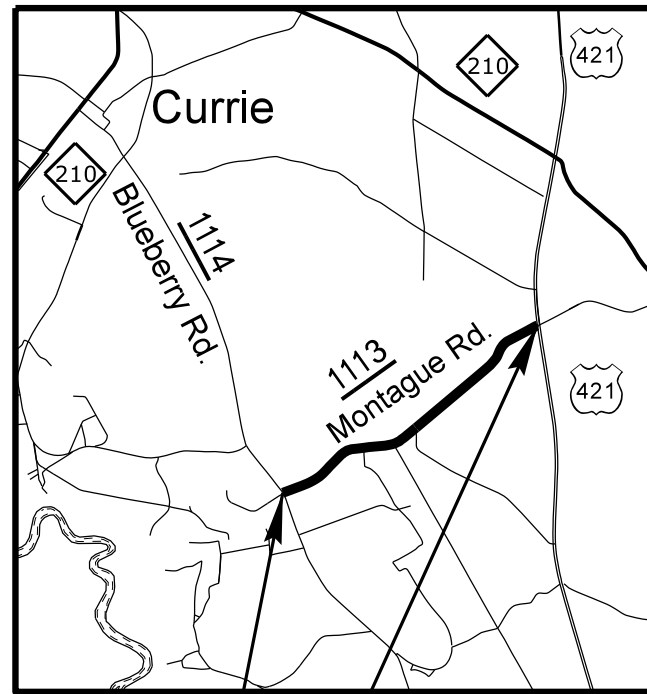


PENDER COUNTY

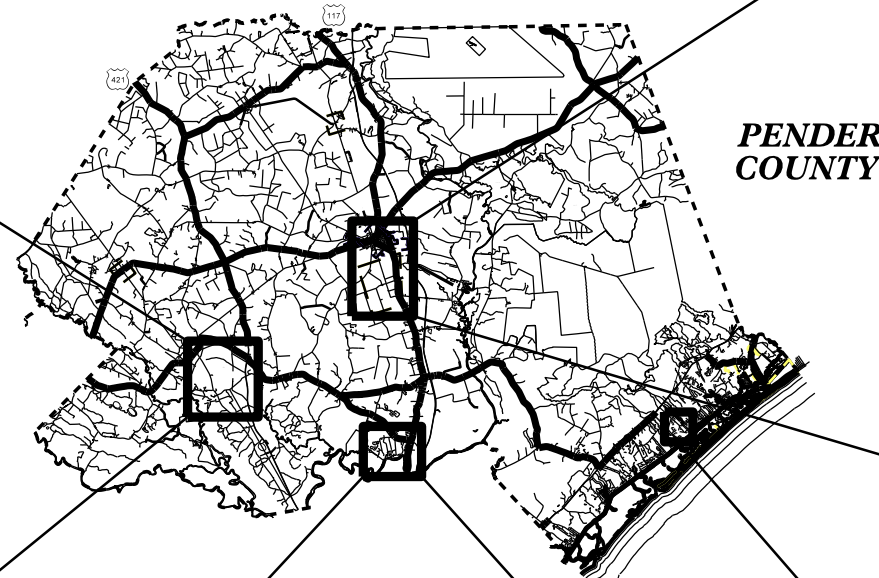
LOCATION: 14 SECTIONS OF SECONDARY ROADS

TYPE OF WORK: RESURFACING, SYSTEM PRESERVATION
 & PAVEMENT MARKINGS, ETC.

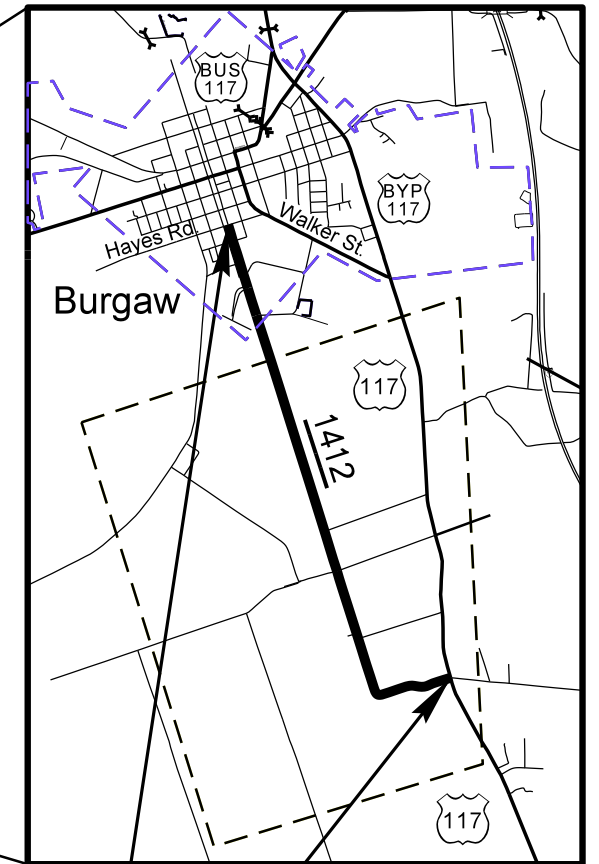


SR 1113
MONTAGUE RD.

1



PENDER COUNTY



SR 1412
NEWROAD AVE.
FRONT ST.
S. DICKERSON ST.

2

SR 1456
BELLHAMMON DR.

4

SR 1455
BRITLEE CT.

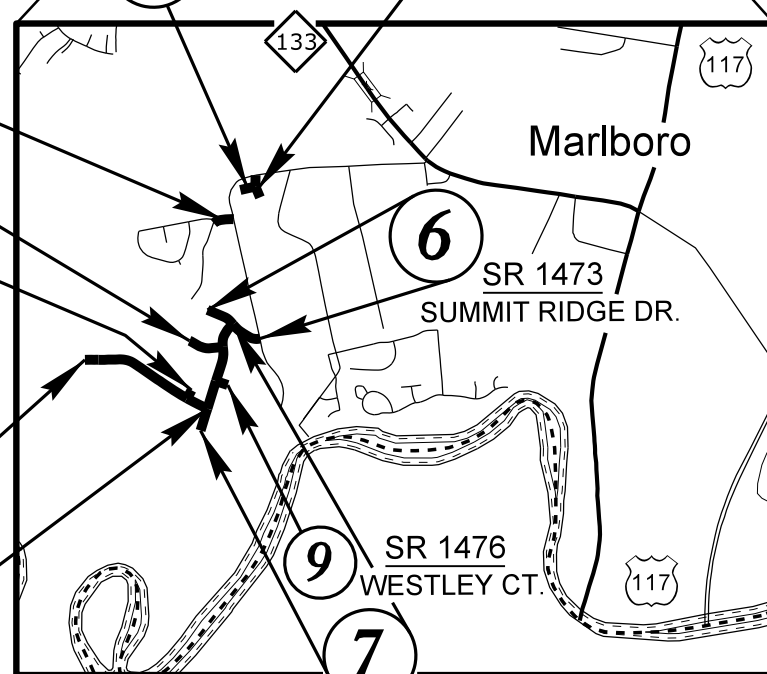
3

SR 1454
PINE HOLLOW DR.

SR 1475
MICHELLE LN.

8

5



SR 1473
SUMMIT RIDGE DR.

6

SR 1476
WESTLEY CT.

9

7

SR 1474
HEARTSIDE DR.

SR 1477
BRIGHTON RD.

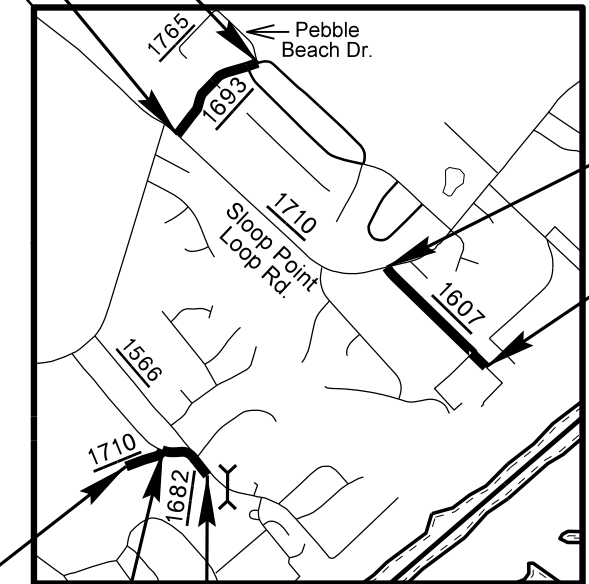
10

SR 1478
SUMMIT CT.

11

SR 1693
DORAL DR.

15



SR 1607
HICKORY PT. RD.

12

SR 1710
HICKORY
CIRCLE

14

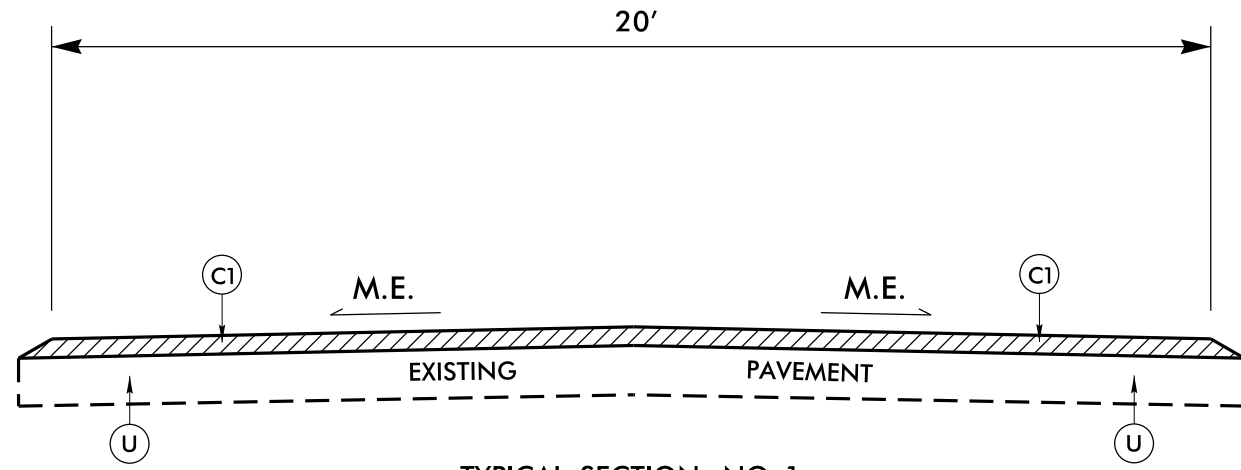
SR 1682
HICKORY LN.

13

INDEX OF SHEETS	
SHEET NO.	SHEET
1	INDEX OF SHEETS & TITLE SHEETS
2 - 5	PAVEMENT SCHEDULE, TYPICAL SECTIONS & DETAIL SHEETS
6 - 7	SUMMARY OF QUANTITIES
8	TRAFFIC CONTROL DETAIL

MAPS N.T.S.

REVISIONS
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 Resurfacing\Resurfacing\Additional Funds\2016CPT.03.31.20711.Etc.\GP\2016CPT.03.31.20711.Etc.\ISH.dgn
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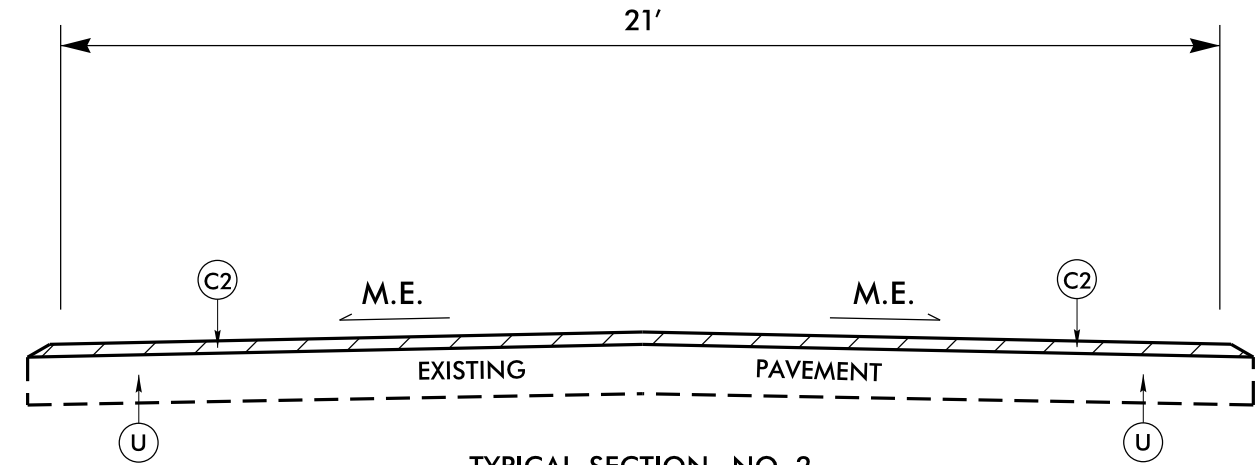


TYPICAL SECTION NO. 1

MAP NO. 1 SR 1113 (MONTAGUE RD.) MP 0.870 – MP 2.807	MAP NO. 2 SR 1412 (NEWROAD AVE., FRONT ST., S. DICKERSON ST.) MP 2.939 – MP 6.409
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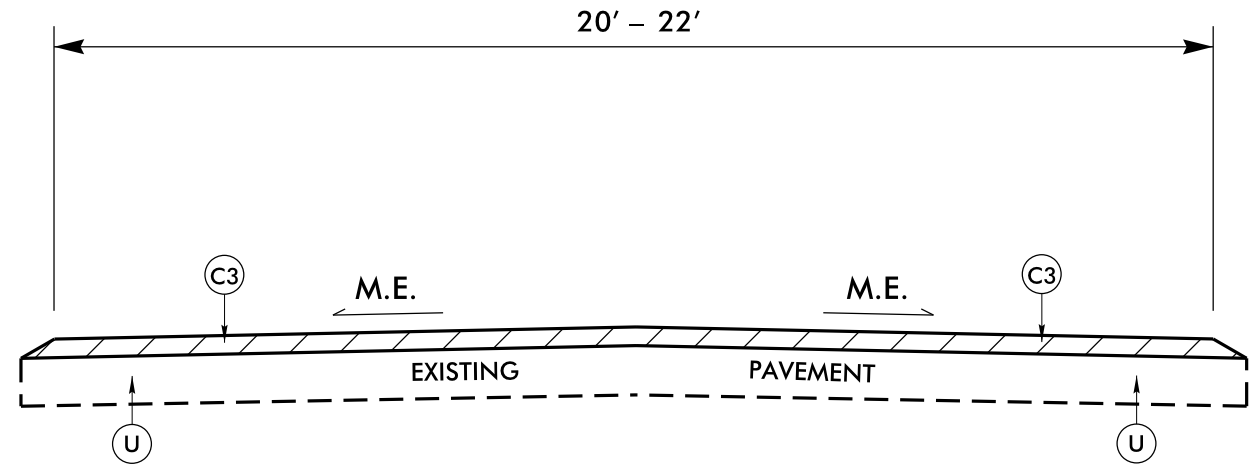
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ.YD.
C2	PROP. APPROX. .75" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 85 LBS. PER SQ.YD.
C3	PROP. APPROX. 1" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 113 LBS. PER SQ.YD.
U	EXISTING PAVEMENT

PAVEMENT EDGE SLOPES ARE 1:1, EXCEPT FINAL SURFACE COURSE. SEE SHOULDER WEDGE DETAIL.
SEE STD. DRAWING 1205.01, SHEET 2 OF 2, TABLE 1 FOR EDGE LINE OFFSETS.



TYPICAL SECTION NO. 2

MAP NO. 3 SR 1454 (PINE HOLLOW DR.) MP 0.000 – MP 0.089	MAP NO. 4 SR 1455 (BRITLEE CT.) MP 0.000 – MP 0.070
MAP NO. 5 SR 1456 (BELLHAMMON DR.) MP 0.000 – MP 0.080	MAP NO. 6 SR 1473 (SUMMIT RIDGE DR.) MP 0.000 – MP 0.263
MAP NO. 7 SR 1474 (HEARTHSIDE DR.) MP 0.000 – MP 0.381	MAP NO. 8 SR 1475 (MICHELLE LN.) MP 0.000 – MP 0.150
MAP NO. 9 SR 1476 (WESTLEY CT.) MP 0.000 – MP 0.050	MAP NO. 10 SR 1477 (BRIGHTON RD.) MP 0.000 – MP 0.595
MAP NO. 11 SR 1478 (SUMMIT CT.) MP 0.000 – MP 0.046	

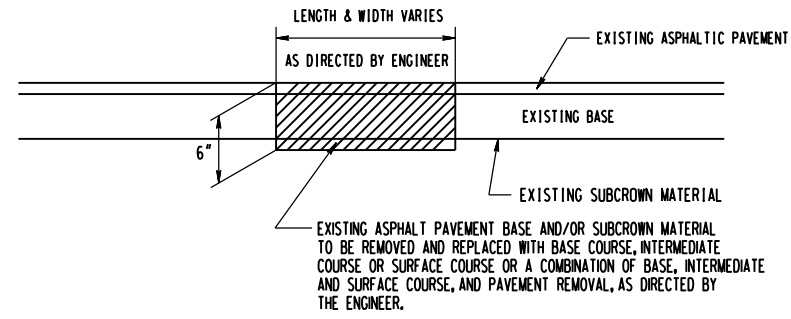


TYPICAL SECTION NO. 3

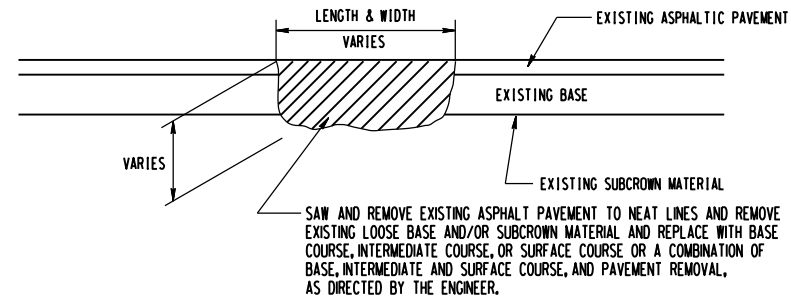
MAP NO. 12 SR 1607 (HICKORY PT. RD.) MP 0.000 – MP 0.399	MAP NO. 13 SR 1682 (HICKORY LN.) MP 0.380 – MP 0.537
MAP NO. 14 SR 1710 (HICKORY CIRCLE) MP 0.000 – MP 0.120	MAP NO. 15 SR 1693 (DORAL DR.) MP 0.000 – MP 0.325

REVISIONS
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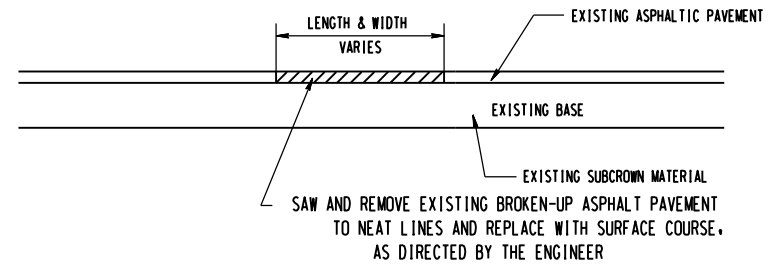
DETAILS OF REPAIRING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



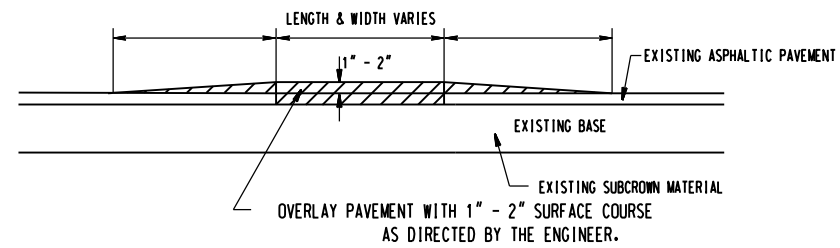
DETAIL NO. 1



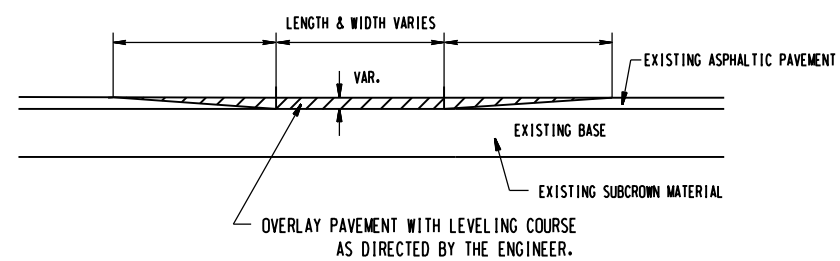
DETAIL NO. 2



DETAIL NO. 3



DETAIL NO. 4

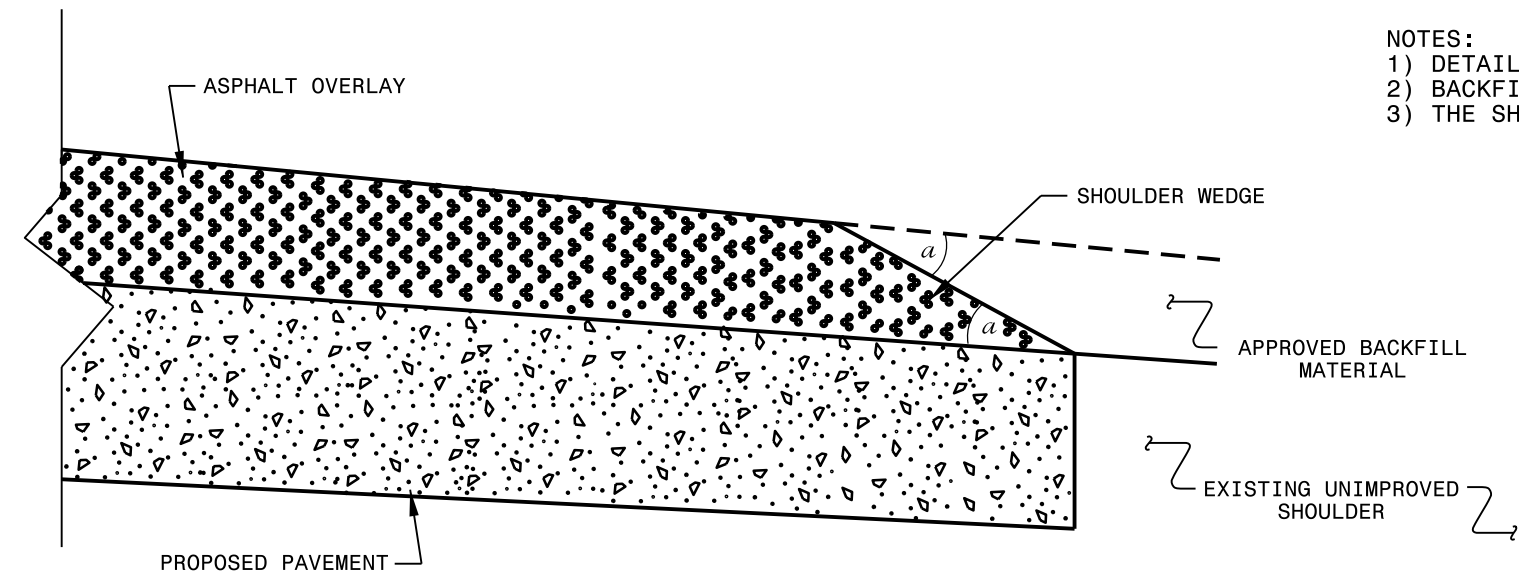


DETAIL NO. 5

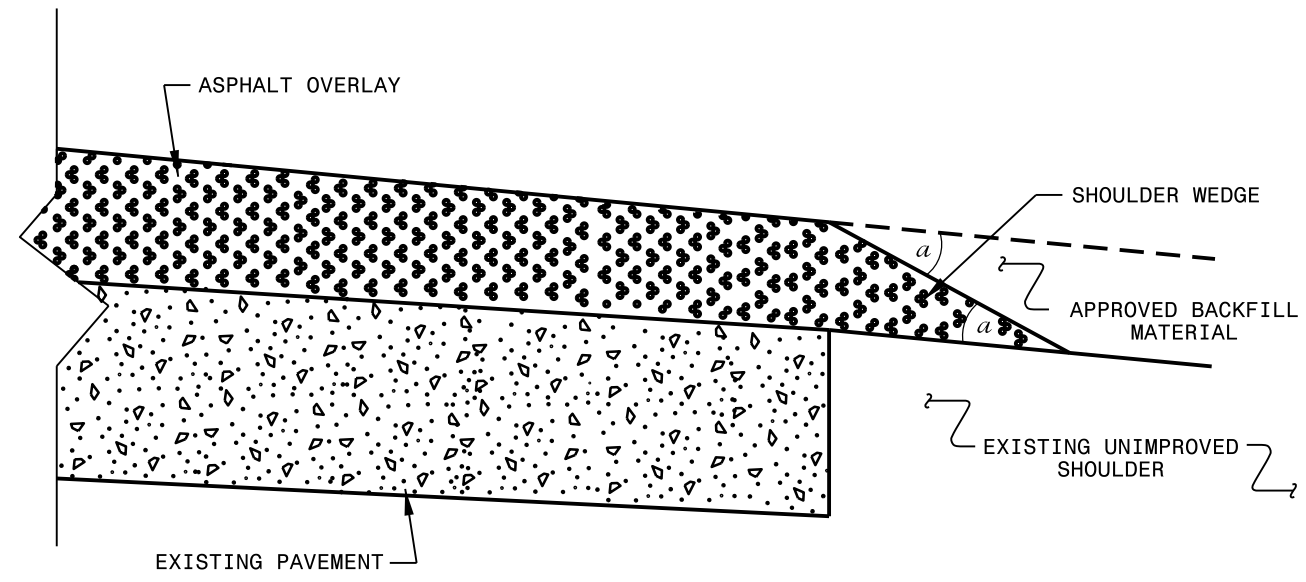
REVISIONS

20-APP-2015-1156
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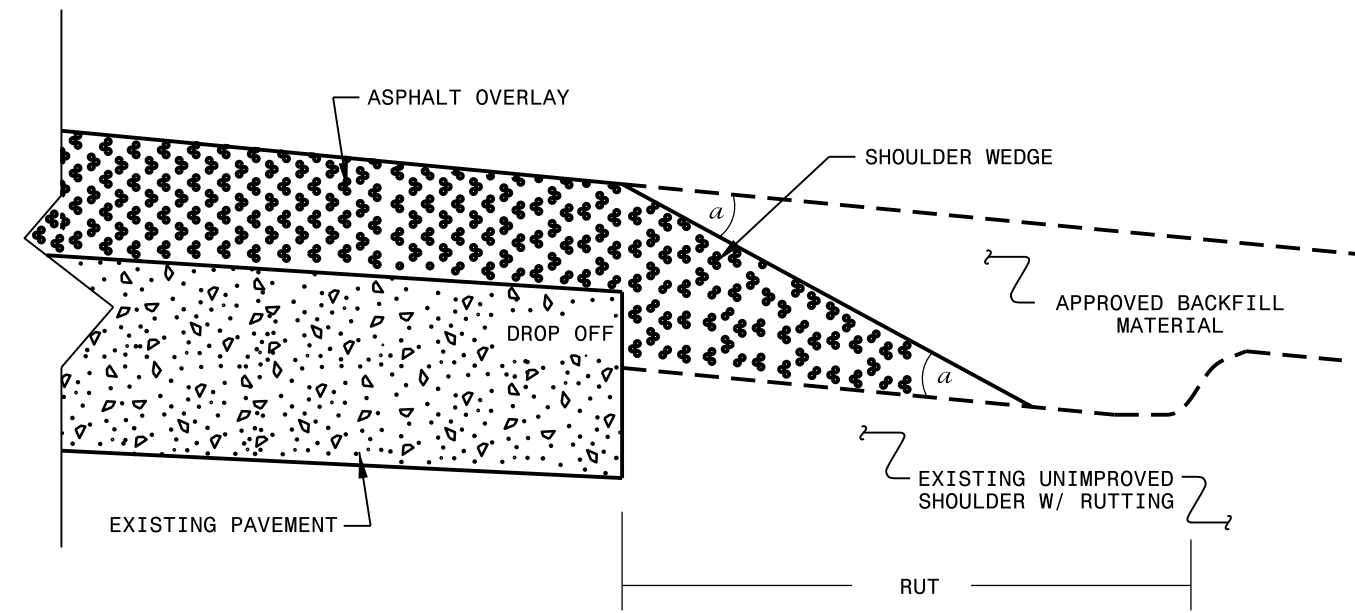
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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			

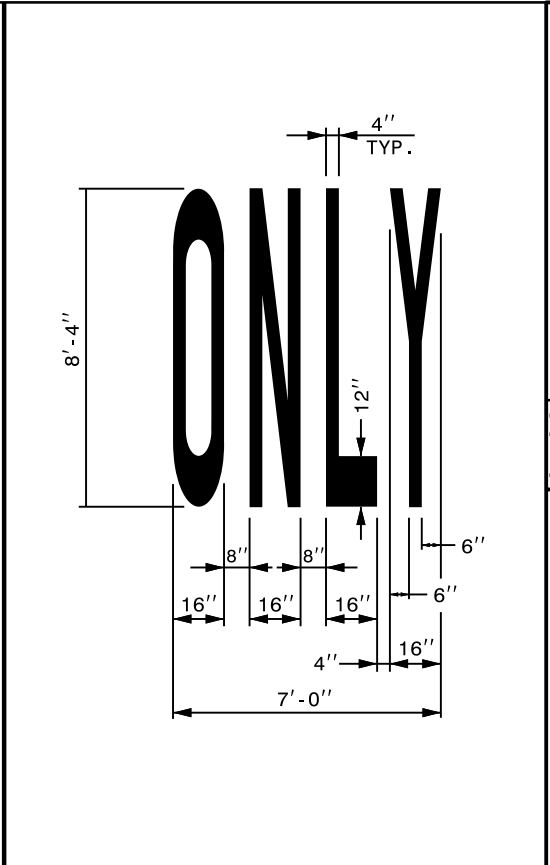
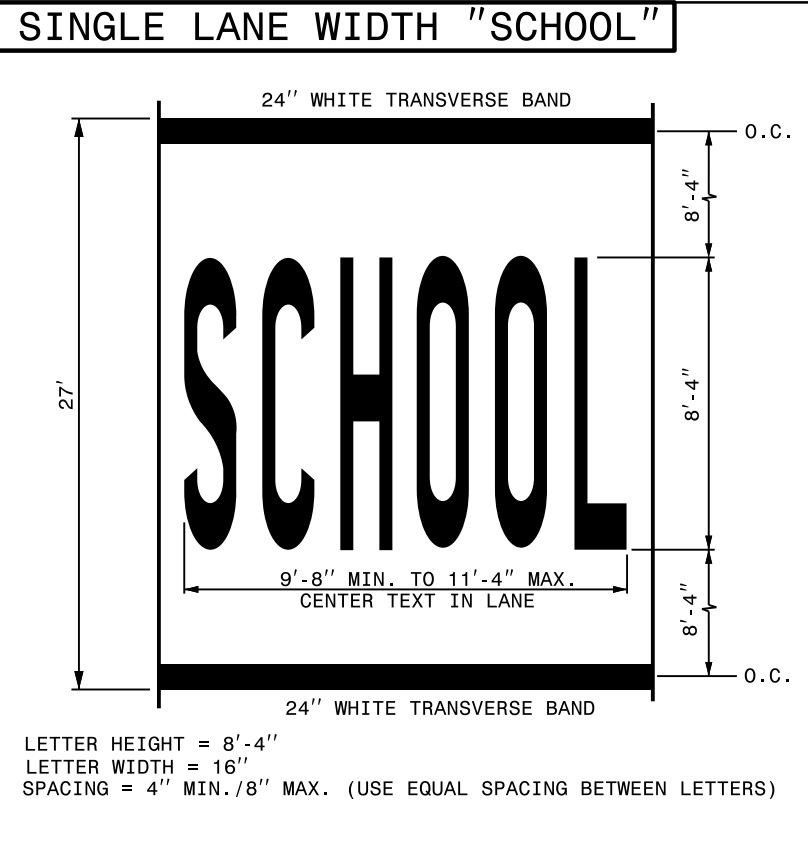
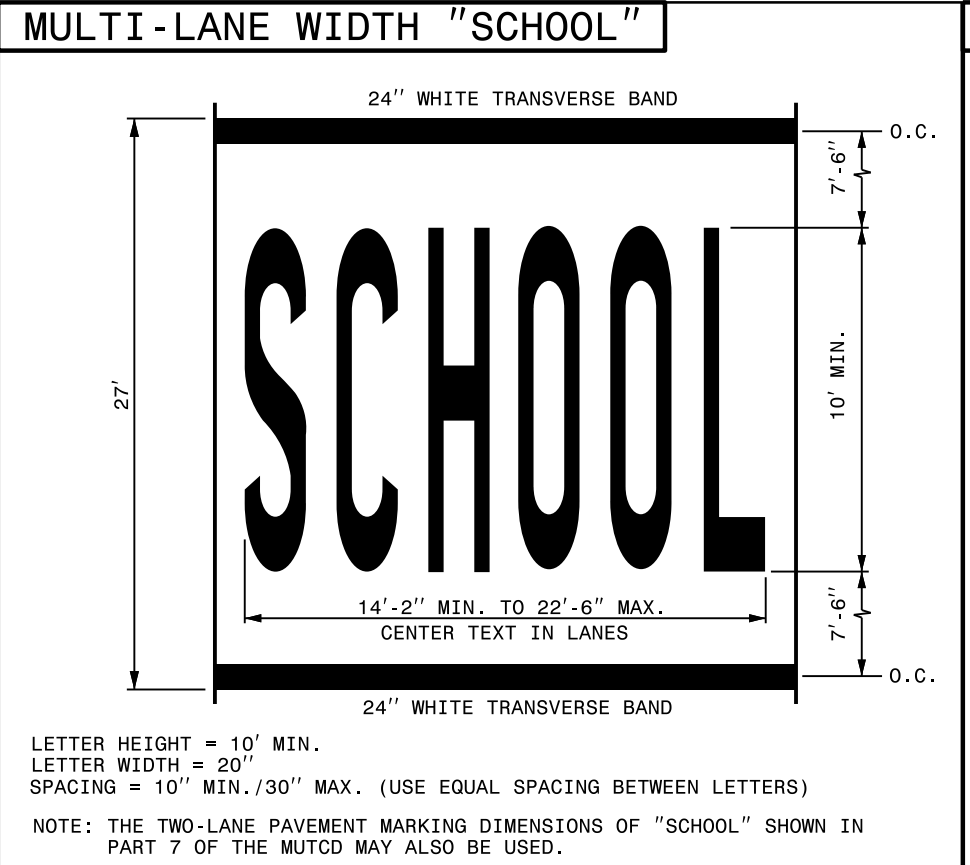
SYSTEMS DESIGN USER NAME

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

1-12

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
SYMBOLS AND WORD MESSAGES

REVISED 9/14/11
SHEET 3 OF 8
1205D08

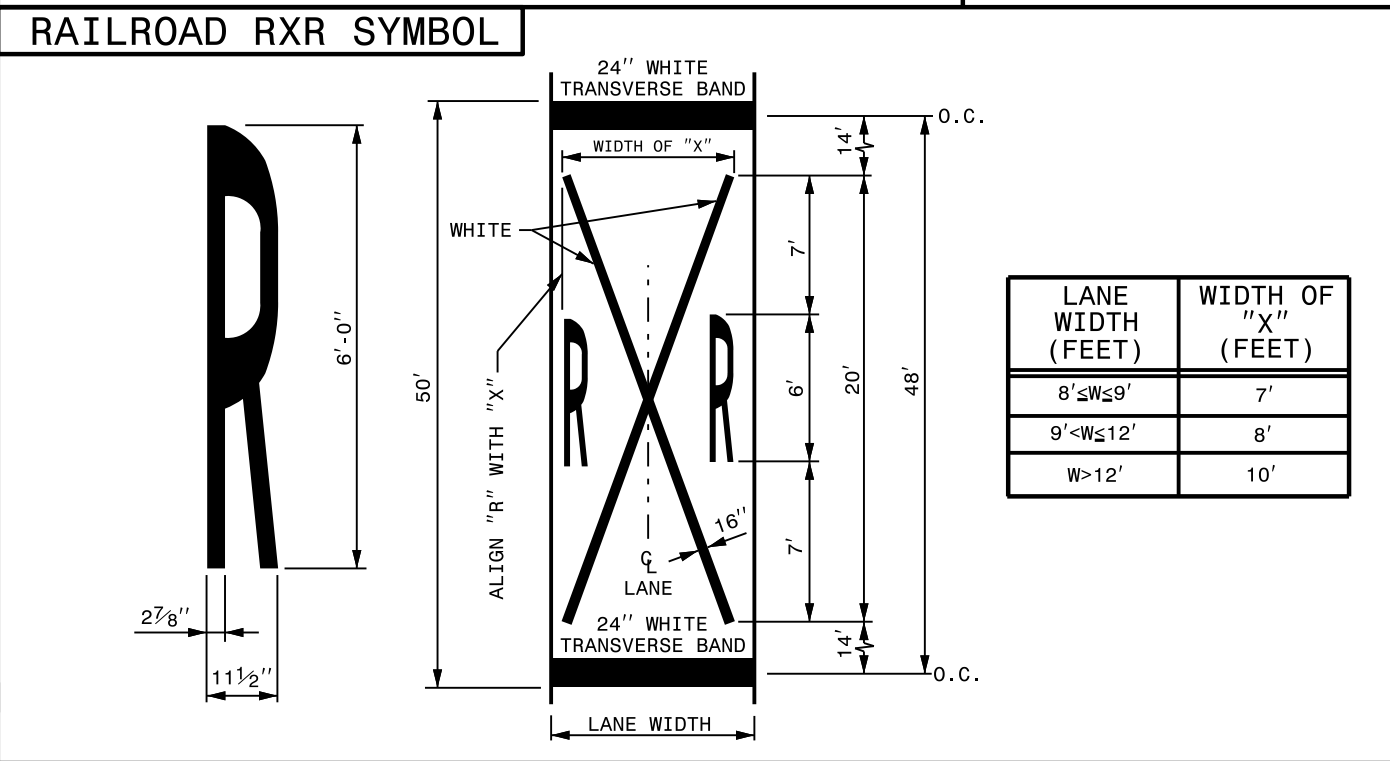


STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
SYMBOLS AND WORD MESSAGES

REVISED 9/14/11
SHEET 3 OF 8
1205D08



GENERAL NOTES:

- THE SCHOOL PAVEMENT MARKING CONSISTS OF SIX (6) CHARACTERS. THE TWO (2) 24" TRANSVERSE BANDS WILL BE PAID FOR UNDER A SEPARATE PAY ITEM. REFER TO ROADWAY STANDARD DRAWING 1205.10 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.
- PAVEMENT MARKING ADVANCE OF A HIGHWAY-RAIL CROSSING SHALL CONSIST OF TWO (2) CHARACTERS AND TWO (2) 16" LINES (FORMING AN X) WHICH ARE PAID FOR UNDER TWO SEPARATE PAY ITEMS. THE TWO (2) 24" TRANSVERSE BANDS WILL BE PAID FOR UNDER A SEPARATE PAY ITEM. REFER TO ROADWAY STANDARD DRAWING 1205.11 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: J. HOWERTON DATE: 10/5/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: s:\oel\12 Stds to Special Details\560d01

26-OCT-2011 4:41 PM C:\Users\jhowerton\Documents\Standard Drawings\Details in Lieu of Standards\Division 12\1205D0803 Revised 9-14-11.dgn

PROJECT NO.	SHEET NO.
2016CPT.03.31.20711, Etc.	6

SUMMARY OF QUANTITIES

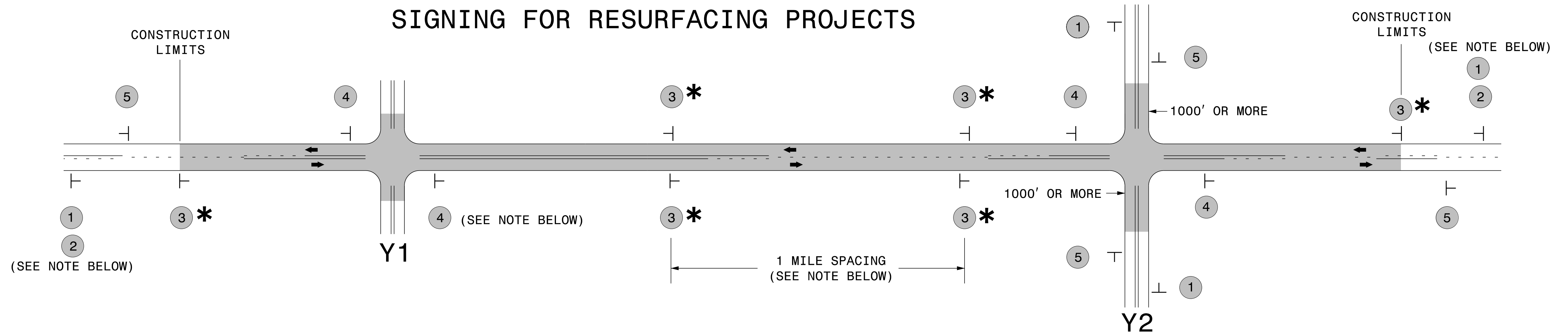
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	INC. MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S4.75A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT (MILL) GENERIC TON	ADJ. OF MON EA	
2016CPT.03.31.20711	Pender	1	SR 1113 (MONTAGUE RD.)	FROM US 421 TO SR 1114 (BLUEBERRY RD.) [MP 0.870 TO MP 2.807]	1	2	2WD	NO	NO	1.937	20	375	2,210		133			
TOTAL FOR MAP NO. 1										1.937		375	2,210		133			
2016CPT.03.31.20711	Pender	2	SR 1412 (NEWROAD AVE., FRONT ST., S. DICKERSON ST.)	FROM US 117 TO HAYES RD. (NS) [MP 2.939 TO MP 6.409]	1	2	2WD	NO	NO	3.47	20	978	3,718		223			
TOTAL FOR MAP NO. 2										3.47		978	3,718		223			
TOTAL FOR PROJ NO. 2016CPT.03.31.20711										5.407		1,353	5,928		356			
2016CPT.03.31.20712	Pender	3	SR 1454 (PINE HOLLOW DR.)	FROM SR 1437 (CARVER DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.089]	2	2	2WD	NO	NO	0.089	21			93	6		4	
TOTAL FOR MAP NO. 3										0.089				93	6		4	
2016CPT.03.31.20712	Pender	4	SR 1455 (BRITLEE CT.)	FROM SR 1454 (PINE HOLLOW DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.070]	2	2	2WD	NO	NO	0.07	21			92	6		2	
TOTAL FOR MAP NO. 4										0.07				92	6		2	
2016CPT.03.31.20712	Pender	5	SR 1456 (BELLHAMMON DR.)	FROM SR 1437 (CARVER DR.) TO END OF MAINTENANCE [MP 0.000 TO MP 0.080]	2	2	2WD	NO	NO	0.08	21			83	6		2	
TOTAL FOR MAP NO. 5										0.08				83	6		2	
2016CPT.03.31.20712	Pender	6	SR 1473 (SUMMIT RIDGE DR.)	FROM SR 1437 (CARVER DR.) TO END OF MAINTENANCE [MP 0.000 TO MP 0.263]	2	2	2WD	NO	NO	0.263	21			176	12		2	
TOTAL FOR MAP NO. 6										0.263				176	12		2	
2016CPT.03.31.20712	Pender	7	SR 1474 (HEARTHSIDE DR.)	FROM SR 1473 (SUMMIT RIDGE DR.) TO END OF MAINTENANCE [MP 0.000 TO MP 0.381]	2	2	2WD	NO	NO	0.381	21			195	13		6	
TOTAL FOR MAP NO. 7										0.381				195	13		6	
2016CPT.03.31.20712	Pender	8	SR 1475 (MICHELLE LN.)	FROM SR 1474 (HEARTHSIDE DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.150]	2	2	2WD	NO	NO	0.15	21			144	10		3	
TOTAL FOR MAP NO. 8										0.15				144	10		3	
2016CPT.03.31.20712	Pender	9	SR 1476 (WESTLEY CT.)	FROM SR 1474 (HEARTHSIDE DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.050]	2	2	2WD	NO	NO	0.05	21			93	6		2	
TOTAL FOR MAP NO. 9										0.05				93	6		2	
2016CPT.03.31.20712	Pender	10	SR 1477 (BRIGHTON RD.)	FROM SR 1474 (HEARTHSIDE DR.) TO CUL-DE-SAC (MP 0.000 TO MP 0.595)	2	2	2WD	NO	NO	0.595	21			346	24		3	
TOTAL FOR MAP NO. 10										0.595				346	24		3	
2016CPT.03.31.20712	Pender	11	SR 1478 (SUMMIT CT.)	FROM SR 1477 (BRIGHTON RD.) TO CUL-DE-SAC (MP 0.000 TO MP 0.046)	2	2	2WD	NO	NO	0.046	21			93	6		2	
TOTAL FOR MAP NO. 11										0.046				93	6		2	
2016CPT.03.31.20712	Pender	12	SR 1607 (HICKORY PT. RD.)	FROM SR 1563 (SLOOP PT. LOOP RD.) TO END OF MAINTENANCE (MP 0.000 TO MP 0.399)	3	2	2WU	NO	NO	0.399	20			474	32	5		
TOTAL FOR MAP NO. 12										0.399				474	32	5		
2016CPT.03.31.20712	Pender	13	SR 1682 (HICKORY LN.)	FROM SR 1710 (HICKORY CIRCLE) TO END OF MAINTENANCE (MP 0.380 TO MP 0.537)	3	2	2WU	NO	NO	0.157	22			234	16	5		
TOTAL FOR MAP NO. 13										0.157				234	16	5		
2016CPT.03.31.20712	Pender	14	SR 1710 (HICKORY CIRCLE)	FROM SR 1682 (HICKORY LN.) TO END OF MAINTENANCE [MP 0.000 TO MP 0.120]	3	2	2WU	NO	NO	0.12	20			78	5			
TOTAL FOR MAP NO. 14										0.12				78	5			
2016CPT.03.31.20712	Pender	15	SR 1693 (DORAL DR.)	FROM SR 1563 (SLOOP PT. LOOP RD.) TO SR 1765 (PEBBLE BEACH DR.) PAVEMENT SEAM (MP 0.000 - MP 0.325)	3	2	2WU	NO	NO	0.325	20			211	14	5		
TOTAL FOR MAP NO. 15										0.325				211	14	5		
TOTAL FOR PROJ NO. 2016CPT.03.31.20712										2.725				2,312	156	15	26	
GRAND TOTAL										8.132				1,353	5,928	2,312	15	26

PROJECT NO.	SHEET NO.
2016CPT.03.31.20711, Etc.	7

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4685000000-E	4686000000-E	4710000000-E	4721000000-E	4900000000-N
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 120 M YELLOW THERMO	24" X 120 M WHITE THERMO	THERMO MSG SCHOOL 120 M	YELLOW & YELLOW MARKERS
										SF	LS	LF	LF	LF	EA	EA
2016CPT.03.31.20711	Pender	1	SR 1113 (MONTAGUE RD.)	FROM US 421 TO SR 1114 (BLUEBERRY RD.) [MP 0.870 TO MP 2.807]	1	2	2WD	1.937	20	224	0.24	20,842	12,784			128
TOTAL FOR MAP NO. 1										224	0.24	20,842	12,784			128
2016CPT.03.31.20711	Pender	2	SR 1412 (NEWROAD AVE., FRONT ST., S. DICKERSON ST.)	FROM US 117 TO HAYES RD. (NS) [MP 2.939 TO MP 6.409]	1	2	2WD	3.47	20	400	0.43	37,337	22,902	50	6	230
TOTAL FOR MAP NO. 2										400	0.43	37,337	22,902	50	6	230
TOTAL FOR PROJ NO. 2016CPT.03.31.20711										624	0.67	58,179	35,686	50	6	358
2016CPT.03.31.20712	Pender	3	SR 1454 (PINE HOLLOW DR.)	FROM SR 1437 (CARVER DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.089]	2	2	2WD	0.089	21	32	0.01					
TOTAL FOR MAP NO. 3										32	0.01					
2016CPT.03.31.20712	Pender	4	SR 1455 (BRITLEE CT.)	FROM SR 1454 (PINE HOLLOW DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.070]	2	2	2WD	0.07	21	32	0.01					
TOTAL FOR MAP NO. 4										32	0.01					
2016CPT.03.31.20712	Pender	5	SR 1456 (BELLHAMMON DR.)	FROM SR 1437 (CARVER DR.) TO END OF MAINTENANCE [MP 0.000 TO MP 0.080]	2	2	2WD	0.08	21	32	0.01					
TOTAL FOR MAP NO. 5										32	0.01					
2016CPT.03.31.20712	Pender	6	SR 1473 (SUMMIT RIDGE DR.)	FROM SR 1437 (CARVER DR.) TO END OF MAINTENANCE [MP 0.000 TO MP 0.263]	2	2	2WD	0.263	21	32	0.04					
TOTAL FOR MAP NO. 6										32	0.04					
2016CPT.03.31.20712	Pender	7	SR 1474 (HEARTHSIDE DR.)	FROM SR 1473 (SUMMIT RIDGE DR.) TO END OF MAINTENANCE [MP 0.000 TO MP 0.381]	2	2	2WD	0.381	21	32	0.05					
TOTAL FOR MAP NO. 7										32	0.05					
2016CPT.03.31.20712	Pender	8	SR 1475 (MICHELLE LN.)	FROM SR 1474 (HEARTHSIDE DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.150]	2	2	2WD	0.15	21	32	0.02					
TOTAL FOR MAP NO. 8										32	0.02					
2016CPT.03.31.20712	Pender	9	SR 1476 (WESTLEY CT.)	FROM SR 1474 (HEARTHSIDE DR.) TO CUL-DE-SAC [MP 0.000 TO MP 0.050]	2	2	2WD	0.05	21	32	0.01					
TOTAL FOR MAP NO. 9										32	0.01					
2016CPT.03.31.20712	Pender	10	SR 1477 (BRIGHTON RD.)	FROM SR 1474 (HEARTHSIDE DR.) TO CUL-DE-SAC (MP 0.000 TO MP 0.595)	2	2	2WD	0.595	21	32	0.07					
TOTAL FOR MAP NO. 10										32	0.07					
2016CPT.03.31.20712	Pender	11	SR 1478 (SUMMIT CT.)	FROM SR 1477 (BRIGHTON RD.) TO CUL-DE-SAC (MP 0.000 TO MP 0.046)	2	2	2WD	0.046	21	32	0.01					
TOTAL FOR MAP NO. 11										32	0.01					
2016CPT.03.31.20712	Pender	12	SR 1607 (HICKORY PT. RD.)	FROM SR 1563 (SLOOP PT. LOOP RD.) TO END OF MAINTENANCE (MP 0.000 TO MP 0.399)	3	2	2WU	0.399	20	32	0.04					
TOTAL FOR MAP NO. 12										32	0.04					
2016CPT.03.31.20712	Pender	13	SR 1682 (HICKORY LN.)	FROM SR 1710 (HICKORY CIRCLE) TO END OF MAINTENANCE (MP 0.380 TO MP 0.537)	3	2	2WU	0.157	22	32	0.01					
TOTAL FOR MAP NO. 13										32	0.01					
2016CPT.03.31.20712	Pender	14	SR 1710 (HICKORY CIRCLE)	FROM SR 1682 (HICKORY LN.) TO END OF MAINTENANCE [MP 0.000 to MP 0.120]	3	2	2WU	0.12	20	32	0.01					
TOTAL FOR MAP NO. 14										32	0.01					
2016CPT.03.31.20712	Pender	15	SR 1693 (DORAL DR.)	FROM SR 1563 (SLOOP PT. LOOP RD.) TO SR 1765 (PEBBLE BEACH DR.) PAVEMENT SEAM (MP 0.000 - MP 0.325)	3	2	2WU	0.325	20	32	0.04					
TOTAL FOR MAP NO. 15										32	0.04					
TOTAL FOR PROJ NO. 2016CPT.03.31.20712										160	0.33					
GRAND TOTAL										784	1	58,179	35,686	50	6	358

SIGNING FOR RESURFACING PROJECTS



LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

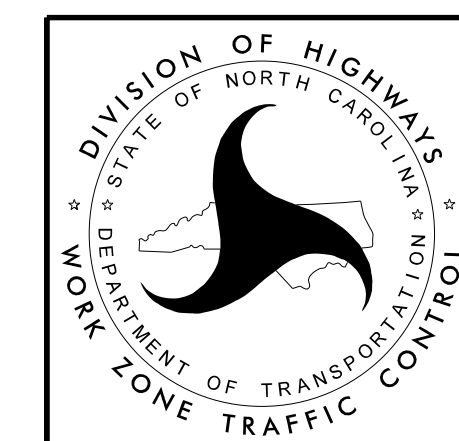
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
1 2		<p style="text-align: center;">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 style="text-align: center;">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; align-items: center;"> <div style="text-align: center;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p style="text-align: center;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
3 *		
4		
5		

* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS:
STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



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