

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS

Letting Date: May 10, 2023

CONTRACT ID: DF00438

TIP NO.: -----

FEDERAL AID NO.: STATE FUNDED

WBS ELEMENT NO.: 2023CPT.06.13.20781.1

ROUTE NO.: Various

LOCATION: Various

COUNTY: Robeson

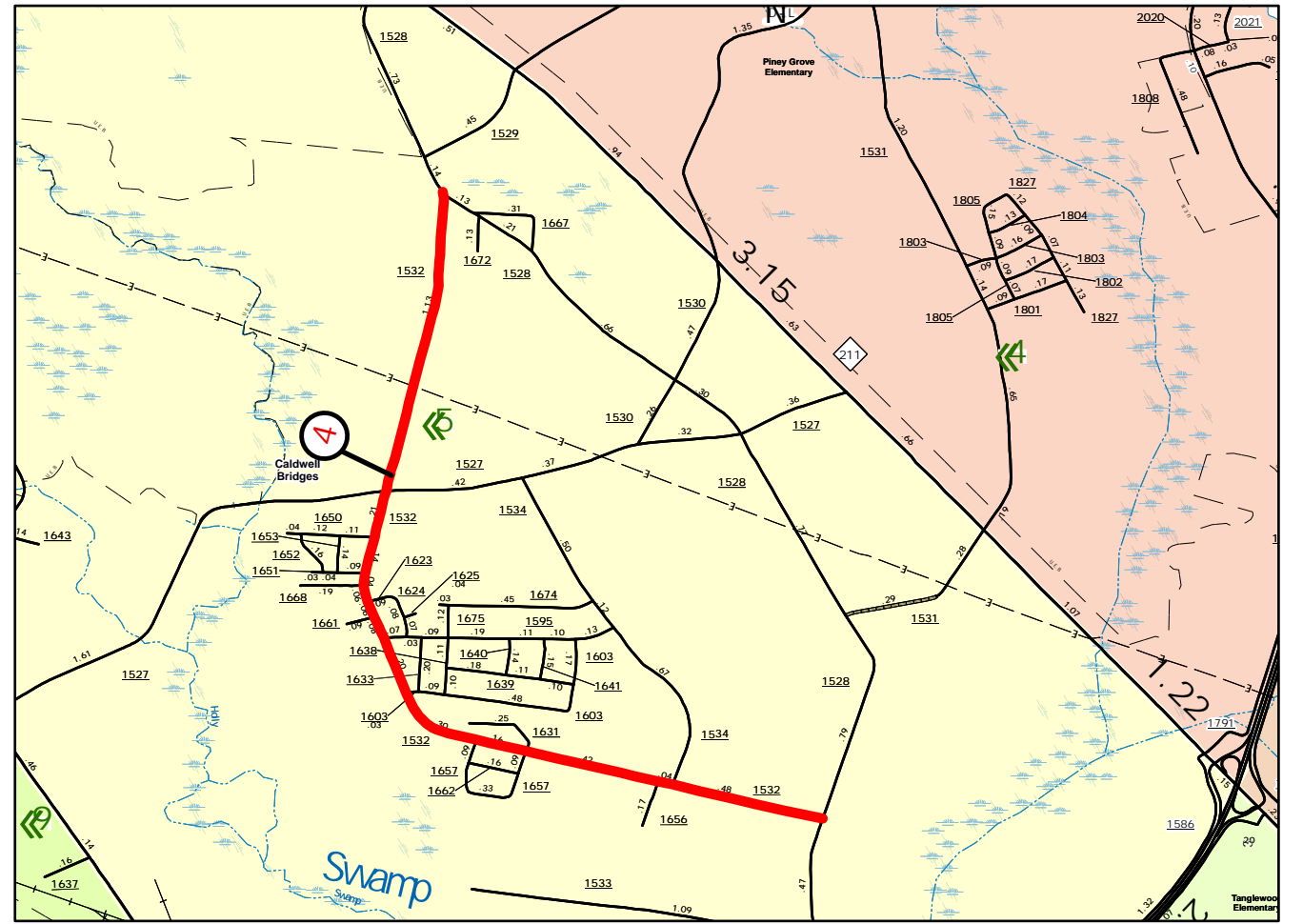
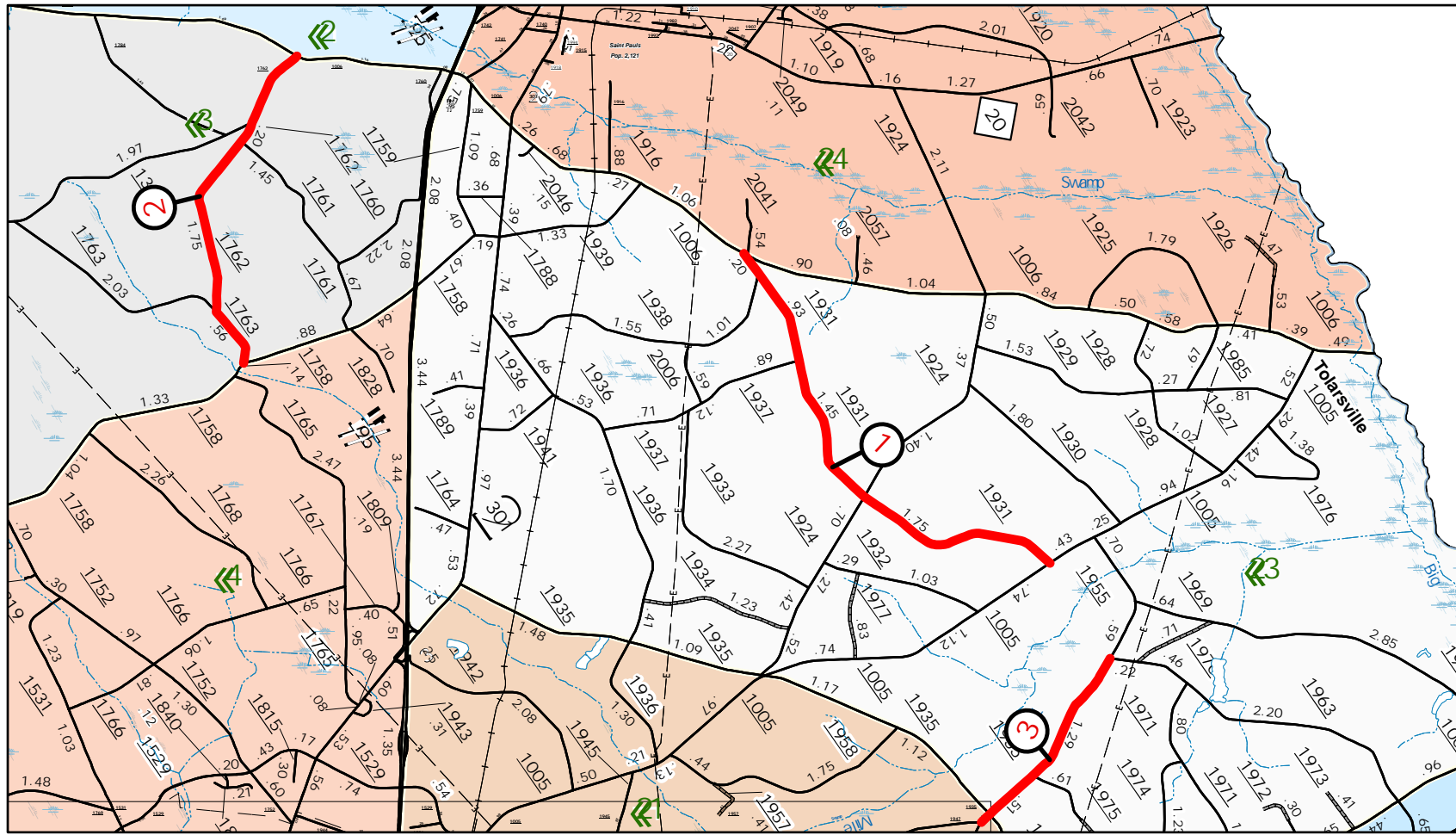
LENGTH OF PROJECT: 19.45 MILES

TYPE OF WORK: RESURFACING, MILLING & PAVEMENT MARKINGS

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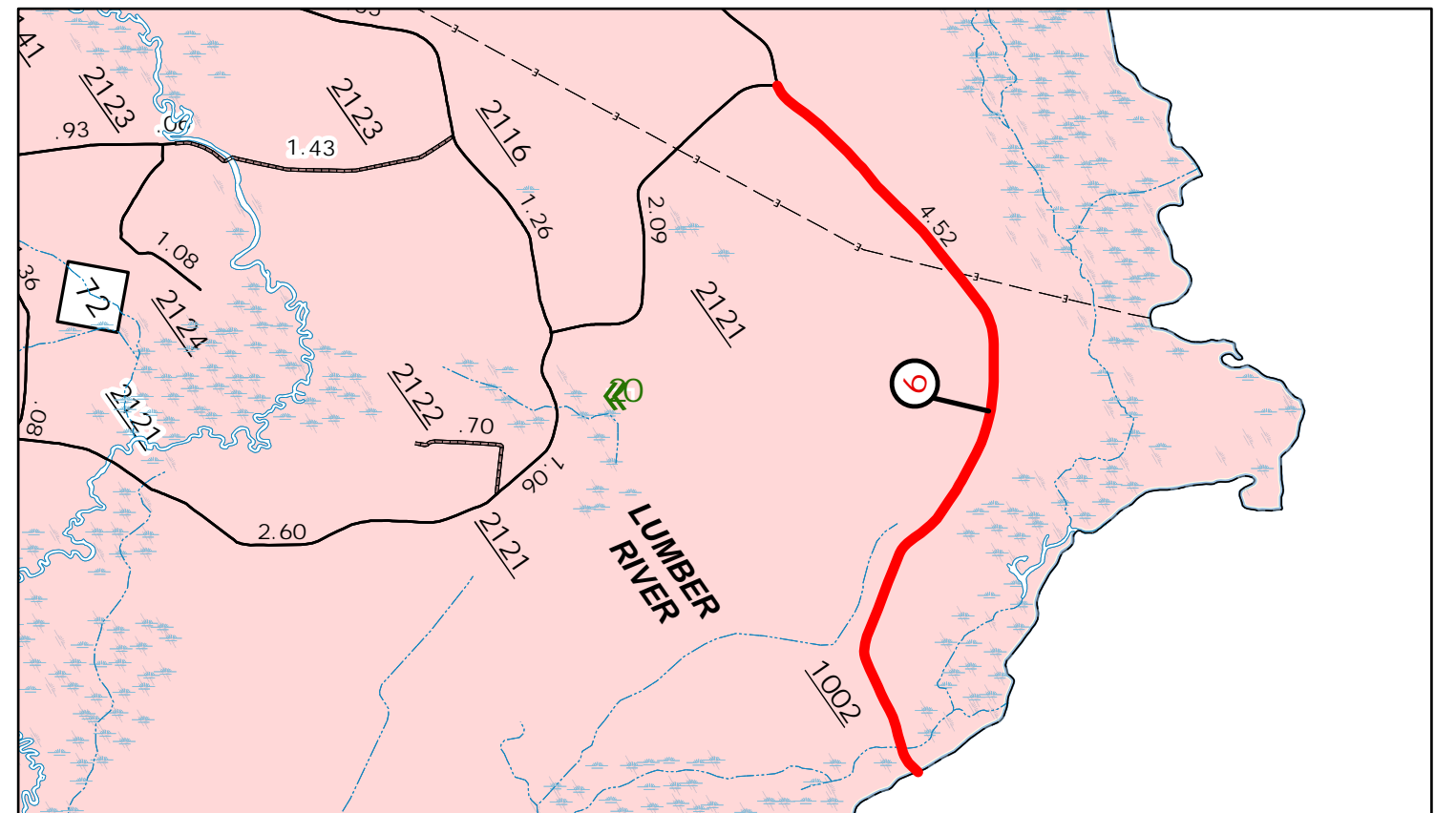
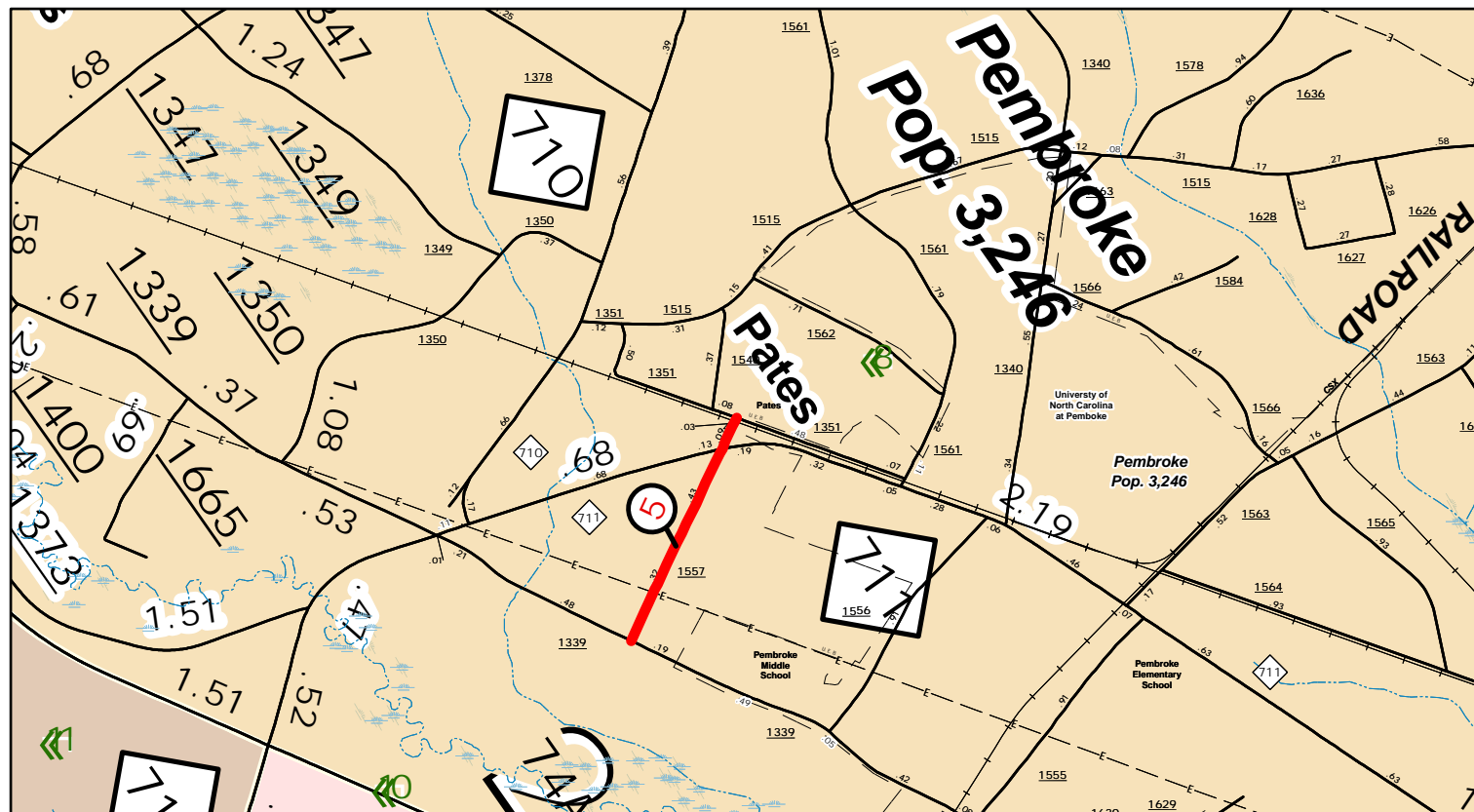
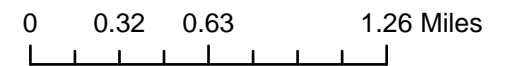
**This file or an individual page
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Robeson County Resurfacing

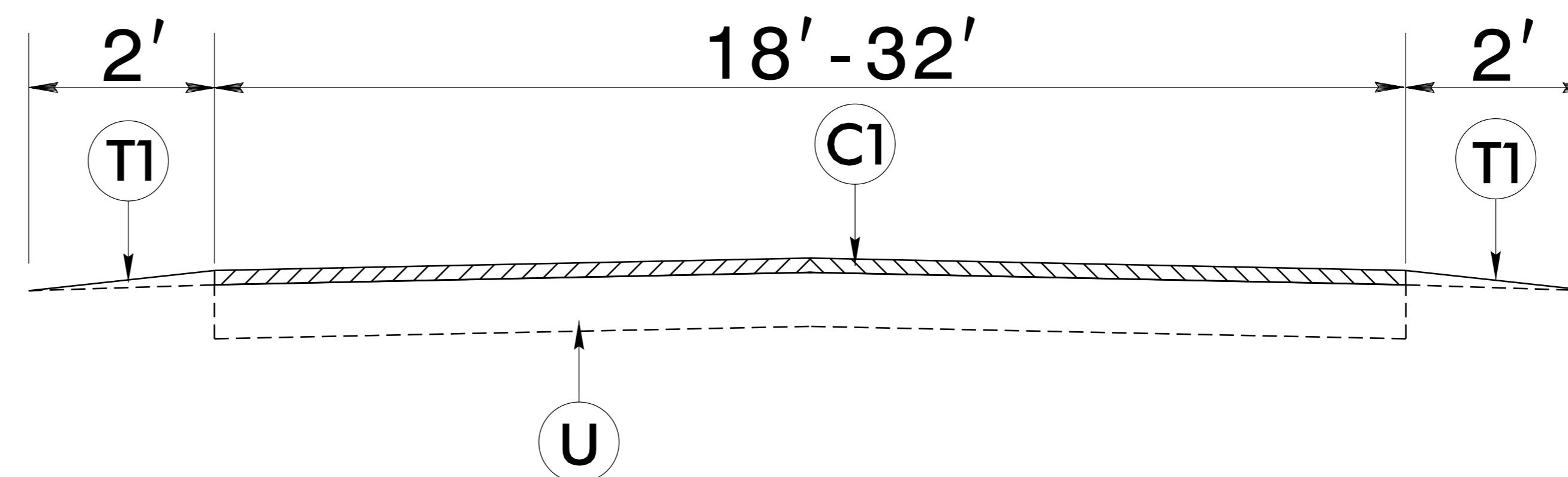
WBS: 2023CPT.06.13.20781.1

Contract Number: DF00438

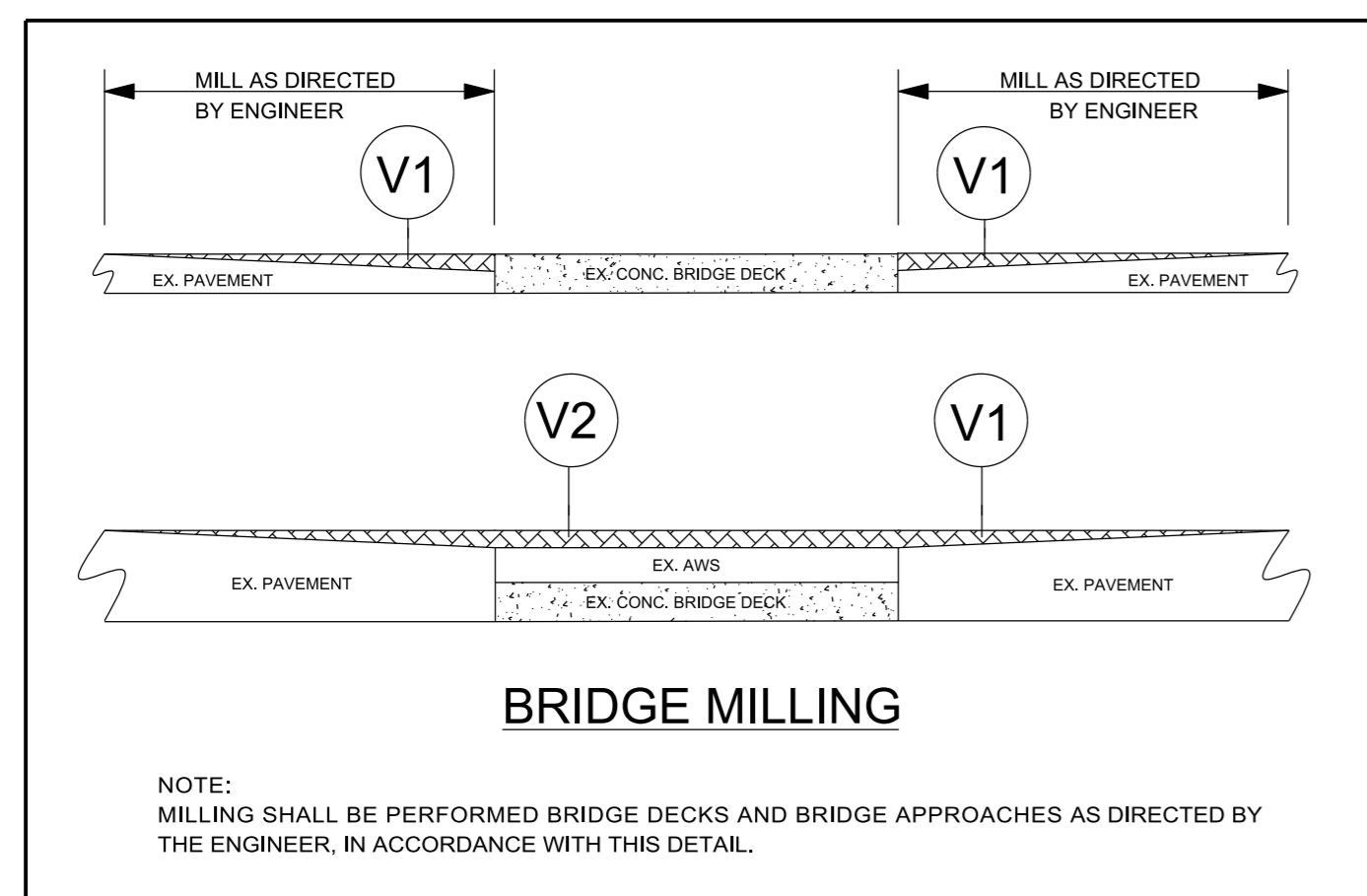


PAVEMENT SCHEDULE

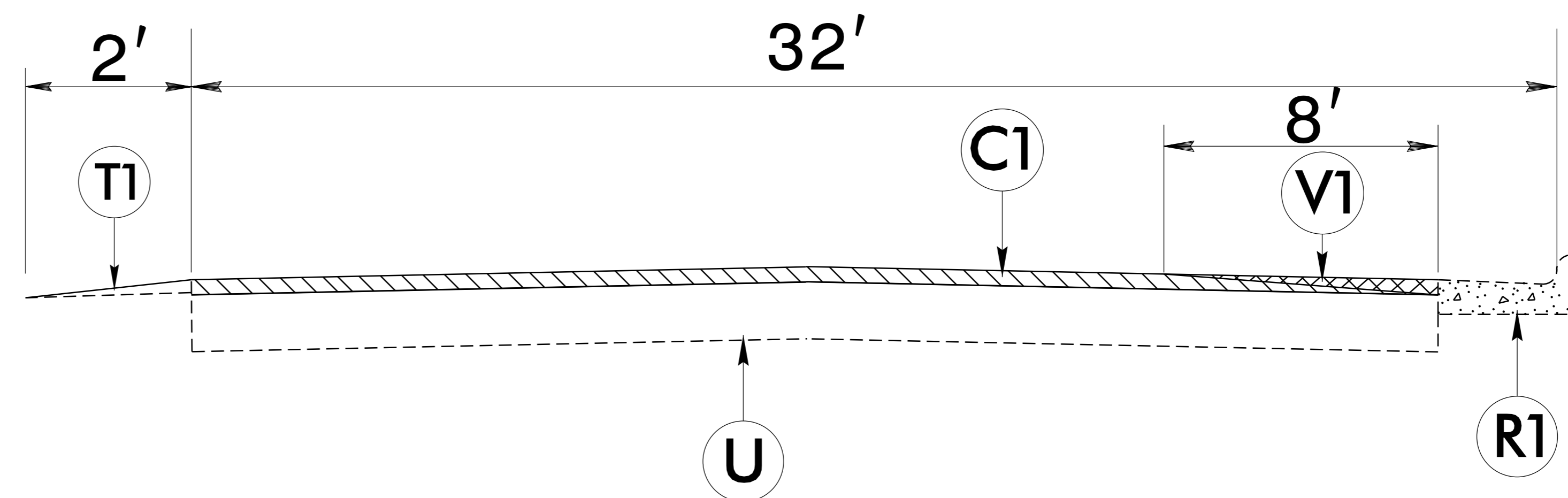
C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
E1	5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	EXISTING CURB AND GUTTER
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT PAVEMENT
V1	0"-1½" MILLING
V2	1½" MILLING



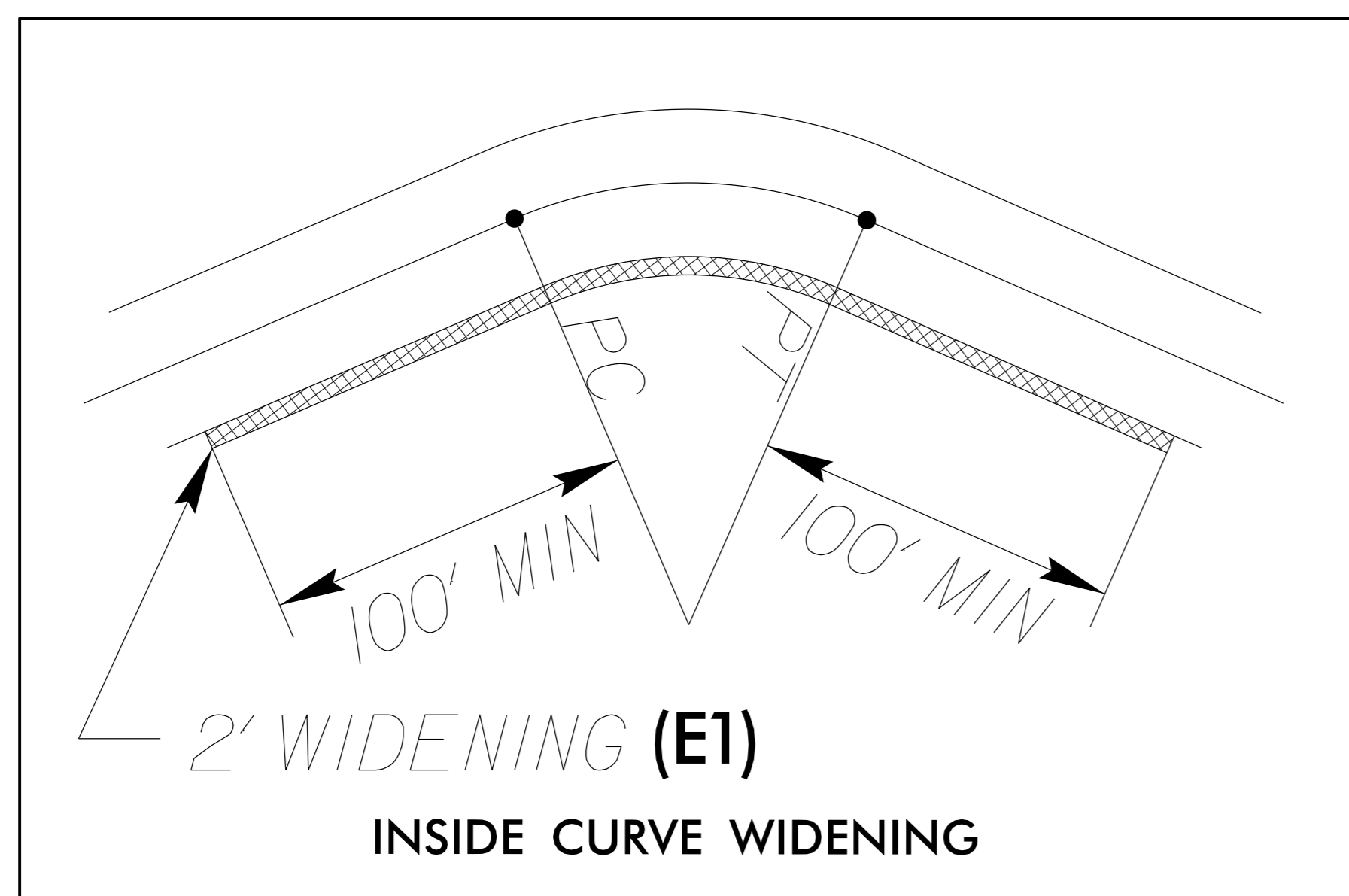
TYPICAL SECTION NO. 1



MAPS 3 & 6



TYPICAL SECTION NO. 2

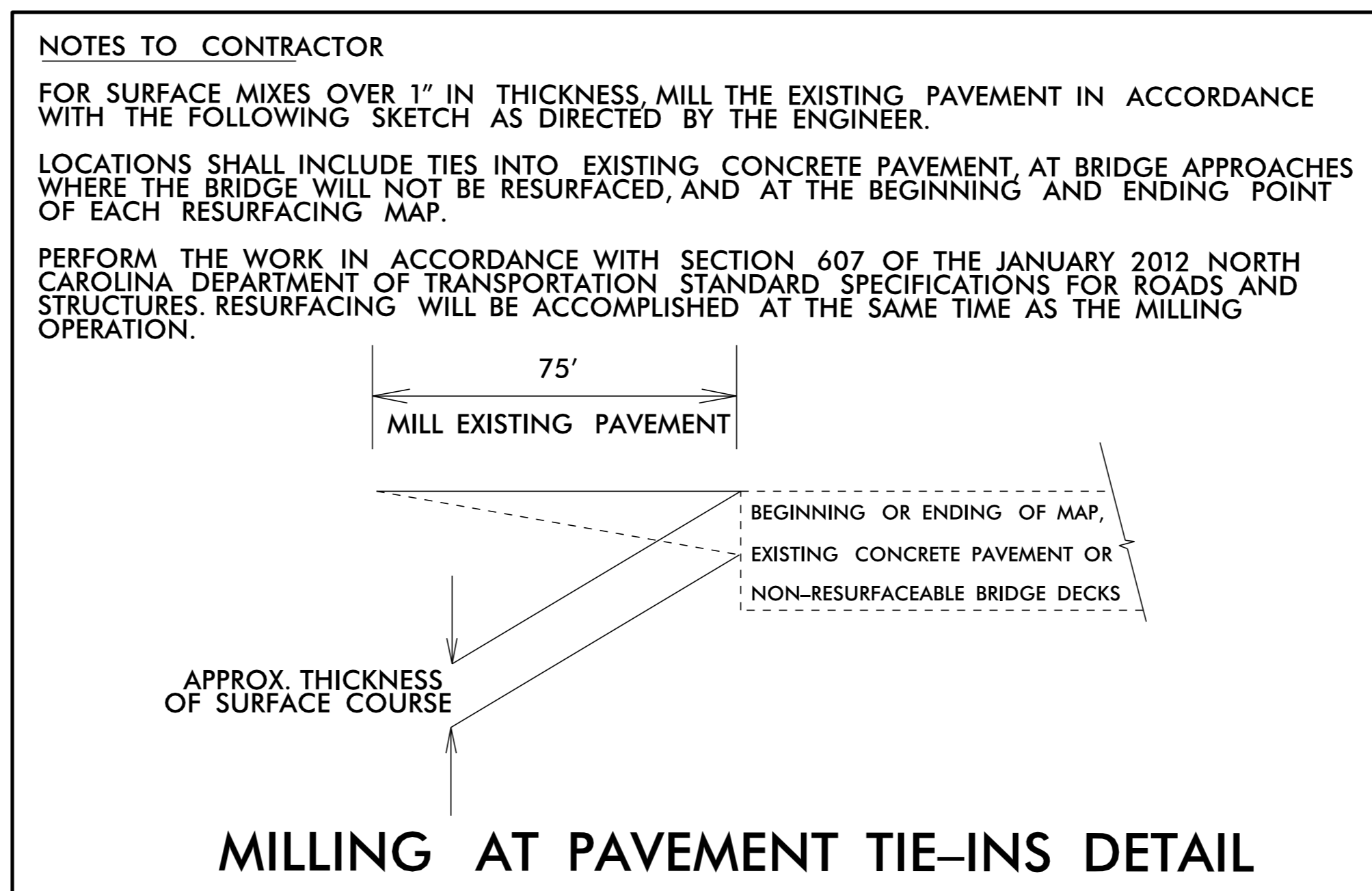
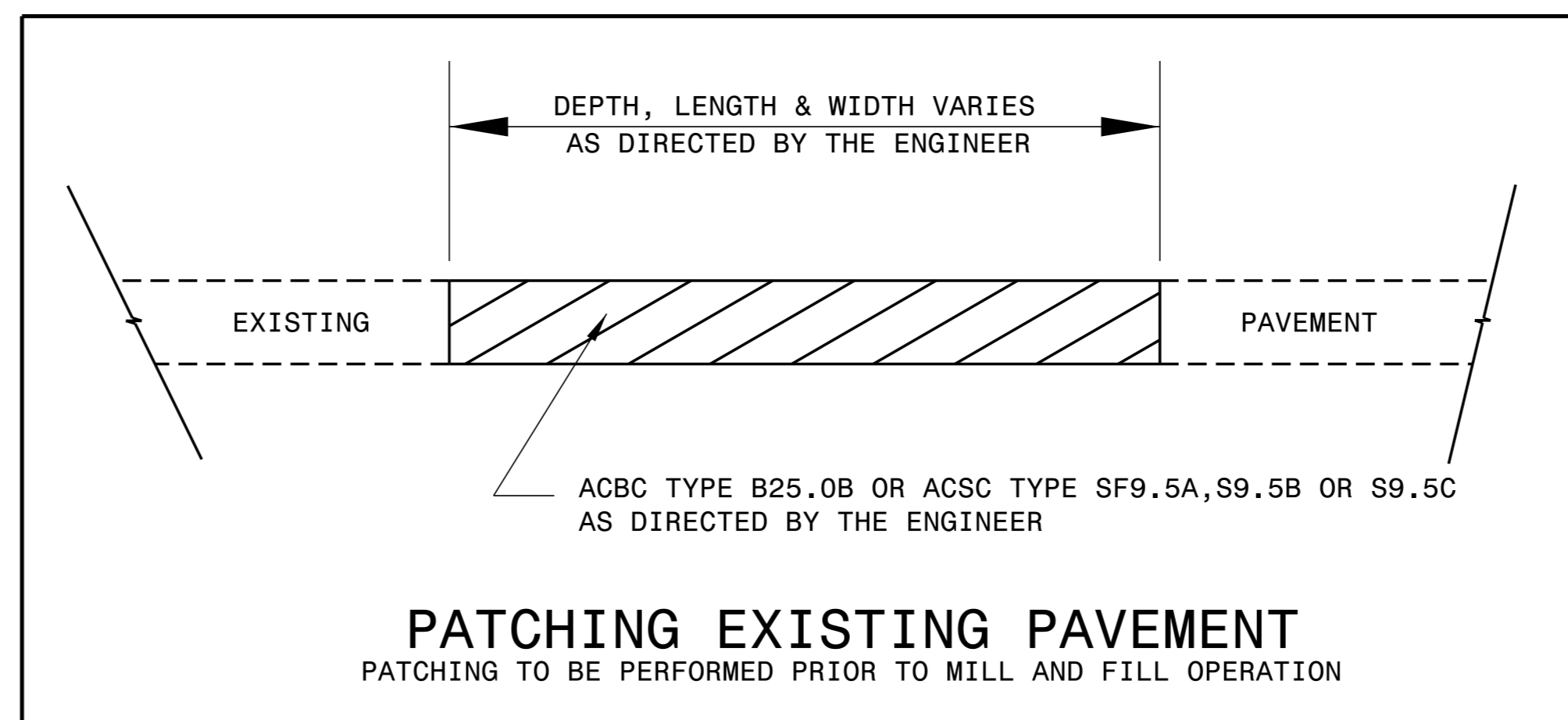
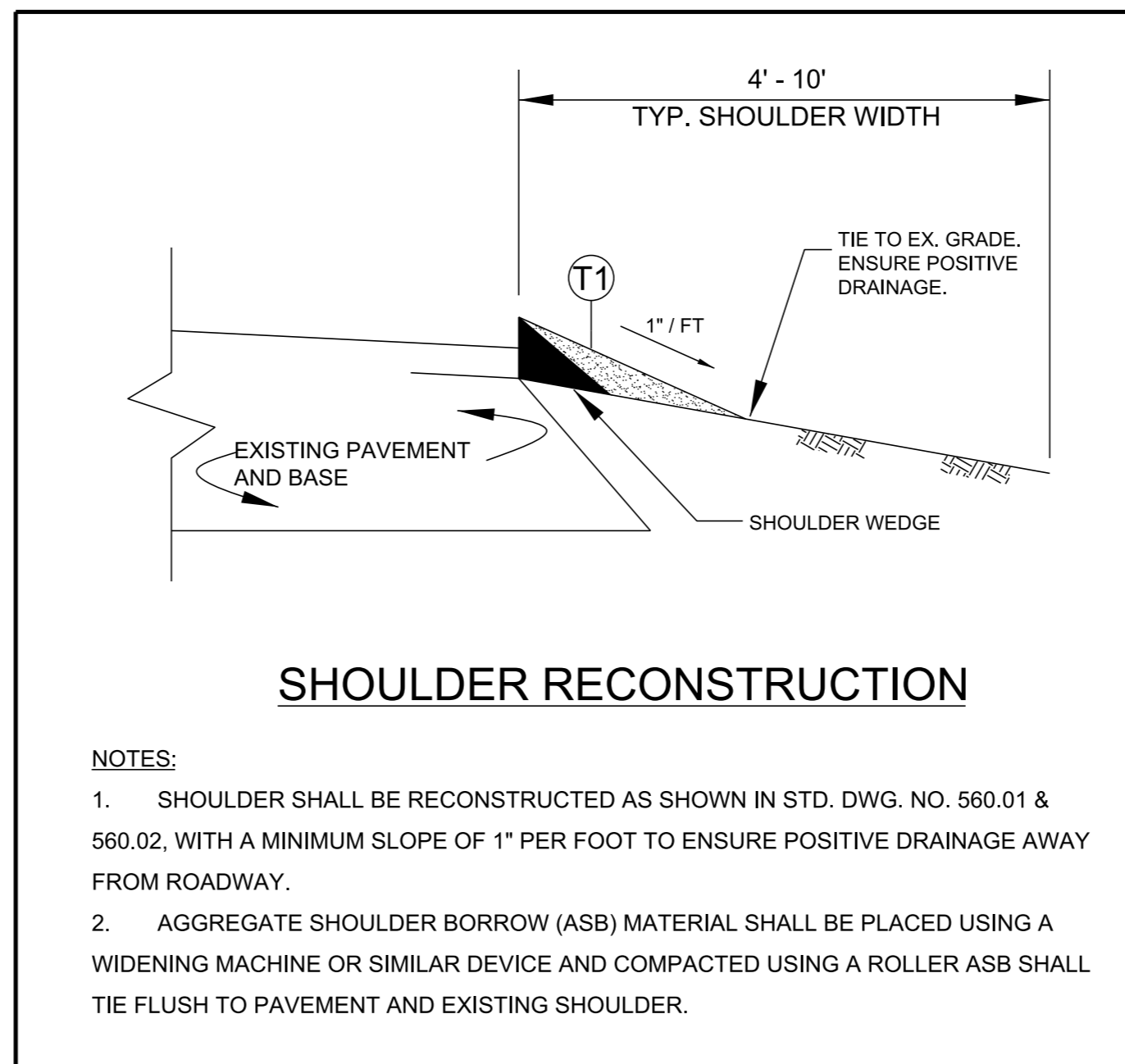


MAPS 1, 2, 3, & 6

6/2/99
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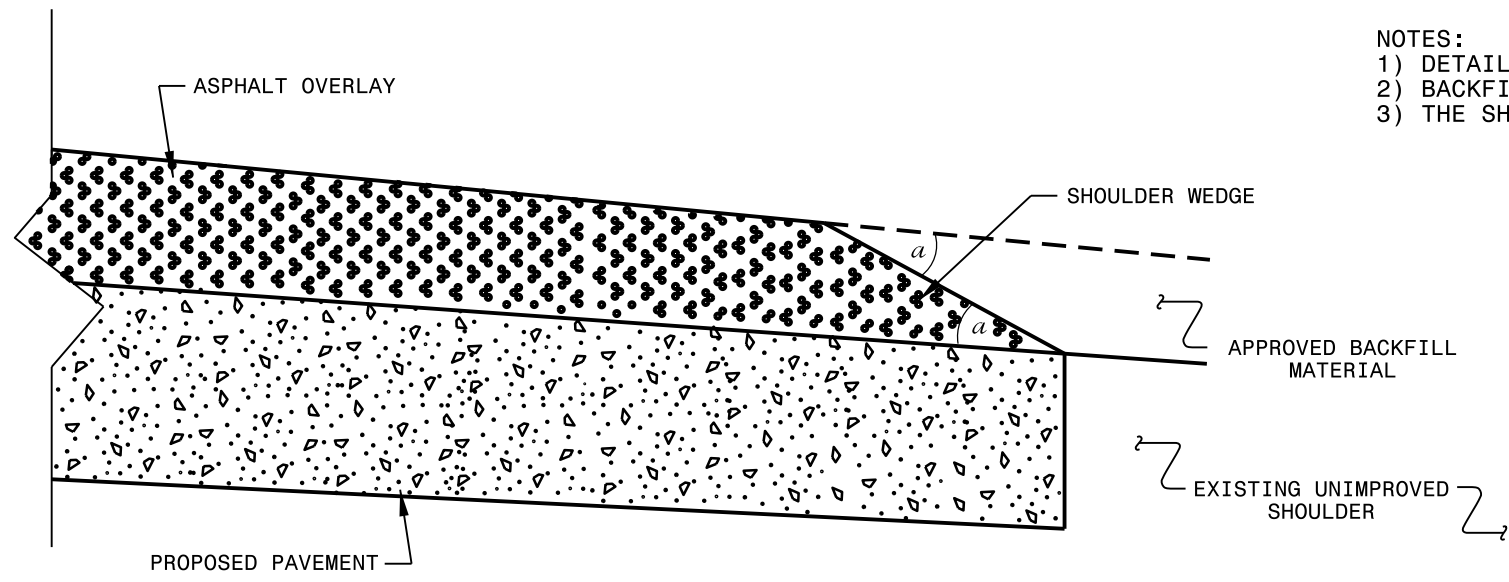
PAVEMENT SCHEDULE

C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
E1	5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	EXISTING CURB AND GUTTER
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT PAVEMENT
V1	0"-1½" MILLING
V2	1½" MILLING

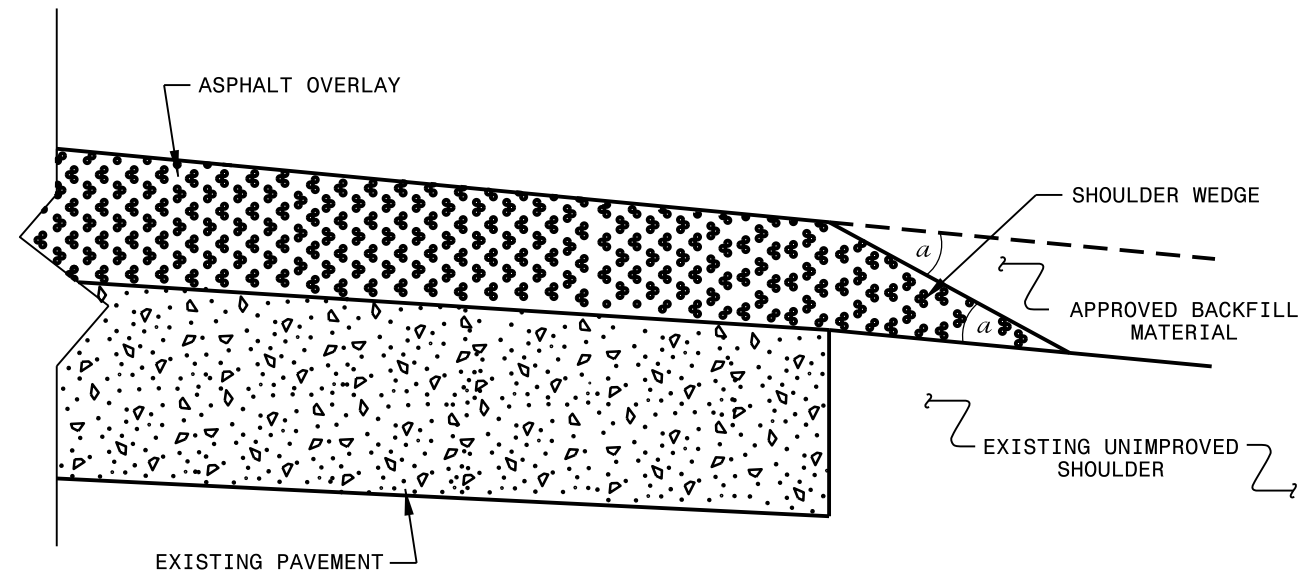


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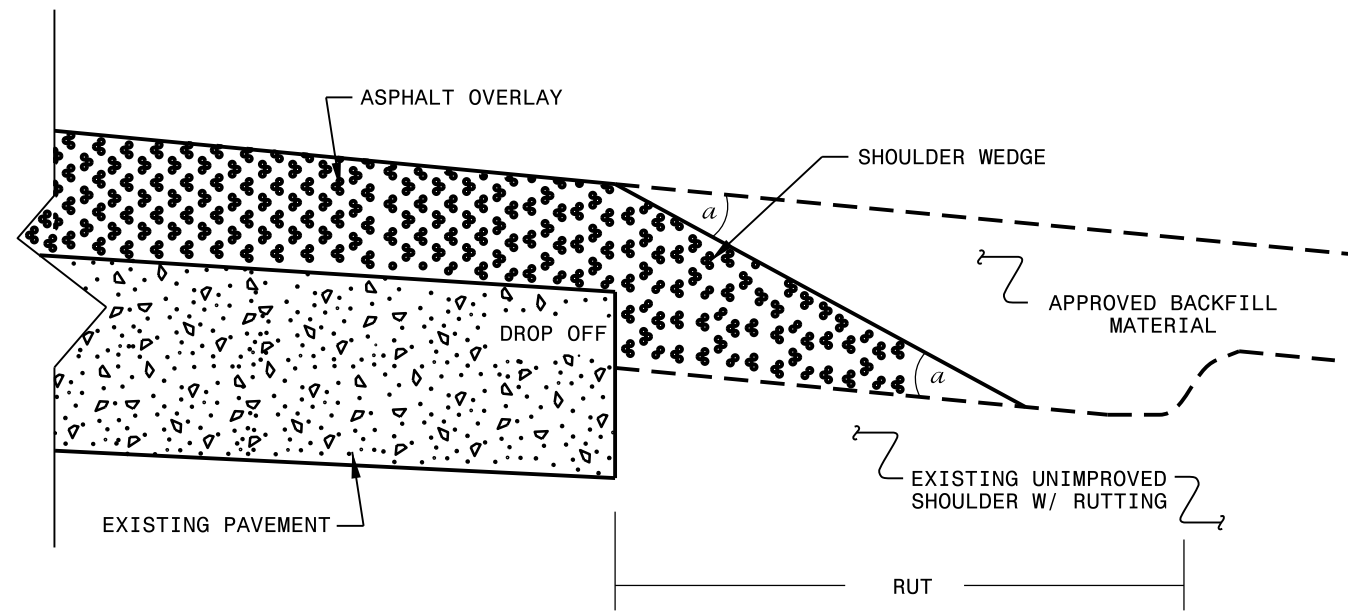
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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.: susr/details/stand/shoulderwedgedetail.dgn			

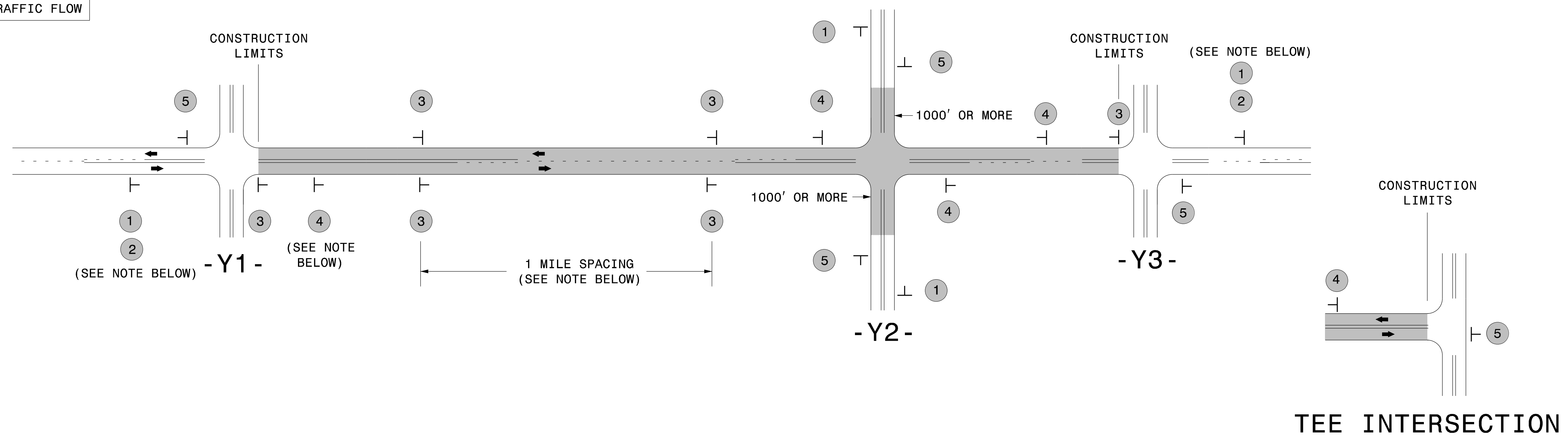
SYSTEM: 06/13/2023 10:58:58 AM
 USER: T.SPELL
 FILE: susr/details/stand/shoulderwedgedetail.dgn

SIGNING FOR RESURFACING PROJECTS

LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

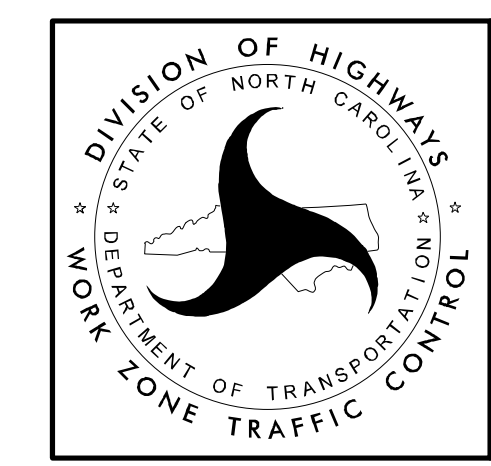
-Y- LINE SIGNING

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>NO REQUIRED STATIONARY SIGNING 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		#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		- 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		- 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		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

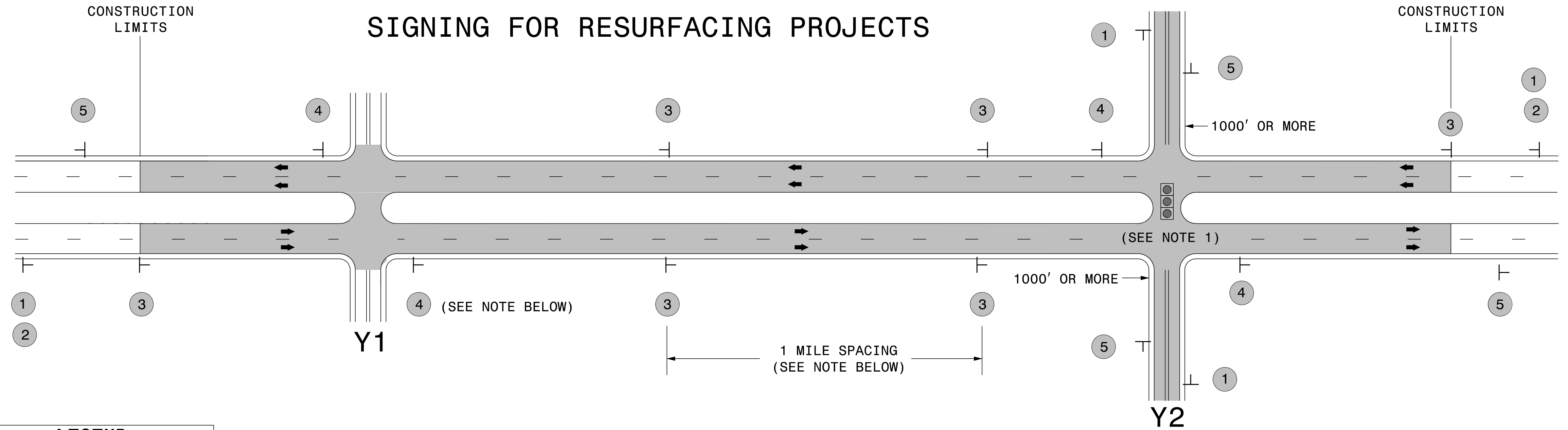
THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

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



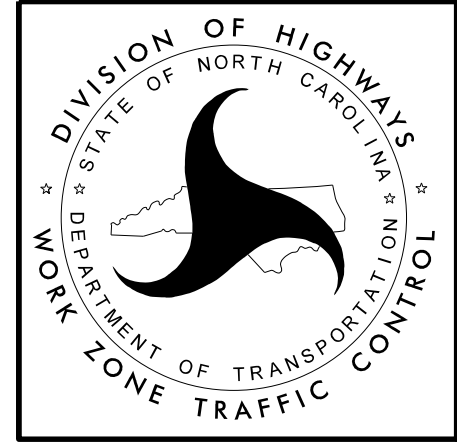
LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	 	<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>	<p>NO REQUIRED STATIONARY SIGNING 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, ADVANCE WARNING PORTABLE 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> </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> <p>NOTES:</p> <ol style="list-style-type: none"> 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.
		<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>	
		<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>	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>	

3/23/2015
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 User:rmgarrrett



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

GUIDELINES FOR LANE WIDTHS ON RESURFACING PROJECTS

Contractor shall place the new pavement markings in accordance with this table and detail unless otherwise directed by the Engineer.

TWO LANE - TWO WAY ROADWAY - 55 MPH		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	12'	2'
32'	12'	4'

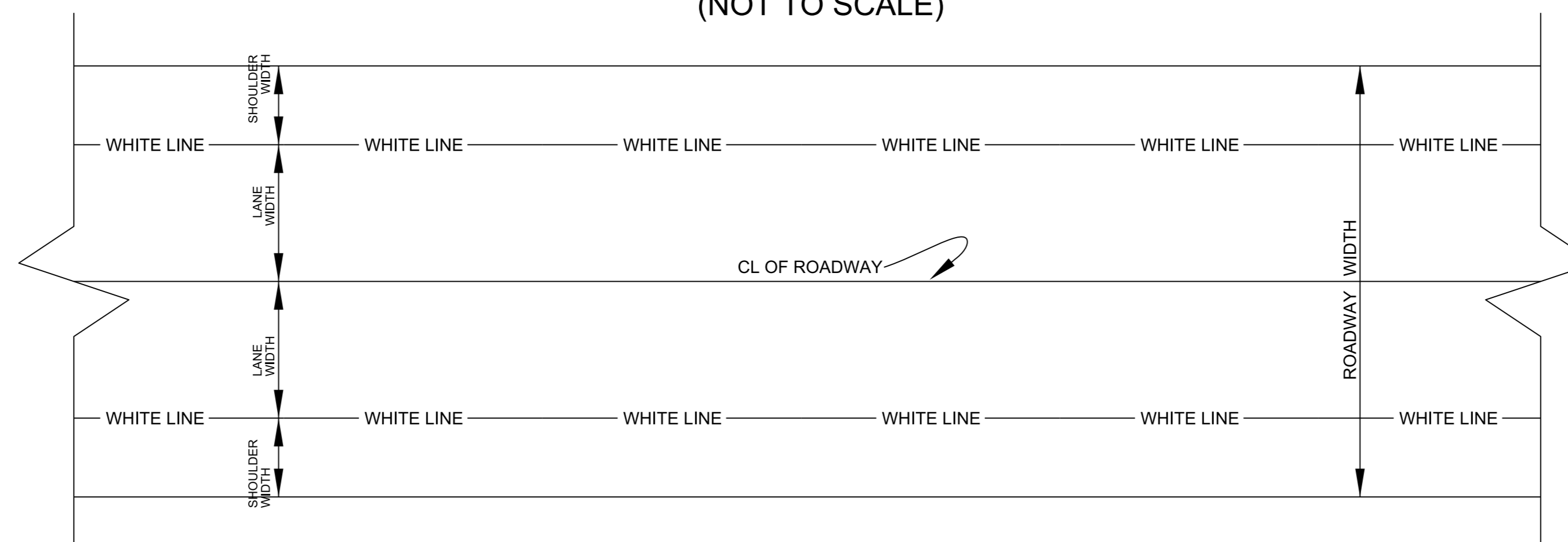
* May vary due to pavement width

TWO LANE - TWO WAY ROADWAY		50
MPH OR LESS		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	11'	3'
32'	11'	5'

* May vary due to pavement width

SCHEMATIC OF ROADWAY

(NOT TO SCALE)



SUMMARY OF QUANTITIES

												PROJECT NO.		SHEET NO.		TOTAL NO.	
												2023CPT.06.13.20781.1					
												1220000000-E	1245000000-E	1260000000-E	1297000000-E	1308000000-E	1330000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH		INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1½" MILLING	0" TO 1.5" MILLING	INCIDENTAL MILLING
										MI	FT						
2023CPT.06.13.20781.1	Robeson	1	SR-1931 / MARTIN RD	FROM SR 1006 TO SR 1005	1	2	2WU	NO	NO	4.33	18	120	8.66	1,400			1,111
TOTAL FOR MAP NO. 1										4.33		120	8.66	1,400			1,111
2023CPT.06.13.20781.1	Robeson	2	SR-1762 / EMMA JANE RD	FROM SR 1006 TO SR 1758	1	2	2WU	NO	NO	3.25	18	54	6.50	1,051			833
TOTAL FOR MAP NO. 2										3.25		54	6.50	1,051			833
2023CPT.06.13.20781.1	Robeson	3	SR-1955 / REGAN CHURCH RD	FROM SR 1005 TO SR 1947	1	2		NO	NO	3.2	21	53	6.40	1,035	361		1,882
TOTAL FOR MAP NO. 3										3.2		53	6.40	1,035	361		1,882
2023CPT.06.13.20781.1	Robeson	4	SR-1532 / NORMENT RD	FROM SR 1528 TO SR 1528	1	2	2WU	NO	NO	3.3	24	81	6.60	1,067			3,889
TOTAL FOR MAP NO. 4										3.3		81	6.60	1,067			3,889
2023CPT.06.13.20781.1	Robeson	5	SR-1557 / REDMOND RD	FROM SR 1351 TO SR 1339	1	2	2WU	NO	NO	0.87	20	15	1.74	281		282	556
TOTAL FOR MAP NO. 5										0.87		15	1.74	281		282	556
2023CPT.06.13.20781.1	Robeson	6	SR-1002 / OLD WHITEVILLE RD	FROM SR 2121 TO COLUMBUS CL	1	2	2WU	NO	NO	4.5	24	45	8.92	1,442			841
TOTAL FOR MAP NO. 6										4.5		45	8.92	1,442			841
TOTAL FOR PROJ NO. 2023CPT.06.13.20781.1										19.45		368	38.82	6,276	361	282	9,112
GRAND TOTAL										19.45		368	38.82	6,276	361	282	9,112

												1491000000-E	1519000000-E	1520000000-E	1575000000-E	1704000000-E	2845000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH		BASE COURSE, B25.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJ. OF METER OR VALVE BOX
										MI	FT	TONS	TONS	TONS	TONS	TONS	EA
2023CPT.06.13.20781.1	Robeson	1	SR-1931 / MARTIN RD	FROM SR 1006 TO SR 1005	1	2	2WU	NO	NO	4.33	18	346	3,962	10	284	21	
TOTAL FOR MAP NO. 1										4.33		346	3,962	10	284	21	
2023CPT.06.13.20781.1	Robeson	2	SR-1762 / EMMA JANE RD	FROM SR 1006 TO SR 1758	1	2	2WU	NO	NO	3.25	18	74	2,925	10	201	1	
TOTAL FOR MAP NO. 2										3.25		74	2,925	10	201	1	
2023CPT.06.13.20781.1	Robeson	3	SR-1955 / REGAN CHURCH RD	FROM SR 1005 TO SR 1947	1	2		NO	NO	3.2	21	221	3,434	10	242	1	
TOTAL FOR MAP NO. 3										3.2		221	3,434	10	242	1	
2023CPT.06.13.20781.1	Robeson	4	SR-1532 / NORMENT RD	FROM SR 1528 TO SR 1528	1	2	2WU	NO	NO	3.3	24		4,180	10	282	1	1
TOTAL FOR MAP NO. 4										3.3			4,180	10	282	1	1
2023CPT.06.13.20781.1	Robeson	5	SR-1557 / REDMOND RD	FROM SR 1351 TO SR 1339	1	2	2WU	NO	NO	0.87	20		927	10	64	1	
TOTAL FOR MAP NO. 5										0.87			927	10	64	1	
2023CPT.06.13.20781.1	Robeson	6	SR-1002 / OLD WHITEVILLE RD	FROM SR 2121 TO COLUMBUS CL	1	2	2WU	NO	NO	4.5	24	269	5,276	10	367	1	
TOTAL FOR MAP NO. 6										4.5		269	5,276	10	367	1	
TOTAL FOR PROJ NO. 2023CPT.06.13.20781.1										19.45		910	20,704	60	1,440	26	1
GRAND TOTAL										19.45		910	20,704	60	1,440	26	1

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO.	SHEET NO.
2023CPT.06.13.20781.1	

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH		4413000000-E WORK ZONE ADVANCE/GENERAL WARNING SIGNING	4457000000-N TEMPORARY TRAFFIC CONTROL	4685000000-E		4695000000-E	4709000000-E
								MI	FT			4" X 90 M	4" X 90 M	8" X 90 M	24" X 90 M
												WHITE THERMO	YELLOW THERMO	WHITE THERMO	WHITE THERMO
2023CPT.06.13.20781.1	Robeson	1	SR-1931 / MARTIN RD	FROM SR 1006 TO SR 1005	1	2	2WU	4.33	18	485	1.00	45,726	38,867		
TOTAL FOR MAP NO. 1								4.33		485	1	45,726	38,867		
2023CPT.06.13.20781.1	Robeson	2	SR-1762 / EMMA JANE RD	FROM SR 1006 TO SR 1758	1	2	2WU	3.25	18	364		34,320	29,172		
TOTAL FOR MAP NO. 2								3.25		364		34,320	29,172		
2023CPT.06.13.20781.1	Robeson	3	SR-1955 / REGAN CHURCH RD	FROM SR 1005 TO SR 1947	1	2		3.2	21	358		33,792	28,724		
TOTAL FOR MAP NO. 3								3.2		358		33,792	28,724		
2023CPT.06.13.20781.1	Robeson	4	SR-1532 / NORMENT RD	FROM SR 1528 TO SR 1528	1	2	2WU	3.3	24	370		34,850	29,622	120	65
TOTAL FOR MAP NO. 4								3.3		370		34,850	29,622	120	65
2023CPT.06.13.20781.1	Robeson	5	SR-1557 / REDMOND RD	FROM SR 1351 TO SR 1339	1	2	2WU	0.87	20	97					
TOTAL FOR MAP NO. 5								0.87		97					
2023CPT.06.13.20781.1	Robeson	6	SR-1002 / OLD WHITEVILLE RD	FROM SR 2121 TO COLUMBUS CL	1	2	2WU	4.5	24	508		47,731	40,570		
TOTAL FOR MAP NO. 6								4.5		508		47,731	40,570		
TOTAL FOR PROJ NO. 2023CPT.06.13.20781.1								19.45		2,182	1.000	196,419	166,955	120	65
GRAND TOTAL								19.45		2182	1.000	196419	166955	120	65
												363,374			
												363,374			

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH		4810000000-E		4891000000-E	4892000000-N	4900000000-N	
								MI	FT	4" WHITE PAINT	4" YELLOW PAINT	GENERIC MARKING, 16" X 90 M WHITE THERMO(RXR CROSSBUCK)	GENERIC MARKING, THERMO RXR 90 M	YELLOW & YELLOW MARKERS	
										LF	LF	LF	EA	EA	
2023CPT.06.13.20781.1	Robeson	1	SR-1931 / MARTIN RD	FROM SR 1006 TO SR 1005	1	2	2WU	4.33	18					285	
TOTAL FOR MAP NO. 1								4.33						285	
2023CPT.06.13.20781.1	Robeson	2	SR-1762 / EMMA JANE RD	FROM SR 1006 TO SR 1758	1	2	2WU	3.25	18					214	
TOTAL FOR MAP NO. 2								3.25						214	
2023CPT.06.13.20781.1	Robeson	3	SR-1955 / REGAN CHURCH RD	FROM SR 1005 TO SR 1947	1	2		3.2	21					212	
TOTAL FOR MAP NO. 3								3.2						212	
2023CPT.06.13.20781.1	Robeson	4	SR-1532 / NORMENT RD	FROM SR 1528 TO SR 1528	1	2	2WU	3.3	24					217	
TOTAL FOR MAP NO. 4								3.3						217	
2023CPT.06.13.20781.1	Robeson	5	SR-1557 / REDMOND RD	FROM SR 1351 TO SR 1339	1	2	2WU	0.87	20	18,372	15,616	80	2		
TOTAL FOR MAP NO. 5								0.87		18,372	15,616	80	2		
2023CPT.06.13.20781.1	Robeson	6	SR-1002 / OLD WHITEVILLE RD	FROM SR 2121 TO COLUMBUS CL	1	2	2WU	4.5	24					300	
TOTAL FOR MAP NO. 6								4.5						300	
TOTAL FOR PROJ NO. 2023CPT.06.13.20781.1								19.45		18,372	15,616	80	2	1,228	
												33,988			