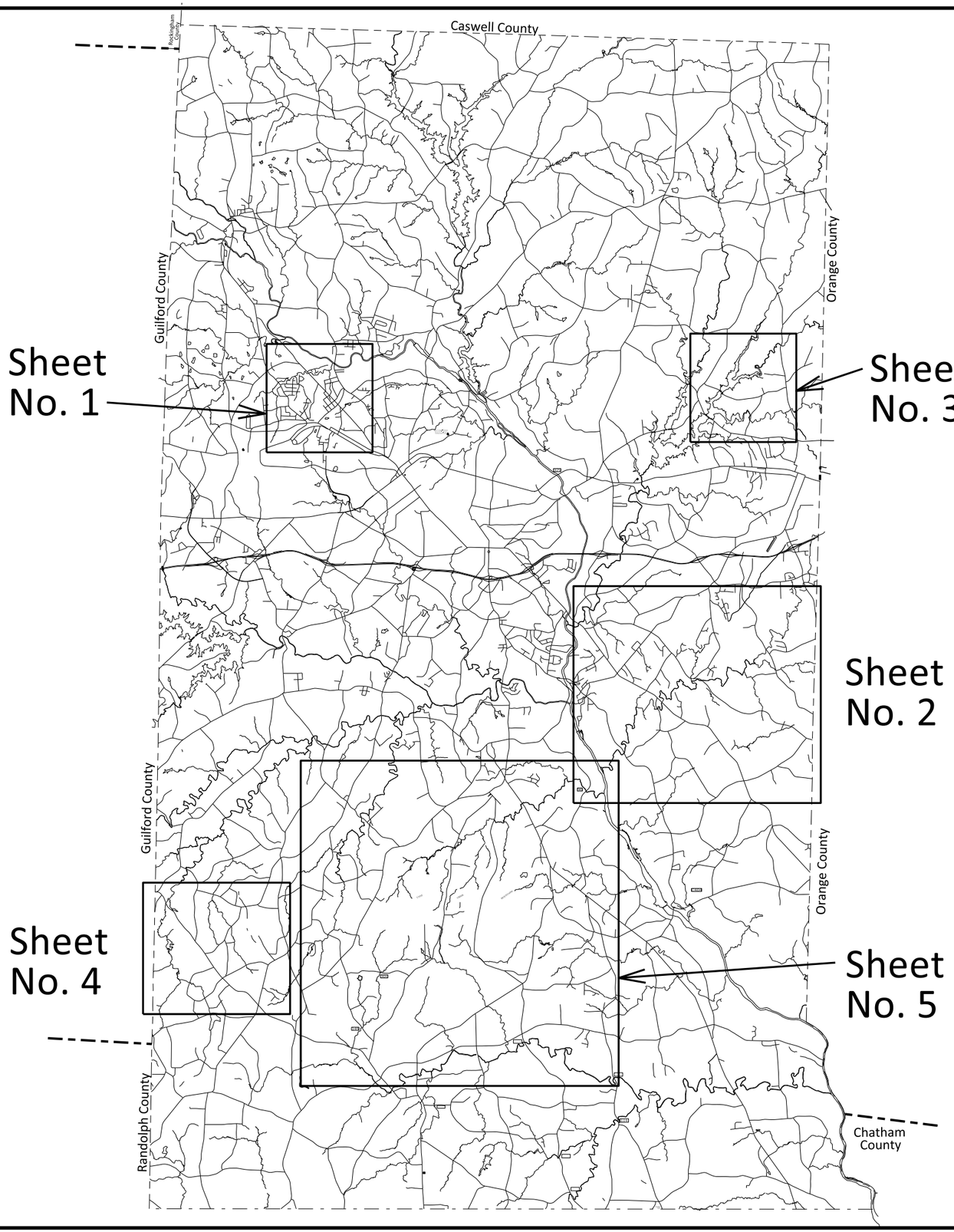
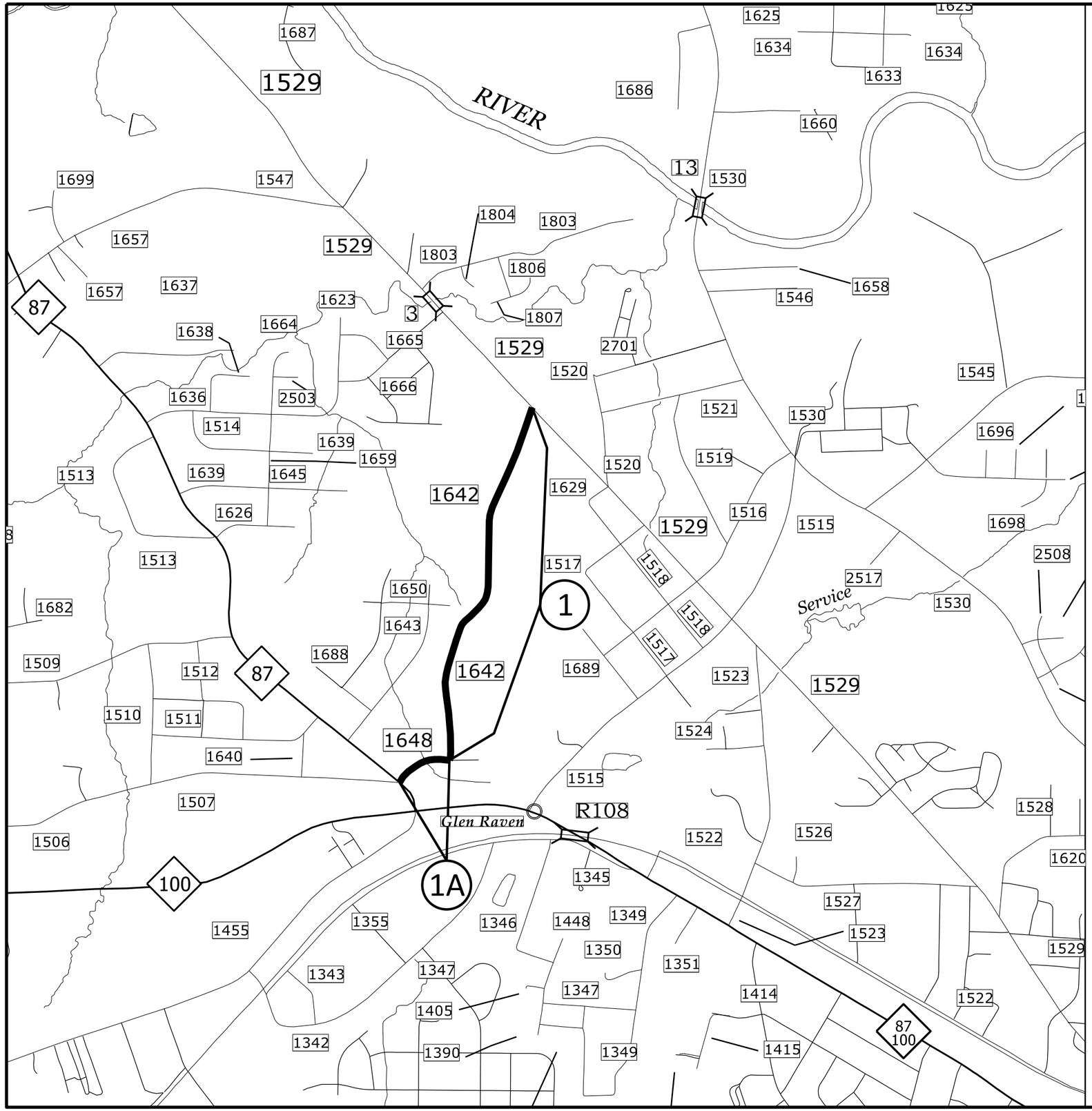
PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	1



ALAMANCE COUNTY

NORTH CAROLINA

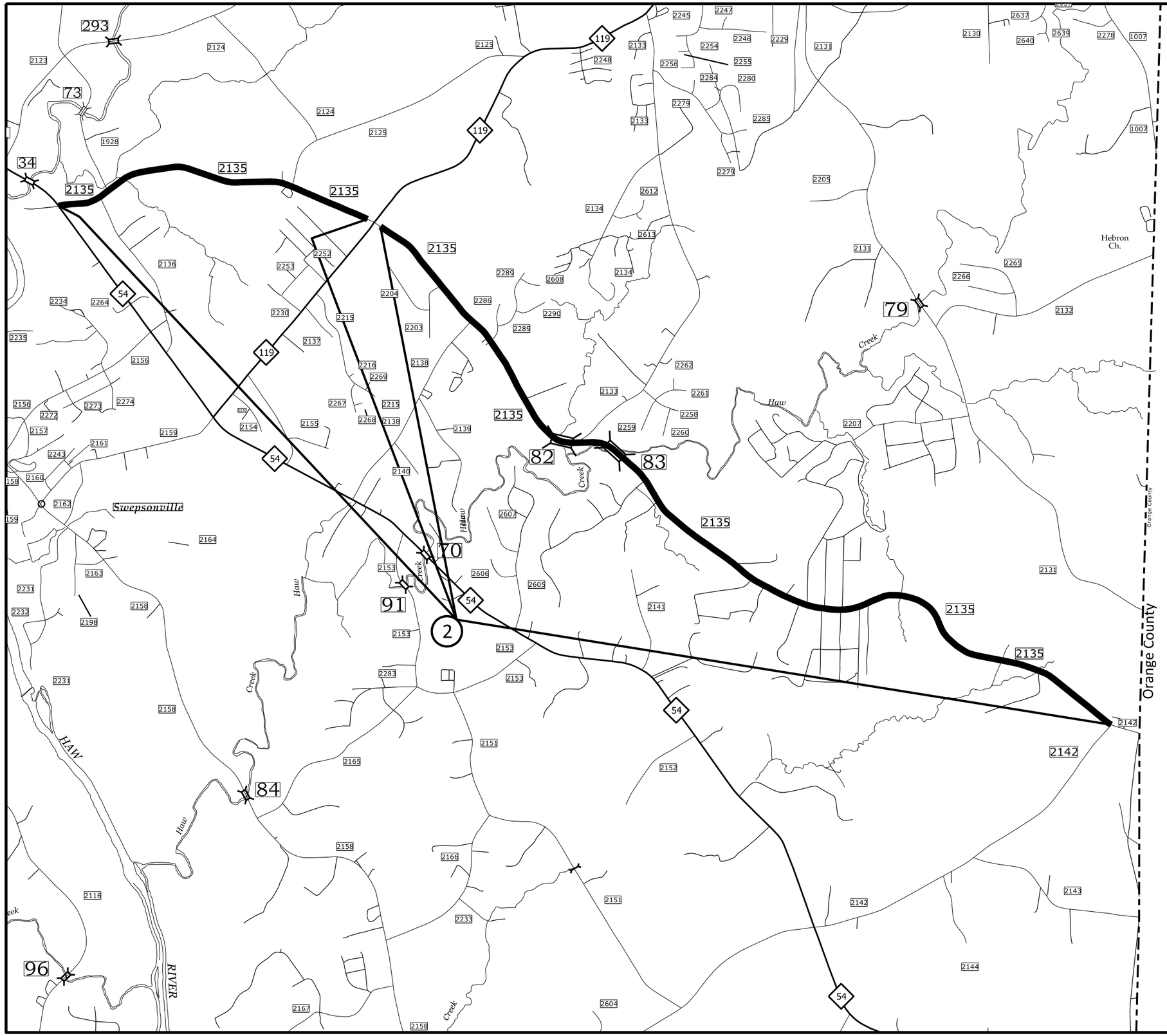
PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	2



Map 1 SR 1642 Macarthur Lane
Map 1A SR 1648 Macarthur Lane

ALAMANCE COUNTY
NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	3



Map 2 SR 2135 S Jim Minor Rd

Incidental Mill to Tie into NC 119

DO NOT PAVETHROUGH NC 119

Incidental Mill at Bridge #82 Bridge Approaches

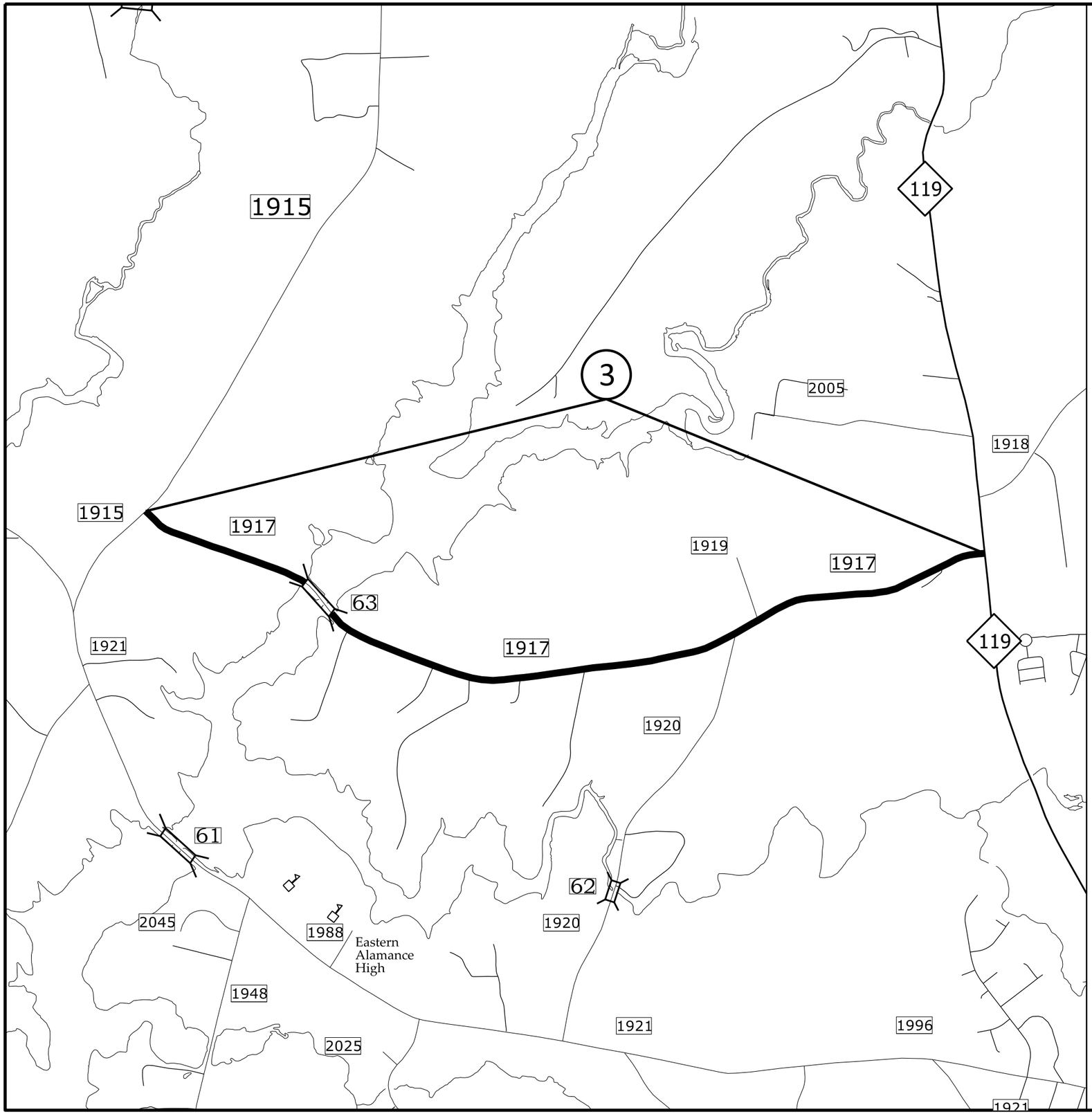
Mill and Fill 1-1/2" on Bridge #82

Resurface Bridge #83

ALAMANCE COUNTY

NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	4



Map 3 SR 1917 White Level Rd

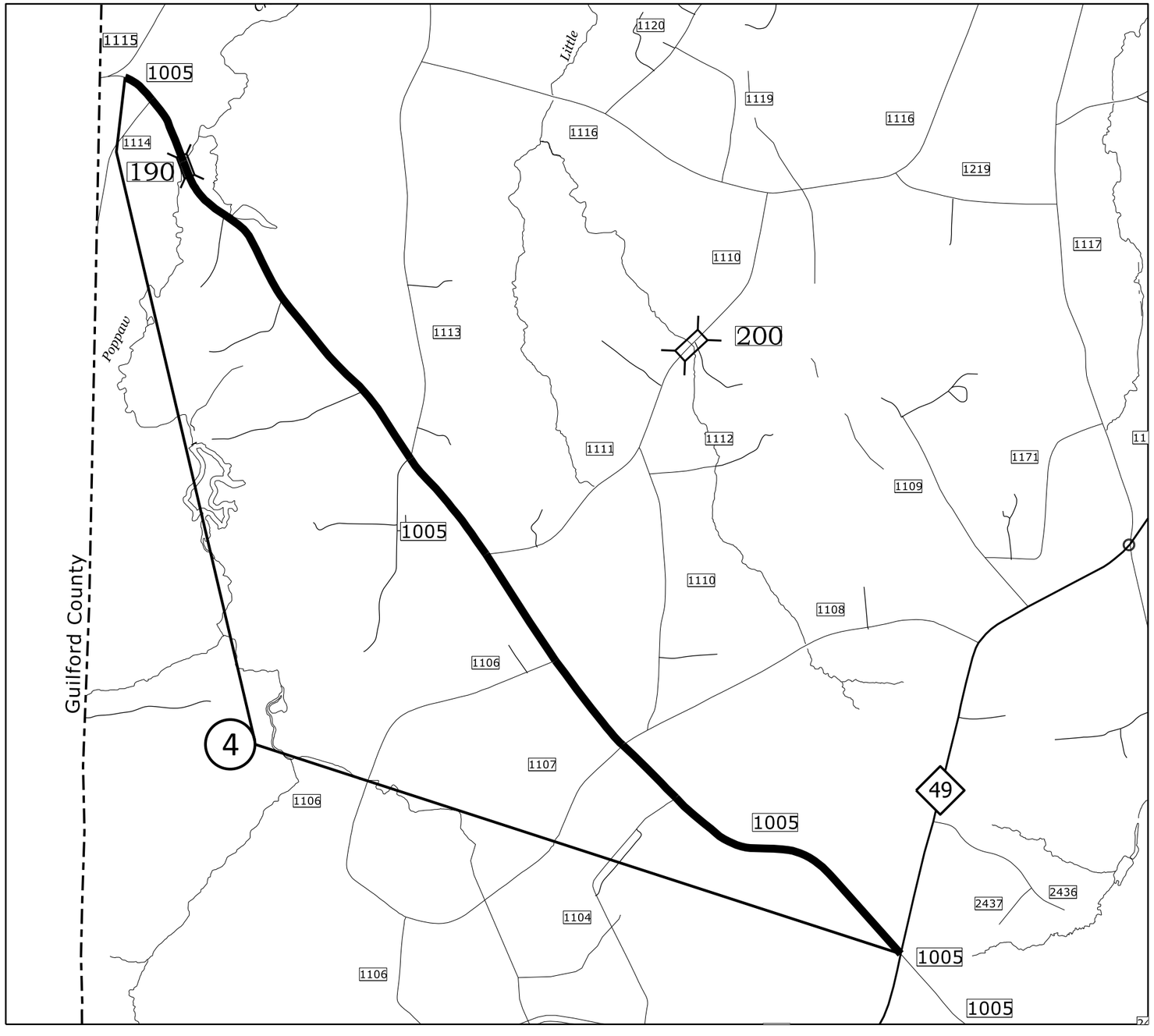
Incidental Mill at Bridge #63 Bridge Approaches

Do Not Resurface Bridge #63

ALAMANCE COUNTY

NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	5

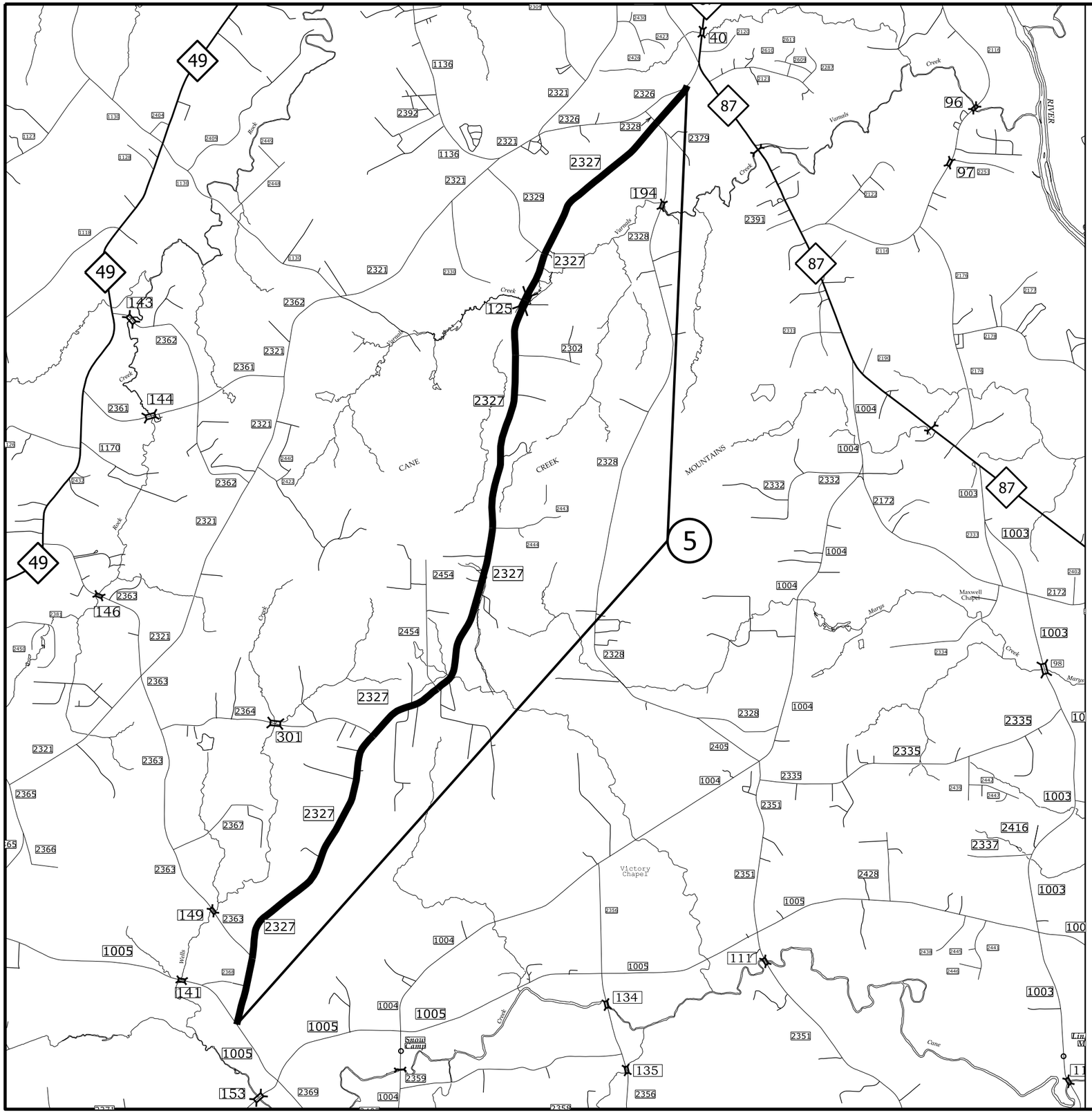


N

Map 4 SR 1005 W Greensboro Chapel Hill Rd.
Resurface Bridge #190

ALAMANCE COUNTY
NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	6



Map 5 SR 2327 Bass Mountain Rd

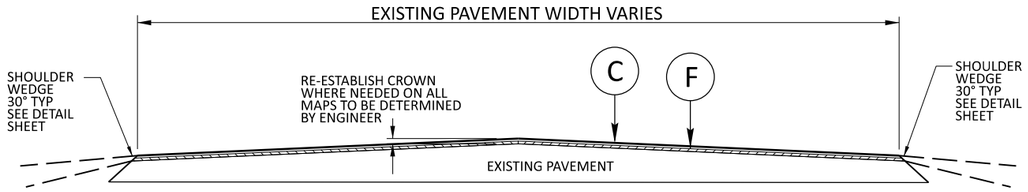
Incidental Mill at Bridge #125 Bridge Approaches

Mill and Fill 1-1/2" on Bridge #125

ALAMANCE COUNTY

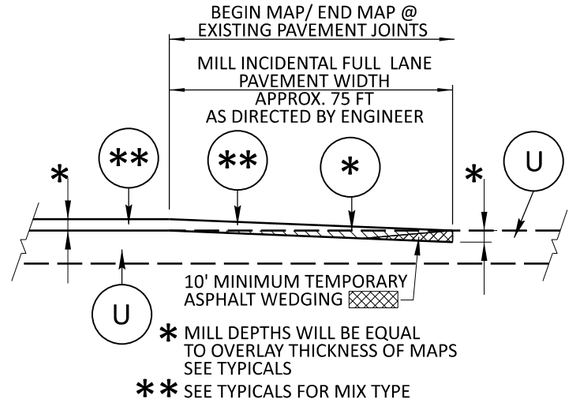
NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	7

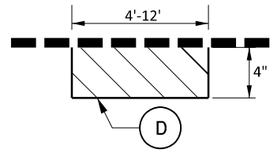


TYPICAL SECTION NO. 1

Map 1 SR 1642 - Macarthur Lane
Map 1A SR 1648 - Macarthur Lane
Map 2 SR 2135 - S Jim Minor Road
*Resurface Bridge #83
Map 3 SR 1917 - White Level Road
*NO ASPHALT ON BRIDGE #63
Map 5 SR 2327 - Bass Mountain Road

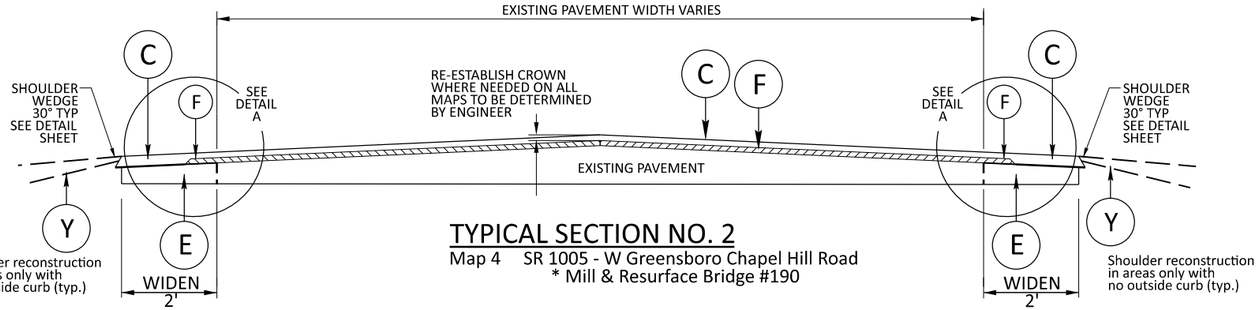


INCIDENTAL MILLING AT TIE-IN DETAIL



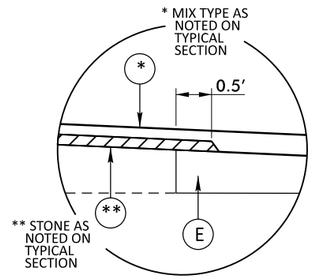
FILL WITH INTERMEDIATE COURSE, TYPE I19.0C AT LOCATIONS AS DIRECTED BY THE ENGINEER.

PATCHING EXISTING PAVEMENT DETAIL

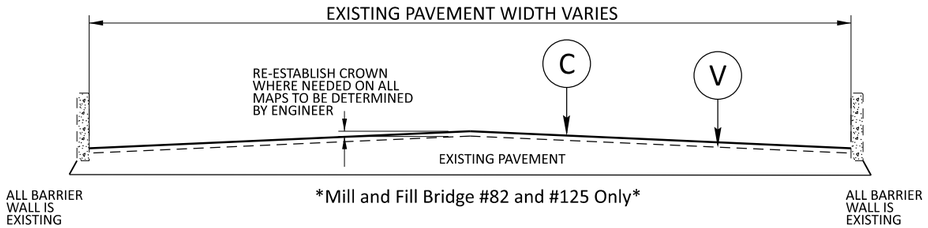


TYPICAL SECTION NO. 2

Map 4 SR 1005 - W Greensboro Chapel Hill Road
* Mill & Resurface Bridge #190



DETAIL A



Mill and Fill Bridge #82 and #125 Only

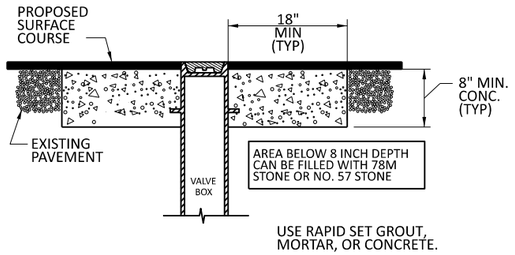
TYPICAL SECTION NO. 3

Map 2 SR 2135 - S Jim Minor Road - Bridge #82
*Mill & Resurface Bridge #82
Map 5 SR 2327 - Bass Mountain Road - Bridge #125
*Mill & Resurface Bridge #125

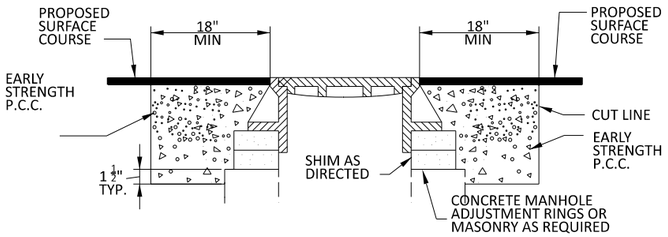
PAVEMENT SCHEDULE

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.
E	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
F	AST MAT COAT, #78M
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
Y	SHOULDER RECONSTRUCTION (SEE DETAIL)

PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	8

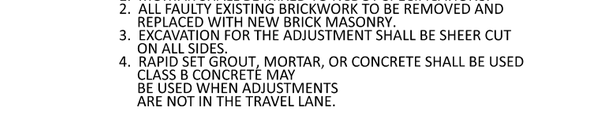


STANDARD CONCRETE ENCASEMENT FOR VALVE CASTINGS IN PAVEMENT



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 CLASS B CONCRETE MAY BE USED WHEN ADJUSTMENTS ARE NOT IN THE TRAVEL LANE.

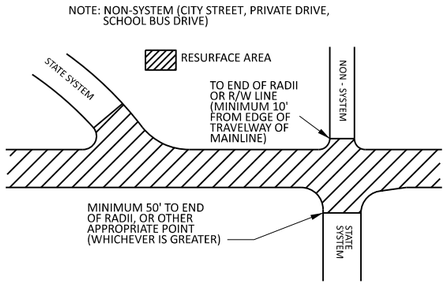
STANDARD CONCRETE ENCASEMENT FOR MANHOLE CASTINGS IN PAVEMENT



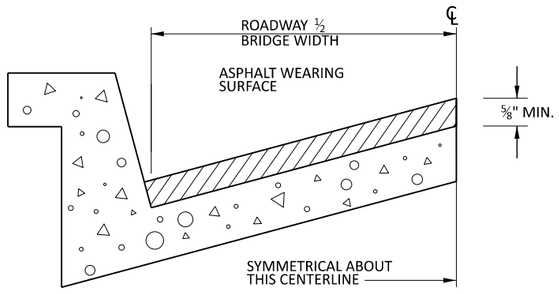
NOTE: MINI SKIPS SHALL BE PLACED ON A 8' CYCLE, CONTAINING A 6' AND 2' SKIP, THE WIDTH OF THE SKIP SHALL BE 6".

TO BE USED AT ALL NON-SIGNALIZED INTERSECTIONS

(NOT TO SCALE)

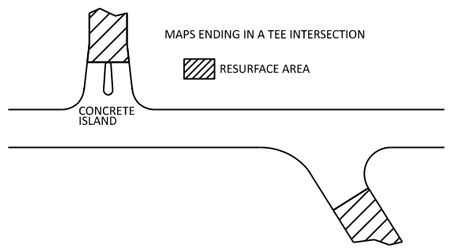


PAVING DETAIL 1
MAIN LINE IS BEING RESURFACED



BRIDGE HALF TYPICAL SECTION

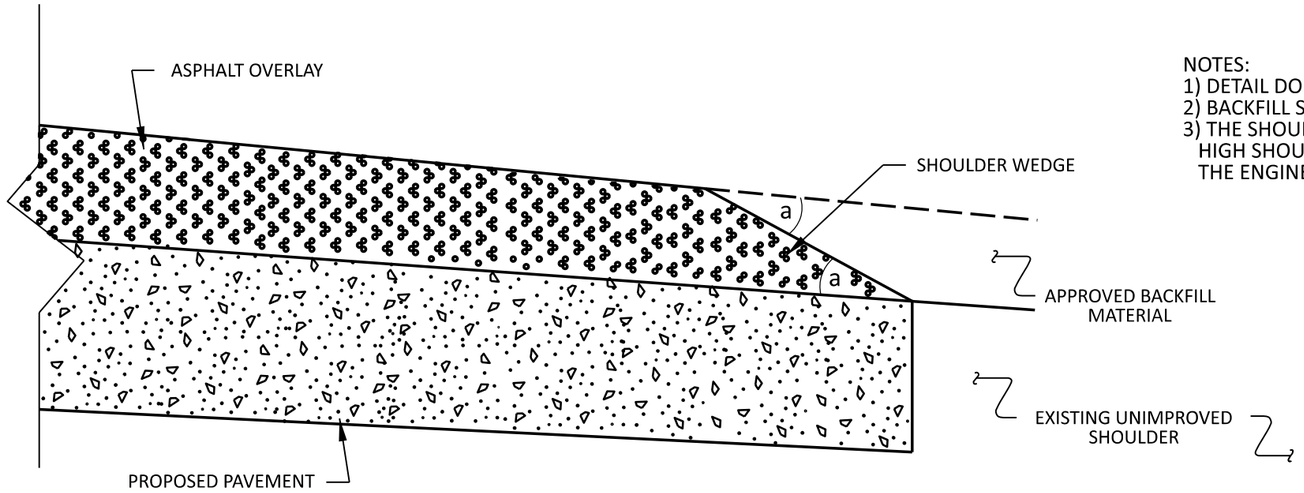
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN. THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.



PAVING DETAIL 2
MAIN LINE NOT BEING RESURFACED

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.
E	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
F	AST MAT COAT, #78M
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
Y	SHOULDER RECONSTRUCTION (SEE DETAIL)

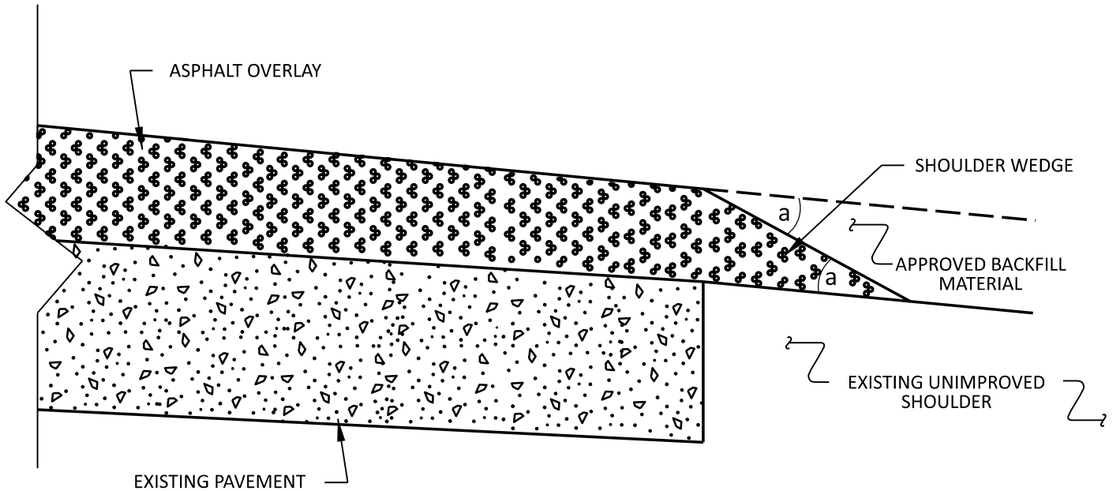
PROJECT REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	9



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, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS DIRECTED BY THE ENGINEER.

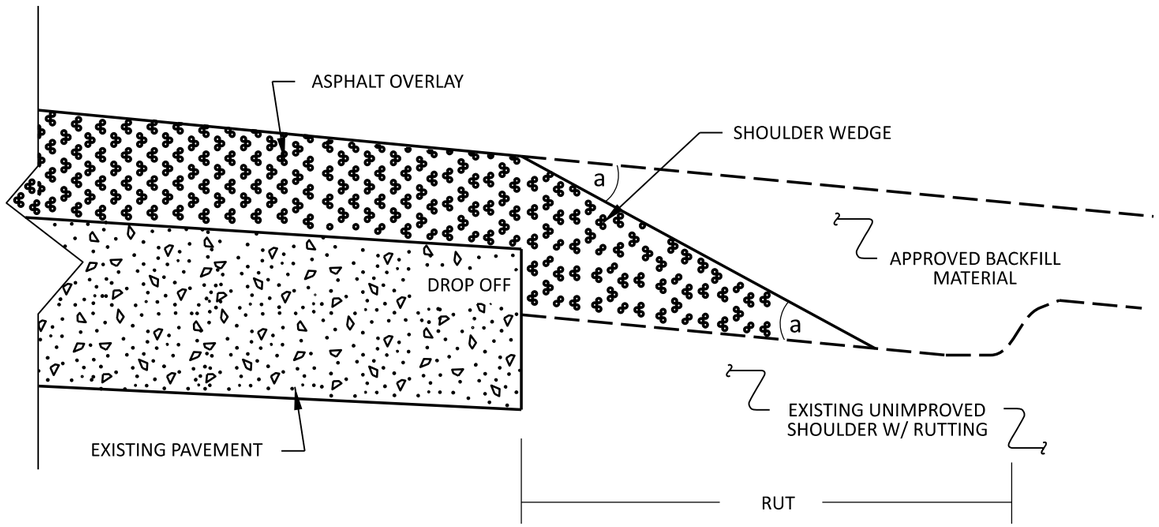
SHOULDER WEDGE DETAIL

(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.:	s:usr/details/stand/shoulderwedgedetail.dgn		

PROJECT NO.	SHEET NO.	TOTAL NO.
2023CPT.07.11.20011	10	

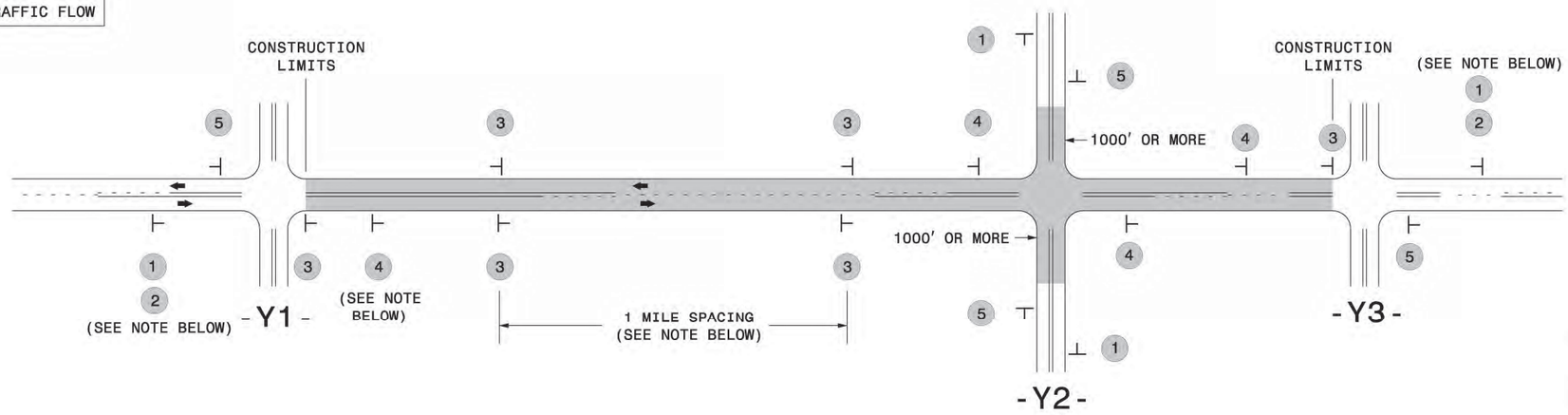
SUMMARY OF QUANTITIES

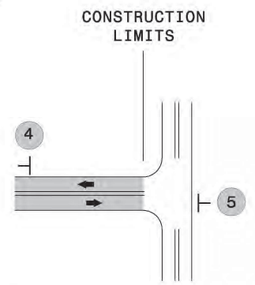
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0106000000-E BORROW EXCAVATION	1220000000-E INCIDENTAL STONE	1245000000-E SHOULDER RECONSTRUCTION	1297000000-E MILLING ASPHALT PAVEMENT, ****DEPTH (1 1/2")	1330000000-E INCIDENTAL MILLING	1491000000-E ASPHALT CONC BASE COURSE, TYPE B25.0C	1519000000-E ASPHALT CONC SURFACE COURSE, TYPE S9.5B	1575000000-E ASPHALT BINDER FOR PLANT MIX	1704000000-E PATCHING EXISTING PAVEMENT	1775000000-E ASPHALT SURFACE TREATMENT, MAT COAT, #78M STONE	1838000000-E EMULSION FOR ASPHALT SURFACE TREATMENT	2830000000-N ADJ. OF MANHOLES	2845000000-N ADJUSTMENT OF METER BOXES OR VALVE BOXES	6084000000-E SEEDING & MULCHING	6110000000-E RESIDENTIAL SEEDING	7444000000-E INDUCTIVE LOOP SAW CUT	4413000000-E WORK ZONE ADVANCE/GENERAL WARNING SIGNING	4457000000-N TEMPORARY TRAFFIC CONTROL	4720000000-E THERMO MSG STOP 90 M	4720000000-E THERMO MSG AHEAD 90 M	4890000000-E GENERIC MARKING, 4" 50 MILS HOT SPRAY THERMO (WHITE)	4890000000-E GENERIC MARKING, 4" 50 MILS HOT SPRAY THERMO (YELLOW)	GENERIC MARKING, 6" 50 MILS HOT SPRAY THERMO (WHITE)	4709000000-E 24" X 90 M WHITE THERMO
										MI	FT	CY	TONS	SMI	SY	SY	TON	TONS	TON	TONS	SY	GAL	EA	EA	AC	AC	LF	SF	LS	EA	EA	LF	LF	LF	LF
2023CPT.07.11.20011	Alamance	1	SR 1642 - MACARTHUR LN	FROM SR 1529 - DURHAM ST EXT TO SR 1648 - MACARTHUR LN	1	2	2WU	NO	NO	0.833	21		54			175		969	75	215	10,614	3,503	1	4				95				8,585	8,585	48	
		1A	SR 1648 - MACARTHUR LN	FROM SR 1642 - MACARTHUR LN (STA 44+00) TO NC 87	1	2	2WU	NO	NO	0.137	21		9			188		160	12	35	1,749	577						16				1,415	1,415		
TOTAL FOR MAP NO. 1										**0.97**			**63**			**363**		**1,129**	**87**	**250**	**12,363**	**4,080**	**1**	**4**				**111**				**10,000**	**10,000**	**48**	
2023CPT.07.11.20011	Alamance	2	SR 2135 - S JIM MINOR RD	FROM NC 54 TO SR 2142 - MT WILLEN RD	1,3	2	2WU	NO	NO	6.35	21		375		317	875		7,794	585	1,300	85,086	28,078		4			800	724				70,000	64,500	252	35
TOTAL FOR MAP NO. 2										**6.35**			**375**		**317**	**875**		**7,794**	**585**	**1,300**	**85,086**	**28,078**		**4**			**800**	**724**				**70,000**	**64,500**	**252**	**35**
2023CPT.07.11.20011	Alamance	3	SR 1917 - WHITE LEVEL RD	FROM SR 1915 - MILES CHAPEL RD TO NC 119	1	2	2WU	NO	NO	2.063	19		80			775		2,272	174	450	24,876	8,209						234	*			22,500	20,500	46	
TOTAL FOR MAP NO. 3										**2.063**			**80**			**775**		**2,272**	**174**	**450**	**24,876**	**8,209**						**234**				**22,500**	**20,500**	**46**	
2023CPT.07.11.20011	Alamance	4	SR 1005 - W GREENSBORO CHAPEL HILL RD	FROM NC 49 TO SR 1115 - KIMESVILLE RD	2	2	2WU	NO	NO	3.634	21	182	175	7.27		363	4,537	5,066	565	450	49,145	16,218			1.50	1.20		419		4	5	40,000	30,000	150	
TOTAL FOR MAP NO. 4										**3.634**		**182**	**175**	**7.27**		**363**	**4,537**	**5,066**	**565**	**450**	**49,145**	**16,218**			**1.50**	**1.20**		**419**		**4**	**5**	**40,000**	**30,000**	**150**	
2023CPT.07.11.20011	Alamance	5	SR 2327 - BASS MOUNTAIN RD	FROM SR 2326 - MT HERMON ROCK CREEK RD TO SR 1005 - W GREENSBORO CHAPEL HILL RD	1,3	2	2WU	NO	NO	7.58	21		388		264	1,117		9,125	794	3,800	99,714	32,906						860				81,500	68,000	178	
TOTAL FOR MAP NO. 5										**7.58**			**388**		**264**	**1,117**		**9,125**	**794**	**3,800**	**99,714**	**32,906**						**860**				**81,500**	**68,000**	**178**	
TOTAL FOR PROJ NO. 2023CPT.07.11.20011										**20.597**		**182**	**1,081**	**7.27**	**581**	**3,493**	**4,537**	**25,386**	**2,205**	**6,250**	**271,184**	**89,491**	**1**	**8**	**1.50**	**1.20**	**800**	**2,348**	**1**	**9**		**417,000**			**35**
GRAND TOTAL										**20.597**		**182**	**1,081**	**7.27**	**581**	**3,493**	**4,537**	**25,386**	**2,205**	**6,250**	**271,184**	**89,491**	**1**	**8**	**1.50**	**1.20**	**800**	**2,348**	**1**	**9**		**417,000**			**35**
																														4	**5**	**224,000**	**193,000**	**674**	

PROJ. REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	TMP-1

SIGNING FOR RESURFACING PROJECTS

LEGEND
- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW





TEE INTERSECTION

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 CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)
3	LOWSOFT SHOULDER SP 13107 48″ X 48″	- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY ½ MILE FROM INTERSECTION AND SPACE 1 MILE APART 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. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500′ +/- OF THE INTERSECTION ALONG -L- LINE.
5	END ROAD WORK G20-2 A 48″ X 24″	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.

-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, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

PLACED 500′ IN ADVANCE OF FLAGGER.

PLACED 250′ IN ADVANCE OF FLAGGER.

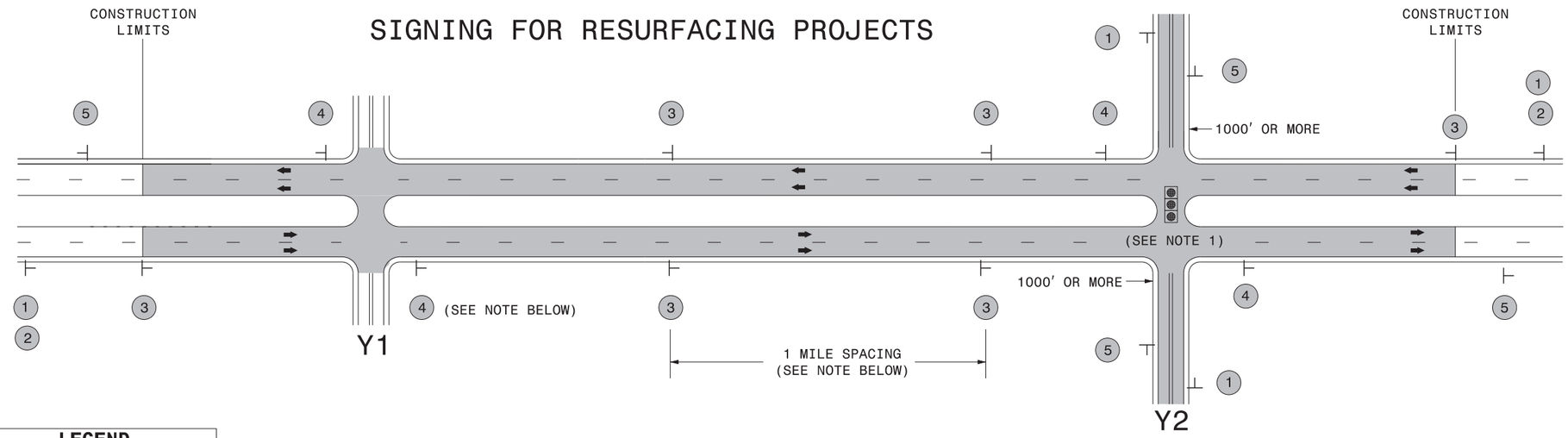
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

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

5/15/2017
S:\TMD\WZTC\Resurfacing\2Lzw & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn
User:keddis

PROJ. REFERENCE NO.	SHEET NO.
2023CPT.07.11.20011	TMP-2

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.

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

3/23/2015
C:\Users\rmgarrett\Downloads\Resurfacing_AdvWarn_UrSu_Shldr.dgn
User:rmgarrett

TIP NO. | SHEET NO.

DocuSigned by:
APPROVED: Matthew V. Springer
DATE: 8/13/2019
BC00F8E8B584403...

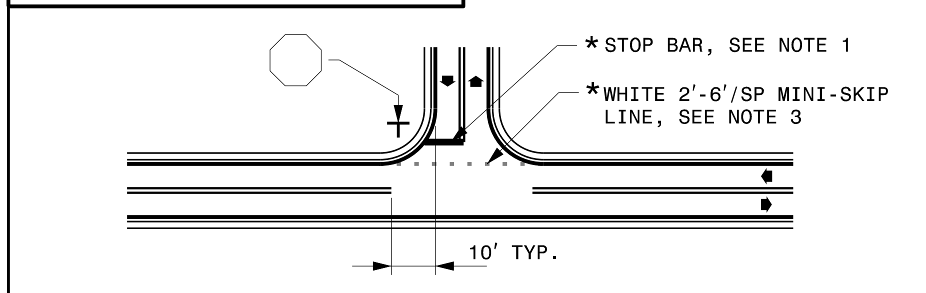
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 042546
MATTHEW V. SPRINGER

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

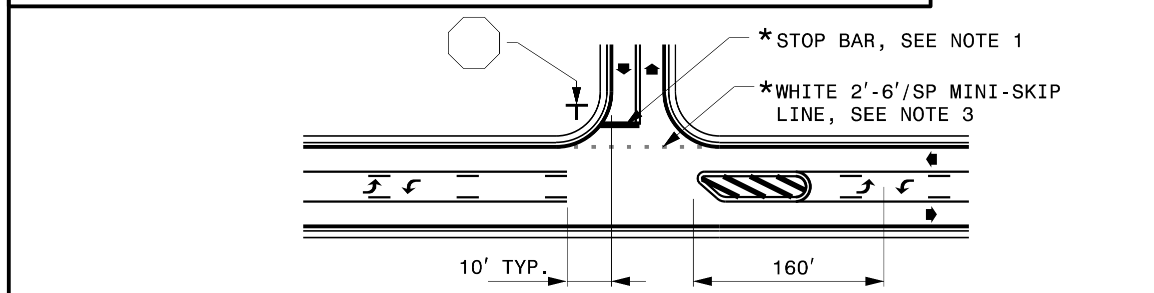
8-19

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
INTERSECTIONS

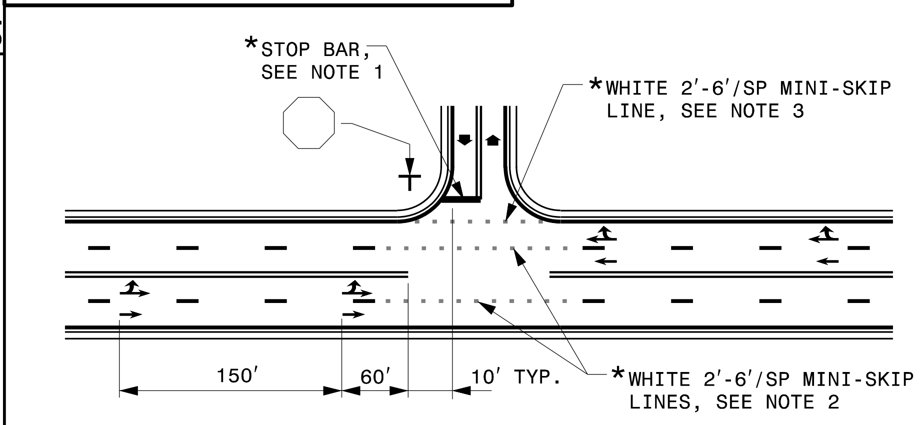
TWO-LANE, TWO-WAY ROADWAY



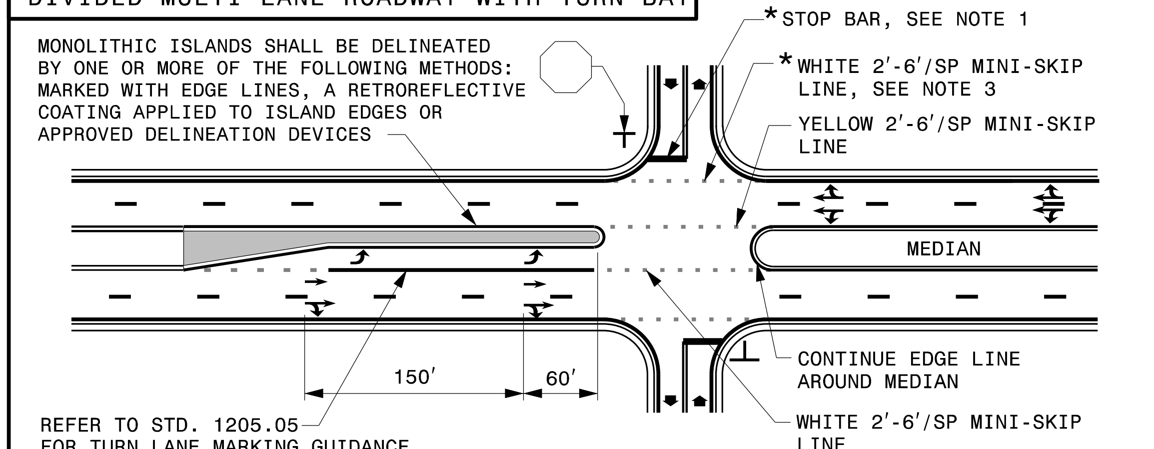
TWO-LANE, TWO-WAY ROADWAY WITH TWO-WAY LEFT TURN LANE



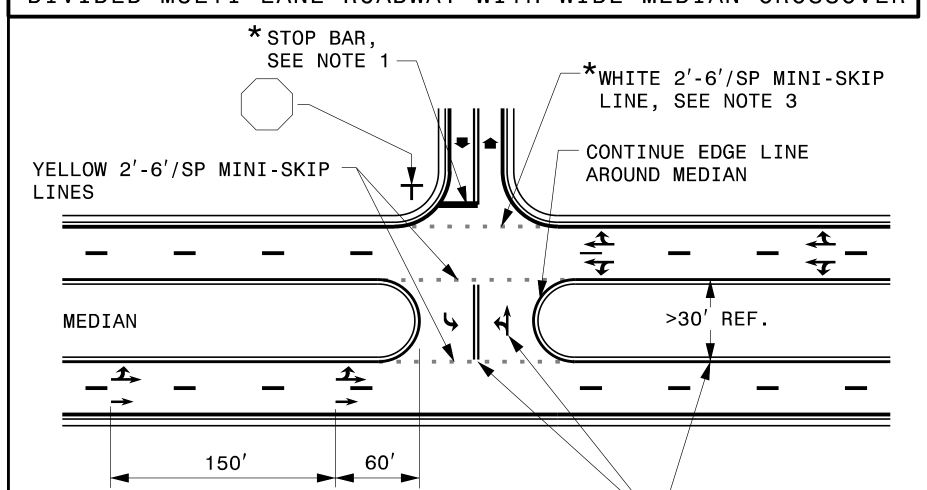
UNDIVIDED MULTI-LANE ROADWAY



DIVIDED MULTI-LANE ROADWAY WITH TURN BAY



DIVIDED MULTI-LANE ROADWAY WITH WIDE MEDIAN CROSSOVER



USE DOUBLE YELLOW CENTER LINE AND ARROW SYMBOLS IN MEDIAN CROSSOVER WHEN WIDTH OF MEDIAN EXCEEDS 30 FT, OTHERWISE THEY ARE NOT REQUIRED.

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

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

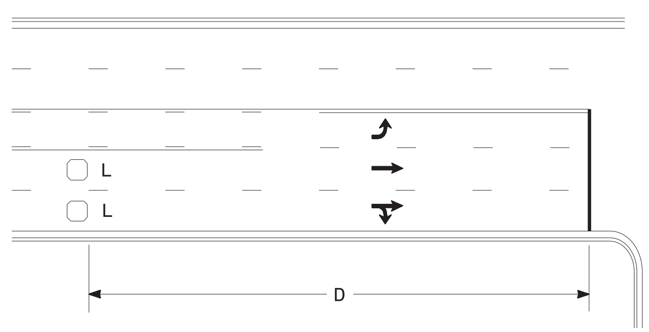
8-19

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
INTERSECTIONS

SHEET 2 OF 2
1205D04

REVISED PAVEMENT MARKING ROADWAY STANDARD DRAWING

High Speed Detection
(≥40 mph)



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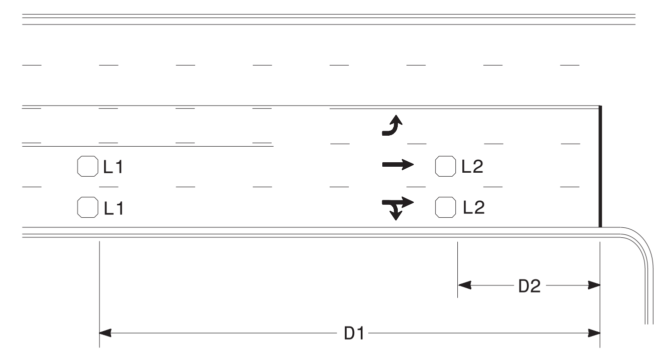


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

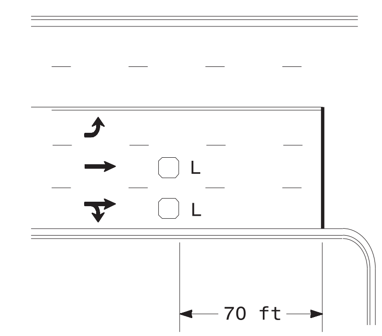
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

"Stretch" Operation

Low Speed Detection
(≤35 mph)



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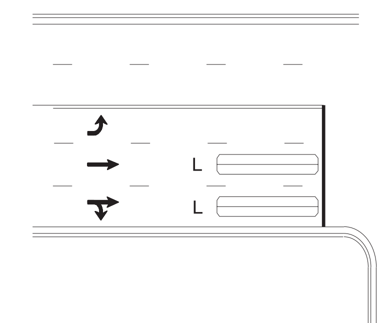
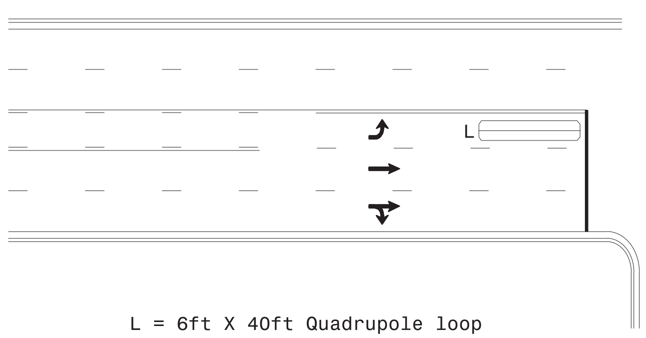


L = 6ft X 6ft
Wired in series

L = 6ft X 40ft
Quadrupole loop, wired separately

Left Turn Lane Detection



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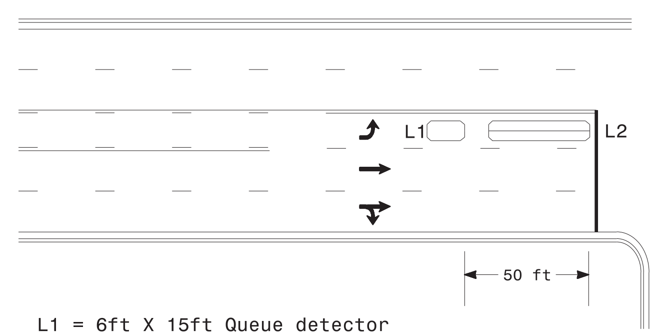


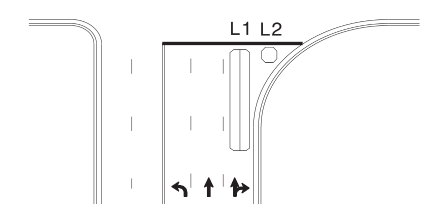
L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

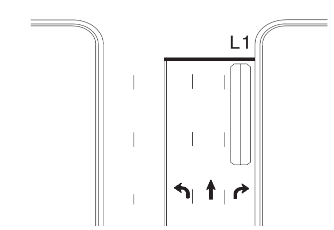
Queue Loop Detection

Right Turn Lane Detection

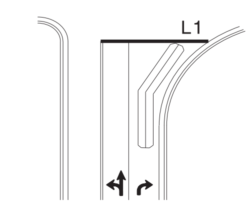


Shared Lane/
Wide Radius Turn

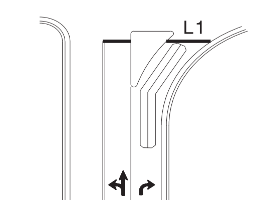
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

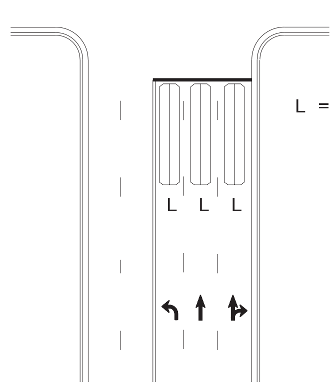


Wide Radius Turn



Channelized Turn

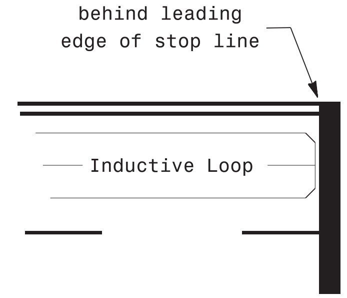
Side Street Detection



L = 6ft X 40ft
Quadrupole loop
Wired to separate
detectors/channels

Presence Loop Placement at Stop Lines

Locate loop slightly
behind leading
edge of stop line



Note:
Loop may be located in advance of stop line under any of the following conditions:
1) stop line is greater than 15′ from edge of intersecting roadway
2) loop detects a permissive or protected/permissive left turn
3) for an exclusive right turn lane

Recommended Number of Turns

Single 6′ X 6′ loop
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6′ X 15′ Loops:
Lead-in < 150′, use 2 turns
Lead-in > 150′, use 3 turns

Prepared in the Offices of: Transportation Mobility and Safety Division, Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

Typical Signal Loop Locations

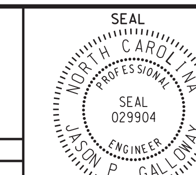
PLAN DATE: September 2020 | REVIEWED BY: JPG
PREPARED BY: PLA | REVIEWED BY:

SCALE N/A

REVISIONS | INIT. | DATE

SIG. INVENTORY NO.

SEAL



9/8/2020
DATE