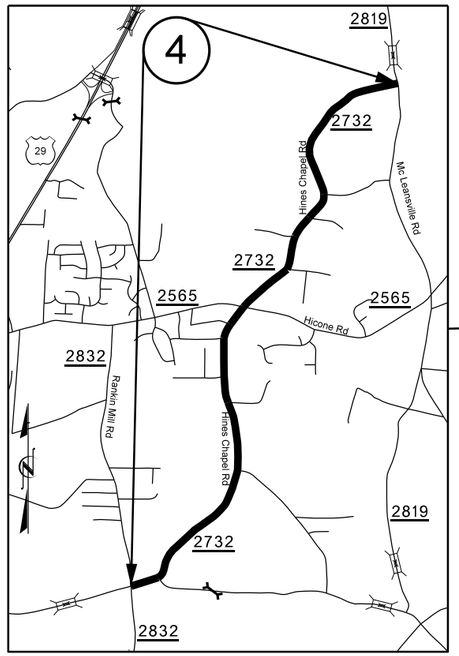
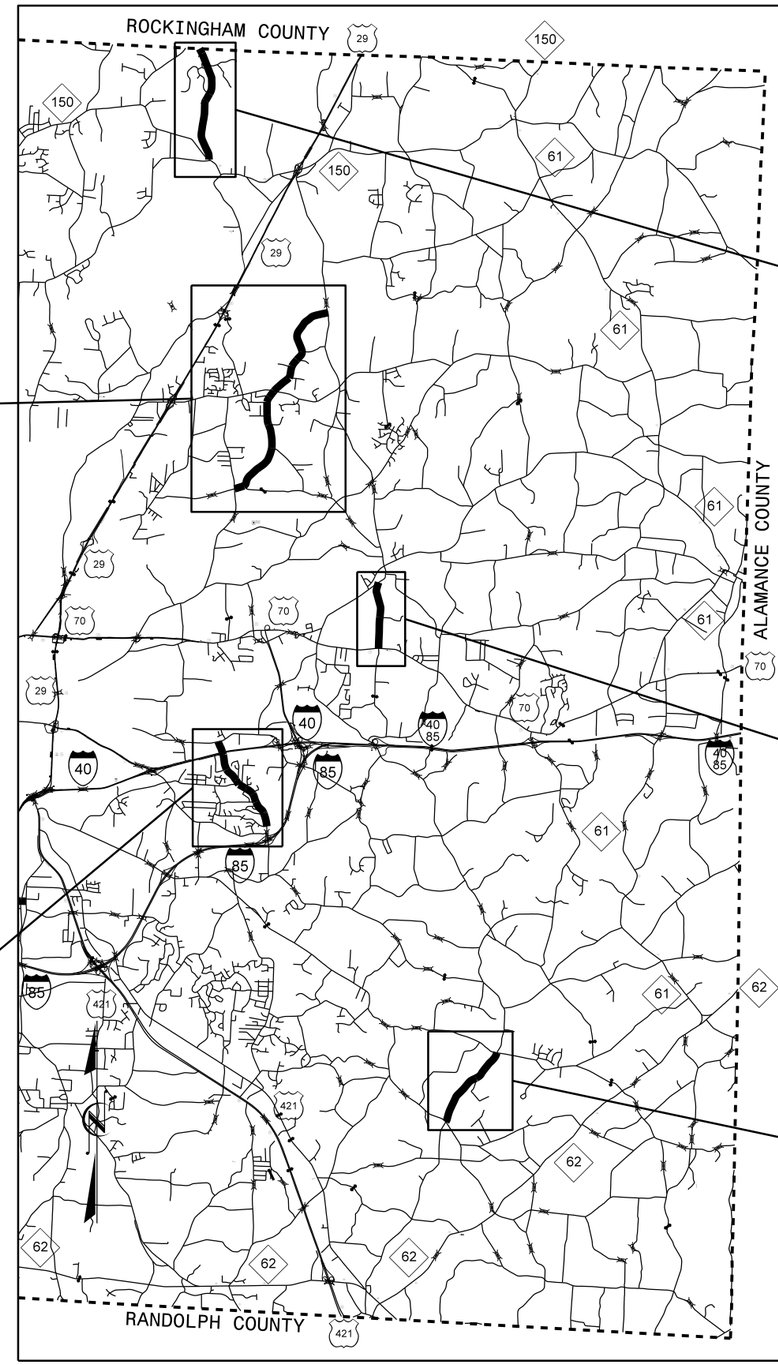
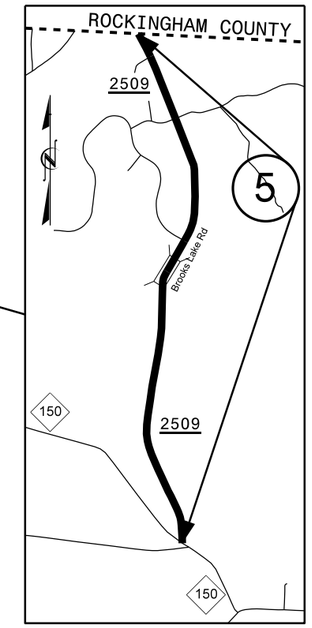
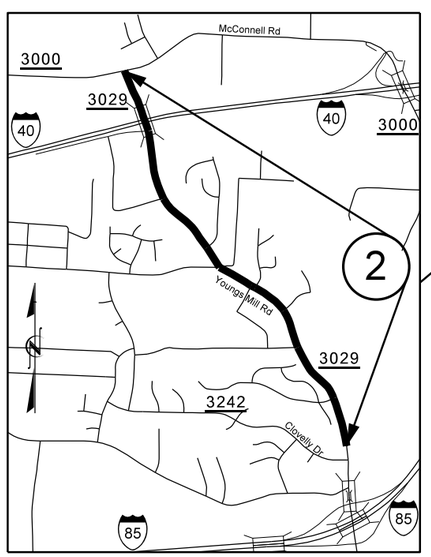
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.20411.70	1	5
F.A. PROJ. NO.			

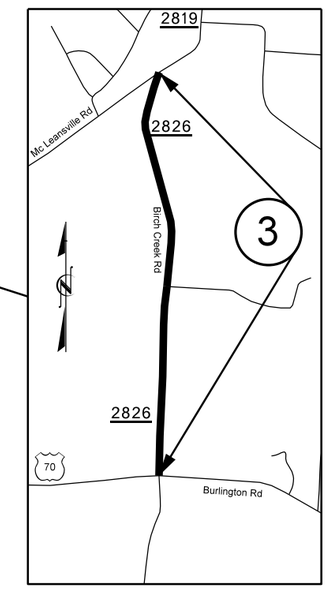
2015 GUILFORD COUNTY

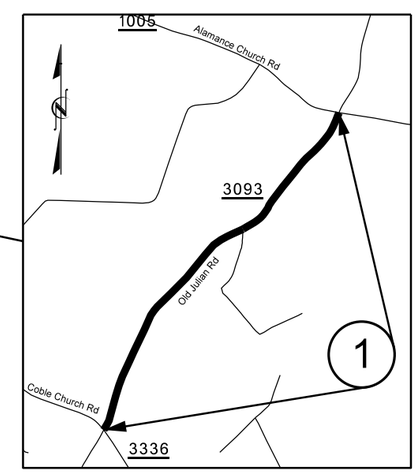












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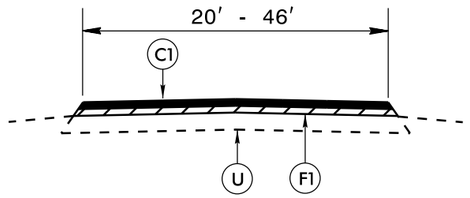
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.20411.70	2	5



*NOTE: NO MILLING AT CURB AND GUTTER SECTIONS ON MAPS 2 AND 3

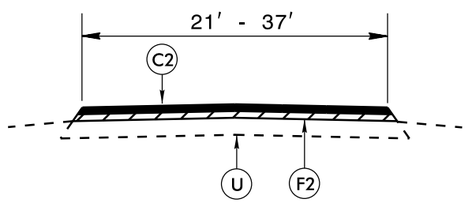
**NOTE: NO PAVEMENT ON BRIDGE #370 ON MAP 2: STA. 84+80 TO STA. 87+05

***NOTE: NO PAVEMENT ON SECTION ON MAP 4: STA. 114+60 TO STA. 116+60

TYPICAL SECTION NO. 1

TO BE USED ON MAPS 1, 2, 3, AND 4

MAP 4: STA. 0+00 TO STA. 116+60



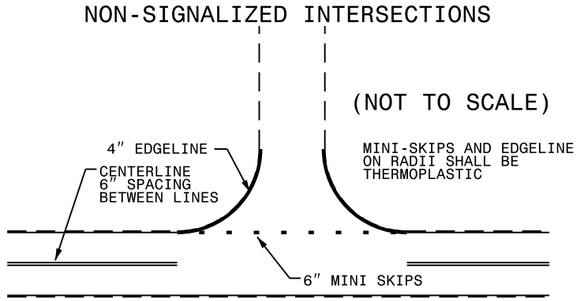
TYPICAL SECTION NO. 2

TO BE USED ON MAP 4

STA. 116+60 TO STA. 221+20

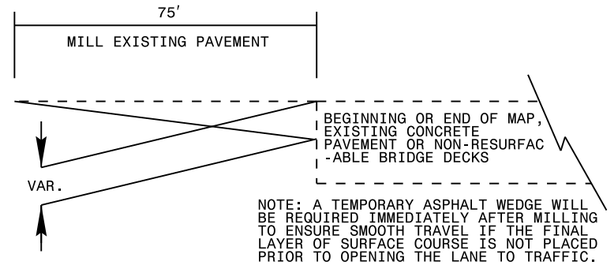
TO BE USED AT ALL NON-SIGNALIZED INTERSECTIONS

(NOT TO SCALE)



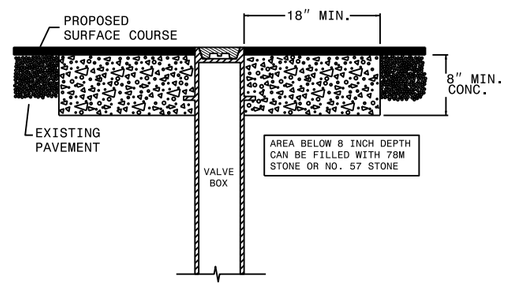
NOTE: MINI SKIPS SHALL BE PLACED ON A 10′ CYCLE, CONTAINING AN 8′ AND 2′ SKIP, THE WIDTH OF THE SKIP SHALL BE 6″.

INCIDENTAL MILLING DETAIL

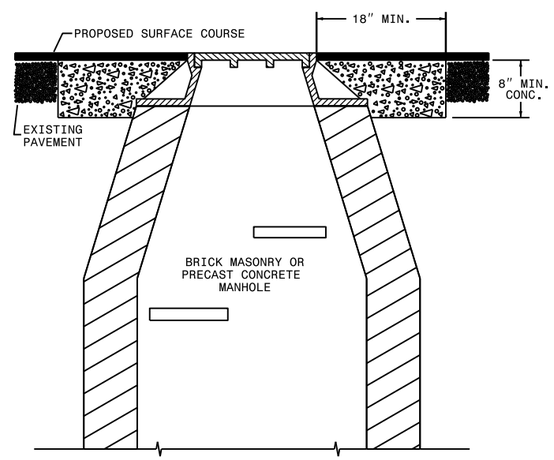


NOTE: A TEMPORARY ASPHALT WEDGE WILL BE REQUIRED IMMEDIATELY AFTER MILLING TO ENSURE SMOOTH TRAVEL IF THE FINAL LAYER OF SURFACE COURSE IS NOT PLACED PRIOR TO OPENING THE LANE TO TRAFFIC.

STANDARD CONCRETE ENCASEMENT FOR MANHOLE & VALVE CASTINGS IN PAVEMENT DETAIL DRAWING



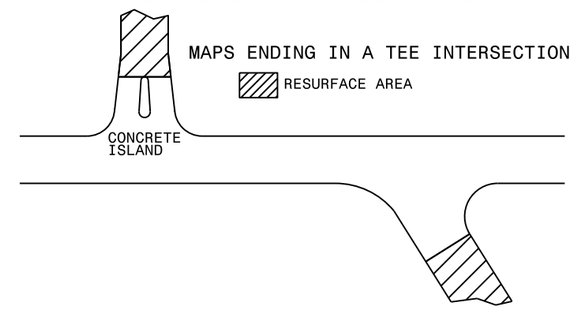
USE RAPID SET GROUT, MORTAR, OR CONCRETE CLASS B CONCRETE MAY BE USED WHEN ADJUSTMENTS ARE NOT IN THE TRAVEL LANE.



NOTES:

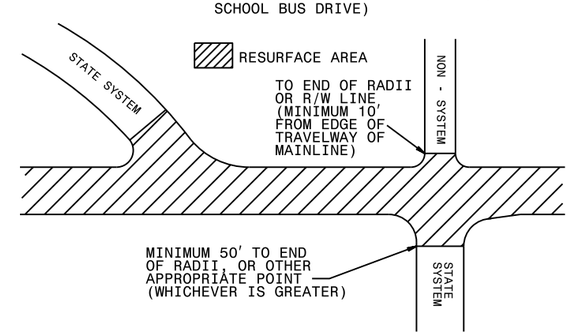
1. MORTAR SHALL BE MIXED TO NCDOT SPECIFICATIONS.
2. ALL FAULTY EXISTING BRICKWORK TO BE REMOVED AND REPLACED WITH NEW BRICK MASONRY.
3. EXCAVATION FOR THE ADJUSTMENT SHALL BE SHEER CUT ON ALL SIDES.
4. RAPID SET GROUT, MORTAR, OR CONCRETE SHALL BE USED

PAVING DETAIL 1
MAIN LINE IS NOT BEING RESURFACED



PAVING DETAIL 2
MAIN LINE IS BEING RESURFACED

NOTE: NON-SYSTEM (CITY STREET, PRIVATE DRIVE, SCHOOL BUS DRIVE)



PAVEMENT SCHEDULE

C1	PROP. APPROX. 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
F1	AST MAT COAT, #78m STONE
F2	AST MAT COAT #67M STONE
U	EXISTING PAVEMENT.

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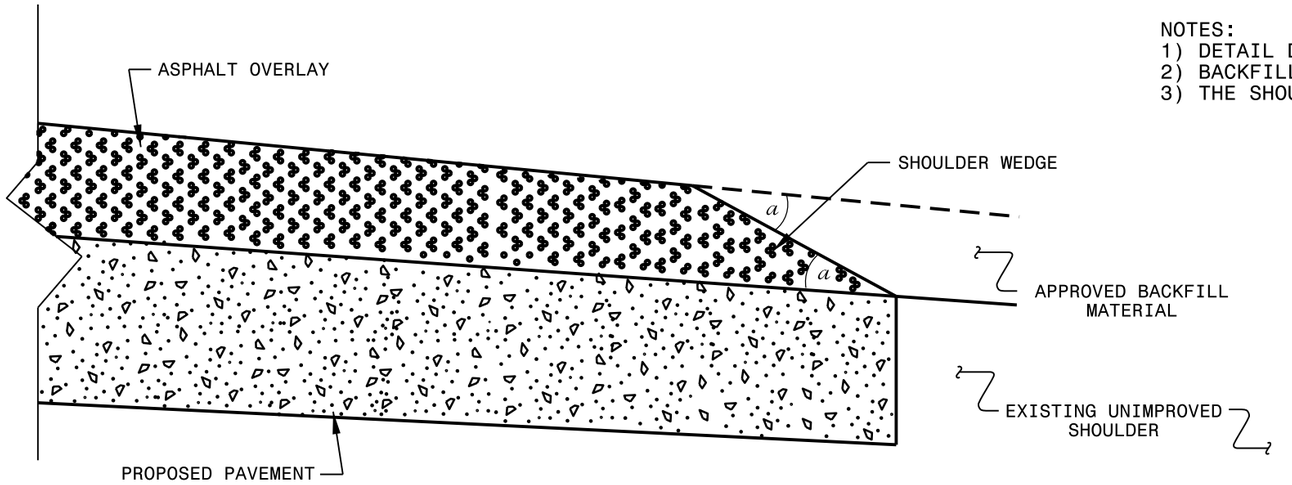
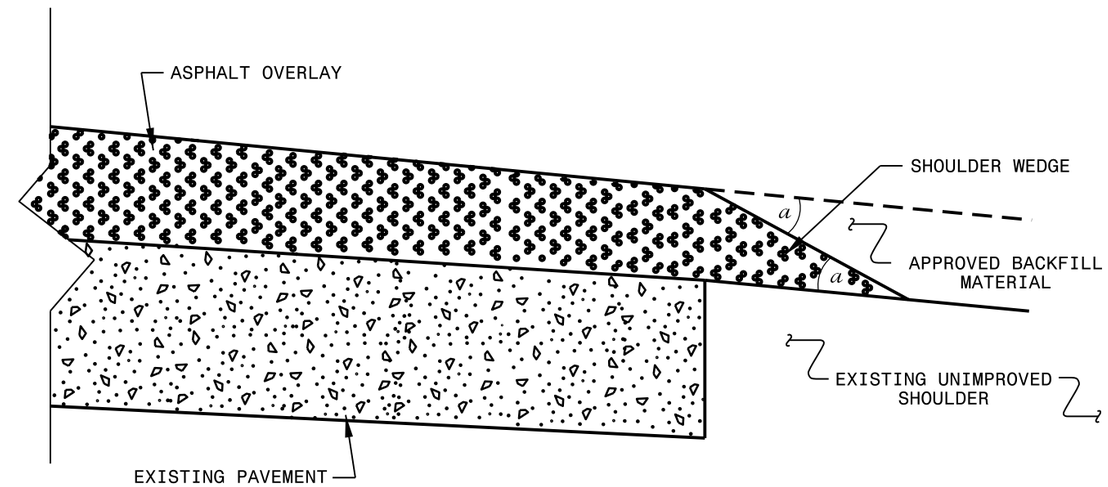
PROJECT REFERENCE NO.	SHEET NO.
7CR.20411.70	3

NOTES:
1) DETAIL DOES NOT APPLY TO OGAFC 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.



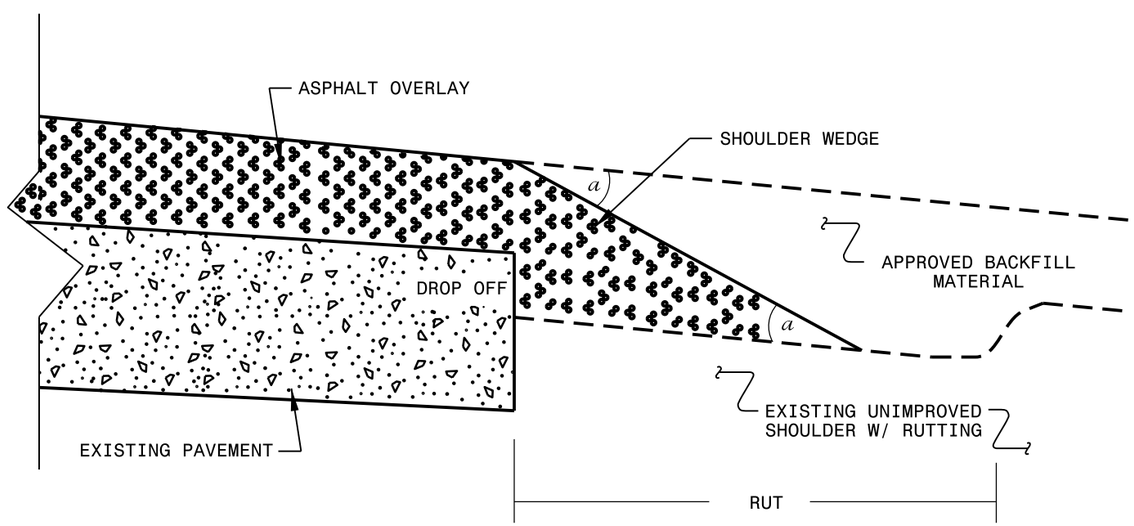
SHOULDER WEDGE DETAIL

(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		

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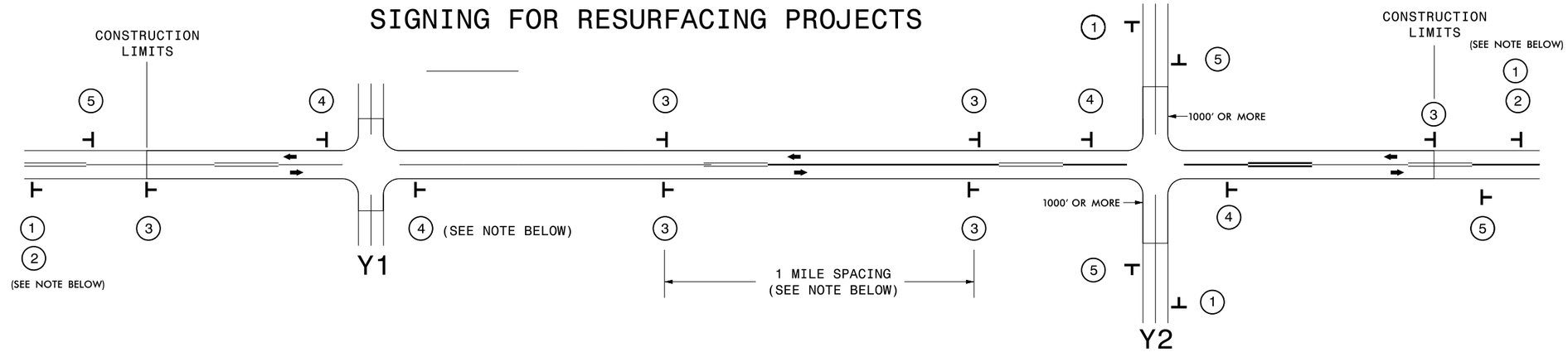
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.20411.70	4	5

SIGNING FOR RESURFACING PROJECTS



LEGEND

⊢ STATIONARY SIGN

⬅ DIRECTION OF TRAFFIC FLOW

SIGNING NOTES AND PLACEMENT PER DIRECTION

MAINLINE (-L-) SIGNING

1	ROAD WORK AHEAD 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.
2	NEXT XX MILES 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	LOW/SOFT SHOULDER 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 ½ MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.
4	ROAD UNDER CONST 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	END ROAD WORK G20-2 A 48″ X 24″	PLACE 500′ FOLLOWING THE END OF CONSTRUCTION LIMITS.

-Y- LINE SIGNING

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, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

ROAD WORK AHEAD
W20-1
48″ X 48″

PLACED 500′ IN ADVANCE OF FLAGGER.

W20-7 A
48″ X 48″

PLACED 250′ IN ADVANCE OF FLAGGER.

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS

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PROJECT NO.	SHEET NO.	TOTAL NO.
7CR.20411.70	5	5

SUMMARY OF QUANTITIES

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	INCIDENTAL MILLING SY	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	ASPHALT SURFACE TREATMENT, MAT COAT, #78M STONE SY	GENERIC PAVING ITEM - [ASPHALT SURFACE TREATMENT, MAT COAT, #67 STONE] SY	RETROFITTING EXISTING CURB RAMPS EA	ADJ. OF MANHOLES EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA
7CR.20411.70	Guilford	1	SR 3093 (OLD JULIAN ROAD)	FROM SR 3336 (COBLE CHURCH ROAD) - 4.12 TO SR 1005 (ALAMANCE CHURCH ROAD) - 5.72	1	2	2WU	NO	NO	1.58	21	105		1,385	93	19,466				
					1	2	2WU	NO	NO	0.02	21-33			22	1	317				
		TOTAL FOR MAP NO. 1								**1.6**		**105**		**1,407**	**94**	**19,783**				
		2	SR 3029 (YOUNGS MILL ROAD)	FROM JOINT 215' NORTH OF SR 3242 (CLOVELLY DRIVE) - 1.83 TO SR 3000 (MCCONNELL ROAD) - 0.00	1	2	2WU	NO	NO	0.063	21	55		54	4	776				
					1	2	2WU	NO	NO	0.119	21-35			135	9	1,955				
					1	2	2WU	NO	NO	0.017	35			24	2	349				
					1	2	2WU	NO	NO	0.027	46			70	5	729			1	3
					1	2	2WU	NO	NO	0.077	21-46			106	7	1,536			1	
					1	2		NO	NO	0.138	21			117	8	1,700				
					1	2	2WU	NO	NO	0.028	21-30			49	3	427				
					1	2	2WU	NO	NO	0.107	30			150	10	1,883				
					1	2	2WU	NO	NO	0.03	21-30			32	2	458				
					1	2	2WU	NO	NO	0.321	21			333	22	3,955				
					1	2	2WU	NO	NO	0.049	25			110	7	719				
					1	2	2WU	NO	NO	0.034	28-40			47	3	678				
					1	2	2WU	NO	NO	0.033	40			73	5	774		2		
					1	2	2WU	NO	NO	0.098	28			111	7	1,610				
					1	2	2WU	NO	NO	0.027	28-41			38	3	554				
					1	2	2WU	NO	NO	0.035	41			78	5	842				
					1	2	2WU	NO	NO	0.148	28			168	11	2,431				
					1	2	2WU	NO	NO	0.151	21			129	9	1,860				
					1	2	2WU	NO	NO	0.078	22			70	5	1,007				
					1	2	2WU	NO	NO	0.027	22-24		192	45	3	364				
				BRIDGE #370	1	2	2WU	NO	NO	0.043	24									
					1	2	2WU	NO	NO	0.028	22-24			26	2	378				
					1	2	2WU	NO	NO	0.154	22			137	9	1,988				
		TOTAL FOR MAP NO. 2								**1.832**		**55**	**192**	**2,102**	**141**	**26,973**		**2**	**2**	**3**
		3	SR 2826 (BIRCH CREEK ROAD)	FROM US 70 (BURLINGTON ROAD) - 1.22 TO SR 2819 (MCLEANSVILLE ROAD) - 0.00	1	2	2WU	NO	NO	0.009	20-24	60		8	1	116				
					1	2	2WU	NO	NO	0.17	20			138	9	1,995				
					1	2	2WU	NO	NO	0.033	20-28			32	2	465				
					1	2	2WU	NO	NO	0.571	26			691	46	8,710			2	4
					1	2	2WU	NO	NO	0.013	20-28			13	1	183				
					1	2	2WU	NO	NO	0.42	20			341	23	4,928				
		TOTAL FOR MAP NO. 3								**1.216**		**60**		**1,223**	**82**	**16,397**			**2**	**4**
		4	SR 2732 (HINES CHAPEL ROAD)	FROM SR 2832 (RANKING MILL ROAD) - 4.19 TO SR 2819 (MCLEANSVILLE ROAD) - 0.00	1	2	2WU	NO	NO	0.025	21-34	248		28	2	411				
					1	2	2WU	NO	NO	2.03	21			1,878	126	25,010				
					1	2	2WU	NO	NO	0.071	21-37			83	6	1,208				
					1	2	2WU	NO	NO	0.045	37			67	5	977				
				SKIP	1	2	2WU	NO	NO	0.038	37									
					2	2	2WU	NO	NO	0.027	37			49	3		586			
					2	2	2WU	NO	NO	0.095	21-37			134	9		1,616			
					2	2	2WU	NO	NO	1.86	21			1,972	132		22,915			
		TOTAL FOR MAP NO. 4								**4.191**		**248**		**4,211**	**283**	**27,606**	**25,117**			
		5	SR 2509 (BROOKS LAKE ROAD)	FROM NC 150 - 2.15 TO ROCKINGHAM COUNTY LINE - 0.00	1	2	2WU	NO	NO	2.154	22	83		2,020	135	27,801				
		TOTAL FOR MAP NO. 5								**2.154**		**83**		**2,020**	**135**	**27,801**				
TOTAL FOR PROJ NO. 7CR.20411.70										**10.993**		**551**	**192**	**10,963**	**735**	**118,560**	**25,117**	**2**	**4**	**7**
GRAND TOTAL										**10.993**		**551**	**192**	**10,963**	**735**	**118,560**	**25,117**	**2**	**4**	**7**

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	4" X 90 M WHITE THERMO LF	6" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO MSG STOP 120 M EA	THERMO MSG AHEAD 120 M EA	THERMO MSG SCHOOL 120 M EA	THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	THERMO STR & RT ARROW 90 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	8" WHITE PAINT LF	8" YELLOW PAINT LF
7CR.20411.70	Guilford	1	SR 3093 (OLD JULIAN ROAD)	FROM SR 3336 (COBLE CHURCH ROAD) - 4.12 TO SR 1005 (ALAMANCE CHURCH ROAD) - 5.72	1	2	2WU	1.6	21-33	180	1	150	24		4	5					33,480	46,203		
		TOTAL FOR MAP NO. 1						**1.6**		**180**	**1**	**150**	**24**		**4**	**5**					**33,480**	**46,203**		
		2	SR 3029 (YOUNGS MILL ROAD)	FROM JOINT 215' NORTH OF SR 3242 (CLOVELLY DRIVE) - 1.83 TO SR 3000 (MCCONNELL ROAD) - 0.00	1	2	2WU	1.832	21-46	205		675	134	30				2	4		34,518	42,840	390	920
		TOTAL FOR MAP NO. 2						**1.832**		**205**		**675**	**134**	**30**				**2**	**4**		**34,518**	**42,840**	**390**	**920**
		3	SR 2826 (BIRCH CREEK ROAD)	FROM US 70 (BURLINGTON ROAD) - 1.22 TO SR 2819 (MCLEANSVILLE ROAD) - 0.00	1	2	2WU	1.216	20-28	137		75	16								19,720	12,605		
		TOTAL FOR MAP NO. 3						**1.216**		**137**		**75**	**16**								**19,720**	**12,605**		
		4	SR 2732 (HINES CHAPEL ROAD)	FROM SR 2832 (RANKING MILL ROAD) - 4.19 TO SR 2819 (MCLEANSVILLE ROAD) - 0.00	1-2	2	2WU	4.191	21-37	470		975	192	180			12	5		5	86,332	88,523		440
		TOTAL FOR MAP NO. 4						**4.191**		**470**		**975**	**192**	**180**			**12**	**5**		**5**	**86,332**	**88,523**		**440**
		5	SR 2509 (BROOKS LAKE ROAD)	FROM NC 150 - 2.15 TO ROCKINGHAM COUNTY LINE - 0.00	1	2	2WU	2.154	22	241		375	76								44,750	45,500		
		TOTAL FOR MAP NO. 5						**2.154**		**241**		**375**	**76**								**44,750**	**45,500**		
TOTAL FOR PROJ NO. 7CR.20411.70								**10.993**		**1,233**	**1**	**2,250**	**442**	**210**	**4**	**5**	**12**	**7**	**4**	**5**	**218,800**	**235,671**	**390**	**1,360**
																21		**16**			**454,471**		**1,750**	
GRAND TOTAL								**10.993**		**1,233**	**1**	**2,250**	**442**	**210**	**4**	**5**	**12**	**7**	**4**	**5**	**218,800**	**235,671**	**390**	**1,360**
																21		**16**			**454,471**		**1,750**	