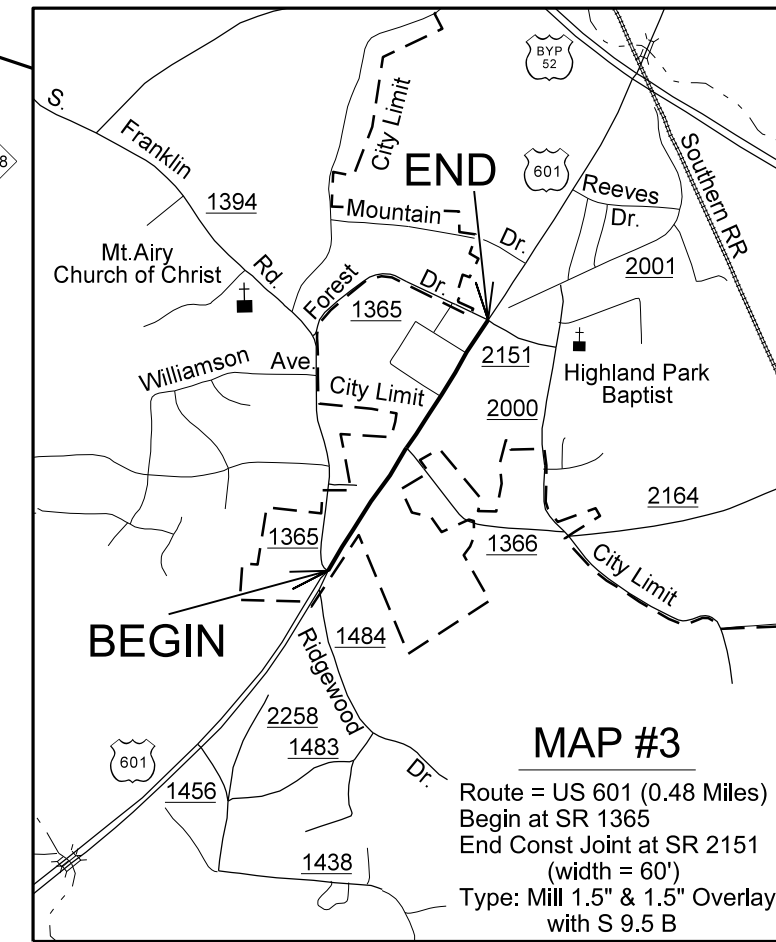
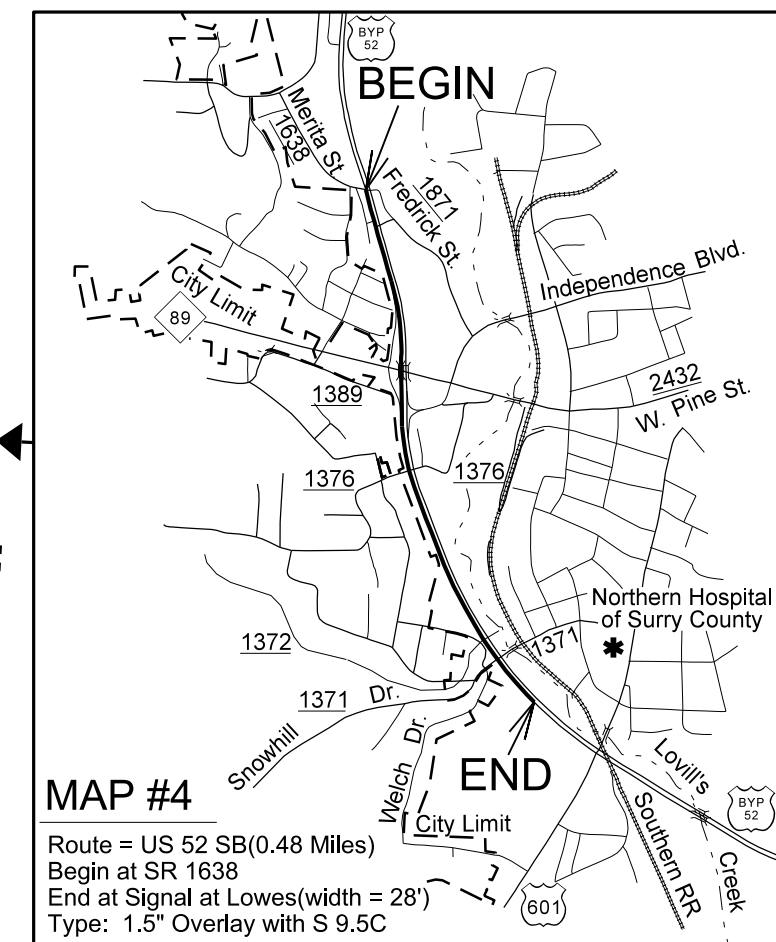
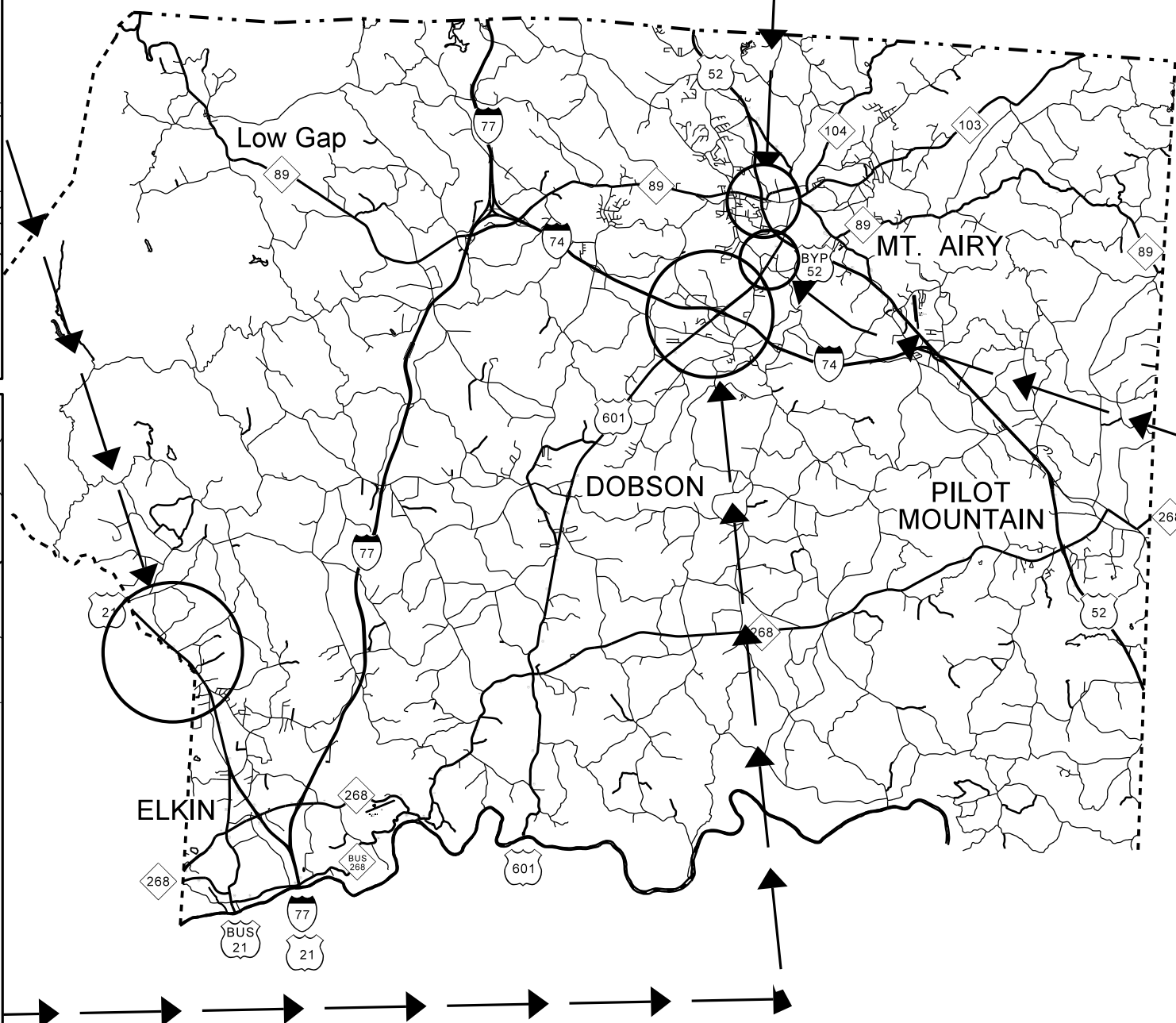
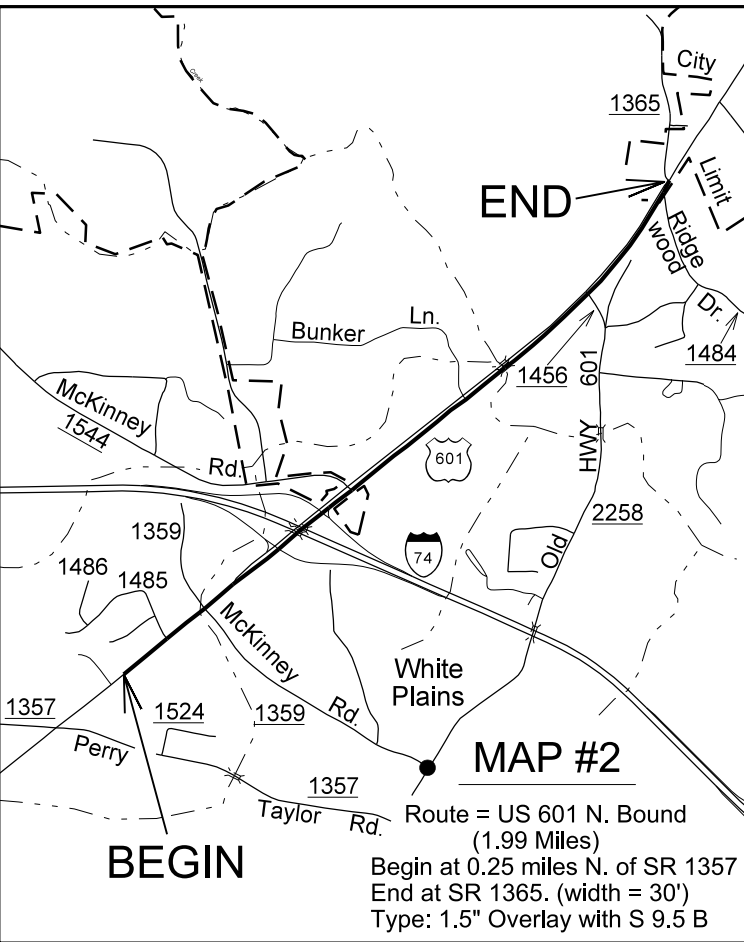
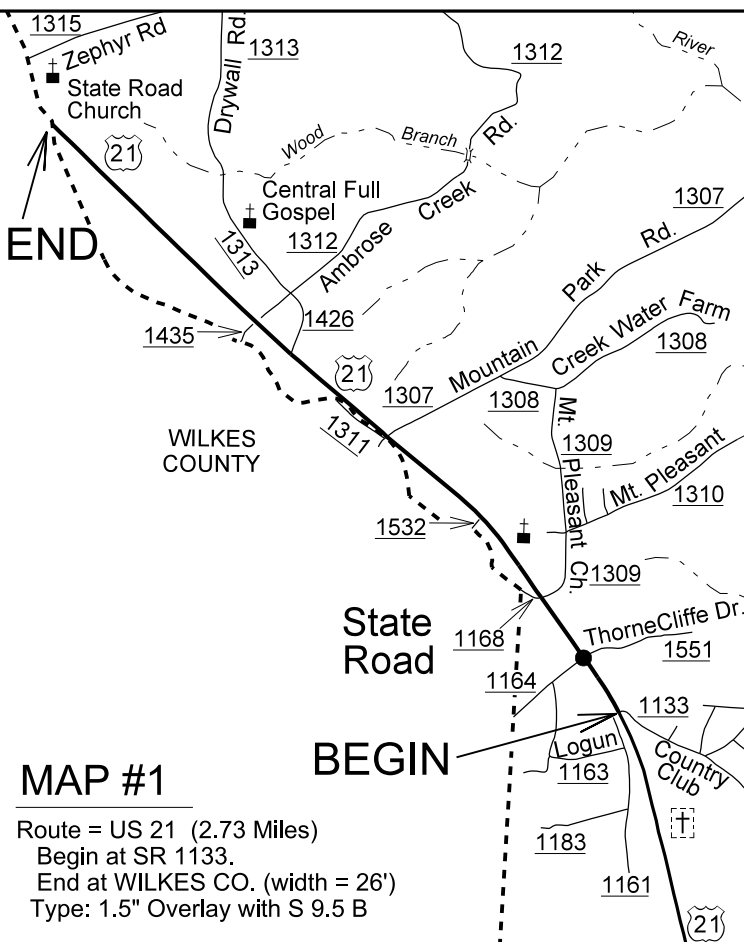


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

2018

TYPE OF WORK: ASPHALT RESURFACING
PRIMARY ROUTES

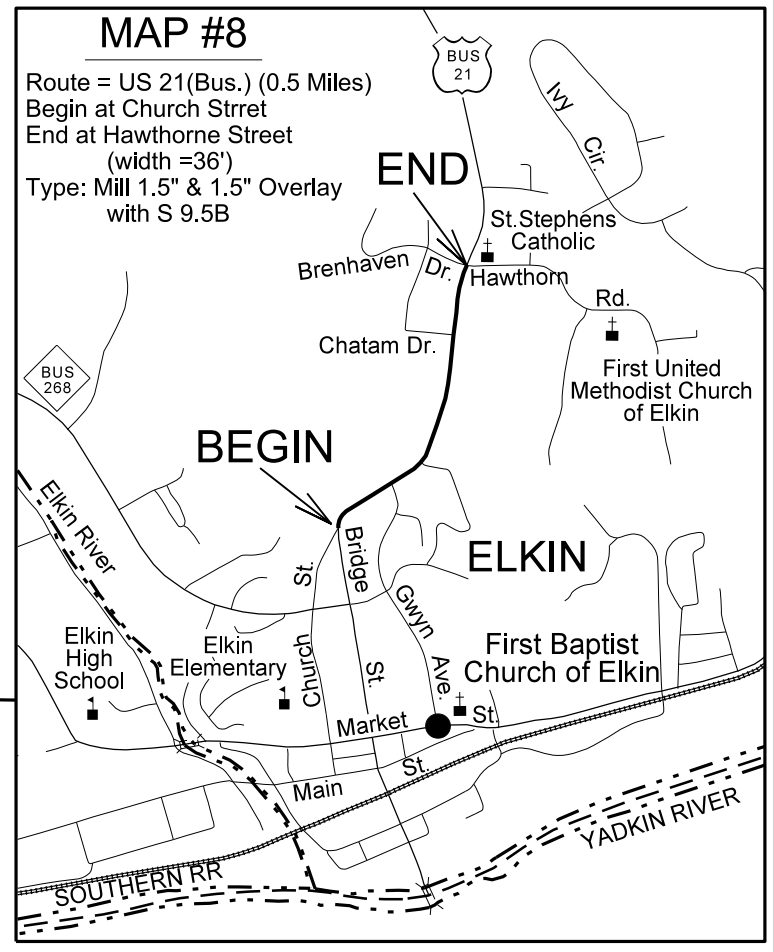
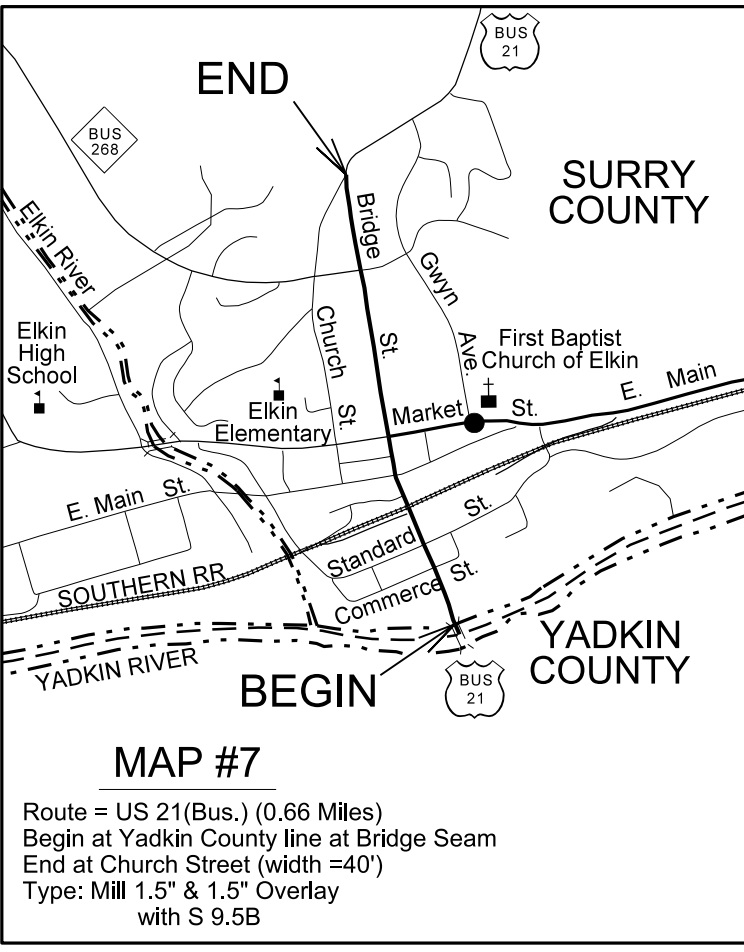
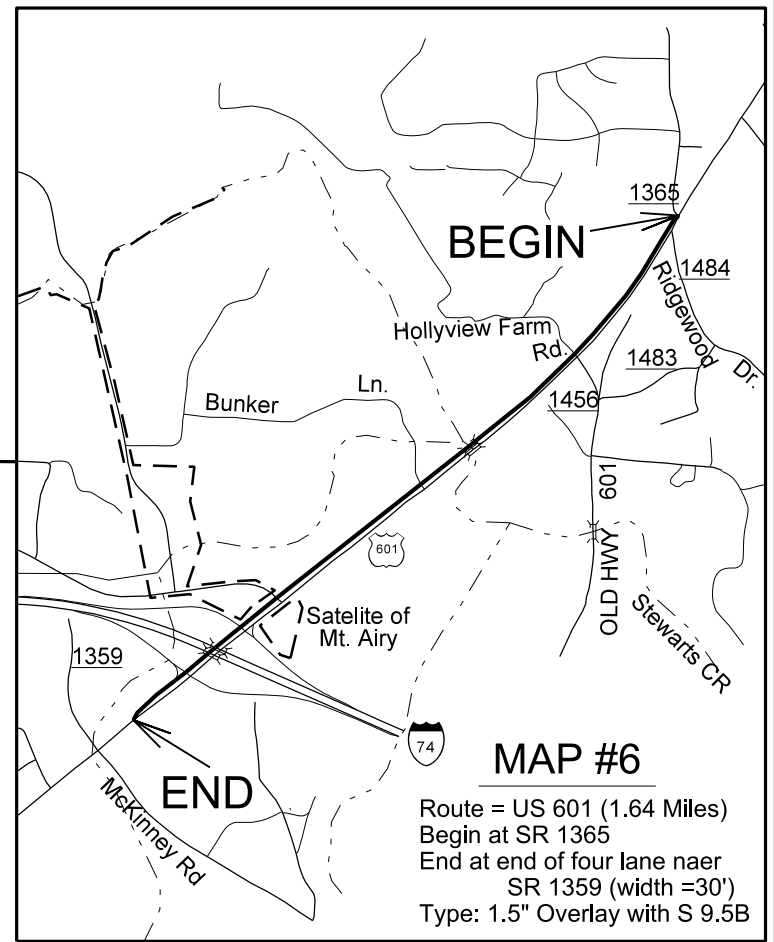
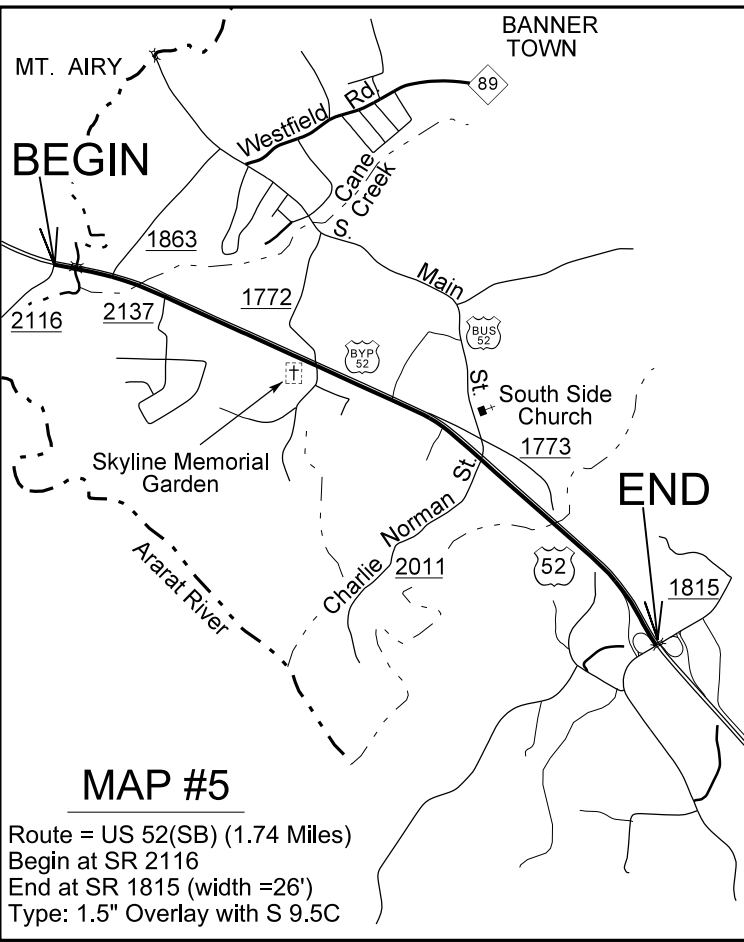
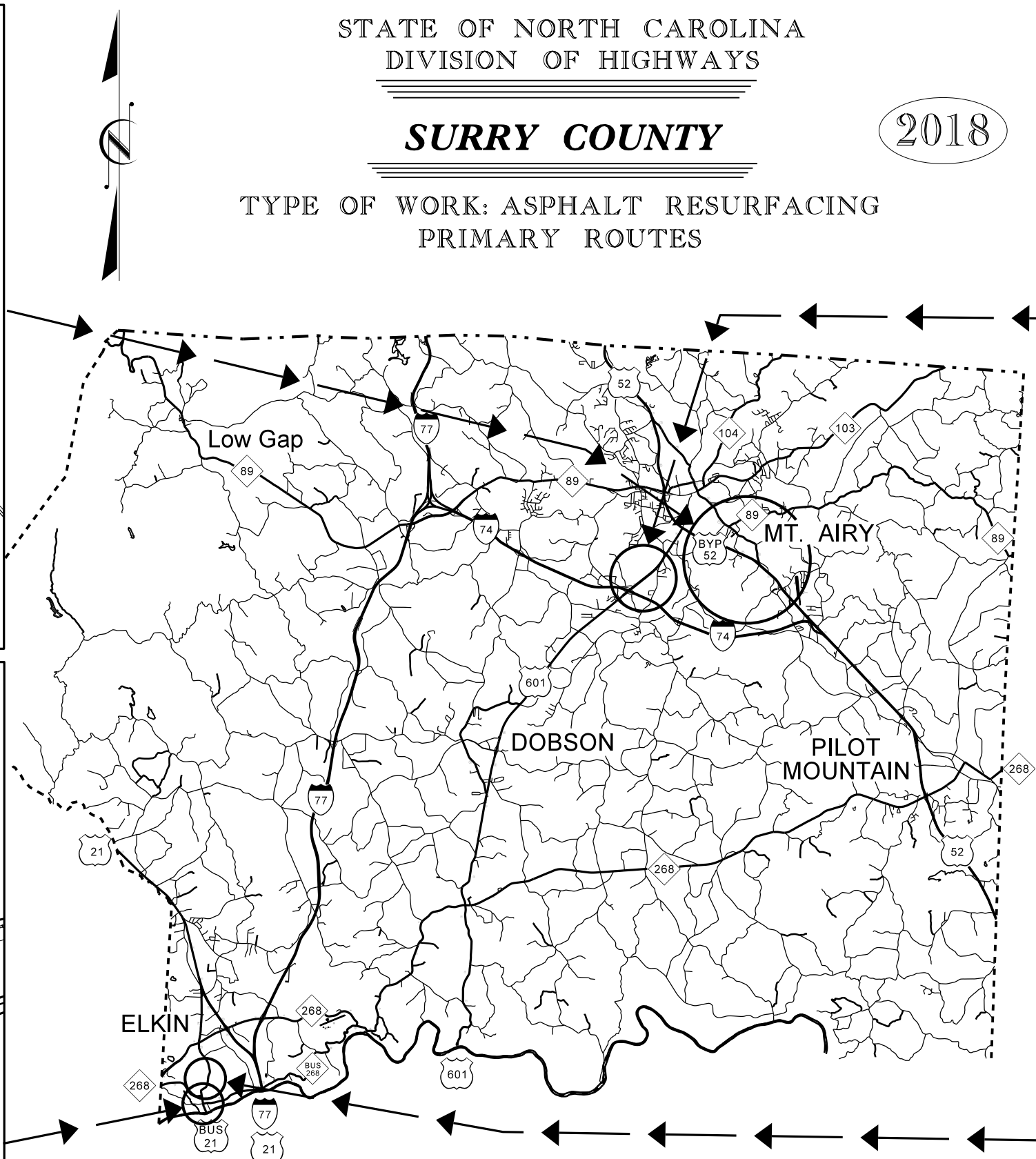


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

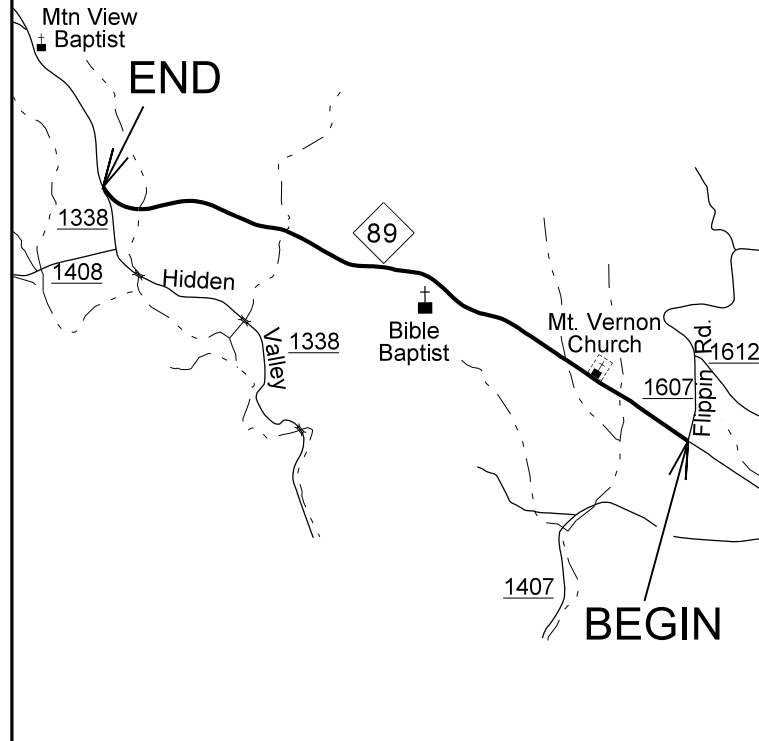
2018

TYPE OF WORK: ASPHALT RESURFACING
PRIMARY ROUTES



MAP #9

Route = NC 89(2.75 Miles)
Begin at SR 1607
End at SR 1338 (width =20')
Type: 1.5" Overlay with S9.5B

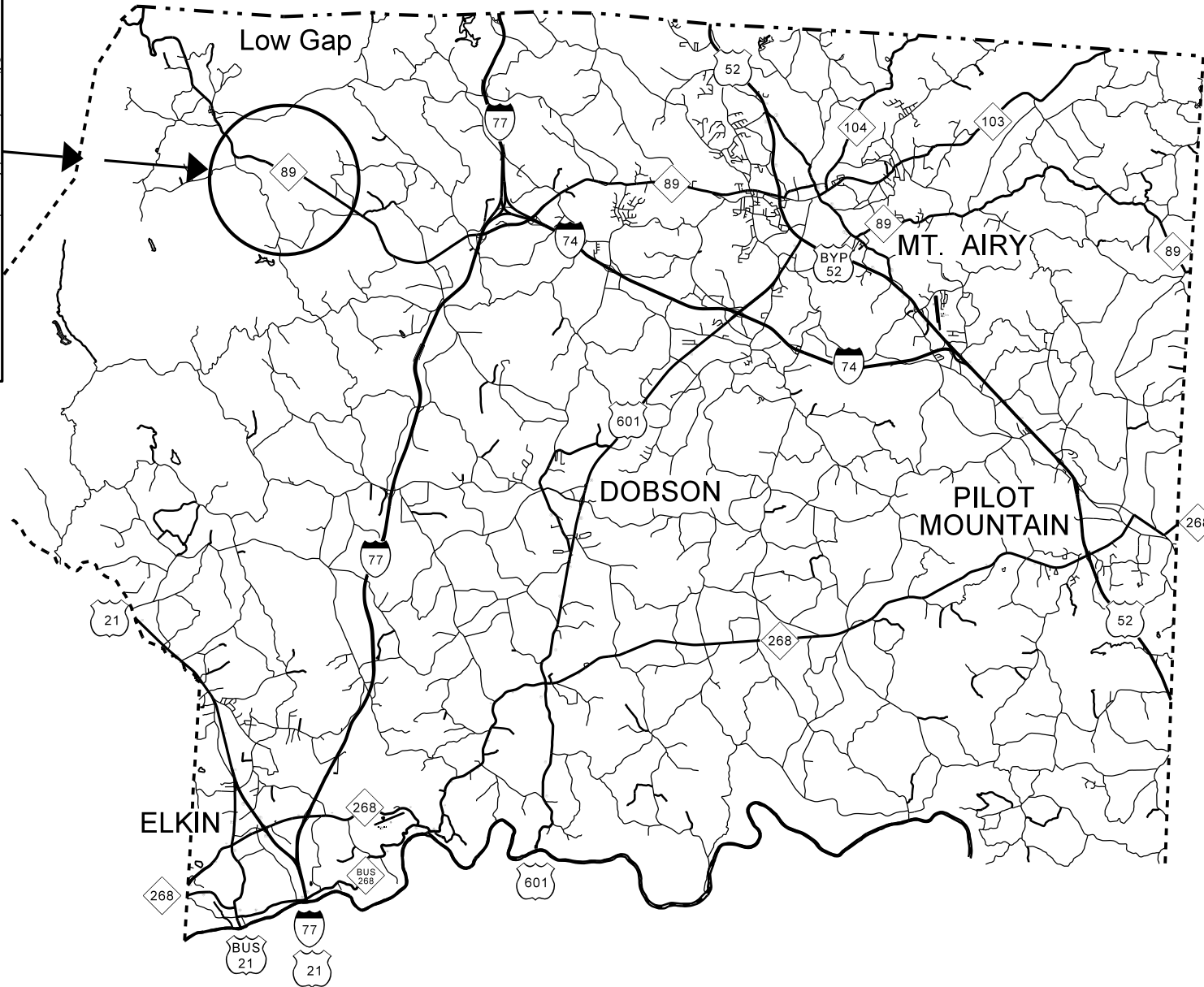


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

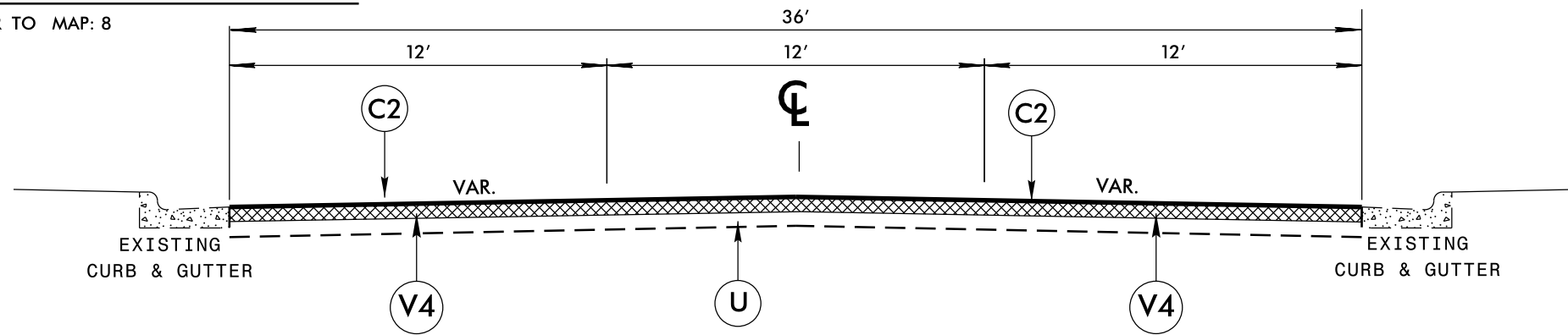
2018

TYPE OF WORK: ASPHALT RESURFACING
PRIMARY ROUTES



TYPICAL SECTION NO. 1

REFER TO MAP: 8

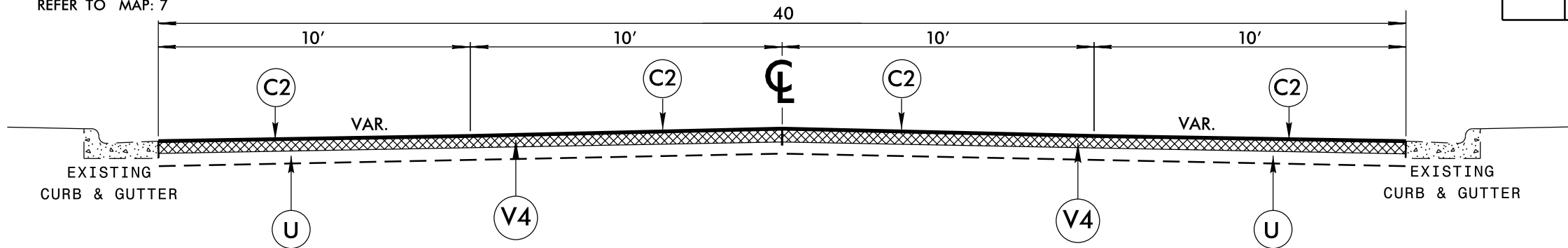


PAVEMENT SCHEDULE

C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A AT AN AVERAGE RATE OF 100 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V4	MILL AT DEPTH OF 1-1/2"

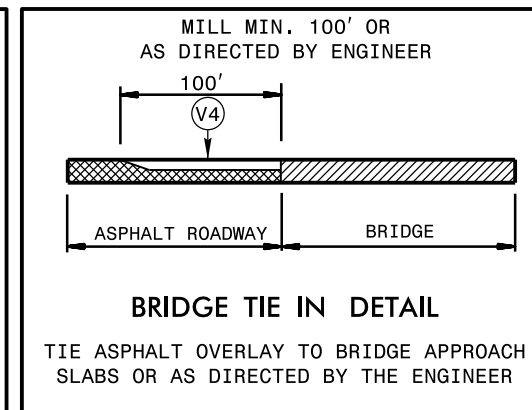
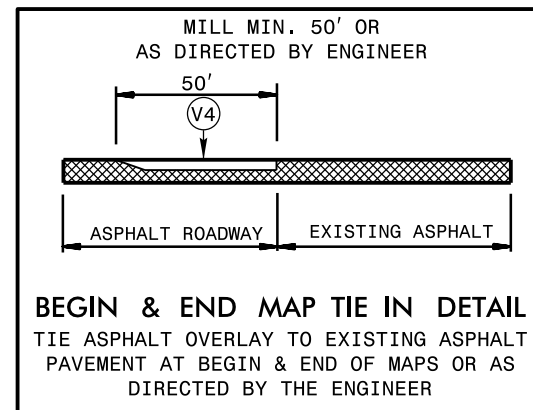
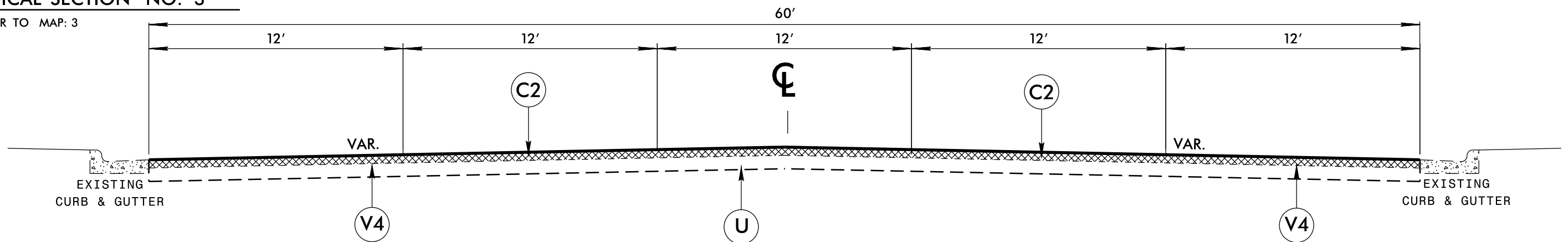
TYPICAL SECTION NO. 2

REFER TO MAP: 7



TYPICAL SECTION NO. 3

REFER TO MAP: 3



SURRY COUNTY
2018 PRIMARY ROADS
ASPHALT RESURFACING

DIVISION II, DISTRICT I

REVISIONS	INIT.	DATE

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

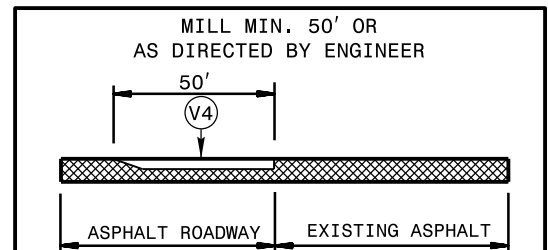
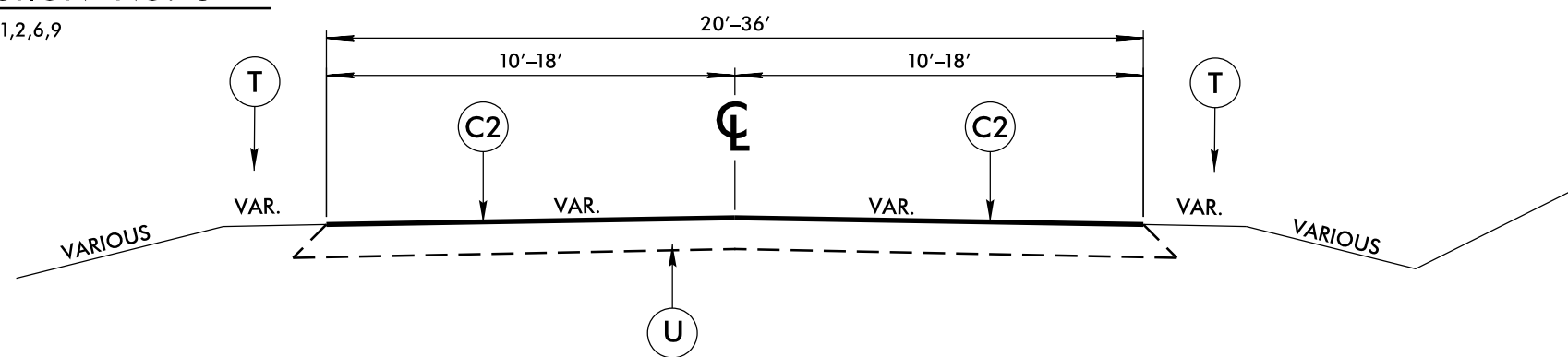
SCALE: N/A DATE: 01/2017
PREPARED BY: S.B. DARNELL
REVIEWED BY: J.D. WOOD
REVIEWED BY:

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A AT AN AVERAGE RATE OF 100 LBS. PER SQ. YD.
C4	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V4	MILL AT DEPTH OF 1-1/2"

TYPICAL SECTION NO. 5

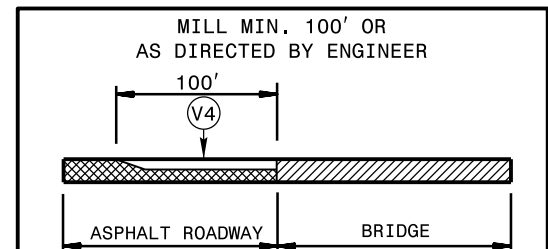
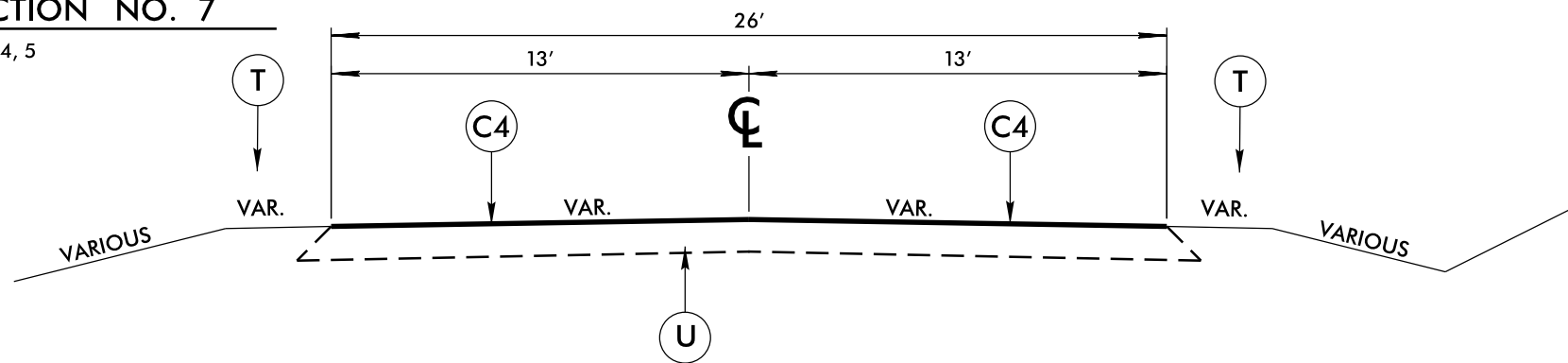
REFER TO MAPS: 1,2,6,9



BEGIN & END MAP TIE IN DETAIL
TIE ASPHALT OVERLAY TO EXISTING ASPHALT PAVEMENT AT BEGIN & END OF MAPS OR AS DIRECTED BY THE ENGINEER

TYPICAL SECTION NO. 7

REFER TO MAPS: 4, 5



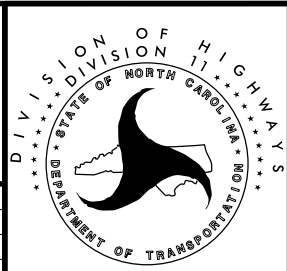
BRIDGE TIE IN DETAIL
TIE ASPHALT OVERLAY TO BRIDGE APPROACH SLABS OR AS DIRECTED BY THE ENGINEER

**SURRY COUNTY
2018 PRIMARY &
SECONDARY ROADS
ASPHALT RESURFACING**

DIVISION II, DISTRICT I

REVISIONS	INIT.	DATE

**N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN**



SCALE: N/A DATE: 01/2017

PREPARED BY: S.B. DARNELL

REVIEWED BY: J.D. WOOD

REVIEWED BY:

PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.11.06.10861		

SUMMARY OF QUANTITIES

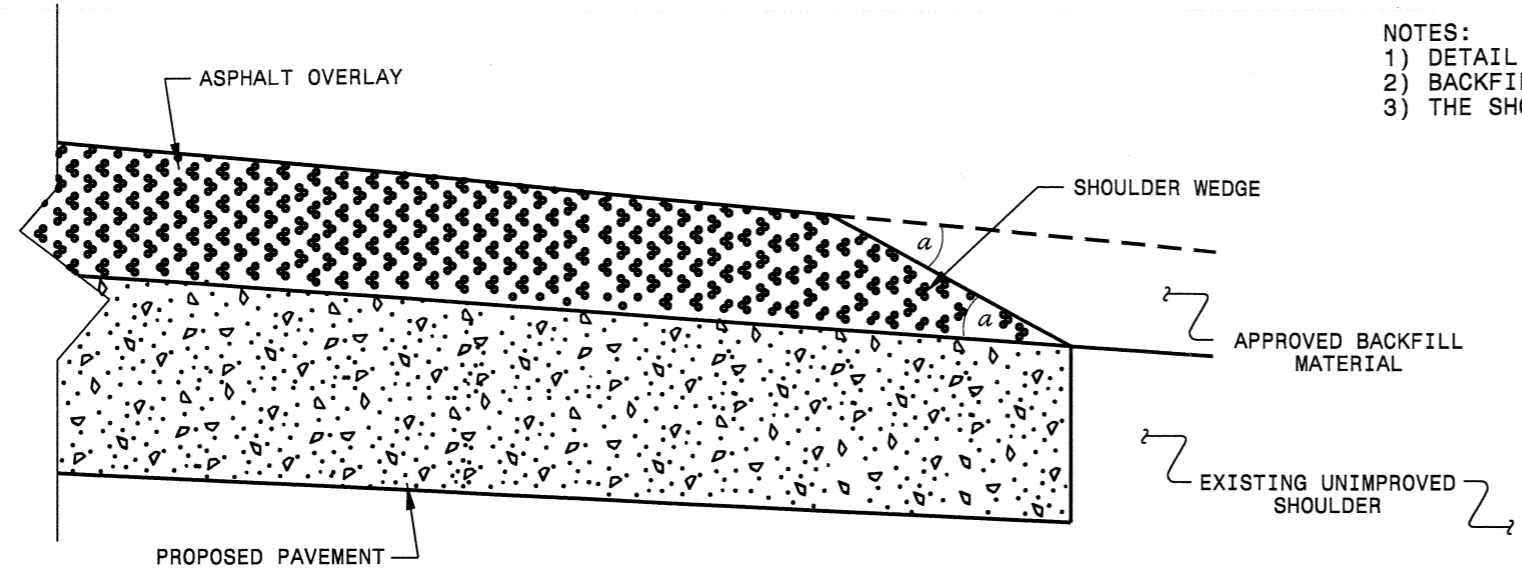
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH M	WIDTH FT	BORROW CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SM	1½" MLLING SY	0" TO 1.5" MLLING SY	INCIDENTAL MLLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	ASPHALT BINDER FOR PLANT MX TONS	PATCHING EXISTING PAVEMENT TONS	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	SEED & MULCHING AC	INDUCTIVE LOOP LF
2018CPT.11.06.10861	Surry	1	US 21	FROM SR 1133 TO WILKES COUNTY LINE	5	2	2WU	2.73	26	410	27	5.46			300	4,188		251	281				0.98	
2018CPT.11.06.10861	Surry	2	US 601	FROM CONSTRUCTION JOINT .25 MILES NORTH OF SR 1357 TO SR 1365	5	2	MD	1.99	30	299		3.98	8,817	1,000	350	4,093		246	244				0.72	
2018CPT.11.06.10861	Surry	3	US 601	FROM SR 1365 TO CONSTRUCTION JOINT AT SR 2151	3	5	MU	0.48	60				17,333		335	1,612		97	96		5			900
2018CPT.11.06.10861	Surry	4	US 52 SB	FROM SR 1638 TO SIGNAL AT LOWES	7	2	MD	1.48	28	222		2.96		350	290		2,785	164	177				0.53	300
2018CPT.11.06.10861	Surry	5	US 52 SB	FROM SR 2116 TO 1815	7	2	MD	1.74	26	261		3.48	1,680	867			3,657	216	222				0.63	
2018CPT.11.06.10861	Surry	6	US 601	FROM SR 1365 TO END 4 LANE	5	2	MD	1.64	30	246		3.28	8,817	1,000		2,950		177	183				0.59	300
2018CPT.11.06.10861	Surry	7	US 21	FROM YADKIN COUNTY LINE TO CHURCH STREET	2	4	MU	0.66	40				15,488		222	1,380		83			15	18		300
2018CPT.11.06.10861	Surry	8	US 21	FROM CHURCH STREET TO HAWTHORNE STREET	1	3	MU	0.5	36				10,560		200	940		56			29	13		150
2018CPT.11.06.10861	Surry	9	NC 89	FROM SR 1607 TO SR 1338	5	2	MU	2.75	20	413	28	5.50			222	2,777		167	178				0.99	
TOTAL FOR PROJ NO. 2018CPT.11.06.10861								13.97		1,851	55	24.66	62,695	3,217	1,919	17,940	6,442	1,457	1,381	18,374	49	31	4.44	1,950
GRAND TOTAL								13.97		1,851	55	24.66	62,695	3,217	1,919	17,940	6,442	1,457	1,381	18,374	49	31	4.44	1,950

PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.11.06.10861		

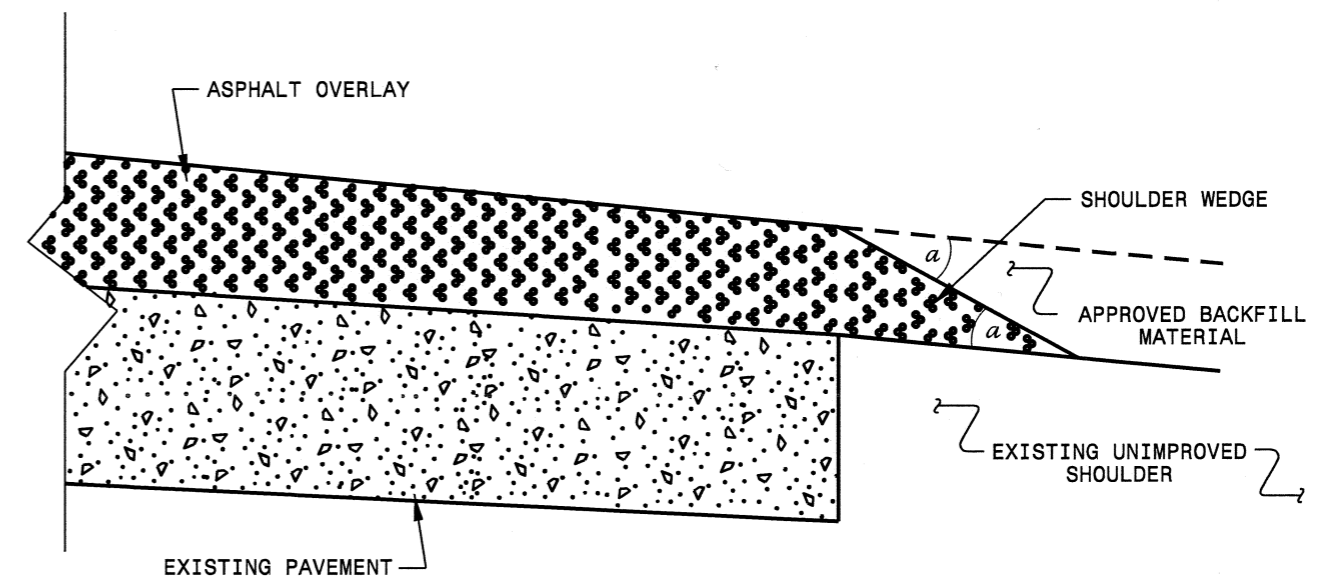
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	481000000-E		482000000-E		483000000-E	483500000-E	484000000-N		484500000-N			490500000-N		
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	4" WHITE PAINT LF	4" YELLOW PAINT LF	8" YELLOW PAINT LF	8" WHITE PAINT LF	16" WHITE PAINT LF	24" WHITE PAINT LF	PAINT M&G ONLY EA	PAINT M&G RXR EA	PAINT LT ARROW EA	PAINT RT ARROW EA	PAINT STR ARROW EA	PAINT STR & RT ARROW EA	PAINT STR & LT ARROW EA	SNOW PLOWABLE MARKERS EA
2018CPT.11.06.10861	Surry	1	US 21	FROM SR 1133 TO WILKES COUNTY LINE	5	2	2WU	2.73	26	216	1.00	58,750	66,350				252			78	6			250	
2018CPT.11.06.10861	Surry	2	US 601	FROM CONSTRUCTION JOINT .25 MILES NORTH OF SR 1357 TO SR 1365	5	2	MD	1.99	30	168	1.00	32,318	29,850	1,200			412							159	
2018CPT.11.06.10861	Surry	3	US 601	FROM SR 1365 TO CONSTRUCTION JOINT AT SR 2151	3	5	MU	0.48	60	144	1.00	10,906	23,040				604			32	6	32	8	2	65
2018CPT.11.06.10861	Surry	4	US 52 SB	FROM SR 1638 TO SIGNAL AT LOWES	7	2	MD	1.48	28	192	1.00	24,035	15,777				282			20	16	38	2	104	
2018CPT.11.06.10861	Surry	5	US 52 SB	FROM SR 2116 TO 1815	7	2	MD	1.74	26	264	1.00	28,258	18,548		5,950			24		34	14	6		122	
2018CPT.11.06.10861	Surry	6	US 601	FROM SR 1365 TO END 4 LANE	5	2	MD	1.64	30	264	1.00	26,634	17,482							28		8		115	
2018CPT.11.06.10861	Surry	7	US 21	FROM YADKIN COUNTY LINE TO CHURCH STREET	2	4	MU	0.66	40	216	1.00	7,498	27,878		1,248	200	910		8	6		4	22	16	89
2018CPT.11.06.10861	Surry	8	US 21	FROM CHURCH STREET TO HAWTHORNE STREET	1	3	MU	0.5	36	96	1.00	500	26,400				100			36		4	4	68	
2018CPT.11.06.10861	Surry	9	NC 89	FROM SR 1607 TO SR 1338	5	2	MU	2.75	20	96	1.00	59,180	59,180											184	
TOTAL FOR PROJ NO. 2018CPT.11.06.10861								13.97		1,656	9	248,079	284,505	1,200	7,198	200	2,560	24	8	234	42	92	36	18	1,156
												532,584	284,505	1,200	7,198	200	2,560	24	8	234	42	92	36	18	1,156
												532,584	284,505	1,200	7,198	200	2,560	24	8	234	42	92	36	18	1,156
GRANDTOTAL								13.97		1,656	9	248,079	284,505	1,200	7,198	200	2,560	24	8	234	42	92	36	18	1,156
												532,584	284,505	1,200	7,198	200	2,560	24	8	234	42	92	36	18	1,156

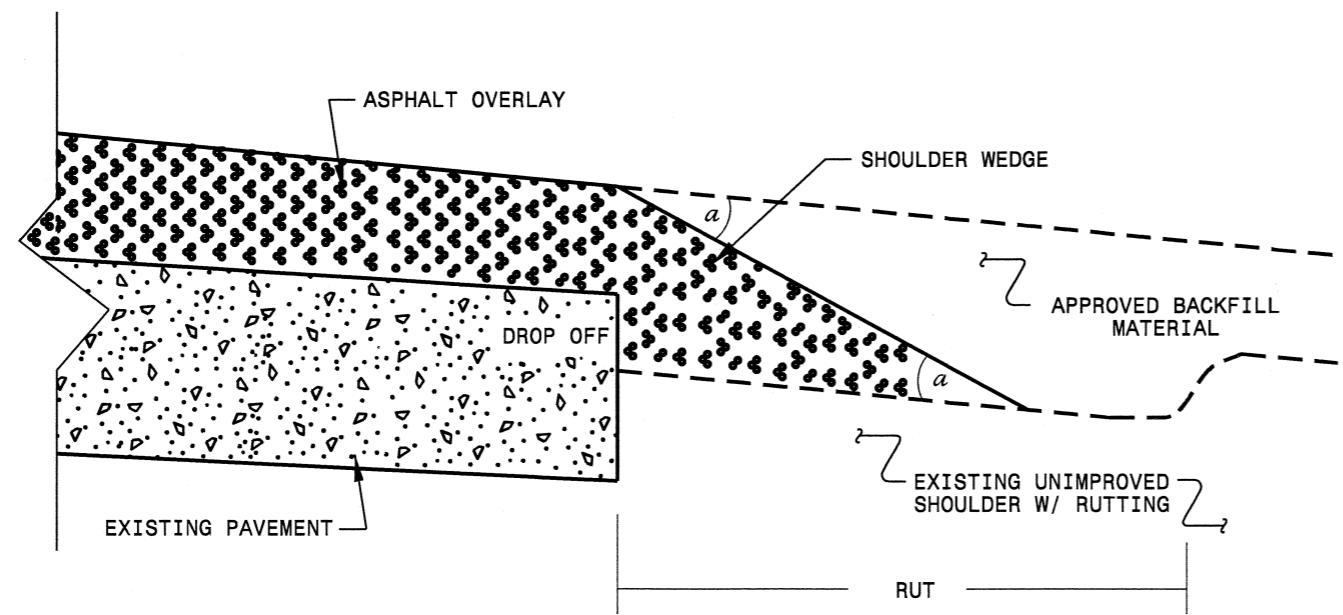
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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°

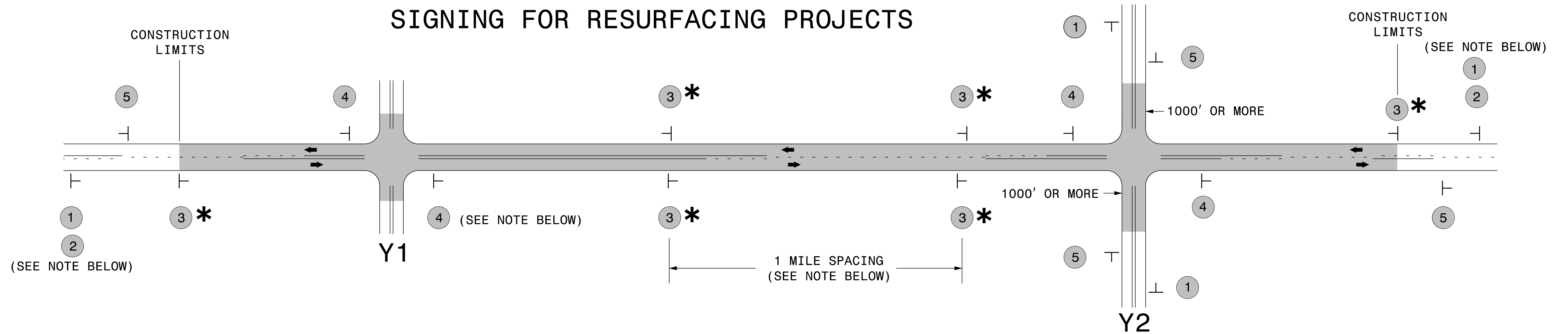
CONTRACT STANDARDS
 AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

**SHOULDER WEDGE
 DETAILS**

ORIGINAL BY: T.SPELL DATE: 7-19-11
 MODIFIED BY: DATE: 10/18/12
 CHECKED BY: DATE:
 FILE SPEC.: s:\user\details\stand\shoulderwedgedetail.dgn

SYSTEMS CONSULTANTS
 CONSULTANTS
 CONSULTANTS

SIGNING FOR RESURFACING PROJECTS



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

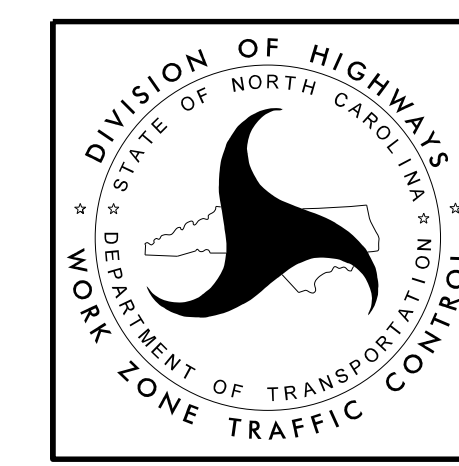
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 <small>W20-1 48" X 48"</small>	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</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;"> <div style="text-align: center;"> <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 <small>W7-3aP 24" X 18"</small>	<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>	
	3 *	 <small>SP 13107 48" X 48"</small>	<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>	
	4	 <small>SP 13106 48" X 48"</small>	<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>	
5	 <small>G20-2 A 48" X 24"</small>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>		

* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

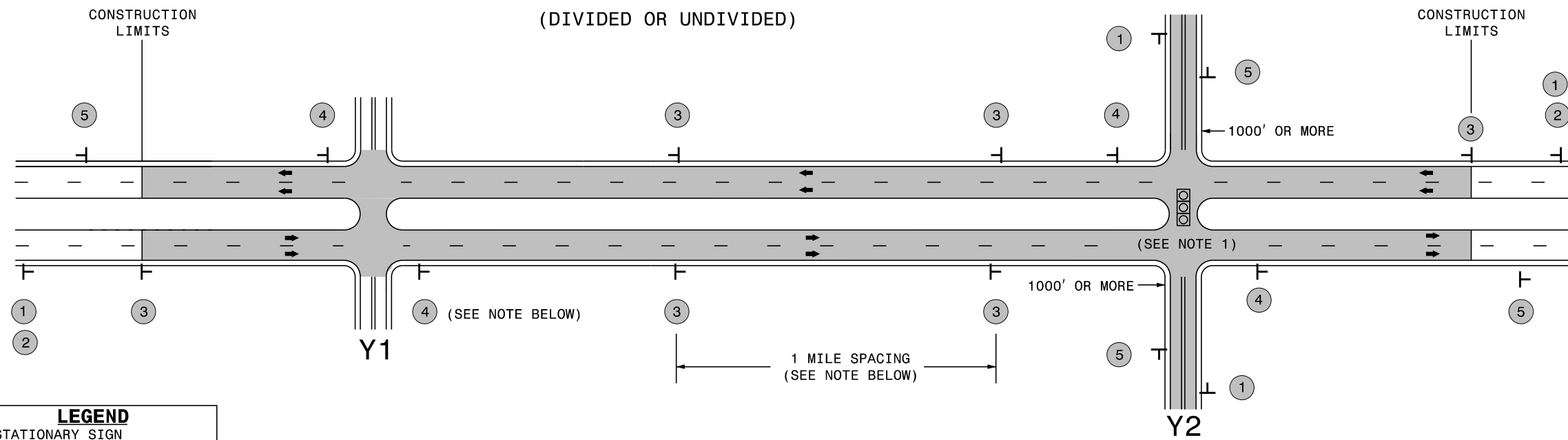
SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS: STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS

6/3/2014 S:\T\U\WZTC\Apps\WorkZoneGeneral\ExternalWebPage\DesRes\Resurfacing\Resurfacing_AdvWarn_2Ln.dgn User:rmgarr.eht

SIGNING FOR RURAL AND SUBURBAN MULTI-LANE ROADWAYS WITH SHOULDER SECTIONS (DIVIDED OR UNDIVIDED)



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 <small>W20-1 48" X 48"</small>	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	
	2	 <small>W7-3aP 24" X 18"</small>	#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	 <small>SP 13107 48" X 48"</small>	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.	
	4	 <small>SP 13106 48" X 48"</small>	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	 <small>G20-2 A 48" X 24"</small>	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	

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.

W20-1
48" X 48"

W20-7 A
48" X 48"

PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.

NOTES:

- 1) 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.

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

**RESURFACING
ADVANCE WARNING SIGNS
FOR RURAL AND SUBURBAN
MULTI-LANE ROADWAYS
W/ SHOULDER SECTIONS
(DIVIDED OR UNDIVIDED)**

2/24/2014 S:\TMU\WZTC\Resurfacing\2013Documents\New_Procedures_05_09_2013\Resurfacing_AdvWarn_UrSu_Shldr.dgn User:rmgarrrett