

CONTRACT:



BEG

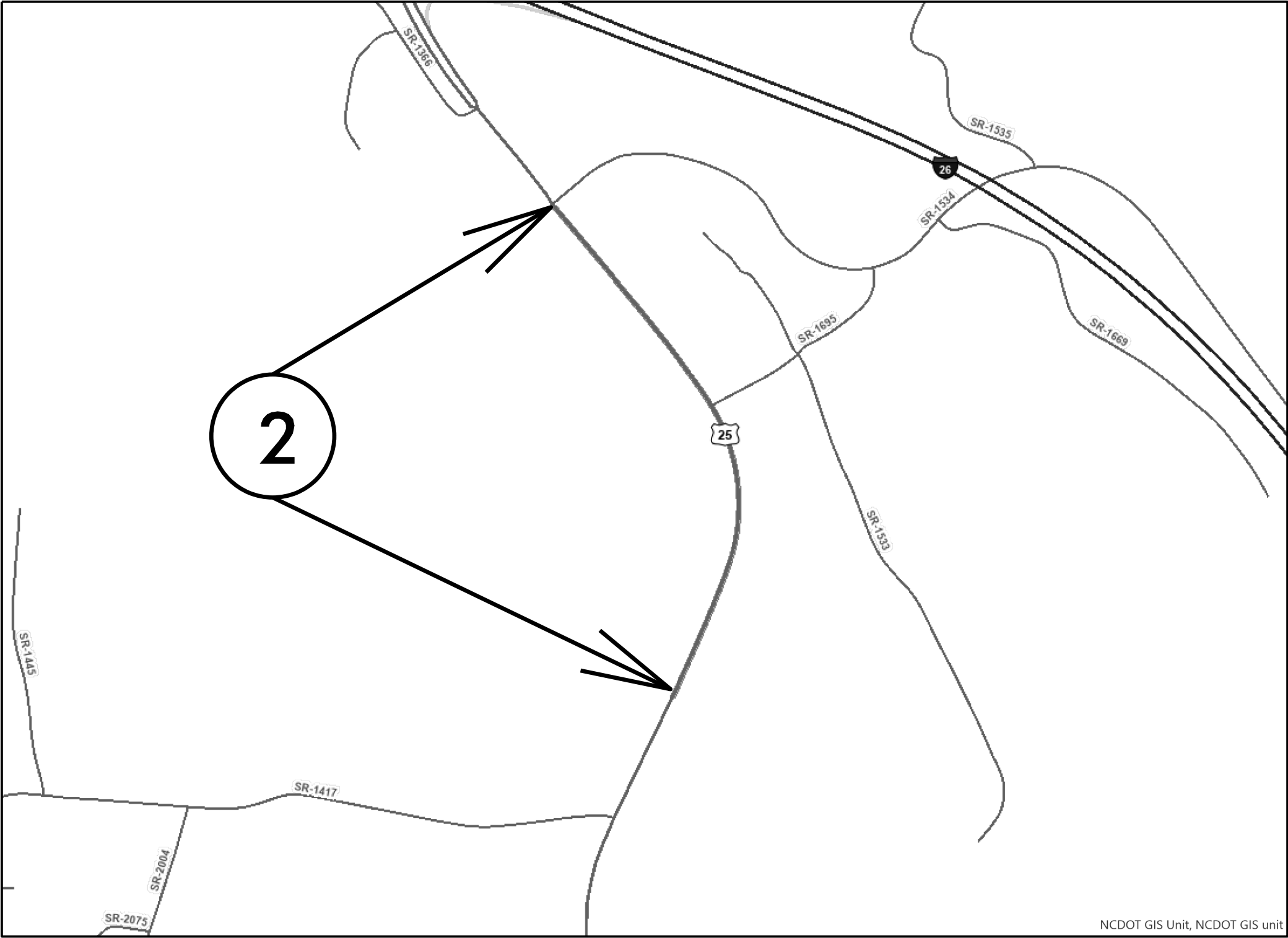


END

09/08/09

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451	2	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	

HENDERSON COUNTY



MAP 2



BEG



END

CONTRACT:

09/08/09

HENDERSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451	3	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	



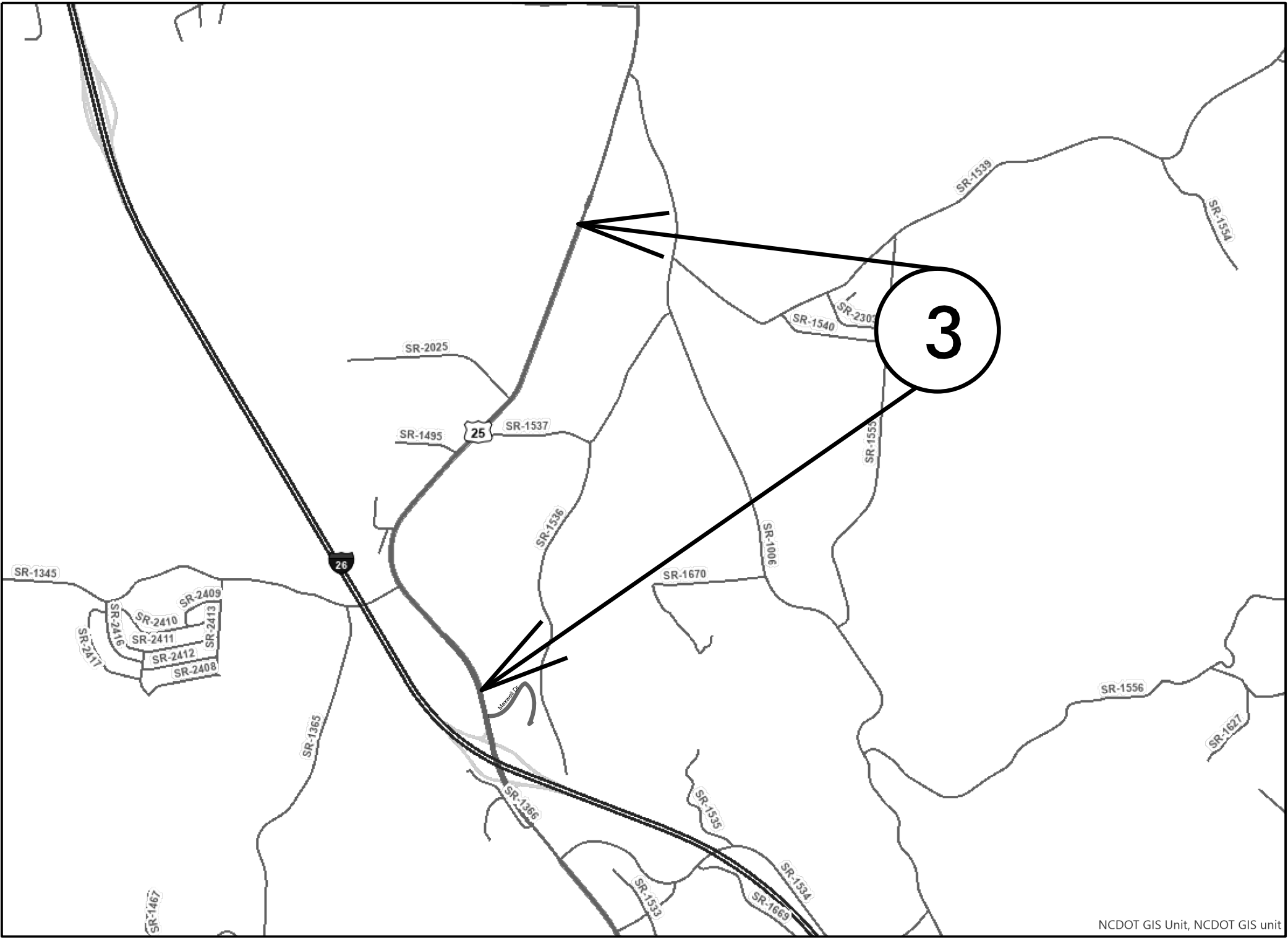
MAP 3



BEG



END



NCDOT GIS Unit, NCDOT GIS unit

CONTRACT:

09/08/09

HENDERSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451	4	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	



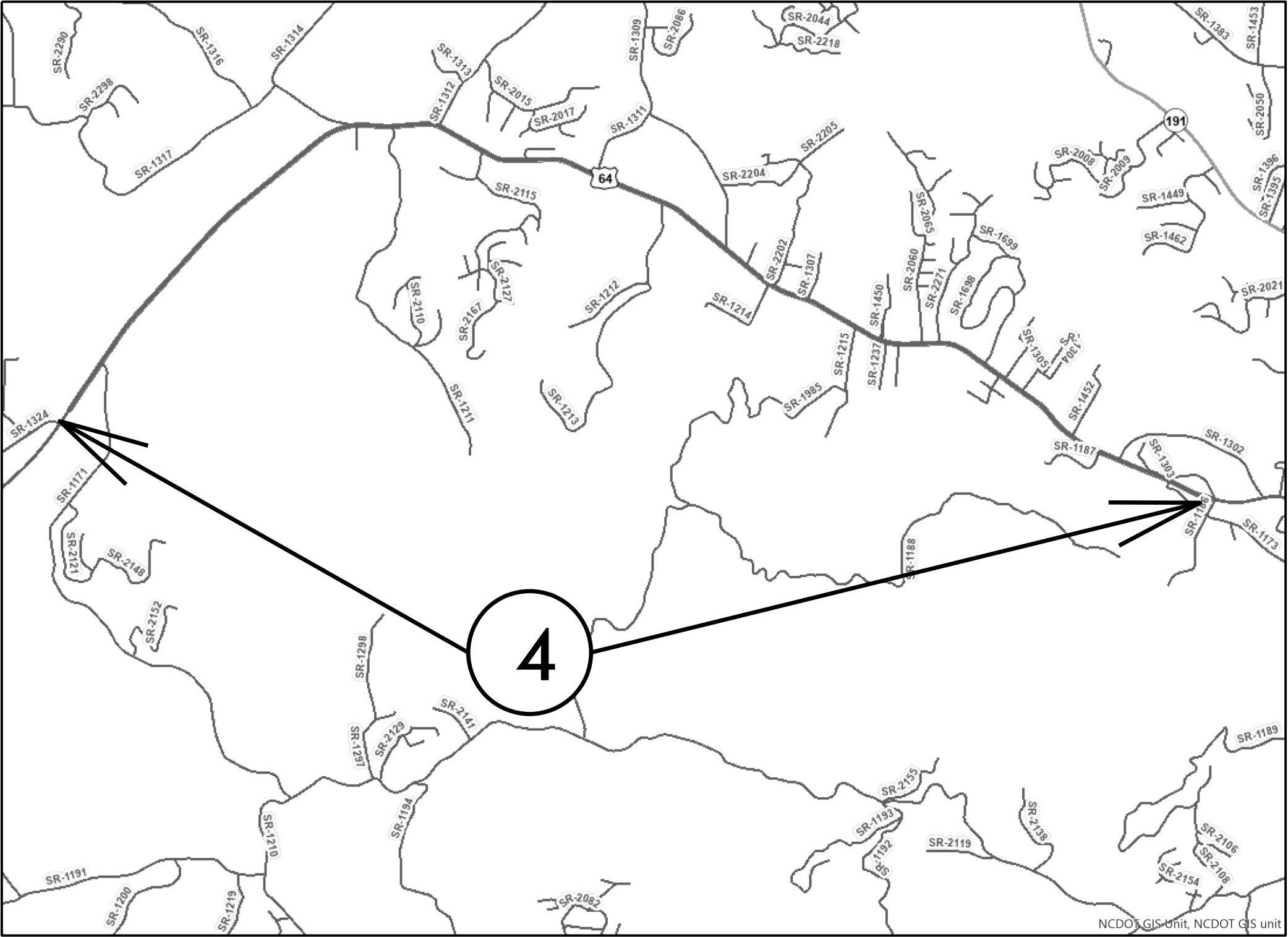
MAP 4



BEG



END



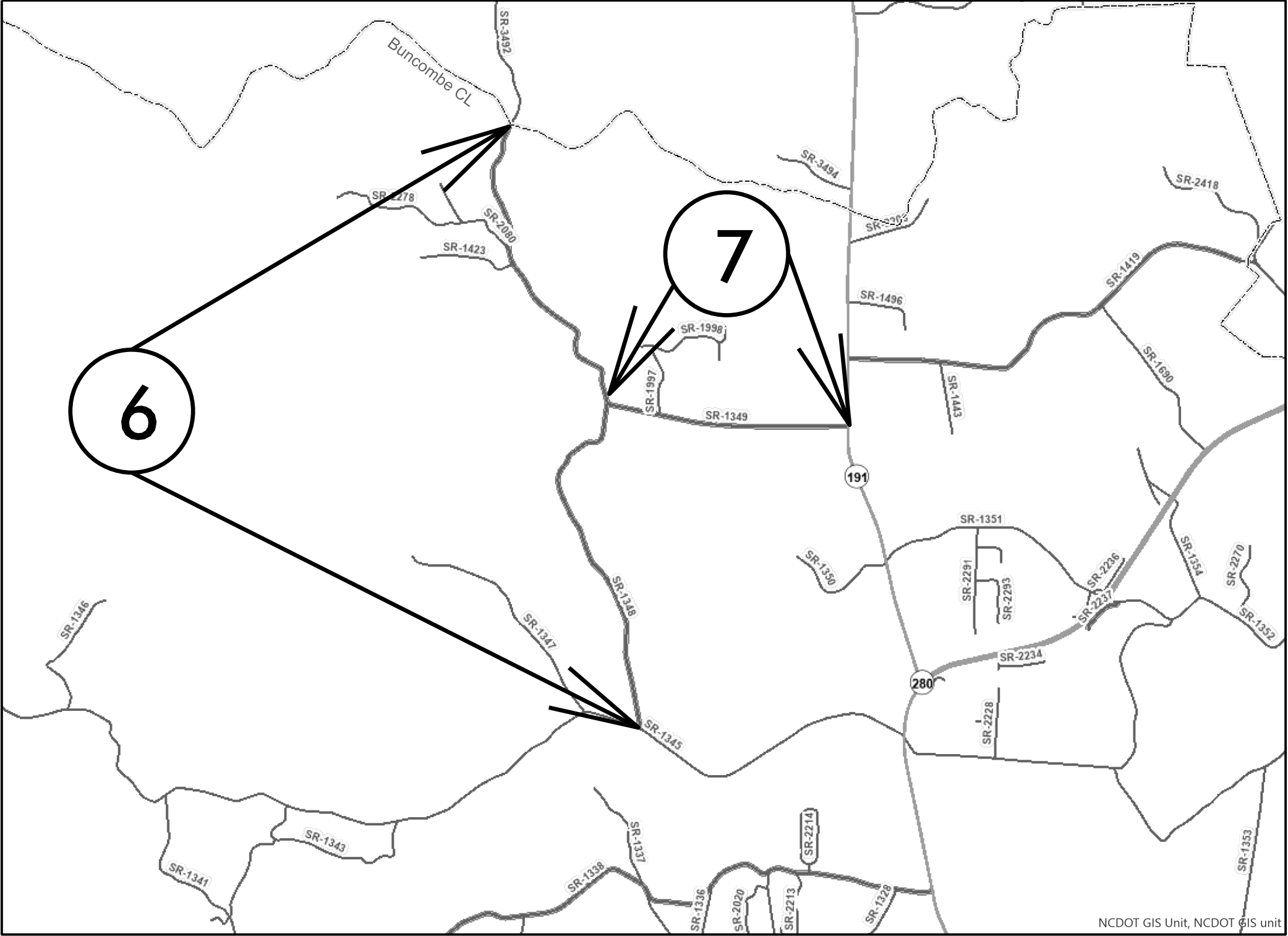
NCDOT GIS unit, NCDOT GIS unit

CONTRACT:

09/08/09

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	6	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	

HENDERSON COUNTY



MAP 6



BEG



END

MAP 7



BEG



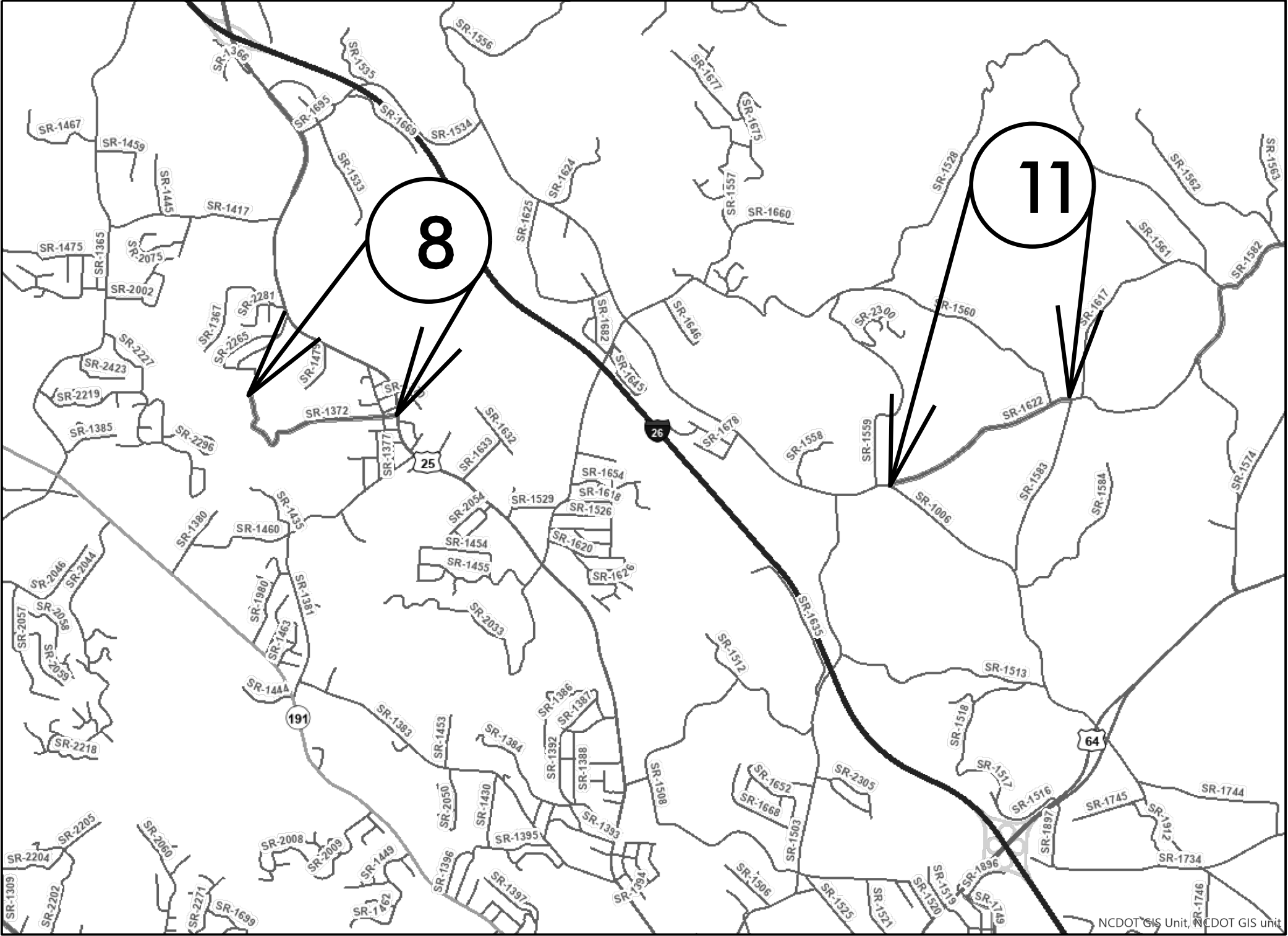
END

CONTRACT:

09/08/09

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	7	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

HENDERSON COUNTY



MAP 8



BEG



END

MAP 11



BEG



END

NCDOT GIS Unit, NCDOT GIS unit

CONTRACT:

09/08/2025

HENDERSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	8	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	



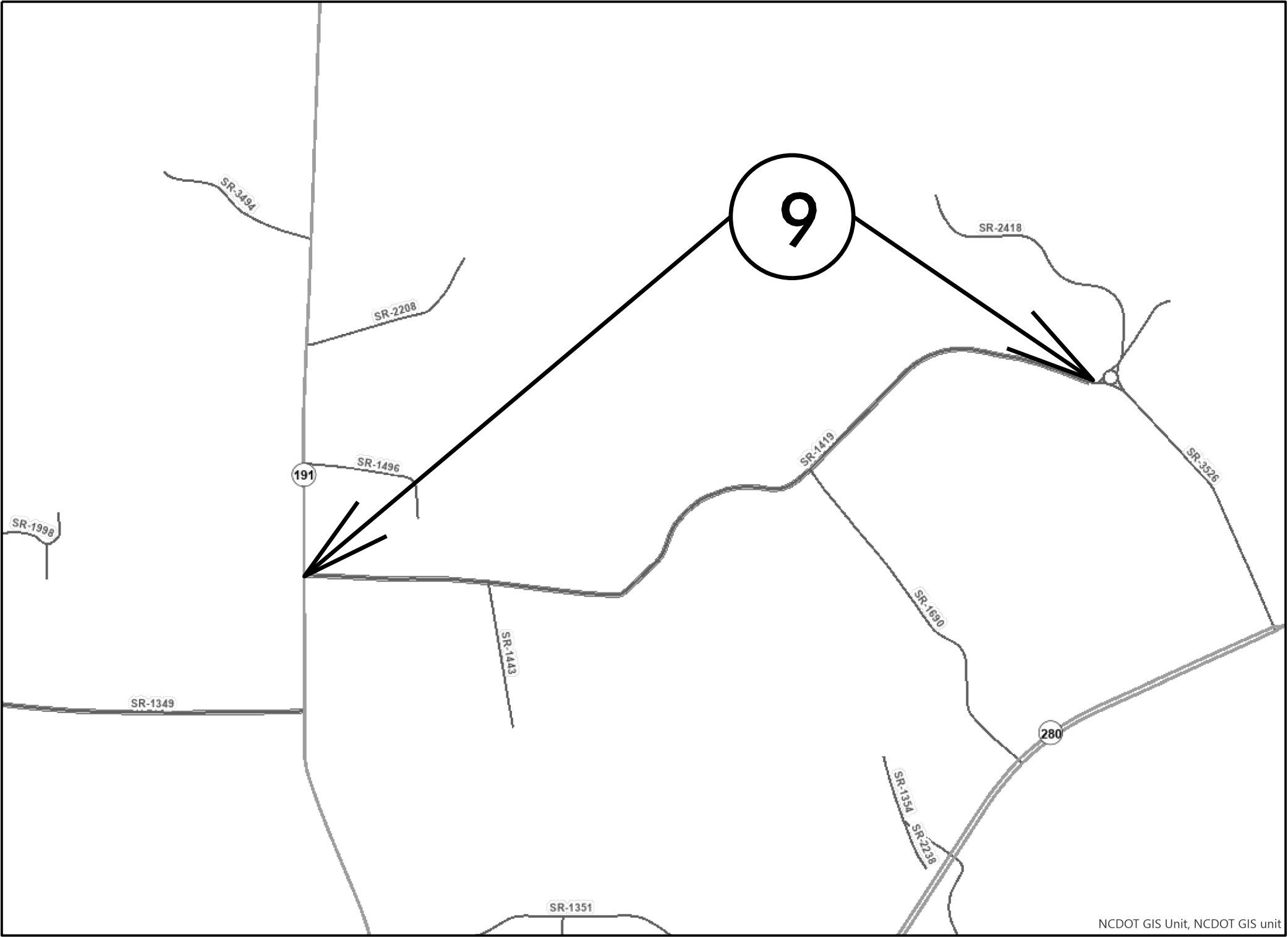
MAP 9



BEG



END



CONTRACT:

09/08/09

HENDERSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	9	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	



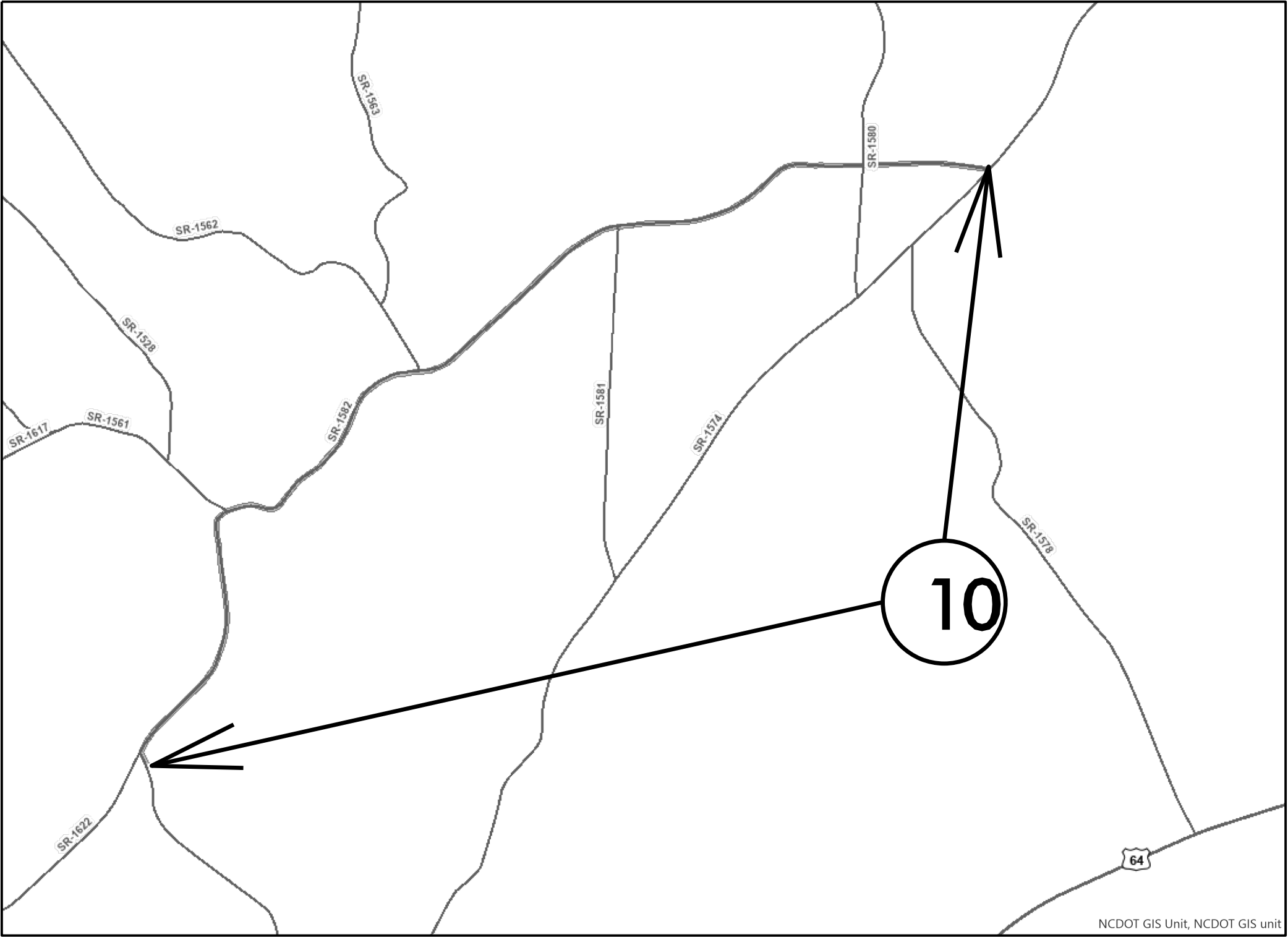
MAP 10



BEG



END



NCDOT GIS Unit, NCDOT GIS unit

CONTRACT:

09/08/09

HENDERSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	110	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	



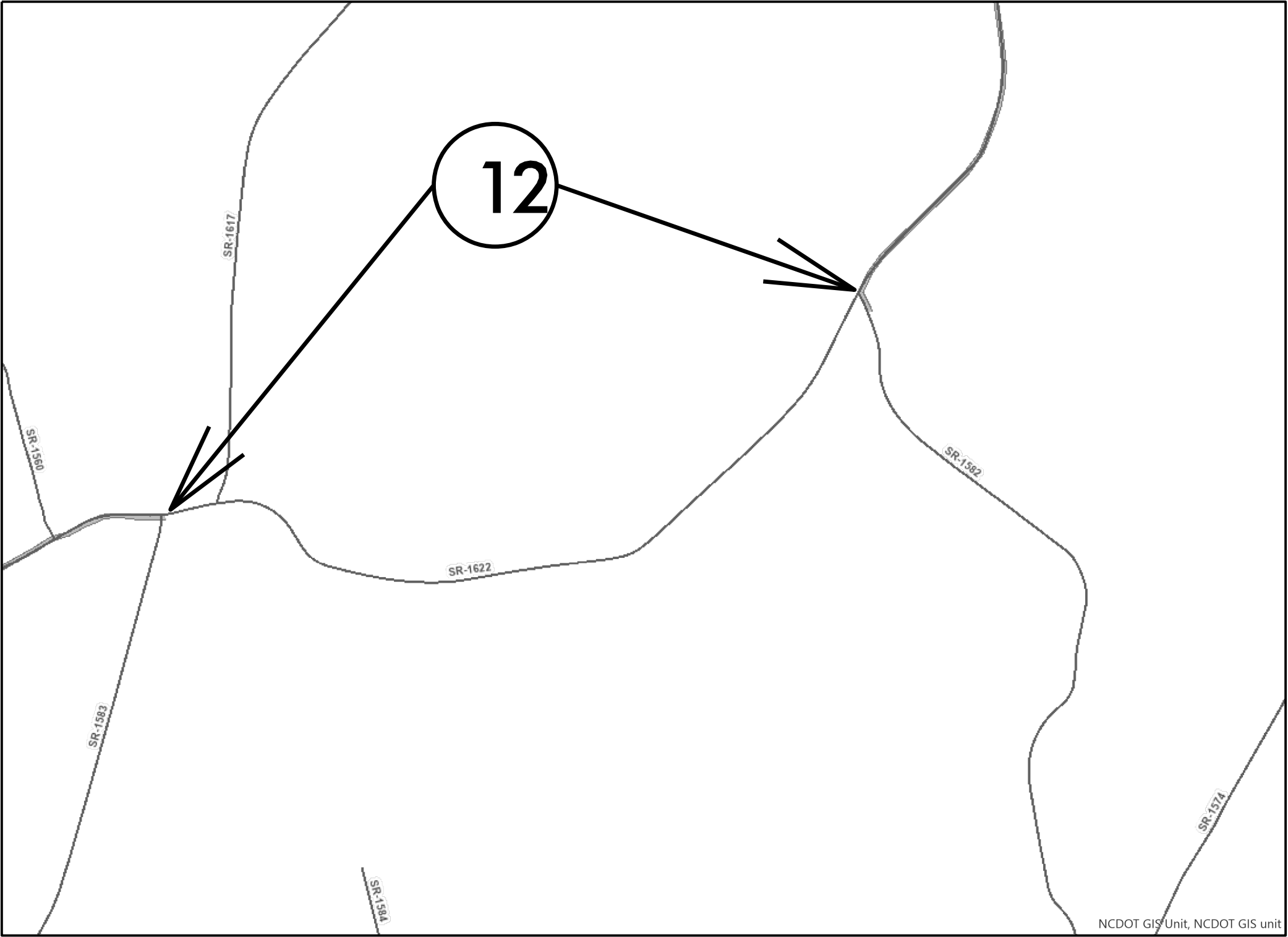
MAP 12



BEG



END



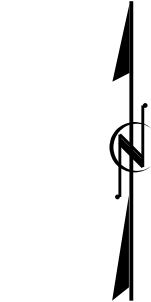
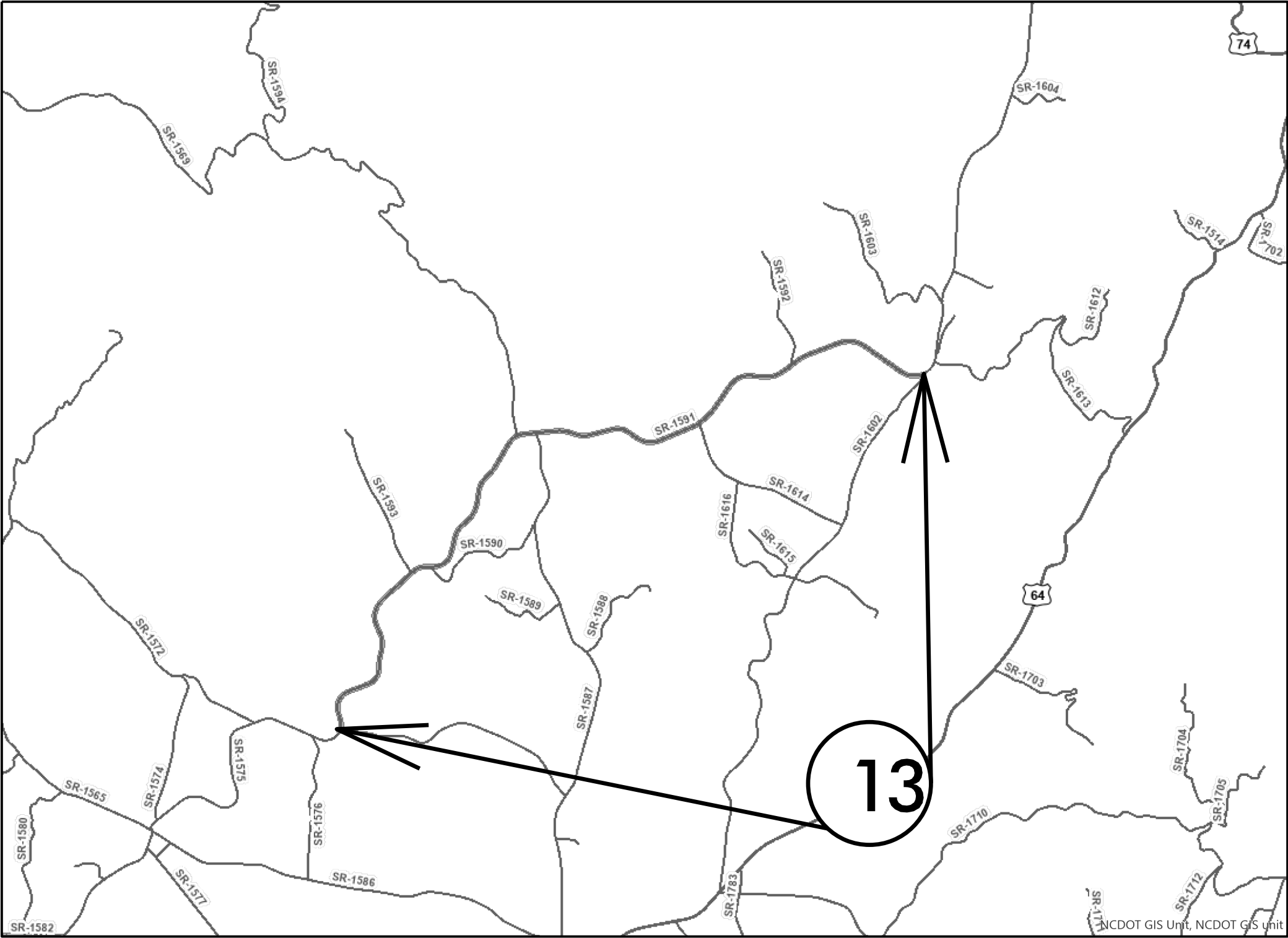
NCDOT GIS Unit, NCDOT GIS unit

CONTRACT:

09/08/09

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	111	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	

HENDERSON COUNTY



MAP 13



BEG



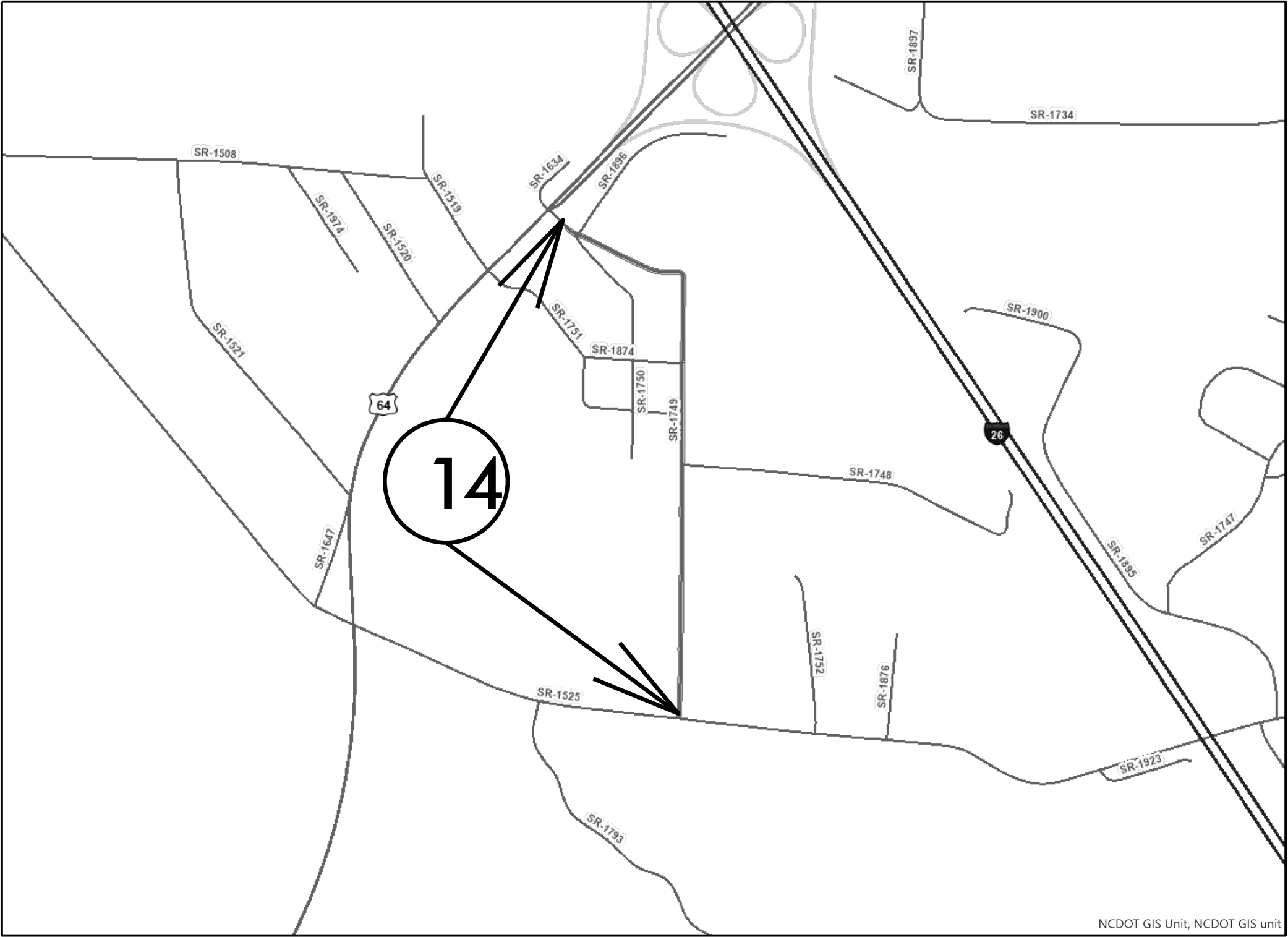
END

CONTRACT:

09/08/09

HENDERSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	112	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	



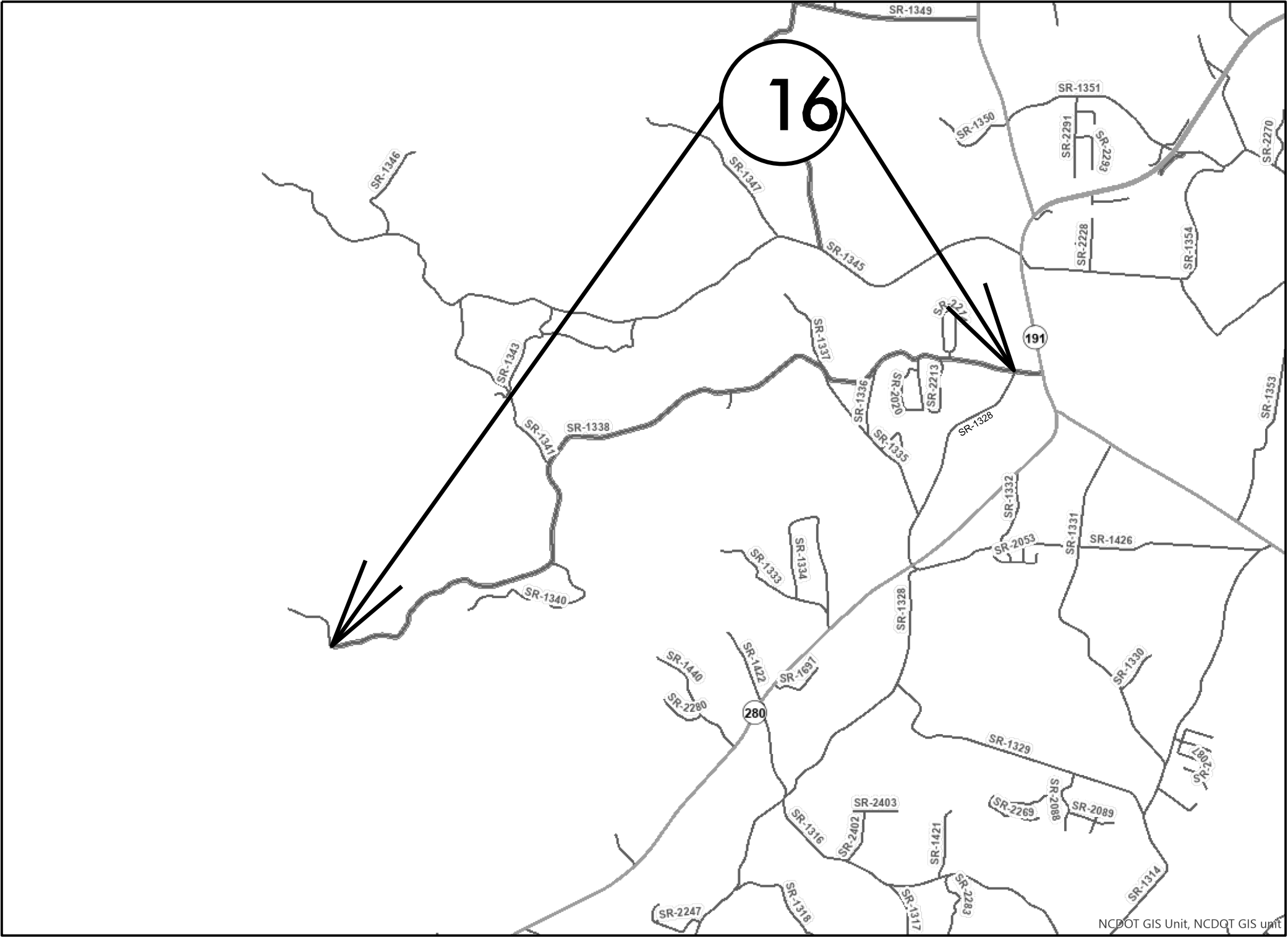
NCDOT GIS Unit, NCDOT GIS unit

CONTRACT:

09/08/09

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	14	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	

HENDERSON COUNTY



MAP 16



BEG



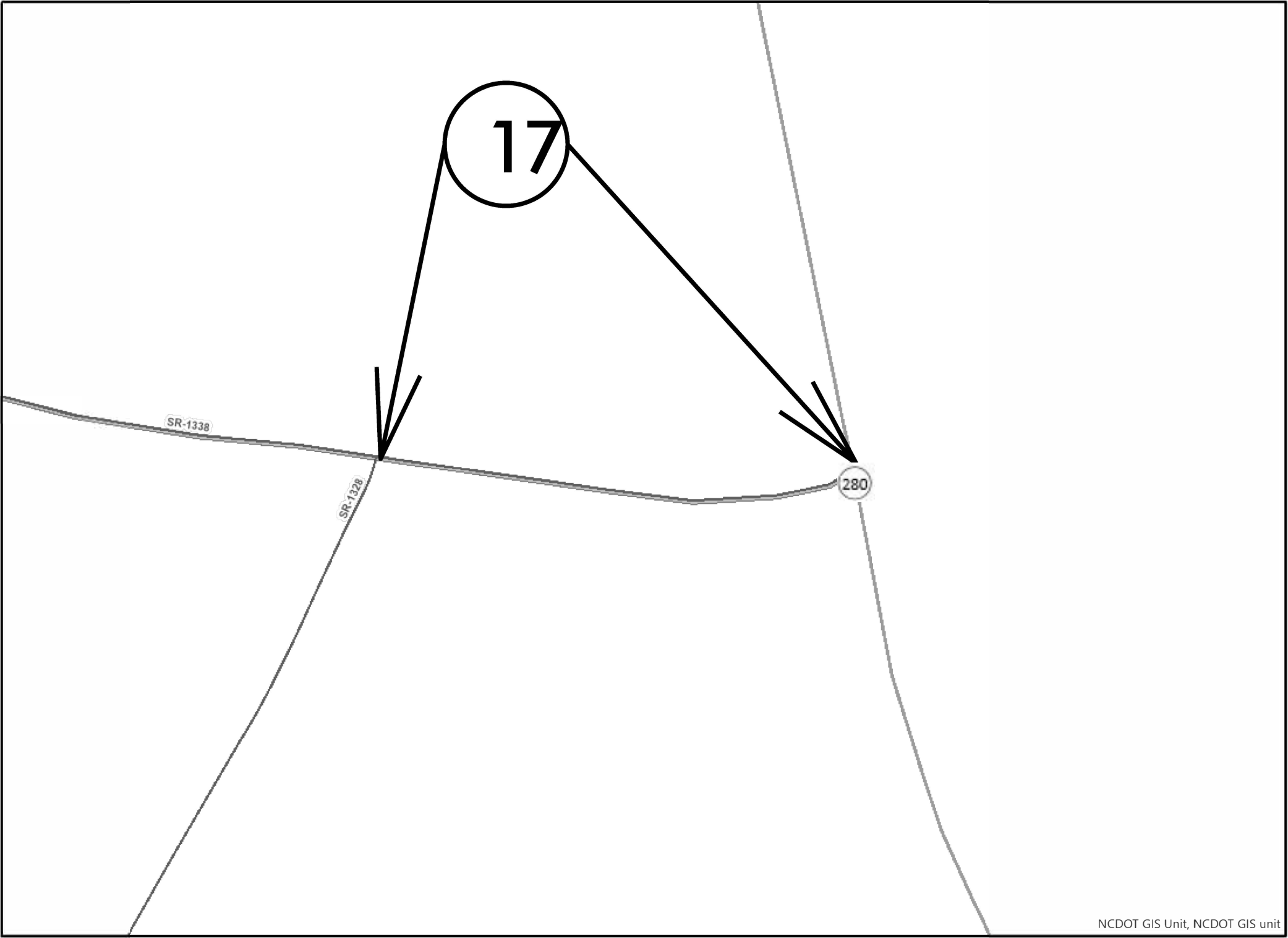
END

CONTRACT:

09/08/99

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	15	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	

HENDERSON COUNTY



NCDOT GIS Unit, NCDOT GIS unit



MAP 17



BEG



END

CONTRACT:

09/08/09

HENDERSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.20451	116	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	



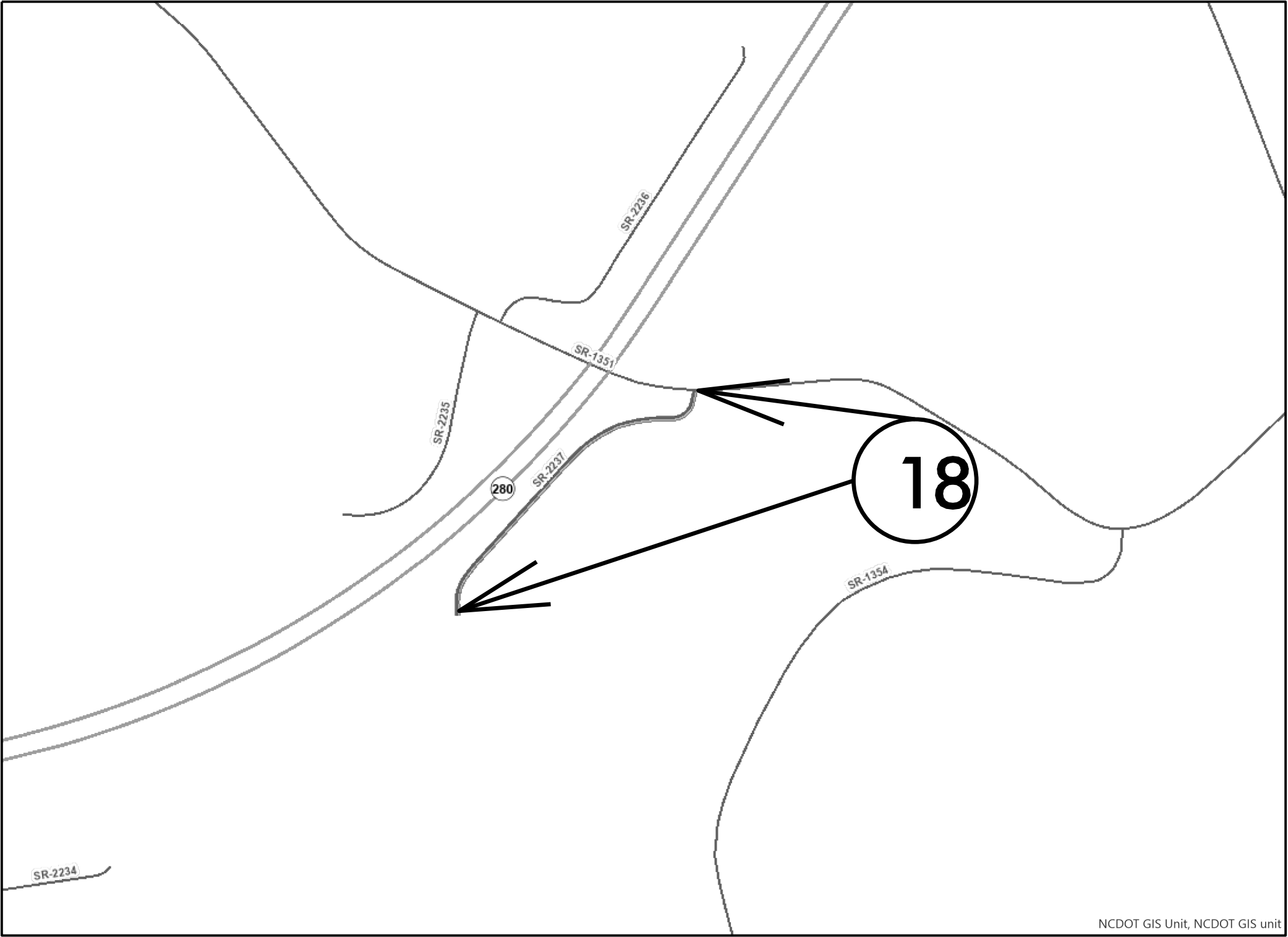
MAP 18



BEG



END



NCDOT GIS Unit, NCDOT GIS unit

CONTRACT:

09/08/09

STATE	STATE PROJECT REFERENCE NO.		SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451		17	
STATE PROJ. NO.		F. A. PROJ. NO.	DESCRIPTION	
2026CPT.14.02.10451				
2026CPT.14.02.20451				

Concrete Repairs						
Map	Road/Intersection	WCR	4" Sidewalk	2'-6" Curb & Gutter	6" Concrete Driveway	Notes
1	US176	1				Type 2B @ MM 0.19
1	US176/SR-1758 Glover St	1				Type 2B @ NW corner of intesection
1	US176/SR-1758 Glover St	1				Type 1A @ NE corner of intersection
1	Edney St	1				Typ 1 Mod @ NW corner of intersection
1	US 176/SR-1775	1				Type 2A Mod @ NW corner of intersection
1	US 176/SR-1775	1				Type 2A Mod @ SW corner of intersection
1	US 176/SR-1775	1				Type 2A Mod @ SE corner of intersection
1	US 176/SR-1775	1				Type 2A Mod @ NE corner of intersection

Total	8	0	0	0
	EA	SY	LF	SY

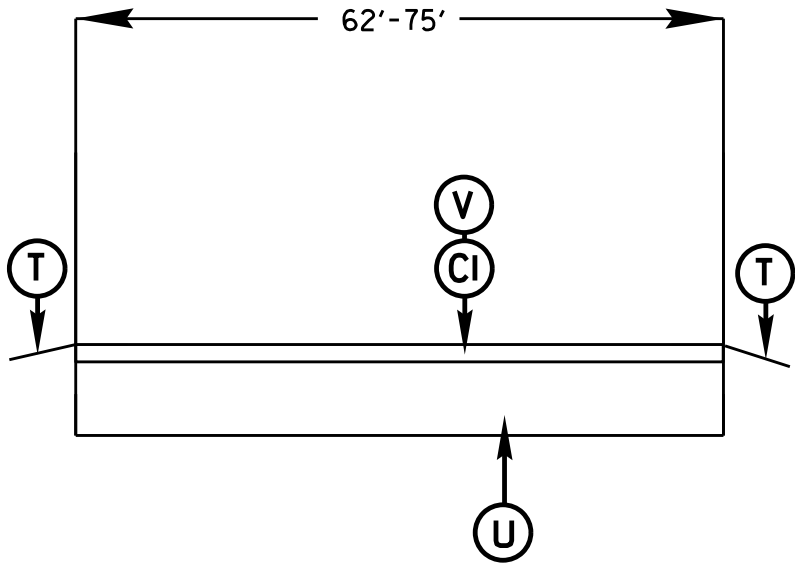
CONTRACT:

09/08/09

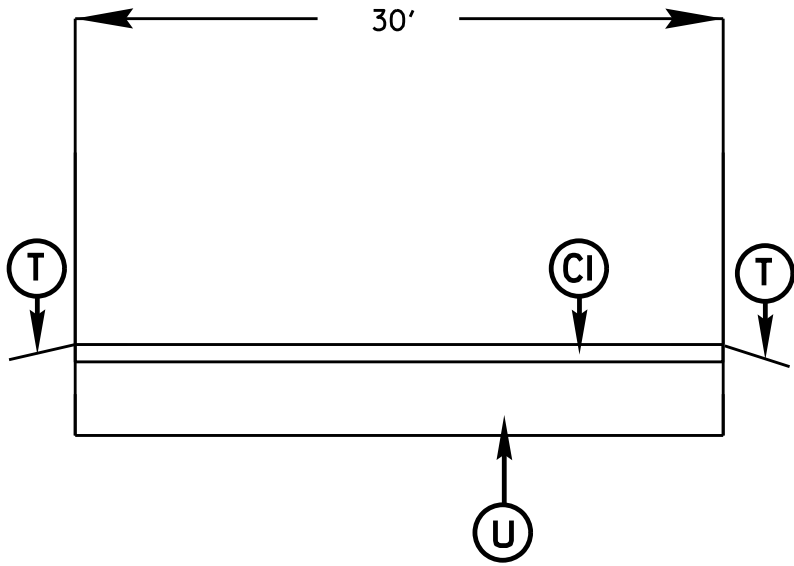
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451	18	
STATE PROJ. NO.		F. A. PROJ. NO.	DESCRIPTION
2026CPT.14.02.10451			
2026CPT.14.02.20451			

SURFACING SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION WITH ASB. 2' WIDE UNLESS DIRECTED BY PROJECT ENGINEER -SEE PROJECT SPECIAL PROVISIONS-
U	EXISTING PAVEMENT
V	MILLED ASPHALT PAVEMENT 1 1/2" IN DEPTH IN LOCATIONS AS DIRECTED BY PROJECT ENGINEER

TYPICAL 1



TYPICAL 2



CONTRACT:

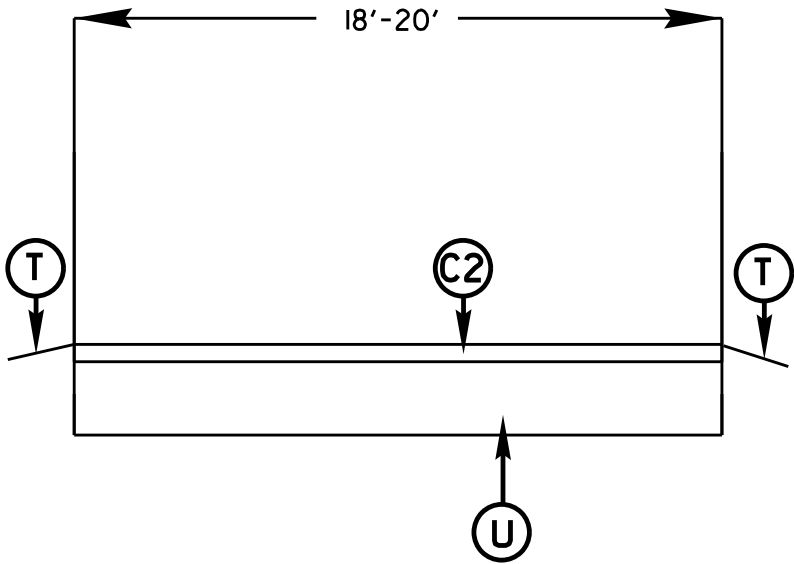
09/08/09

CONTRACT:

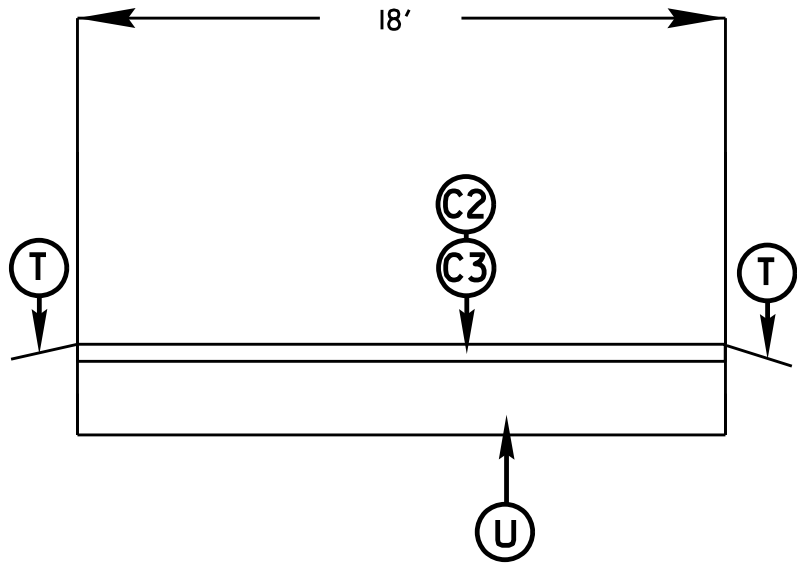
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451	119	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
2026CPT.14.02.10451			
2026CPT.14.02.20451			

SURFACING SCHEDULE	
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165LBS. PER SQ. YD.
C3	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE,TYPE S9.5B, (LEVELING COURSE), AT AN AVERAGE RATE OF 138LBS. PER SQ. YD.
C4	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE,TYPE S9.5B, AT AN AVERAGE RATE OF 138LBS. PER SQ. YD.
C5	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE,TYPE S9.5B (LEVELING COURSE), AT AN AVERAGE RATE OF 82.5LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION WITH ASB. 2' WIDE UNLESS DIRECTED BY PROJECT ENGINEER -SEE PROJECT SPECIAL PROVISIONS-
U	EXISTING PAVEMENT

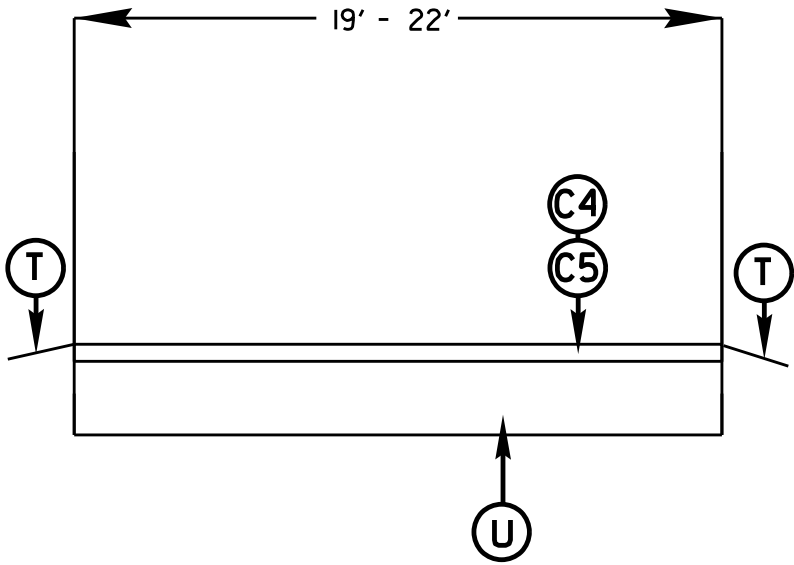
TYPICAL 3



TYPICAL 4

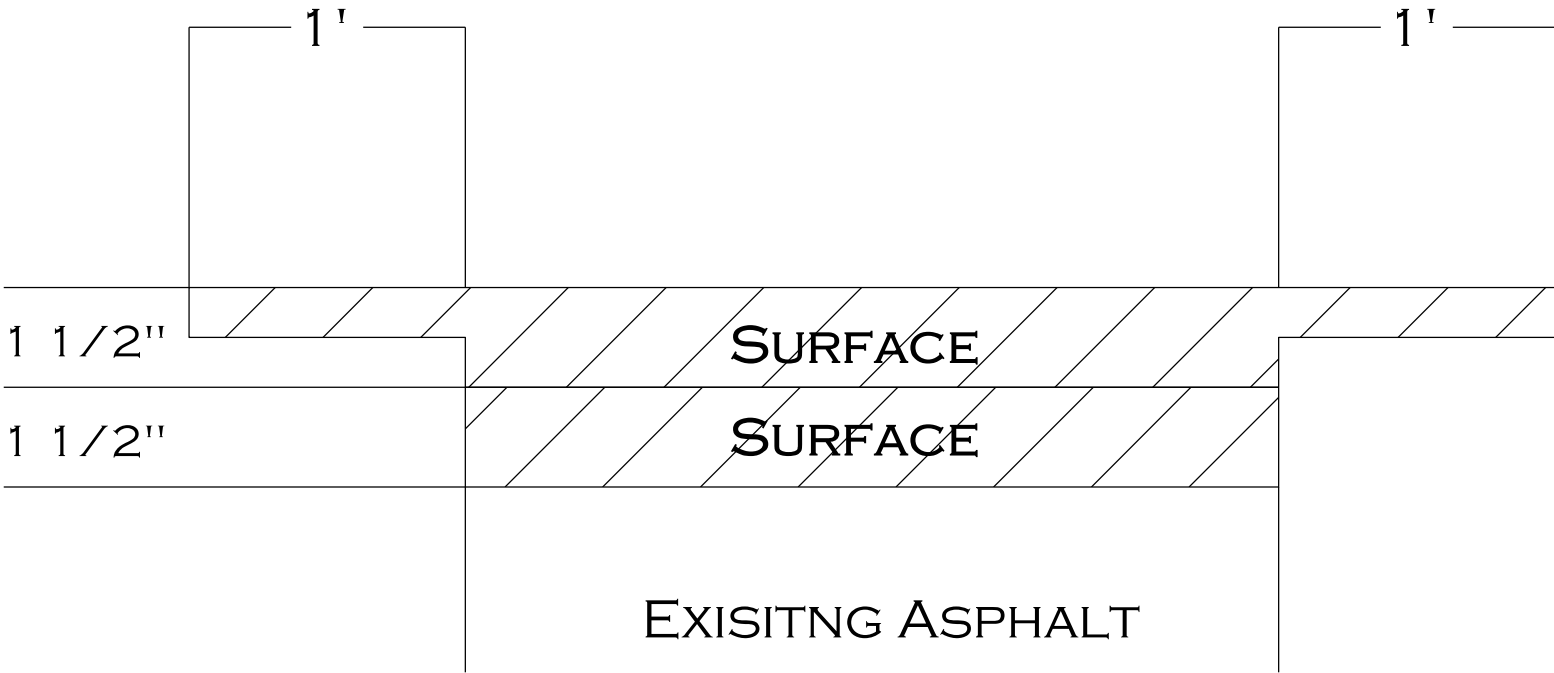


TYPICAL 5



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451	20	
STATE PROJ. NO.		F. A. PROJ. NO.	DESCRIPTION
2026CPT.14.02.10451			
2026CPT.14.02.20451			

PATCHING DETAIL



PAVEMENT SCHEDULE

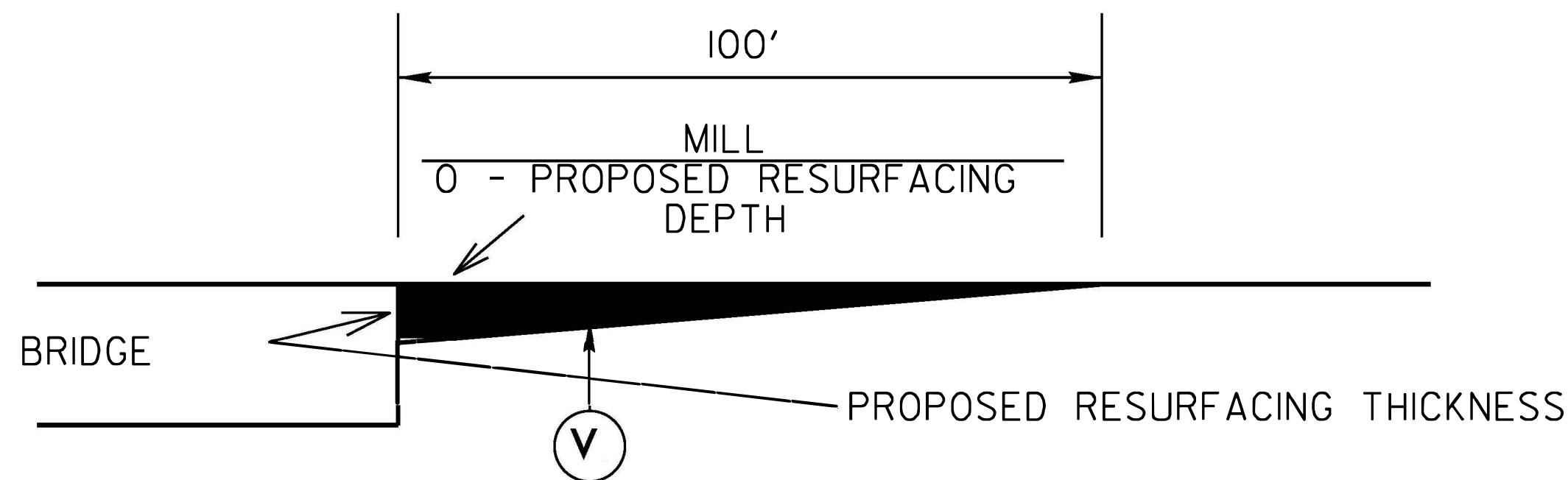
MILLING REQUIRED 3" DEEP
LENGTH AND WIDTH TO BE DETERIMED BY ENGINEER

PRIMARY ROUTES - S9.5C
SECONDARY ROUTES - S9.5B

CONTRACT:

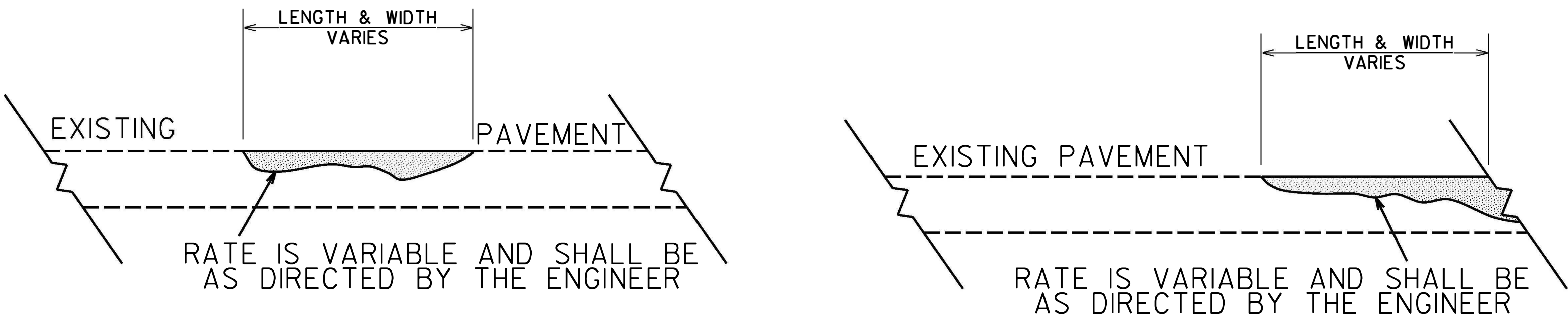
09/08/09

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451	21	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
2026CPT.14.02.10451			
2026CPT.14.02.20451			



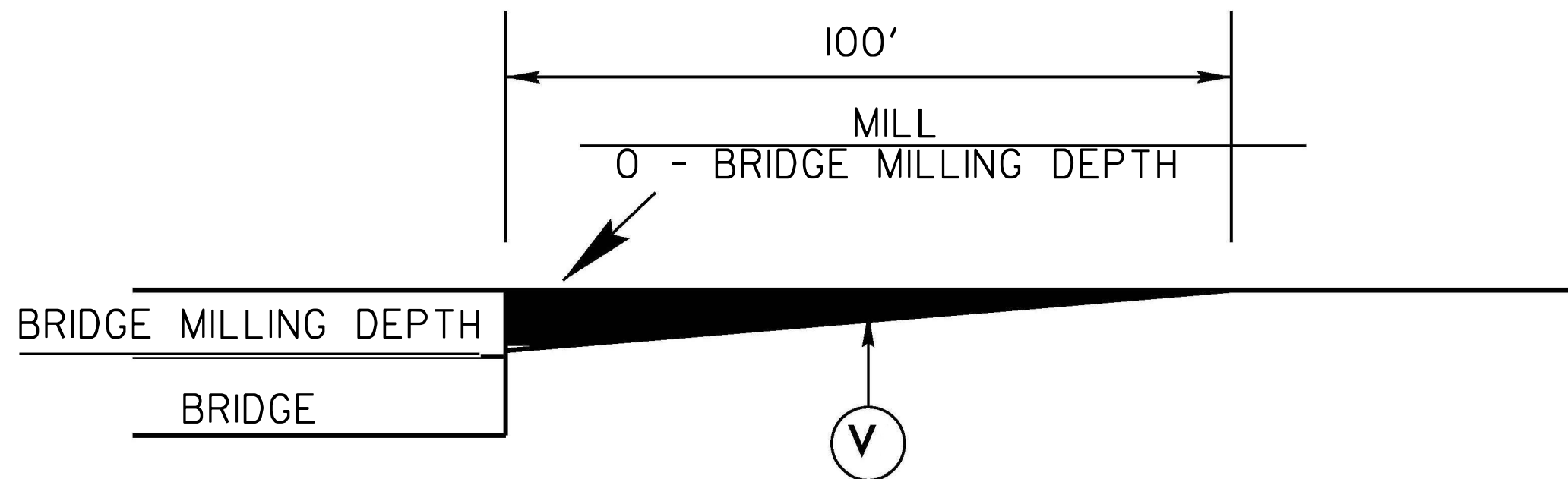
MILLING DETAIL AT BRIDGE APPROACHES

**WHERE BRIDGES WILL NOT BE RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL
MILLING.**



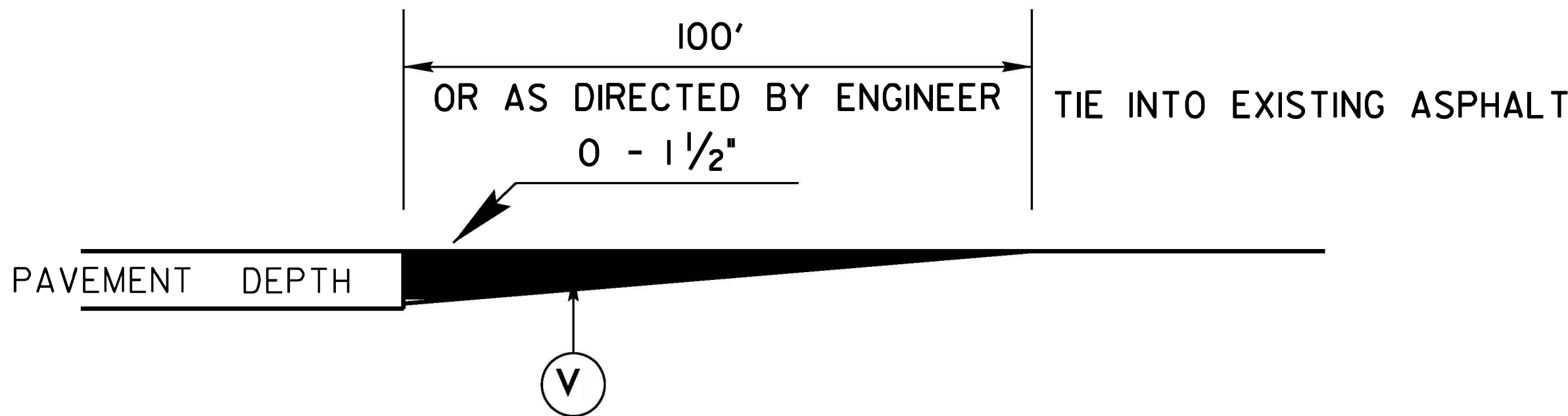
DETAIL SHOWING METHOD OF WEDGING

***PROPOSED WEDGE COURSE* (114 LBS PER SQ YARD PER 1" DEPTH)**



MILLING DETAIL AT BRIDGE APPROACHES

**WHERE BRIDGES WILL BE MILLED THEN RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.**

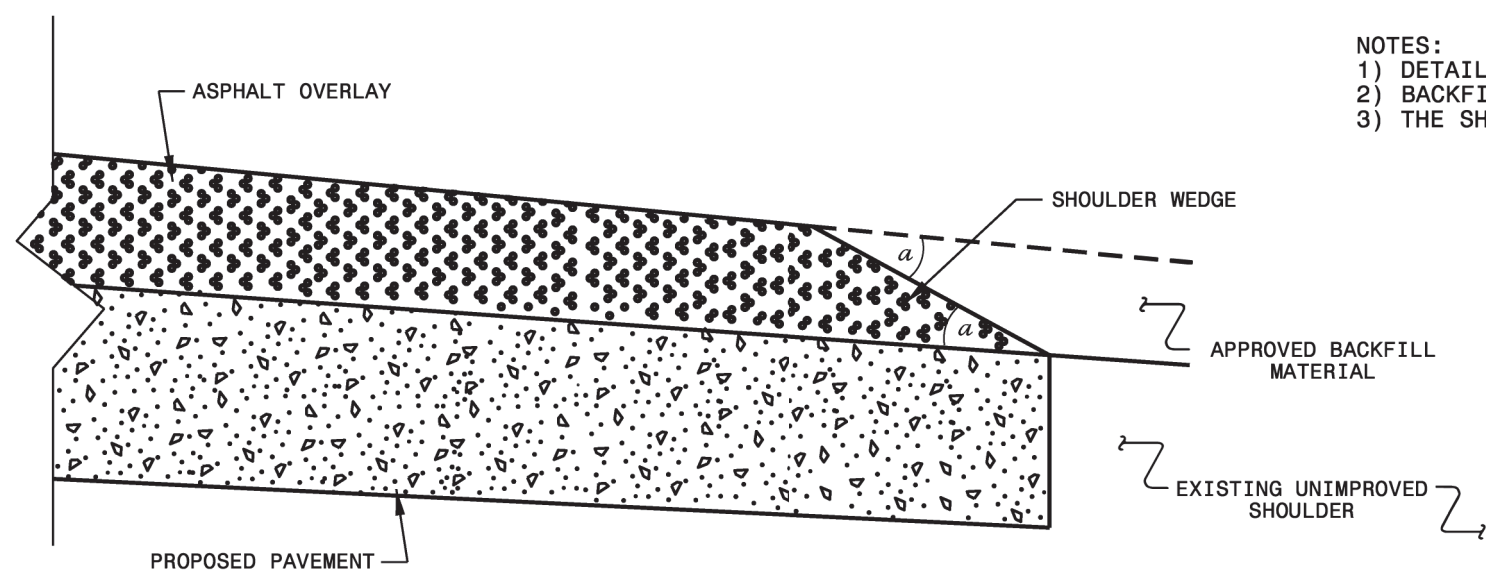


DETAIL TO TIE INTO EXIST PAVEMENT

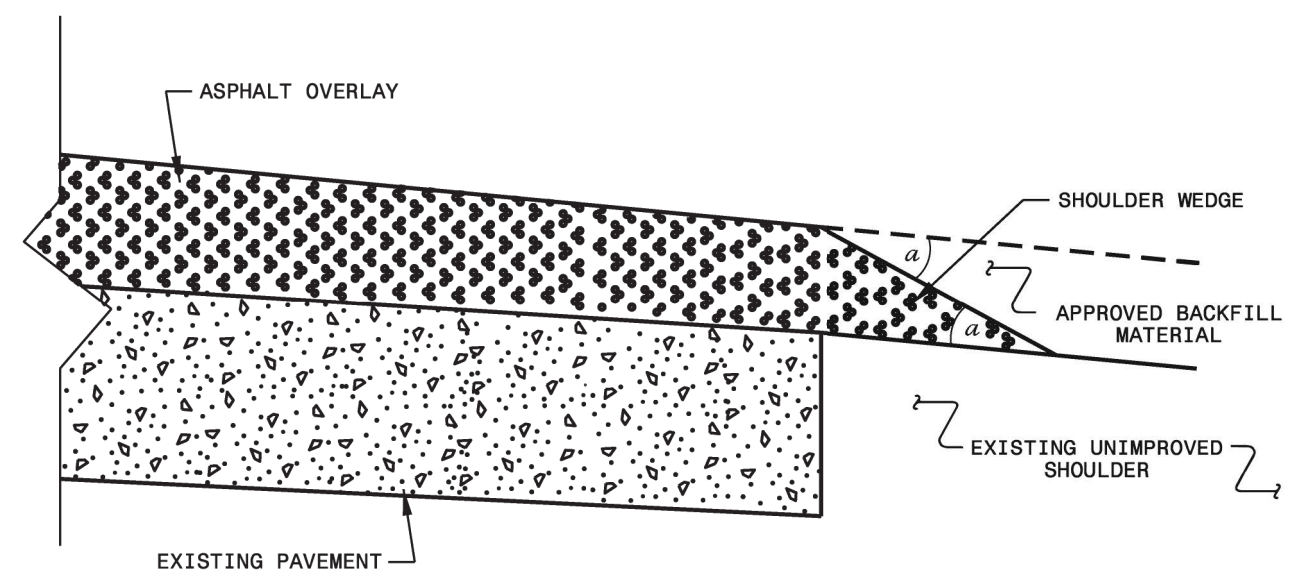
**THE CONTRACTOR'S ATTENTION IS DIRECTED TO
THE FACT THAT HE WILL BE REQUIRED TO MILL
THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER
TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END
AND Y LINES OF EACH MAP.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.**

CONTRACT:

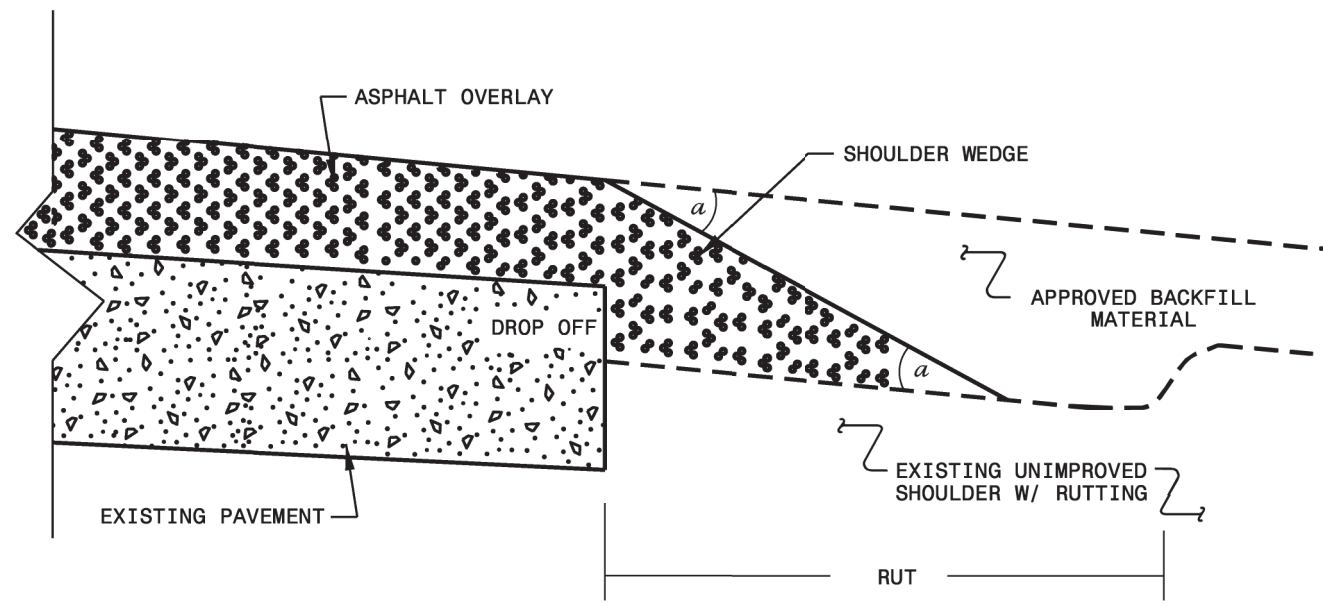
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ Widening or
with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ NO Widening)



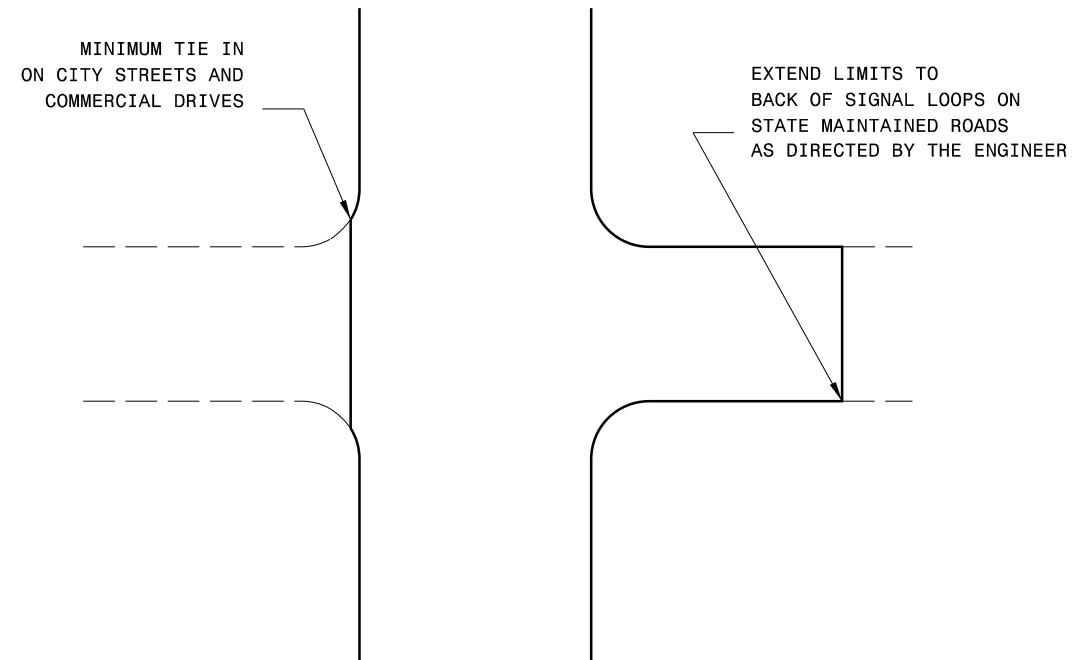
SHOULDER WEDGE DETAIL
(Resurfacing Adjacent to
Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

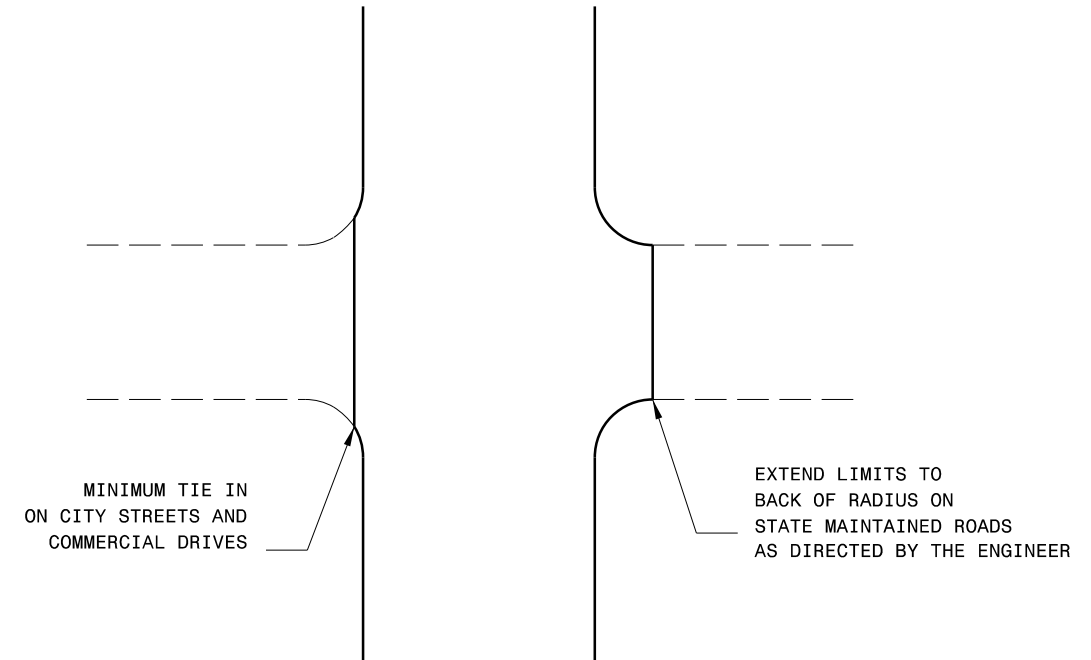
CONTRACT STANDARDS AND DEVELOPMENT UNIT			
Office 919-707-6950		FAX 919-250-4119	
SHOULDER WEDGE DETAILS			
ORIGINAL BY:	<u>T. SPELL</u>	DATE:	<u>7-19-11</u>
MODIFIED BY:	<u></u>	DATE:	<u>10/16/12</u>
CHECKED BY:	<u></u>	DATE:	<u></u>
FILE SPEC.:	<u>s:\usr\det-alls\stand\shoulderwed_detail.dgn</u>		

CONTRACT:

SYSTEMS
DESIGN
CONSULTING



TYPICAL DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES



TYPICAL DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES

[illegible]

09/08/09

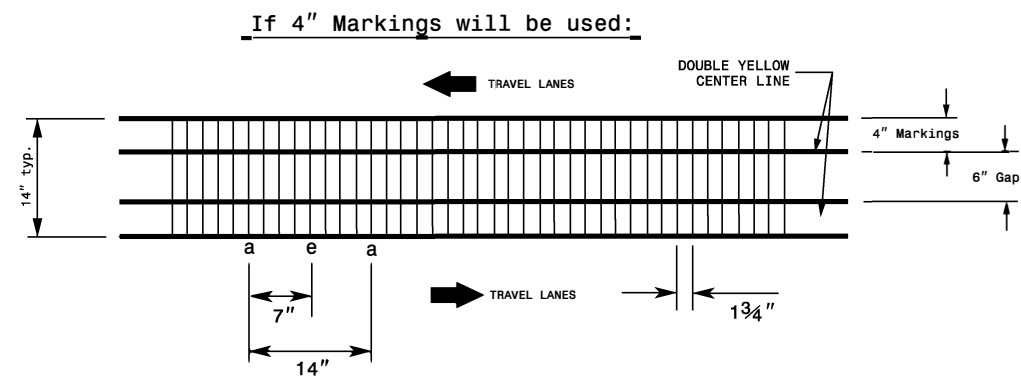
STATE	STATE PROJECT REFERENCE NO.		SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.14.02.10451		24	
STATE PROJ. NO.		F. A. PROJ. NO.	DESCRIPTION	
2026CPT.14.02.10451				
2026CPT.14.02.20451				

Bridge Structure Table							
Map #	Route No.	Road Name	County	Structure No.	Posted SV (Tons)	Posted TTST (Tons)	Paving Across Bridge
4	US-64	US-64	Henderson	440115	99	99	Yes
8	SR-1419	Old Fanning Bridge Rd	Henderson	440094	99	99	Yes
14	SR-1338	S Mills River	Henderson	440006	99	99	Yes
14	SR-1338	S Mills River	Henderson	440164	99	99	Yes

CONTRACT:

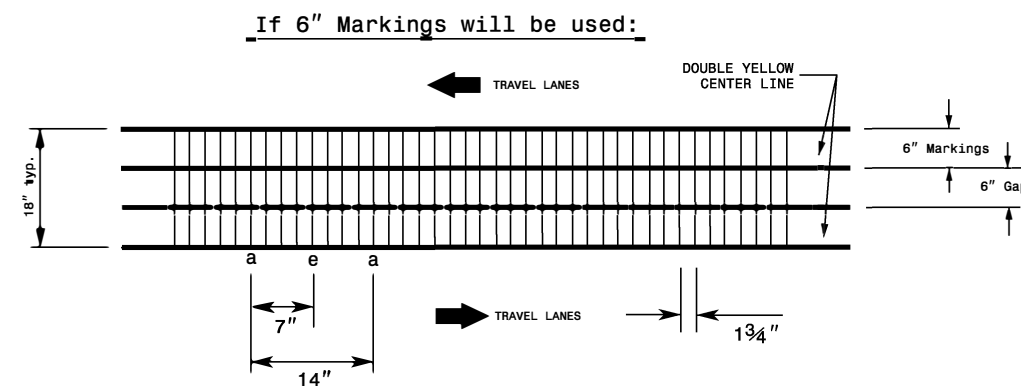
See Table 2 within Rumble Strip
Policy for Design Guidance

Rumble Dimensions



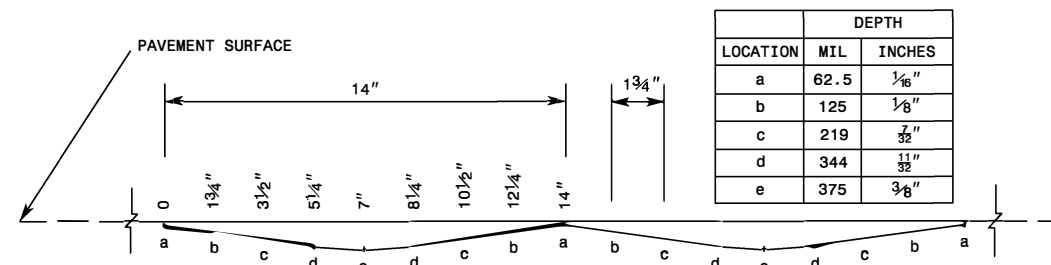
Markings Dimensions

Rumble Dimensions



Markings Dimensions

PROFILE:



REFERENCE DRAWING ID: Sin.CL

NOTES:

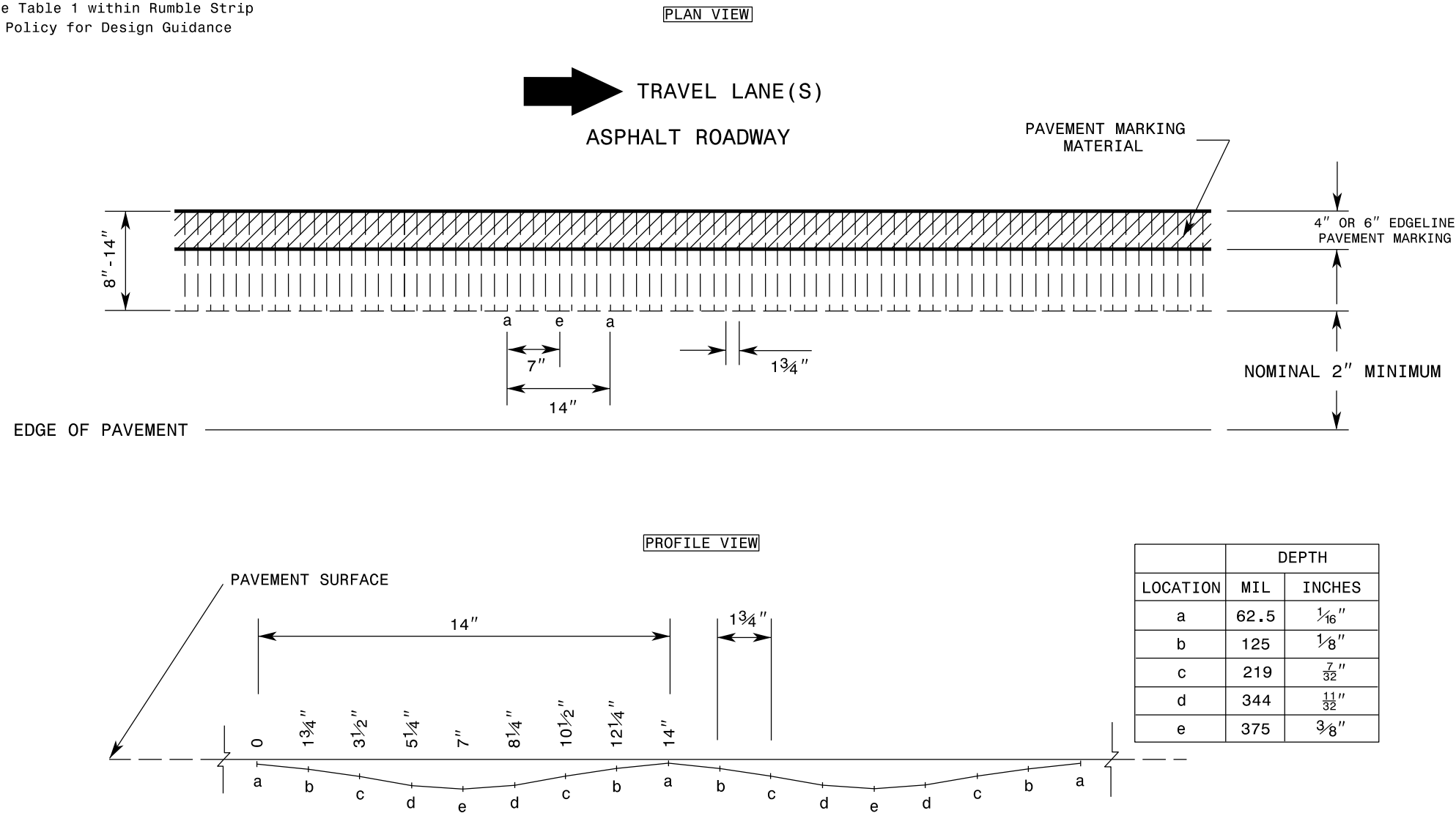
- 1) Specification in table taken from MNDOT Research Project Final Report 2016-23: *Sinusoidal Rumble Strip Design Optimization Study By: Terhaar et. al, June 2016*
- 2) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 3) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

SHEET 6 OF 9

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

ROADWAY DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
SINUSOIDAL CENTERLINE RUMBLE STRIPE

See Table 1 within Rumble Strip
Policy for Design Guidance



REFERENCE DRAWING ID: Sin.Stripe

NOTES:

- 1) Specification in table taken from MNDOT Research Project Final Report 2016-23; *Sinusoidal Rumble Strip Design Optimization Study By: Terhaar et. al, June 2016*
- 2) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 3) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

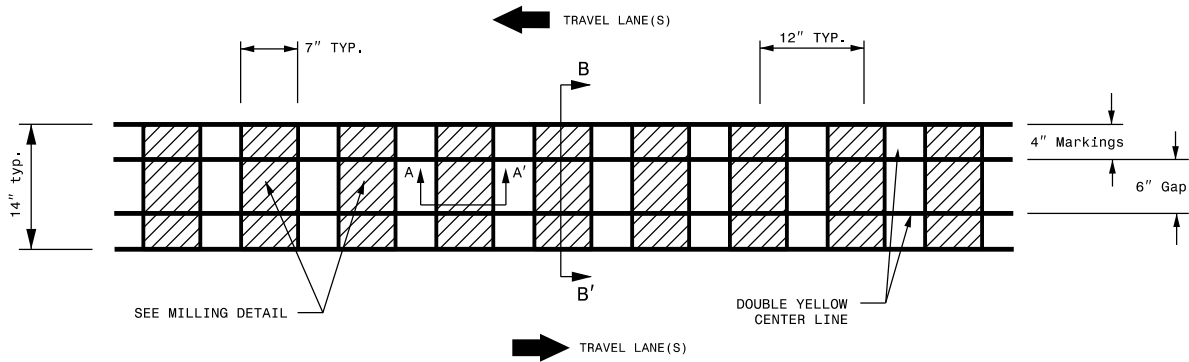
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
SINUSOIDAL EDGELINE RUMBLE STRIPE

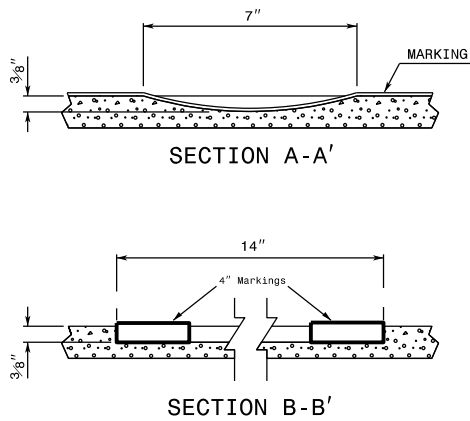
SHEET 4 OF 9

See Table 2 within Rumble Strip
Policy for Design Guidance

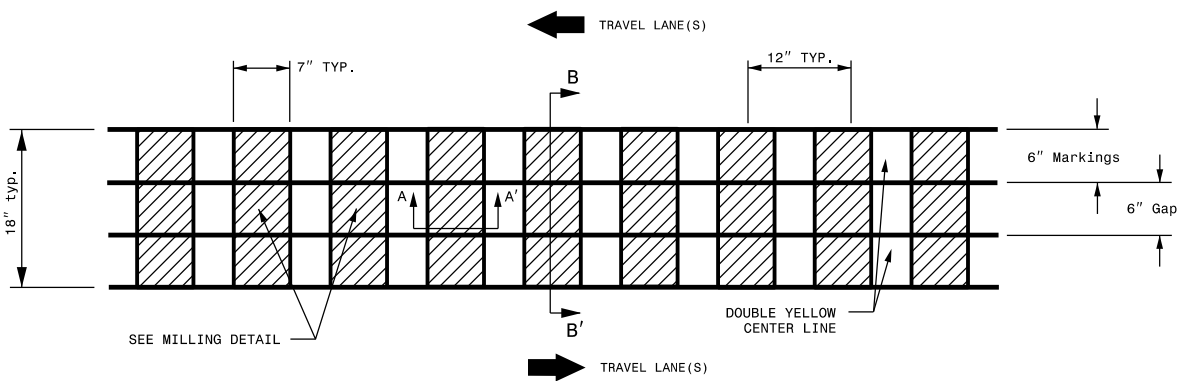
If 4" Markings will be used:



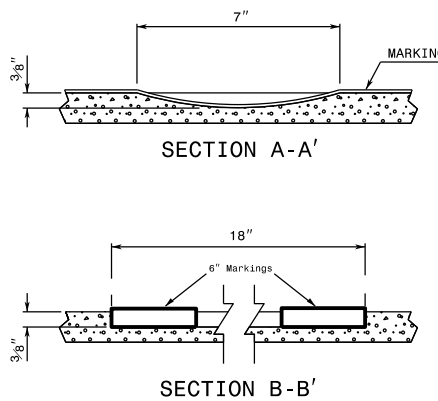
MILLING DETAIL - 4" Markings



If 6" Markings will be used:



MILLING DETAIL - 6" Markings



REFERENCE DRAWING ID: Trad.CL

NOTES:

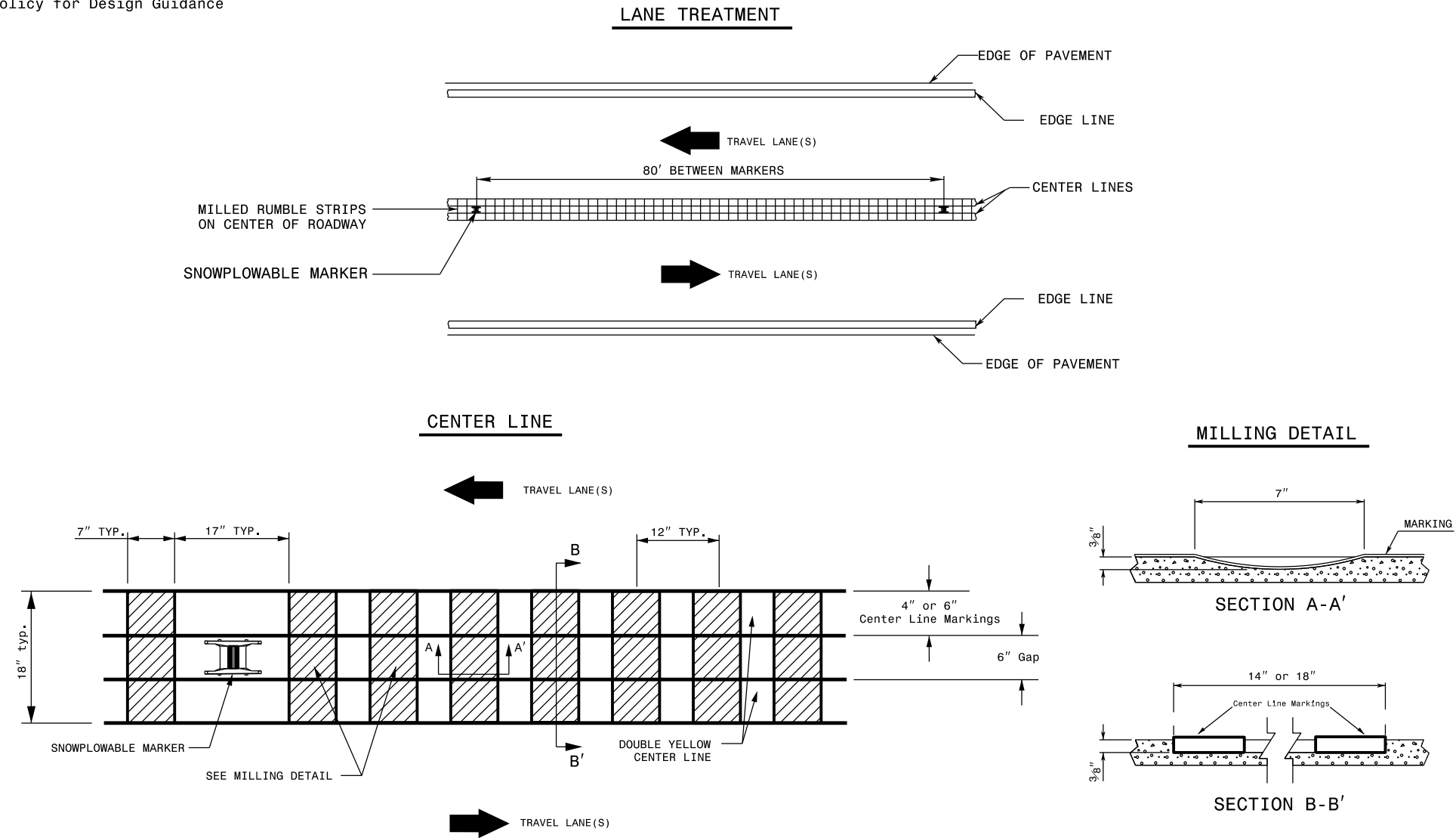
- 1) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 2) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

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

ROADWAY DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
TRADITIONAL CENTERLINE RUMBLE STRIPE

SHEET 5 OF 9

See Table 2 within Rumble Strip
Policy for Design Guidance



REFERENCE DRAWING ID: Trad.CL with Snowplowable Markers

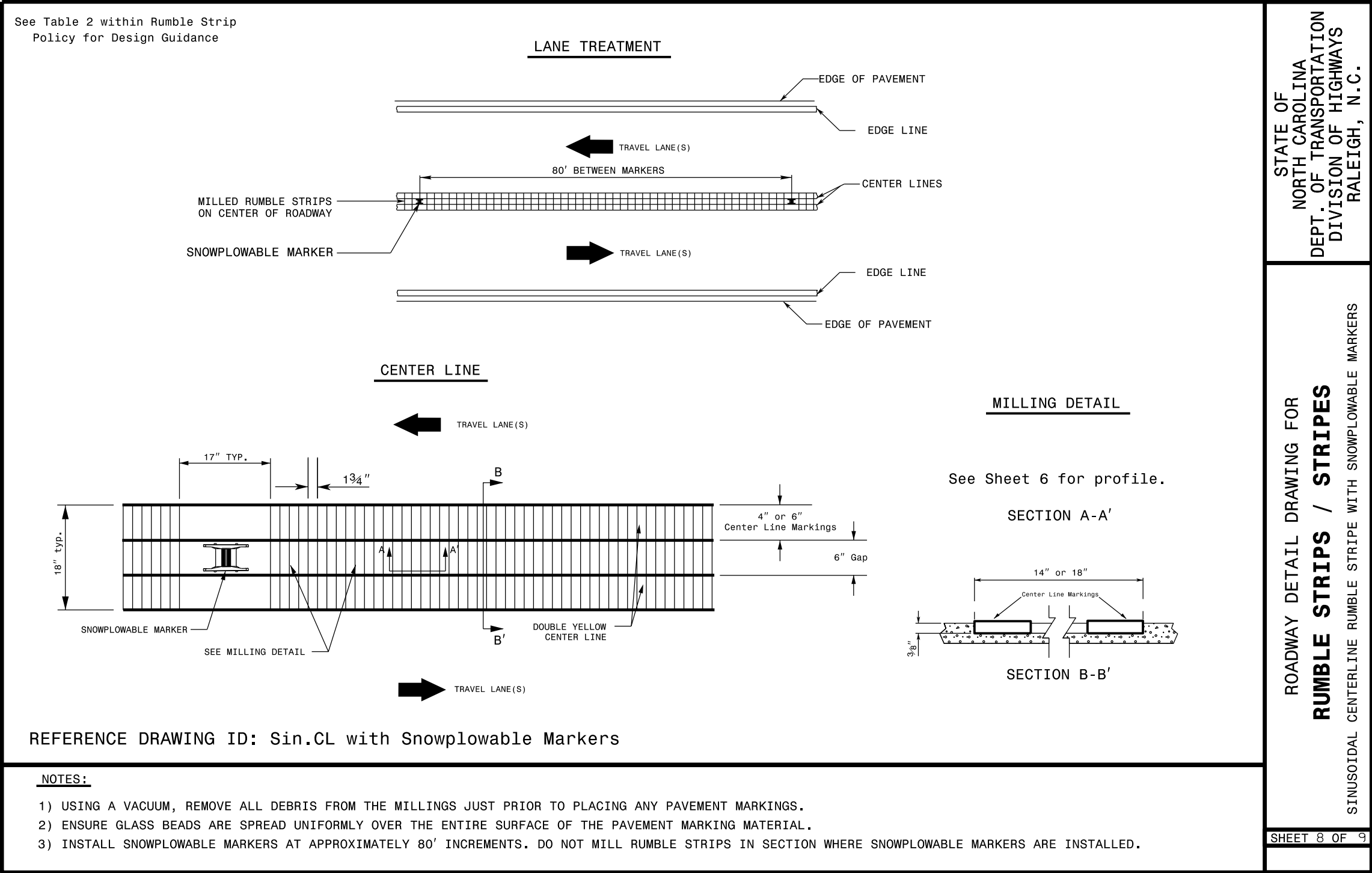
NOTES:

- 1) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 2) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.
- 3) INSTALL SNOWPLOWABLE MARKERS AT APPROXIMATELY 80' INCREMENTS. DO NOT MILL RUMBLE STRIPS IN SECTION WHERE SNOWPLOWABLE MARKERS ARE INSTALLED.

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

ROADWAY DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
TRADITIONAL CENTERLINE RUMBLE STRIPE WITH SNOWPLOWABLE MARKERS

SHEET 7 OF 9



PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.14.02.10451	30	
2026CPT.14.02.20451		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1519000000-E	1520000000-E	1523000000-E	1575000000-E	1704000000-E	CENTERLINE MILLED RUMBLE STRIPS, 18" (ASPHALT CONCRETE)	1881000000-E	SINUSOIDAL MILLED RUMBLE STRIPS, 8"(EDGE LINE)	2612500000-N	2830000000-N	2845000000-N	4520000000-N	6000000000-E	6029000000-E	6042000000-E	6084000000-E	6117000000-N	7444000000-E	7456100000-E		
												SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT		SINUSOIDAL MILLED RUMBLE STRIPS, 18"(CENTERLINE)		REMOVE AND REPLACE CONCRETE CURB RAMPS	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	TUBULAR MARKERS (FIXED)	TEMPORARY SILT FENCE	SAFETY FENCE	1/4" HARDWARE CLOTH	SEED & MULCHING	RESPONSE FOR EROSION CONTROL	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14-2)		
								MI	FT			SMI	TON	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	TONS	LF	LF	LF	EA	EA	EA	EA	LF	LF	LF	AC	EA	LF	LF
2026CPT.14.02.10451	Henderson	1	US-176	FROM NC225/US25 TO SR 1783	1	2	2WU	2.02	75	0.17	2.19			89,769	5,838			8,349	493				8	21	19		50	50	50	0.25	3	2,712.00	1,742.00			
TOTAL FOR MAP NO. 1								2.02						89,769	5,838			8,349	493				8	21	19		50	50	50	0.25	3	2,712.00	1,742.00			
2026CPT.14.02.10451	Henderson	2	US-25	FROM BRIDGE 169 TO SR 1534	1	2	MU	0.582	62	11.41	11.99			19,861	350			1,698	100								50	50	50	0.25	3	2,712.00	1,742.00			
TOTAL FOR MAP NO. 2								0.582						19,861	350			1,698	100													402.00	200.00			
																																402.00	200.00			
2026CPT.14.02.10451	Henderson	3	US-25	FROM MAXWELL DR +.03 TO BRIDGE 216	1	2	MU	1.595	64	19.57	21.17			63,079	2,695			5,525	326		345			7	8	30.00						1,149.00	516.00			
TOTAL FOR MAP NO. 3								1.595						63,079	2,695			5,525	326		345			7	8	30.00						1,149.00	516.00			
2026CPT.14.02.10451	Henderson	4	US-64	FROM BRIDGE 57 TO SR 1186	2	2	2WU	5.7	30	2.961	8.661	10.96	1,710		3,500			9,193	580	776		6,340	60,192	1	13							1,234.00	362.00			
TOTAL FOR MAP NO. 4								5.7				10.96	1,710		3,500			9,193	580	776		6,340	60,192	1	13							1,234.00	362.00			
2026CPT.14.02.10451	Henderson	5	NC-191	FROM PAVEMENT CHANGE TO SR 1309 & SR 1365	PD	2	2WD	2.66	24	4.38	7.04								81	1,678		2,000										540.00	100.00			
TOTAL FOR MAP NO. 5								2.66											81	1,678		2,000										540.00	100.00			
TOTAL FOR PROJ NO. 2026CPT.14.02.10451								12.557				10.96	1,710	172,709	12,383			24,765	1,580	2,454	345	8,340	60,192	8	29	40	30.00	50	50	50	0.25	3	6,037.00	2,920.00		
2026CPT.14.02.20451	Henderson	6	SR-1348 / PENNSYLVANIA RD	SR 1345 TO BUNCOMBE CL	3	2	2WU	2.89	20	0	2.89	5.78	867		18	2,972			195	35																
TOTAL FOR MAP NO. 6								2.89				5.78	867		18	2,972			195	35																
2026CPT.14.02.20451	Henderson	7	SR-1349 / MCDOWELL RD	FROM SR 1348 TO NC 191	3	2	2WU	1.01	18	0	1.01	1.50	303		144	952			64	45																
TOTAL FOR MAP NO. 7								1.01				1.50	303		144	952			64	45																
2026CPT.14.02.20451	Henderson	8	SR-1372 / WICKINS DR	FROM US 25 BUS TO EOM	5	2	2WU	1.01	18	0	1.01	1.94	303		220	780	452		84	92																
TOTAL FOR MAP NO. 8								1.01				1.94	303		220	780	452		84	92																
2026CPT.14.02.20451	Henderson	9	SR-1419 / OLD FANNING BRIDGE RD	NC 191 TO SR 3526	5	2		1.85	22	0	1.85	3.57	555		675	1,726	1,017		189	215																
TOTAL FOR MAP NO. 9								1.85				3.57	555		675	1,726	1,017		189	215																
2026CPT.14.02.20451	Henderson	10	SR-1582 / N CLEAR CREEK RD	FROM SR 1574 TO SR 1622	3	2	2WU	1.77	20	0	1.77	3.50	531		1,130	1,909			140	341																
TOTAL FOR MAP NO. 10								1.77				3.50	531		1,130	1,909			140	341																
2026CPT.14.02.20451	Henderson	11	SR-1622 / N CLEAR CREEK RD	FROM SR 1006 TO SR 1583	3	2	2WU	1.03	20	0	1.03	2.04	309		200	1,100			72	18																
TOTAL FOR MAP NO. 11								1.03				2.04	309		200	1,100			72	18																
2026CPT.14.02.20451	Henderson	12	SR-1622 / N CLEAR CREEK RD	FROM SR 1583 TO SR 1582	3	2	2WD	0.76	20	1.03	1.79	1.52	228		100	827			55	18																
TOTAL FOR MAP NO. 12								0.76				1.52	228		100	827			55	18																
2026CPT.14.02.20451	Henderson	13	SR-1591 / OLD CLEAR CREEK RD	FROM SR 1572 TO SR 1602	5	2	2WU	4.19	19	0	4.19	8.40	1,257		1,600	3,460	2,023		361	92																
TOTAL FOR MAP NO. 13								4.19				8.40	1,257		1,600	3,460	2,023		361	92																
2026CPT.14.02.20451	Henderson	14	SR-1749 / ORRS CAMP RD	FROM SR 1525 TO SR 1896	3	2	2WU	0.71	18	0.03	0.74	2.70	213			1,260			86	76																
TOTAL FOR MAP NO. 14								0.71				2.70	213			1,260			86	76																
2026CPT.14.02.20451	Henderson	15	SR-1779 / SHEPHERD ST	FROM SR 1776 TO US 176	3	2	2WU	0.71	19	0.03	0.74	1.26	213		244	617			46	113				6								395.00	330.00			
TOTAL FOR MAP NO. 15								0.71				1.26	213		244	617			46	113					6									395.00	330.00	
2026CPT.14.02.20451	Henderson	16	SR-1338 / S MILLS RIVER RD	FROM SR 1328 TO EOM	3	2	2WD	4.86	21	0	4.86	9.66	1,458		925	5,389			395	922																
TOTAL FOR MAP NO. 16								4.86				9.66	1,458		925	5,389			395	922																
2026CPT.14.02.20451	Henderson	17	SR-1328 / OLD TURNPIKE RD	FROM NC 280 TO SR 1328	3	2	2WD	0.11	21	0	0.11	0.22	33		90	118			10	53																
TOTAL FOR MAP NO. 17								0.11				0.22	33		90	118			10	53																
2026CPT.14.02.20451	Henderson	18	SR-2237 / OREN DR	FROM SR 1351 TO EOM	4	2	2WD	0.187	18	0	0.187	0.38	56			165	150		20																	
TOTAL FOR MAP NO. 18								0.187				0.38	56			165	150		20																	
TOTAL FOR PROJ NO. 2026CPT.14.02.20451								21.087				42.47	6,326		5,346	21,275	3,642		1,717	2,020					6									395.00	330.00	
GRAND TOTAL																																				
								33.644						53.43	8,036	172,709	17,729	21,275	3,642	24,765	3,297	4,474	345	8,340	60,192	8	29	46	30.00	50	50	50	0.25	3	6,432.00	3,250.00

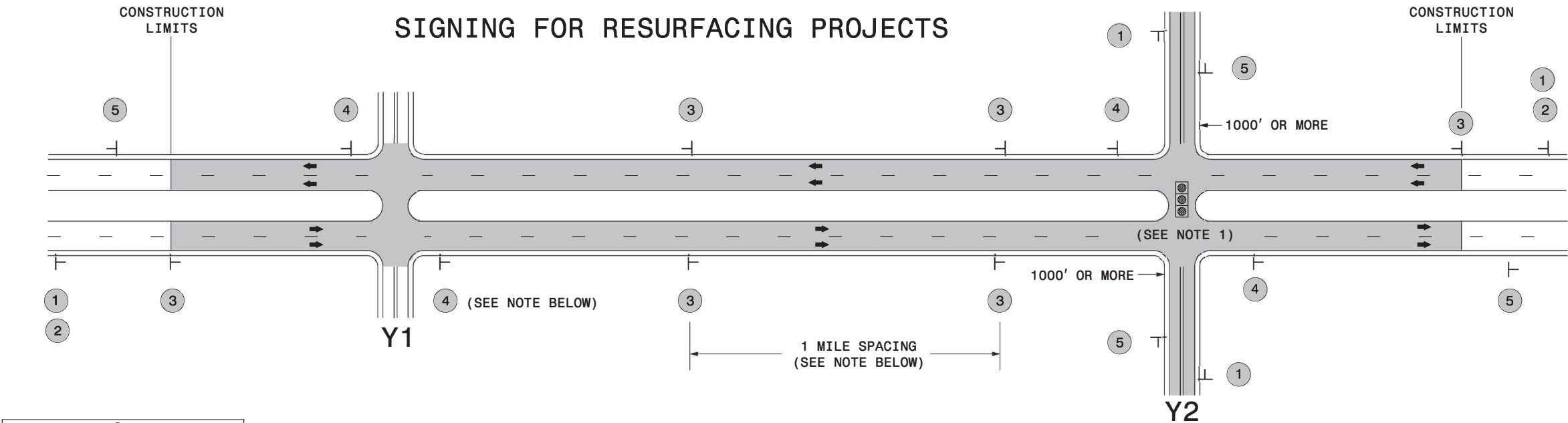
PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.14.02.10451	31	
2026CPT.14.02.20451		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	TEMPORARY TRAFFIC CONTROL	4685000000-E		4688000000-E		4695000000-E	4700000000-E	4704000000-E	4709000000-E	4720000000-E		4725000000-E					4810000000-E		4815000000-E		4835000000-E		
												WORK ZONE ADVANCE/GENERAL WARNING SIGNING		THERMOPLASTIC PAVEMENT MARKING LINES(4" X 90 MIL)(WHITE)	THERMOPLASTIC PAVEMENT MARKING LINES(4" X 90 MIL)(YELLOW)	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS)(YELLOW)	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS)(WHITE)	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)(YELLOW)	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)(WHITE)	THERMOPLASTIC PAVEMENT MARKING LINES (16", 90 MILS)(WHITE)	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)(WHITE)	THERMO RXR 90 M	THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO STR & LT ARROW 90 M	THERMO STR ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	6" WHITE PAINT	6" YELLOW PAINT	24" WHITE PAINT		
								MI	FT			SF	LS	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
2026CPT.14.02.10451	Henderson	1	US-176	FROM NC225/US25 TO SR 1783	1	2	2WU	2.02	75	0.17	2.19	227	*	6,808	20,713							844			71	4	20	1	24	6,808	20,713			844	
TOTAL FOR MAP NO. 1								2.02				227		6,808	20,713																			844	
2026CPT.14.02.10451	Henderson	2	US-25	FROM BRIDGE 169 TO SR 1534	1	2	MU	0.582	62	11.408	11.99	65					6,732	1,625					88			3	1			2			1,625	6,732	88
TOTAL FOR MAP NO. 2								0.582				65					6,732	1,625					88			3	1			2			1,625	6,732	88
2026CPT.14.02.10451	Henderson	3	US-25	FROM MAXWELL DR +.03 TO BRIDGE 216	1	2	MU	1.595	64	19.574	21.169						19,094	5,293					545			51	1	7		14			5,293	19,094	545
TOTAL FOR MAP NO. 3								1.595									19,094	5,293					545			51	1	7		14			5,293	19,094	545
2026CPT.14.02.10451	Henderson	4	US-64	FROM BRIDGE 57 TO SR 1186	2	2	2WU	5.7	30	2.961	8.661						57,880	57,880	750	50	100	315	4		25	3		2							
TOTAL FOR MAP NO. 4								5.7									57,880	57,880	750	50	100	315	4		25	3		2							
2026CPT.14.02.10451	Henderson	5	NC-191	FROM PAVEMENT CHANGE TO SR 1309 & SR 1365	PD	2	2WD	2.66	24	4.38	7.04	298					9,000	9,000																	
TOTAL FOR MAP NO. 5								2.66				298					9,000	9,000																	
TOTAL FOR PROJ NO. 2026CPT.14.02.10451								12.557				590	1.00	15,808	29,713	83,706	64,798	750	50	100	1,792	4		150	9	27	3	40	6,808	20,713	6,918	25,826	1,477		
														45,521		148,504						4		229					27,521		32,744				
2026CPT.14.02.20451	Henderson	6	SR-1348 / PENNSYLVANIA RD	SR 1345 TO BUNCOMBE CL	3	2	2WU	2.89	20	0	2.89	324	*																						
TOTAL FOR MAP NO. 6								2.89				324																							
2026CPT.14.02.20451	Henderson	7	SR-1349 / MCDOWELL RD	FROM SR 1348 TO NC 191	3	2	2WU	1.01	18	0	1.01	113																							
TOTAL FOR MAP NO. 7								1.01				113																							
2026CPT.14.02.20451	Henderson	8	SR-1372 / WICKINS DR	FROM US 25 BUS TO EOM	5	2	2WU	1.01	18	0	1.01	114																							
TOTAL FOR MAP NO. 8								1.01				114																							
2026CPT.14.02.20451	Henderson	9	SR-1419 / OLD FANNING BRIDGE RD	NC 191 TO SR 3526	5	2		1.85	22	0	1.85	208		18,910	19,333																				
TOTAL FOR MAP NO. 9								1.85				208		18,910	19,333																				
2026CPT.14.02.20451	Henderson	10	SR-1582 / N CLEAR CREEK RD	FROM SR 1574 TO SR 1622	3	2	2WU	1.77	20	0	1.77	199																							
TOTAL FOR MAP NO. 10								1.77				199																							
2026CPT.14.02.20451	Henderson	11	SR-1622 / N CLEAR CREEK RD	FROM SR 1006 TO SR 1583	3	2	2WU	1.03	20	0	1.03	115																							
TOTAL FOR MAP NO. 11								1.03				115																							
2026CPT.14.02.20451	Henderson	12	SR-1622 / N CLEAR CREEK RD	FROM SR 1583 TO SR 1582	3	2	2WD	0.76	20	1.03	1.79	86																							
TOTAL FOR MAP NO. 12								0.76				86																							
2026CPT.14.02.20451	Henderson	13	SR-1591 / OLD CLEAR CREEK RD	FROM SR 1572 TO SR 1602	5	2	2WU	4.19	19	0	4.19	470																							
TOTAL FOR MAP NO. 13								4.19				470																							
2026CPT.14.02.20451	Henderson	14	SR-1749 / ORRS CAMP RD	FROM SR 1525 TO SR 1896	3	2	2WU	0.71	18	0.03	0.74	84																							
TOTAL FOR MAP NO. 14								0.71				84																							
2026CPT.14.02.20451	Henderson	15	SR-1779 / SHEPHERD ST	FROM SR 1776 TO US 176	3	2	2WU	0.71	19	0.03	0.74																								
TOTAL FOR MAP NO. 15								0.71																											
2026CPT.14.02.20451	Henderson	16	SR-1338 / S MILLS RIVER RD	FROM SR 1328 TO EOM	3	2	2WD	4.86	21	0	4.86	541																							
TOTAL FOR MAP NO. 16								4.86				541																							
2026CPT.14.02.20451	Henderson	17	SR-1328 / OLD TURNPIKE RD	FROM NC 280 TO SR 1328	3	2	2WD	0.11	21	0	0.11																								
TOTAL FOR MAP NO. 17								0.11																											
2026CPT.14.02.20451	Henderson	18	SR-2237 / OREN DR	FROM SR 1351 TO EOM	4	2	2WD	0.187	18	0	0.187	25																							
TOTAL FOR MAP NO. 18								0.187				25																							
TOTAL FOR PROJ NO. 2026CPT.14.02.20451								21.087				2,279	1.000	18,910	19,333							202		24	8	2	2								
														38,243								24		12											
GRAND TOTAL								33.644				2,869	1.000	34,718	49,046	83,706	64,798	750	50	100	1,994	4	24	158	11	29	3	40	6,808	20,713	6,918	25,826	1,477		
														83,764		148,504						28		241					27,521		32,744				

PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.14.02.10451	32	
2026CPT.14.02.20451		

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4845000000-N					4890000000-E		4890000000-E	4890000000-E	4895000000-N
												PAINT LT ARROW	PAINT RT ARROW	PAINT STR & RT ARROW	PAINT STR & LT ARROW	PAINT STR ARROW	WHITE HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINES, 4", 60 MIL	YELLOW HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINES, 4", 60 MIL	WHITE HOT SPRAY THERMO (24", 60 MILS)	YELLOW HOT SPRAY THERMO (8", 60 MILS)	POLYCARBONATE H-SHAPED MARKERS
								MI	FT			EA	EA	EA	EA	EA	LF	LF	LF	LF	EA
2026CPT.14.02.10451	Henderson	1	US-176	FROM NC225/US25 TO SR 1783	1	2	2WU	2.02	75	0.17	2.19	71	4	20	1	24					640.00
TOTAL FOR MAP NO. 1								2.02				71	4	20	1	24					640.00
2026CPT.14.02.10451	Henderson	2	US-25	FROM BRIDGE 169 TO SR 1534	1	2	MU	0.582	62	11.408	11.99	3	1			2					215.00
TOTAL FOR MAP NO. 2								0.582				3	1			2					215.00
2026CPT.14.02.10451	Henderson	3	US-25	FROM MAXWELL DR +.03 TO BRIDGE 216	1	2	MU	1.595	64	19.574	21.169	51	1	7		14					855.00
TOTAL FOR MAP NO. 3								1.595				51	1	7		14					855.00
2026CPT.14.02.10451	Henderson	4	US-64	FROM BRIDGE 57 TO SR 1186	2	2	2WU	5.7	30	2.961	8.661										725.00
TOTAL FOR MAP NO. 4								5.7													725.00
2026CPT.14.02.10451	Henderson	5	NC-191	FROM PAVEMENT CHANGE TO SR 1309 & SR 1365	PD	2	2WD	2.66	24	4.38	7.04										100.00
TOTAL FOR MAP NO. 5								2.66													100.00
TOTAL FOR PROJ NO. 2026CPT.14.02.10451								12.557				125	6.00	27	1	40					2,535.00
												199									
2026CPT.14.02.20451	Henderson	6	SR-1348 / PENNSYLVANIA RD	SR 1345 TO BUNCOMBE CL	3	2	2WU	2.89	20	0	2.89						30,520	30,520			
TOTAL FOR MAP NO. 6								2.89									30,520	30,520			
2026CPT.14.02.20451	Henderson	7	SR-1349 / MCDOWELL RD	FROM SR 1348 TO NC 191	3	2	2WU	1.01	18	0	1.01						10,666	10,666			
TOTAL FOR MAP NO. 7								1.01									10,666	10,666			
2026CPT.14.02.20451	Henderson	8	SR-1372 / WICKINS DR	FROM US 25 BUS TO EOM	5	2	2WU	1.01	18	0	1.01						10,240	10,240			
TOTAL FOR MAP NO. 8								1.01									10,240	10,240			
2026CPT.14.02.20451	Henderson	9	SR-1419 / OLD FANNING BRIDGE RD	NC 191 TO SR 3526	5	2		1.85	22	0	1.85										
TOTAL FOR MAP NO. 9								1.85													
2026CPT.14.02.20451	Henderson	10	SR-1582 / N CLEAR CREEK RD	FROM SR 1574 TO SR 1622	3	2	2WU	1.77	20	0	1.77						18,585	18,585	50		
TOTAL FOR MAP NO. 10								1.77									18,585	18,585	50		
2026CPT.14.02.20451	Henderson	11	SR-1622 / N CLEAR CREEK RD	FROM SR 1006 TO SR 1583	3	2	2WU	1.03	20	0	1.03						11,000	11,000	100	100	
TOTAL FOR MAP NO. 11								1.03									11,000	11,000	100	100	
2026CPT.14.02.20451	Henderson	12	SR-1622 / N CLEAR CREEK RD	FROM SR 1583 TO SR 1582	3	2	2WD	0.76	20	1.03	1.79						8,100	8,100	100		
TOTAL FOR MAP NO. 12								0.76									8,100	8,100	100		
2026CPT.14.02.20451	Henderson	13	SR-1591 / OLD CLEAR CREEK RD	FROM SR 1572 TO SR 1602	5	2	2WU	4.19	19	0	4.19						88,500	88,500			
TOTAL FOR MAP NO. 13								4.19									88,500	88,500			
2026CPT.14.02.20451	Henderson	14	SR-1749 / ORRS CAMP RD	FROM SR 1525 TO SR 1896	3	2	2WU	0.71	18	0.03	0.74						14,256	14,261			
TOTAL FOR MAP NO. 14								0.71									14,256	14,261			
2026CPT.14.02.20451	Henderson	15	SR-1779 / SHEPHERD ST	FROM SR 1776 TO US 176	3	2	2WU	0.71	19	0.03	0.74						6,653	6,653	50		31.00
TOTAL FOR MAP NO. 15								0.71									6,653	6,653	50		31
2026CPT.14.02.20451	Henderson	16	SR-1338 / S MILLS RIVER RD	FROM SR 1328 TO EOM	3	2	2WD	4.86	21	0	4.86						104,080	104,080			
TOTAL FOR MAP NO. 16								4.86									104,080	104,080			
2026CPT.14.02.20451	Henderson	17	SR-1328 / OLD TURNPIKE RD	FROM NC 280 TO SR 1328	3	2	2WD	0.11	21	0	0.11						2,324	2,324			
TOTAL FOR MAP NO. 17								0.11									2,324	2,324			
2026CPT.14.02.20451	Henderson	18	SR-2237 / OREN DR	FROM SR 1351 TO EOM	4	2	2WD	0.187	18	0	0.187							2,050			
TOTAL FOR MAP NO. 18								0.187										2,050			
TOTAL FOR PROJ NO. 2026CPT.14.02.20451								21.087									304,924	306,979	300	100	31.00
												611,903									
GRAND TOTAL								33.644				125.00	6	27	1	40	304,924	306,979	300	100	2,566.00
												199					611,903				



LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 2 ROAD WORK AHEAD W20-1 48" X 48" NEXT XX MILES W7-3aP 24" X 18" PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. #2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)	NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS: 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK. ROAD WORK AHEAD W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. ROAD WORK AHEAD W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER. NOTES: 1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
	3 LOWSOFT SHOULDER SP 13107 48" X 48" PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	
	4 ROAD UNDER CONST SP 13106 48" X 48" THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.	
	5 END ROAD WORK G20-2 A 48" X 24" PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	



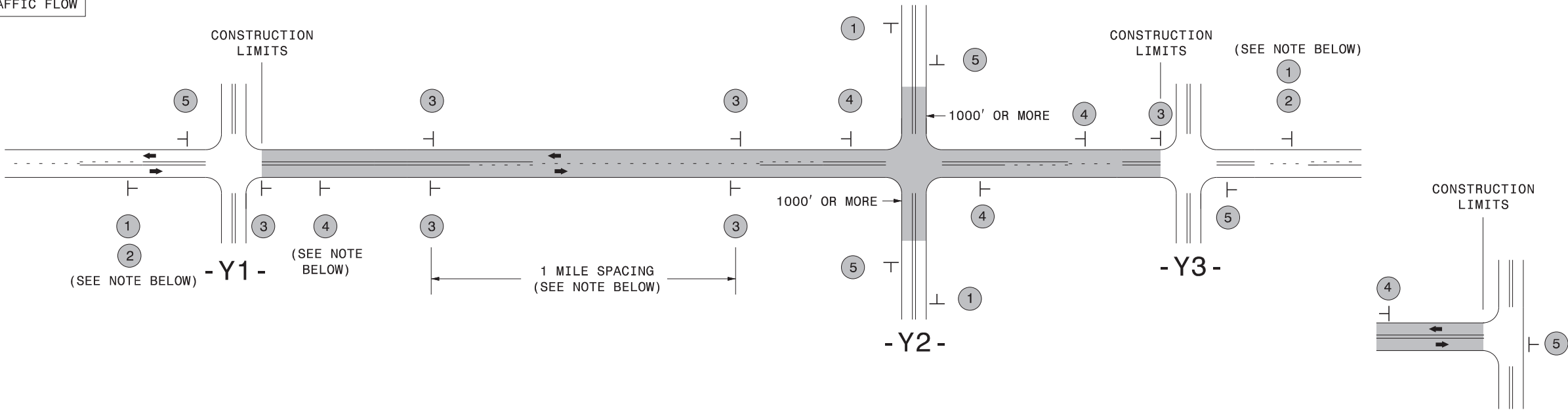
RESURFACING
ADVANCE WARNING SIGNS
FOR RURAL AND SUBURBAN
MULTI-LANE ROADWAYS
W/ SHOULDER SECTIONS

SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW



TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 2 ROAD WORK AHEAD W20-1 48" X 48" NEXT XX MILES W7-3aP 24" X 18" PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. #2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS: 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.
	3 LOW/SOFT SHOULDER SP 13107 48" X 48" - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4 ROAD UNDER CONST SP 13106 48" X 48" - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5 END ROAD WORK G20-2 A 48" X 24" PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	
	THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.	

MAPS LESS THAN 2 MILES	FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.
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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA WORK ZONE TRAFFIC CONTROL	ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING
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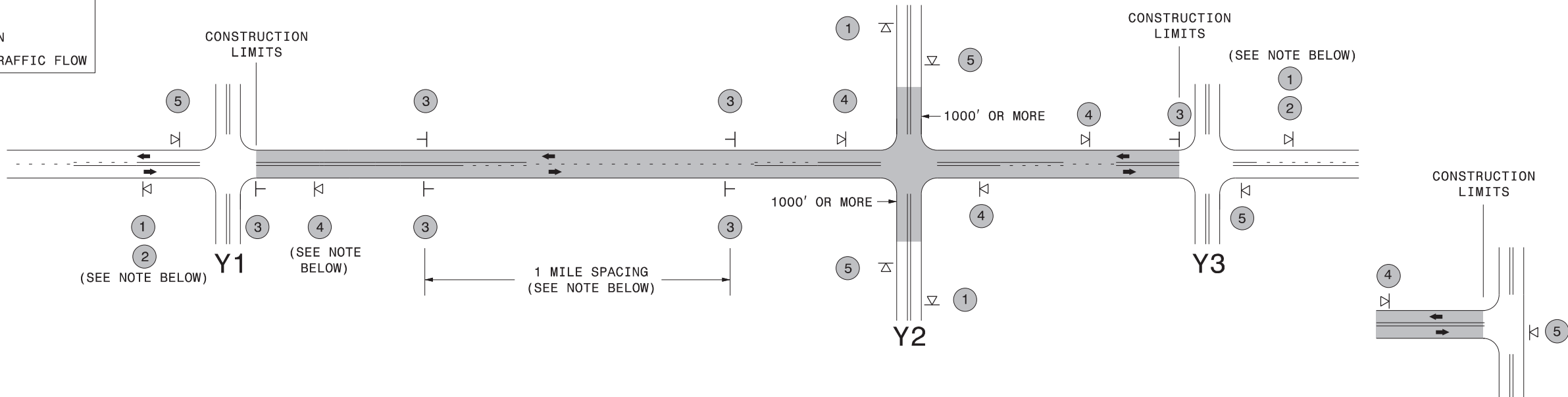
SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

 PORTABLE SIGN

 STATIONARY SIGN

 DIRECTION OF TRAFFIC FLOW

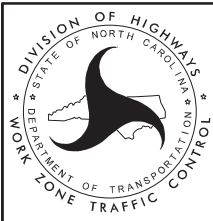


TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 ROAD WORK AHEAD W20-1 48" X 48" 2 NEXT XX MILES W7-3aP 24" X 18" - PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. - SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.	STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS: 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALLE BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK. ROAD WORK AHEAD W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER.
	3 LOOSE GRAVEL W8-7 48" X 48" UNMARKED PAVEMENT SP 48" X 48" - ALTERNATE THE FOLLOWING TWO SIGNS: - STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT". - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4 ROAD UNDER CONST SP 13106 48" X 48" - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.	
	5 END ROAD WORK G20-2 A 48" X 24" PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	
	THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.	
PS LESS 2 MILES	FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.	

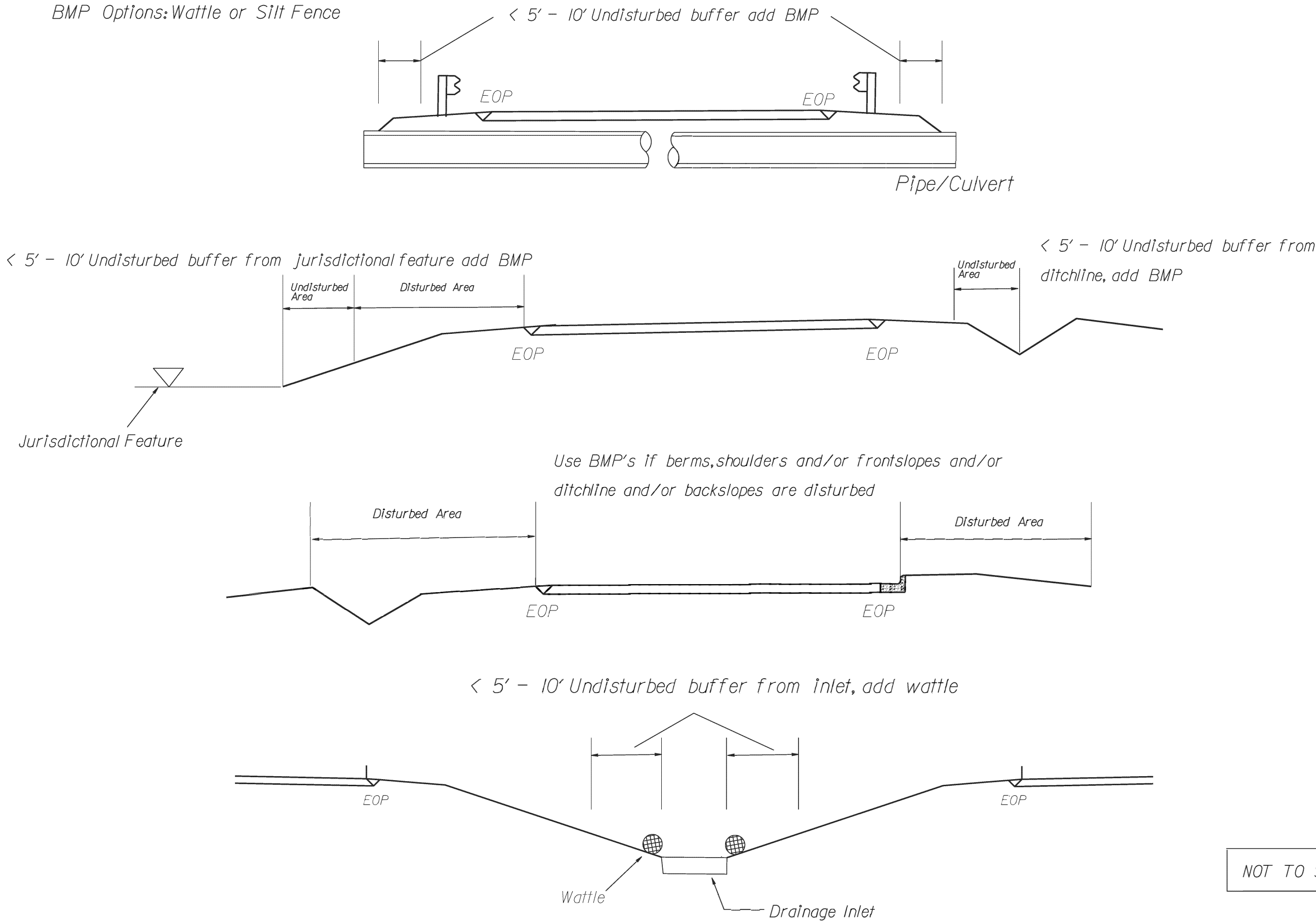


ADVANCE WARNING SIGNS
FOR
2-LANE ROADWAY
ASPHALT SURFACE TREATMENT

NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

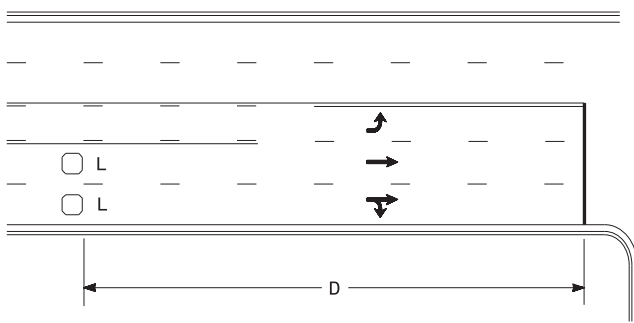
BMP Options: Wattle or Silt Fence

EROSION CONTROL DETAIL



NOT TO SCALE

High Speed Detection
(≥40 mph)

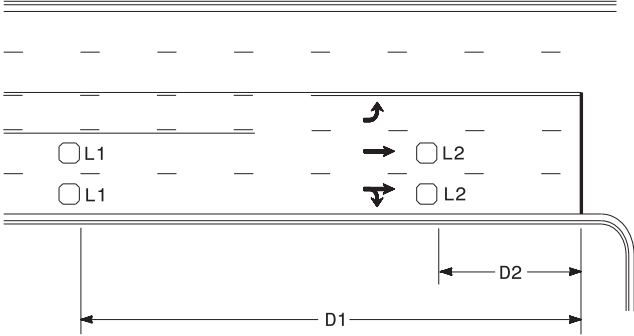


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR



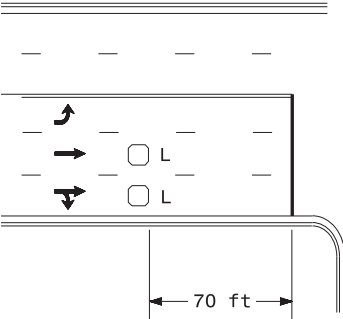
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

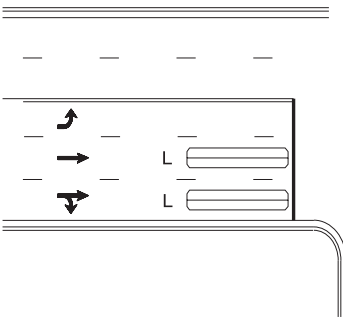
"Stretch" Operation

Low Speed Detection
(≤35 mph)



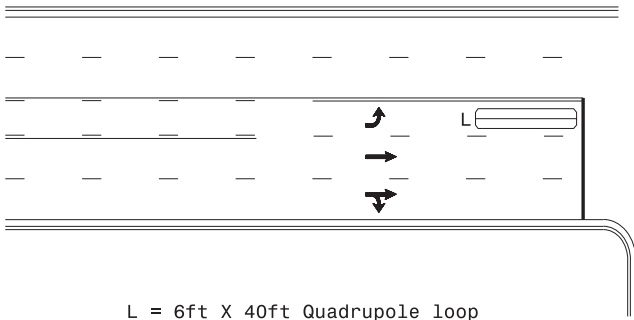
L = 6ft X 6ft
Wired in series

OR



L = 6ft X 40ft
Quadrupole loop, wired separately

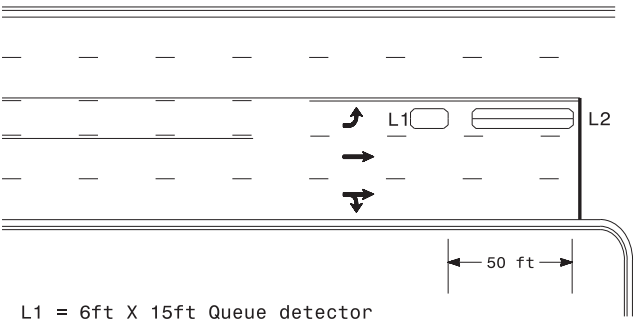
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

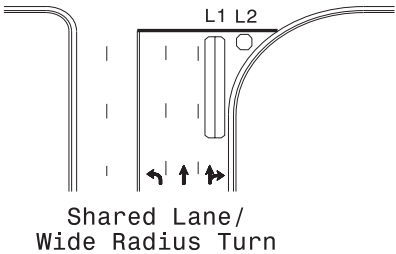
OR



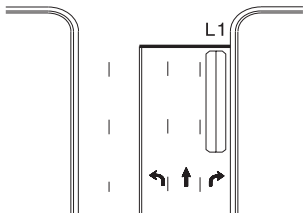
L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

Queue Loop Detection

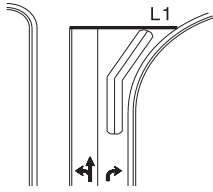
Right Turn Lane Detection



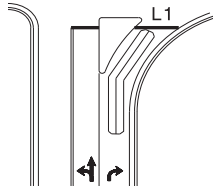
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

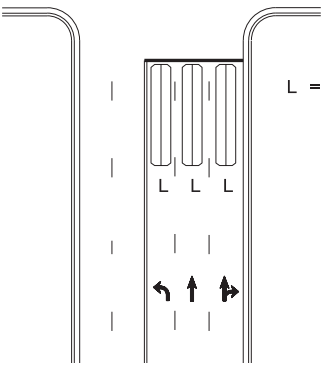


Wide Radius Turn



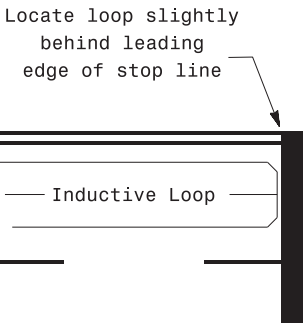
Channelized Turn

Side Street Detection



L = 6ft X 40ft
Quadrupole loop
Wired to separate
detectors/channels

Presence Loop Placement at Stop Lines



Note:
Loop may be located in advance
of stop line under any of the
following conditions:
1) stop line is greater than 15'
from edge of intersecting
roadway
2) loop detects a permissive or
protected/permissive left turn
3) for an exclusive right turn
lane

Recommended Number of Turns

Single 6' X 6' loop
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6' X 15' Loops:
Lead-in < 150', use 2 turns
Lead-in > 150', use 3 turns

Prepared in the Offices of:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N. Greenfield Pkwy, Garner, NC 27529

Typical Signal Loop Locations

PLAN DATE: September 2020
REVIEWED BY: JPG
PREPARED BY: PLA
REVIEWED BY:
SCALE: N/A
REVISIONS:
INIT.:
DATE:

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
029904
JASON P. GALLOWAY
9/8/2020
DATE
SIG. INVENTORY NO.