

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS

Letting Date: October 16, 2024

CONTRACT ID: DF00499

TIP NO.: -----

FEDERAL AID NO.: STATE FUNDED

WBS ELEMENT NO.: 2025CPT.06.09.20431.1

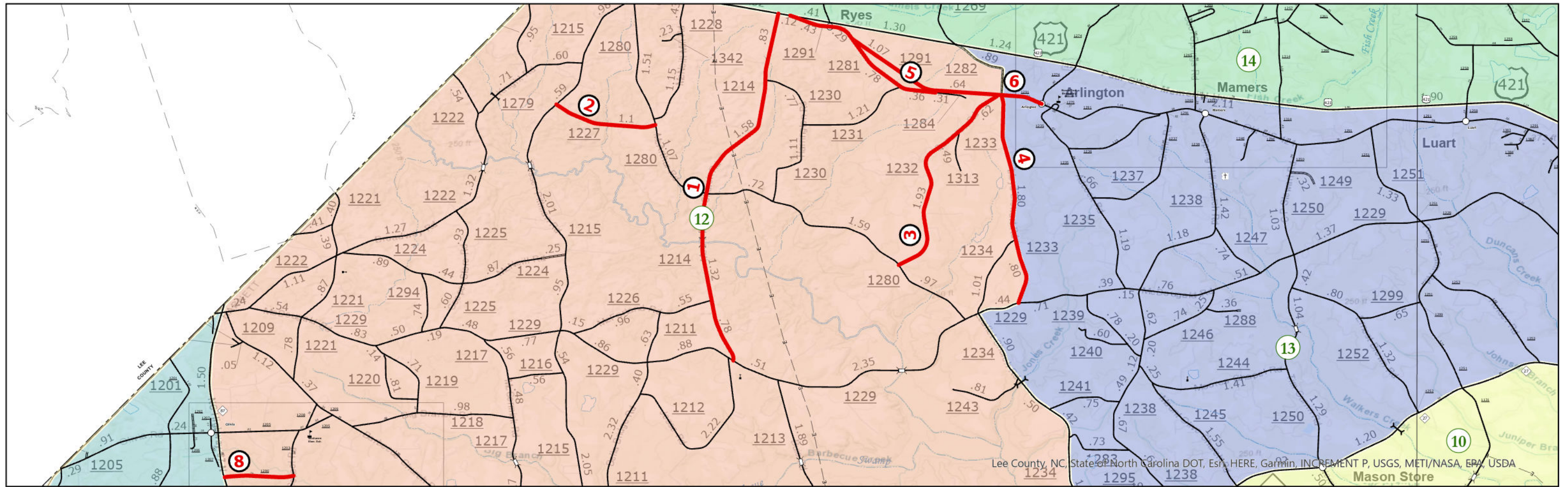
ROUTE NO.: VARIES

LOCATION: VARIES

COUNTY: HARNETT

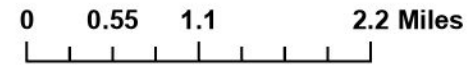
LENGTH OF PROJECT: 22.91 MILES

TYPE OF WORK: WIDENING, RESURFACING & PAVEMENT MARKINGS



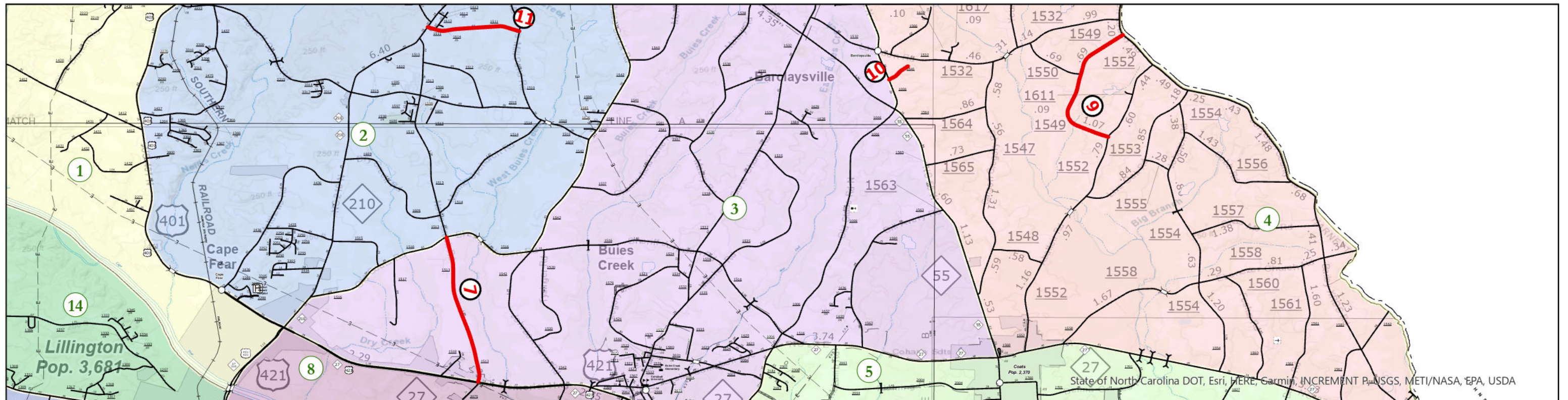
Harnett County Resurfacing 2024

Contract: DF00499

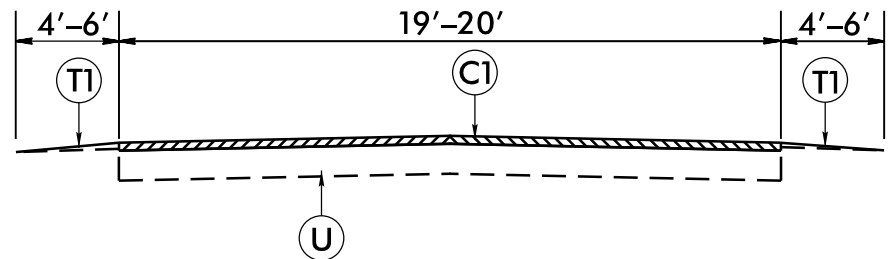


Legend

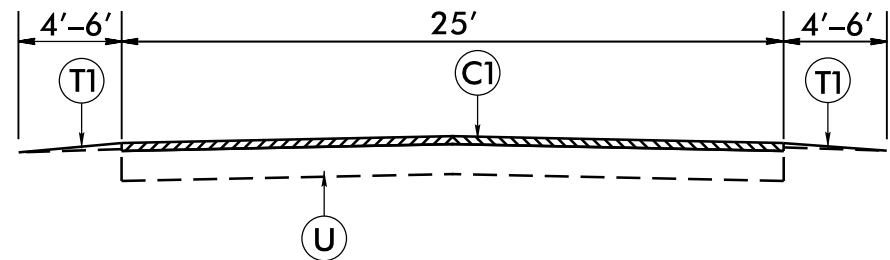
— WGS: 2025CPT.06.09.20431.1



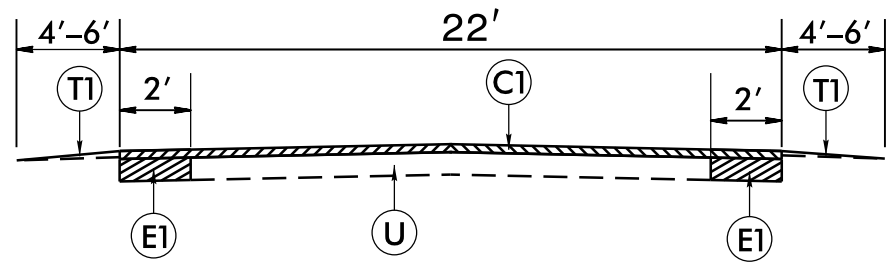
PAVEMENT SCHEDULE	
C1	1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
E1	5 1/2" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	EXISTING CURB AND GUTTER
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	0" - 1 1/2" MILLING
V2	1 1/2" MILLING



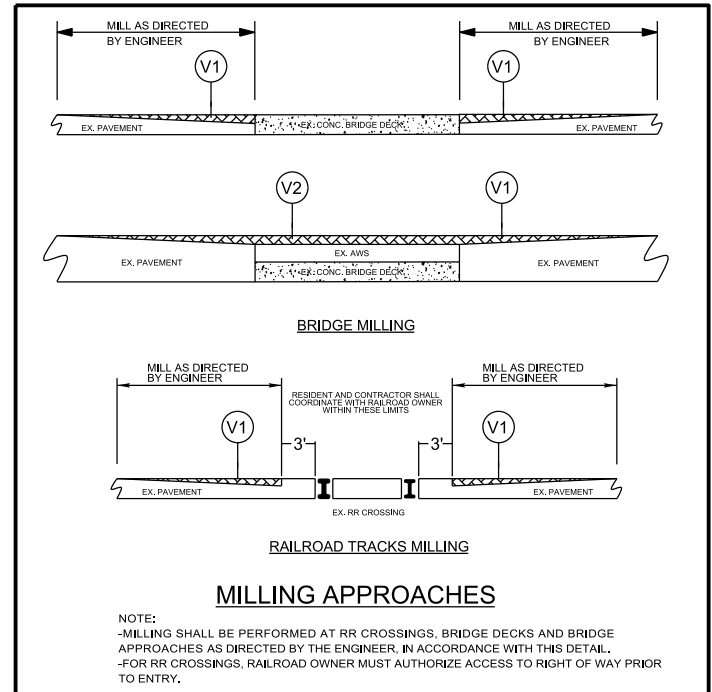
TYPICAL SECTION NO. 1
-PLUS 2' INSIDE CURVE WIDENING ON MAPS 1, 3 & 9 (SEE DETAIL)



TYPICAL SECTION NO. 2

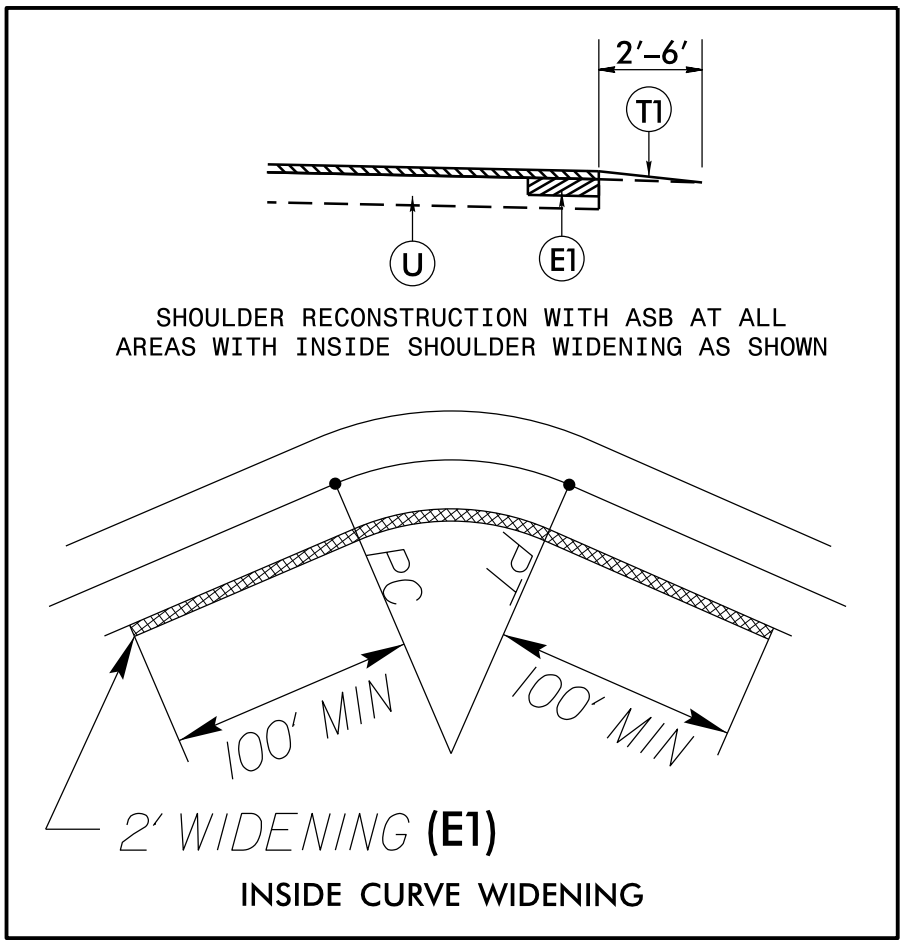


TYPICAL SECTION NO. 3

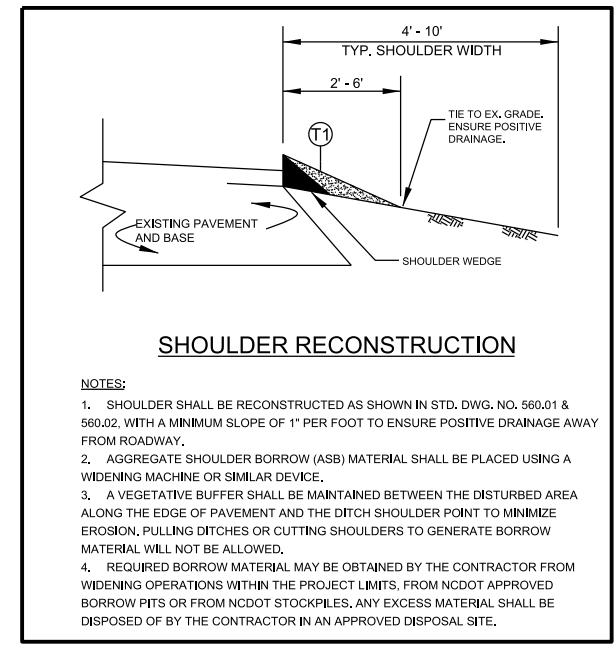


MILLING APPROACHES

NOTE:
-MILLING SHALL BE PERFORMED AT RR CROSSINGS, BRIDGE DECKS AND BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.
-FOR RR CROSSINGS, RAILROAD OWNER MUST AUTHORIZE ACCESS TO RIGHT OF WAY PRIOR TO ENTRY.

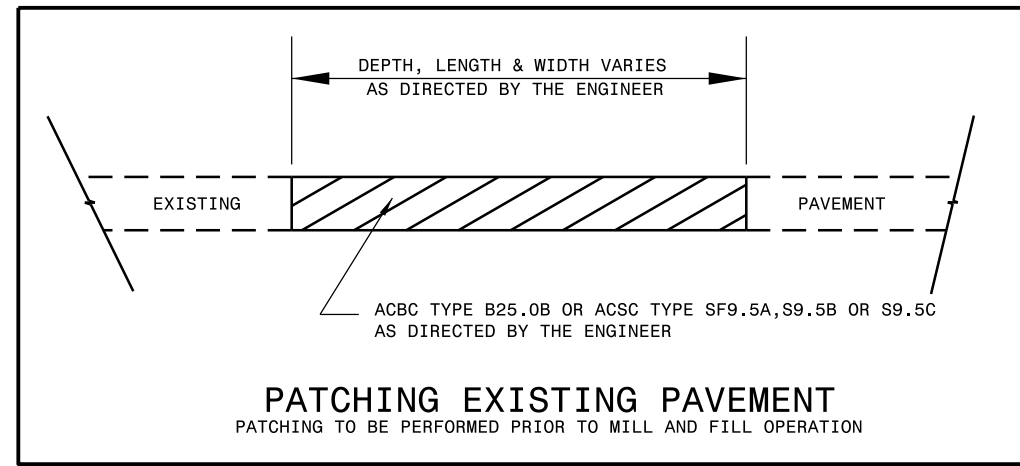


SHOULDER RECONSTRUCTION WITH ASB AT ALL AREAS WITH INSIDE SHOULDER WIDENING AS SHOWN

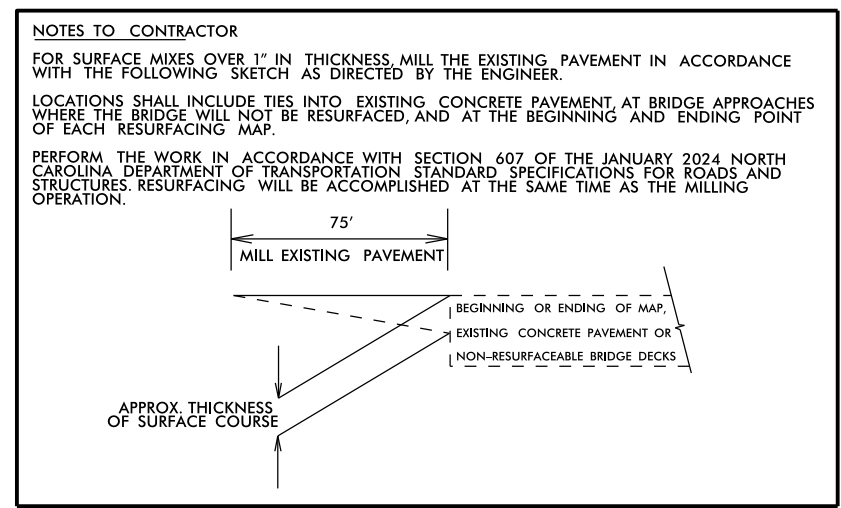


SHOULDER RECONSTRUCTION

- 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.



PATCHING EXISTING PAVEMENT
PATCHING TO BE PERFORMED PRIOR TO MILL AND FILL OPERATION

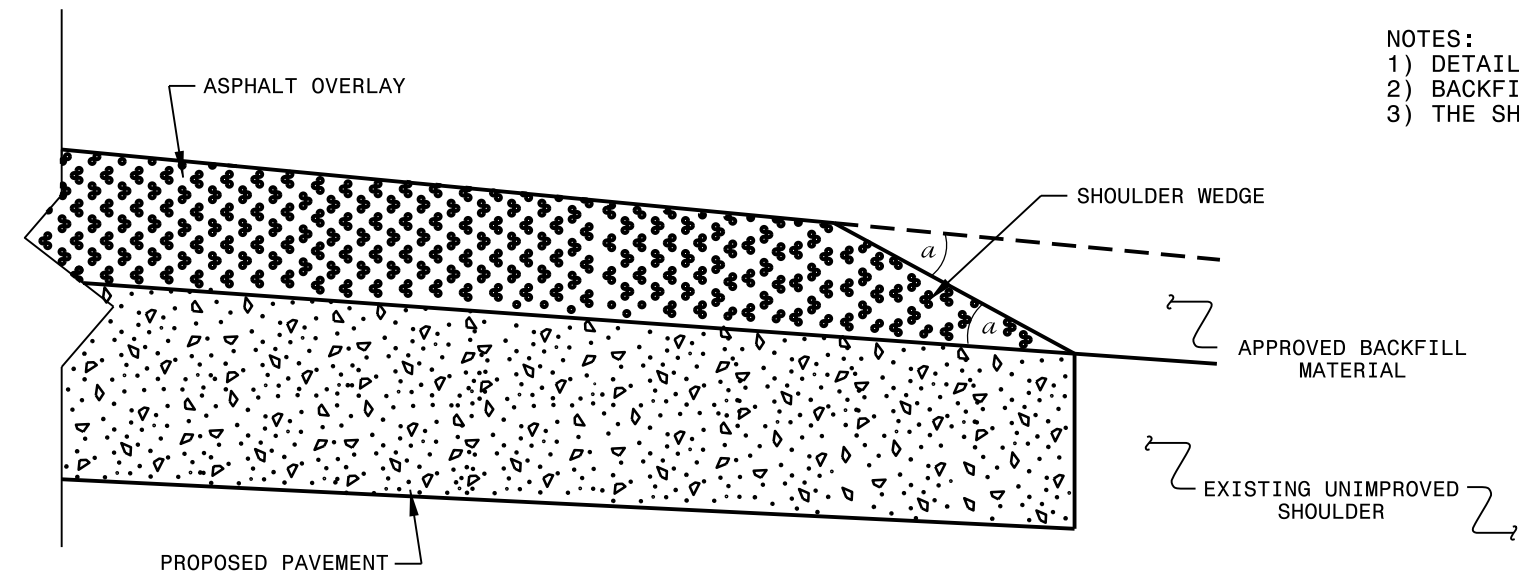


NOTES TO CONTRACTOR
FOR SURFACE MIXES OVER 1" IN THICKNESS, MILL THE EXISTING PAVEMENT IN ACCORDANCE WITH THE FOLLOWING SKETCH AS DIRECTED BY THE ENGINEER.
LOCATIONS SHALL INCLUDE TIES INTO EXISTING CONCRETE PAVEMENT AT BRIDGE APPROACHES WHERE THE BRIDGE WILL NOT BE RESURFACED, AND AT THE BEGINNING AND ENDING POINT OF EACH RESURFACING MAP.
PERFORM THE WORK IN ACCORDANCE WITH SECTION 607 OF THE JANUARY 2024 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. RESURFACING WILL BE ACCOMPLISHED AT THE SAME TIME AS THE MILLING OPERATION.

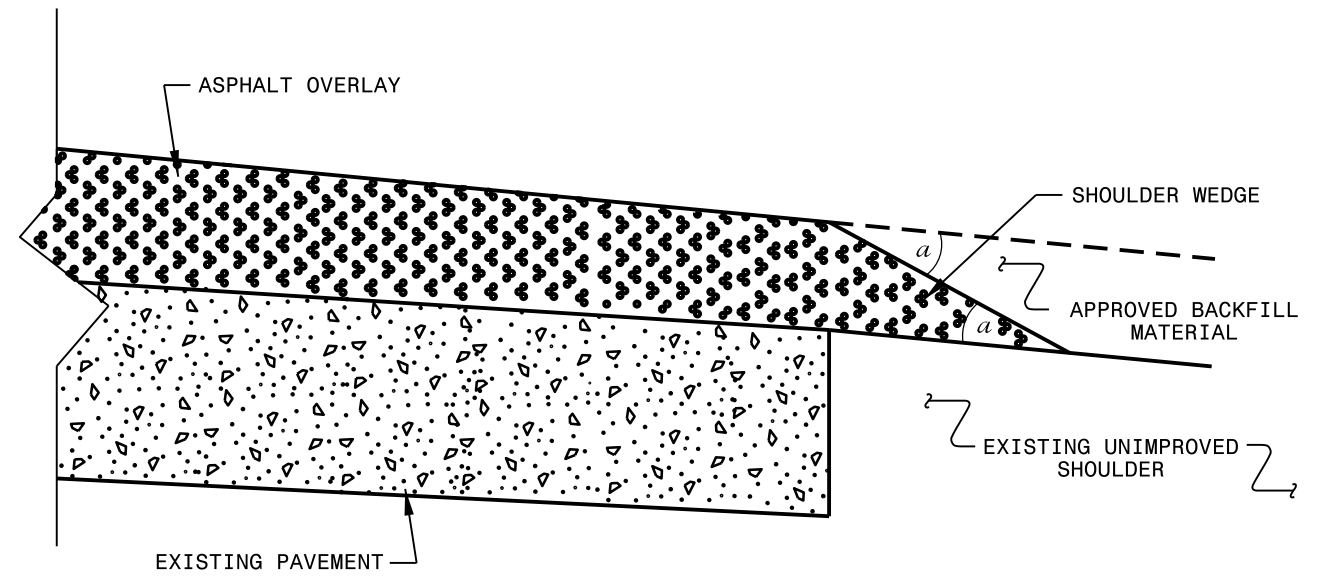
MILLING AT PAVEMENT TIE-INS DETAIL

6/2/99
25-SEP-2024 10:10
S:\Projects\2024\Resurfacing\DF00499\2025CPT\1.06.09.20431.1.Fall 2024_Hornett\Plans\TYPICALS.dgn

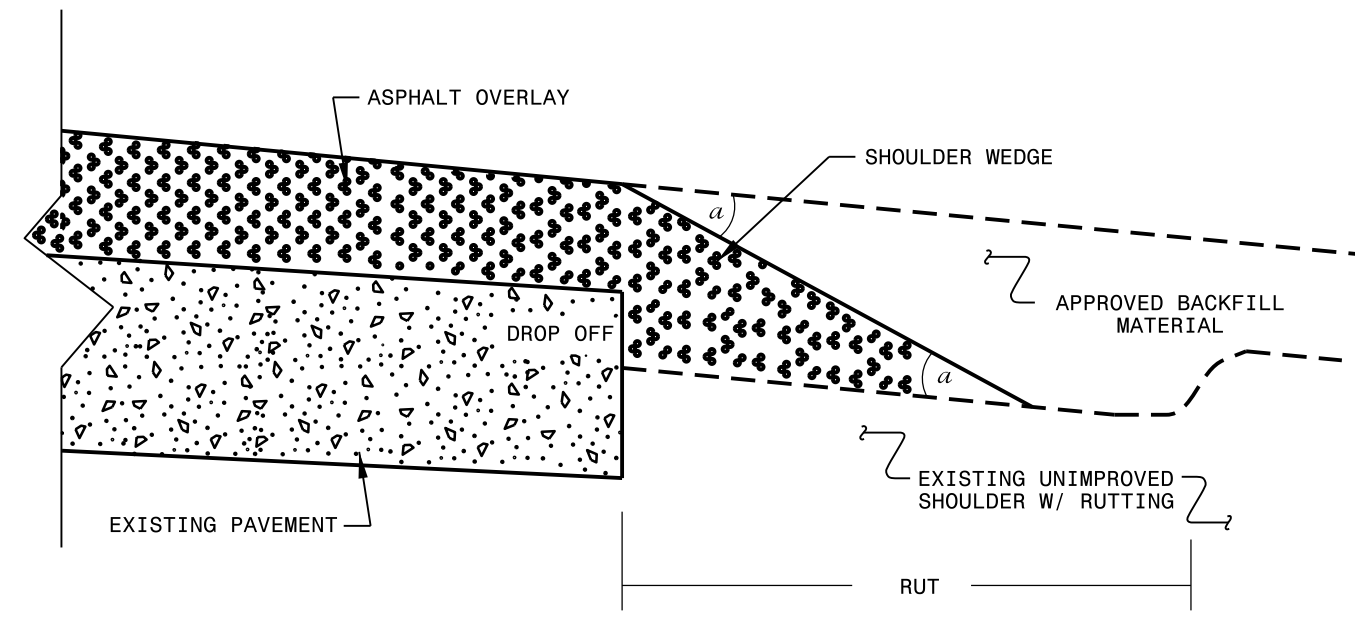
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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.: susr/details/stand/shoulderwedgedetail.dgn			

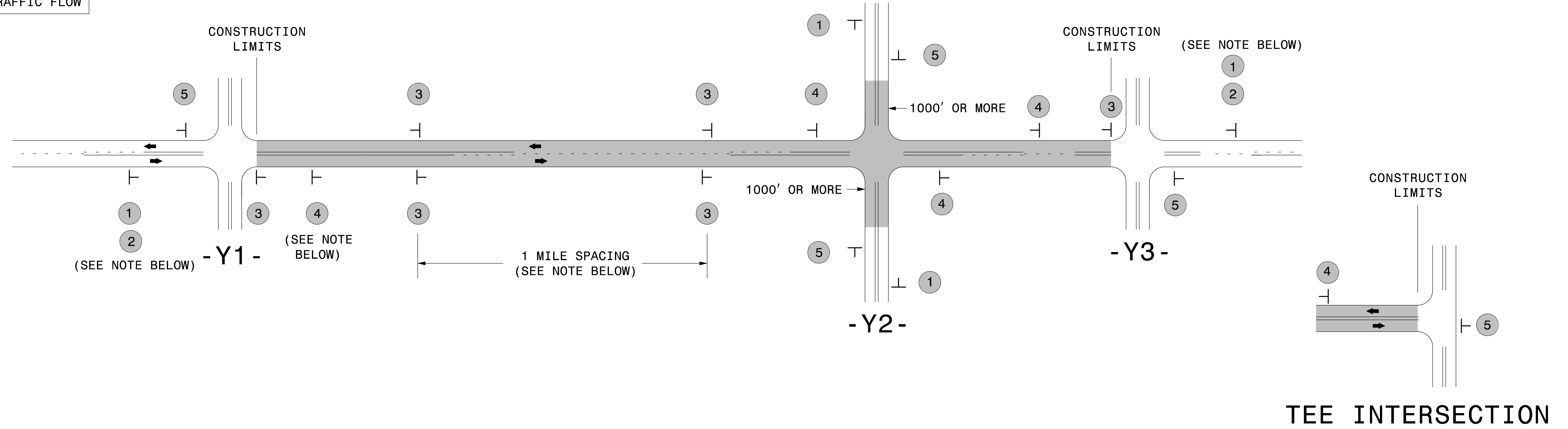
SYSTEMS DESIGN
 USER NAME

SIGNING FOR RESURFACING PROJECTS

LEGEND

┃ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

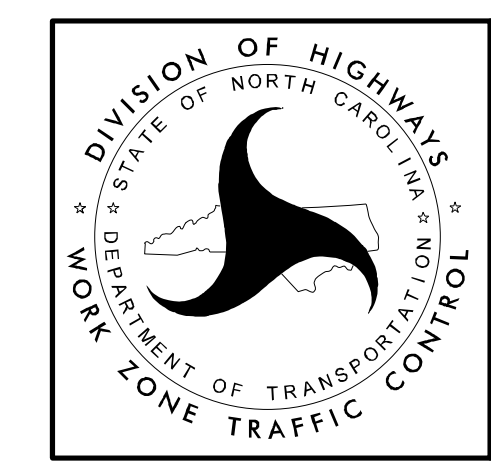
-Y- LINE SIGNING

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"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS 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

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'

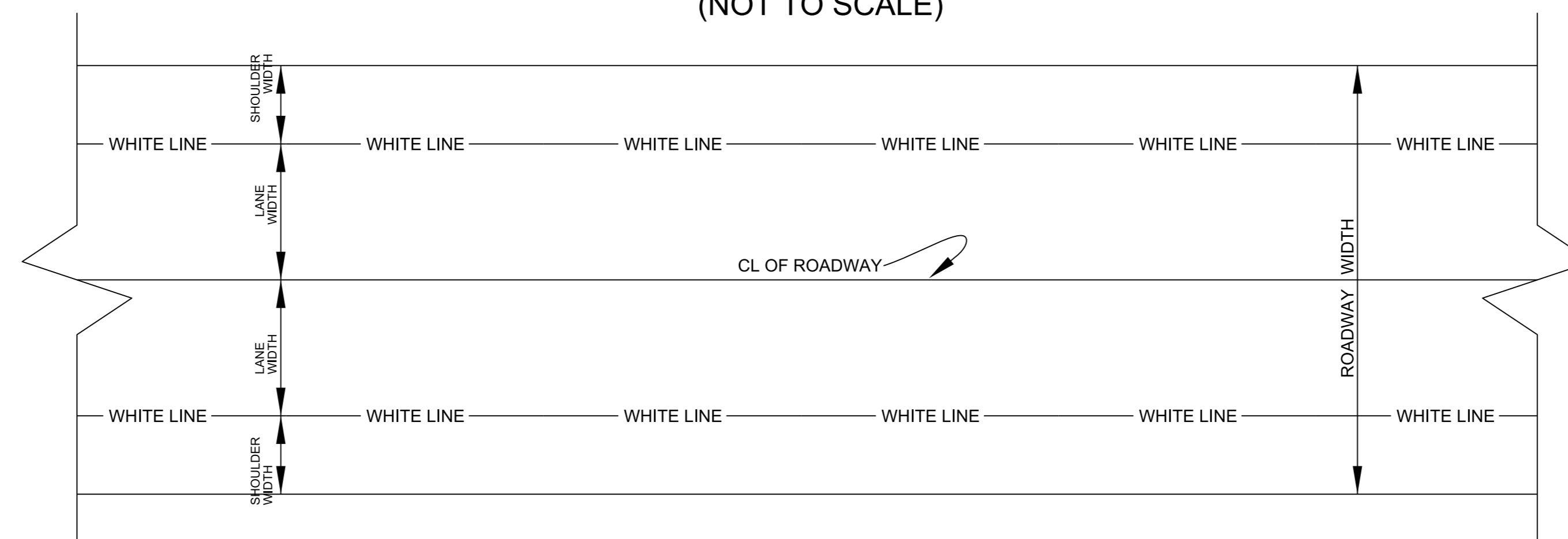
* May vary due to pavement width

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)



PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.06.09.20431.1		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1245000000-E	1260000000-E	1330000000-E	1491000000-E	1519000000-E	1575000000-E	1704000000-E
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT
												TONS	SMI	TON	SY	TONS	TONS	TONS	TONS
2025CPT.06.09.20431.1	Harnett	1	SR-1214 / MT PISGAH CHURCH RD	FROM SR 1229 TO US 421	1	2	2WU	4.52	19	0	4.52	58	9.04	1,461		72	4,223	283	8
TOTAL FOR MAP NO. 1								4.52				58	9.04	1,461		72	4,223	283	8
2025CPT.06.09.20431.1	Harnett	2	SR-1227 / MCLEOD RD	FROM SR 1215 TO SR1215	1	2	2WU	1.07	20	0	1.07	35	2.14	346			1,036	70	7
TOTAL FOR MAP NO. 2								1.07				35	2.14	346			1,036	70	7
2025CPT.06.09.20431.1	Harnett	3	SR-1232 / CAMERON RD	FROM SR 1280 TO SR 1291	1	2	2WU	2.55	20	0	2.55	67	5.10	825	278	307	2,574	168	6
TOTAL FOR MAP NO. 3								2.55				67	5.10	825	278	307	2,574	168	6
2025CPT.06.09.20431.1	Harnett	4	SR-1233 / LLOYD STEWART RD	FROM SR1291 TO SR 1229	1	2	2WU	2.6	20	0	2.6	83	5.20	841	278		2,542	170	
TOTAL FOR MAP NO. 4								2.6				83	5.20	841	278		2,542	170	
2025CPT.06.09.20431.1	Harnett	5	SR-1281 / THOMAS FARM RD	FROM SR 1291 TO SR 1291	1, 2	2	2WU	1.17	20	0	1.17	47	2.34	378	556		1,189	79	
TOTAL FOR MAP NO. 5								1.17				47	2.34	378	556		1,189	79	
2025CPT.06.09.20431.1	Harnett	6	SR-1291 OI / OLD US 421	FROM US421 TO SR 1274	2	2	2WU	2.87	25	0	2.87	50	5.70	928	1,667		3,621	243	
TOTAL FOR MAP NO. 6								2.87				50	5.70	928	1,667		3,621	243	
2025CPT.06.09.20431.1	Harnett	7	SR-1513 / NEILLS CREEK RD	FROM SR1516 TO US 421	3	2	2WU	4.45	18	0	4.45	42	3.80	614		1,398	2,023	199	
TOTAL FOR MAP NO. 7								4.45				42	3.80	614		1,398	2,023	199	
2025CPT.06.09.20431.1	Harnett	8	SR-1290 / GRAHAM RD	FROM SR 1203 TO NC87	1	2		0.7	20	0	0.7	37	1.40	226			678	46	1
TOTAL FOR MAP NO. 8								0.7				37	1.40	226			678	46	1
2025CPT.06.09.20431.1	Harnett	9	SR-1549 / DENNING RD	FROM SR 1552 TO SR 1552	1	2	2WU	1.75	20	0	1.75	58	3.50	566	556	110	1,773	117	
TOTAL FOR MAP NO. 9								1.75				58	3.50	566	556	110	1,773	117	
2025CPT.06.09.20431.1	Harnett	10	SR-1641 / WYNNRIDGE DR	FROM SR 1006 TO END OF SEAM	1	2	2WU	0.26	20	0	0.26	17	0.50	84			252	17	
TOTAL FOR MAP NO. 10								0.26				17	0.50	84			252	17	
2025CPT.06.09.20431.1	Harnett	11	SR-1511 / NATHAN MATTHEWS RD	FROM NC 210 TO SR 1510	1	2	2WU	0.97	20	0	0.97	20	1.94	314			939	63	
TOTAL FOR MAP NO. 11								0.97				20	1.94	314			939	63	
TOTAL FOR PROJ NO. 2025CPT.06.09.20431.1								22.91				514	40.66	6,583	3,335	1,887	20,850	1,455	22
GRAND TOTAL								22.91				514	40.66	6,583	3,335	1,887	20,850	1,455	22

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.06.09.20431.1		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	441300000-E	445700000-N	468500000-E		490000000-N
												WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	YELLOW & YELLOW MARKERS
												SF	LS	LF	LF	EA
2025CPT.06.09.20431.1	Harnett	1	SR-1214 / MT PISGAH CHURCH RD	FROM SR 1229 TO US 421	1	2	2WU	4.52	19	0	4.52	506	1.00	47,710	35,782	297
TOTAL FOR MAP NO. 1								4.52				506	1	47,710	35,782	297
2025CPT.06.09.20431.1	Harnett	2	SR-1227 / MCLEOD RD	FROM SR 1215 TO SR1215	1	2	2WU	1.07	20	0	1.07	120		11,299	4,660	70
TOTAL FOR MAP NO. 2								1.07				120		11,299	4,660	70
2025CPT.06.09.20431.1	Harnett	3	SR-1232 / CAMERON RD	FROM SR 1280 TO SR 1291	1	2	2WU	2.55	20	0	2.55	286		68,585	51,439	165
TOTAL FOR MAP NO. 3								2.55				286		68,585	51,439	165
2025CPT.06.09.20431.1	Harnett	4	SR-1233 / LLOYD STEWART RD	FROM SR1291 TO SR 1229	1	2	2WU	2.6	20	0	2.6	291		71,328	53,498	170
TOTAL FOR MAP NO. 4								2.6				291		71,328	53,498	170
2025CPT.06.09.20431.1	Harnett	5	SR-1281 / THOMAS FARM RD	FROM SR 1291 TO SR 1291	1, 2	2	2WU	1.17	20	0	1.17	131		14,648	10,881	70
TOTAL FOR MAP NO. 5								1.17				131		14,648	10,881	70
2025CPT.06.09.20431.1	Harnett	6	SR-1291 OI / OLD US 421	FROM US421 TO SR 1274	2	2	2WU	2.87	25	0	2.87	321		30,307	22,730	182
TOTAL FOR MAP NO. 6								2.87				321		30,307	22,730	182
2025CPT.06.09.20431.1	Harnett	7	SR-1513 / NEILLS CREEK RD	FROM SR1516 TO US 421	3	2	2WU	4.45	18	0	4.45	213		19,747	14,810	297
TOTAL FOR MAP NO. 7								4.45				213		19,747	14,810	297
2025CPT.06.09.20431.1	Harnett	8	SR-1290 / GRAHAM RD	FROM SR 1203 TO NC87	1	2		0.7	20	0	0.7	78		7,352	5,544	60
TOTAL FOR MAP NO. 8								0.7				78		7,352	5,544	60
2025CPT.06.09.20431.1	Harnett	9	SR-1549 / DENNING RD	FROM SR 1552 TO SR 1552	1	2	2WU	1.75	20	0	1.75	196		18,480	13,860	112
TOTAL FOR MAP NO. 9								1.75				196		18,480	13,860	112
2025CPT.06.09.20431.1	Harnett	10	SR-1641 / WYNNRIDGE DR	FROM SR 1006 TO END OF SEAM	1	2	2WU	0.26	20	0	0.26	29				
TOTAL FOR MAP NO. 10								0.26				29				
2025CPT.06.09.20431.1	Harnett	11	SR-1511 / NATHAN MATTHEWS RD	FROM NC 210 TO SR 1510	1	2	2WU	0.97	20	0	0.97	109		9,704	7,122	66
TOTAL FOR MAP NO. 11								0.97				109		9,704	7,122	66
TOTAL FOR PROJ NO. 2025CPT.06.09.20431.1								22.91				2,280	1.000	299,160	220,326	1,489
													519,486			
GRAND TOTAL								22.91				2,280	1.000	299,160	220,326	1,489
													519,486			