

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS - REVISED
June 14, 2017

CONTRACT ID: DF00167

WBS ELEMENT NO.: 2017CPT.06.18.20781.1

FEDERAL AID NO.: STATE FUNDED

COUNTY: ROBESON

TIP NO.: -----

LENGTH OF PROJECT: 29.50 MILES

ROUTE NO.: VARIOUS SECONDARY ROUTES

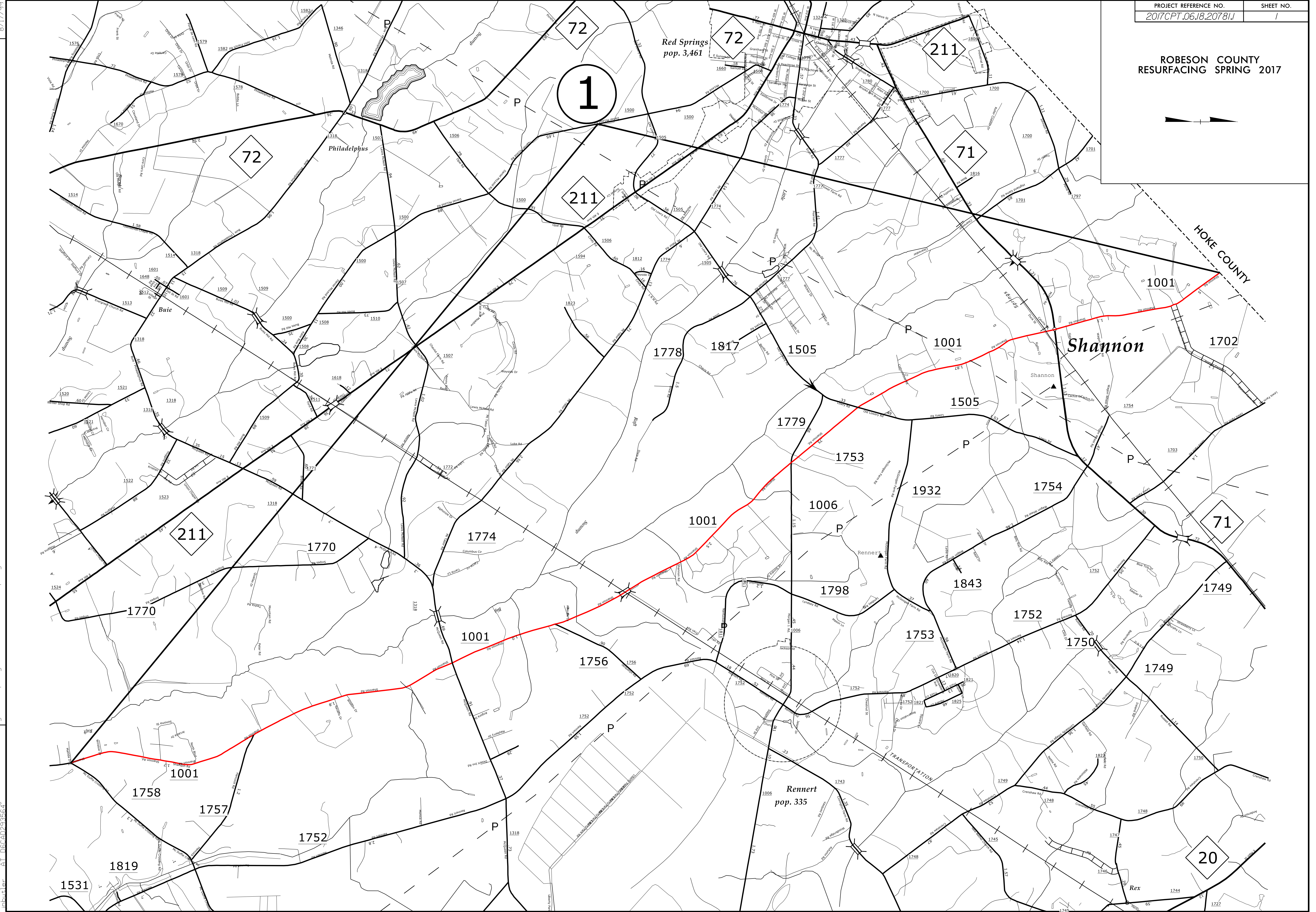
TYPE OF WORK: RESURFACING, MILLING, WIDENING & SHOULDER RECONSTRUCTION

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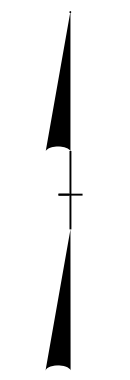
ROBESON COUNTY RESURFACING SPRING 2017



REVISIONS

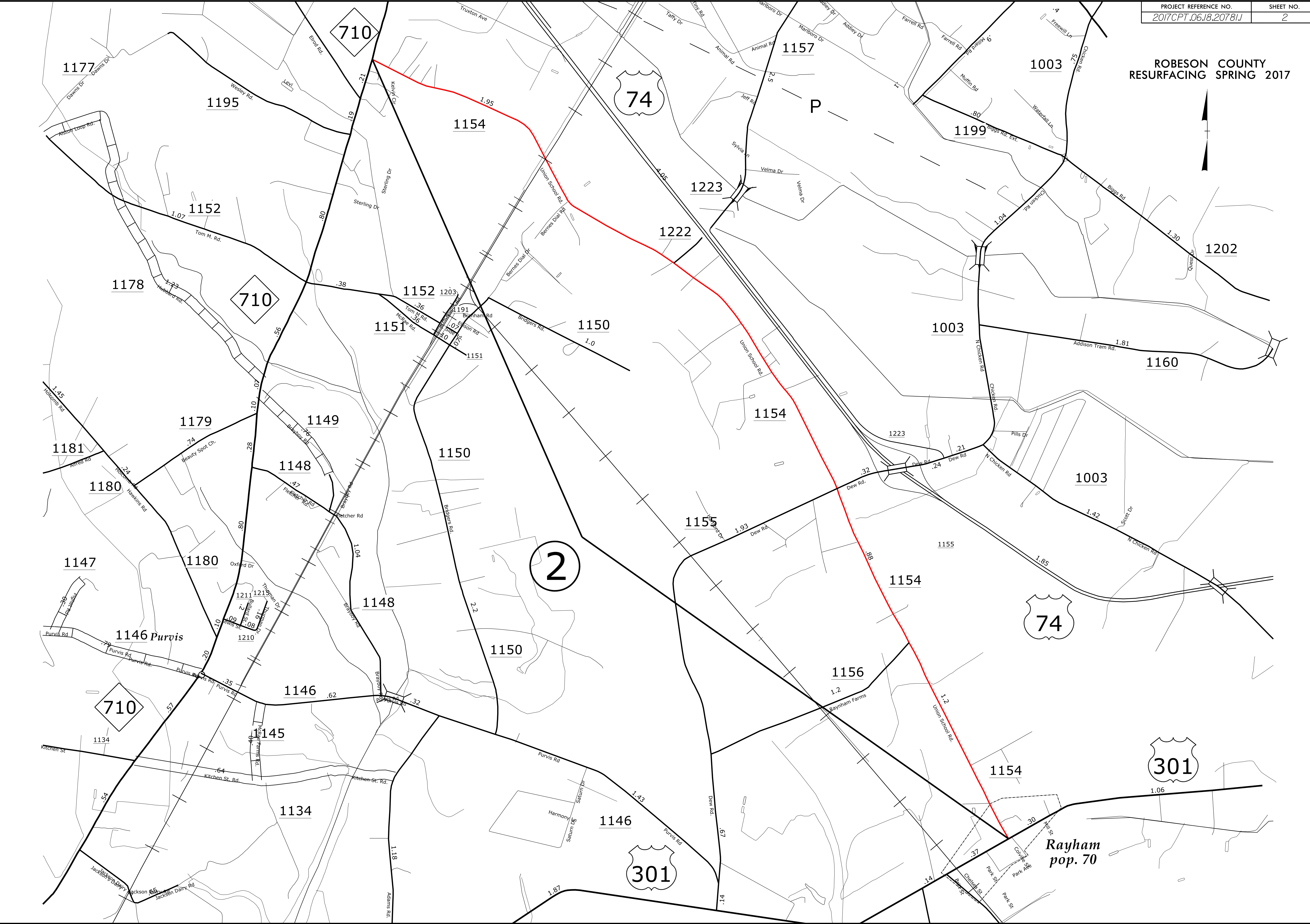
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ROBESON COUNTY
RESURFACING SPRING 2017



REVISIONS

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BUS 74

BUS 74

3

P

1158

1197

1003.75

1199

1157

1223

1222

74

4.05

1.04

1.30

2.5

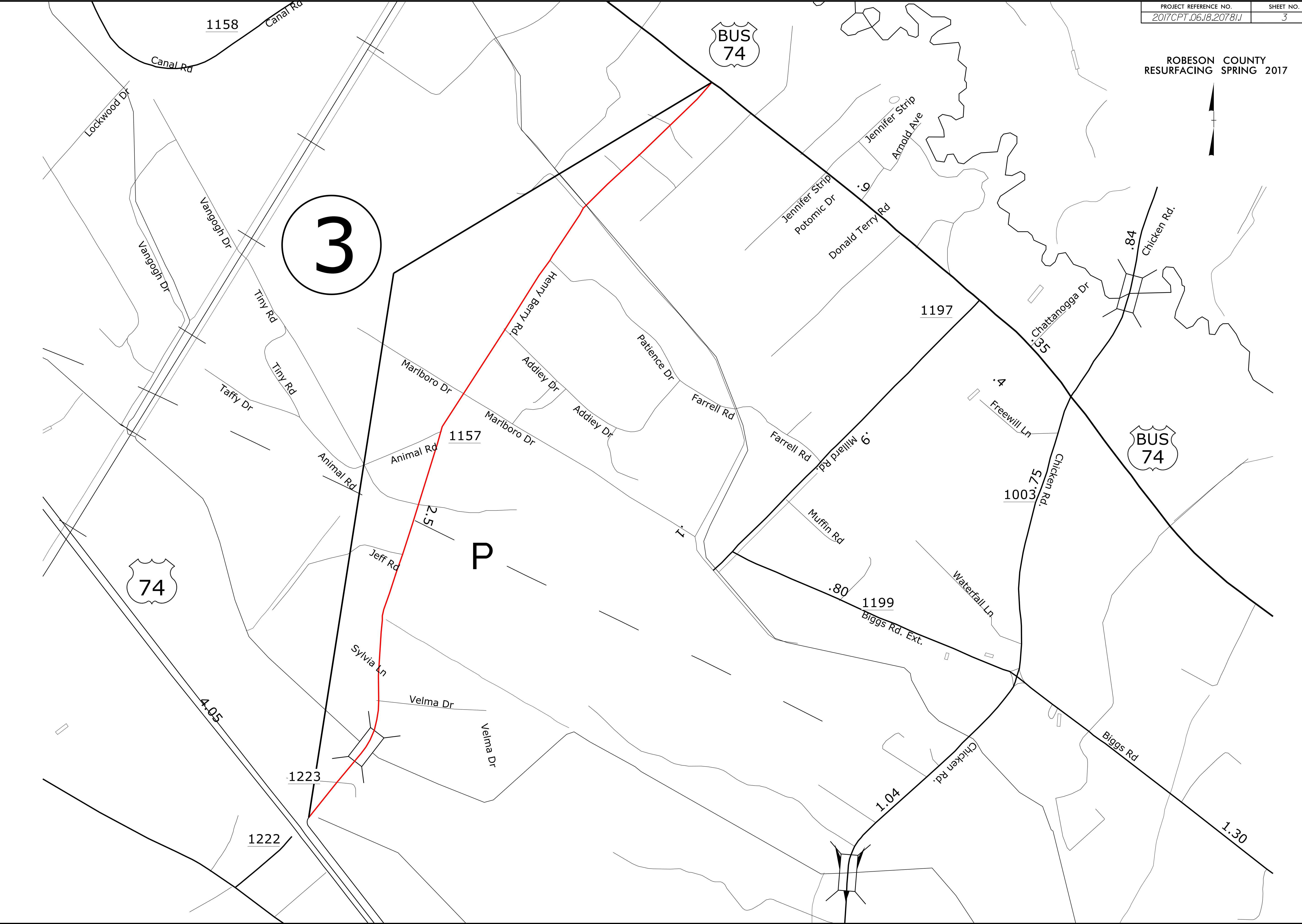
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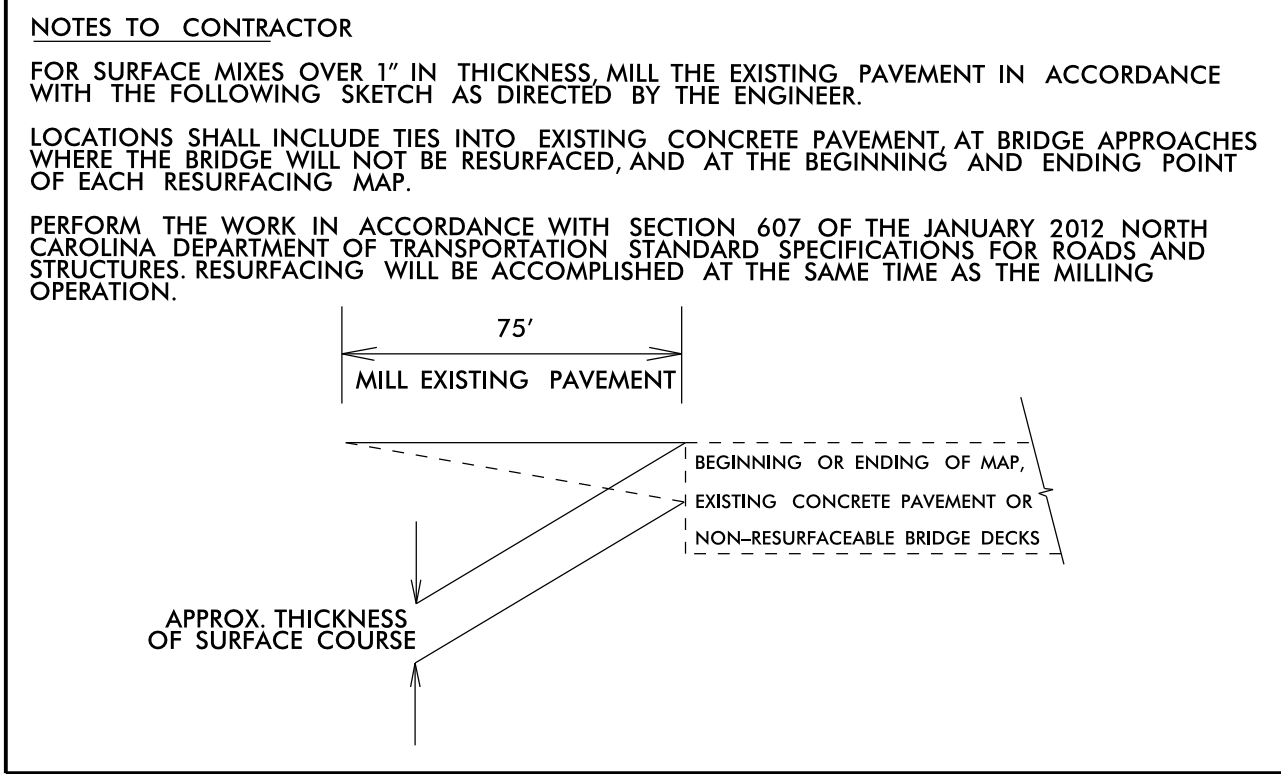
REVISIONS

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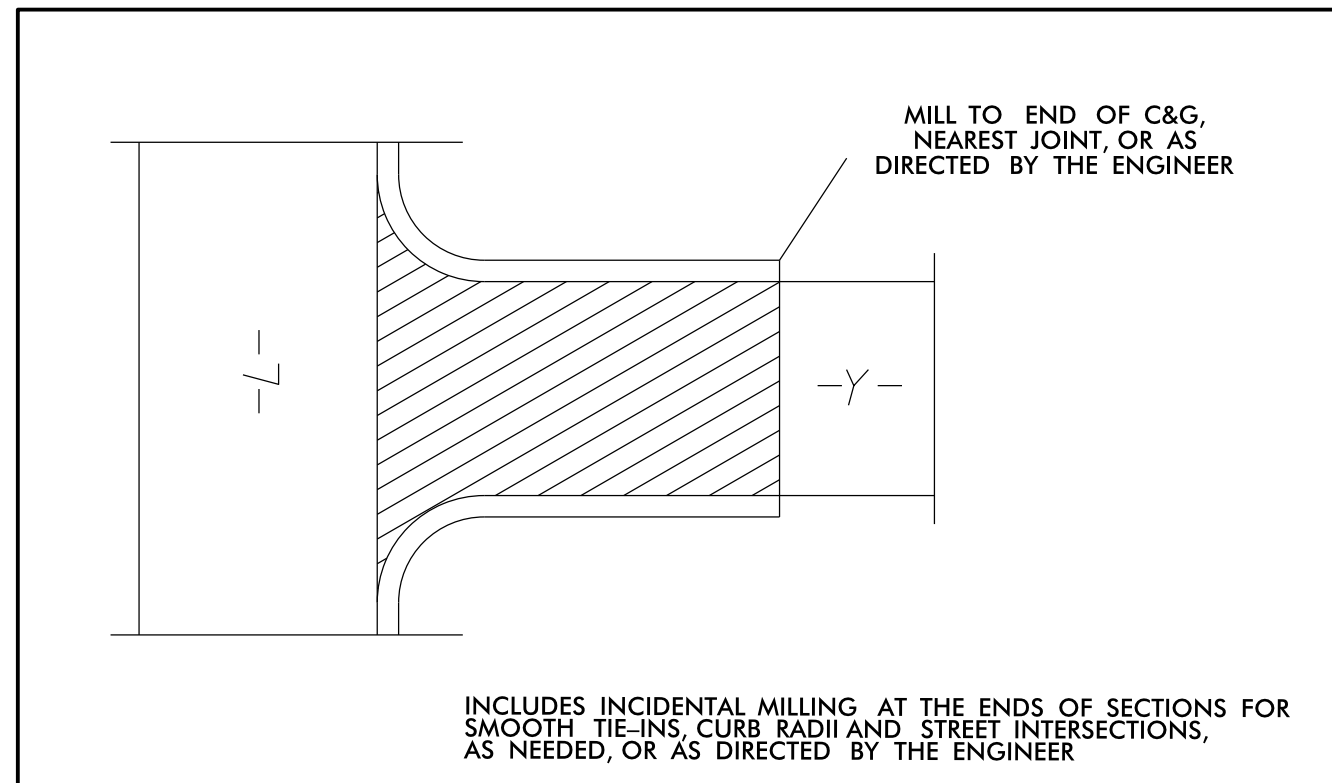


PAVEMENT SCHEDULE

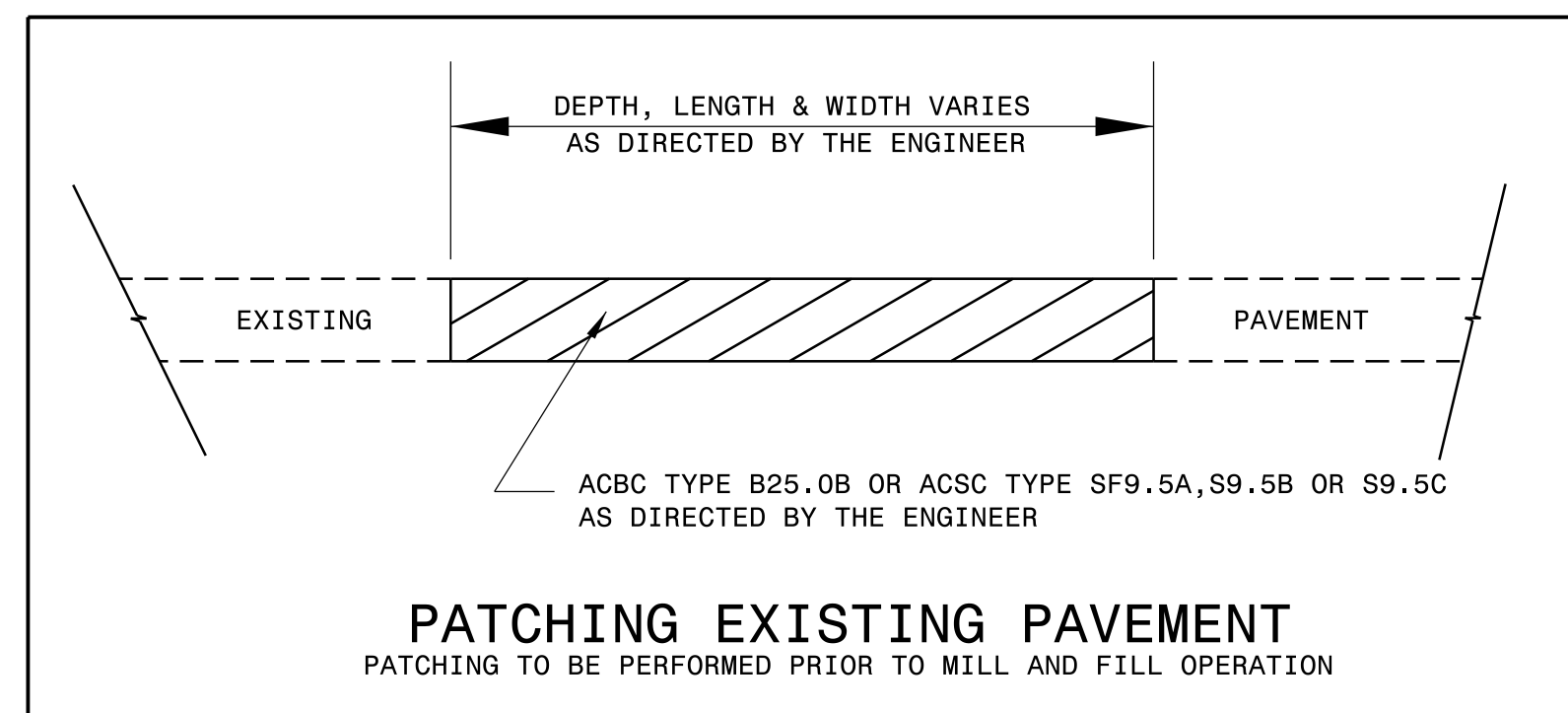
C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C3	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT



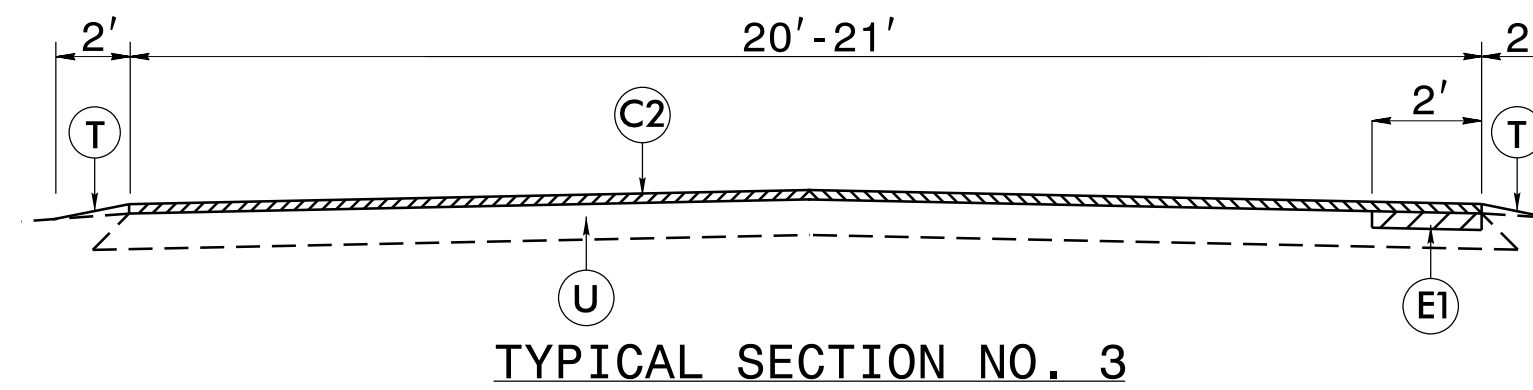
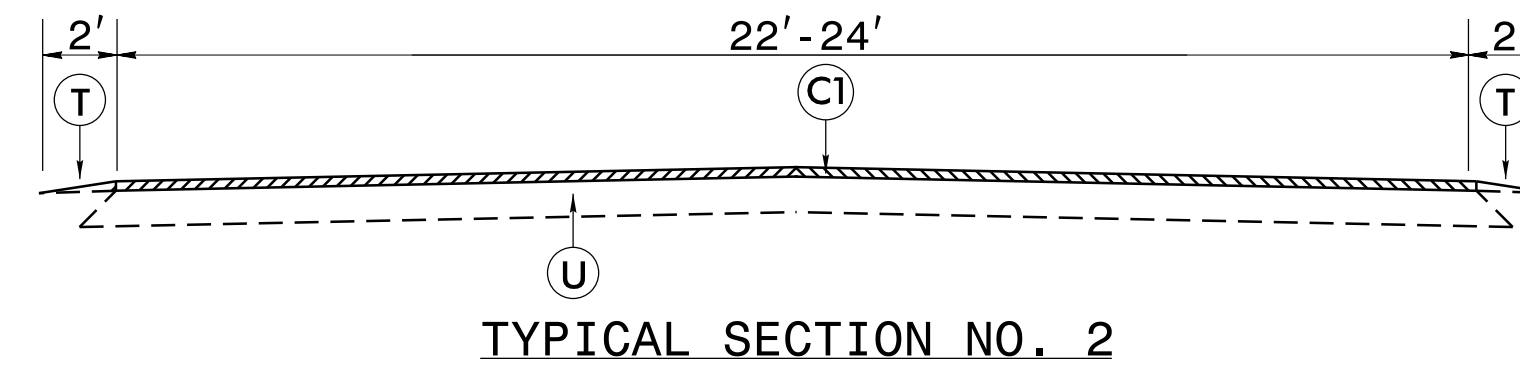
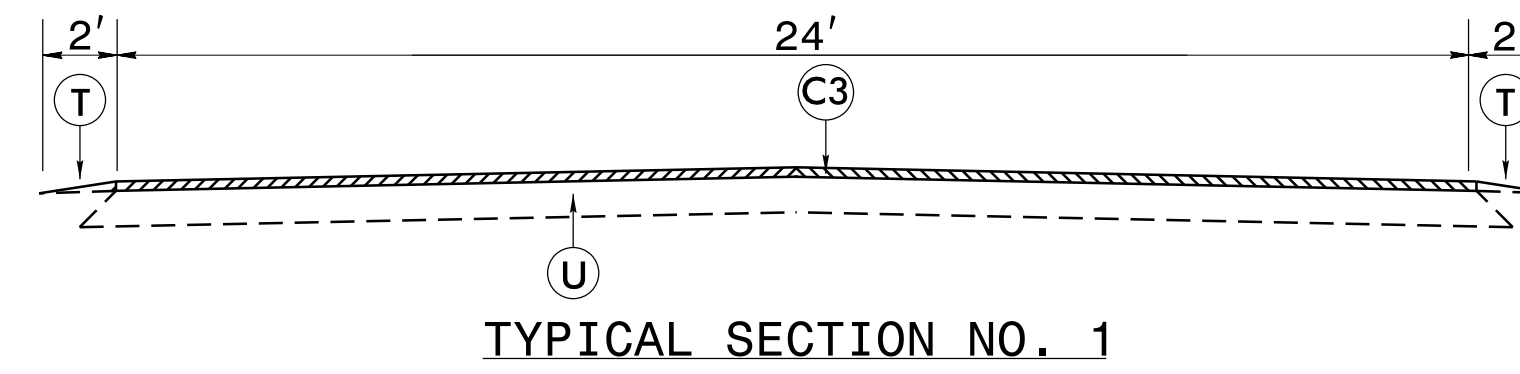
MILLING AT PAVEMENT TIE-INS DETAIL



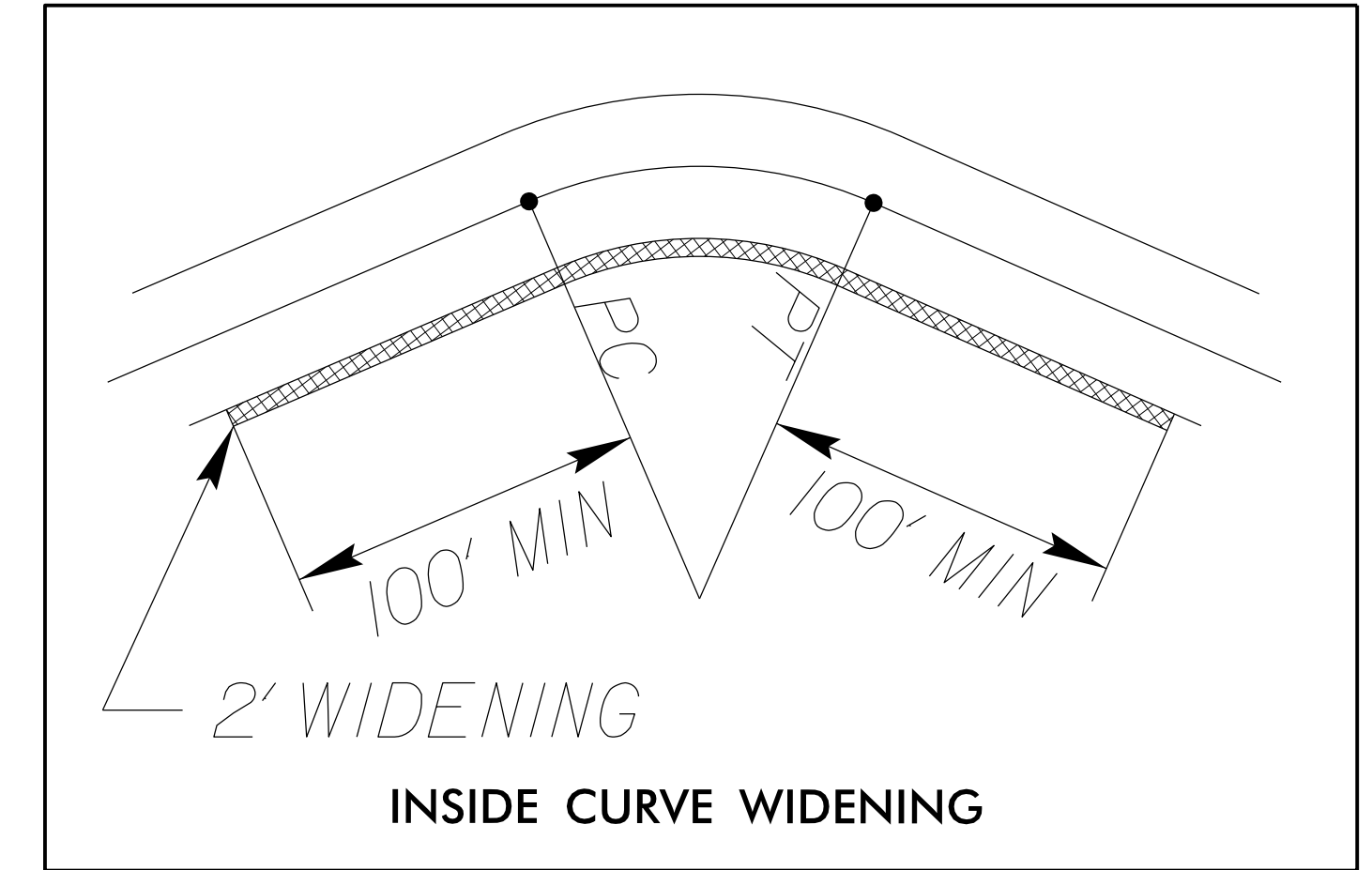
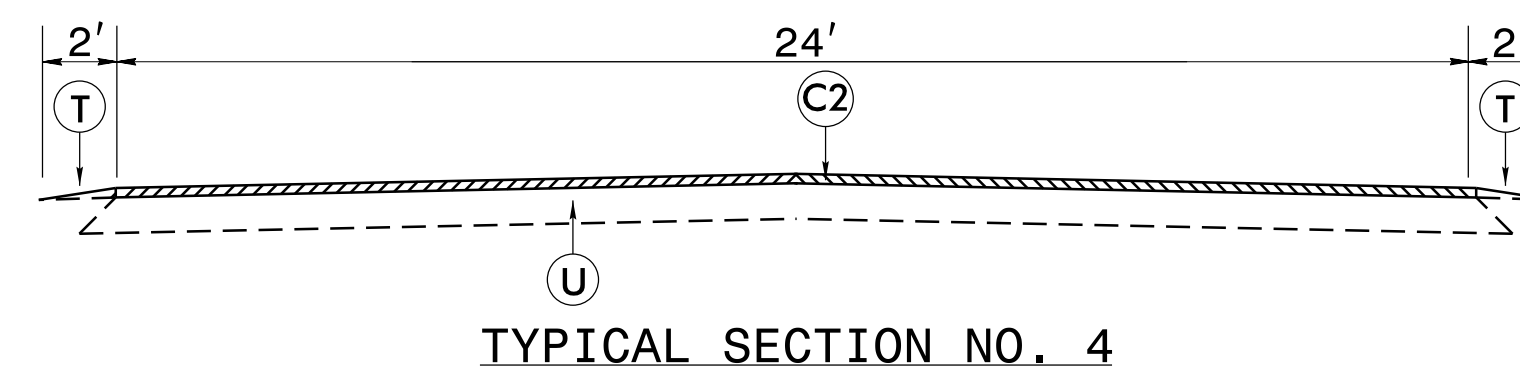
MILLING AT CURB AND GUTTER INTERSECTIONS



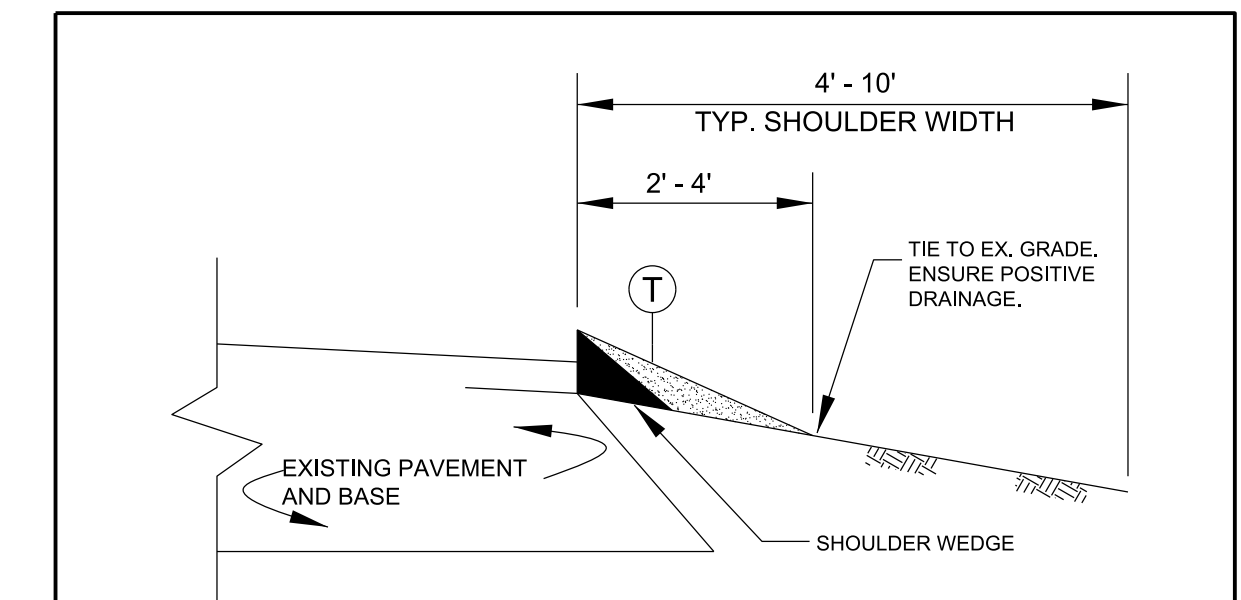
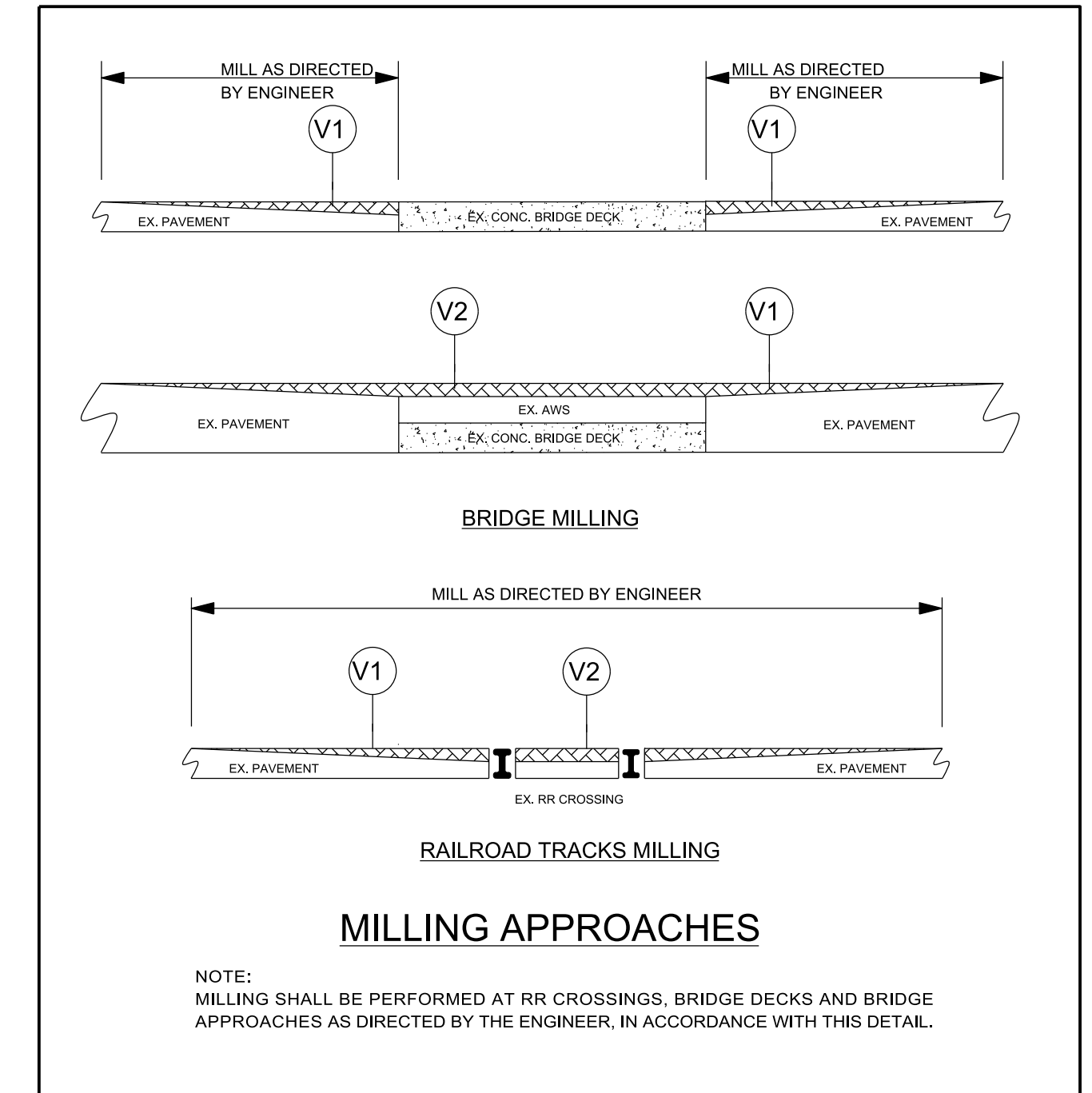
MAP 2



*INCLUDES INSIDE CURVE WIDENING



MAPS 3 & 6



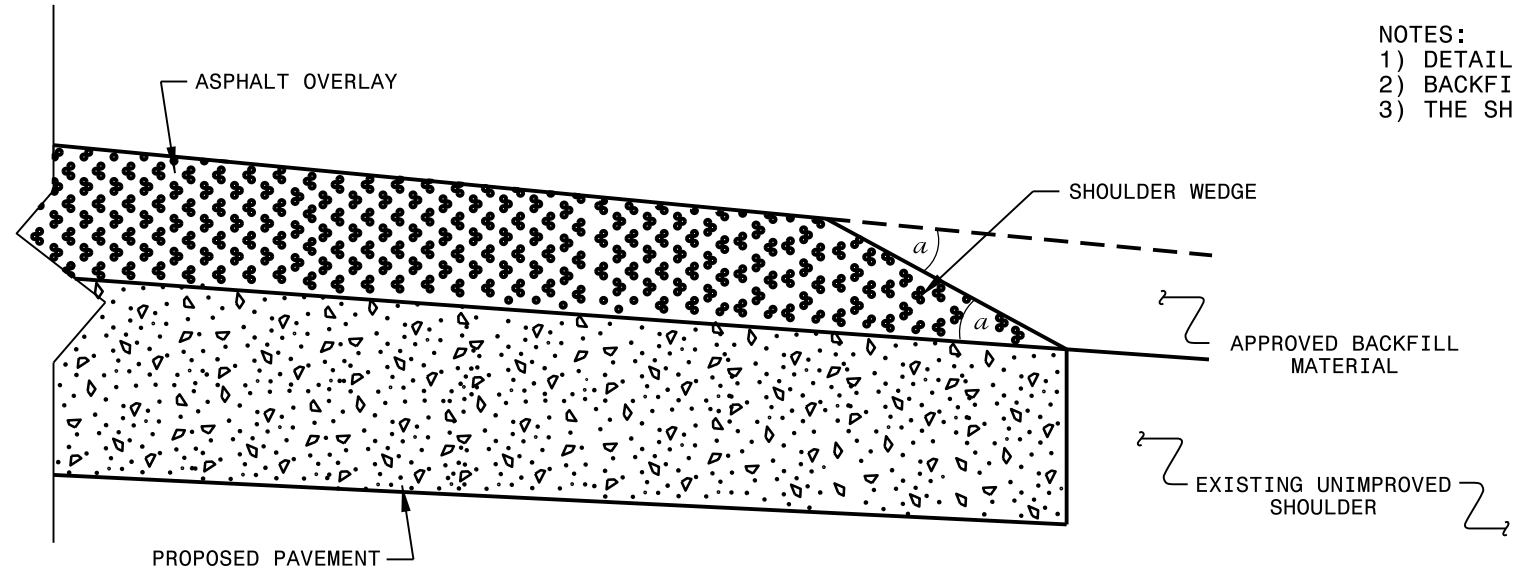
SHOULDER RECONSTRUCTION

- NOTES:**
- SHOULDER SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM ROADWAY.
 - AGGREGATE SHOULDER BORROW (ASB) MATERIAL SHALL BE PLACED USING A WIDENING MACHINE OR SIMILAR DEVICE.
 - A VEGETATIVE BUFFER SHALL BE MAINTAINED BETWEEN THE DISTURBED AREA ALONG THE EDGE OF PAVEMENT AND THE DITCH SHOULDER POINT TO MINIMIZE EROSION. PULLING DITCHES OR CUTTING SHOULDERS TO GENERATE BORROW MATERIAL WILL NOT BE ALLOWED.
 - REQUIRED BORROW MATERIAL MAY BE OBTAINED BY THE CONTRACTOR FROM WIDENING OPERATIONS WITHIN THE PROJECT LIMITS, FROM NCDOT APPROVED BORROW PITS OR FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

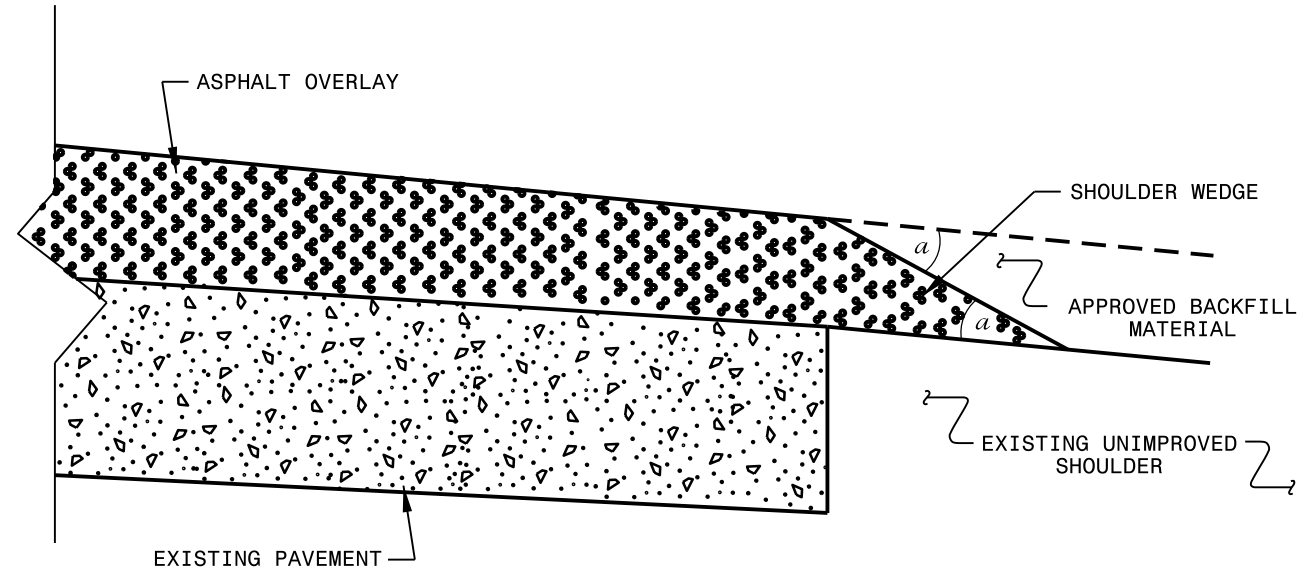
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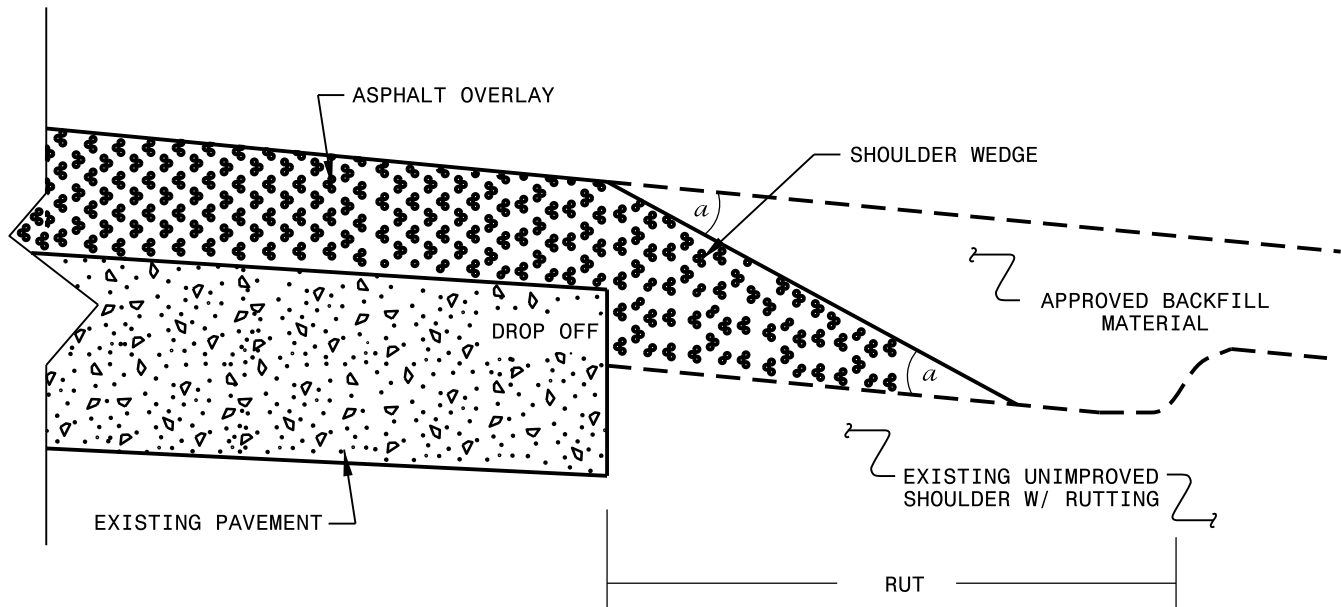
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ Widening or
 with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)

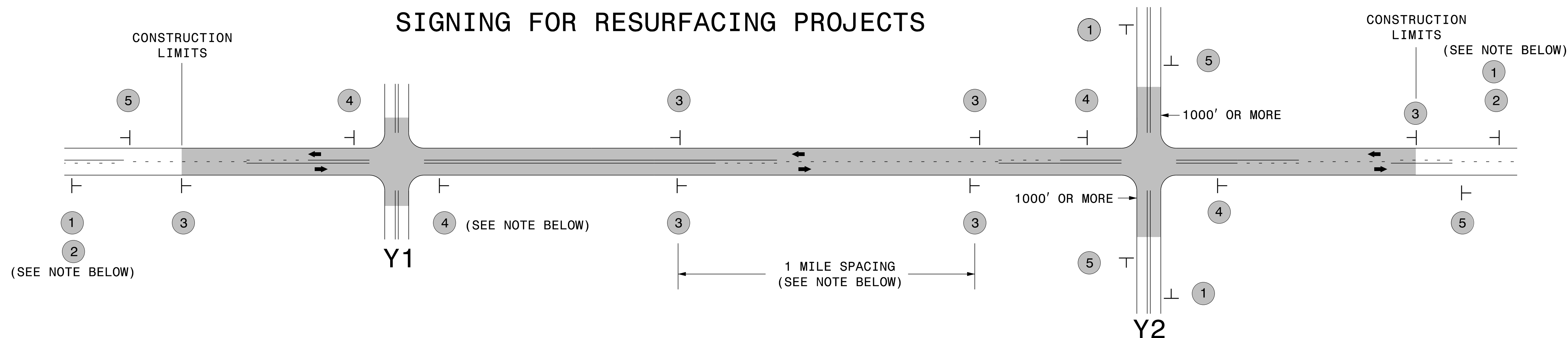


SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- 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.: s:\usr\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	 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.	<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;"> <div style="text-align: center;"> W20-1 48" X 48" </div> <div style="text-align: center;"> W20-7 A 48" X 48" </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 W7-3aP 24" X 18"	#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)	
	3	 SP 13107 48" X 48"	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.	
	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.	
	5	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	

**RESURFACING
 ADVANCE WARNING SIGNS
 FOR
 RURAL AND SUBURBAN
 2 LANE ROADWAYS**

3/19/2015 C:\Users\rmgarrrett\Downloads\Resurfacing_AdvWarn.2Ln (2).dgn User:rmgarrrett

GUIDELINES FOR LANE WIDTHS ON RESURFACING PROJECTS

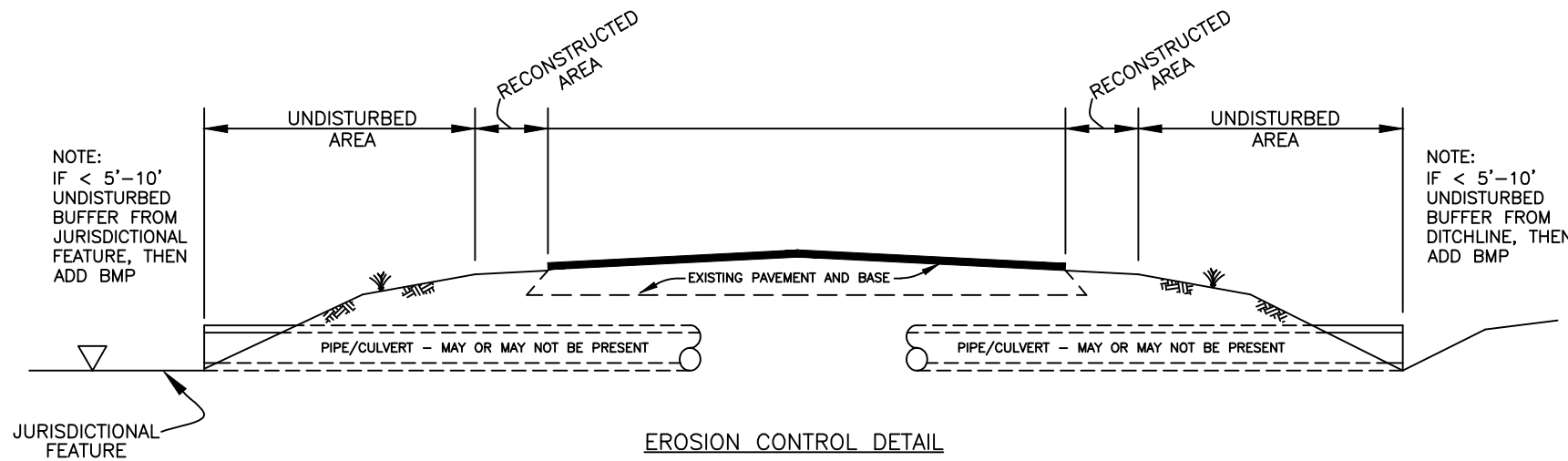
Contractor shall place the new pavement markings in accordance with this table and detail unless otherwise directed by the Engineer.

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

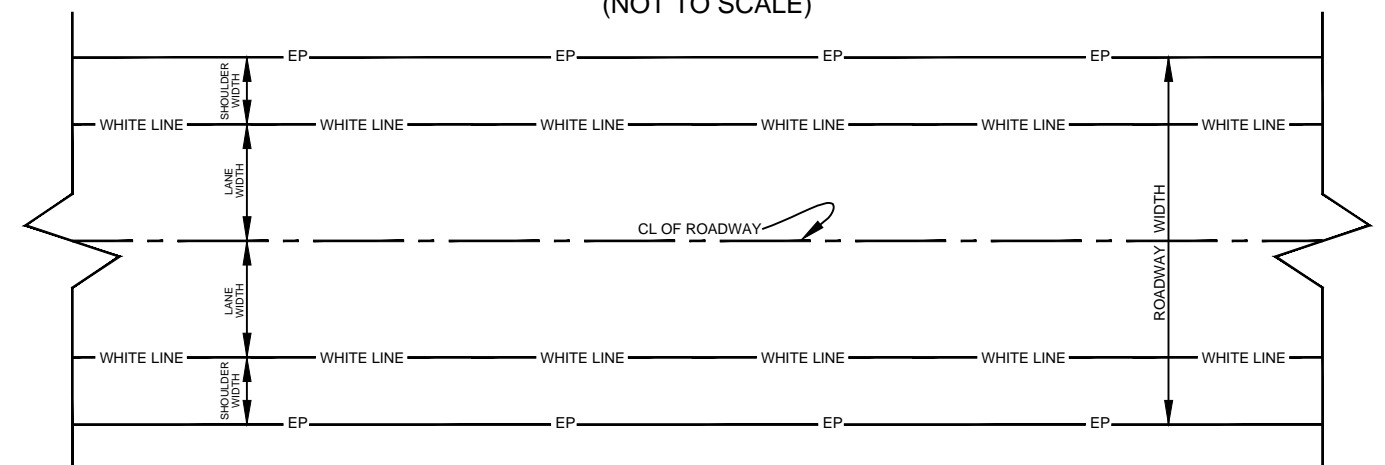


EROSION CONTROL DETAIL

NOTES:

1. IF A 5'-10' VEGETATED, UNDISTURBED BUFFER FROM ROW, DITCHLINE, WATER FEATURE OR DRAINAGE INLET CAN BE MAINTAINED, THEN NO BMP'S NEEDED.
2. IF < 5'-10' UNDISTURBED BUFFER FROM ROW, DITCHLINE, WATER FEATURE OR DRAINAGE INLET, THEN ADD BMP'S.
3. BMP OPTIONS:
 - a. MATTING MAY BE APPLIED AS SHOWN IN NCDOT STD. DWG. 1631.01 TO ESTABLISH BUFFER.
 - b. IF MATTING IS NOT PRACTICAL, OR THERE IS NOT ENOUGH SHOULDER WIDTH, THEN INSTALL TEMPORARY SILT FENCE AS SHOWN IN NCDOT STD. DWG. 1605.01, AND WATTLES WITH POLYACRYLAMIDE (PAM).

SCHEMATIC OF ROADWAY (NOT TO SCALE)



SUMMARY OF QUANTITIES

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.06.18.20781.1		

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	GENERIC GRADING ITEM AGGREGATE SHOULDER BORROW TON	SHOULDER RECONSTRUCTION SMI	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	SURFACE COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	ADJ. OF METER OR VALVE BOX EA	
2017CPT.06.18.20781.1	Robeson	1	SR 1001	FROM SR 1758 TO HOKE CO. LN.	2	2	2WU	NO	NO	10.73	22	3,470	21.46	800		11,699			702			
TOTAL FOR MAP NO. 1										10.73		3,470	21.46	800		11,699			702			
2017CPT.06.18.20781.1	Robeson	2	SR 1154	FROM NC 710 TO US 301	2	2	2WU	NO	NO	5.44	24	1,759	10.90			6,528			392	5	2	
TOTAL FOR MAP NO. 2										5.44		1,759	10.90			6,528			392	5	2	
2017CPT.06.18.20781.1	Robeson	3	SR 1157	FROM JT. 0.22 MI S OF BRIDGE TO US 74A	3	2	2WU	NO	NO	2.22	20	700	4.40		595			2,212	174			
TOTAL FOR MAP NO. 3										2.22		700	4.40		595			2,212	174			
2017CPT.06.18.20781.1	Robeson	4	SR 1166	FROM US 74A TO SR 1131	1	2	2WU	NO	NO	4.74	24	1,530	9.50				5,762		340			
TOTAL FOR MAP NO. 4										4.74		1,530	9.50				5,762		340			
2017CPT.06.18.20781.1	Robeson	5	SR 1339	FROM NC 710 TO SR 1347	4	2	2WU	NO	NO	2.1	24	700	4.20					2,743	184			
TOTAL FOR MAP NO. 5										2.1		700	4.20					2,743	184			
2017CPT.06.18.20781.1	Robeson	6	SR 1352	FROM SR 1312 TO SR 1340	3	2	2WU	NO	NO	4.27	21	478	8.40	180	1,145			4,426	347			
TOTAL FOR MAP NO. 6										4.27		478	8.40	180	1,145			4,426	347			
TOTAL FOR PROJ NO. 2017CPT.06.18.20781.1										29.5		8,637	58.86	980	1,740	18,227	5,762		9,381	2,139	5	2
GRAND TOTAL										29.5		8,637	58.86	980	1,740	18,227	5,762		9,381	2,139	5	2

THERMOPLASTIC AND PAINT QUANTITIES

										PROJECT NO.		SHEET NO.	TOTAL NO.							
										2017CPT.06.18.20781.1										
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	468500000-E		468600000-E		469500000-E	470000000-E	470500000-E	471000000-E	
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	4" X 90 M WHITE THERMO LF	4" X 90 M YELLOW THERMO LF	4" X 120 M YELLOW THERMO LF	4" X 120 M WHITE THERMO LF	8" X 90 M WHITE THERMO LF	12" X 90 M YELLOW THERMO DIAGONAL LF	16" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	
2017CPT.06.18.20781.1	Robeson	1	SR 1001	FROM SR 1758 TO HOKE CO. LN.	2	2	2WU	10.73	22	1,202	LS	118,658		100,859				390	260	
TOTAL FOR MAP NO. 1									10.73		1,202	LS	118,658		100,859			390	260	
2017CPT.06.18.20781.1	Robeson	2	SR 1154	FROM NC 710 TO US 301	2	2	2WU	5.44	24	609	LS							390	512	
TOTAL FOR MAP NO. 2									5.44		609	LS						390	512	
2017CPT.06.18.20781.1	Robeson	3	SR 1157	FROM JT. 0.22 MI S OF BRIDGE TO US 74A	3	2	2WU	2.22	20	223	LS									
TOTAL FOR MAP NO. 3									2.22		223	LS								
2017CPT.06.18.20781.1	Robeson	4	SR 1166	FROM US 74A TO SR 1131	1	2	2WU	4.74	24	530	LS	45,140	2,106	39,369	412	490	295		131	
TOTAL FOR MAP NO. 4									4.74		530	LS	45,140	2,106	39,369	412	490	295		131
2017CPT.06.18.20781.1	Robeson	5	SR 1339	FROM NC 710 TO SR 1347	4	2	2WU	2.1	24	700	LS	22,176		13,860	710	480	617	390	885	
TOTAL FOR MAP NO. 5									2.1		700	LS	22,176		13,860	710	480	617	390	885
2017CPT.06.18.20781.1	Robeson	6	SR 1352	FROM SR 1312 TO SR 1340	3	2	2WU	4.27	21	478	LS								700	
TOTAL FOR MAP NO. 6									4.27		478	LS								700
TOTAL FOR PROJ NO. 2017CPT.06.18.20781.1									29.5		3,742	LS	185,974	2,106	154,088	1,122	970	912	1,170	2,488
												188,080		155,210						
GRAND TOTAL									29.5		3,742	1	185,974	2,106	154,088	1,122	970	912	1,170	2,488
												188,080		155,210						

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	472100000-E		472500000-E				481000000-E		490000000-N		
										THERMO RXR 120 M EA	THERMO MSG SCHOOL 120 M EA	THERMO LT ARROW 90 M EA	THERMO STR ARROW 90 M EA	THERMO STR & RT ARROW 90 M EA	THERMO RT ARROW 90 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	YELLOW & YELLOW MARKERS EA	CRYSTAL & RED MARKERS EA	
2017CPT.06.18.20781.1	Robeson	1	SR 1001	FROM SR 1758 TO HOKE CO. LN.	2	2	2WU	10.73	22	4								750		
TOTAL FOR MAP NO. 1									10.73		4							750		
2017CPT.06.18.20781.1	Robeson	2	SR 1154	FROM NC 710 TO US 301	2	2	2WU	5.44	24	4	6					114,892	97,658			
TOTAL FOR MAP NO. 2									5.44		4	6				114,892	97,658			
2017CPT.06.18.20781.1	Robeson	3	SR 1157	FROM JT. 0.22 MI S OF BRIDGE TO US 74A	3	2	2WU	2.22	20							47,774	37,000			
TOTAL FOR MAP NO. 3									2.22						47,774	37,000				
2017CPT.06.18.20781.1	Robeson	4	SR 1166	FROM US 74A TO SR 1131	1	2	2WU	4.74	24			10	4	2				518	20	
TOTAL FOR MAP NO. 4									4.74				10	4	2			518	20	
2017CPT.06.18.20781.1	Robeson	5	SR 1339	FROM NC 710 TO SR 1347	4	2	2WU	2.1	24	4	12	10	1	2	4			306	88	
TOTAL FOR MAP NO. 5									2.1		4	12	10	1	2	4			306	88
2017CPT.06.18.20781.1	Robeson	6	SR 1352	FROM SR 1312 TO SR 1340	3	2	2WU	4.27	21							90,180	76,652			
TOTAL FOR MAP NO. 6									4.27							90,180	76,652			
TOTAL FOR PROJ NO. 2017CPT.06.18.20781.1									29.5		12	30	20	5	4	4	252,846	211,310	1,574	108
										42		33				464,156		1,682		
GRAND TOTAL									29.5		12	30	20	5	4	4	252,846	211,310	1,574	108
										42		33				464,156		1,682		