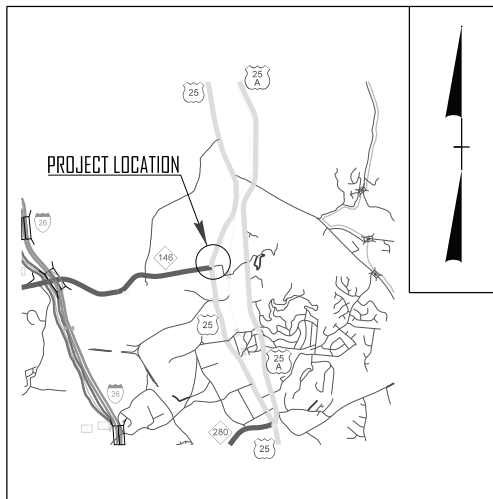


09/08/25

TIP PROJECT: SM-57131

CONTRACT: DM00452

See Sheet 1A For Index of Sheets



VICINITY MAP (NTS)

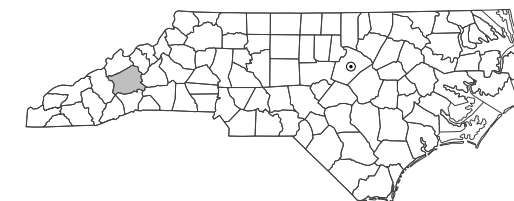
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

BUNCOMBE COUNTY

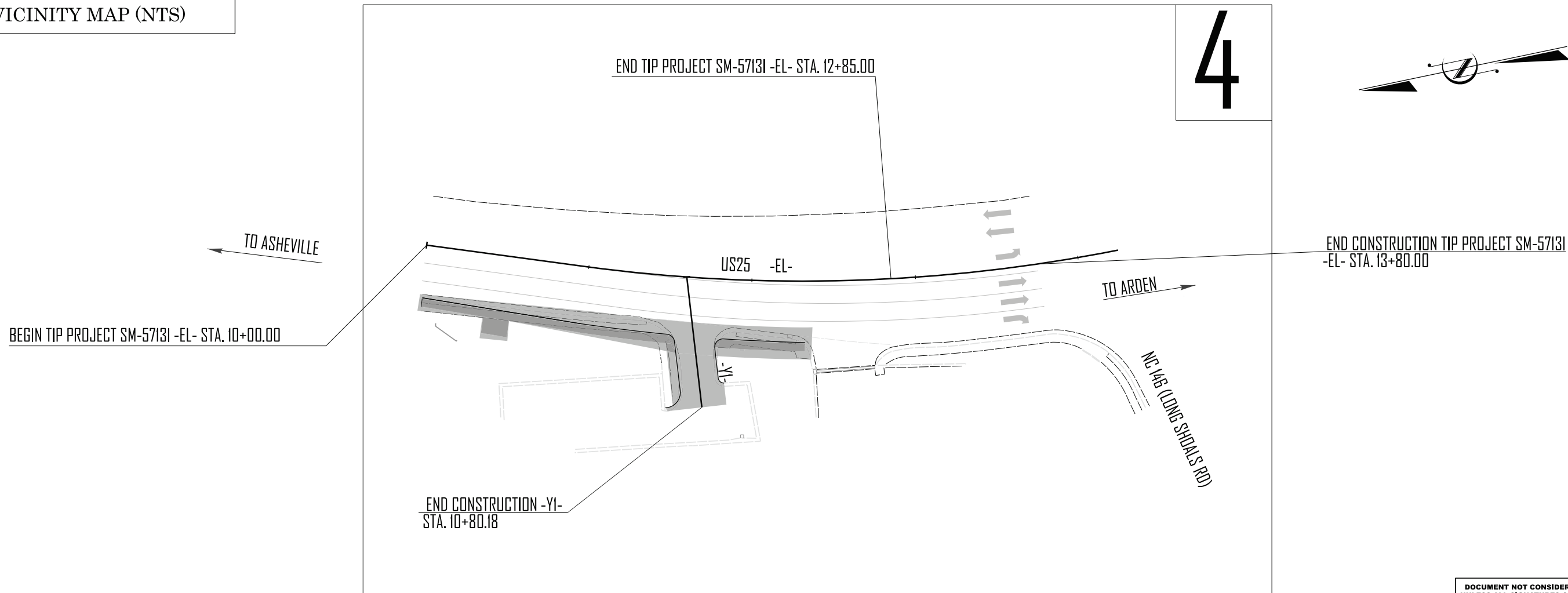
LOCATION: *US 25 (HENDERSONVILLE RD) AT NC 146 (LONG SHOALS RD)*

TYPE OF WORK: *WIDENING, GRADING, DRAINAGE, PAVING,  
AND PAVEMENT MARKING*

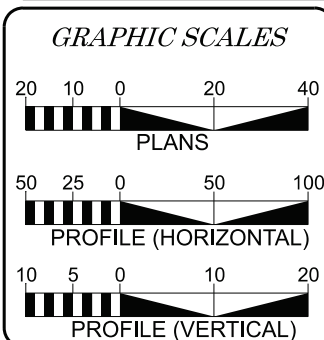
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SM-57131	11	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
49034.1.1	N/A	PE	
49034.2.1	N/A	ROW	
49034.3.1	N/A	CONST.	



4



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



**DESIGN DATA**

ADT 2024 = 30,500  
V = 45 MPH

**PROJECT LENGTH**

LENGTH OF ROADWAY TIP PROJECT SM-57131 = 0.072MI

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
55 Orange Street, Asheville NC, 28801

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: **WILLIAM C. CARVER, P.E.**  
JULY 17, 2025  
PROJECT ENGINEER

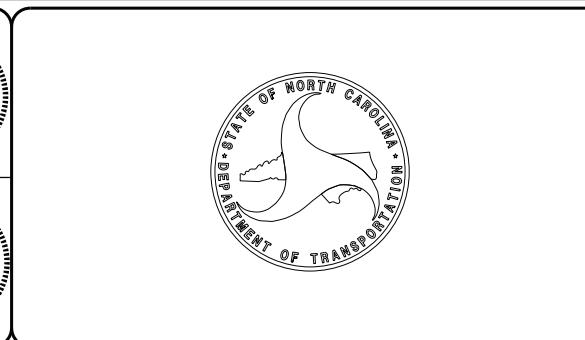
LETTING DATE: **HAMPTON FLETCHER, SI**  
MAY 6, 2026  
PROJECT DESIGN ENGINEER

**HYDRAULICS ENGINEER**

**COREY A. CAVALIER, P.E.**  
Seal: COREY A. CAVALIER, P.E., SEAL 030018, ENGINEER, NORTH CAROLINA

**ROADWAY DESIGN ENGINEER**

**WILLIAM C. CARVER, P.E.**  
Seal: WILLIAM C. CARVER, P.E., SEAL 041993, ENGINEER, NORTH CAROLINA





Signed by:  
William C. Carver  
16252A8519340F

## INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2D-1	DRAINAGE DETAILS
3B-1	ROADWAY SUMMARIES
3D-1	DRAINAGE SUMMARIES
4 THRU 6	PLAN AND PROFILE SHEET
RW-01 THRU RW-04	SURVEY CONTROL SHEETS
TMP-1 THRU TMP-5A	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-4	EROSION CONTROL PLANS
X-1A THRU X-1B	CROSS-SECTION SUMMARY SHEET
X-1 THRU X-5	CROSS-SECTIONS

GENERAL NOTES: 2024 SPECIATIONS EFFECTIVE: 01-16-24  
REVISED

## GRADING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED OR FUTURE SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS, GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED 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 TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

## DRIVEWAY:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.03 AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

## UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE:  
Dominion Energy  
City of Asheville Water Department  
AT&T

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

## RIGHT OF WAY OF MARKERS:

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

## CURB RAMPS:

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS.  
CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD. 848.06

2024 ROADWAY ENGLISH STANDARD DRAWINGS EFF. 01-16-2024  
REV.

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit N.C. Department of Transportation - Raleigh, N.C., Dated January 16, 2024 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  
225.03 Deceleration and Accelerations

## DIVISION 3 - PIPE CULVERTS

300.01 Method of Pipe Installation

## DIVISION 8 - INCIDENTALS

840.02 Concrete Catch Basin - 12" thru 54" Pipe  
840.03 Frames, Grates, and Hood - for use on Standard Catch Basin  
846.01 Concrete Curb, Gutter and Curb & Gutter  
848.01 Concrete Sidewalk  
848.02 Driveway Turnout - Radius Type  
848.06 Curb Ramp

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

Note: Not to Scale

### BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	○
Computed Property Corner	×
Existing Concrete Monument (ECM)	□
Parcel / Sequence Number	(23)
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	MLB
Proposed Wetland Boundary	MLB
Existing Endangered Animal Boundary	EAB
Existing Endangered Plant Boundary	EPB
Existing Historic Property Boundary	HPB
Known Contamination Area: Soil	-----
Potential Contamination Area: Soil	-----
Known Contamination Area: Water	-----
Potential Contamination Area: Water	-----
Contaminated Site: Known or Potential	-----

### BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	⊕
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	MLB
Proposed Lateral, Tail, Head Ditch	-----
False Sump	-----

### RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○
Switch	□
RR Abandoned	-----
RR Dismantled	-----

### RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	-----
Primary Horiz and Vert Control Point	-----
Secondary Horiz and Vert Control Point	-----
Vertical Benchmark	-----
Existing Right of Way Monument	△
Proposed Right of Way Monument (Rebar and Cap)	▲
Proposed Right of Way Monument (Concrete)	▲
Existing Permanent Easement Monument	-----
Proposed Permanent Easement Monument (Rebar and Cap)	◇
Existing C/A Monument	△
Proposed C/A Monument (Rebar and Cap)	▲
Proposed C/A Monument (Concrete)	▲
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Existing Control of Access Line	-----
Proposed Control of Access Line	-----
Proposed ROW and CA Line	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	E
Proposed Temporary Drainage Easement	TDE
Proposed Permanent Drainage Easement	PDE
Proposed Permanent Drainage/Utility Easement	DUE
Proposed Permanent Utility Easement	PUE
Proposed Temporary Utility Easement	TUE
Proposed 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:

\* SUE - Subsurface Utility Engineering  
LOS - Level of Service - A,B,C or D (Accuracy)

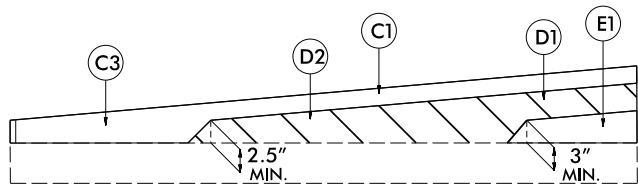
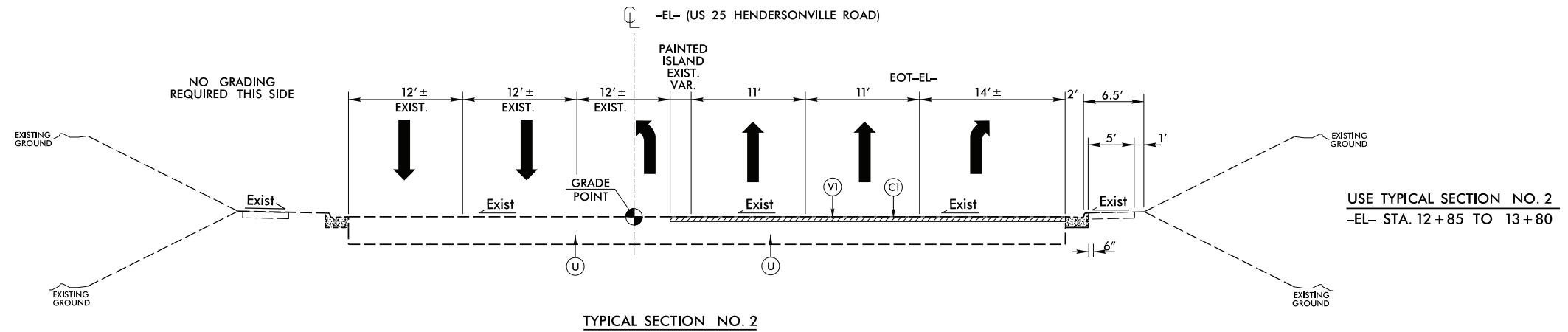
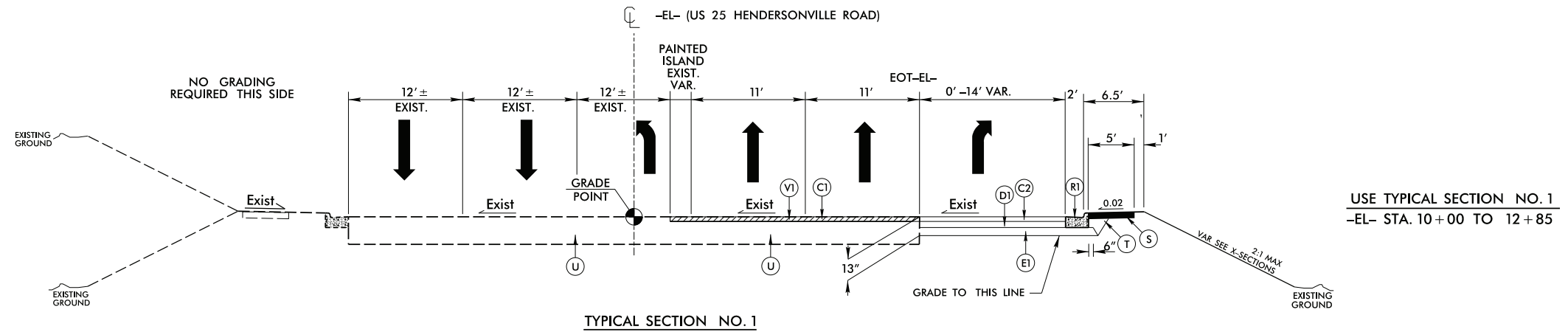
POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊗
Power Transformer	⊗
U/G Power Cable Hand Hole	-----
H-Frame Pole	●
U/G Power Line Test Hole (SUE - LOS A)*	⊕
U/G Power Line (SUE - LOS B)*	-----
U/G Power Line (SUE - LOS C)*	-----
U/G Power Line (SUE - LOS D)*	-----

### TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Pedestal	⊕
Telephone Cell Tower	⊕
U/G Telephone Cable Hand Hole	-----
U/G Telephone Test Hole (SUE - LOS A)*	⊕
U/G Telephone Cable (SUE - LOS B)*	-----
U/G Telephone Cable (SUE - LOS C)*	-----
U/G Telephone Cable (SUE - LOS D)*	-----
U/G Telephone Conduit (SUE - LOS B)*	-----
U/G Telephone Conduit (SUE - LOS C)*	-----
U/G Telephone Conduit (SUE - LOS D)*	-----
U/G Fiber Optics Cable (SUE - LOS B)*	-----
U/G Fiber Optics Cable (SUE - LOS C)*	-----
U/G Fiber Optics Cable (SUE - LOS D)*	-----

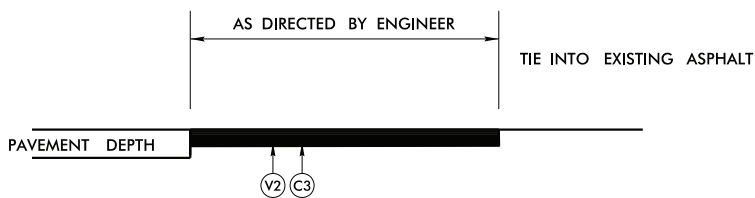
WATER:	
Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line Test Hole (SUE - LOS A)*	⊕
U/G Water Line (SUE - LOS B)*	-----
U/G Water Line (SUE - LOS C)*	-----
U/G Water Line (SUE - LOS D)*	-----
Above Ground Water Line	A/G Water
TV:	
TV Pedestal	⊕
TV Tower	⊗
U/G TV Cable Hand Hole	-----
U/G TV Test Hole (SUE - LOS A)*	⊕
U/G TV Cable (SUE - LOS B)*	-----
U/G TV Cable (SUE - LOS C)*	-----
U/G TV Cable (SUE - LOS D)*	-----
U/G Fiber Optic Cable (SUE - LOS B)*	-----
U/G Fiber Optic Cable (SUE - LOS C)*	-----
U/G Fiber Optic Cable (SUE - LOS D)*	-----
GAS:	
Gas Valve	◇
Gas Meter	⊕
U/G Gas Line Test Hole (SUE - LOS A)*	⊕
U/G Gas Line (SUE - LOS B)*	-----
U/G Gas Line (SUE - LOS C)*	-----
U/G Gas Line (SUE - LOS D)*	-----
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 Force Main Line Test Hole (SUE - LOS A)*	⊕
SS Force Main Line (SUE - LOS B)*	-----
SS Force Main Line (SUE - LOS C)*	-----
SS Force Main Line (SUE - LOS D)*	-----
MISCELLANEOUS:	
Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line (SUE - LOS B)*	-----
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	□
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 336 LBS. PER SQ. YARD
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YARD PER 1" DEPTH TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT TO EXCEED 4" IN DEPTH.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
R1	2'-6" CURB AND GUTTER
S	5' SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	MILLING ASPHALT PAVEMENT, 1-12" DEPTH
V2	INCIDENTAL MILLING
W	WEDGING

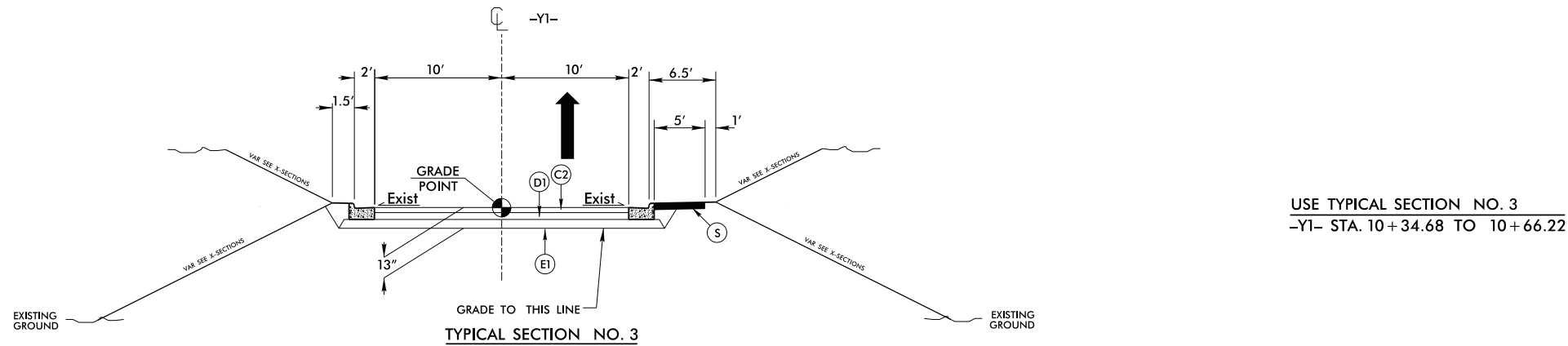


Wedging Detail For Resurfacing

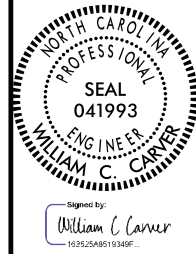
DETAIL SHOWING INCIDENTAL MILLING AND PAVEMENT TIE-IN

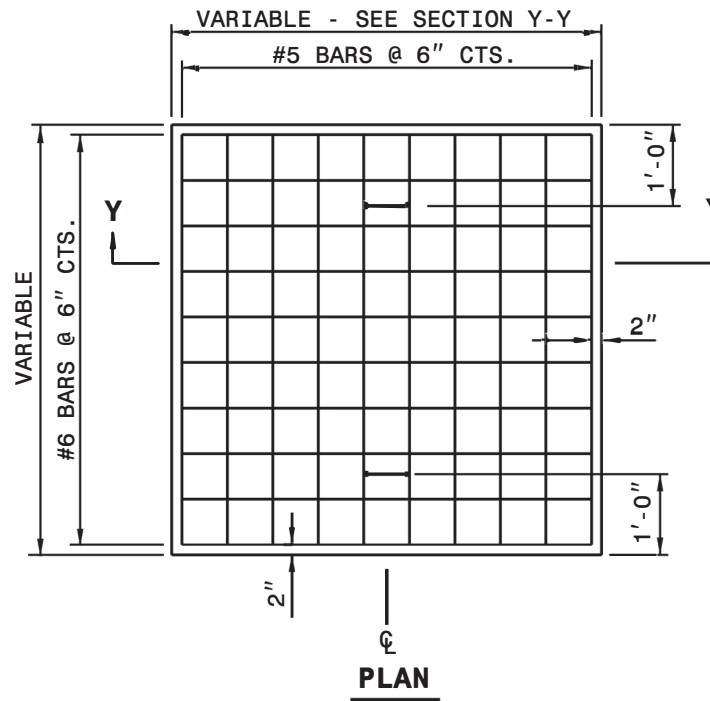
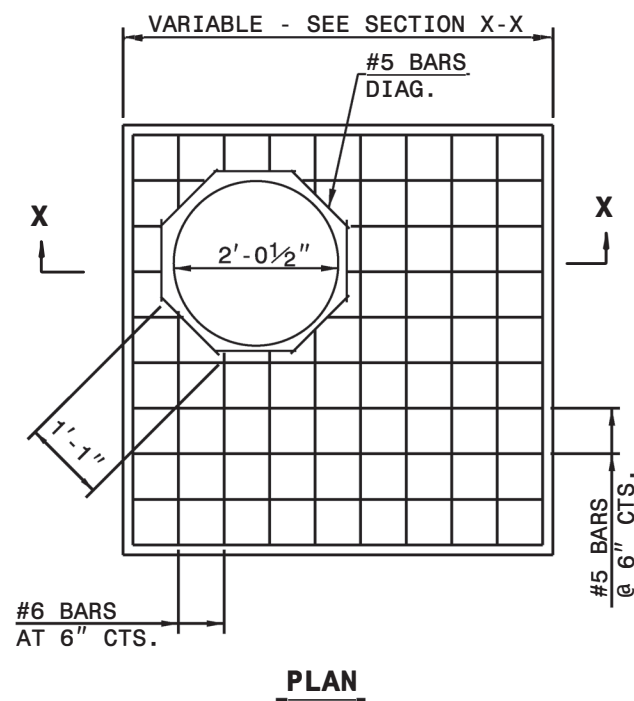
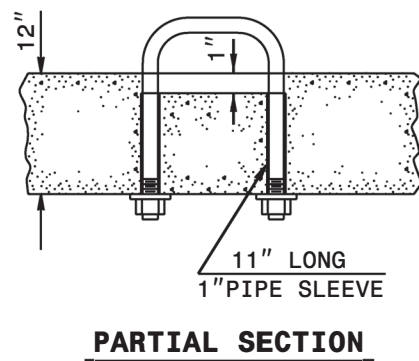


-Y1- STA. 10+66.12 TO 10+80.18



NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



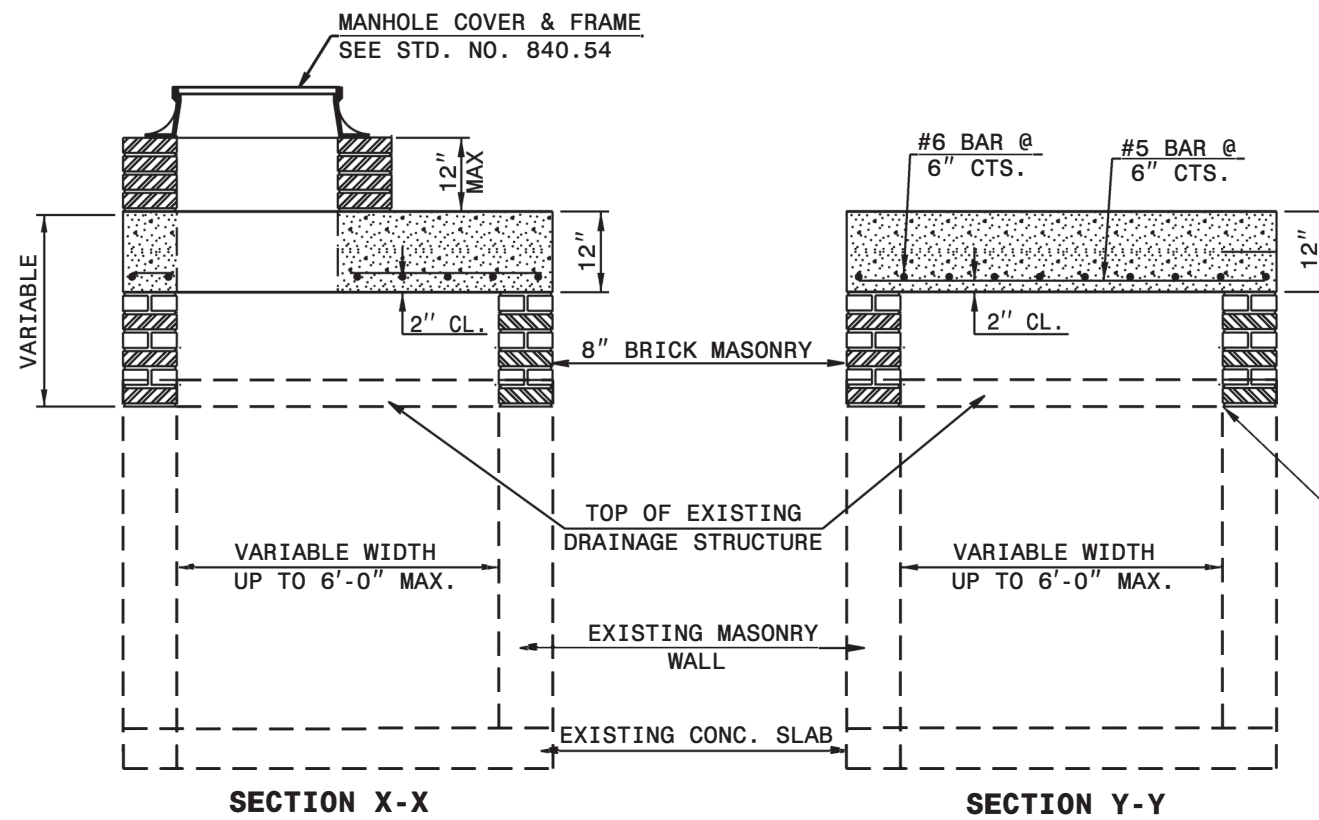
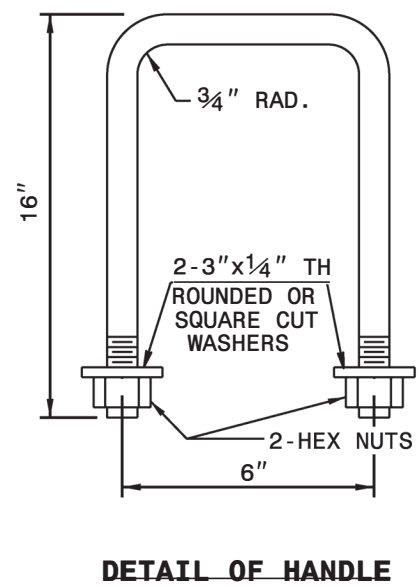


**GENERAL NOTES:**  
 CONSTRUCT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.  
 FIELD VERIFY THE DIMENSIONS FOR THE EXISTING BOXES.

**BILL OF MATERIALS**

MASONRY			
TOP SLAB CONCRETE CLASS "A"		.037YDS <sup>3</sup>	PER FT <sup>2</sup>
BRICK MASONRY		.025YDS <sup>3</sup>	PER FT <sup>2</sup>
REINFORCING STEEL		7.64LBS	PER FT <sup>2</sup>
MANHOLE OPTION QUANTITIES			
SIZE	QTY.	LENGTH	REINF. STEEL LBS.
#5 DIAG.	8	1'-1"	9.04

**NOTE:**  
 CONCRETE AND REINFORCING STEEL QUANTITIES BASED ON SQUARE FOOT AREA OF THE PROPOSED TOP SLAB FOR THE EXISTING DRAINAGE STRUCTURE.  
 BRICK MASONRY QUANTITY IS BASED ON THE TOTAL SQUARE FOOTAGE OF EXTERIOR WALL SURFACE AREA TO BE CONSTRUCTED.



ALIGN PROPOSED BRICK VERTICAL ADJUSTMENT TO INNER FACE OF WALL

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

**DETAIL TO CONVERT EXISTING DROP INLET OR CATCH BASIN TO TRAFFIC BEARING JUNCTION BOX (MANHOLE OPTIONAL)**

ORIGINAL BY: T.S.S. DATE: FEB 2000  
 MODIFIED BY: E.F.W. DATE: NOV 2001  
 CHECKED BY: DATE:  
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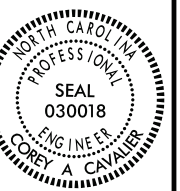
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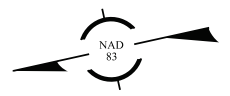




Signed by: William C. Carter  
1625254851346F



Signed by: Corey A. Cavalier  
A03388477DF481



CUR DATA -EL-  
Plc 12+62.93  
 $\Delta c = 18^\circ 53' 48.5''$  (LT)  
D =  $05^\circ 46' 34.5''$   
Lc = 327.15  
Tc = 165.07  
R = 991.92  
SE = 0.000

10

-EL- START 10+00.00

-EL- PC 10+97.85

-EL- END 14+25.00

BEGIN TIP PROJECT SM-57131  
-EL- STA 10+00.00

END TIP PROJECT SM-57131  
-EL- STA 12+85.00

-EL-

-EL- STA 11+60.13  
-Y1- STA 10+00.00

US 25 (HENDERSONVILLE RD)

END CONSTRUCTION TIP PROJECT SM-57131  
-EL- STA 13+80.00

S19°28'24.6"W

N84°49'08.1"W

10

BEGIN 2'-6" C+G  
-EL- STA. 10+00.00

BEGIN 4" CONC. SIDEWALK  
-EL- STA. 10+00.00

EXIST. PDE

BURIED JB

DO NOT DISTURB SIGN

40' (BUS PAD)

48' (BUS PAD)

56' (BUS PAD)

54.19'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

54.99'

END CONSTRUCTION  
-Y1- STA 10+66.22

END 2'-6" C+G  
-Y1- STA. 10+97.86

END 4" CONC. SIDEWALK  
-Y1- STA. 10+77.12

+47.97  
95.35'

END PAVING  
-Y1- STA 10+80.18

1  
KAGR2 ARDEN, L.P.  
DB 6181 PG 895

BEGIN 2'-6" C+G  
-Y1- STA. 10+66.49

BEGIN 4" CONC. SIDEWALK  
-EL- STA. 11+75.00

+97.76  
86.14'

EXIST. CB

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

15' HOPE

ADJUST WATER METER ADD CONC. APRON

RETAIN

RETAIN

RETAIN

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0401

CONV CB TO JB

DIRVEWAY DI

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PDE

PDE

END 2'-6" C+G  
-EL- STA. 12+32.40

END 4" CONC. SIDEWALK  
-Y1- STA. 12+32.40

+38.30'  
50.00'

+38.58'  
60.66'

2  
PULLIAM HERITAGE, LLC  
DB 5387 PG 571  
PB 152 PG 97

NC146 (LONG SHOALS RD)

295' STORAGE

100' TAPER

S 85°08'34" E  
200.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

S 84°07'11" E  
174.30'

N 12°07'06" E  
234.69'

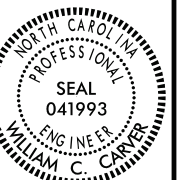
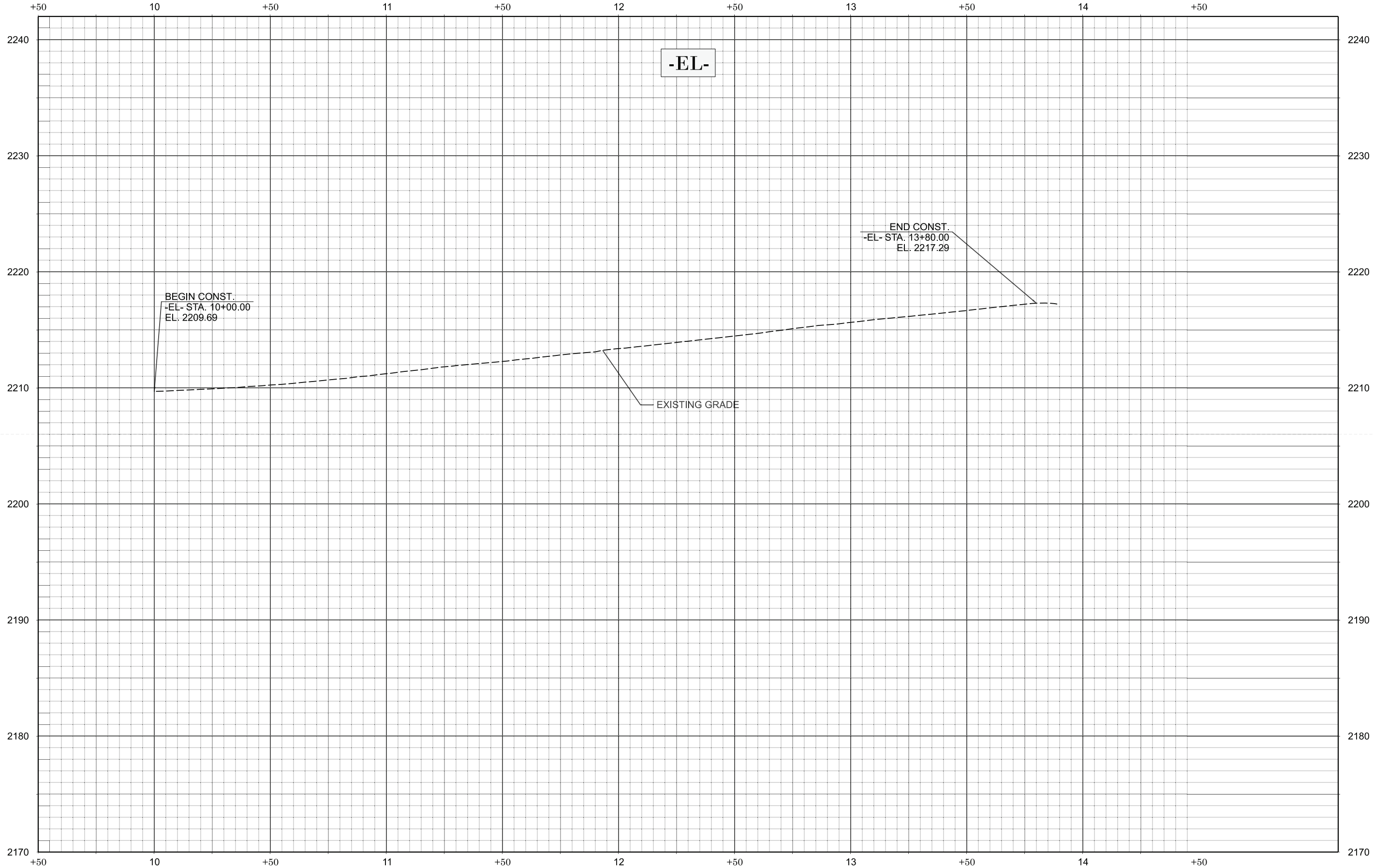
N 12°10'24" E  
122.04'

N 14°15'26" E  
26.36'

N 14°16'42" E  
73.73'

N 09°20'19" E  
27.90'

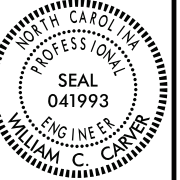
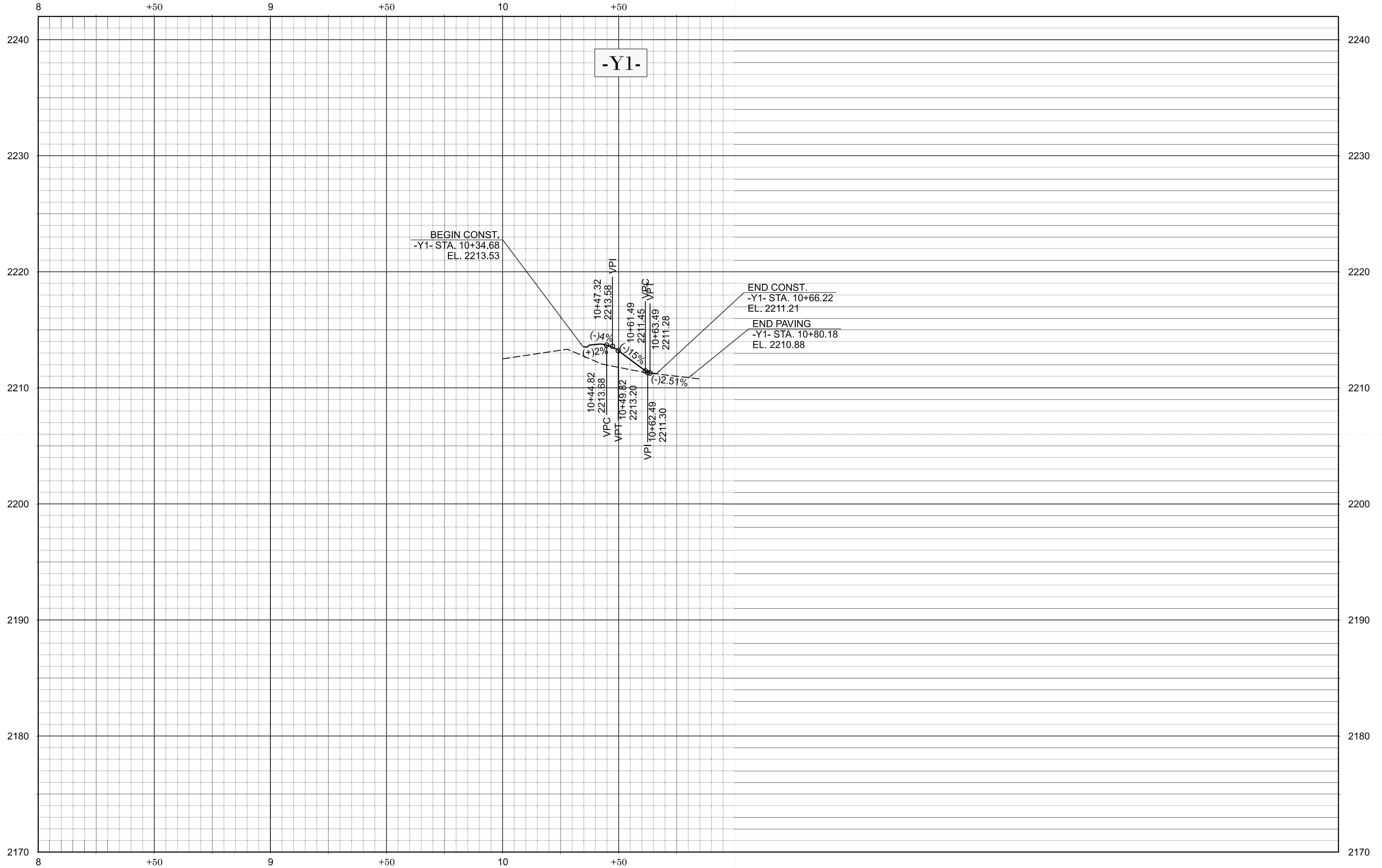
SEE SHEET 5 AND 6 FOR PROFILES



Signed by:  
William C. Carver  
1925204819340F...



Signed by:  
Corey A. Cavalier  
A2338841770F481...



Signed by:  
*William C. Carver*  
16352548519349F



Signed by:  
*Corey A. Cavalier*  
A03388A4177DF48F

09/08/09

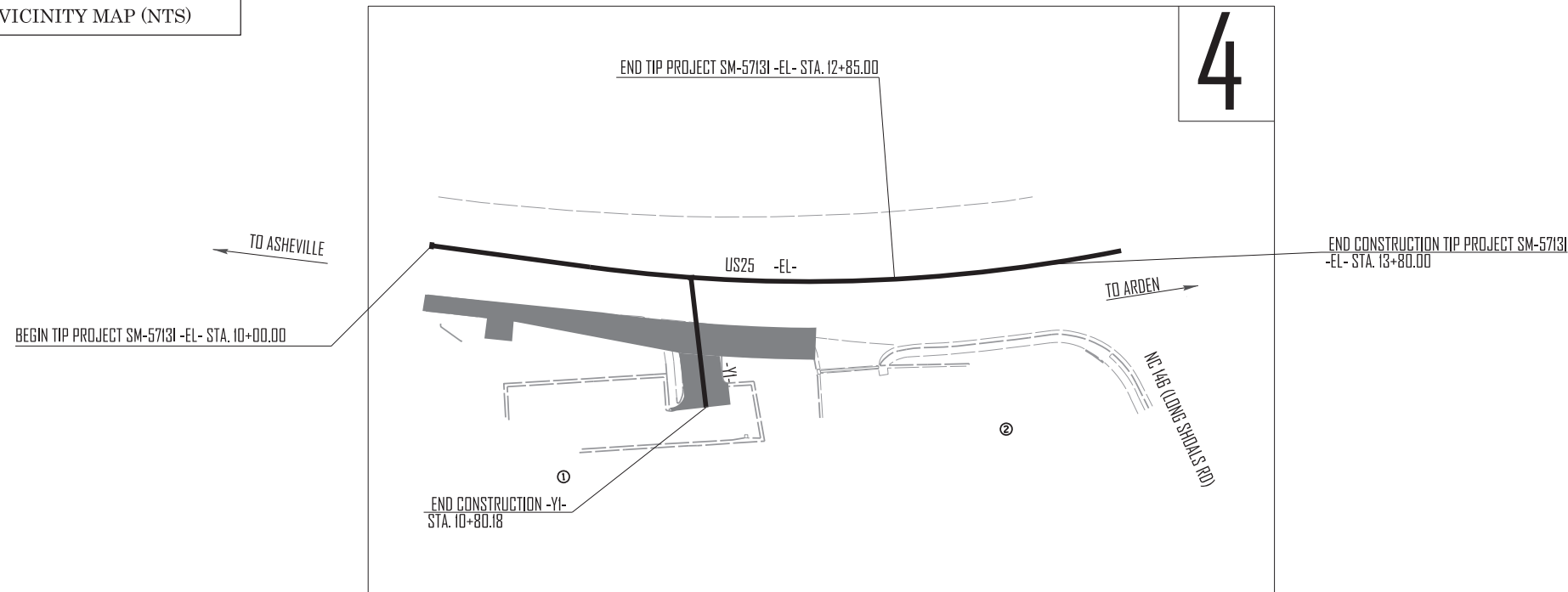
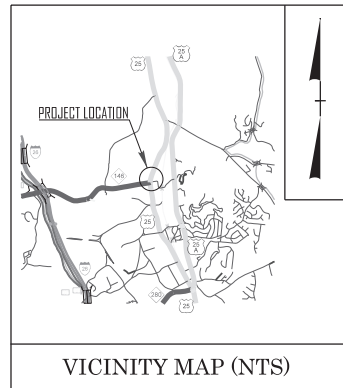
TIP PROJECT: SM57131

# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SM-57131	RW01	6

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

# BUNCOMBE COUNTY



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

### GRAPHIC SCALES



### DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT GPS1 WITH NAD83/NA2011 STATE PLANE GRID COORDINATES OF

NORTHING: 650106.0526 EASTING: 950658.6782  
ELEVATION: 2219.57'

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999828054

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

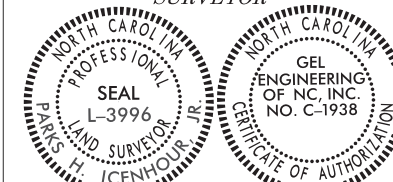
GEL Engineering of NC, Inc. DBA

## GEL SOLUTIONS

an Affiliate of  
THE GEL GROUP, INC.

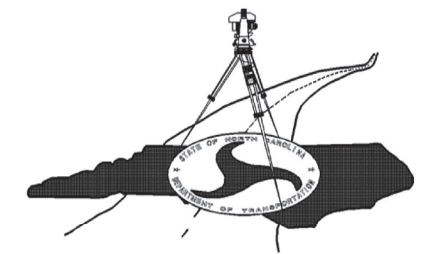
111 CREEK RIDGE ROAD  
SUITE C  
GREENSBORO, NC 27406  
(336) 516-9840  
WWW.GEL-SOLUTIONS.COM

PROFESSIONAL LAND  
SURVEYOR



Digitally signed by  
Parks H. Icenhour, Jr.  
Date: 2026.03.11  
17:07:52 -04'00'

SIGNATURE: DATE:



# PRIMARY SURVEY CONTROL SHEET

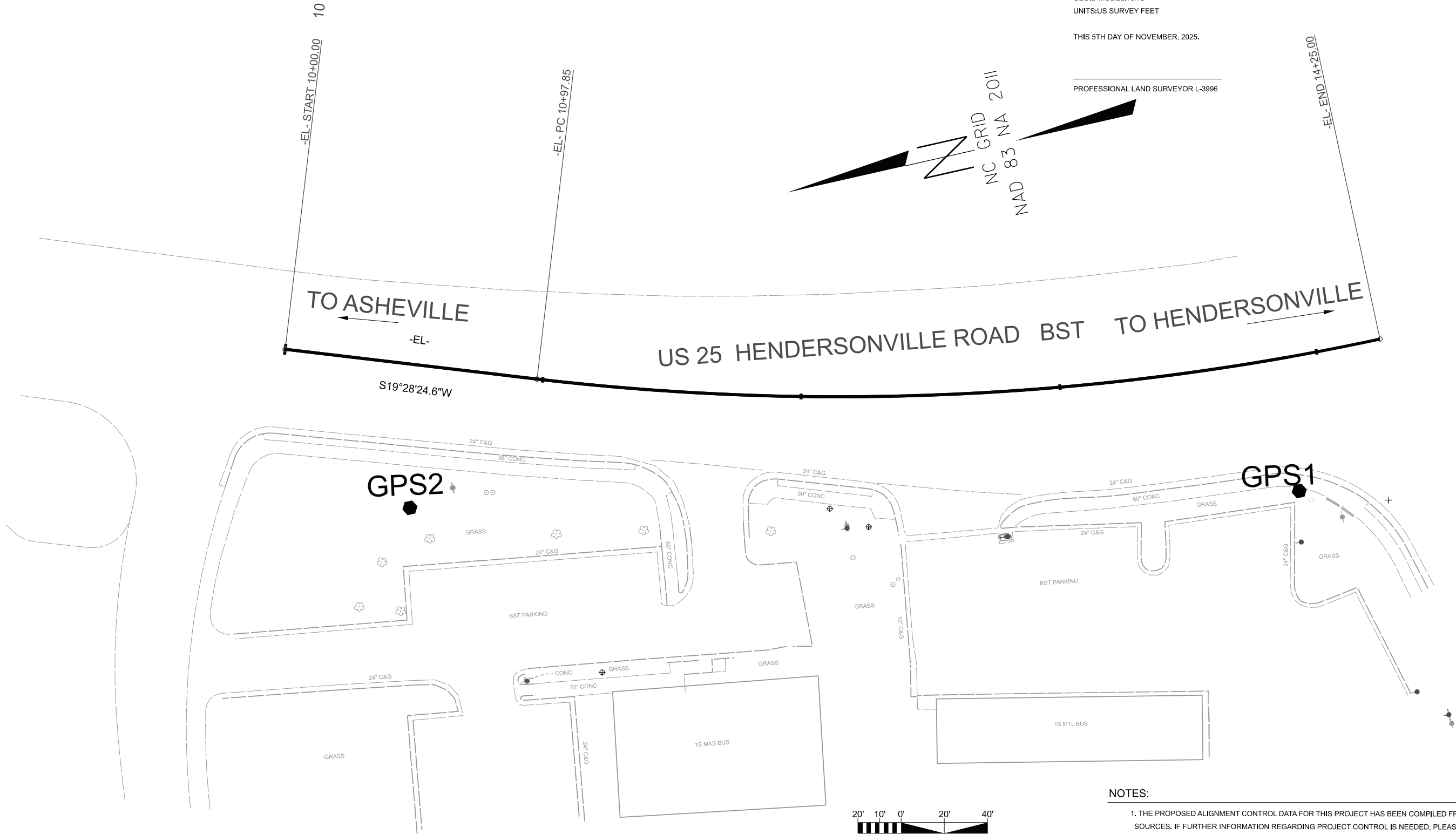
I, PARKS H ICENHOUR JR, PLS, CERTIFY THAT THE PRIMARY PROJECT CONTROL WAS VERIFIED UNDER MY SUPERVISION FROM AN ACTUAL GPS SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:

CLASS OF SURVEY: AA  
TYPE OF GPS FIELD PROCEDURE: RTN  
DATES OF SURVEY: 4/26/23  
DATUM/EPOCH: NAD 83/NA 2011  
PUBLISHED/FIXED-CONTROL USE: N/A  
LOCALIZED AROUND: GPS-1  
NORTHING: 650106.0526  
EASTING: 950658.6782  
COMBINED GRID FACTOR: 0.999828054  
GEOID MODEL: 18NC  
UNITS: US SURVEY FEET

THIS 5TH DAY OF NOVEMBER, 2025.

PROFESSIONAL LAND SURVEYOR L-3996

PRIMARY CONTROL				
GPS1	650106.053	950658.678	2219.57	GPS1
GPS2	650442.072	950728.169	2210.76	GPS2



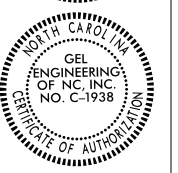
SM-5713-I

R/W 02G-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



PROFESSIONAL LAND SURVEYOR

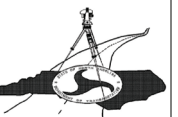


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES ARE COMPLETED

2024 STANDARD SPECIFICATIONS

**TIP PROJECT: SM-5713-I**  
**County: BUNCOMBE**

PREPARED FOR



LOCATION AND SURVEYS UNIT

PREPARED BY

**GEL SOLUTIONS**  
an Affiliate of THE GEL GROUP, INC.  
111 CREEK RIDGE ROAD  
SUITE C  
GREENSBORO, NC 27406  
(336) 516-9840  
WWW.GEL-SOLUTIONS.COM

### NOTES:

1. 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.

# SECONDARY SURVEY CONTROL SHEET

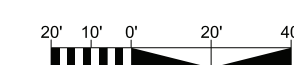
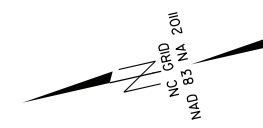
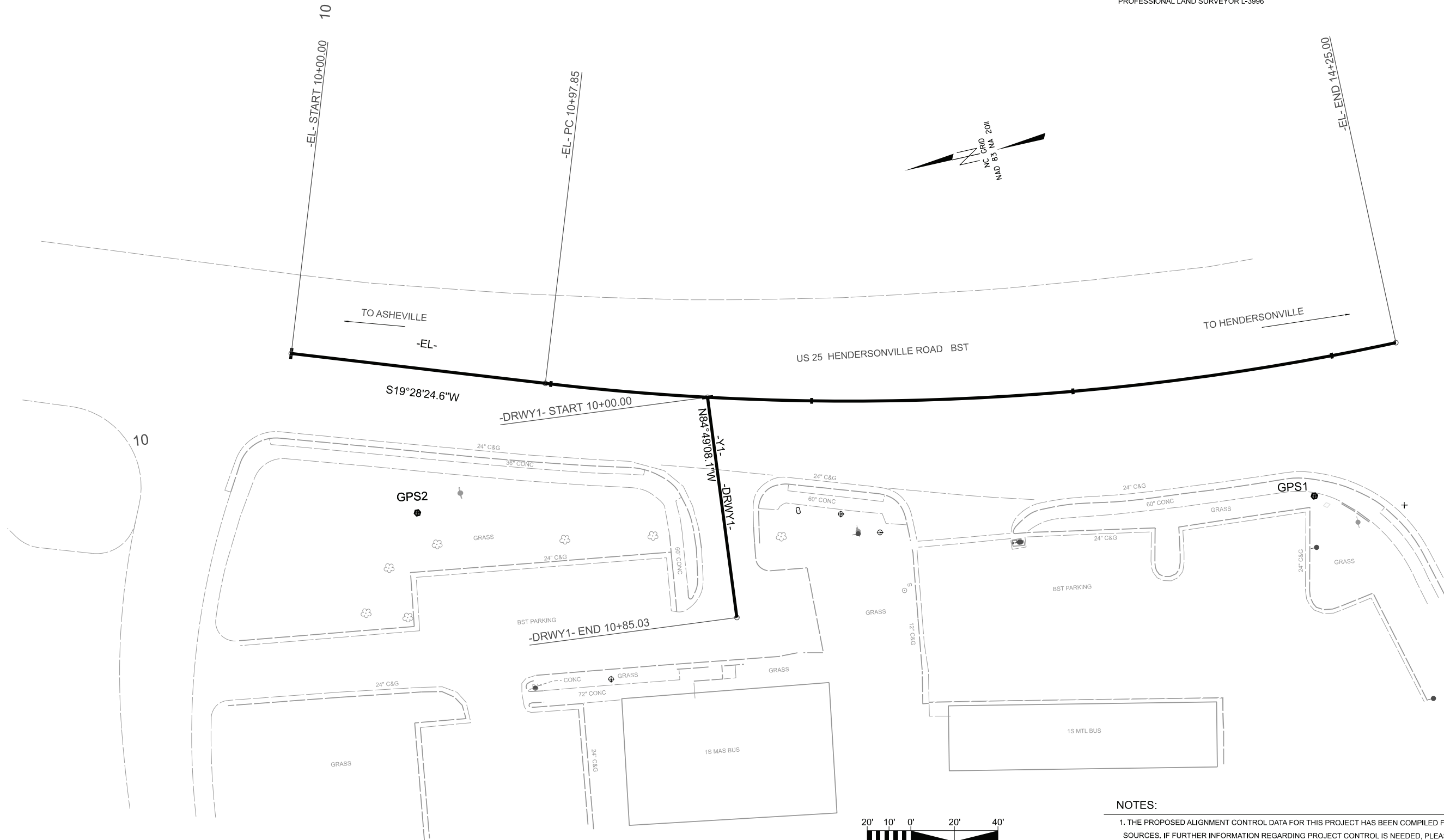
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

I, PARKS H ICENHOUR JR, PLS, CERTIFY THAT THE SECONDARY BASELINE CONTROL FOR THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION UTILIZING PRIMARY GPS CONTROL SET BY OTHERS; THAT ALL HORIZONTAL CLOSURES HAD A MINIMUM RATIO OF PRECISION OF 1:20,000 (CLASS AA) AND VERTICAL ACCURACY TO 1:10,000 (CLASS A). FIELD WORK WAS PERFORMED FROM 4/26/2025 TO 7/19/2025, AND ALL COORDINATES ARE BASED ON NAD 83/NA 2011 AND ALL ELEVATIONS ARE BASED ON NAVD 88; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS OF 21NCAC 56.1600 AS APPLICABLE.

THIS 5TH DAY OF NOVEMBER, 2025.

PROFESSIONAL LAND SURVEYOR L-3996

EXISTING ALIGNMENT: EL												
POINT	STATION	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R	LT	ST
START	10+00.00	650475.6616	950798.3077	S19°28'24.6"W	97.8530							
PC	10+97.85	650383.4062	950765.6864	S10°01'32.8"W	325.6665	18°53'48.5"	05°46'34.5"	327.1472	165.0727	991.9220		



### NOTES:

1. 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.

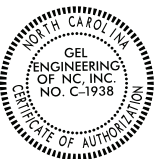
SM57131

R/W 02C-2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



PROFESSIONAL LAND SURVEYOR

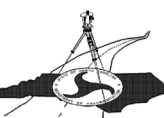


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES ARE COMPLETED

2024 STANDARD SPECIFICATIONS

**TIP PROJECT: SM-5713-1**  
**County: BUNCOMBE**

PREPARED FOR



LOCATION AND SURVEYS UNIT

PREPARED BY

**GEL SOLUTIONS**  
 an Affiliate of THE GEL GROUP, INC.  
 111 CREEK RIDGE ROAD  
 SUITE C  
 GREENSBORO, NC 27406  
 (336) 516-9840  
 WWW.GEL-SOLUTIONS.COM

# PROPOSED ALIGNMENT CONTROL SHEET

I, PARKS H ICENHOUR JR, PLS. 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.

THIS 3RD DAY OF NOVEMBER, 2025.

PROFESSIONAL LAND SURVEYOR L-3996

PROPOSED ALIGNMENT: EL												
POINT	STATION	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R	LT	ST
START	10+00.00	650475.6616	950798.3077	S19°28'24.6"W	97.8530							
PC	10+97.85	650383.4062	950765.6864	S10°01'32.8"W	325.6665	18°53'48.5"	05°46'34.5"	327.1472	165.0727	991.9220		

PROPOSED ALIGNMENT: DRWY1												
POINT	STATION	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R	LT	ST
START	10+00.00	650324.0811	950746.7811	N84°49'08.1"W	85.0317							
END	10+85.03	650331.7598	950662.0968									

SM57131

R/W 020-1

NORTH CAROLINA  
DEPARTMENT  
OF TRANSPORTATION



PROFESSIONAL LAND  
SURVEYOR

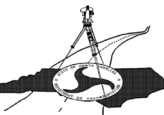


DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL SIGNATURES  
ARE COMPLETED

2024 STANDARD  
SPECIFICATIONS

**TIP PROJECT: SM-5713-1**  
County: **BUNCOMBE**

PREPARED FOR



LOCATION AND  
SURVEYS UNIT

PREPARED BY

**GEL SOLUTIONS**

an Affiliate of  
**THE GEL GROUP, INC.**  
111 CREEK RIDGE ROAD  
SUITE C  
GREENSBORO, NC 27406  
(336) 516-9840  
WWW.GEL-SOLUTIONS.COM

NOTES:

1. 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.

# RIGHT OF WAY CONTROL SHEET

PERMANENT ROW MARKER IRON PIN AND CAP: EL			
STATION	OFFSET	NORTH	EAST
10+37.69	38.71	650453.0324	950749.2474
10+38.12	50.00	650456.3907	950738.4598
12+12.18	50.80	650284.9840	950684.3370
12+25.52	50.30	650271.1871	950681.7937
12+38.30	50.00	650257.9764	950679.3585

PERMANENT EASEMENT MARKER IRON PIN AND CAP: EL			
STATION	OFFSET	NORTH	EAST
12+38.58	60.66	650259.7881	950668.8475

I, PARKS H ICENHOUR JR, PLS. CERTIFY THAT THE RIGHT OF WAY AND PERMANENT EASEMENT MONUMENTATION FOR THIS PROJECT SHOWN HEREIN WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT ALL HORIZONTAL CLOSURES HAD A MINIMUM RATIO OF PRECISION OF 1:10,000 (CLASS A). FIELD WORK WAS PERFORMED FROM 9/29/2025 TO 10/06/2025, AND ALL COORDINATES ARE BASED ON NAD83/NA 2011; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS OF 21NCAC 56.1600 AS APPLICABLE.

THIS 3RD DAY OF NOVEMBER, 2025.

PROFESSIONAL LAND SURVEYOR L-3996

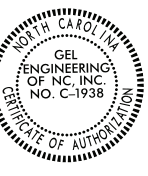
SM57131

R/W 03E-1

NORTH CAROLINA  
DEPARTMENT  
OF TRANSPORTATION



PROFESSIONAL LAND  
SURVEYOR

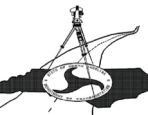


DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL SIGNATURES  
ARE COMPLETED

2024 STANDARD  
SPECIFICATIONS

**TIP PROJECT: SM-5713-1**  
County: **BUNCOMBE**

PREPARED FOR



LOCATION AND  
SURVEYS UNIT

PREPARED BY

**GEL SOLUTIONS**  
an Affiliate of  
**THE GEL GROUP, INC.**  
111 CREEK RIDGE ROAD  
SUITE C  
GREENSBORO, NC 27406  
(336) 516-9840  
WWW.GEL-SOLUTIONS.COM

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

I, PARKS H ICENHOUR JR., PLS. CERTIFY THAT THE RIGHT OF WAY AND PERMANENT EASEMENT MONUMENTATION FOR THIS PROJECT SHOWN HEREIN WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT ALL HORIZONTAL CLOSURES HAD A MINIMUM RATIO OF PRECISION OF 1:10,000 (CLASS A). FIELD WORK WAS PERFORMED FROM 9/29/2025 TO 10/06/2025, AND ALL COORDINATES ARE BASED ON NAD83/NA 2011; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS OF 21NCAC 56.1600 AS APPLICABLE.

THIS 4TH DAY OF NOVEMBER, 2025.

PROFESSIONAL LAND SURVEYOR L-3996

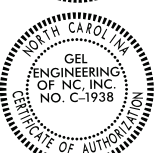
SM-5713-I

R/W 04

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



PROFESSIONAL LAND SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES ARE COMPLETED

2024 STANDARD SPECIFICATIONS

**TIP PROJECT: SM-5713-I**  
**County: BUNCOMBE**

PREPARED FOR

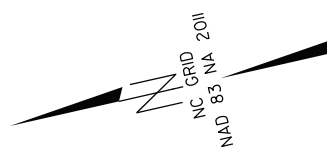
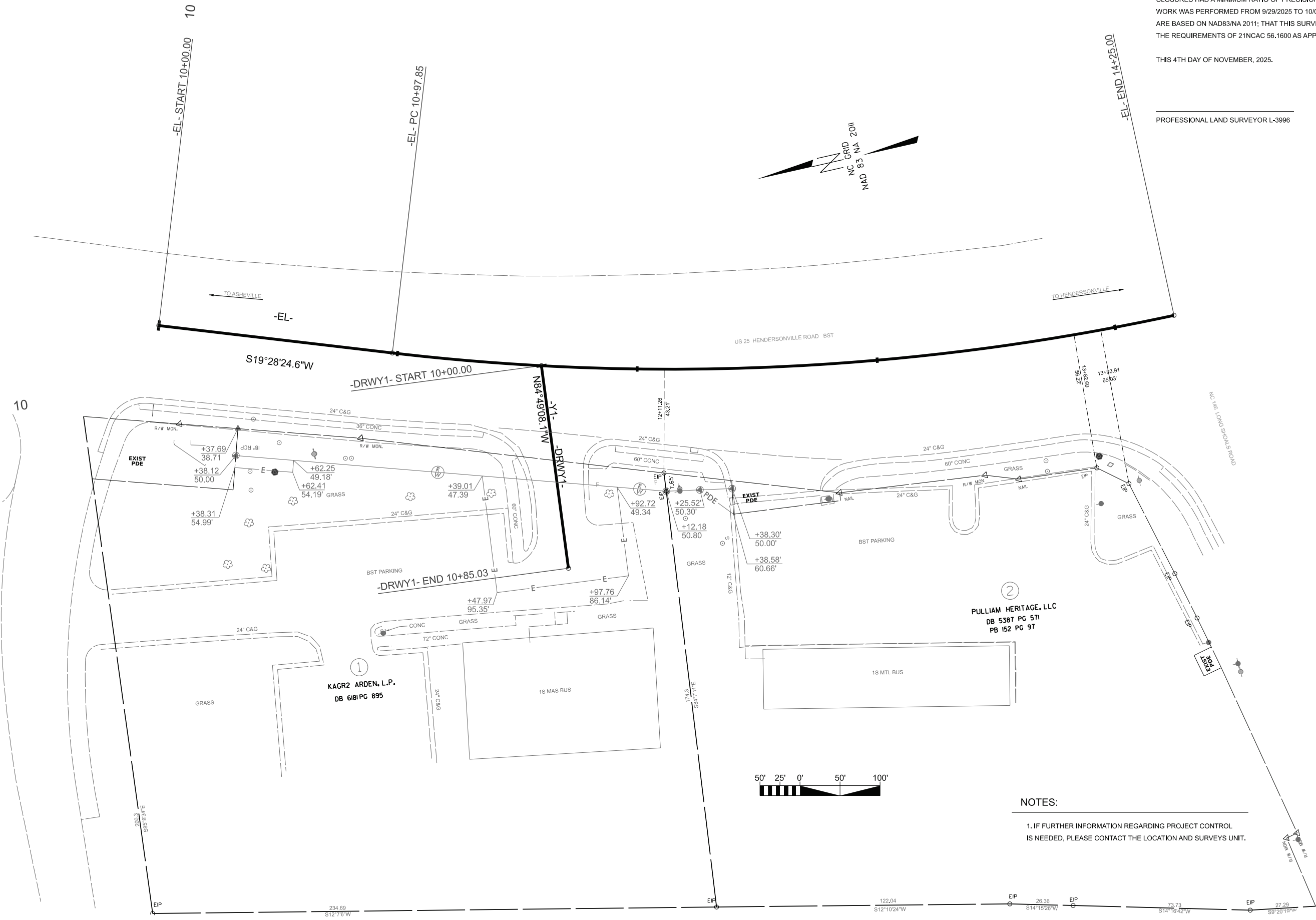


LOCATION AND SURVEYS UNIT

PREPARED BY

**GEL SOLUTIONS**

an Affiliate of THE GEL GROUP, INC.  
 111 CREEK RIDGE ROAD  
 SUITE C  
 GREENSBORO, NC 27406  
 (336) 516-9840  
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**NOTES:**  
 1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

10

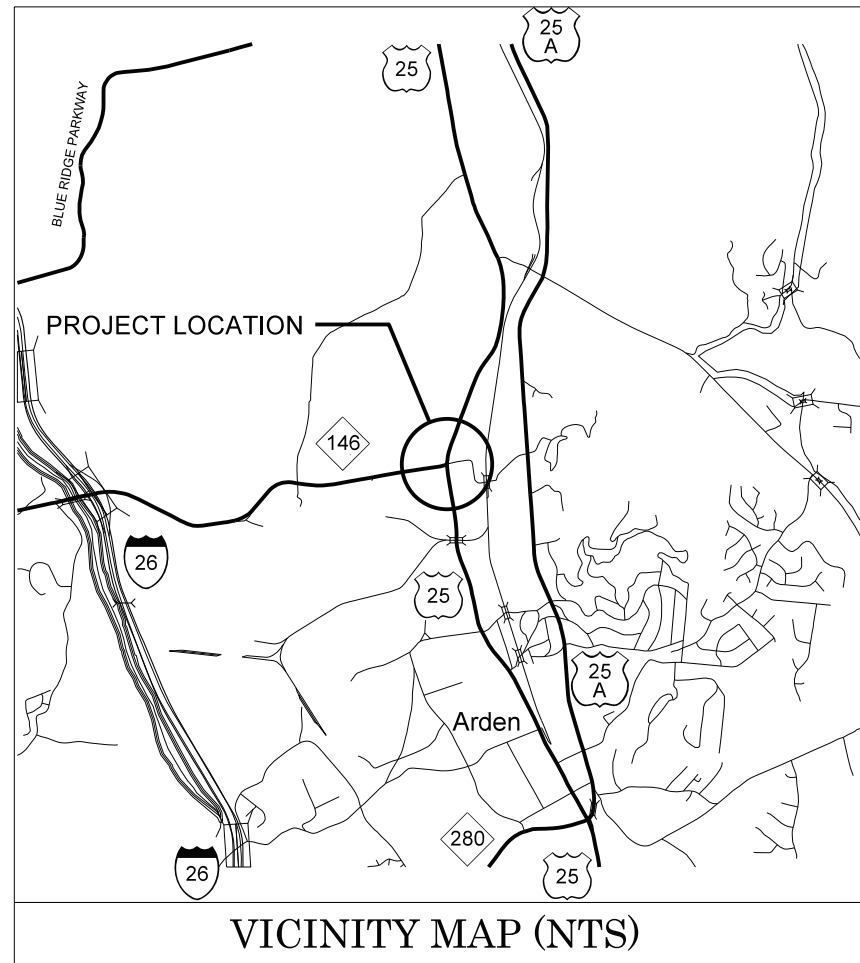
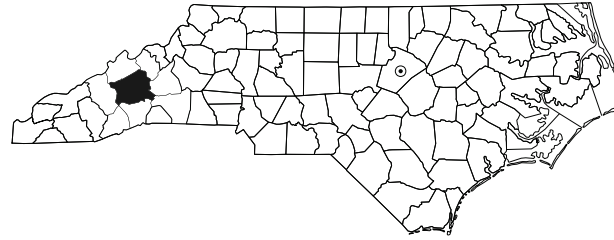
10

EIP 234.69 S12°7'6"W 122.04 S12°10'24"W 26.36 S14°15'28"W 73.73 S14°16'42"W 27.29 S9°20'19"W

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

BUNCOMBE COUNTY

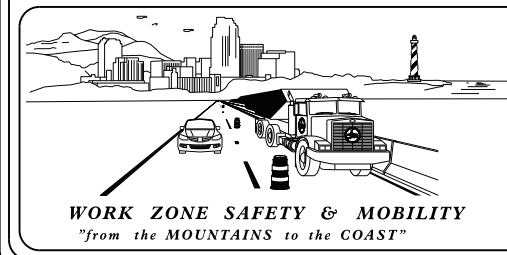


SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4	TEMPORARY TRAFFIC CONTROL PHASE I DETAIL
TMP-4A	TEMPORARY TRAFFIC CONTROL PHASE I DETAIL
TMP-5	TEMPORARY TRAFFIC CONTROL PHASE II DETAIL
TMP-5A	TEMPORARY TRAFFIC CONTROL PHASE II DETAIL

SHEET NO.  
TMP-1

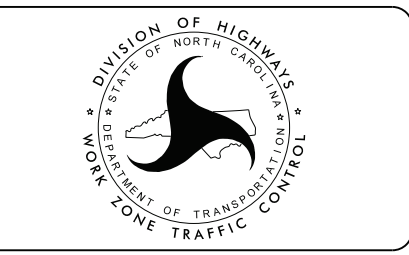
TIP PROJECT:  
SM-57131

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



PLANS PREPARED BY:  
DIVISION 13 DDC

NCDOT CONTACTS:  
WILLIAM C. CARVER P.E.  
PROJECT ENGINEER  
HAMPTON T. FLETCHER  
PROJECT DESIGN ENGINEER



APPROVED: \_\_\_\_\_  
DATE: 03/24/2026

SEAL  
Professional Engineer Seal for William C. Carver, No. 041993, State of North Carolina.

2/26/2026  
S:\DDC\Projects\Buncombe\SM57131\Traffic\TMP\SM57131\_ddc\_tmp\_tsh.dgn  
User:htfletcher

## ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - 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
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1145.01	BARRICADES TYPE III
1150.01	FLAGGING DEVICES
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS

## LEGEND

### GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

- WORK AREA
- REMOVAL

### SIGNALS

- |          |          |           |
|----------|----------|-----------|
| EXISTING | PROPOSED | TEMPORARY |
|          |          |           |

### PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

### TRAFFIC CONTROL DEVICES

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

### TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

### PAVEMENT MARKERS

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

### PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

### TEMPORARY PAVEMENT MARKING

PAVEMENT MARKINGS	PAVEMENT MARKINGS
PAINT (4")	PAINT SYMBOLS
P1 SOLID WHITE EDGE LINE	P70 LEFT TURN ARROW
P3 10FT. WHITE SKIP	P71 RIGHT TURN ARROW
P4 3FT. - 9FT/SP WHITE MINISKIP	P72 STRAIGHT ARROW
P11 YELLOW SINGLE CENTER	
P12 10FT. YELLOW SKIP	
P13 SOLID DOUBLE YELLOW	
PAINT (8")	
P40 WHITE GORE LINE	
P41 WHITE DIAGONALS	
PAINT (24")	
P61 STOPBAR	

2/26/2026  
S:\D00\Projects\Buncombe\SM5713I\Traffic\TMP\SM5713I\_ddc\_tmp\_tsh.dgn  
User:htfletcher

APPROVED: DATE: 03/24/2026	SEAL 		<b>ROADWAY STANDARD DRAWINGS &amp; LEGEND</b>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			

# 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 UNDESIRED 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:

ROAD NAME	DAY AND TIME RESTRICTIONS
-EL- US25 (HENDERSONVILLE RD)	MONDAY THRU SUNDAY 6AM THRU 8PM

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

ROAD NAME	DAY AND TIME RESTRICTIONS
-EL- US25 (HENDERSONVILLE RD)	MONDAY THRU SUNDAY 6AM THRU 8PM

**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 8:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 8:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 8:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:00 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 8:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 8:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 8:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
-EL- US 25 (HENDERSONVILLE RD)	ANYTIME UNLESS OTHERWISE DIRECTED BY THE ENGINEER

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.
- H) 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.
- 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 US25 (HENDERSONVILLE ROAD).
- K) USE SEQUENTIAL FLASHING WARNING LIGHTS ON DRUMS USED FOR THE MERGING TAPERS OF NIGHTTIME LANE CLOSURES IN ACCORDANCE WITH SECTION 1140 IN THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- L) NOTIFY THE NCDOT STATEWIDE TRANSPORTATION OPERATIONS CENTER (STOC) AT 877-627-7862 APPROXIMATELY 30 MINUTES PRIOR TO INSTALLING AND WITHIN 15 MINUTES AFTER REMOVING LANE CLOSURES ON INTERSTATES, FREEWAYS, CONTROLLED ACCESS FACILITIES, AND US ROUTES.

**PAVEMENT EDGE DROP OFF REQUIREMENTS**

- M) 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.
- N) 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) 350FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

**TRAFFIC PATTERN ALTERATIONS**

- O) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

**SIGNING**

- P) 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.
- Q) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.  
  
COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- R) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

**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 RADIUS, 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.

**PAVEMENT MARKINGS AND MARKERS**

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

ROAD NAME	MARKING	MARKER
-EL- US 25 (HENDERSONVILLE ROAD)	PAINT	NONE

- V) 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.

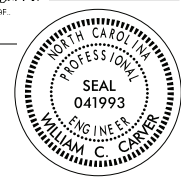

- W) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

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

**MISCELLANEOUS**

- Y) LAW ENFORCEMENT BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- 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) AND 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.).

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APPROVED: <u>William C. Carver</u> <small>Signed by: 183025A8519546F</small> DATE: 03/24/2026  <div style="text-align: center;">  </div>		<h2 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h2>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>		

PROJECT PHASING

PHASE I

STEP 1

ERECT WORK ZONE ADVANCE WARNING SIGNS ON -EL- US 25 (HENDERSONVILLE RD), NC 146(LONG SHOALS RD) AND ALLEN AVE. SEE RDWY STD. 1101.01 SHEET 3 (SEE TMP4 AND TMP4A).

STEP 2

CONSTRUCT PROPOSED -EL- AND -Y1- UP TO BUT NOT INCLUDING LAYER OF SURFACE COURSE. (SEE TMP4 AND TMP 4A)

AS FOLLOWS:

CONVERT MASONRY DRAINAGE STRUCTURE TO JUNCTION BOX

-EL- STA. 12+23 RT

PROPOSED C&G

-EL- STA. 10+00 +/- RT TO -EL- STA. 11+57 +/- RT

-EL- STA. 11+77 +/- RT TO -EL- STA. 12+32 +/- RT

-Y1- STA. 10+38 +/- RT TO -EL- STA. 10+80 +/- RT

-Y1- STA. 10+42 +/- RT TO -EL- STA. 10+67 +/- LT

PROPOSED 4" CONC. SIDEWALK, CURB RAMPS, AND BUS PAD

-EL- STA. 10+00 +/- RT TO -EL- STA. 11+57 +/- RT

-EL- STA. 11+77 +/- RT TO -EL- STA. 12+32 +/- RT

-Y1- STA. 10+40 +/- RT TO -EL- STA. 10+56 +/- RT

PLACE FINAL LAYER OF SURFACE COURSE ON -Y1- FROM STA. 10+34 +/- TO -Y1- STA. 10+80 +/-

PHASE II

STEP 1

USING RDWY STD. 1101.02 AND FLAGGERS AS NECESSARY, PERFORM THE FOLLOWING ON -EL- US 25.

-CONSTRUCT TIE-INS

-MILL AND PLACE FINAL LAYER OF SURFACE COURSE ON -EL-

-PLACE FINAL PAVEMENT MARKINGS AND MARKERS (SEE PAVEMENT MARKING PLANS)

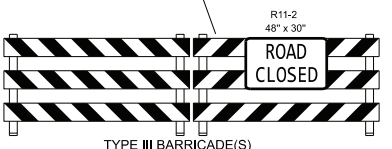
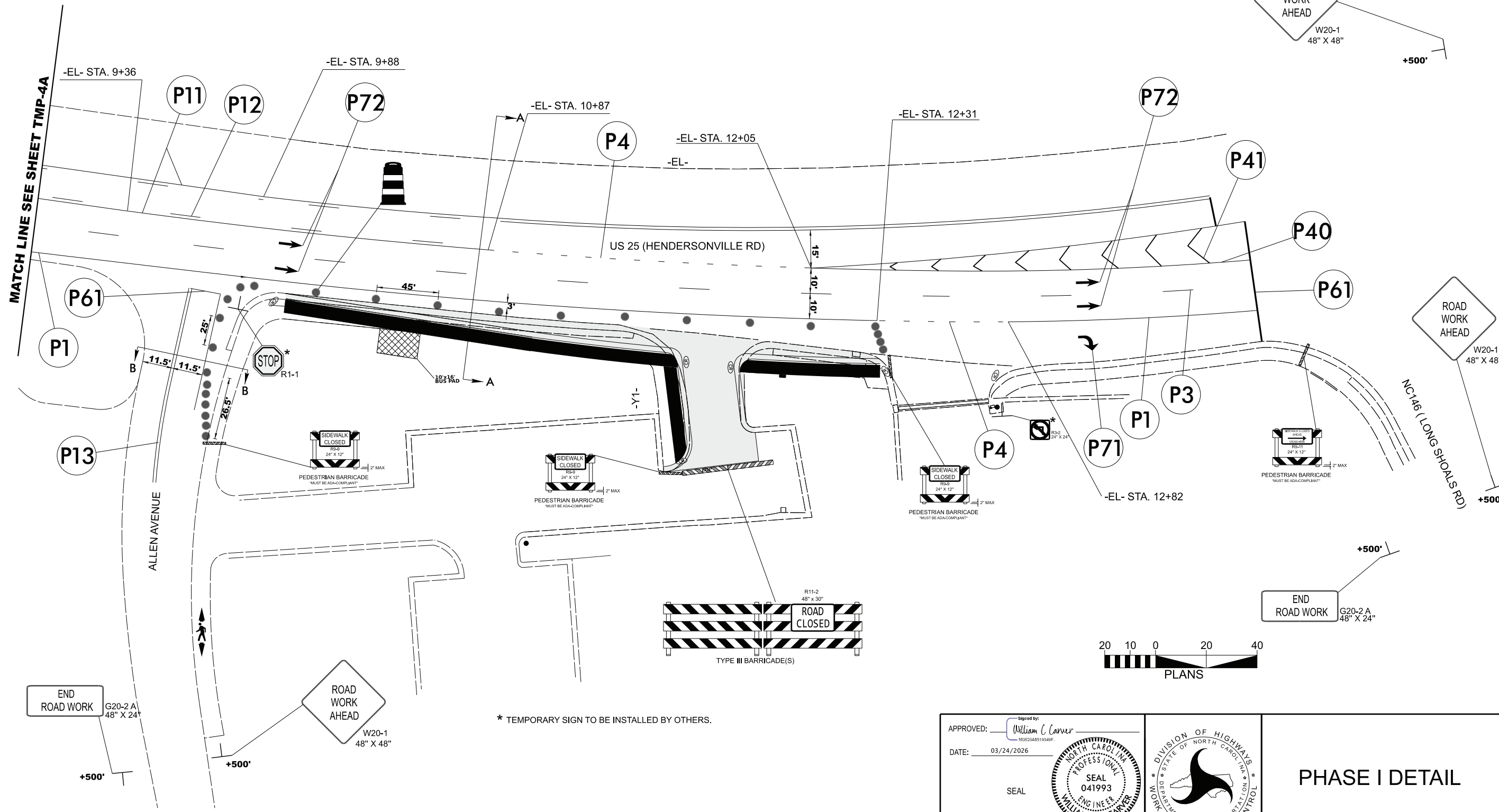
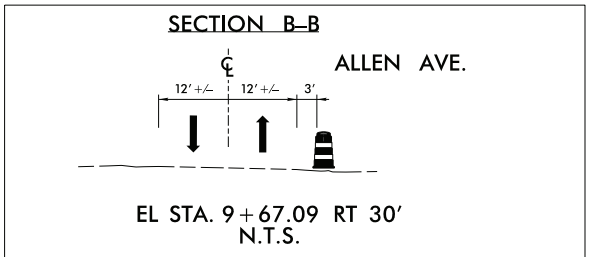
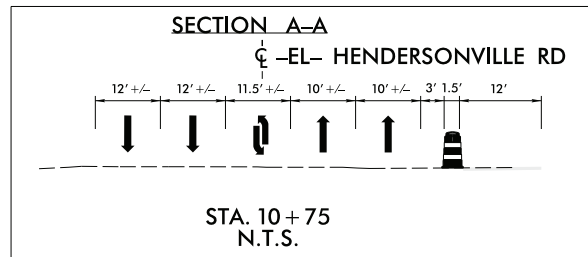
STEP 2

-REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES AND SIGNAGE FROM PROJECT

-OPEN ALL LANES TO THEIR FINAL TRAFFIC PATTERN

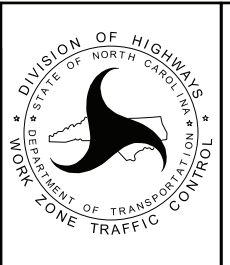
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APPROVED: <i>William C. Carver</i> DATE: 03/24/2026 SEAL 		<p align="center">TRANSPORTATION OPERATIONS PLAN</p>
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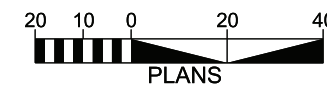
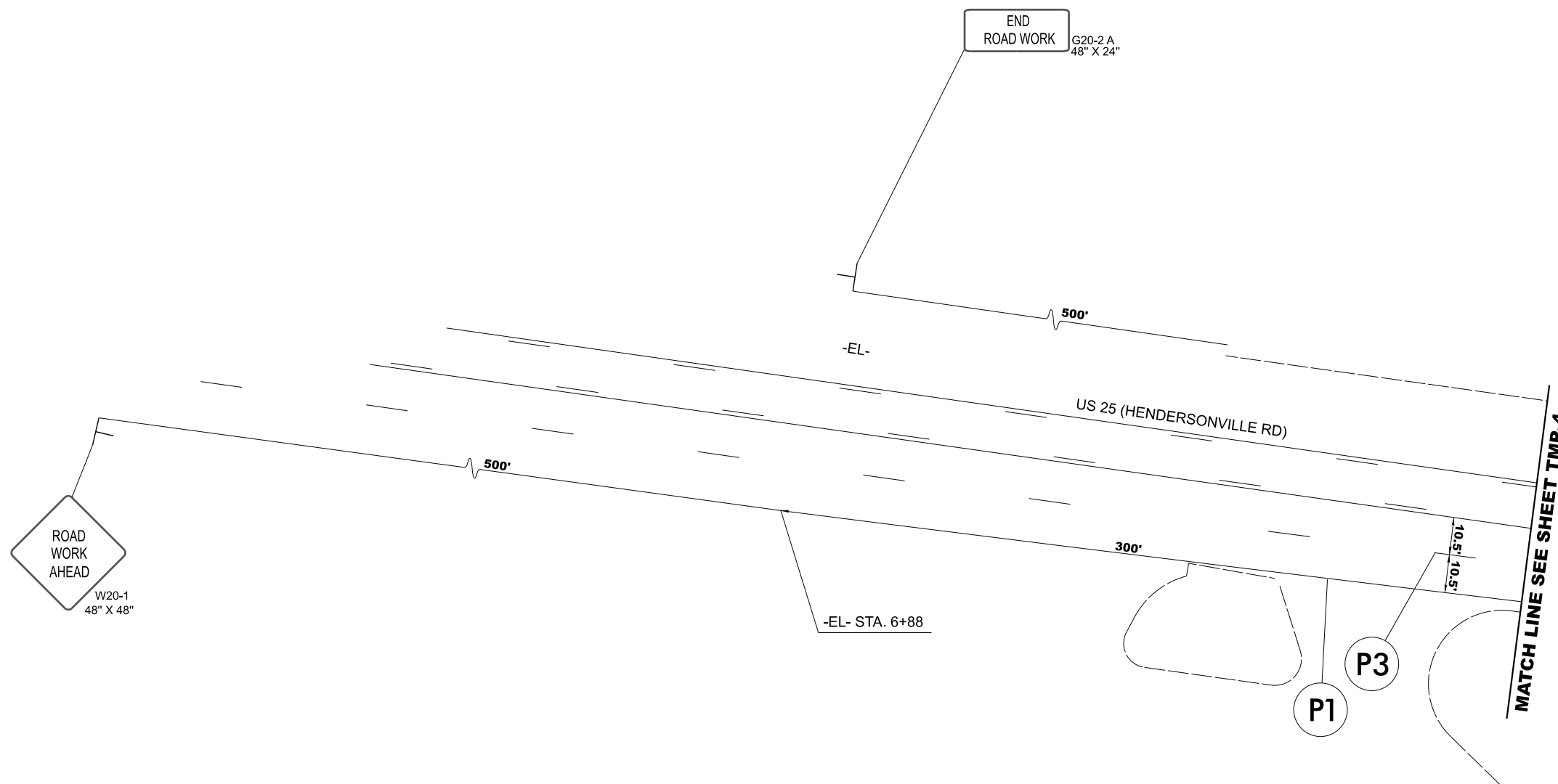
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APPROVED: *William C. Carver*  
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 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 041993  
 WILLIAM C. CARVER

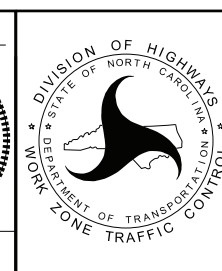
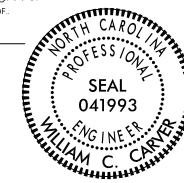


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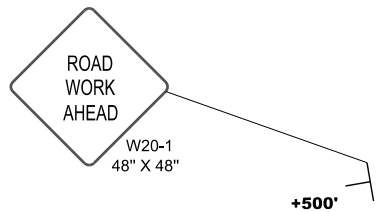
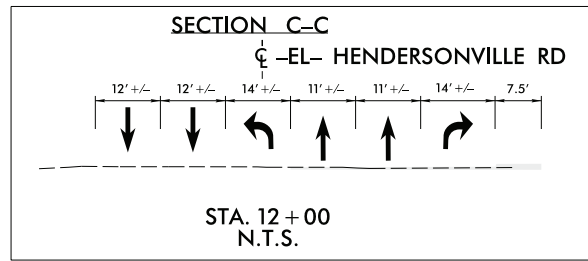
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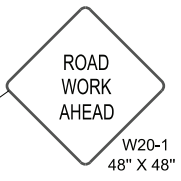
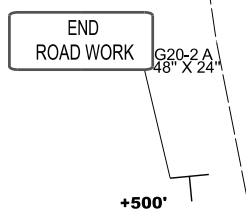
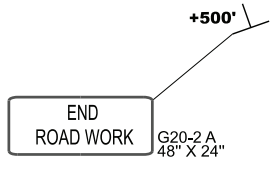
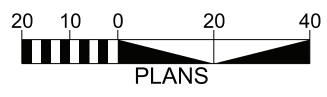
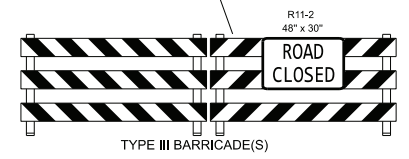
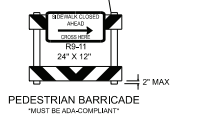
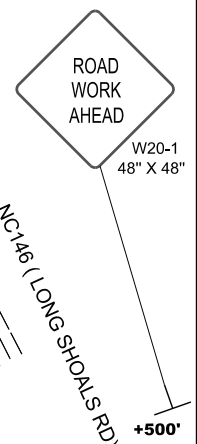
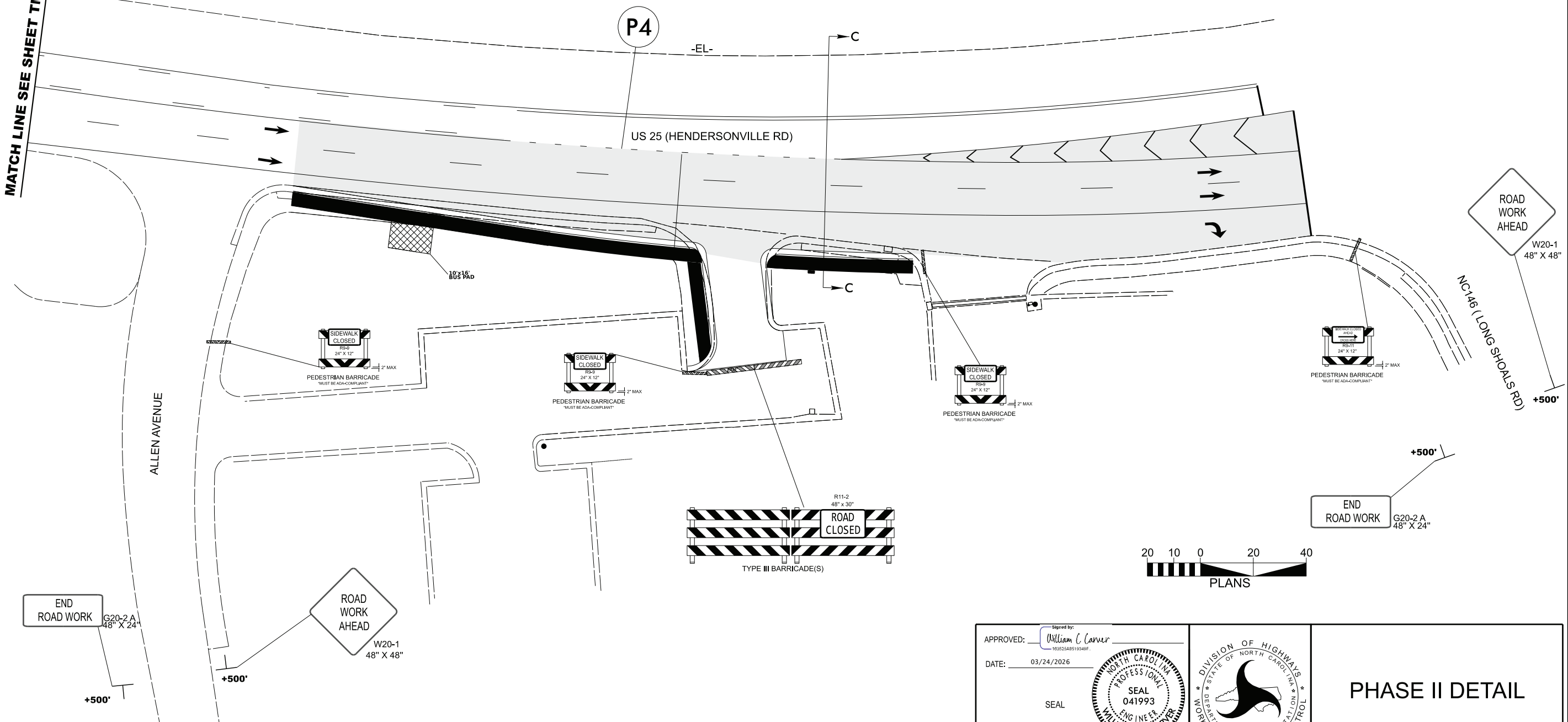
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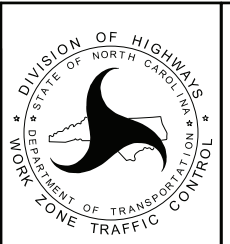


MATCH LINE SEE SHEET TMP-5A



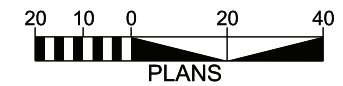
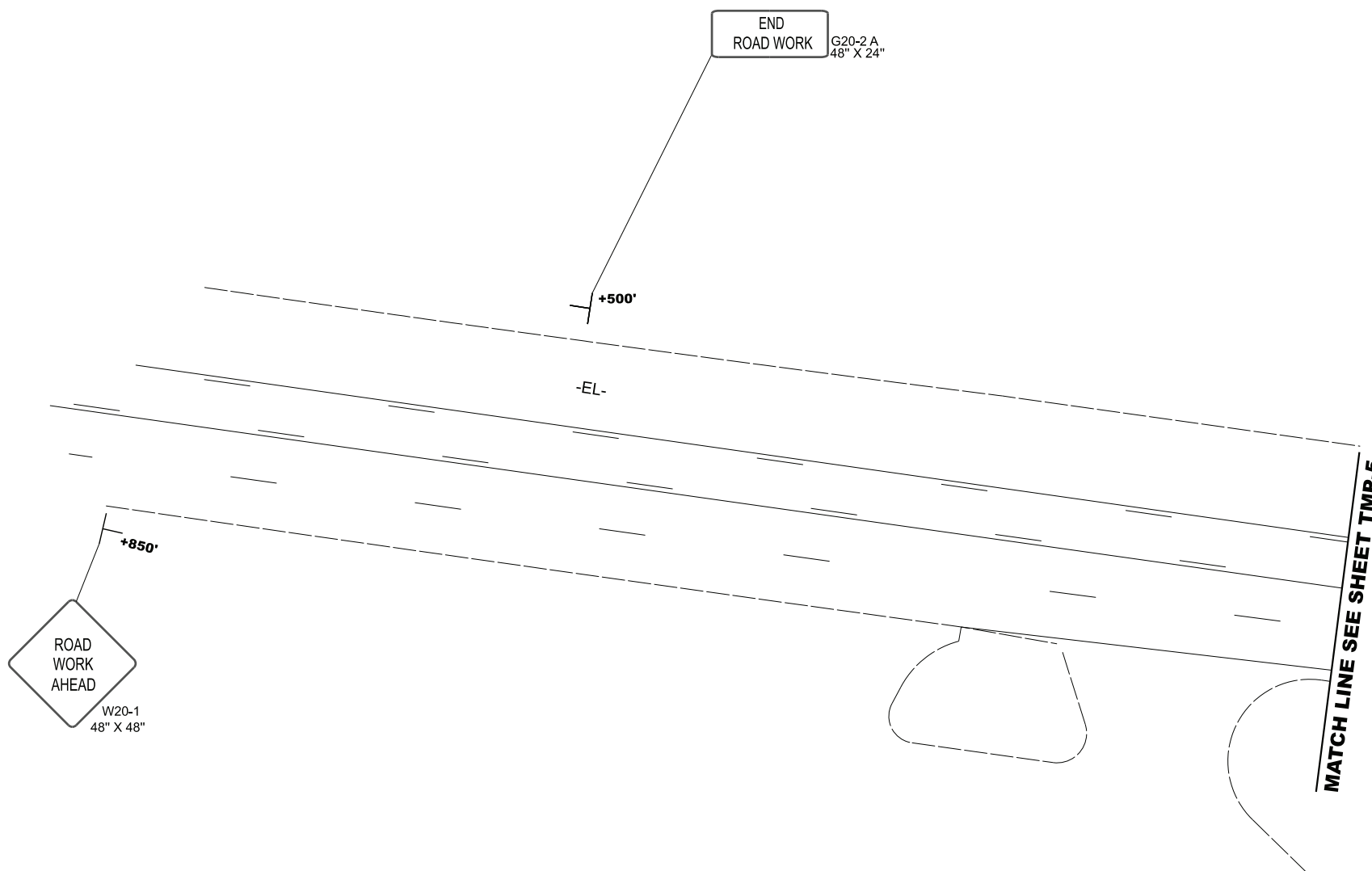
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 SEAL 041993  
 WILLIAM C. CARVER





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APPROVED: <i>William C. Carver</i> DATE: 03/24/2026 SEAL 		<h2>PHASE II DETAIL (CONT.)</h2>
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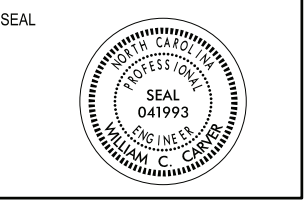
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

PAVEMENT MARKING PLAN  
BUNCOMBE COUNTY

LOCATION: US 25 (HENDERSONVILLE RD) AT NC146 (LONG SHOALS RD)

PROJ. REFERENCE NO. SM-57131	SHEET NO. PMP-1
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APPROVED:   
DATE: 04/14/2026



**ROADWAY STANDARD DRAWINGS**

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 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 - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

**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 ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US 25 (HENDERSONVILLE RD)	THERMOPLASTIC	POLYCARBONATE H-SHAPED MARKERS

USE THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARCTERS, DIAGONALS, AND LANE LINES ALL ROADS.

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

D) STOP BARS AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

E) REMOVE ALL RESIDUE AND SURFACE LAITANCE BY ACCEPTABLE METHODS ON CONCRETE PRIOR TO PLACING PAVEMENT MARKING MATERIAL. IN ACCORDANCE WITH APPROVED METHODS AND THE 2024 STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, THE CONTRACTOR SHALL REMOVE CURING COMPOUND FROM ALL OTHER CONCRETE SURFACES PRIOR TO PLACING FINAL PAVEMENT MARKING MATERIAL.

F) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS, AND DIAGONALS. IF HEAT-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

**INDEX**

SHEET. NO.	DESCRIPTION
PMP-1	PAVEMENT MARKINGS PLAN TITLE, INDEX OF SHEETS, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, GENERAL NOTES, AND FINAL PAVEMENT MARKING SCHEDULE
PMP-2	PAVEMENT MARKING PLAN

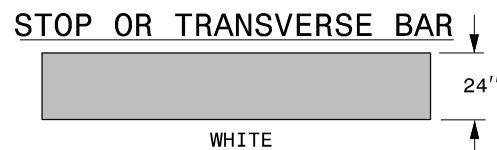
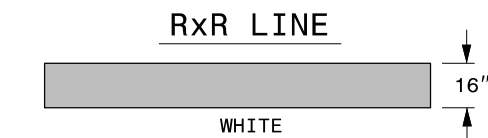
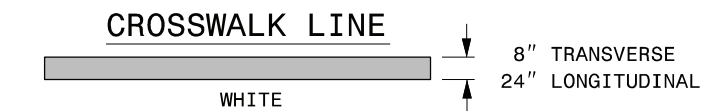
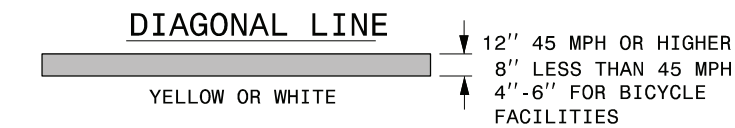
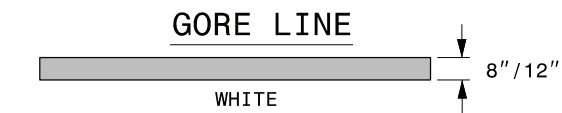
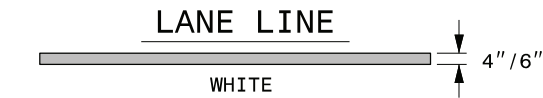
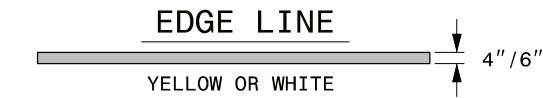
**FINAL PAVEMENT MARKING SCHEDULE**

PAVEMENT MARKINGS	PAVEMENT MARKINGS
THERMOPLASTIC (24", 90 MILS)	THERMOPLASTIC PAVEMENT MARKING SYMBOLS(90 MILS)
T61 WHITE STOP	T70 LEFT TURN ARROW
THERMOPLASTIC (4")	T71 RIGHT TURN ARROW
T2 SOLID WHITE LANE LINE	T72 STRAIGHT ARROW
T3 10FT. WHITE SKIP	SNOWPLOWABLE RAISED PAVEMENT MARKERS
T4 3FT. - 9FT/SP WHITE MINISKIP	ME YELLOW AND YELLOW
T11 YELLOW SINGLE CENTER	MF CRYSTAL AND RED
T12 10FT. YELLOW SKIP	
T13 YELLOW DOUBLE CENTER	
THERMOPLASTIC (8")	
T40 WHITE GORE LINE	
T41 WHITE DIAGONALS	

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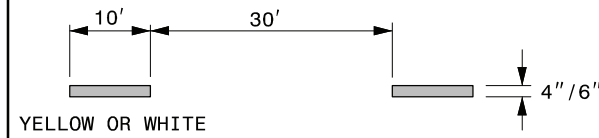
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**CONTINUOUS LINES**



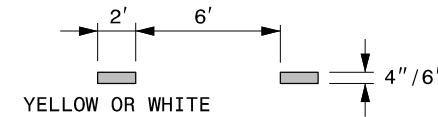
**10'-30'/SP SKIP LINE**

UNLESS OTHERWISE SHOWN, USE 10'-30'/SP SKIPS FOR SKIP LANE LINES AND SKIP CENTER LINES.



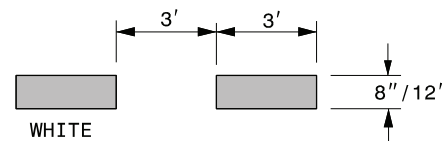
**2'-6'/SP MINI-SKIP LINE**

UNLESS OTHERWISE SHOWN, USE 2'-6'/SP MINI-SKIPS FOR LANE LINE EXTENSIONS THROUGH INTERSECTIONS, EDGE LINE EXTENSIONS THROUGH INTERSECTIONS AND BICYCLE LANE EXTENSIONS.



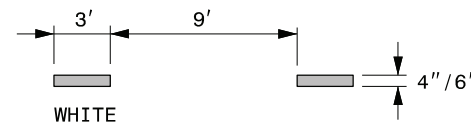
**3'-3'/SP MINI-SKIP LINE**

UNLESS OTHERWISE SHOWN, USE 3'-3'/SP MINI-SKIPS FOR THE WHITE EDGE LINE EXTENSIONS AT ROUNDABOUTS.



**3'-9'/SP MINI-SKIP LINE**

UNLESS OTHERWISE SHOWN, USE 3'-9'/SP MINI-SKIPS FOR MINI-SKIP LANE LINES, LINE EXTENSIONS THROUGH TAPERS, AND MINI-SKIPS USED FOR BICYCLE LANE LINES.



GENERAL NOTES:

- 1- USE 6" LANE, EDGE, AND CENTER LINES ON ALL FULL CONTROL OF ACCESS FACILITIES AND OTHER ROUTES AS DIRECTED BY THE ENGINEER.
- 2- LANE LINES INDICATED AS "WIDE" ON THE ROADWAY STANDARD DRAWINGS SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE.
- 3- GORE LINES SHALL BE TWICE THE WIDTH OF THE NORMAL LINE.

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

ROADWAY DETAIL DRAWING FOR  
**PAVEMENT MARKINGS**  
LINE TYPES AND OFFSETS

SHEET 1 OF 2

**1205D01**

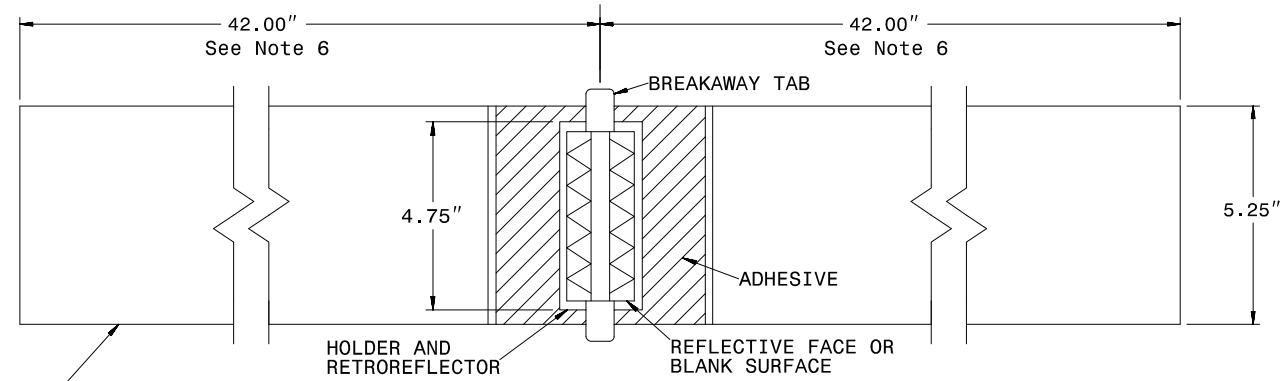


Signed by:  
*Matthew V. Springer, P.E.*  
BC09PFE0858403

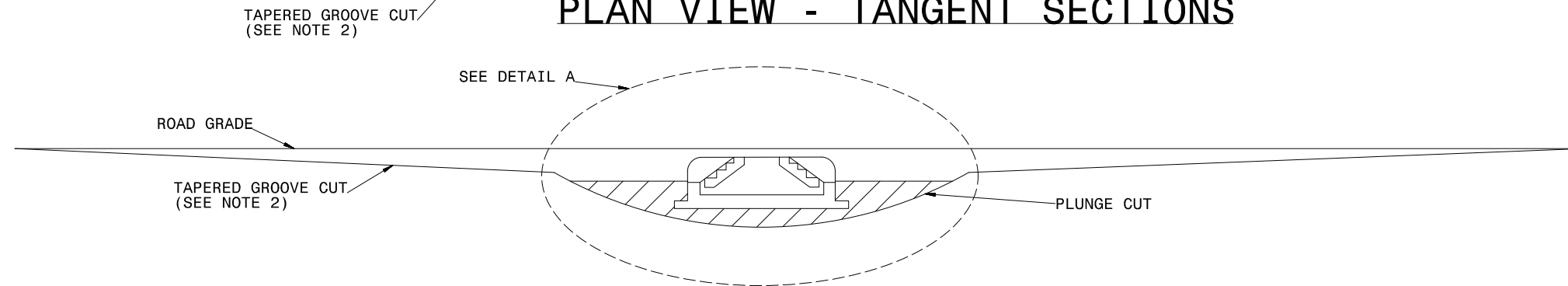
**CONTRACTS STANDARDS AND DEVELOPMENT UNIT**  
Office 919-707-8950 FAX 919-250-4119

**SEE TITLE BLOCK**

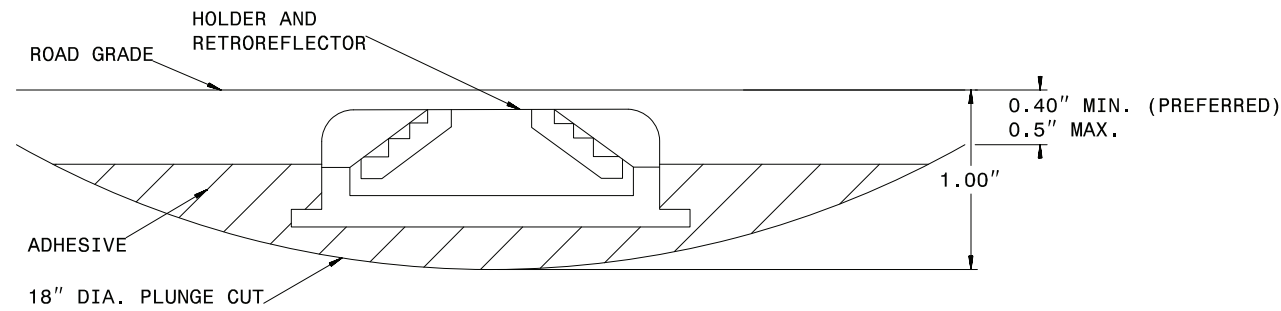
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MODIFIED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
FILE SPEC.: \_\_\_\_\_



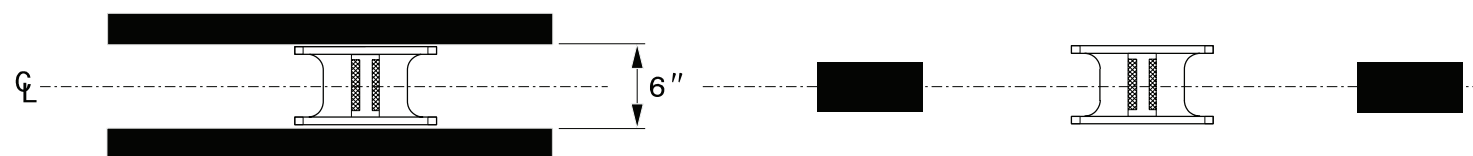
**PLAN VIEW - TANGENT SECTIONS**



**PROFILE VIEW**



**DETAIL A**



**MARKER SPACING**

**NOTES:**

1. ALL GROOVE EDGES SHALL BE AT LEAST 2 INCHES FROM ANY SEAM OR PAVEMENT JOINT
2. GROOVE CUTS MAY BE TAPERED OR BEVELED. TAPERED CUTS SHALL START AT ROAD LEVEL ON EACH END AND TAPER AT A FIXED RATE AS SHOWN ON THE PROFILE VIEW. BEVELED GROOVE CUTS SHALL BE 0.5" MAXIMUM DEPTH (0.4" PREFERRED), AND SHALL BE 0.4" MINIMUM DEPTH AT BOTH ENDS OF THE PLUNGE CUT.
3. GROOVE AND PLUNGE CUT SHALL BE CLEAN AND DRY PRIOR TO PLACEMENT OF ADHESIVE.
4. THE EPOXY ADHESIVE SHALL BE THOROUGHLY MIXED UNTIL IT IS UNIFORM IN COLOR, AND APPLIED IN COLOR, AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
5. MARKER SHALL BE INSTALLED AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH THE BREAKAWAY TABS RESTING ON THE PAVEMENT SURFACE. THE EPOXY SHALL BE FILLED TO THE LEVEL OF THE TOP OF THE MARKER HOLDER. EPOXY SHALL NOT TOUCH THE RETROREFLECTOR.
6. TOTAL GROOVE LENGTH MAY BE SHORTENED TO 54" ON SHARP CURVES IF APPROVED BY THE ENGINEER. GROOVES SHALL NOT OVERLAP WITH LOOP DETECTOR WIRES.

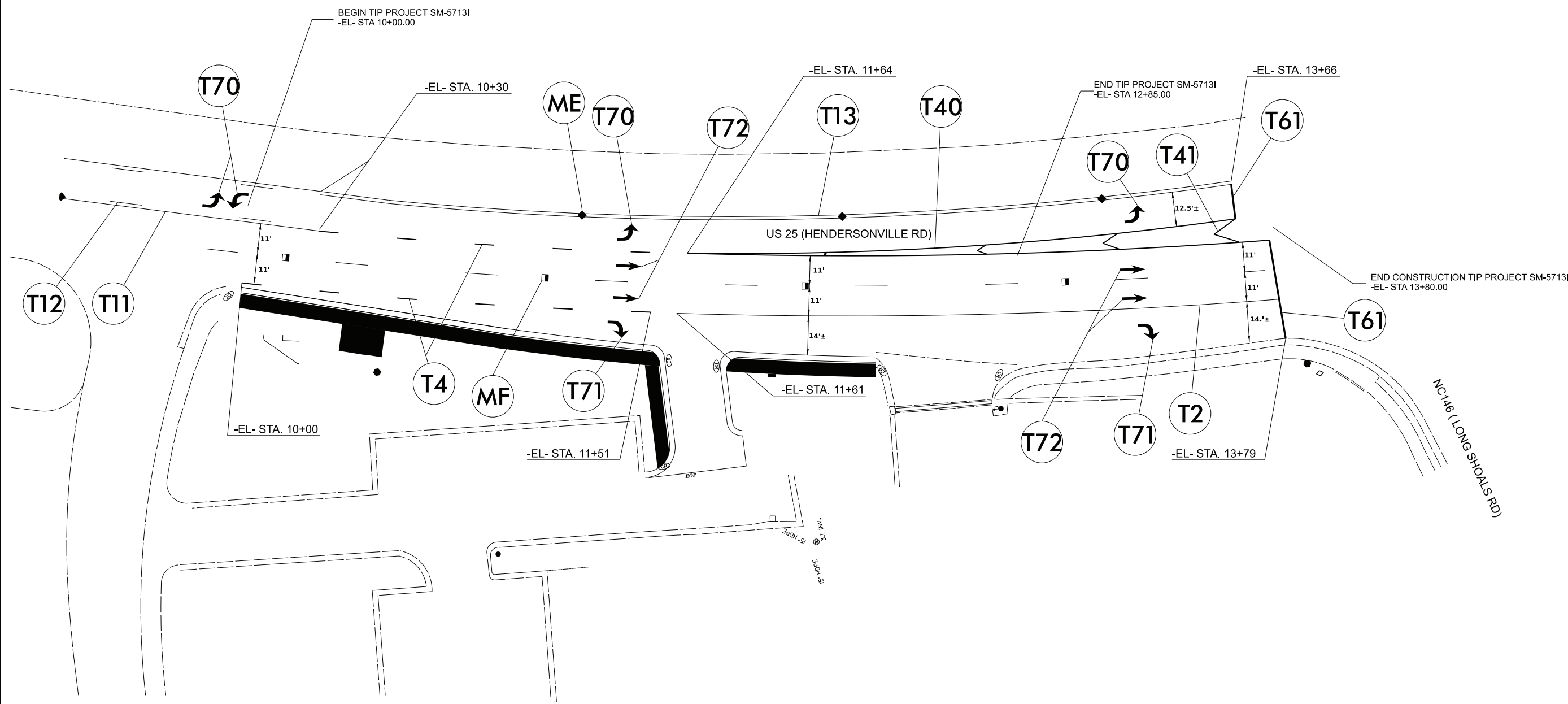


Signed by:  
Matthew V Springer, PE  
BC000616584403

<b>CONTRACTS STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-8950 FAX 919-250-4119	
<b>DETAIL OF INLAID CRADLE MARKER</b>	
ORIGINAL BY: rgwatson	DATE: 02-06-2024
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.:	



10



**PROJECT NOTES**

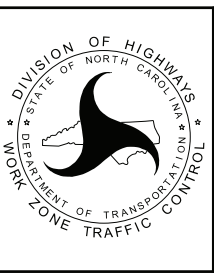
- SEE SHEET PMP-1 FOR FINAL PAVEMENT MARKING SCHEDULE
- SEE NCDOT 2024 STANDARD DRAWING 1250.01 FOR PLACEMENT OF MARKERS **ME** AND **MF**.

2/26/2026  
 S:\D00\Projects\Buncombe\SM5713I\Traffic\MP\SM5713I\_ddc.dsn\_pmp.dgn  
 User:thfletcher

APPROVED: *William C. Carver*  
10352548519248F

DATE: 04/14/2026

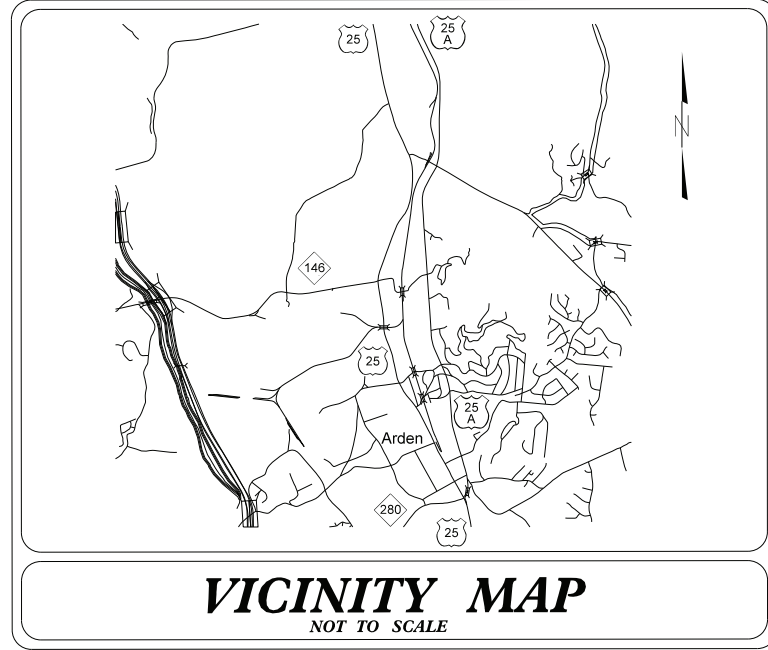
SEAL



**PAVEMENT MARKING PLAN**

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

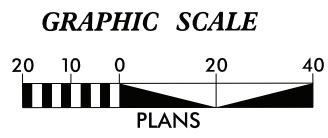
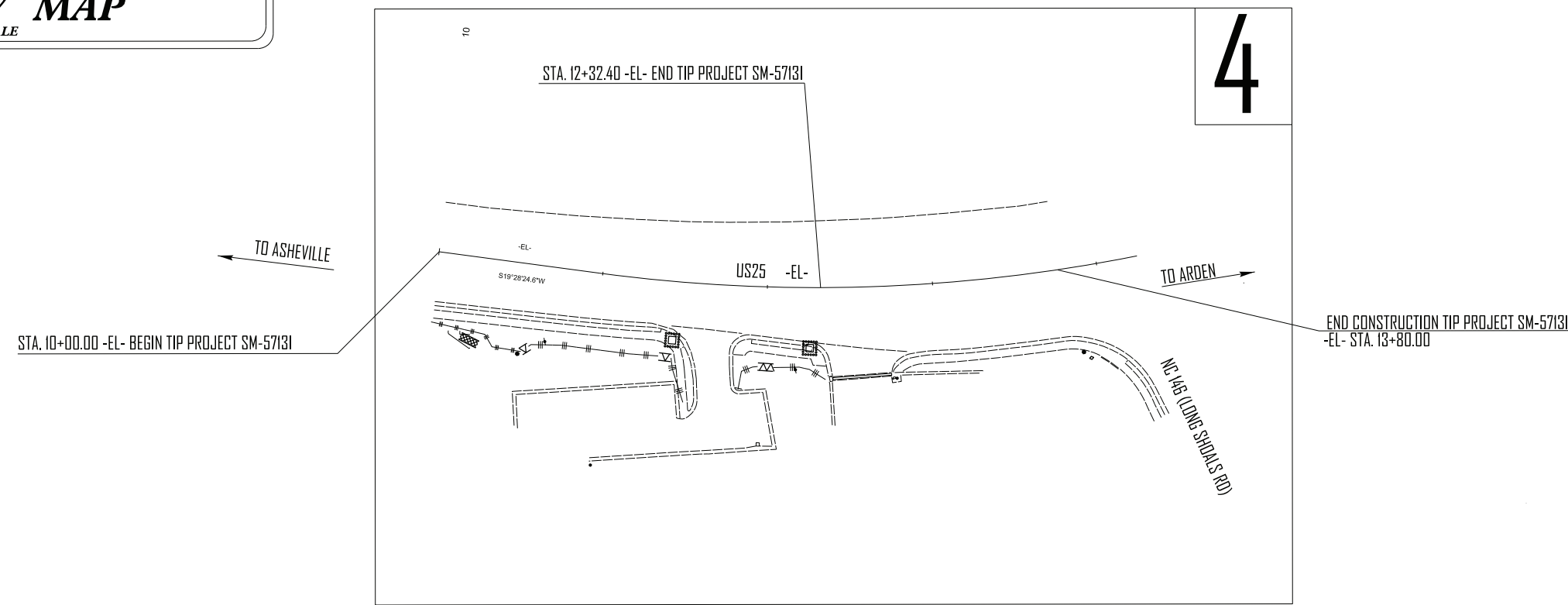
**TIP PROJECT: SM-57131**



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL**

**BUNCOMBE COUNTY**  
**LOCATION: US 25 (HENDERSONVILLE RD) AT NC 146 (LONG SHOALS RD)**  
**TYPE OF WORK: WIDENING, GRADING, DRAINAGE, PAVING,  
AND PAVEMENT MARKING**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SM-57131	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY  
WITH THE REGULATIONS SET FORTH BY THE NCG-010000  
GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH  
CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION  
OF ENERGY, MINERAL, AND LAND RESOURCES.

Prepared in the Office of:  
**DIVISION 13 DDC**  
55 Orange St.  
Asheville, NC 288011  
**2024 STANDARD SPECIFICATIONS**

Designed by:  
**Hampton Fletcher** **3382**  
NAME LEVEL III CERTIFICATION NO.

**Roadway Standard Drawings**

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

I:\Projects\6-AM-57131\Environmental\EC\SM57131.dwg, EC, tsh.dgn  
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# DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

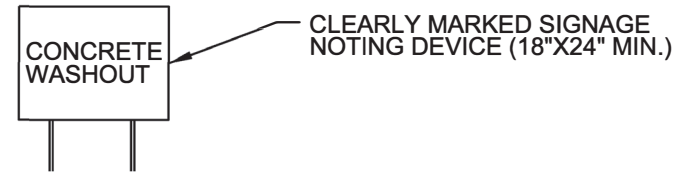
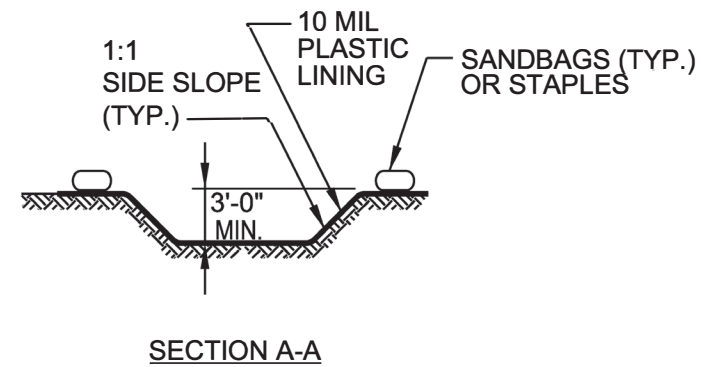
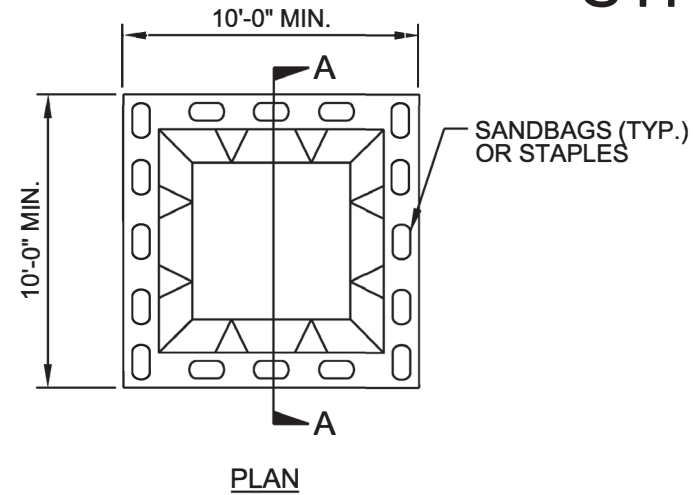
PROJECT REFERENCE NO. <b>SM-5713I</b>	SHEET NO. <b>EC-02</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

## EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

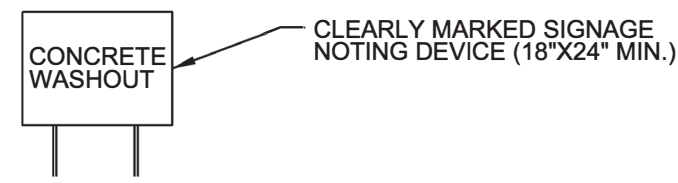
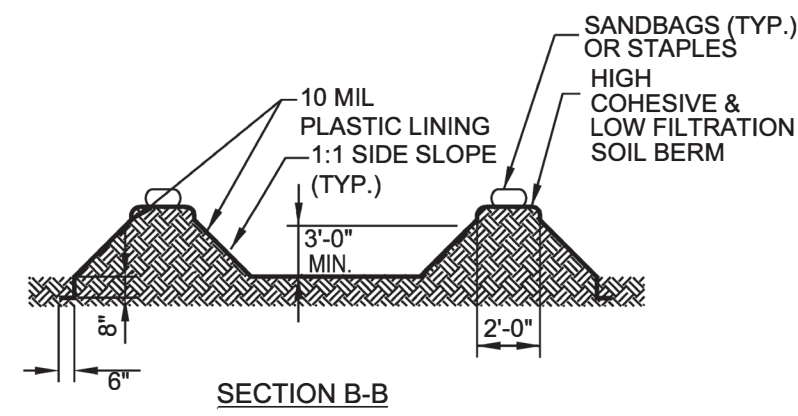
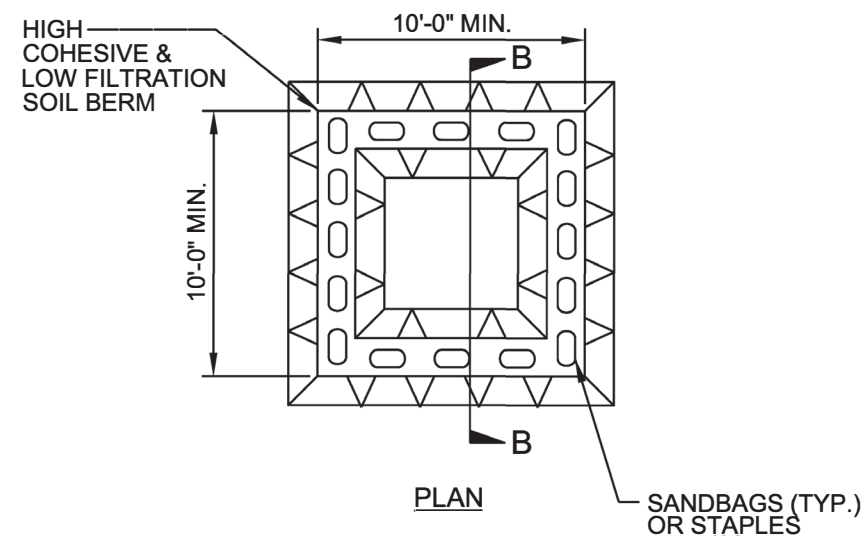
PROJECT REFERENCE NO. <i>SM-57131</i>	SHEET NO. <i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



**BELOW GRADE WASHOUT STRUCTURE**  
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
  2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
  3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



**ABOVE GRADE WASHOUT STRUCTURE**  
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
  2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
  3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

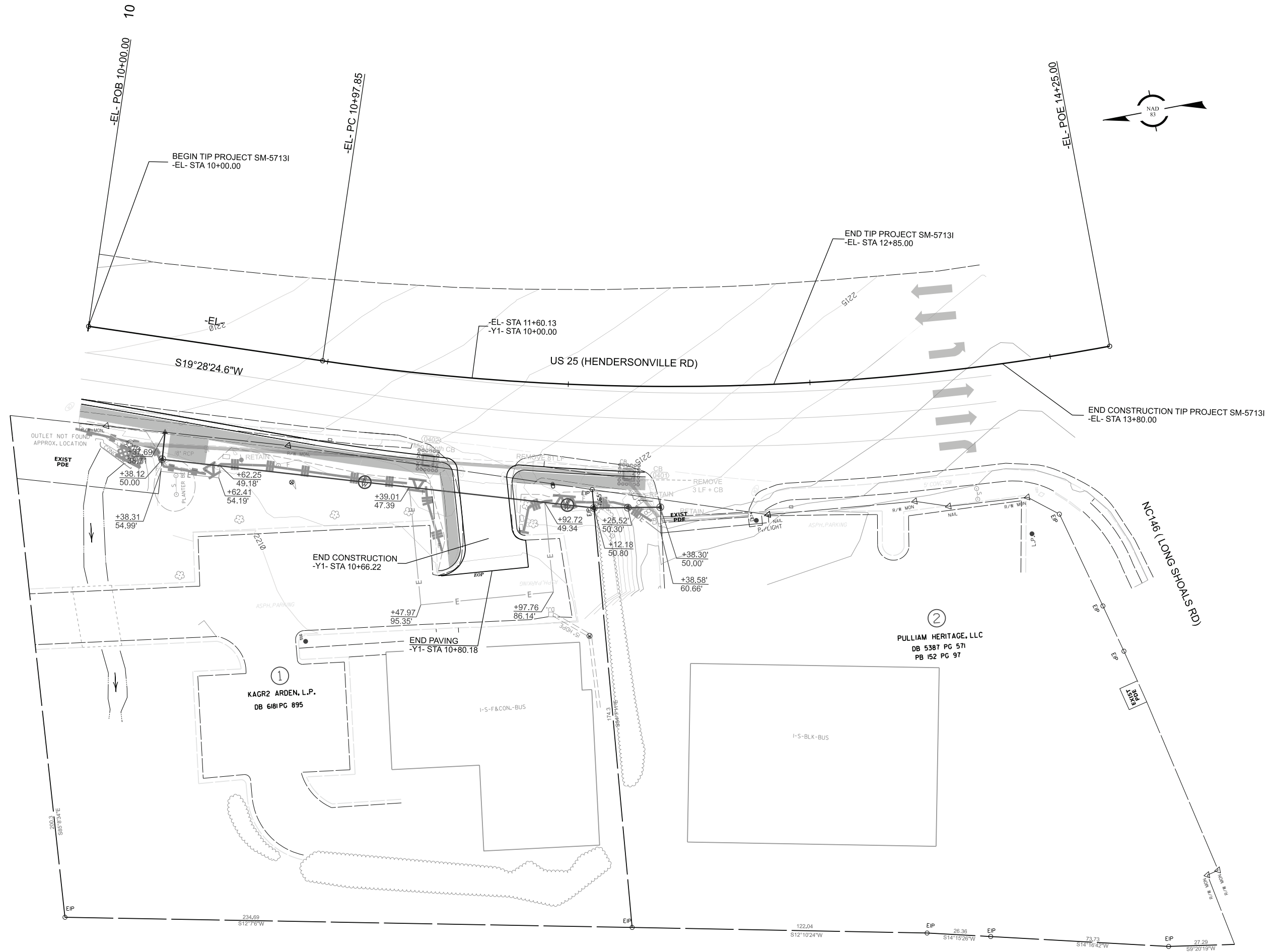
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## ***SOIL STABILIZATION TIMEFRAMES***

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

<i>CROSS SECTION INDEX OF SHEETS</i>		
	<i>CROSS SECTION SUMMARY</i>	<i>X-B</i>
<i>-EL-</i>	<i>10+00.00 TO 13+80.00</i>	<i>X-1 THRU X-4</i>
<i>-DR1-</i>	<i>10+00.00 TO 10+80.18</i>	<i>X-5</i>



