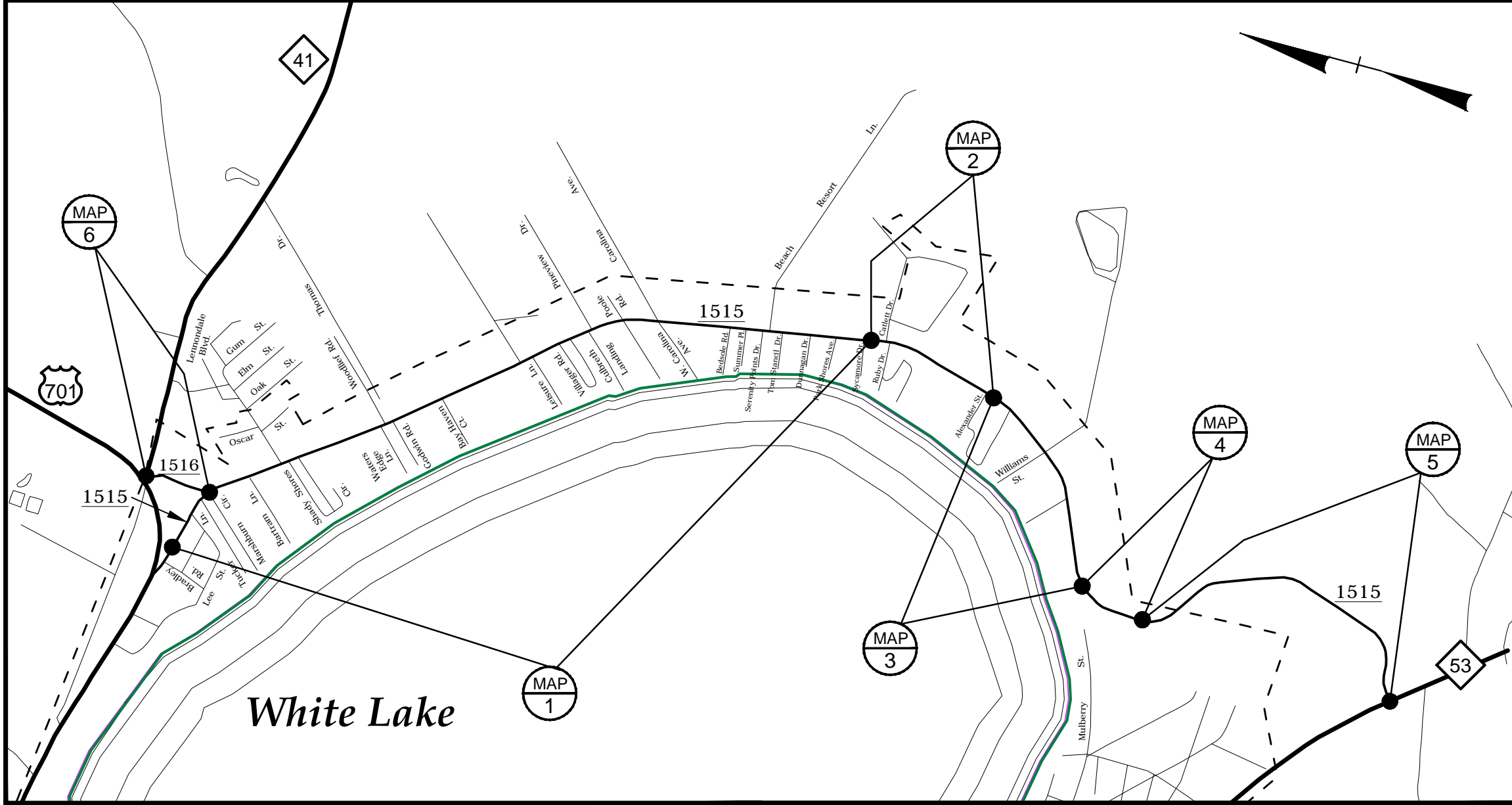


RESURFACING MAPS - BLADEN COUNTY

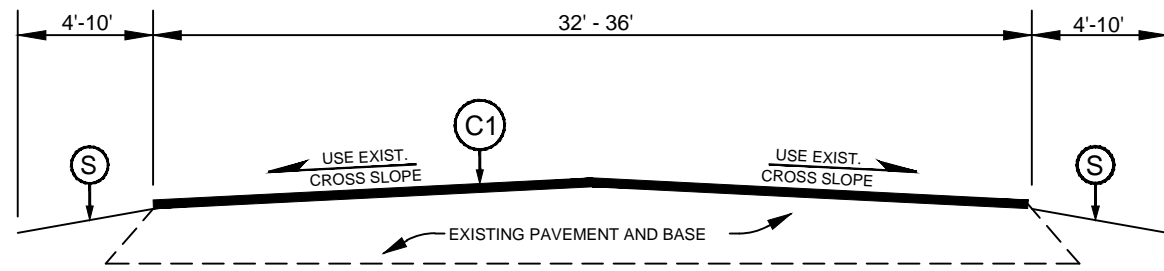
PROJECT REFERENCE NO.	MAP NOS.
6CR.20091.77	1 - 6



BLADEN COUNTY
Project Length Approximately 2.69 Miles

TYPICAL SECTION NO. 1

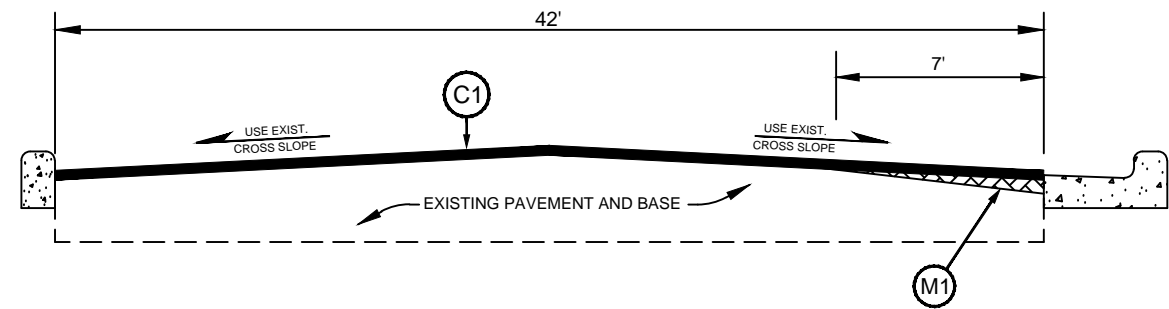
MAP 1: SR 1515-A - FROM CJ @ US 701 TO BEGIN 3 LANE
 MAP 6: SR 1516 - FROM SR 1515 TO CJ @ NC 41



NOTES:
 1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

TYPICAL SECTION NO. 2

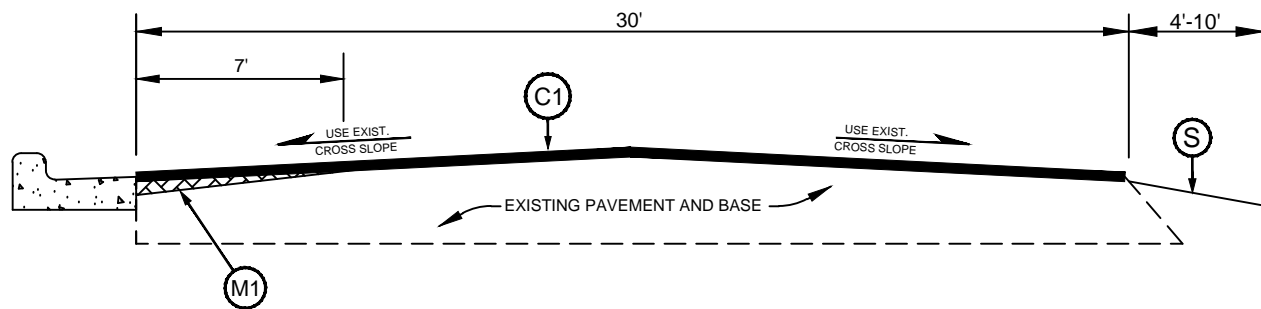
MAP 2: SR 1515-B - FROM BEGIN 3 LANE TO END 3 LANE



NOTES:
 1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

TYPICAL SECTION NO. 3

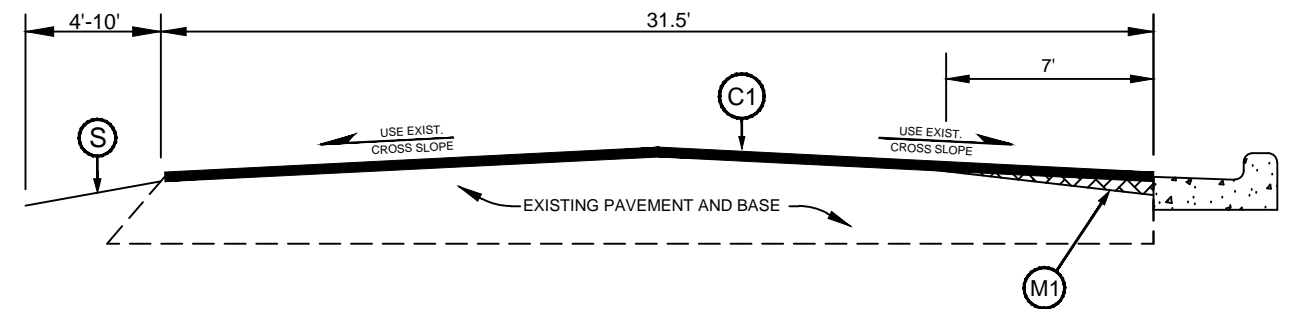
MAP 3: SR 1515-C - FROM END 3 LANE TO END C&G-L / BEGIN C&G-R



NOTES:
 1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

TYPICAL SECTION NO. 4

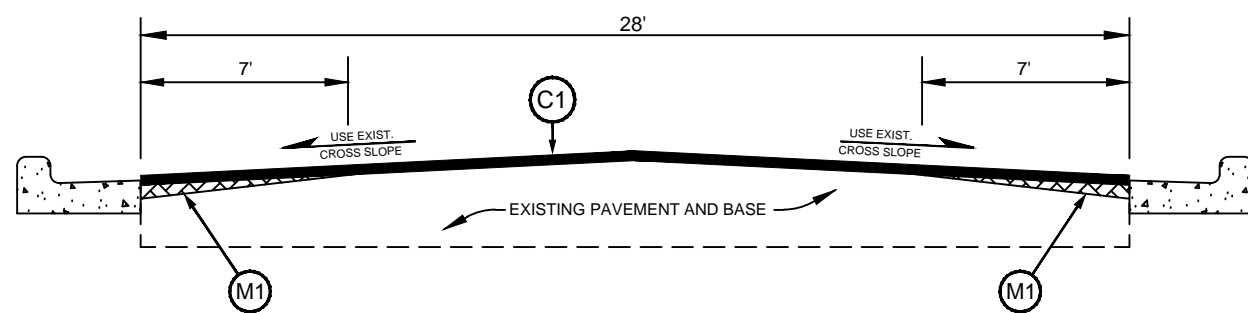
MAP 4: SR 1515-D - FROM END C&G-L / BEGIN C&G-R TO BEGIN C&G-BOTH SIDES



NOTES:
 1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.
 2. INCLUDES MILL & FILL PAVEMENT REPAIR WHERE IDENTIFIED BY ENGINEER. SEE DETAIL 2.

TYPICAL SECTION NO. 5

MAP 5: SR 1515-E - FROM BEGIN C&G-BOTH SIDES TO NC 53

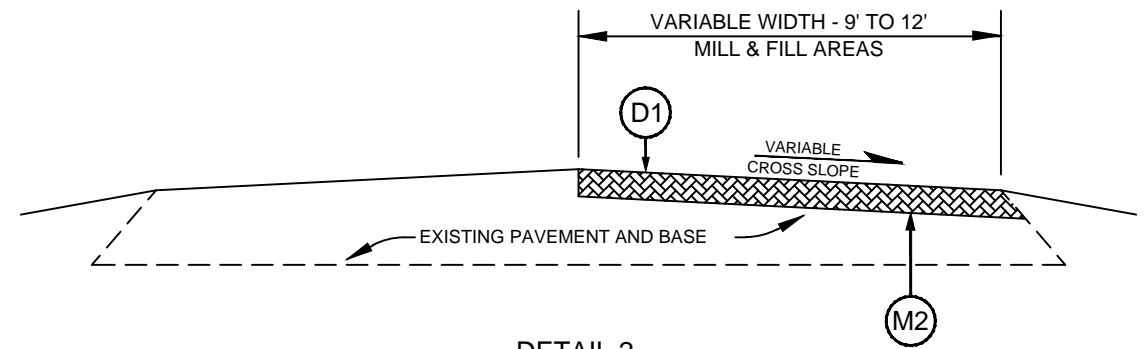


NOTES:
 1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

PAVEMENT SCHEDULE

C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 165 pounds per square yard.
D1	Proposed approximately 2½" of Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 285 pounds per square yard.
M1	Milling Depth 0" - 1½" at the edge of Curb & Gutter. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay, or as Directed by the Engineer.
M2	Milling Depth 2½" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
S	Shoulder Reconstruction by others.

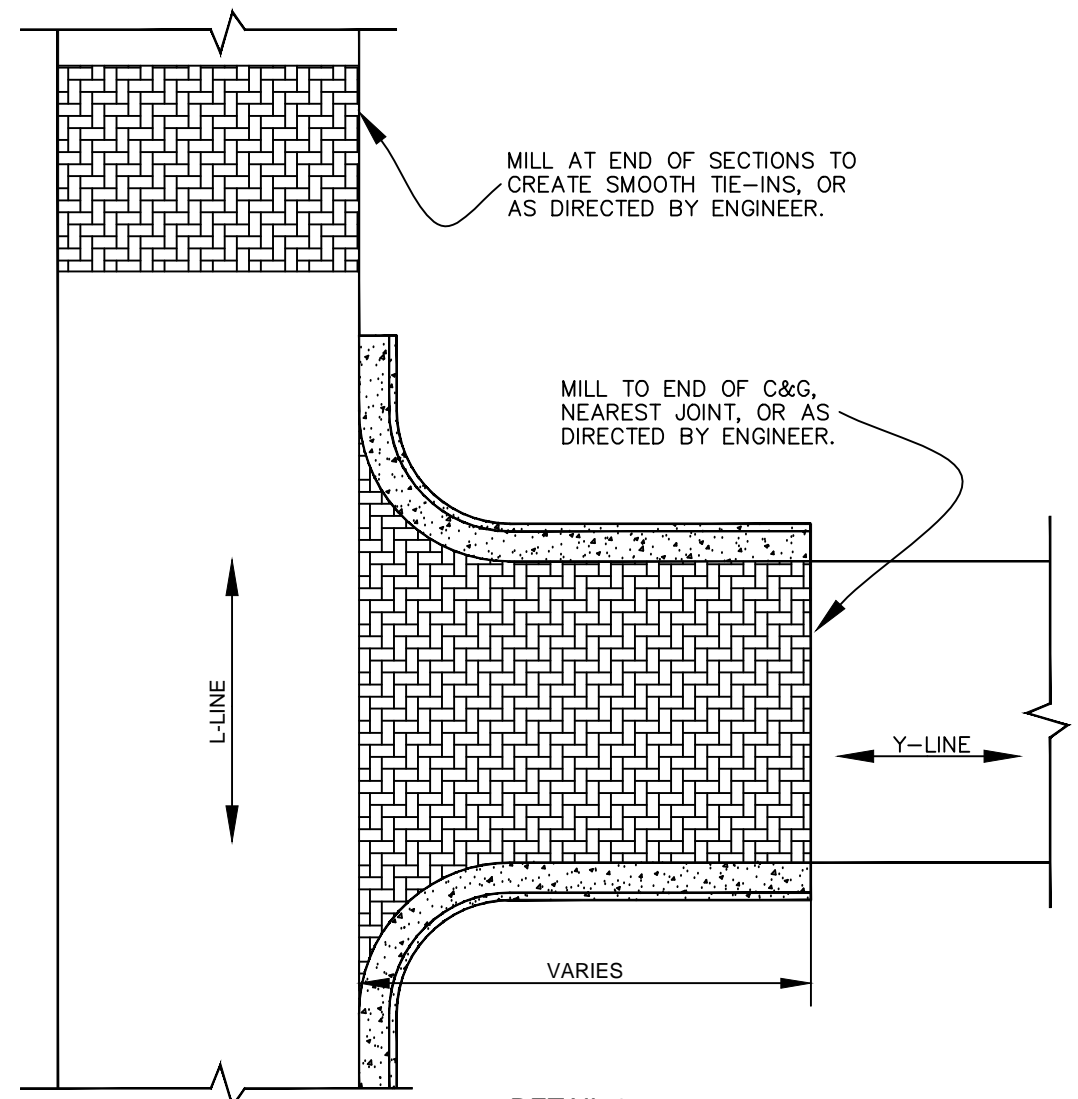
DRAWINGS NOT TO SCALE



DETAIL 2
MILL & FILL PAVEMENT REPAIR

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.



DETAIL 1
Y-LINE / BUTT JOINT MILLING

NOTES:

1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER.
2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.

PAVEMENT SCHEDULE

C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 165 pounds per square yard.
D1	Proposed approximately 2½" of Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 285 pounds per square yard.
M1	Milling Depth 0" - 1½" at the edge of Curb & Gutter. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay, or as Directed by the Engineer.
M2	Milling Depth 2½" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
S	Shoulder Reconstruction by others.

DRAWINGS NOT TO SCALE

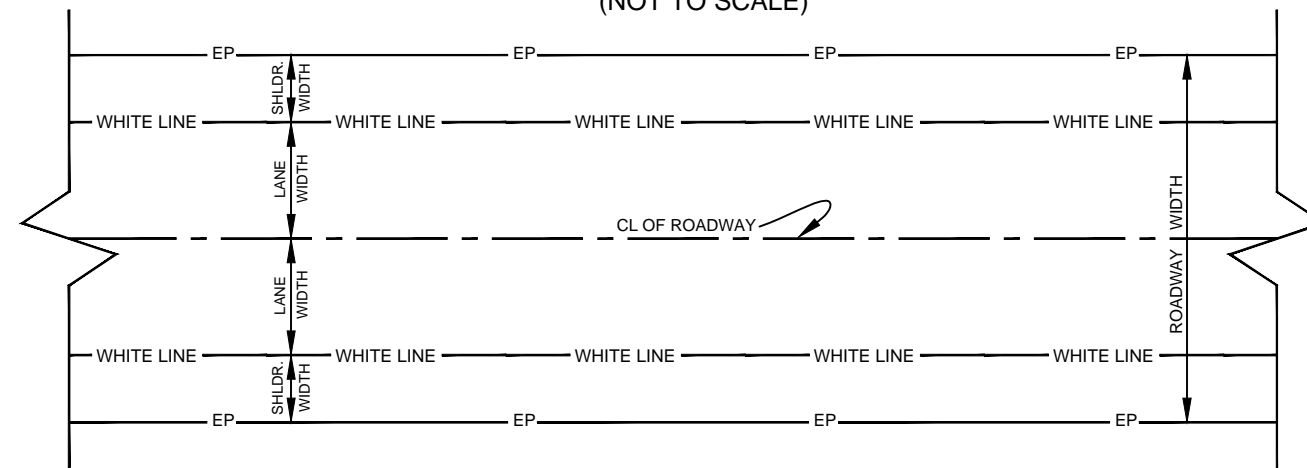
DETAIL 6 GUIDELINES FOR LANE WIDTHS ON RESURFACING PROJECTS

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

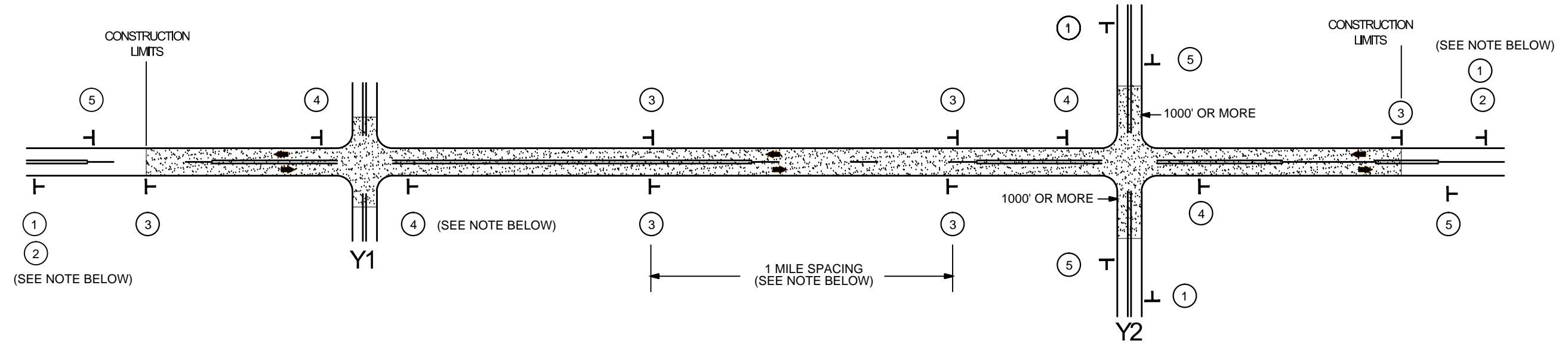
TWO LANE - TWO WAY ROADWAY - 55 MPH		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	12'	2'
32'	12'	4'
* May vary due to pavement width		

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)



SIGNING FOR RESURFACING PROJECTS

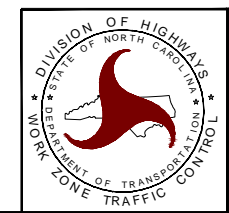


LEGEND	
	STATIONARY SIGN
	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

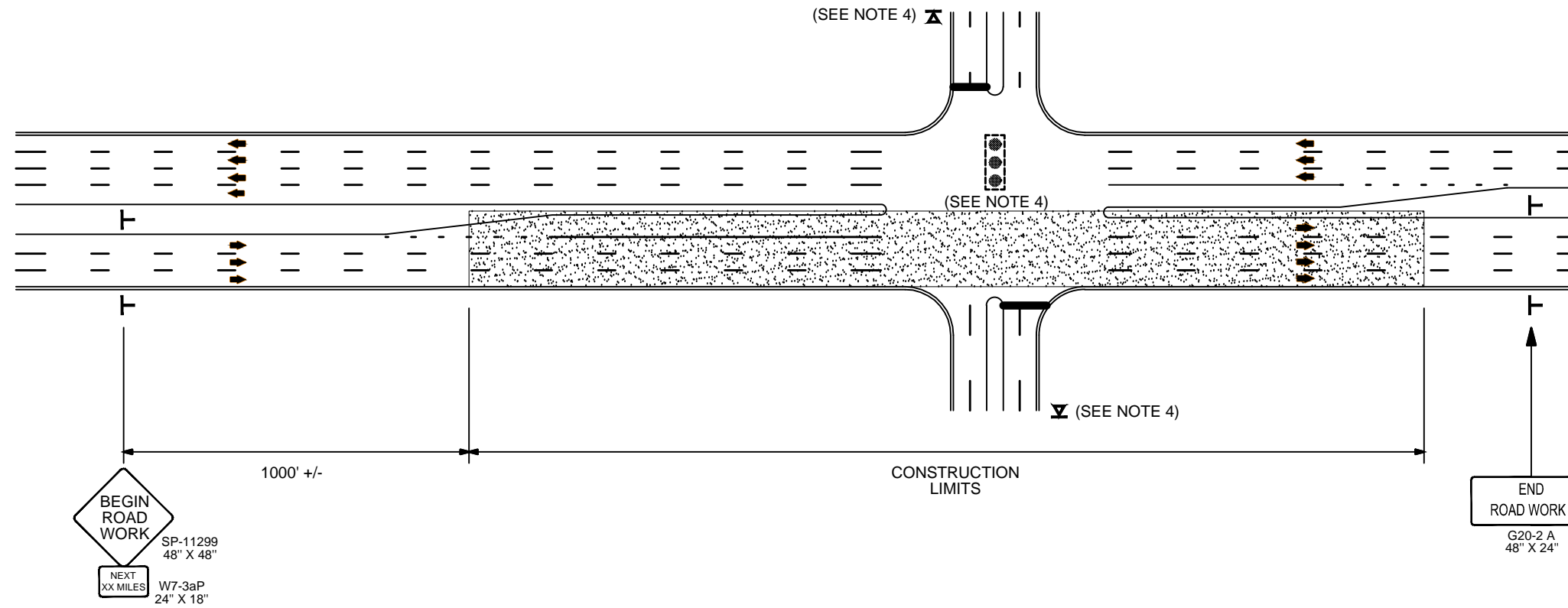
-Y- LINE SIGNING

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"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS 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;"> PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
		<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>	



RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS

URBAN / SUBURBAN WORKZONES



NOTES:

1. 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
2. MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
3. ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
4. 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.
5. LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
6. SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
7. IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
8. IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND	
T	STATIONARY SIGN
➔	DIRECTION OF TRAFFIC FLOW



**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**

SUMMARY OF QUANTITIES

														PROJECT NO.		SHEET NO.	TOTAL NO.
														6CR.20091.77		1	2
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TONS	2.5" MILLING SY	0" TO 1.5" MILLING SY	INCIDENTAL MILLING SY	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, SF9.5A TONS
6CR.20091.77	Bladen	1	SR 1515 - A	FROM CJ @ US 701 TO BEGIN 3 LANE	1	2	2WU	NO	NO	1.25	32	38			222		1,998
TOTAL FOR MAP NO. 1										1.25		38			222		1,998
6CR.20091.77	Bladen	2	SR 1515 - B	FROM BEGIN 3 LANE TO END 3 LANE	2	2	2WU	NO	NO	0.28	42	8		1,150	222		631
TOTAL FOR MAP NO. 2										0.28		8		1,150	222		631
6CR.20091.77	Bladen	3	SR 1515 - C	FROM END 3 LANE TO END C&G - L/BEGIN C&G-R	3	2	2WU	NO	NO	0.32	30	10		1,314	178		514
TOTAL FOR MAP NO. 3										0.32		10		1,314	178		514
6CR.20091.77	Bladen	4	SR 1515 - D	FROM ENDC&G - LEFT/BEGIN C&G - RIGHT TO BEGIN C&G - BOTH SIDES	4	2	2WU	NO	NO	0.12	31.5	4	704	493	222	100	245
TOTAL FOR MAP NO. 4										0.12		4	704	493	222	100	245
6CR.20091.77	Bladen	5	SR 1515 - E	FROM BEGIN C&G - BOTH SIDES TO NC 53	5	2	2WU	NO	NO	0.59	28			4,846	133		837
TOTAL FOR MAP NO. 5										0.59				4,846	133		837
6CR.20091.77	Bladen	6	SR 1516	FROM SR 1515 TO CJ @ NC 41	1	2	2WU	NO	NO	0.13	36	1			89		251
TOTAL FOR MAP NO. 6										0.13		1			89		251
TOTAL FOR PROJ NO. 6CR.20091.77										2.69		61	704	7,803	1,066	100	4,476
GRAND TOTAL										2.69		61	704	7,803	1,066	100	4,476

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	LEVELING COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	ADJ. OF DROP INLET EA	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA
6CR.20091.77	Bladen	1	SR 1515 - A	FROM CJ @ US 701 TO BEGIN 3 LANE	1	2	2WU	NO	NO	1.25	32	97	140		4	10
TOTAL FOR MAP NO. 1										1.25		97	140		4	10
6CR.20091.77	Bladen	2	SR 1515 - B	FROM BEGIN 3 LANE TO END 3 LANE	2	2	2WU	NO	NO	0.28	42	28	44		2	2
TOTAL FOR MAP NO. 2										0.28		28	44		2	2
6CR.20091.77	Bladen	3	SR 1515 - C	FROM END 3 LANE TO END C&G - L/BEGIN C&G-R	3	2	2WU	NO	NO	0.32	30	23	36		1	1
TOTAL FOR MAP NO. 3										0.32		23	36		1	1
6CR.20091.77	Bladen	4	SR 1515 - D	FROM ENDC&G - LEFT/BEGIN C&G - RIGHT TO BEGIN C&G - BOTH SIDES	4	2	2WU	NO	NO	0.12	31.5	9	22	2	3	3
TOTAL FOR MAP NO. 4										0.12		9	22	2	3	3
6CR.20091.77	Bladen	5	SR 1515 - E	FROM BEGIN C&G - BOTH SIDES TO NC 53	5	2	2WU	NO	NO	0.59	28	40	58			
TOTAL FOR MAP NO. 5										0.59		40	58			
6CR.20091.77	Bladen	6	SR 1516	FROM SR 1515 TO CJ @ NC 41	1	2	2WU	NO	NO	0.13	36	6	17			
TOTAL FOR MAP NO. 6										0.13		6	17			
TOTAL FOR PROJ NO. 6CR.20091.77										2.69		203	317	2	10	16
GRAND TOTAL										2.69		203	317	2	10	16

THERMOPLASTIC AND PAINT QUANTITIES

										PROJECT NO.	SHEET NO.	TOTAL NO.						
										6CR.20091.77	2	2						
										4413000000-E	4685000000-E	4686000000-E	4695000000-E	4697000000-E				
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	4" X 90 M WHITE THERMO LF	4" X 120 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	8" X 90 M YELLOW THERMO LF	8" X 120 M WHITE THERMO LF			
6CR.20091.77	Bladen	1	SR 1515 - A	FROM CJ @ US 701 TO BEGIN 3 LANE	1	2	2WU	1.25	32	140	13,800	120	13,800					
TOTAL FOR MAP NO. 1								1.25		140	13,800	120	13,800					
6CR.20091.77	Bladen	2	SR 1515 - B	FROM BEGIN 3 LANE TO END 3 LANE	2	2	2WU	0.28	42	31	2,500		4,450	80				
TOTAL FOR MAP NO. 2								0.28		31	2,500		4,450	80				
6CR.20091.77	Bladen	3	SR 1515 - C	FROM END 3 LANE TO END C&G - L/BEGIN C&G-R	3	2	2WU	0.32	30	36	3,500		3,500		60			
TOTAL FOR MAP NO. 3								0.32		36	3,500		3,500		60			
6CR.20091.77	Bladen	4	SR 1515 - D	FROM ENDC&G - LEFT/BEGIN C&G - RIGHT TO BEGIN C&G - BOTH SIDES	4	2	2WU	0.12	31.5	13	1,300		1,300		64			
TOTAL FOR MAP NO. 4								0.12		13	1,300		1,300		64			
6CR.20091.77	Bladen	5	SR 1515 - E	FROM BEGIN C&G - BOTH SIDES TO NC 53	5	2	2WU	0.59	28	66	6,300		6,300					
TOTAL FOR MAP NO. 5								0.59		66	6,300		6,300					
6CR.20091.77	Bladen	6	SR 1516	FROM SR 1515 TO CJ @ NC 41	1	2	2WU	0.13	36	15	1,000		1,000					
TOTAL FOR MAP NO. 6								0.13		15	1,000		1,000					
TOTAL FOR PROJ NO. 6CR.20091.77								2.69		301	28,400	120	30,350	80	124			
GRAND TOTAL											2.69		301	28,400	120	30,350	80	124
													30,470					

										4710000000-E	4725000000-E	4900000000-N			
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	24" X 120 M WHITE THERMO LF	THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	YELLOW & YELLOW MARKERS EA	CRYSTAL & RED MARKERS EA	
6CR.20091.77	Bladen	1	SR 1515 - A	FROM CJ @ US 701 TO BEGIN 3 LANE	1	2	2WU	1.25	32				85	5	
TOTAL FOR MAP NO. 1								1.25					85	5	
6CR.20091.77	Bladen	2	SR 1515 - B	FROM BEGIN 3 LANE TO END 3 LANE	2	2	2WU	0.28	42		10	2	75		
TOTAL FOR MAP NO. 2								0.28			10	2	75		
6CR.20091.77	Bladen	3	SR 1515 - C	FROM END 3 LANE TO END C&G - L/BEGIN C&G-R	3	2	2WU	0.32	30				25		
TOTAL FOR MAP NO. 3								0.32					25		
6CR.20091.77	Bladen	4	SR 1515 - D	FROM ENDC&G - LEFT/BEGIN C&G - RIGHT TO BEGIN C&G - BOTH SIDES	4	2	2WU	0.12	31.5				10		
TOTAL FOR MAP NO. 4								0.12					10		
6CR.20091.77	Bladen	5	SR 1515 - E	FROM BEGIN C&G - BOTH SIDES TO NC 53	5	2	2WU	0.59	28	15			40		
TOTAL FOR MAP NO. 5								0.59		15			40		
6CR.20091.77	Bladen	6	SR 1516	FROM SR 1515 TO CJ @ NC 41	1	2	2WU	0.13	36				10	5	
TOTAL FOR MAP NO. 6								0.13					10	5	
TOTAL FOR PROJ NO. 6CR.20091.77								2.69		15	10	2	245	10	
GRAND TOTAL											2.69		12	255	10
													12	255	