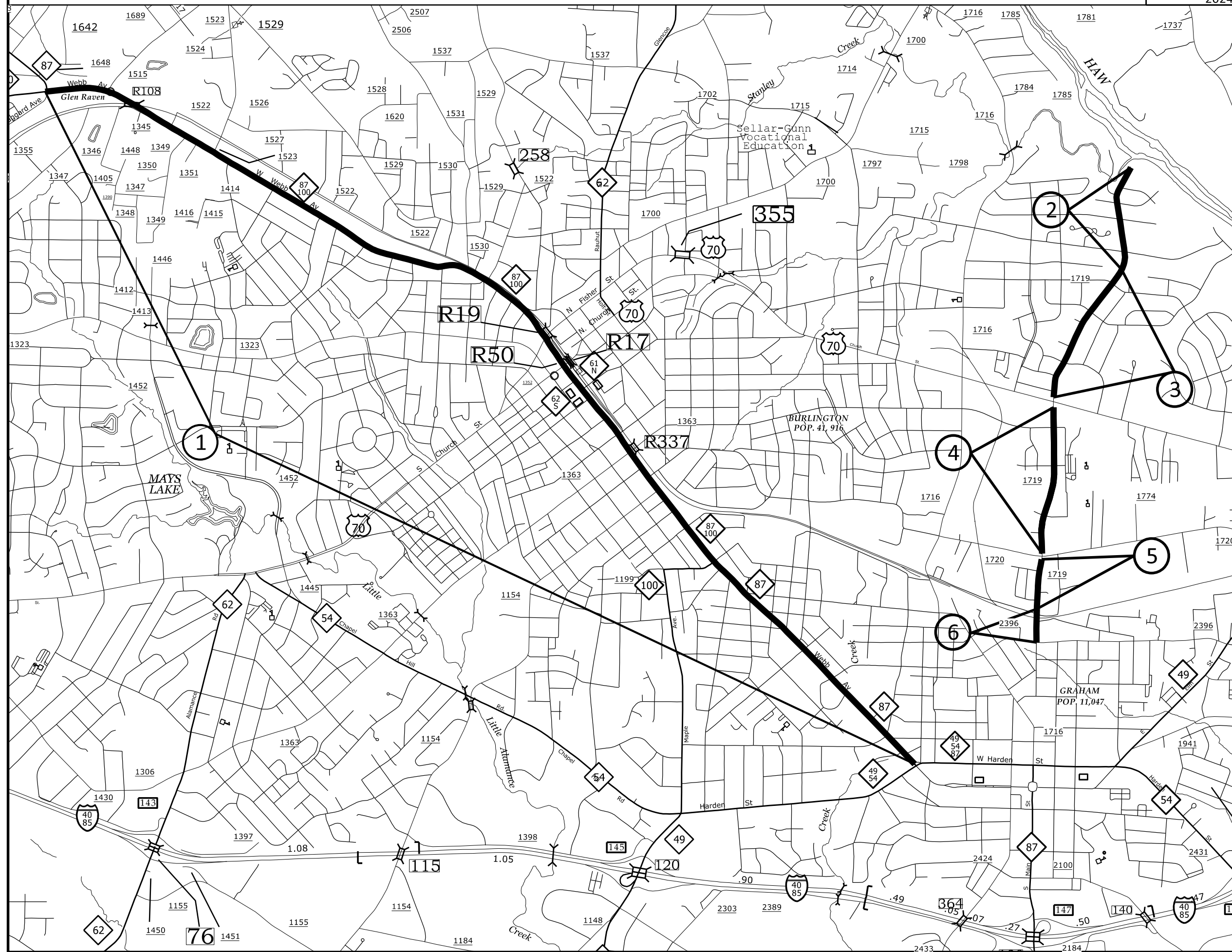


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Map 1 NC 87/Webb Ave.
Mill and Fill
1½" S9.5 B
Include the Non-SR's to the back of the radius. It does not include residential or commercial driveways. Skip US 70.

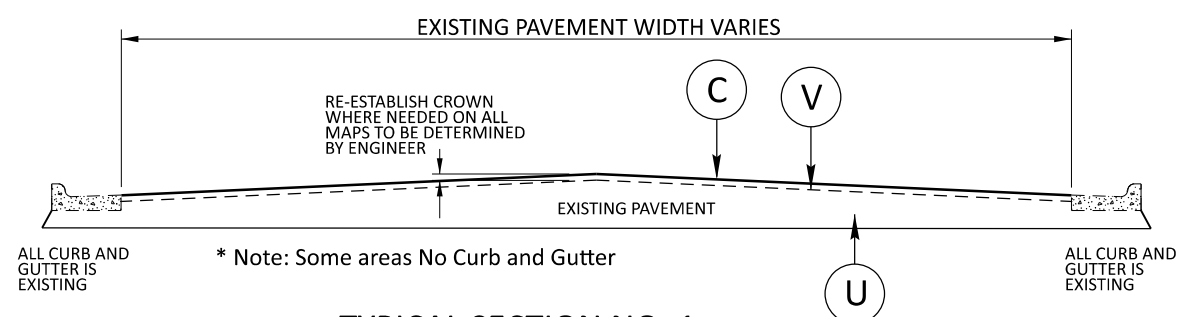
Map 2
SR 1719 Sellars Mill Road
#78 Mat Seal
1½" S9.5 B

Map 3
SR 1719 Sellars Mill Road
Mill and Fill
1½" S9.5 B
Where paved in gutter mill out and leave gutter exposed

Map 4
SR 1719 Sellars Mill Road
Mill and Fill
1½" S9.5 B
Where paved in gutter mill out and leave gutter exposed

Map 5
SR 1719 Pomeroy St
#78 Mat Seal
1½" S9.5 B

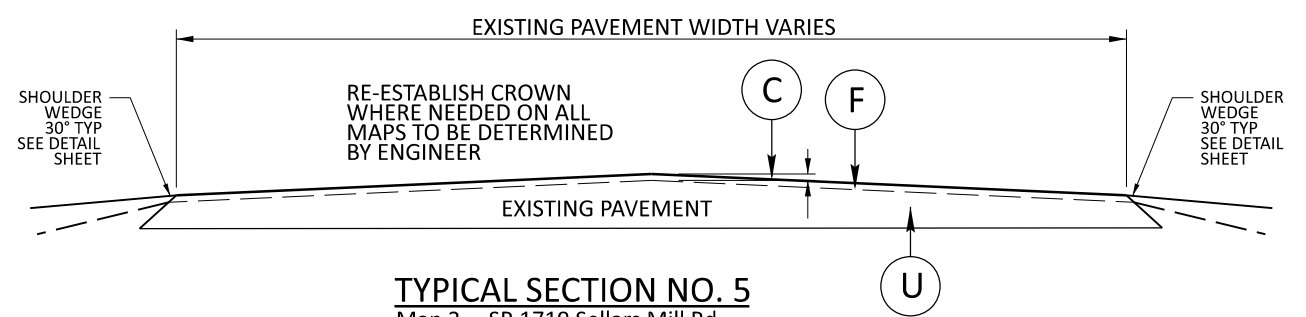
Map 6
SR 1719 Pomeroy St
Mill and Fill
1½" S9.5 B
Where paved in gutter mill out and leave gutter exposed



TYPICAL SECTION NO. 1

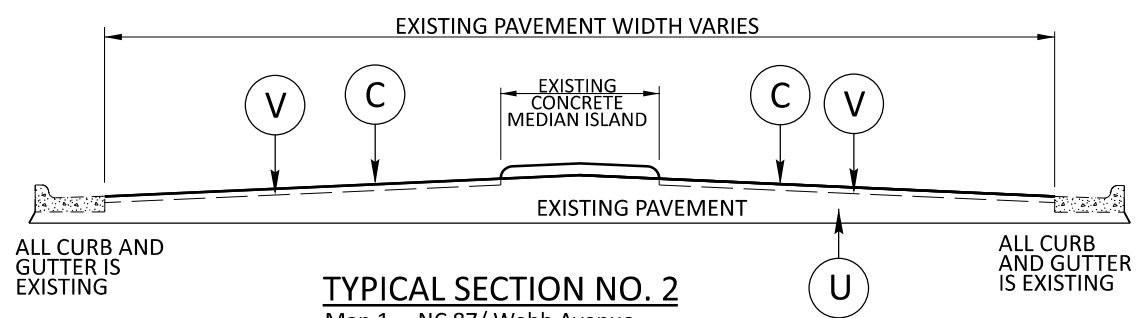
Map 1 NC 87/ Webb Avenue
 Map 3 SR 1719 Sellars Mill Rd
 Map 4 SR 1719 Sellars Mill Rd
 Map 6 SR 1719 Pomeroy St.

* Note: Some areas No Curb and Gutter



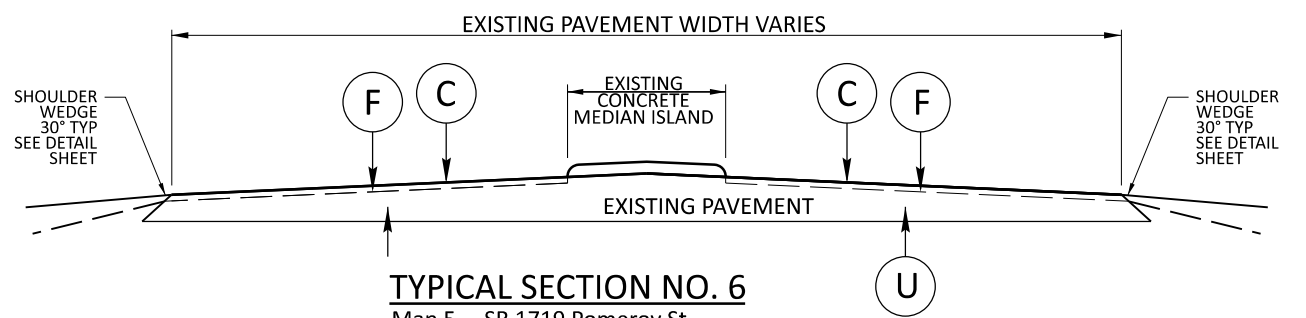
TYPICAL SECTION NO. 5

Map 2 SR 1719 Sellars Mill Rd
 Map 5 SR 1719 Pomeroy St.



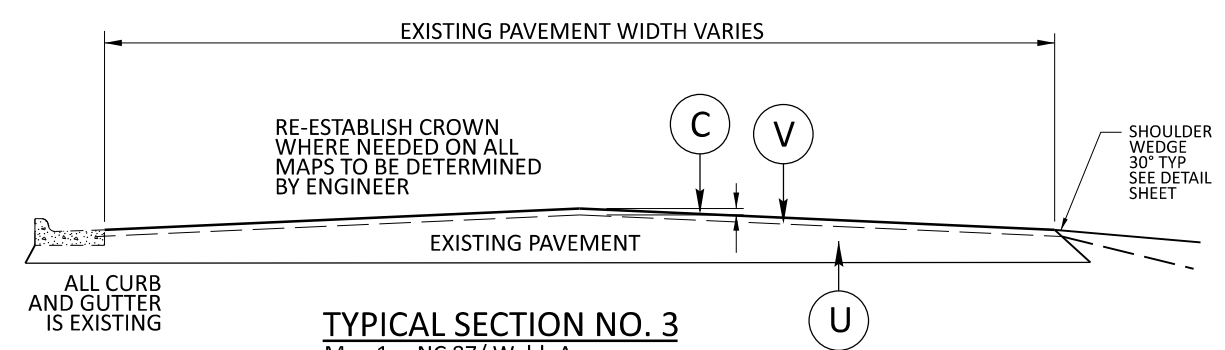
TYPICAL SECTION NO. 2

Map 1 NC 87/ Webb Avenue



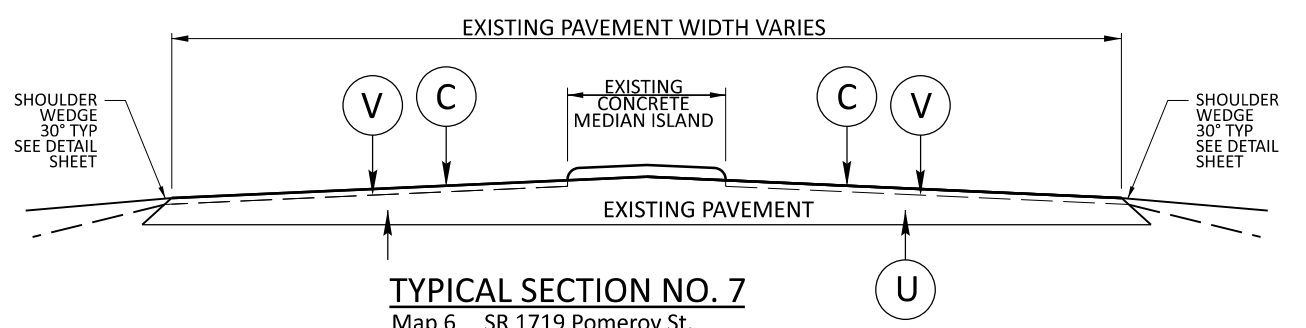
TYPICAL SECTION NO. 6

Map 5 SR 1719 Pomeroy St.



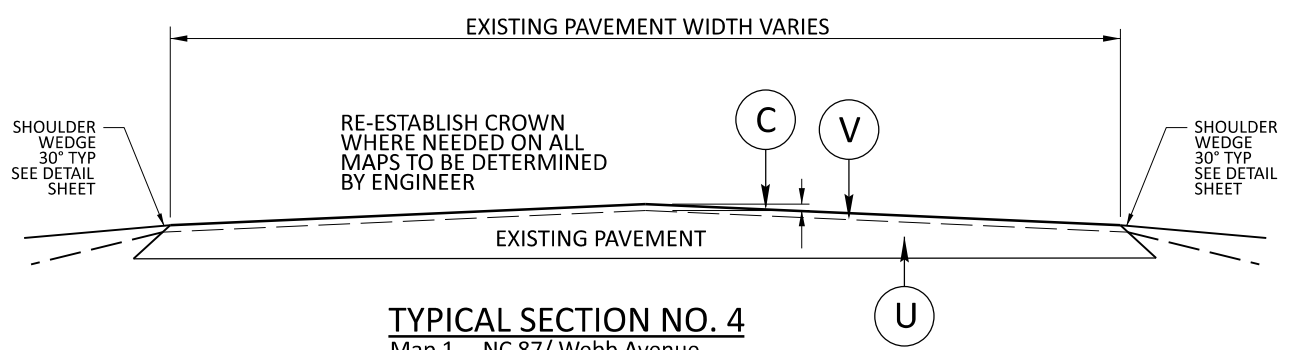
TYPICAL SECTION NO. 3

Map 1 NC 87/ Webb Avenue



TYPICAL SECTION NO. 7

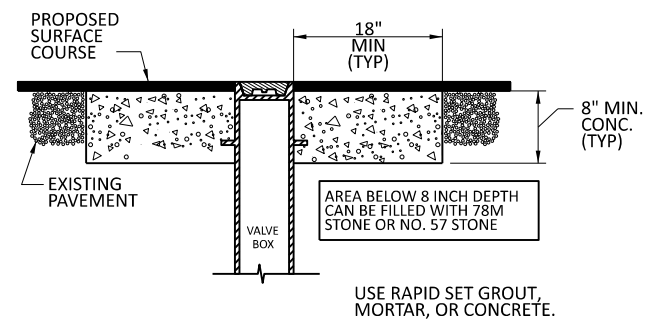
Map 6 SR 1719 Pomeroy St.



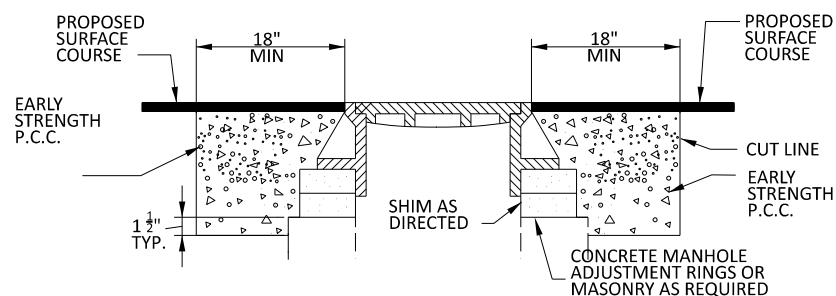
TYPICAL SECTION NO. 4

Map 1 NC 87/ Webb Avenue

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, #78M
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
V1	MILL ASPHALT PAVEMENT, 4" DEPTH

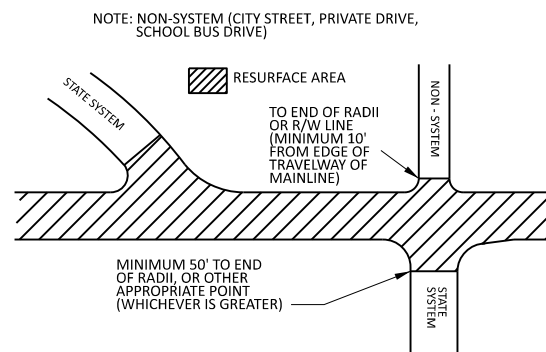


STANDARD CONCRETE ENCASEMENT FOR VALVE CASTINGS IN PAVEMENT

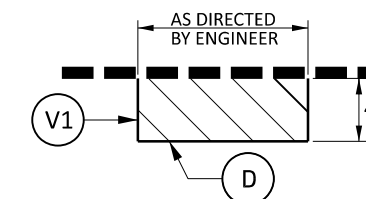


- NOTES:
1. MORTAR SHALL BE MIXED TO NCDOT SPECIFICATIONS.
 2. ALL FAULTY EXISTING BRICKWORK TO BE REMOVED AND REPLACED WITH NEW BRICK MASONRY.
 3. EXCAVATION FOR THE ADJUSTMENT SHALL BE SHEER CUT ON ALL SIDES.
 4. RAPID SET GROUT, MORTAR, OR CONCRETE SHALL BE USED CLASS B CONCRETE MAY BE USED WHEN ADJUSTMENTS ARE NOT IN THE TRAVEL LANE.

STANDARD CONCRETE ENCASEMENT FOR MANHOLE CASTINGS IN PAVEMENT

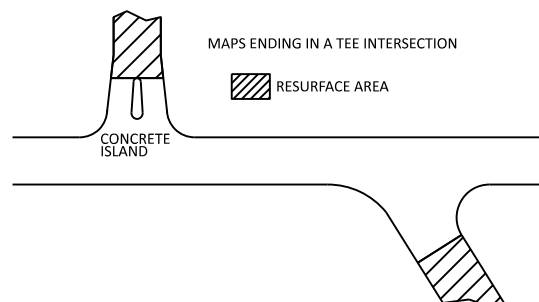


**PAVING DETAIL 1
MAIN LINE IS BEING RESURFACED**

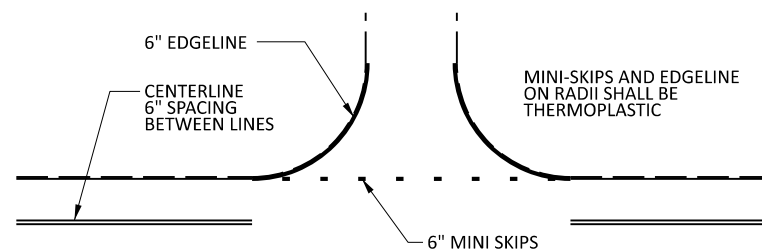


MILL FILL WITH INTERMEDIATE COURSE, TYPE I19.0C AT LOCATIONS AS DIRECTED BY THE ENGINEER.

PATCHING EXISTING PAVEMENT DETAIL



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

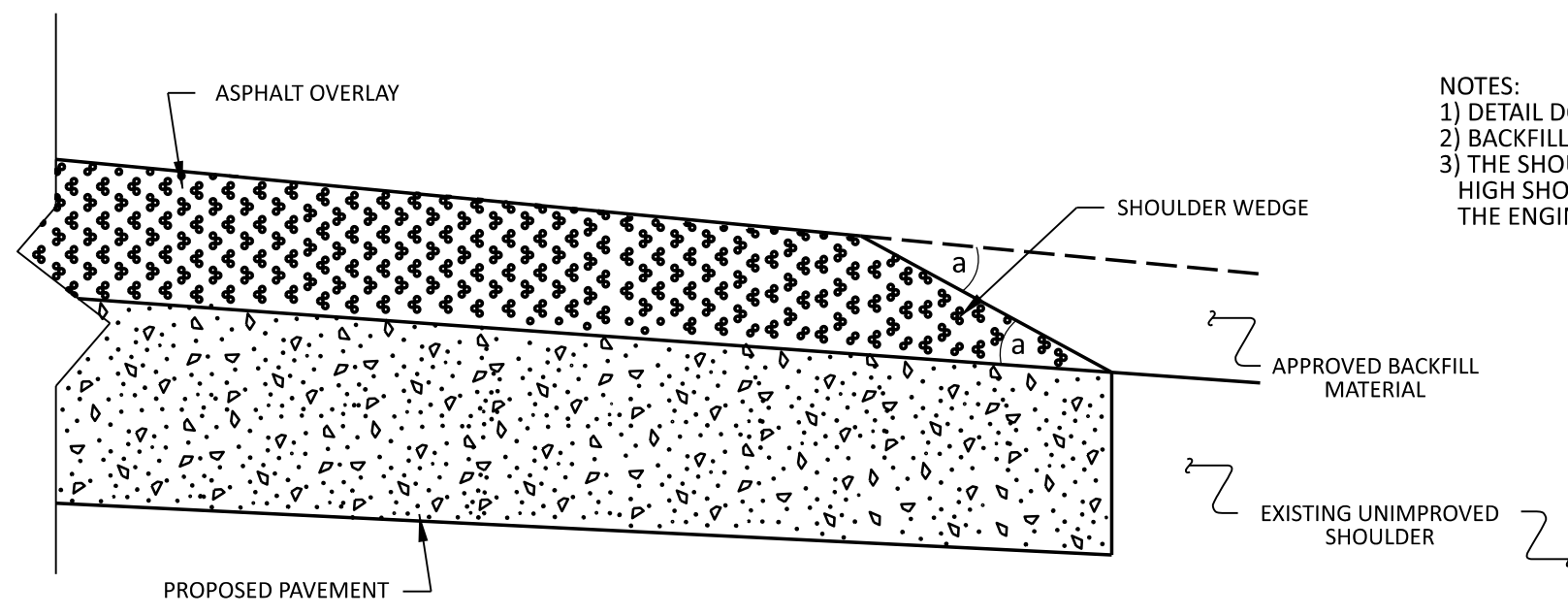


NOTE: MINI SKIPS SHALL BE PLACED ON A 8' CYCLE, CONTAINING A 6' AND 2' SKIP, THE WIDTH OF THE SKIP SHALL BE 6'.

**TO BE USED AT ALL
NON-SIGNALIZED INTERSECTIONS
(NOT TO SCALE)**

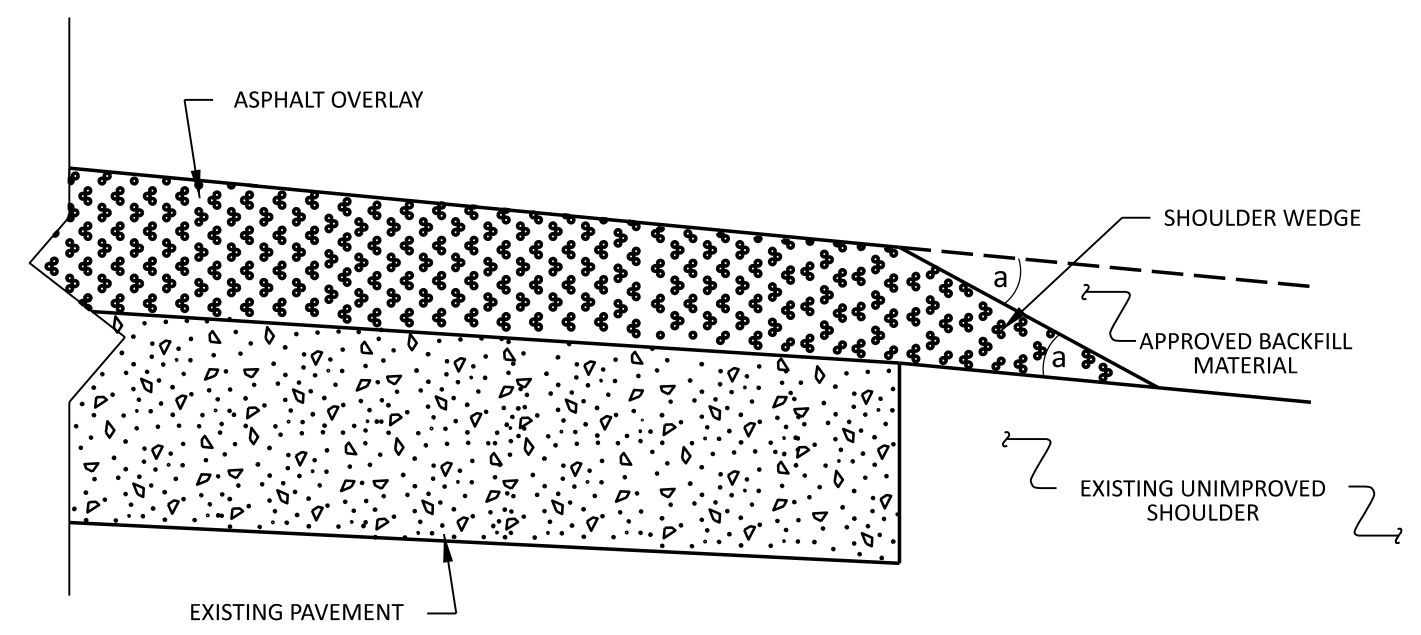
PAVEMENT SCHEDULE

C	PROP. APPROX. 1 1/2" 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.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH
V1	MILL ASPHALT PAVEMENT, 4" DEPTH

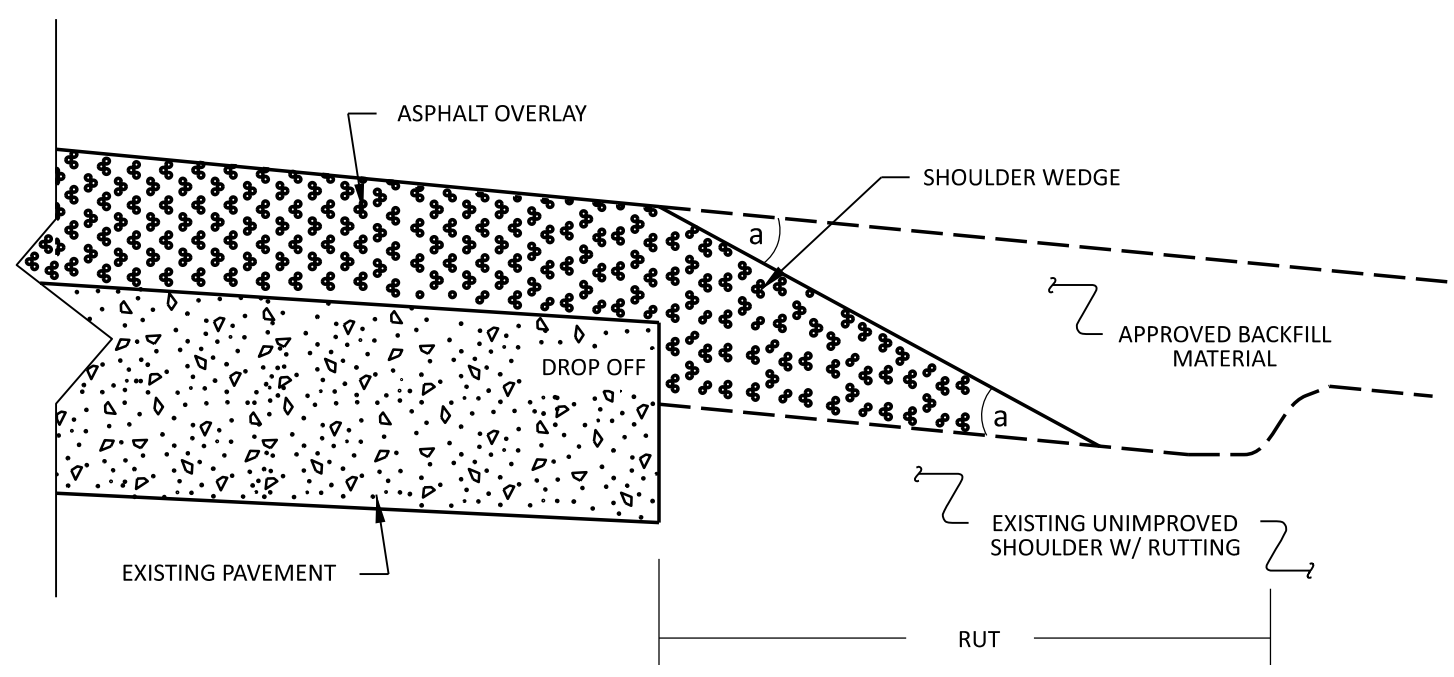


NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS DIRECTED BY THE ENGINEER.

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.: susr/details/stand/shoulderwedgedetail.dgn

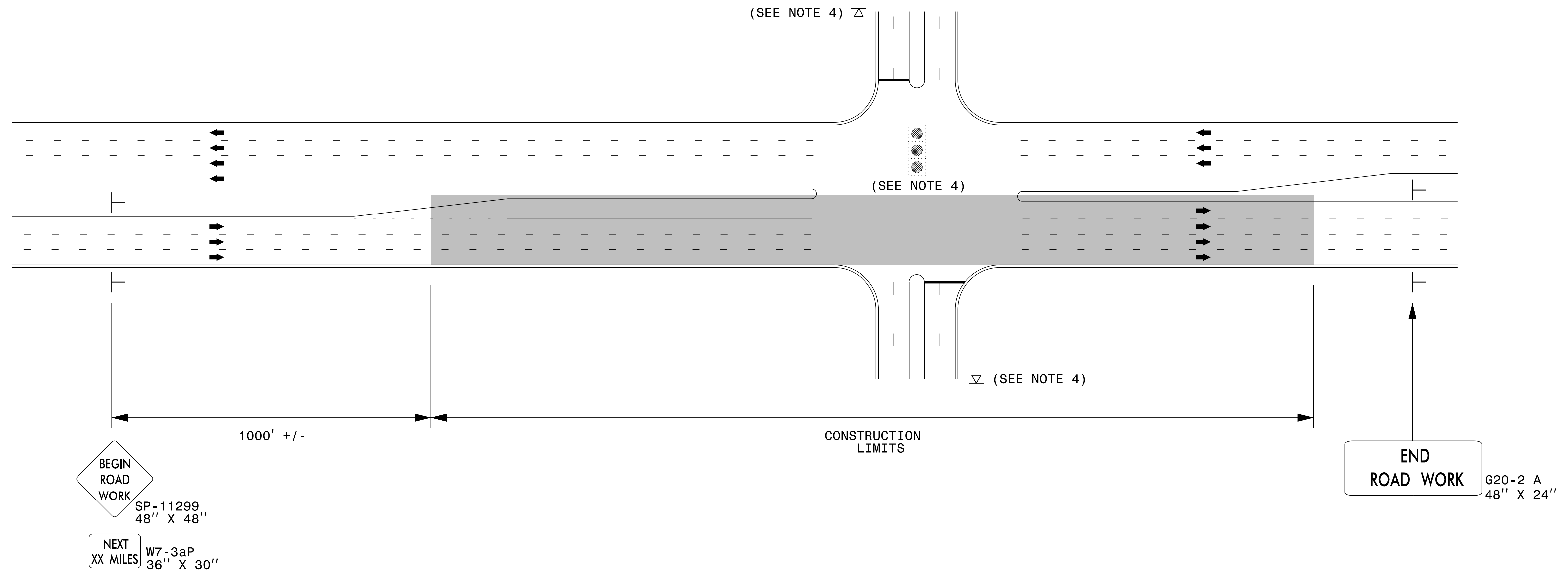
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1297000000-E	1330000000-E	1519000000-E	1575000000-E	1704000000-E	1775000000-E	1838000000-E	2830000000-N	2845000000-N	5255000000-N	7990000000-E
										INCIDENTAL STONE	MILLING ASPHALT PAVEMENT DEPTH (1 1/2")	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, TYPE 59.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ASPHALT SURFACE TREATMENT, MAT COAT, #78M STONE	EMULSION FOR ASPHALT SURFACE TREATMENT	ADI. OF MANHOLES	ADJUSTMENT OF METER BOXES OR VALVE BOXES	PORTABLE LIGHTING	INDUCTIVE LOOP SAW CUT (DEEP CUT)
										TONS	SY	SY	TONS	TON	TONS	SY	GAL	EA	EA	L5	LF
2024CPT.07.05.10011	Alamance	1	NC-87	FROM NC 49 HARDEN ST TO E. HAGGARD AVENUE	1,2,3,4	4.99	20	18.8	23.79	213	119,401	14,863	12,221	811	350		97	95	1	8,750	
TOTAL FOR MAP NO. 1										213	119,401	14,863	12,221	811	350		97	95	1	8,750	
TOTAL FOR PROJ NO. 2024CPT.07.05.10011										213	119,401	14,863	12,221	811	350		97	95	1	8,750	
2024CPT.07.05.20011	Alamance	2	SR-1719 / N SELLARS MILL RD	FROM BEG MAINT. TO BEG. CURB & GUTTER	5	0.37	20	0.095	0.47	42			496	37	90	4,400	1,452	1	9		
TOTAL FOR MAP NO. 2										42			496	37	90	4,400	1,452	1	9		
2024CPT.07.05.20011	Alamance	3	SR-1719 / N SELLARS MILL RD	FROM BEG. CURB & GUTTER TO US 70 (N CHURCH ST)	1	0.64	26	0.47	1.11		14,327	1,033	1,398	95	90		8	15		400	
TOTAL FOR MAP NO. 3											14,327	1,033	1,398	95	90		8	15		400	
2024CPT.07.05.20011	Alamance	4	SR-1719 / S SELLARS MILL RD	FROM US 70 (N CHURCH ST) TO SR 1720	1	0.64	43	1.153	1.8		18,485	1,294	1,682	114	90		15	11		1,425	
TOTAL FOR MAP NO. 4											18,485	1,294	1,682	114	90		15	11		1,425	
2024CPT.07.05.20011	Alamance	5	SR-1719 / S SELLARS MILL RD	FROM SR 1720 TO BEG. ISLAND	5,6	0.19	24	1.822	2.04	48		764	495	36	90	4,204	1,516	3		200	
TOTAL FOR MAP NO. 5										48		764	495	36	90	4,204	1,516	3		200	
2024CPT.07.05.20011	Alamance	6	SR-1719 / S SELLARS MILL RD	FROM BEG. ISLAND TO SR 2396	1,7	0.2	40	2.04	2.18		2,471		243	20	90					400	
TOTAL FOR MAP NO. 6											2,471		243	20	90					400	
TOTAL FOR PROJ NO. 2024CPT.07.05.20011										90	35,283	3,091	4,314	302	450	8,604	2,968	27	35		2,425
GRAND TOTAL										303	154,684	17,954	16,535	1,113	800	8,604	2,968	124	130	1	11,175

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4457000000-N	4685000000-E	4688000000-E	4695000000-E	4700000000-E	4704000000-E	4709000000-E	4720000000-E	4725000000-E						4905100000-N										
										WORK ZONE ADVANCE/GENERAL SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M YELLOW THERMO	4" X 90 M WHITE THERMO	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	12" X 90 M WHITE THERMO	16" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO RXR 90 MILS	THERMO MSG ONLY 90 M	THERMO STR ARROW 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO STR & LT ARROW 90 M	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKERS CRYSTAL/RED	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKERS YELLOW/YELLOW						
										SF	LS	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA							
2024CPT.07.05.10011	Alamance	1	NC-87	FROM NC 49 HARDEN ST TO E. HAGGARD AVENUE	1,2,3,4	4.99	20	18.8	23.79	620	1.00			10,500	49,000	500	350	200	50	1,775	2	16	51	71	13	47	17	450	450						
TOTAL FOR MAP NO. 1										620	1.000			10,500	49,000	500	350	200	50	1,775	2	16	51	71	13	47	17	450	450						
TOTAL FOR PROJ NO. 2024CPT.07.05.10011										620	1.000			10,500	49,000	500	350	200	50	1,775	2	16	51	71	13	47	17	450	450						
														59,500	49,000	850					18								900						
2024CPT.07.05.20011	Alamance	2	SR-1719 / N SELLARS MILL RD	FROM BEG MAINT. TO BEG. CURB & GUTTER	5	0.37	20	0.095	0.47	41		3,200	3,800	70																					
TOTAL FOR MAP NO. 2										41		3,200	3,800	70																					
2024CPT.07.05.20011	Alamance	3	SR-1719 / N SELLARS MILL RD	FROM BEG. CURB & GUTTER TO US 70 (N CHURCH ST)	1	0.64	26	0.47	1.11	72		7,000	300	100		100							5			1									
TOTAL FOR MAP NO. 3										72		7,000	300	100		100									5			1							
2024CPT.07.05.20011	Alamance	4	SR-1719 / S SELLARS MILL RD	FROM US 70 (N CHURCH ST) TO SR 1720	1	0.64	43	1.153	1.8	74		8,300	850	100				800		16		3	26	3	5										
TOTAL FOR MAP NO. 4										74		8,300	850	100				800		16		3	26	3	5										
2024CPT.07.05.20011	Alamance	5	SR-1719 / S SELLARS MILL RD	FROM SR 1720 TO BEG. ISLAND	5,6	0.19	24	1.822	2.04	28		2,700	2,700	40			150		2																
TOTAL FOR MAP NO. 5										28		2,700	2,700	40				150		2															
2024CPT.07.05.20011	Alamance	6	SR-1719 / S SELLARS MILL RD	FROM BEG. ISLAND TO SR 2396	1,7	0.2	40	2.04	2.18	12		1,000	500				75		4				2			2									
TOTAL FOR MAP NO. 6										12		1,000	500					75		4					2										
TOTAL FOR PROJ NO. 2024CPT.07.05.20011										227		22,200	8,150	310				1,025		6		16		3	33	3	8								
GRAND TOTAL												7.03		24.38	31.39	847	1.000	22,200	8,150	10,810	49,000	500	450	200	50	2,800	8	32	54	104	16	55	17	450	450
														30,350		310		950		40				246					900						

URBAN / SUBURBAN WORKZONES

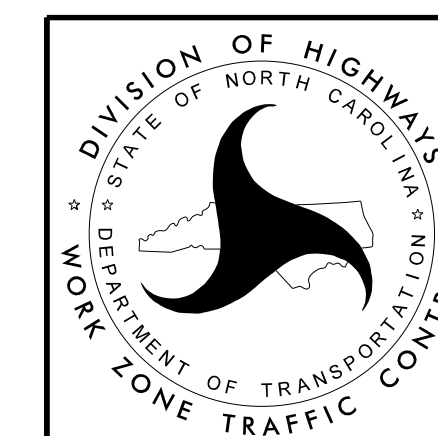


NOTES:

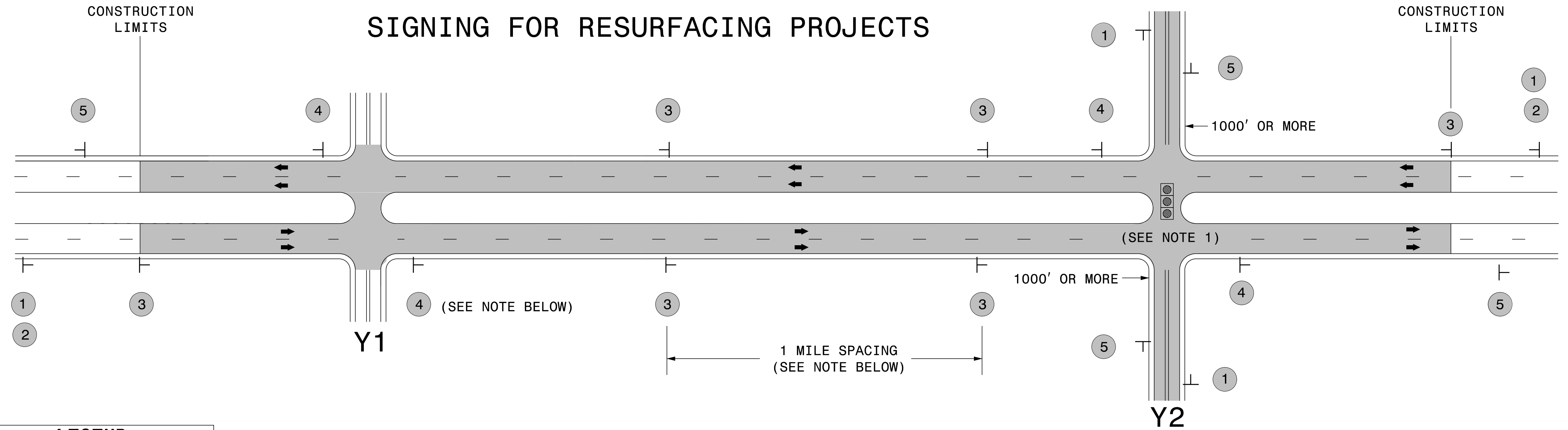
- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) 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.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) 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 WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- ┆ STATIONARY SIGN
- ➔ DIRECTION OF TRAFFIC FLOW



**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**



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	 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.	<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;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 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	 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 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	
	4	 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	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.		
			<p>NOTES:</p> <ol style="list-style-type: none"> 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**

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

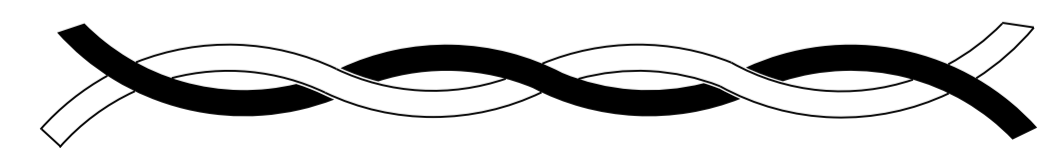
DEPTH (IN)	MAX NO. OF WIRE LAYERS				
	2	3	4	5	6
SAW SLOT DEPTH	4.0	4.5	5.0	5.0	5.0
MINIMUM TOTAL ASPHALT DEPTH REQUIRED	5.0	5.5	6.0	6.0	6.0

LOOP WIRE TWISTING METHOD

INCORRECT WAY TO TWIST WIRE

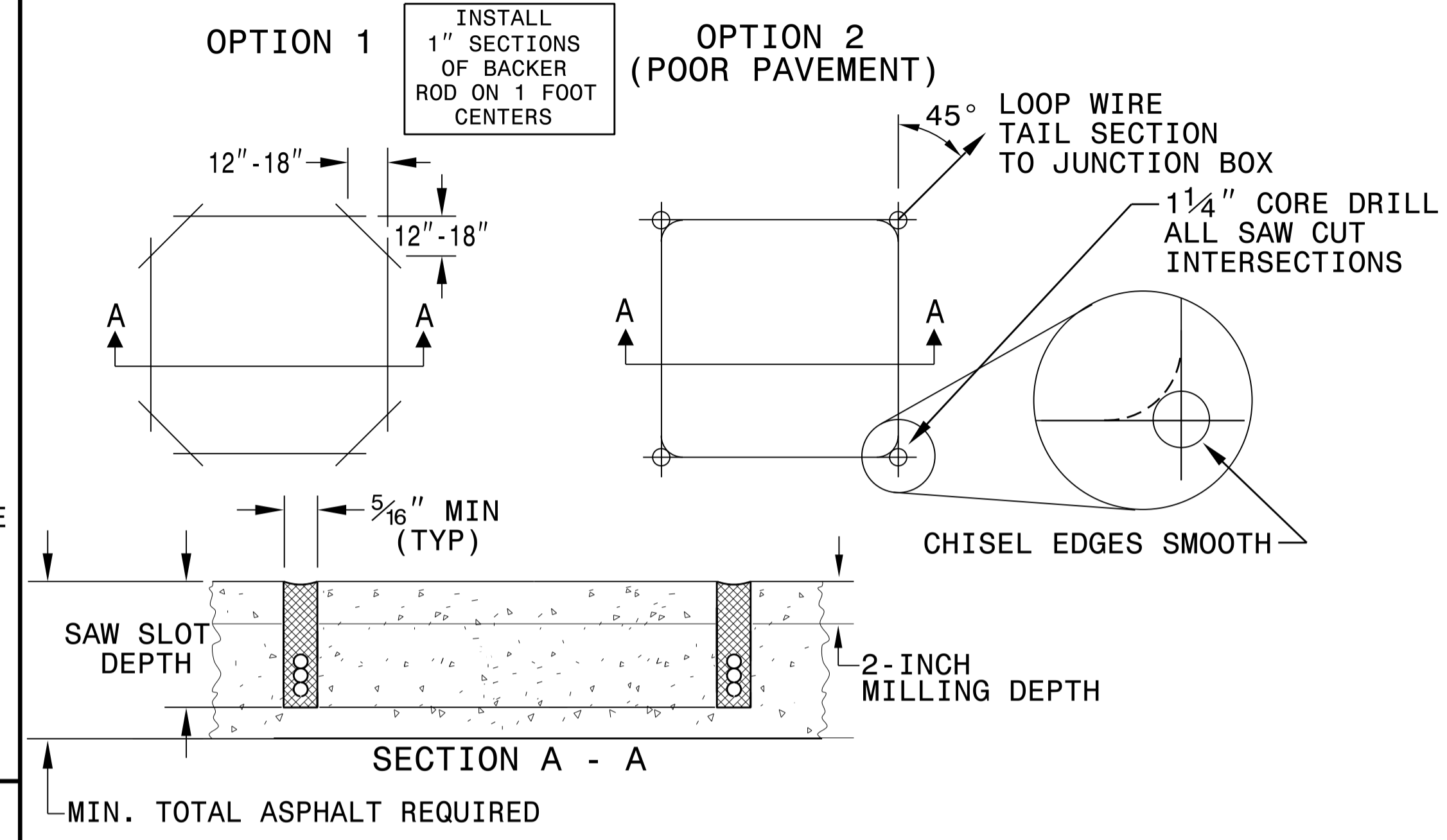


CORRECT WAY TO TWIST WIRE

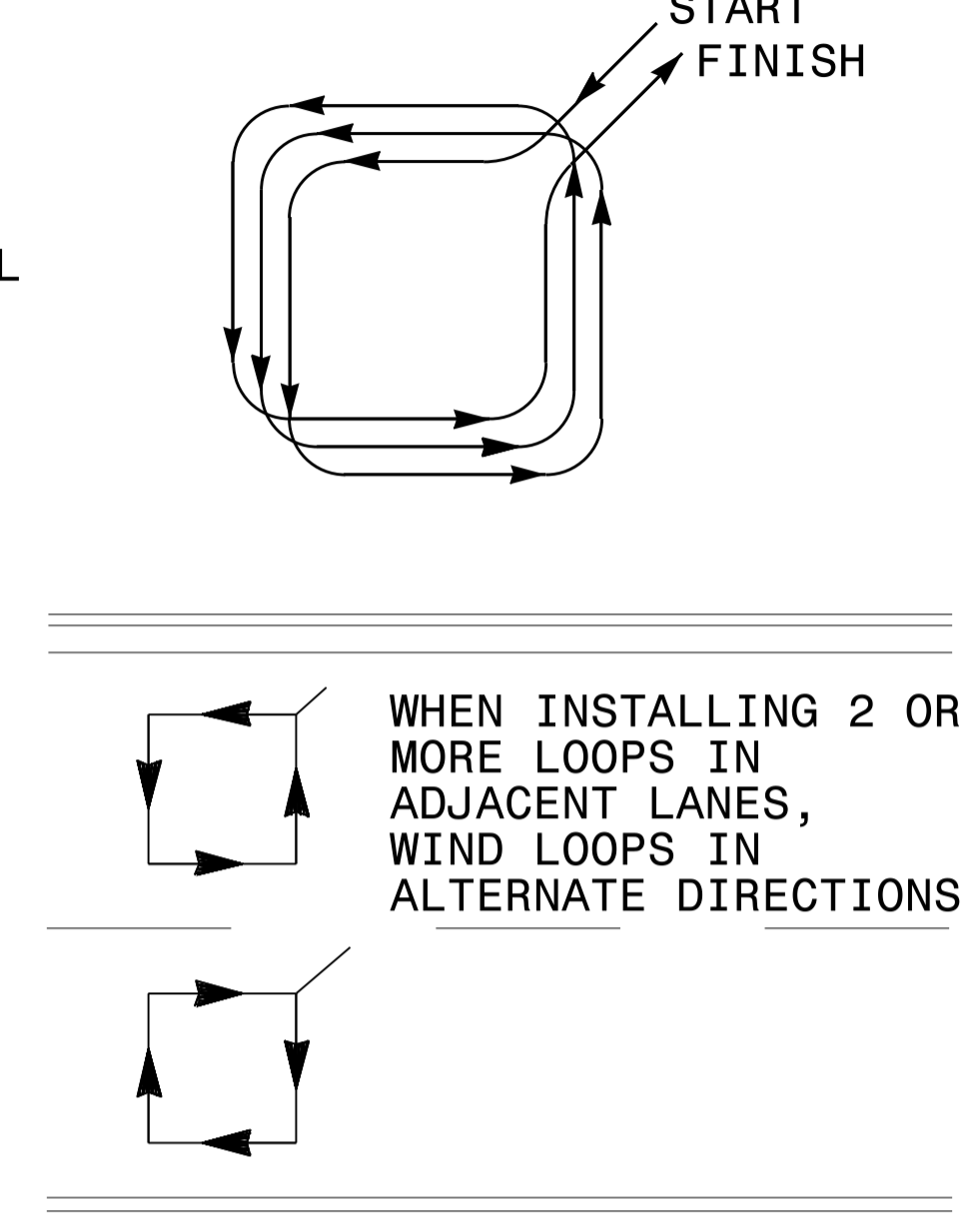


CONVENTIONAL 4-SIDED LOOP

SAW CUT OPTIONS

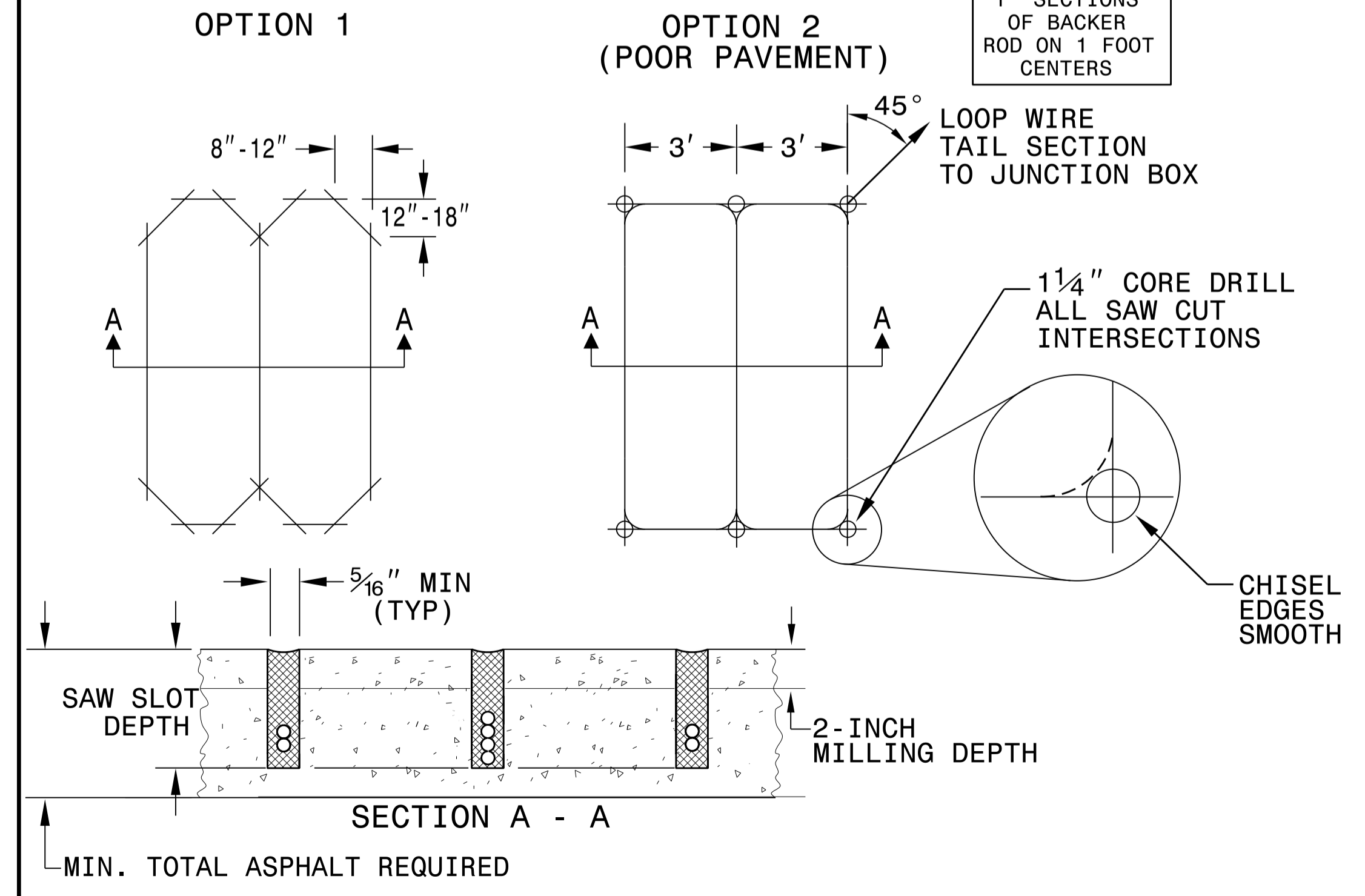


LOOP WINDING METHOD

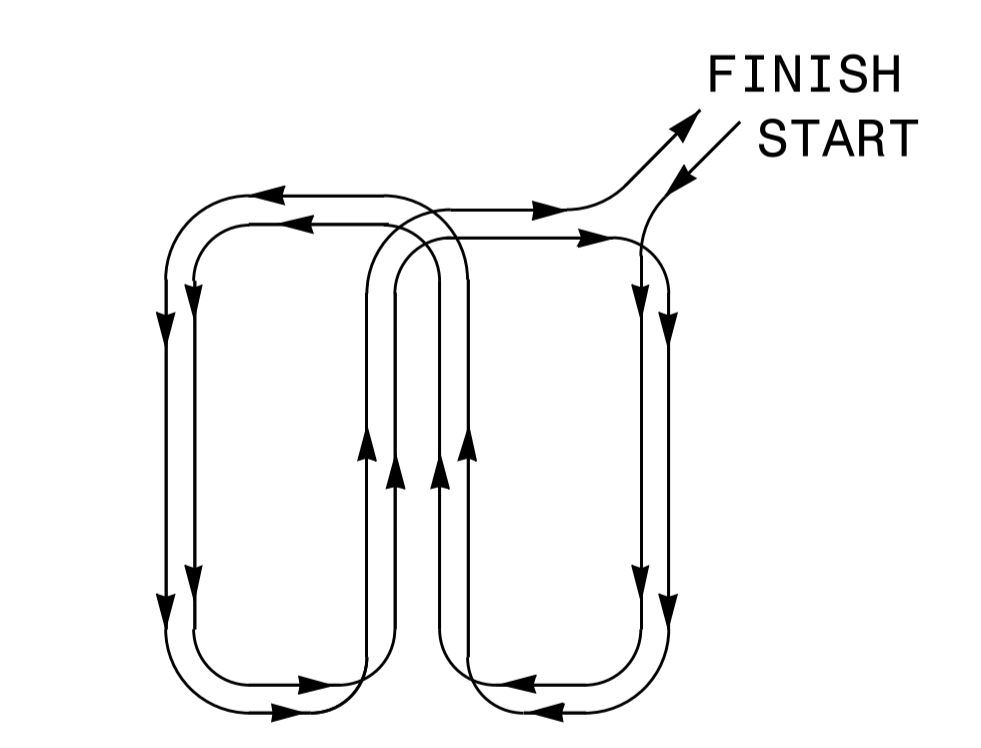


QUADRUPOLE LOOP

SAW CUT OPTIONS

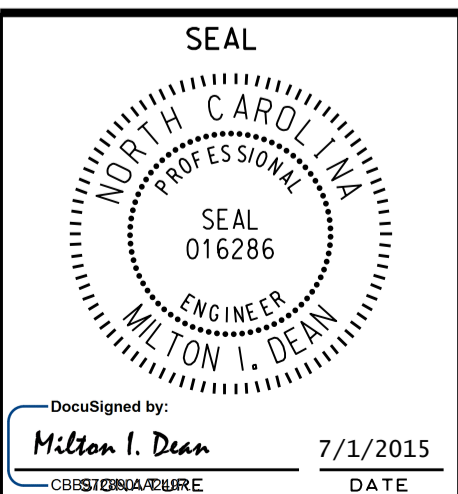
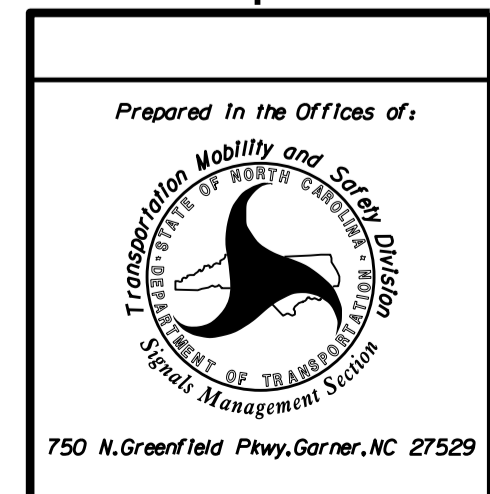


LOOP WINDING METHOD

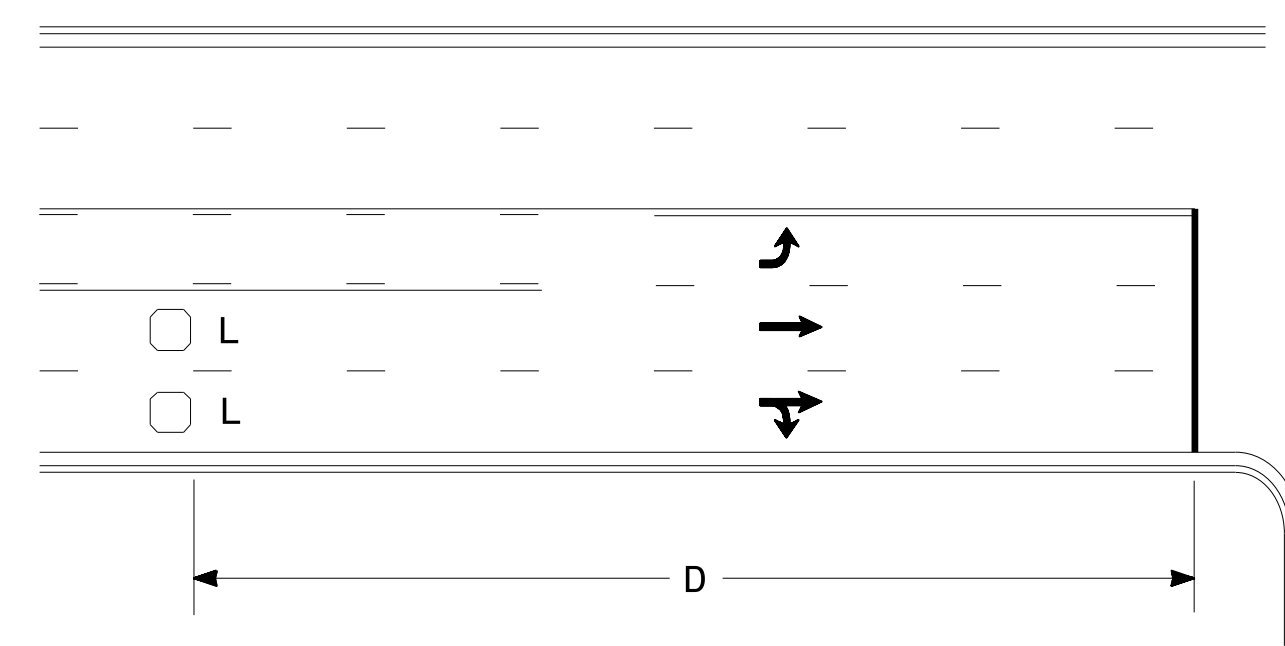


REVISIONS

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



High Speed Detection (≥40 mph)

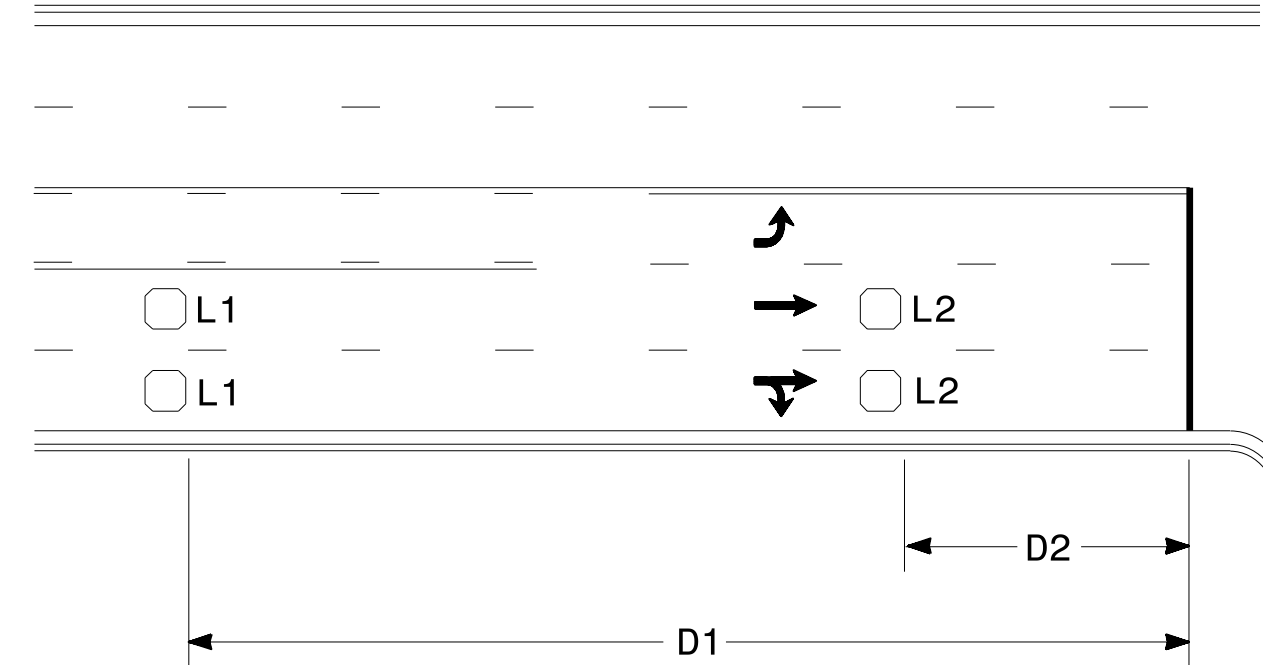


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired in series for TS1
Controllers
Wired separately for TS2,
170, and 2070L Controllers

Volume Density Operation

OR

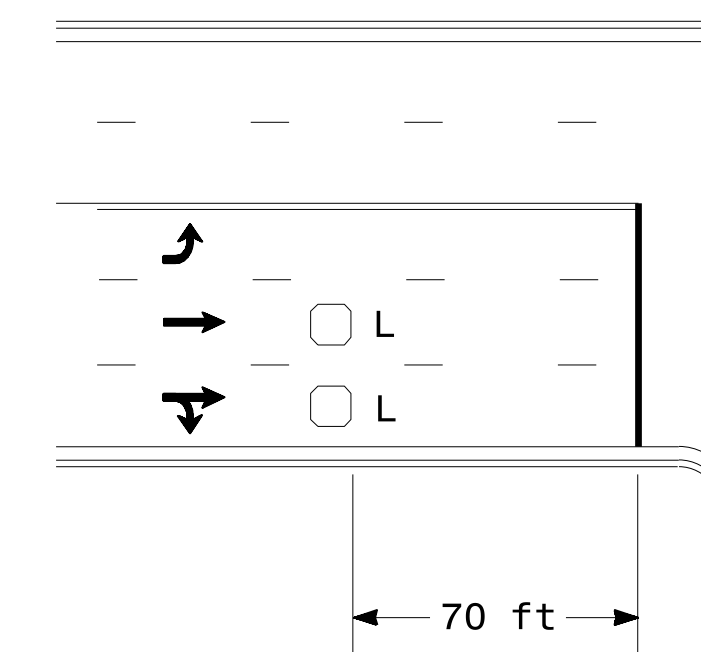


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series
L2 = 6ft X 6ft
Wired in series

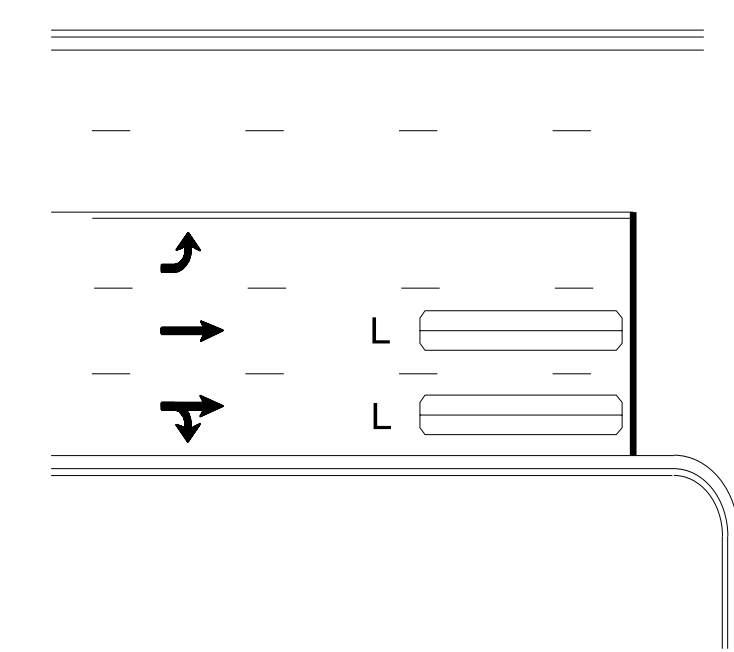
"Stretch" Operation

Low Speed Detection (≤35 mph)



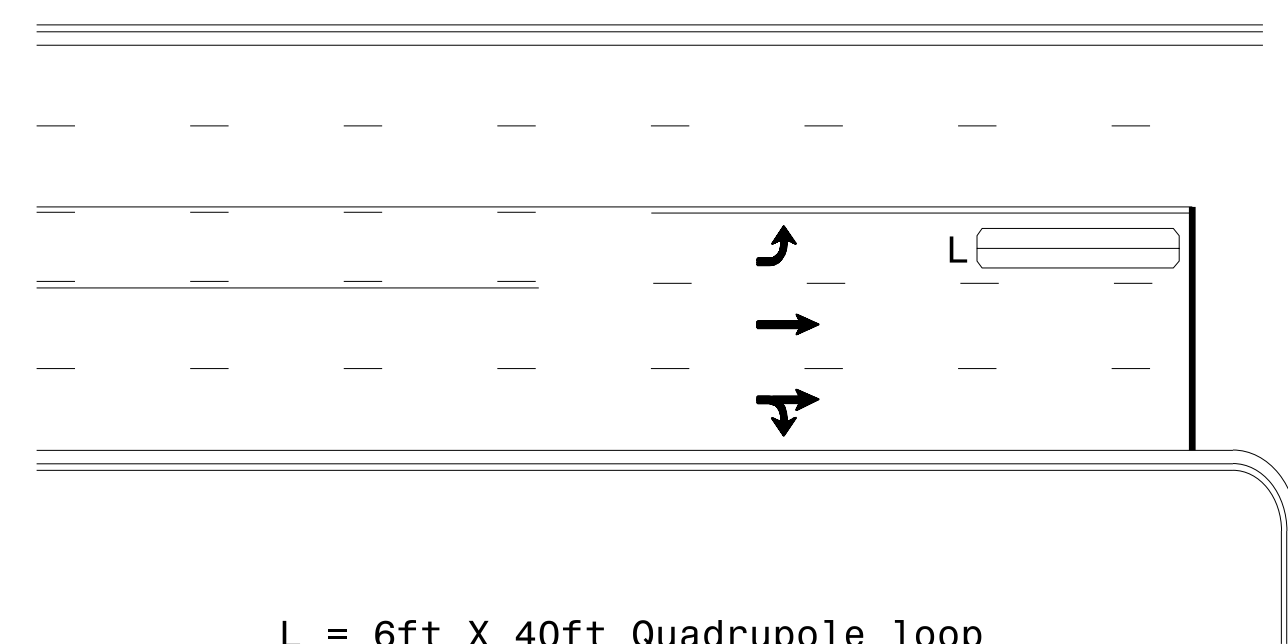
L = 6ft X 6ft
Wired in series

OR



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

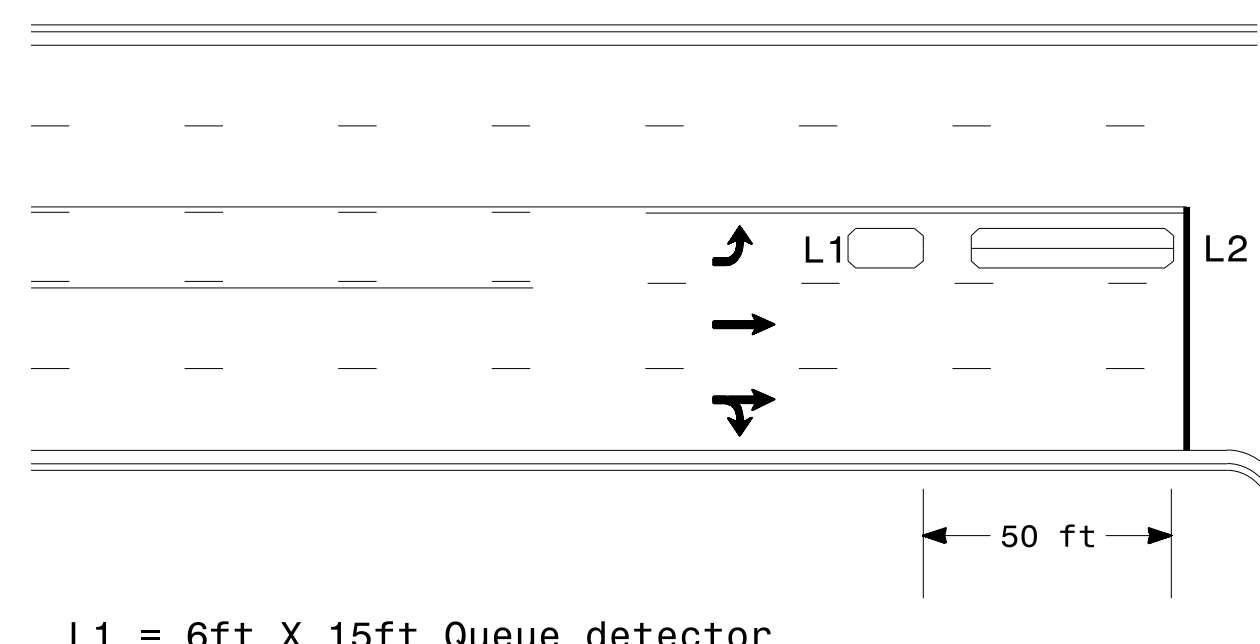
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

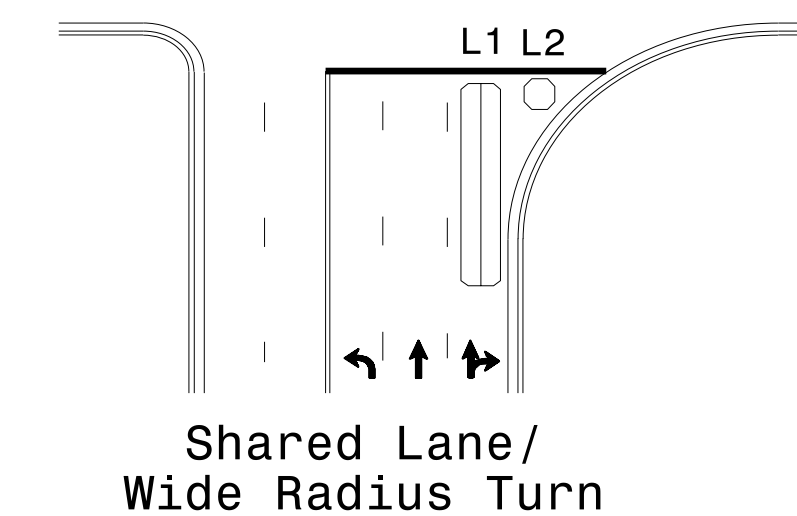
OR



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

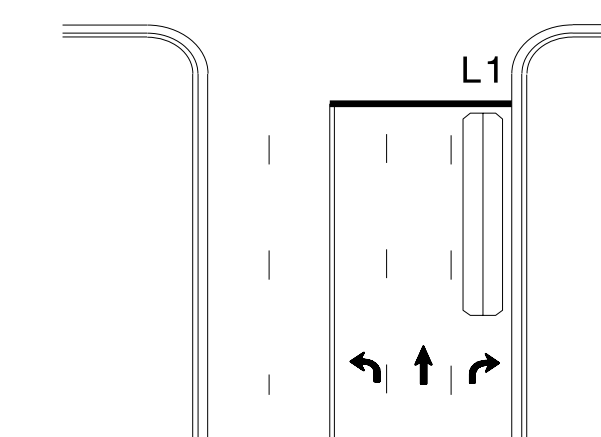
Queue Loop Detection

Right Turn Lane Detection

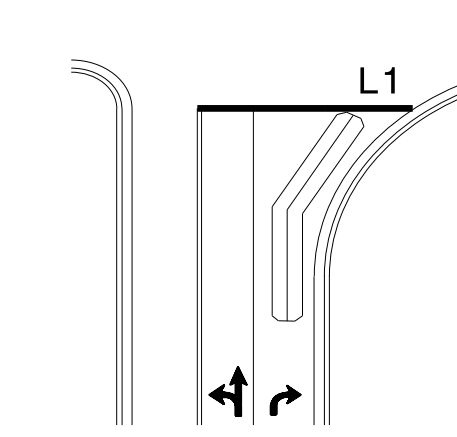


Shared Lane/
Wide Radius Turn

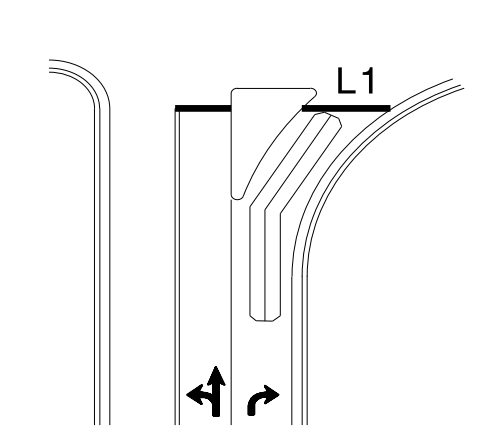
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

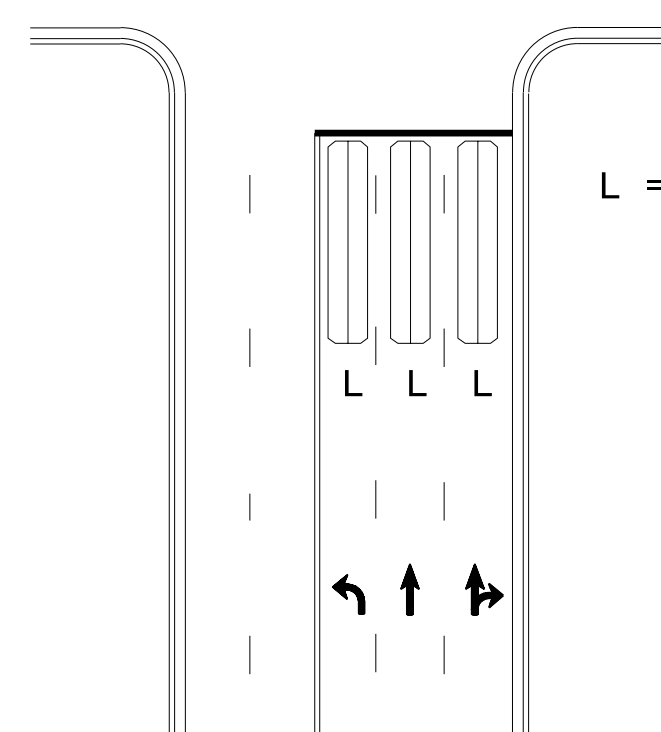


Wide Radius Turn



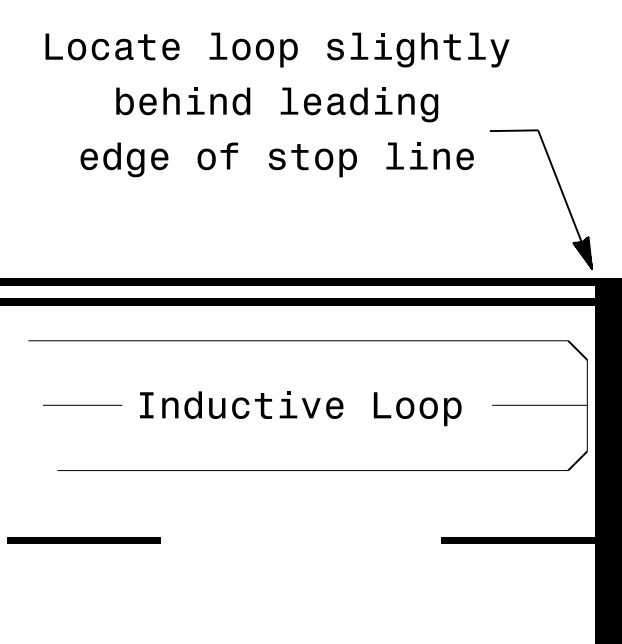
Channelized Turn

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

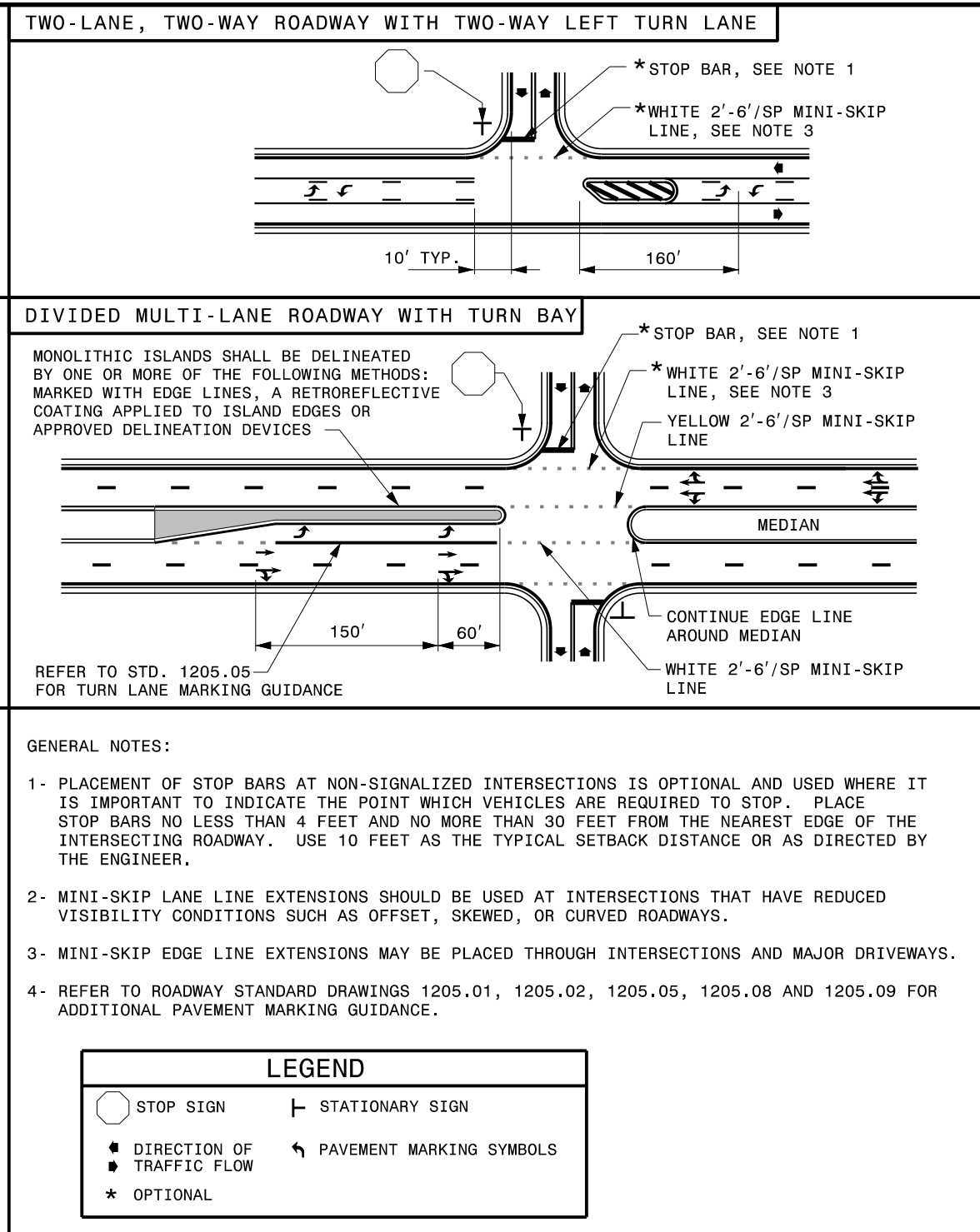
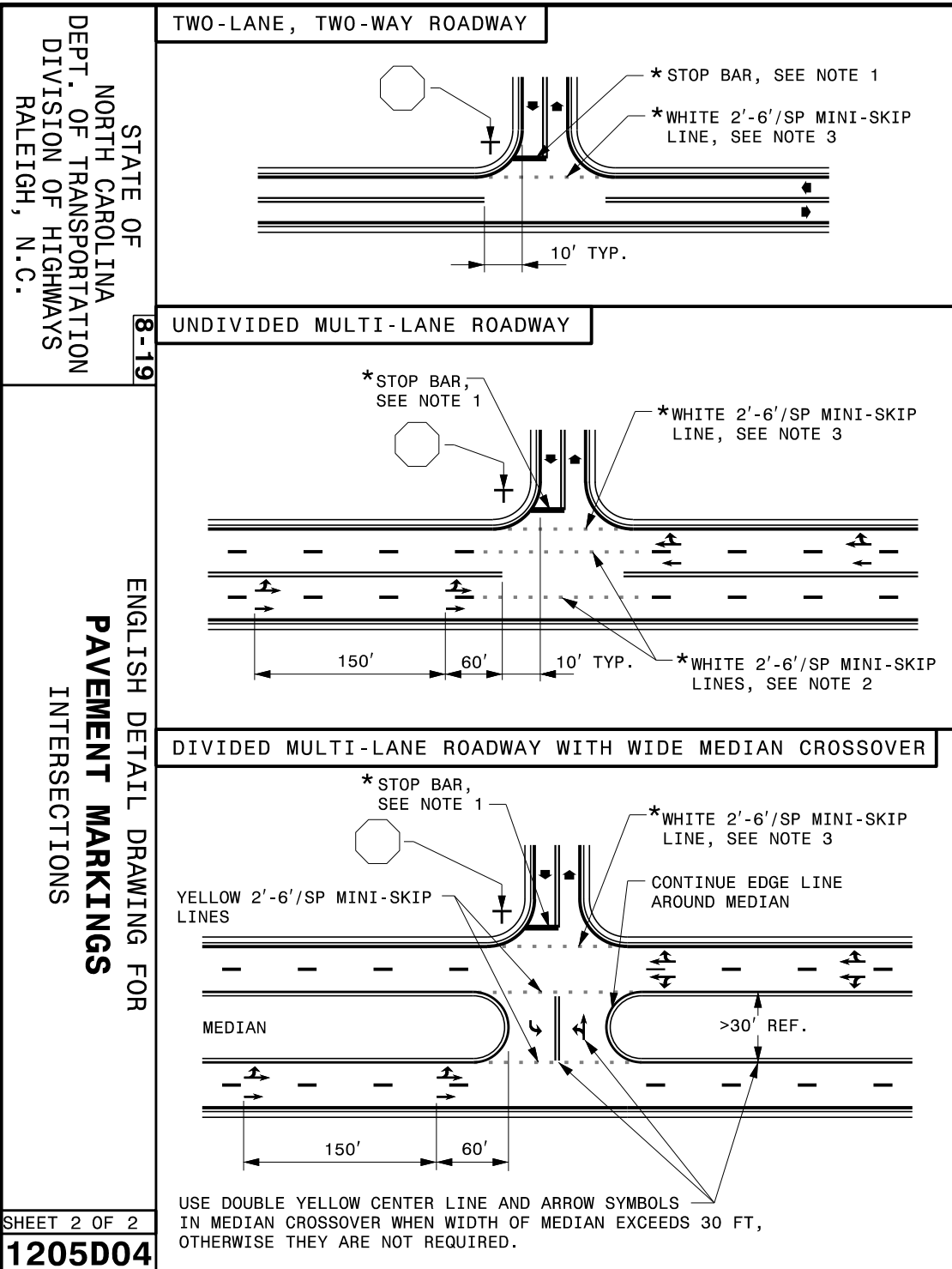
Single 6' X 6' loop
(when wired separately):

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

	<p>Prepared In the Offices of:</p> <p>TRANSPORTATION MOBILITY AND SAFETY DIVISION DEPARTMENT OF TRANSPORTATION SIGNAL DESIGN SECTION 750 N. Greenfield Pkwy, Garner, NC 27529</p>		<p>SEAL NORTH CAROLINA PROFESSIONAL ENGINEER PAMELA L. ALEXANDER 23489</p>
	<p>Typical Signal Loop Locations</p>		
SCALE N/A	<p>PLAN DATE: January 2015 PREPARED BY: PLA</p>	<p>REVIEWED BY: JPG REVIEWED BY:</p>	<p>DocuSigned by: P. Alexander 1/30/2015 10:44:44 AM B4756E00CE4E4ED SIG. INVENTORY NO.</p>



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**

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 User:dstokes