

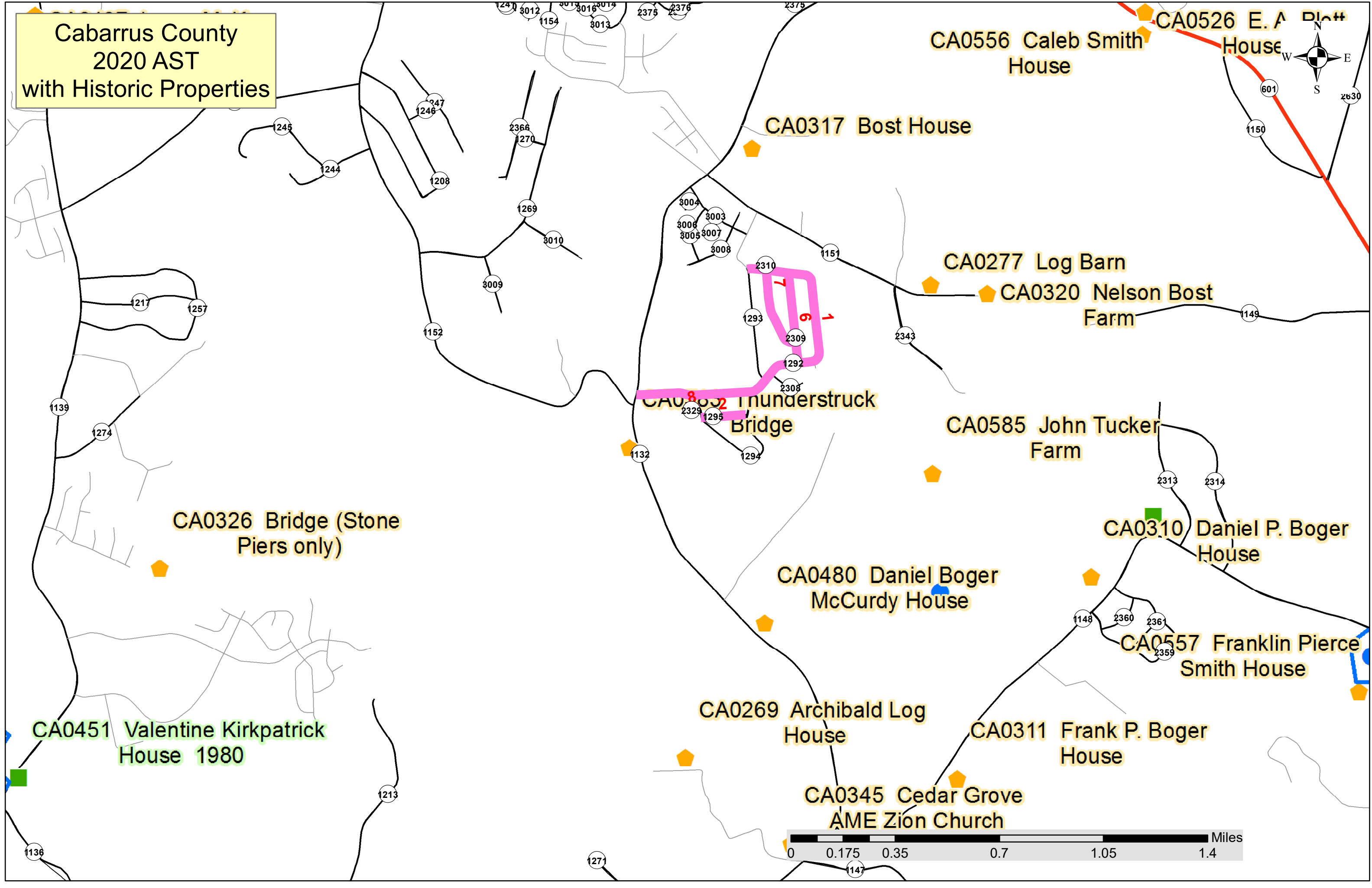
PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT.10.06.20132	1	7

## SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	BEGIN MP	END MP	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1803500000-E	1820000000-E	1838000000-E	2143000000-E	4413000000-E	4457000000-N		
												ASPHALT SURFACE TREATMENT, DOUBLE SEAL	ASPHALT SURFACE TREATMENT, FOG SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	BLOTTING SAND	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL		
												MI	FT	SY	SY	GAL	TON	SF	LS
2020CPT.10.06.20132	Cabarrus	1	(SR 1292) BOSTWOOD LANE	FROM (SR 1132) FLOWES STORE RD TO (SR 1293) MEETING ST	0.00	1.15	2	NO	NO	1.15	22	14,779	14,779	8,128		40			
<b>TOTAL FOR MAP NO. 1</b>												<b>1.15</b>		<b>14,779</b>	<b>14,779</b>	<b>8,128</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	2	(SR 1295) WATSON DR	FROM (SR 1294) CLARA CIRCLE TO (SR 1294) CLARA CIRCLE	0.00	0.15	2	NO	NO	0.15	19	1,672	1,672	920		40			
<b>TOTAL FOR MAP NO. 2</b>												<b>0.15</b>		<b>1,672</b>	<b>1,672</b>	<b>920</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	3	(SR 1925) RANDOLPH ROAD	FROM NC 3 TO DEAD END	0.00	0.29	2	NO	NO	0.29	20	3,344	3,344	1,839		40			
<b>TOTAL FOR MAP NO. 3</b>												<b>0.29</b>		<b>3,344</b>	<b>3,344</b>	<b>1,839</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	4	(SR 1954) GRANITE HILL DRIVE	FROM (SR 1608) DAVIDSON DR TO (SR 1955) HIDDEN FOREST LN	0.00	0.37	2	NO	NO	0.37	22	4,775	4,775	2,627		40			
<b>TOTAL FOR MAP NO. 4</b>												<b>0.37</b>		<b>4,775</b>	<b>4,775</b>	<b>2,627</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	5	(SR 2206) GOLDFISH RD	FROM (SR 1002) OLD-SALS RD TO ROWAN COUNTY LN	0.00	0.09	2	NO	NO	0.09	20	997	997	549		40			
<b>TOTAL FOR MAP NO. 5</b>												<b>0.09</b>		<b>997</b>	<b>997</b>	<b>549</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	6	(SR 2309) ASHLEY DR	FROM (SR 1292) BOSTWOOD LN TO (SR 1292) BOSTWOOD LN	0.00	0.30	2	NO	NO	0.3	20	3,520	3,520	1,936		40			
<b>TOTAL FOR MAP NO. 6</b>												<b>0.3</b>		<b>3,520</b>	<b>3,520</b>	<b>1,936</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	7	(SR 2310) VANDERHORST DRIVE	FROM (SR 2309) ASHLEY DR TO (SR 1292) BOSTWOOD LN	0.00	0.28	2	NO	NO	0.28	20	3,285	3,285	1,807		40			
<b>TOTAL FOR MAP NO. 7</b>												<b>0.28</b>		<b>3,285</b>	<b>3,285</b>	<b>1,807</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	8	(SR 2329) MARILYN CT	(SR 1294) CLARA CIRCLE TO CUL-DE-SAC	0.00	0.05	2	NO	NO	0.05	19	557	557	307		40			
<b>TOTAL FOR MAP NO. 8</b>												<b>0.05</b>		<b>557</b>	<b>557</b>	<b>307</b>		<b>40</b>	
2020CPT.10.06.20132	Cabarrus	9	(SR 2423) FISHER ROAD	FROM NC 49 TO (SR 1006) MT. PLEASANT RD	0.00	1.26	2	NO	NO	1.26	20	14,784		8,131		40			
<b>TOTAL FOR MAP NO. 9</b>												<b>1.26</b>		<b>14,784</b>		<b>8,131</b>		<b>40</b>	
<b>FOR PROJ NO. 2020CPT.10.06.20132</b>												<b>3.94</b>		<b>47,713</b>	<b>32,929</b>	<b>26,244</b>		<b>360</b>	
<b>GRAND TOTAL</b>												<b>3.94</b>		<b>47,713</b>	<b>32,929</b>	<b>26,244</b>	<b>10.00</b>	<b>360</b>	<b>1</b>

Note: The Contractor shall not park equipment or work outside of the existing right of way in Historic Areas.

Cabarrus County  
2020 AST  
with Historic Properties



CA0556 Caleb Smith House

CA0526 E. A. House

CA0317 Bost House

CA0277 Log Barn

CA0320 Nelson Bost Farm

CA0832 Thunderstruck Bridge

CA0585 John Tucker Farm

CA0326 Bridge (Stone Piers only)

CA0310 Daniel P. Boger House

CA0480 Daniel Boger McCurdy House

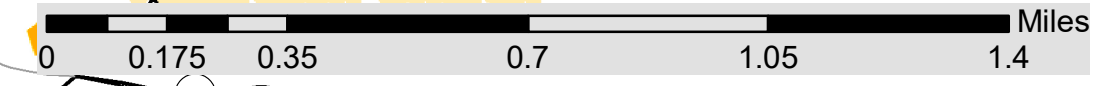
CA0557 Franklin Pierce Smith House

CA0451 Valentine Kirkpatrick House 1980

CA0269 Archibald Log House

CA0311 Frank P. Boger House

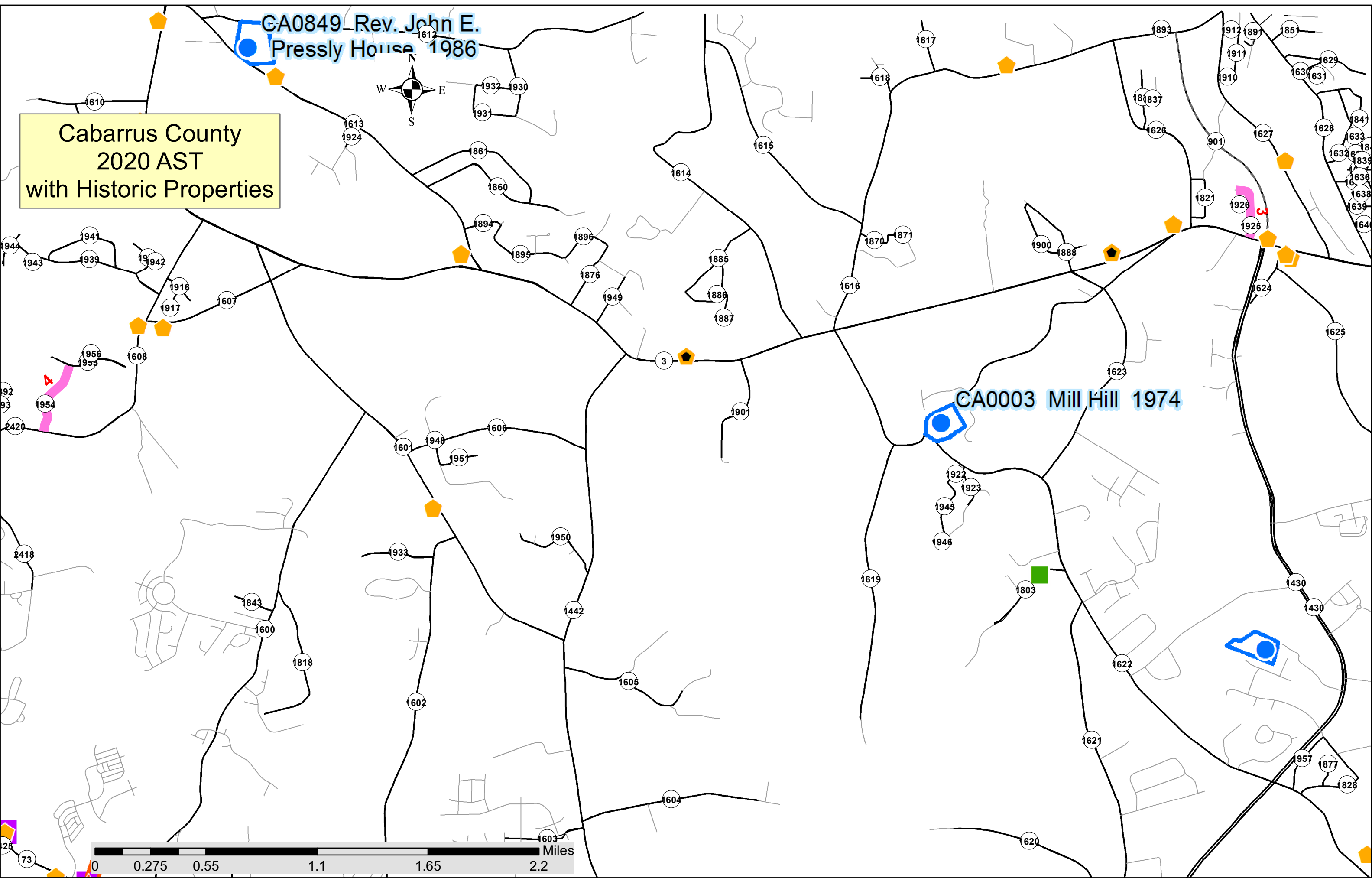
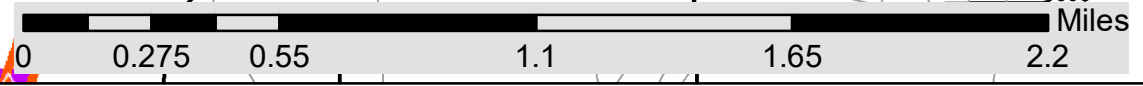
CA0345 Cedar Grove AME Zion Church



Cabarrus County  
2020 AST  
with Historic Properties

GA0849 Rev. John E.  
Pressly House 1986

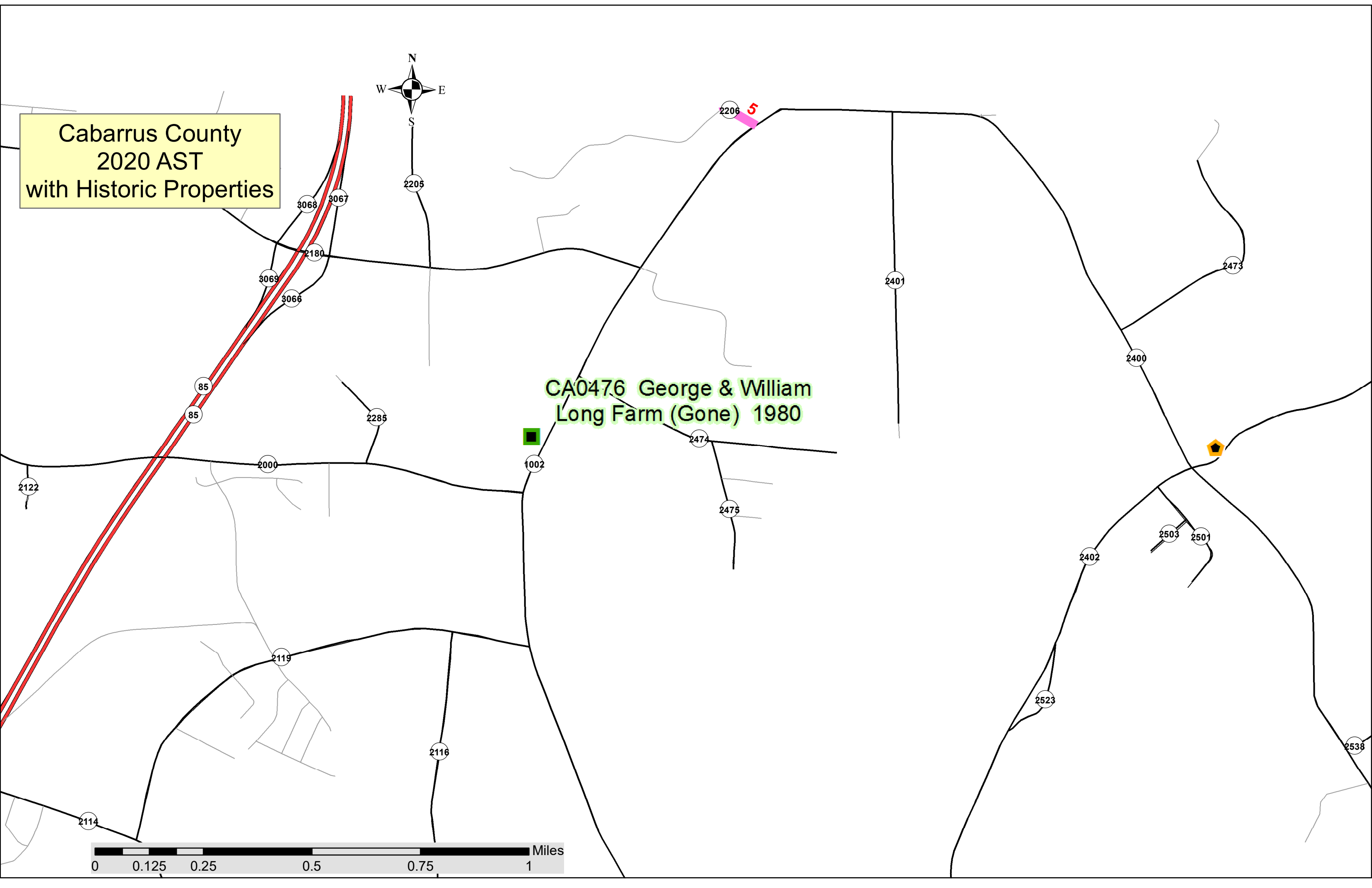
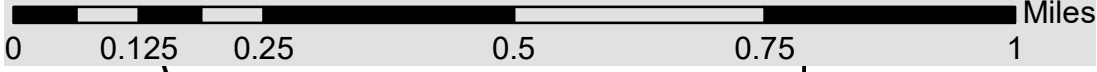
CA0003 Mill Hill 1974



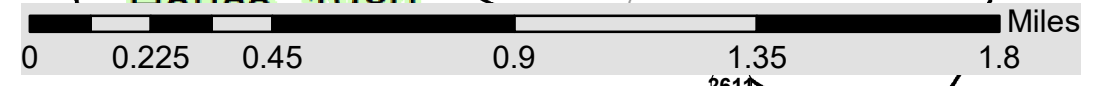
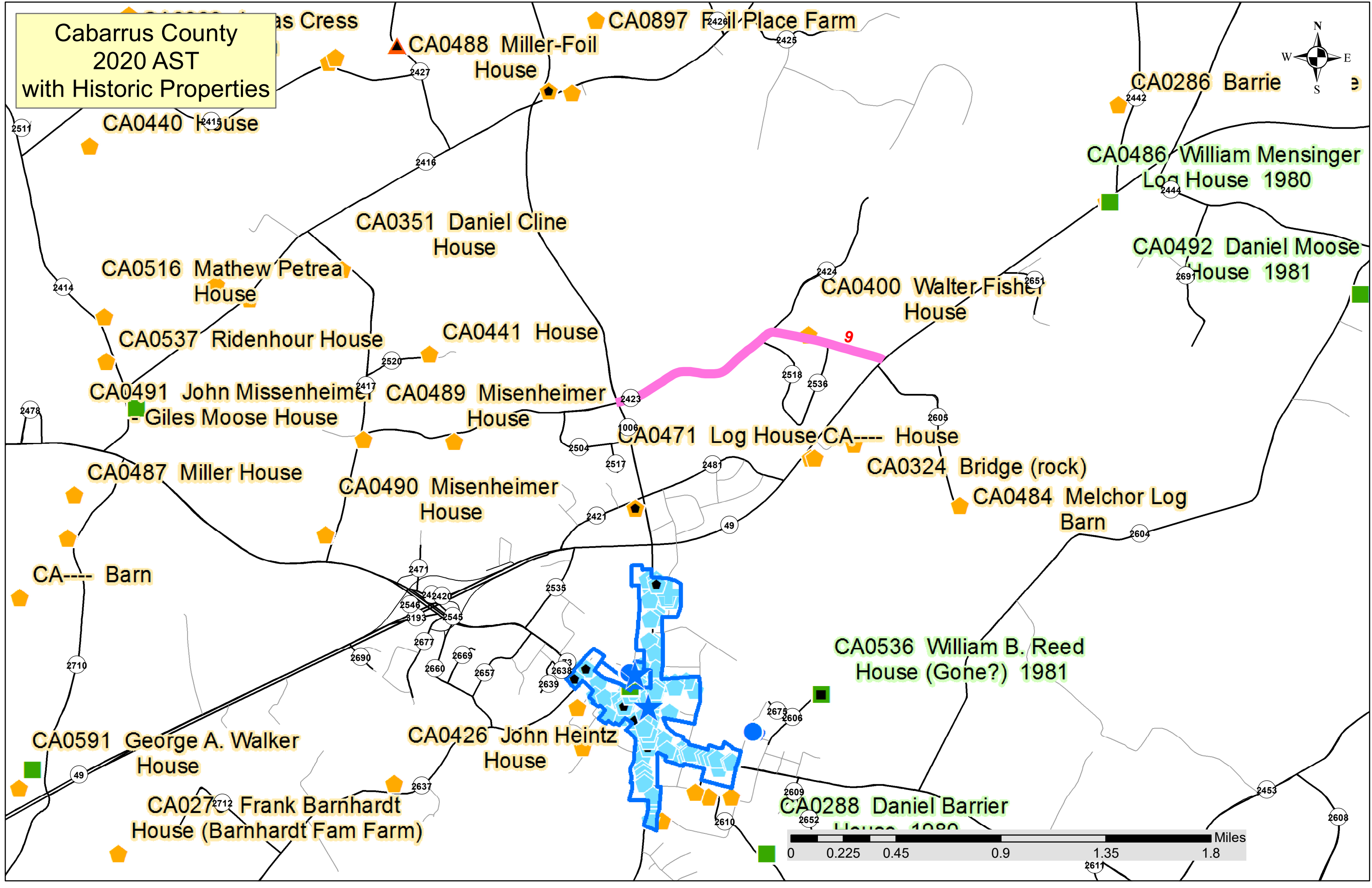
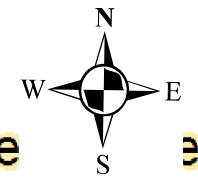
Cabarrus County  
2020 AST  
with Historic Properties



CA0476 George & William  
Long Farm (Gone) 1980



Cabarrus County  
2020 AST  
with Historic Properties

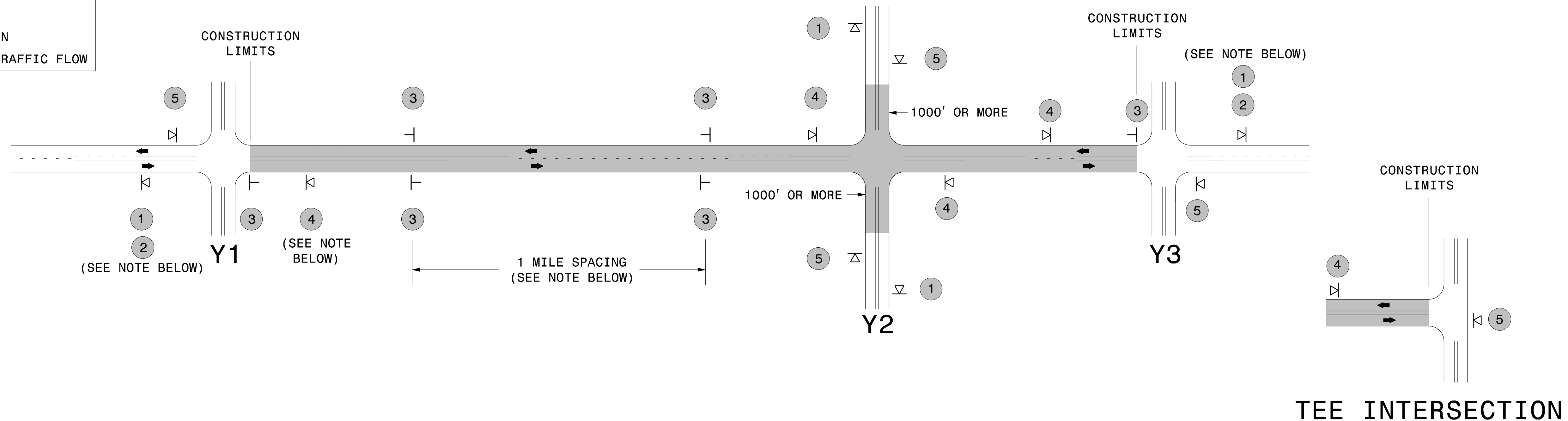




## SIGNING FOR ASPHALT SURFACE TREATMENT

**LEGEND**

⏏ PORTABLE SIGN  
 ┆ STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW



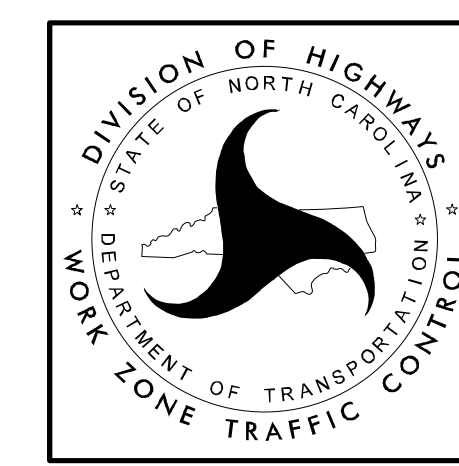
### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

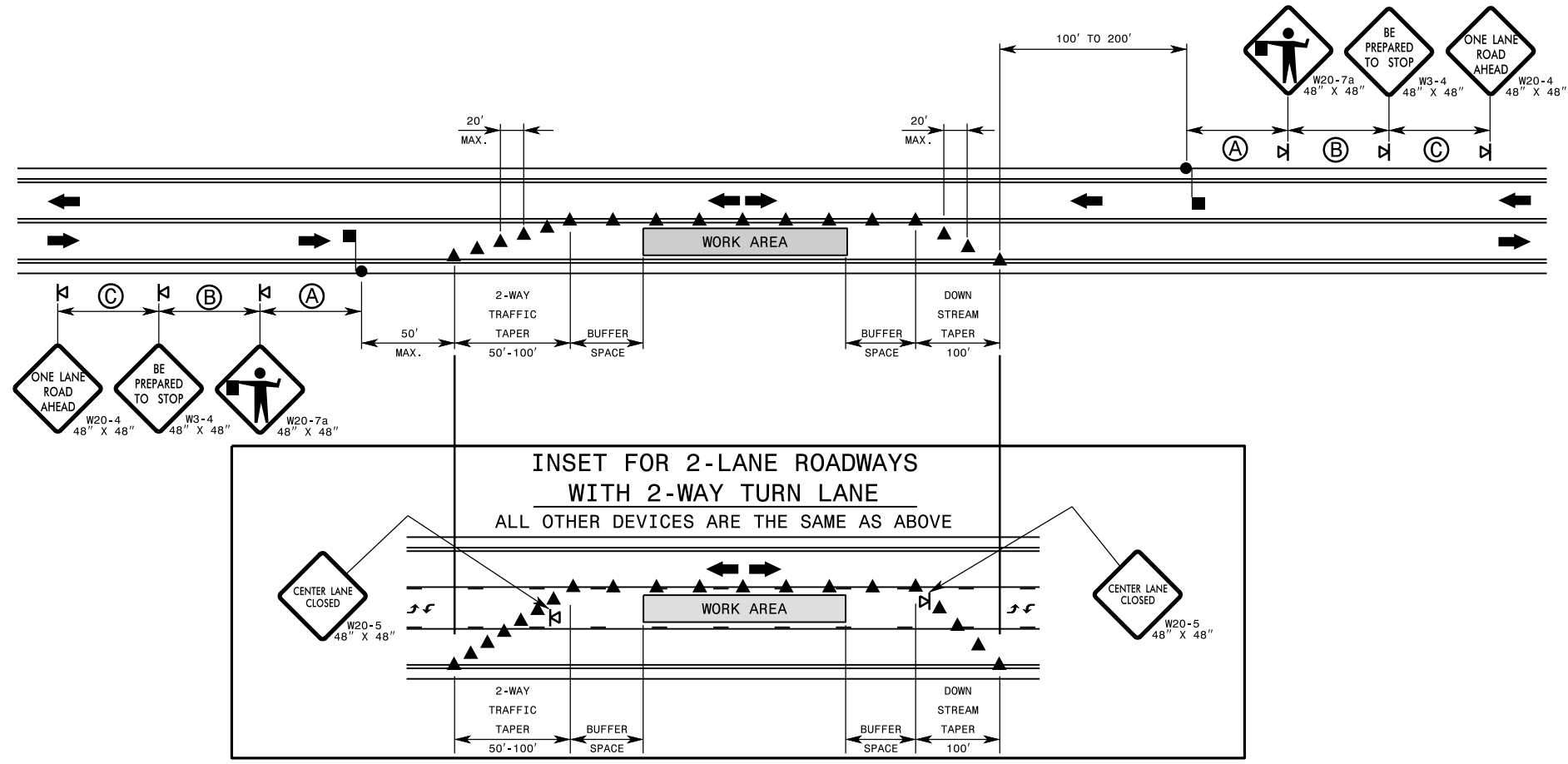
<b>SIGNING NOTES AND PLACEMENT PER DIRECTION</b>	1	 	<ul style="list-style-type: none"> <li>- PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</li> <li>- SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.</li> </ul>	<p><b>STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <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; align-items: center;"> <div style="text-align: center;">   <small>W20-1 48" X 48"</small>            PLACED 500' IN ADVANCE OF FLAGGER.         </div> <div style="text-align: center;">   <small>W20-7 A 48" X 48"</small>            PLACED 250' IN ADVANCE OF FLAGGER.         </div> </div>
	3	 	<ul style="list-style-type: none"> <li>- ALTERNATE THE FOLLOWING TWO SIGNS:</li> <li>- STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</li> <li>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER.</li> <li>- AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</li> </ul>	
	4		<ul style="list-style-type: none"> <li>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</li> <li>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</li> <li>- 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.</li> <li>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</li> </ul>	
	5		<ul style="list-style-type: none"> <li>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</li> </ul>	
	<p>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.</p>			

**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.

