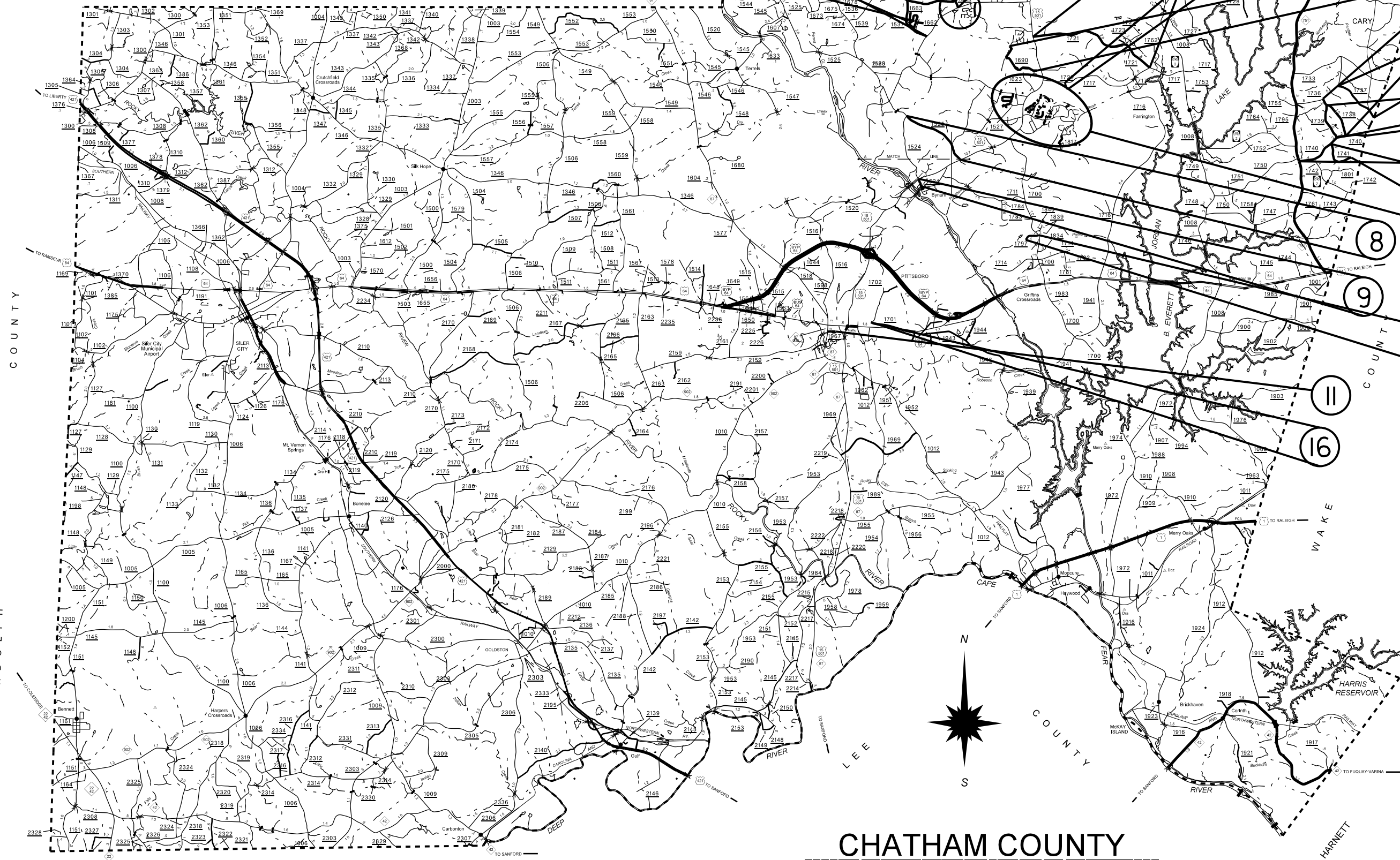
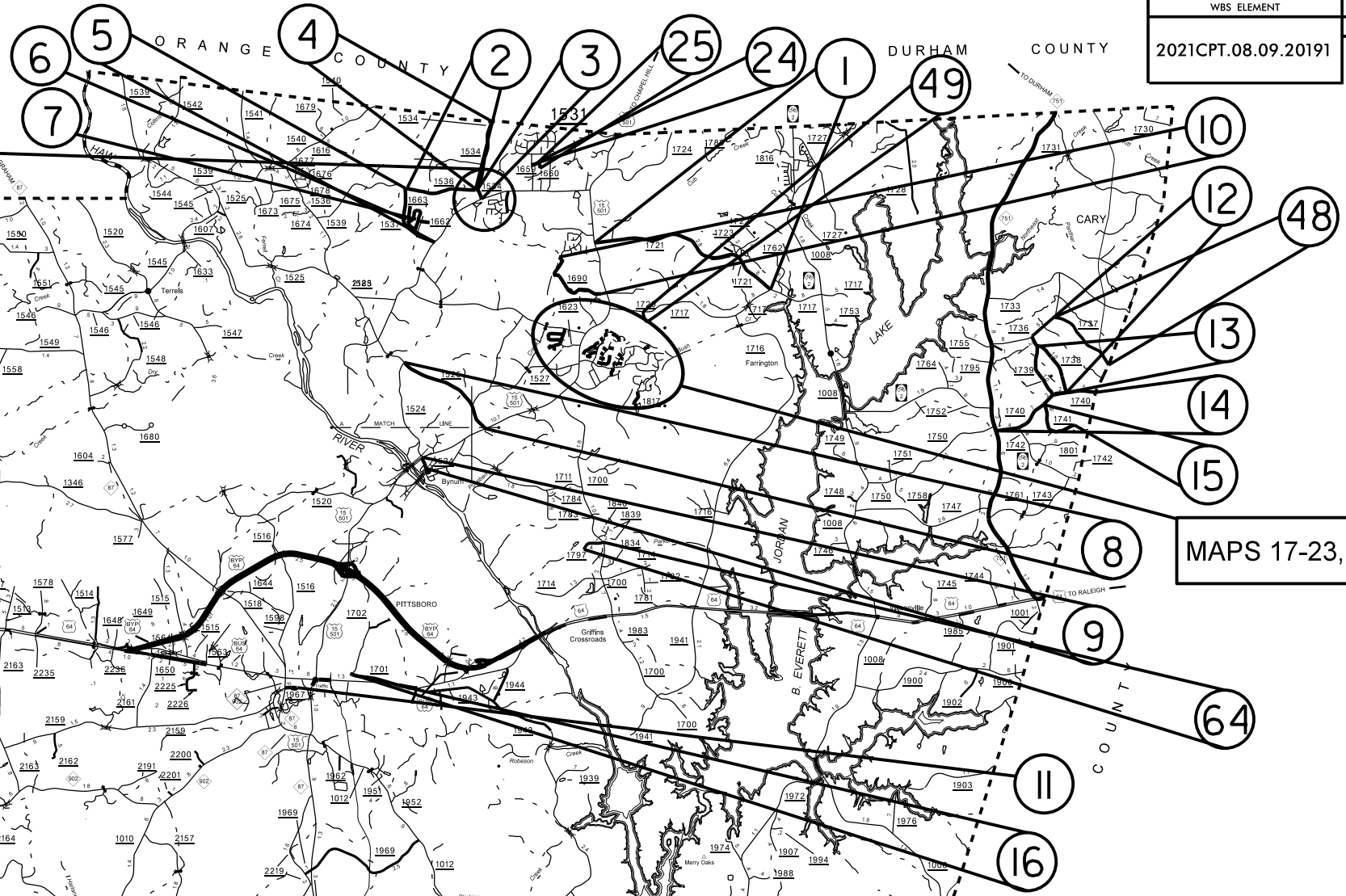


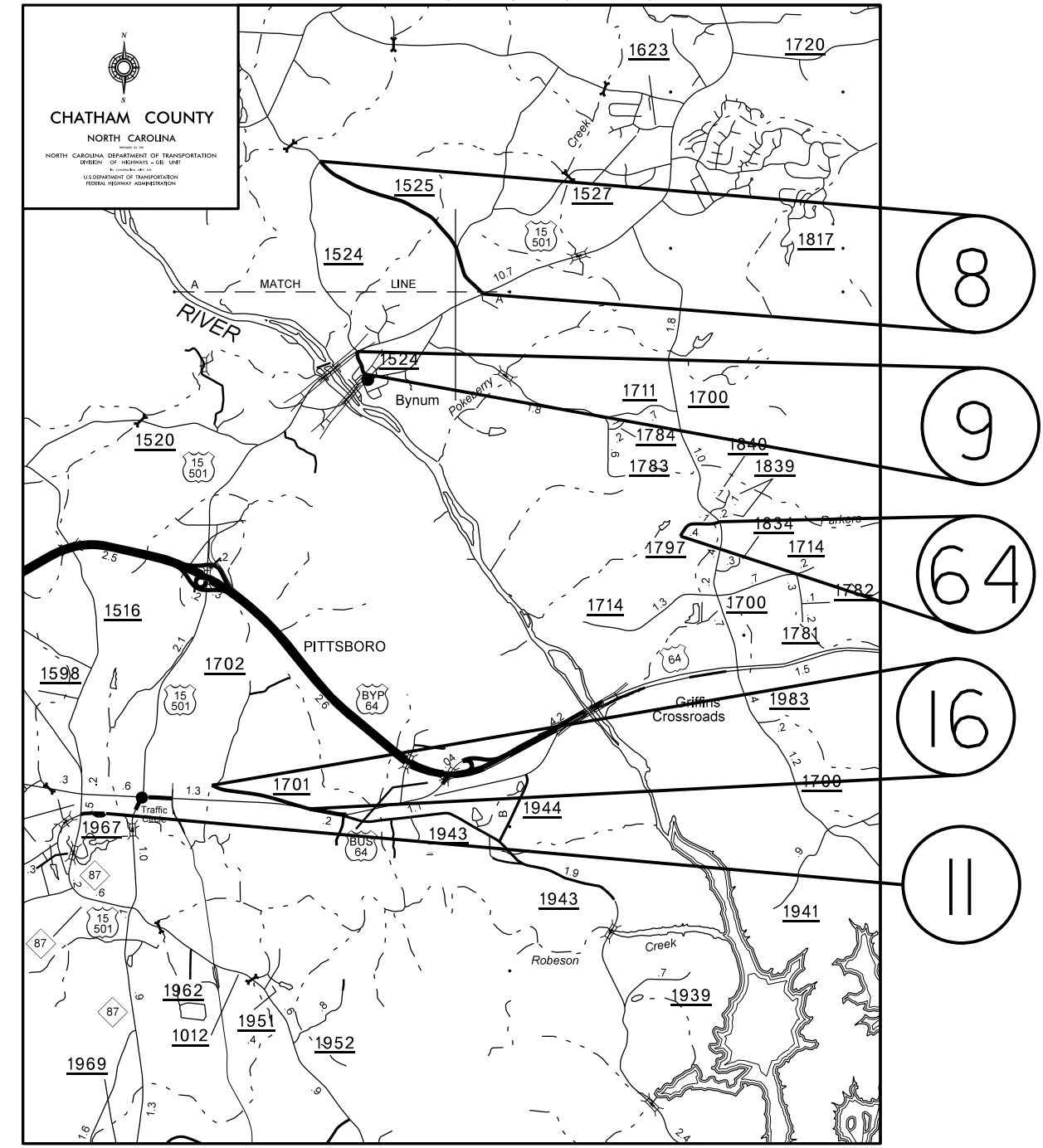
MAPS 50-63

MAPS 17-23, 26-47

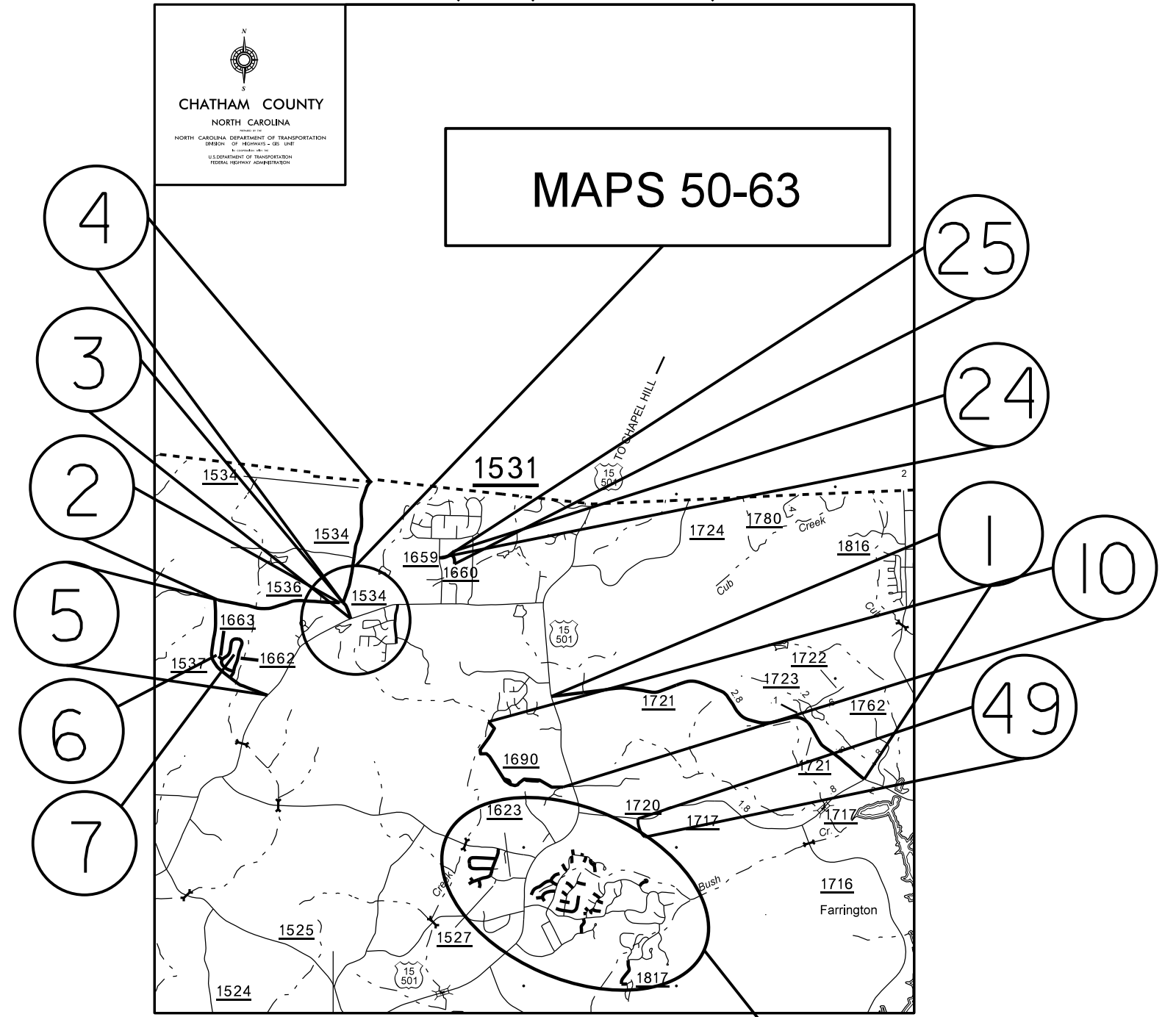


CHATHAM COUNTY
SECONDARY RESURFACING MAP

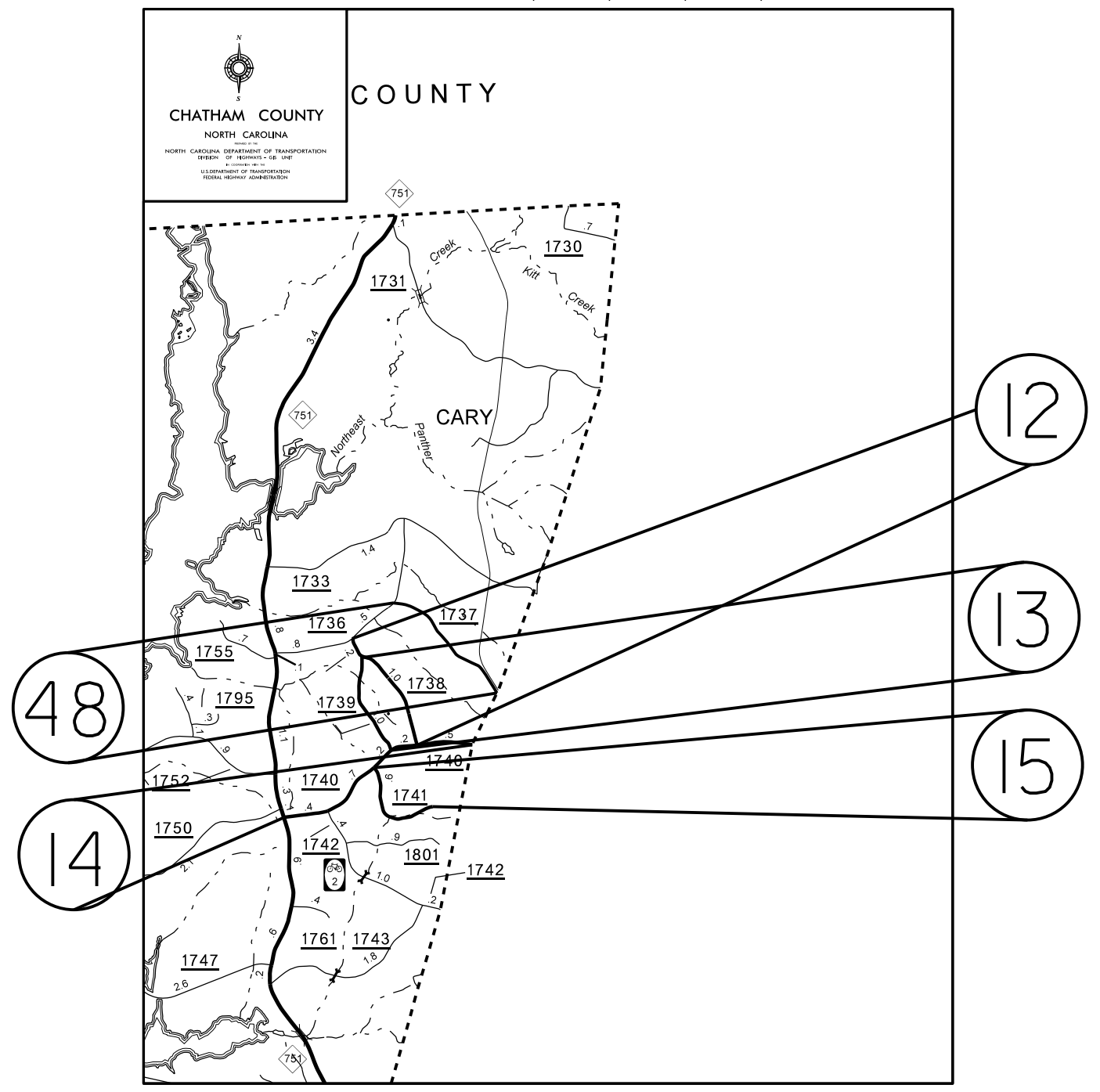
MAPS 8,9,11,16,64

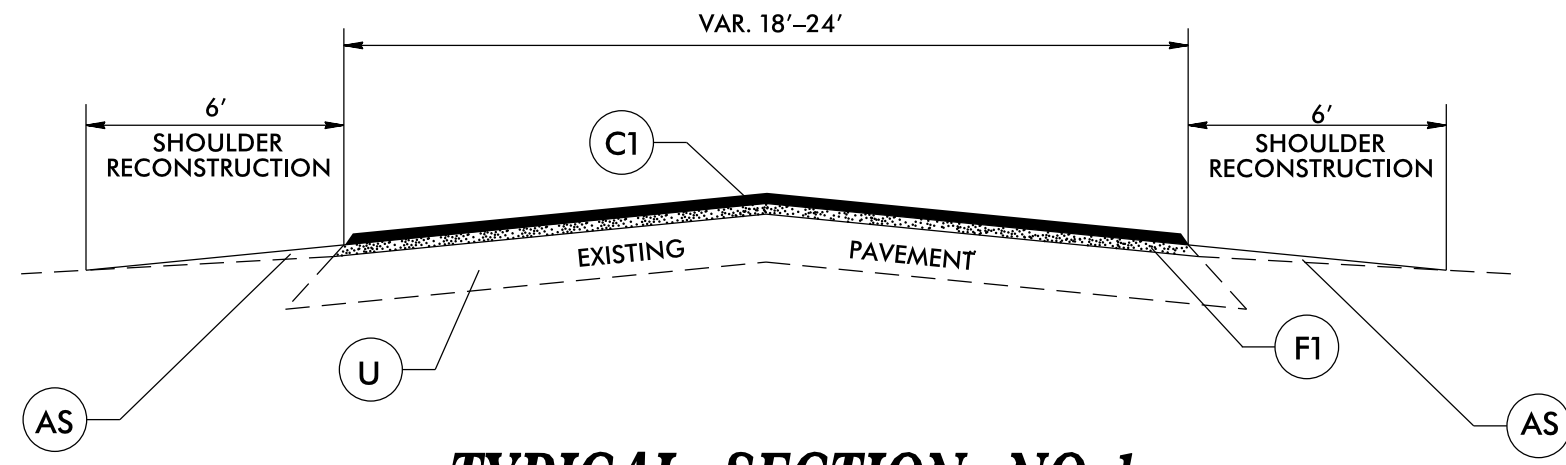


MAPS 1-7,10,17-47,50-63

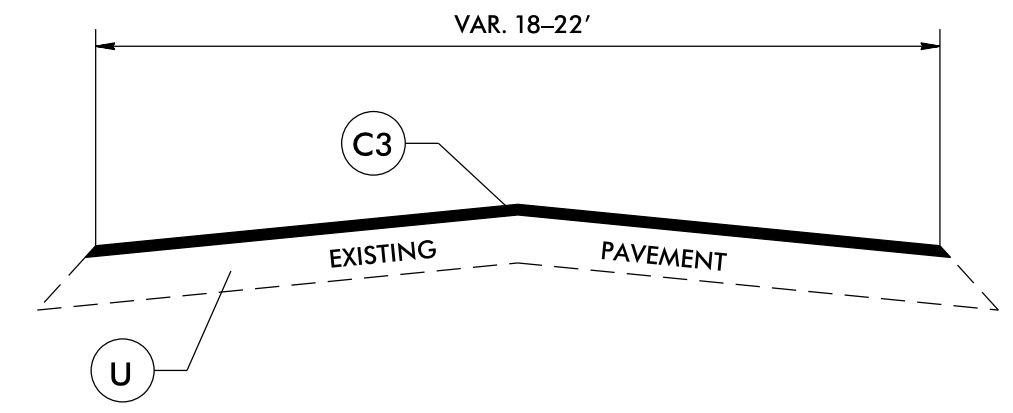


MAPS 12,13,14,15,48

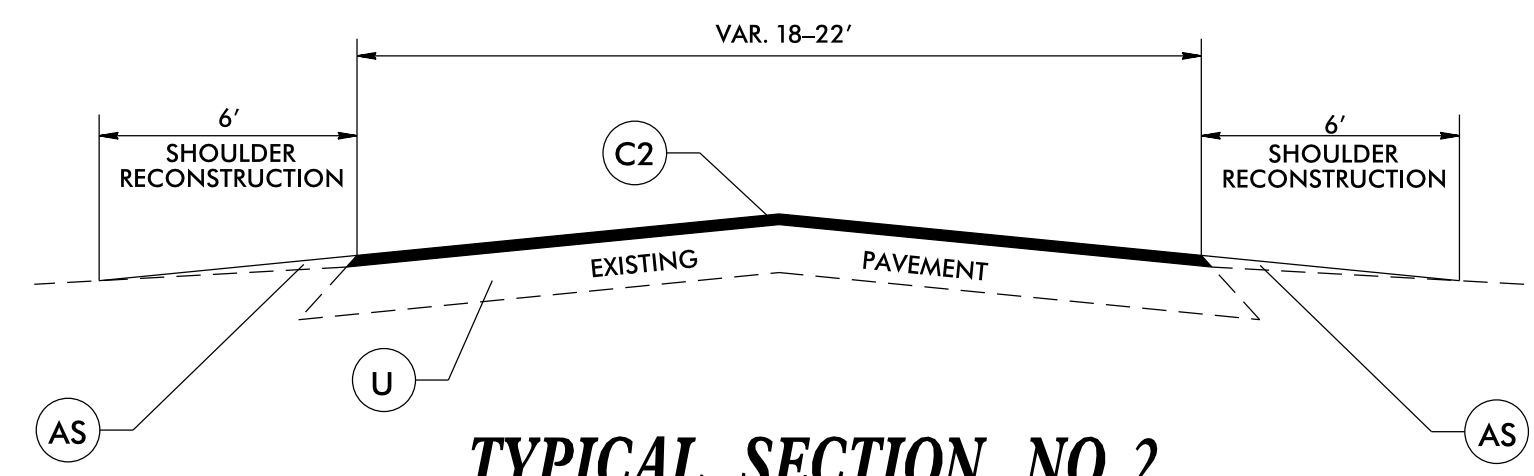




TYPICAL SECTION NO. 1



TYPICAL SECTION NO. 3

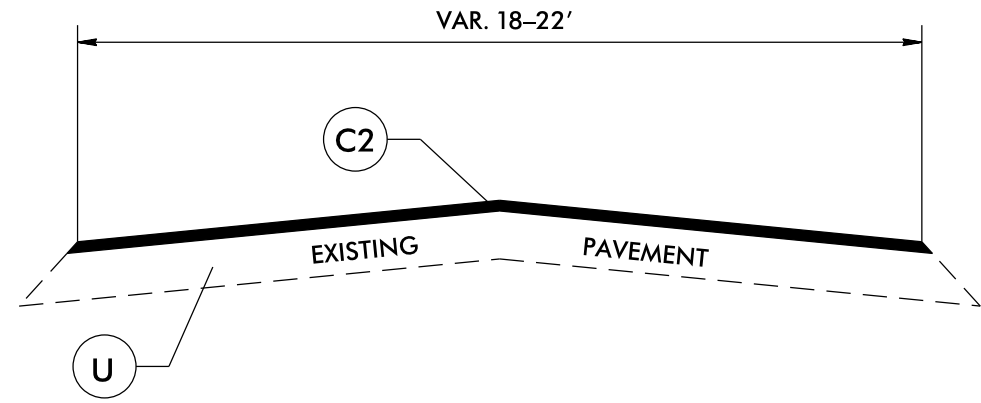


TYPICAL SECTION NO. 2

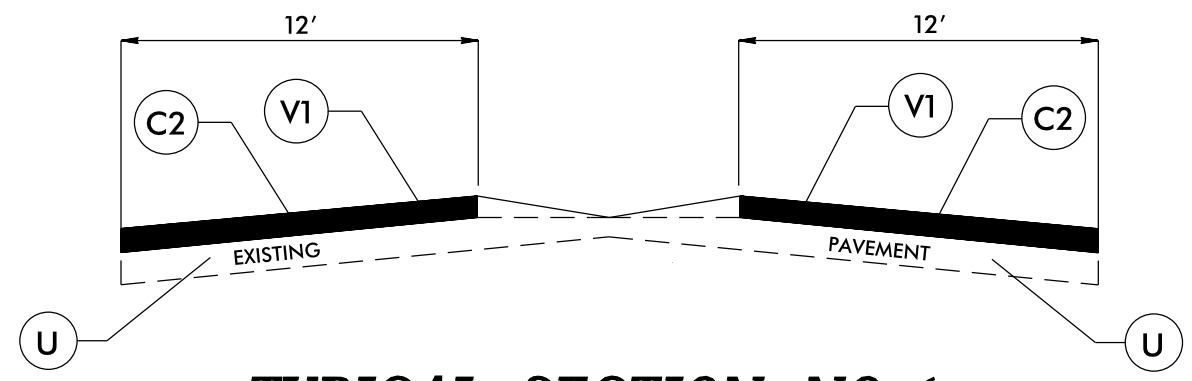
NOTE: PLACE LEVELING COURSE FOR MAPS 13 AND 48

PAVEMENT SCHEDULE	
AS	AGGREGATE SHOULDER BORROW
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C3	PROP. APPROX. 0.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ. YD.
F1	PROPOSED ASPHALT SURFACE TREATMENT, MAT COAT WITH #67 STONE
U	EXISTING PAVEMENT.
V1	MILLING 1.25" IN DEPTH
V2	MILLING 0" TO 1.25" IN DEPTH

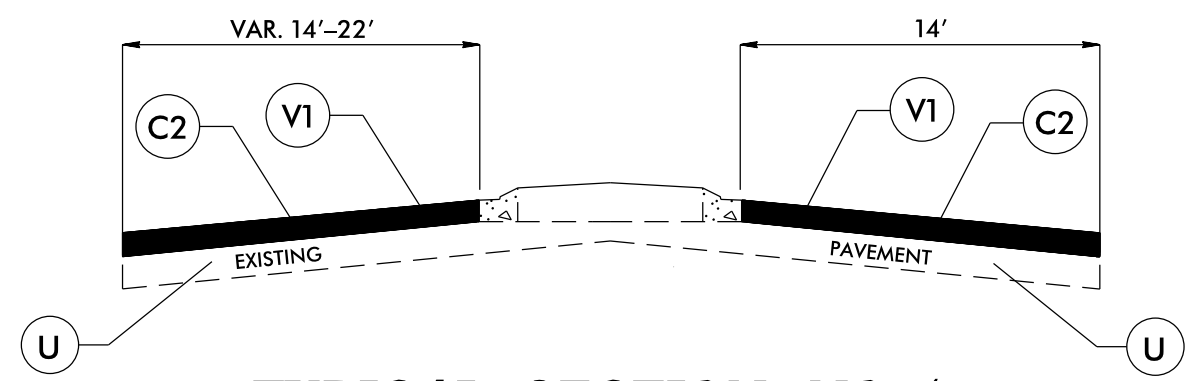
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TYPICAL SECTION NO. 4



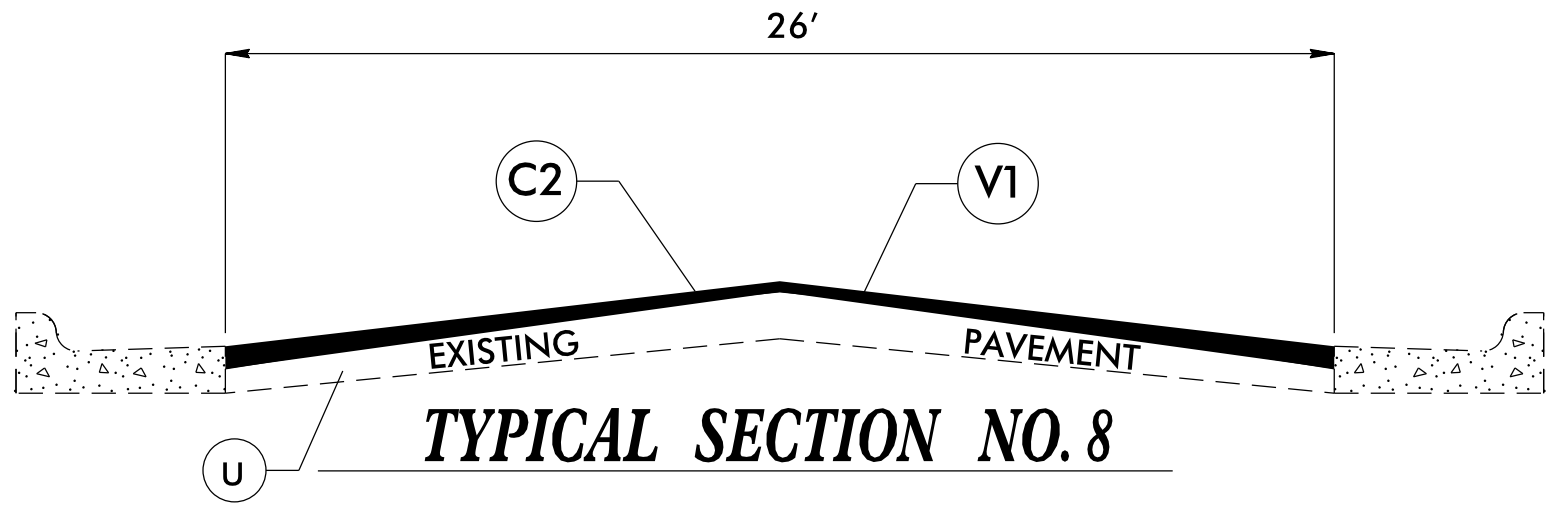
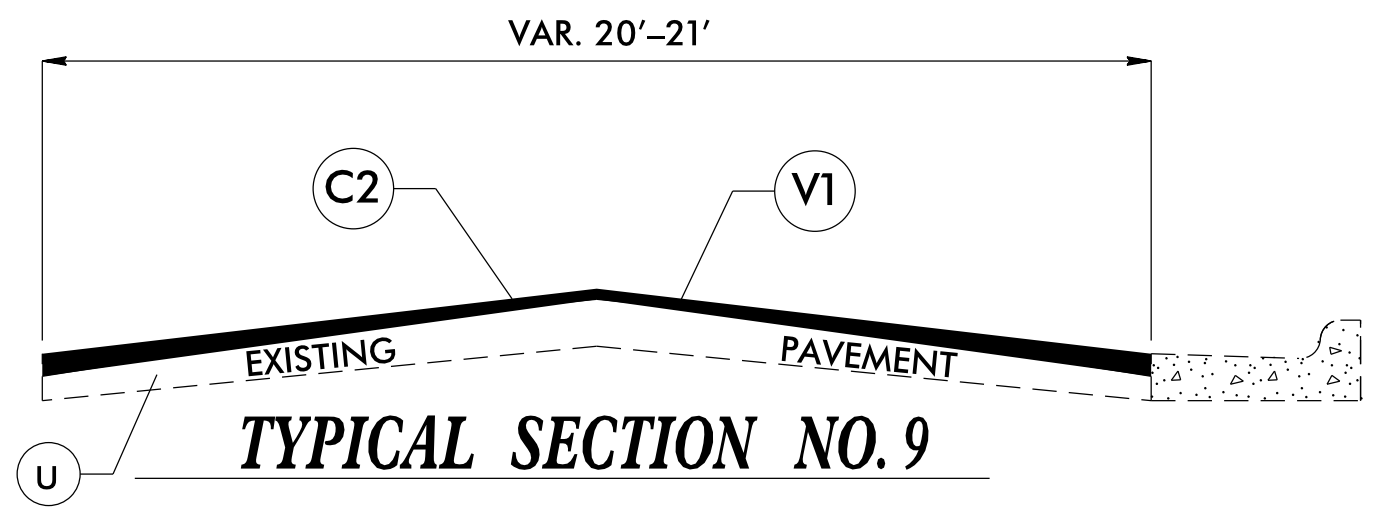
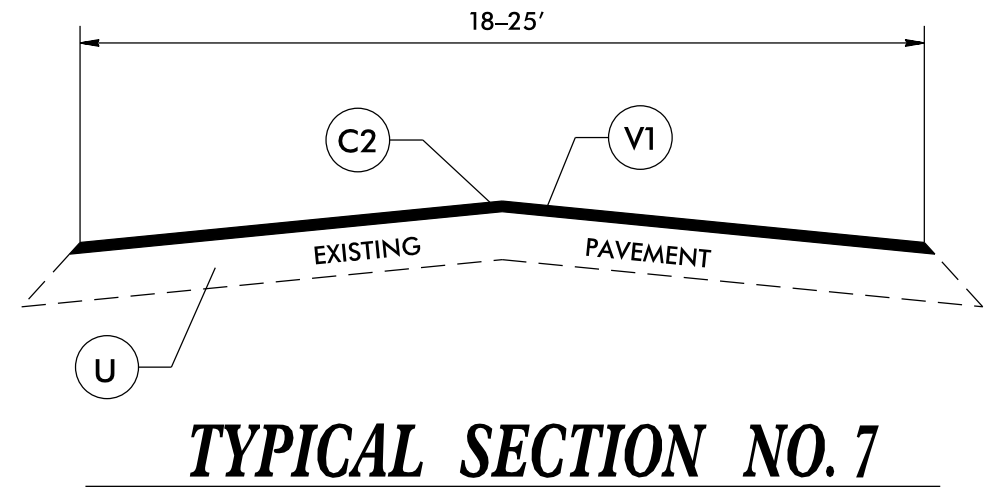
TYPICAL SECTION NO. 6



TYPICAL SECTION NO. 5

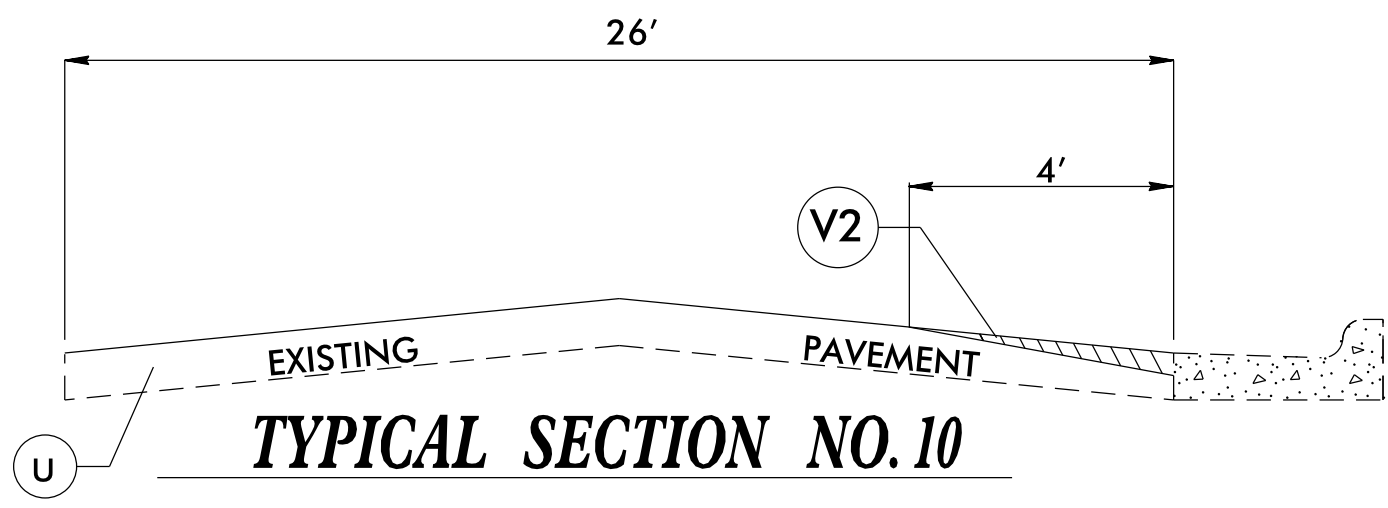
PAVEMENT SCHEDULE	
AS	AGGREGATE SHOULDER BORROW
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C3	PROP. APPROX. 0.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ. YD.
F1	PROPOSED ASPHALT SURFACE TREATMENT, MAT COAT WITH #67 STONE
U	EXISTING PAVEMENT.
V1	MILLING 1.25" IN DEPTH
V2	MILLING 0" TO 1.25" IN DEPTH

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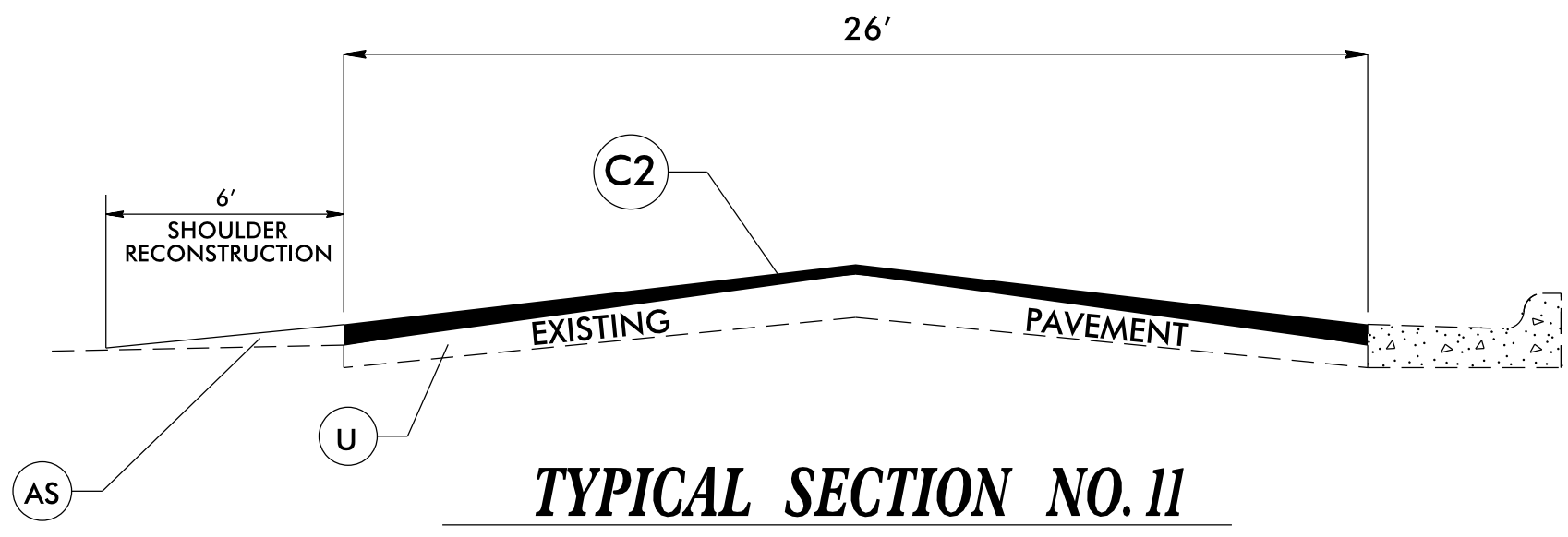


PAVEMENT SCHEDULE	
AS	AGGREGATE SHOULDER BORROW
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C3	PROP. APPROX. 0.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ. YD.
F1	PROPOSED ASPHALT SURFACE TREATMENT, MAT COAT WITH #67 STONE
U	EXISTING PAVEMENT.
V1	MILLING 1.25" IN DEPTH
V2	MILLING 0" TO 1.25" IN DEPTH

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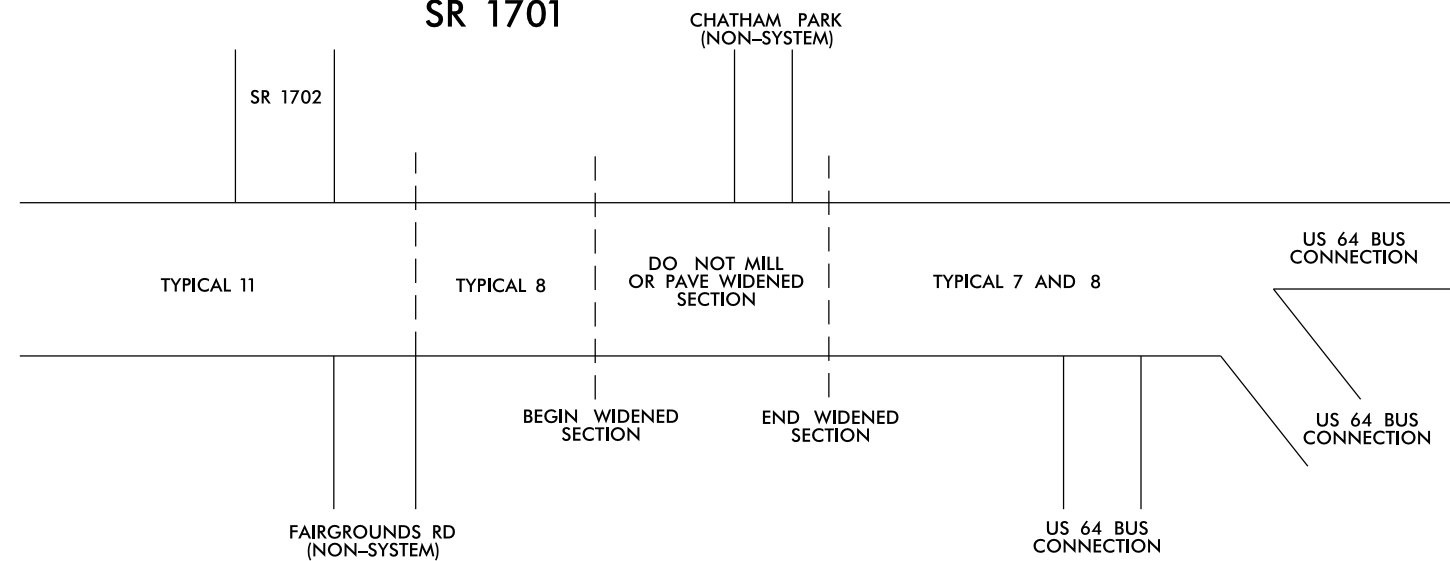
PAVEMENT SCHEDULE	
AS	AGGREGATE SHOULDER BORROW
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C3	PROP. APPROX. 0.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ. YD.
F1	PROPOSED ASPHALT SURFACE TREATMENT, MAT COAT WITH #67 STONE
U	EXISTING PAVEMENT.
V1	MILLING 1.25" IN DEPTH
V2	MILLING 0" TO 1.25" IN DEPTH



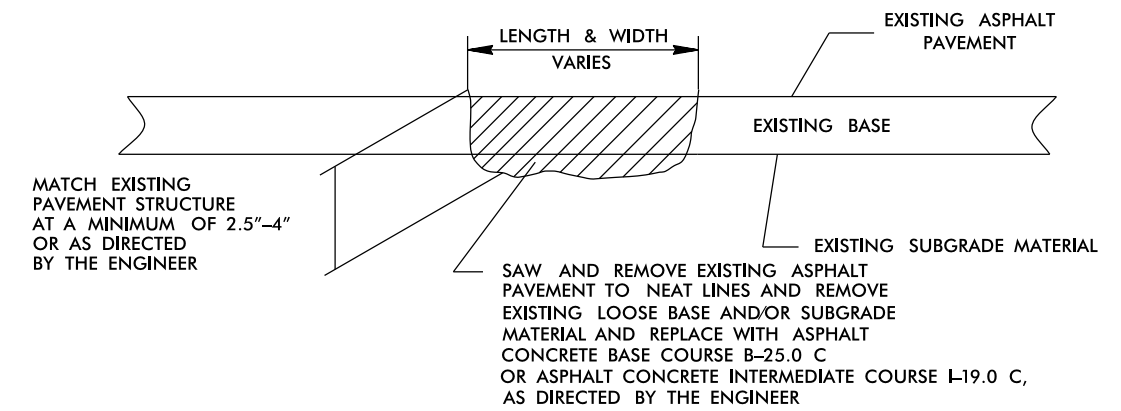
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PAVEMENT TIE-IN AND PATCHING DETAILS

DETAILS FOR MAP 16 SR 1701



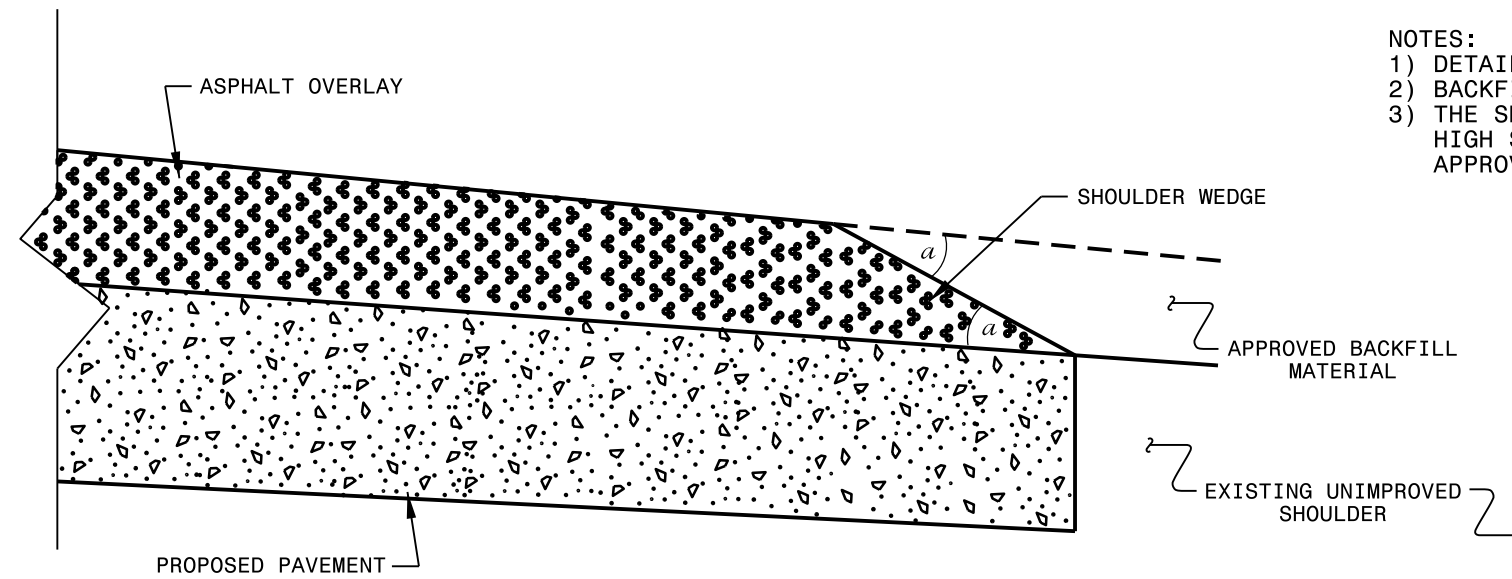
DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING



NOTE: MAPS WITH MILLING SHALL BE PATCHED AFTER MILLING IS COMPLETE

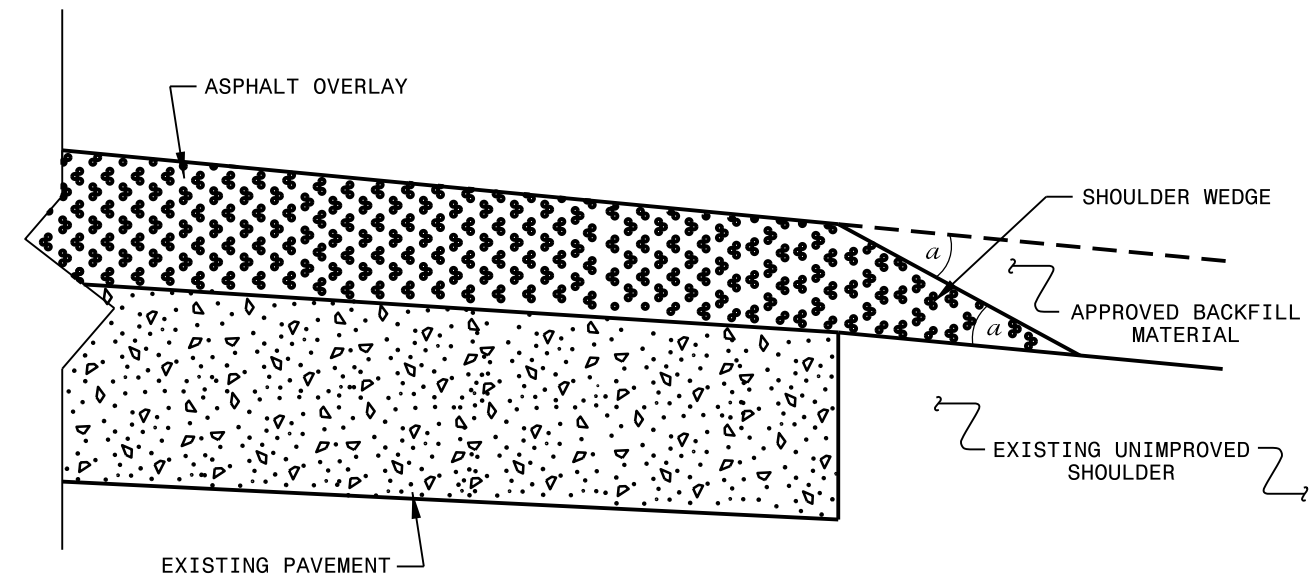
NOTES:

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



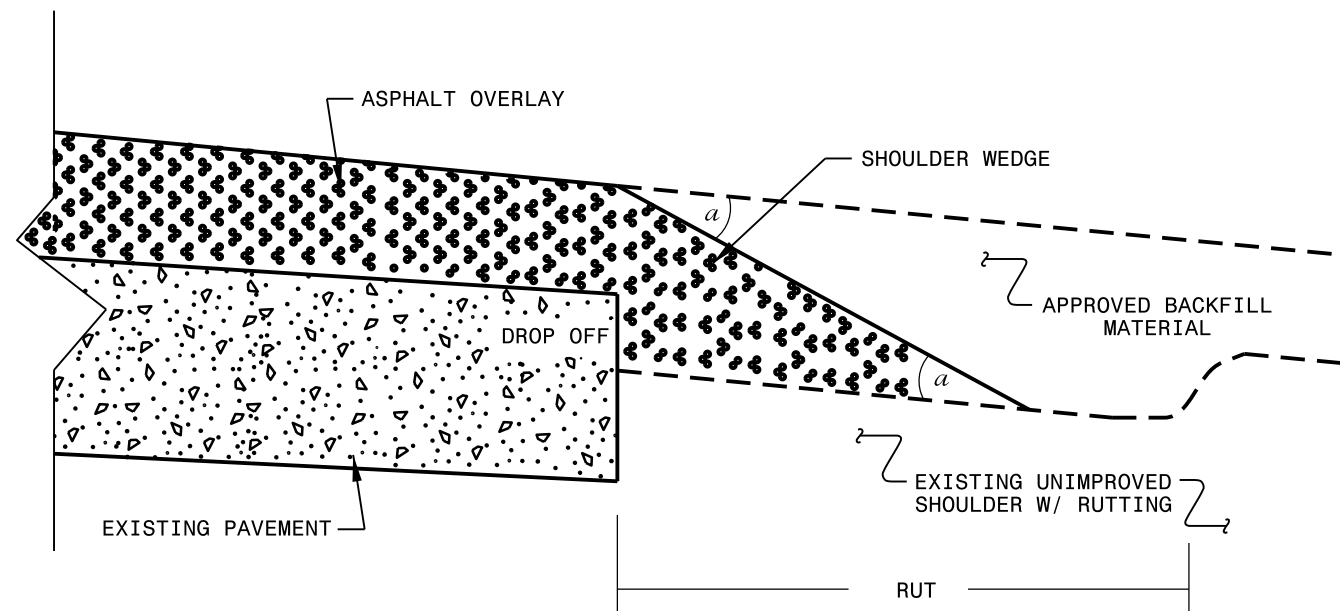
SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ Widening or with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL

(Resurfacing Adjacent to Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT		
Office 919-707-6950 FAX 919-250-4119		
SHOULDER WEDGE DETAILS		
ORIGINAL BY: T.SPELL	DATE: 7-19-11	
MODIFIED BY:	DATE: 2/2/16	
CHECKED BY:	DATE:	
FILE SPEC.: szusr/details/stand/shoulderwedgedetail.dgn		

SUMMARY OF QUANTITIES

PROJECT COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANS	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH		INC. STONE BASE	SH. RECON .	ASB	1.25" MILLING	0" TO 1.25" MILLING	INC. MILLING	S9.5B	LEVEL-ING S9.5B	S4.75A	ASPH. BINDER FOR PL. MIX	PATCH. EXI. PAV'T	AST, MAT-COAT, #67	EMUL-SION FOR AST	VACUUM TRUCK	RETRO-FIT EXI. CURB RAMP	ADJ. OF DROP INLET	ADJ. OF MAN-HOLES	ADJ. OF METER OR VALVE BOX	IND. LOOP SAW- CUT	
								MI	FT																				TONS
	1	SR 1721 (LYSTRA RD)	FROM PVT JT 375FT W OF US 15-501 TO PVT JT W OF SR 1717 (JACK BENNETT RD)	1	2	NO	NO	3.48	24 - 36		6.96	765.60			352	5,900			396	220	54,800	21,950	3				1		
	2	SR 1536 (LAMONT NORWOOD RD)	FROM PVT JT 490LF E OF SR 1537 (TOBACCO RD) TO E OF INTERSECTION WITH SR 1534 (POYTHRESS RD)	2	2	NO	NO	1.23	20		2.46	270.60			167	1,097			74	50									
	3	SR 1534 (POYTHRESS RD)	FROM E OF INTERSECTION WITH SR 1536 (LAMONT NORWOOD RD) TO SR 132 (MANN'S CHAPEL RD)	2	2	NO	NO	0.194	20		0.39	42.68			167	173			12	50									
	4	SR 1534 (POYTHRESS RD)	FROM SR 1536 (LAMONT NORWOOD RD) TO END MAINT (ORANGE CO LINE)	2	2	NO	NO	1.23	20		2.46	270.60			167	1,097			74										
	5	SR 1537 (TOBACCO RD)	FROM SR 1532 (MANN'S CHAPEL RD) TO PVT JT S OF SR 1536 LAMONT NORWOOD RD	2	2	NO	NO	1.26	20		2.52	277.20			167	1,124			75	50									
	6	SR 1662 (JAMESTOWN RD - LOOPS)	FROM SR 1537 TOBACCO RD TO SR 1662 (JAMESTOWN RD)	3	2	NO	NO	0.92	20								505	35									2		
	7	SR 1663 (PLYMOUTH RD)	FROM SR 1663 (JAMESTOWN RD) TO CUL DE SAC	3	2	NO	NO	0.05	18								25	2											
	8	SR 1525 (HAMLET CHAPEL RD)	FROM SR 1524 (MOORE MTN RD) TO PVT. JT N OF US 15-501	2	2	NO	NO	1.92	22		3.84	422.40			244	1,883			127	30									
	9	SR 1524 (DURHAM EUBANKS RD)	FROM S END OF ISLAND AT US 15-501 TO SR 1713 (BYNUM RD)	4	2	NO	NO	0.24	18					200	193				13	25									
	10	SR 1690 (BRIAR CHAPEL PKWY)	FROM US 15-501 TO POKEBERRY CREEK BRIDGE	5,6,7,8	2	NO	NO	1.25	20 - 36	25			20,390			1,551			105	75							1	360	
	11	SR 1967 (PITTSBORO ELEM. SCHOOL RD)	FROM NC 87 TO END MAINT (MCCLENEHAN ST)	4	2	NO	NO	0.21	18					100	169				11	20			1	1			2		
	12	SR 1738 (FERRELL RD)	FROM SR 1736 (MT PISGAH CH RD) TO SR 1740 (LEWTER SHOP RD)	2	2	NO	NO	1.21	20		2.42	266.20			167	1,079			72	125									
	13	SR 1739 (BARBEE RD)	FROM SR 1738 (FERRELL RD) TO SR 1740 (LEWTER SHOP RD)	2,9	2	NO	NO	0.97	20		1.94	213.00	2,222		111	865	150		68	100							1		
	14	SR 1740 (LEWTER SHOP RD)	FROM NC 751 TO WAKE CO	1,10,11	2	NO	NO	2.03	20		4.06	426.30		340	444	2,247			152	35	23,000	9,200	1						
	15	SR 1741 (THOMPSON RD)	FROM SR 1740 (LEWTER SHOP RD) TO CUL DE SAC	2	2	NO	NO	0.943	20		1.89	207.46			167	841			56	40									
	16	SR 1701 (THOMPSON ST)	FROM US 64 BUS TO END MAINT 180FT W OF SR 1702 (FIRE TOWER RD)	6,7,10	2	NO	NO	0.75	18 - 36	10			7,400	180	250	510			34	50									
	17	SR 1806 (SWIM & CROQUET)	FROM SR 1718 (VILLAGE WAY) TO SR 1807 (WEATHERSFIELD)	4	2	NO	NO	1.15	20						56	1,026			69	5						1			
	18	SR 1819 (STONEVIEW)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	NO	NO	0.14	20 - 30								77		5	10							1		
	19	SR 1835 (S. LANGDON)	FROM SR 1836 (MILLCROFT) TO SR 1859 (BRADFORD PLACE)	4	2	NO	NO	0.26	20						56	232			16	10							3		
	20	SR 1617 (FOREST CREEK DR)	FROM SR 1528 (ANDREWS STORE RD) TO CUL DE SAC	4	2	NO	NO	0.51	20						444	455			30	20							7		
	21	SR 1618 (FOSTER LN - E AND W OF SR 1617)	FROM SR 1617 (FOREST CREEK DR - N CONNECTION) TO CUL DE SAC (E OF SR 1617)	4	2	NO	NO	0.618	20						167	551			37	10									
	22	SR 1621 (GLENDALE DR)	FROM SR 1617 (FOREST CREEK DR) TO CUL DE SAC	4	2	NO	NO	0.08	20						56	71			5	5									
	23	SR 1622 (SEDGEWOOD DR)	FROM SR 1617 (FOREST CREEK DR) TO CUL DE SAC	4	2	NO	NO	0.032	20						56	29			2										
	24	SR 1659 (WOODCREEK CT)	FROM SR 1568 (CHATHAM DR) TO CUL DE SAC	3	2	NO	NO	0.165	20								91		6										
	25	SR 1660 (GLEN EDEN)	FROM SR 1659 (WOODCREEK CT) TO CUL DE SAC	3	2	NO	NO	0.103	18								51		4										
	26	SR 1767 (TRESTLELEAF)	FROM SR 1766 (CREEKWOOD) TO END MAINT (.04MI S OF SR 1768 - BEGIN BIFURCATED SECTION)	3	2	NO	NO	0.194	20								106		7	5									
	27	SR 1768 (STONE LEDGE)	FROM SR 1767 (TRESTLELEAF) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.081	20								44		3	10									
	28	SR 1769 (BENCHMARK)	FROM SR 1767 (TRESTLELEAF) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.34	20								187		13	5									
	29	SR 1770 (MATCHWOOD)	FROM SR 1769 (BENCHMARK) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.128	20								70		5	5									
	30	SR 1771 (TRUNDLE RIDGE)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.11	20								60		4										
	31	SR 1798 (SHADOWBROOK)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.088	20								48		3	5									
	32	SR 1772 (SHAGBARK)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.06	20								33		2	5									

SUMMARY OF QUANTITIES

PROJECT	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANE S	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH		INC. STONE BASE	SH. RECON	ASB	1.25" MILLING	0" TO 1.25" MILLING	INC. MILLING	S9.5B	LEVELING S9.5B	S4.75A	ASPH. BINDER FOR PL. MIX	PATCH. EXI. PAV'T	AST, MAT-COAT, #67	EMULSION FOR AST	VACUUM TRUCK	RETRO-FIT EXI. CURB RAMP	ADJ. OF DROP INLET	ADJ. OF MAN-HOLES	ADJ. OF METER OR VALVE BOX	IND. LOOP SAW- CUT																						
									MI	FT																				TONS	SMI	TON	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	TONS	SY	GAL	WK	EA	EA	EA	EA	EA	LF
2021CPT	CH	33	SR 1773 (MEADOW RUN)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.03	20								16	1										1																						
		34	SR 1799 (BECKET BEND)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.088	20								48	3	5																															
		35	SR 1774 (STONE EDGE)	FROM SR 1766 (CREEKWOOD) TO SR 1775 (STONE EDGE)	3	2	NO	NO	0.07	20								38	3																																
		36	SR 1775 (STONE EDGE)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	NO	NO	0.11	20								60	4																																
		37	SR 1777 (WEATHERBEND - E AND W OF SR 1776 WINDSTREAM)	FROM CUL DE SAC E OF SR 1776 (WINDSTREAM) TO CUL DE SAC W OF SR 1776 (WINDSTREAM)	3	2	NO	NO	0.32	20								176	12	5																															
		38	SR 1800 (HEDGEROW - E AND W OF SR 1776)	FROM CUL DE SAC W OF SR 1776 (WINDSTONE) TO CUL DE SAC E OF SR 1776 (WINDSTONE)	3	2	NO	NO	0.09	20								49	3	5																															
		39	SR 1794 (TINDERWOOD)	FROM SR 1776 (WINDSTONE) TO CUL DE SAC	3	2	NO	NO	0.041	20								22	2	5																															
		40	SR 1778 (TURTLE RUN)	FROM SR 1776 (WINDSTONE) TO CUL DE SAC	3	2	NO	NO	0.077	20								42	3	5																															
		41	SR 1779 (WINTERSAGE)	FROM SR 1776 (WINDSTONE) TO CUL DE SAC	3	2	NO	NO	0.109	20								60	4	5																															
		42	SR 1786 (HOLLY HOCK)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	NO	NO	0.03	20								16	1	20																															
		43	SR 1787 (SUMMERWOOD)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	NO	NO	0.03	20								16	1	5								1																							
		44	SR 1788 (CLAYMOOR)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	NO	NO	0.03	20								16	1								1																								
		45	SR 1789 (QUAIL RUN)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	NO	NO	0.082	20								45	3								1																								
		46	SR 1791 (CLOVER THATCH)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	NO	NO	0.051	20								28	2								1																								
		47	SR 1792 (GREYSTONE)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	NO	NO	0.072	20								40	3																																
		48	SR 1737 (EARNEST JONES RD)	FROM WAKE CO TO END PVT (.26MI W OF WAKE CO LINE)	2	2	NO	NO	0.26	20		0.52	57.20				232	200		29	50																														
		49	SR 1720 (HENLEY RD)	FROM SR 1717 (JACK BENNETT RD) TO END MAINT (0.2MI FROM SR 1720)	2	2	NO	NO	0.2	20		0.40	44.00			56	178		12	20																															
		50	SR 1533 (DOLLAR RD)	FROM SR 1532 (MANN'S CHP RD) TO SR 1584 (WILLOW WAY)	3	2	NO	NO	0.339	20					111		186	13	20																																
		51	SR 1580 (WHITE OAK TRL)	FROM SR 1533 (DOLLAR RD) TO SR 1582 (MULBERRY LANE)	3	2	NO	NO	0.34	20					222		187	13	10																																
		52	SR 1581 (WINTERBERRY WAY)	FROM SR 1580 (WHITE OAK TRL) TO SR 1532 (MANN'S CHP RD)	3	2	NO	NO	0.14	20					111		77	5	10																																
		53	SR 1582 (MULBERRY LANE) LOOPS	FROM SR 1580 (W CONNECTION WHITE OAK TRL) TO SR 1580 (E CONNECTION WHITE OAK TRL)	3	2	NO	NO	0.08	18					100		40	3	10																																
		54	SR 1582 (RED PINE RD)	FROM SR 1582 (MULBERRY LANE) TO CUL DE SAC	3	2	NO	NO	0.36	18					50		178	12	20																																
		55	SR 1583 (CHINABERRY COURSE)	FROM SR 1580 (WHITE OAK TRL) TO SR 1584 (WILLOW WAY)	3	2	NO	NO	0.11	20					111		60	4	10																																
		56	SR 1584 (WILLOW WAY)	FROM SR 1533 (DOLLAR RD) TO SR 1587 (LOBLOLLY LN)	3	2	NO	NO	0.38	20					333		208	15	10																																
		57	SR 1587 (LOBLOLLY LN)	FROM SR 1584 (WILLOW WAY) TO CUL DE SAC	3	2	NO	NO	0.1	18					50		49	3	10																																
		58	SR 1586 (LADY BUG LN)	FROM SR 1584 (WILLOW WAY) TO CUL DE SAC	3	2	NO	NO	0.1	18					50		49	3	10																																
		59	SR 1585 (GREENTREE TRL)	FROM CUL DE SAC TO CUL DE SAC	3	2	NO	NO	0.15	18							74	5	10																																
		60	SR 1588 (OAK LEAF LN)	FROM SR 1584 (WILLOW WAY) TO SR 1590 (BRIAR PATCH)	3	2	NO	NO	0.17	18					200		84	6	10																																
		61	SR 1589 (STRAWBERRY PATCH)	FROM SR 1588 (OAK LEAF LN) TO CUL DE SAC	3	2	NO	NO	0.04	18					50		20	1	10																																
		62	SR 1590 (BRIAR PATCH)	FROM SR 1588 (OAK LEAF LN) TO CUL DE SAC	3	2	NO	NO	0.04	18					50		20	1	10																																
		63	SR 1611 (BLUEBERRY HILL RD)	FROM SR 1536 (LAMONT NORWOOD RD) TO CUL DE SAC	3	2	NO	NO	0.09	18					50		44	3	10																																
		64	SR 1797 (SILVERBERRY RD)	FROM SR 1700 (MT GILEAD CH RD) TO END MAINT (0.4MI FROM SR 1797)	2	2	NO	NO	0.4	18		0.80	88.00			50	321		22	20																															
GRAND TOTAL FOR PROJ NO. 2021CPT.08.09.20191									26.475		35	30.66	3,351.24	30,012	520	5,132	21,824	350	3,245	1,713	1,270	77,800	31,150	4	1	1	8	16	360																						

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH		WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMP. TRAFFIC CONTROL	LAW ENFORCEMENT	4685000000-E			4720000000-E	4725000000-E			4891000000-E	4905000000-N						
							MI	FT				SF	LS	HR		4" X 90 M YELLOW THERMO	4" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO		THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR ARROW 90 M	24" X 90 M WHITE THERMO	SNOW PLOWABLE MARKERS Y & Y MARKERS	SNOW PLOWABLE MARKERS C & R MARKERS
																LF	LF	LF		EA	EA	EA	EA	EA	EA	
		1	SR 1721 (LYSTRA RD)	FROM PVT JT 375FT W OF US 15-501 TO PVT JT W OF SR 1717 (JACK BENNETT RD)	1	2	3.48	24 - 36	400			40	39,725	38,300	410	12	17	4	4	96	290	30				
		2	SR 1536 (LAMONT NORWOOD RD)	FROM PVT JT 490LF E OF SR 1537 (TOBACCO RD) TO E OF INTERSECTION WITH SR 1534 (POYTHRESS RD)	2	2	1.23	20	140																	
		3	SR 1534 (POYTHRESS RD)	FROM E OF INTERSECTION WITH SR 1536 (LAMONT NORWOOD RD) TO SR 132 (MANN'S CHAPEL RD)	2	2	0.194	20	25																	
		4	SR 1534 (POYTHRESS RD)	FROM SR 1536 (LAMONT NORWOOD RD) TO END MAINT (ORANGE CO LINE)	2	2	1.23	20	140																	
		5	SR 1537 (TOBACCO RD)	FROM SR 1532 (MANN'S CHAPEL RD) TO PVT JT S OF SR 1536 LAMONT NORWOOD RD	2	2	1.26	20	145																	
		6	SR 1662 (JAMESTOWN RD - LOOPS)	FROM SR 1537 TOBACCO RD TO SR 1662 (JAMESTOWN RD)	3	2	0.92	20	130																	
		7	SR 1663 (PLYMOUTH RD)	FROM SR 1663 (JAMESTOWN RD) TO CUL DE SAC	3	2	0.05	18	9																	
		8	SR 1525 (HAMLET CHAPEL RD)	FROM SR 1524 (MOORE MTN RD) TO PVT. JT N OF US 15-501	2	2	1.92	22	225																	
		9	SR 1524 (DURHAM EUBANKS RD)	FROM S END OF ISLAND AT US 15-501 TO SR 1713 (BYNUM RD)	4	2	0.24	18	30																	
		10	SR 1690 (BRIAR CHAPEL PKWY)	FROM US 15-501 TO POKEBERRY CREEK BRIDGE	5,6,7,8	2	1.25	20 - 36	150			40														
		11	SR 1967 (PITTSBORO ELEM. SCHOOL RD)	FROM NC 87 TO END MAINT (MCCLENEHAN ST)	4	2	0.21	18	30																	
		12	SR 1738 (FERRELL RD)	FROM SR 1736 (MT PISGAH CH RD) TO SR 1740 (LEWTER SHOP RD)	2	2	1.21	20	140																	
		13	SR 1739 (BARBEE RD)	FROM SR 1738 (FERRELL RD) TO SR 1740 (LEWTER SHOP RD)	2,9	2	0.97	20	115																	
		14	SR 1740 (LEWTER SHOP RD)	FROM NC 751 TO WAKE CO	1,10,11	2	2.03	20	235																	
		15	SR 1741 (THOMPSON RD)	FROM SR 1740 (LEWTER SHOP RD) TO CUL DE SAC	2	2	0.943	20	110																	
		16	SR 1701 (THOMPSON ST)	FROM US 64 BUS TO END MAINT 180FT W OF SR 1702 (FIRE TOWER RD)	6,7,10	2	0.75	18 - 36	110																	
		17	SR 1806 (SWIM & CROQUET)	FROM SR 1718 (VILLAGE WAY) TO SR 1807 (WEATHERSFIELD)	4	2	1.15	20	180																	
		18	SR 1819 (STONEVIEW)	FROM SR 1785 (BEECHMAST) TO CUL DE SAC	3	2	0.14	20 - 30	20																	
		19	SR 1835 (S. LANGDON)	FROM SR 1836 (MILLCROFT) TO SR 1859 (BRADFORD PLACE)	4	2	0.26	20	35																	
		20	SR 1617 (FOREST CREEK DR)	FROM SR 1528 (ANDREWS STORE RD) TO CUL DE SAC	4	2	0.51	20	65																	
		21	SR 1618 (FOSTER LN -E AND W OF SR 1617)	FROM SR 1617 (FOREST CREEK DR - N CONNECTION) TO CUL DE SAC (E OF SR 1617)	4	2	0.618	20	75																	
		22	SR 1621 (GLENDALE DR)	FROM SR 1617 (FOREST CREEK DR) TO CUL DE SAC	4	2	0.08	20	15																	
		23	SR 1622 (SEDGEWOOD DR)	FROM SR 1617 (FOREST CREEK DR) TO CUL DE SAC	4	2	0.032	20	9																	
		24	SR 1659 (WOODCREEK CT)	FROM SR 1568 (CHATHAM DR) TO CUL DE SAC	3	2	0.165	20	25																	
		25	SR 1660 (GLEN EDEN)	FROM SR 1659 (WOODCREEK CT) TO CUL DE SAC	3	2	0.103	18	15																	
		26	SR 1767 (TRESTLELEAF)	FROM SR 1766 (CREEKWOOD) TO END MAINT (.04MI S OF SR 1768 - BEGIN BIFURCATED SECTION)	3	2	0.194	20	30																	
		27	SR 1768 (STONE LEDGE)	FROM SR 1767 (TRESTLELEAF) TO CUL DE SAC (LOOPS)	3	2	0.081	20	15																	
		28	SR 1769 (BENCHMARK)	FROM SR 1767 (TRESTLELEAF) TO CUL DE SAC (LOOPS)	3	2	0.34	20	45																	
		29	SR 1770 (MATCHWOOD)	FROM SR 1769 (BENCHMARK) TO CUL DE SAC (LOOPS)	3	2	0.128	20	20																	
		30	SR 1771 (TRUNDLE RIDGE)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	0.11	20	15																	
		31	SR 1798 (SHADOWBROOK)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	0.088	20	15																	
		32	SR 1772 (SHAGBARK)	FROM SR 1766 (CREEKWOOD) TO CUL DE SAC (LOOPS)	3	2	0.06	20	9																	

THERMOPLASTIC AND PAINT QUANTITIES

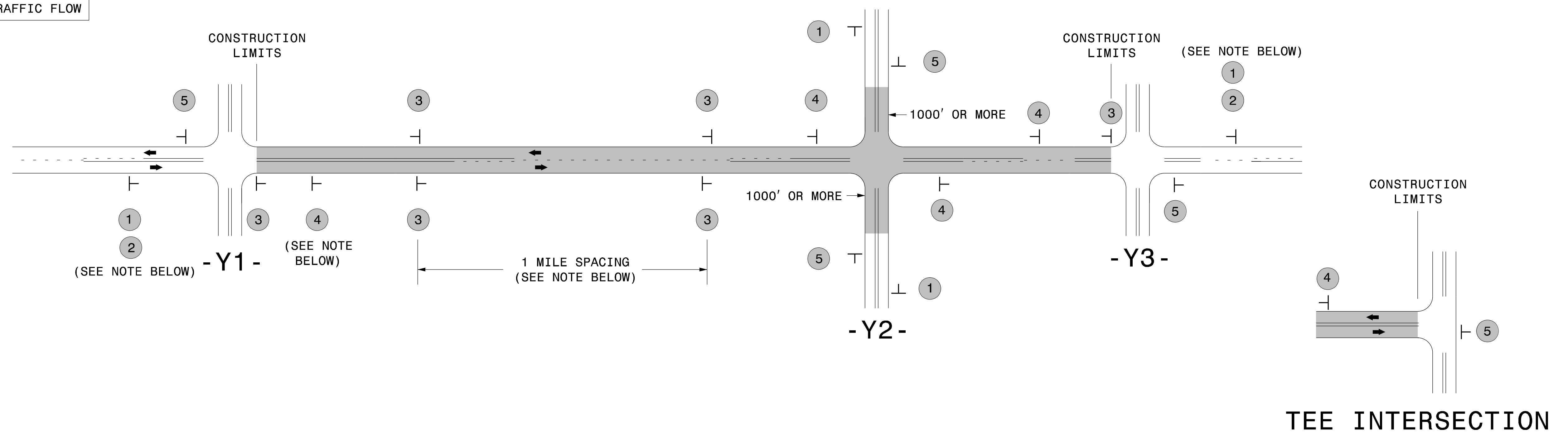
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH	WIDTH	4413000000-E	4457000000-E	4510000000-E	4685000000-E	4700000000-E	4720000000-E	4725000000-E			4891000000-E	4905000000-N				
									WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMP. TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 90 M YELLOW THERMO	4" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR ARROW 90 M	24" X 90 M WHITE THERMO	SNOW PLOWABLE MARKERS Y & Y MARKERS	SNOW PLOWABLE MARKERS C & R MARKERS		
									MI	FT	SF	LS	HR	LF	LF	LF	EA	EA	EA	EA	EA	EA	
2021			33	SR 1773 (MEADOW RUN)			0.03	20	9														
			34	SR 1799 (BECKET BEND)			0.088	20	15														
			35	SR 1774 (STONE EDGE)			0.07	20	9														
			36	SR 1775 (STONE EDGE)			0.11	20	15														
			37	SR 1777 (WEATHERBEND - E AND W OF SR 1776 WINSTREAM)			0.32	20	40														
			38	SR 1800 (HEDGEROW - E AND W OF SR 1776)			0.09	20	15														
			39	SR 1794 (TINDERWOOD)			0.041	20	10														
			40	SR 1778 (TURTLE RUN)			0.077	20	9														
			41	SR 1779 (WINTERSAGE)			0.109	20	15														
			42	SR 1786 (HOLLY HOCK)			0.03	20	9														
			43	SR 1787 (SUMMERWOOD)			0.03	20	9														
			44	SR 1788 (CLAYMOOR)			0.03	20	9														
			45	SR 1789 (QUAIL RUN)			0.082	20	15														
			46	SR 1791 (CLOVER THATCH)			0.051	20	9														
			47	SR 1792 (GREYSTONE)			0.072	20	9														
			48	SR 1737 (EARNEST JONES RD)			0.26	20	35														
			49	SR 1720 (HENLEY RD)			0.2	20	25														
			50	SR 1533 (DOLLAR RD)			0.339	20	50														
			51	SR 1580 (WHITE OAK TRL)			0.34	20	40														
			52	SR 1581 (WINTERBERRY WAY)			0.14	20	20														
			53	SR 1582 (MULBERRY LANE) LOOPS			0.08	18	9														
			54	SR 1582 (RED PINE RD)			0.36	18	45														
			55	SR 1583 (CHINABERRY COURSE)			0.11	20	15														
			56	SR 1584 (WILLOW WAY)			0.38	20	45														
			57	SR 1587 (LOBLOLLY LN)			0.1	18	15														
			58	SR 1586 (LADY BUG LN)			0.1	18	15														
			59	SR 1585 (GREENTREE TRL)			0.15	18	20														
			60	SR 1588 (OAK LEAF LN)			0.17	18	20														
			61	SR 1589 (STRAWBERRY PATCH)			0.04	18	9														
			62	SR 1590 (BRIAR PATCH)			0.04	18	9														
			63	SR 1611 (BLUEBERRY HILL RD)			0.09	18	15														
			64	SR 1797 (SILVERBERRY RD)			0.4	18	50	*													
GRAND TOTAL FOR PROJ NO. 2021CPT.08.09.20191																							
									26.475		3,356	1	80	39,725	38,300	410	12	17	4	4	96	290	30
													78,025				25						320

SIGNING FOR RESURFACING PROJECTS

LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

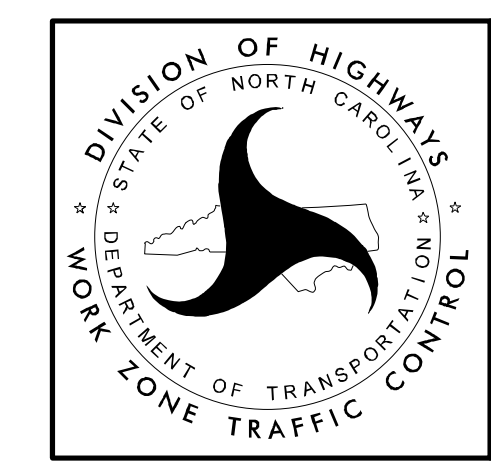
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	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, 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" </div> <div style="text-align: center;"> W20-7 A 48" X 48" </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 CONSTRUCTION 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"	<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	 SP 13106 48" X 48"	<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	 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.



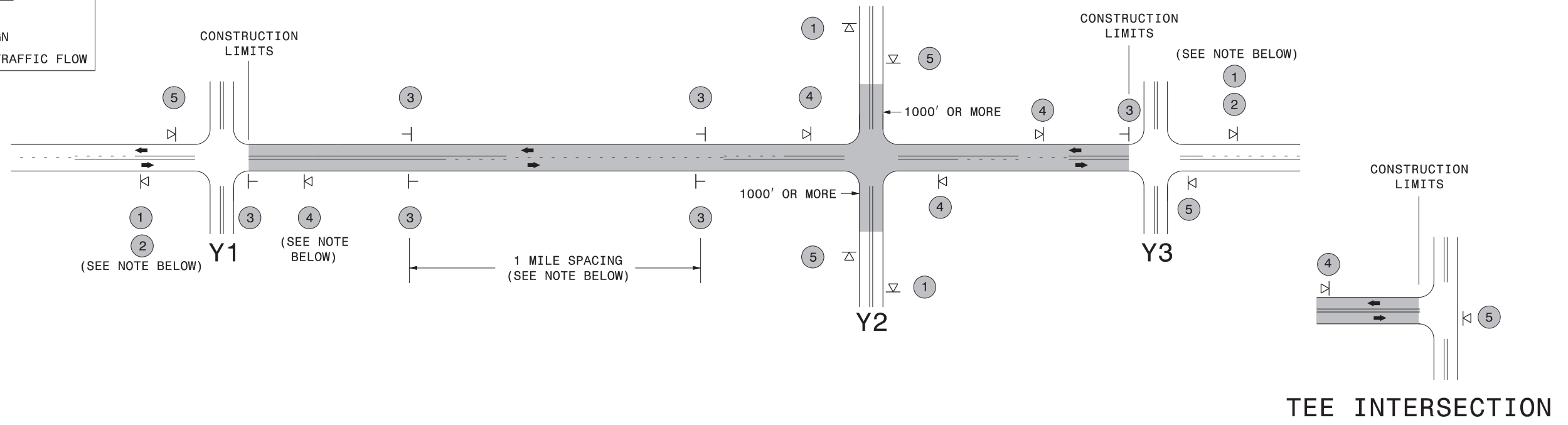
ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

5/15/2017 S:\TMU\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn User:kadai

SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

- ▷ PORTABLE SIGN
- ┆ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

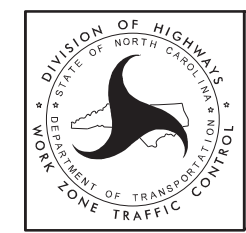
-Y- LINE SIGNING

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>STATIONARY SIGNING NOT REQUIRED 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		- SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.	
	3	 	- ALTERNATE THE FOLLOWING TWO SIGNS: - STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT". - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 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.	
	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

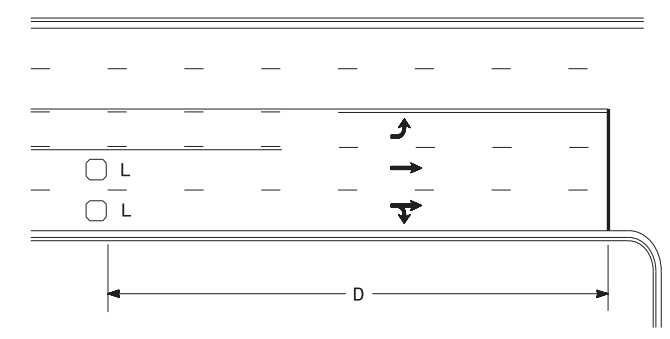
FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.



ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

5/12/2017 S:\TUXWZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln - AST.dgn User:kedais

High Speed Detection (≥40 mph)

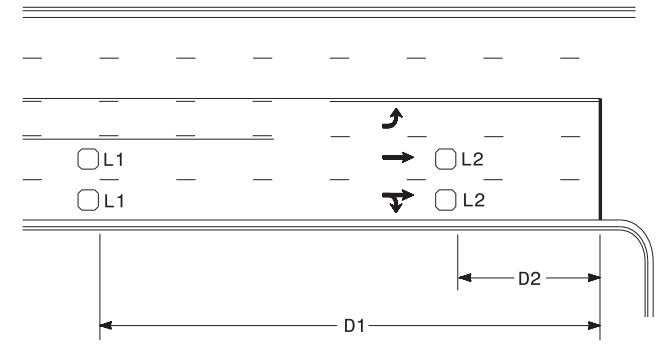


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR



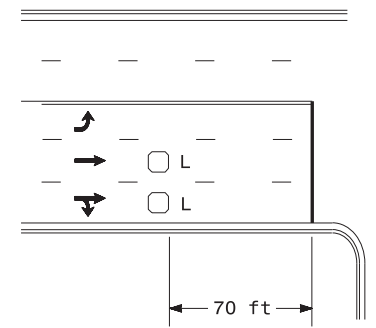
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

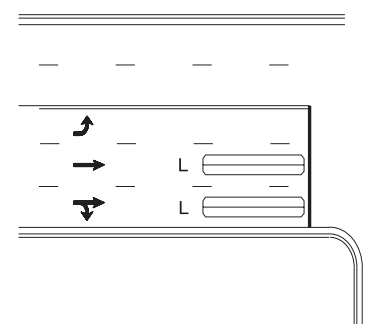
"Stretch" Operation

Low Speed Detection (≤35 mph)



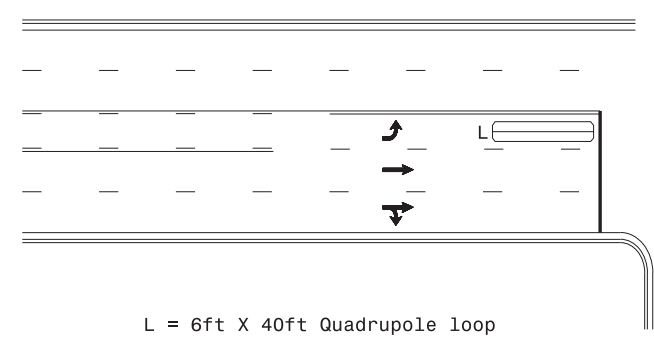
L = 6ft X 6ft
Wired in series

OR



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

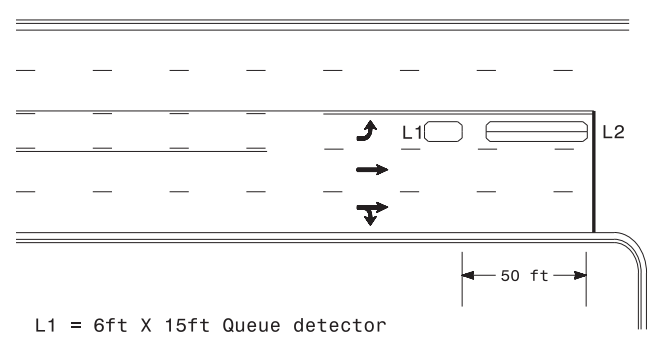
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

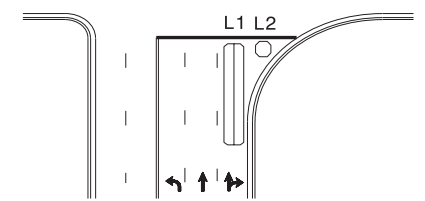
OR



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

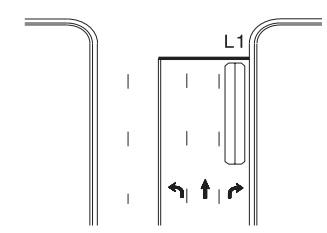
Queue Loop Detection

Right Turn Lane Detection

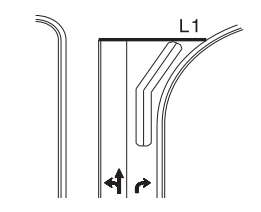


L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately

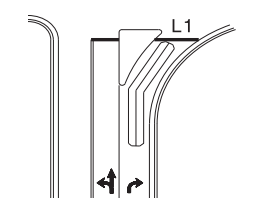
Shared Lane/
Wide Radius Turn



Standard Turn

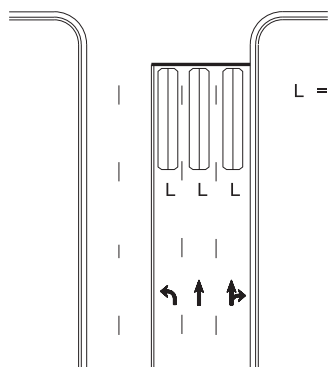


Wide Radius Turn



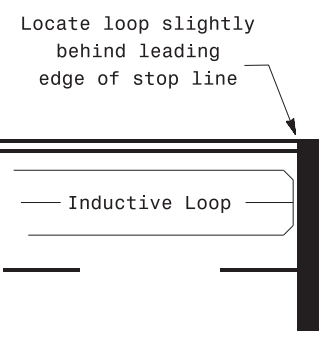
Channelized Turn

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

Typical Signal Loop Locations

	PLAN DATE: September 2020 PREPARED BY: PLA	REVIEWED BY: JPG REVIEWED BY:
	SCALE: N/A	REVISIONS:
750 N. Greenfield Pkwy, Garner, NC 27529		DATE: 9/8/2020