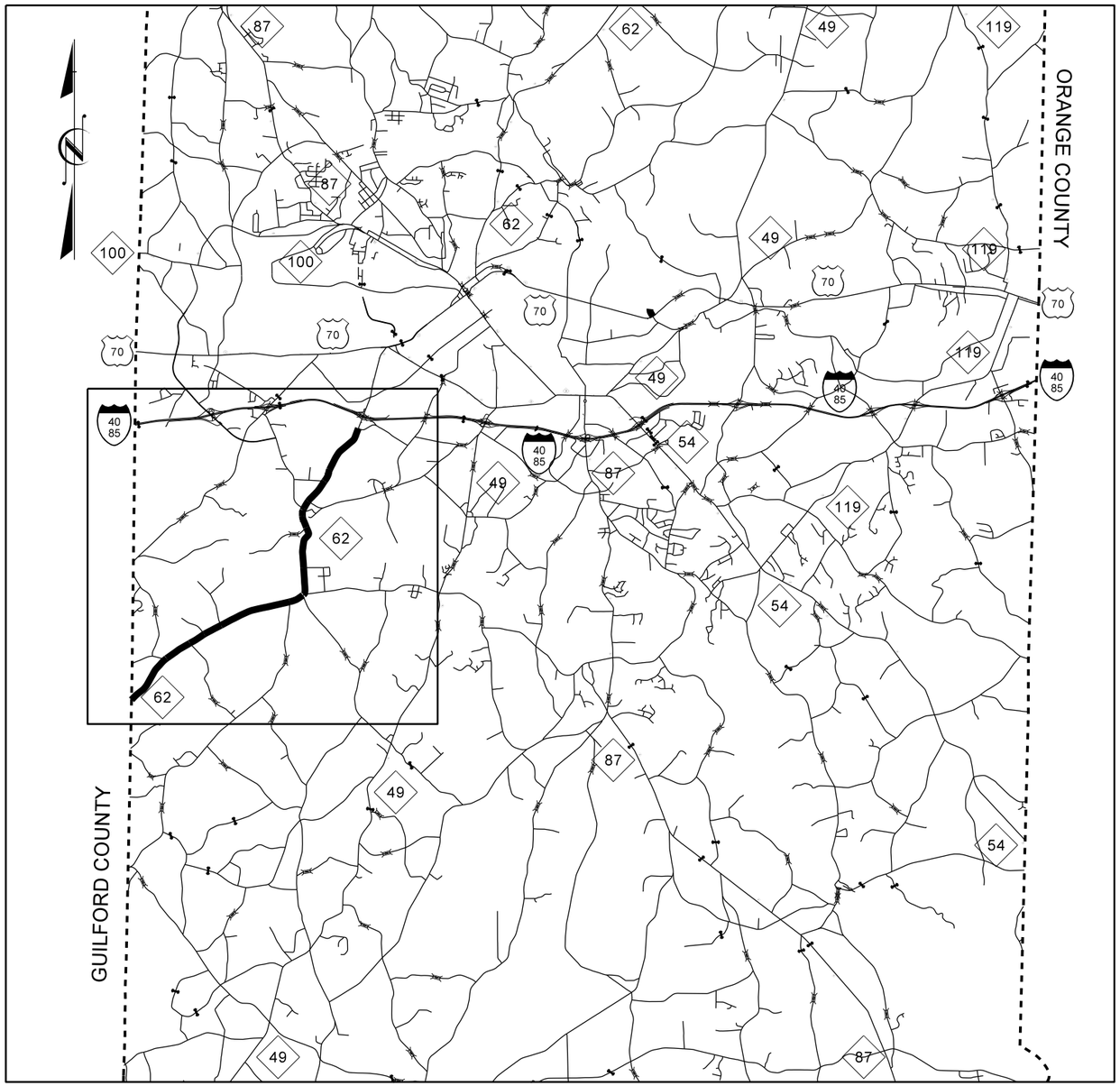
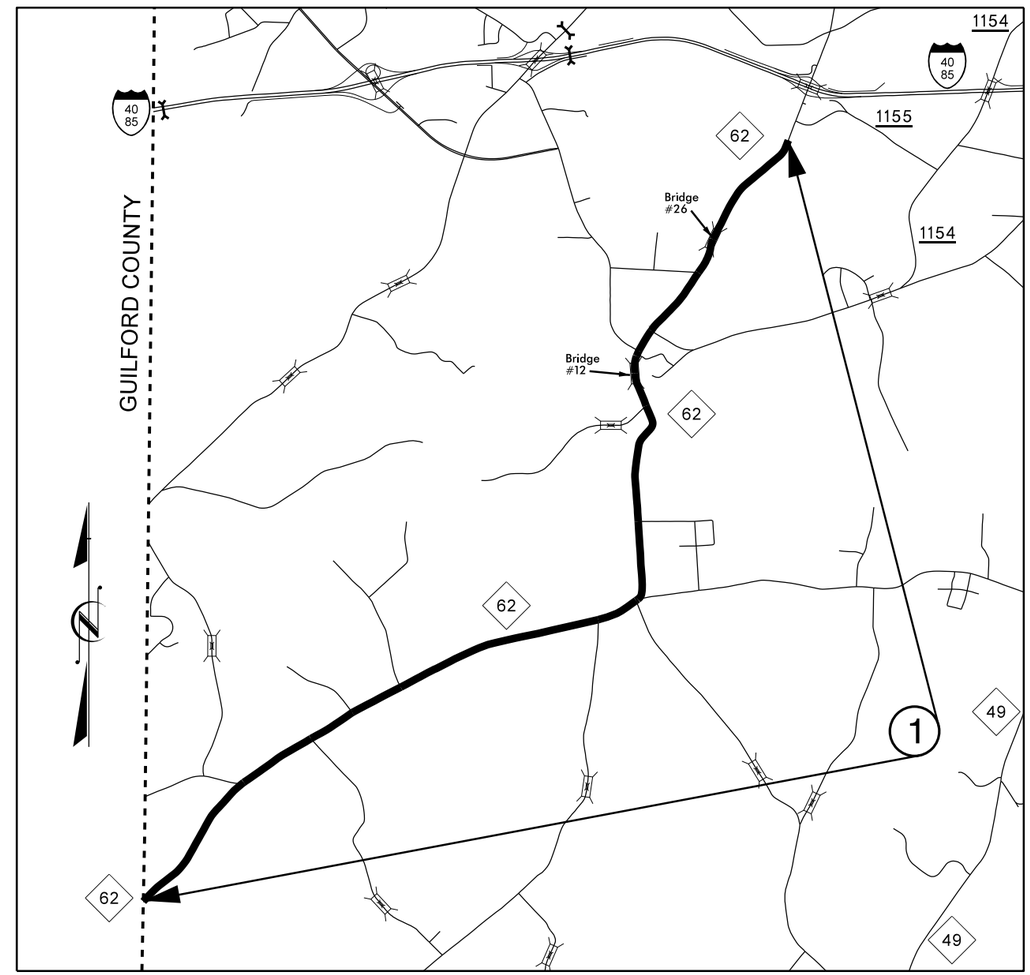
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.10011.45	1	7
F.A. PROJ. NO.			

2015 ALAMANCE COUNTY





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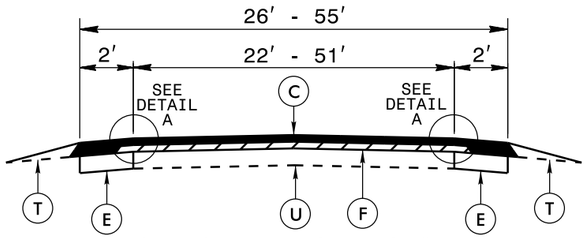
cthuskins AT D7CADD271374

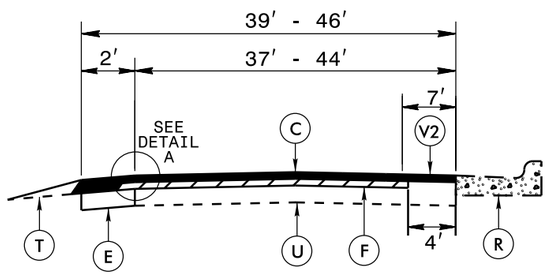
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.10011.45	2	7



*NOTE: NO PAVEMENT ON BRIDGE #26
STA. 317+85 TO STA. 318+25
**NOTE: NO PAVEMENT ON SECTION
STA. 332+30 TO STA. 345+95

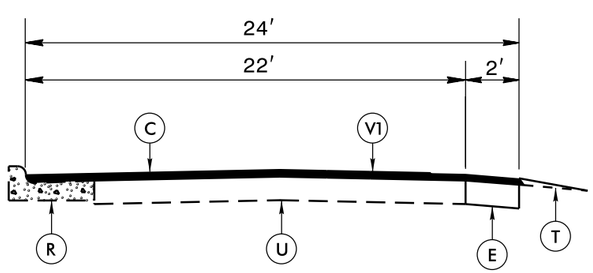
TYPICAL SECTION NO. 1

TO BE USED ON MAP 1
STA. 0+00 TO STA. 191+40
STA. 195+10 TO STA. 221+00
STA. 225+00 TO STA. 236+15
STA. 277+40 TO STA. 362+60



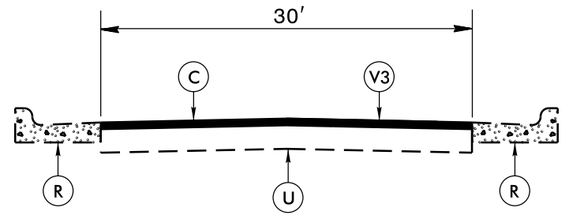
TYPICAL SECTION NO. 2

TO BE USED ON MAP 1
STA. 191+40 TO STA. 195+10



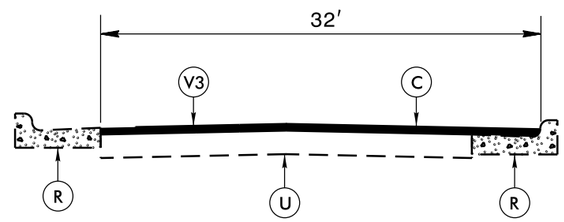
TYPICAL SECTION NO. 3

TO BE USED ON MAP 1
STA. 221+00 TO STA. 225+00



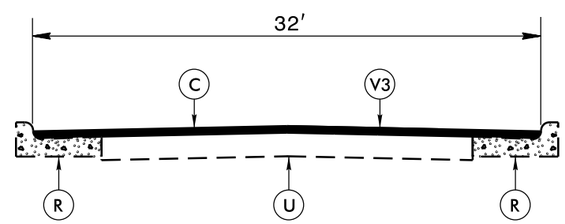
TYPICAL SECTION NO. 4

TO BE USED ON MAP 1
STA. 236+15 TO STA. 244+10



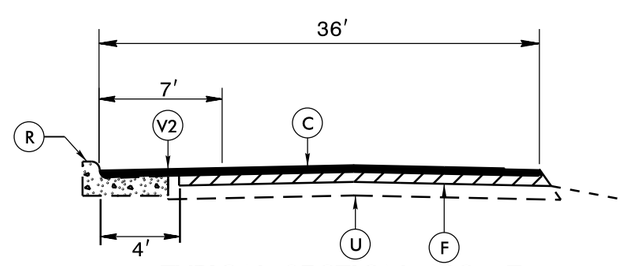
TYPICAL SECTION NO. 5

TO BE USED ON MAP 1
STA. 244+10 TO STA. 245+50



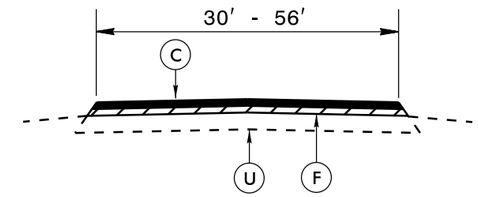
TYPICAL SECTION NO. 6

TO BE USED ON MAP 1
STA. 245+50 TO STA. 262+30



TYPICAL SECTION NO. 7

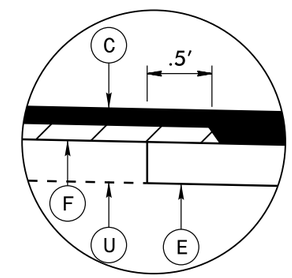
TO BE USED ON MAP 1
STA. 262+30 TO STA. 263+45



*NOTE: NO PAVEMENT ON BRIDGE #12
STA. 265+30 TO STA. 267+40

TYPICAL SECTION NO. 8

TO BE USED ON MAP 1
STA. 263+45 TO STA. 277+40



DETAIL A

PAVEMENT SCHEDULE

C	PROP. APPROX. 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.		
E	PROP. APPROX. 8″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS		
F	AST MAT COAT, #67 STONE		
R	EXISTING CONCRETE STRUCTURE		
T	SHOULDER RECONSTRUCTION, AS DIRECTED BY THE ENGINEER.		
U	EXISTING PAVEMENT.		
V1	1½″ MILLING	V2	0 - 1½″ MILLING
V3	1½″ - 3″ MILLING		

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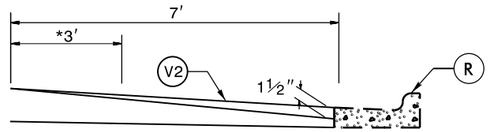
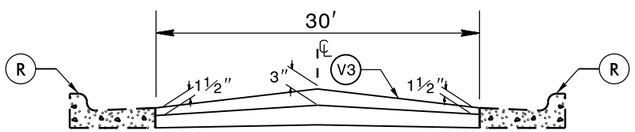
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.10011.45	3	7

MILLING DETAIL 1



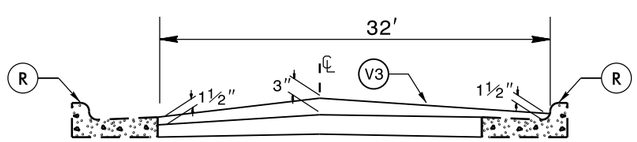
*IF #67 STONE OR 78M SEAL IS INVOLVED OVERLAP 3'.
PROFILE MILLING 0 - 1½"
PROFILE MILL EXISTING ASPHALT PAVEMENT 0 - 1½" AT LOCATIONS AS DIRECTED BY THE ENGINEER.
NOTE: TO BE USED IN CONJUCTION WITH:
TS. NO. 2 ON MAP 1 STA. 191+40 TO STA. 195+10 RT

MILLING DETAIL 2



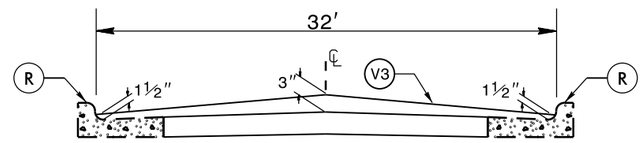
MILLING 1½" - 3"
MILL EXISTING ASPHALT PAVEMENT 1½" - 3"
AT LOCATIONS AS DIRECTED BY THE ENGINEER.
NOTE: TO BE USED IN CONJUCTION WITH:
TS. NO. 5 ON MAP 1 STA. 236+15 TO STA. 244+10

MILLING DETAIL 3



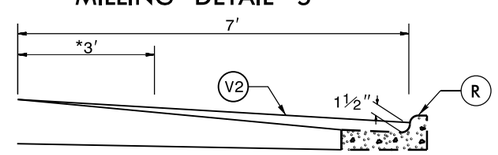
MILLING 1½" - 3"
MILL EXISTING ASPHALT PAVEMENT 1½" - 3"
AT LOCATIONS AS DIRECTED BY THE ENGINEER.
NOTE: TO BE USED IN CONJUCTION WITH:
TS. NO. 6 ON MAP 1 STA. 244+10 TO STA. 245+50

MILLING DETAIL 4



MILLING 1½" - 3"
MILL EXISTING ASPHALT PAVEMENT 1½" - 3"
AT LOCATIONS AS DIRECTED BY THE ENGINEER.
NOTE: TO BE USED IN CONJUCTION WITH:
TS. NO. 7 ON MAP 1 STA. 245+50 TO STA. 262+30

MILLING DETAIL 5



*IF #67 STONE OR 78M SEAL IS INVOLVED OVERLAP 3'.
PROFILE MILLING 0 - 1½"
PROFILE MILL EXISTING ASPHALT PAVEMENT 0 - 1½" AT LOCATIONS AS DIRECTED BY THE ENGINEER.
NOTE: TO BE USED IN CONJUCTION WITH:
TS. NO. 8 ON MAP 1 STA. 262+30 TO STA. 263+45 LT

PAVEMENT SCHEDULE

C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.		
E	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS		
F	AST MAT COAT, #67 STONE		
R	EXISTING CONCRETE STRUCTURE		
T	SHOULDER RECONSTRUCTION, AS DIRECTED BY THE ENGINEER.		
U	EXISTING PAVEMENT.		
V1	1½" MILLING	V2	0 - 1½" MILLING
V3	1½" - 3" MILLING		

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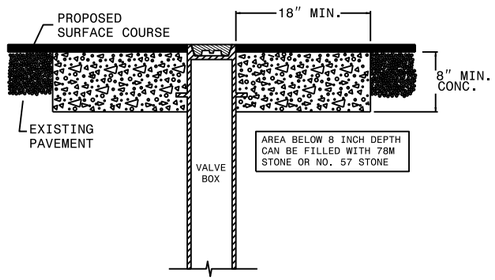
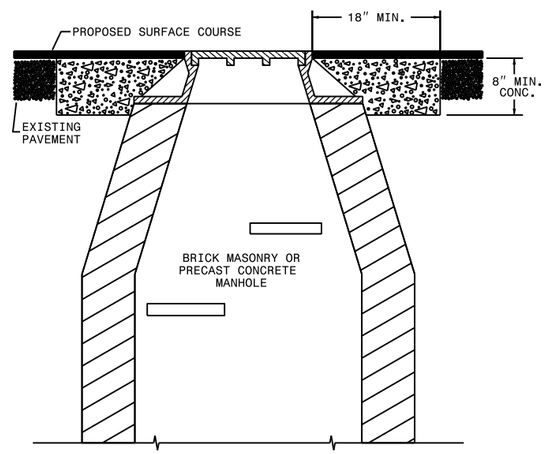
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.10011.45	4	7

STANDARD CONCRETE ENCASEMENT FOR MANHOLE & VALVE CASTINGS IN PAVEMENT
DETAIL DRAWING NO. 858.01

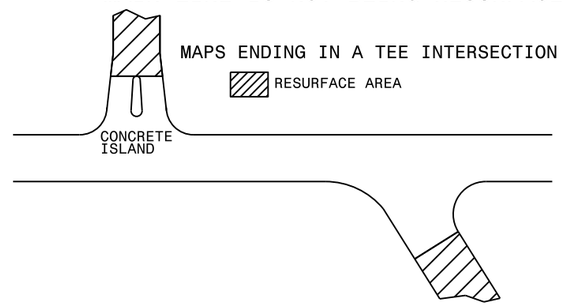


USE RAPID SET GROUT, MORTAR, OR CONCRETE CLASS B CONCRETE MAY BE USED WHEN ADJUSTMENTS ARE NOT IN THE TRAVEL LANE.



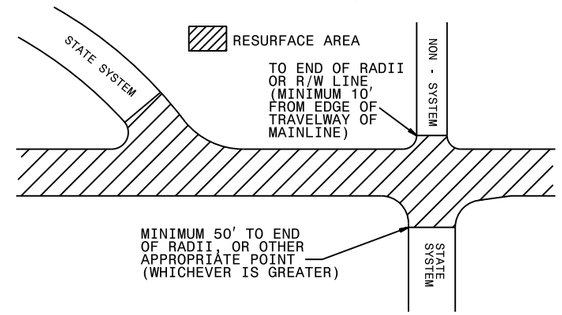
NOTES:
1. MORTAR SHALL BE MIXED TO NCDOT SPECIFICATIONS.
2. ALL FAULTY EXISTING BRICKWORK TO BE REMOVED AND REPLACED WITH NEW BRICK MASONRY.
3. EXCAVATION FOR THE ADJUSTMENT SHALL BE SHEER CUT ON ALL SIDES.
4. RAPID SET GROUT, MORTAR, OR CONCRETE SHALL BE USED

PAVING DETAIL 1
MAIN LINE IS NOT BEING RESURFACED



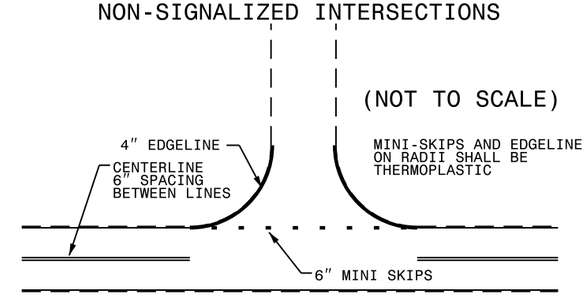
PAVING DETAIL 2
MAIN LINE IS BEING RESURFACED

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



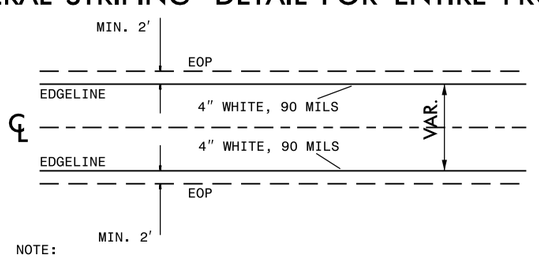
TO BE USED AT ALL NON-SIGNALIZED INTERSECTIONS

(NOT TO SCALE)



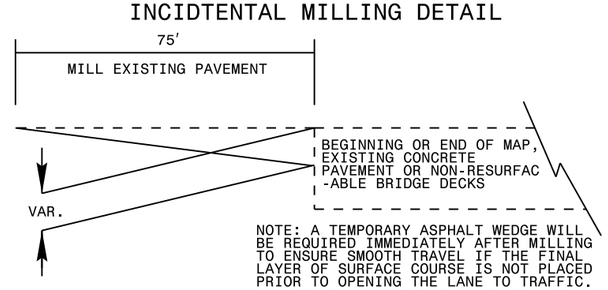
NOTE: MINI SKIPS SHALL BE PLACED ON A 8' CYCLE, CONTAINING AN 6' AND 2' SKIP, THE WIDTH OF THE SKIP SHALL BE 6".

STRIPING DETAIL 1
GENERAL STRIPING DETAIL FOR ENTIRE PROJECT



NOTE:
1. TO BE USED IN CONJUNCTION WITH TYPICAL SECTION NO. 1, 2, AND 3
2. USE IN CONJUNCTION WITH THE EXISTING PAVEMENT MARKINGS TO ESTABLISH THE STRIPING.
3. USE IN CONJUNCTION WITH THE NCDOT STANDARD DRAWINGS.

INCIDTENTAL 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.

PAVEMENT SCHEDULE

C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.		
E	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS		
F	AST MAT COAT, #67 STONE		
R	EXISTING CONCRETE STRUCTURE		
T	SHOULDER RECONSTRUCTION, AS DIRECTED BY THE ENGINEER.		
U	EXISTING PAVEMENT.		
V1	1½" MILLING	V2	0 - 1½" MILLING
V3	1½" - 3" MILLING		

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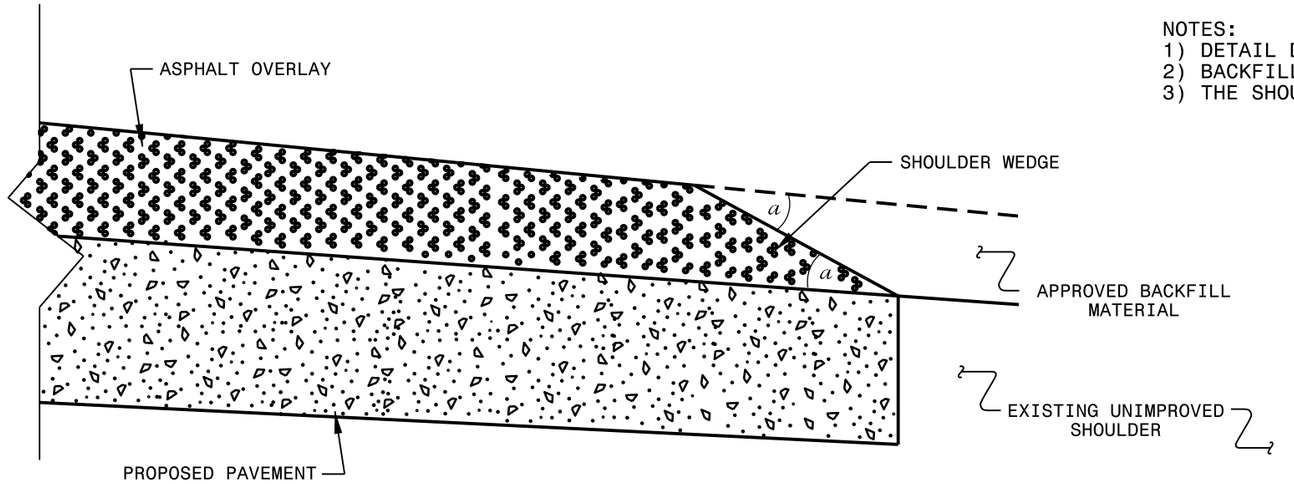
cthuskins AT DICADD271374

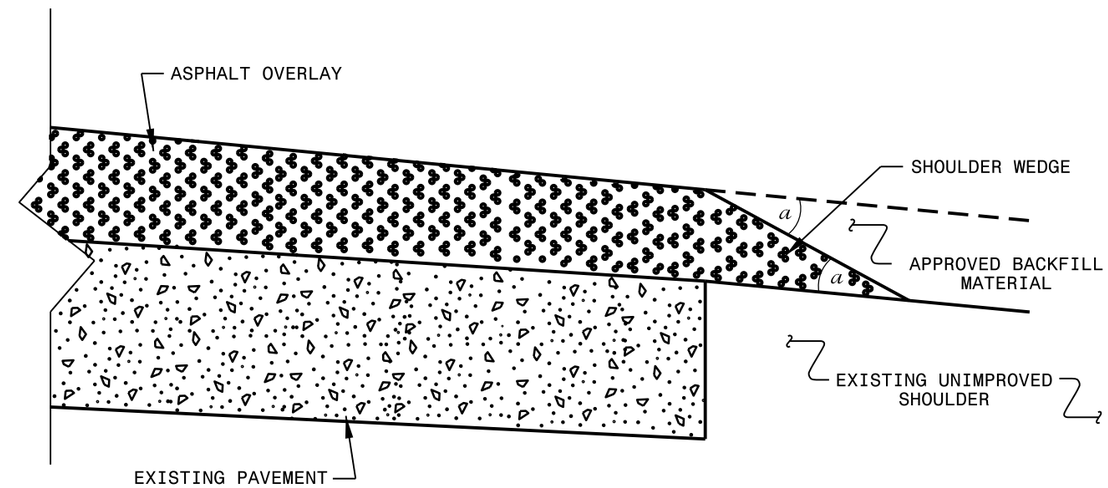
PROJECT REFERENCE NO.	SHEET NO.
7CR.10011.45	5

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.



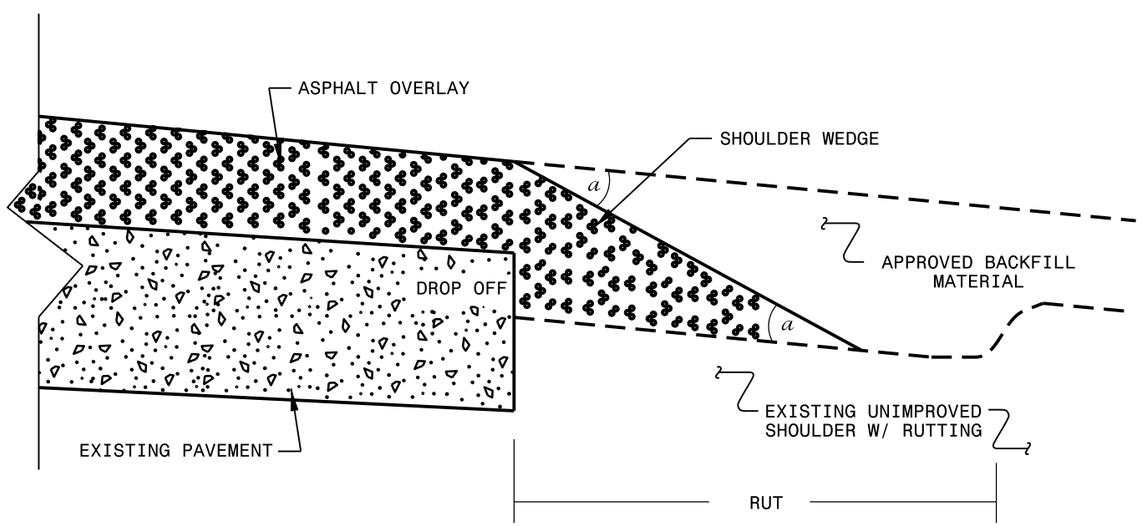
SHOULDER WEDGE DETAIL

(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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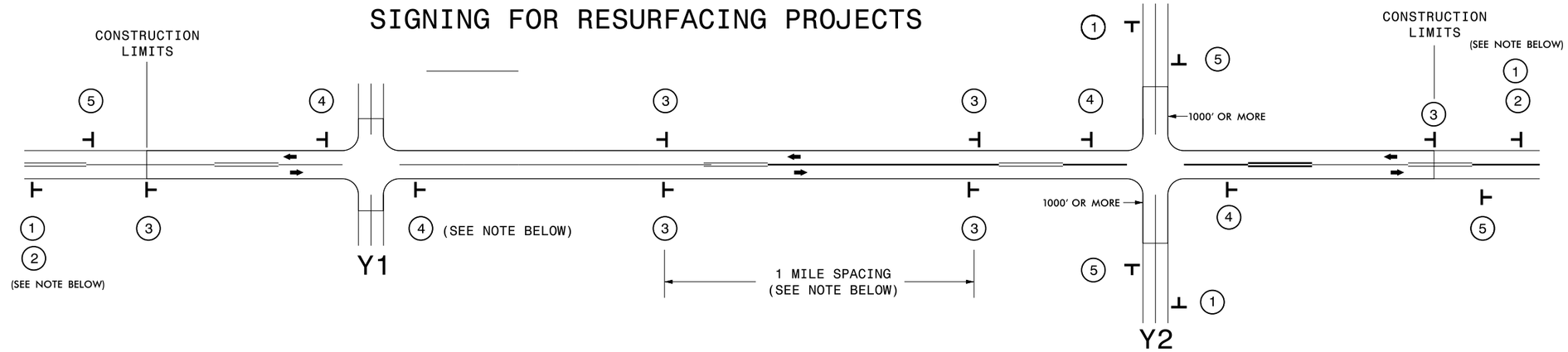
cthuskins AT D7CADD271374

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.10011.45	6	7

SIGNING FOR RESURFACING PROJECTS



LEGEND

⊢ STATIONARY SIGN

⬅ DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

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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cthuskins AT D7CADD27I374

PROJECT NO.	SHEET NO.	TOTAL NO.
7CR.10011.45	7	7

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	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	MILLING ASPHALT PAVEMENT, 1½" DEPTH SY	MILLING ASPHALT PAVEMENT, 0" TO 1 1/2" DEPTH SY	MILLING ASPHALT PAVEMENT, 1½ - 3" DEPTH SY	INCIDENTAL MILLING SY	ASPHALT CONC BASE COURSE, TYPE B25.0B TONS	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	GENERIC PAVING ITEM - ASPHALT SURFACE TREATMENT, MAT COAT, #67 STONE SY	ADJ. OF DROP INLET EA	ADJ. OF MANHOLES EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA	SEEDING & MULCHING AC	RESIDENTIAL SEEDING ACR
7CR.10011.45	Alamance	1	NC 62 (ALAMANCE ROAD)	FROM GUILFORD COUNTY LINE - 0.00 TO JOINT 300' SOUTH OF SR 1155 (HATCHERY ROAD) - 6.87	1	2	2WU	NO	NO	3.062	22	20	355	11.00					3,823	3,980	435	41,311				3.00	1.00
					1	2	2WU	NO	NO	0.078	22-32								97	118	12	1,276					
					1	2	2WU	NO	NO	0.064	32								80	133	12	1,247					
					1	2	2WU	NO	NO	0.06	22-32								75	91	9	980					
					1	2	2WU	NO	NO	0.143	22								179	222	23	1,929					
					1	2	2WU	NO	NO	0.068	22-34								85	107	11	1,160					
					1	2	2WU	NO	NO	0.062	34								77	114	11	1,264					
					1	2	2WU	NO	NO	0.056	34-51								70	148	13	1,426					
					1	2	2WU	NO	NO	0.033	51								41	109	9	1,011					
					2	2	2WU	NO	NO	0.044	44					181			31	99	8	1,048					
					2	2	2WU	NO	NO	0.027	37-44					111			19	57	5	583					
					1	2	2WU	NO	NO	0.057	22-37								71	94	9	1,017					
					1	2	2WU	NO	NO	0.434	22							183	542	602	64	5,852		1	4		
					3	2	2WU	NO	NO	0.076	22				981				54	96	9						
					1	2	2WU	NO	NO	0.211	22							367	263	268	30	2,849					
					4	2	2WU	NO	NO	0.151	30						2,892			240	16			2			
					5	2	2WU	NO	NO	0.027	32						507			42	3						
					6	2	2WU	NO	NO	0.318	32						6,337			524	35		2		6		
					7	2	2WU	NO	NO	0.022	36					90		300		38	3	415					
					8	2	2WU	NO	NO	0.035	30-36							275		56	4	678					
				BRIDGE #12	8	2	2WU	NO	NO	0.04	30																
					8	2	2WU	NO	NO	0.073	30-45							317		135	9	1,627					
					8	2	2WU	NO	NO	0.027	45									79	5	713					
					8	2	2WU	NO	NO	0.046	56									165	11	1,511					
					8	2	2WU	NO	NO	0.043	35-56									96	6	1,160					
					1	2	2WU	NO	NO	0.384	22								479	508	55	5,188					
					1	2	2WU	NO	NO	0.075	22-32								94	113	12	1,229					
					1	2	2WU	NO	NO	0.091	32								114	189	18	1,760					
					1	2	2WU	NO	NO	0.071	22-32								89	107	11	1,167					
					1	2	2WU	NO	NO	0.145	22							183	181	194	21	1,955		1			
				BRIDGE #26	1	2	2WU	NO	NO	0.008	27																
					1	2	2WU	NO	NO	0.266	22							183	332	398	41	3,591		1			
				SKIP	1	2	2WU	NO	NO	0.259	22-32																
					1	2	2WU	NO	NO	0.315	22								393	400	44	4,255					
		TOTAL FOR MAP NO. 1								**6.871**		**20**	**355**	**11.00**	**981**	**382**	**9,736**	**1,808**	**7,189**	**9,522**	**954**	**88,202**	**2**	**5**	**10**	**3.00**	**1.00**
TOTAL FOR PROJ NO. 7CR.10011.45										**6.871**		**20**	**355**	**11.00**	**981**	**382**	**9,736**	**1,808**	**7,189**	**9,522**	**954**	**88,202**	**2**	**5**	**10**	**3.00**	**1.00**
GRAND TOTAL										**6.871**		**20**	**355**	**11.00**	**981**	**382**	**9,736**	**1,808**	**7,189**	**9,522**	**954**	**88,202**	**2**	**5**	**10**	**3.00**	**1.00**

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	TEMPORARY TRAFFIC CONTROL LS	WORK ZONE SIGNS (STATIONARY) SF	4" X 90 M WHITE THERMO LF	4" X 120 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	6" X 120 M WHITE THERMO LF	8" X 90 M YELLOW THERMO LF	24" X 120 M WHITE THERMO LF	THERMO MSG SCHOOL 120 M EA	THERMO LT ARROW 90 M EA	THERMO STR ARROW 90 M EA	THERMO RT ARROW 90 M EA	4" YELLOW PAINT LF	6" WHITE PAINT LF	SNOWPLOWABLE PAVEMENT MARKERS EA
7CR.10011.45	Alamance	1	NC 62 (ALAMANCE ROAD)	FROM GUILFORD COUNTY LINE - 0.00 TO JOINT 300' SOUTH OF SR 1155 (HATCHERY ROAD) - 6.87	1-8	2	2WU	6.871	22-56	1	770	62,980	1,369	66,333	394	775	116	12	16	3	3	5,230	14	600
TOTAL FOR PROJ NO. 7CR.10011.45								**6.871**		**1**	**770**	**62,980**	**1,369**	**66,333**	**394**	**775**	**116**	**12**	**16**	**3**	**3**	**5,230**	**14**	**600**
													67,702							**22**				
GRAND TOTAL								**6.871**		**1**	**770**	**62,980**	**1,369**	**66,333**	**394**	**775**	**116**	**12**	**16**	**3**	**3**	**5,230**	**14**	**600**
													67,702							**22**				