

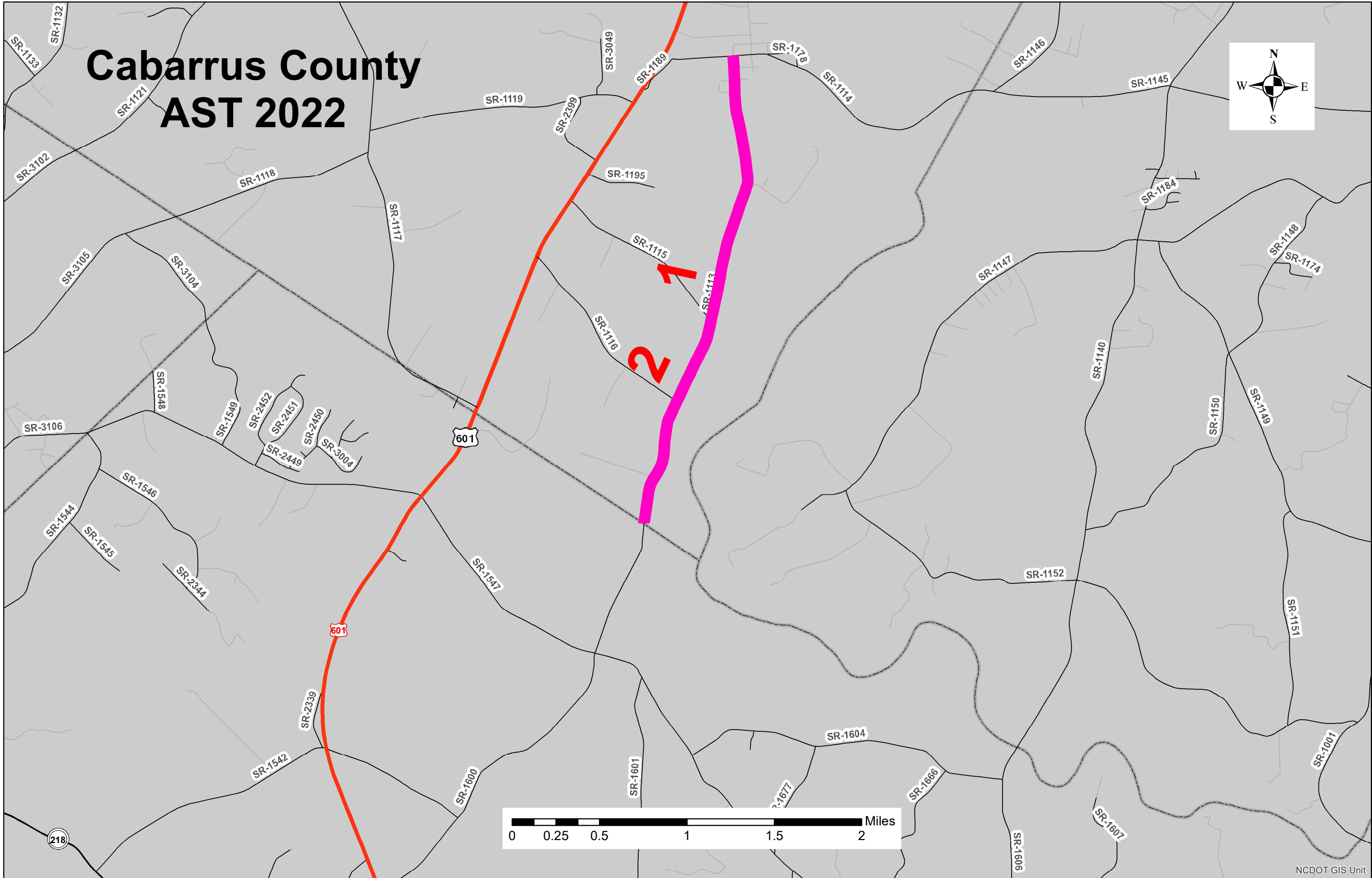
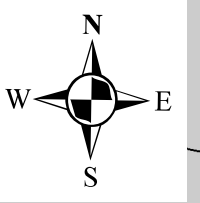
PROJECT NO.	SHEET NO.	TOTAL NO.
2022CPT.10.10.20132	1	8

SUMMARY OF QUANTITIES

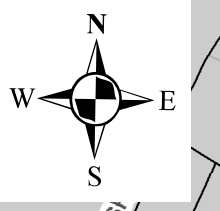
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1803500000-E	1820000000-E	1836000000-E	1838000000-E	1838500000-N	2143000000-E	4413000000-E	4457000000-N
												ASPHALT SURFACE TREATMENT, DOUBLE SEAL	AST, FOG SEAL	ASPHALT SURFACE TREATMENT, TRIPLE SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	VACUUM TRUCK	BLOTTING SAND	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL
										MI	FT	SY	SY	SY	GAL	WK	TON	SF	LS
2022CPT.10.10.20132	Cabarrus	1	SR 1113 - HOPEWELL CHURCH ROAD	FROM SR 1114 (GARMON MILL ROAD) (MP 0.00) TO SR 1115 (KISER ROAD) (MP 1.55)		2		NO	NO	1.55	20		18,703	18,703	18,145	0.25	0.75	174.0	0.07
TOTAL FOR MAP NO. 1										1.55			18,703	18,703	18,145	0.25	0.75	174.0	0.07
2022CPT.10.10.20132	Cabarrus	2	SR 1113 - HOPEWELL CHURCH ROAD	FROM SR 1115 (KISER ROAD) (MP 1.55) TO UNION COUNTY LINE (MP 2.83)		2		NO	NO	1.28	20		15,343	15,343	14,885	0.25	0.50	144.0	0.06
TOTAL FOR MAP NO. 2										1.28			15,343	15,343	14,885	0.25	0.50	144.0	0.06
2022CPT.10.10.20132	Cabarrus	3	SR 1148 - PARKS LAFFERTY ROAD	FROM US 601 (MP 0.00) TO SR 2359 (SAGEBRUSH CIRCLE) (MP 1.19)		2		NO	NO	1.19	20		14,998	14,998	14,550	0.25	1.00	132.0	0.05
TOTAL FOR MAP NO. 3										1.19			14,998	14,998	14,550	0.25	1.00	132.0	0.05
2022CPT.10.10.20132	Cabarrus	4	SR 1151 - SIMPLICITY ROAD	FROM SR 1132 (FLOWES STORE ROAD) (MP 0.00) TO DEAD END (MP 1.03)		2		NO	NO	1.03	20		12,502	12,502	12,130	0.20	0.50	112.0	0.04
TOTAL FOR MAP NO. 4										1.03			12,502	12,502	12,130	0.20	0.50	112.0	0.04
2022CPT.10.10.20132	Cabarrus	5	SR 1220 - MCMILLIAN DRIVE	FROM SR 1139 (ROCKY RIVER ROAD) (MP 0.00) TO END OF MAINTENANCE (MP 0.42)		2		NO	NO	0.42	20		5,027	5,027	4,880	0.10	0.25	32.0	0.02
TOTAL FOR MAP NO. 5										0.42			5,027	5,027	4,880	0.10	0.25	32.0	0.02
2022CPT.10.10.20132	Cabarrus	6	SR 1221 - JULIA COURT	FROM SR 1220 (MCMILLIAN DRIVE) (MP 0.00) TO CUL-DE-SAC (MP 0.11)		2		NO	NO	0.11	20	1,278	1,278		860	0.10	0.20	32.0	0.01
TOTAL FOR MAP NO. 6										0.11		1,278	1,278		860	0.10	0.20	32.0	0.01
2022CPT.10.10.20132	Cabarrus	7	SR 1612 - ARCHER ROAD	FROM SR 1613 (EARNHARDT LAKE ROAD) (MP 0.00) TO ROWAN COUNTY LINE (MP 2.26)		2		NO	NO	2.26	20		27,048	27,048	26,240	0.25	1.00	200.0	0.10
TOTAL FOR MAP NO. 7										2.26			27,048	27,048	26,240	0.25	1.00	200.0	0.10
2022CPT.10.10.20132	Cabarrus	8	SR 1614 - ALEXANDER ROAD	FROM ROWAN COUNTY LINE (MP 0.00) TO SR 1615 (PLUM ROAD) (MP 0.13)		2		NO	NO	0.13	20		1,556	1,556	1,510	0.10	0.20	32.0	0.01
TOTAL FOR MAP NO. 8										0.13			1,556	1,556	1,510	0.10	0.20	32.0	0.01
2022CPT.10.10.20132	Cabarrus	9	SR 1614 - ALEXANDER ROAD	FROM SR 1615 (PLUM ROAD) (MP 0.13) TO NARROWING OF PAVEMENT (MP 0.92)		2		NO	NO	0.79	20		9,455	9,455	9,175	0.20	0.25	64.0	0.02
TOTAL FOR MAP NO. 9										0.79			9,455	9,455	9,175	0.20	0.25	64.0	0.02
2022CPT.10.10.20132	Cabarrus	10	SR 1614 - ALEXANDER ROAD	FROM NARROWING OF PAVEMENT (MP 0.92) TO NC 3 (MP 2.10)		2		NO	NO	1.18	18	12,710	12,710		8,520	0.25	0.50	90.0	0.05
TOTAL FOR MAP NO. 10										1.18		12,710	12,710		8,520	0.25	0.50	90.0	0.05
2022CPT.10.10.20132	Cabarrus	11	SR 1841 - BAHAMA DRIVE	FROM SR 1628 (CHARLIE WALKER ROAD) (MP 0.00) TO SR 1841 (BAHAMA DRIVE) (MP 0.59)		2		NO	NO	0.59	18		6,355	6,355	6,165	0.10	0.25	32.0	0.03
TOTAL FOR MAP NO. 11										0.59			6,355	6,355	6,165	0.10	0.25	32.0	0.03
2022CPT.10.10.20132	Cabarrus	12	SR 1885 - WINCHESTER DRIVE	FROM SR 1614 (ALEXANDER ROAD) (MP 0.00) TO SR 1886 (LYNCHBURG DRIVE) (MP 0.46)		2		NO	NO	0.46	18	4,955	4,955		3,320	0.10	0.25	32.0	0.02
TOTAL FOR MAP NO. 12										0.46		4,955	4,955		3,320	0.10	0.25	32.0	0.02
2022CPT.10.10.20132	Cabarrus	13	SR 1921 - CAMDEN AVENUE	FROM SR 1663 (NORMANDY ROAD) (MP 0.00) TO MELROSE DRIVE (MP 0.21)		2		NO	NO	0.21	18		2,262	2,262	2,195	0.10	0.25	32.0	0.01
TOTAL FOR MAP NO. 13										0.21			2,262	2,262	2,195	0.10	0.25	32.0	0.01
2022CPT.10.10.20132	Cabarrus	14	SR 1924 - FRAZIER DRIVE	FROM SR 1613 (EARNHARDT LAKE ROAD) (MP 0.00) TO TURNPLOW DRIVE (MP 0.12)		2		NO	NO	0.12	19		1,365	1,365	1,325	0.10	0.20	32.0	0.01
TOTAL FOR MAP NO. 14										0.12			1,365	1,365	1,325	0.10	0.20	32.0	0.01
2022CPT.10.10.20132	Cabarrus	15	SR 2437 - BOSTIAN FISHER ROAD	FROM SR 2437 (ROCKWELL ROAD) (MP 0.00) TO END OF MAINTENANCE (MP 0.89)		2		NO	NO	0.89	20	10,653	10,653		7,140	0.25	0.25	92.0	0.04
TOTAL FOR MAP NO. 15										0.89		10,653	10,653		7,140	0.25	0.25	92.0	0.04
2022CPT.10.10.20132	Cabarrus	16	SR 2445 - EMANUEL ROAD	FROM SR 2416 (MT. OLIVE ROAD) (MP 0.00) TO ROWAN COUNTY LINE (MP 1.78)		2		NO	NO	1.78	18		19,176	19,176	18,605	0.25	1.00	32.0	0.08
TOTAL FOR MAP NO. 16										1.78			19,176	19,176	18,605	0.25	1.00	32.0	0.08
2022CPT.10.10.20132	Cabarrus	17	SR 2454 - BETHLEHEM CHURCH ROAD	FROM NC 49 (MP 0.00) TO SR 2452 (CULP ROAD) (MP 1.68)		2		NO	NO	1.68	20		20,106	20,106	19,505	0.25	0.75	128.0	0.07
TOTAL FOR MAP NO. 17										1.68			20,106	20,106	19,505	0.25	0.75	128.0	0.07
2022CPT.10.10.20132	Cabarrus	18	SR 2501 - TEAKWOOD DRIVE	FROM SR 2402 (SAPP ROAD) (MP 0.00) TO CUL-DE-SAC (MP 0.30)		2		NO	NO	0.3	20		3,901	3,901	3,785	0.10	0.20	32.0	0.01
TOTAL FOR MAP NO. 18										0.3			3,901	3,901	3,785	0.10	0.20	32.0	0.01
2022CPT.10.10.20132	Cabarrus	19	SR 2631 - FAIRBLUFF ROAD	FROM US 601 (MP 0.00) TO US 601 (MP 0.48)		2		NO	NO	0.48	20	5,745	5,745		3,850	0.10	0.25	32.0	0.02
TOTAL FOR MAP NO. 19										0.48		5,745	5,745		3,850	0.10	0.25	32.0	0.02
2022CPT.10.10.20132	Cabarrus	20	SR 2637 - MT. PLEASANT ROAD WEST	FROM SR 2411 (COLD SPRINGS ROAD EAST) (MP 0.00) TO NC 73 (W. FRANKLIN STREET) (MP 2.48)		2		NO	NO	2.48	20		29,681	29,681	28,795	0.50	1.00	160.0	0.10
TOTAL FOR MAP NO. 20										2.48			29,681	29,681	28,795	0.50	1.00	160.0	0.10
2022CPT.10.10.20132	Cabarrus	21	SR 2675 - PRESTON DRIVE	FROM SR 2606 (B STREET) (MP 0.00) TO END OF MAINTENANCE (MP 0.09)		2		NO	NO	0.09	18		924	924	900	0.10	0.20	32.0	0.01
TOTAL FOR MAP NO. 21										0.09			924	924	900	0.10	0.20	32.0	0.01
2022CPT.10.10.20132	Cabarrus	22	SR 2800 - RIVERSIDE VILLAGE DRIVE	FROM SR 1304 (ROBERTA ROAD) (MP 0.00) TO END OF MAINTENANCE (MP 0.25)		2		NO	NO	0.25	20		3,019	3,019	2,930	0.10	0.25	32.0	0.01
TOTAL FOR MAP NO. 22										0.25			3,019	3,019	2,930	0.10	0.25	32.0	0.01
TOTAL FOR PROJ NO. 2022CPT.10.10.20132										19.27			35,341	226,762	191,421	4.00	10.00	1,680	1
GRAND TOTAL										19.27			35,341	226,762	191,421	4.00	10.00	1,680	1

NOTE: The Contractor shall not park equipment or work outside of the Right Of Way in any Historic Area

Cabarrus County AST 2022



Cabarrus County AST 2022



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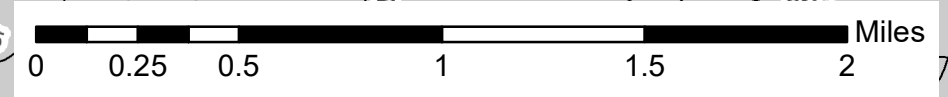
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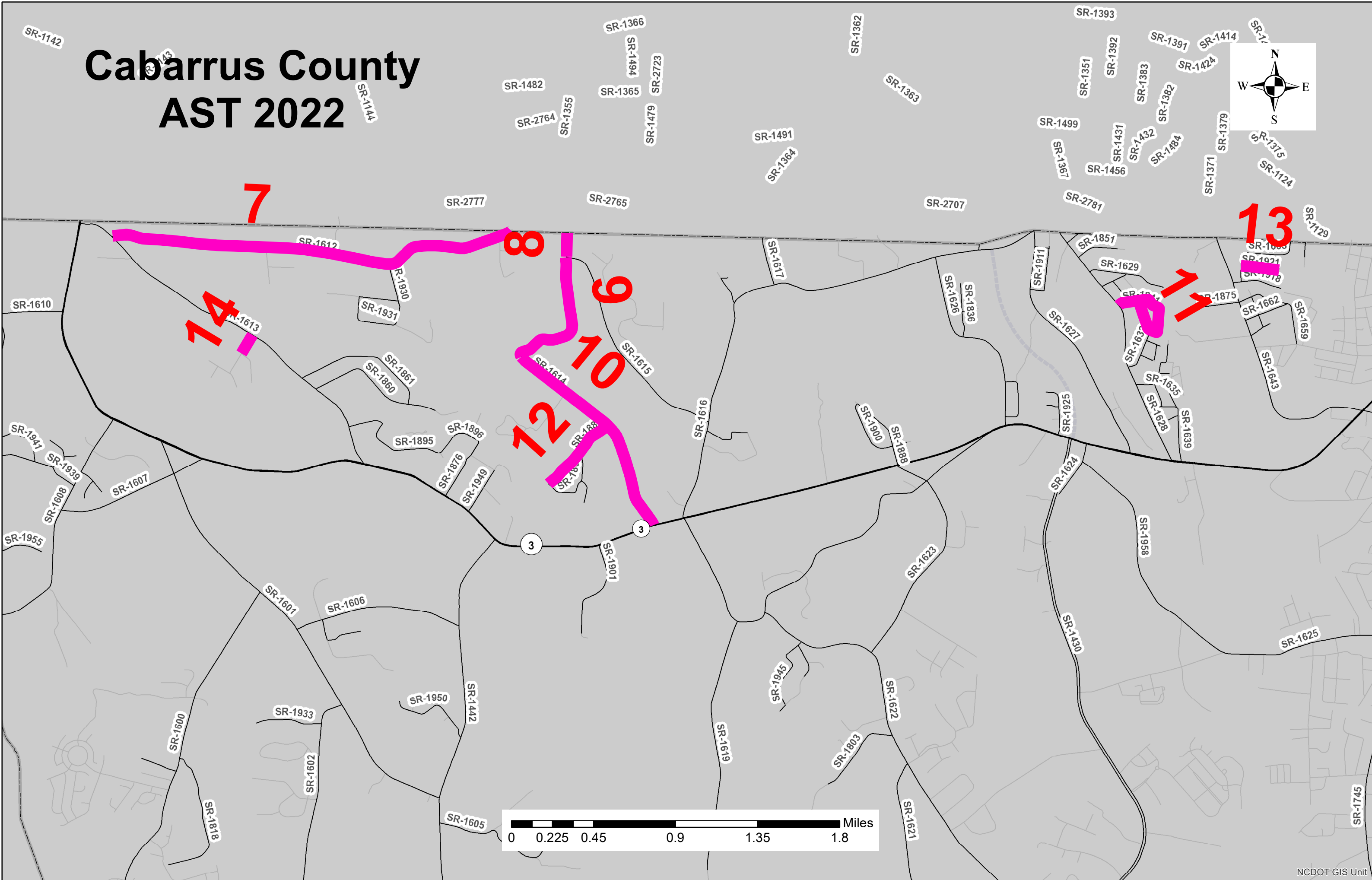
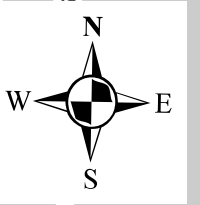
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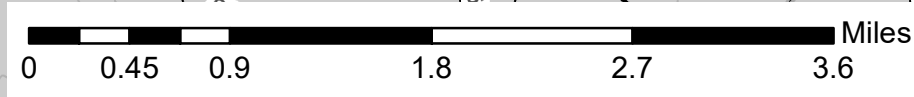
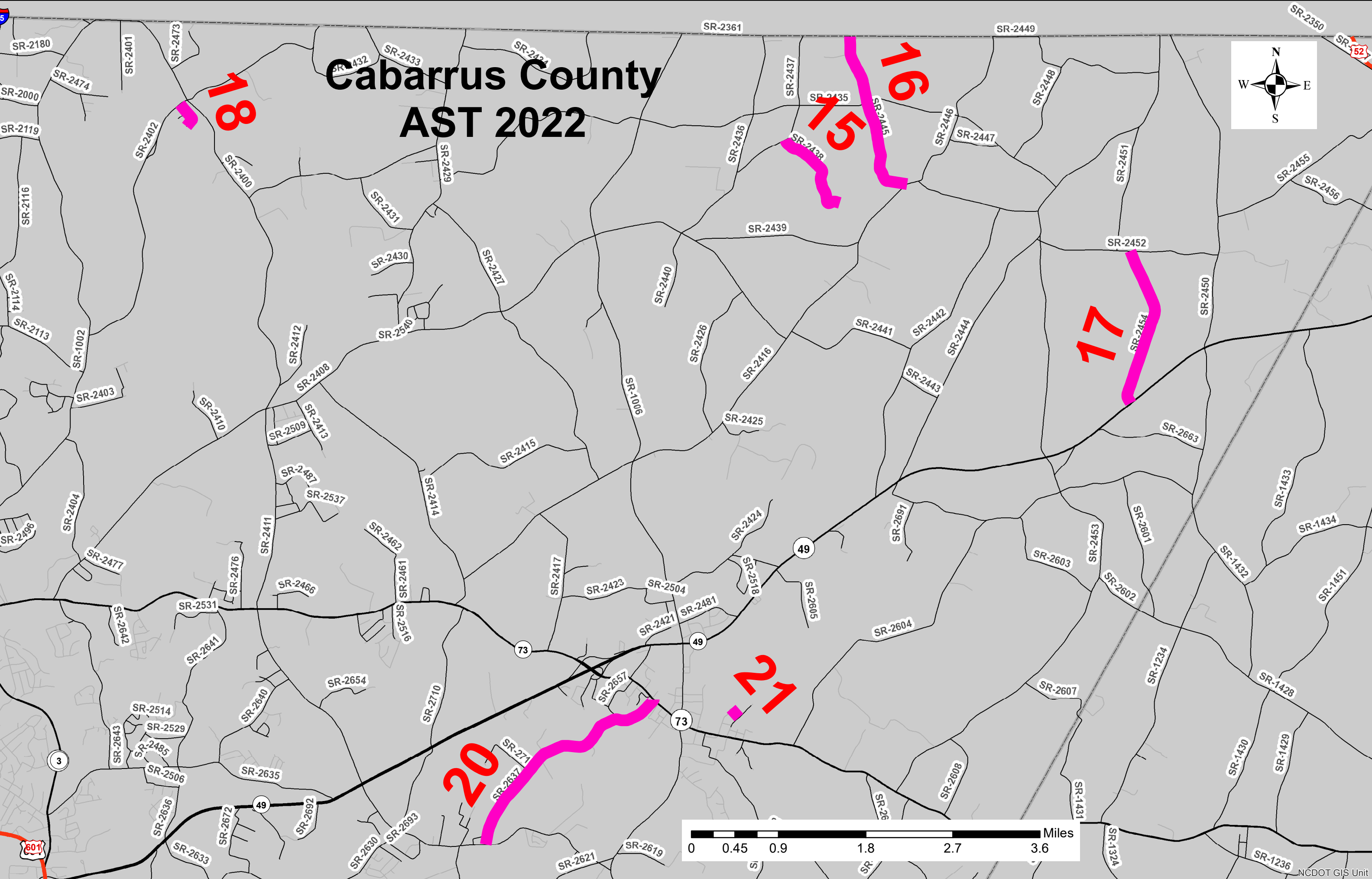
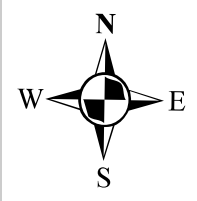
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Cabarrus County AST 2022



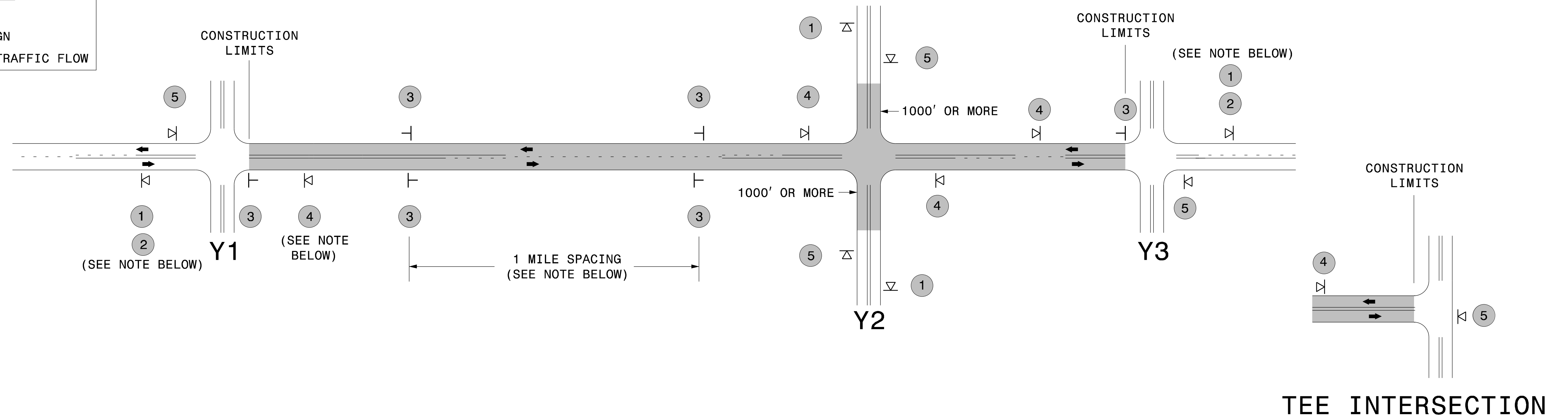
Cabarrus County AST 2022



SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

- ▷ PORTABLE SIGN
- └ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1		- PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>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.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	2		- 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.	
	3	 	- 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		- 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		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

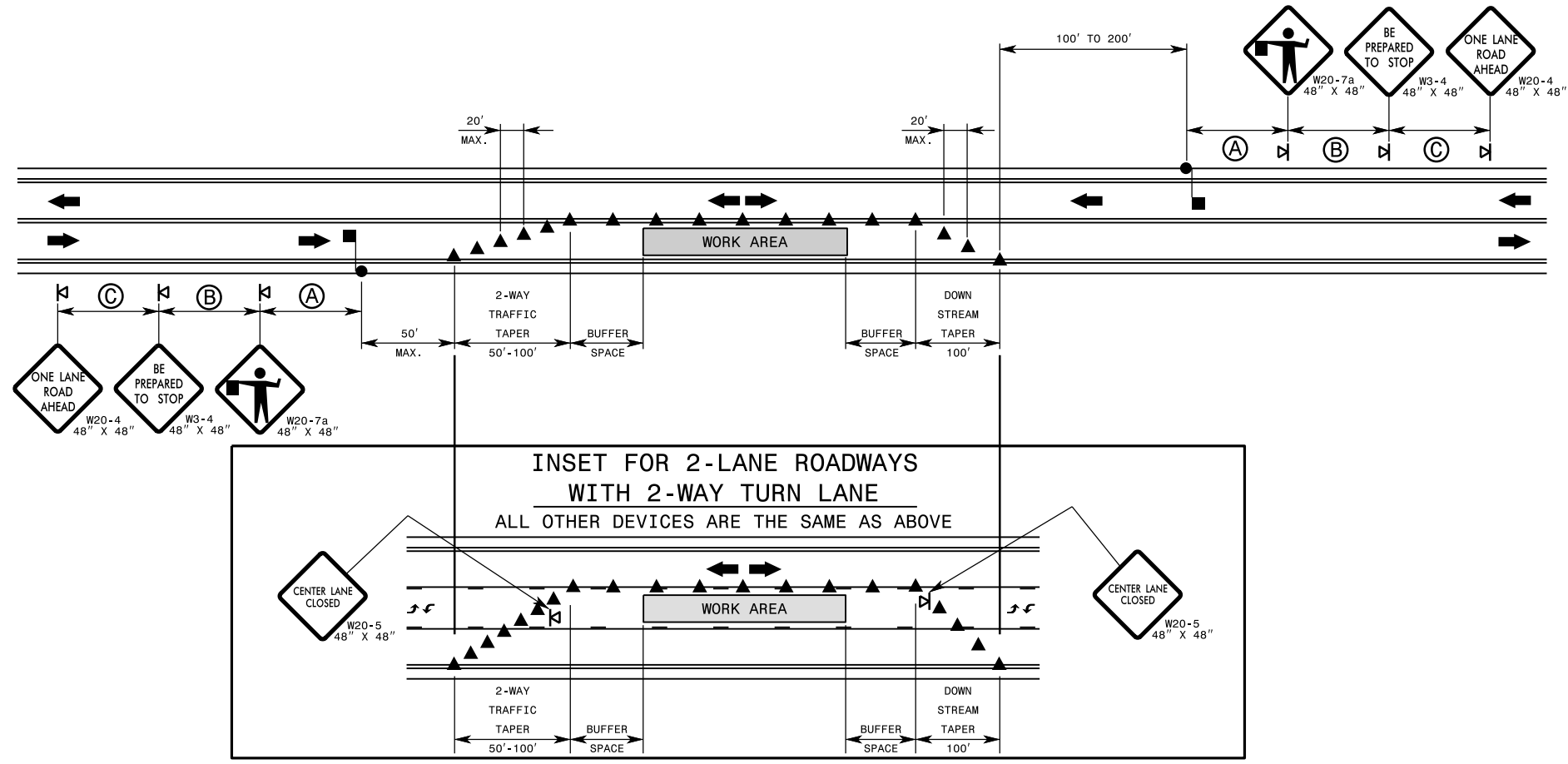
THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

MAPS LESS THAN 2 MILES

FOR 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



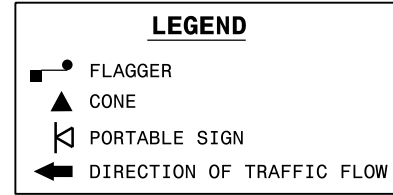
GENERAL NOTES FOR FLAGGING OPERATIONS

- 1- REFER TO RSD. 1101.11, SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
- 2- INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.
- 3- REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 4- PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 5- EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO RSD. 1101.11, SHEET 2).
- 6- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.
- 7- DRUMS OR SKINNY DRUMS MAY BE USED IN LIEU OF CONES. REFER TO RSD. 1180.01 FOR SKINNY DRUM REQUIREMENTS.
- 8- USE FLAGGERS TO CONTROL TRAFFIC AT INTERSECTIONS AFFECTED BY THE LANE CLOSURE. SUPPLEMENT FLAGGERS LOCATED AT INTERSECTIONS WITH FLAGGER AHEAD SIGNS (W20-7a) PLACED APPROXIMATELY 250 FT. IN ADVANCE OF THE FLAGGER. FOR SIGNALIZED INTERSECTIONS PLACE SIGNALS IN THE FLASH MODE AND USE LAW ENFORCEMENT.
- 9- REFER TO THE CURRENT MUTCD FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.
- 10- DO NOT EXCEED A 1 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

- 11- IF VEHICLE QUEUES WILL REACH WITHIN 15' OF EITHER SIDE OF ACTIVE RAILROAD TRACKS, PROVIDE A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER TO PREVENT VEHICLES FROM STOPPING WITHIN THE GRADE CROSSING. PROVIDE OFFICER OR FLAGGER EVEN IF AUTOMATIC WARNING MEASURES ALREADY EXIST.

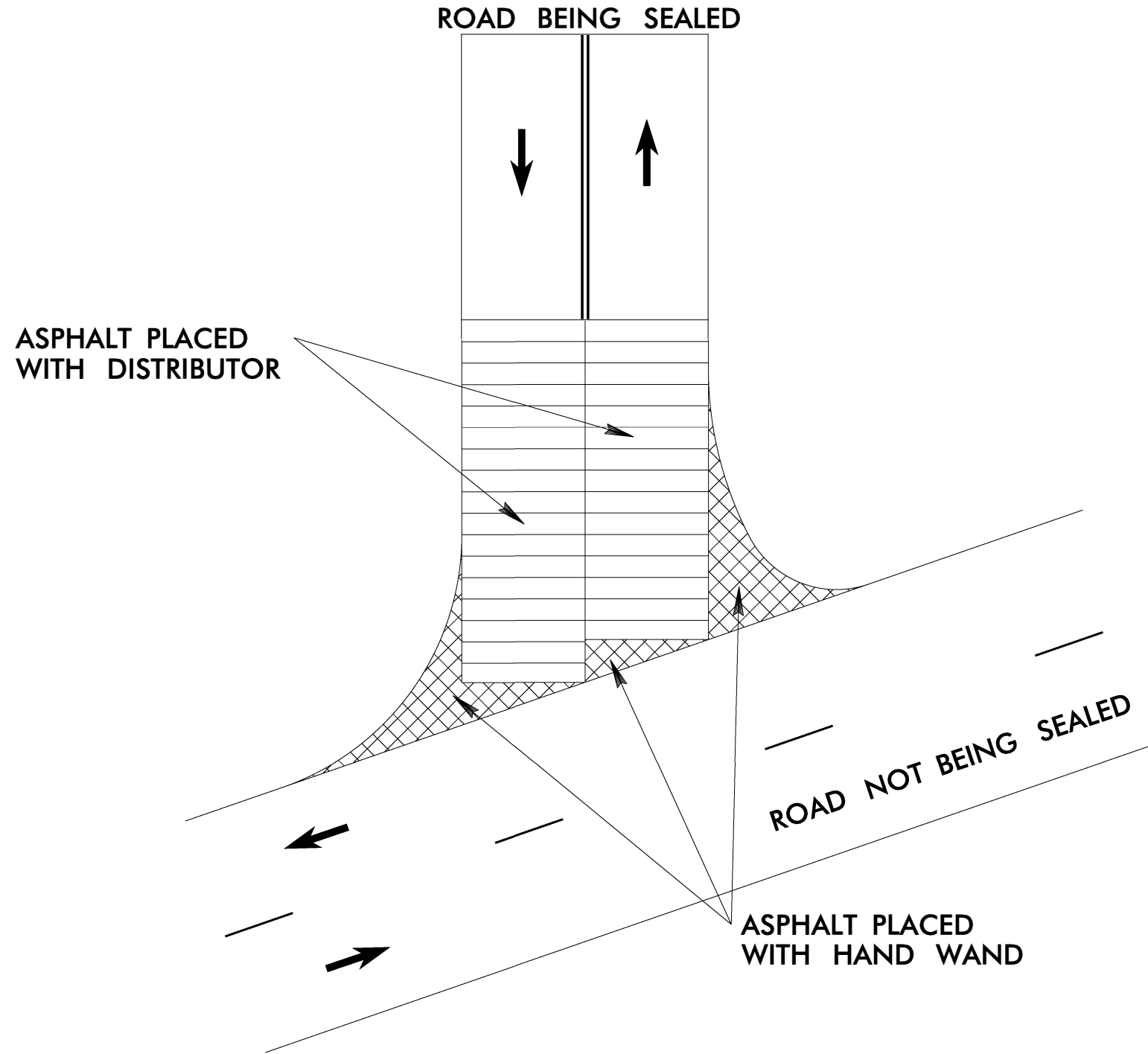
GENERAL NOTES FOR PILOT CAR OPERATIONS

- 1- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.
- 2- IF ROADWAY WIDTH IS LESS THAN 22 FEET (EOP TO EOP), CONES MAY NOT BE REQUIRED ALONG WORK AREA, AND AT THE DISCRETION OF THE ENGINEER, CONES MAY BE OMITTED ALONG THE WORK AREA IF USING A PILOT CAR.
- 3- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.
- 4- MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.
- 5- DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURE, MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- 6- ADVISE RESIDENTS AND BUSINESSES WITHIN THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE EGRESS AND INGRESS FROM DRIVEWAYS DURING FLAGGING AND PILOT CAR OPERATIONS.



INTERSECTION EMULSION PLACEMENT TWO LANE TWO WAY ROADWAY

PROJECT NO.	SHEET NO.
2022CPT.10.10.20132	8
F.A. PROJECT NO.	



LEGEND

- ➔ DIRECTION OF TRAFFIC FLOW
- SKIP LINES
- === DOUBLE YELLOW LINES

INTERSECTION EMULSION PLACEMENT

SCALE	N/A
DATE	9-2019
DWG. BY	TBL
DESIGN BY	TBL
APPROVED	TWB



REVISIONS	