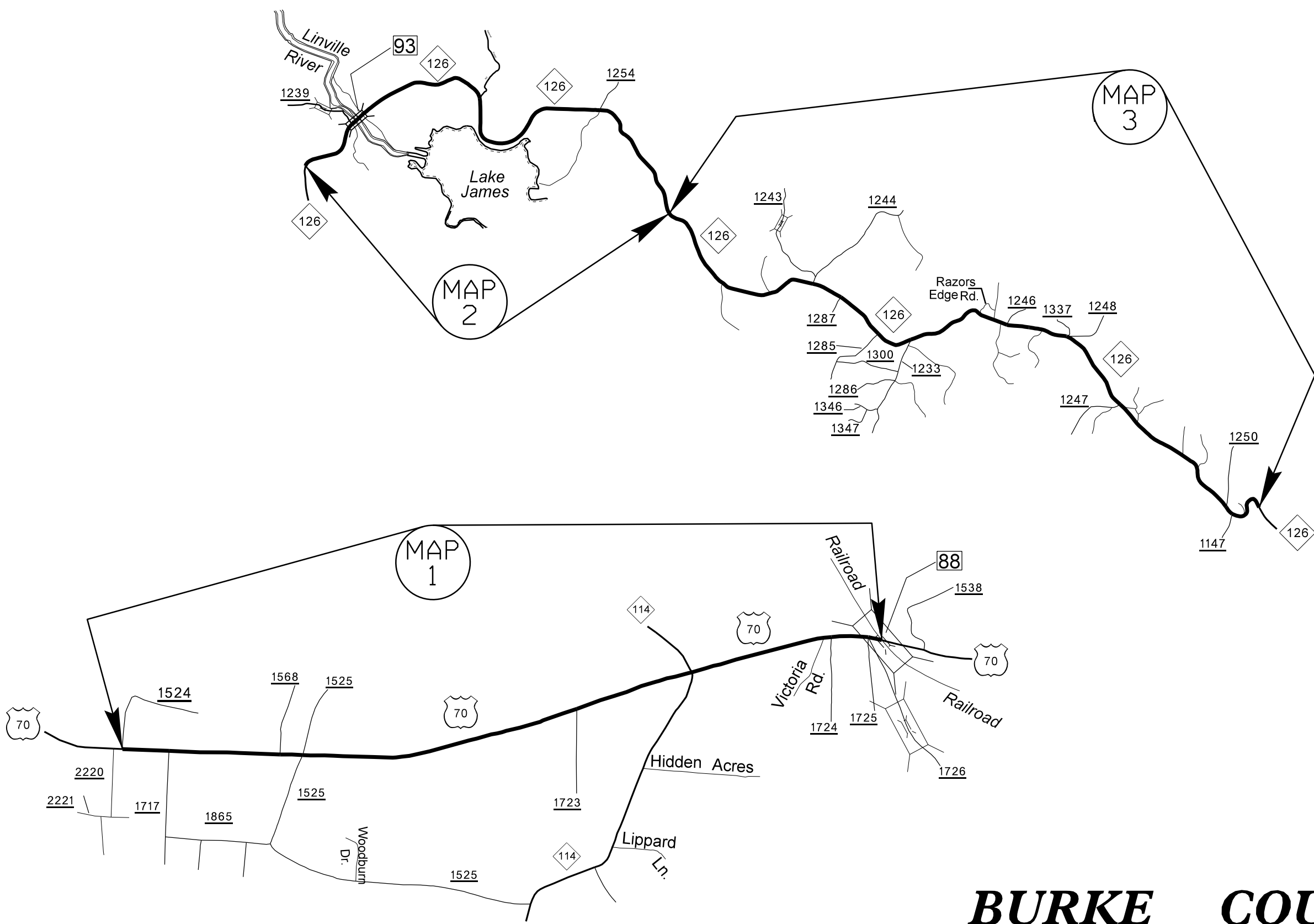
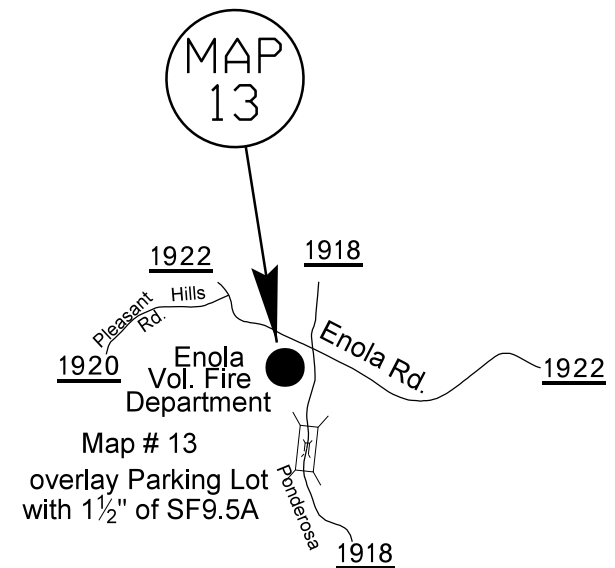
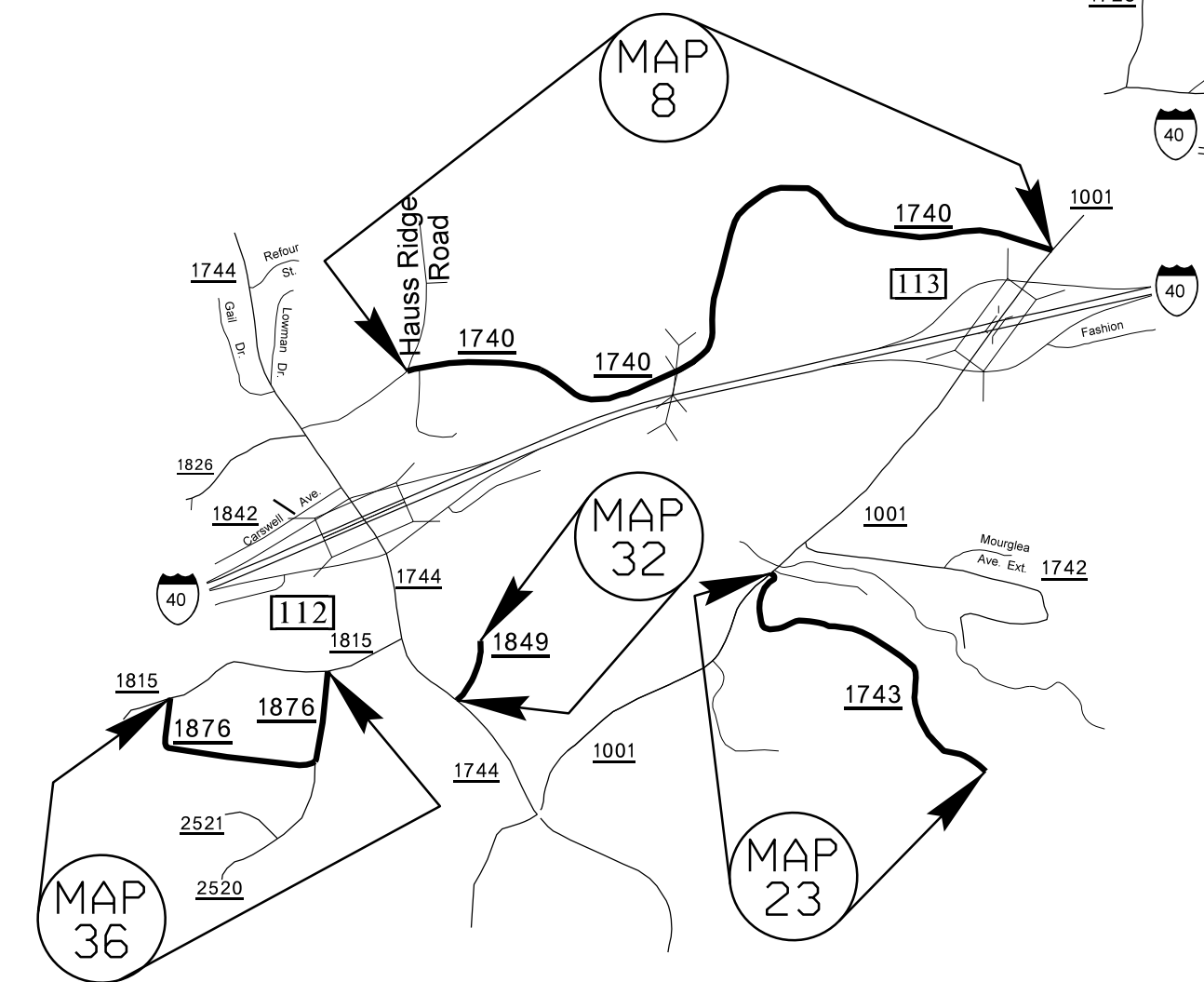
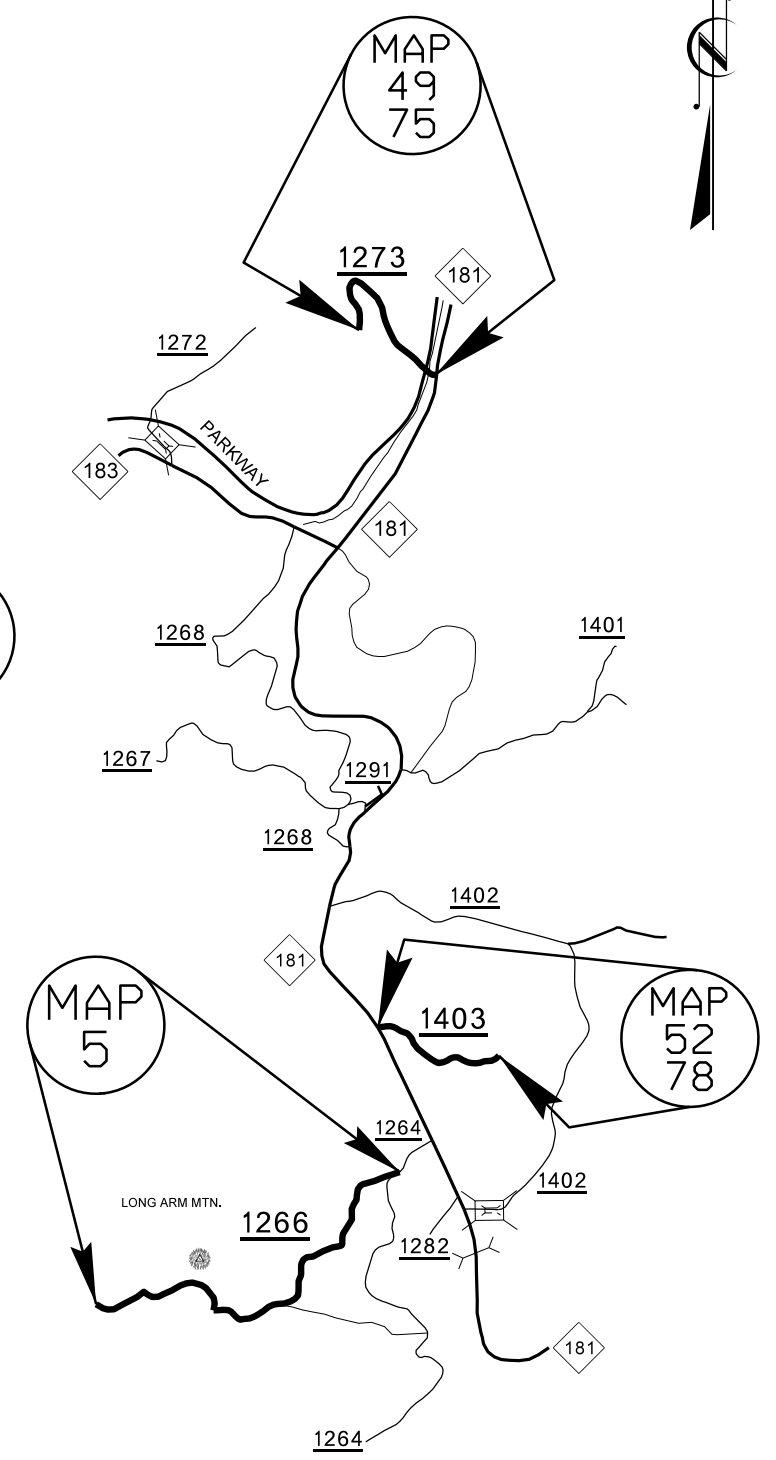
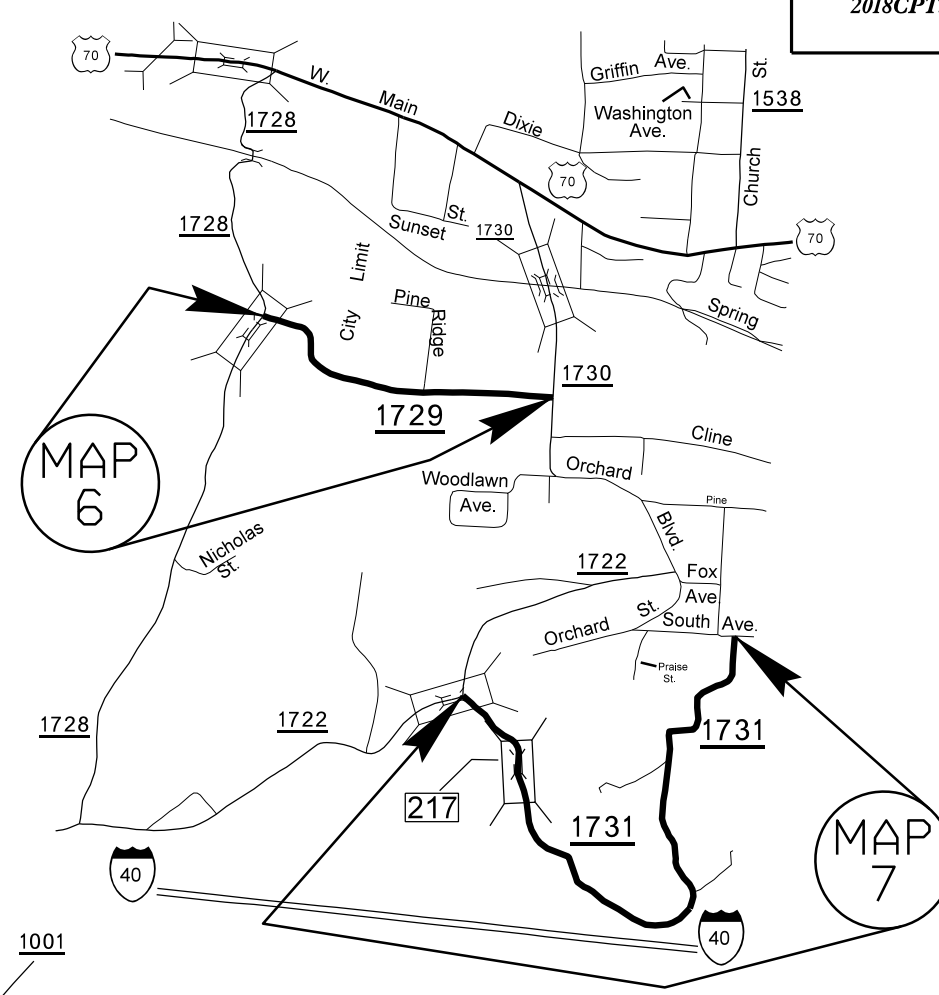
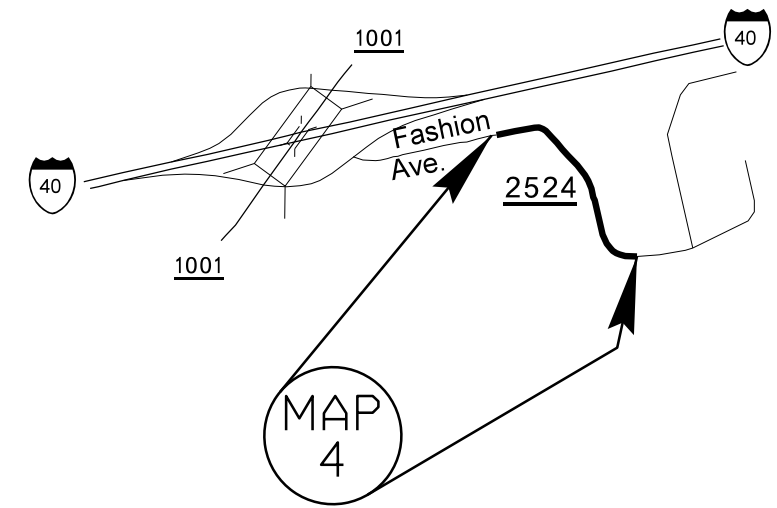


PROJECT NO.	SHEET NO.	TOTAL SHEETS
2018CPT.13.02.10121, 2018CPT.13.02.20121, 2018CPT.13.02.20122	1	



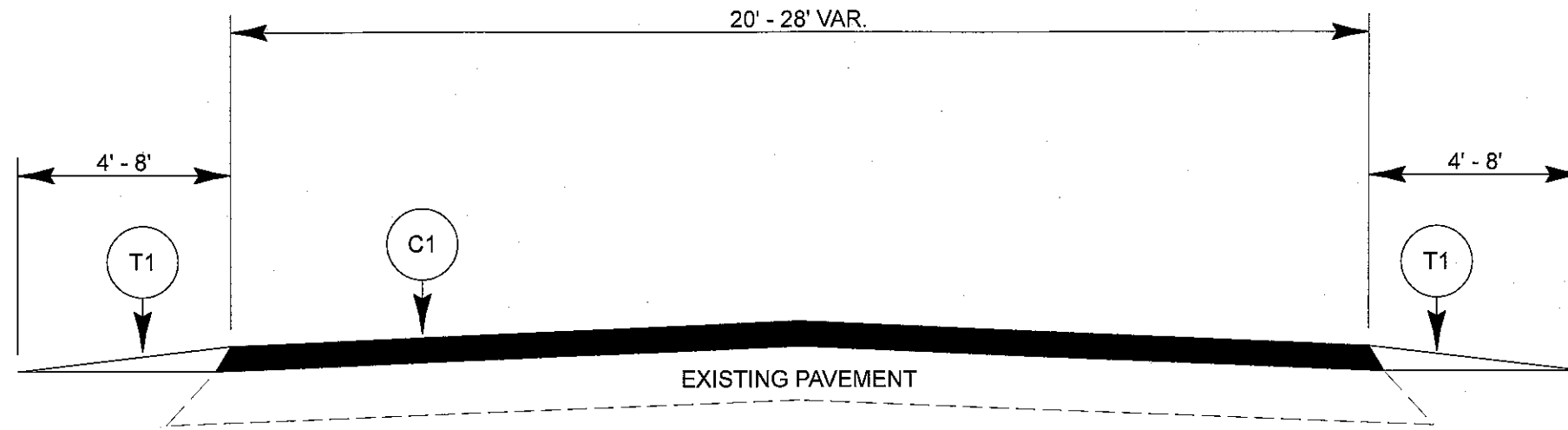
BURKE COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2018CPT.13.02.10121, 2018CPT.13.02.20121, 2018CPT.13.02.20122	2	

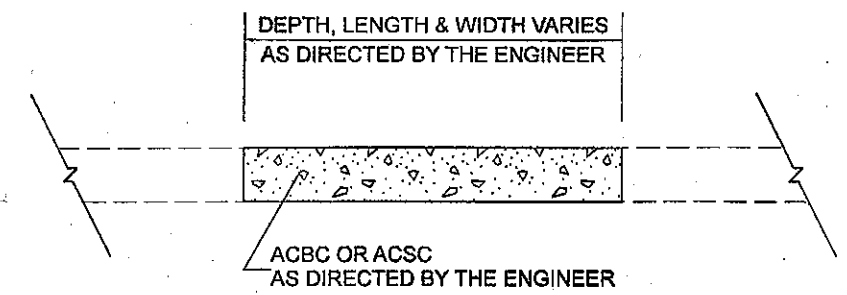


BURKE COUNTY

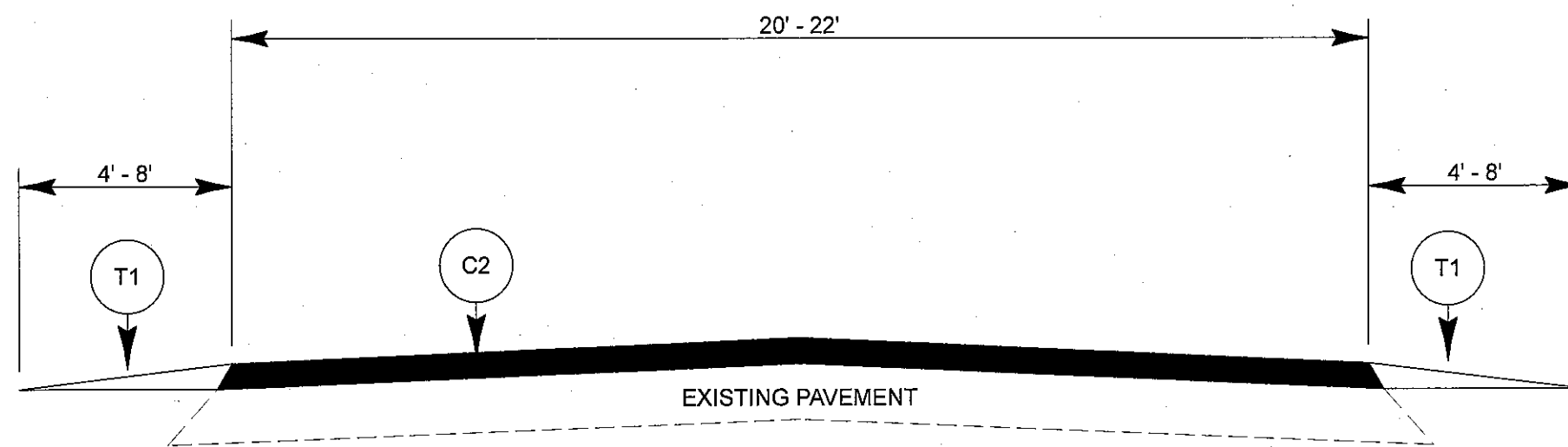
PROJECT NO.	SHEET NO.	TOTAL SHEETS
2018CPT.13.02.10121, 2018CPT.13.02.20121, 2018CPT.13.02.20122,	7	



TYPICAL SECTION NO. 1



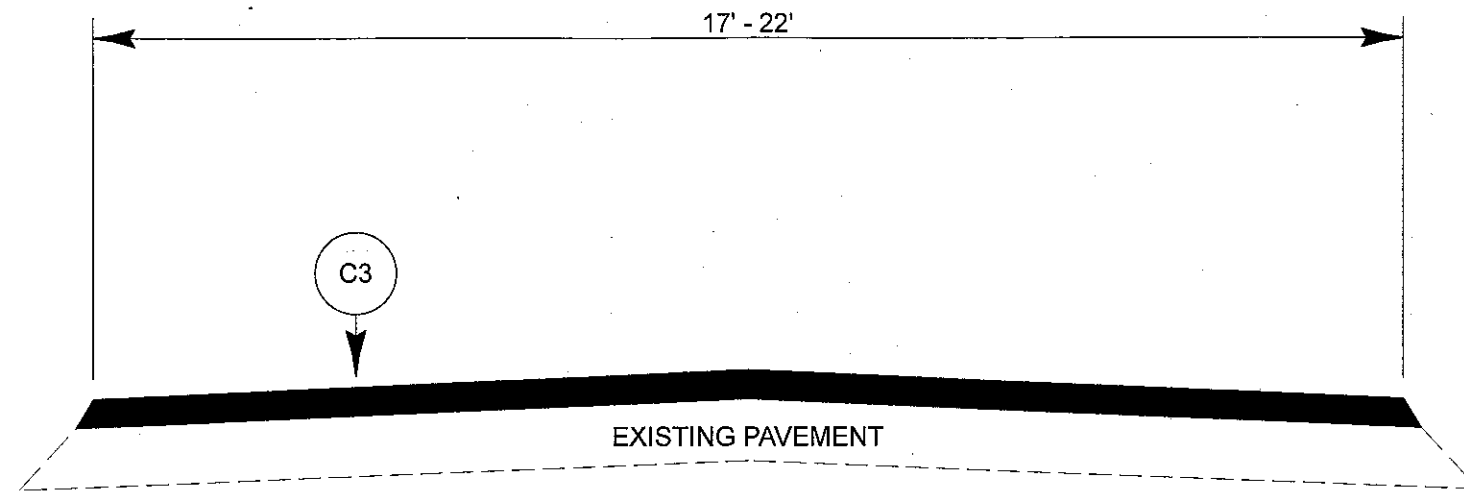
PATCHING EXISTING PAVEMENT



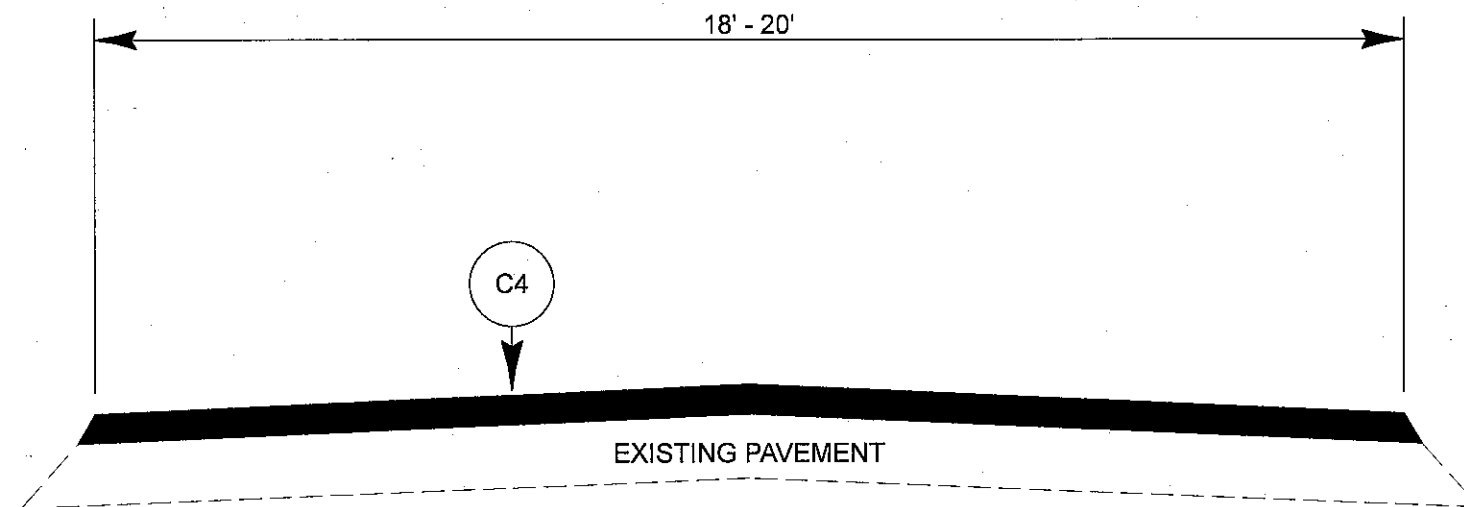
TYPICAL SECTION NO. 2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD
C2	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YARD
C3	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YARD
C4	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 100 LBS. PER SQ. YARD
F1	ASPHALT SURFACE TREATMENT, DOUBLE SEAL (LIGHTWEIGHT AGGREGATE)
T1	SHOULDER RECONSTRUCTION
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 1" DEPTH
V3	INCIDENTAL MILLING
V4	MILLING ASPHALT PAVEMENT, 0 TO 1" DEPTH

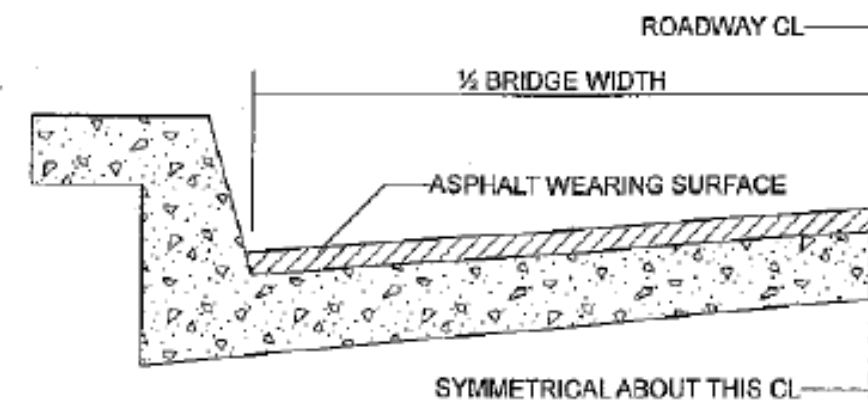
PROJECT NO.	SHEET NO.	TOTAL SHEETS
2018CPT.13.02.10121, 2018CPT.13.02.20121, 2018CPT.13.02.20122,	8	



TYPICAL SECTION NO. 3



TYPICAL SECTION NO. 4



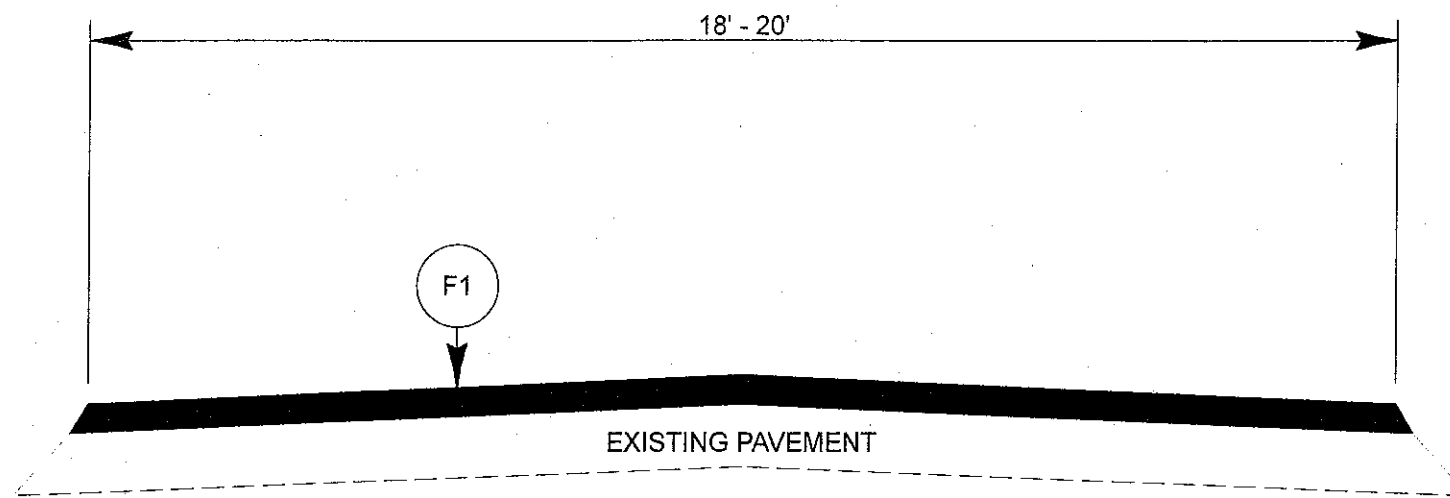
BRIDGE HALF TYPICAL SECTION

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", SP9.5A 1.0", S9.5X 1.5", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 1/4", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1.0", SP9.5A 1.5", S9.5X 2.0", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 1/4", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2".

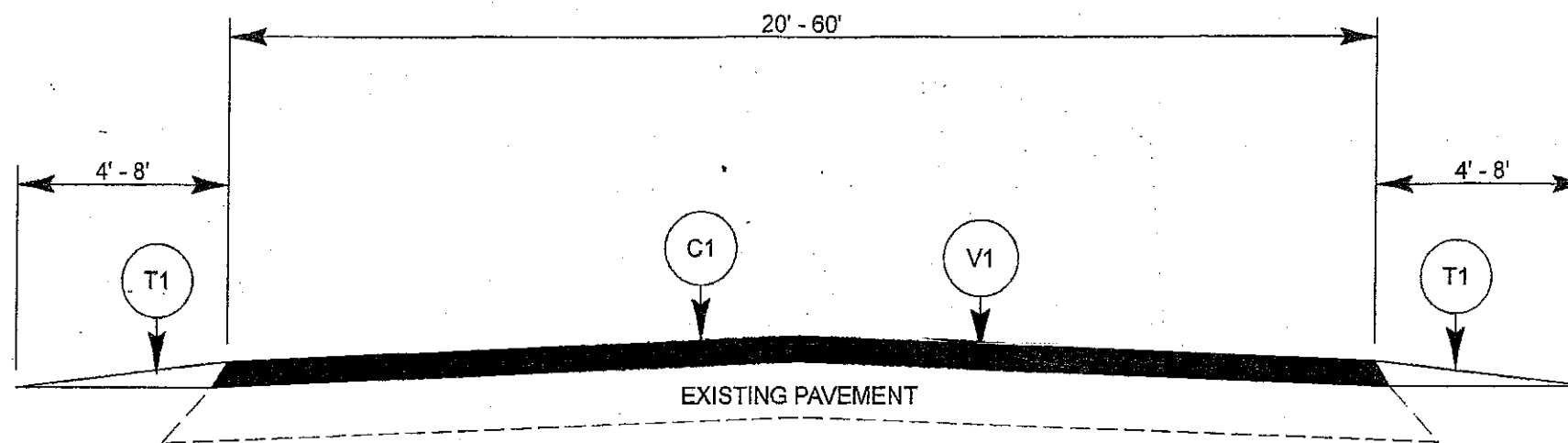
NOTES

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.

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2018CPT.13.02.10121, 2018CPT.13.02.20121, 2018CPT.13.02.20122,	9	

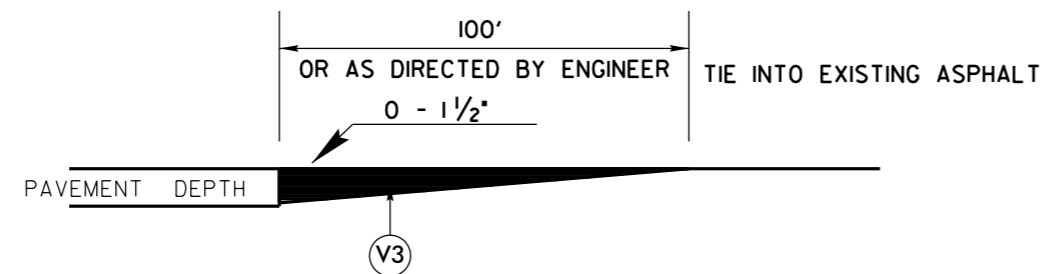


TYPICAL SECTION NO. 5



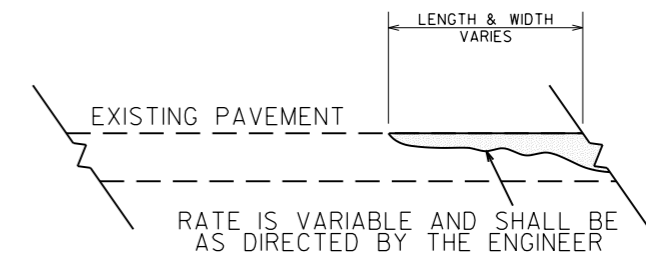
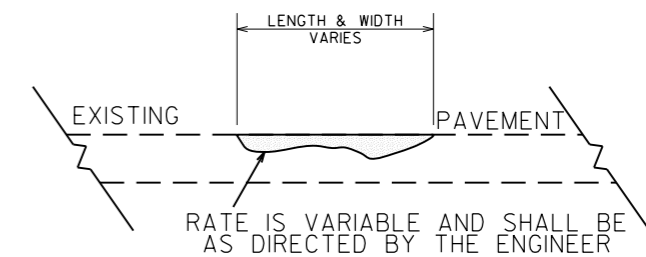
Note: In the pavement schedule V1 (Milling asphalt pavement 0" to 1-1/2" depth) is to be used on bridge decks ONLY on map #4 in typical section #1 and map #12 in typical section #2.

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2018CPT.13.02.10121, 2018CPT.13.07.20121, 2018CPT.13.02.20122	10	



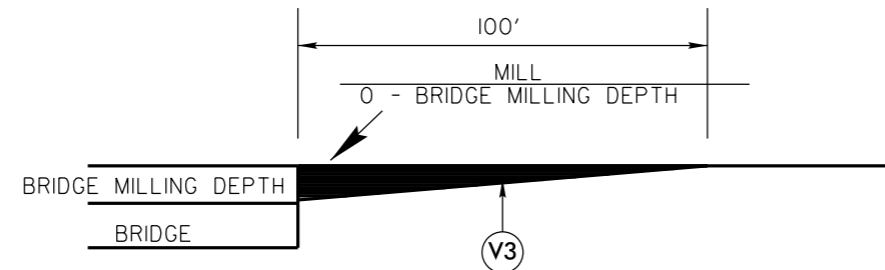
DETAIL TO TIE INTO EXIST PAVEMENT

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 S9.5B. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



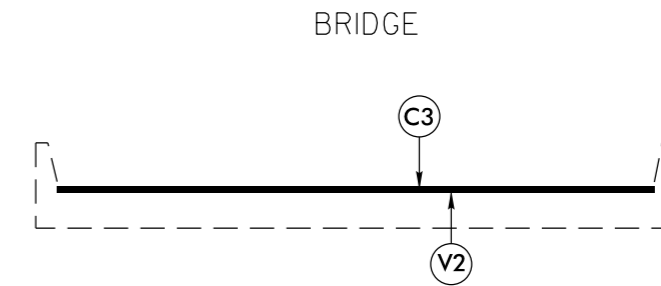
DETAIL SHOWING METHOD OF WEDGING

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2018CPT.13.02.10121, 2018CPT.13.07.20121, 2018CPT.13.02.20122	11	



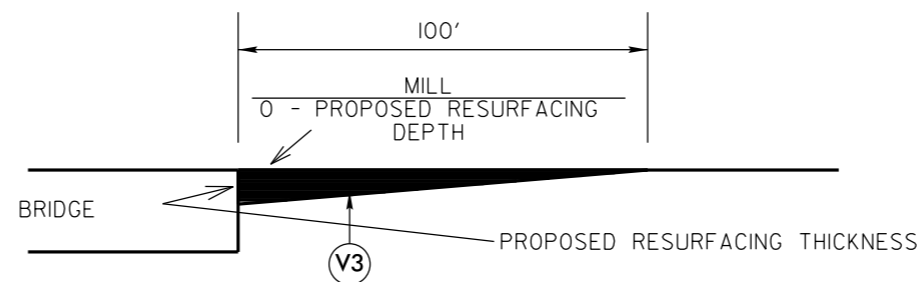
MILLING DETAIL AT BRIDGE APPROACHES

**WHERE BRIDGES WILL BE MILLED THEN RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.
USE AT BRIDGE NUMBERS: 14, MAP 24.**



BRIDGE DETAIL

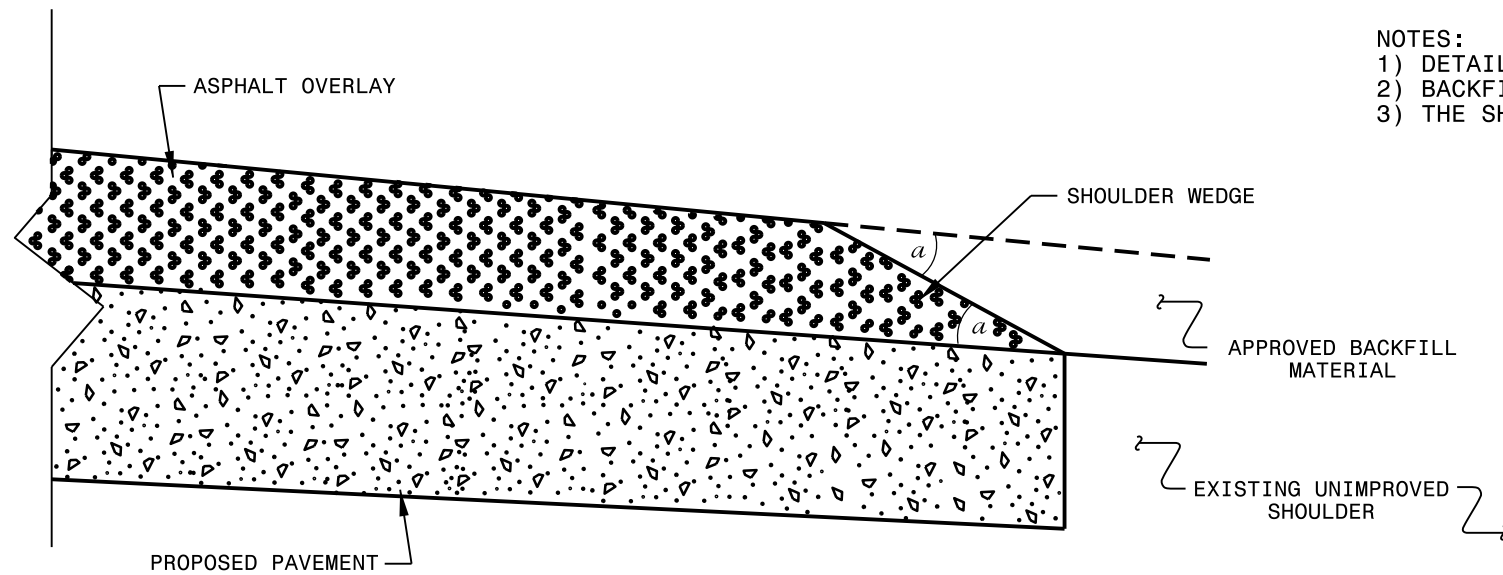
**BRIDGE NUMBER 14, MAP 24,
MILL 1" OFF EXISTING PAVEMENT
SEE MAPS FOR BRIDGE LOCATION**



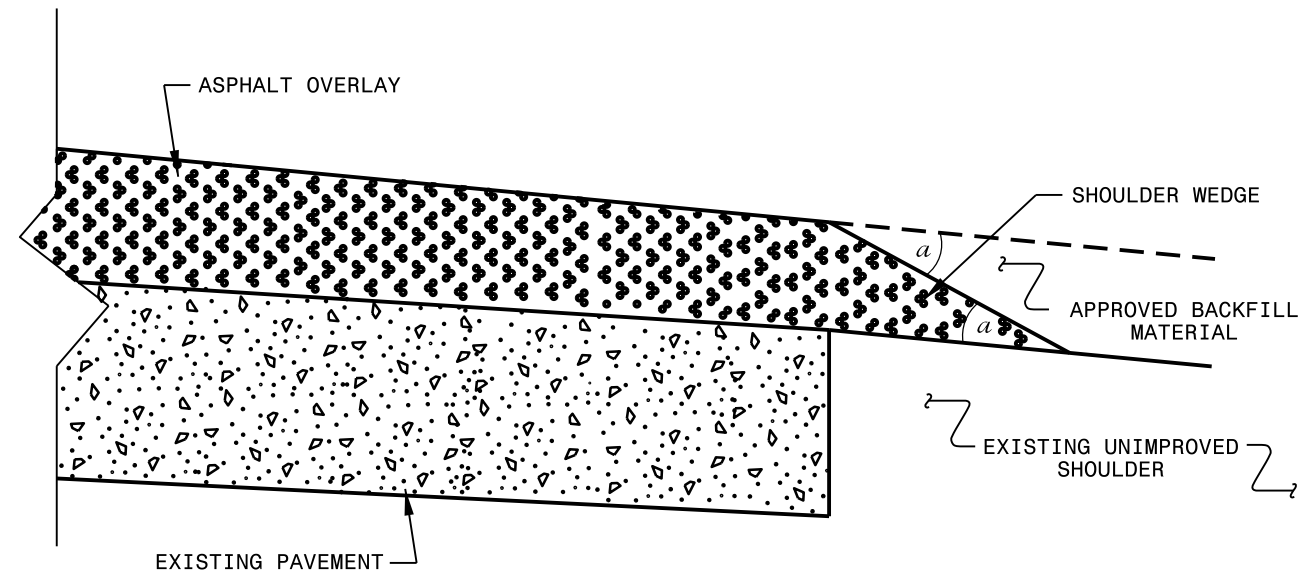
MILLING DETAIL AT BRIDGE APPROACHES

**WHERE BRIDGES WILL NOT BE RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.
USE AT BRIDGE NUMBER 357, MAP 22.**

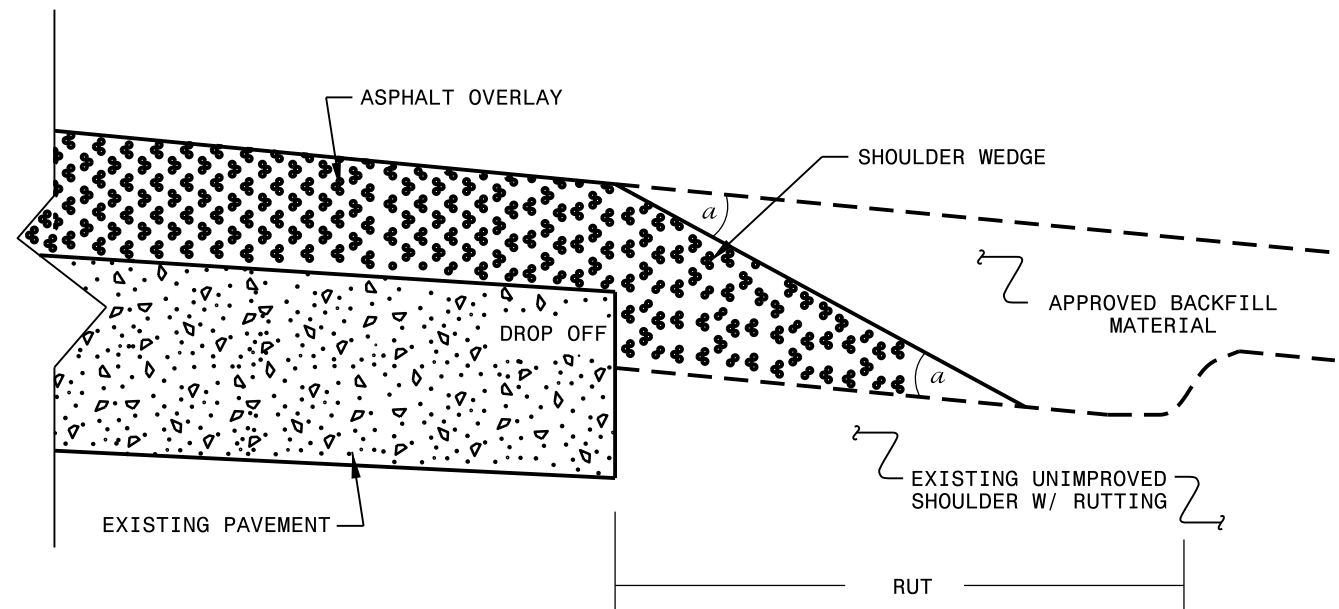
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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	

SYSTEMS DESIGN
USER NAME

PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.13.02.10121, ETC.	14	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TON	SHOULDER RECONSTRUCTION SMI	1" MILLING SY	MILLING ASPHALT PAVEMENT, 0" TO 1 1/2" DEPTH SY	MILLING ASPHALT PAVEMENT, 0" TO 1" SY	INCIDENTAL MILLING SY	ASPHALT CONC SURFACE COURSE, TYPE S9.5B TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A TON	ASPHALT CONC SURFACE COURSE, TYPE S4.75A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TON	ASPHALT SURFACE TREATMENT, DOUBLE SEAL SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL	VACUUM TRUCK WK	ADJUSTMENT OF MANHOLES EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA	INDUCTIVE LOOP SAWCUT LF			
2018CPT.13.02.20121	Burke	49	SR 1273	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)		5	2	2WU	NO	NO	0.47	18										75									
2018CPT.13.02.20121	Burke	50	SR 1287	FROM NC 126 TO DEAD END (MP 0.00 - MP 0.12)		5	2	2WU	NO	NO	0.12	18										25									
2018CPT.13.02.20121	Burke	51	SR 1317	FROM NC 181 TO SR 1218 (MP 0.00 - MP 0.21)		5	2	2WU	NO	NO	0.21	18										25									
2018CPT.13.02.20121	Burke	52	SR 1403	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.36)		5	2	2WU	NO	NO	0.36	20										60									
2018CPT.13.02.20121	Burke	53	SR 1513	FROM SR 1515 TO SR 1514 (MP 0.00 - MP 1.51)		5	2	2WU	NO	NO	1.51	19										700									
2018CPT.13.02.20121	Burke	54	SR 1770	FROM SR 1761 TO DEAD END (MP 0.00 - MP 0.56)		5	2	2WU	NO	NO	0.56	19										50									
2018CPT.13.02.20121	Burke	55	SR 1791	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.81)		5	2	2WU	NO	NO	0.81	18										285									
2018CPT.13.02.20121	Burke	56	SR 1804	FROM CATAWBA COUNTY LINE TO SR 1800 (MP 0.00 - MP 0.55)		5	2	2WU	NO	NO	0.55	18										45									
2018CPT.13.02.20121	Burke	57	SR 1807	FROM SR 1800 TO SR 1803 (MP 0.00 - MP 0.86)		5	2	2WU	NO	NO	0.86	20										100									
2018CPT.13.02.20121	Burke	58	SR 1846	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.19)		5	2	2WU	NO	NO	0.19	18										15									
2018CPT.13.02.20121	Burke	59	SR 1853	FROM SR 1001 TO DEAD END (MP 0.00 - MP 1.46)		5	2	2WU	NO	NO	1.46	18										135									
2018CPT.13.02.20121	Burke	60	SR 1900	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 2.58)		5	2	2WU	NO	NO	2.58	18										100									
2018CPT.13.02.20121	Burke	61	SR 1914	FROM SR 1913 TO SR 1915 (MP 0.00 - MP 1.59)		5	2	2WU	NO	NO	1.59	19										325									
2018CPT.13.02.20121	Burke	62	SR 1917	FROM SR 1324 TO SR 1922 (MP 0.00 - MP 1.77)		5	2	2WU	NO	NO	1.77	20										200									
2018CPT.13.02.20121	Burke	63	SR 1995	FROM SR 1924 TO DEAD END (MP 0.00 - MP 0.37)		5	2	2WU	NO	NO	0.37	18										175									
2018CPT.13.02.20121	Burke	64	SR 2025	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 1.53)		5	2	2WU	NO	NO	1.53	18										275									
2018CPT.13.02.20121	Burke	65	SR 2043	FROM SR 1984 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)		5	2	2WU	NO	NO	0.47	18										65									
2018CPT.13.02.20121	Burke	66	GOVERNMENT DRIVE	FROM SR 1922 TO END OF MAINTENANCE (MP 0.00 - MP 0.40)		3	2	2WU	NO	NO	0.4	20		0.80					429			29	30								
TOTAL FOR PROJ NO. 2018CPT.13.02.20121										43.358		649	26.71	115	720	1,960	890	336	23,755		1,610	10,515			6	6					
2018CPT.13.02.20122	Burke	67	SR 1466	FROM SR 1416 TO DEAD END (MP 0.00 - MP 0.10)		4	2	2WU	NO	NO	0.1	20										68	5	50							
2018CPT.13.02.20122	Burke	68	SR 1468	FROM NC 181 TO SR 1469 (MP 0.00 - MP 0.06)		4	2	2WU	NO	YES	0.06	20										41	3	15							
2018CPT.13.02.20122	Burke	69	SR 1469	FROM DEAD END TO DEAD END (MP 0.00 - MP 0.06)		4	2	2WU	NO	YES	0.11	20										75	5	35							
2018CPT.13.02.20122	Burke	70	SR 1488	FROM SR 1439 TO CUL-CE-SAC (MP 0.00 - MP 0.25)		4	2	2WU	NO	NO	0.25	18										153	10	125				4			
2018CPT.13.02.20122	Burke	71	SR 1489	FROM SR 1488 TO CUL-DE-SAC (MP 0.00 - MP 0.07)		4	2	2WU	NO	NO	0.07	18										43	3	35							
2018CPT.13.02.20122	Burke	72	SR 1490	FROM SR 1488 TO CUL-DE-SAC (MP 0.00 - MP 0.20)		4	2	2WU	NO	NO	0.2	18										123	8	125							
2018CPT.13.02.20122	Burke	73	SR 1257	FROM SR 1240 TO END OF MAINTENANCE (MP 0.00 - MP 0.78)		5	2	2WU	NO	NO	0.78	20													9,152	5,028	3				
2018CPT.13.02.20122	Burke	74	SR 1263	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.68)		5	2	2WU	NO	NO	0.68	19												7,580	4,169						
2018CPT.13.02.20122	Burke	75	SR 1273	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)		5	2	2WU	NO	NO	0.47	18												4,963	2,730						
2018CPT.13.02.20122	Burke	76	SR 1287	FROM NC 126 TO DEAD END (MP 0.00 - MP 0.12)		5	2	2WU	NO	NO	0.12	18												1,267	686						
2018CPT.13.02.20122	Burke	77	SR 1317	FROM NC 181 TO SR 1218 (MP 0.00 - MP 0.21)		5	2	2WU	NO	NO	0.21	18												2,218	1,220						
2018CPT.13.02.20122	Burke	78	SR 1403	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.36)		5	2	2WU	NO	NO	0.36	20												4,224	2,323						
2018CPT.13.02.20122	Burke	79	SR 1513	FROM SR 1515 TO SR 1514 (MP 0.00 - MP 1.51)		5	2	2WU	NO	NO	1.51	19												16,831	9,230						
2018CPT.13.02.20122	Burke	80	SR 1770	FROM SR 1761 TO DEAD END (MP 0.00 - MP 0.56)		5	2	2WU	NO	NO	0.56	19												6,242	3,427						
2018CPT.13.02.20122	Burke	81	SR 1791	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.81)		5	2	2WU	NO	NO	0.81	18												8,554	4,681						
2018CPT.13.02.20122	Burke	82	SR 1804	FROM CATAWBA COUNTY LINE TO SR 1800 (MP 0.00 - MP 0.55)		5	2	2WU	NO	NO	0.55	18												5,808	3,195						
2018CPT.13.02.20122	Burke	83	SR 1807	FROM SR 1800 TO SR 1803 (MP 0.00 - MP 0.86)		5	2	2WU	NO	NO	0.86	20												10,091	5,550						
2018CPT.13.02.20122	Burke	84	SR 1846	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.19)		5	2	2WU	NO	NO	0.19	18												2,006	1,104						
2018CPT.13.02.20122	Burke	85	SR 1853	FROM SR 1001 TO DEAD END (MP 0.00 - MP 1.46)		5	2	2WU	NO	NO	1.46	18												15,418	8,480						
2018CPT.13.02.20122	Burke	86	SR 1900	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 2.58)		5	2	2WU	NO	NO	2.58	18												27,245	14,970						
2018CPT.13.02.20122	Burke	87	SR 1914	FROM SR 1913 TO SR 1915 (MP 0.00 - MP 1.59)		5	2	2WU	NO	NO	1.59	19												17,723	9,748						
2018CPT.13.02.20122	Burke	88	SR 1917	FROM SR 1324 TO SR 1922 (MP 0.00 - MP 1.77)		5	2	2WU	NO	NO	1.77	20												20,768	11,442						
2018CPT.13.02.20122	Burke	89	SR 1995	FROM SR 1924 TO DEAD END (MP 0.00 - MP 0.37)		5	2	2WU	NO	NO	0.37	18												3,907	2,149						
2018CPT.13.02.20122	Burke	90	SR 2025	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 1.53)		5	2	2WU	NO	NO	1.53	18												16,157	8,881						
2018CPT.13.02.20122	Burke	91	SR 2043	FROM SR 1984 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)		5	2	2WU	NO	NO	0.47	18												4,963	2,748						
TOTAL FOR PROJ NO. 2018CPT.13.02.20122										17.66											503	34	385	185,117	101,761	3		4			
GRAND TOTAL											72.938	1,245	50.55	115	720	1,960	6,462	15,374	23,755	503	2,547	14,300	185,117	101,761	3	6	20	1,200			

PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.13.02.10121, ETC.	15	

THERMOPLASTIC AND PAINT QUANTITIES

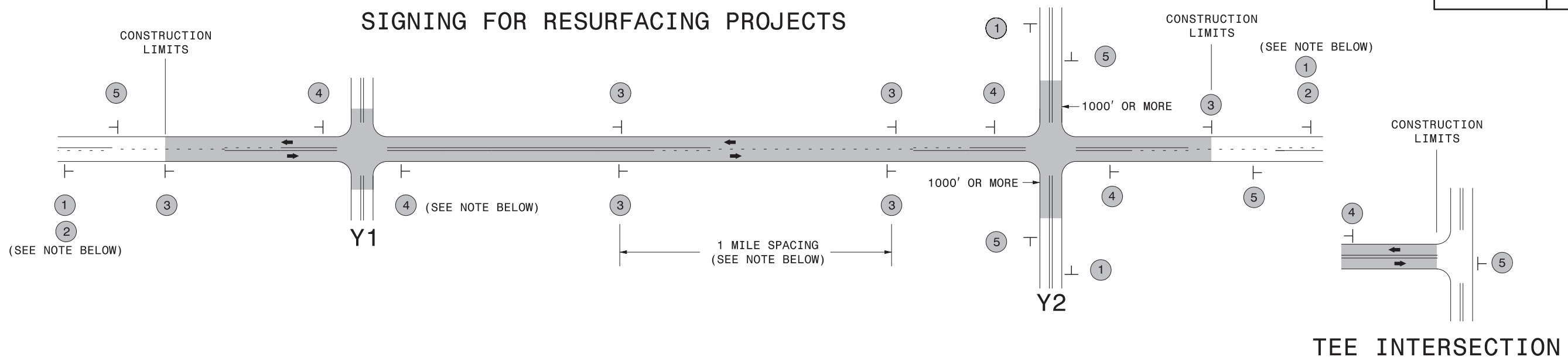
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	469700000-E	470000000-E			471000000-E	472100000-E	472500000-E				481000000-E		484700000-E		490500000-N		
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS) YELLOW	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT CHARACTER (120 MILS) SCHOOL	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & LT ARROW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	POLYUREA PAVEMENT MARKING LINES (4") WHITE (HRE)	POLYUREA PAVEMENT MARKING LINES (4") YELLOW (HRE)	SNOWPLOWABLE PAVEMENT MARKERS			
NO		NO			NO					SF	LS	LF	LF	LF	LF	EA	EA	EA	EA	EA	LF	LF	LF	LF	EA			
2018CPT.13.02.10121	Burke	1	US 70	FROM SR 1524 TO BRIDGE # 88 OVER RAILROAD (MP 16.10 - MP 17.98)		2	ZWU	1.88	28	210	1		100	200	225					14	1	1	1			19,853	19,853	140
2018CPT.13.02.10121	Burke	2	NC 126	FROM A POINT 2.02 MILES EAST OF SR 1238 TO A POINT 1.0 MILES EAST OF SR 1254 (MP 5.74 - MP 9.74)		2	ZWU	4	22	448	*															42,240	42,240	420
2018CPT.13.02.10121	Burke	3	NC 126	FROM A POINT 1.0 MILES EAST OF SR 1254 TO A POINT 0.35 MILES EAST OF SR 1147 (MP 9.74 - MP 15.78)		2	ZWU	6.04	22	677	*			700	48		12			2						63,782	63,782	540
TOTAL FOR PROJ NO. 2018CPT.13.02.10121										1,335	1		100	900	273	12	16	1	1	1			125,875	125,875	1,100			
													1,000						19					251,750				
2018CPT.13.02.20121	Burke	4	SR 2524	FROM SCL RTH COL TO END MAINT (MP 0.00 - MP 0.28)		2	ZWU	0.28	20	31	*															5,914	5,914	
2018CPT.13.02.20121	Burke	5	SR 1266	FROM SR 1264 TO END MAINT (MP 0.00 - MP 1.074)		2	ZWU	1.074	20	120	*															22,683	22,683	
2018CPT.13.02.20121	Burke	6	SR 1729	FROM SR 1728 TO SR 1730 (MP 0.00 - MP 0.50)		2	ZWU	0.502	20	56	*															10,602	10,602	
2018CPT.13.02.20121	Burke	7	SR 1731	FROM SR 1722 TO CL VALDESE (MP 0.00 - MP 1.093)		2	ZWU	1.093	20	122	*															23,084	23,084	
2018CPT.13.02.20121	Burke	8	SR 1740	FROM HAUSS RIDGE RD TO SR 1001 (MP 0.00 - 1.125)		2	ZWU	1.125	20	126	*															23,760	23,760	
2018CPT.13.02.20121	Burke	9	SR 1785	FROM SR 1761 TO SR 1786 (MP 0.00 - MP 0.780)		2	ZWU	0.78	18	87	*															16,474	16,474	
2018CPT.13.02.20121	Burke	10	SR 1797	FROM NC 18 TO PVMT CHG (MP 0.00 - MP 0.292)		2	ZWU	0.292	18	33	*																	
2018CPT.13.02.20121	Burke	11	SR 1800	FROM NC 18 TO THE CATAWBA CO LINE (MP 0.00 - MP 5.68)		2	ZWU	5.68	22	636	*	45			40	12										119,962	119,962	
2018CPT.13.02.20121	Burke	12	SR 1924	FROM SR 1932 TO SR 1922 (MP 12.82 - MP 14.95)		2	ZWU	2.13	24	239	*				46	12				2						44,986	44,986	
2018CPT.13.02.20121	Burke	13	ENOLA VFD	ENOLA VOL. FIRE DEPARTMENT		2	ZWU	0.002	10																			
2018CPT.13.02.20121	Burke	14	SR 1145	FROM US 70 TO DEAD END (MP 0.00 - MP 0.61)		2	ZWU	0.61	18	68	*																	
2018CPT.13.02.20121	Burke	15	SR 1220	FROM NC 126 TO END OF MAINTENANCE (MP 0.00 - MP 0.19)		3	ZWU	0.19	18	22	*																	
2018CPT.13.02.20121	Burke	16	SR 1235	FROM SR 1234 TO END OF MAINTENANCE (MP 0.00 - MP 0.65)		3	ZWU	0.65	18	74	*																	
2018CPT.13.02.20121	Burke	17	SR 1334	FROM SR 1206 TO CUL-DE-SAC (MP 0.00 - MP 0.53)		3	ZWU	0.53	18	60	*																	
2018CPT.13.02.20121	Burke	18	SR 1335	FROM SR 1334 TO CUL-DE-SAC (MP 0.00 - MP 0.10)		3	ZWU	0.1	18	11	*																	
2018CPT.13.02.20121	Burke	19	SR 1336	FROM SR 1334 TO CUL-DE-SAC (MP 0.00 - MP 0.09)		3	ZWU	0.09	19	10	*																	
2018CPT.13.02.20121	Burke	20	SR 1354	FROM SR 1350 TO CUL-DE-SAC (MP 0.00 - MP 0.28)		3	ZWU	0.28	22	31	*																	
2018CPT.13.02.20121	Burke	21	SR 1550	FROM VALDESE CITY LIMITS TO DEAD END (MP 0.00 - MP 0.15)		3	ZWU	0.15	18	17	*																	
2018CPT.13.02.20121	Burke	22	SR 1728	FROM SR 1729 TO US 70 (MP 0.898 - MP 1.38)		3	ZWU	0.48	20	54	*															10,138	10,138	
2018CPT.13.02.20121	Burke	23	SR 1743	FROM SR 1001 TO END OF PAVEMENT (MP 0.00 - MP 0.41)		3	ZWU	0.41	17	46	*																	
2018CPT.13.02.20121	Burke	24	SR 1746	FROM SR 1001 TO SR SR 1001 (MP 0.00 - MP 0.37)		3	ZWU	0.37	18	42	*																	
2018CPT.13.02.20121	Burke	25	SR 1771	FROM SR 1761 TO US 70 (MP 0.00 - MP 0.40)		3	ZWU	0.4	19	45	*															8,448	8,448	
2018CPT.13.02.20121	Burke	26	SR 1776	FROM SR 1002 TO SR 1761 (MP 0.00 - MP 0.25)		3	ZWU	0.25	17	28	*																	
2018CPT.13.02.20121	Burke	27	SR 1779	FROM SR 1002 TO END OF MAINTENANCE (MP 0.00 - MP 0.20)		3	ZWU	0.2	20	22	*																	
2018CPT.13.02.20121	Burke	28	SR 1782	FROM SR 1002 TO END OF MAINTENANCE (MP 0.00 - MP 0.61)		3	ZWU	0.61	18	68	*																	
2018CPT.13.02.20121	Burke	29	SR 1788	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.60)		3	ZWU	0.6	18	67	*																	
2018CPT.13.02.20121	Burke	30	SR 1834	FROM SR 1002 TO DEAD END (MO 0.00 - 0.61)		3	ZWU	0.61	20	69	*															12,883	12,883	
2018CPT.13.02.20121	Burke	31	SR 1837	FROM SR 1761 TO SR 1758 (MP 0.00 - MP 0.81)		3	ZWU	0.81	20	91	*				16	6										17,107	17,107	
2018CPT.13.02.20121	Burke	32	SR 1849	FROM SR 1744 TO END OF MAINTENANCE (MP 0.00 - MP 0.09)		3	ZWU	0.09	16	10	*																	
2018CPT.13.02.20121	Burke	33	SR 1859	FROM SR 1002 TO DEAD END (MP 0.00 - MP 0.17)		3	ZWU	0.17	17	19	*																	
2018CPT.13.02.20121	Burke	34	SR 1860	FROM US 70 TO DEAD END (MP 0.00 - MP 0.15)		3	ZWU	0.15	16	17	*																	
2018CPT.13.02.20121	Burke	35	SR 1861	FROM SR 1737 TO END OF MAINTENANCE (MP 0.00 - MP 0.73)		3	ZWU	0.73	18	81	*																	
2018CPT.13.02.20121	Burke	36	SR 1876	FROM SR 1815 TP SR 1815 (MP 0.00 - MP 0.44)		3	ZWU	0.44	16	49	*																	
2018CPT.13.02.20121	Burke	37	SR 1881	FROM SR 1784 TO SR 1882 (MP 0.00 - MP 0.35)		3	ZWU	0.35	20	39	*															7,392	7,392	
2018CPT.13.02.20121	Burke	38	SR 1882	FROM SR 1881 TO SR 1784 (MP 0.00 - MP 0.24)		3	ZWU	0.24	18	27	*															5,069	5,069	
2018CPT.13.02.20121	Burke	39	SR 1883	FROM SR 1881 TO SR 1784 (MP 0.00 * MP 0.27)		3	ZWU	0.27	18	30	*															5,702	5,702	
2018CPT.13.02.20121	Burke	40	SR 1893	FROM SR 1786 TO DEAD END (MP 0.00 - MP 0.78)		3	ZWU	0.78	18	87	*																	
2018CPT.13.02.20121	Burke	41	SR 1920	FROM SR 1922 TO END OF MAINTENANCE (MP 0.00 - MP 0.40)		3	ZWU	0.4	18	45	*																	
2018CPT.13.02.20121	Burke	42	SR 2501	FROM SR 1800 TO END OF MAINTENANCE (MP 0.00 - MP 0.15)		3	ZWU	0.15	18	17	*																	
2018CPT.13.02.20121	Burke	43	SR 2502	FROM SR 1800 TO END OF MAINTENANCE (MP 0.00 - MP 0.15)		3	ZWU	0.15	18	17	*																	
2018CPT.13.02.20121	Burke	44	SR 2522	FROM SR 1800 TO SR 1797 (MP 0.00 - MP 0.56)		3	ZWU	0.56	18	63	*																	
2018CPT.13.02.20121	Burke	45	SR 2523	FROM SR 1784 TO END OF MAINTENANCE (MP 0.00 - MP 0.76)		3	ZWU	0.76	20	85	*															16,051	16,051	
2018CPT.13.02.20121	Burke	46	SR 2533	FROM NC 18 TO END OF MAINTENANCE (MP 0.00 - MP 0.55)		3	ZWU	0.55	20	62	*																	
2018CPT.13.02.20121	Burke	47	SR 1257	FROM SR 1240 TO END OF MAINTENANCE (MP 0.00 - MP 0.78)		5	ZWU	0.																				

PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.13.02.10121, ETC.	16	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	469700000-E	470000000-E			472100000-E	472500000-E				481000000-E		484700000-E		490500000-N	
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS) YELLOW	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) SCHOOL	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & LT ARROW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	POLYUREA PAVEMENT MARKING LINES (4") WHITE (HIGHLY REFLECTIVE ELEMENTS)	POLYUREA PAVEMENT MARKING LINES (4") YELLOW (HIGHLY REFLECTIVE ELEMENTS)	SNOWFLOWABLE PAVEMENT MARKERS	
										SF	LS	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
2018CPT.13.02.20121	Burke	48	SR 1263	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.68)	5	2	2WU	0.68	19																	
2018CPT.13.02.20121	Burke	49	SR 1273	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)	5	2	2WU	0.47	18																	
2018CPT.13.02.20121	Burke	50	SR 1287	FROM NC 126 TO DEAD END (MP 0.00 - MP 0.12)	5	2	2WU	0.12	18																	
2018CPT.13.02.20121	Burke	51	SR 1317	FROM NC 181 TO SR 1218 (MP 0.00 - MP 0.21)	5	2	2WU	0.21	18																	
2018CPT.13.02.20121	Burke	52	SR 1403	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.36)	5	2	2WU	0.36	20																	
2018CPT.13.02.20121	Burke	53	SR 1513	FROM SR 1515 TO SR 1514 (MP 0.00 - MP 1.51)	5	2	2WU	1.51	19																	
2018CPT.13.02.20121	Burke	54	SR 1770	FROM SR 1761 TO DEAD END (MP 0.00 - MP 0.56)	5	2	2WU	0.56	19																	
2018CPT.13.02.20121	Burke	55	SR 1791	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.81)	5	2	2WU	0.81	18																	
2018CPT.13.02.20121	Burke	56	SR 1804	FROM CATAWBA COUNTY LINE TO SR 1800 (MP 0.00 - MP 0.55)	5	2	2WU	0.55	18																	
2018CPT.13.02.20121	Burke	57	SR 1807	FROM SR 1800 TO SR 1803 (MP 0.00 - MP 0.86)	5	2	2WU	0.86	20																	
2018CPT.13.02.20121	Burke	58	SR 1846	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.19)	5	2	2WU	0.19	18																	
2018CPT.13.02.20121	Burke	59	SR 1853	FROM SR 1001 TO DEAD END (MP 0.00 - MP 1.46)	5	2	2WU	1.46	18																	
2018CPT.13.02.20121	Burke	60	SR 1900	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 2.58)	5	2	2WU	2.58	18																	
2018CPT.13.02.20121	Burke	61	SR 1914	FROM SR 1913 TO SR 1915 (MP 0.00 - MP 1.59)	5	2	2WU	1.59	19																	
2018CPT.13.02.20121	Burke	62	SR 1917	FROM SR 1324 TO SR 1922 (MP 0.00 - MP 1.77)	5	2	2WU	1.77	20																	
2018CPT.13.02.20121	Burke	63	SR 1995	FROM SR 1922 TO DEAD END (MP 0.00 - MP 0.37)	5	2	2WU	0.37	18																	
2018CPT.13.02.20121	Burke	64	SR 2025	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 1.53)	5	2	2WU	1.53	18																	
2018CPT.13.02.20121	Burke	65	SR 2043	FROM SR 1984 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)	5	2	2WU	0.47	18																	
2018CPT.13.02.20121	Burke	66	GOVERNMENT DRIVE	FROM SR 1922 TO END OF MAINTENANCE (MP 0.00 - MP 0.40)	3	2	2WU	0.4	20	45	*				16				1			1		8,448	8,448	
TOTAL FOR PROJ NO. 2018CPT.13.02.20121									43,358	2,968	45			118	30	1	2	1		358,703	358,703					
										4										717,406						
2018CPT.13.02.20122	Burke	67	SR 1466	FROM SR 1416 TO DEAD END (MP 0.00 - MP 0.10)	4	2	2WU	0.1	20	11	*															
2018CPT.13.02.20122	Burke	68	SR 1468	FROM NC 181 TO SR 1469 (MP 0.00 - MP 0.06)	4	2	2WU	0.06	20	7	*															
2018CPT.13.02.20122	Burke	69	SR 1469	FROM DEAD END TO DEAD END (MP 0.00 - MP 0.06)	4	2	2WU	0.11	20	12	*															
2018CPT.13.02.20122	Burke	70	SR 1488	FROM SR 1439 TO CUL-CE-SAC (MP 0.00 - MP 0.25)	4	2	2WU	0.25	18	28	*															
2018CPT.13.02.20122	Burke	71	SR 1489	FROM SR 1488 TO CUL-DE-SAC (MP 0.00 - MP 0.07)	4	2	2WU	0.07	18	8	*															
2018CPT.13.02.20122	Burke	72	SR 1490	FROM SR 1488 TO CUL-DE-SAC (MP 0.00 - MP 0.20)	4	2	2WU	0.2	18	22	*															
2018CPT.13.02.20122	Burke	73	SR 1257	FROM SR 1240 TO END OF MAINTENANCE (MP 0.00 - MP 0.78)	5	2	2WU	0.78	20	87	*															
2018CPT.13.02.20122	Burke	74	SR 1263	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.68)	5	2	2WU	0.68	19	76	*													14,362	14,362	
2018CPT.13.02.20122	Burke	75	SR 1273	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)	5	2	2WU	0.47	18	53	*															
2018CPT.13.02.20122	Burke	76	SR 1287	FROM NC 126 TO DEAD END (MP 0.00 - MP 0.12)	5	2	2WU	0.12	18	13	*															
2018CPT.13.02.20122	Burke	77	SR 1317	FROM NC 181 TO SR 1218 (MP 0.00 - MP 0.21)	5	2	2WU	0.21	18	24	*															
2018CPT.13.02.20122	Burke	78	SR 1403	FROM NC 181 TO END OF MAINTENANCE (MP 0.00 - MP 0.36)	5	2	2WU	0.36	20	40	*															
2018CPT.13.02.20122	Burke	79	SR 1513	FROM SR 1515 TO SR 1514 (MP 0.00 - MP 1.51)	5	2	2WU	1.51	19	169	*													31,891	31,891	
2018CPT.13.02.20122	Burke	80	SR 1770	FROM SR 1761 TO DEAD END (MP 0.00 - MP 0.56)	5	2	2WU	0.56	19	63	*															
2018CPT.13.02.20122	Burke	81	SR 1791	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.81)	5	2	2WU	0.81	18	90	*															
2018CPT.13.02.20122	Burke	82	SR 1804	FROM CATAWBA COUNTY LINE TO SR 1800 (MP 0.00 - MP 0.55)	5	2	2WU	0.55	18	62	*													11,616	11,616	
2018CPT.13.02.20122	Burke	83	SR 1807	FROM SR 1800 TO SR 1803 (MP 0.00 - MP 0.86)	5	2	2WU	0.86	20	96	*													18,163	18,163	
2018CPT.13.02.20122	Burke	84	SR 1846	FROM SR 1786 TO END OF MAINTENANCE (MP 0.00 - MP 0.19)	5	2	2WU	0.19	18	21	*															
2018CPT.13.02.20122	Burke	85	SR 1853	FROM SR 1001 TO DEAD END (MP 0.00 - MP 1.46)	5	2	2WU	1.46	18	164	*													30,835	30,835	
2018CPT.13.02.20122	Burke	86	SR 1900	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 2.58)	5	2	2WU	2.58	18	289	*													54,490	54,490	
2018CPT.13.02.20122	Burke	87	SR 1914	FROM SR 1913 TO SR 1915 (MP 0.00 - MP 1.59)	5	2	2WU	1.59	19	178	*													33,581	33,581	
2018CPT.13.02.20122	Burke	88	SR 1917	FROM SR 1324 TO SR 1922 (MP 0.00 - MP 1.77)	5	2	2WU	1.77	20	199	*													37,382	37,382	
2018CPT.13.02.20122	Burke	89	SR 1995	FROM SR 1922 TO DEAD END (MP 0.00 - MP 0.37)	5	2	2WU	0.37	18	42	*															
2018CPT.13.02.20122	Burke	90	SR 2025	FROM SR 1924 TO END OF MAINTENANCE (MP 0.00 - MP 1.53)	5	2	2WU	1.53	18	171	*													32,314	32,314	
2018CPT.13.02.20122	Burke	91	SR 2043	FROM SR 1984 TO END OF MAINTENANCE (MP 0.00 - MP 0.47)	5	2	2WU	0.47	18	53	*															
TOTAL FOR PROJ NO. 2018CPT.13.02.20122									17,66	1,978											264,634	264,634				
										529,268																
GRAND TOTAL									72,938	6,281	1	45	100	900	391	42	17	3	2	1	623,337	623,337	125,875	125,875	1,100	
										1,000										23		1,246,674				

SIGNING FOR RESURFACING PROJECTS



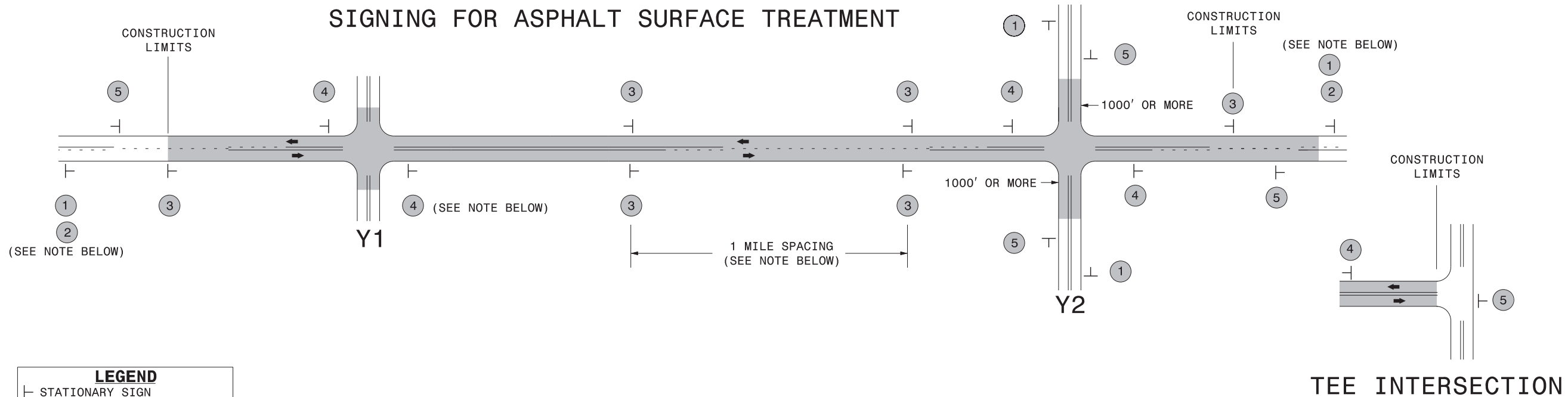
LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	2	3	4	5	
			<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 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>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>		
			<p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>			
			<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- 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.</p> <p>- 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>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p>	<p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>		
			<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>			

**RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS**



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.		
	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	 W8-7 48" X 48"	- 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.		
		 SP 48" X 48"			
	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. - 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.			

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

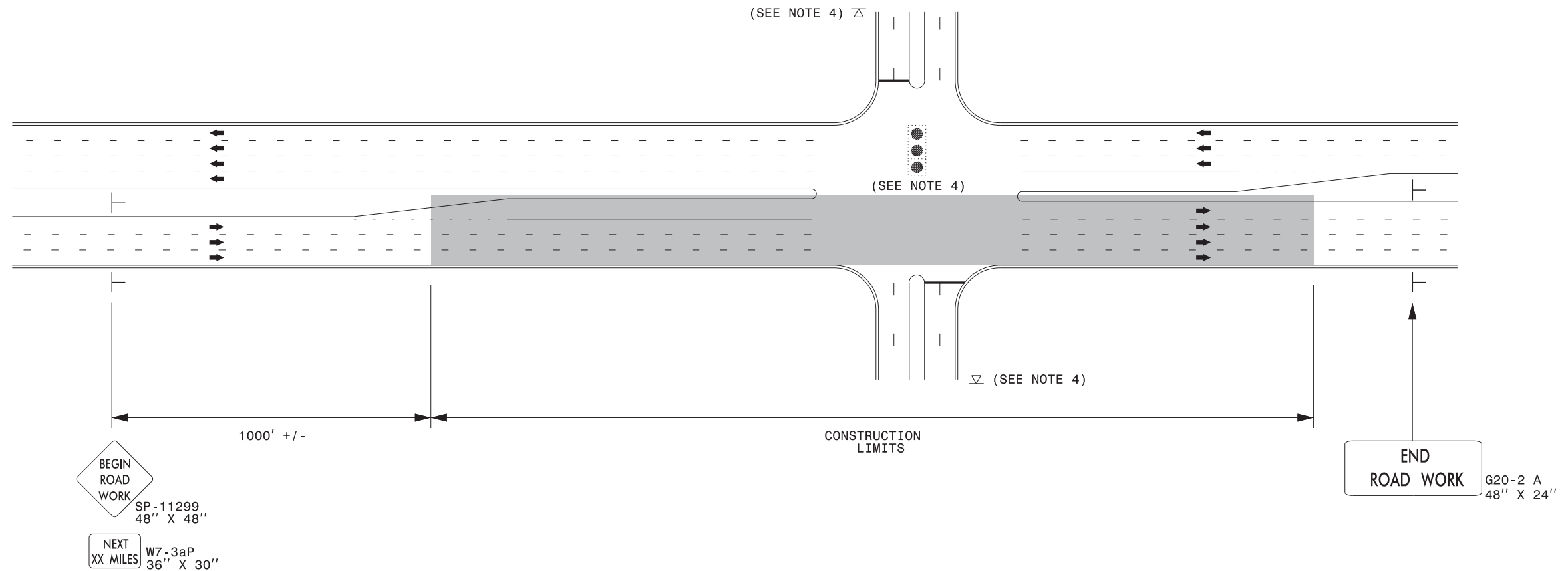
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.

**ADVANCE WARNING SIGNS
FOR
ASPHALT SURFACE TREATMENTS
2 LANE ROADWAYS**

URBAN / SUBURBAN WORKZONES

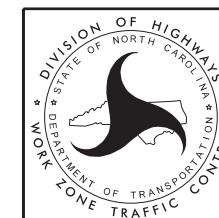


NOTES:

- 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.

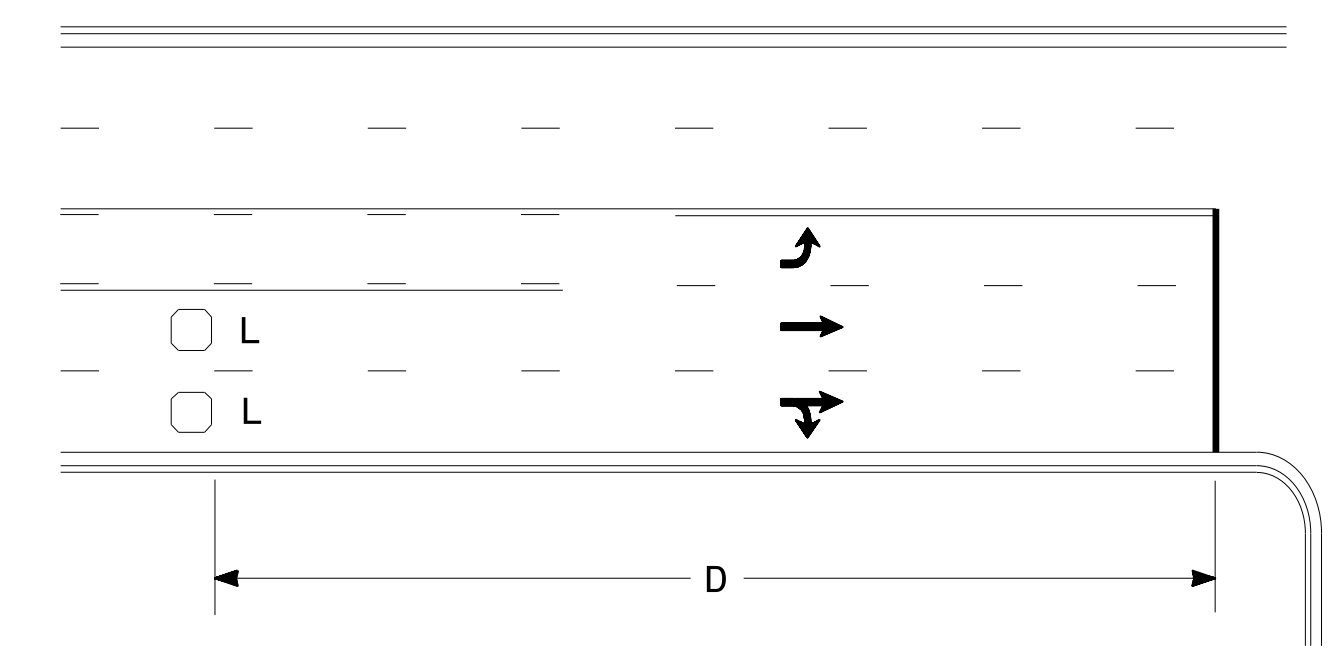
LEGEND

- ┆ STATIONARY SIGN
- ➔ DIRECTION OF TRAFFIC FLOW



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

High Speed Detection (≥40 mph)

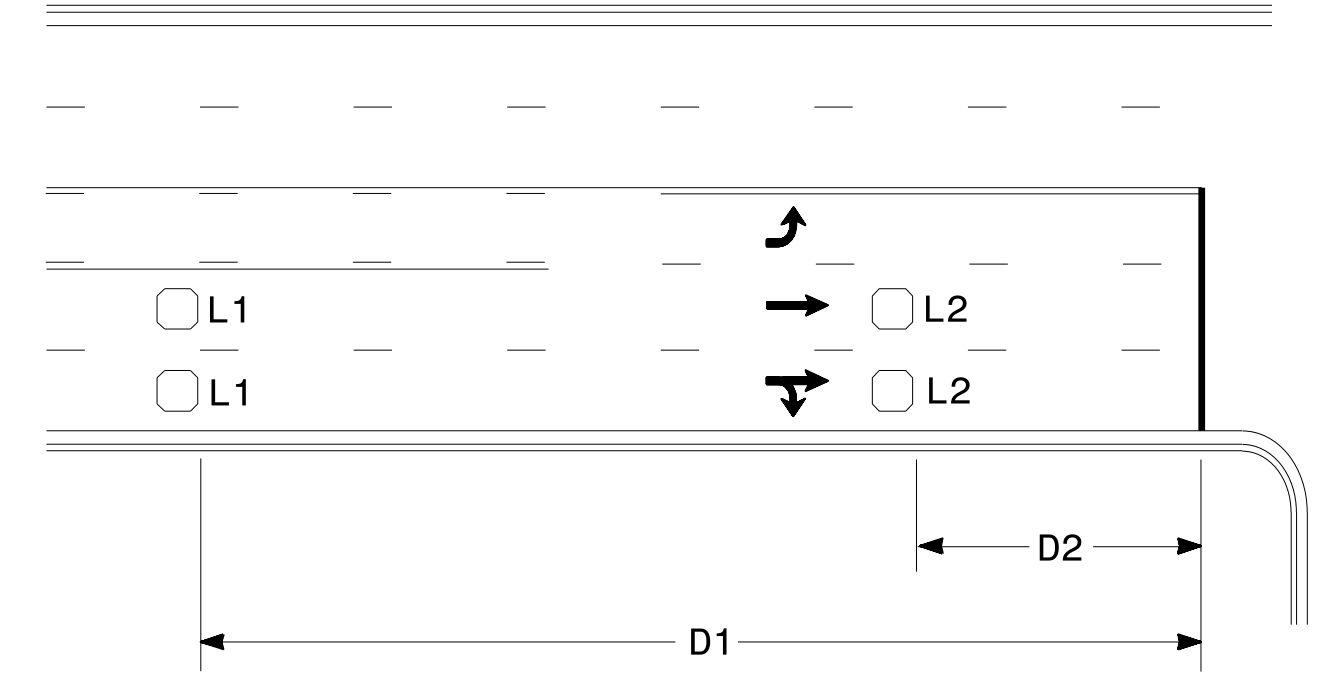


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

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

Volume Density Operation

OR

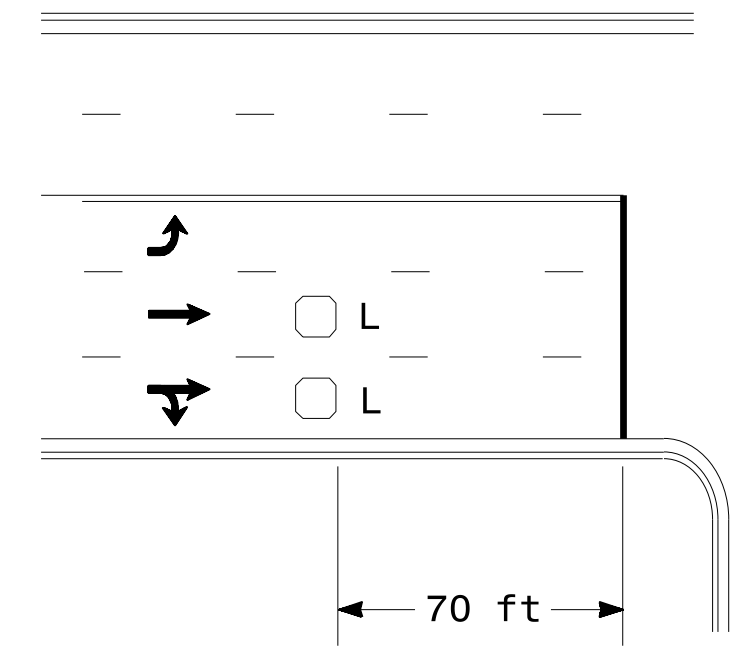


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

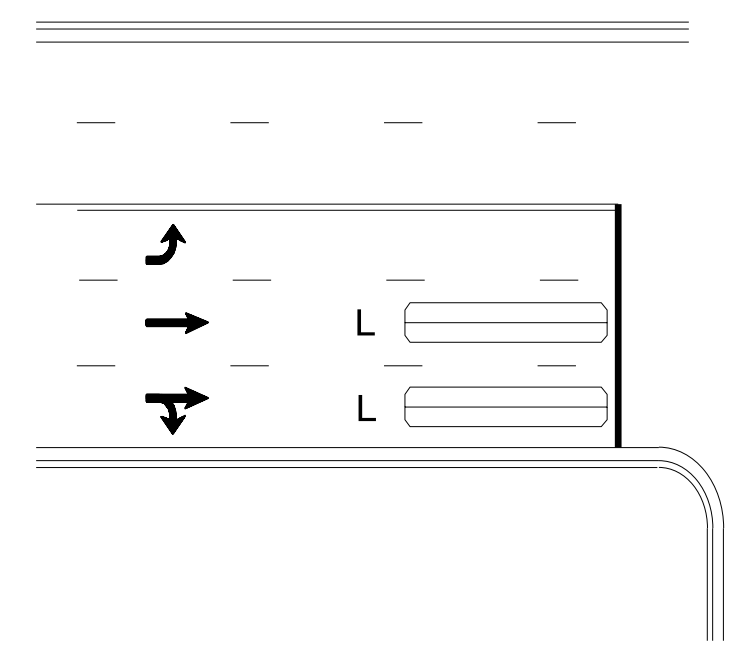
"Stretch" Operation

Low Speed Detection (≤35 mph)



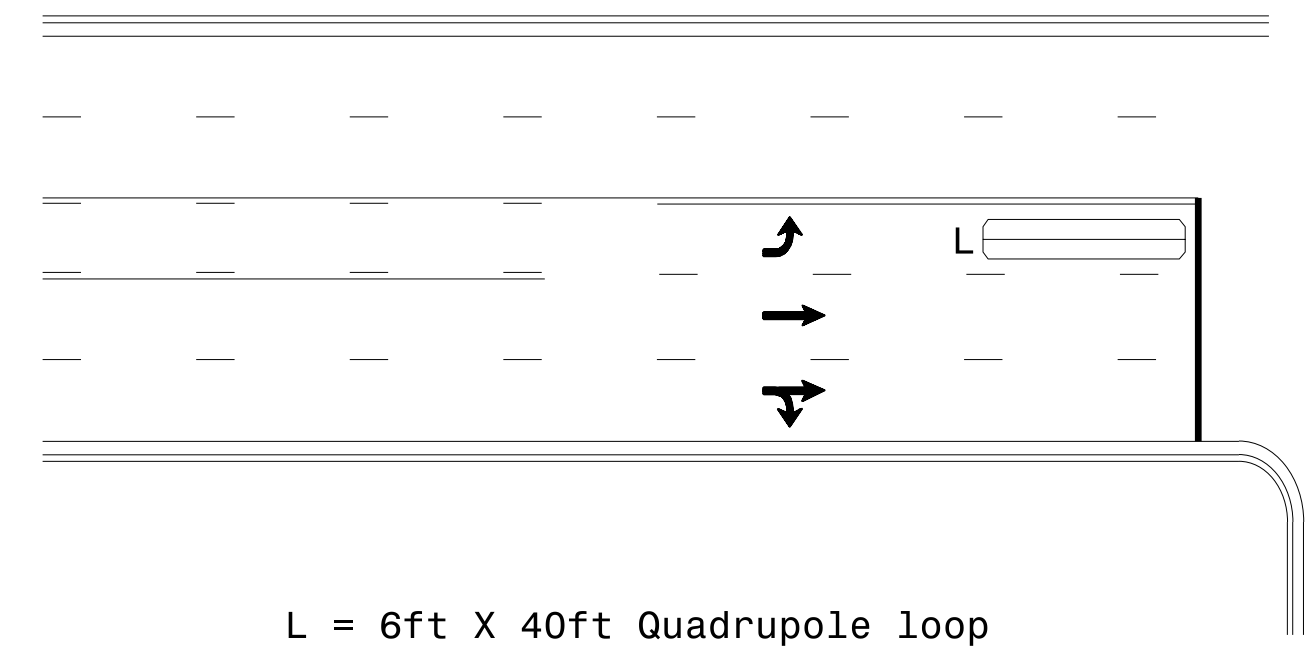
L = 6ft X 6ft
Wired in series

OR



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

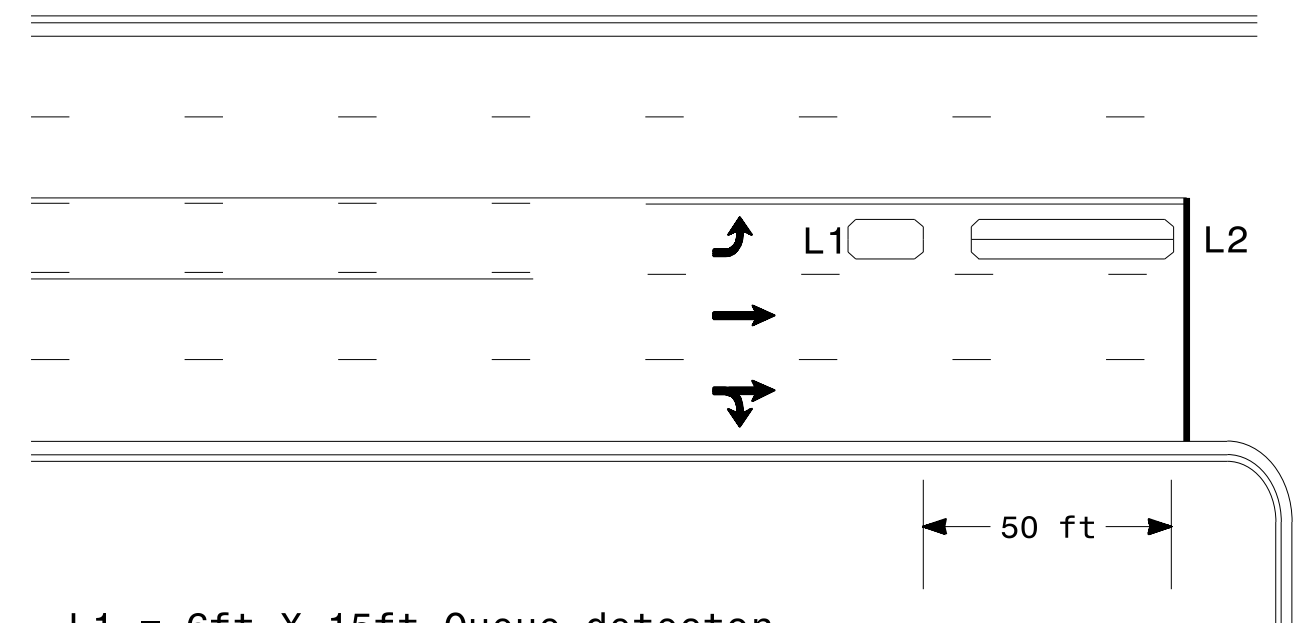
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

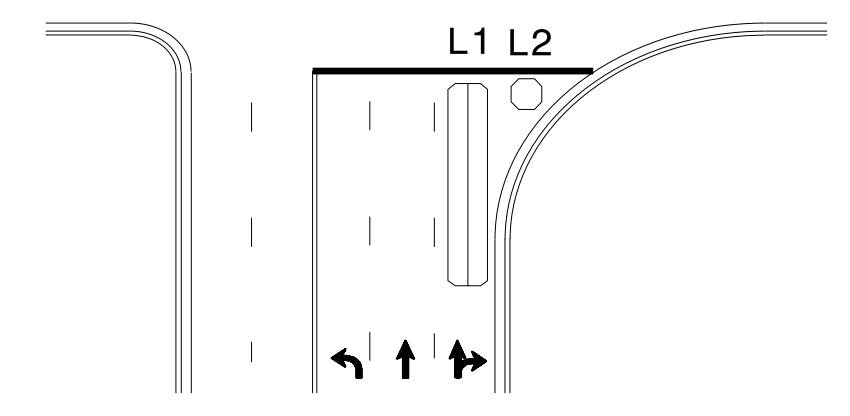
OR



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

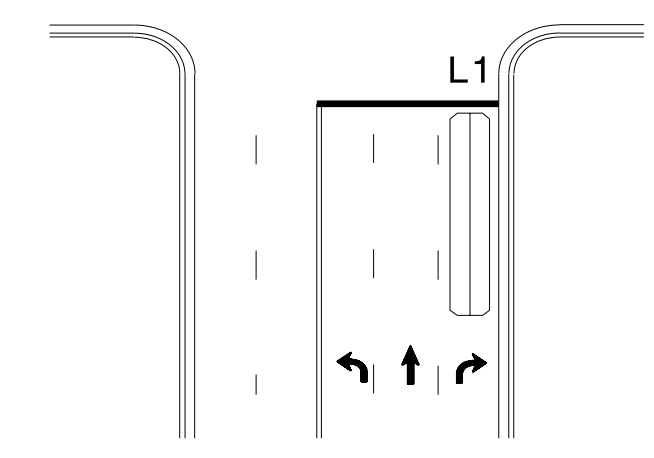
Queue Loop Detection

Right Turn Lane Detection

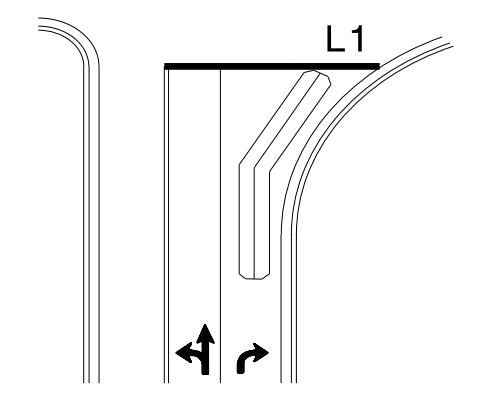


Shared Lane/
Wide Radius Turn

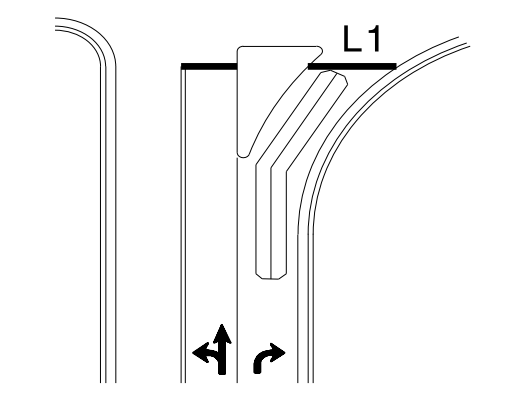
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

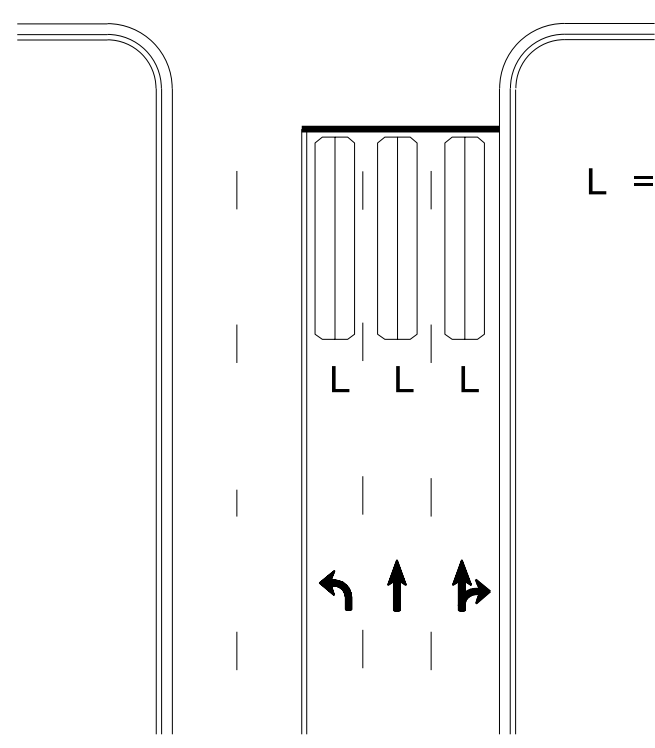


Wide Radius Turn



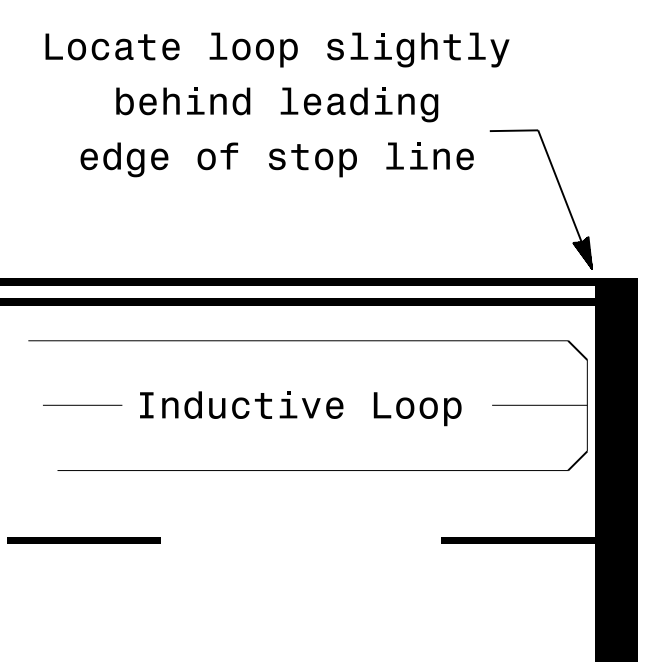
Channelized Turn

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

750 N. Greenfield Pkwy, Garner, NC 27529

Typical Signal Loop Locations

PLAN DATE: January 2015	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:
REVISIONS	INIT. DATE

SCALE: N/A

SEAL

1/30/2015

3D:\184-2015_18739_Signals\SIG-1\SIG-1_Signal Loop Design_Section\Eastern_Regional\loop\ypj\ca\2015.dgn
 paalexander