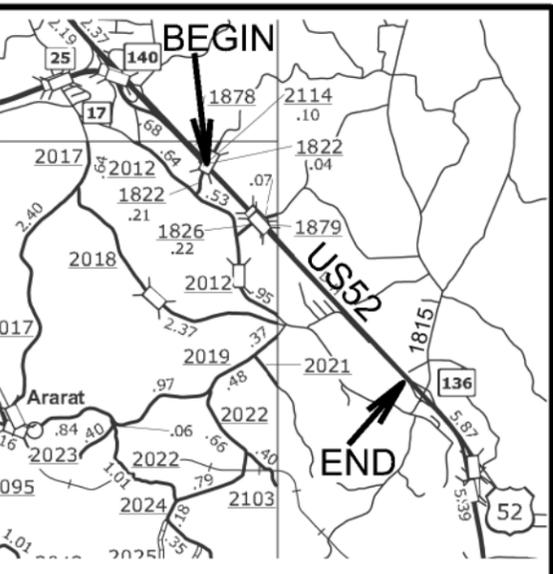
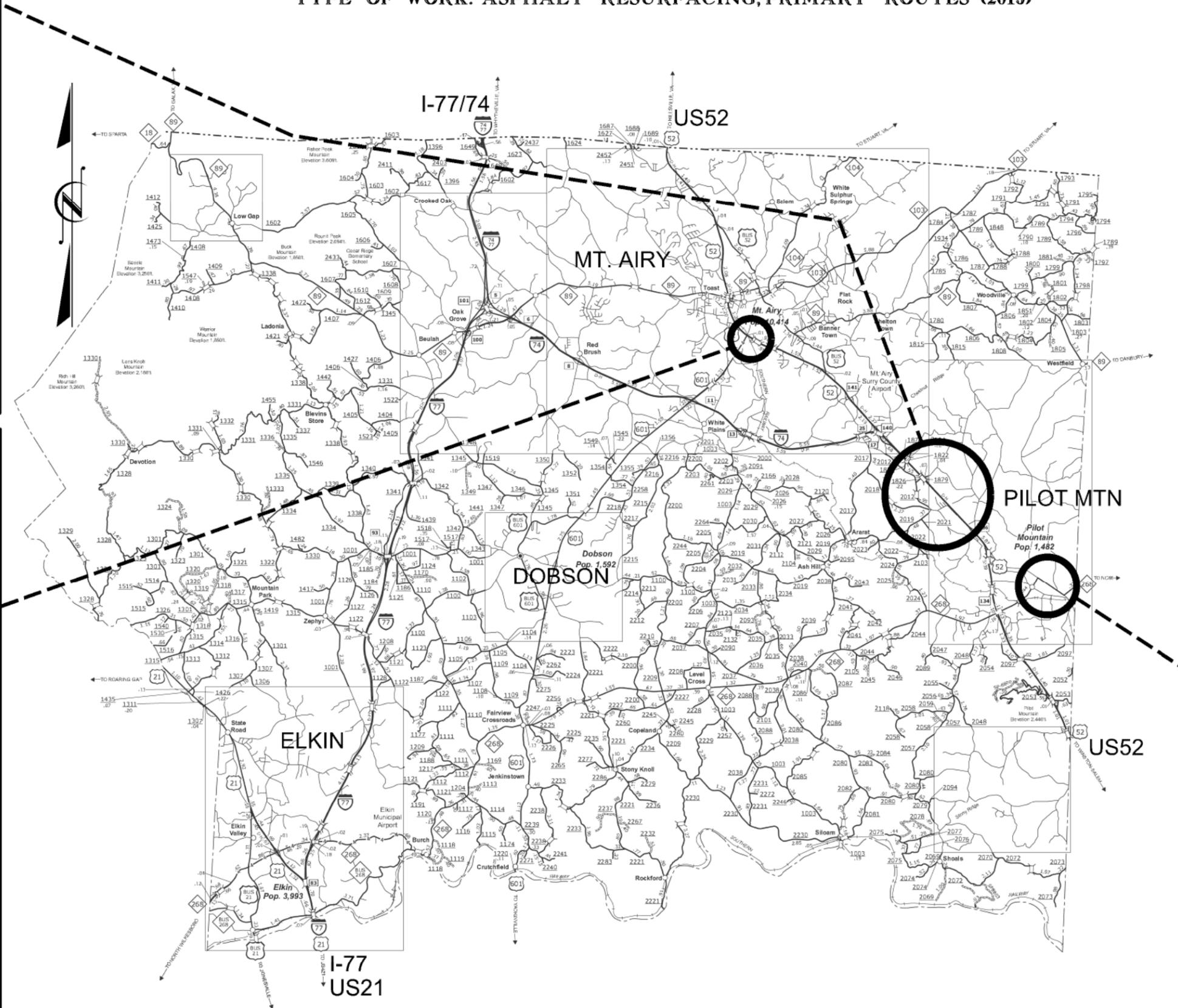
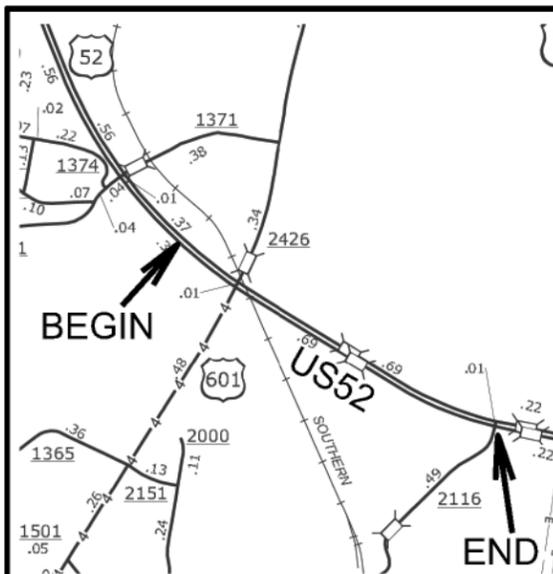


STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
SURRY COUNTY

TYPE OF WORK: ASPHALT RESURFACING, PRIMARY ROUTES (2015)



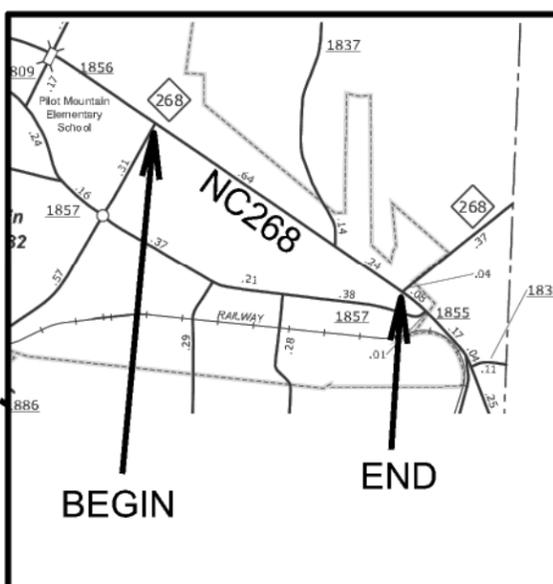
MAP #1
 Route = US 52 SBL (2.43 Miles)
 Begin at SR 1822
 End at the beginning of the concrete near the Off Ramp for Cook School Road SR 1815.
 4 inch MILL & FILL (width = 32 feet)
 Type: 2.5" Binder = I19.0B;
 1.5" Surface = S9.5C



MAP #3
 Route = US 52 SBL (0.88 Miles)
 Begin at the Signal Light (Entrance to Lowes)
 End at SR 2116
 (width = 48 feet)
 Type = S9.5C (Rail Project Overlay)



MAP #2
 Route = US 52 NBL (0.88 Miles)
 Begin at SR 2116
 End at the Signal Light (Entrance to Lowes)
 (width = 32 feet)
 Type = S9.5C (Rail Project Overlay)

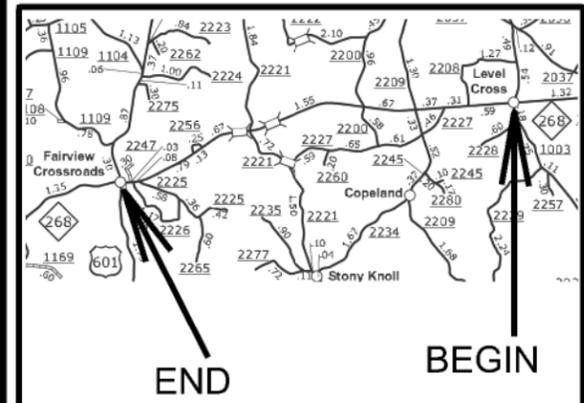


MAP #4
 Route = NC 268 (0.91 Miles)
 Begin at SR 1856
 End at SR 1855
 (width = 22 feet)
 Type = S9.5B

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

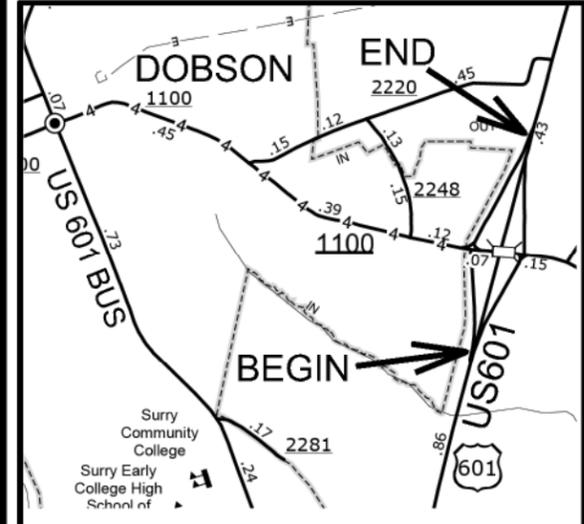
TYPE OF WORK: ASPHALT RESURFACING, PRIMARY ROUTES (2015)



MAP #5

Route = NC 268 (5.36 Miles)
Begin at SR 1003
End at US 601

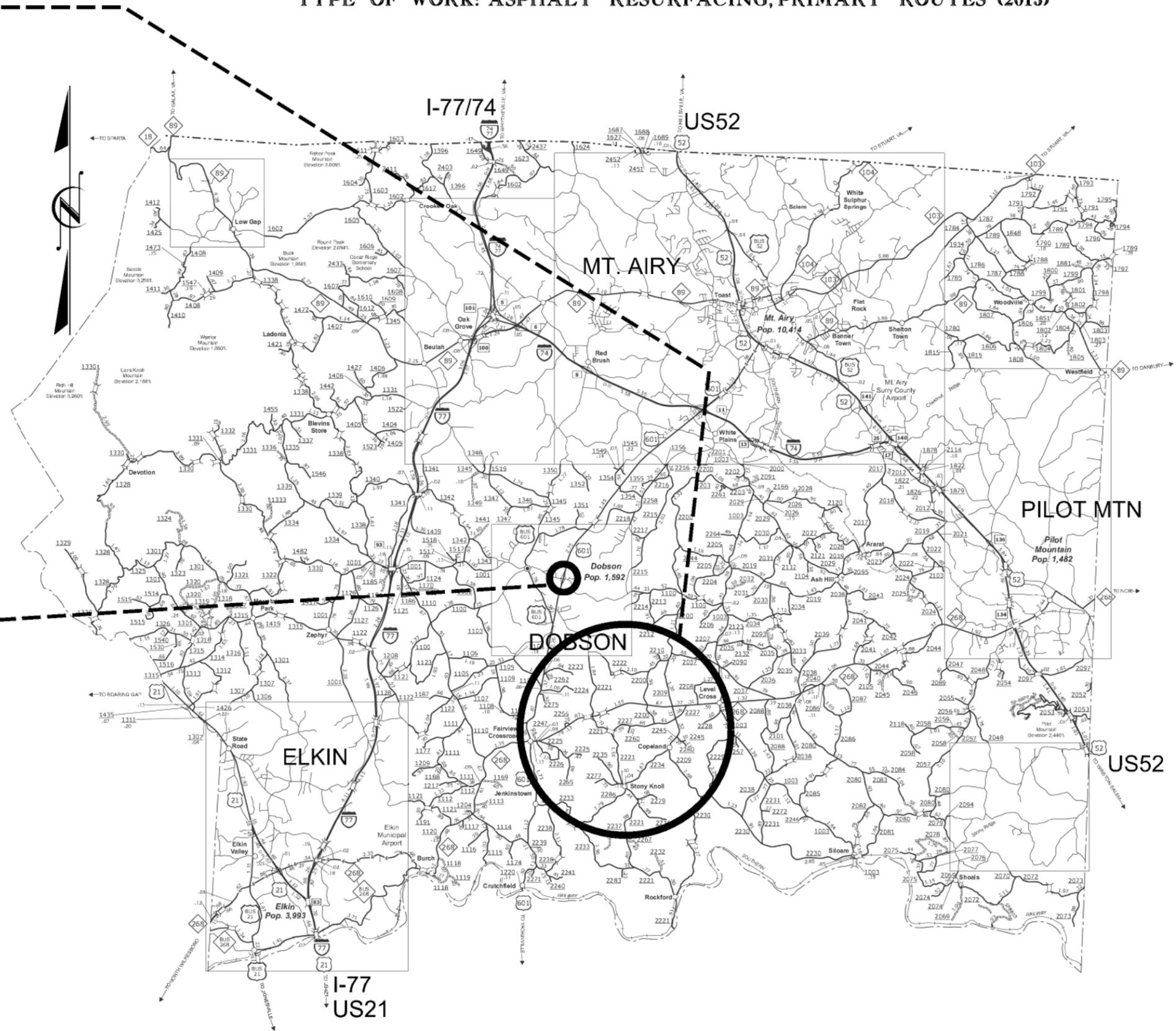
(width = 20 feet)
Type = S9.5B



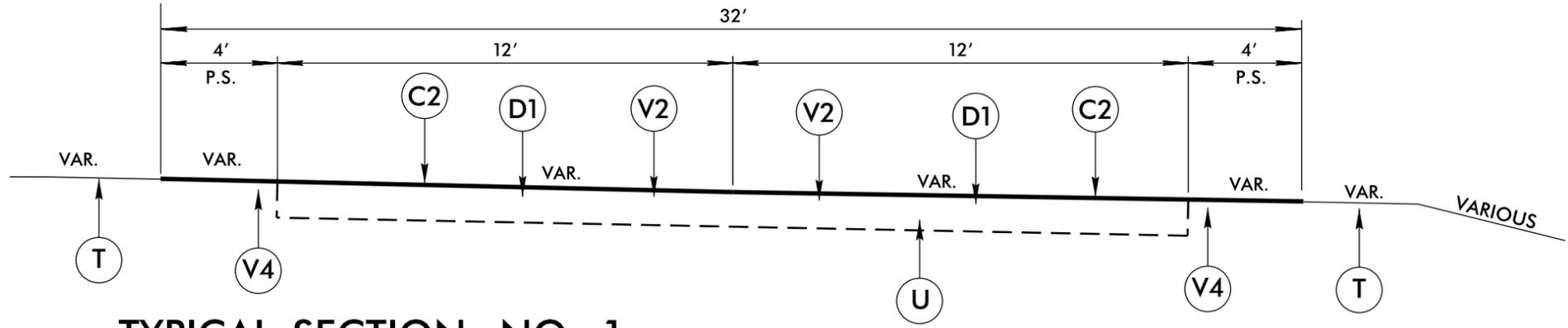
MAP #6

Route = US 601 (1.20 Miles)
All 4 Ramps at the SR 1100 Overpass
(Ramps Only)

(width = 14 feet)
Type = S9.5B (Mill and Fill)



☑ * PATCHING AT LOCATIONS AS DIRECTED BY ENGINEER
 * MILL 4" & FILL WITH I19.0B AT LOCATIONS DIRECTED BY ENGINEER

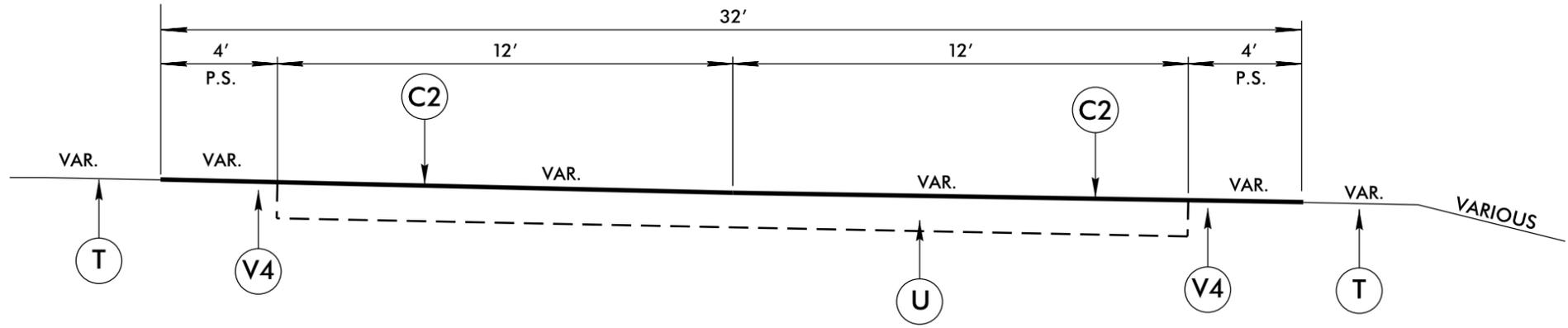


TYPICAL SECTION NO. 1

MAP 1 – US52 SBL FROM SR 1822 TO BEGIN CONCRETE NEAR COOK SCHOOL RD OFF RAMP

NOTE: Mill Bridge Approaches for SR 1826 per Bridge Tie-In Detail below.

☑ * PATCHING AT LOCATIONS AS DIRECTED BY ENGINEER

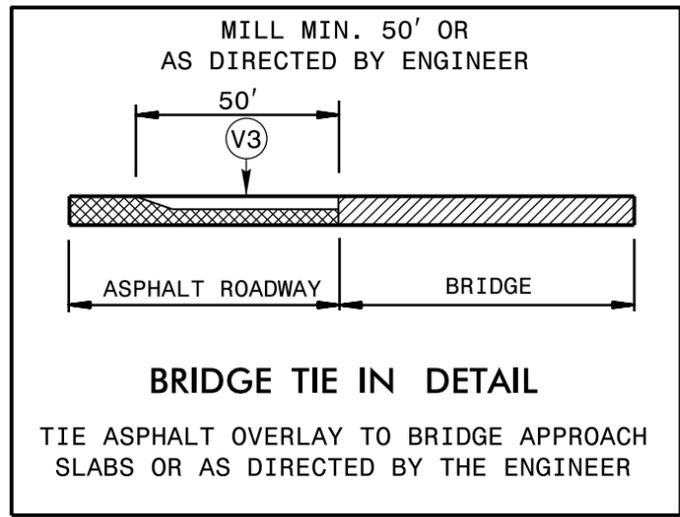
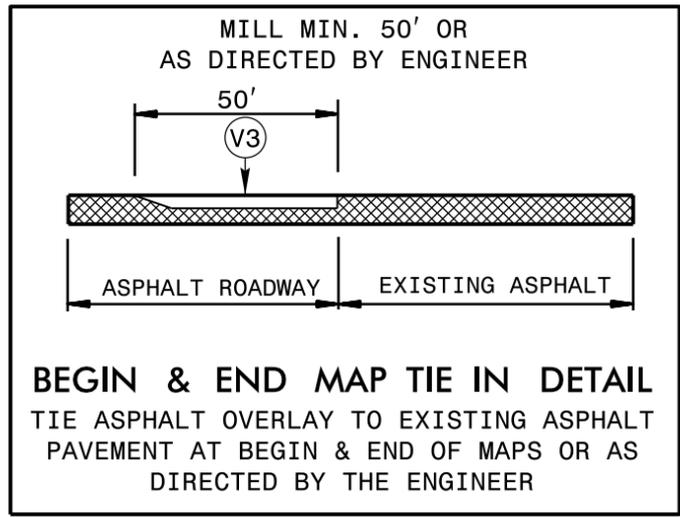


TYPICAL SECTION NO. 2

MAP 2 – US52 NBL FROM SR 2116 TO ENTRANCE AT LOWES
 MAP 3 – US52 SBL FROM ENTRANCE AT LOWES TO SR 2116

NOTE: Width varies at turn lanes

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4"
V3	INCIDENTAL MILLING
V4	MILLED RUMBLE STRIPS (ASPHALT CEMENT)



SURRY COUNTY
PRIMARY RESURFACING

DIVISION II

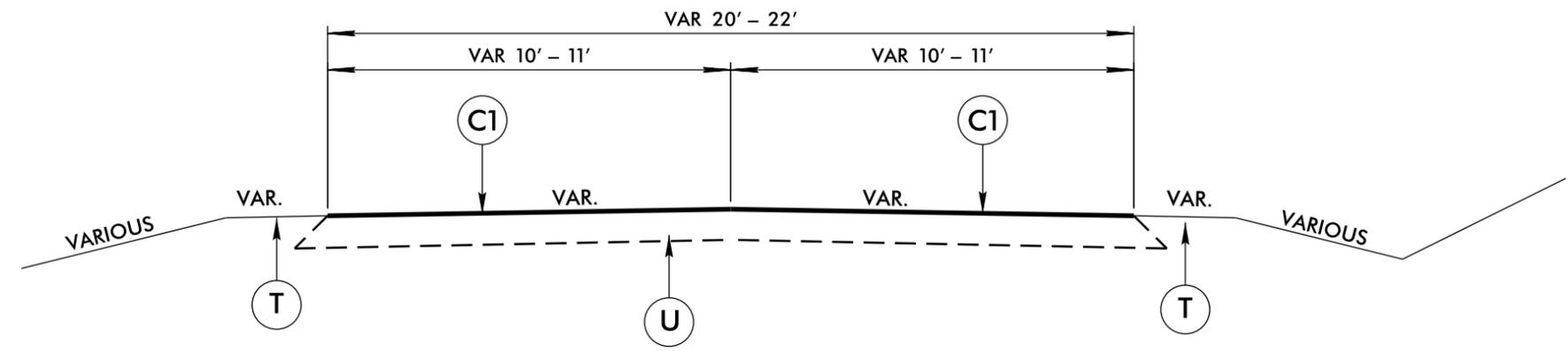
REVISIONS	INT.	DATE

SCALE: N/A DATE: 08/2014

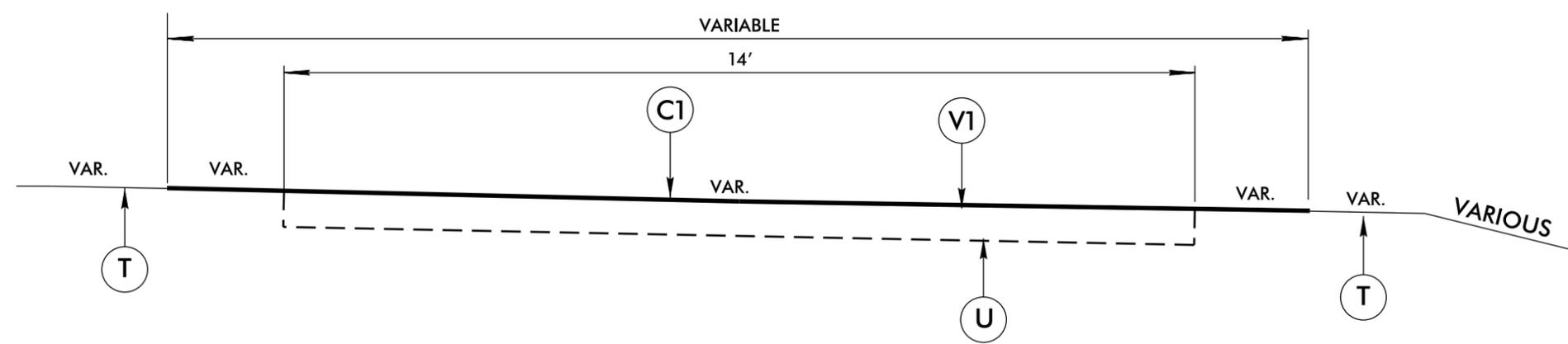
PREPARED BY: S.B. DARNELL
 REVIEWED BY: J.D. WOOD

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

☑ * PATCHING AT LOCATIONS AS DIRECTED BY ENGINEER



TYPICAL SECTION NO. 3
 MAP 4 – NC 268 FROM SR 1856 TO SR 1855
 MAP 5 – NC 268 FROM SR 1003 TO US 601
 NOTE: Width varies at turn lanes



TYPICAL SECTION NO. 4
 MAP 6 – US 601 RAMPS AT THE INTERCHANGE WITH SR 1100

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4"
V3	INCIDENTAL MILLING
V4	MILLED RUMBLE STRIPS (ASPHALT CEMENT)

**SURRY COUNTY
PRIMARY RESURFACING**

DIVISION II

REVISIONS	INT.	DATE

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



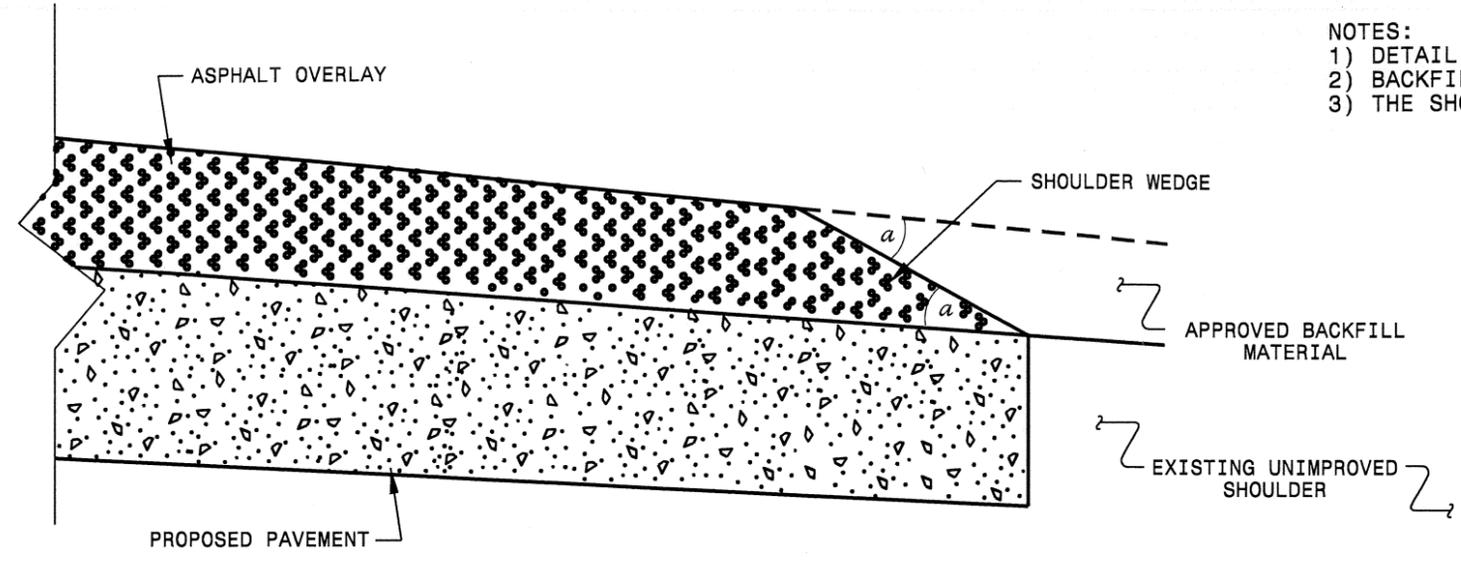
SCALE: N/A DATE: 08/2014

PREPARED BY: S.B. DARNELL

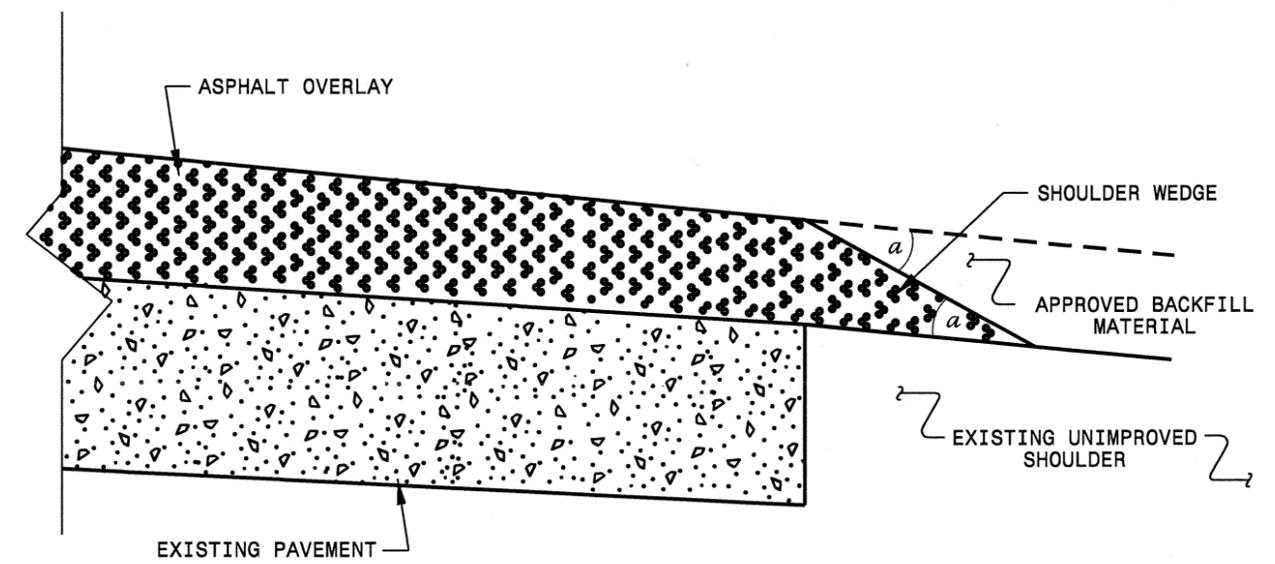
REVIEWED BY: J.D. WOOD

REVIEWED BY:

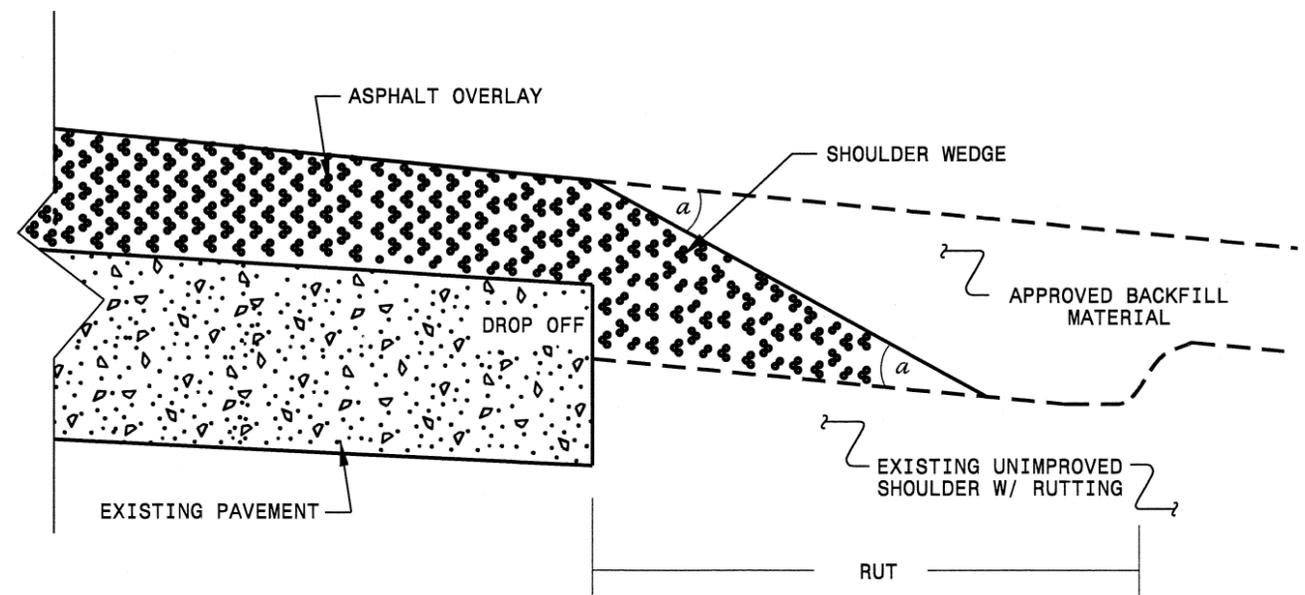
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.22		

SUMMARY OF QUANTITIES

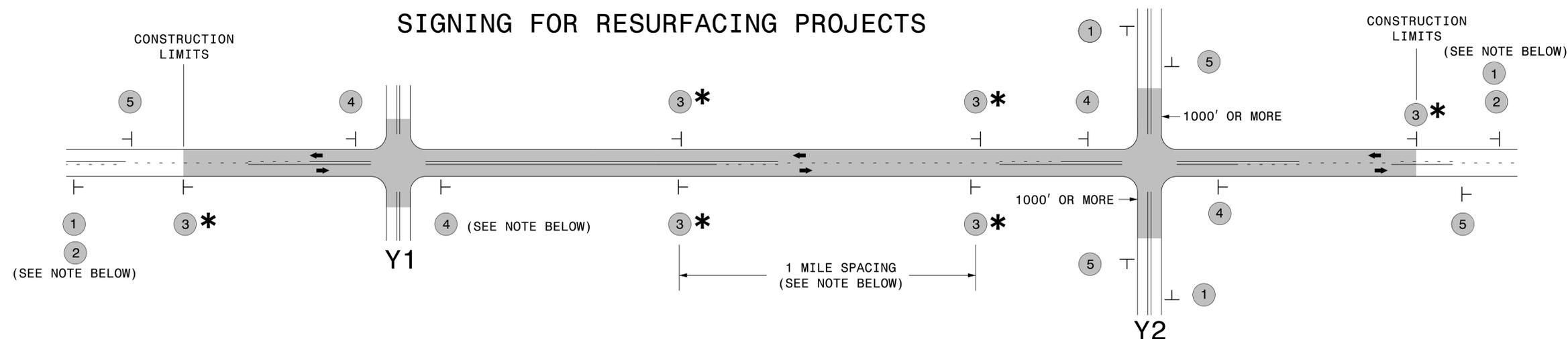
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARMMX ASPHALT REQUIRED	LENGTH M	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SM	4" MILLING SY	1½" MILLING SY	INCIDENTAL MILLING SY	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	ADI. OF MANHOLES EA	ADI. OF METER OR VALVE BOX EA	SEED & MULCHING AC	INDUCTIVE LOOP LF
11CR.10861.22	Surry	1	US 52 SBL	FROM SR 1822 TO BEGIN CONCRETE NEAR COOK SCHOOL ROAD	1	2	MD	NO	NO	2.43	32	486		4.86	950		356	500		4,025	261	150	25,661			1.70	
11CR.10861.22	Surry	2	US 52 NBL	FROM SR 2116 TO ENTRANCE AT LOWES	2	2	MD	NO	NO	0.88	32	176		1.76			1,422			1,560	92	50	9,293				640
11CR.10861.22	Surry	3	US 52 SBL	FROM ENTRANCE AT LOWES TO SR 2116	2	2	MD	NO	NO	0.88	32	176		1.76			1,422			1,660	98	50	9,293				640
11CR.10861.22	Surry	4	NC 268	FROM SR 1856 TO SR 1855	3	2	2WU	NO	NO	0.91	22		30				488			1,065	64	40		1	4		
11CR.10861.22	Surry	5	NC 268	FROM SR 1003 TO US 601	3	2	2WU	NO	NO	5.36	20		100				1,110			5,465	328	175					
11CR.10861.22	Surry	6	US 601 RAMPS	AT THE INTERCHANGE WITH SR 1100	4	1	2WU	NO	NO	1.2	14	240		2.40		9,856			935		56	40				0.70	
TOTAL FOR PROJ NO. 11CR.10861.22										11.66		1,078	130	10.78	950	9,856	4,798	500	7,465	7,245	899	505	44,247	1	4	2.40	1,280
GRAND TOTAL										11.66		1,078	130	10.78	950	9,856	4,798	500	7,465	7,245	899	505	44,247	1	4	2.40	1,280

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.22		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4810000000-E		4815000000-E		4820000000-E	4830000000-E	4835000000-E	4840000000-N		4845000000-N			4905000000-N
										WDRK ZONE ADVANCE/GENERAL WARNING SIGNS	TEMPORARY TRAFFIC CONTROL	4" WHITE PAINT	4" YELLOW PAINT	6" WHITE PAINT	6" YELLOW PAINT	8" YELLOW PAINT	16" WHITE PAINT	24" WHITE PAINT	PAINT M&G ONLY	PAINT M&G RXR	PAINT LT ARROW	PAINT STR ARROW	PAINT RT ARROW	SNOW PLOWABLE MARKERS
										SF	LS	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA
11CR.10861.22	Surry	1	US 52 SBL	FROM SR 1822 TO BEGIN CONCRETE NEAR COOK SCHOOL ROAD	1	2	MD	2.43	32	154	1			32,076	25,661									162
11CR.10861.22	Surry	2	US 52 NBL	FROM SR 2116 TO ENTRANCE AT LOWES	2	2	MD	0.88	32	90				11,616	9,293		250	130	12	10	6	4	2	60
11CR.10861.22	Surry	3	US 52 SBL	FROM ENTRANCE AT LOWES TO SR 2116	2	2	MD	0.88	32	90				11,616	9,293		350	180	8	6	12	8	10	60
11CR.10861.22	Surry	4	NC 268	FROM SR 1856 TO SR 1855	3	2	2WU	0.91	22	86		19,219	19,219			240					6			62
11CR.10861.22	Surry	5	NC 268	FROM SR 1003 TO US 601	3	2	2WU	5.36	20	214		113,203	113,203											355
11CR.10861.22	Surry	6	US 601 RAMPS	AT THE INTERCHANGE WITH SR 1100	4	1	2WU	1.2	14	96		25,344	25,344											
TOTAL FOR PROJ NO. 11CR.10861.22								11.66		730	1	157,766	157,766	55,308	44,247	240	600	310	20	16	24	12	12	699
												315,532		99,555				36		48				

SIGNING FOR RESURFACING PROJECTS



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

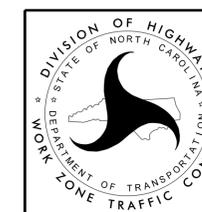
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
1 2		<p style="text-align: center;">NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p style="text-align: center;">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;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p style="text-align: center;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
3 *		
4		
5		

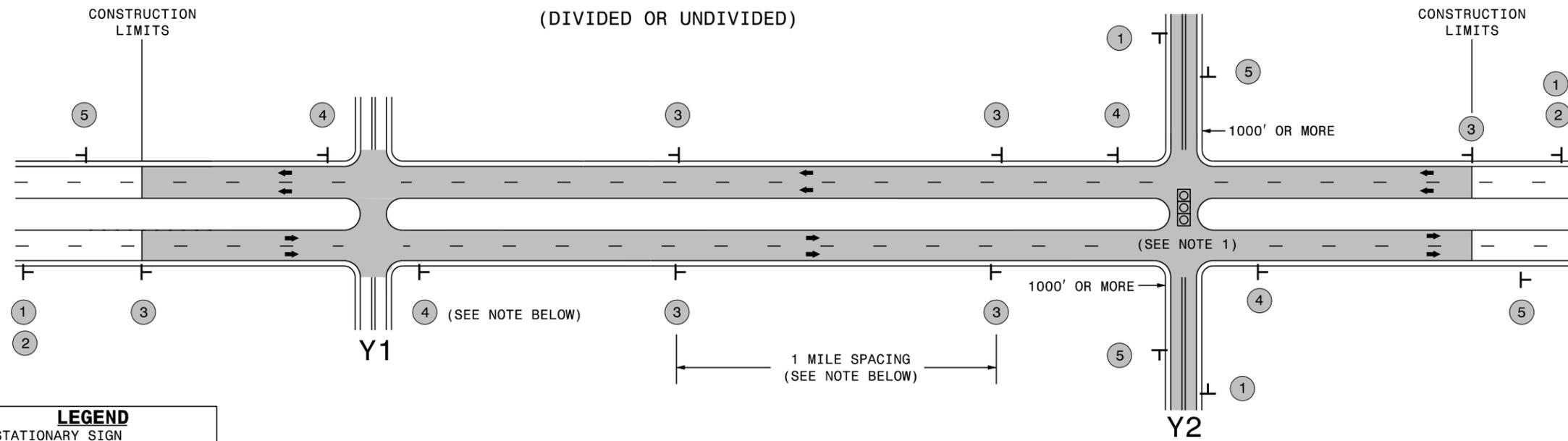
* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

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**

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



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>	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"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) 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>	#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.		

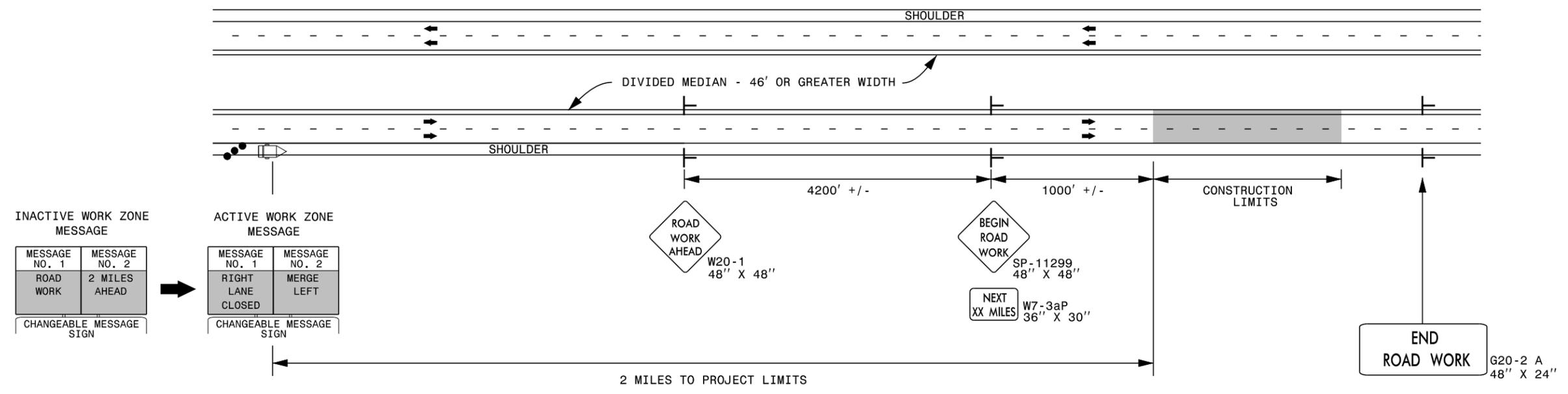
NOTES:

- 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.

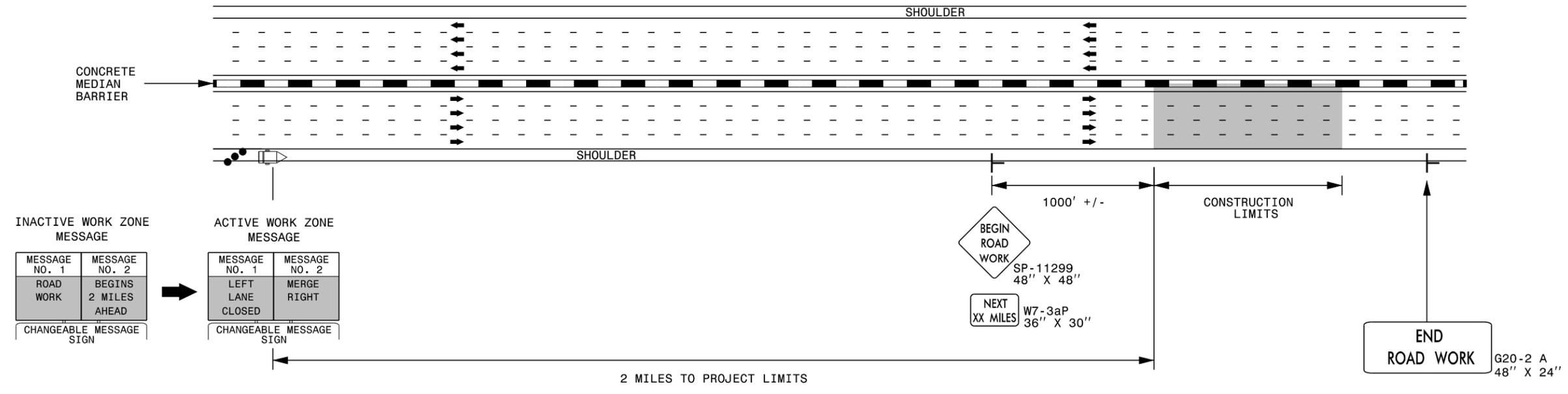
**RESURFACING
ADVANCE WARNING SIGNS
FOR RURAL AND SUBURBAN
MULTI-LANE ROADWAYS
W/ SHOULDER SECTIONS
(DIVIDED OR UNDIVIDED)**

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

DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER

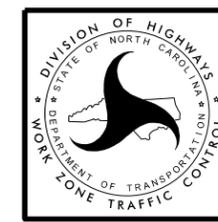


NOTES:

- 1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6' AS MEASURED FROM THE EDGE OF PAVEMENT.
- 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) FOR MEDIAN WIDTHS LESS THAN 46' (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
- 4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 5) INSTALL "ROAD WORK AHEAD" (W20-1) ALONG ENTRANCE RAMP 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMP WITHIN THE WORK ZONE.
- 6) 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 AND WITH DIVIDED MEDIANS OF 46' OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM



**RESURFACING ADVANCE
WARNING SIGNS FOR
HIGH SPEED FACILITIES
≥ 60 MPH**

I0/3/2013
 S:\T\U\W\ZTC\Resurfacing\2013\Documents\New_Procedures_05_09_2013\Resurfacing_AdvWarn_HSpd.dgn
 User:frmgarratt