

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS

Letting Date: September 17, 2025

CONTRACT ID: DF00529

TIP NO.: -----

FEDERAL AID NO.: STATE FUNDED

WBS ELEMENT NO.: 2026CPT.06.03.10241.1, 2026CPT.06.03.20241.1 & 36248.224

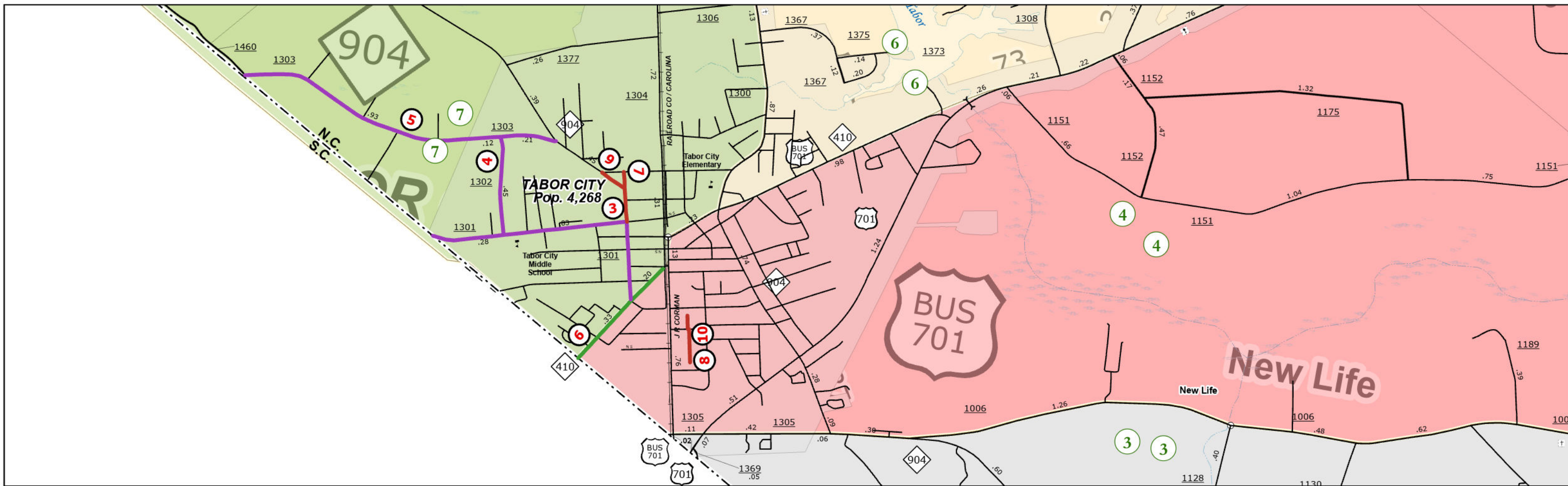
ROUTE NO.: NC 410 & VARIOUS SR ROUTES

LOCATION: VARIOUS

COUNTY: COLUMBUS

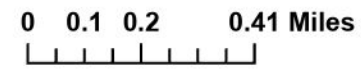
LENGTH OF PROJECT: 4.697 MILES

TYPE OF WORK: RESURFACING, MILLING, & PAVEMENT MARKINGS



Columbus County Resurfacing

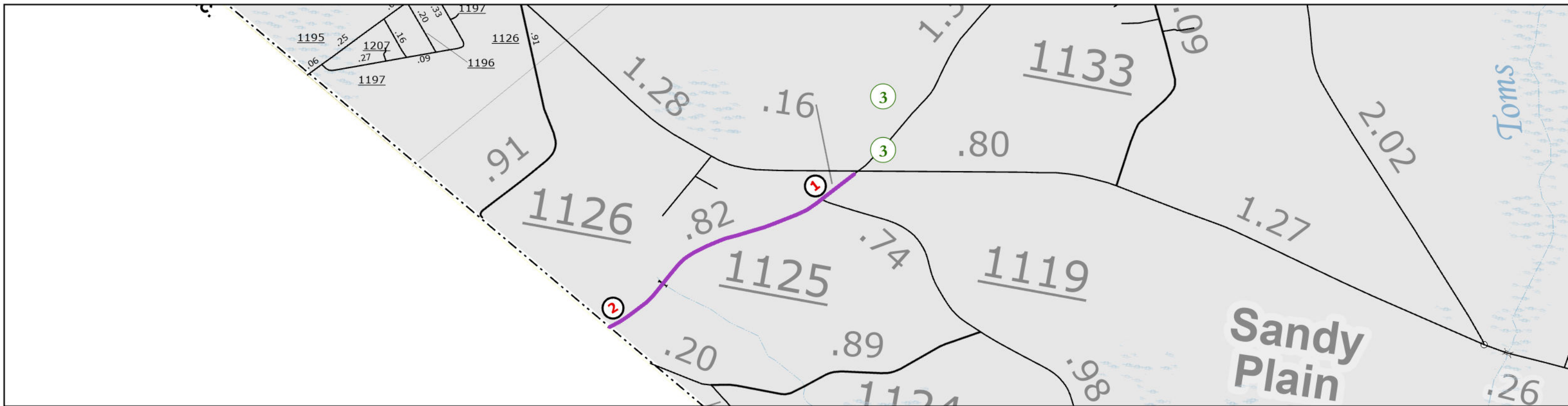
Contract: DF00529



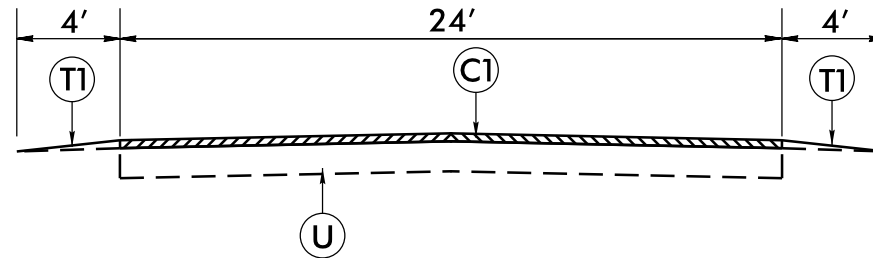
Legend

- WBS: 2026CPT.06.03.10241.1
- WBS: 2026CPT.06.03.20241.1
- WBS: 36248.224

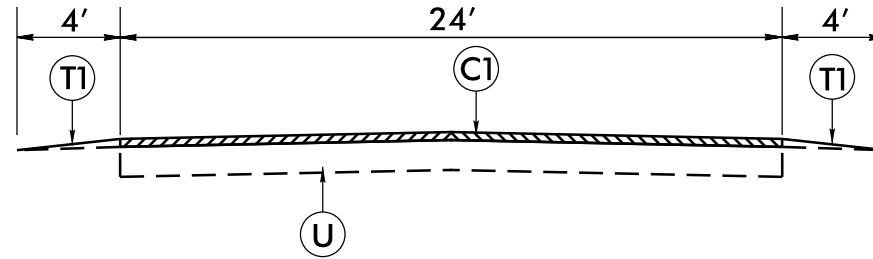
N



PAVEMENT SCHEDULE	
C1	1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
D1	2 1/2" 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.
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	0" - 1 1/2" MILLING
V2	1 1/2" MILLING
V3	2 1/2" MILLING

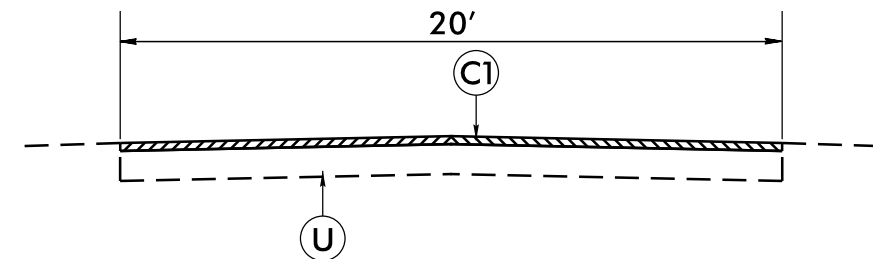


TYPICAL SECTION NO. 1



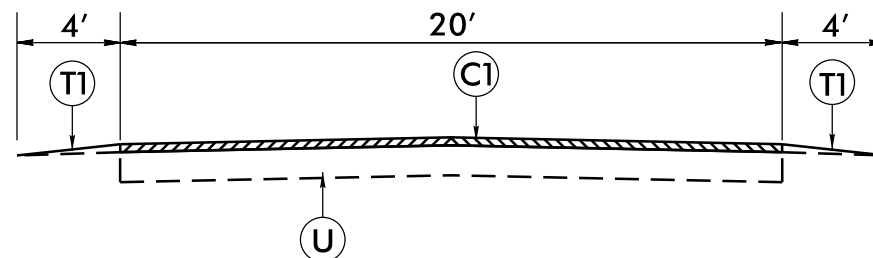
TYPICAL SECTION NO. 2

- PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)
- PLUS 2 1/2' MILL & FILL WITH I19.0C (6' WIDE)
- LEVELING S9.5B AS DIRECTED BY ENGINEER



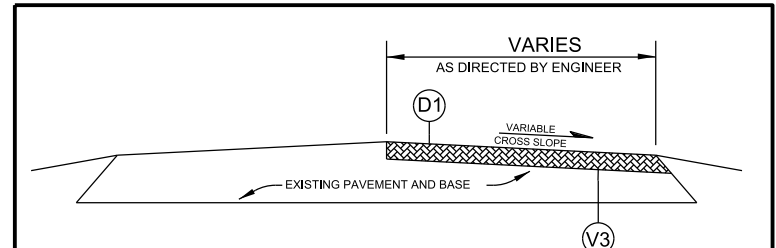
TYPICAL SECTION NO. 3

- PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)
- PLUS 2 1/2' MILL & FILL WITH I19.0C (5'-10' WIDE) AS DIRECTED BY ENGINEER



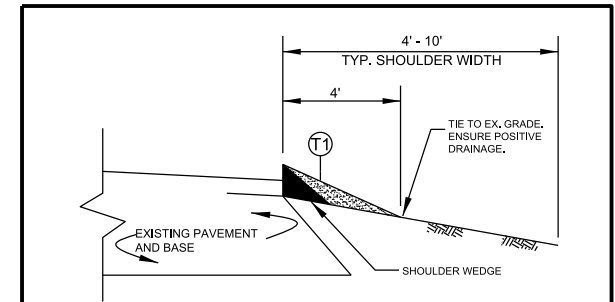
TYPICAL SECTION NO. 4

- PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)



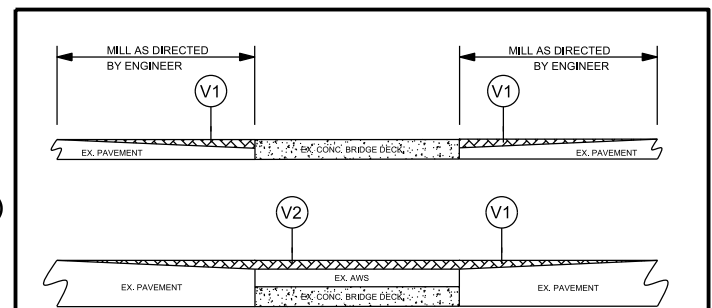
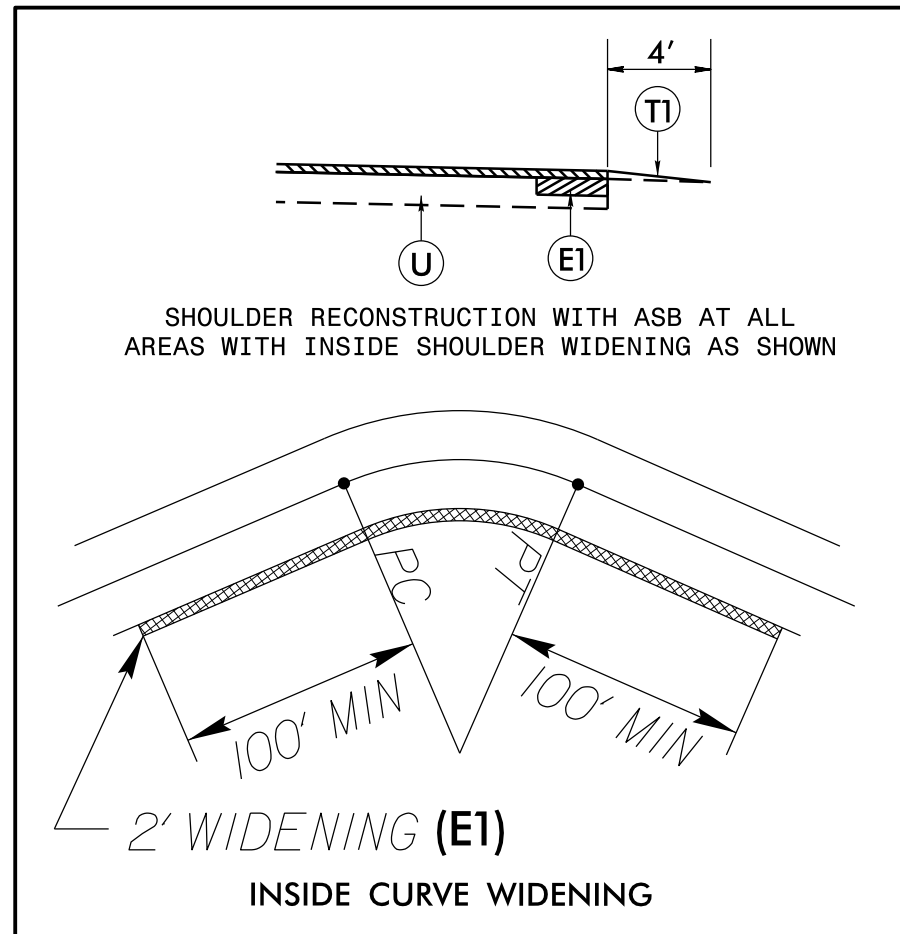
MILL & FILL PAVEMENT REPAIR DETAIL

- NOTES:
1. DISTRESSED AREAS TO BE REPAIRED BY MILL & FILL SHALL BE DESIGNATED BY THE ENGINEER.
 2. FILL MILLED AREAS WITH ASPHALT INTERMEDIATE COURSE BACK FLUSH WITH THE EXISTING ASPHALT LEFT IN PLACE, PRIOR TO PLACEMENT OF PROPOSED ASPHALT SURFACE COURSE.

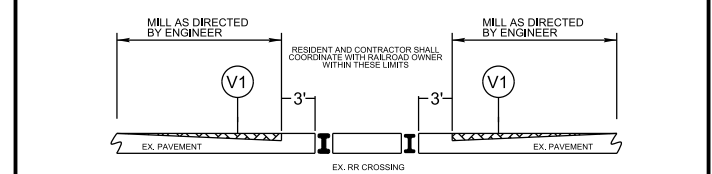


SHOULDER RECONSTRUCTION

- NOTES:
1. 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.
 2. AGGREGATE SHOULDER BORROW (ASB) MATERIAL SHALL BE PLACED USING A 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.



BRIDGE MILLING

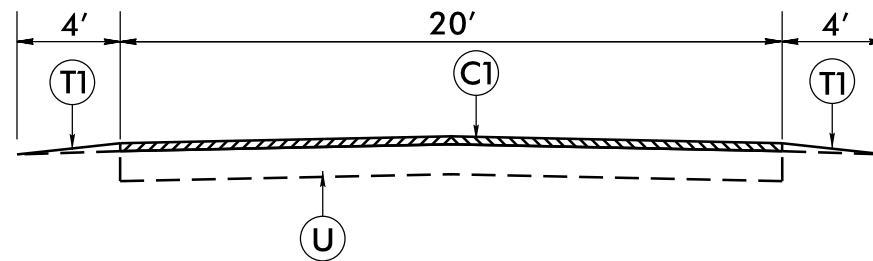


RAILROAD TRACKS MILLING

MILLING APPROACHES

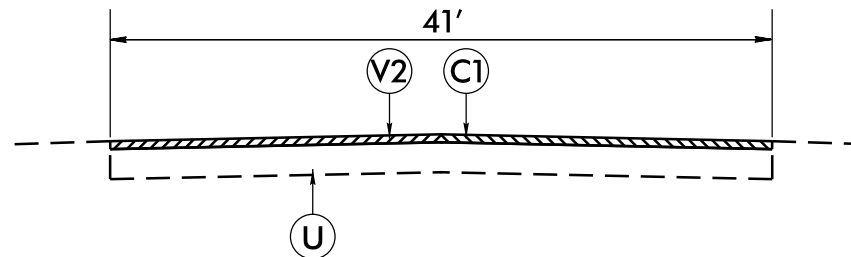
- NOTE:
- MILLING SHALL BE PERFORMED AT RR CROSSINGS, BRIDGE DECKS AND BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.
 - FOR RR CROSSINGS, RAILROAD OWNER MUST AUTHORIZE ACCESS TO RIGHT OF WAY PRIOR TO ENTRY.

PAVEMENT SCHEDULE	
C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 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.
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	0" - 1½" MILLING
V2	1½" MILLING
V3	2½" MILLING

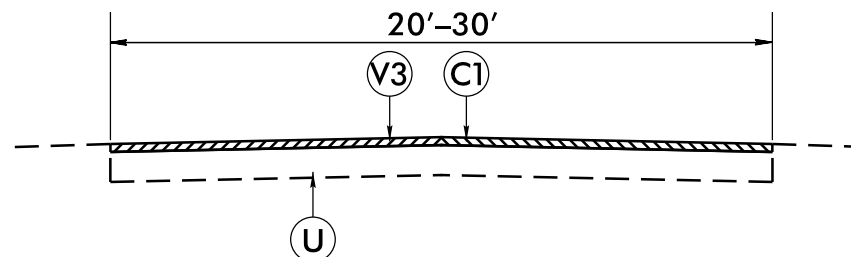


TYPICAL SECTION NO. 5

- PLUS 2' INSIDE CURVE WIDENING (SEE DETAIL)
- PLUS 2½' MILL & FILL WITH I19.0C (5'-10' WIDE) AS DIRECTED BY ENGINEER

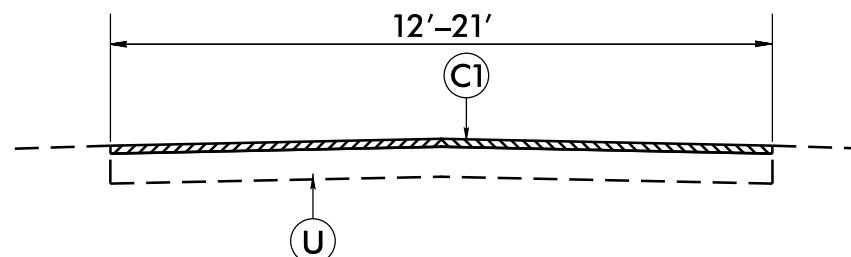


TYPICAL SECTION NO. 6

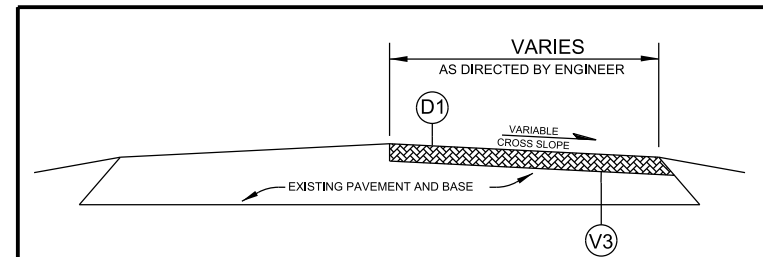


TYPICAL SECTION NO. 7

- PLUS 2½' MILLING IN CURB & GUTTER TO CORRECT PAVEMENT ABOVE GUTTER AS DIRECTED BY ENGINEER

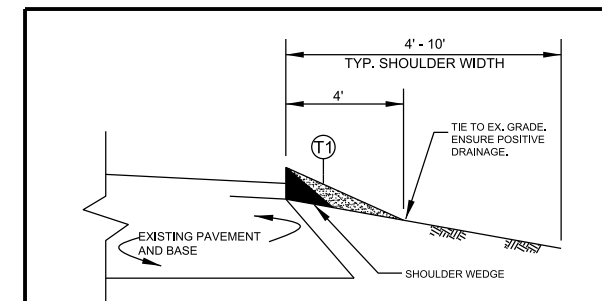


TYPICAL SECTION NO. 8



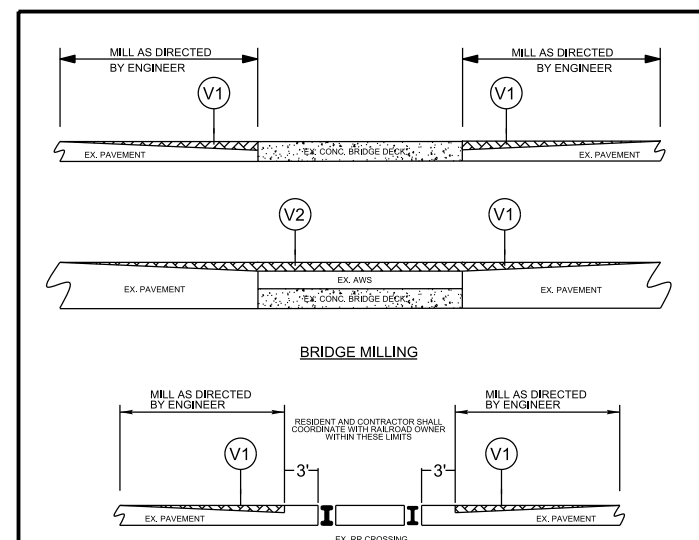
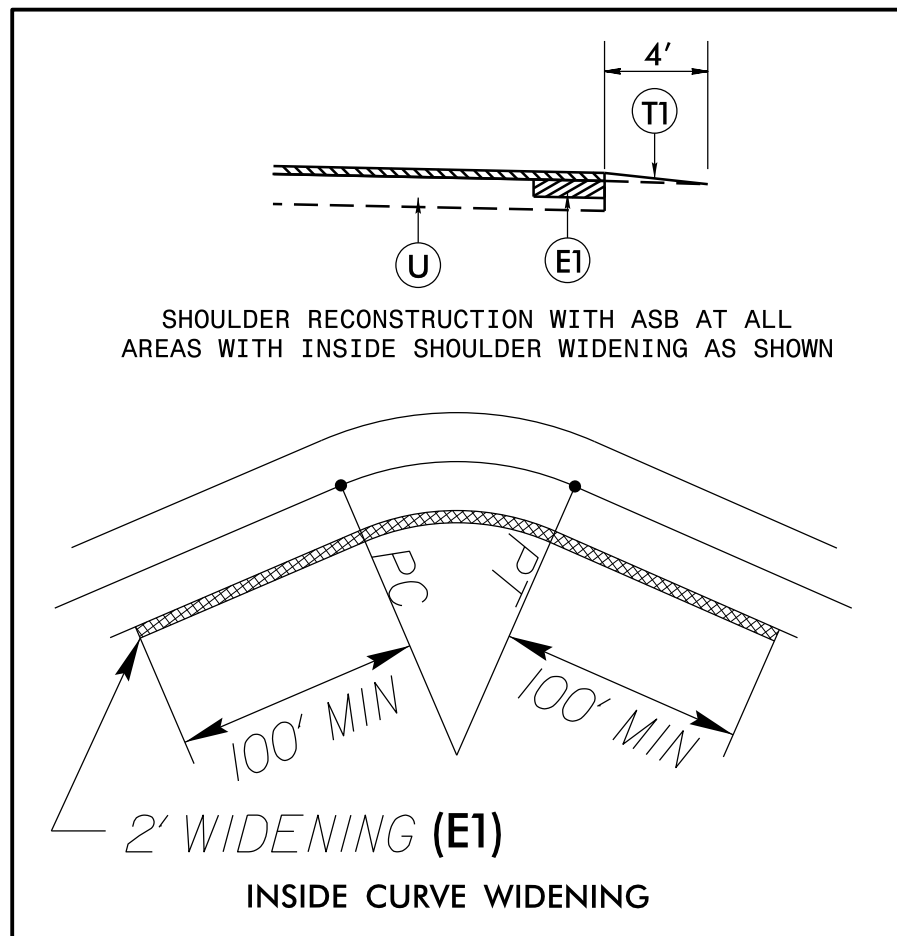
MILL & FILL PAVEMENT REPAIR DETAIL

- NOTES:
- 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.



SHOULDER RECONSTRUCTION

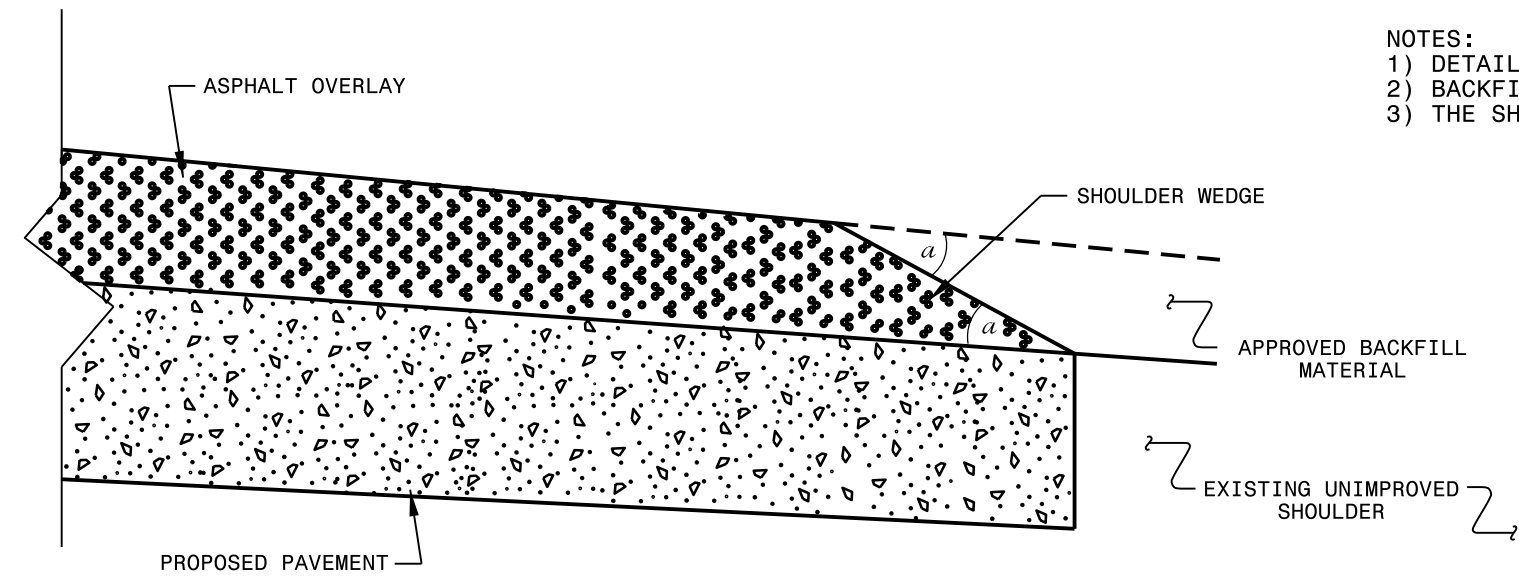
- NOTES:
- SHOULDER SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM ROADWAY.
 - AGGREGATE SHOULDER BORROW (ASB) MATERIAL SHALL BE PLACED USING A WIDENING MACHINE OR SIMILAR DEVICE.
 - A VEGETATIVE BUFFER SHALL 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.



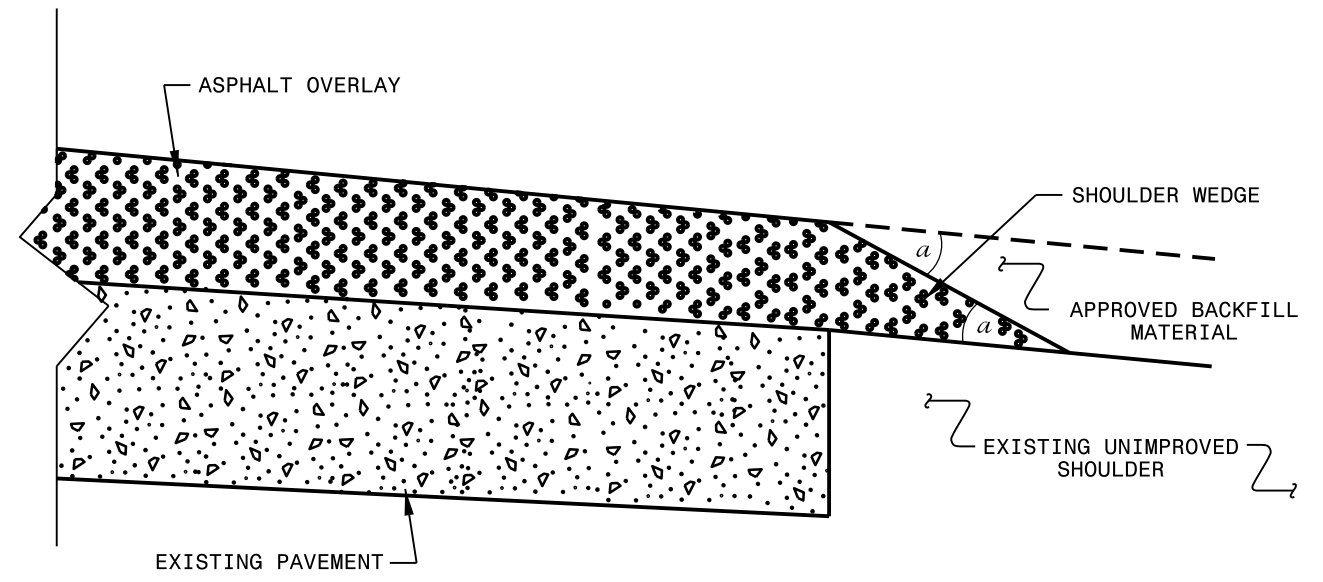
MILLING APPROACHES

- 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.

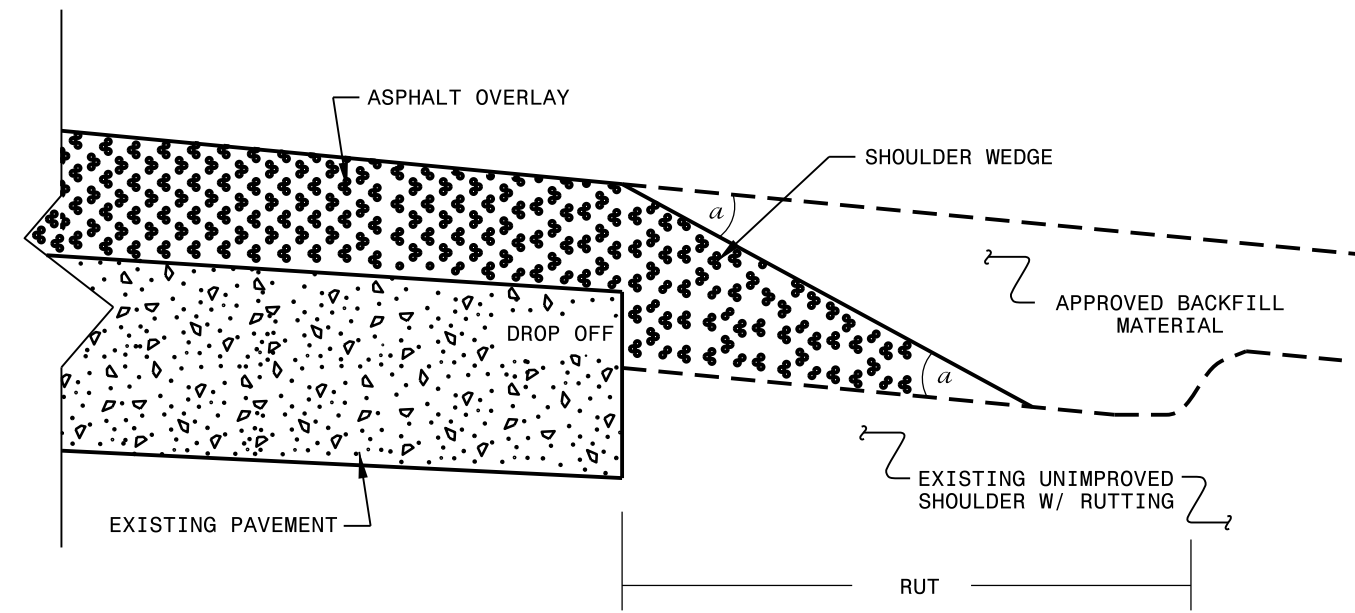
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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

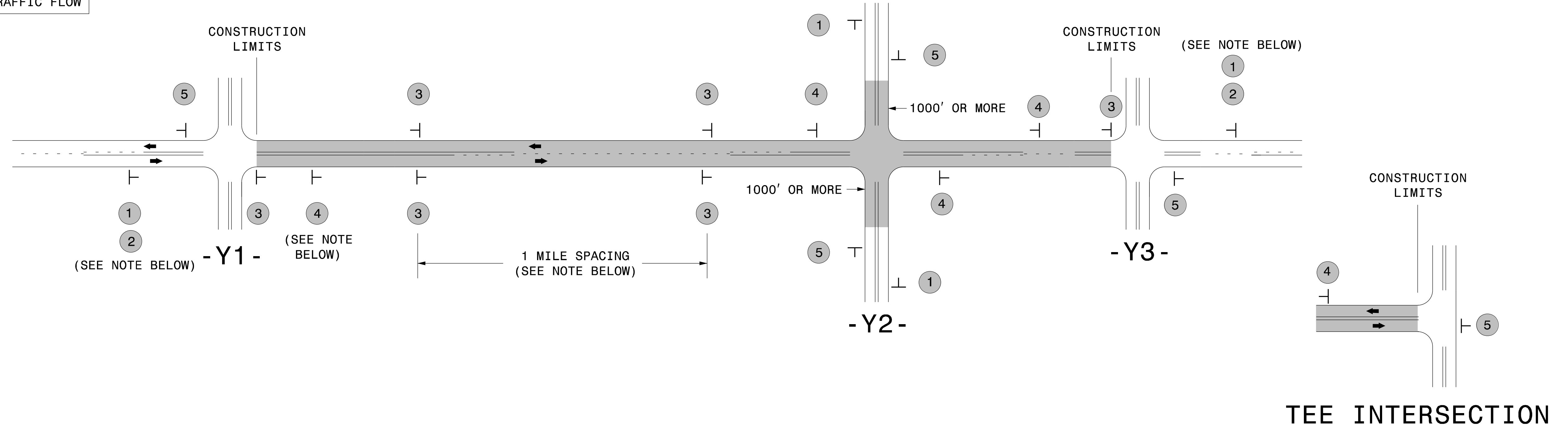
SYSTEMS DESIGN
 USER NAME

SIGNING FOR RESURFACING PROJECTS

LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

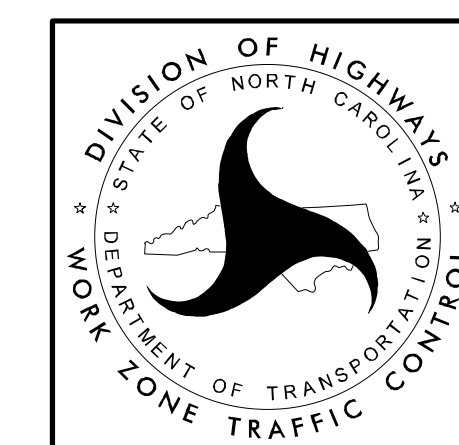
-Y- LINE SIGNING

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'

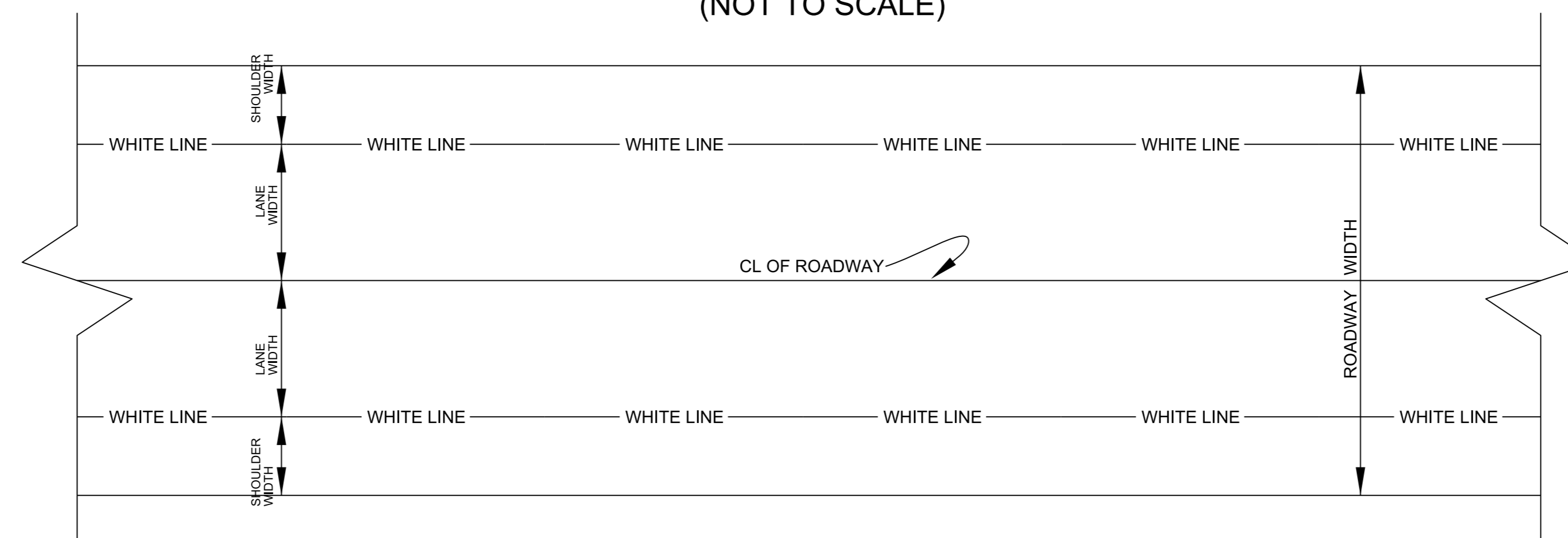
* May vary due to pavement width

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.
2026CPT.06.03.20241.1, 2026CPT.06.03.10241.1
36248.224,

SHEET NO.	TOTAL NO.

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	1297000000-E	1330000000-E	1491000000-E	1503000000-E	1519000000-E	1520000000-E	1575000000-E	2815000000-N	2830000000-N	2845000000-N	
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	2 1/2" MILLING	1 1/2" MILLING	INCIDENTAL MILLING	BASE COURSE, B25.0C	INTERMEDIATE COURSE, I19.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	ADJ. OF DROP INLET	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX
								MI	FT			TONS	SMI	TON	SY	SY	SY	TONS	TONS	TONS	TONS	EA	EA	EA	
2026CPT.06.03.20241.1	Columbus	1	SR-1005 / PEACOCK RD	FROM SR 1125 TO NC 904	1	2	2WU	0.135	24	0	0.135	5	0.27	41					198		13				
2026CPT.06.03.20241.1	Columbus	2	SR-1125 / COX TOWN RD	FROM SC LINE TO SR 1005	2	2	2WU	0.81	24	0	0.81	5	1.62	243	1,444		211	107	206	1,097	12	87			
2026CPT.06.03.20241.1	Columbus	3	SR-1301 / W SIXTH ST	FROM SC LINE TO NC 410	3	2	2WU	1.095	20	0	1.095	5			241		176	23	34	1,256		84	3	17	18
2026CPT.06.03.20241.1	Columbus	4	SR-1302 / SCHOOL ST	FROM SR 1301 TO SR 1303	4	2	2WU	0.45	20	0	0.45	5	0.45	68				33		473		32			
2026CPT.06.03.20241.1	Columbus	5	SR-1303 / CAROLINA RD	FROM SC LINE TO NC 904	5	2	2WU	1.26	20	0	1.26	10	2.52	378	352		181	134	50	1,461		103			
TOTAL FOR PROJ NO. 2026CPT.06.03.20241.1								3.75				30	4.86	730	2,037		568	297	290	4,485	12	319	3	17	18
2026CPT.06.03.10241.1	Columbus	6	NC-410 -GREEN SEA ROAD	FROM SC LINE TO US 701 BUS	6	2	2WU	0.54	41	0	0.54								1,230		80		10	20	
TOTAL FOR PROJ NO. 2026CPT.06.03.10241.1								0.54								12,989				1,230		80		10	20
36248.224	Columbus	7	WATERING STREET	FROM NC 904 TO N. LEWIS STREET	7	2	2WU	0.078	20	0	0.078	10			1,056		305			127		8			
36248.224	Columbus	8	N. LEWIS STREET	NC 904 TO SR 1301 W. SIXTH STREET	8	2	2WU	0.209	21	0	0.209	10					172			239		16	2		
36248.224	Columbus	9	COX STREET	FROM MALLARD ST. TO DEAD END	8	2	2WU	0.053	12	0	0.053									35		2			
36248.224	Columbus	10	MCGOUGAN STREET	FROM MALLARD ST. TO END PAVEMENT	8	2	2WU	0.067	18	0	0.067									66		4			
TOTAL FOR PROJ NO. 36248.224								0.407				20			1,056		477			467		30		2	
GRAND TOTAL								4.697				50	4.86	730	3,093	12,989	1,045	297	290	6,182	12	429	3	29	38
															16,082										

PROJECT NO.
2026CPT.06.03.20241.1, 2026CPT.06.03.10241.1
36248.224,

SHEET NO.	TOTAL NO.

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4457000000-N	4685000000-E		4695000000-E		4704000000-E	4709000000-E	4725000000-E		4892000000-N	4900000000-N		
												WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M YELLOW THERMO	4" X 90 M WHITE THERMO	8" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	16" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO RT ARROW 90 M	THERMO LT ARROW 90 M	THERMO RXR CHARACTERS 90 M	YELLOW & YELLOW MARKERS	CRYSTAL & RED MARKERS	
												SF	LS	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	
2026CPT.06.03.20241.1	Columbus	1	SR-1005 / PEACOCK RD	FROM SR 1125 TO NC 904	1	2	2WU	0.135	24	0	0.135	80	0.02	1,500	1,570								11		
2026CPT.06.03.20241.1	Columbus	2	SR-1125 / COX TOWN RD	FROM SC LINE TO SR 1005	2	2	2WU	0.81	24	0	0.81	64	0.27	8,600	8,600								55		
2026CPT.06.03.20241.1	Columbus	3	SR-1301 / W SIXTH ST	FROM SC LINE TO NC 410	3	2	2WU	1.095	20	0	1.095	144	0.20	10,774	11,563	105							73		
2026CPT.06.03.20241.1	Columbus	4	SR-1302 / SCHOOL ST	FROM SR 1301 TO SR 1303	4	2	2WU	0.45	20	0	0.45	64	0.04	4,752	4,752								30		
2026CPT.06.03.20241.1	Columbus	5	SR-1303 / CAROLINA RD	FROM SC LINE TO NC 904	5	2	2WU	1.26	20	0	1.26	128	0.23	7,443	13,306								84		
TOTAL FOR PROJ NO. 2026CPT.06.03.20241.1								3.75				480	0.76	33,069	39,791	105							253		
												72,860		105									253		
2026CPT.06.03.10241.1	Columbus	6	NC-410 -GREEN SEA ROAD	FROM SC LINE TO US 701 BUS	6	2	2WU	0.54	41	0	0.54	96	0.20	7,086	328		197	44	48	5	5	2	134	6	
TOTAL FOR PROJ NO. 2026CPT.06.03.10241.1								0.54				96	0.20	7,086	328		197	44	48	5	5	2	134	6	
												7,414		197					10				140		
36248.224	Columbus	7	WATERING STREET	FROM NC 904 TO N. LEWIS STREET	7	2	2WU	0.078	20	0	0.078		0.01												
36248.224	Columbus	8	N. LEWIS STREET	NC 904 TO SR 1301 W. SIXTH STREET	8	2	2WU	0.209	21	0	0.209		0.01												
36248.224	Columbus	9	COX STREET	FROM MALLARD ST. TO DEAD END	8	2	2WU	0.053	12	0	0.053		0.01												
36248.224	Columbus	10	MCGOUGAN STREET	FROM MALLARD ST. TO END PAVEMENT	8	2	2WU	0.067	18	0	0.067		0.01												
TOTAL FOR PROJ NO. 36248.224								0.407					0.040												
GRAND TOTAL								4.697				576	1.000	40,155	40,119	105	197	44	48	5	5	2	387	6	
														80,274		302			10				393		