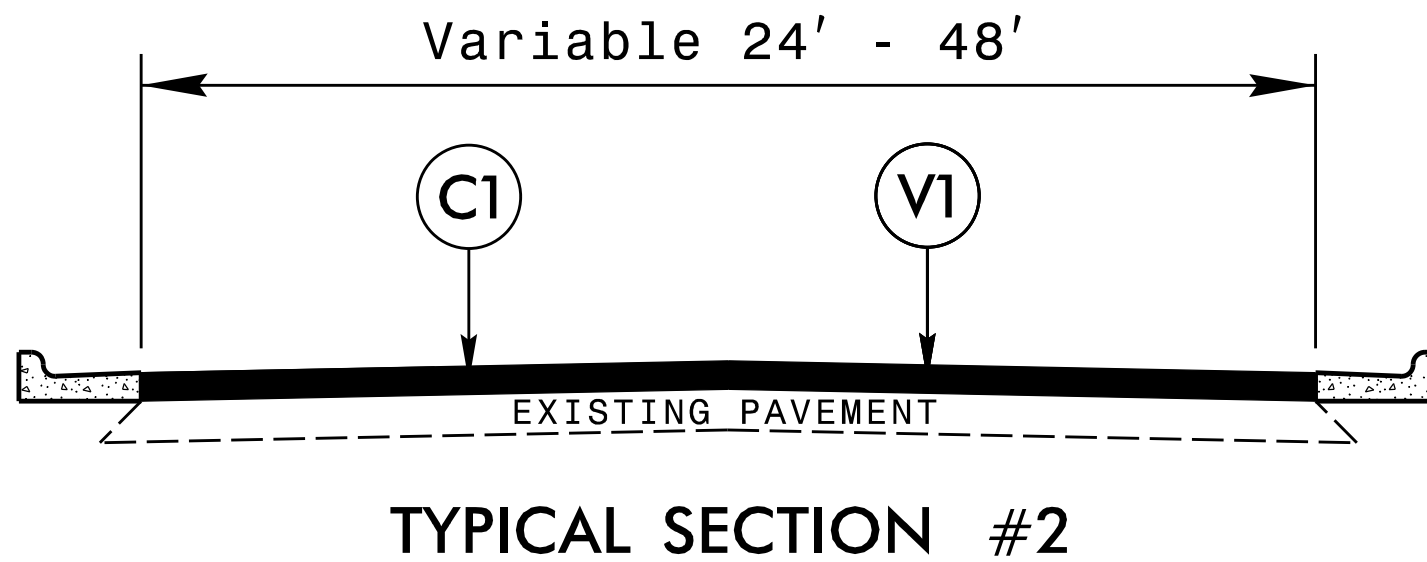
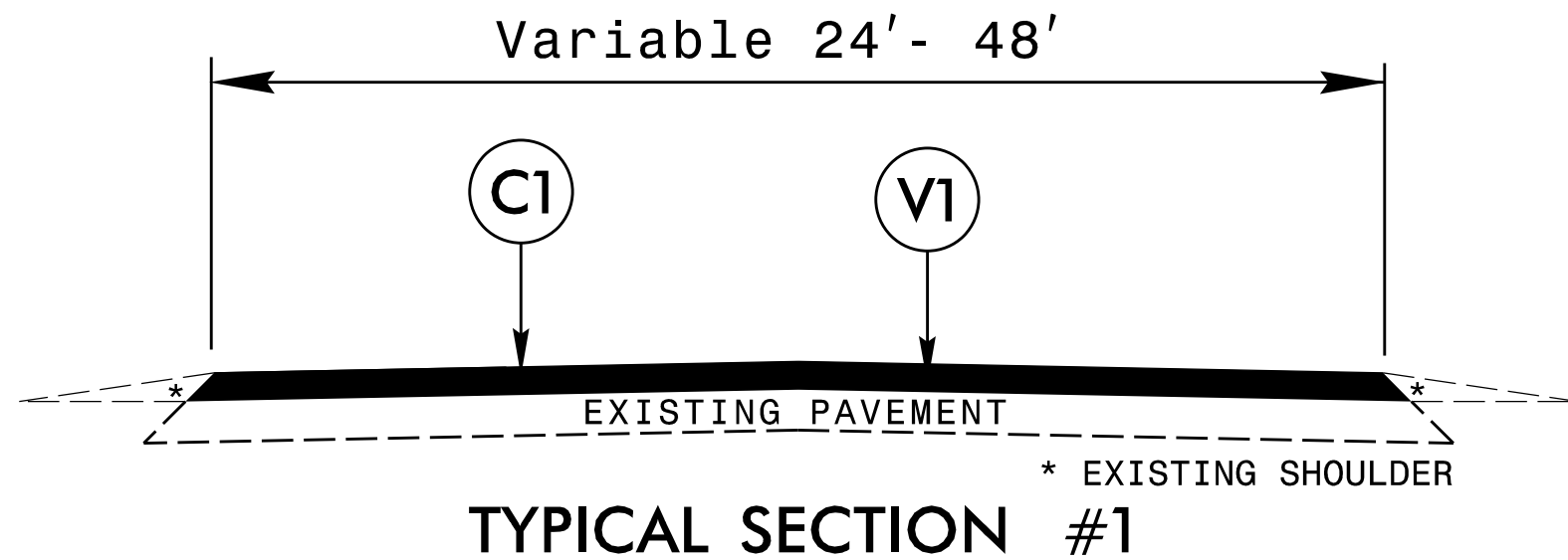
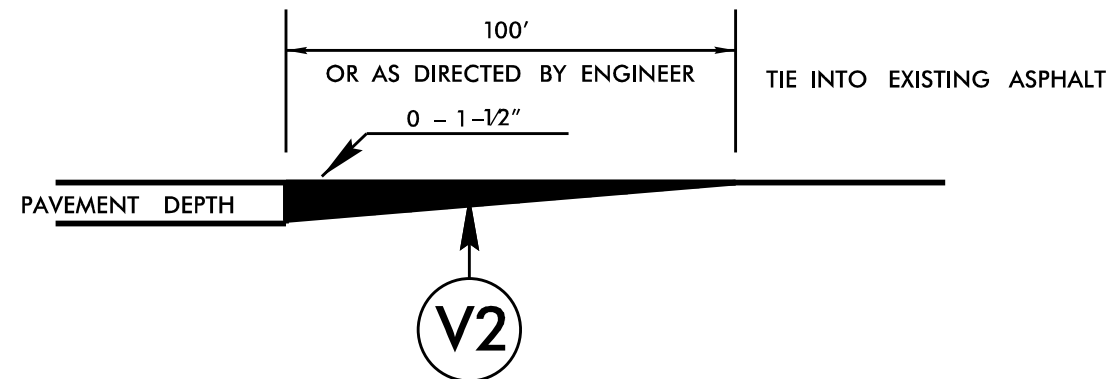


MAP #	ROUTE NAME	FROM_DESC	TO_DESC	LENGTH
1	US 70	SR 1280 (FOREST HILL DRIVE) +.13 MI END OF BRIDGE # 66	ABUTMENT BRIDGE# 96 CATAWBA RIVER OVERFLOW	2.33



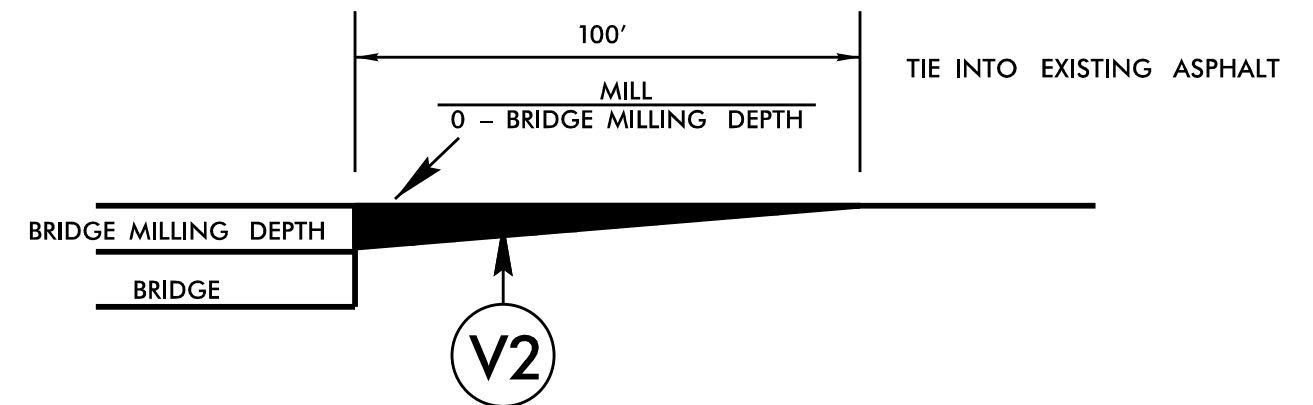


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD
V1	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH
V2	INCIDENTAL MILLING



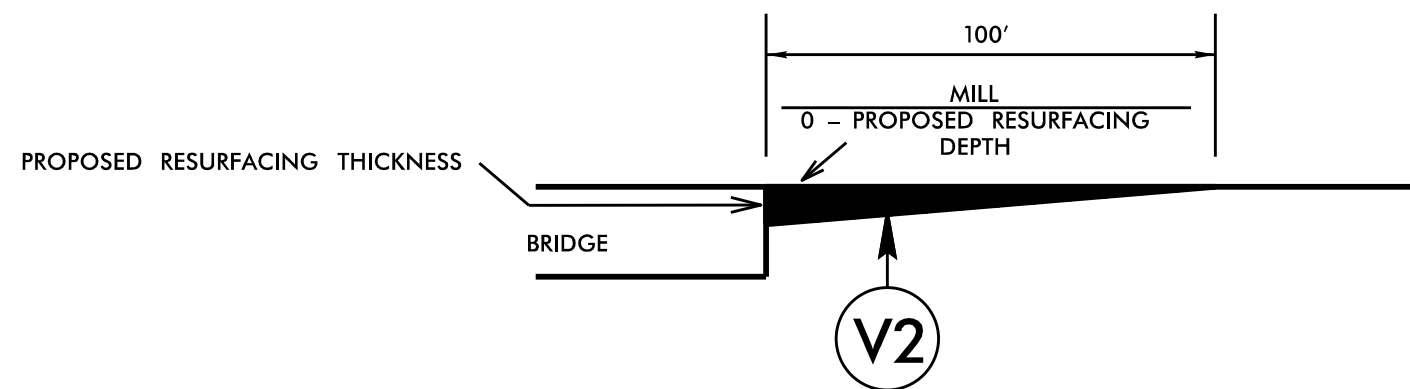
DETAIL TO TIE INTO EXIST PAVEMENT

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5C. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



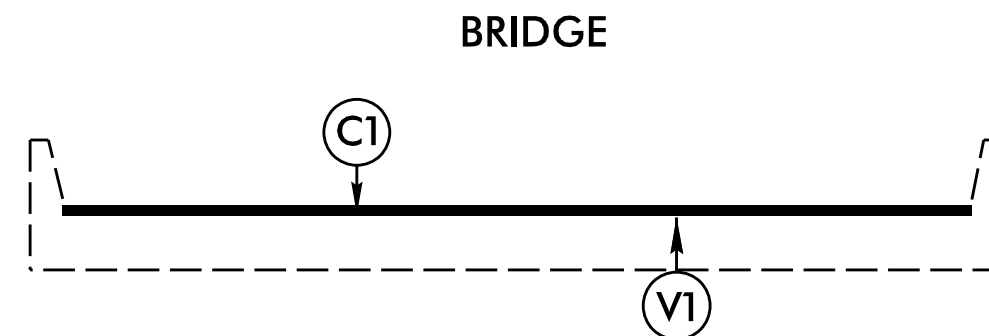
MILLING DETAIL AT BRIDGE APPROACHES

WHERE BRIDGES WILL BE MILLED THEN RESURFACED. THIS WILL BE PAID FOR AS INCIDENTAL MILLING. USE AT BRIDGE NUMBER: 080 MAP 1.



MILLING DETAIL AT BRIDGE APPROACHES

WHERE BRIDGES WILL NOT BE RESURFACED. THIS WILL BE PAID FOR AS INCIDENTAL MILLING. USE AT BRIDGE NUMBER: 096 MAP 1.



BRIDGE DETAIL

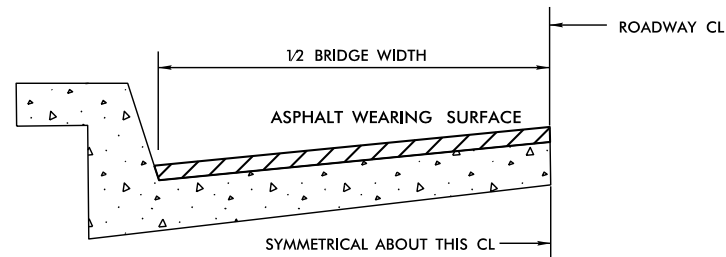
BRIDGE NUMBER 080 MAP 1. MILL 1-1/2" OFF EXISTING PAVEMENT SEE MAP FOR BRIDGE LOCATION.

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C. AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD
V1	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH
V2	INCIDENTAL MILLING

6/2/24

SECTION 01100 - PAVEMENT
PART 1 - GENERAL
1.01 SUMMARY
A. Section Includes
1. Milling and Resurfacing
B. Related Sections
1. Bridge Deck
2. Concrete Paving
3. Asphalt Paving
4. Storm Sewer Installation
5. Utility Installation
6. Earth Retention
7. Earth Retention
8. Earth Retention
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100. Earth Retention



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. THE MINIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1/2", S9.5B 1", S9.5C,D 1.5" - 2". ULTRA-THIN HOT MIX ASPHALT - TYPE A 3/4". ULTRA-THIN HOT MIX ASPHALT - TYPE B 5/8". ULTRA-THIN HOT MIX ASPHALT - TYPE C 1/2". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1", S9.5B 1.5", S9.5C,D 2". ULTRA-THIN HOT MIX ASPHALT - TYPE A 3/4", ULTRA-THIN HOT MIX ASPHALT - TYPE B 5/8", ULTRA-THIN HOT MIX ASPHALT - TYPE C 1/2".

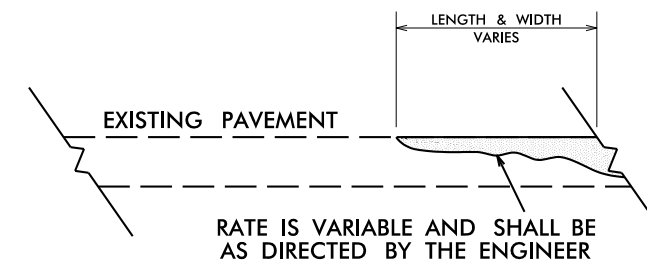
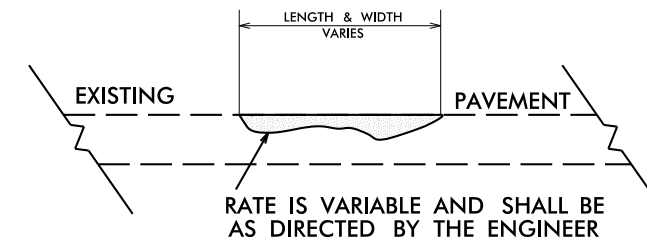
NOTES

ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT. ALL PAVED S. R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.

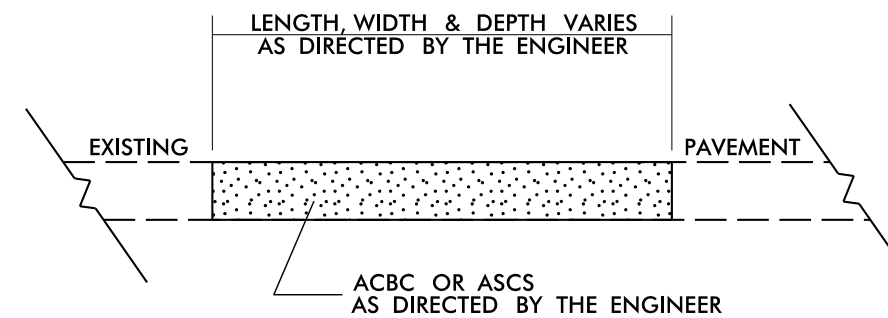
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.

SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE INDICATED.

BRIDGES ARE TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

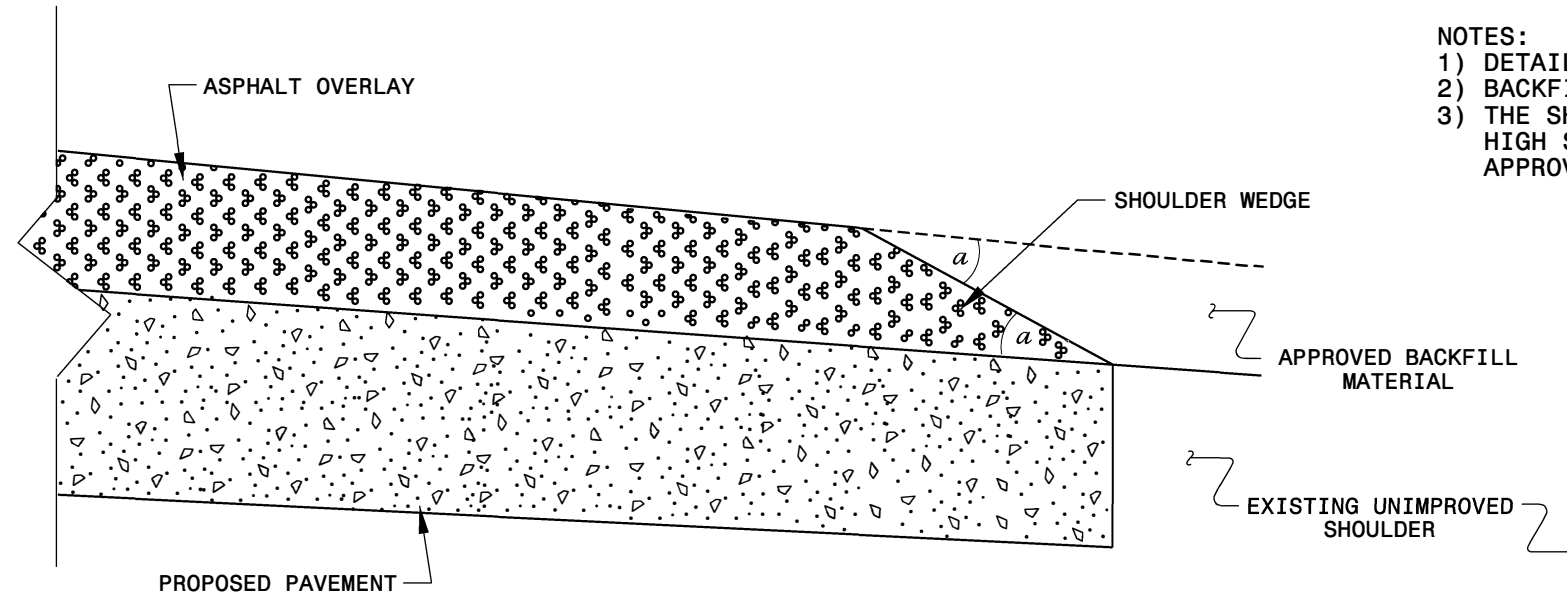


DETAIL SHOWING METHOD OF WEDGING

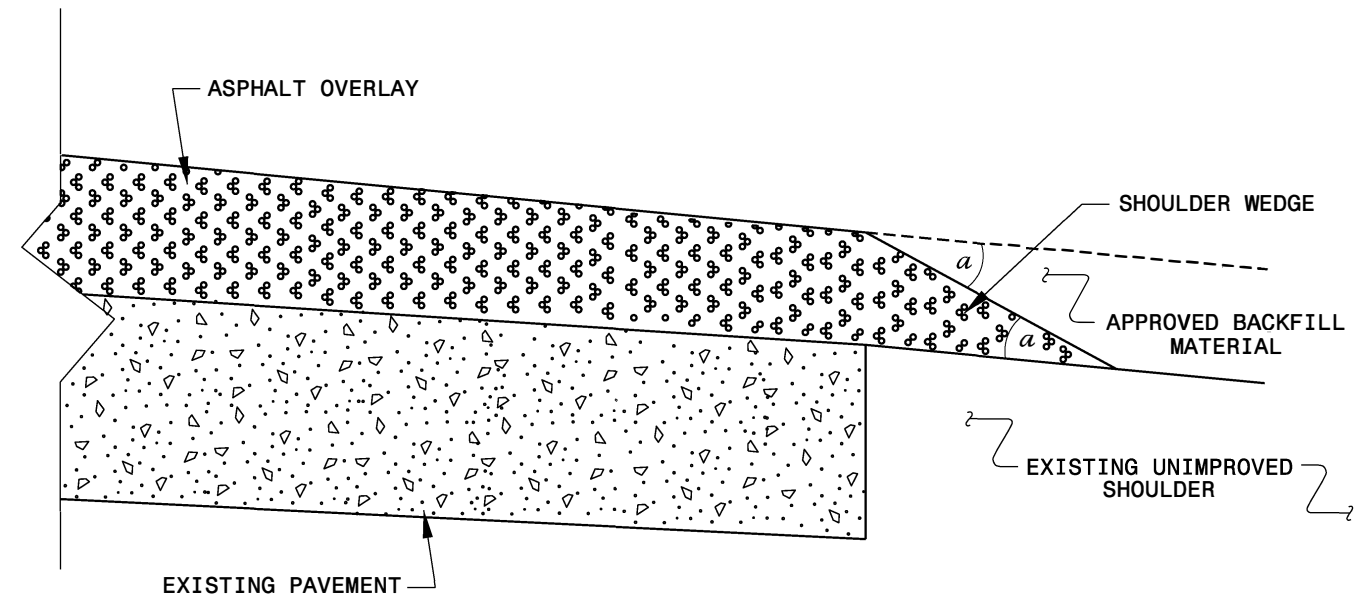


PATCHING EXISTING PAVEMENT

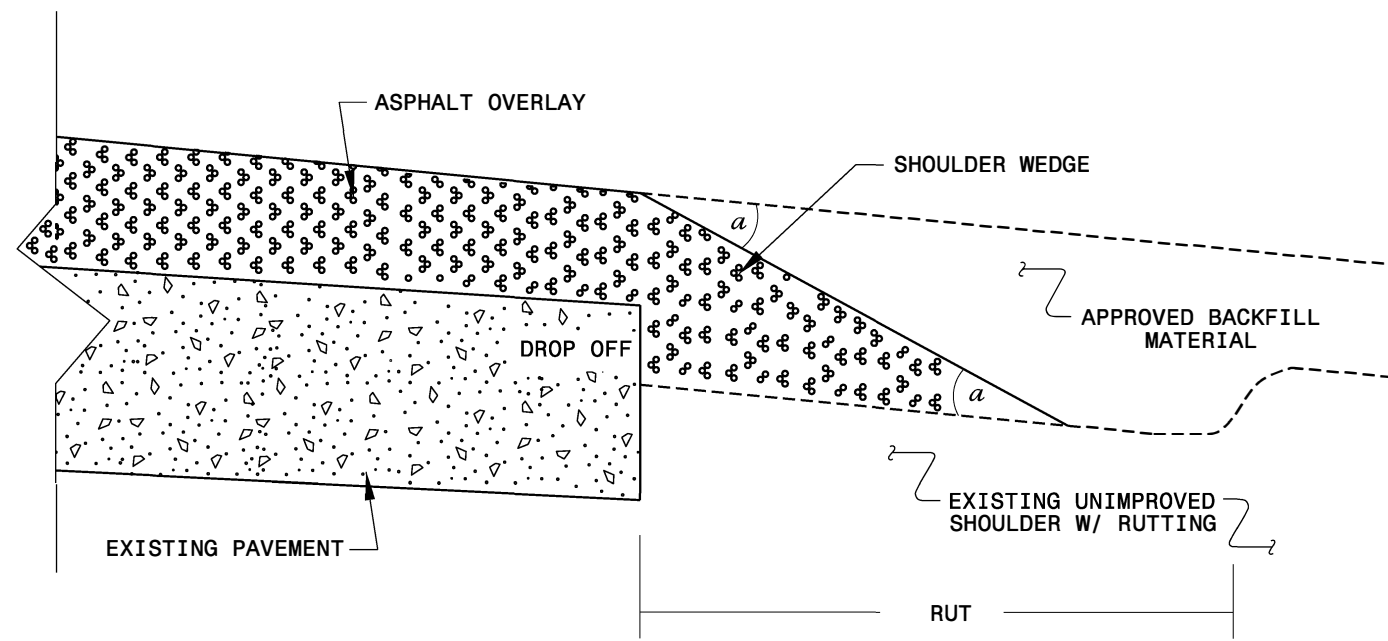
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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.: s:\usr\details\stand\shoulderwedgedetail.dgn	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT NO.	SHEET NO.
2024.CPT.13.08.10591	6

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1297000000-E	1330000000-E	1523000000-E	1575000000-E	1704000000-E	2845000000-N	7444000000-E	7456000000-E
						MI	FT			INCIDENTAL STONE BASE	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJUSTMENT OF METER BOXES OR VALVE BOXES	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14-2)
						TON	SY	SY	TON	TON	TON	EA	LF	LF				
2024.CPT.13.08.10591	McDowell	1	US-70 E / US 70 WEST	FROM SR 1280 (FOREST HILL DRIVE) +.13 MI END OF BRIDGE # 66 TO ABUTMENT BRIDGE# 96 CATAWBA RIVER OVERFLOW	1,2	2.33	33.50	12.91	15.24	110	45,180	2,546	3,965	238	75	10	755	40
TOTAL FOR PROJ NO. 2024.CPT.13.08.10591						2.33		12.91	15.24	110	45,180	2,546	3,965	238	75	10	755	40
GRAND TOTAL						2.33		12.91	15.24	110	45,180	2,546	3,965	238	75	10	755	40

* NOTE - ALL MAPS, COUNTY = McDOWELL, FINAL SURFACE TESTING REQUIRED = NO, WARM MIX ASPHALT REQUIRED = NO, LANE TYPES = MU, NUMBER OF LANES = 3.

PROJECT NO.	SHEET NO.
2024.CPT.13.08.10591	7

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		4695000000-E	4709000000-E	4720000000-E	4725000000-E
										WORK ZONE ADVANCE / GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS) YELLOW	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING CHARACTER (90 MILS) "SCHOOL"	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW
						MI	FT			SF	LS	LF	LF	LF	LF	EA	EA
2024.CPT.13.08.10591	McDowell	1	US-70 E / US 70 WEST	FROM SR 1280 (FOREST HILL DRIVE) +.13 MI END OF BRIDGE # 66 TO ABUTMENT BRIDGE# 96 CATAWBA RIVER OVERFLOW	1,2	2.33	33.50	12.91	15.24	126	1	27,136	11,918	161	102	12	42
TOTAL FOR PROJ NO. 2024.CPT.13.08.10591						2.33	33.50	12.91	15.24	126	1	27,136	11,918	161	102	12	42
GRAND TOTAL						2.33		12.91	15.24	126	1	27,136	11,918	161	102	12	42
												39,054					

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH	WIDTH	BEGIN MP	END MP	4810000000-E	4820000000-E	4835000000-E	4840000000-N	4845000000-N	4905100000-N		
										PAINT PAVEMENT MARKING LINES (4") YELLOW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (8") WHITE	PAINT PAVEMENT MARKING LINES (24") WHITE	PAINT PAVEMENT MARKING CHARACTER "SCHOOL"	PAINT PAVEMENT MARKING SYMBOL (LT ARROW)	NON-CAST IRON SNOWPLOWABLE PAVMENT MARKERS (DOUBLE YELLOW)	NON-CAST IRON SNOWPLOWABLE PAVMENT MARKERS (RED/ WHITE)
						MI	FT			LF	LF	LF	LF	EA	EA	EA	EA
2024.CPT.13.08.10591	McDowell	1	US-70 E / US 70 WEST	FROM SR 1280 (FOREST HILL DRIVE) +.13 MI END OF BRIDGE # 66 TO ABUTMENT BRIDGE# 96 CATAWBA RIVER OVERFLOW	1,2	2.33	33.50	12.91	15.24	27,136	200	161	102	12	42	394	23
TOTAL FOR PROJ NO. 2024.CPT.13.08.10591						2.33	33.50	12.91	15.24	27,136	200	161	102	12	42	394	23
GRAND TOTAL						2.33		12.91	15.24	27,136	200	161	102	12	42	394	23
										27,336						417	
										27,336	200	161	102	12	42	394	23
										27,336						417	

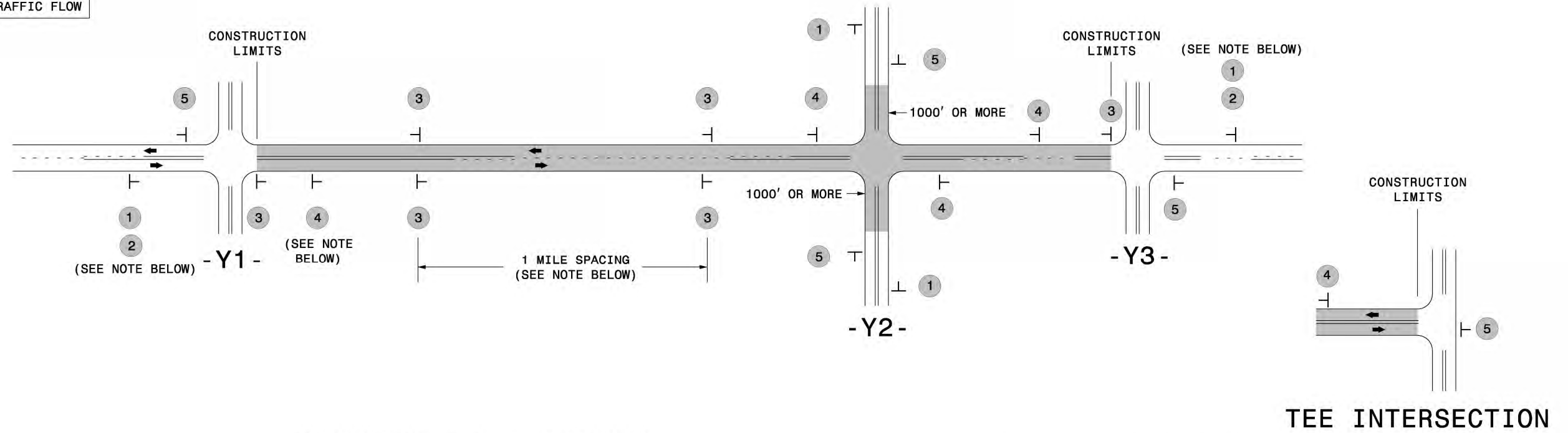
* NOTE - ALL MAPS, COUNTY = McDOWELL, FINAL SURFACE TESTING REQUIRED = NO, WARM MIX ASPHALT REQUIRED = NO, LANE TYPES = MU, NUMBER OF LANES = 3.

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"> 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, 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;"> W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" 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		- 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		- 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.

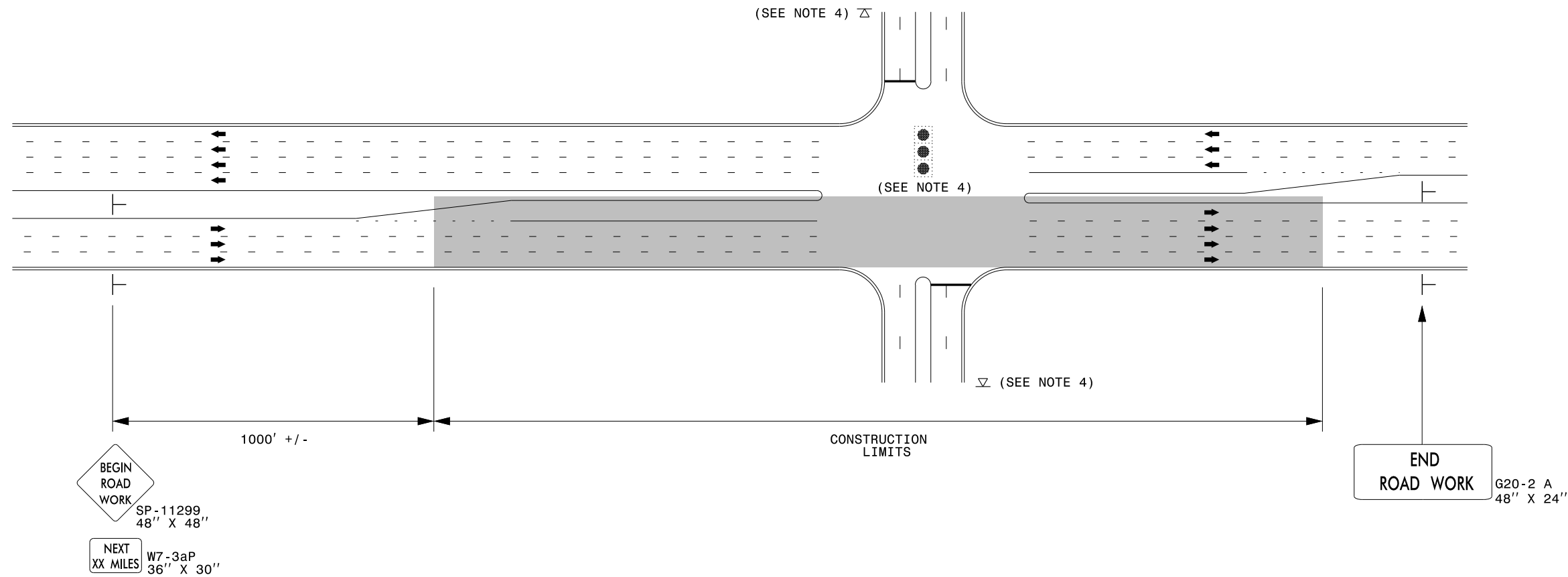
MAPS LESS THAN 2 MILES

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

5/15/2017 S:\T\13\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn User:keads

URBAN / SUBURBAN WORKZONES

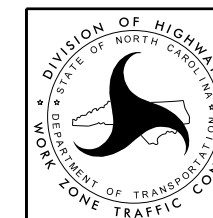


NOTES:

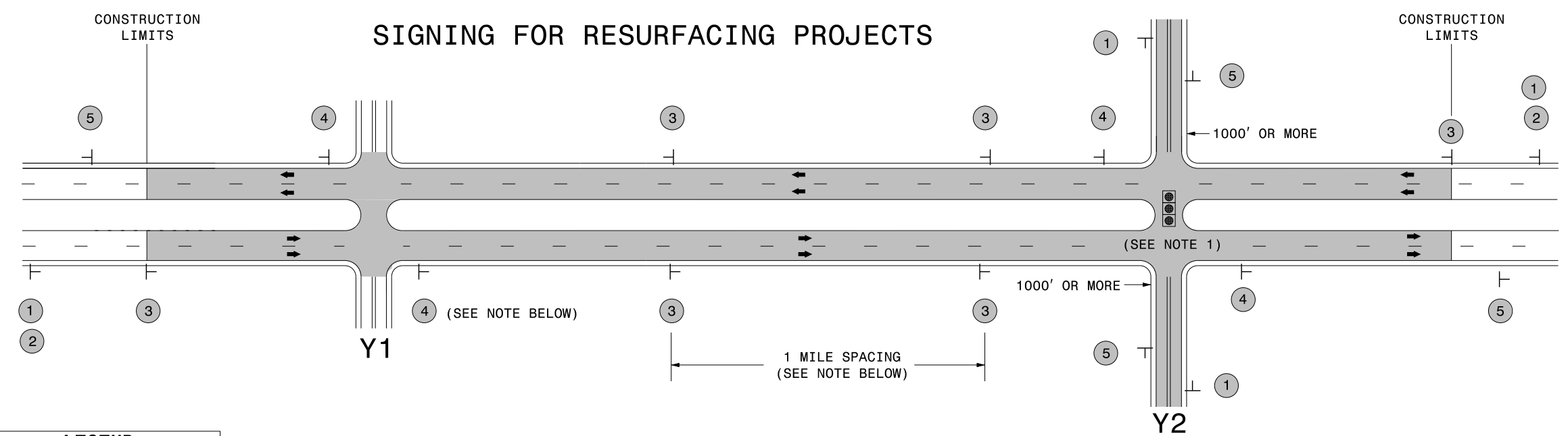
- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. 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

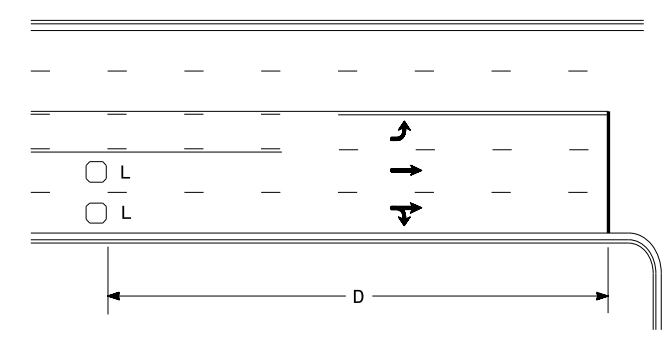
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>2) SUBDIVISION ROADS</p> <p>3) DEAD END ROADS</p>
		<p>#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)</p>
		<p>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.</p>
		<p>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.</p>
	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <p>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</p> <p>2) SUBDIVISION ROADS</p> <p>3) DEAD END ROADS</p> <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>PLACED 500' IN ADVANCE OF FLAGGER.</p> </div> <div style="text-align: center;"> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p> </div> </div> <p>NOTES:</p> <p>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.</p>

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

RESURFACING ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN MULTI-LANE ROADWAYS W/ SHOULDER SECTIONS

High Speed Detection (≥40 mph)

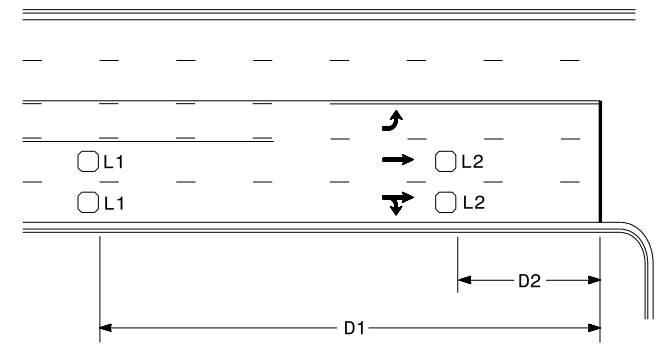


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

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

Volume Density Operation

OR

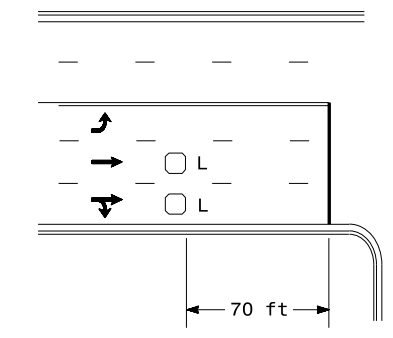


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

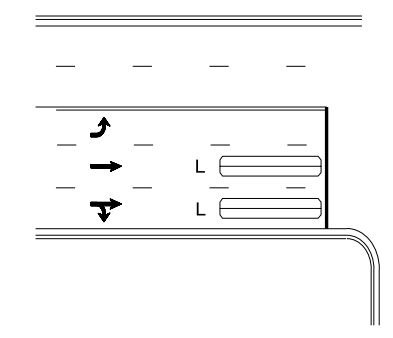
"Stretch" Operation

Low Speed Detection (≤35 mph)



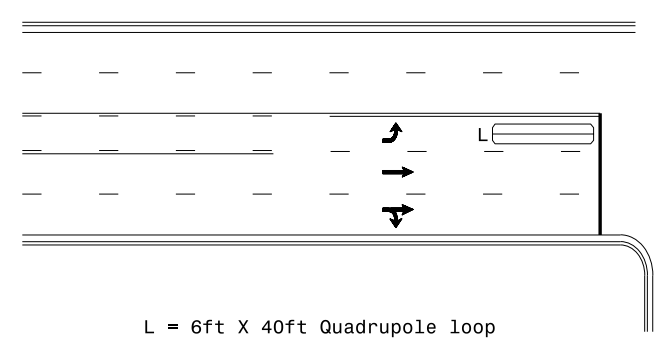
L = 6ft X 6ft
Wired in series

OR



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

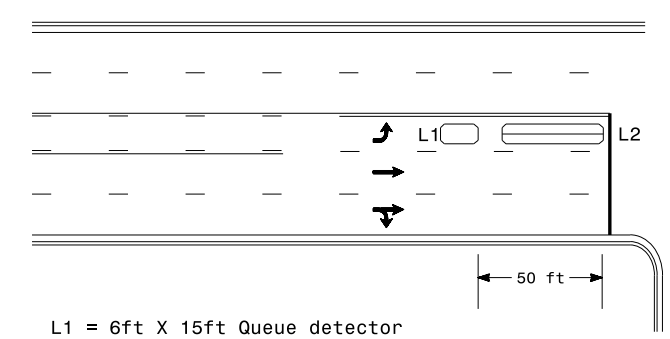
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

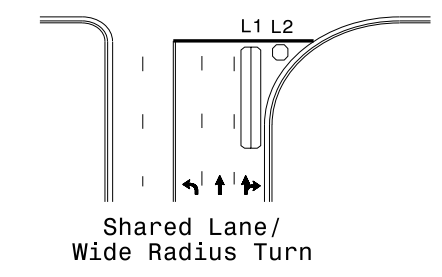
OR



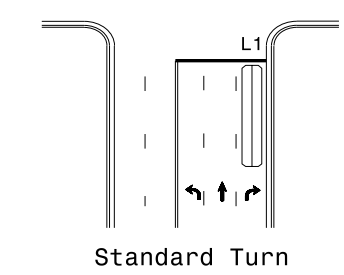
L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

Queue Loop Detection

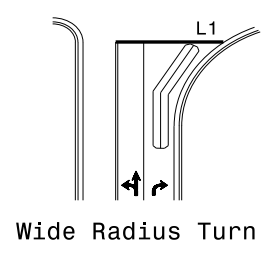
Right Turn Lane Detection



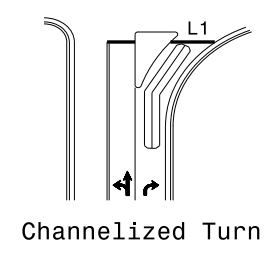
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

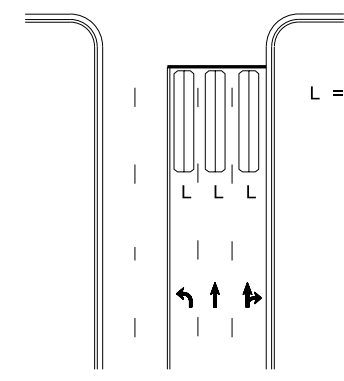


Wide Radius Turn



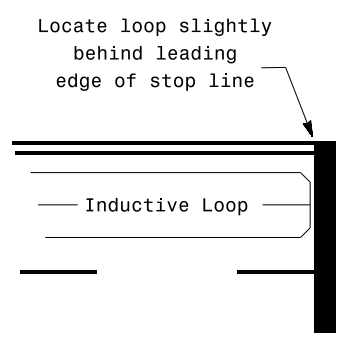
Channelized Turn

Side Street Detection



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

Presence Loop Placement at Stop Lines



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:

750 N. Greenfield Pkwy, Garner, NC 27529

Typical Signal Loop Locations	
PLAN DATE: January 2015	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:
SCALE: N/A	REVISIONS: INIT. DATE

SIG. INVENTORY NO. DATE

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