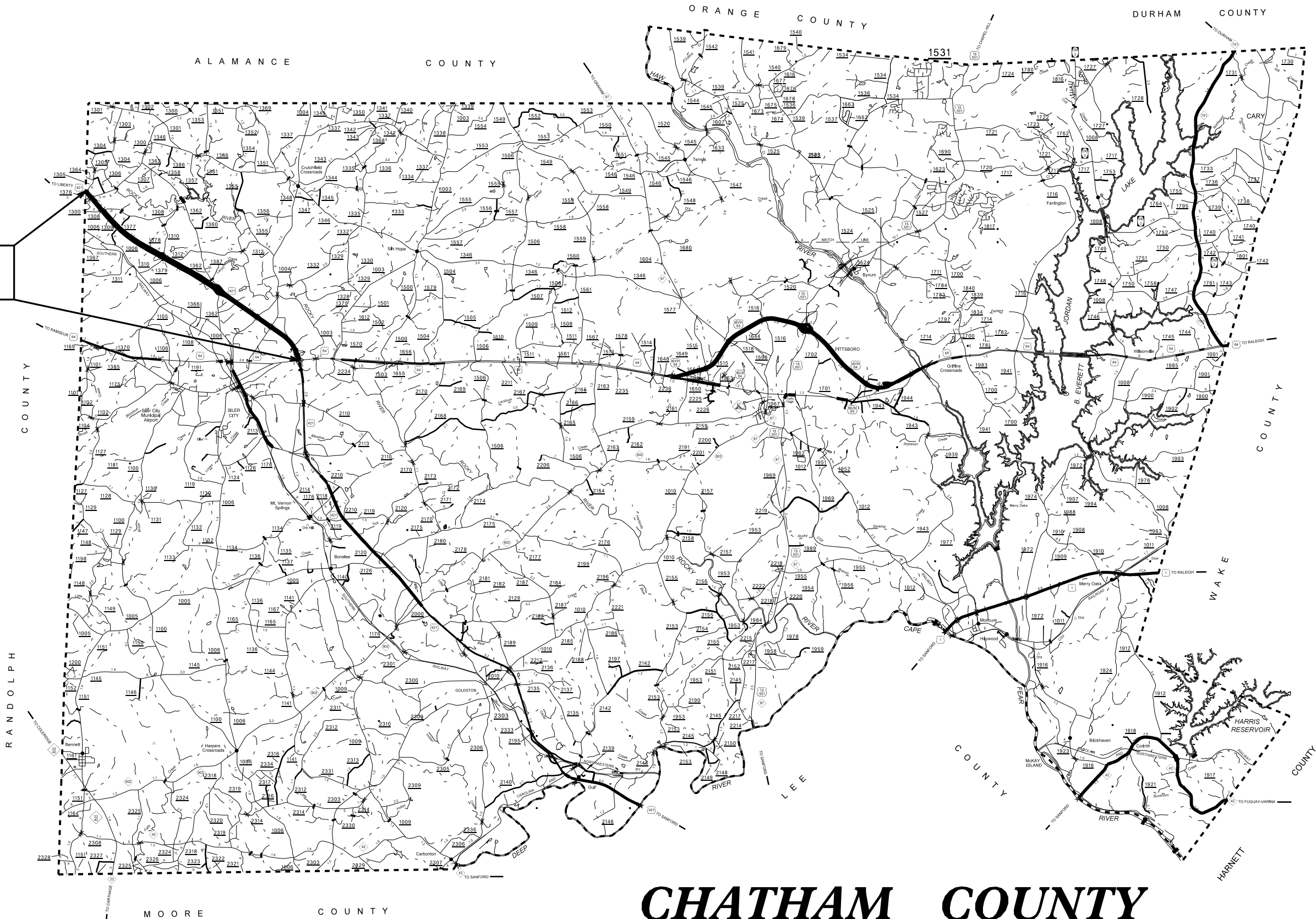
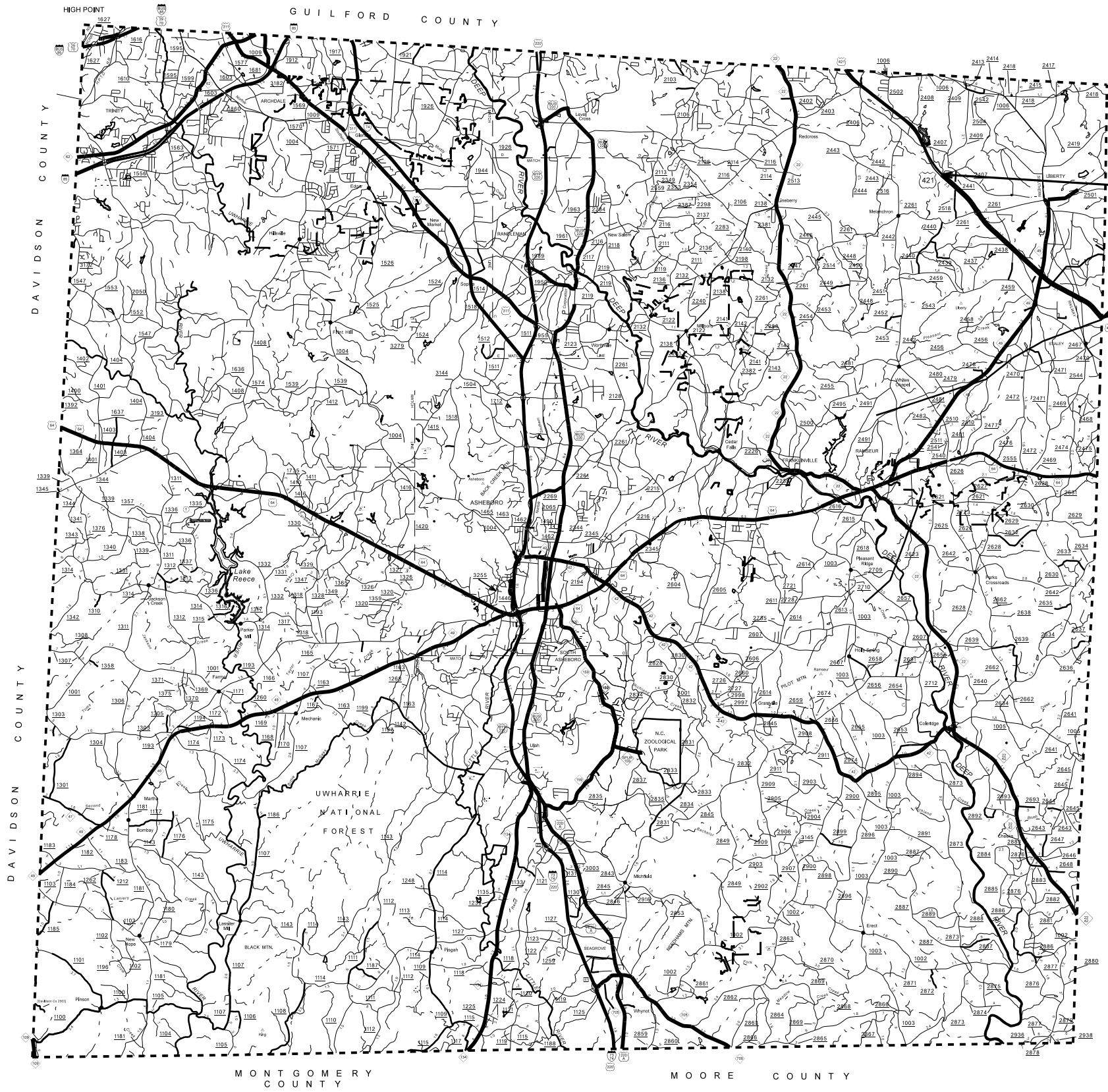
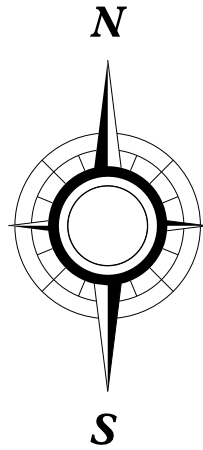


MAPS 1-6



CHATHAM COUNTY RESURFACING

DATE: 08/07/2023
TIME: 10:00 AM
USER: JACOB
PROJECT: CHATHAM COUNTY RESURFACING
SHEET: 1 OF 6

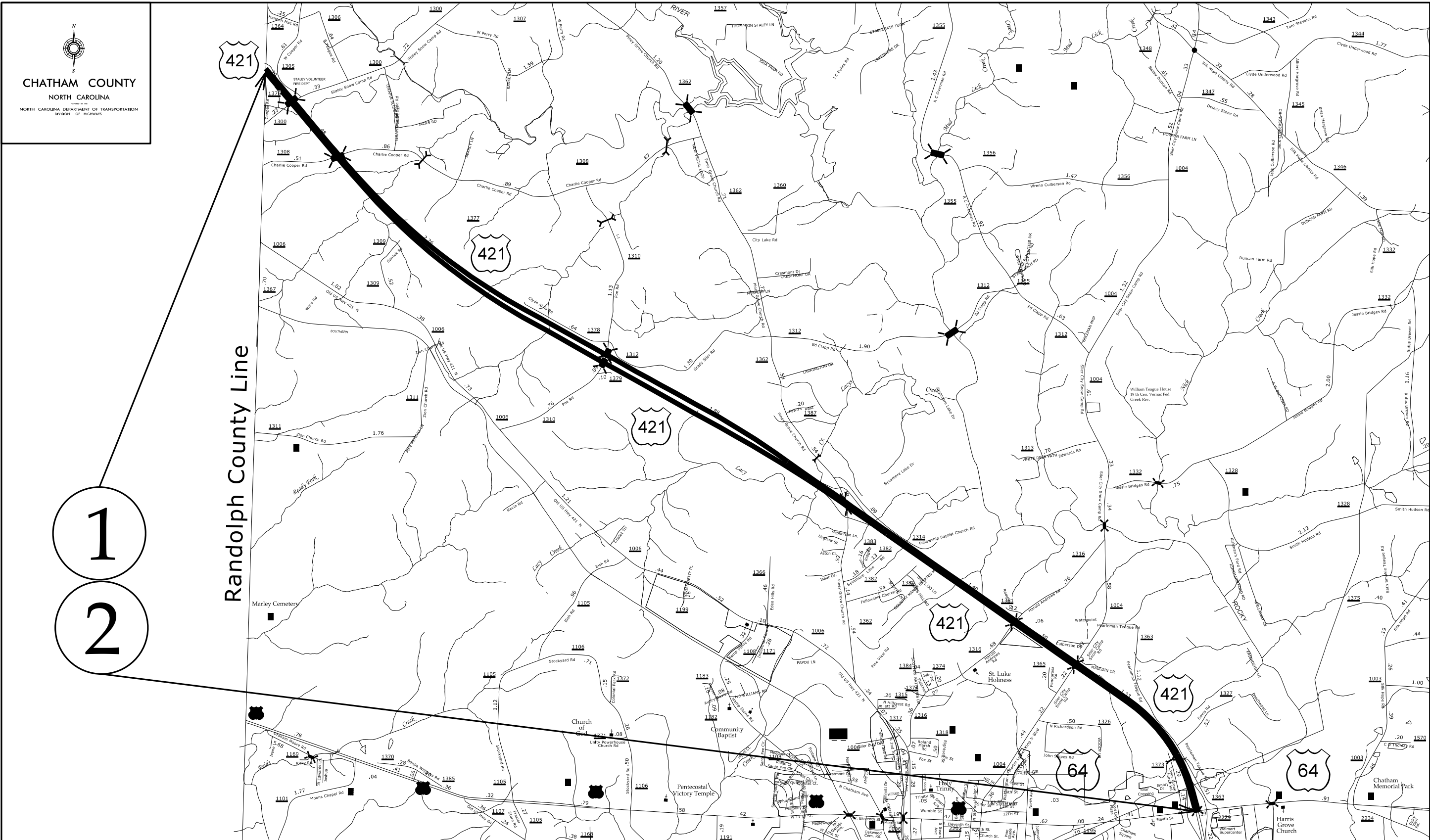


ALAMANCE COUNTY
MAPS 7-13

RANDOLPH COUNTY RESURFACING

DATE: 08/07/2023
TIME: 10:00 AM
DRAWN BY: [unreadable]
CHECKED BY: [unreadable]
SCALE: 1" = 1 MILE
PROJECT NO.: 2023CPT.08.07.10191
SHEET NO.: 2

Maps 1 and 2



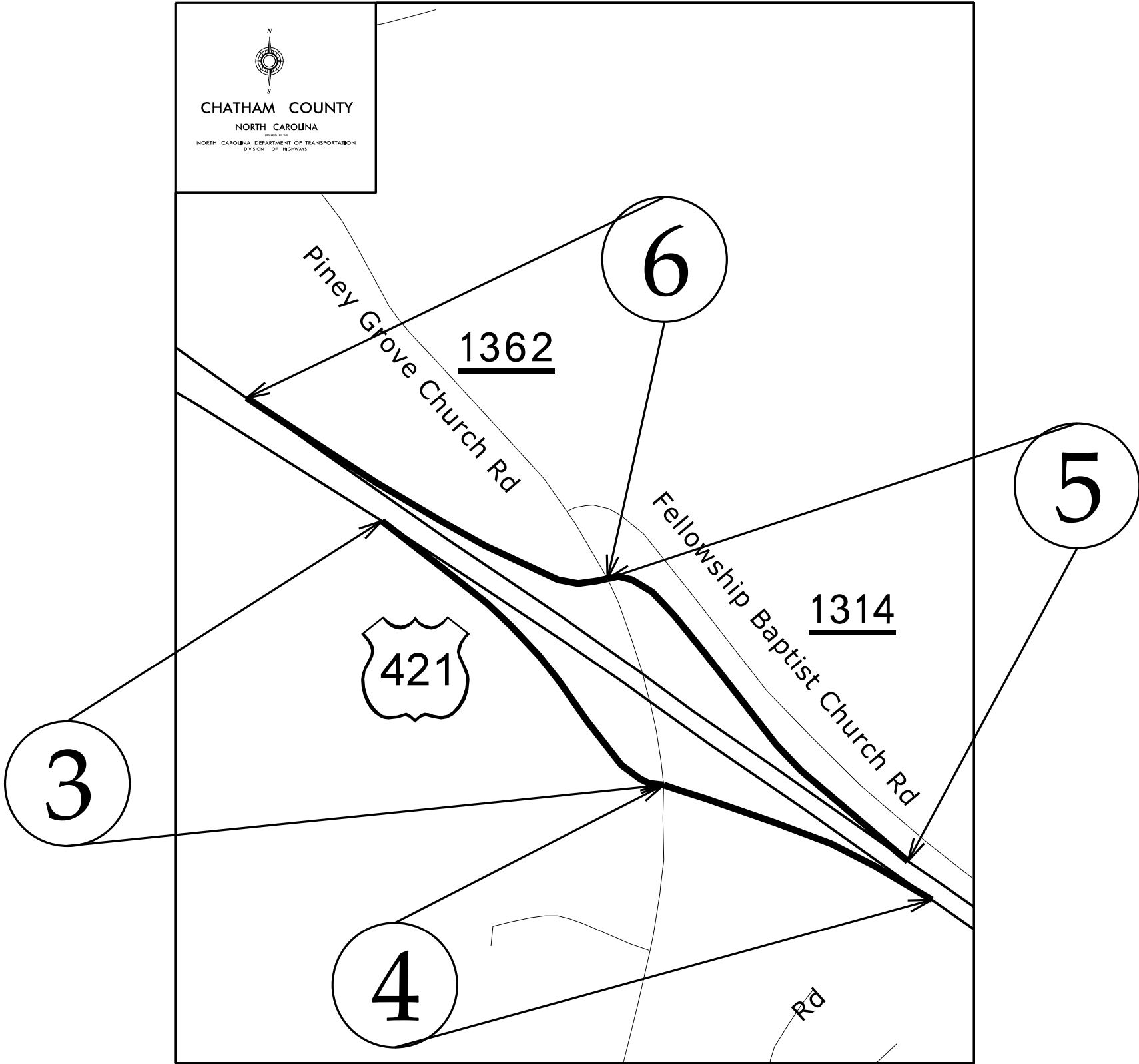
1

2

Randolph County Line

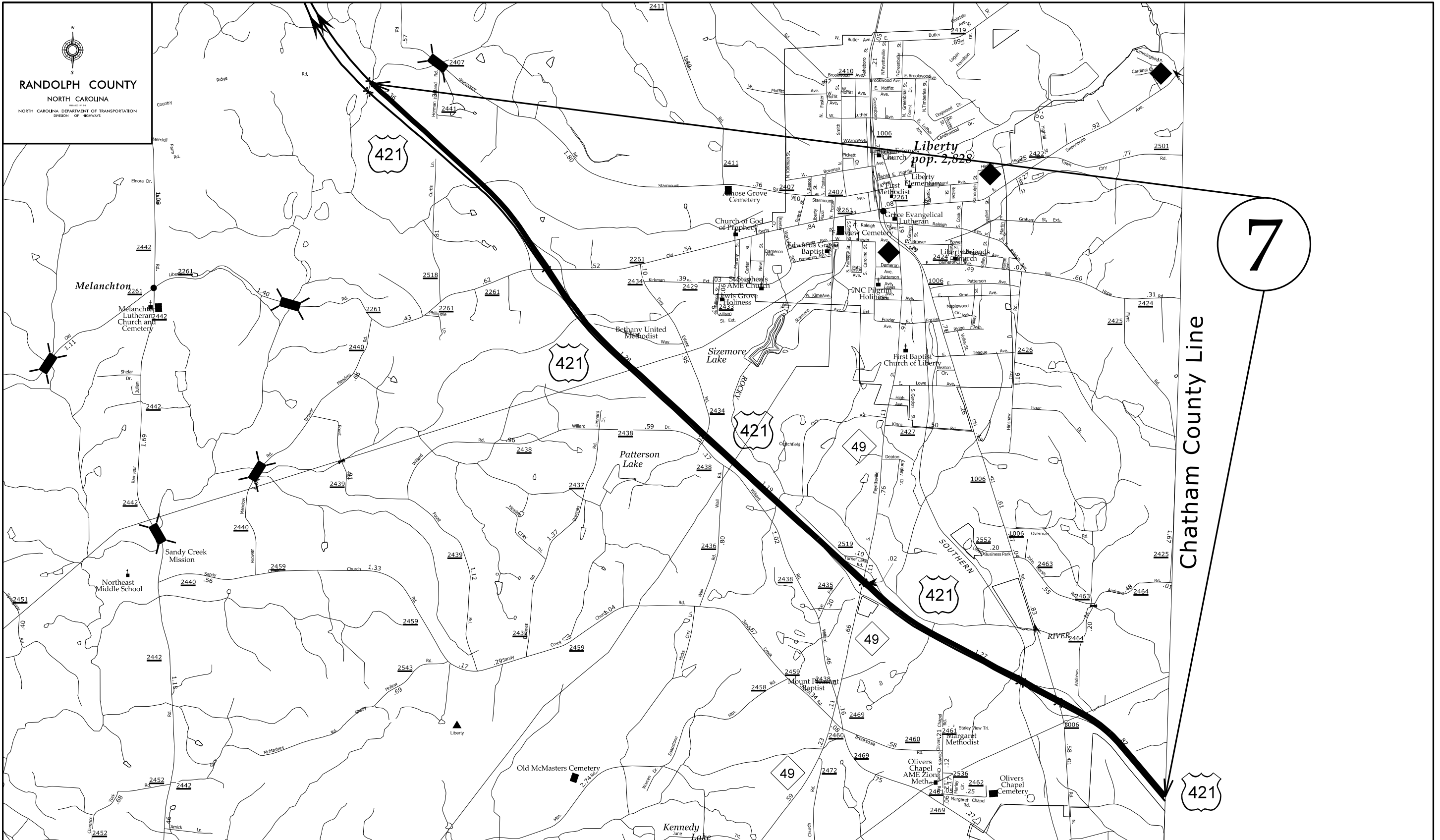
CHATHAM COUNTY
NORTH CAROLINA
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Maps 3-6



DATE: 08/07/2023
TIME: 10:00 AM
USER: JAC

Map 7



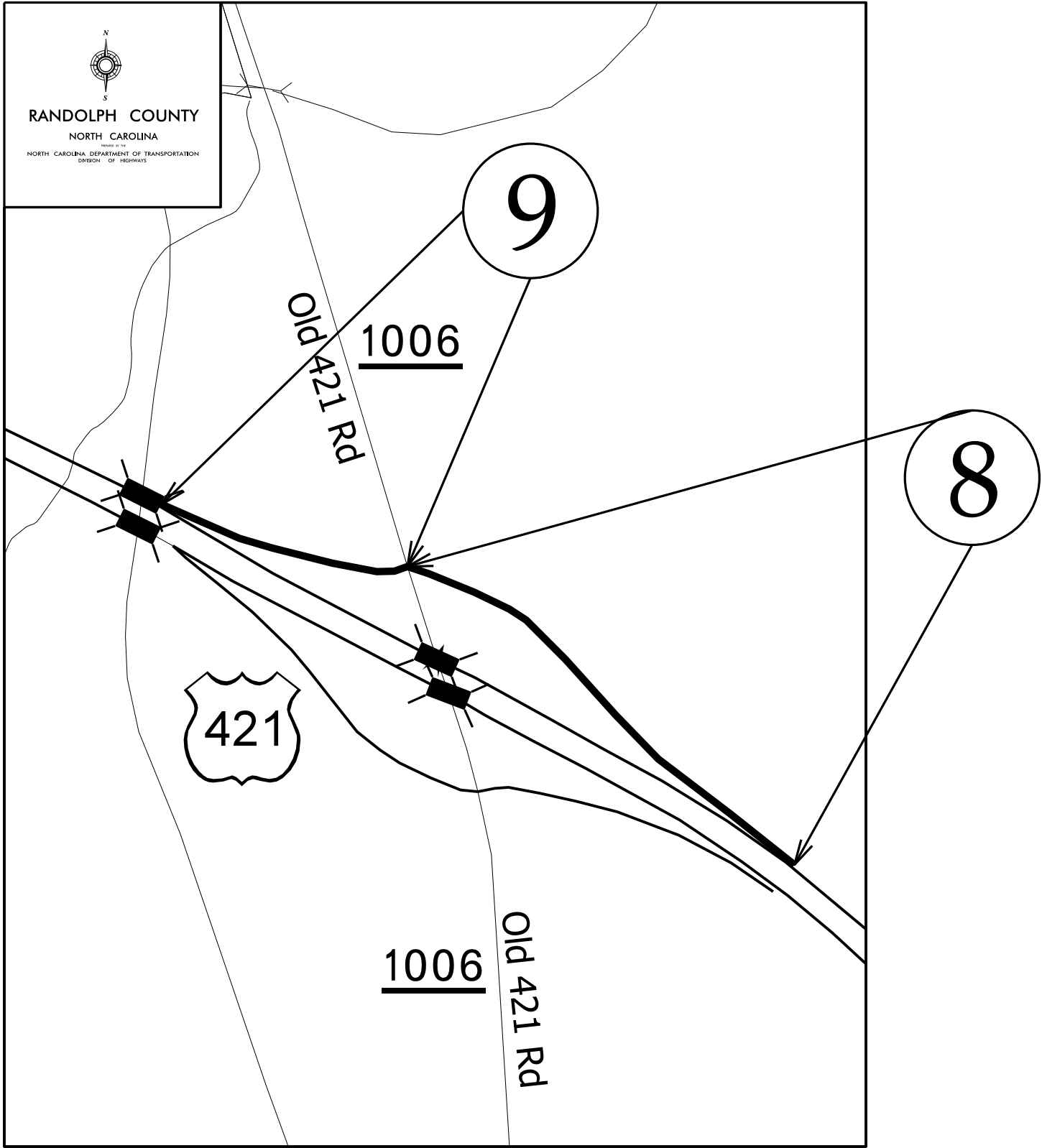
RANDOLPH COUNTY
NORTH CAROLINA
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

7

Chatham County Line

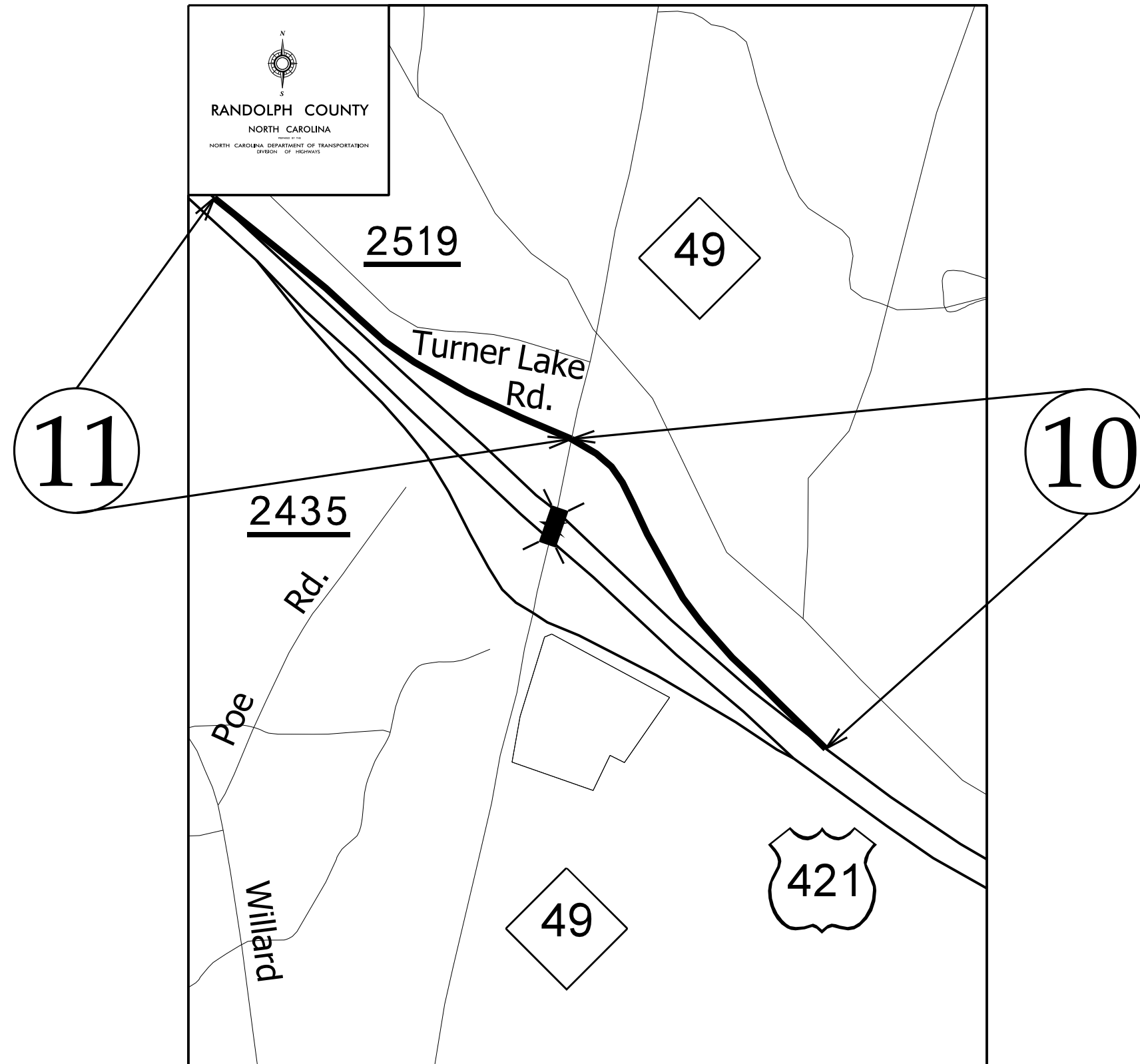
DATE PLOTTED: 08/07/2023
TIME PLOTTED: 10:11:11 AM
PLOTTER: HP DesignJet T1100e
SCALE: 1" = 1 MILE
SHEET NO.: 5
PROJECT NO.: 2023CPT.08.07.10191
DRAWN BY: [unreadable]
CHECKED BY: [unreadable]
APPROVED BY: [unreadable]

Maps 8 and 9

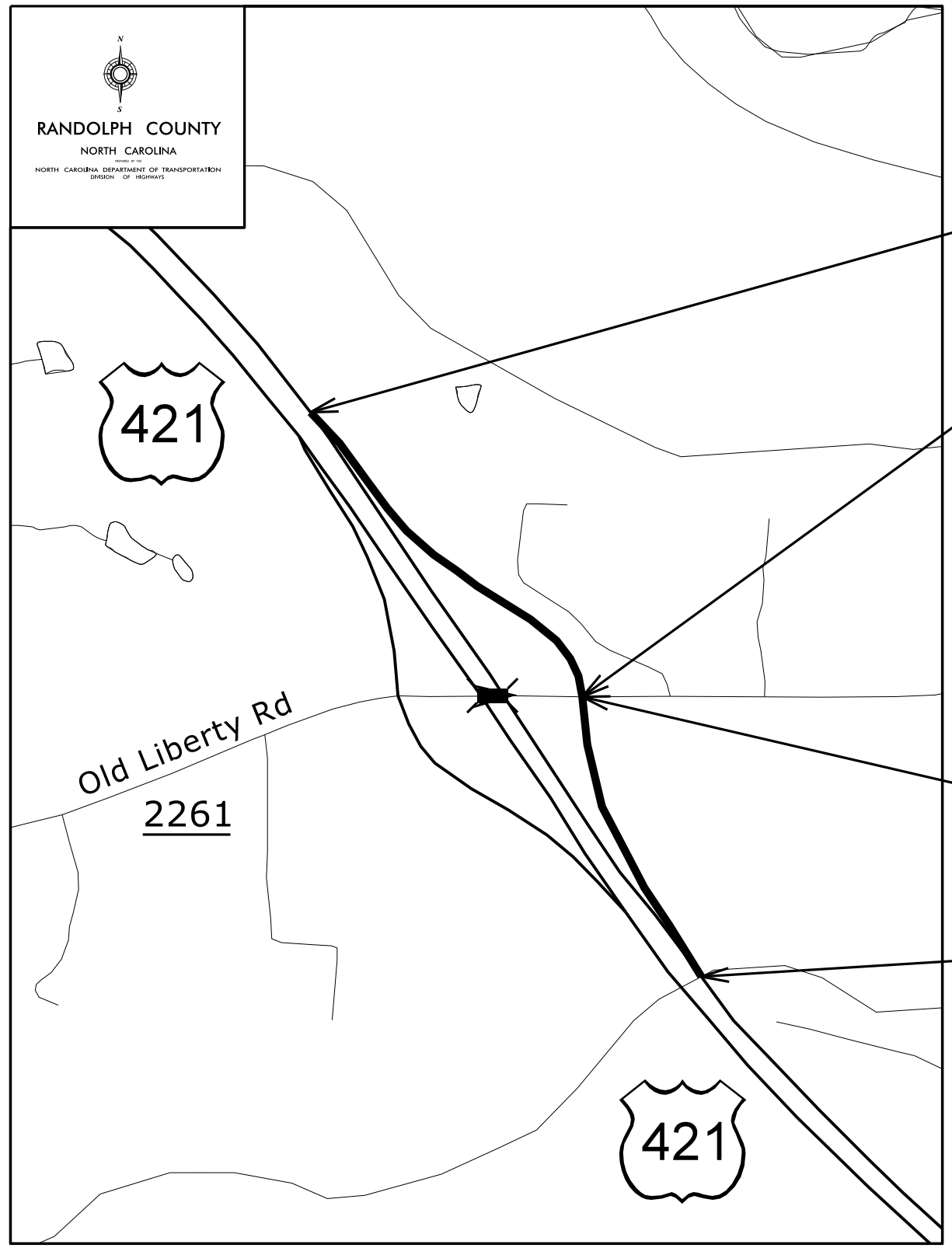


CONSTRUCTION

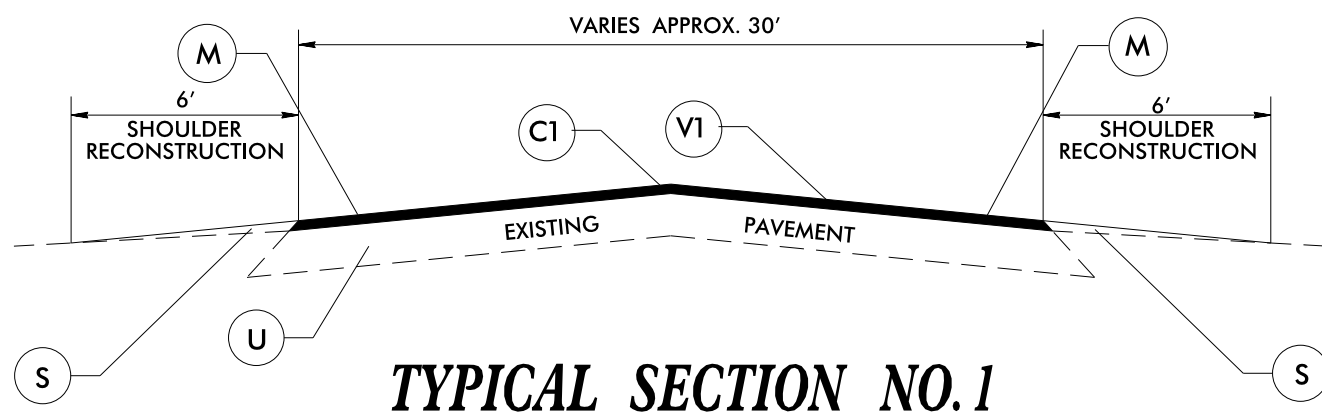
Maps 10 and 11



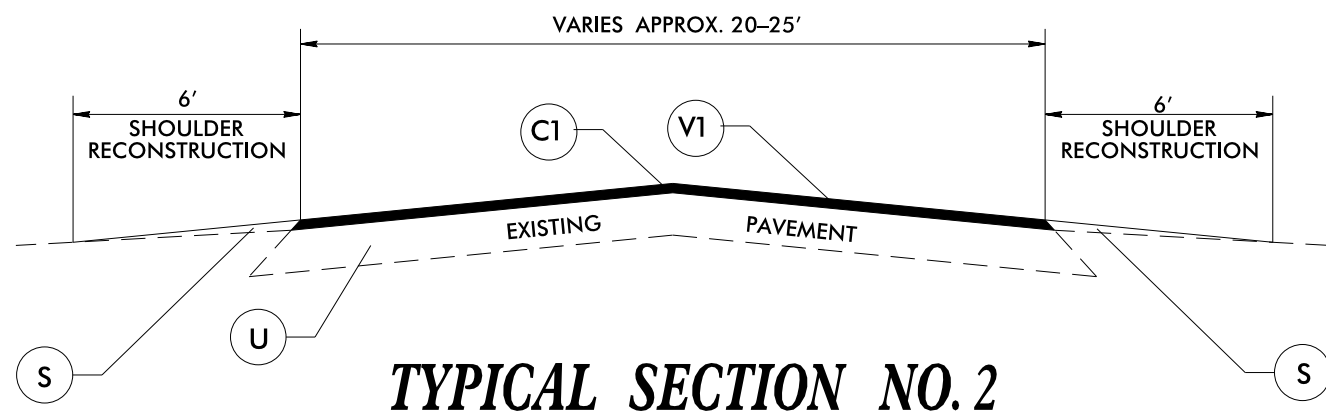
Maps 12 and 13



DATE: 08/07/2023
TIME: 10:00 AM
DRAWN BY: [unreadable]
CHECKED BY: [unreadable]
SCALE: [unreadable]
PROJECT: [unreadable]
SHEET: 8 OF 8



TYPICAL SECTION NO. 1



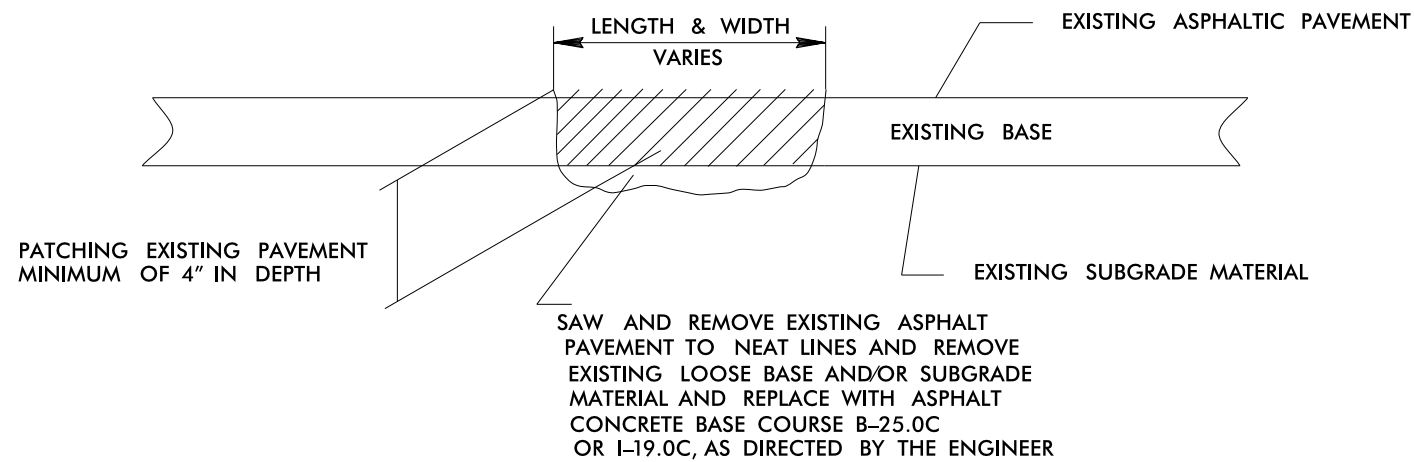
TYPICAL SECTION NO. 2

PAVEMENT SCHEDULE

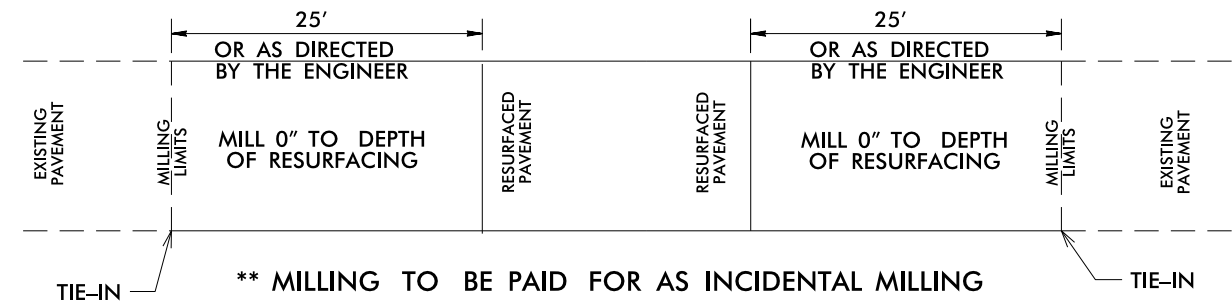
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
M	MILLED RUMBLE STRIPS
S	AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT.
V1	MILLING 1.5" IN DEPTH

20230807 10:19:11

DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING

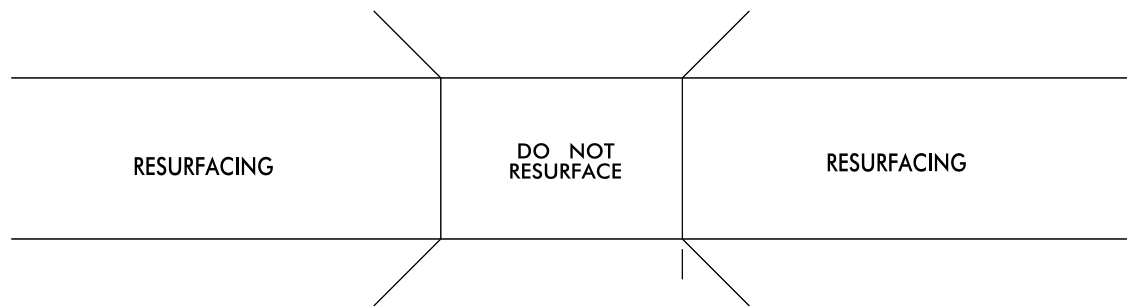


PAVEMENT TIE-IN DETAIL



PROJECT NOTES

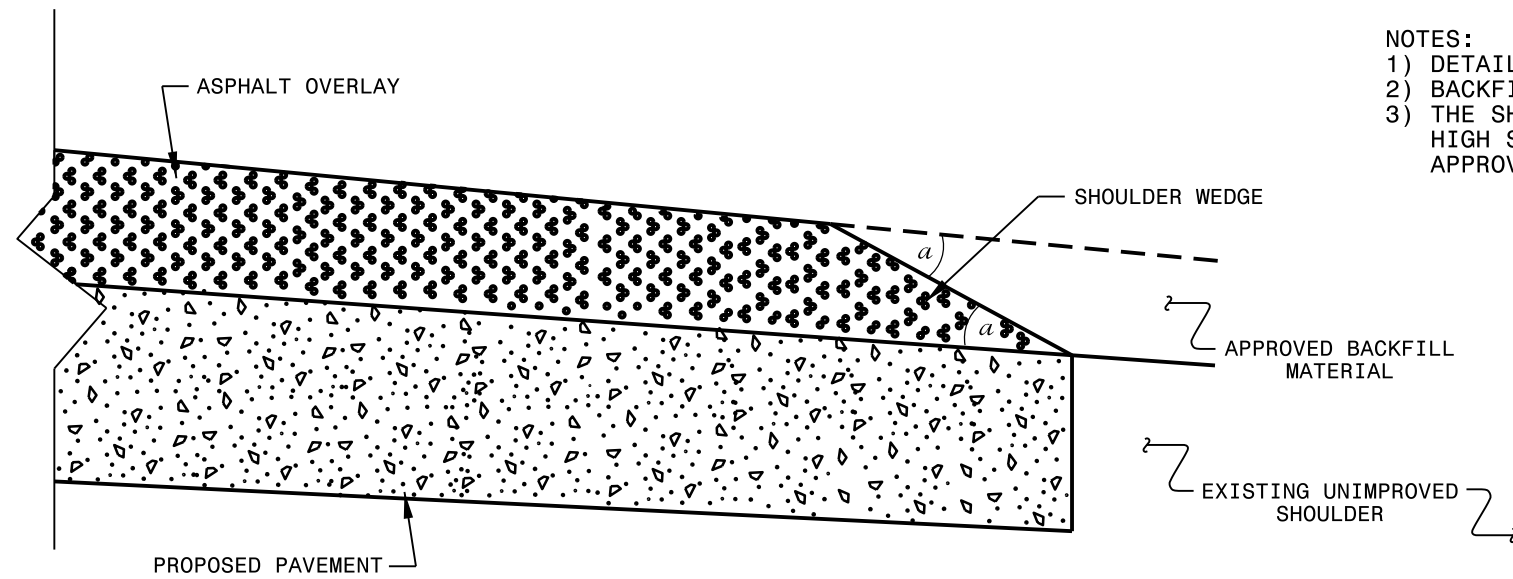
- PAINT MARKINGS INCLUDED FOR MILLING ON MAPS 1-13.
- PAINT MARKINGS AND LINE REMOVAL INCLUDED FOR BRIDGES ON MAP 7.



**BRIDGE DRAWING FOR
MAP NO. 7 US 421 NB
(BRIDGES NO 161 and 471)**

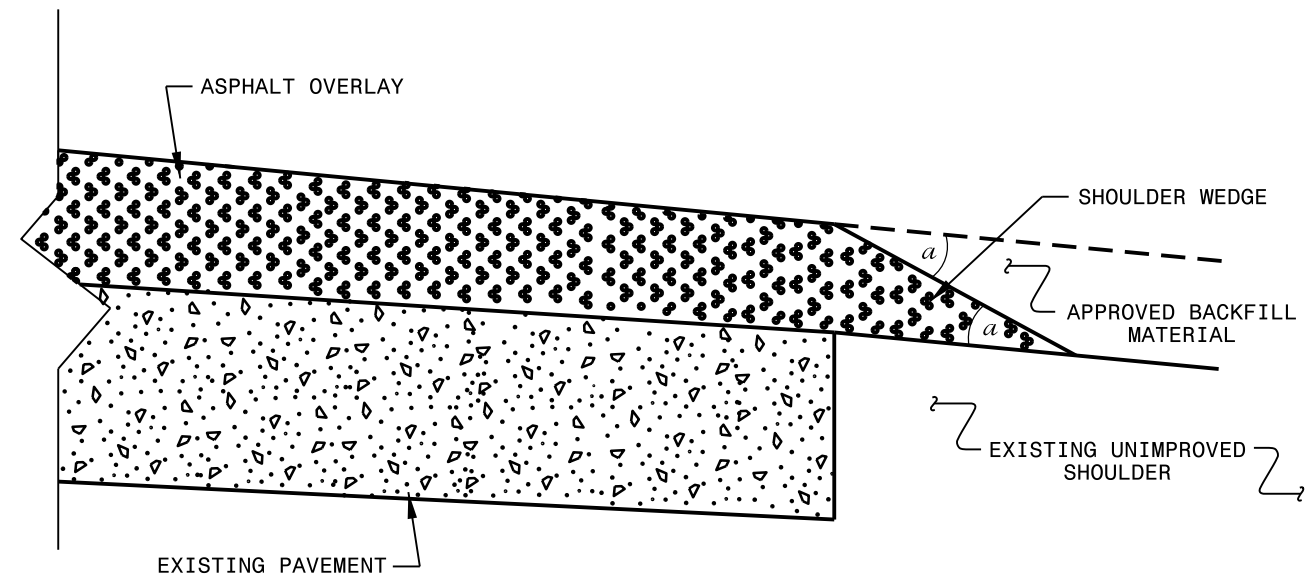
NOTES:

- 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, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



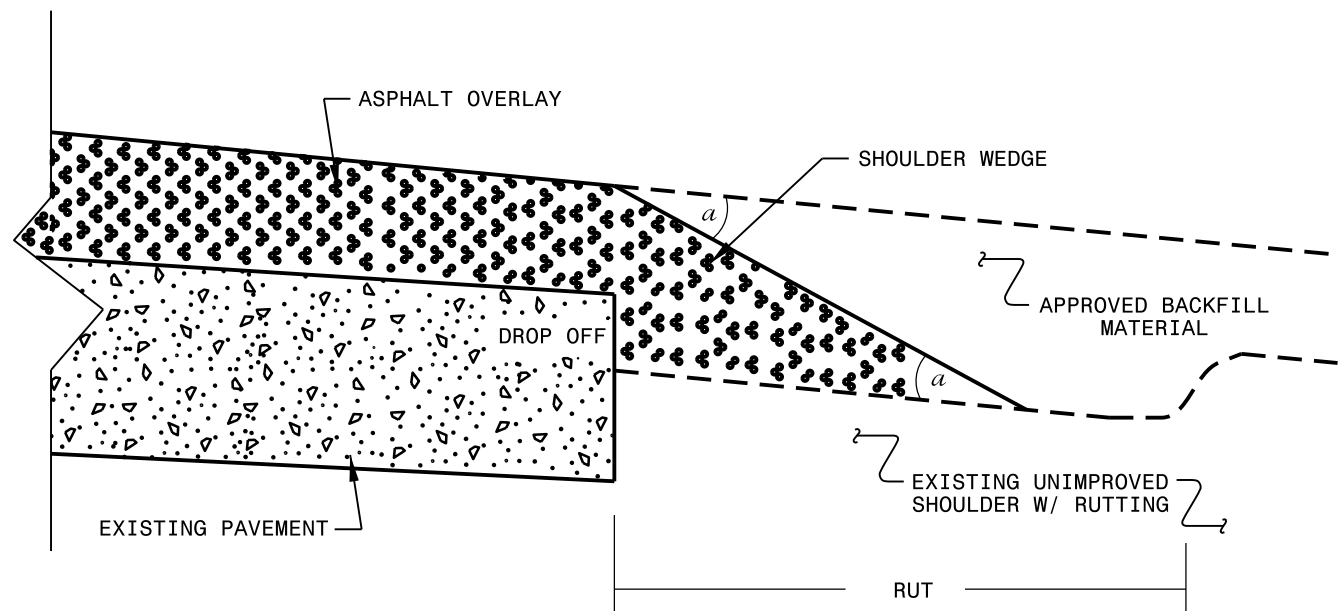
SHOULDER WEDGE DETAIL

(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: 2/2/16	
CHECKED BY:	DATE:	
FILE SPEC.: szusr/details/stand/shoulderwedgedetail.dgn		

PROJECT NO.	SHEET NO.	TOTAL NO.
2023CPT.08.07.10191, 2023CPT.08.07.10761	12	

SUMMARY OF QUANTITIES

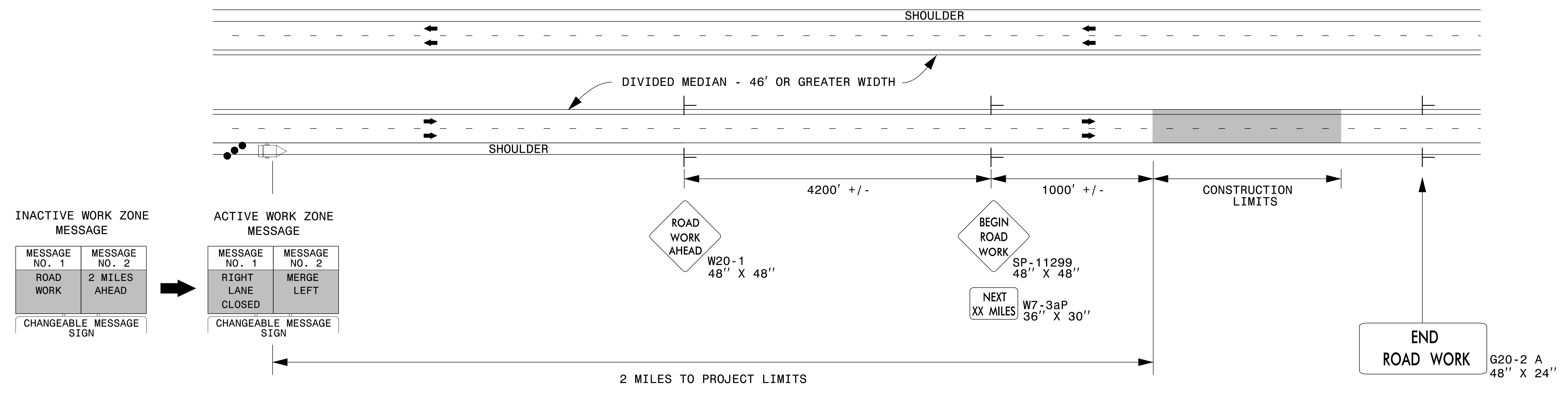
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1524200000-E	1575000000-E	1577000000-E	1704000000-E	1840000000-E		
												SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1.5" MILLING	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, TYPE S9.5D	ASPHALT BINDER FOR PLANT MIX	POLYMER MODIFIED ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	MILLED RUMBLE STRIPS		
												MI	FT	SMI	TON	SY	SY	TON	TONS	TONS	TONS	LF
2023CPT.08.07.10191	Chatham	1	US HWY 421 SB	(FROM: CHATHAM COUNTY LINE TO US HWY 64)	1	2	MD	NO	NO	8.11	30	16.22	2,273.00	149,312		12,542		715		85,642		
TOTAL FOR MAP NO. 1												8.11		16.22	2,273.00	149,312		12,542		715		85,642
2023CPT.08.07.10191	Chatham	2	US HWY 421 NB	(FROM: US HWY 64 TO CHATHAM COUNTY LINE)	1	2	MD	NO	NO	8.14	30	16.28	2,282.00	154,954	2,470	13,016		742		85,958		
TOTAL FOR MAP NO. 2												8.14		16.28	2,282.00	154,954	2,470	13,016		742		85,958
2023CPT.08.07.10191	Chatham	3	US 421 EXIT 174 SB OFF RAMP	FROM US 421 TO SR 1362 PINEY GROVE CHURCH RD	2	1		NO	NO	0.27	20	0.54	76.00	3,515		295		17				
TOTAL FOR MAP NO. 3												0.27		0.54	76.00	3,515		295		17		
2023CPT.08.07.10191	Chatham	4	US 421 EXIT 174 SB ON RAMP	FROM SR 1362 PINEY GROVE CHURCH RD TO US 421	2	1		NO	NO	0.21	20	0.42	59.00	2,835		238		14				
TOTAL FOR MAP NO. 4												0.21		0.42	59.00	2,835		238		14		
2023CPT.08.07.10191	Chatham	5	US 421 EXIT 174 NB OFF RAMP	FROM US 421 TO SR 1362 PINEY GROVE CHURCH RD	2	1		NO	NO	0.29	20	0.58	81.00	3,697		311		18				
TOTAL FOR MAP NO. 5												0.29		0.58	81.00	3,697		311		18		
2023CPT.08.07.10191	Chatham	6	US 421 EXIT 174 NB ON RAMP	FROM SR 1362 PINEY GROVE CHURCH RD TO US 421	2	1		NO	NO	0.21	20	0.42	59.00	3,071		258		15				
TOTAL FOR MAP NO. 6												0.21		0.42	59.00	3,071		258		15		
TOTAL FOR PROJ NO. 2023CPT.08.07.10191												17.23		34.46	4,830.00	317,384	2,470	26,660		1,521		171,600
2023CPT.08.07.10761	Randolph	7	US HWY 421 NB	(FROM: CHATHAM COUNTY LINE TO BRIDGE 121 OVER SANDY CREEK)	1	2	MD	NO	NO	6.83	30	13.66	1,912.00	149,440	520	12,553	10	716	200	72,125		
TOTAL FOR MAP NO. 7												6.83		13.66	1,912.00	149,440	520	12,553	10	716	200	72,125
2023CPT.08.07.10761	Randolph	8	US 421 EXIT 180 NB OFF RAMP	FROM US 421 TO SR 1006 OLD 421 RD	2	1		NO	NO	0.23	20	0.46	64.00	2,445		205		12				
TOTAL FOR MAP NO. 8												0.23		0.46	64.00	2,445		205		12		
2023CPT.08.07.10761	Randolph	9	US 421 EXIT 180 NB ON RAMP	FROM SR 1006 OLD 421 RD TO US 421	2	1		NO	NO	0.15	20	0.30	42.00	1,480		124		7				
TOTAL FOR MAP NO. 9												0.15		0.30	42.00	1,480		124		7		
2023CPT.08.07.10761	Randolph	10	US 421 EXIT 181 NB OFF RAMP	FROM US 421 TO NC 49	2	2		NO	NO	0.2	20	0.40	56.00	2,290		192		11				
TOTAL FOR MAP NO. 10												0.2		0.40	56.00	2,290		192		11		
2023CPT.08.07.10761	Randolph	11	US 421 EXIT 181 NB ON RAMP	FROM NC 49 TO US 421	2	2		NO	NO	0.42	24	0.84	118.00	7,345	390	617		35				
TOTAL FOR MAP NO. 11												0.42		0.84	118.00	7,345	390	617		35		
2023CPT.08.07.10761	Randolph	12	US 421 EXIT 183 NB OFF RAMP	(FROM: US421 TO: SR 2261 OLD LIBERTY RD.)	2	2		NO	NO	0.29	25	0.58	82.00	5,715	520	480		27				
TOTAL FOR MAP NO. 12												0.29		0.58	82.00	5,715	520	480		27		
2023CPT.08.07.10761	Randolph	13	US 421 EXIT 183 NB ON RAMP	(FROM:SR2261 OLD LIBERTY RD. TO: US-421)	2	2		NO	NO	0.54	25	1.08	152.00	9,825	520	825		47				
TOTAL FOR MAP NO. 13												0.54		1.08	152.00	9,825	520	825		47		
TOTAL FOR PROJ NO. 2023CPT.08.07.10761												8.66		17.32	2,426.00	178,540	1,950	14,996	10	855	200	72,125
GRAND TOTAL												25.89		51.78	7,256.00	495,924	4,420	41,656	10	2,376	200	243,725

PROJECT NO.	SHEET NO.	TOTAL NO.
2023CPT.08.07.10191, 2023CPT.08.07.10761	13	

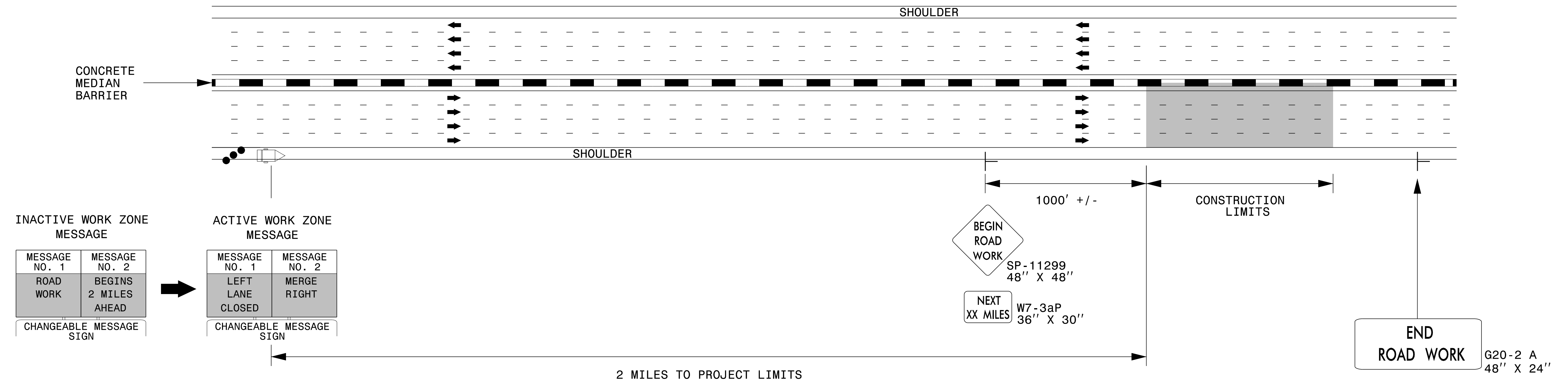
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4510000000-N	4688000000-E		4700000000-E	4709000000-E	4725000000-E		4815000000-E		4825000000-E	4835000000-E	4845000000-N		4855000000-E	4865000000-E	4905100000-N					
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	12" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO MERGE ARROW 90M	THERMO RAMP ARROW 90M	6" WHITE PAINT	6" YELLOW PAINT	12" WHITE PAINT	24" WHITE PAINT	PAINT MERGE ARROW	PAINT RAMP ARROW	6" LINE REMOVAL	12" LINE REMOVAL	NON-CAST IRON SNOWPLOW ABLE PAVEMENT MARKER C&R					
										MI	FT	SF	LS	HR	LF	LF	LF	LF	EA	EA	LF	LF	LF	EA	EA	LF	LF	EA				
2023CPT.08.07.10191	Chatham	1	US HWY 421 SB	(FROM: CHATHAM COUNTY LINE TO US HWY 64)	1	2	MD	8.11	30	430				62	53,527	42,821	2,115			3		53,527	42,821	2,115			3			641		
TOTAL FOR MAP NO. 1										8.11		430		62	53,527	42,821	2,115			3		53,527	42,821	2,115			3		641			
2023CPT.08.07.10191	Chatham	2	US HWY 421 NB	(FROM: US HWY 64 TO CHATHAM COUNTY LINE)	1	2	MD	8.14	30	380				83	53,726	42,980	2,130			6		53,726	42,980	2,130			6			650		
TOTAL FOR MAP NO. 2										8.14		380		83	53,726	42,980	2,130			6		53,726	42,980	2,130			6		650			
2023CPT.08.07.10191	Chatham	3	US 421 EXIT 174 SB OFF RAMP	FROM US 421 TO SR 1362 PINEY GROVE CHURCH RD	2	1		0.27	20	8					1,490	1,395		48		1	1,490	1,395		48		1			14			
TOTAL FOR MAP NO. 3										0.27		8	*		1,490	1,395		48		1	1,490	1,395		48		1			14			
2023CPT.08.07.10191	Chatham	4	US 421 EXIT 174 SB ON RAMP	FROM SR 1362 PINEY GROVE CHURCH RD TO US 421	2	1		0.21	20	32					1,115	1,095					1,115	1,095										
TOTAL FOR MAP NO. 4										0.21		32		1,115	1,095					1,115	1,095											
2023CPT.08.07.10191	Chatham	5	US 421 EXIT 174 NB OFF RAMP	FROM US 421 TO SR 1362 PINEY GROVE CHURCH RD	2	1		0.29	20	8					1,600	1,515		54		1	1,600	1,515		54		1			14			
TOTAL FOR MAP NO. 5										0.29		8		1,600	1,515		54		1	1,600	1,515		54		1			14				
2023CPT.08.07.10191	Chatham	6	US 421 EXIT 174 NB ON RAMP	FROM SR 1362 PINEY GROVE CHURCH RD TO US 421	2	1		0.21	20	32					1,135	1,155					1,135	1,155										
TOTAL FOR MAP NO. 6										0.21		32		1,135	1,155					1,135	1,155											
TOTAL FOR PROJ NO. 2023CPT.08.07.10191										17.23		890	*	145	112,593	90,961	4,245	102		9	2	112,593	90,961	4,245	102	9	2					1,319
														203,554						11		203,554				11						
2023CPT.08.07.10761	Randolph	7	US HWY 421 NB	(FROM: CHATHAM COUNTY LINE TO BRIDGE 121 OVER SANDY CREEK)	1	2	MD	6.83	30	689				68	73,221	37,238	1,275			3		74,381	38,166	2,003			3		1,080	360	393	
TOTAL FOR MAP NO. 7										6.83		689		68	73,221	37,238	1,275			3		74,381	38,166	2,003			3		1,080	360	393	
2023CPT.08.07.10761	Randolph	8	US 421 EXIT 180 NB OFF RAMP	FROM US 421 TO SR 1006 OLD 421 RD	2	1		0.23	20	8					1,100	1,100					1,100	1,100										
TOTAL FOR MAP NO. 8										0.23		8		1,100	1,100					1,100	1,100											
2023CPT.08.07.10761	Randolph	9	US 421 EXIT 180 NB ON RAMP	FROM SR 1006 OLD 421 RD TO US 421	2	1		0.15	20	32					665	665					665	665										
TOTAL FOR MAP NO. 9										0.15		32		665	665					665	665											
2023CPT.08.07.10761	Randolph	10	US 421 EXIT 181 NB OFF RAMP	FROM US 421 TO NC 49	2	2		0.2	20	8					1,030	1,030					1,030	1,030										
TOTAL FOR MAP NO. 10										0.2		8		1,030	1,030					1,030	1,030											
2023CPT.08.07.10761	Randolph	11	US 421 EXIT 181 NB ON RAMP	FROM NC 49 TO US 421	2	2		0.42	24	32					2,218	2,218					2,218	2,218										
TOTAL FOR MAP NO. 11										0.42		32		2,218	2,218					2,218	2,218											
2023CPT.08.07.10761	Randolph	12	US 421 EXIT 183 NB OFF RAMP	(FROM: US421 TO: SR 2261 OLD LIBERTY RD.)	2	2		0.29	25	8					1,532	1,532		25		1	1,532	1,532		25		1			14			
TOTAL FOR MAP NO. 12										0.29		8		1,532	1,532		25		1	1,532	1,532		25		1			14				
2023CPT.08.07.10761	Randolph	13	US 421 EXIT 183 NB ON RAMP	(FROM:SR2261 OLD LIBERTY RD. TO: US-421)	2	2		0.54	25	32					2,852	2,852					2,852	2,852										
TOTAL FOR MAP NO. 13										0.54		32		2,852	2,852					2,852	2,852											
TOTAL FOR PROJ NO. 2023CPT.08.07.10761										8.66		809	*	68	82,618	46,635	1,275	25		3	1	83,778	47,563	2,003	25	3	1			1,080	360	407
														129,253						4		131,341			4							
GRAND TOTAL									25.89		1,699	1.0000	213	195,211	137,596	5,520	127		12	3	196,371	138,524	6,248	127	12	3	1,080	360	1,726			
														332,807						15		334,895			15							

DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



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

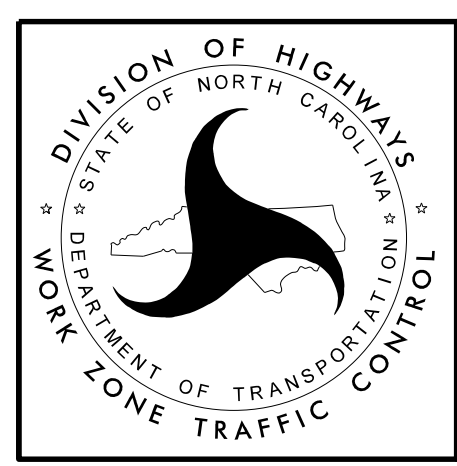


NOTES:

- 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**

3/23/2015 C:\Users\rmgarrrett\Downloads\Resurfacing_AdvWarn_HSpd.dgn User:rmgarrrett