

**2024 GRANVILLE COUNTY  
RESURFACING**

5/14/23

SECTION 158



Person County  
Granville County

158

158

158

1

2

3

1138

1148

1138

1149

1150

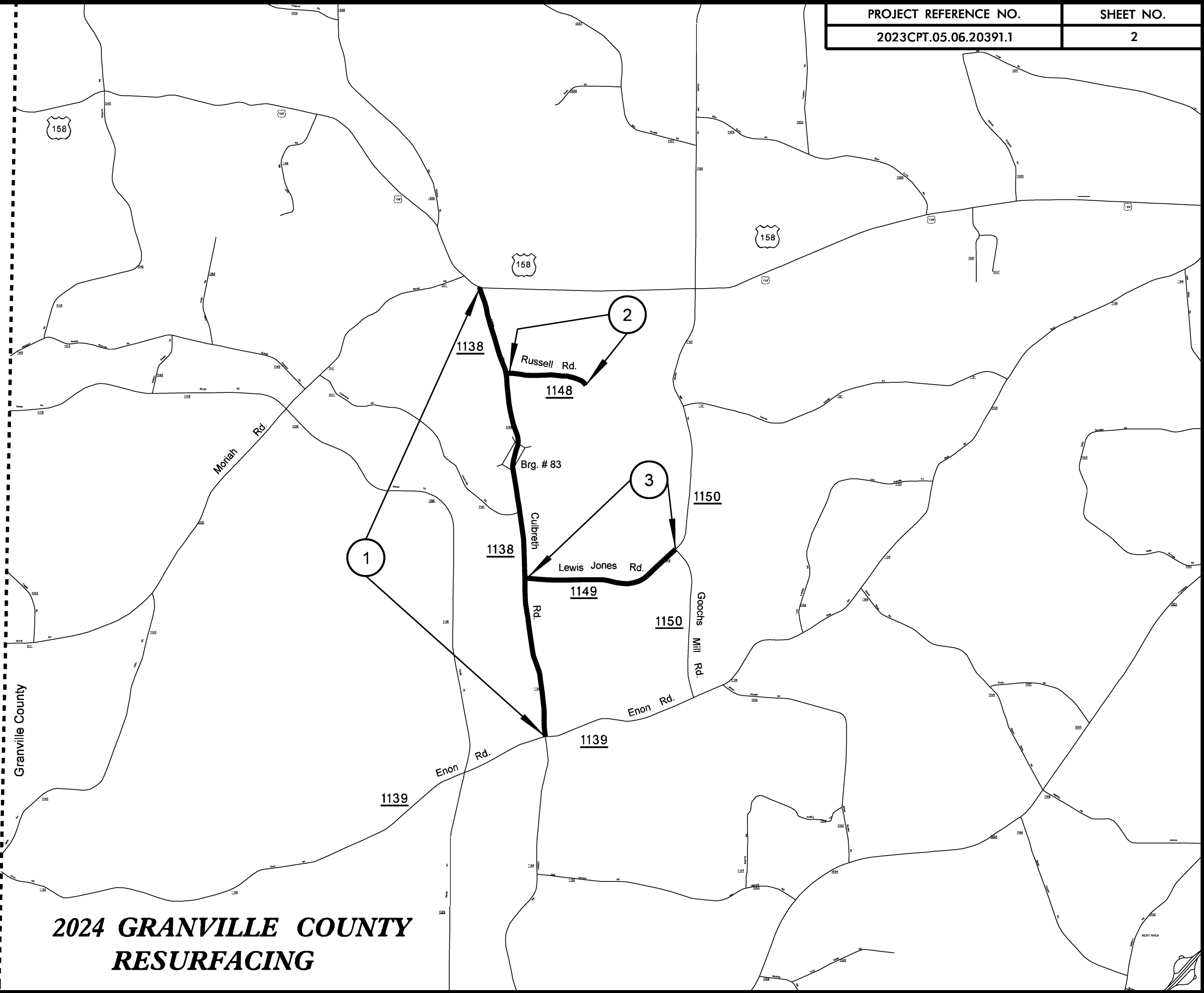
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1139

# 2024 GRANVILLE COUNTY RESURFACING

5/14/23



# PAVEMENT SCHEDULE

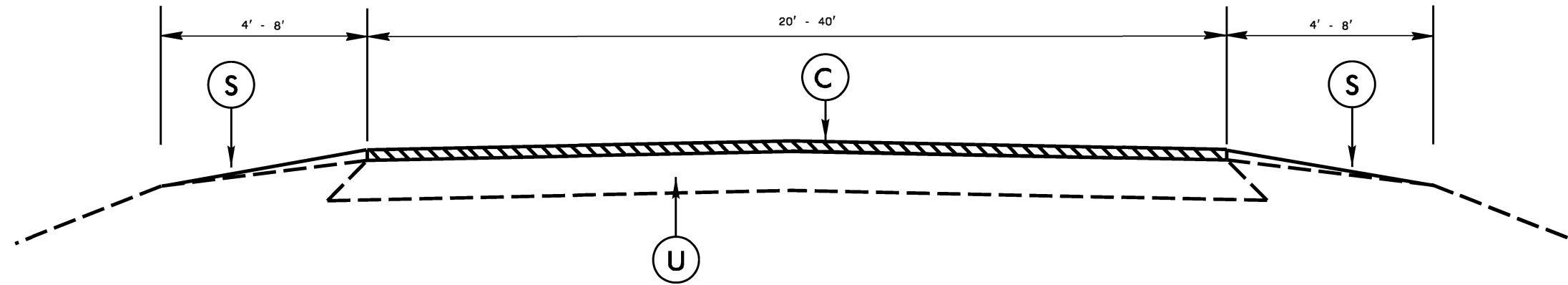
PROJECT REFERENCE NO.

SHEET NO.

2023CPT.05.06.20391.1

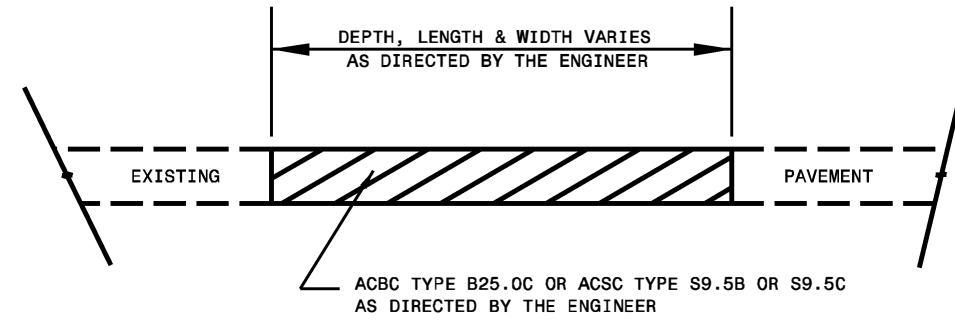
3

C	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
S	SHOULDER GRADING ASB REQUIRED
U	EXISTING PAVEMENT

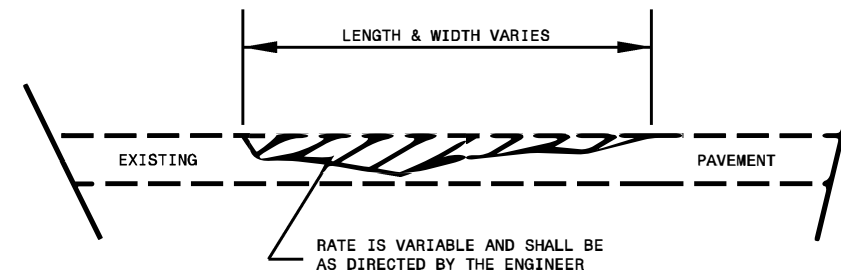


TYPICAL SECTION NO. 1

*\* MILL 1 1/2" +/- ON MAP 1, BRIDGE #83 AS DIRECTED BY THE ENGINEER TO RESURFACE AND NOT ADD ANY ADDITIONAL WEIGHT ON THE BRIDGE.*



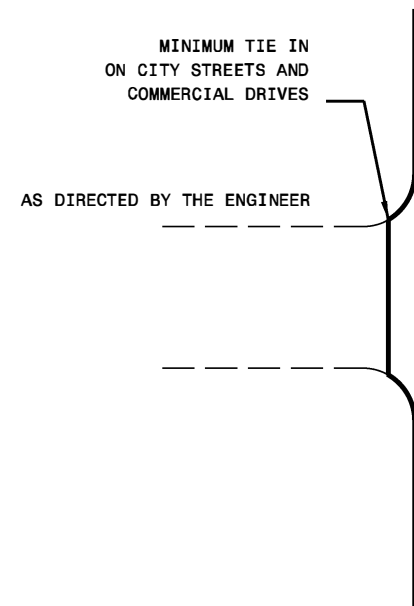
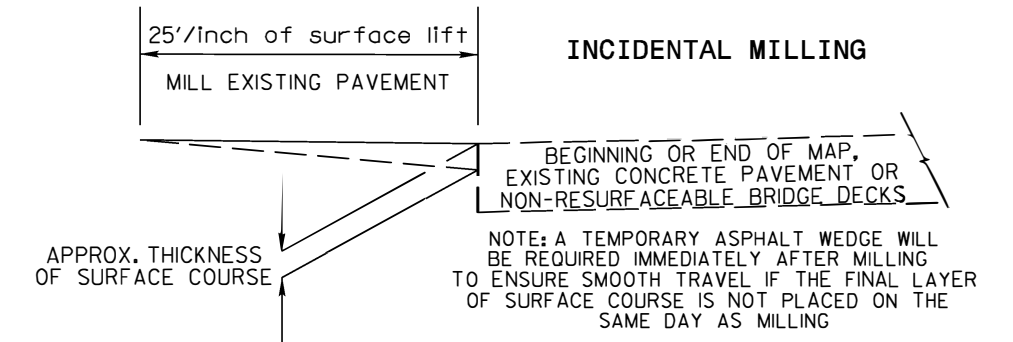
**PATCHING EXISTING PAVEMENT**  
MILLING TO BE PERFORMED PRIOR TO PATCHING



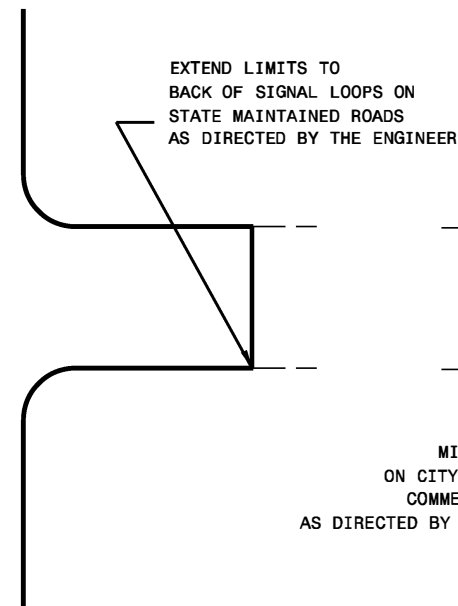
**ASPHALT CONCRETE SURFACE COURSE (LEVELING COURSE)**

NOTES

ALL UNPAVED S.R. ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT  
 ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADI, OR AS DIRECTED BY THE ENGINEER.  
 EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.  
 BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

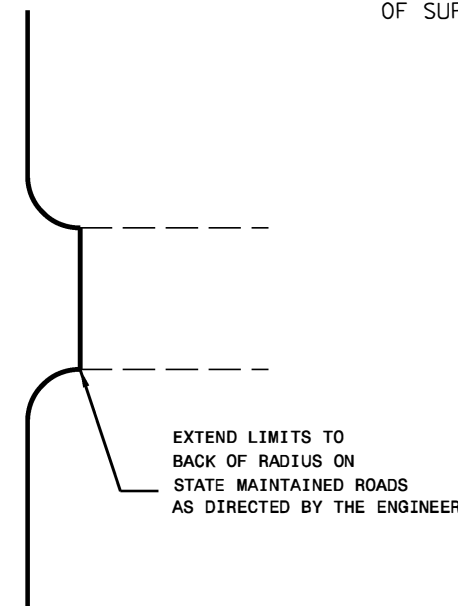


**DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES**



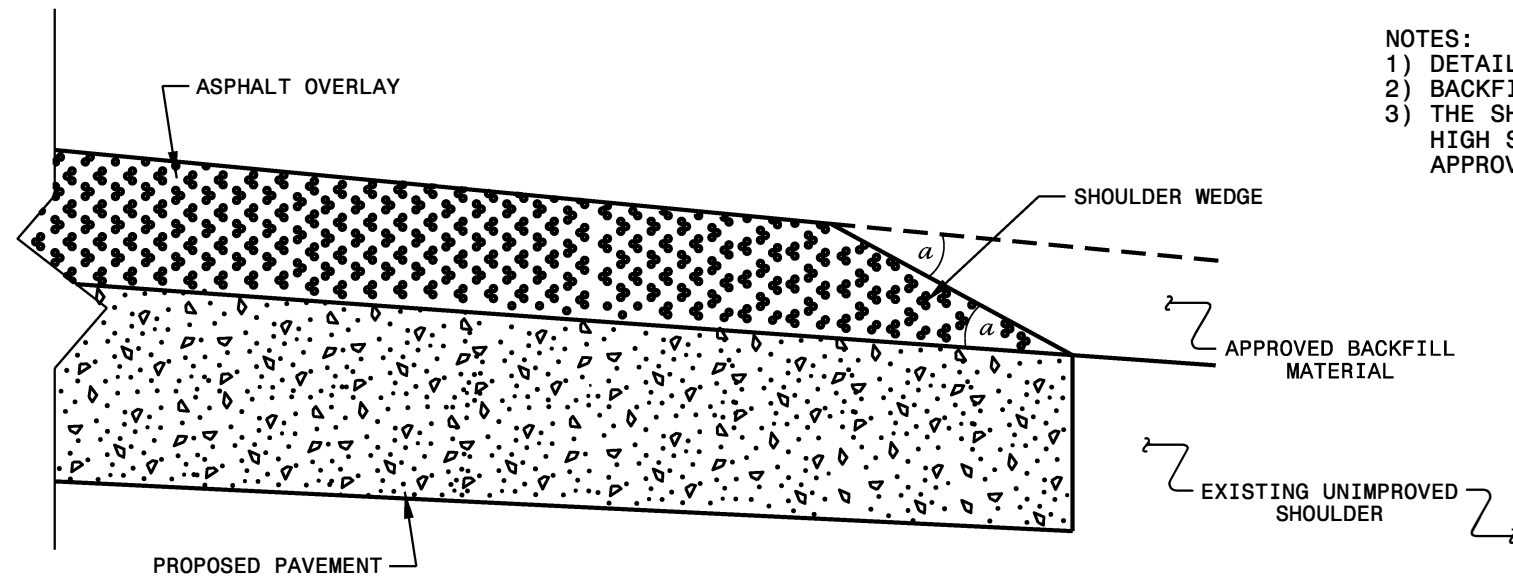
MINIMUM TIE IN ON CITY STREETS AND COMMERCIAL DRIVES AS DIRECTED BY THE ENGINEER

**DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES**



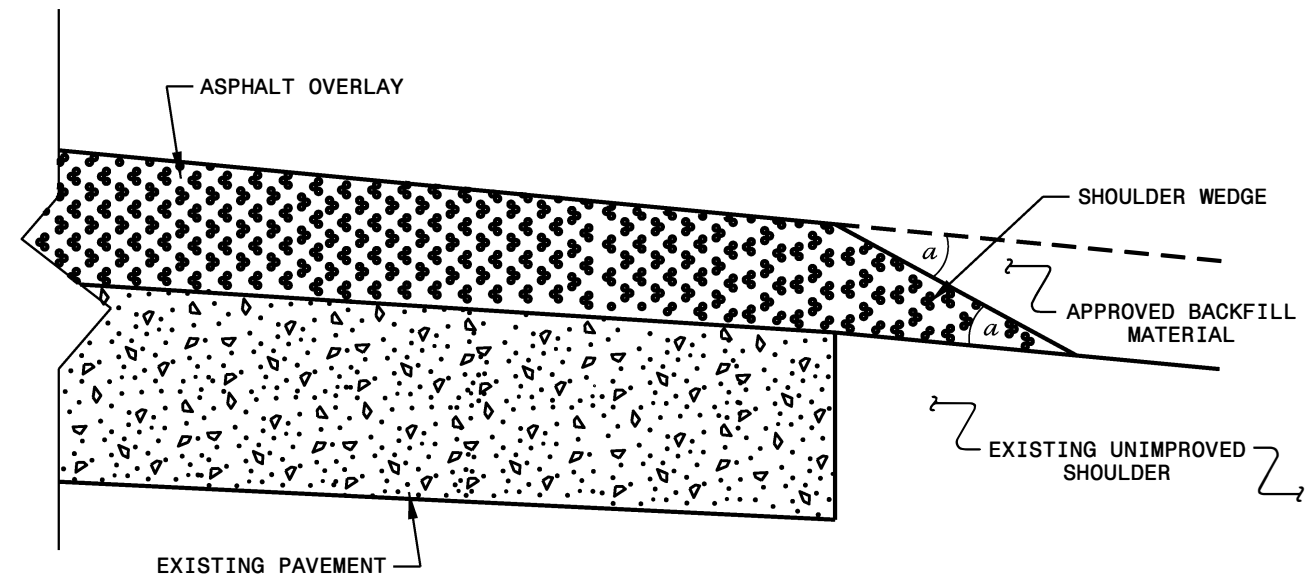
**NOTES:**

- 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, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



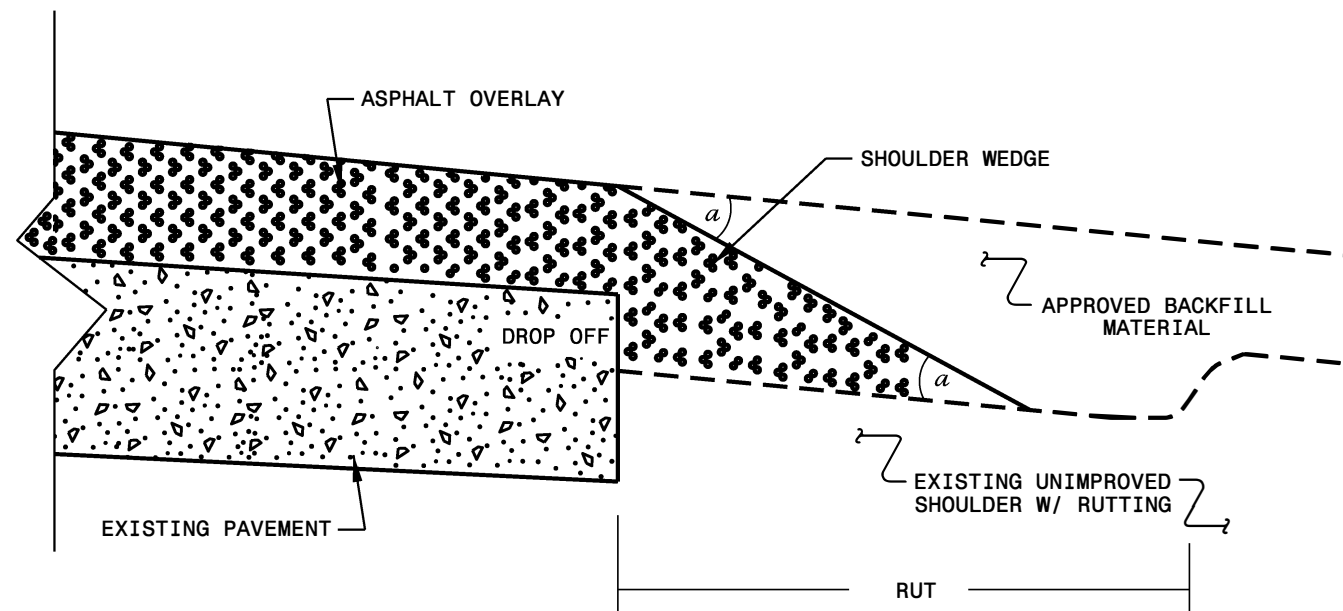
**SHOULDER WEDGE DETAIL**

(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)

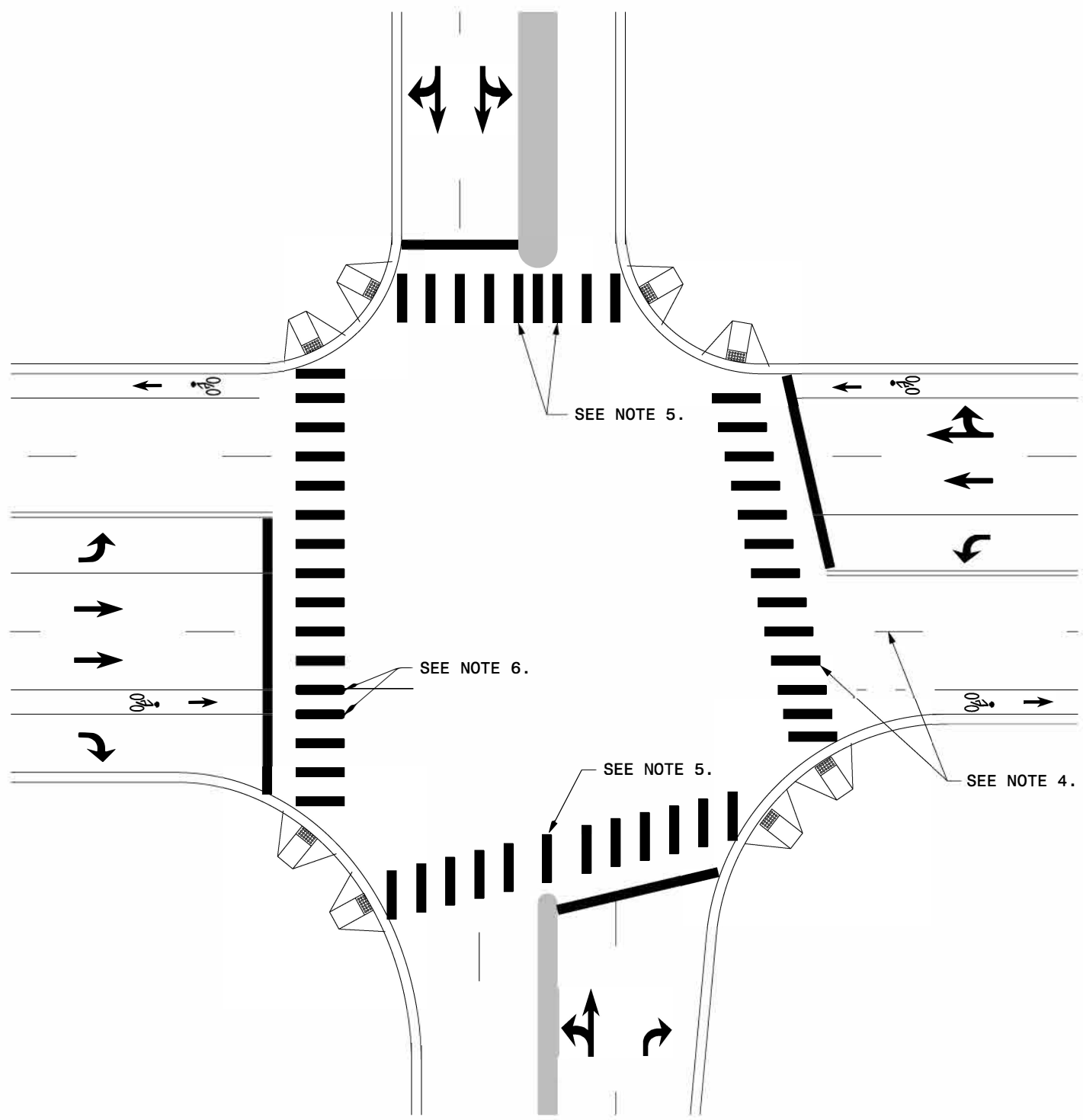
- SHOULDER WEDGE ANGLE = 30°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>SHOULDER WEDGE DETAILS</b>	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	

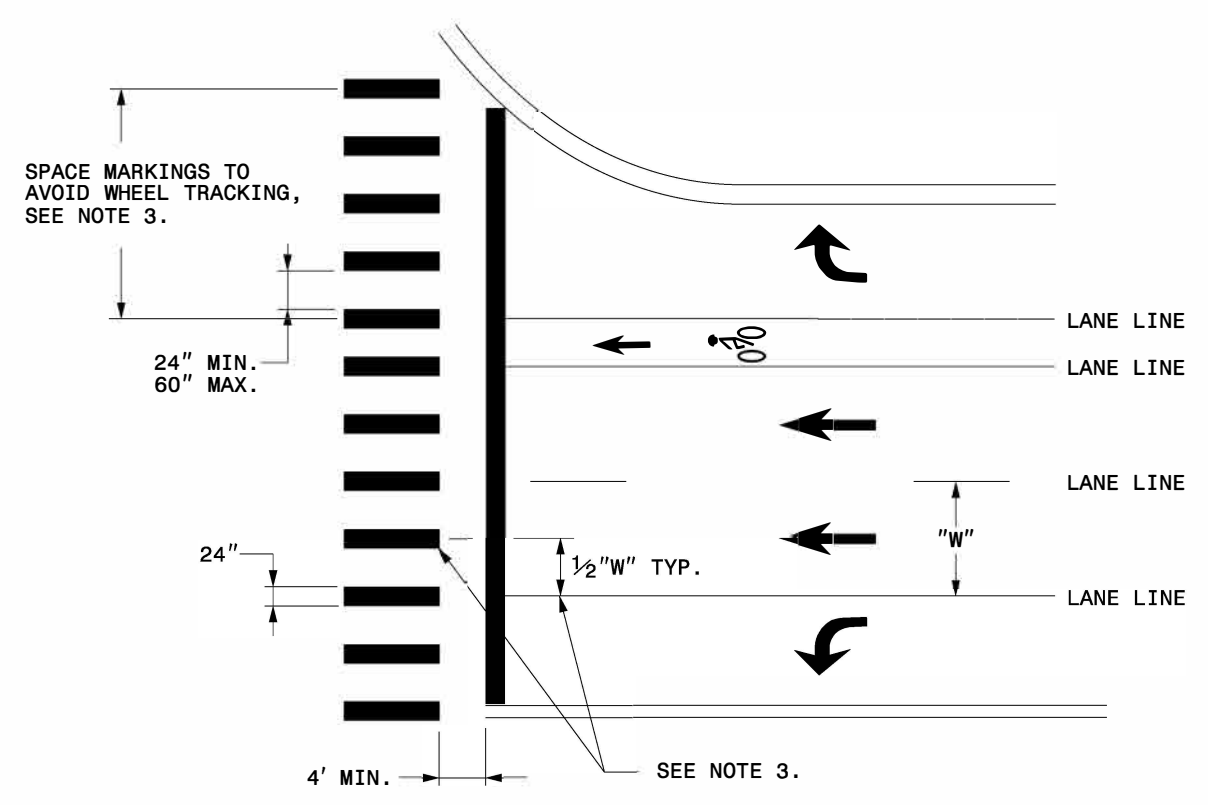
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

5-18

ENGLISH DETAIL DRAWING FOR  
**PAVEMENT MARKINGS**  
HI-VISIBILITY CROSSWALKS  
NO-TRACK MARKING GUIDANCE



CROSSWALK INTERSECTION DETAIL



CROSSWALK MARKING DETAIL

GENERAL NOTES:

- 1- THE GUIDANCE IN THIS DETAIL IS TO BE USED WHEN NO-TRACK SPACING OF HI-VISIBILITY MARKINGS IS REQUESTED.
- 2- USE THE GUIDANCE SHOWN ON THE ABOVE DETAILS IN CONJUNCTION WITH PAVEMENT MARKING GUIDANCE SHOWN ON ROADWAY STANDARD DRAWINGS 1205.01 AND 1205.07.
- 3- PLACE MARKINGS TO AVOID WHEELPATH OF VEHICLES. MARKINGS TYPICALLY WILL BE LOCATED CENTERED AT THE LANE LINES AND EDGE LINES WITH ONE ADDITIONAL MARKING CENTERED IN THE MIDDLE OF THE LANE. AT WIDE LANE WIDTHS DUE TO TAPERS AND LARGE RADII, LOCATE MARKINGS AT BEST SPACING TO AVOID WHEEL TRACKING. THE SPACE BETWEEN MARKINGS SHALL NOT BE LESS THAN 24 INCHES OR GREATER THAN 60 INCHES.
- 4- WHERE THE CROSSWALK IS SKEWED TO THE LANE LINES, THE MARKINGS SHOULD BE PARALLEL TO THE LANE LINES.
- 5- PLACE MARKINGS ON BOTH EDGES OF THE NOSE OF A MEDIAN. FOR NARROW MEDIANS LESS THAN 4 FEET, A SINGLE MARKING MAY BE USED. FOR WIDE MEDIANS, INSTALL ADDITIONAL MARKINGS IN THE MEDIAN AREA. THE SPACE BETWEEN THE MARKINGS SHALL NOT TO BE LESS THAN 24 INCHES OR GREATER THAN 60 INCHES.
- 6- LOCATE MARKINGS CENTERED ON BICYCLE LANE LINES. MARKINGS SHALL NOT BE LOCATED IN THE CENTER OF THE BICYCLE PATH.

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

5-18

ENGLISH DETAIL DRAWING FOR  
**PAVEMENT MARKINGS**  
HI-VISIBILITY CROSSWALKS  
NO-TRACK MARKING GUIDANCE

SHEET 1 OF 1

PROJECT NO.	SHEET NO.	TOTAL NO.
2023CPT.05.06.20391.1	7	

### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0264000000-E	1220000000-E	1260000000-E	1297000000-E	1330000000-E	1519000000-E	1520000000-E	1575000000-E	1704000000-E			
											SHOULDER GRADING	INCIDENTAL STONE BASE	AGGREGATE SHOULDER BORROW	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	LEVELING COURSE, TYPE S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT			
											MI	FT	SMI	TON	TON	SY	SY	TON	TON	TON	TON	
2023CPT.05.06.20391.1	Granville	1	SR 1138 - CULBRETH RD	US 158 TO SR 1139 - ENON RD	1	2	NO	NO	3.532	24	7.06	177	653	1,011	680	4,410		362	1,390			
		2	SR 1148 - RUSSELL RD	SR 1138 - CULBRETH RD TO CUL-DE-SAC	1	2	NO	NO	0.638	20	1.28	32	118			694		46				
		3	SR 1149 - LEWIS JONES RD	SR 1138 - CULBRETH RD TO SR 1150 - GOOCHS MILL RD	1	2	NO	NO	1.255	20	2.51	63	232		220	1,318	8	89				
		4	SR 1513 - HUNTSBORO RD	SR 1514 - CHEWNING RD TO VANCE CO	1	2	NO	NO	0.689	20	1.38	35	127		85	705		47				
		5	SR 1520 - HAROLD OBRIEN RD	SR 1521 - HUNTSBORO RD TO SR 1514 - CHEWNING RD	1	2	NO	NO	1.717	20	3.43	86	317		415	1,812		124	55			
		6	SR 1521 - HUNTSBORO RD/TABBS CREEK RD	SR 1514 - CHEWNING RD TO US 158 BYP - WILLIAMSBORO ST	1	2	NO	NO	5.646	21-40	11.29	283	1,043		1,300	6,304		427	110			
		7	SR 1522 - SALEM RD	US 158 BYP - OXFORD LOOP NE TO VANCE CO	1	2	NO	NO	4.129	20	8.26	207	763		1,120	4,359		292				
		8	SR 1533 - AIRPORT RD	SR 1522 - SALEM RD TO END MAINT.	1	2	NO	NO	0.516	24	1.03	26	95		100	633		42				
<b>TOTAL FOR PROJ NO. 2023CPT.05.06.20391.1</b>												<b>18.122</b>		<b>36.24</b>	<b>909</b>	<b>3,348</b>	<b>1,011</b>	<b>3,920</b>	<b>20,235</b>	<b>8</b>	<b>1,429</b>	<b>1,555</b>
<b>GRAND TOTAL</b>												<b>18.122</b>		<b>36.24</b>	<b>909</b>	<b>3,348</b>	<b>1,011</b>	<b>3,920</b>	<b>20,235</b>	<b>8</b>	<b>1,429</b>	<b>1,555</b>

PROJECT NO.	SHEET NO.	TOTAL NO.
2023CPT.05.06.20391.1	8	

**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	4413000000-E		4457000000-N	4685000000-E			4709000000-E		4720000000-E		4725000000-E	
							LENGTH	WIDTH		4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	24" X 90 M WHITE THERMO	THERMO MSG STOP 90 M	THERMO MSG AHEAD 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M		
							MI	FT	WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	LF	LF	LF	EA	EA	EA	EA	
2023CPT.05.06.20391.1	Granville	1	SR 1138 - CULBRETH RD	US 158 TO SR 1139 - ENON RD	1	2	3.532	24	396	*	38,004	31,455						
		2	SR 1148 - RUSSELL RD	SR 1138 - CULBRETH RD TO CUL-DE-SAC	1	2	0.638	20	126		6,738	6,738						
		3	SR 1149 - LEWIS JONES RD	SR 1138 - CULBRETH RD TO SR 1150 - GOOCHS MILL RD	1	2	1.255	20	141		13,252	10,605						
		4	SR 1513 - HUNTSBORO RD	SR 1514 - CHEWNING RD TO VANCE CO	1	2	0.689	20	78		7,276	4,830						
		5	SR 1520 - HAROLD OBRIEN RD	SR 1521 - HUNTSBORO RD TO SR 1514 - CHEWNING RD	1	2	1.717	20	193		18,132	11,810						
		6	SR 1521 - HUNTSBORO RD/TABBS CREEK RD	SR 1514 - CHEWNING RD TO US 158 BYP - WILLIAMSBORO ST	1	2	5.646	21-40	633		59,622	51,085	58			1	2	
		7	SR 1522 - SALEM RD	US 158 BYP - OXFORD LOOP NE TO VANCE CO	1	2	4.129	20	463		44,428	36,873	55	24	10			
		8	SR 1533 - AIRPORT RD	SR 1522 - SALEM RD TO END MAINT.	1	2	0.516	24	58		5,552	5,448						
<b>TOTAL FOR PROJ NO. 2023CPT.05.06.20391.1</b>							<b>18.122</b>		<b>2,088</b>	<b>*</b>	<b>193,004</b>	<b>158,844</b>	<b>113</b>	<b>24</b>	<b>10</b>	<b>1</b>	<b>2</b>	
											<b>351,848</b>		<b>34</b>		<b>3</b>			
<b>GRAND TOTAL</b>							<b>18.122</b>		<b>2,088</b>	<b>1.00</b>	<b>193,004</b>	<b>158,844</b>	<b>113</b>	<b>24</b>	<b>10</b>	<b>1</b>	<b>2</b>	
											<b>351,848</b>		<b>34</b>		<b>3</b>			

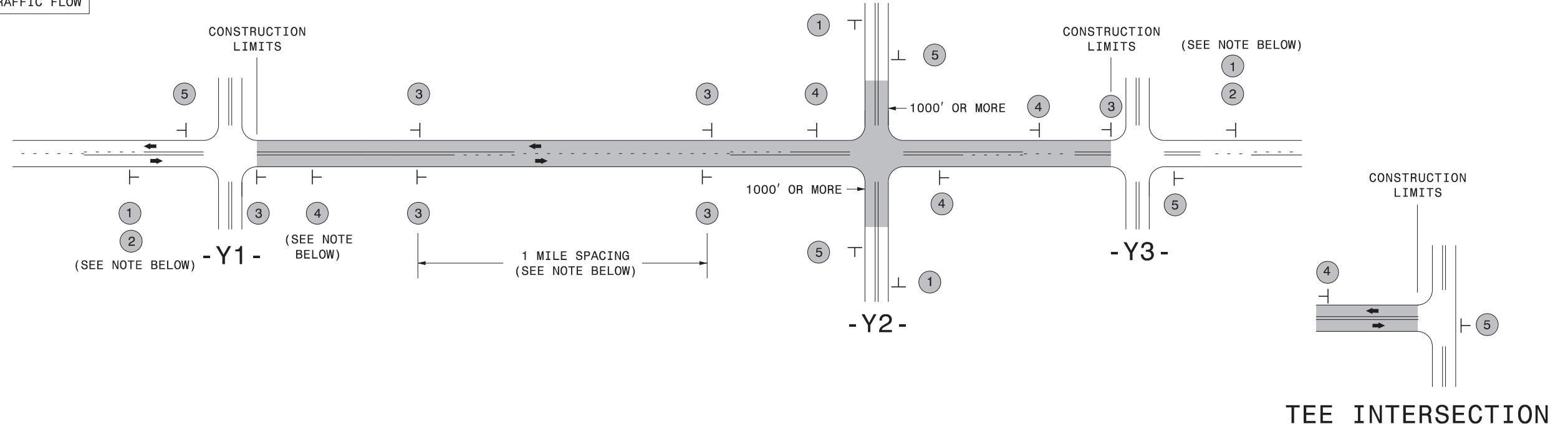


# SIGNING FOR RESURFACING PROJECTS

**LEGEND**

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

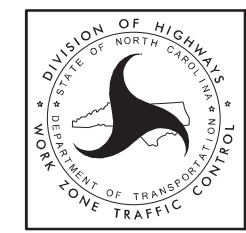
## -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 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.	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.  <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">                       W20-1                      48" X 48"                      PLACED 500' IN ADVANCE                 </div> <div style="text-align: center;">                       W20-7 A                      48" X 48"                      PLACED 250' IN ADVANCE OF FLAGGER.                 </div> </div>
	2	 W7-3aP 24" X 18"	#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)	
	3	 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	 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	 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.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING