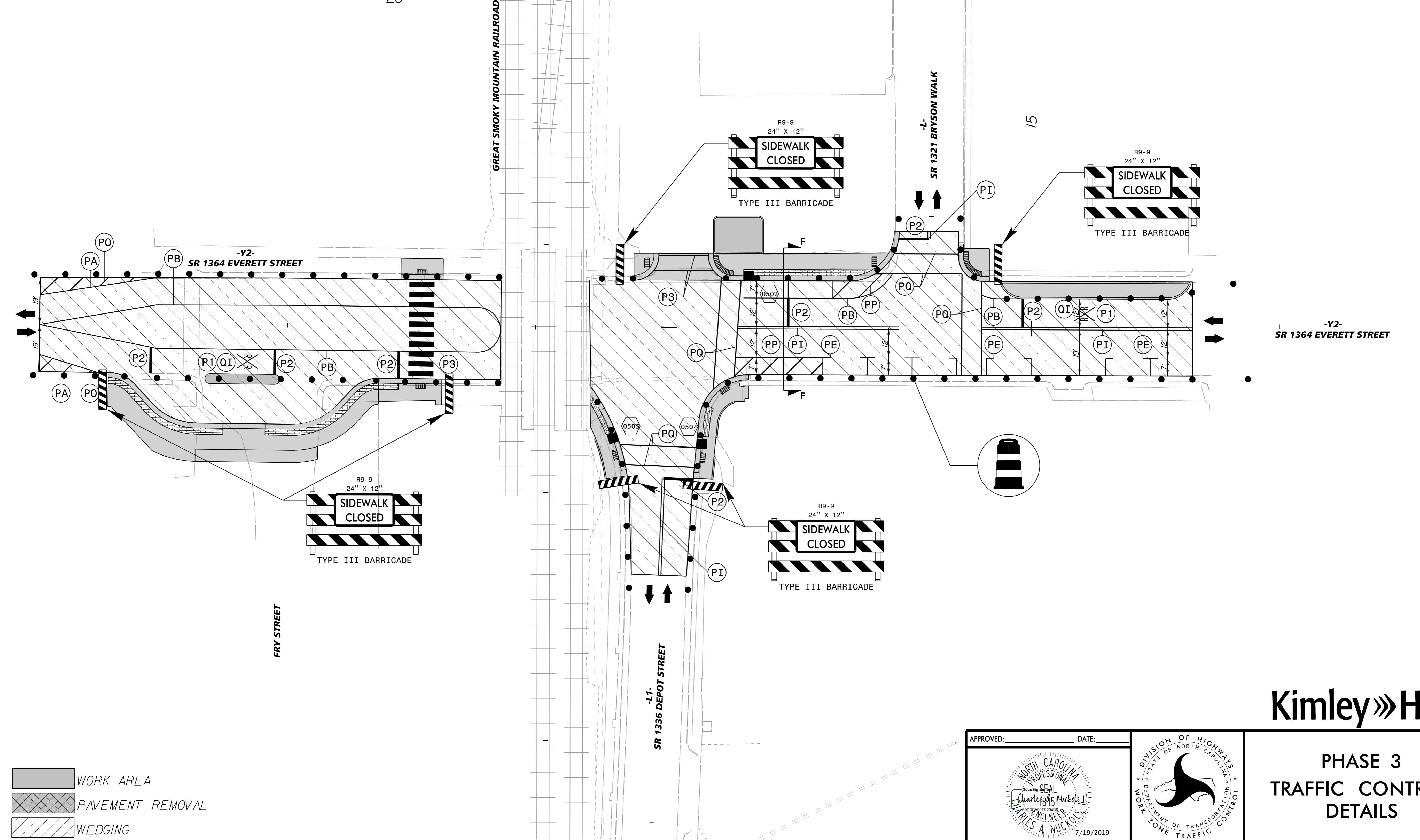
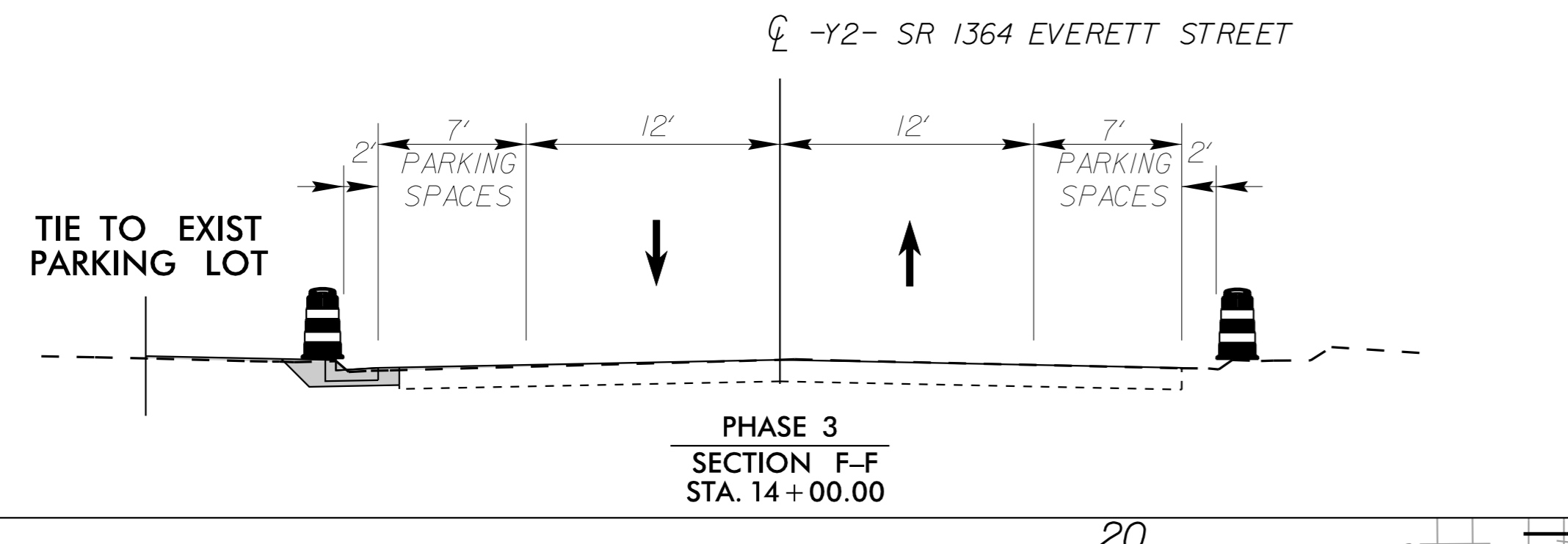
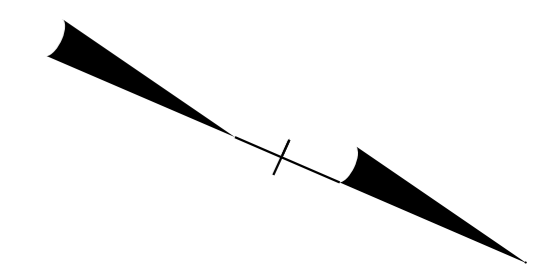


APPROVED: _____ DATE: _____

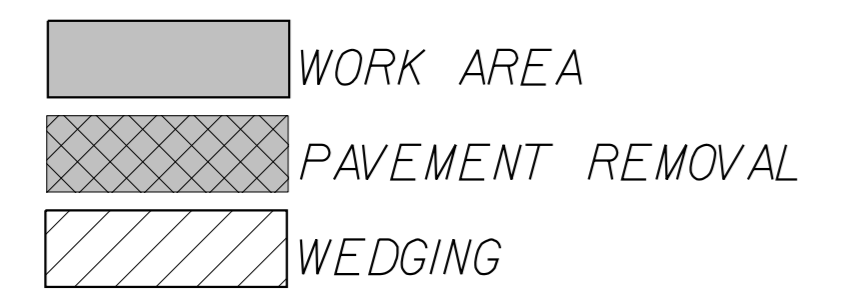


Kimley»Horn

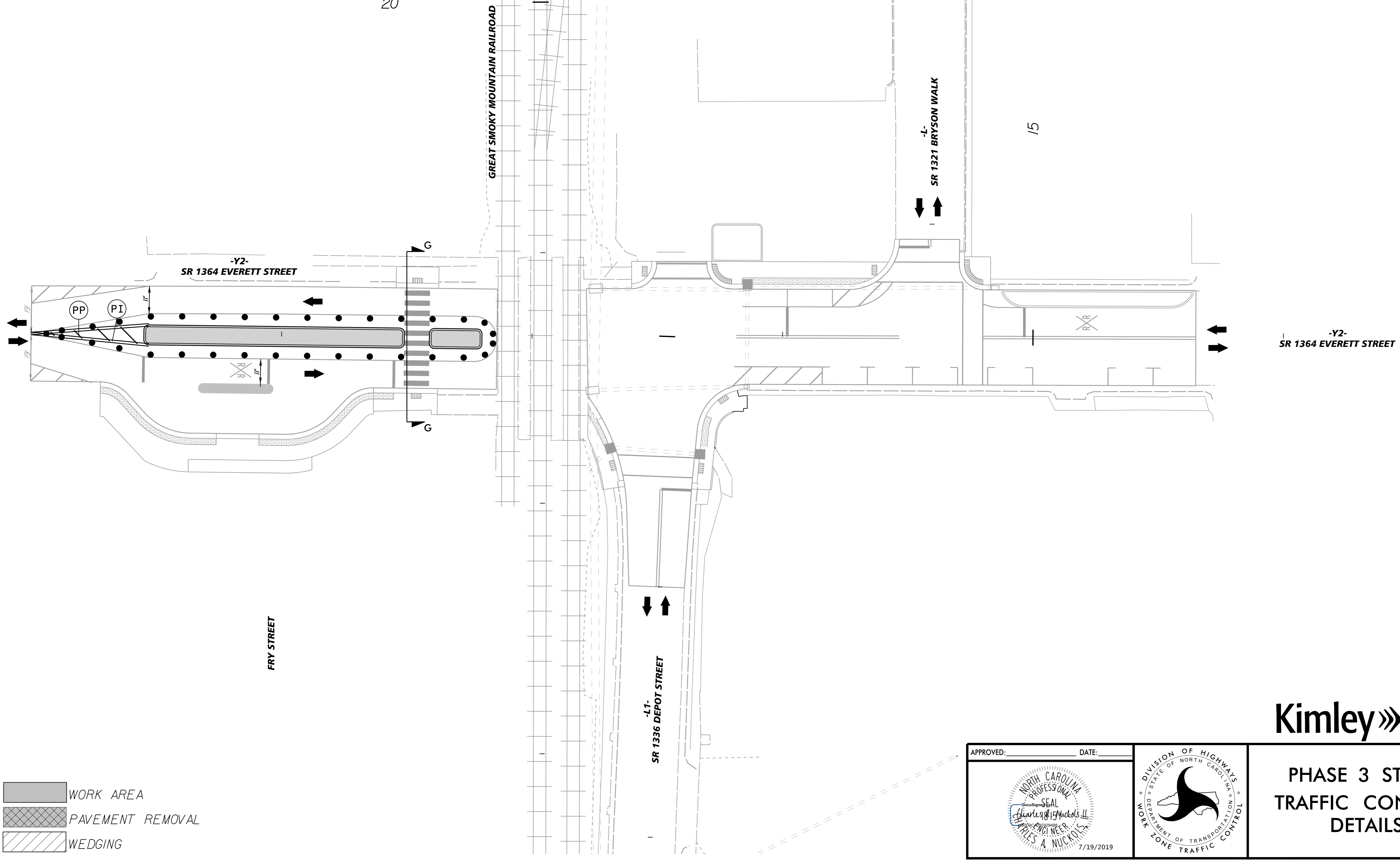
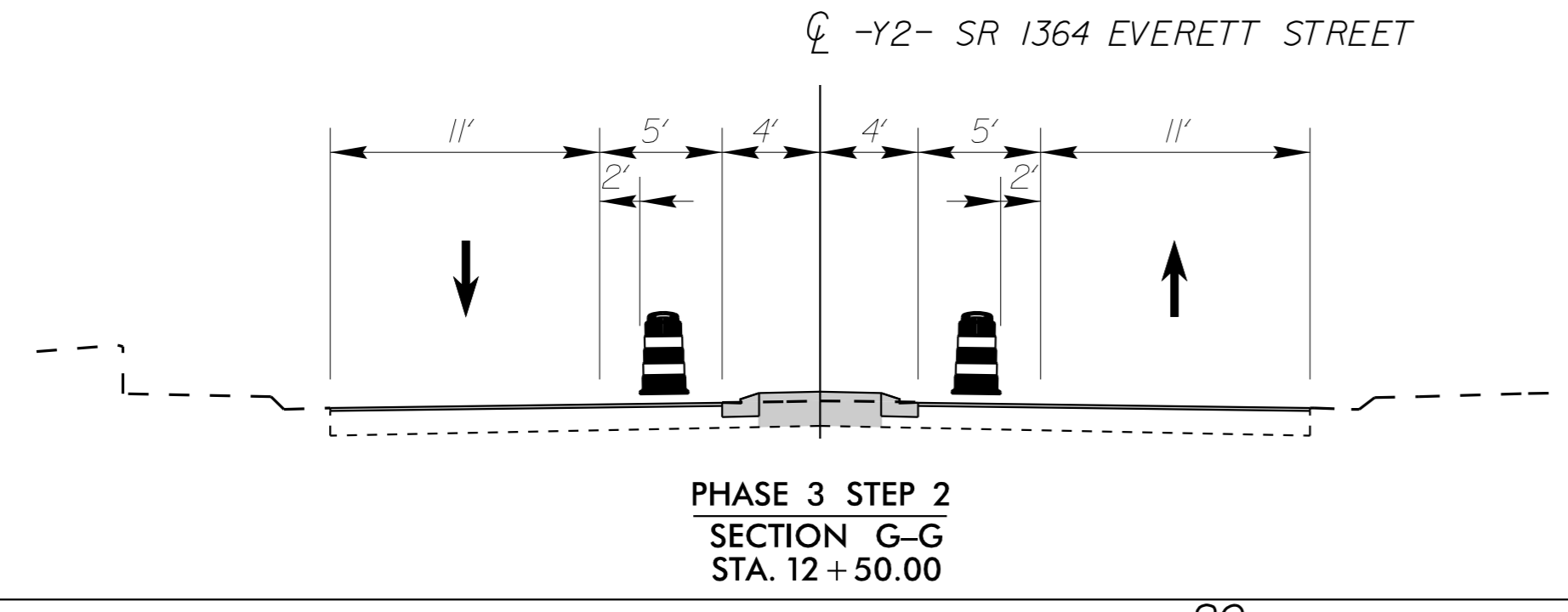
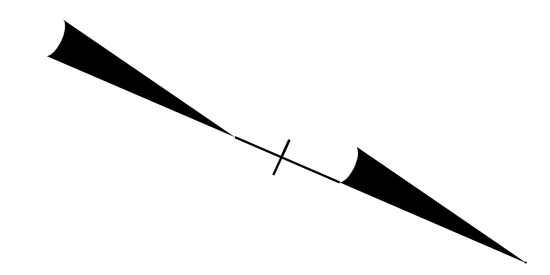
PHASE 3
TRAFFIC CONTROL
DETAILS



7/16/2019 K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson IntTrafficControl)CP-Plan Sheets\R-5843_tcp_psh_7.dgn



APPROVED:	DATE:		<p>Kimley»Horn</p> <p>PHASE 3 TRAFFIC CONTROL DETAILS</p>
	7/19/2019		



7/17/2019 K:\RAL_Roadway\01036387 - Div 14 (R-5843) Bryson IntTrafficControl\CP\Plan Sheets\R-5843_tcp_psh_8.dgn

- WORK AREA
- PAVEMENT REMOVAL
- WEDGING

APPROVED:	DATE: 7/19/2019		<h2 style="margin: 0;">Kimley»Horn</h2> <h3 style="margin: 0;">PHASE 3 STEP 2 TRAFFIC CONTROL DETAILS</h3>
-----------	-----------------	--	--

K:\PAL_Roadway\01036387 - Div 14 (R-5843 Bryson Int)\Traffic\Signing\CADD\Pavement marking\R-5843_rdy_pmp_1shdgn

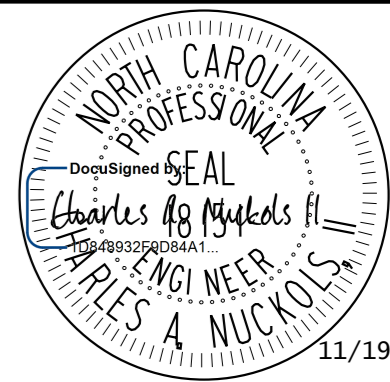
TIP PROJECT: R-5843

CONTRACT: DN00709

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SWAIN COUNTY

**LOCATION: INTERSECTIONS: SLOPE STREET (SR 1323) /BRYSON WALK (SR 1321)
EVERETT STREET (SR 1364) /DEPOT STREET (SR 1336)
DEPOT STREET (SR 1336) /RAMSEUR STREET (SR 1336)
DEEP CREEK ROAD (SR 1336) /RAMSEUR STREET (SR 1336)**


PROJECT REFERENCE NO. <i>R-5843</i>	SHEET NO. <i>PMP-1</i>
APPROVED: _____	
DATE: _____	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

INDEX	
SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN COVER SHEET
PMP-2	N/A
PMP-3 THRU PMP-5	PAVEMENT MARKING DETAILS

ROADWAY STANDARD DRAWING	
THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:	
STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - DIVIDED AND UNDIVIDED ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

PAVEMENT MARKING SCHEDULE	
SYMBOL	DESCRIPTION
UF	THERMOPLASTIC SYMBOLS (90 MILS) COMBO LEFT/RIGHT ARROW
UG	COMBO LEFT/RIGHT/STRAIGHT ARROW
UI	THERMOPLASTIC CHAR. (90 MILS) ALPHANUMERIC CHAR.
DC	THERMOPLASTIC (90 MILS) DECORATIVE CROSSWALK (RED)
TA	THERMOPLASTIC (4", 50 MILS) WHITE EDGELINE
TB	YELLOW EDGELINE
TI	YELLOW DOUBLE CENTER LINE
T9	2 FT. - 6 FT./SP YELLOW MINISKIP
TO	THERMOPLASTIC (8", 90 MILS) WHITE DIAGONAL
TP	YELLOW DIAGONAL
TQ	WHITE CROSSWALK LINE
T1	THERMOPLASTIC (16", 90 MILS) WHITE LINE RR
T2	THERMOPLASTIC (24", 90 MILS) WHITE STOPBAR
T3	WHITE CROSSWALK LINE

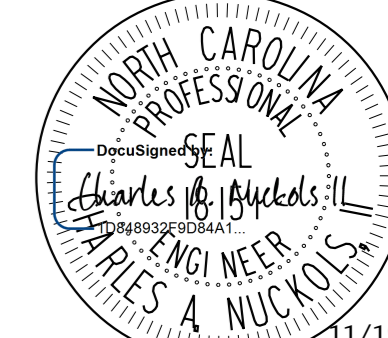
- | GENERAL NOTES | | |
|--|----------------|---------------|
| THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER. | | |
| A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS USING 60 MIL ON THE FINAL SURFACE AS FOLLOWS: | | |
| <u>ROAD NAME</u> | <u>MARKING</u> | <u>MARKER</u> |
| -L- | THERMOPLASTIC | N/A |
| -L1- | THERMOPLASTIC | N/A |
| -Y1- | THERMOPLASTIC | N/A |
| -Y2- | THERMOPLASTIC | N/A |
| -Y4- | THERMOPLASTIC | N/A |
| -Y5- | THERMOPLASTIC | N/A |
| B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES. | | |
| C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS. | | |
| D) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER. | | |
| E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM. | | |
| F) SEE ROADWAY PLANS FOR ALTERNATE CURB RAMP DESIGNS WHEN INDICATED ON PAVEMENT MARKING DETAIL SHEETS. | | |
| G) USE 50 MIL THERMOPLASTIC WHEN INDICATED ON PAVEMENT MARKING SCHEDULE | | |
| H) SEE SPECIAL PROVISIONS FOR STAMPED DECORATIVE CROSSWALK. LOCATIONS CALLED OUT ON THE PLANS | | |

PLAN PREPARED BY: Kimley-Horn and Associates <small>P.O. BOX 3964 RALEIGH, NC 27636 PE NO. F-012</small>		
Charles A. Nuckols P.E.	PROJECT ENGINEER	
Caleb D. Lowman P.E.	PROJECT DESIGN ENGINEER	

Kimley » Horn
 421 FAYETTEVILLE ST, SUITE 600
 RALEIGH, N.C. 27601

RIGHT-OF-WAY REV.
 CONST. REV.

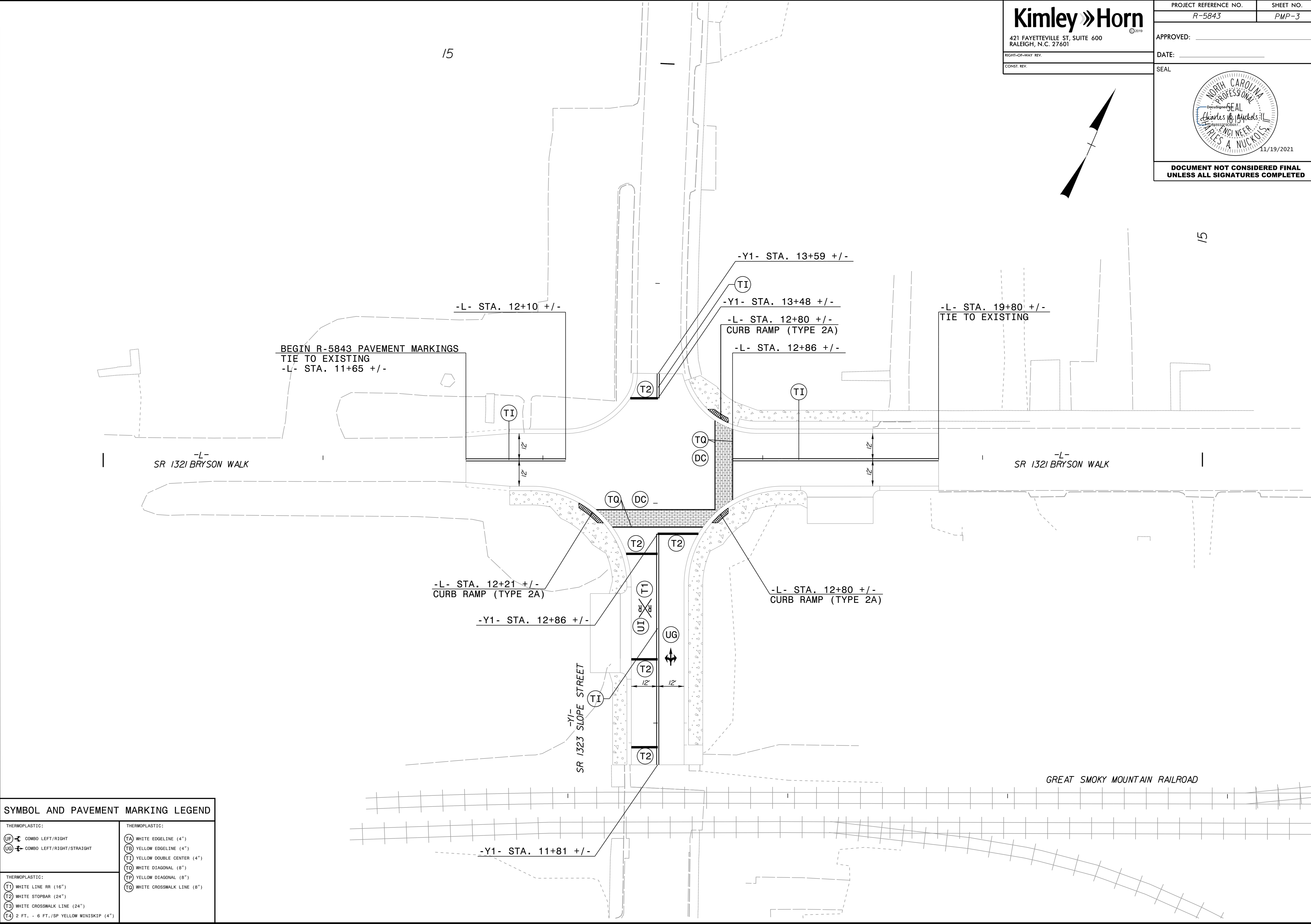
PROJECT REFERENCE NO. <i>R-5843</i>	SHEET NO. <i>PMP-3</i>
APPROVED: _____	
DATE: _____	
SEAL	



11/19/2021

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson In)\Traffic\Signing\CADD\Pavement marking\R-5843_rdy_pmp_3.dgn



SYMBOL AND PAVEMENT MARKING LEGEND	
<p>THERMOPLASTIC:</p> <p>(UF) COMBO LEFT/RIGHT</p> <p>(UG) COMBO LEFT/RIGHT/STRAIGHT</p>	<p>THERMOPLASTIC:</p> <p>(TA) WHITE EDGELINE (4")</p> <p>(TB) YELLOW EDGELINE (4")</p> <p>(TC) YELLOW DOUBLE CENTER (4")</p> <p>(TD) WHITE DIAGONAL (8")</p> <p>(TE) YELLOW DIAGONAL (8")</p> <p>(TF) WHITE CROSSWALK LINE (8")</p>
<p>THERMOPLASTIC:</p> <p>(T1) WHITE LINE RR (16")</p> <p>(T2) WHITE STOPBAR (24")</p> <p>(T3) WHITE CROSSWALK LINE (24")</p> <p>(T4) 2 FT. - 6 FT./SP YELLOW MINISKIP (4")</p>	

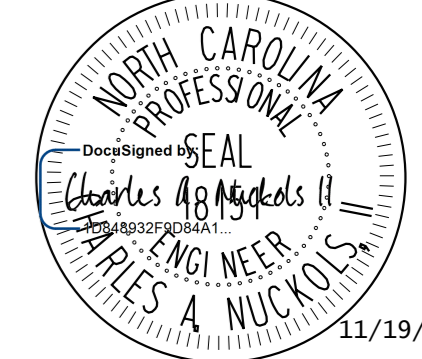
11/18/2021

Kimley Horn
 421 FAYETTEVILLE ST, SUITE 600
 RALEIGH, N.C. 27601

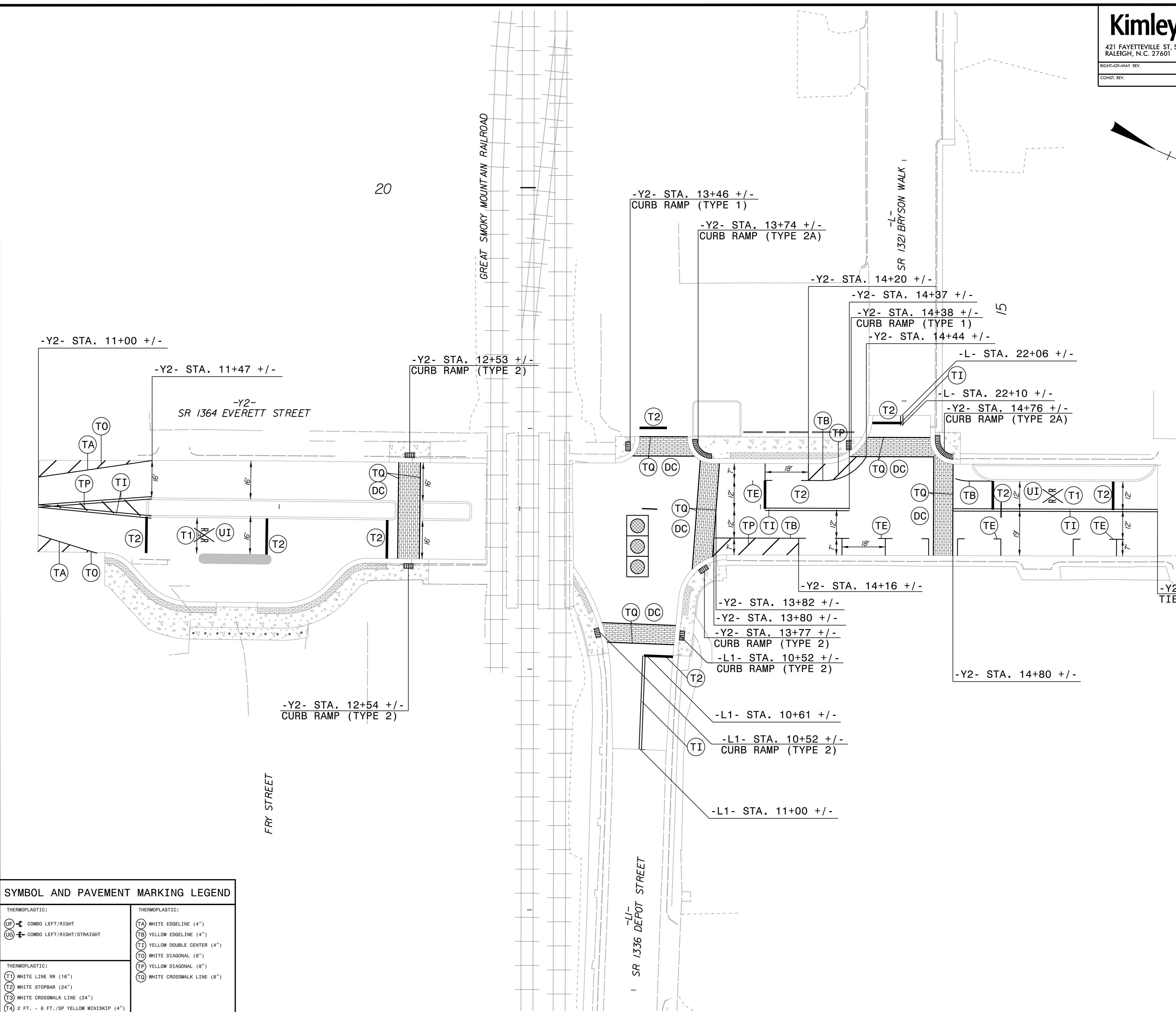
PROJECT REFERENCE NO. R-5843 SHEET NO. PMP-4

APPROVED: _____ DATE: _____

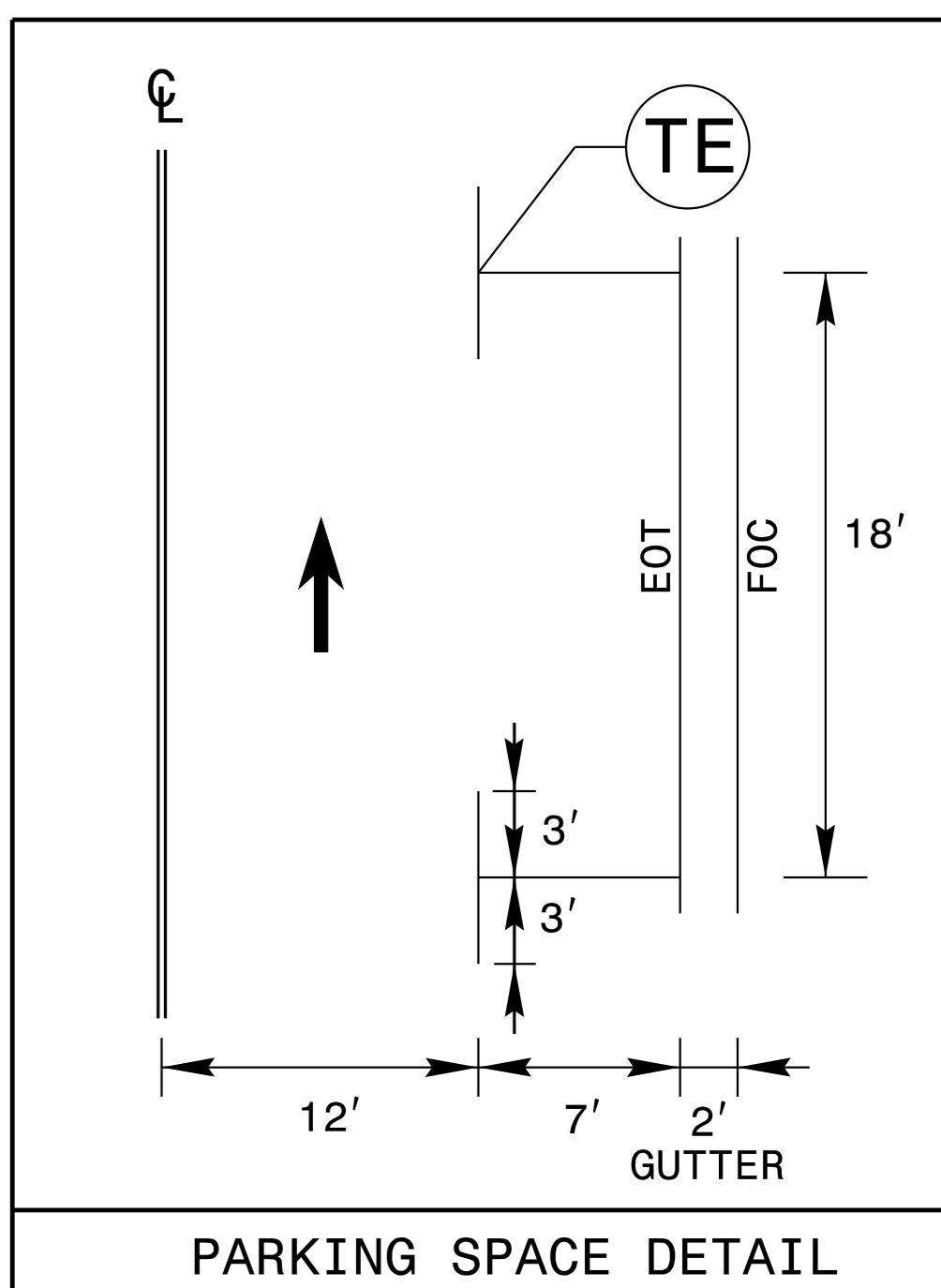
CONST. REV. _____ SEAL



**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**



-Y2- STA. 15+65 +/-
 TIE TO EXIST



K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson In)\Traffic\Signing\CADD\Pavement\marking\R-5843_rdy_pmp_4.dgn
 11/18/2021

SYMBOL AND PAVEMENT MARKING LEGEND

<p>THERMOPLASTIC:</p> <p>(UF) COMBO LEFT/RIGHT</p> <p>(UG) COMBO LEFT/RIGHT/STRAIGHT</p>	<p>THERMOPLASTIC:</p> <p>(TA) WHITE EDGELINE (4")</p> <p>(TB) YELLOW EDGELINE (4")</p> <p>(TI) YELLOW DOUBLE CENTER (4")</p> <p>(TO) WHITE DIAGONAL (8")</p> <p>(TP) YELLOW DIAGONAL (8")</p> <p>(TD) WHITE CROSSWALK LINE (8")</p>
<p>THERMOPLASTIC:</p> <p>(T1) WHITE LINE RR (16")</p> <p>(T2) WHITE STOPBAR (24")</p> <p>(T3) WHITE CROSSWALK LINE (24")</p> <p>(T4) 2 FT. - 6 FT./SP YELLOW MINISKIP (4")</p>	

Kimley Horn
 421 FAYETTEVILLE ST, SUITE 600
 RALEIGH, N.C. 27601

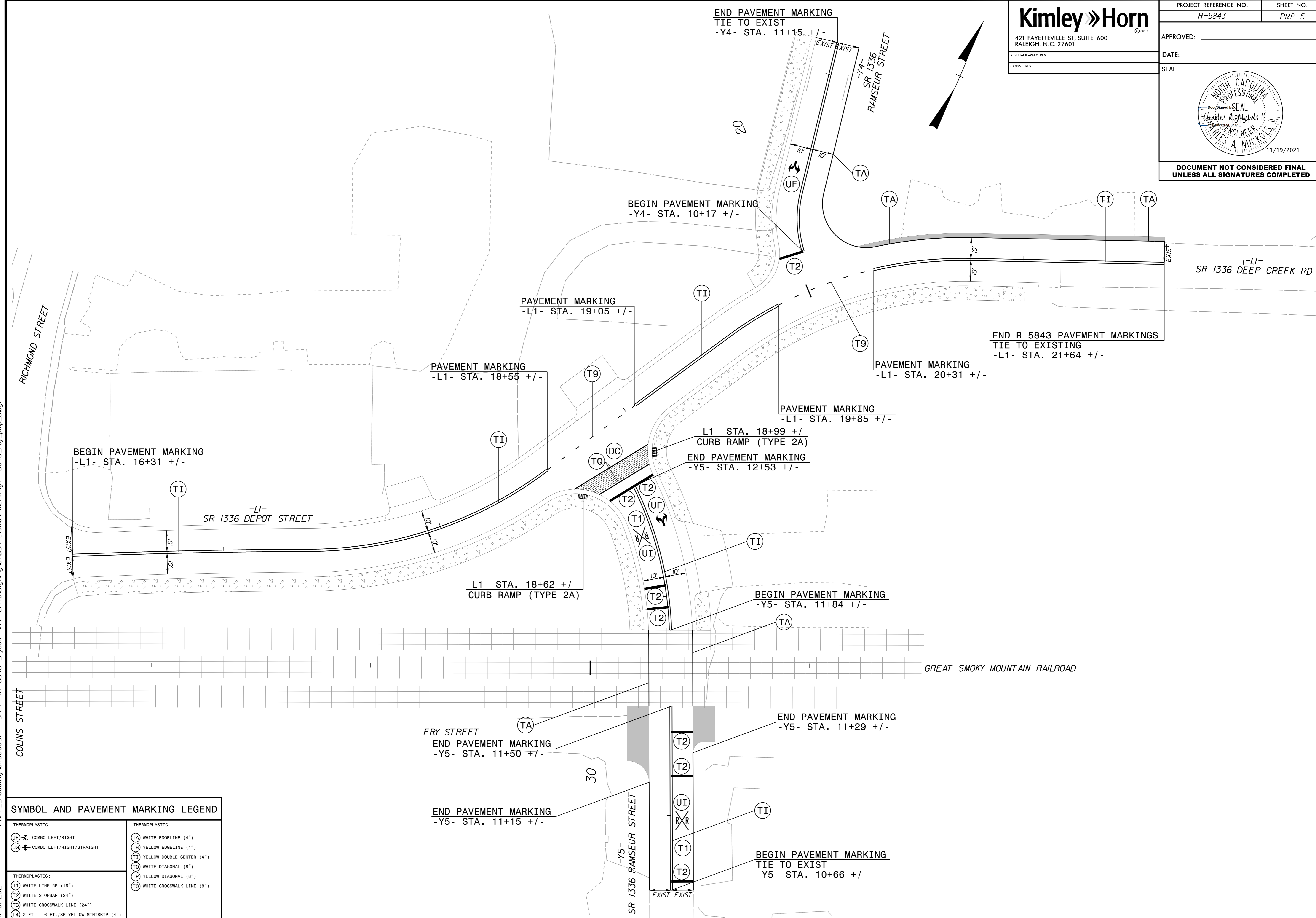
PROJECT REFERENCE NO. R-5843 SHEET NO. PMP-5

APPROVED: _____ DATE: _____

SEAL

Charles A. Nuckolls II
 NORTH CAROLINA PROFESSIONAL ENGINEER
 No. 11111
 11/19/2021

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**



SYMBOL AND PAVEMENT MARKING LEGEND

<p>THERMOPLASTIC:</p> <p>(UF) COMBO LEFT/RIGHT</p> <p>(UG) COMBO LEFT/RIGHT/STRAIGHT</p>	<p>THERMOPLASTIC:</p> <p>(TA) WHITE EDGELINE (4")</p> <p>(TB) YELLOW EDGELINE (4")</p> <p>(TI) YELLOW DOUBLE CENTER (4")</p> <p>(TO) WHITE DIAGONAL (8")</p> <p>(TP) YELLOW DIAGONAL (8")</p> <p>(TD) WHITE CROSSWALK LINE (8")</p>
<p>THERMOPLASTIC:</p> <p>(T1) WHITE LINE RR (16")</p> <p>(T2) WHITE STOPBAR (24")</p> <p>(T3) WHITE CROSSWALK LINE (24")</p> <p>(T4) 2 FT. - 6 FT./SP YELLOW MINISKIP (4")</p>	

K:\RAL_Roadway\01036387 - Div 14 (R-5843 Bryson In\Traffic\Signing\CADD\Pavement marking\R-5843_rdy_pmp_5.dgn 11/18/2021