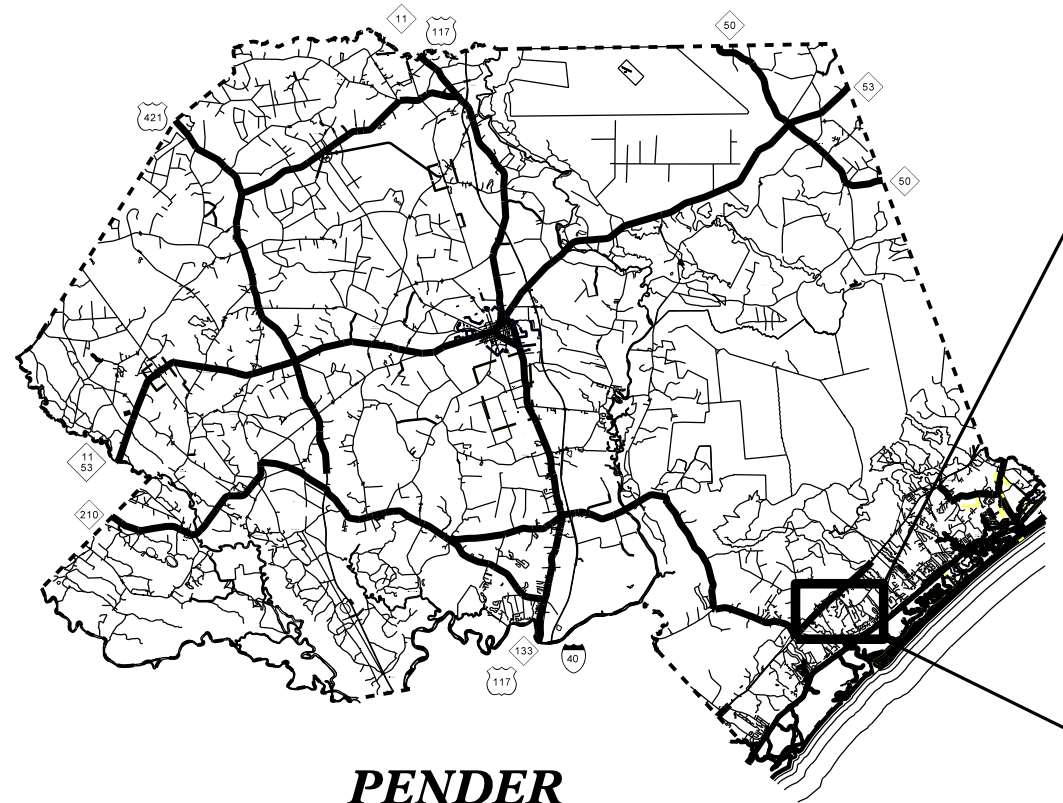


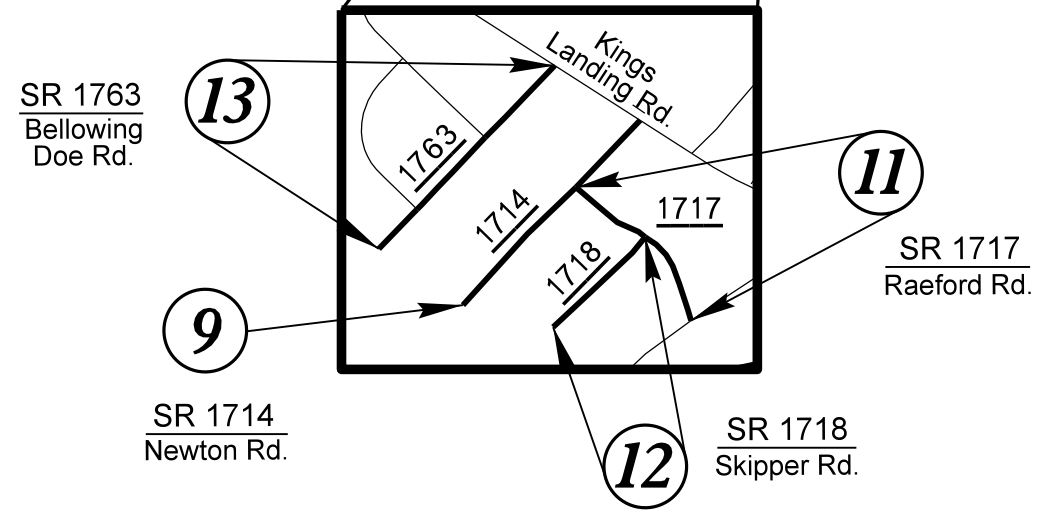
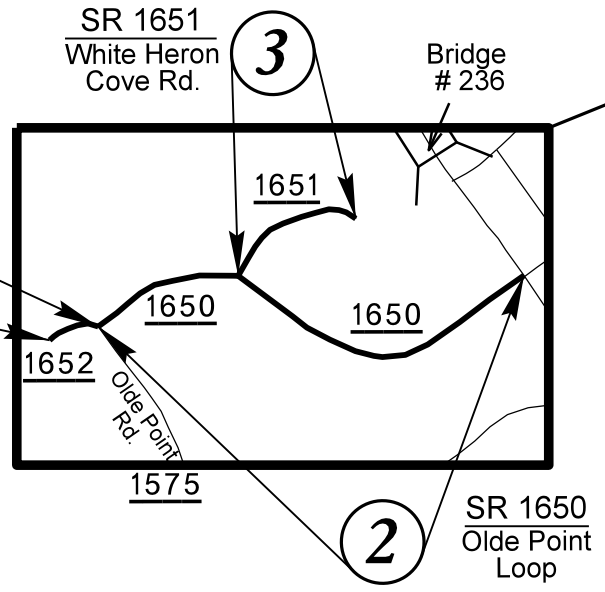
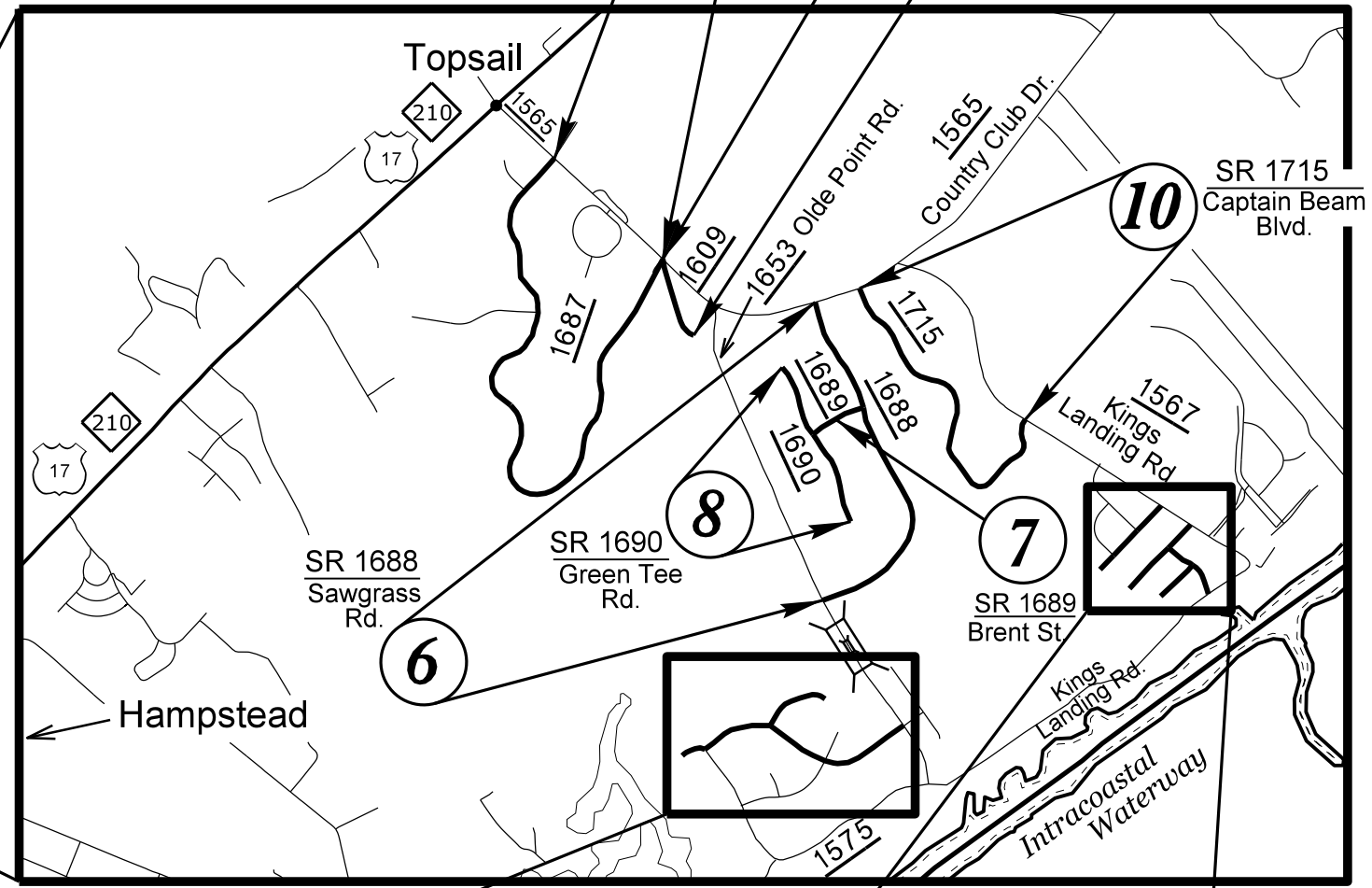
# PENDER COUNTY

**LOCATION: 13 SECTIONS OF SECONDARY ROADS**  
**TYPE OF WORK: MILL PATCHING & RESURFACING, ETC.**

INDEX OF SHEETS	
SHEET NO.	SHEET
1	INDEX OF SHEETS & TITLE SHEET
2 - 4	PAVEMENT SCHEDULE, TYPICAL SECTION & DETAIL SHEETS
5 & 6	SUMMARY OF QUANTITIES
7	TRAFFIC CONTROL DETAIL



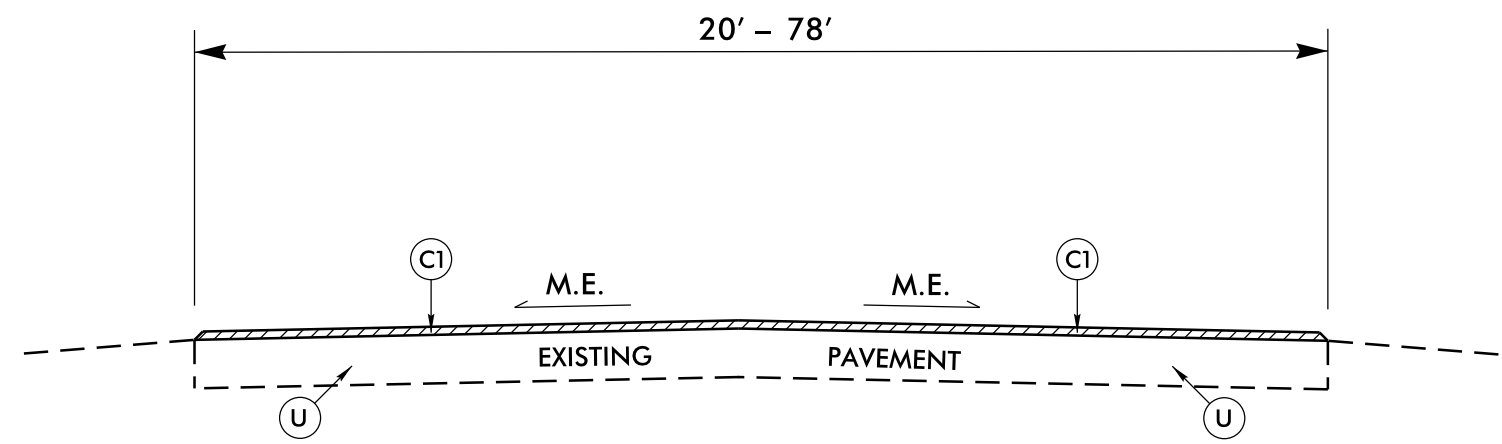
**PENDER  
COUNTY**



REVISIONS

15-APR-2015 10:47 C:\Resurfacing\3SP.20715.003\_Pender\_Thin\_Lift Asphalt\3SP.20715.003\_PENDER\_Rdy\_TSH.dgn

20-APP-2015-1513  
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 8/17/99  
 REVISIONS  
 \$\$\$BLSERNAME\$\$\$



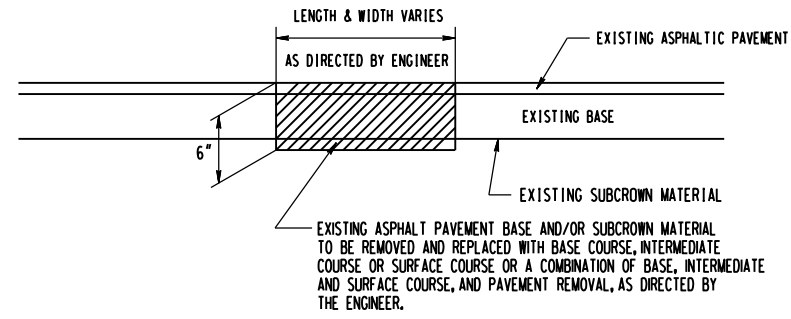
TYPICAL SECTION NO. 1

- |  |   |
|--|---|
| <p><u>MAP NO. 1</u><br/>SR 1609 (SPRING GARDEN RD.)</p> <p><u>MAP NO. 2</u><br/>SR 1650 (OLDE POINT LOOP)</p> <p><u>MAP NO. 3</u><br/>SR 1651 (WHITE HERON COVE RD.)</p> <p><u>MAP NO. 4</u><br/>SR 1652 (DEER COVE RD.)</p> <p><u>MAP NO. 5</u><br/>SR 1687 (RAVENSWOOD RD.)</p> <p><u>MAP NO. 6</u><br/>SR 1688 (SAWGRASS RD.)</p> <p><u>MAP NO. 7</u><br/>SR 1689 (BRENT ST.)</p> | <p><u>MAP NO. 8</u><br/>SR 1690 (GREEN TEE RD.)</p> <p><u>MAP NO. 9</u><br/>SR 1714 (NEWTON RD.)</p> <p><u>MAP NO. 10</u><br/>SR 1715 (CAPTAIN BEAM BLVD.)</p> <p><u>MAP NO. 11</u><br/>SR 1717 (RAEFORD RD.)</p> <p><u>MAP NO. 12</u><br/>SR 1718 (SKIPPER RD.)</p> <p><u>MAP NO. 13</u><br/>SR 1763 (BELLOWING DOE RD.)</p> |
|--|---|

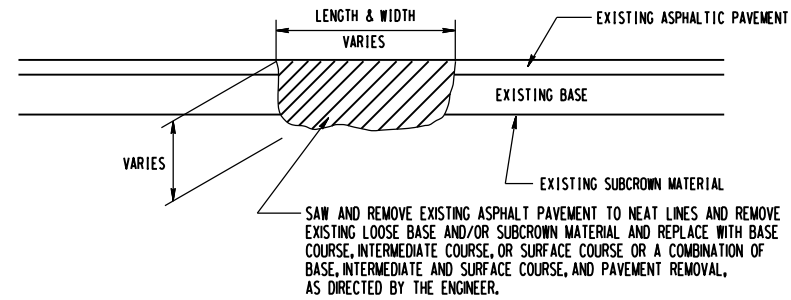
<b>PAVEMENT SCHEDULE</b>	
C1	PROP. APPROX. 3/4" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 85 LBS. PER SQ.YD.
U	EXISTING PAVEMENT

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

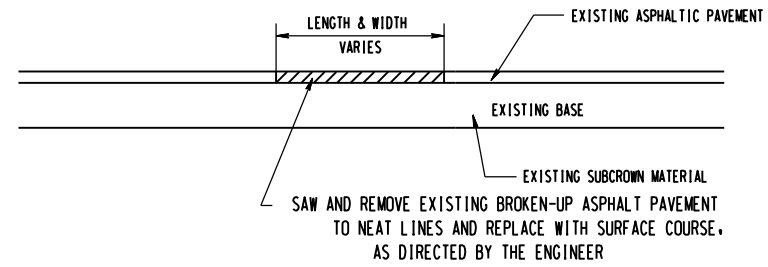
DETAILS OF REPAIRING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



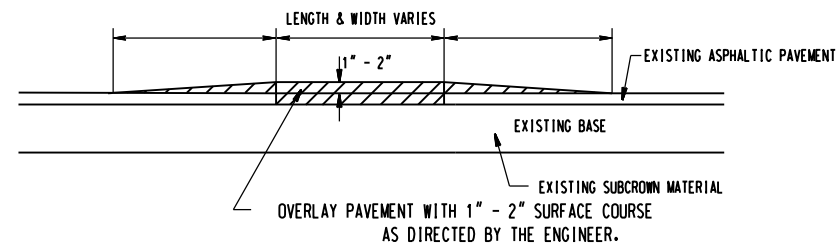
DETAIL NO. 1



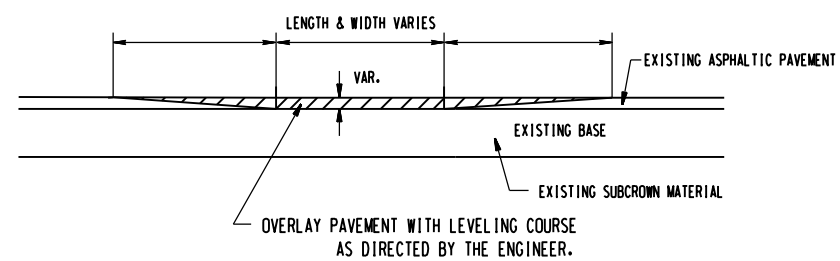
DETAIL NO. 2



DETAIL NO. 3



DETAIL NO. 4



DETAIL NO. 5

REVISIONS

20-APP-2015-11E4  
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 \$\$\$SERNAME\$\$\$

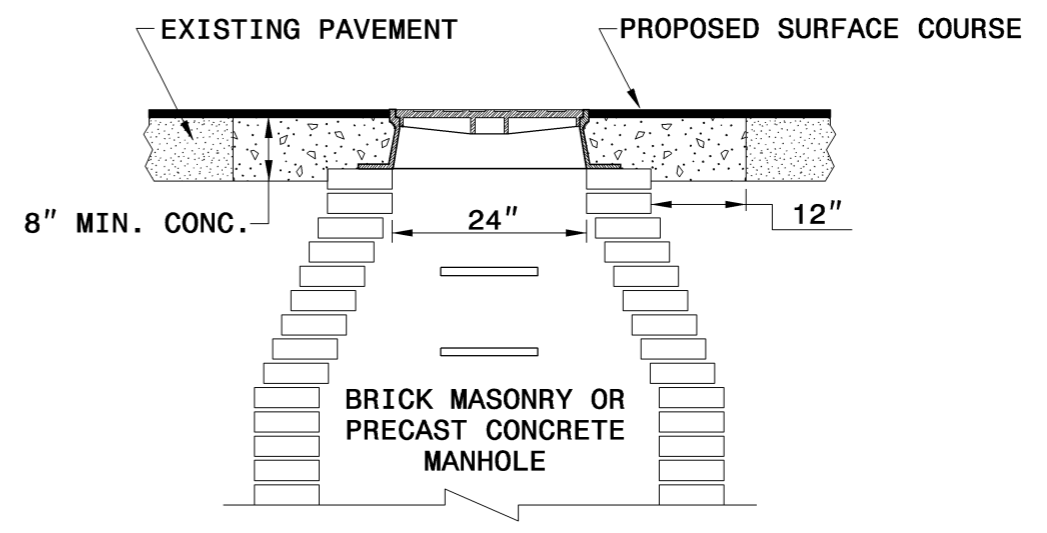
STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR  
**MANHOLE AND VALVE BOX ADJUSTMENTS**

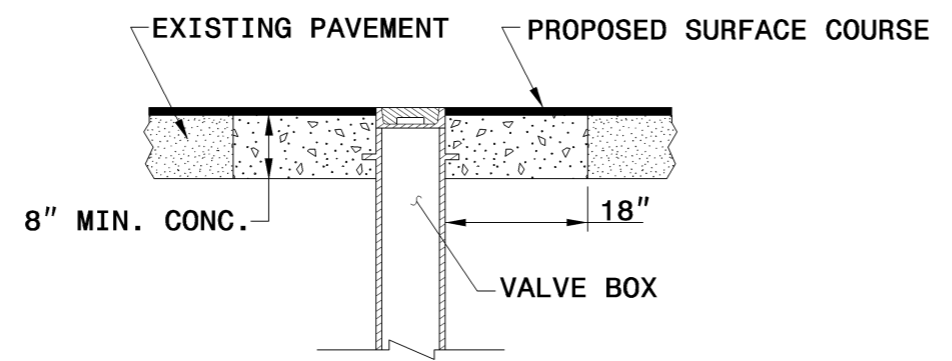
SHEET 1 OF 1  
**840D55**

**GENERAL NOTES:**

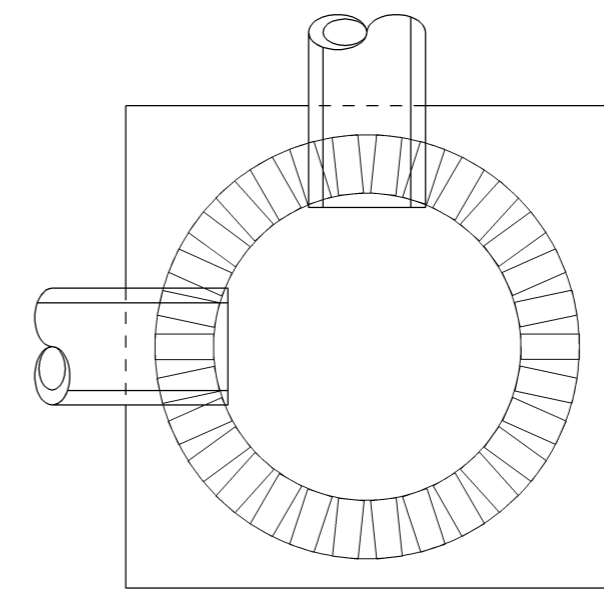
1. USE RAPID SET GROUT, MORTAR, OR CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
2. REMOVE ALL FAULTY EXISTING BRICKWORK AND REPLACE WITH NEW BRICK MASONRY.
3. SHEER CUT EXCAVATION FOR THE ADJUSTMENT ON ALL SIDES.
4. FILL AREA BELOW 8" DEPTH WITH 78M OR NO. 57 CLEAN STONE.
5. MIX MORTAR TO NCDOT SPECIFICATIONS.
6. MORTAR JOINTS 1/2" +/- 1/8"



**MANHOLE CONCRETE ENCASEMENT**



**VALVE BOX CONCRETE ENCASEMENT**



**ELEVATION VIEW**

PLACE BRICK ACCORDING TO ELEVATION VIEW

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

ENGLISH DETAIL DRAWING FOR  
**MANHOLE AND VALVE BOX ADJUSTMENTS**

SHEET 1 OF 1  
**840D55**

**PROJECT SERVICES UNIT  
STANDARDS AND SPECIAL DESIGN**  
Office 919-250-4128 FAX 919-250-4119

**SEE PLATE FOR TITLE**

ORIGINAL BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 MODIFIED BY: E.E. WARD DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 FILE SPEC.: /usr/details/stand/840d55.dgn

07-DEC-2005 14:25 S:\Contracts\ContractStand\stand\840d55.dgn ericward AT P522293

PROJECT NO.	SHEET NO.
3SP.20715.003	5

**SUMMARY OF QUANTITIES**

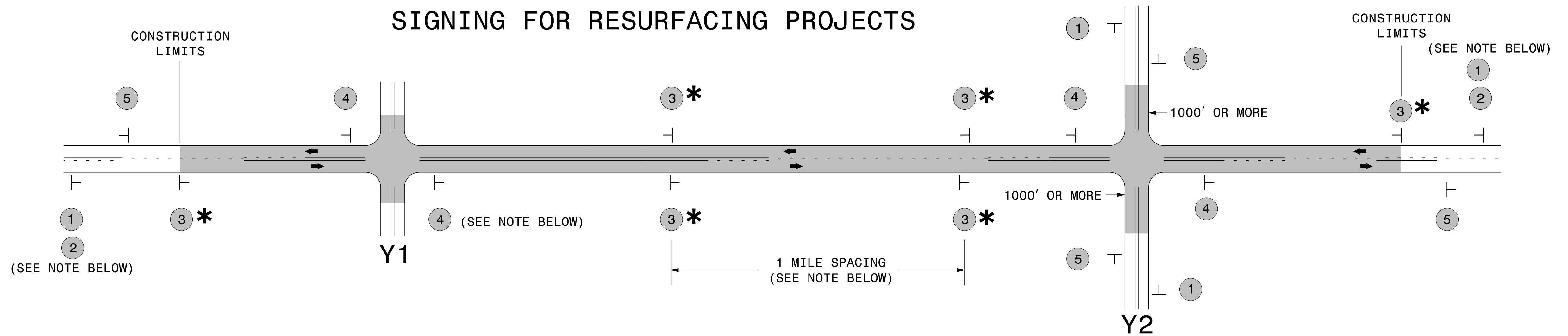
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	ASPHALT CONC SURFACE COURSE, TYPE S4.75A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT (FULL DEPTH) TON	ADJ. OF MANHOLES EA
3SP.20715.003	Pender	N/A	VARIOUS SECONDARY ROADS	PROJECT WIDE	N/A	2	2WU	NO	NO						
<b>TOTAL</b>															
3SP.20715.003	Pender	1	SR 1609 (SPRING GARDEN RD.)	FROM SR 1565 TO CUL-DE-SAC	1	2	2WU	NO	NO	0.2	20 - 32	105	7	5	
<b>TOTAL FOR MAP NO. 1</b>															
3SP.20715.003	Pender	2	SR 1650 (OLDE POINT LOOP)	FROM SR 1575 TO SR 1653	1	2	2WU	NO	NO	0.53	20	270	19	10	
<b>TOTAL FOR MAP NO. 2</b>															
3SP.20715.003	Pender	3	SR 1651 (WHITE HERON COVE RD.)	FROM SR 1650 TO CUL-DE-SAC	1	2	2WU	NO	NO	0.16	20 - 56	85	6	10	
<b>TOTAL FOR MAP NO. 3</b>															
3SP.20715.003	Pender	4	SR 1652 (DEER COVE RD.)	FROM SR 1650 TO CUL-DE-SAC	1	2	2WU	NO	NO	0.06	20 - 58	34	2	5	
<b>TOTAL FOR MAP NO. 4</b>															
3SP.20715.003	Pender	5	SR 1687 (RAVENSWOOD RD.)	FROM SR 1565 TO SR 1565	1	2	2WU	NO	NO	1.62	20	826	58	20	
<b>TOTAL FOR MAP NO. 5</b>															
3SP.20715.003	Pender	6	SR 1688 (SAWGRASS RD.)	FROM SR 1565 TO SR 1653	1	2	2WU	NO	NO	0.86	20	443	31	10	
<b>TOTAL FOR MAP NO. 6</b>															
3SP.20715.003	Pender	7	SR 1689 (BRENT ST.)	FROM SR 1688 TO SR 1690	1	2	2WU	NO	NO	0.13	20	66	5	5	
<b>TOTAL FOR MAP NO. 7</b>															
3SP.20715.003	Pender	8	SR 1690 (GREEN TEE RD.)	FROM CUL-DE-SAC TO CAL-DE-SAC	1	2	2WU	NO	NO	0.41	20 - 78	217	15	10	
<b>TOTAL FOR MAP NO. 8</b>															
3SP.20715.003	Pender	9	SR 1714 (NEWTON RD.)	FROM SR 1567 TO CUL-DE-SAC	1	2	2WU	NO	NO	0.21	20 - 75	111	8	10	
<b>TOTAL FOR MAP NO. 9</b>															
3SP.20715.003	Pender	10	SR 1715 (CAPTAIN BEAM BLVD.)	FROM SR 1567 TO SR 1565	1	2	2WU	NO	NO	0.81	20	413	29	10	
<b>TOTAL FOR MAP NO. 10</b>															
3SP.20715.003	Pender	11	SR 1717 (RAEFORD RD.)	FROM SR 1575 TO SR 1714	1	2	2WU	NO	NO	0.15	20	76	5	10	
<b>TOTAL FOR MAP NO. 11</b>															
3SP.20715.003	Pender	12	SR 1718 (SKIPPER RD.)	FROM SR 1717 TO CUL-DE-SAC	1	2	2WU	NO	NO	0.1	20 - 70	55	4	10	
<b>TOTAL FOR MAP NO. 12</b>															
3SP.20715.003	Pender	13	SR 1763 (BELLOWING DOE RD.)	FROM SR 1567 TO CUL-DE-SAC	1	2	2WU	NO	NO	0.19	20 - 70	100	7	10	2
<b>TOTAL FOR MAP NO. 13</b>															
<b>TOTAL FOR PROJ NO. 3SP.20715.003</b>															
<b>GRAND TOTAL</b>															
										5.43		2,801	196	125	2

PROJECT NO.	SHEET NO.
3SP.20715.003	6

**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4685000000-E	4686000000-E	4900000000-N
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 120 M YELLOW THERMO	YELLOW & YELLOW MARKERS
										SF	LS	LF	LF	EA
3SP.20715.003	Pender	N/A	VARIOUS SECONDARY ROADS	PROJECT WIDE	N/A	2	2WU				1			
<b>TOTAL</b>											<b>1</b>			
3SP.20715.003	Pender	1	SR 1609 (SPRING GARDEN RD.)	FROM SR 1565 TO CUL-DE-SAC	1	2	2WU	0.2	20 - 32	32				
<b>TOTAL FOR MAP NO. 1</b>										<b>0.2</b>				
3SP.20715.003	Pender	2	SR 1650 (OLDE POINT LOOP)	FROM SR 1575 TO SR 1653	1	2	2WU	0.53	20	64		5,597	5,597	35
<b>TOTAL FOR MAP NO. 2</b>										<b>0.53</b>		<b>5,597</b>	<b>5,597</b>	<b>35</b>
3SP.20715.003	Pender	3	SR 1651 (WHITE HERON COVE RD.)	FROM SR 1650 TO CUL-DE-SAC	1	2	2WU	0.16	20 - 56	32				
<b>TOTAL FOR MAP NO. 3</b>										<b>0.16</b>				
3SP.20715.003	Pender	4	SR 1652 (DEER COVE RD.)	FROM SR 1650 TO CUL-DE-SAC	1	2	2WU	0.06	20 - 58	32				
<b>TOTAL FOR MAP NO. 4</b>										<b>0.06</b>				
3SP.20715.003	Pender	5	SR 1687 (RAVENSWOOD RD.)	FROM SR 1565 TO SR 1565	1	2	2WU	1.62	20	192				
<b>TOTAL FOR MAP NO. 5</b>										<b>1.62</b>				
3SP.20715.003	Pender	6	SR 1688 (SAWGRASS RD.)	FROM SR 1565 TO SR 1653	1	2	2WU	0.86	20	96				
<b>TOTAL FOR MAP NO. 6</b>										<b>0.86</b>				
3SP.20715.003	Pender	7	SR 1689 (BRENT ST.)	FROM SR 1688 TO SR 1690	1	2	2WU	0.13	20	32				
<b>TOTAL FOR MAP NO. 7</b>										<b>0.13</b>				
3SP.20715.003	Pender	8	SR 1690 (GREEN TEE RD.)	FROM CUL-DE-SAC TO CAL-DE-SAC	1	2	2WU	0.41	20 - 78	32				
<b>TOTAL FOR MAP NO. 8</b>										<b>0.41</b>				
3SP.20715.003	Pender	9	SR 1714 (NEWTON RD.)	FROM SR 1567 TO CUL-DE-SAC	1	2	2WU	0.21	20 - 75	32				
<b>TOTAL FOR MAP NO. 9</b>										<b>0.21</b>				
3SP.20715.003	Pender	10	SR 1715 (CAPTAIN BEAM BLVD.)	FROM SR 1567 TO SR 1565	1	2	2WU	0.81	20	96				
<b>TOTAL FOR MAP NO. 10</b>										<b>0.81</b>				
3SP.20715.003	Pender	11	SR 1717 (RAEFORD RD.)	FROM SR 1575 TO SR 1714	1	2	2WU	0.15	20	32				
<b>TOTAL FOR MAP NO. 11</b>										<b>0.15</b>				
3SP.20715.003	Pender	12	SR 1718 (SKIPPER RD.)	FROM SR 1717 TO CUL-DE-SAC	1	2	2WU	0.1	20 - 70	32				
<b>TOTAL FOR MAP NO. 12</b>										<b>0.1</b>				
3SP.20715.003	Pender	13	SR 1763 (BELLOWING DOE RD.)	FROM SR 1567 TO CUL-DE-SAC	1	2	2WU	0.19	20 - 70	32				
<b>TOTAL FOR MAP NO. 13</b>										<b>0.19</b>				
<b>TOTAL FOR PROJ NO. 3SP.20715.003</b>										<b>5.43</b>	<b>1</b>	<b>5,597</b>	<b>5,597</b>	<b>35</b>
<b>GRAND TOTAL</b>										<b>5.43</b>	<b>1</b>	<b>5,597</b>	<b>5,597</b>	<b>35</b>

## SIGNING FOR RESURFACING PROJECTS



LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

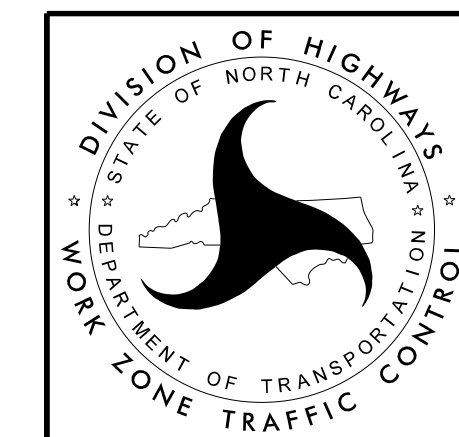
### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

<b>SIGNING NOTES AND PLACEMENT PER DIRECTION</b>	1	 <small>W20-1 48" X 48"</small>	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.					
	2	 <small>W7-3aP 24" X 18"</small>	#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 *	 <small>SP 13107 48" X 48"</small>	PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.					
	4	 <small>SP 13106 48" X 48"</small>	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	 <small>G20-2 A 48" X 24"</small>	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	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.					
			 <small>W20-1 48" X 48"</small>			 <small>W20-7 A 48" X 48"</small>		
			PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.					

### \* 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**