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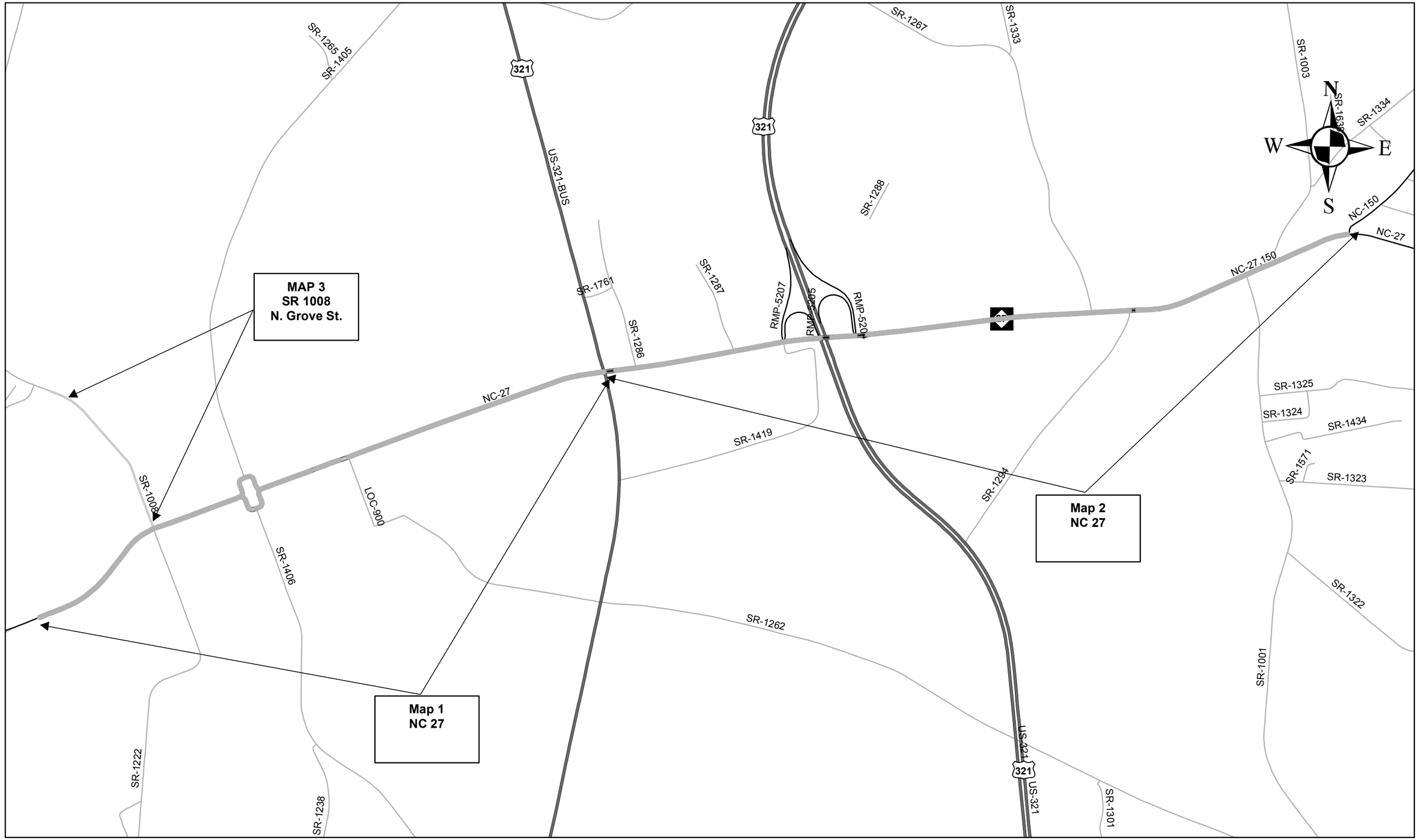
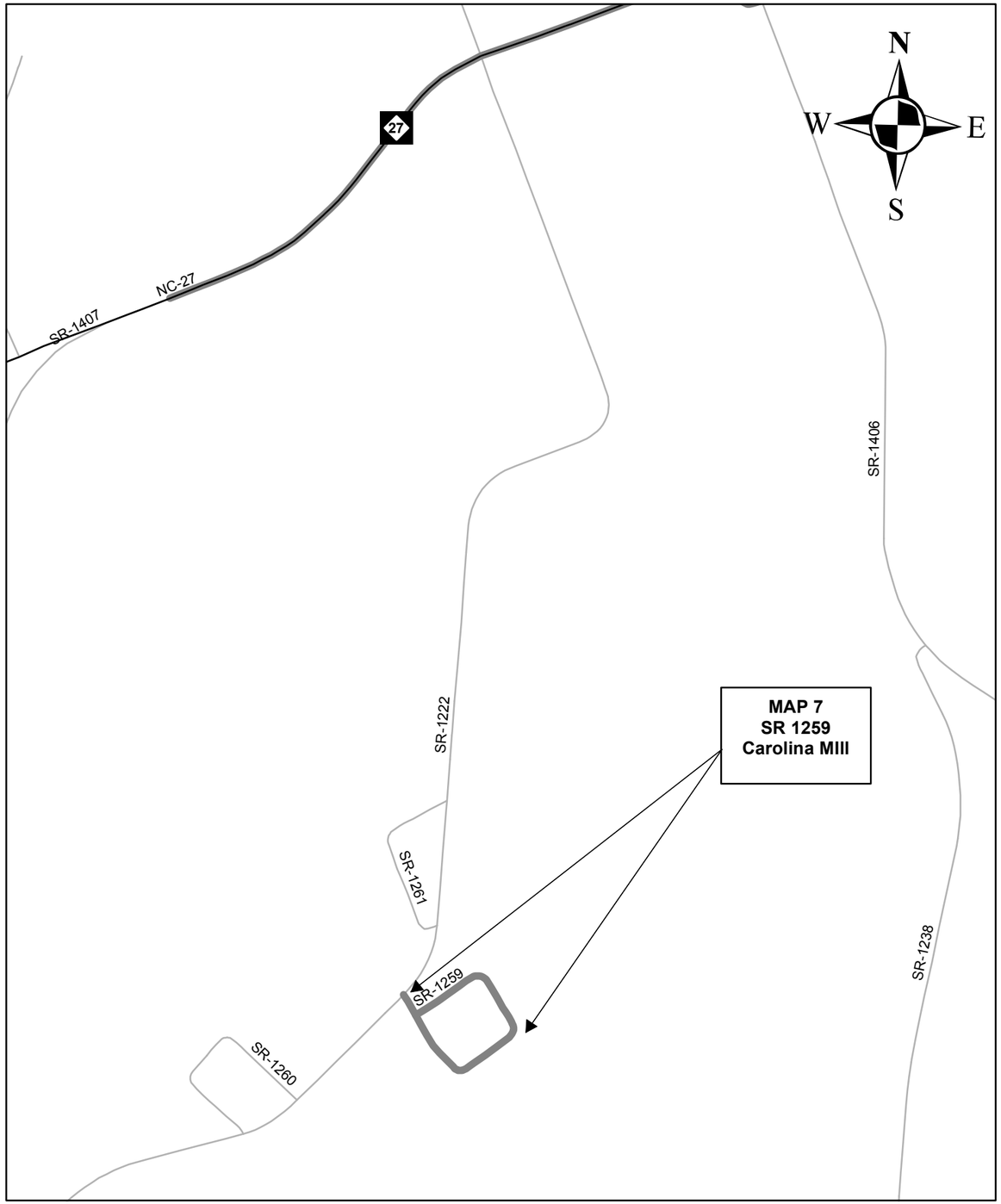
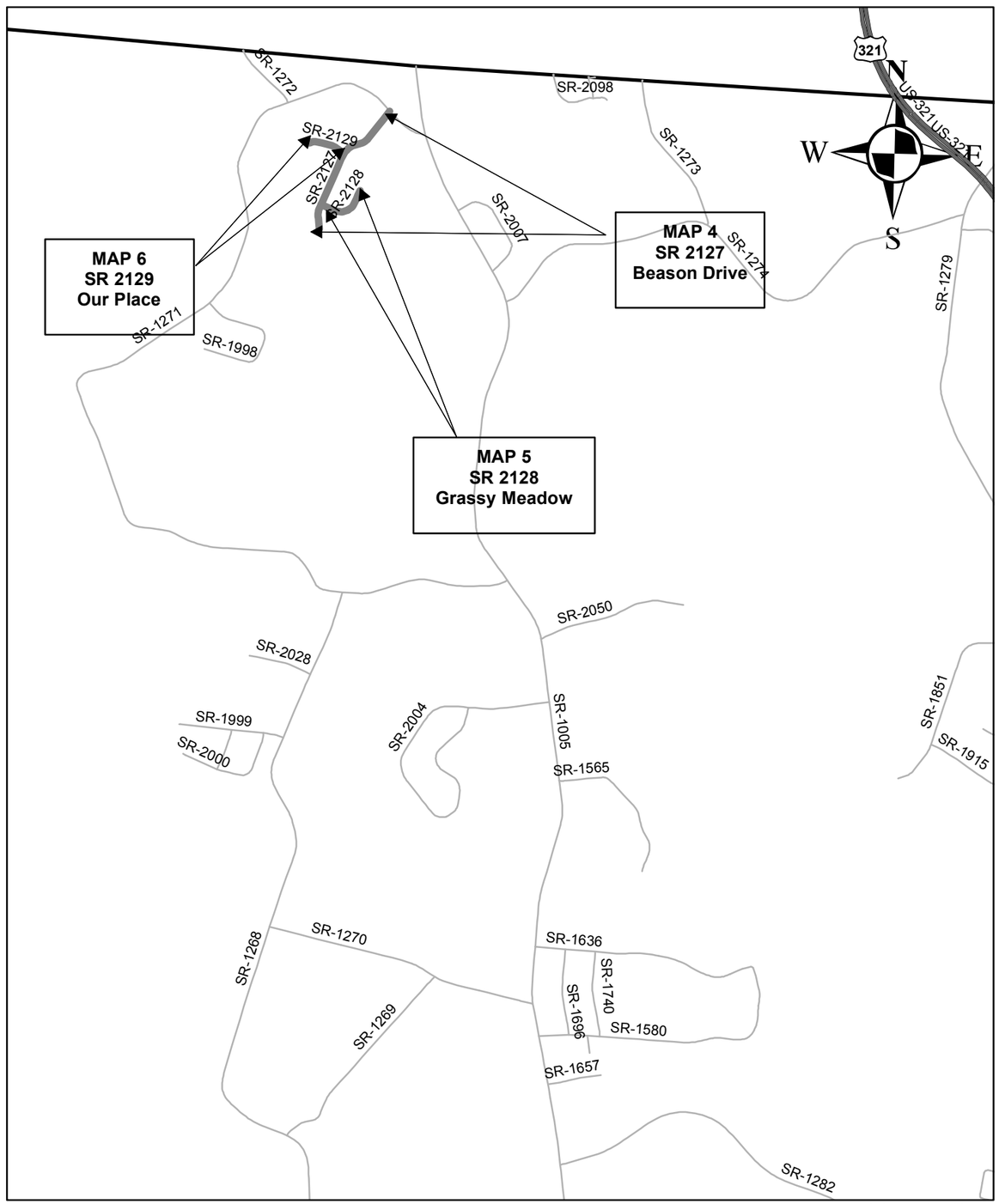
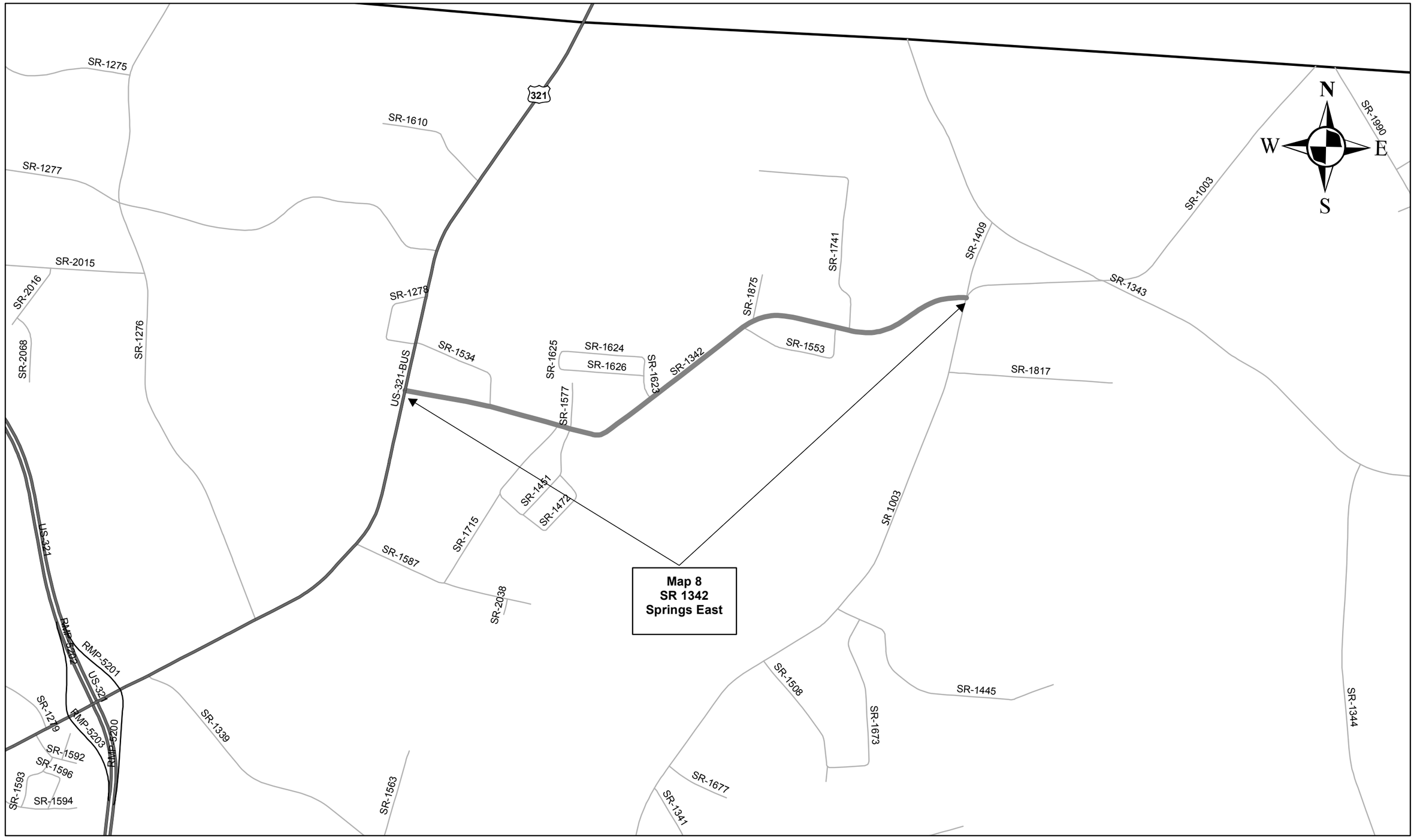


Lincoln County
DL00158
2018CPT.12.06.10551
2018CPT.12.06.20551
MAP 1

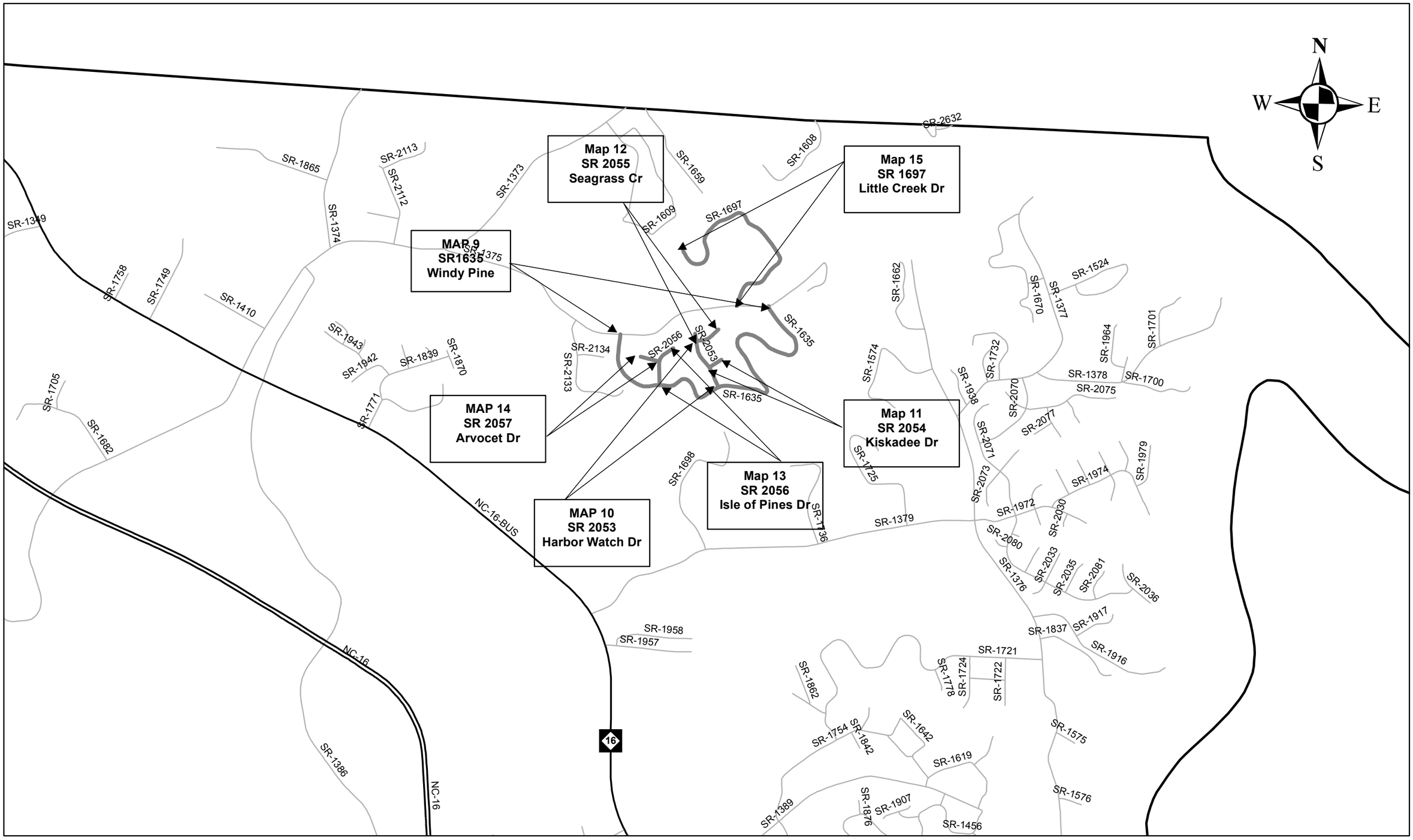




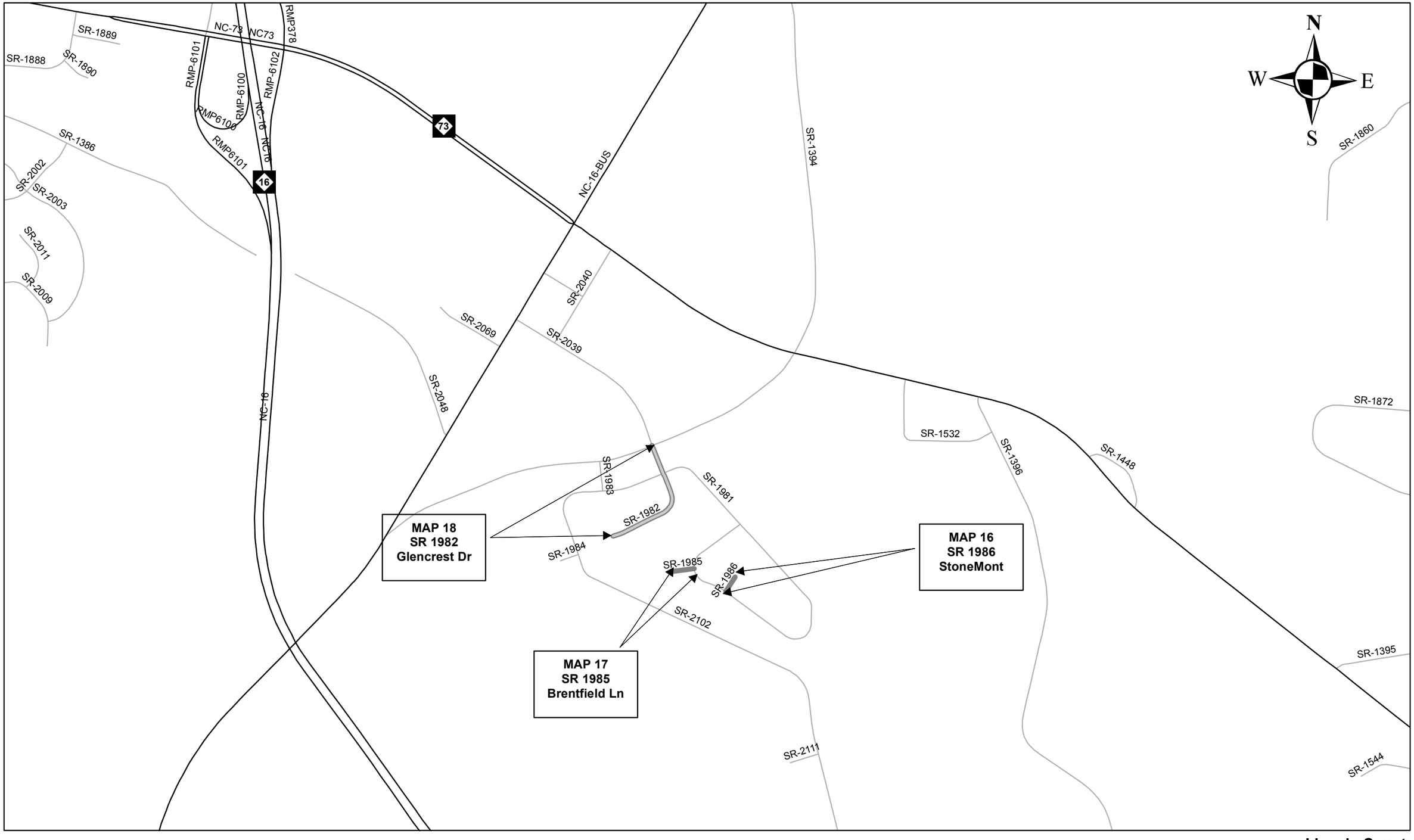
Lincoln County
DL00158
2018CPT.12.06.20551
MAP 2



Lincoln County
DL00158
2018CPT.12.06.20551
MAP 3



Lincoln County
DL00158
2018CPT.12.06.20551
MAP 4

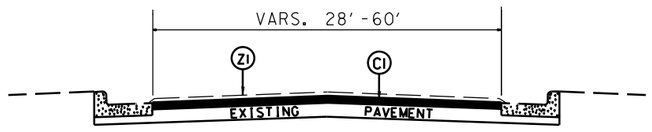


Lincoln County
DL00158
2018CPT.12.06.20551
MAP 5

STATE	PROJECT WBS	SHEET NUMBER
NC	2018CPT.12.06.10551	7
	2018CPT.12.06.20551	

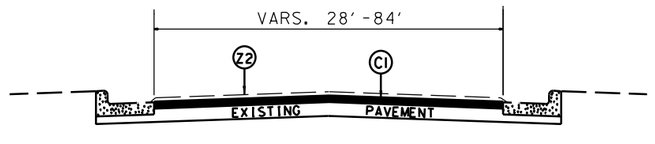
Drawn by: GHB

Checked by:



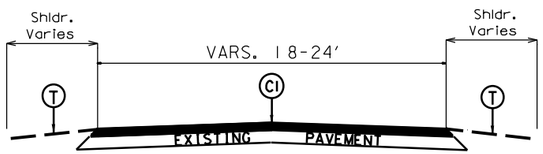
TYPICAL SECTION NO. 1

MAP #1 (entire map)



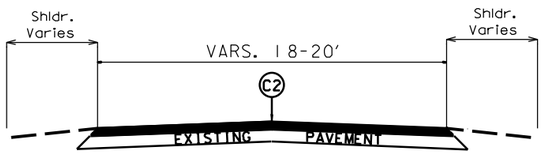
TYPICAL SECTION NO. 2

MAP #2 (entire map)
MAP #3 (0+00 to 19+90)



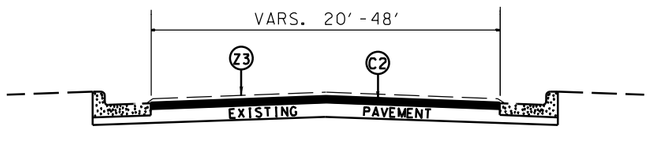
TYPICAL SECTION NO. 3

MAP #3 (19+90 TO 26+40)
MAP #4-9 (entire maps)



TYPICAL SECTION NO. 4

MAP #10-15 (entire maps)



TYPICAL SECTION NO. 5

MAP #16-18 (entire map)

Typical #5 Notes:

1. For sections with center islands, mill 1" depth across the full width of the travel lane and tie in on both ends as directed by the Engineer. This milling will be paid for at the contract unit price for 0 to 1" milling.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1" OF ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT ANAVERAGE RATE OF 110 LBS PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
Y	INCIDENTAL MILLING
Z1	MILL EXST. ASPHALT PAVEMENT APPROX. 1½ " IN DEPTH, FULL WIDTH
Z2	MILL EXST. ASPHALT PAVEMENT APPROX. 0" to 1½ " IN DEPTH, FROM CENTER TO EOP
Z3	MILL EXST. ASPHALT PAVEMENT APPROX. 0"to 1" IN DEPTH AT A WIDTH OF 12'

General Notes:

* Pavement edge slopes are 1:1 unless specified otherwise.

2017 - 2018 Resurfacing Program Typical Sections Lincoln County NC

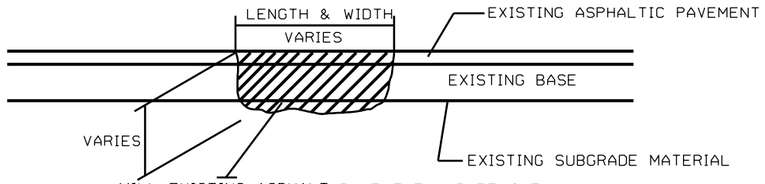
STATE	PROJECT WBS	SHEET NUMBER
NC	2018CPT.12.06.10551	8
	2018CPT.12.06.20551	

Checked by:

Drawn by: GHB

DETAIL A

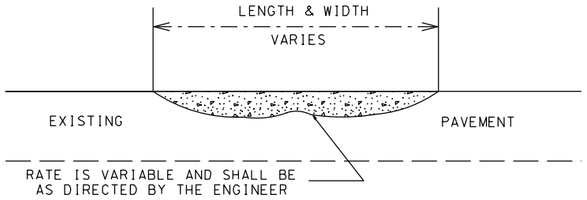
PATCHING EXISTING PAVEMENT

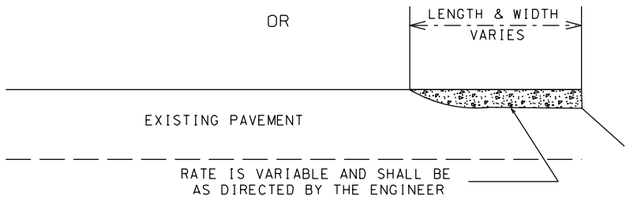


MILL EXISTING ASPHALT PAVEMENT AND REMOVE
EXISTING LOOSE BASE AND/OR SUBGRADE MATERIAL AND REPLACE WITH ACIC TYPE, I19.0X AND ACSC TYPE, S9.5X AS DIRECTED BY THE ENGINEER.

DETAIL B

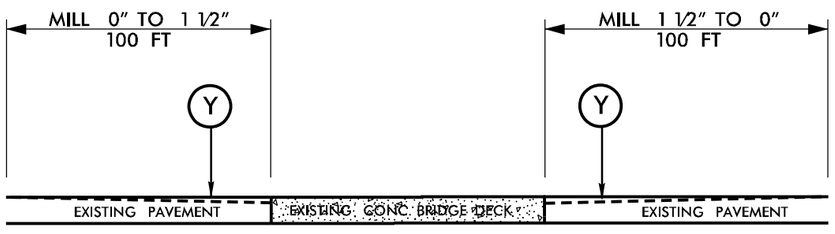
ASPHALT CONCRETE SURFACE COURSE
TYPE S9.5B or SF9.5A (LEVELING COURSE)

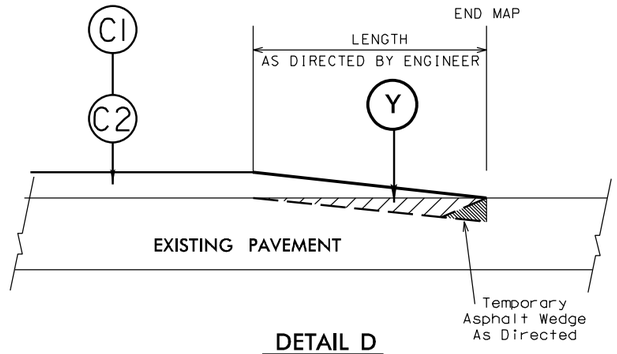




DETAIL C

MILLING BRIDGE APPROACHES





DETAIL D

TIE-IN (INCIDENTAL) MILLING DETAIL

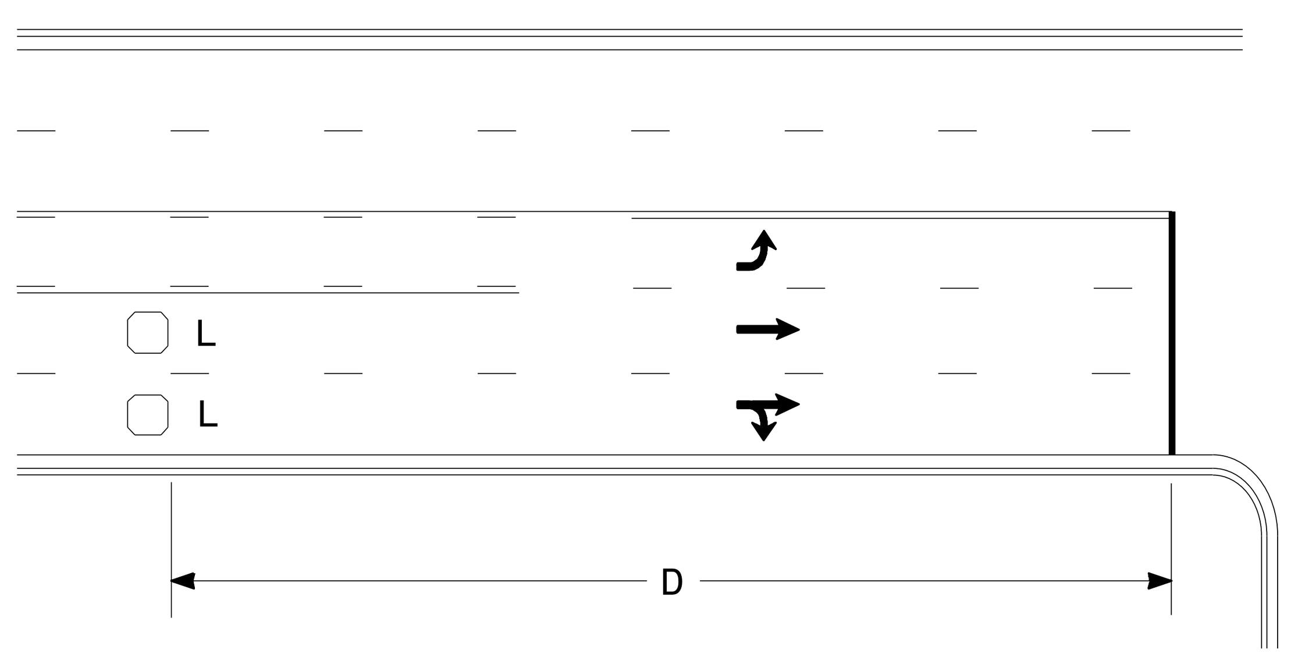
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1" OF ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT ANAVERAGE RATE OF 110 LBS PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
Y	INCIDENTAL MILLING
Z1	MILL EXST. ASPHALT PAVEMENT APPROX. 0" to 1½ " IN DEPTH AT A WIDTH OF 12'
Z2	MILL EXST. ASPHALT PAVEMENT APPROX. 0"to 1 " IN DEPTH AT A WIDTH OF 12'

General Notes:

* Pavement edge slopes are 1:1 unless specified otherwise.

2017 - 2018
Resurfacing Program
Typical Sections
Lincoln County NC

High Speed Detection
(≥40 mph)



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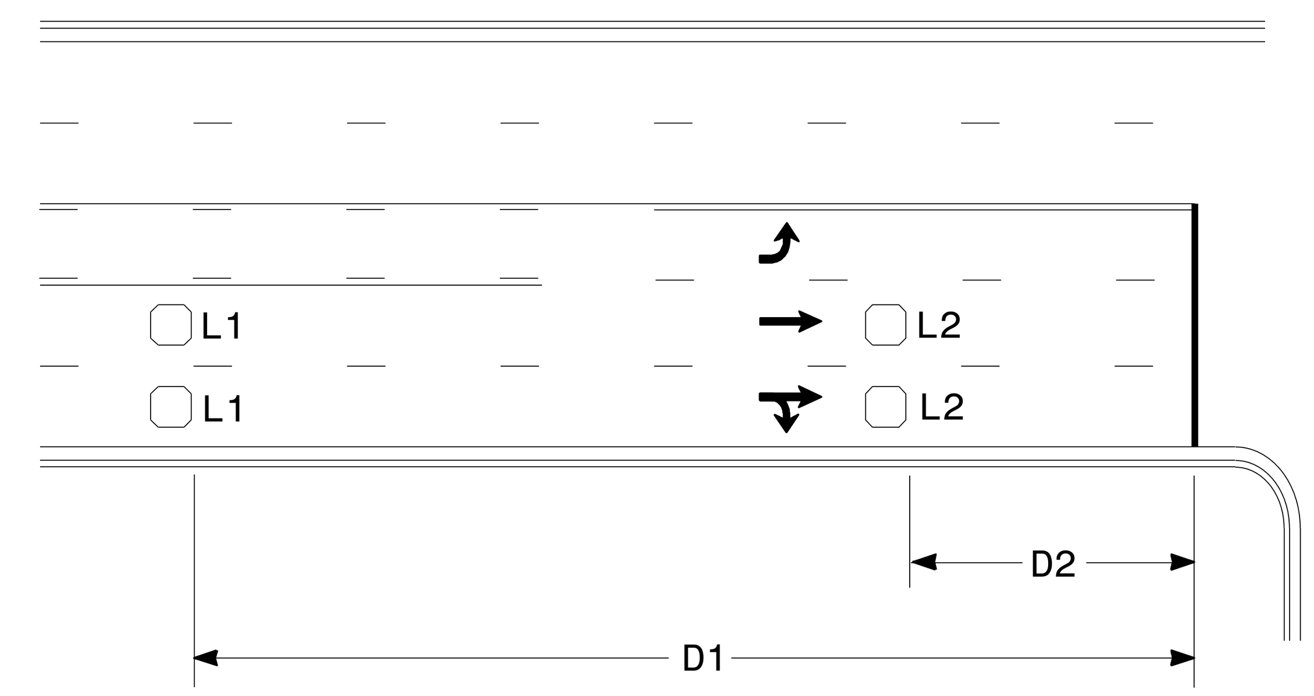


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired in series for TS1 Controllers
Wired separately for TS2, 170, and 2070L Controllers

Volume Density Operation

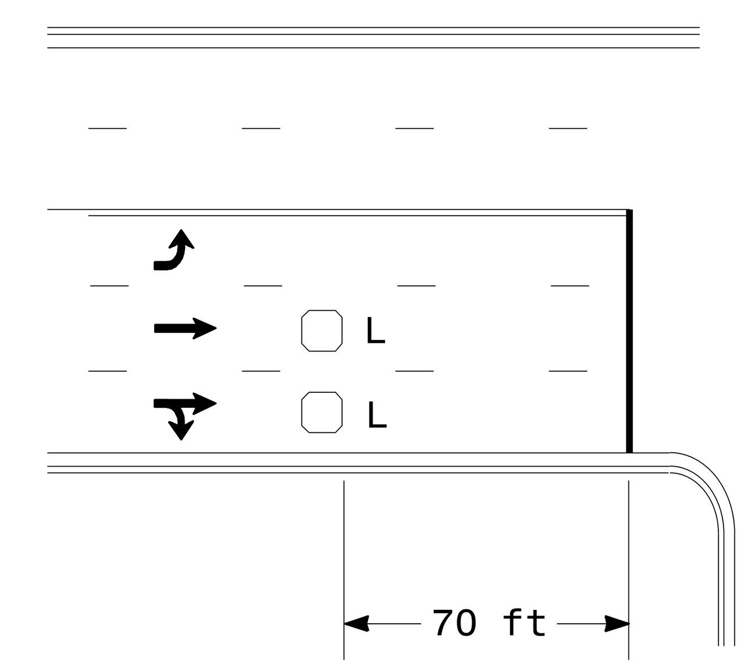
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

"Stretch" Operation

Low Speed Detection
(≤35 mph)



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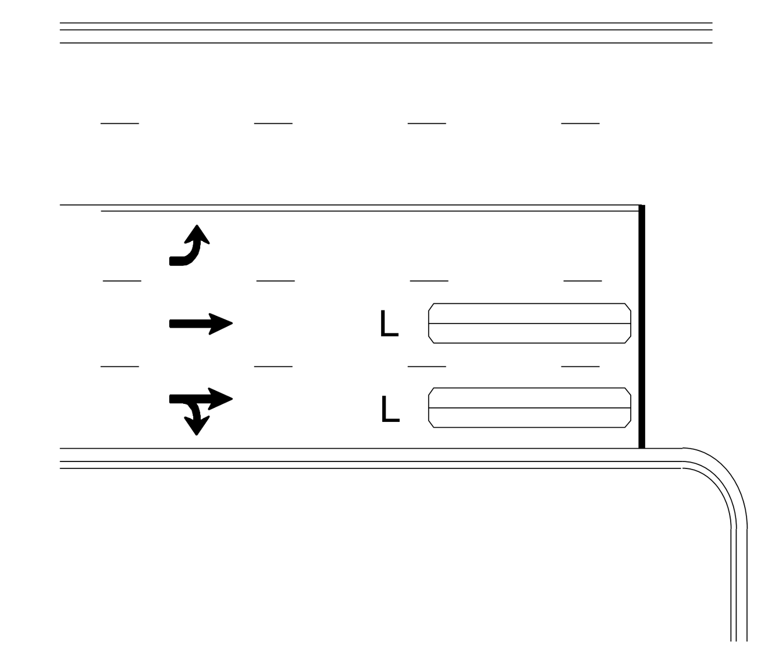
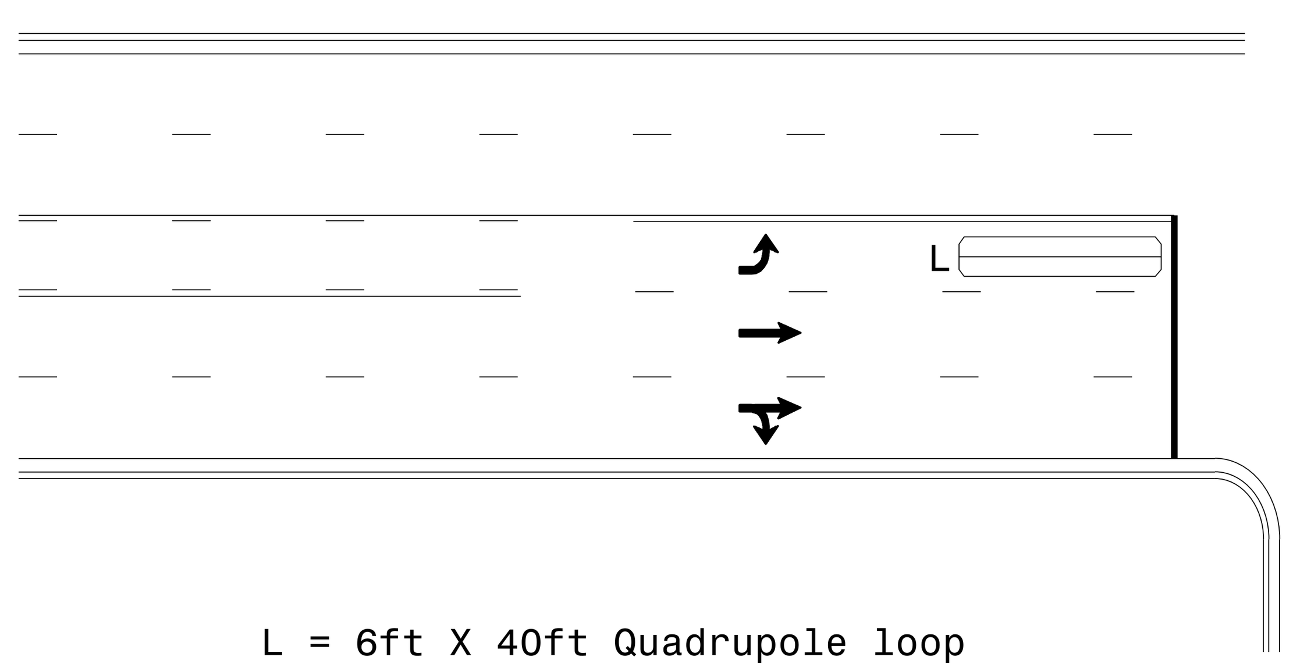


L = 6ft X 6ft
Wired in series

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

Left Turn Lane Detection



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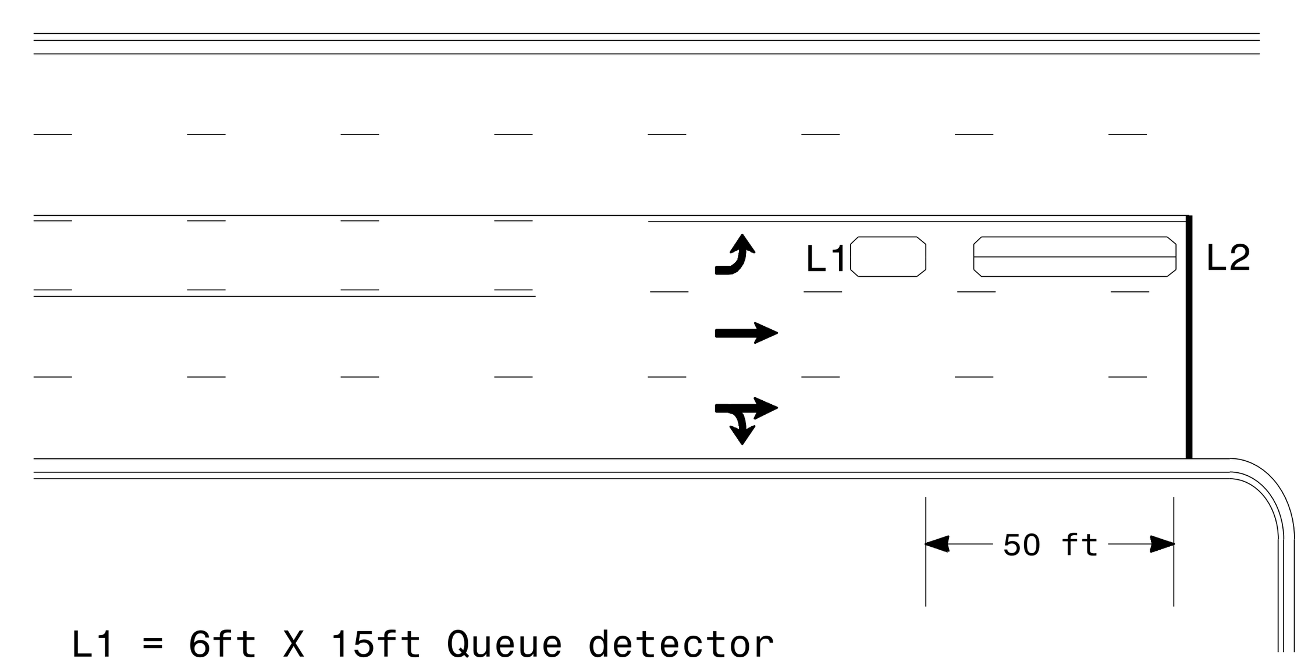


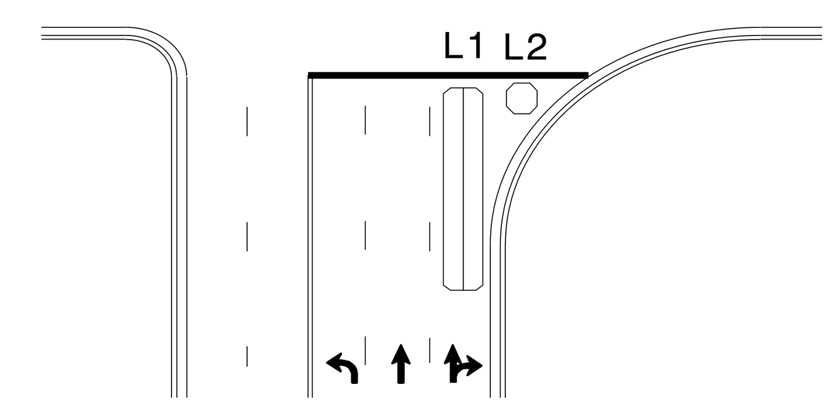
L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

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

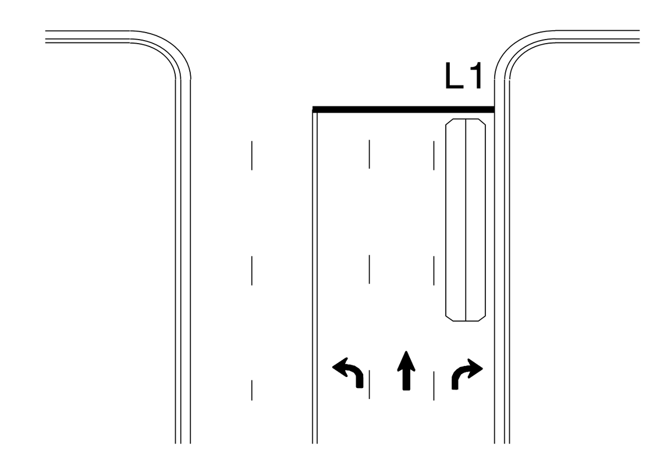
Queue Loop Detection

Right Turn Lane Detection

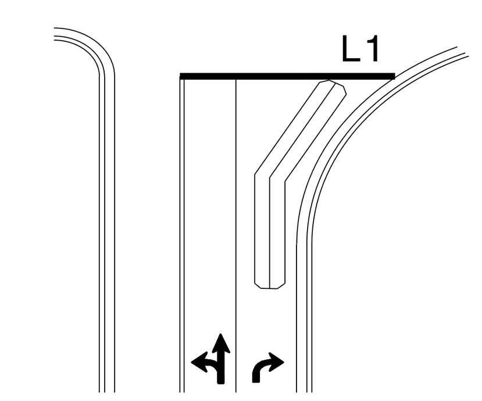


Shared Lane/
Wide Radius Turn

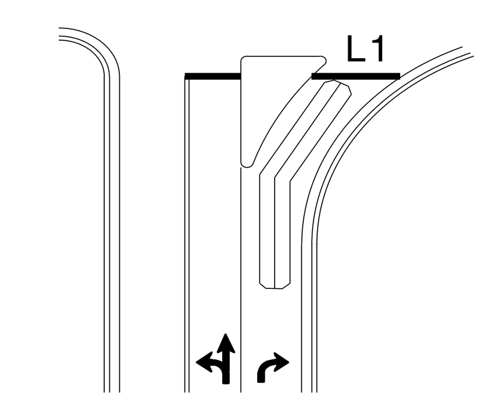
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

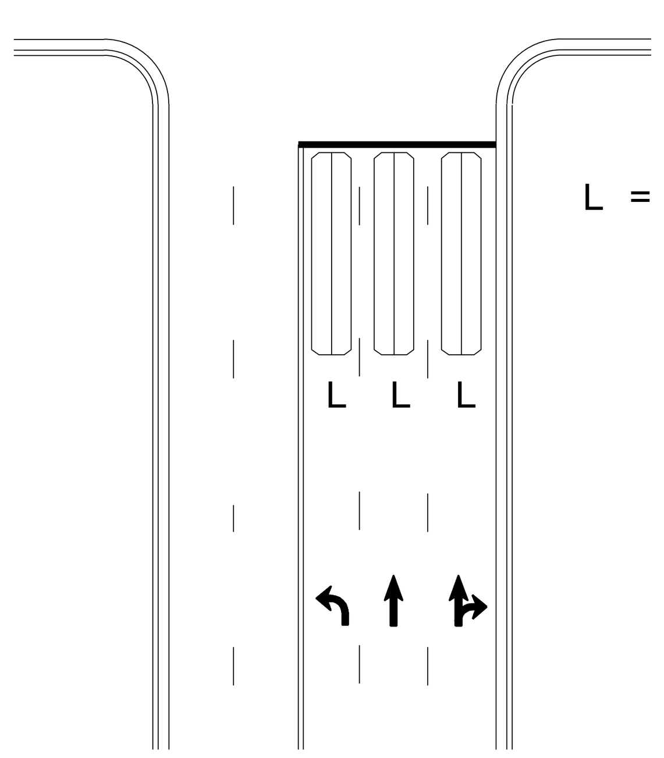


Wide Radius Turn



Channelized Turn

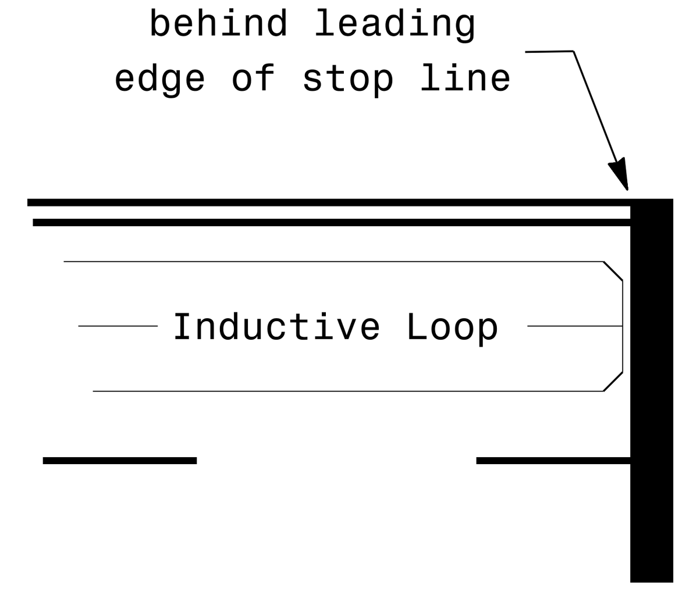
Side Street Detection



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

Presence Loop Placement at Stop Lines

Locate loop slightly behind leading edge of stop line



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

SCALE
N/A

Typical Signal Loop Locations

PLAN DATE: January 2015	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:

REVISIONS	INIT.	DATE

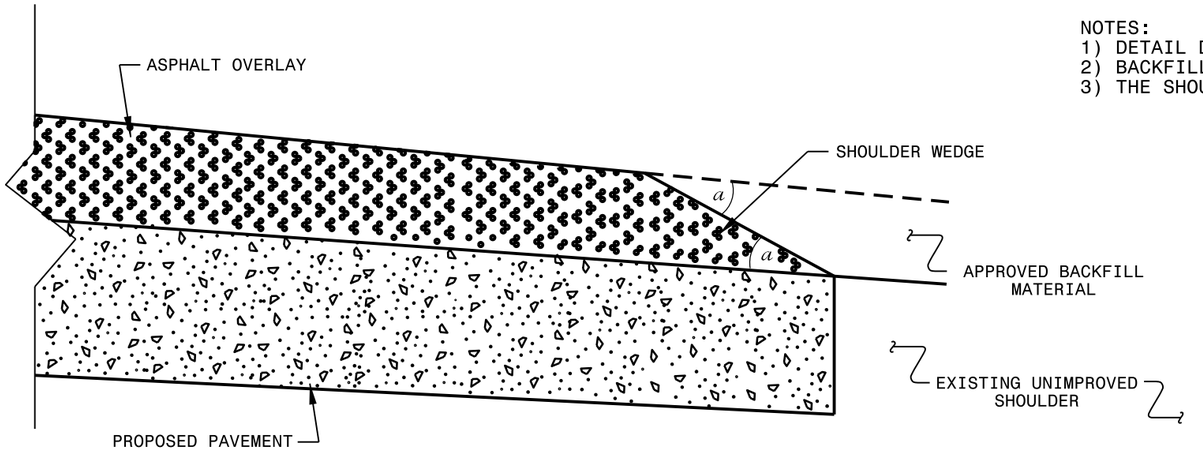
SEAL
North Carolina Professional Engineer Seal 23489 Pamela L. Alexander
DocuSigned by: PL Alexander
B4756E00CE4E46D...
1/30/2015
DATE

SIG. INVENTORY NO.

30-JAN-2015 12:30
S:\ITS&SU\ITS Signals\Signal Design Section\Eastern Region\looptypical2015.dgn
palexander

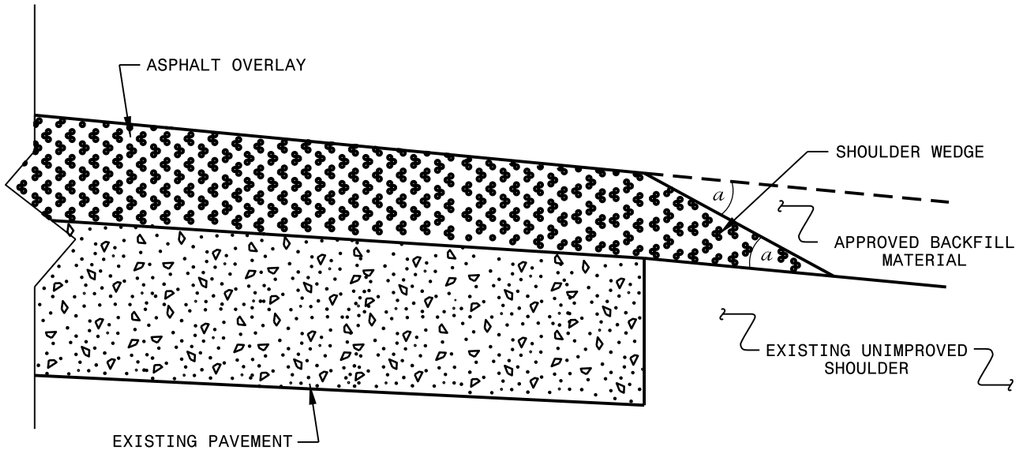
PROJECT REFERENCE NO.	SHEET NO.
2018CPT.12.06.10551	10

NOTES:
1) DETAIL DOES NOT APPLY TO OGAFC 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.



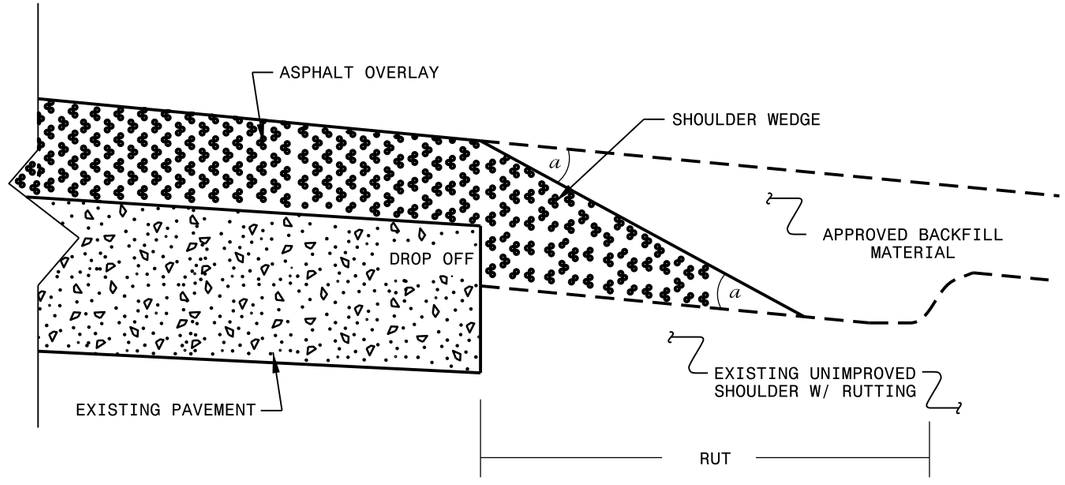
SHOULDER WEDGE DETAIL

(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: T.SPELL DATE: 7-19-11
MODIFIED BY: _____ DATE: 10/16/12
CHECKED BY: _____ DATE: _____
FILE SPEC.: $:usr/details/stand/shoulderwedgedetail.dgn

$$$$$$SYSTIME$$$$$$
$$$$$$USERNAME$$$$$$

PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.12.06.10551	11	
2018CPT.12.06.20551		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0255000000-E AGGREGATE SHOULDER BORROW	1220000000-E INCIDENTAL STONE BASE	1245000000-E SHOULDER RECONSTRUCTION	1297000000-E 1½" MILLING	1308000000-E 0" TO 1.5" MILLING	1308000000-E 0" TO 1" MILLING	1330000000-E INCIDENTAL MILLING	1519000000-E SURFACE COURSE, S9.5B	1520000000-E LEVELING COURSE, S9.5B	1525000000-E SURFACE COURSE, SF9.5A	1525100000-E LEVELING COURSE, SF9.5A	1575000000-E ASPHALT BINDER FOR PLANT MIX	1704000000-E PATCHING EXISTING PAVEMENT	2800000000-N ADJUSTMENT OF CATCH BASIN	2830000000-N ADUSTMENT OF MANHOLES	2845000000-N ADJUSTMENT OF METER OR VALVE BOX	5255000000-N PORTABLE LIGHTING	7324000000-N JUNCTION BOX (STANDARD SIZE)	7444000000-E INDUCTIVE LOOP	7456000000-E LEAD-IN CABLE
										MI	FT	TON	TONS	SMI	SY	SY	SY	SY	TONS	TONS	TONS	TON	TONS	TONS	EA	EA	EA	LS	EA	LF	LF
2018CPT.12.06.10551	Lincoln	1	NC 27	FROM BRDG 23 TO NC 150	1	2 TO 4	MU	NO	NO	1.78	VARS. 28-60		20		51,440			500	4,650	100			288	500	3	34	24	*	2.00	4,500	2,500
2018CPT.12.06.10551	Lincoln	2	NC 27	FROM BUS 321 TO NC 150	2	5 TO 7	MU	NO	NO	2.08	VARS. 60-84		20			75,000		100	6,700	150			411	550		18	7	*	2.00	10,500	5,250
TOTAL FOR PROJ NO. 2018CPT.12.06.10551										**3.86**			**40**		**51,440**	**75,000**		**600**	**11,350**	**250**			**699**	**1,050**	**3**	**52**	**31**	**1.00**	**4.00**	**15,000**	**7,750**
2018CPT.12.06.20551	Lincoln	3	SR 1008 (N. GROVE ST)	FROM NC 27 TO PVMT CHANGE	2,3	2	2WU	NO	NO	0.5	VARS. 24-28	15	10	0.20		6,335		50	725	20			45	200		7	7			1,000	750
2018CPT.12.06.20551	Lincoln	4	SR 2127 (BEASON DR)	FROM SR 1271 (RITCHIE RD) TO CUL-DE-SAC	3	2	2WU	NO	NO	0.42	20	50		0.85				100	580	20			36	260							
2018CPT.12.06.20551	Lincoln	5	SR 2128 (GRASSY MEADOW CT)	FROM SR 2127 (BEASON DR) TO CUL-DE-SAC	3	2	2WU	NO	NO	0.15	18	20		0.32				100	190	10			12	110							
2018CPT.12.06.20551	Lincoln	6	SR 2129 (OUR PLACE)	FROM SR 2127 (BEASON DR) TO CUL-DE-SAC	3	2	2WU	NO	NO	0.11	20	15		0.23				100	150	10			10	80							
2018CPT.12.06.20551	Lincoln	7	SR 1259 (CAROLINA MILL CR)	FROM SR 1222 (S GROVE ST) TO DEAD END	3	2	2WU	NO	NO	0.84	20	100		1.68				150	870	20			53	60		1					
2018CPT.12.06.20551	Lincoln	8	SR 1342 (SPRINGS EAST RD)	FROM US 321 BUS TO SR 1003 (BUFFALO SHOALS RD)	3	2	2WU	NO	NO	1.68	20	200		3.36				100	1,750	40			107	75							
2018CPT.12.06.20551	Lincoln	9	SR 1635 (WINDY PINE CIRCLE)	FROM SR 1375 (PINE RIDGE DR) TO SR 1375	3	2	2WU	NO	NO	1.61	18	180	10	3.22				100	1,500	30			92	380							
2018CPT.12.06.20551	Lincoln	10	SR 2053 (HARBOR WATCH DR)	FROM SR 1635 (WINDY PINE CR) TO CUL DE SAC	4	2	2WU	NO	NO	0.25	20		10					100			200	66	17	45							
2018CPT.12.06.20551	Lincoln	11	SR 2054 (KISKADEE DR)	FROM SR 2053 (HARBOR WATCH DR) TO CUL-DE-SAC	4	2	2WU	NO	NO	0.06	20							100			60	20	5	15							
2018CPT.12.06.20551	Lincoln	12	SR 2055 (SEAGRASS CR)	FROM SR 2053 (HARBOR WATCH DR) TO CUL-DE-SAC	4	2	2WU	NO	NO	0.11	20							100			90	30	8	48							
2018CPT.12.06.20551	Lincoln	13	SR 2056 (ISLE OF PINES DR)	FROM SR 1635 (WINDY PINE CR) TO CUL-DE-SAC	4	2	2WU	YES	NO	0.18	20		10					100			151	50	13	50							
2018CPT.12.06.20551	Lincoln	14	SR 2057 (ARVOCET DR)	FROM SR 2056 (ISLE OF PINES DR) TO CUL-DE-SAC	4	2	2WU	NO	NO	0.08	20							100			76	25	7	18							
2018CPT.12.06.20551	Lincoln	15	SR 1697 (LITTLE CREEK DR)	FROM SR 1375 (PINE RIDGE DR) TO CUL-DE-SAC	4	2	2WU	NO	NO	0.96	18							100			570	190	50	400							
2018CPT.12.06.20551	Lincoln	16	SR 1986 (STONEMONT WAY)	FROM SR 1981 (SEDGEBROOK DR) TO CUL-DE-SAC	5	2	2WU	NO	NO	0.03	20						400	100			42	15	4	16							
2018CPT.12.06.20551	Lincoln	17	SR 1985 (BRENTFIELD LN)	FROM SR 1981 (SEDGEBROOK DR) TO CUL-DE-SAC	5	2	2WU	NO	NO	0.04	20		10				450	100			45	15	4								
2018CPT.12.06.20551	Lincoln	18	SR 1982 (GLENCREST DR)	FROM SR 1394 (S. PILOT KNOB) TO CUL-DE-SAC	5	2	2WU	NO	NO	0.23	20						2,750	100			232	77	20	65		1	1					
TOTAL FOR PROJ NO. 2018CPT.12.06.20551										**7.25**		**580**	**50**	**9.86**		**6,335**	**3,600**	**1,600**	**5,765**	**150**	**1,466**	**488**	**483**	**1,822**		**9**	**8**			**1,000**	**750**
GRAND TOTAL										**11.11**		**580**	**90**	**9.86**	**51,440**	**81,335**	**3,600**	**2,200**	**17,115**	**400**	**1,466**	**488**	**1,182**	**2,872**	**3**	**61**	**39**	**1.00**	**4.00**	**16,000**	**8,500**

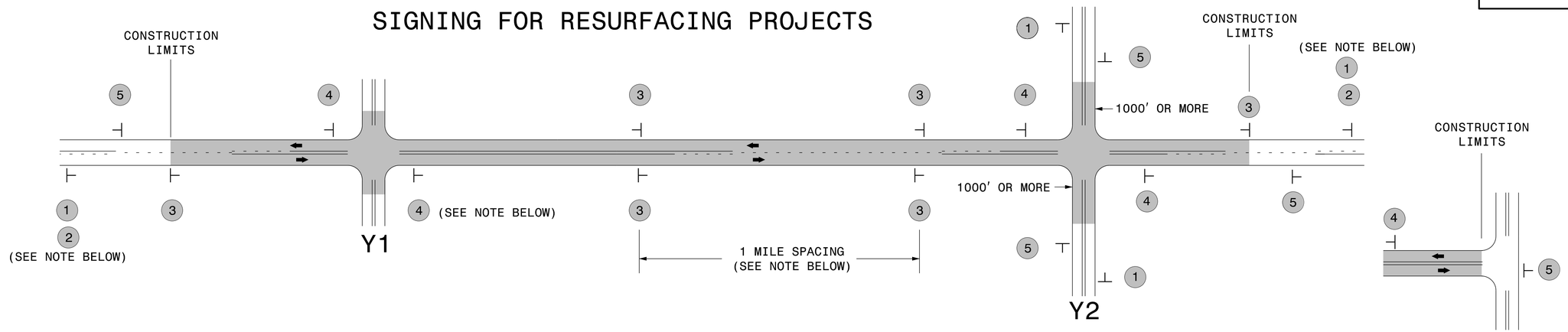
PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.12.06.10551	12	
2018CPT.12.06.20551		

THERMOPLASTIC AND PAINT QUANTITIES

										4413000000-E	4457000000-N	4510000000-N	4685000000-E	4695000000-E		4697000000-E	4700000000-E	4705000000-E	4710000000-E	4721000000-E			4725000000-E						4810000000-E		4847000000-E		4850000000-E	4905000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	WORK ZONE ADVANCE GENERAL WARNING	TEMP TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 90 M WHITE THERMO	8" X 90 M WHITE THERMO	8" X 90 MILS YELLOW THERMO	8" X 120 M WHITE THERMO	12" X 90 M YELLOW THERMO	16" X 120 M WHITE THERMO	24" X 120 M WHITE THERMO	THERMO MSG ONLY 120 M	THERMO MSG SCHOOL 120 M	THERMO RXR 120 M	THERMO LT ARROW 90 M	THERMO STR ARROW 90 M	THERMO STR & LT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO MERGE ARROW (90 MILS)	THERMO RT ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	POLYUREA PAVEMENT MARKING LINES (4", WHITE) (HIGHLY REFLECTIVE ELEMENTS)	POLYUREA PAVEMENT MARKING LINES (4", YELLOW) (HIGHLY REFLECTIVE ELEMENTS)	4" LINE REMOVAL	SNOW PLOWABLE MARKERS
								MI	FT	SF	LS	HR	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	EA
2018CPT.12.06.10551	Lincoln	1	NC 27	FROM BRDG 23 TO NC 150	1	2 TO 4	MU	1.78	VARS. 28-60	825	1	60	11,055	410		350	130		2,020				9	1	3	12	2		1,000	1,000	3,000	17,110		800
2018CPT.12.06.10551	Lincoln	2	NC 27	FROM BUS 321 TO NC 150	2	5 TO 7	MU	2.08	VARS. 60-84	675		60		200	620				850	8	12		68	3		4		18	1,000	1,000	11,000	29,530	1,300	550
TOTAL FOR PROJ NO. 2018CPT.12.06.10551								**3.86**		**1,500**	**1**	**120**	**11,055**	**610**	**620**	**350**	**130**		**2,870**	**8**	**12**		**77**	**4**	**3**	**16**	**2**	**18**	**2,000**	**2,000**	**14,000**	**46,640**	**1,300**	**1,350**
														1,230							**20**		**120**						**4,000**		**60,640**			
2018CPT.12.06.20551	Lincoln	3	SR 1008 (N. GROVE ST)	FROM NC 27 TO PVMT CHANGE	2,3	2	2WU	0.5	VARS. 24-28	288				30					50												1,150	5,300		35
2018CPT.12.06.20551	Lincoln	4	SR 2127 (BEASON DR)	FROM SR 1271 (RITCHIE RD) TO CUL-DE-SAC	3	2	2WU	0.42	20	24																								
2018CPT.12.06.20551	Lincoln	5	SR 2128 (GRASSY MEADOW CT)	FROM SR 2127 (BEASON DR) TO CUL-DE-SAC	3	2	2WU	0.15	18																									
2018CPT.12.06.20551	Lincoln	6	SR 2129 (OUR PLACE)	FROM SR 2127 (BEASON DR) TO CUL-DE-SAC	3	2	2WU	0.11	20																									
2018CPT.12.06.20551	Lincoln	7	SR 1259 (CAROLINA MILL CR)	FROM SR 1222 (S GROVE ST) TO DEAD END	3	2	2WU	0.84	20	24									50	35			2											
2018CPT.12.06.20551	Lincoln	8	SR 1342 (SPRINGS EAST RD)	FROM US 321 BUS TO SR 1003 (BUFFALO SHOALS RD)	3	2	2WU	1.68	20	312																			35,550	35,550				
2018CPT.12.06.20551	Lincoln	9	SR 1635 (WINDY PINE CIRCLE)	FROM SR 1375 (PINE RIDGE DR) TO SR 1375	3	2	2WU	1.61	18	50																			34,000	34,000				
2018CPT.12.06.20551	Lincoln	10	SR 2053 (HARBOR WATCH DR)	FROM SR 1635 (WINDY PINE CR) TO CUL DE SAC	4	2	2WU	0.25	20																									
2018CPT.12.06.20551	Lincoln	11	SR 2054 (KISKADEE DR)	FROM SR 2053 (HARBOR WATCH DR) TO CUL-DE-SAC	4	2	2WU	0.06	20																									
2018CPT.12.06.20551	Lincoln	12	SR 2055 (SEAGRASS CR)	FROM SR 2053 (HARBOR WATCH DR) TO CUL-DE-SAC	4	2	2WU	0.11	20																									
2018CPT.12.06.20551	Lincoln	13	SR 2056 (ISLE OF PINES DR)	FROM SR 1635 (WINDY PINE CR) TO CUL-DE-SAC	4	2	2WU	0.18	20																									
2018CPT.12.06.20551	Lincoln	14	SR 2057 (ARVOCET DR)	FROM SR 2056 (ISLE OF PINES DR) TO CUL-DE-SAC	4	2	2WU	0.08	20																									
2018CPT.12.06.20551	Lincoln	15	SR 1697 (LITTLE CREEK DR)	FROM SR 1375 (PINE RIDGE DR) TO CUL-DE-SAC	4	2	2WU	0.96	18																				20,300	20,300				
2018CPT.12.06.20551	Lincoln	16	SR 1986 (STONEMONT WAY)	FROM SR 1981 (SEDGEBROOK DR) TO CUL-DE-SAC	5	2	2WU	0.03	20																									
2018CPT.12.06.20551	Lincoln	17	SR 1985 (BRENTFIELD LN)	FROM SR 1981 (SEDGEBROOK DR) TO CUL-DE-SAC	5	2	2WU	0.04	20																									
2018CPT.12.06.20551	Lincoln	18	SR 1982 (GLENCREST DR)	FROM SR 1394 (S. PILOT KNOB) TO CUL-DE-SAC	5	2	2WU	0.23	20	72																									
TOTAL FOR PROJ NO. 2018CPT.12.06.20551								**7.25**		**770**				**30**					**50**	**85**			**2**							**89,850**	**89,850**	**1,150**	**5,300**		**35**
														30							**2**									**179,700**		**6,450**			
GRAND TOTAL								**11.11**		**2,270**	**1**	**120**	**11,055**	**640**	**620**	**350**	**130**		**50**	**2,955**	**8**	**12**	**2**	**77**	**4**	**3**	**16**	**2**	**18**	**91,850**	**91,850**	**15,150**	**51,940**	**1,300**	**1,385**
														1,260							**22**			**120**						**183,700**		**67,090**			

PROJ. REFERENCE NO.	SHEET NO.
2018CPT.12.06.10551	13

SIGNING FOR RESURFACING PROJECTS



LEGEND
- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW

SIGNING NOTES AND PLACEMENT PER DIRECTION

MAINLINE (-L-) SIGNING

1	ROAD WORK AHEAD W20-1 48″ X 48″	PLACE 1000′ PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000′ ALONG -Y- LINE.
2	NEXT XX MILES W7-3aP 24″ X 18″	#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)
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 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. - 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.

-Y- LINE SIGNING

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.

W20-7 A 48″ X 48″ — PLACED 250′ IN ADVANCE OF FLAGGER.

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2 LANE ROADWAYS

4/20/2016
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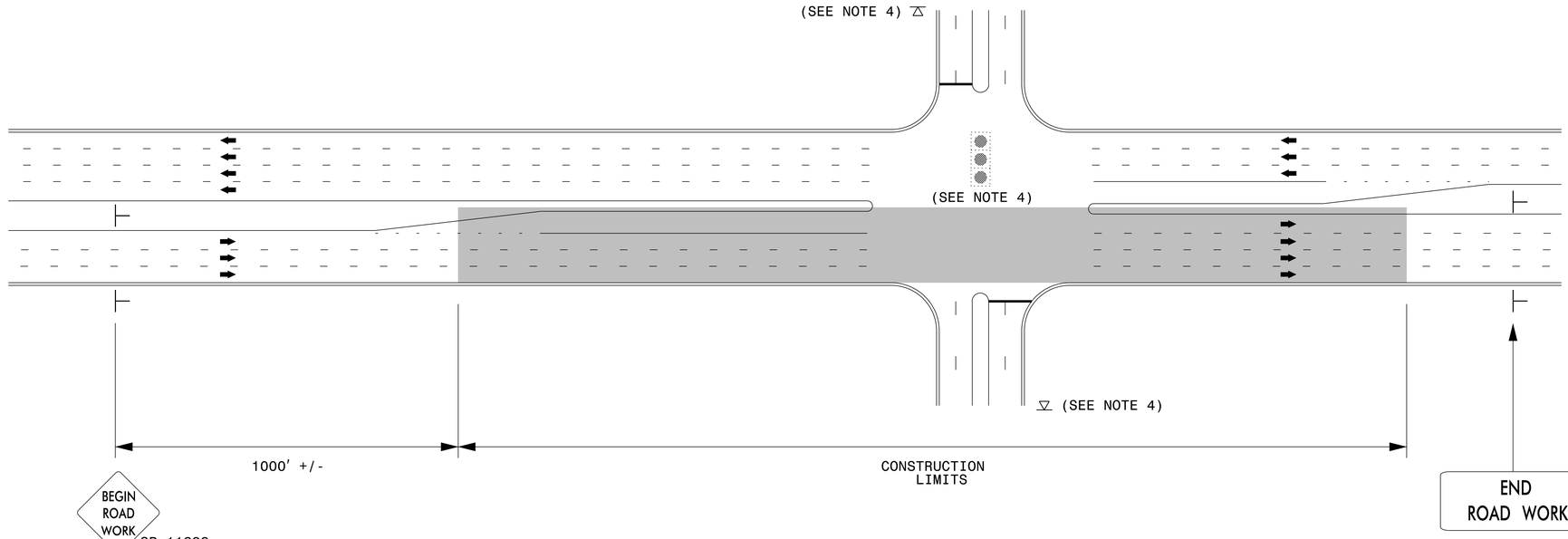
PROJ. REFERENCE NO.	SHEET NO.
2018CPT.12.06.10551	14

URBAN / SUBURBAN WORKZONES



NOTES:

1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
4) 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.
5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS.THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- ⊢ STATIONARY SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES

4/8/2015
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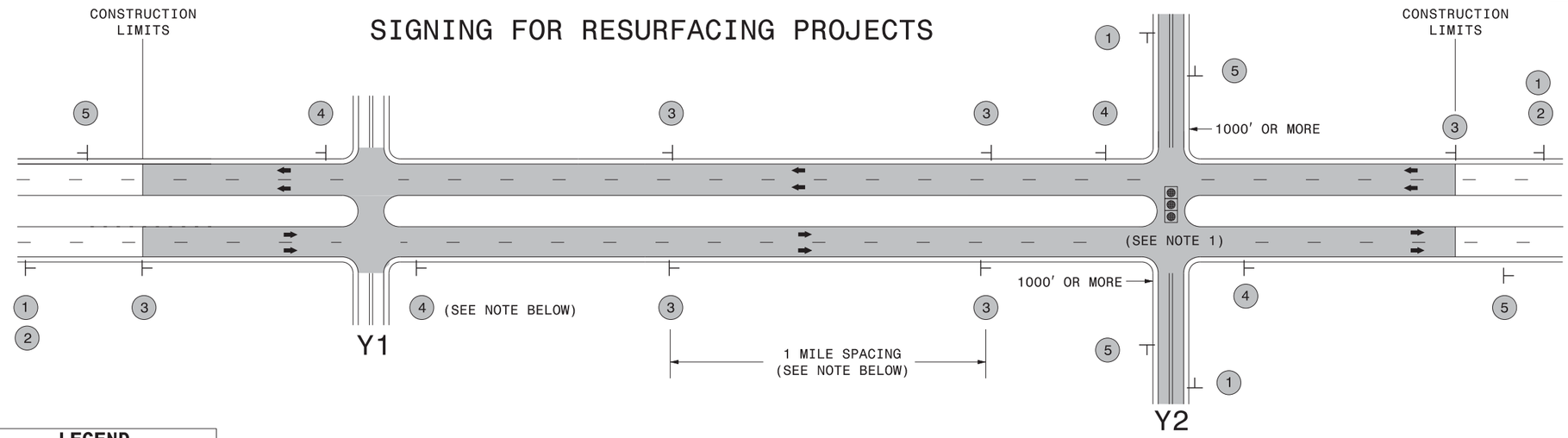
PROJ. REFERENCE NO.	SHEET NO.
2018CPT.12.06.10551	15

SIGNING FOR RESURFACING PROJECTS



LEGEND
- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

1 — ROAD WORK AHEAD (W20-1, 48″ X 48″)
PLACE 1000′ PRIOR TO BEGINNING OF CONSTRUCTION LIMITS.
ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000′ ALONG -Y- LINE.

2 — NEXT XX MILES (W7-3aP, 24″ X 18″)
#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)

3 — LOW/SOFT 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 ½ 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.

-Y- LINE SIGNING

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.

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.

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

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

3/23/2015
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