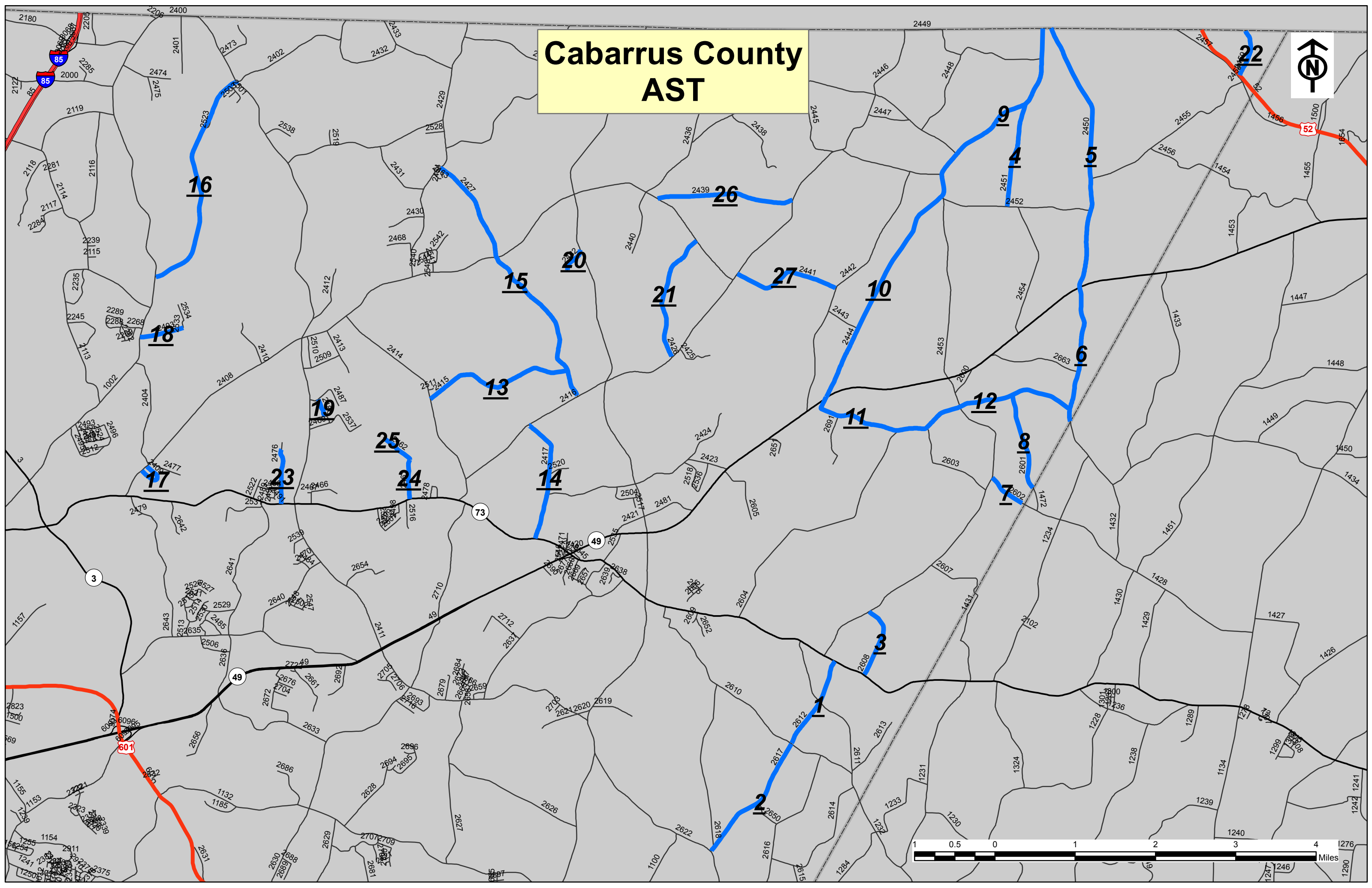


PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.10.60.20132	1	4

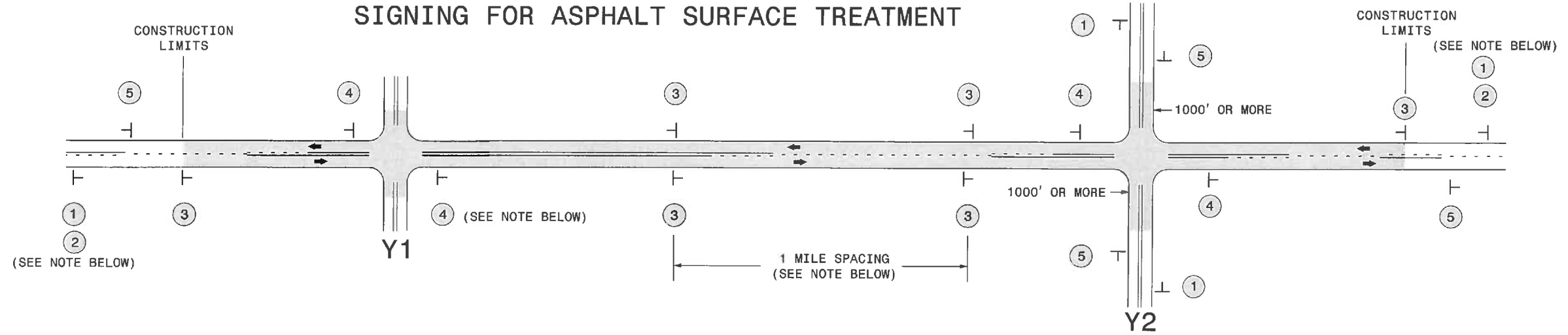
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	BEGIN MP	END MP	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	ASPHALT SURFACE TREATMENT, DOUBLE SEAL SY	ASPHALT SURFACE TREATMENT, TRIPLE SEAL SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL	BLOTTING SAND TON	WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS
2016CPT.10.60.20132	Cabarrus	1	HAHN SCOTT RD (SR 2612)	FROM NC 73 TO BOWMAN BARRIER RD	0.000	1.180	2	NO	NO	1.18	19	13,153		7,234		80	
TOTAL FOR MAP NO. 1										1.18		13,153		7,234		80	
2016CPT.10.60.20132	Cabarrus	2	HAHN SCOTT RD (SR 2617)	FROM BOWMAN BARRIER RD TO BARRIER STORE RD	0.000	1.700	2	NO	NO	1.7	19	18,949		10,422		80	
TOTAL FOR MAP NO. 2										1.7		18,949		10,422		80	
2016CPT.10.60.20132	Cabarrus	3	HAHN RD (SR 2608)	FROM LENTZ HARNESS RD TO NC 73	0.000	0.910	2	NO	NO	0.91	19	10,143		5,579		96	
TOTAL FOR MAP NO. 3										0.91		10,143		5,579		96	
2016CPT.10.60.20132	Cabarrus	4	SHELLY RD (SR 2451)	FROM CULP RD TO ST STEPHENS CH RD	0.000	1.300	2	NO	NO	1.3	17	12,965		7,131		80	
TOTAL FOR MAP NO. 4										1.3		12,965		7,131		80	
2016CPT.10.60.20132	Cabarrus	5	GOLD HILL RD (SR 2450)	FROM THE ROWAN COUNTY LINE TO NC 49	0.000	3.380	2	NO	NO	3.38	19	37,676		20,722		112	
TOTAL FOR MAP NO. 5										3.38		37,676		20,722		112	
2016CPT.10.60.20132	Cabarrus	6	GOLD HILL RD (SR 2450)	FROM NC 49 TO THE STANLY COUNTY LINE	3.380	5.080	2	NO	NO	1.7	20	19,947		10,971		80	
TOTAL FOR MAP NO. 6										1.7		19,947		10,971		80	
2016CPT.10.60.20132	Cabarrus	7	BEAR CREEK CH RD (SR 2602)	FROM LENTZ HARNESS SHOP RD TO THE STANLY COUNTY LINE	0.000	0.500	2	NO	NO	0.5	20	5,867		3,227		96	
TOTAL FOR MAP NO. 7										0.5		5,867		3,227		96	
2016CPT.10.60.20132		8	BETHEL CH RD (SR 2601)	FROM DUTCH RD TO THE STANLY COUNTY LINE	0.000	1.210	2	NO	NO	1.21	18	12,778		7,028		80	
TOTAL FOR MAP NO. 8										1.21		12,778		7,028		80	
2016CPT.10.60.20132	Cabarrus	9	ST STEPHENS CH RD (SR 2444)	FROM THE ROWAN COUNTY LINE TO LENTZ HARNESS SHOP RD	0.000	2.620	2	NO	NO	2.62	20	30,741		16,908		182	
TOTAL FOR MAP NO. 9										2.62		30,741		16,908		182	
2016CPT.10.60.20132		10	ST STEPHENS CH RD (SR 2444)	FROM LENTZ HARNESS SHOP RD TO NC 49	2.620	5.600	2	NO	NO	2.98	20		34,965	28,322		182	
TOTAL FOR MAP NO. 10										2.98			34,965	28,322		182	
2016CPT.10.60.20132	Cabarrus	11	CRUISE RD (SR 2444)	FROM NC 49 TO DUTCH RD	5.600	6.800	2	NO	NO	1.2	18	12,672		6,970		80	
TOTAL FOR MAP NO. 11										1.2		12,672		6,970		80	
2016CPT.10.60.20132	Cabarrus	12	DUTCH RD (SR 2444)	FROM CRUISE RD TO GOLD HILL RD	6.800	9.100	2	NO	NO	2.3	18	24,288		13,358		112	
TOTAL FOR MAP NO. 12										2.3		24,288		13,358		112	
2016CPT.10.60.20132	Cabarrus	13	CRESS RD (SR 2415)	FROM ST JOHNS RD TO CLINE SCHOOL RD	0.000	1.930	2	NO	NO	1.93	17	19,249		10,587		80	
TOTAL FOR MAP NO. 13										1.93		19,249		10,587		80	
2016CPT.10.60.20132	Cabarrus	14	MOOSE RD (SR 2417)	FROM NC 73 TO MT OLIVE RD	0.000	1.560	2	NO	NO	1.56	20	18,304		10,067		112	
TOTAL FOR MAP NO. 14										1.56		18,304		10,067		112	
2016CPT.10.60.20132	Cabarrus	15	CLINE SCHOOL RD (SR 2427)	FROM MT OLIVE RD TO RIMMER RD	0.000	3.480	2	NO	NO	3.48	17	34,707		19,089		214	
TOTAL FOR MAP NO. 15										3.48		34,707		19,089		214	
2016CPT.10.60.20132	Cabarrus	16	SAPP RD (SR 2402)	FROM OLD SALISBURY CONCORD RD TO IRISH POTATO RD	1.730	4.630	2	NO	NO	2.9	18	30,624		16,843		214	
TOTAL FOR MAP NO. 16										2.9		30,624		16,843		214	
2016CPT.10.60.20132	Cabarrus	17	PATIENCE RD (SR 2409)	FROM GOLD HILL RD TO GOLD HILL RD	0.000	0.450	2	NO	NO	0.45	17	4,488		2,468		112	
TOTAL FOR MAP NO. 17										0.45		4,488		2,468		112	
2016CPT.10.60.20132	Cabarrus	18	KISER RD (SR 2403)	FROM OLD SALISBURY CONCORD RD TO END OF MAINTENANCE	0.000	0.580	2	NO	NO	0.58	18	6,125		3,369		56	
TOTAL FOR MAP NO. 18										0.58		6,125		3,369		56	
2016CPT.10.60.20132	Cabarrus	19	EMERALD DR (SR 2486)	FROM MILLS CIRCLE TO IRISH WOODS DR	0.000	0.230	2	NO	NO	0.23	18	2,429		1,336		56	
TOTAL FOR MAP NO. 19										0.23		2,429		1,336		56	
2016CPT.10.60.20132	Cabarrus	20	DR FLOYD RD (SR 2482)	FROM MT PLEASANT RD TO END OF STATE MAINTENANCE	0.000	0.320	2	NO	NO	0.32	18	3,379		1,859		56	
TOTAL FOR MAP NO. 20										0.32		3,379		1,859		56	
2016CPT.10.60.20132	Cabarrus	21	NELLIE BEAVER RD (SR 2426)	FROM MT OLIVE RD TO GOLD HILL RD	0.000	1.630	2	NO	NO	1.63	18	17,213		9,467		112	
TOTAL FOR MAP NO. 21										1.63		17,213		9,467		112	
2016CPT.10.60.20132	Cabarrus	22	WAGONER RD (SR 2459)	FROM US 52 TO THE ROWAN COUNTY LINE	0.000	0.600	2	NO	NO	0.6	19	6,688		3,678		112	
TOTAL FOR MAP NO. 22										0.6		6,688		3,678		112	
2016CPT.10.60.20132	Cabarrus	23	KIRKWOOD DR (SR 2476)	FROM NC 73 TO THE END OF STATE MAINTENANCE	0.000	0.690	2	NO	NO	0.69	20	8,096		4,453		56	
TOTAL FOR MAP NO. 23										0.69		8,096		4,453		56	
2016CPT.10.60.20132	Cabarrus	24	WINEGARD RD (SR 2461)	FROM NC 73 TO SR 2462	0.000	0.490	2	NO	NO	0.49	19	5,462		3,004		56	
TOTAL FOR MAP NO. 24										0.49		5,462		3,004		56	
2016CPT.10.60.20132	Cabarrus	25	WINEGARD RD (SR 2462)	FROM SR 2461 TO THE DEAD END	0.000	0.420	2	NO	NO	0.42	19	4,682		2,575		32	
TOTAL FOR MAP NO. 25										0.42		4,682		2,575		32	
2016CPT.10.60.20132	Cabarrus	26	VINEYARD RD (SR 2439)	FROM GOLD HILL RD TO MT OLIVE RD	0.000	1.710	2	NO	NO	1.71	19	19,061		10,483		112	
TOTAL FOR MAP NO. 26										1.71		19,061		10,483		112	
2016CPT.10.60.20132	Cabarrus	27	FINK RD (SR 2441)	FROM MT OLIVE RD TO LITTLE BUFFALO CREEK RD	0.000	1.380	2	NO	NO	1.38	18	14,573		8,015		112	
TOTAL FOR MAP NO. 27										1.38		14,573		8,015		112	
TOTAL FOR PROJ NO. 2016CPT.10.60.20132										39.35		394,259	34,965	245,165	20.00	2,752	1
GRAND TOTAL										39.35		394,259	34,965	245,165	20.00	2,752	1

Cabarrus County AST



SIGNING FOR ASPHALT SURFACE TREATMENT



LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 <small>W20-1 48" X 48"</small>	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#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)</p>
	2	 <small>W7-30P 24" X 18"</small>	
	3	 <small>W8-7 48" X 48"</small> <small>SP 48" X 48"</small>	<p>ALTERNATE THE FOLLOWING TWO SIGNS:</p> <p>STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</p> <p>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.</p>
	4	 <small>SP 13106 48" X 48"</small>	<p>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.</p>
	5	 <small>G20-2 A 48" X 24"</small>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>

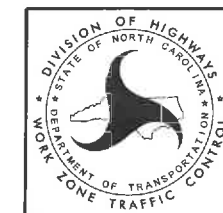
NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

- 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

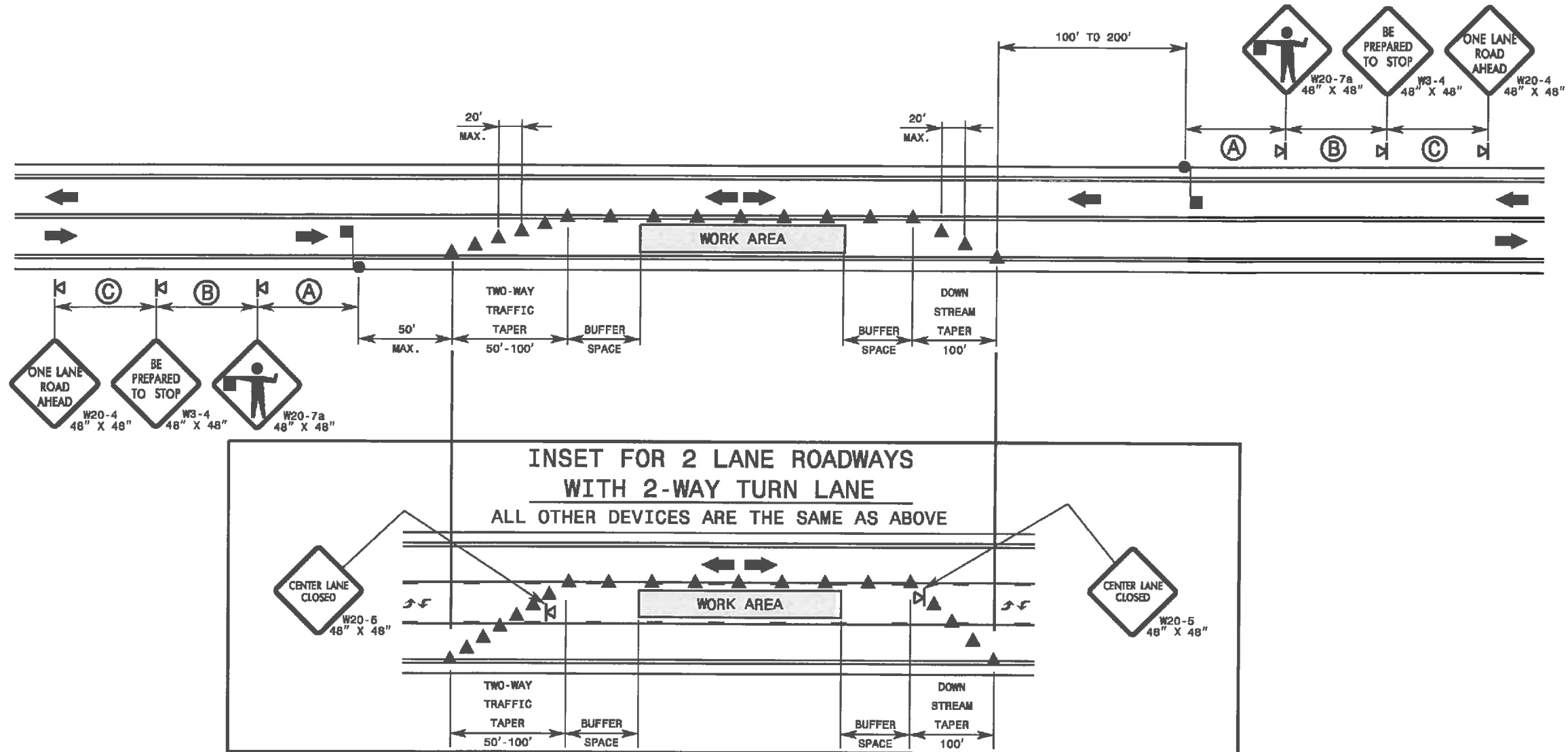
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.



ADVANCE WARNING SIGNS
FOR
ASPHALT SURFACE TREATMENTS
2 LANE ROADWAYS



GENERAL NOTES FOR FLAGGER OPERATIONS

- 1- REFER TO STD. 1101.11 SHEET 4 FOR 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 STD. 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 ROADWAY STANDARD DRAWING 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 RECOMMEND THE USE OF LAW ENFORCEMENT.
- 9- REFER TO 2009 MUTCD, CHAPTER 6, 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.

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.

LEGEND

- FLAGGER
- CONE
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW