STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 6

PLANS

Letting Date: February 21, 2024

CONTRACT ID: DF00467

TIP NO.: -----

FEDERAL AID NO.: STATE FUNDED

WBS ELEMENT NO.: 2024CPT.06.13.10241.1 & 2024CPT.06.13.20241.1

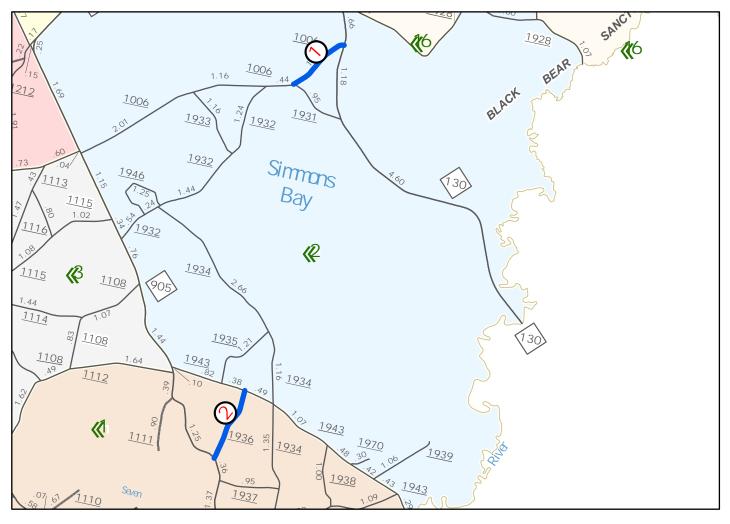
ROUTE NO.: VARIES

LOCATION: VARIES

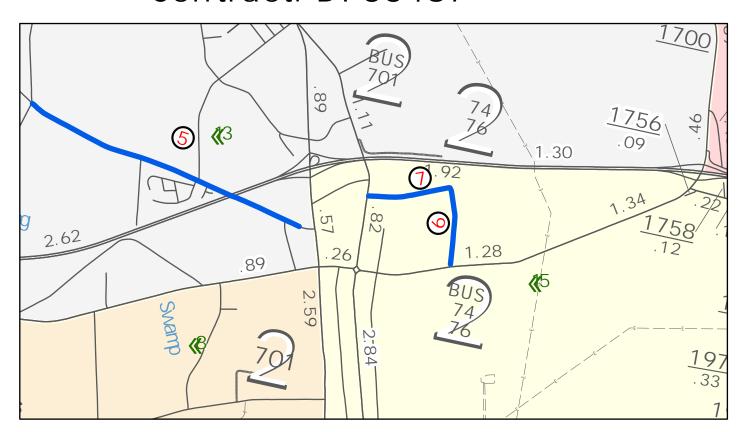
COUNTY: COLUMBUS

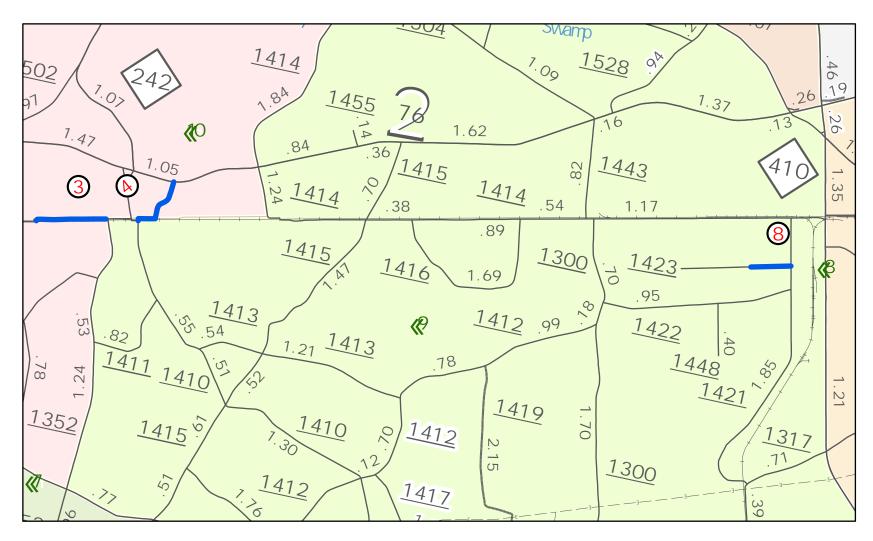
LENGTH OF PROJECT: 11.84 MILES

TYPE OF WORK: RESURFACING, MILLING & PAVEMENT MARKINGS



Columbus County Resurfacing Contract: DF00467



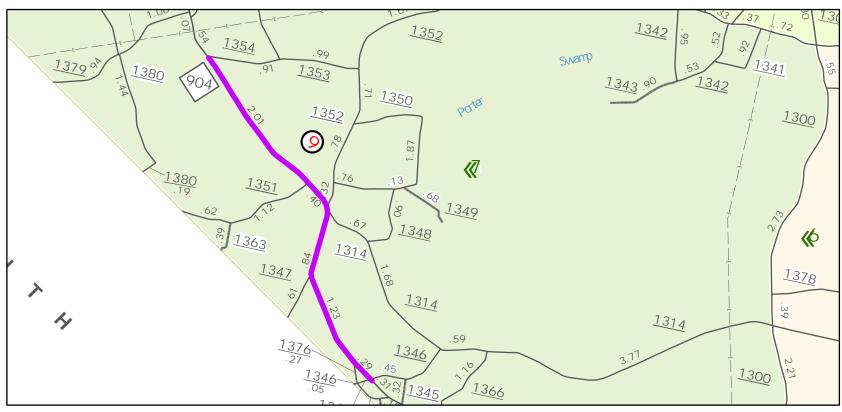


Legend

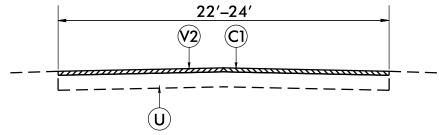
O 0.5 1 2 Miles

WBS: 2024CPT.06.13.10241.1

WBS: 2024CPT.06.13.20241.1

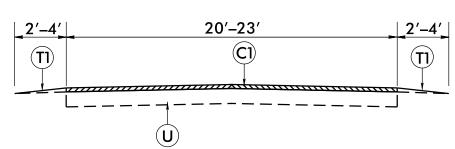


	PAVEMENT SCHEDULE
C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, TO BE PLACED IN 2 LAYERS OF 1½" LIFTS AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. PER LIFT.
СЗ	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C,AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
Т1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	0" - 1½" MILLING
V2	34" MILLING
V3	1½" MILLING
V4	2½" MILLING



TYPICAL SECTION NO. 1

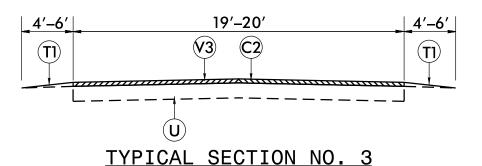
-PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)

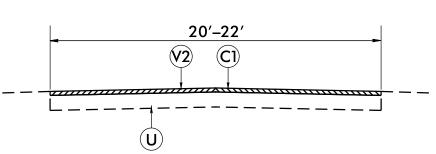


TYPICAL SECTION NO. 2

-PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)

-PLUS 2.5" MILL AND FILL WITH I19.0C (SEE DETAIL 1)

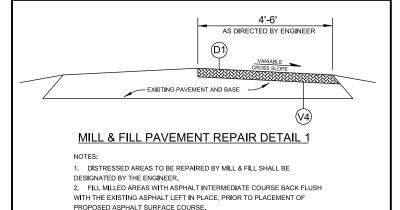


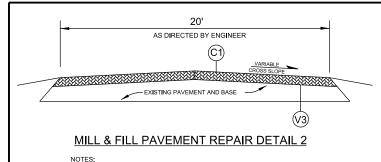


TYPICAL SECTION NO. 4

-PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)

-PLUS 1.5" MILL AND FILL WITH S9.5B (SEE DETAIL 2)





DISTRESSED AREAS TO BE REPAIRED BY MILL & FILL SHALL BE DESIGNATED BY THE ENGINEER.

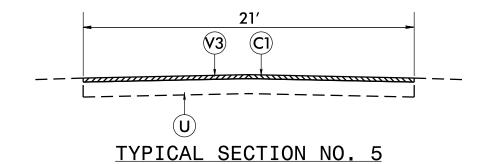
FILL MILLED AREAS WITH ASPHALT INTERMEDIATE COURSE BACK FLUSH WITH THE EXISTING ASPHALT LEFT IN PLACE, PRIOR TO PLACEMENT OF PROPOSED ASPHALT SURFACE COURSE.

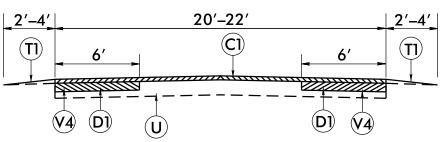
Work Files\Projects\Resurfacing\2024 Spring

12/9

PROJECT REFERENCE NO.	SHEET NO.
DF 00467	

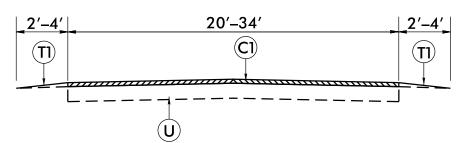
	PAVEMENT SCHEDULE
C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
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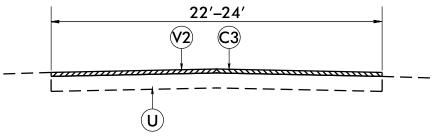


TYPICAL SECTION NO. 6

-PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)



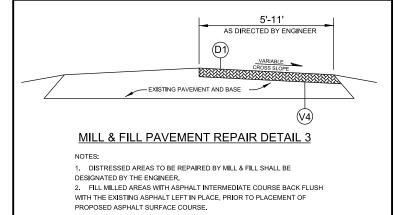
TYPICAL SECTION NO. 7



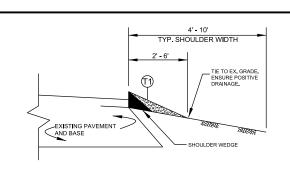
TYPICAL SECTION NO. 8

-PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)

-PLUS 2.5" MILL AND FILL WITH I19.0C (SEE DETAIL 3)



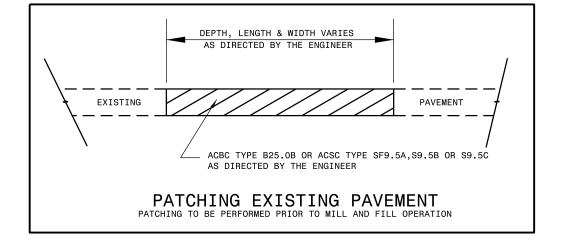
3-JAN-ZUZ4 U9:35 \tup.dgn secelisfBnAMEese

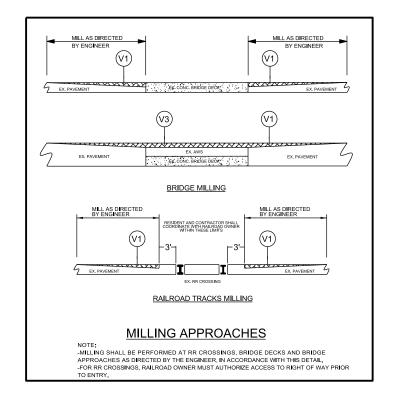


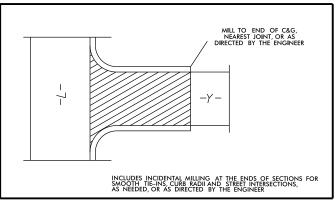
SHOULDER RECONSTRUCTION

NOTES:

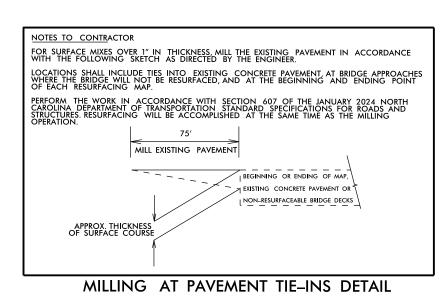
- SHOULDER SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1° PER FOOT TO ENSURE POSITIVE DRAINAGE AWA' FROM ROADWAY.
- 2. AGGREGATE SHOULDER BORROW (ASB) MATERIAL SHALL BE PLACED USING A WIDENING MACHINE OR SIMILAR DEVICE
- WIDENING MACHINE OR SIMILAR DEVICE.
 3. 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.
- 4. 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.

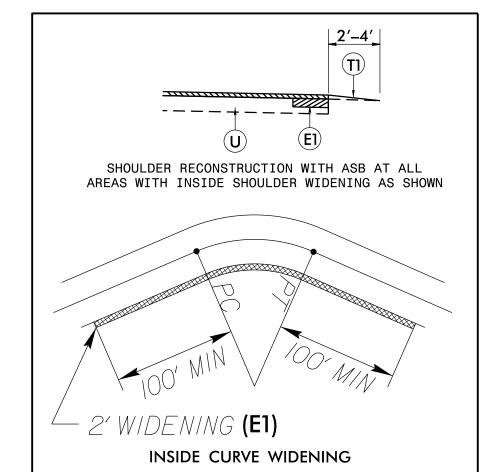


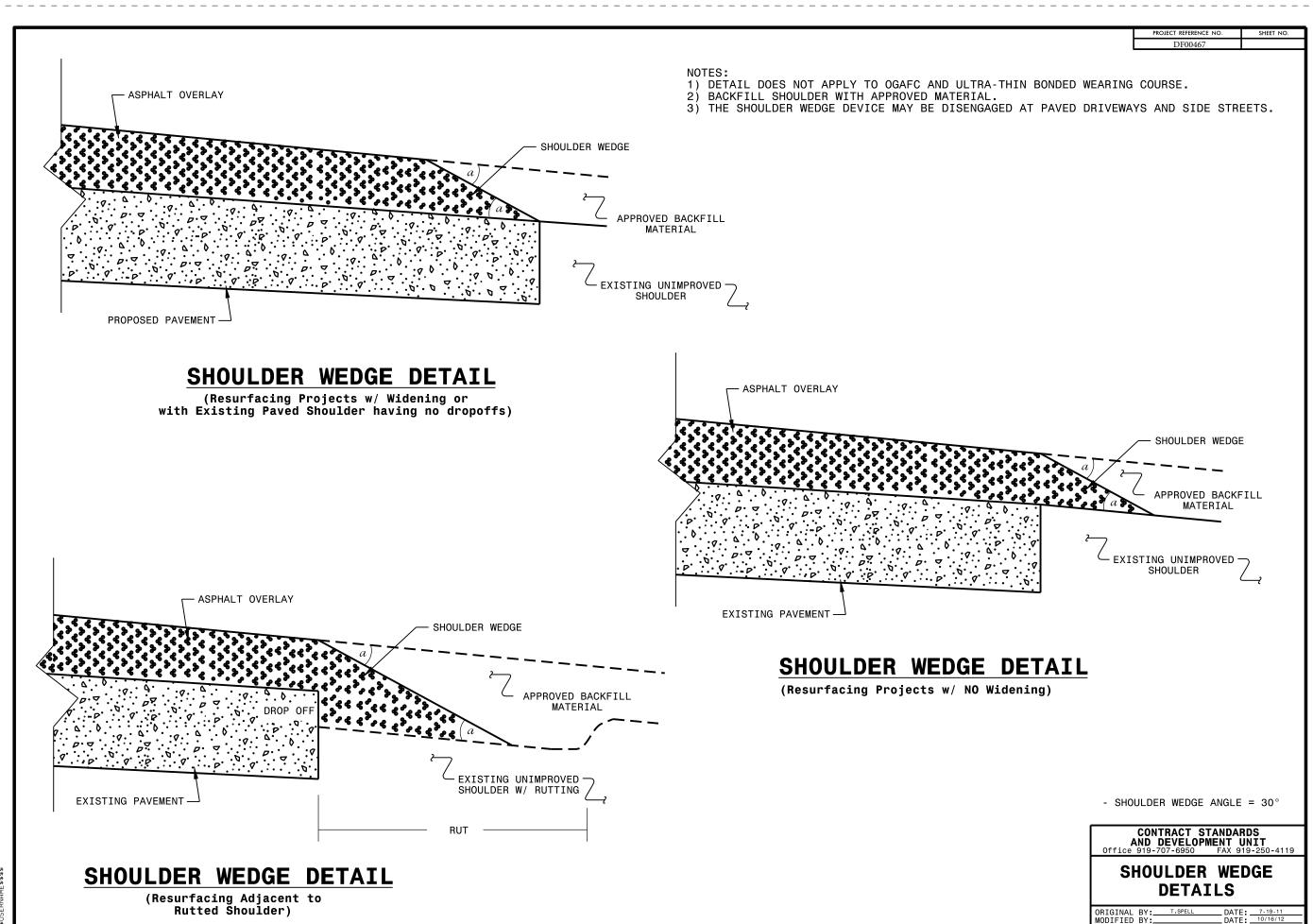




MILLING AT CURB AND GUTTER INTERSECTIONS





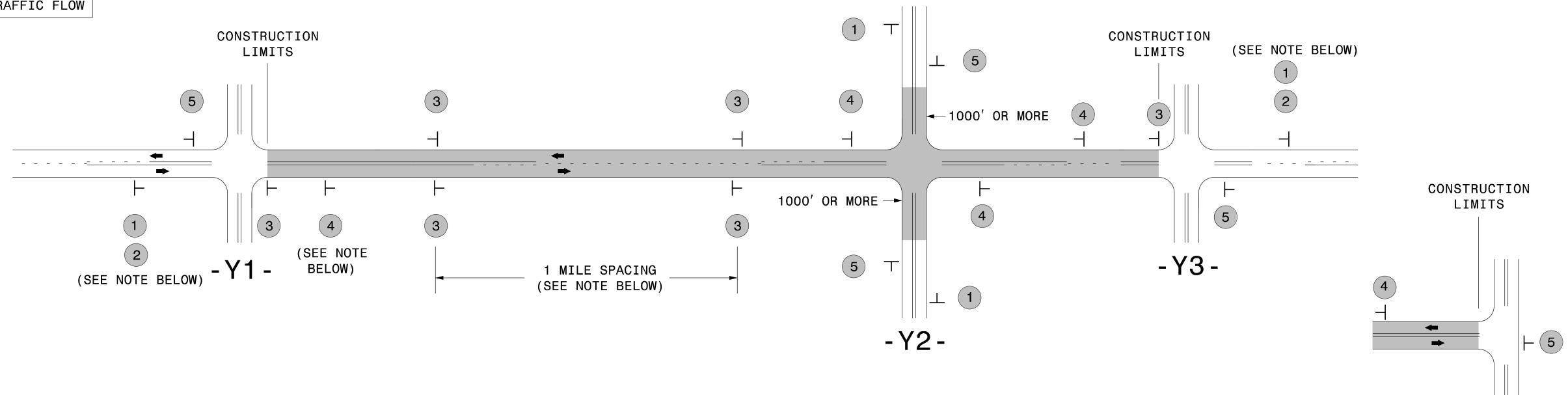


PROJ. REFERENCE NO. DF00467

SIGNING FOR RESURFACING PROJECTS



← DIRECTION OF TRAFFIC FLOW

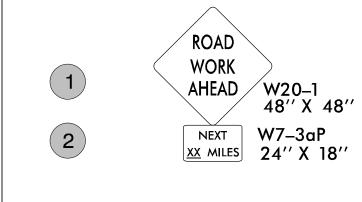


MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

NOI ZO Ш \triangleleft \Box SH NO ER **5** IGNIN

SO



PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.

ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)



- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.
- AT TEE INTERSECTIONS INSTALL INITIALLY ½ MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.
- **ROAD** UNDER
- 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.

END ROAD WORK 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.

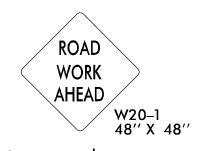
THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

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.

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

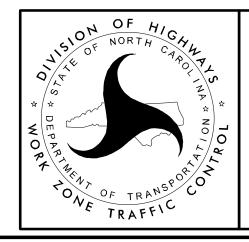
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



PLACED 500' IN ADVANCE OF FLAGGER.



PLACED 250' IN ADVANCE OF FLAGGER.



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

TEE INTERSECTION

PROJECT REFERENCE NO.	SHEET NO.
DF00467	

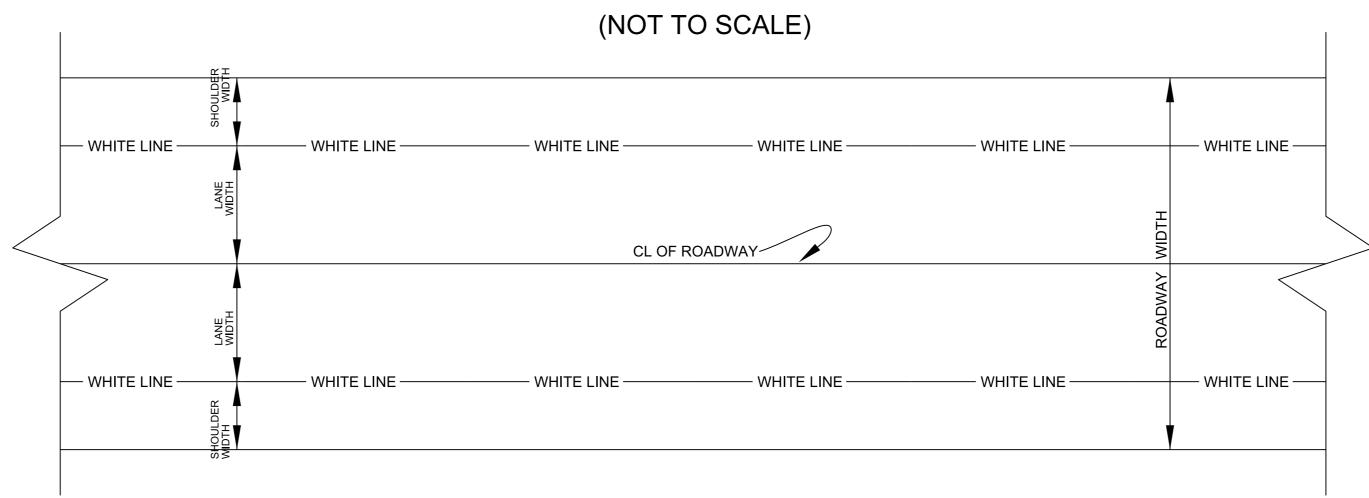
GUIDELINES FOR LANE WIDTHS ON RESURFACING PROJECTS

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 pavemen	t width	•											

TWO LANE - TWO	TWO LANE - TWO WAY ROADWAY 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 pavemer	nt width											

SCHEMATIC OF ROADWAY



PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.06.13.20241.1. 2024CPT.06.13.10241.1		
2024CP1.06.13.20241.1, 2024CP1.06.13.10241.1		

SUMMARY OF QUANTITIES

														122000000-E	1245000000-E	1260000000-E	12	97000000	-E	133000000-E	1491000000-E	1503000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	2830000000-N	2845000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE	FINAL	WARM MIX	LENGTH	WIDTH E	BEGIN MP	END MP	INCIDENTAL	SHOULDER	AGGREGATE	0.75"	2 1/2"	1½"	INCIDENTAL	BASE COURSE,		SURFACE	SURFACE	ASPHALT	PATCHING	ADJ. OF	ADJ. OF METER
							TYPE	SURFACE	ASPHALT					STONE BASE	RECONSTRUCTI	SHOULDER	MILLING	MILLING	MILLING	MILLING	B25.0C	INTERMEDIATE	COURSE, S9.5B	COURSE, S9.5C	BINDER FOR	EXISTING	MANHOLES	OR VALVE BOX
								TESTING	REQUIRED						ON	BORROW						COURSE,			PLANT MIX	PAVEMENT		1
								REQUIRED														119.0C						1
										MI	FT			TONS	SMI	TON	SY	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	EA	EA
2024CPT.06.13.20241.1	Columbus	1	SR-1006 / ERVIN T RICHARDSON RD	FROM NC 130 TO SR 1932	1	2		NO	NO	1.02	22	0	1.02	20	0.22	66	13,764			553	117		1,240		86			(
2024CPT.06.13.20241.1	Columbus	2	SR-1936 / S P LONG RD	FROM NC 905 TO SR 1943	2	2		NO	NO	1.17	20	0	1.17	20	2.34	351		770			67	113	1,164		84			
2024CPT.06.13.20241.1	Columbus	3	SR-1403 / JUNE BALDWIN RD	FROM WCL CERRO GORDO TO SR 1352	3	2		NO	NO	0.58	19	1.98	2.56	20	1.16	174			6,465	165			1,074		70	3		(
2024CPT.06.13.20241.1	Columbus	4	SR-1409 / PINE ST / RAILROAD ST	FROM SR 1408 TO US 76	2	2		NO	NO	0.51	20	0	0.51	20	1.02	153		779		292	53	120	581		46			i
2024CPT.06.13.20241.1	Columbus	5	SR-1552 / SMYRNA ROAD	FROM US 701 TO SR 1585	4	2		NO	NO	2.21	20	0.12	2.33	20	0.11	33	25,931		4,694	1,846	58		2,981		197	5		1
2024CPT.06.13.20241.1	Columbus	6	SR-1706 / SPIVEY RD	FROM US 74 BUS TO MP 0.6	5	2		NO	NO	0.58	21	0.02	0.6	20					7,146	170			639		41		2	4
2024CPT.06.13.20241.1	Columbus	7	SR-1706 / WARRIOR TRL	FROM MP 0.6 TO US 701 BUS	6	2		NO	NO	0.62	20	0.6	1.22	20	1.24	186		5,093		1,142	30	749	776		88			4
2024CPT.06.13.20241.1	Columbus	8	SR-1423 / W SMITH ST	FROM SR 1422 TO COLLINS ST.	7	2		NO	NO	0.35	20	0	0.35	20	0.70	105							487		32		6	i
TOTAL	FOR BROLE	10 20240	PT.06.13.20241.1							7.04				160	6.79	1,068	39,695	6,642	18,305	4,168	325	982	8,942		644	8	8	8
TOTAL	FOR PROJ I	NO. 2024CI	71.06.13.20241.1															64,642										ı
2024CPT.06.13.10241.1	Columbus	9	NC-904	FROM SR 1354 TO SR 1346	8	2		NO	NO	4.8	22	4.85	9.65	60	0.70	112	61,952	5,107		5,196	284	751		5,778	393	11		1
TOTAL	FOR BROLL	10 20240	PT.06.13.10241.1							4.8				60	0.70	112	61,952	5,107		5,196	284	751		5,778	393	11		
IOTAL	FUK PRUJ I	NO. 2024CI	71.00.13.10241.1															67,059										1
								•												•		•						
	GP	AND TOTA						•		11.84		•		220	7.49	1,180	101,647	11,749	18,305	9,364	609	1,733	8,942	5,778	1,037	19	8	8
	GR	AND IUIA	AL.															131,701										

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.06.13.20241.1. 2024CPT.06.13.10241.1		
2024CF1.00.13.20241.1, 2024CF1.00.13.10241.1		

THERMOPLASTIC AND PAINT QUANTITIES

								4413000000-E	4457000000-N	4685000000-E		4720000000-E		472500000	0-E	48100	00000-E	4709000000-E	4704000000-E	490000	0000-N				
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES L	ANE LI	ENGTH	WIDTH	BEGIN MI	END MP	WORK ZONE	TEMPORARY	4" X 90 M	4" X 90 M	THERMO	THERMO RT	THERMO I	LT THERMO STR	4" WHITE	4" YELLOW	24" X 90 M	16" X 90 M WHITE	YELLOW &	CRYSTAL &
						1	YPE					ADVANCE/GE	TRAFFIC	YELLOW	WHITE	MSG RXR 90	ARROW 90	ARROW	90 & RT ARROW	PAINT	PAINT	WHITE	THERMO(RXR	YELLOW	RED
												NERAL	CONTROL	THERMO	THERMO	М	M	M	90 M			THERMO	CROSSBUCK)	MARKERS	MARKERS
												WARNING													
												SIGNING													
								МІ	FT			SF	LS	LF	LF	EA	EA	EA	EA	LF	LF	LF	LF	EA	EA
2024CPT.06.13.20241.1	Columbus	1	SR-1006 / ERVIN T RICHARDSON RD	FROM NC 130 TO SR 1932		2		1.02	22	0	1.02	112	0.09	7,650	10,975									82	
2024CPT.06.13.20241.1	Columbus	2	SR-1936 / S P LONG RD	FROM NC 905 TO SR 1943		2		1.17	20	0	1.17	112	0.10	8,775	12,589									94	
2024CPT.06.13.20241.1	Columbus	3	SR-1403 / JUNE BALDWIN RD	FROM WCL CERRO GORDO TO SR 1352		2		0.58	19	1.98	2.56	80	0.05	4,350	6,241	2						35	50	46	
2024CPT.06.13.20241.1	Columbus	4	SR-1409 / PINE ST / RAILROAD ST	FROM SR 1408 TO US 76		2		0.51	20	0	0.51	96	0.04	3,825	5,488	2						37	50	41	
2024CPT.06.13.20241.1	Columbus	5	SR-1552 / SMYRNA ROAD	FROM US 701 TO SR 1585		2		2.21	20	0.12	2.33	198	0.19	16,575	23,780		1			23,758	16,575			177	10
2024CPT.06.13.20241.1	Columbus	6	SR-1706 / SPIVEY RD	FROM US 74 BUS TO US 701 BUS		2		0.58	21	0.02	0.6	72	0.05	4,350	6,241			1	1					46	
2024CPT.06.13.20241.1	Columbus	7	SR-1706 / WARRIOR TRL	FROM SPIVEY RD TO US 701 BUS		2		0.62	20	0.6	1.22	72	0.05	4,650	6,671									50	
2024CPT.06.13.20241.1	Columbus	8	SR-1423 / W SMITH ST	FROM SR 1422 TO COLLINS ST.		2		0.35	20	0	0.35	64	0.03	3,696	3,766									28	
TOTAL	EOD DDO	I NIO 2024	CPT.06.13.20241.1					7.04				806	0.60	53,871	75,751	4	1	1	1	23,758	16,575	72	100	564	10
TOTAL	FOR FRO.	110. 2024	CF 1.00.13.20241.1											129,	,622			3		40	,333	72	100	57	74
2024CPT.06.13.10241.1	Columbus	9	NC-904	FROM SR 1354 TO SR 1346		2		4.8	22	4.85	9.65	310	0.41	36,000	51,648						36,000			384	
TOTAL	EOR PRO	NO 2024	CPT 06 13 10241 1					4.8				310	0.410	36,000	51,648						36,000			384	
TOTAL FOR PROJ NO. 2024CPT.06.13.10241.1			Cr 1.00.13.10241.1	_						, and the second				87,0	648					36	,000			38	34
	G	RAND TO	ΓΔΙ					11.84				1,116	1.010	89,871	127,399	4	1	1	1	23,758	52,575	72	100	948	10
GRAND TOTAL														217,	,270			3		76	,333	72	100	95	58