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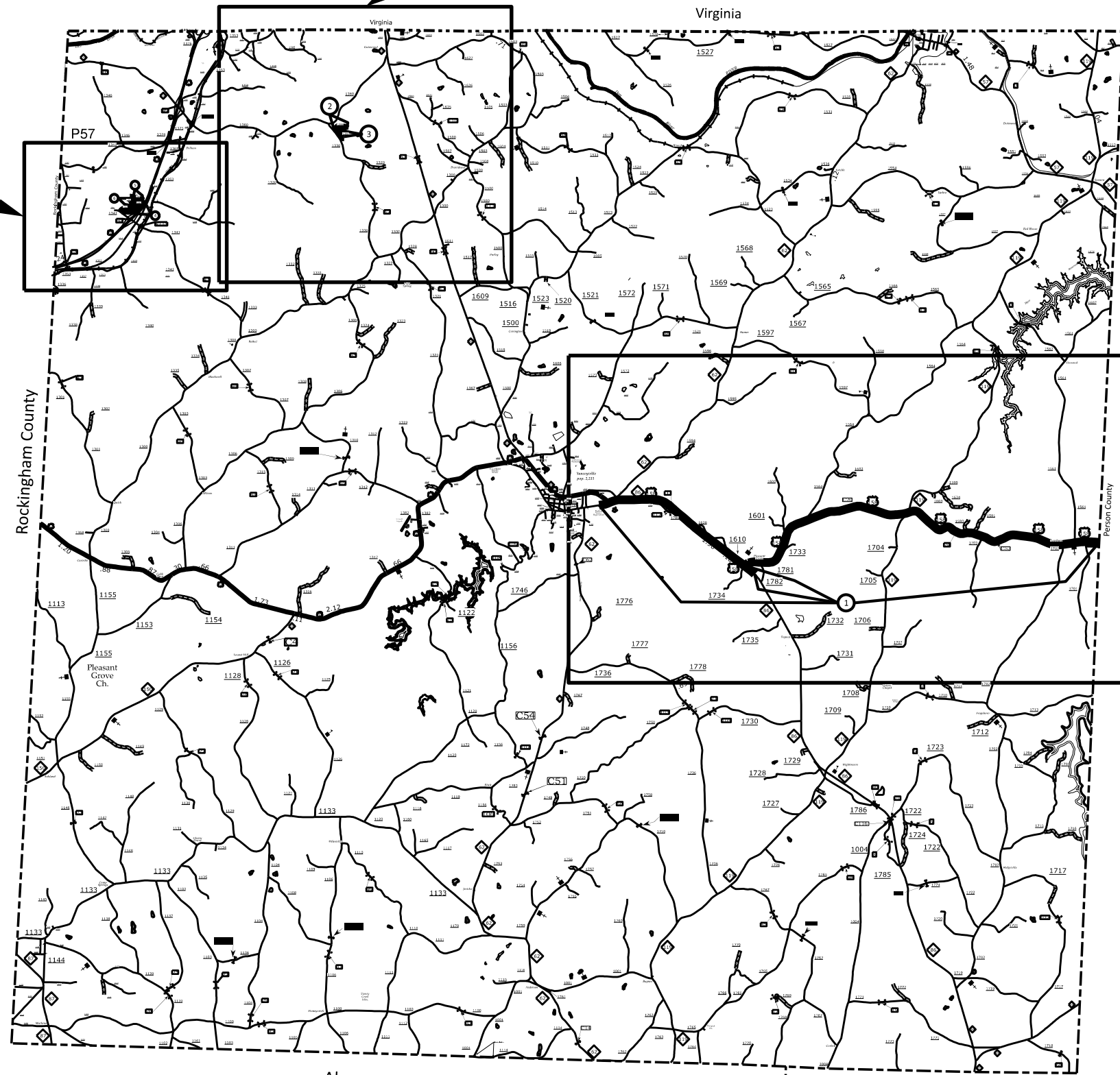
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PROJECT REFERENCE NO.	SHEET NO.
2024CPT.07.10.10171, 2024CPT.07.10.20171	1

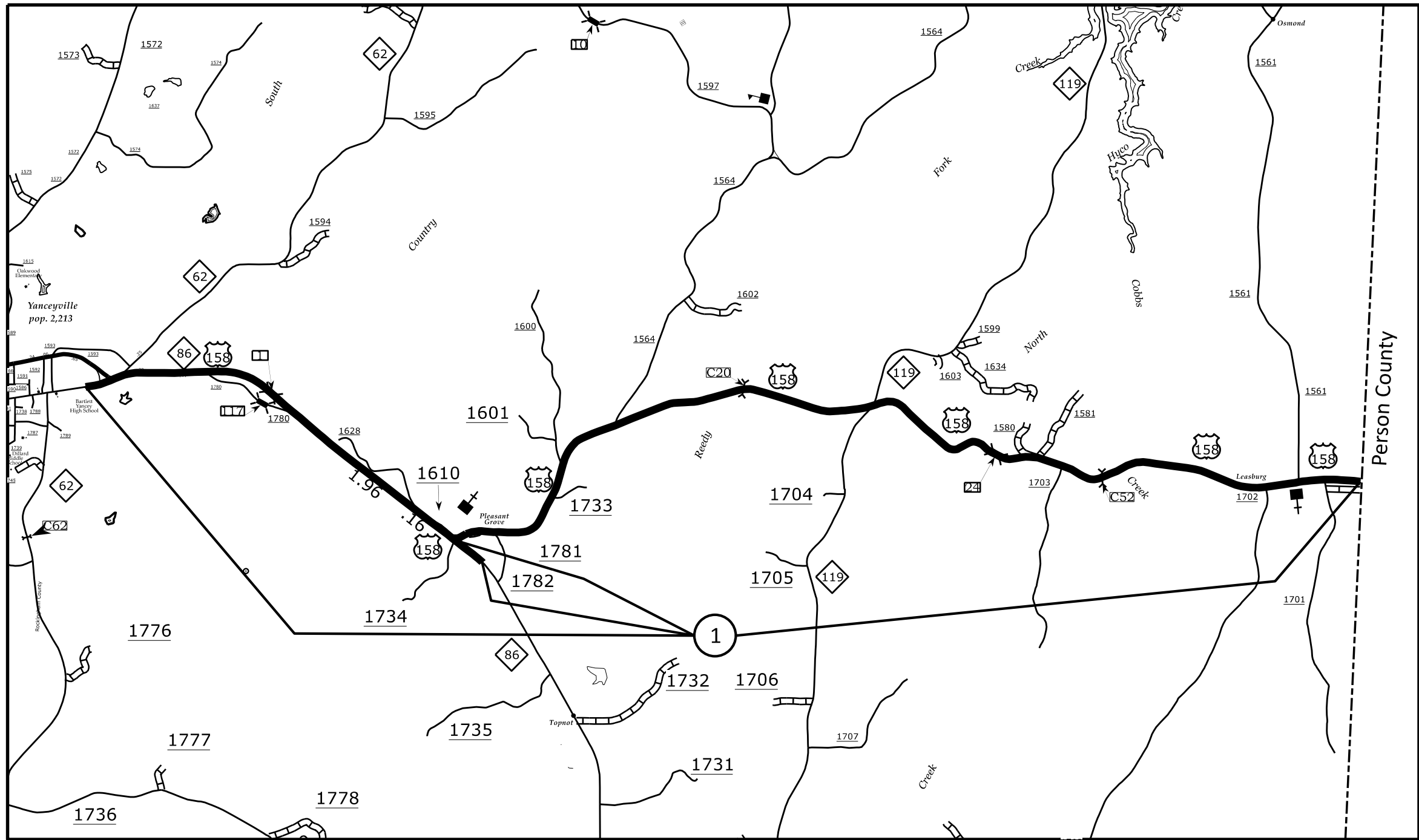
Sheet 4

Sheet 3

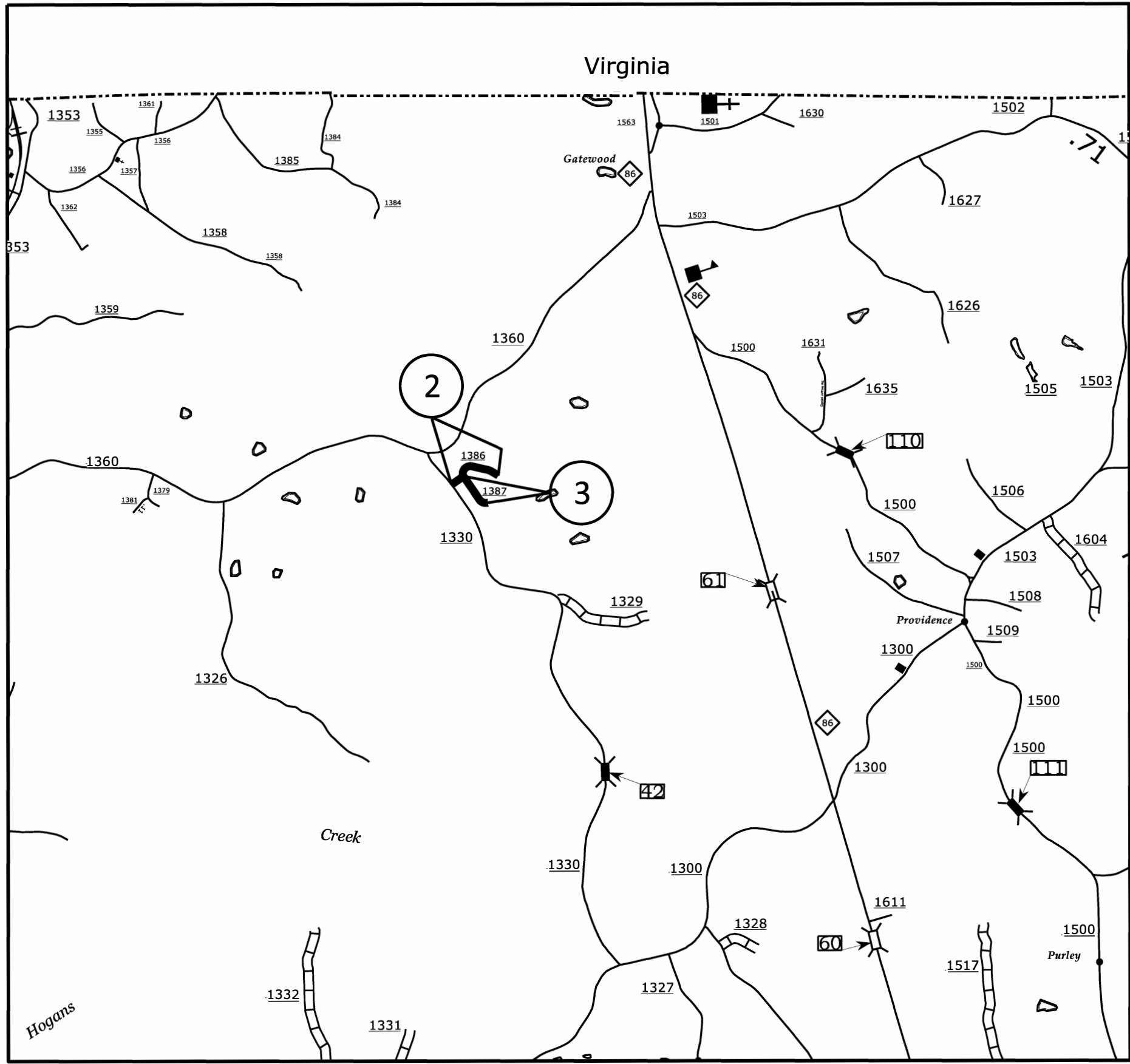
Sheet 2



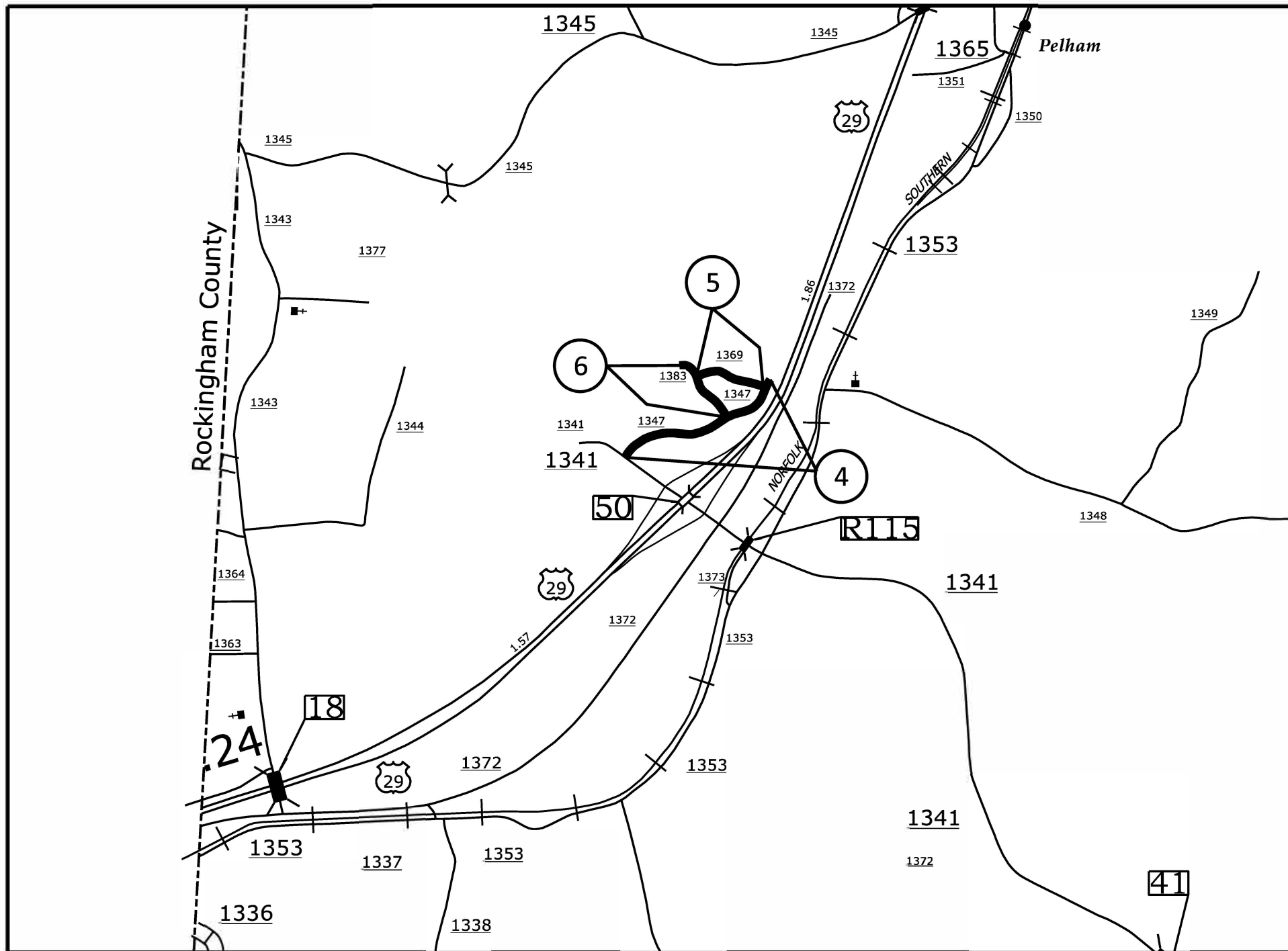
CASWELL COUNTY
NORTH CAROLINA



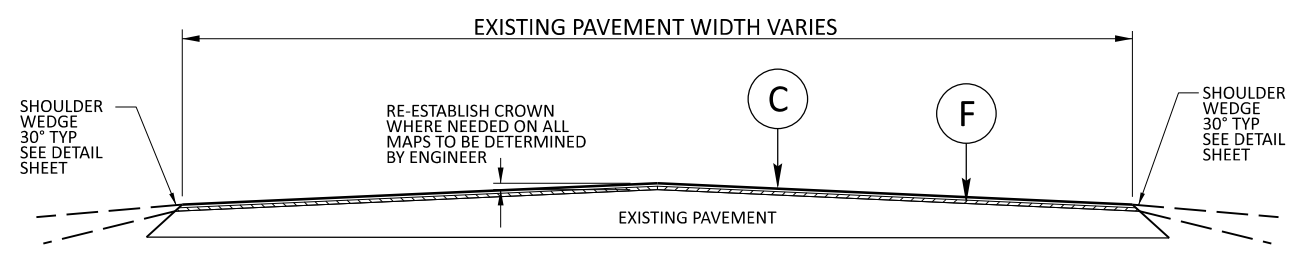
Map 1 US 158
- From concrete joint east of Bartlett Yancey High School to Person County Line
- Tie to joint 1000' North of SR 1782 Tiptoe Rd



Map 2 SR 1386 - Shady Pond Rd
 Map 3 SR 1387 - Lakeside Ln

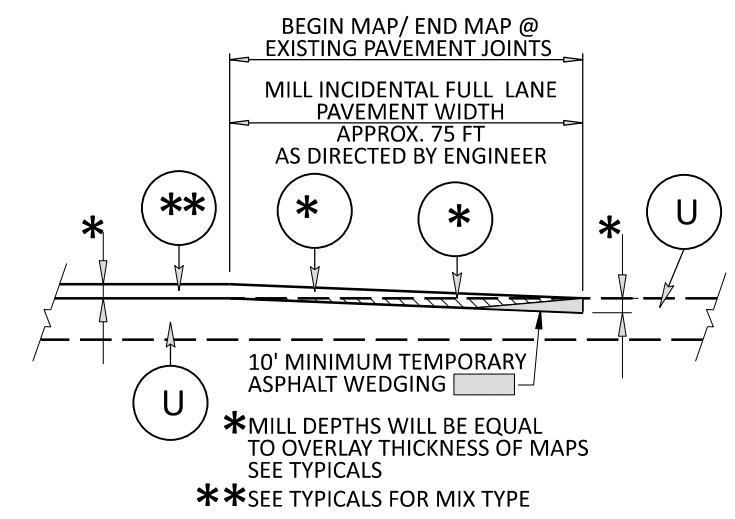


- Map 4 SR 1347 - Jeffries Rd
- Map 5 SR 1369 - Mount View Dr
- Map 6 SR 1383 - Lakeview Dr

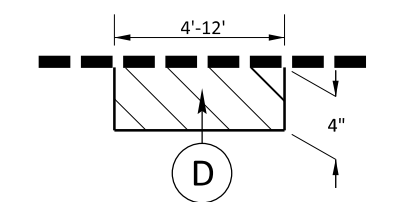


TYPICAL SECTION NO. 1

Map 1 US 158
0+00 to 41+50
190+25 to 602+00
Skip Bridge #024

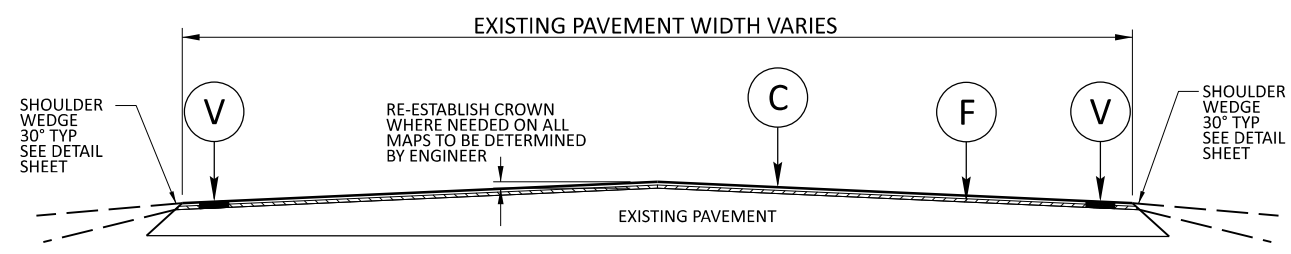


INCIDENTAL MILLING AT TIE-IN DETAIL



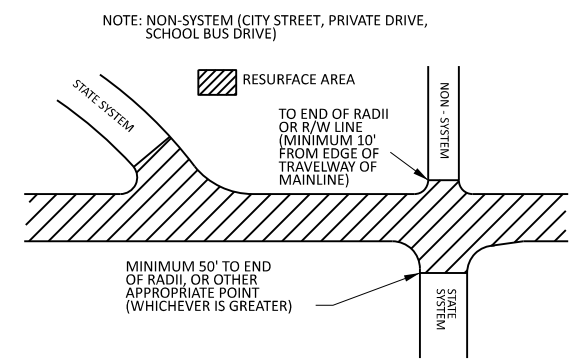
MILL FILL WITH INTERMEDIATE COURSE, TYPE I19.0C AT LOCATIONS AS DIRECTED BY THE ENGINEER.

PATCHING EXISTING PAVEMENT DETAIL

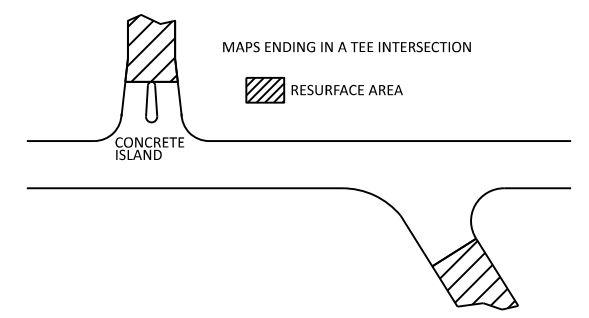


TYPICAL SECTION NO. 2

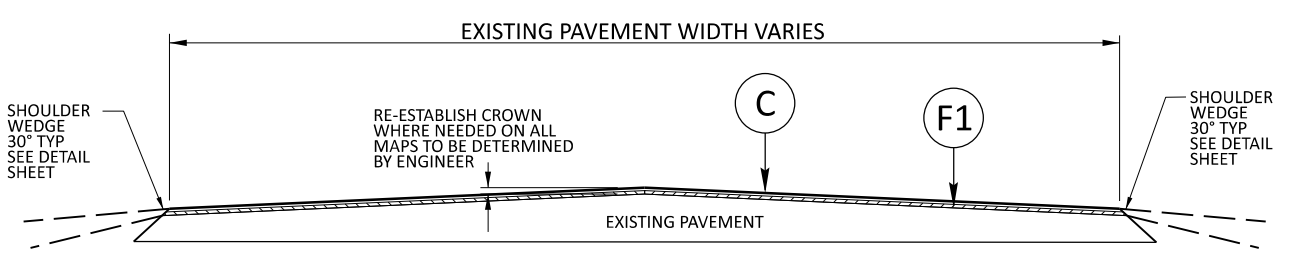
Map 1 US 158
41+50 to 190+25
Skip Bridge #001



**PAVING DETAIL 1
MAIN LINE IS BEING RESURFACED**



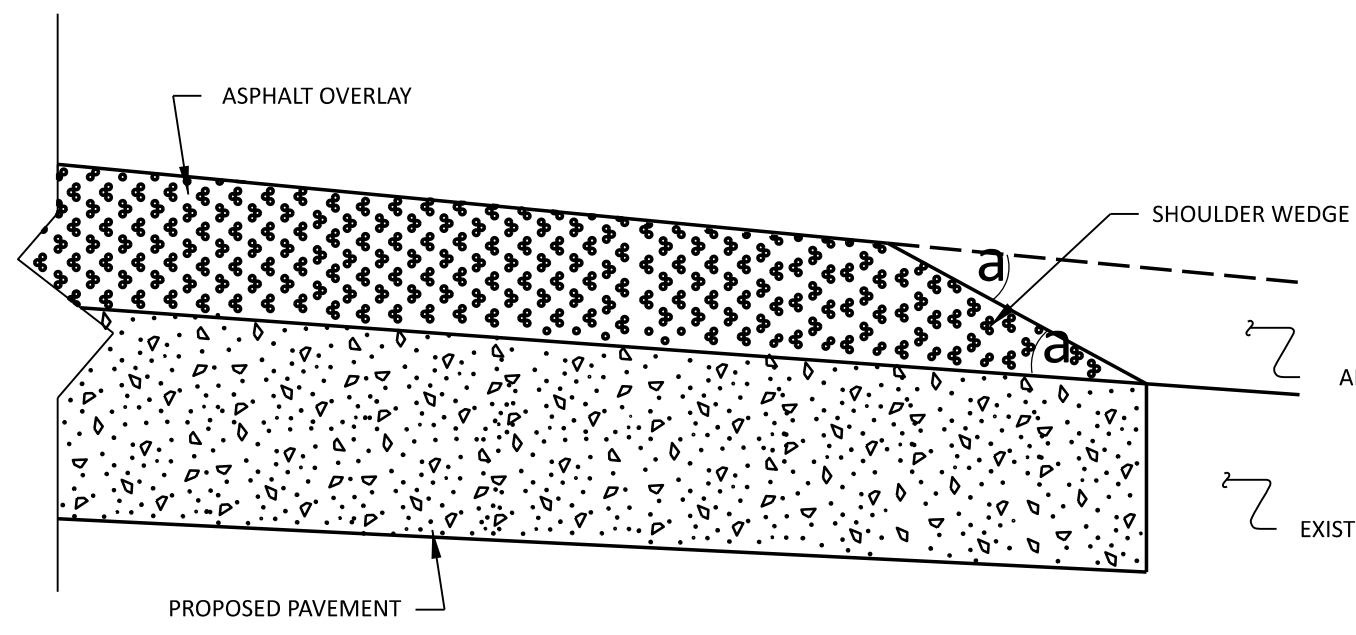
**PAVING DETAIL 2
MAIN LINE NOT BEING RESURFACED**



TYPICAL SECTION NO. 3

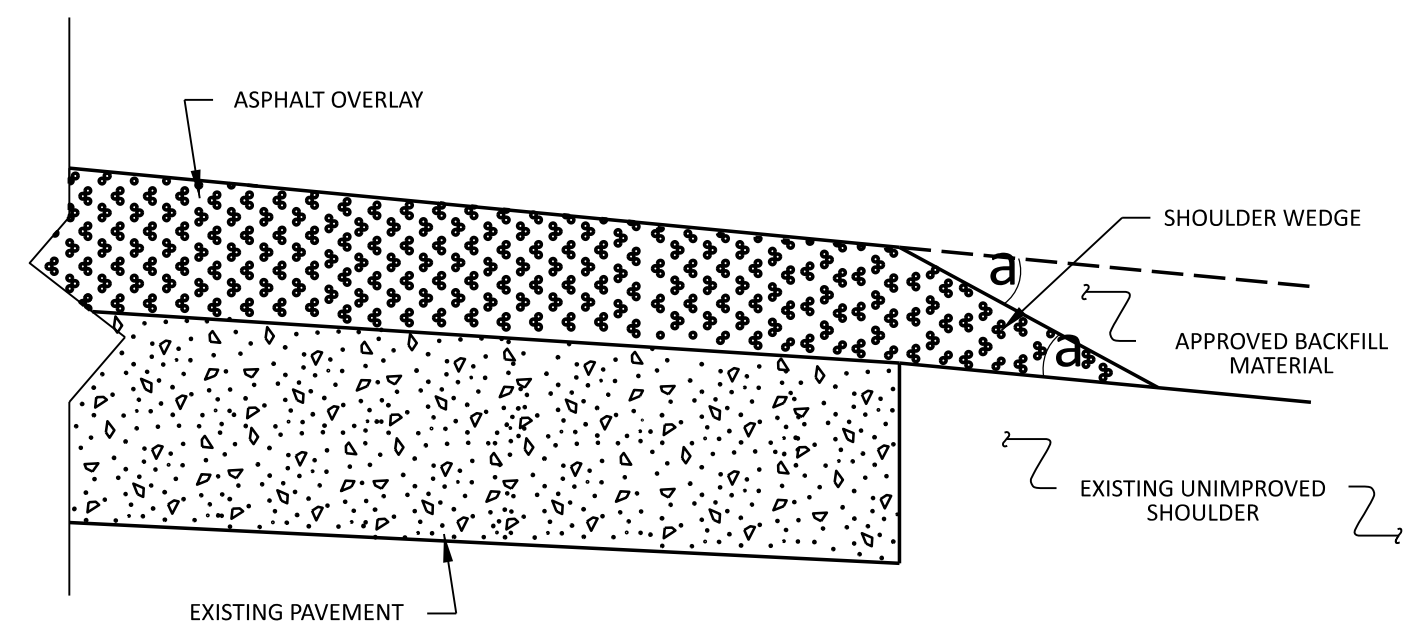
Map 2 SR 1386 - Shady Pond Rd
Map 3 SR 1387 - Lakeside Ln
Map 4 SR 1347 - Jeffries Rd
Map 5 SR 1369 - Mount View Dr
Map 6 SR 1383 - Lakeview Dr

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, TO BE APPLIED AT AN AVERAGE RATE OF 165 LBS PER SQ. YD.
D	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
F	AST MAT COAT, #67
F1	AST MAT COAT, #78M
U	EXISTING PAVEMENT
V	MILLED RUMBLE STRIPS

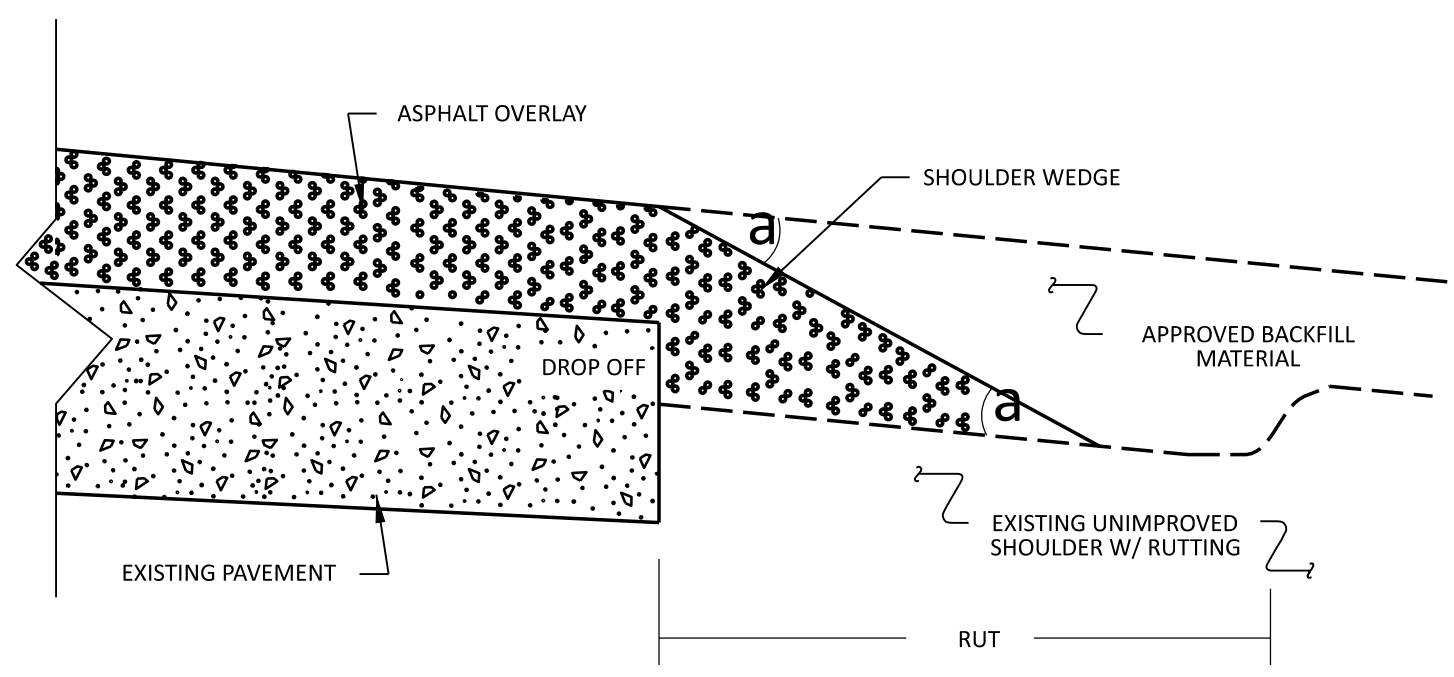


NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFK AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS DIRECTED BY THE ENGINEER.

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

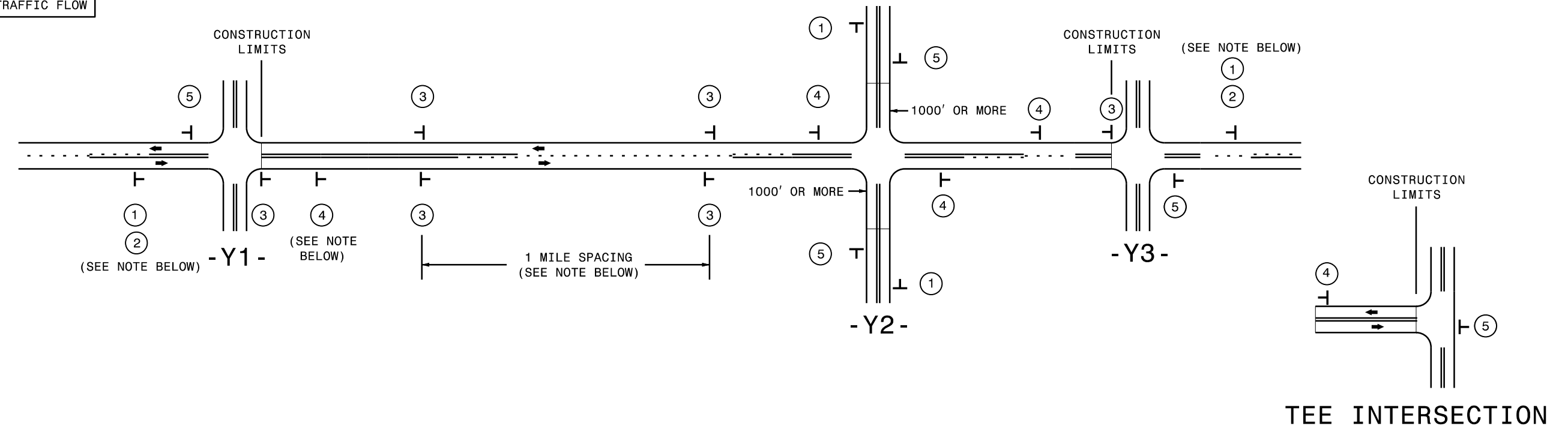
ORIGINAL BY: T.SPELL DATE: 7-19-11
 MODIFIED BY: DATE: 10/16/12
 CHECKED BY: DATE:
 FILE SPEC.: susr/details/stand/shoulderwedgedetail.dgn

SIGNING FOR RESURFACING PROJECTS

LEGEND

└ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

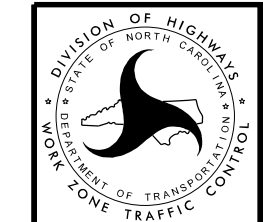
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	①		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"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING 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;"> PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	②		#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	③		<ul style="list-style-type: none"> PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. 	
	④		<ul style="list-style-type: none"> 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. FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE. 	
⑤		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.		

THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

MAPS LESS THAN 2 MILES

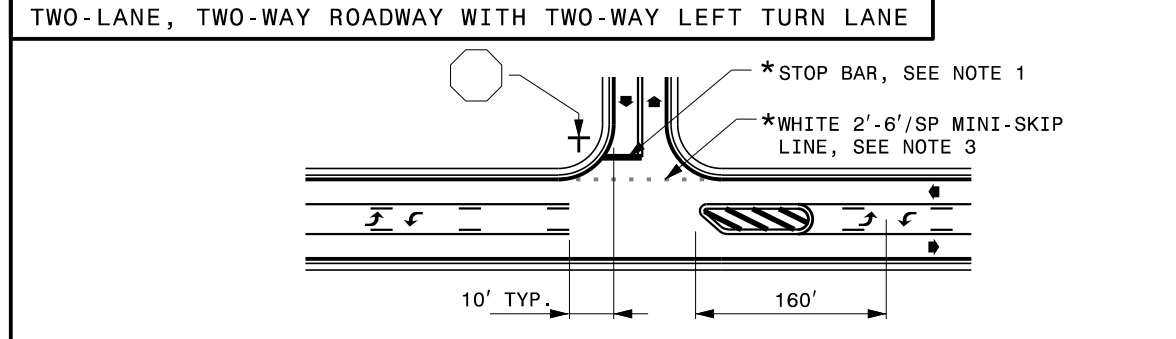
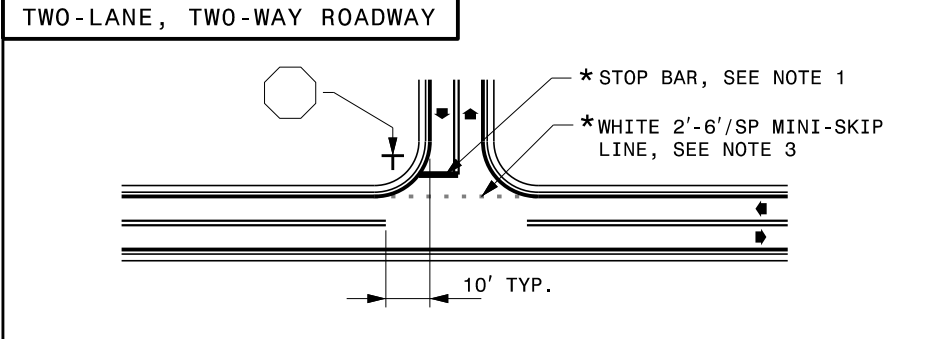
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

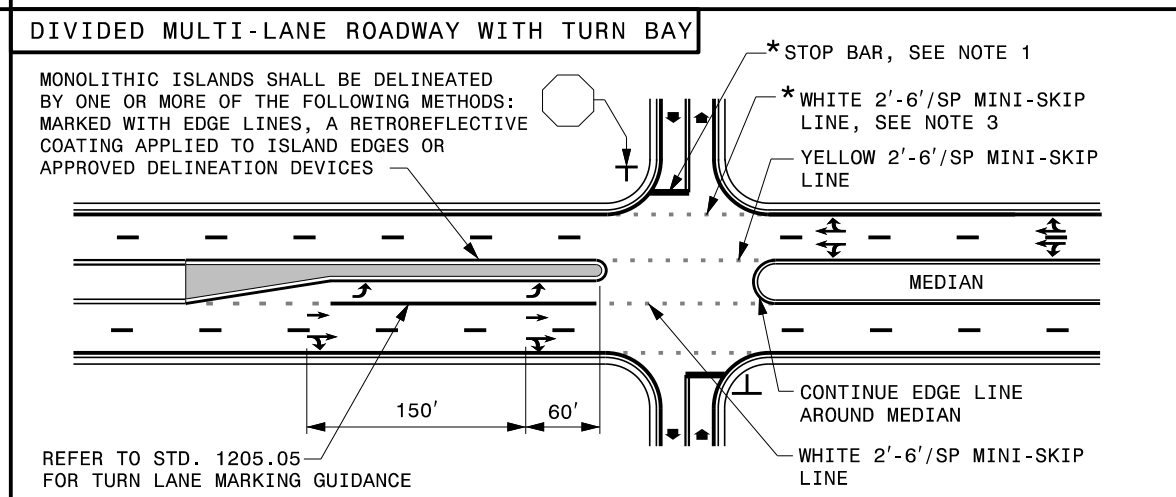
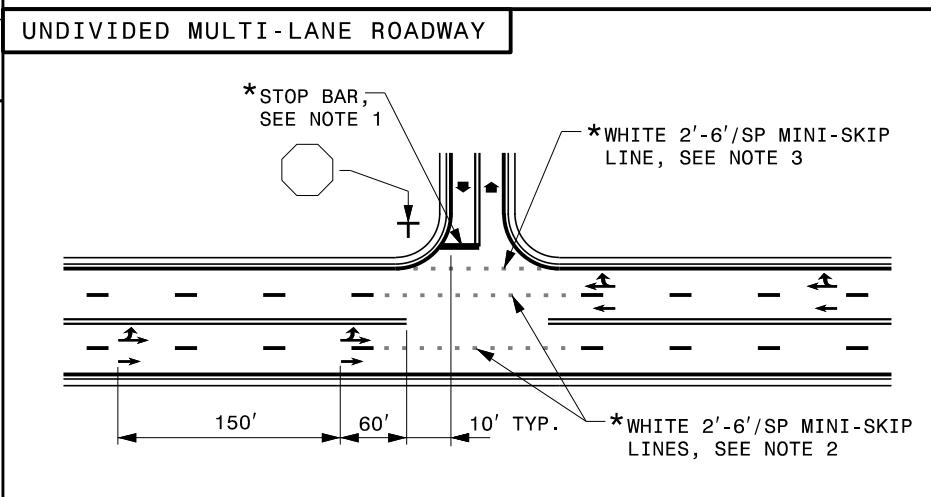
TIP NO. SHEET NO.
 DocuSigned by:
 APPROVED: *Matthew V. Springer*
 DATE: 8/13/2019
 SEAL

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

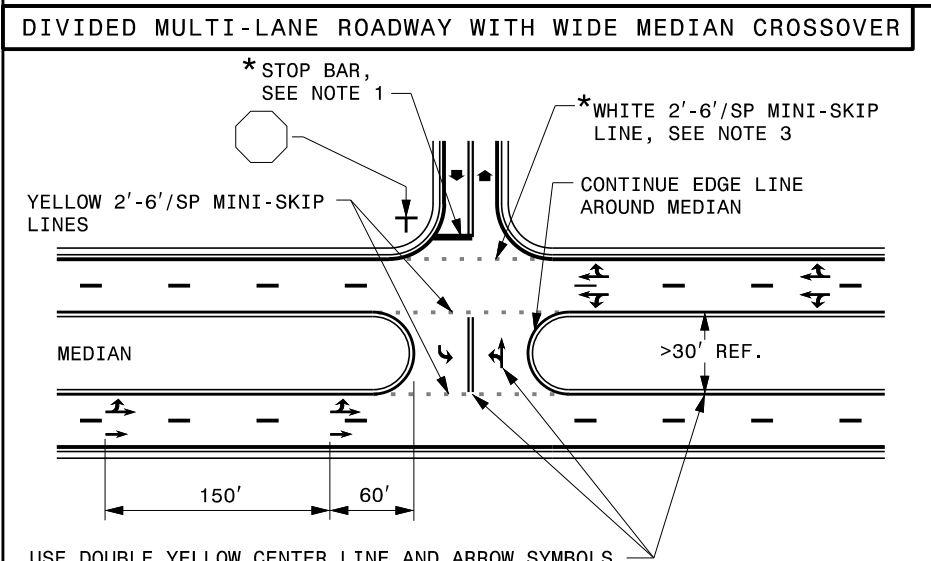


STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

8-19
 ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
 INTERSECTIONS



8-19
 ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
 INTERSECTIONS



GENERAL NOTES:

- 1- PLACEMENT OF STOP BARS AT NON-SIGNALIZED INTERSECTIONS IS OPTIONAL AND USED WHERE IT IS IMPORTANT TO INDICATE THE POINT WHICH VEHICLES ARE REQUIRED TO STOP. PLACE STOP BARS NO LESS THAN 4 FEET AND NO MORE THAN 30 FEET FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY. USE 10 FEET AS THE TYPICAL SETBACK DISTANCE OR AS DIRECTED BY THE ENGINEER.
- 2- MINI-SKIP LANE LINE EXTENSIONS SHOULD BE USED AT INTERSECTIONS THAT HAVE REDUCED VISIBILITY CONDITIONS SUCH AS OFFSET, SKEWED, OR CURVED ROADWAYS.
- 3- MINI-SKIP EDGE LINE EXTENSIONS MAY BE PLACED THROUGH INTERSECTIONS AND MAJOR DRIVEWAYS.
- 4- REFER TO ROADWAY STANDARD DRAWINGS 1205.01, 1205.02, 1205.05, 1205.08 AND 1205.09 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.

LEGEND

	STOP SIGN		STATIONARY SIGN
	DIRECTION OF TRAFFIC FLOW		PAVEMENT MARKING SYMBOLS
*	OPTIONAL		

SHEET 2 OF 2
1205D04

SHEET 2 OF 2
1205D04

REVISED PAVEMENT MARKING ROADWAY STANDARD DRAWING

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
DEEP-CUT INDUCTIVE DETECTION LOOPS
(FOR INSTALLATION PRIOR TO MILLING)

NOTES

- OVERLAP SAW CUTS AT CORNERS AND INTERSECTION POINTS TO ENSURE UNIFORM SAW SLOT DEPTH.
- MAINTAIN 12" SPACING BETWEEN LOOP WIRE TAIL SECTIONS.
- WIRE LOOPS CONNECTED TO THE SAME DETECTOR IN SERIES.
- LOCATE LOOPS IN CENTER OF LANES UNLESS OTHERWISE SHOWN ON PLANS.
- USE A SERIES OF ONE INCH PIECES OF BACKER ROD SPACED ONE FOOT APART ALONG THE ENTIRE LENGTH OF THE FEEDER SLOT AND LOOP SAW SLOT.
- CONSULT LOOP SEALANT MANUFACTURER TO DETERMINE CURING TIME REQUIRED PRIOR TO MILLING.
- REFER TO STANDARD DRAWING 1725.01 SHEETS 2 AND 3 FOR ADDITIONAL REQUIREMENTS.

SAW SLOT DEPTH CHART

ASSUMING 2" MILLING DEPTH

DEPTH (IN)	MAX NO. OF WIRE LAYERS				
	2	3	4	5	6
SAW SLOT DEPTH	4.0	4.5	5.0	5.0	5.0
MINIMUM TOTAL ASPHALT DEPTH REQUIRED	5.0	5.5	6.0	6.0	6.0

LOOP WIRE TWISTING METHOD

INCORRECT WAY TO TWIST WIRE

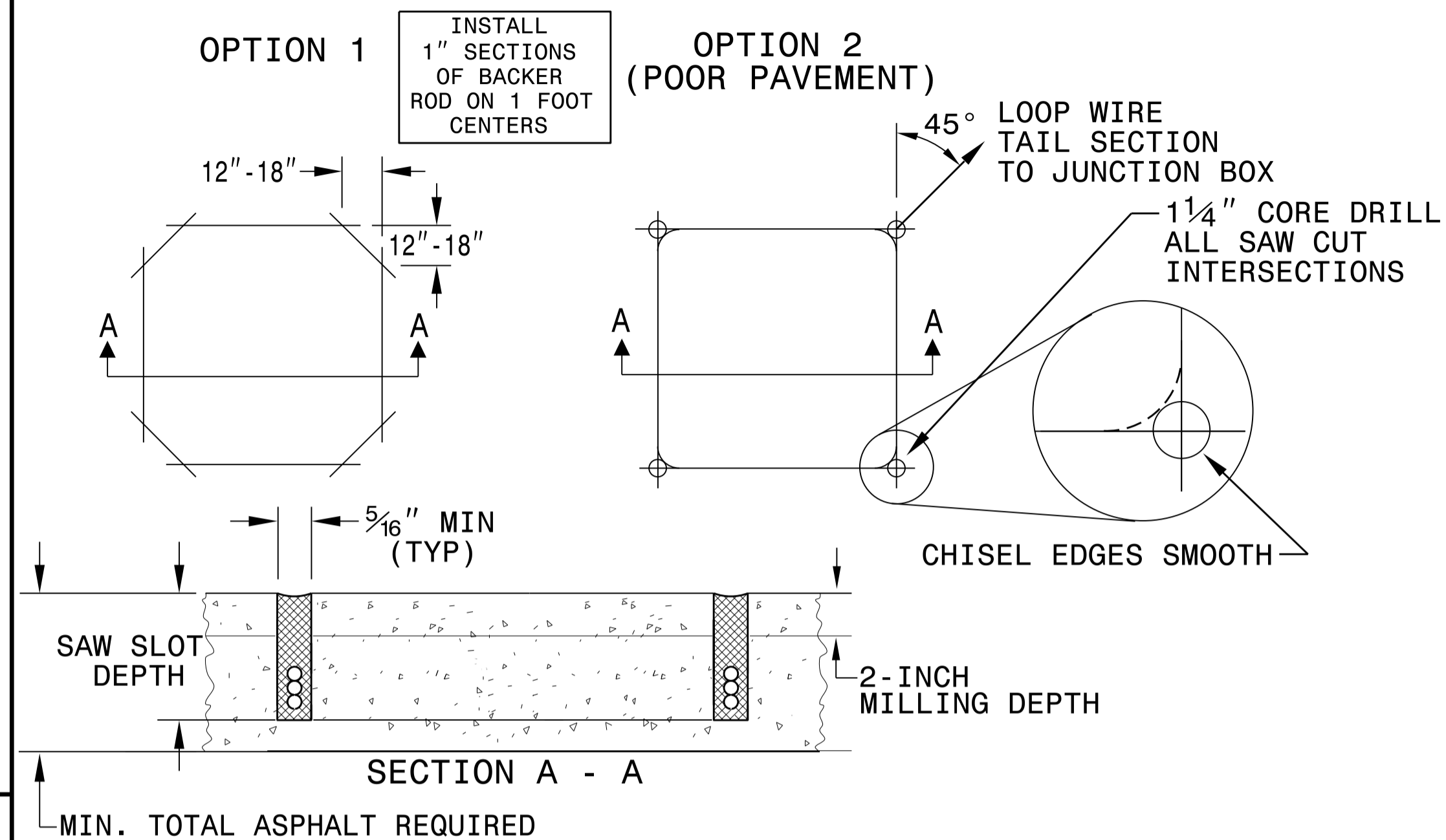


CORRECT WAY TO TWIST WIRE

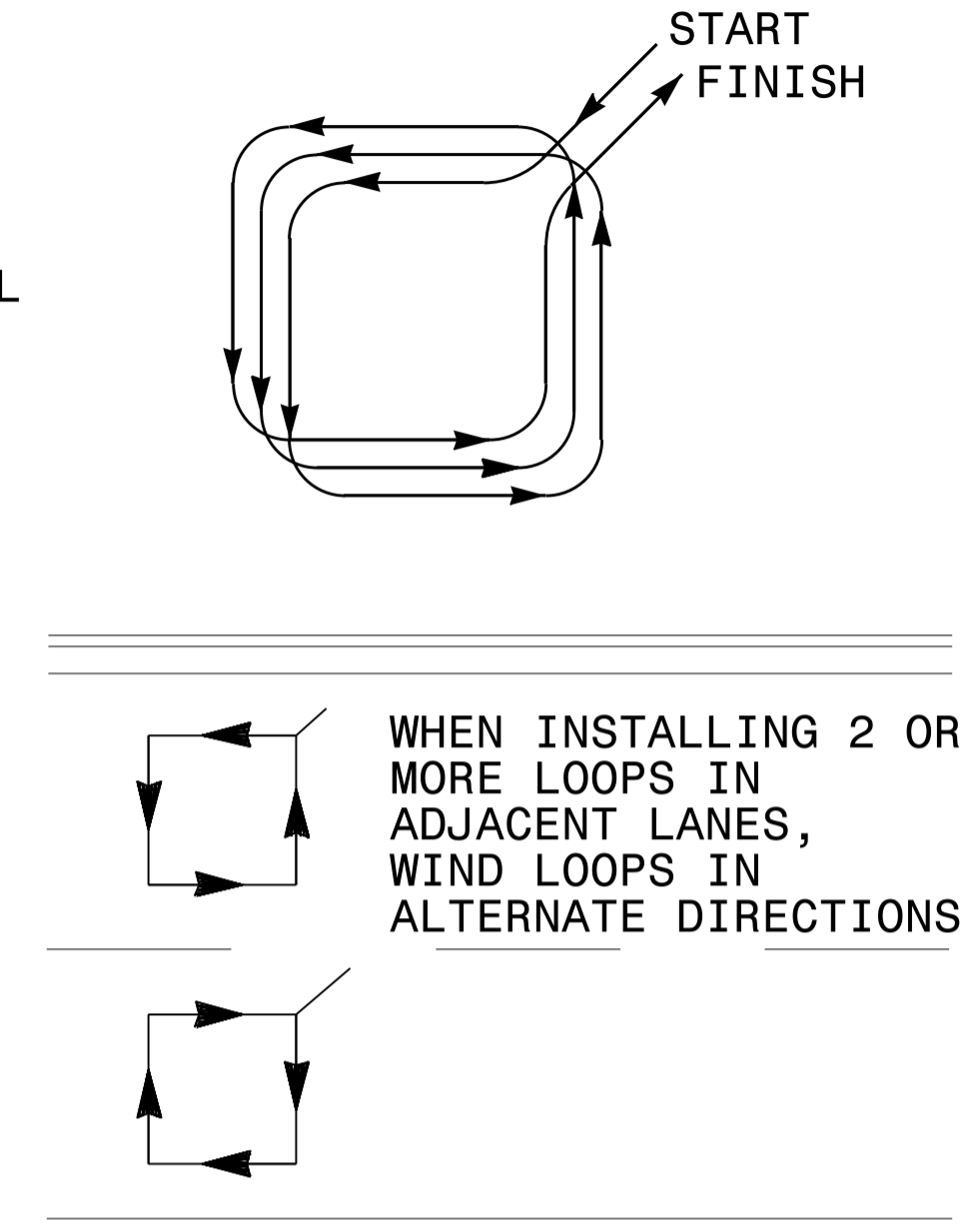


CONVENTIONAL 4-SIDED LOOP

SAW CUT OPTIONS

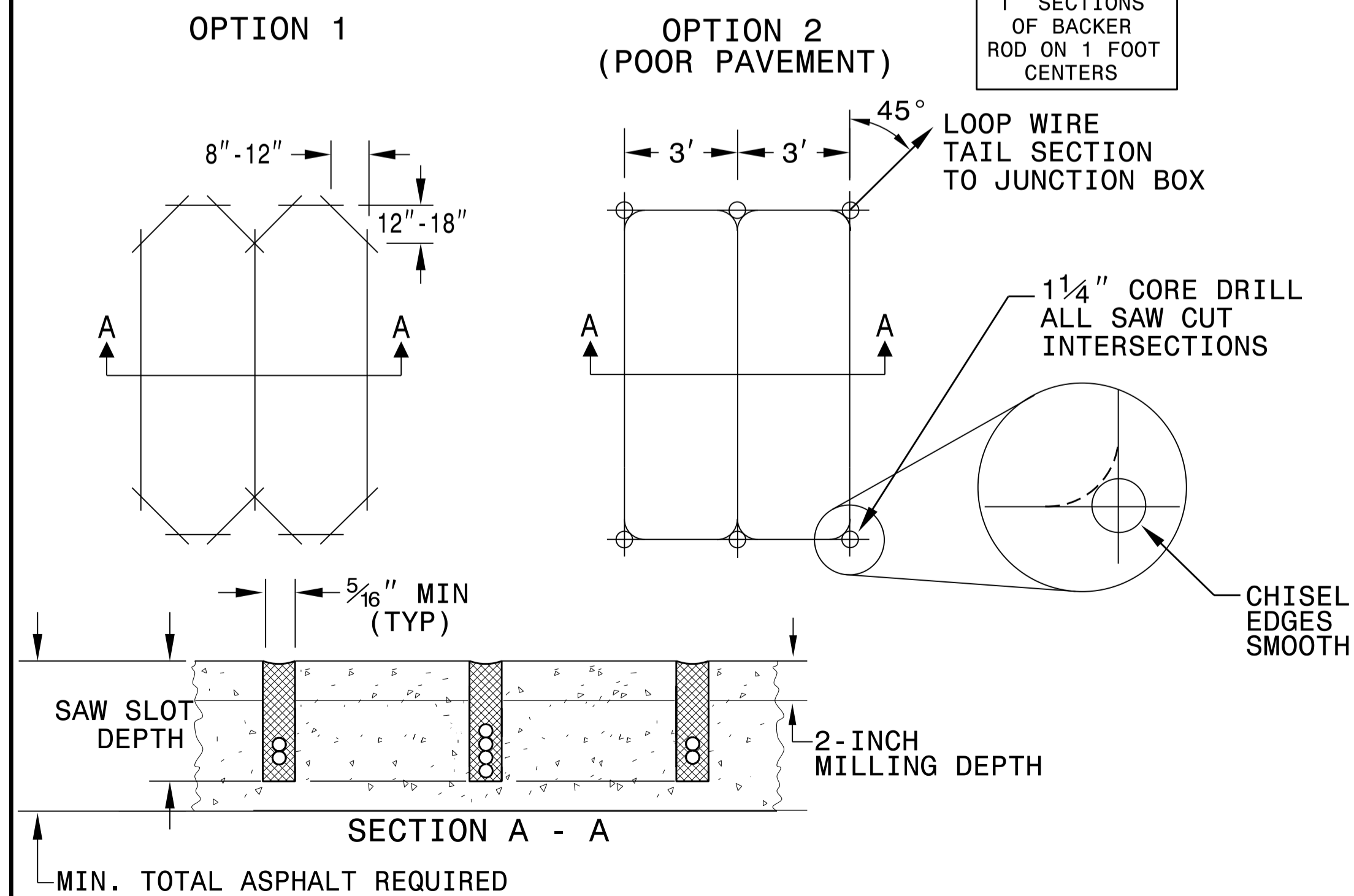


LOOP WINDING METHOD

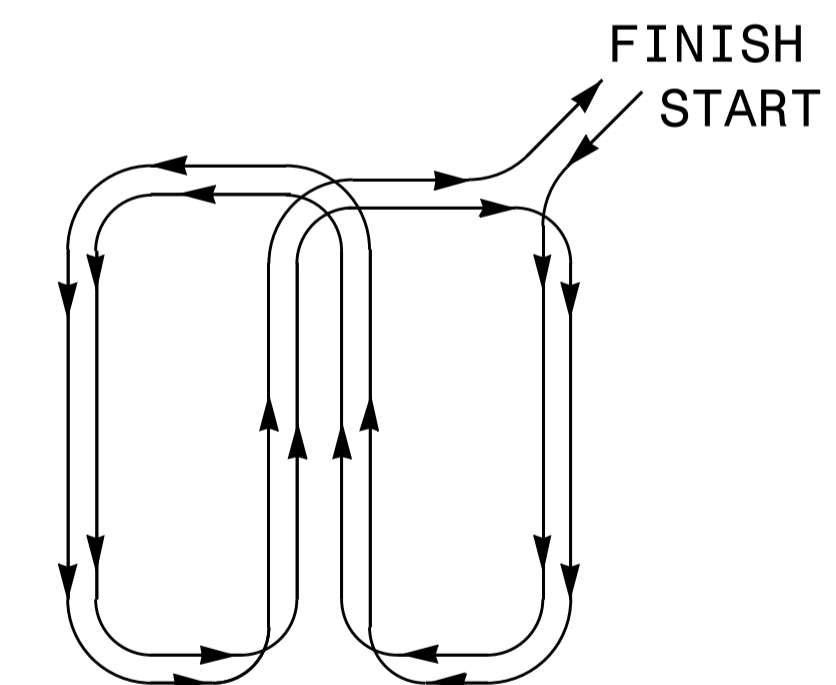


QUADRUPOLE LOOP

SAW CUT OPTIONS

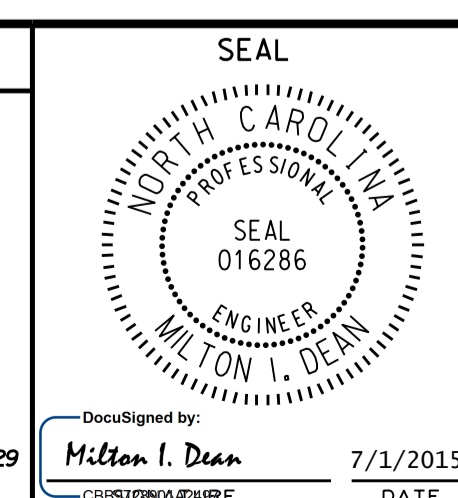
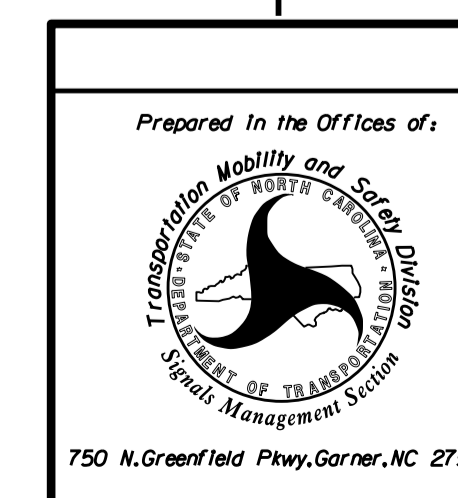


LOOP WINDING METHOD



REVISIONS

1. REMOVED TWISTING NOTES FROM TAIL SECT. TO JUNCTION BOX. 2/26/08 MWH
2. REVISED SECTION A - A DETAILS. 6/29/15 JTP



DocuSigned by:
Milton I. Dean
7/1/2015
DATE

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
DEEP-CUT INDUCTIVE DETECTION LOOPS
(FOR INSTALLATION PRIOR TO MILLING)

PROJECT REFERENCE NO
2024CPT.07.10.10171
2024CPT.07.10.20171

SHEET NO
9 OF 10

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.07.10.10171, 2024CPT.07.10.20171	10	10

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1245000000-E	1260000000-E	1330000000-E	1519000000-E	1575000000-E	1704000000-E	1775000000-E	1775000000-E	1838000000-E	1840000000-E	7990000000-E		
											INCIDENTAL STONE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ASPHALT SURFACE TREATMENT, MAT COAT, #78M STONE	ASPHALT SURFACE TREATMENT, MAT COAT, #67 STONE	EMULSION FOR ASPHALT SURFACE TREATMENT	MILLED RUMBLE STRIPS	INDUCTIVE LOOP SAW CUT (DEEP CUT)		
							MI	FT				TONS	SMI	TON	SY	TONS	TON	TON	SY	SY	GAL	LF	LF	
2024CPT.07.10.10171	Caswell	1	US-158 E /NC 86 HWY S	FROM CONCRETE JOINT EAST OF BARTLETT YANCEY HIGH SCHOOL TO PERSON CO LINE	1,2	2	11.08	24	14.04	25.12	450	1.00	100	1,467	17,760	1,156	26		183,815	69,850	28,000	400		
TOTAL FOR MAP NO. 1							11.08					450	1.00	100	1,467	17,760	1,156	26		183,815	69,850	28,000	400	
TOTAL FOR PROJ NO. 2024CPT.07.10.10171							11.08		14.04	25.12		450	1.00	100	1,467	17,760	1,156	26		183,815	69,850	28,000	400	
2024CPT.07.10.20171	Caswell	2	SR-1386 / SHADY POND RD	FROM SR 1330 TO CUL-DE-SAC	3	2	0.36	22	0	0.36				213	453	32	60	4,717		1,557				
TOTAL FOR MAP NO. 2							0.36							213	453	32	60	4,717		1,557				
2024CPT.07.10.20171	Caswell	3	SR-1387 / LAKESIDE LN	FROM SR 1386 TO CUL-DE-SAC	3	2	0.28	22	0	0.28				320	320	22	15	3,508		1,157				
TOTAL FOR MAP NO. 3							0.28							320	320	22	15	3,508		1,157				
2024CPT.07.10.20171	Caswell	4	SR-1347 / JEFFRIES RD	FROM SR 1341 TO CUL-DE-SAC	3	2	0.55	21	0	0.55	36			238	712	46		7,390		2,439				
TOTAL FOR MAP NO. 4							0.55					36		238	712	46		7,390		2,439				
2024CPT.07.10.20171	Caswell	5	SR-1369 / MOUNT VIEW DR	FROM SR 1347 TO END MAINT	3	2	0.23	20	0	0.23	18				234	15		2,567		847				
TOTAL FOR MAP NO. 5							0.23					18			234	15		2,567		847				
2024CPT.07.10.20171	Caswell	6	SR-1383 / LAKE VIEW DR	FROM SR 1347 TO DEAD END	3	2	0.23	20	0	0.23	9				272	18		2,847		939				
TOTAL FOR MAP NO. 6							0.23					9			272	18		2,847		939				
TOTAL FOR PROJ NO. 2024CPT.07.10.20171							1.65		0	1.65		63			451	1,991	133	75	21,029		6,939			
GRAND TOTAL							12.73		14.04	26.77		513	1.00	100	1,918	19,751	1,289	101	21,029		183,815	76,789	28,000	400

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4457000000-N	4688000000-E		4700000000-E	4709000000-E	4720000000-E		4725000000-E				4890000000-E			4905100000-N				
											WORK ZONE ADVANCE/ GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	12" X 90 M YELLOW THERMO	24" X 90 M WHITE THERMO	THERMO MSG AHEAD 90 M	THERMO MSG SIGNAL 90 M	THERMO LT & RT ARROW 90 M	THERMO LT ARROW 90 M	THERMO STR ARROW 90 M	THERMO RT ARROW 90 M	4" 50 MILS HOT SPRAY THERMO (WHITE)	4" 50 MILS HOT SPRAY THERMO (YELLOW)	6" 50 MILS HOT SPRAY THERMO (WHITE)	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKERS YELLOW/YELLOW	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKERS CRYSTAL/RED			
							MI	FT				SF	LS	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA			
2024CPT.07.10.10171	Caswell	1	US-158 E / US 158 HWY E/NC 86 HWY S	FROM CONCRETE JOINT EAST OF BARTLETT YANCEY HIGH SCHOOL TO PERSON CO LINE	1,2	2	11.08	24	14.04	25.12	1,277	1	125,250	106,500	900	250	10	12	1	6	4	2					890	80		
TOTAL FOR MAP NO. 1							11.08					1,277	1	125,250	106,500	900	250	10	12	1	6	4	2					890	80	
TOTAL FOR PROJ NO. 2024CPT.07.10.10171							11.08		14.04	25.12		1,277	1	125,250	106,500	900	250	10	12	1	6	4	2					890	80	
														231,750				22		13							970			
2024CPT.07.10.20171	Caswell	2	SR-1386 / SHADY POND RD	FROM SR 1330 TO CUL-DE-SAC	3	2	0.36	22	0	0.36	39																			
TOTAL FOR MAP NO. 2							0.36					39																		
2024CPT.07.10.20171	Caswell	3	SR-1387 / LAKESIDE LN	FROM SR 1386 TO CUL-DE-SAC	3	2	0.28	22	0	0.28	29																			
TOTAL FOR MAP NO. 3							0.28					29																		
2024CPT.07.10.20171	Caswell	4	SR-1347 / JEFFRIES RD	FROM SR 1341 TO CUL-DE-SAC	3	2	0.55	21	0	0.55	58												5,700	5,200	30					
TOTAL FOR MAP NO. 4							0.55					58													5,700	5,200	30			
2024CPT.07.10.20171	Caswell	5	SR-1369 / MOUNT VIEW DR	FROM SR 1347 TO END MAINT	3	2	0.23	20	0	0.23	24																			
TOTAL FOR MAP NO. 5							0.23					24																		
2024CPT.07.10.20171	Caswell	6	SR-1383 / LAKE VIEW DR	FROM SR 1347 TO DEAD END	3	2	0.23	20	0	0.23	26																			
TOTAL FOR MAP NO. 6							0.23					26																		
TOTAL FOR PROJ NO. 2024CPT.07.10.20171							1.65		0	1.65		176														5,700	5,200	30		
														231,750				22		13				10,900						
GRAND TOTAL							12.73		14.04	26.77		1,453	1	125,250	106,500	900	250	10	12	1	6	4	2	5,700	5,200	30	890	80		
														231,750				22		13			10,900				970			