

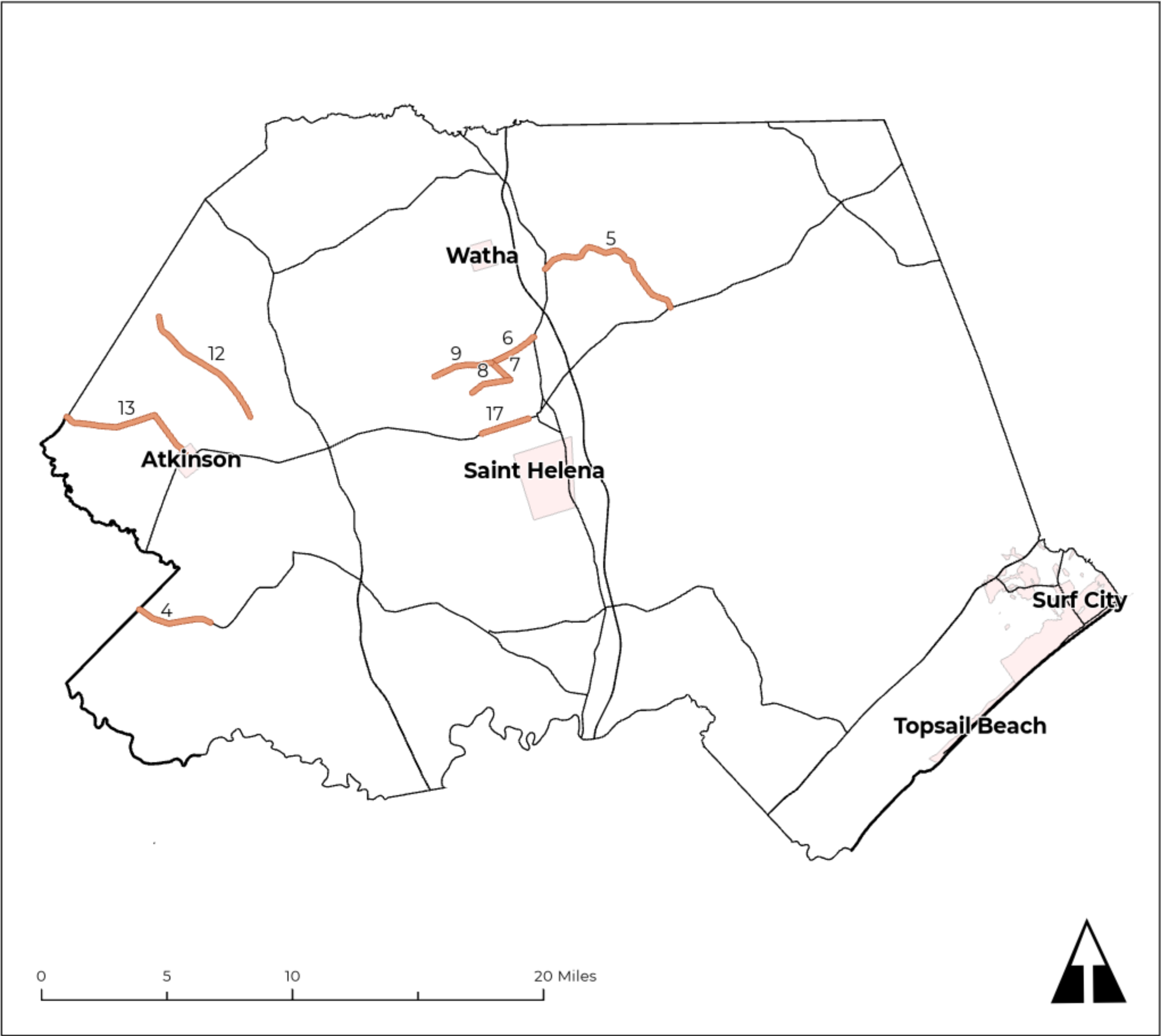
# Pender County

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Maps

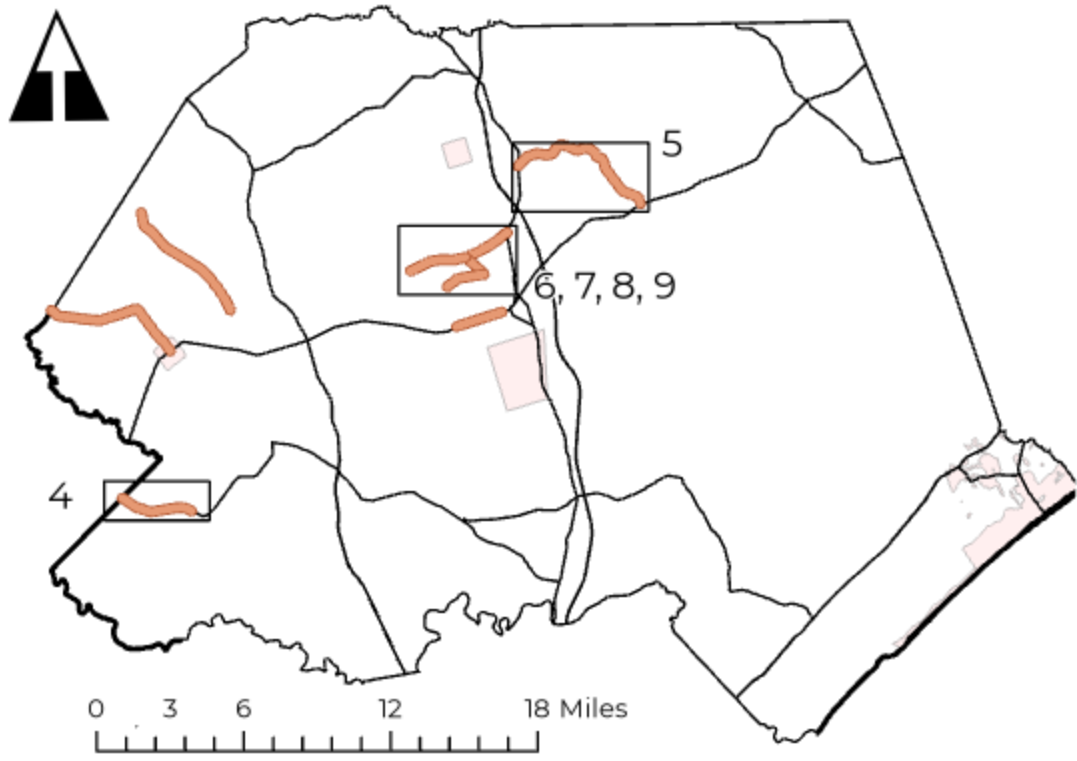
Sheet No.

4-9	.....	2
12, 13, 17	.....	3

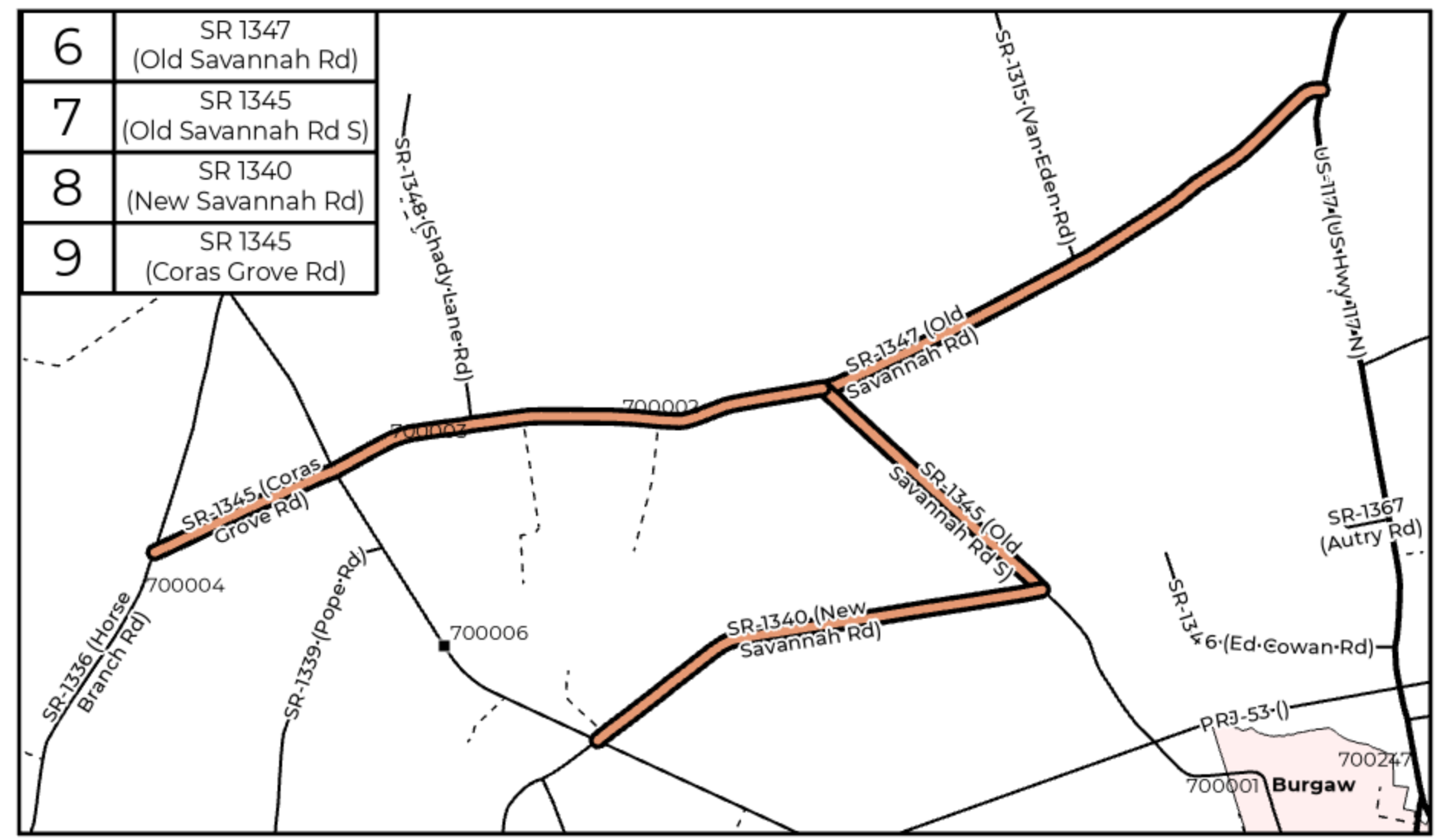
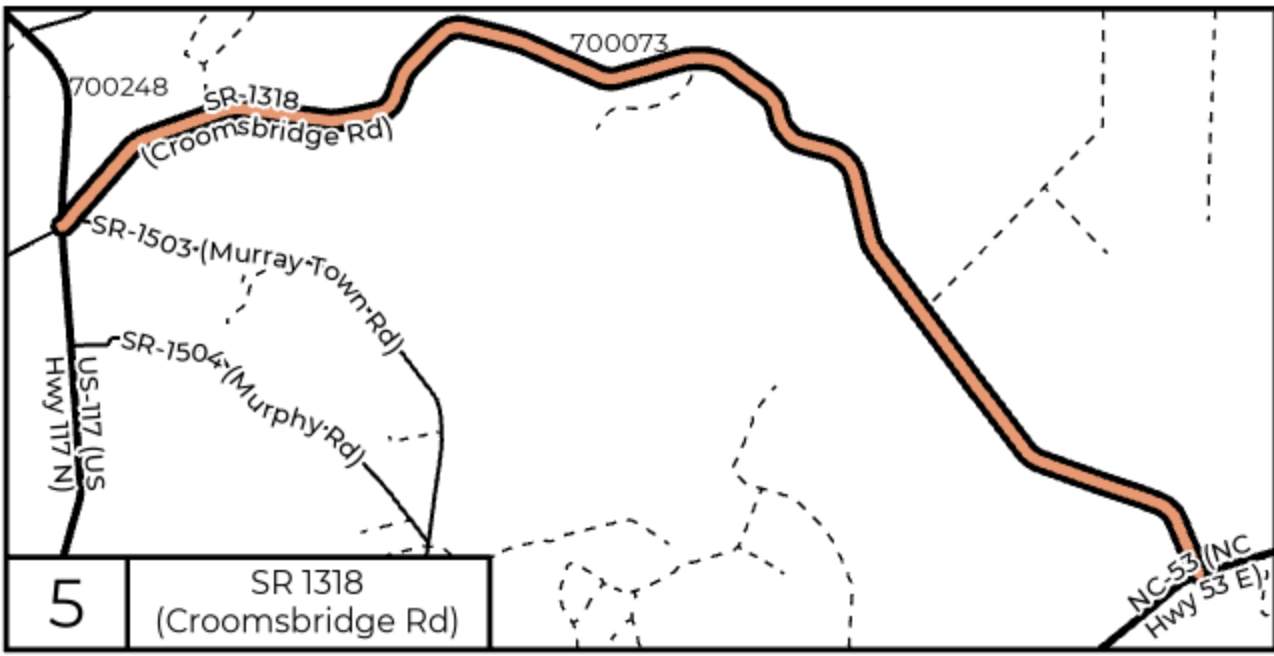


# Pender County 4-9

PROJECT REFERENCE NO. 2021CPT.03.12.10711, ETC.	SHEET NO. 2
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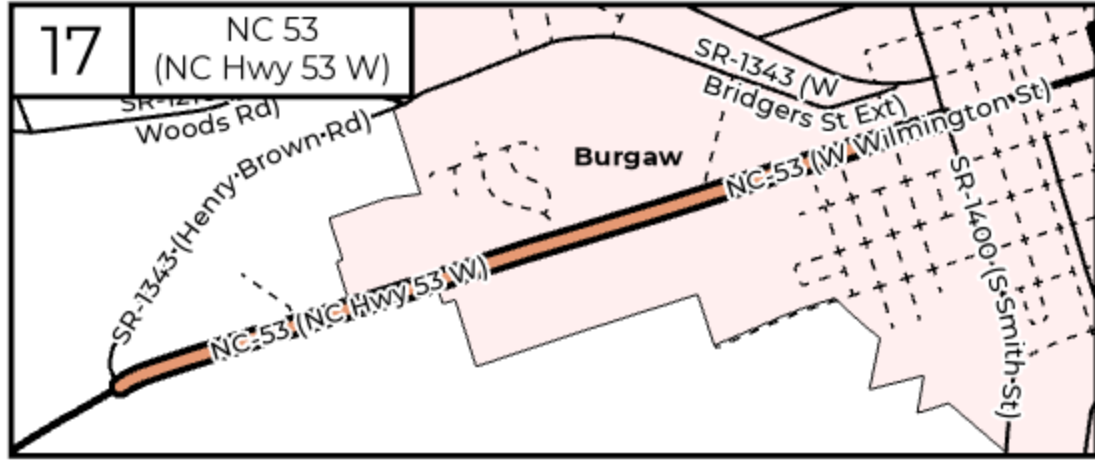
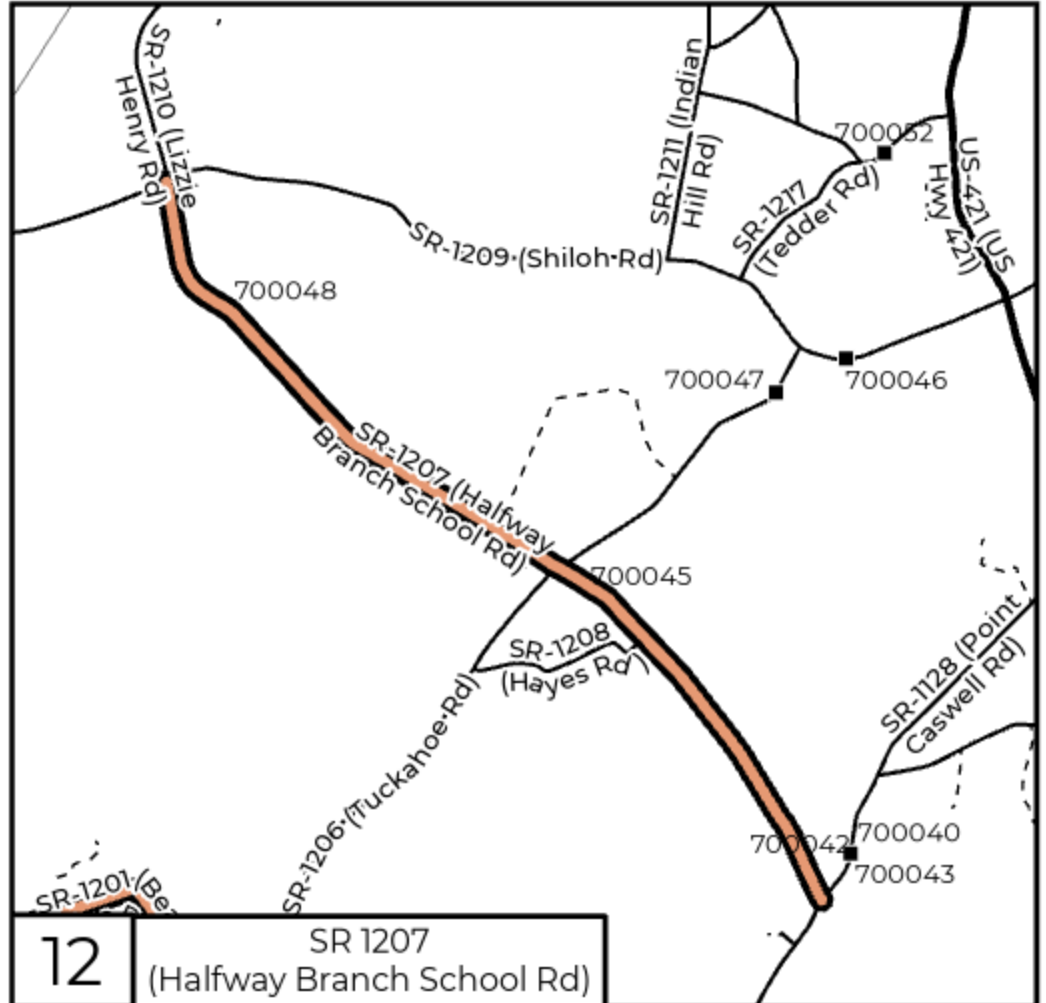
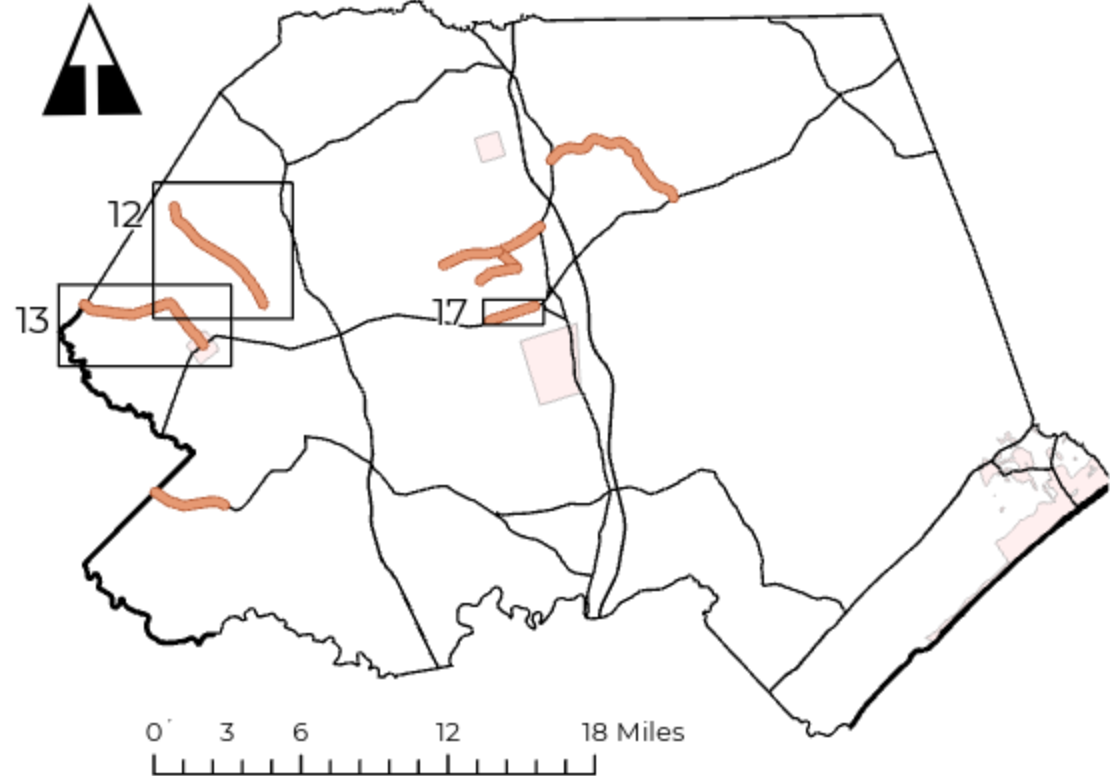


Legend	
Bridge	State Maintained Road
Road Section	Municipality Road

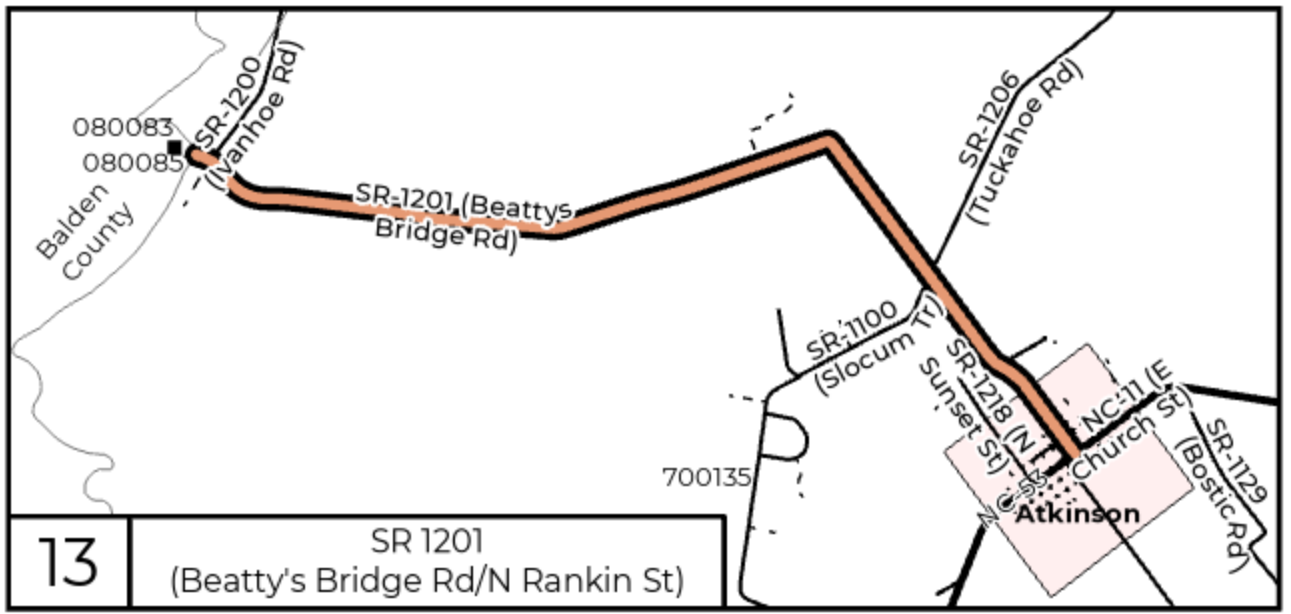


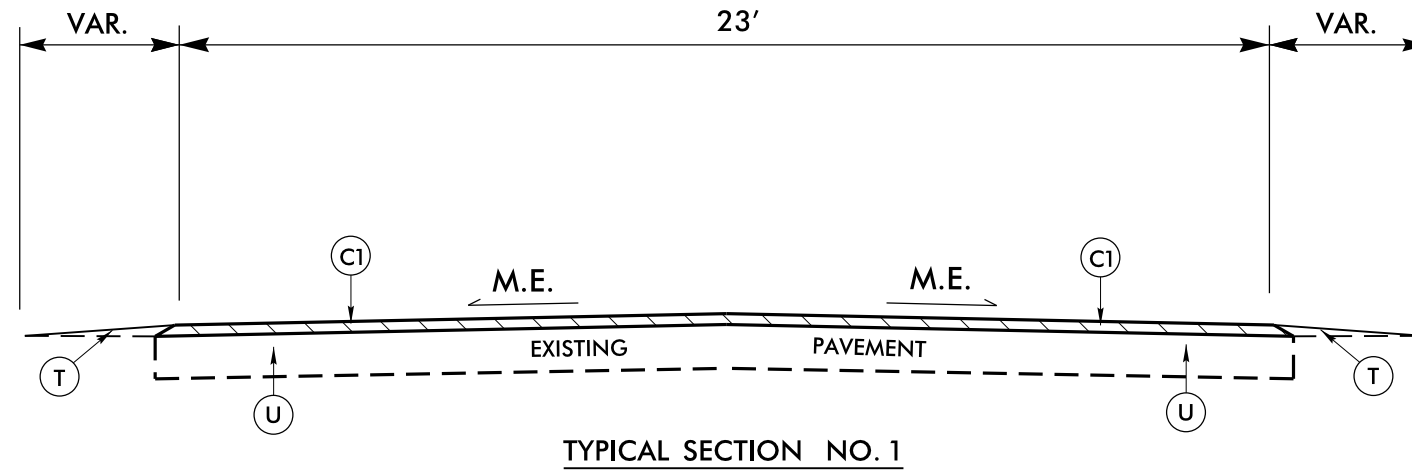
# Pender County 12, 13, 17

PROJECT REFERENCE NO.	SHEET NO.
2021CPT.03.12.10711, ETC.	3



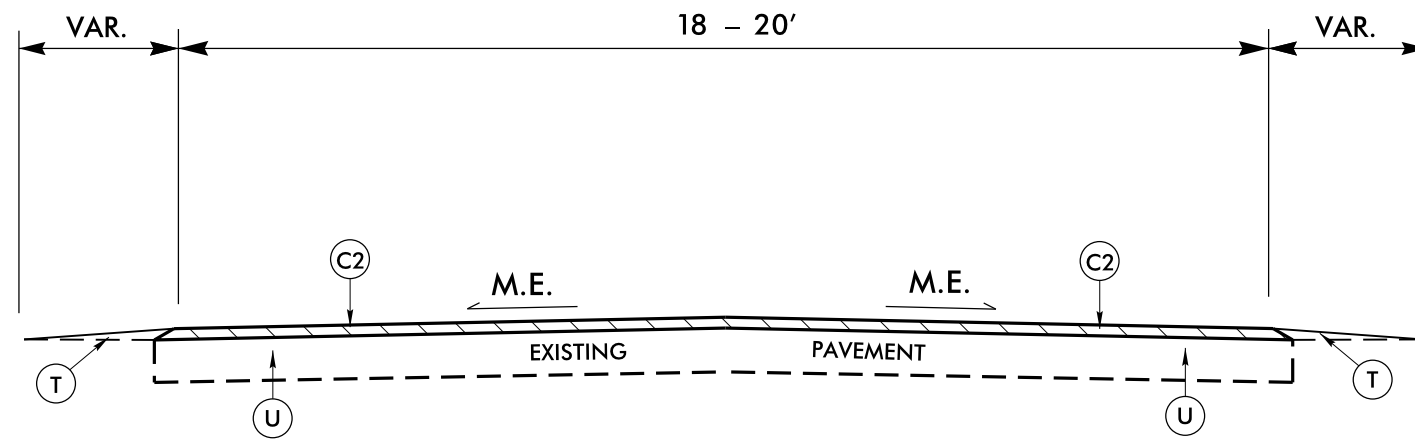
Legend	
■ Bridge	— State Maintained Road
▬ Road Section	- - - Municipality Road





**TYPICAL SECTION NO. 1**

MAP NO. 4  
NC 210  
MP 47.81 – MP 50.83



**TYPICAL SECTION NO. 2**

MAP NO. 5  
SR 1318 (CROOMSBRIDGE RD.)  
MP 0.00 – MP 3.46  
MP 3.52 – MP 6.60  
SEE ALSO TYPICAL NO. 3

VI NOTES: MAP NO. 5 MILL 1½" FOR FLOODPLAIN FROM MP 0.00 - MP 1.11 AND FROM MP 2.10 - MP 5.23

MILL A SINGLE LANE AND PAVE BACK BY THE END OF EACH WORK DAY.

MAP NO. 6  
SR 1347 (OLD SAVANNAH RD.)  
MP 0.00 – MP 2.00

MAP NO. 7  
SR 1345 (OLD SAVANNAH RD. S.)  
MP 2.39 – MP 3.41

MAP NO. 8  
SR 1340 (NEW SAVANNAH RD.)  
MP 0.00 – MP 1.65

MAP NO. 9  
SR 1345 (CORAS GROVE RD.)  
MP 0.00 – MP 2.39

VI NOTES: MAP NO. 9 MILL 1½" FOR FLOODPLAIN FROM MP 0.78 - MP 1.02 AND FROM MP 1.86 - MP 2.07

MILL A SINGLE LANE AND PAVE BACK BY THE END OF EACH WORK DAY.

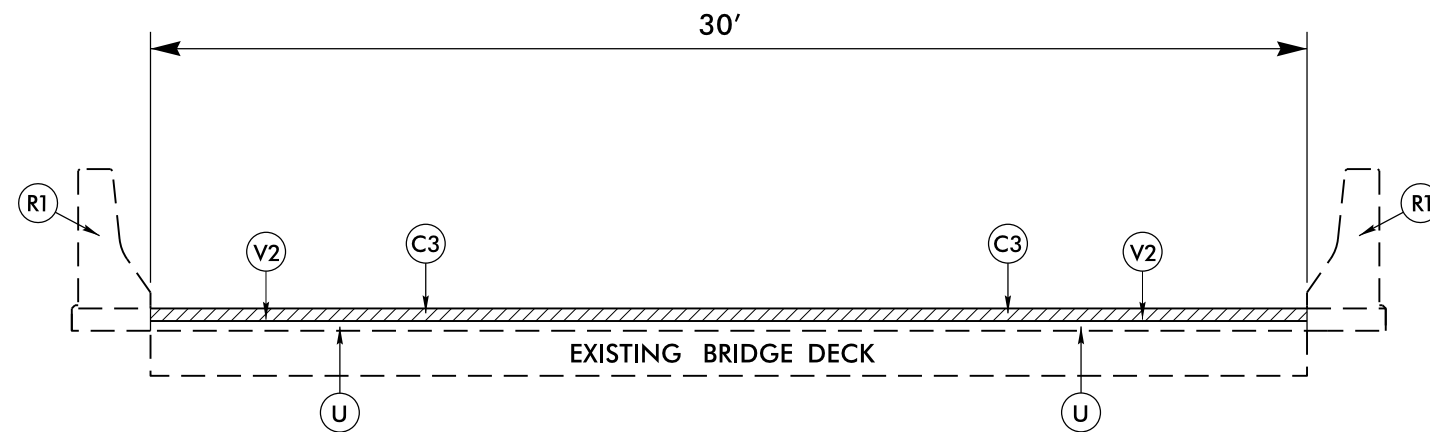
MAP NO. 13  
SR 1201 (BEATTY'S BRIDGE RD./N. RANKIN ST.)  
MP 0.00 – MP 5.90

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ.YD.
C2	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
C3	PROP. APPROX. 1" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ.YD.
F1	ASPHALT SERVICE TREATMENT - #67 MAT COAT (GRANITE) STONE
R1	EXISTING CONCRETE BRIDGE RAIL
T	EARTH MATERIAL (SHOULDER RECONSTRUCTION)
U	EXISTING PAVEMENT
V1	MILLING ASPHALT PAVEMENT, 1½" DEPTH
V2	MILLING ASPHALT PAVEMENT, 1" DEPTH

PAVEMENT EDGE SLOPES ARE 1:1, EXCEPT FINAL SURFACE COURSE. SEE SHOULDER WEDGE DETAIL.

REVISIONS

28-OCT-2020\_09:29 S:\Division\Resurfacing\Resurfacing Data\2021\Resurfacing\RALEIGH-REVISIONS\NEW\_TYPICALS\CONTRACT\_B\Appendix - Typicals\_B.dgn 8/17/99



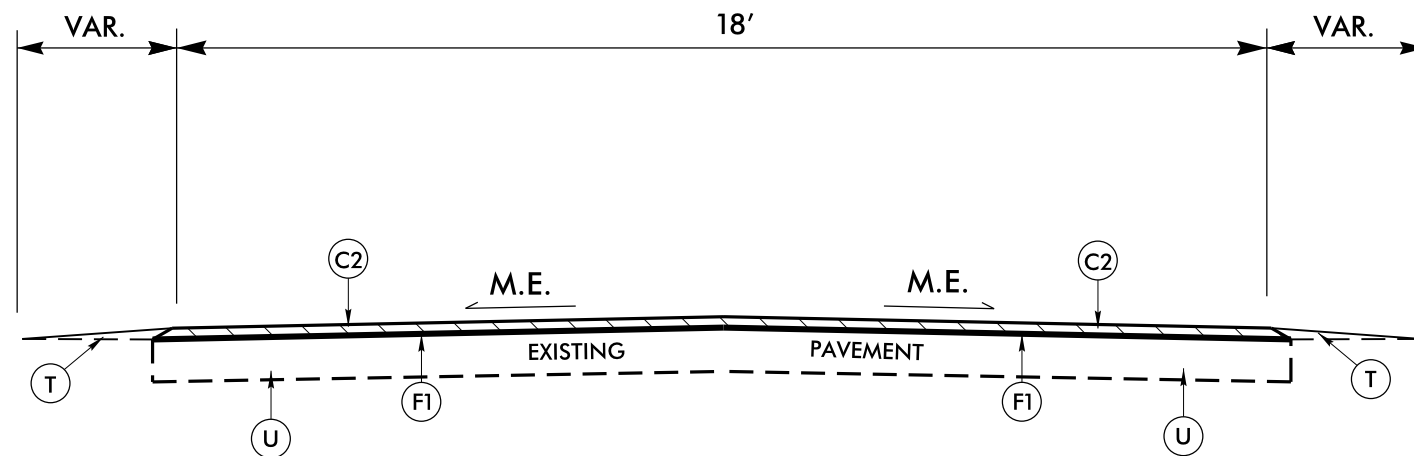
**TYPICAL SECTION NO. 3**

MAP NO. 5  
SR 1318 (CROOMSBRIDGE RD.)  
PENDER BRIDGE #73  
MP 3.46 – MP 3.52

NOTES: MILL A SINGLE LANE AND PAVE BACK  
BY THE END OF EACH WORK DAY

PAVEMENT SCHEDULE	
C2	1½" S9.5B
C3	1" S9.5B
F1	AST-MAT COAT #67 (GRANITE STONE)
R1	EXISTING CONCRETE BRIDGE RAIL
T	EARTH MATERIAL SHOULDER RECONST.
U	EXISTING PAVEMENT
V2	MILLING 1" DEPTH

PAVEMENT EDGE SLOPES ARE 1:1, EXCEPT FINAL SURFACE COURSE. SEE SHOULDER WEDGE DETAIL.



**TYPICAL SECTION NO. 4**

MAP NO. 12  
SR 1207 (HALFWAY BRANCH SCHOOL RD.)  
MP 0.00 – MP 5.58  
NO ASPHALT WORK PENDER BRIDGE #48

2018 ROADWAY ENGLISH STANDARD DRAWINGS

EFF.01-16-2018  
REV.

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N.C. Department of Transportation - Raleigh, N.C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 8 - INCIDENTALS	
862.01	Guardrail Placement
862.02	Guardrail Installation

REVISIONS

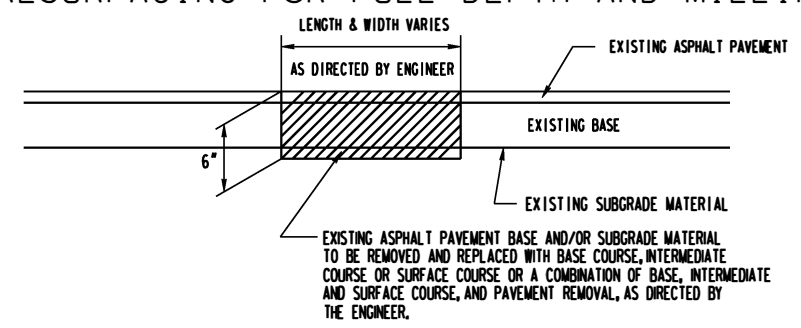
8/17/99

Resurfacing\PENDER\RALEIGH\_REVISIONS\NEW\_TYPICALS\CONTRACT\_BA\Pender - Typicals\_Bdgn

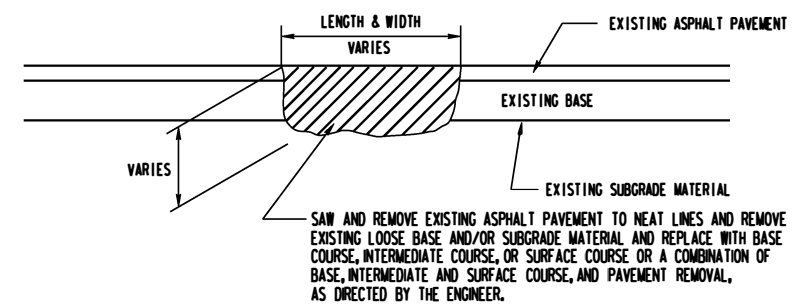
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5/14/99  
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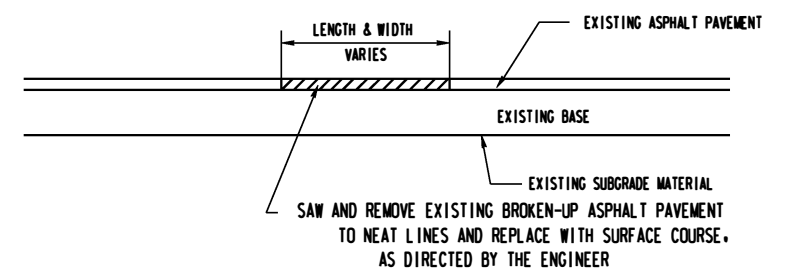
### DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



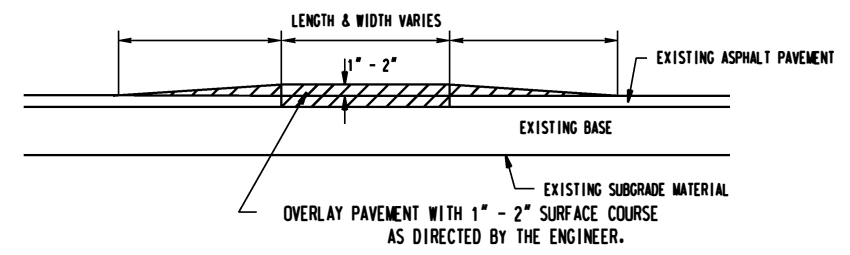
DETAIL NO. 1



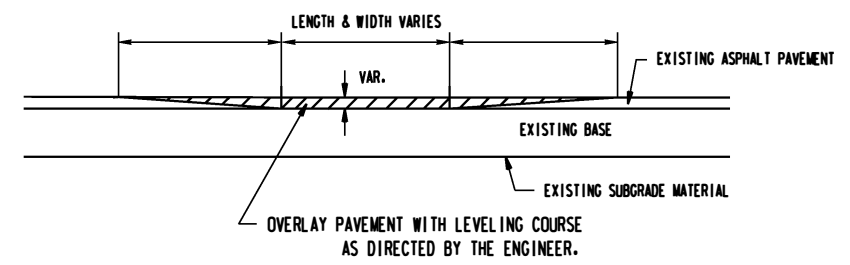
DETAIL NO. 2



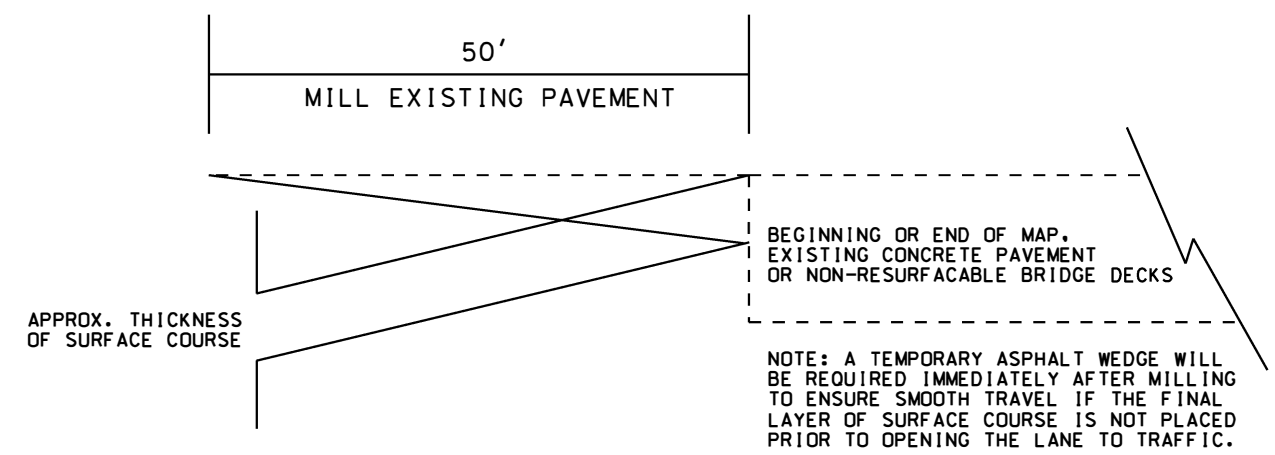
DETAIL NO. 3



DETAIL NO. 4

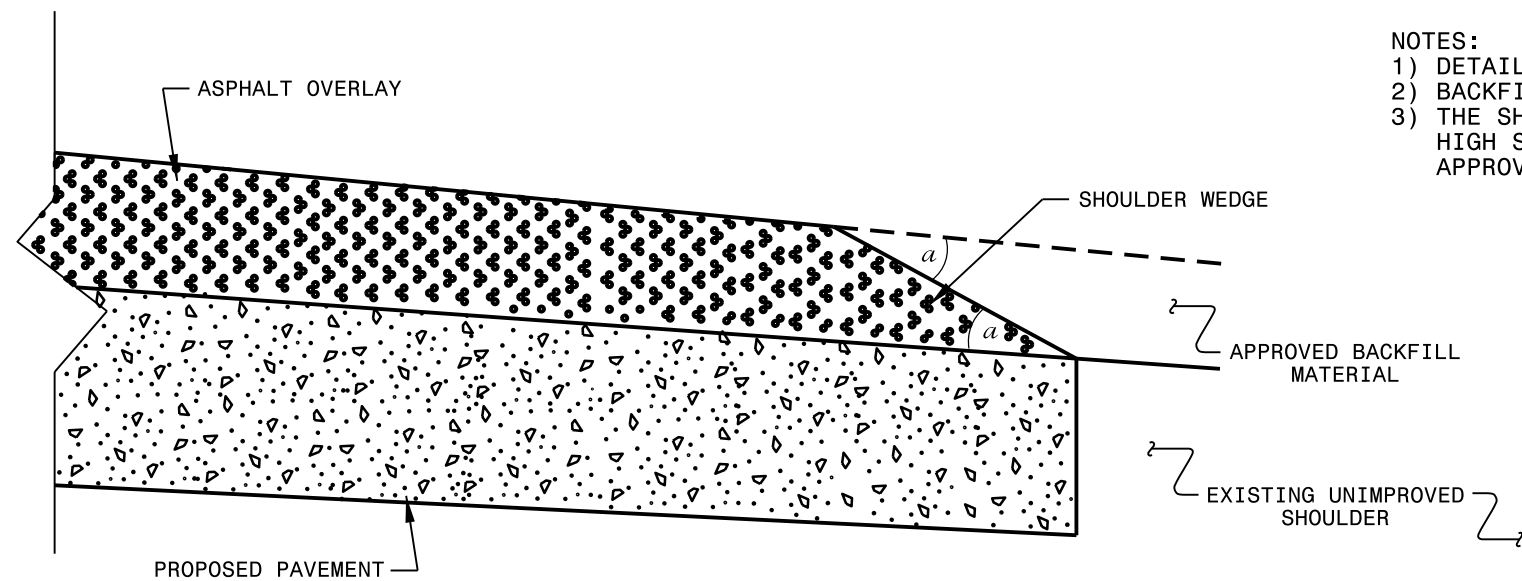


DETAIL NO. 5

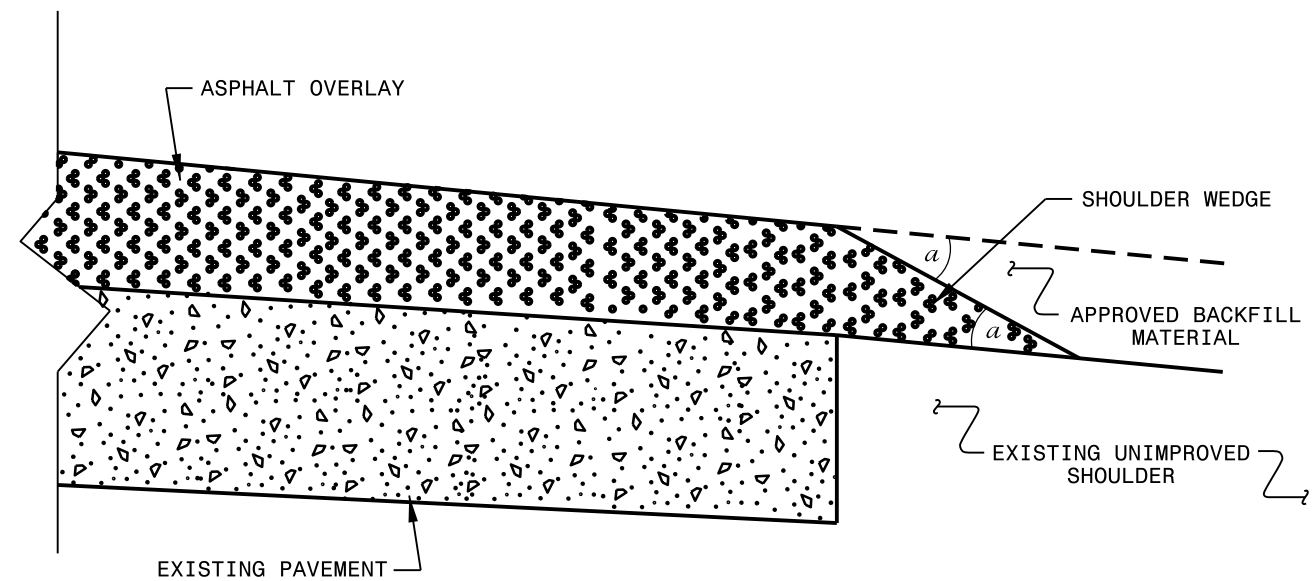


DETAIL FOR MILLING & INCIDENTAL MILLING PAY ITEMS:  
MAY BE USED AT THE BEGINNING & END OF MAPS  
AND AT APPROACH & TRAILING ENDS OF BRIDGES

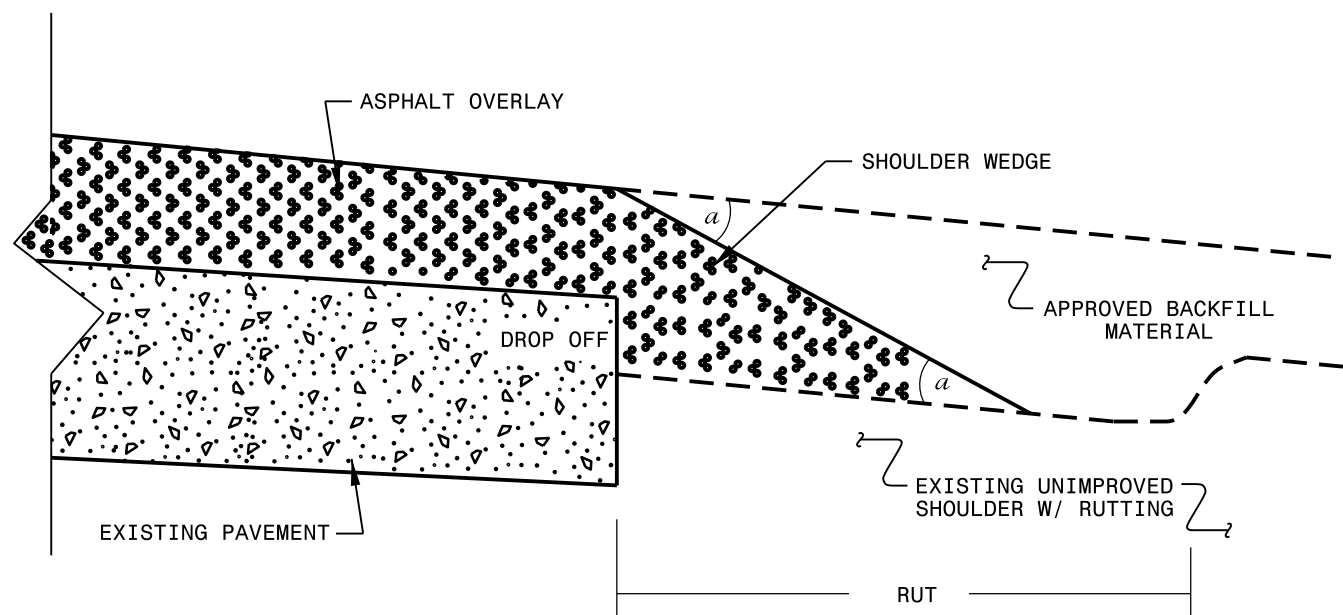
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ Widening or  
 with Existing Paved Shoulder having no dropoffs)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ NO Widening)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

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

PROJECT NO.	SHEET NO.	TOTAL NO.
.03.12.10711, 2021CPT.03.12.10712,	8	

**SUMMARY OF QUANTITIES**

PROJECT NO	COUNT	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0106000000-E	1220000000-E	1245000000-E	1297000000-E	1330000000-E	1519000000-E	1520000000-E	1523000000-E	1575000000-E	1775500000-E	1838000000-E	1880000000-E	1880000000-E					
												BORROW EXCAVATION	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1.5" MILLING	1" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	ASPHALT SURFACE TREATMENT, MATCOAT, #67 GRANITE	EMULSION FOR ASPHALT SURFACE TREATMENT	PATCHING EXISTING PAVEMENT (MILL)	PATCHING EXISTING PAVEMENT I19.0C (MILL)	PATCHING EXISTING PAVEMENT (FULL DEPTH)			
												MI	FT	CY	TON	SMI	SY	SY	SY	TON	TON	TON	TON	SY	GAL	TON	TON	TON	
2021CPT.03.12.10711	Pender	4	NC 210	FROM SR 1102 (MORGAN RD.) TO BLADEN COUNTY [MP 47.81 - MP 50.83]	1	2	2WU	NO	NO	3.02	23	285	60	6.04					4,140	248			150						
<b>TOTAL FOR MAP NO. 4</b>												3.02		285	60	6.04					4,140	248			150				
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.10711</b>												3.02		285	60	6.04					4,140	248			150				
2021CPT.03.12.20711	Pender	5	SR 1318 (CROOMSBRIDGE ROAD)	FROM NC 53 TO US 117 [MP 0.00 - MP 6.60]	2,3	2	2WU	NO	NO	6.6	20	615	150	13.20	47,152	1,056	510	6,505			436			800					
<b>TOTAL FOR MAP NO. 5</b>												6.6		615	150	13.20	47,152	1,056	510	6,505			436			800			
2021CPT.03.12.20711	Pender	6	SR 1347 (OLD SAVANNAH ROAD)	FROM SR 1345 (CORAS GROVE ROAD) TO US 117 [MP 0.00 - MP 2.00]	2	2	2WU	NO	NO	2	20	190	50	4.00			530	1,948	100			137			400				
<b>TOTAL FOR MAP NO. 6</b>												2		190	50	4.00			530	1,948	100			137			400		
2021CPT.03.12.20711	Pender	7	SR1345 (OLD SAVANNAH ROAD S.)	FROM SR 1345 (CORAS GROVE ROAD) TO SR 1340 (NEWSAVANNAH ROAD) [MP 2.39 - MP 3.41]	2	2	2WU	NO	NO	1.02	18	100	10	2.00			120	877			59				350				
<b>TOTAL FOR MAP NO. 7</b>												1.02		100	10	2.00			120	877			59				350		
2021CPT.03.12.20711	Pender	8	SR 1340 (NEW SAVANNAH ROAD)	FROM SR 1345 (OLD SAVANNAH ROAD S.) TO SR 1332 (PENDERLEA HWY) [MP 0.00 - MP 1.65]	2	2	2WU	NO	NO	1.65	19	160	70	3.30			340	1,544			103				350				
<b>TOTAL FOR MAP NO. 8</b>												1.65		160	70	3.30			340	1,544			103				350		
2021CPT.03.12.20711	Pender	9	SR 1345 (CORAS GROVE ROAD)	FROM SR 1336 (HORSE BRANCH ROAD) TO SR 1347 (OLD SAVANNAH ROAD) [MP 0.00 - MP 2.39]	2	2	2WU	NO	NO	2.39	18	230	105	4.80	4,800		300	2,105			141				350				
<b>TOTAL FOR MAP NO. 9</b>												2.39		230	105	4.80	4,800		300	2,105			141				350		
2021CPT.03.12.20711	Pender	12	SR 1207 (HALFWAY BRANCH SCHOOL ROAD)	FROM SR 1128 (POINT CASWELL ROAD) TO SR 1209 (SHILOH ROAD) [MP 0.00 - MP 5.58]	4	2	2WU	NO	NO	5.58	18	530	140	11.20			540	4,913			329	58,925	23,570		200				
<b>TOTAL FOR MAP NO. 12</b>												5.58		530	140	11.20			540	4,913			329	58,925	23,570		200		
2021CPT.03.12.20711	Pender	13	SR 1201 (BEATTY'S BRIDGE ROAD/N. RANKIN STREET)	FROM BLADEN COUNTY TO NC 53 [MP 0.00 - MP 5.90]	2	2	2WU	NO	NO	5.9	20	560	155	11.80			280	5,850			392				450				
<b>TOTAL FOR MAP NO. 13</b>												5.9		560	155	11.80			280	5,850			392				450		
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.20711</b>												25.14		2,385	680	50.30	51,952	1,056	2,620	23,742	100		1,597	58,925	23,570		2,450	450	
2021CPT.03.12.10712	Pender	17	NC 53	FROM SR 1400 (S. SMITH ST.) TO SR 1343 (HENRY BROWN RD.) [MP 18.87 - MP 20.84]	N/A	2	2WU	NO	NO	1.97	23														300				
<b>TOTAL FOR MAP NO. 17</b>												1.97																300	
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.10712</b>												1.97																300	
<b>GRAND TOTAL</b>												30.13		2,670	740	56.34	51,952	1,056	2,620	23,742	100		4,140	1,845	58,925	23,570	450	2,450	450



PROJECT NO.	SHEET NO.	TOTAL NO.
T.03.12.10711, 2021CPT.03.12.10712,	9	

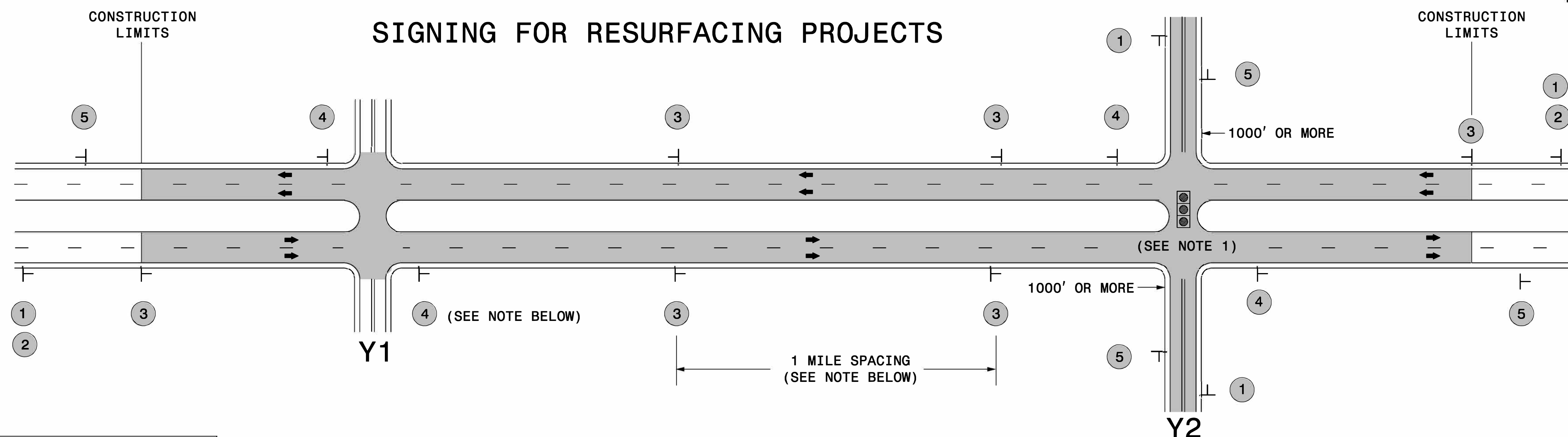
## SUMMARY OF QUANTITIES

PROJECT NO	COUNT	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	3287000000-N	3420000000-E	3435000000-N	6000000000-E	6009000000-E	6012000000-E	6015000000-E	6018000000-E	6021000000-E	6036000000-E	6042000000-E	6071010000-E	6084000000-E	6090000000-E	6093000000-E	6117000000-N		
												GUARDRAIL END UNITS, TYPE TL-3	REMOVE & REPLACE EXISTING GUARDRAIL	GUARDRAIL PRE-FAB POST	TEMPORARY SILT FENCE	STONE FOR EC CLASS B	SEDIMENT CONTROL STONE	TEMPORARY MULCHING	SEED FOR TEMPORARY SEEDING	FERTILIZER FOR TEMPORARY SEEDING	MATTING FOR EROSION CONTROL	1/4" HARDWARE CLOTH	WATTLE	SEED & MULCHING	SEED FOR REPAIR SEEDING	FERTILIZER FOR REPAIR SEEDING	RESPONSE FOR EROSION CONTROL		
											MI	FT	EA	LF	EA	LF	TON	TON	ACR	LBS	TON	SY	LF	LF	AC	LB	TON	EA	
2021CPT.03.12.10711	Pender	4	NC 210	FROM SR 1102 (MORGAN RD.) TO BLADEN COUNTY [MP 47.81 - MP 50.83]	1	2	2WU	NO	NO	3.02	23	4.00	325.00	6.00	302	76	76	3.02	151	0.76	20	151	50	2.20	151	0.76	3		
<b>TOTAL FOR MAP NO. 4</b>											<b>3.02</b>		<b>4.00</b>	<b>325.00</b>	<b>6.00</b>	<b>302</b>	<b>76</b>	<b>76</b>	<b>3.02</b>	<b>151</b>	<b>0.76</b>	<b>20</b>	<b>151</b>	<b>50</b>	<b>2.20</b>	<b>151</b>	<b>0.76</b>	<b>3</b>	
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.10711</b>											<b>3.02</b>		<b>4.00</b>	<b>325.00</b>	<b>6.00</b>	<b>302</b>	<b>76</b>	<b>76</b>	<b>3.02</b>	<b>151</b>	<b>0.76</b>	<b>20</b>	<b>151</b>	<b>50</b>	<b>2.20</b>	<b>151</b>	<b>0.76</b>	<b>3</b>	
2021CPT.03.12.20711	Pender	5	SR 1318 (CROOMSBRIDGE ROAD)	FROM NC 53 TO US 117 [MP 0.00 - MP 6.60]	2,3	2	2WU	NO	NO	6.6	20				660	165	165	6.60	330	1.65	40	330	100	4.80	330	1.65	2		
<b>TOTAL FOR MAP NO. 5</b>											<b>6.6</b>					<b>660</b>	<b>165</b>	<b>165</b>	<b>6.60</b>	<b>330</b>	<b>1.65</b>	<b>40</b>	<b>330</b>	<b>100</b>	<b>4.80</b>	<b>330</b>	<b>1.65</b>	<b>2</b>	
2021CPT.03.12.20711	Pender	6	SR 1347 (OLD SAVANNAH ROAD)	FROM SR 1345 (CORAS GROVE ROAD) TO US 117 [MP 0.00 - MP 2.00]	2	2	2WU	NO	NO	2	20				200	50	50	2.00	100	0.50	20	100	30	1.45	100	0.50	2		
<b>TOTAL FOR MAP NO. 6</b>											<b>2</b>					<b>200</b>	<b>50</b>	<b>50</b>	<b>2.00</b>	<b>100</b>	<b>0.50</b>	<b>20</b>	<b>100</b>	<b>30</b>	<b>1.45</b>	<b>100</b>	<b>0.50</b>	<b>2</b>	
2021CPT.03.12.20711	Pender	7	SR1345 (OLD SAVANNAH ROAD S.)	FROM SR 1345 (CORAS GROVE ROAD) TO SR 1340 (NEWSAVANNAH ROAD) [MP 2.39 - MP 3.41]	2	2	2WU	NO	NO	1.02	18				102	26	26	1.02	51	0.30	10	51	20	0.73	51	0.30	2		
<b>TOTAL FOR MAP NO. 7</b>											<b>1.02</b>					<b>102</b>	<b>26</b>	<b>26</b>	<b>1.02</b>	<b>51</b>	<b>0.30</b>	<b>10</b>	<b>51</b>	<b>20</b>	<b>0.73</b>	<b>51</b>	<b>0.30</b>	<b>2</b>	
2021CPT.03.12.20711	Pender	8	SR 1340 (NEW SAVANNAH ROAD)	FROM SR 1345 (OLD SAVANNAH ROAD S.) TO SR 1332 (PENDERLEA HWY) [MP 0.00 - MP 1.65]	2	2	2WU	NO	NO	1.65	19				165	41	41	1.65	83	0.40	20	85	30	1.20	83	0.40	2		
<b>TOTAL FOR MAP NO. 8</b>											<b>1.65</b>					<b>165</b>	<b>41</b>	<b>41</b>	<b>1.65</b>	<b>83</b>	<b>0.40</b>	<b>20</b>	<b>85</b>	<b>30</b>	<b>1.20</b>	<b>83</b>	<b>0.40</b>	<b>2</b>	
2021CPT.03.12.20711	Pender	9	SR 1345 (CORAS GROVE ROAD)	FROM SR 1336 (HORSE BRANCH ROAD) TO SR 1347 (OLD SAVANNAH ROAD) [MP 0.00 - MP 2.39]	2	2	2WU	NO	NO	2.39	18				239	60	60	2.39	120	0.60	20	120	40	1.70	120	0.60	2		
<b>TOTAL FOR MAP NO. 9</b>											<b>2.39</b>					<b>239</b>	<b>60</b>	<b>60</b>	<b>2.39</b>	<b>120</b>	<b>0.60</b>	<b>20</b>	<b>120</b>	<b>40</b>	<b>1.70</b>	<b>120</b>	<b>0.60</b>	<b>2</b>	
2021CPT.03.12.20711	Pender	12	SR 1207 (HALFWAY BRANCH SCHOOL ROAD)	FROM SR 1128 (POINT CASWELL ROAD) TO SR 1209 (SHILOH ROAD) [MP 0.00 - MP 5.58]	4	2	2WU	NO	NO	5.58	18	4.00	100.00		558	140	140	5.58	279		40	279	90	4.00	279	2.80	3		
<b>TOTAL FOR MAP NO. 12</b>											<b>5.58</b>		<b>4.00</b>	<b>100.00</b>		<b>558</b>	<b>140</b>	<b>140</b>	<b>5.58</b>	<b>279</b>		<b>40</b>	<b>279</b>	<b>90</b>	<b>4.00</b>	<b>279</b>	<b>2.80</b>	<b>3</b>	
2021CPT.03.12.20711	Pender	13	SR 1201 (BEATTY'S BRIDGE ROAD/N. RANKIN STREET)	FROM BLADEN COUNTY TO NC 53 [MP 0.00 - MP 5.90]	2	2	2WU	NO	NO	5.9	20				590	148	148	5.90	295	1.50	40	295	90	4.30	295	1.50	3		
<b>TOTAL FOR MAP NO. 13</b>											<b>5.9</b>					<b>590</b>	<b>148</b>	<b>148</b>	<b>5.90</b>	<b>295</b>	<b>1.50</b>	<b>40</b>	<b>295</b>	<b>90</b>	<b>4.30</b>	<b>295</b>	<b>1.50</b>	<b>3</b>	
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.20711</b>											<b>25.14</b>		<b>4.00</b>	<b>100.00</b>		<b>2,514</b>	<b>630</b>	<b>630</b>	<b>25.14</b>	<b>1,258</b>	<b>4.95</b>	<b>190</b>	<b>1,260</b>	<b>400</b>	<b>18.18</b>	<b>1,258</b>	<b>7.75</b>	<b>16</b>	
2021CPT.03.12.10712	Pender	17	NC 53	FROM SR 1400 (S. SMITH ST.) TO SR 1343 (HENRY BROWN RD.) [MP 18.87 - MP 20.84]	N/A	2	2WU	NO	NO	1.97	23																		
<b>TOTAL FOR MAP NO. 17</b>											<b>1.97</b>																		
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.10712</b>											<b>1.97</b>																		
<b>GRAND TOTAL</b>											<b>30.13</b>		<b>8.00</b>	<b>425.00</b>	<b>6.00</b>	<b>2,816</b>	<b>706</b>	<b>706</b>	<b>28.16</b>	<b>1,409</b>	<b>5.71</b>	<b>210</b>	<b>1,411</b>	<b>450</b>	<b>20.38</b>	<b>1,409</b>	<b>8.51</b>	<b>19</b>	

PROJECT NO.	SHEET NO.	TOTAL NO.
PT.03.12.10711, 2021CPT.03.12.2021CPT.03.12.10712,	10	

## THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANE S	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4685000000-E		4810000000-E		4900000000-N	4905000000-N		
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	4" WHITE PAINT	4" YELLOW PAINT	YELLOW & YELLOW MARKERS	SNOW PLOWABLE MARKERS (Y/Y)		
										SF	LS	LF	LF	LF	LF	EA	EA		
2021CPT.03.12.10711	Pender	4	NC 210	FROM SR 1102 (MORGAN RD.) TO BLADEN COUNTY [MP 47.81 - MP 50.83]	1	2	2WU	3.02	23	352	*	32,495	13,000				199		
<b>TOTAL FOR MAP NO. 4</b>								<b>3.02</b>		<b>352</b>		<b>32,495</b>	<b>13,000</b>				<b>199</b>		
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.10711</b>								<b>3.02</b>		<b>352</b>	<b>*</b>	<b>32,495</b>	<b>13,000</b>				<b>199</b>		
												<b>45,495</b>							
2021CPT.03.12.20711	Pender	5	SR 1318 (CROOMSBRIDGE ROAD)	FROM NC 53 TO US 117 [MP 0.00 - MP 6.60]	2	2	2WU	6.6	20	752				142,032	87,120	436			
<b>TOTAL FOR MAP NO. 5</b>								<b>6.6</b>		<b>752</b>				<b>142,032</b>	<b>87,120</b>	<b>436</b>			
2021CPT.03.12.20711	Pender	6	SR 1347 (OLD SAVANNAH ROAD)	FROM SR 1345 (CORAS GROVE ROAD) TO US 117 [MP 0.00 - MP 2.00]	2	2	2WU	2	20	224				43,040	26,400	132			
<b>TOTAL FOR MAP NO. 6</b>								<b>2</b>		<b>224</b>				<b>43,040</b>	<b>26,400</b>	<b>132</b>			
2021CPT.03.12.20711	Pender	7	SR1345 (OLD SAVANNAH ROAD S.)	FROM SR 1345 (CORAS GROVE ROAD) TO SR 1340 (NEWSAVANNAH ROAD) [MP 2.39 - MP 3.41]	2	2	2WU	1.02	18	112				21,520	13,200	66			
<b>TOTAL FOR MAP NO. 7</b>								<b>1.02</b>		<b>112</b>				<b>21,520</b>	<b>13,200</b>	<b>66</b>			
2021CPT.03.12.20711	Pender	8	SR 1340 (NEW SAVANNAH ROAD)	FROM SR 1345 (OLD SAVANNAH ROAD S.) TO SR 1332 (PENDERLEA HWY) [MP 0.00 - MP 1.65]	2	2	2WU	1.65	19	192	*			35,293	21,648	108			
<b>TOTAL FOR MAP NO. 8</b>								<b>1.65</b>		<b>192</b>				<b>35,293</b>	<b>21,648</b>	<b>108</b>			
2021CPT.03.12.20711	Pender	9	SR 1345 (CORAS GROVE ROAD)	FROM SR 1336 (HORSE BRANCH ROAD) TO SR 1347 (OLD SAVANNAH ROAD) [MP 0.00 - MP 2.39]	2	2	2WU	2.39	18	272				51,648	38,500	158			
<b>TOTAL FOR MAP NO. 9</b>								<b>2.39</b>		<b>272</b>				<b>51,648</b>	<b>38,500</b>	<b>158</b>			
2021CPT.03.12.20711	Pender	12	SR 1207 (HALFWAY BRANCH SCHOOL ROAD)	FROM SR 1128 (POINT CASWELL ROAD) TO SR 1209 (SHILOH ROAD) [MP 0.00 - MP 5.58]	4	2	2WU	5.58	18	640				120,512	73,920	370			
<b>TOTAL FOR MAP NO. 12</b>								<b>5.58</b>		<b>640</b>				<b>120,512</b>	<b>73,920</b>	<b>370</b>			
2021CPT.03.12.20711	Pender	13	SR 1201 (BEATTY'S BRIDGE ROAD/N. RANKIN ST.)	FROM BLADEN COUNTY TO NC 53 [MP 0.00 - MP 5.90]	2	2	2WU	5.9	20	672				126,968	77,880	390			
<b>TOTAL FOR MAP NO. 13</b>								<b>5.9</b>		<b>672</b>				<b>126,968</b>	<b>77,880</b>	<b>390</b>			
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.20711</b>								<b>25.14</b>		<b>2,864</b>	<b>*</b>			<b>541,013</b>	<b>338,668</b>	<b>1,660</b>			
												<b>879,681</b>							
2021CPT.03.12.10712	Pender	17	NC 53	FROM SR 1400 (S. SMITH ST.) TO SR 1343 (HENRY BROWN RD.) [MP 18.87 - MP 20.84]		2	2WU	1.97	23		*								
<b>TOTAL FOR MAP NO. 17</b>								<b>1.97</b>											
<b>TOTAL FOR PROJ NO. 2021CPT.03.12.10712</b>								<b>1.97</b>			<b>*</b>								
<b>GRAND TOTAL</b>								<b>30.13</b>		<b>3,216</b>	<b>1</b>	<b>32,495</b>	<b>13,000</b>	<b>541,013</b>	<b>338,668</b>	<b>1,660</b>	<b>199</b>		
												<b>45,495</b>		<b>879,681</b>					



**LEGEND**  
 | STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW



**MAINLINE (-L-) SIGNING**

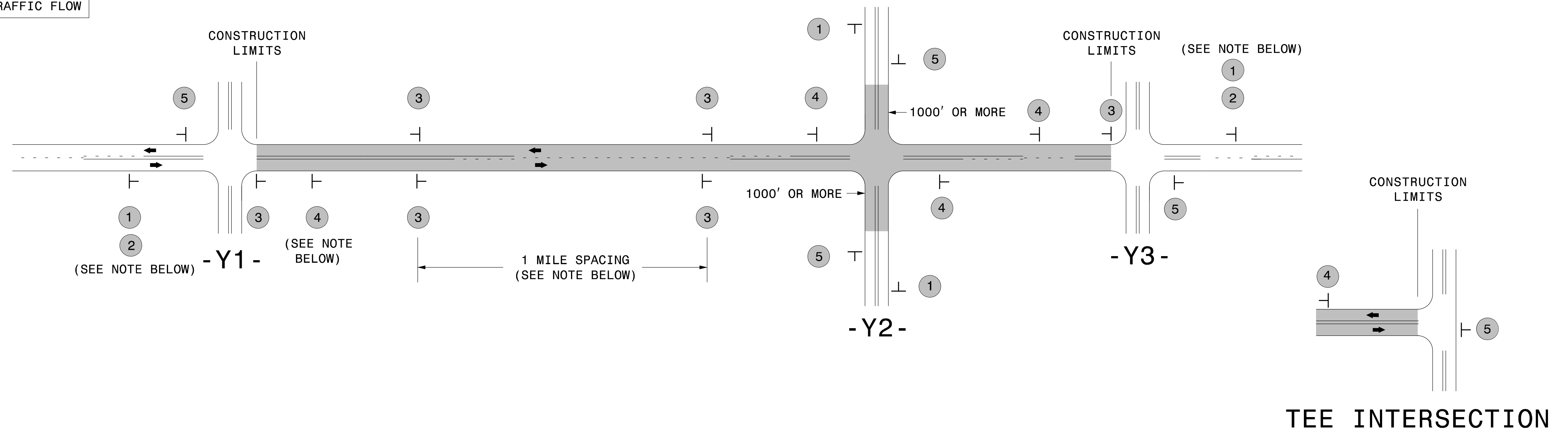
**-Y- LINE SIGNING**

SIGNING NOTES AND PLACEMENT PER DIRECTION	 	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#2 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><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">   <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;">   <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.</li> </ol>
		<p>PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.</p>	
		<p>THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</p>	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>	

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




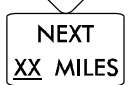


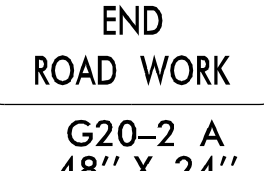
# SIGNING FOR RESURFACING PROJECTS

**LEGEND**  
 STATIONARY SIGN  
 DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

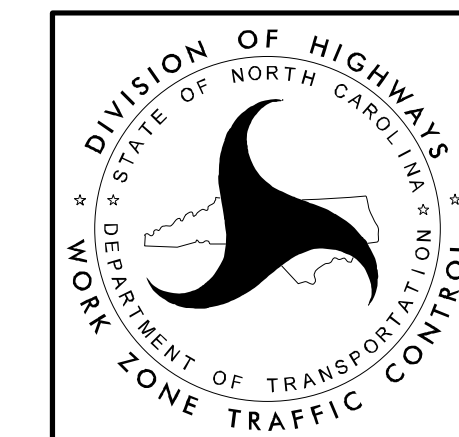
## -Y- LINE SIGNING

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"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <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	 NEXT XX MILES 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	 LOW/SOFT SHOULDER SP 13107 48" X 48"	<ul style="list-style-type: none"> <li>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</li> <li>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</li> </ul>	
	4	 ROAD UNDER CONST SP 13106 48" X 48"	<ul style="list-style-type: none"> <li>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</li> <li>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</li> <li>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</li> <li>- 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.</li> <li>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</li> <li>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</li> </ul>	
	5	 END ROAD WORK 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.

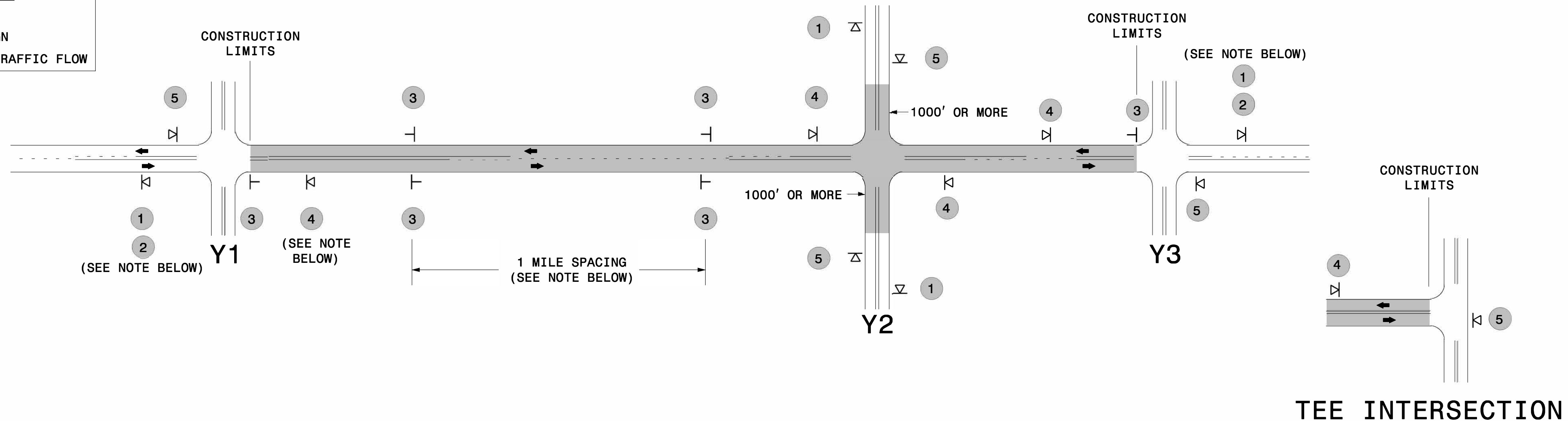


ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

## SIGNING FOR ASPHALT SURFACE TREATMENT

**LEGEND**

- ◻ PORTABLE SIGN
- └ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW



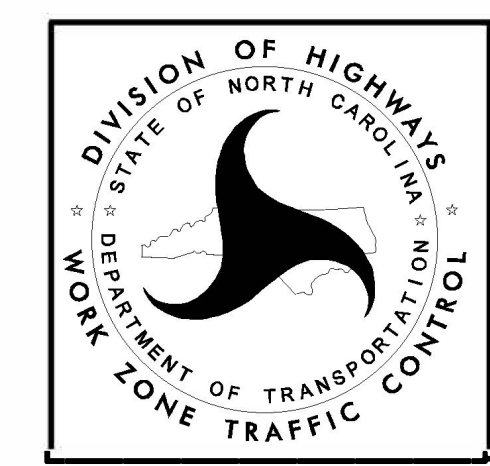
### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

<b>SIGNING NOTES AND PLACEMENT PER DIRECTION</b>	1	 	<ul style="list-style-type: none"> <li>- PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</li> <li>- 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.</li> </ul>	<p><b>STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <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; align-items: center;"> <div style="text-align: center;">   <small>W20-1 48" X 48"</small>              PLACED 500' IN ADVANCE OF FLAGGER.         </div> <div style="text-align: center;">   <small>W20-7 A 48" X 48"</small>              PLACED 250' IN ADVANCE OF FLAGGER.         </div> </div>
	3	 	<ul style="list-style-type: none"> <li>- ALTERNATE THE FOLLOWING TWO SIGNS:</li> <li>- STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</li> <li>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER.</li> <li>- AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</li> </ul>	
	4		<ul style="list-style-type: none"> <li>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</li> <li>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</li> <li>- 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.</li> <li>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</li> </ul>	
	5		<ul style="list-style-type: none"> <li>- PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</li> </ul>	
	<p>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.</p>			

**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:\TMS\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing\_ActvWarn\_2Ln - AST.dgn User:hdais

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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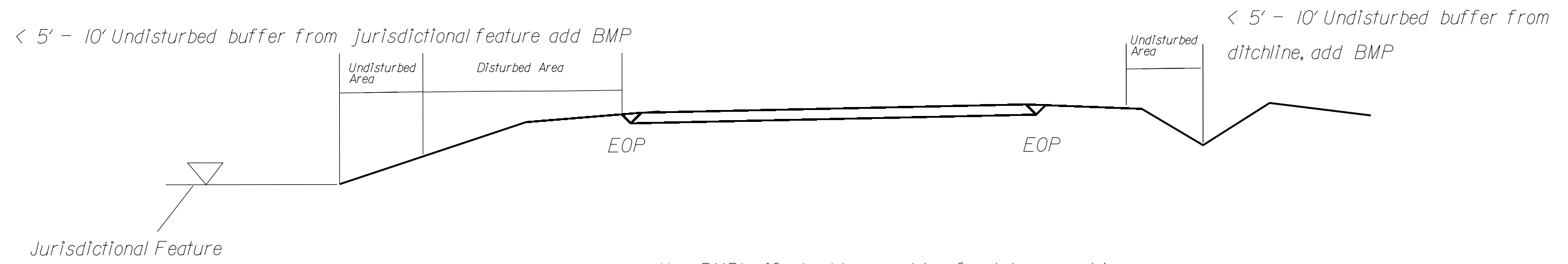
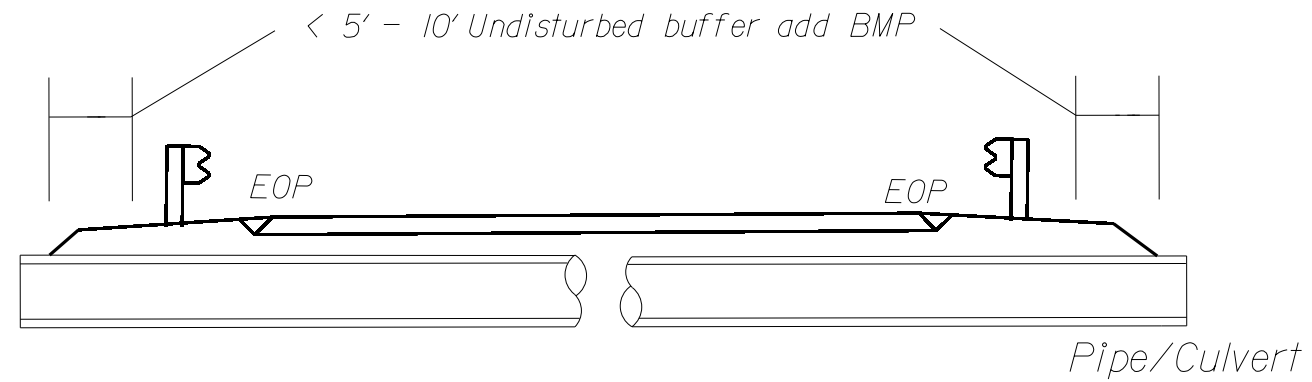
## ***SOIL STABILIZATION TIMEFRAMES***

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

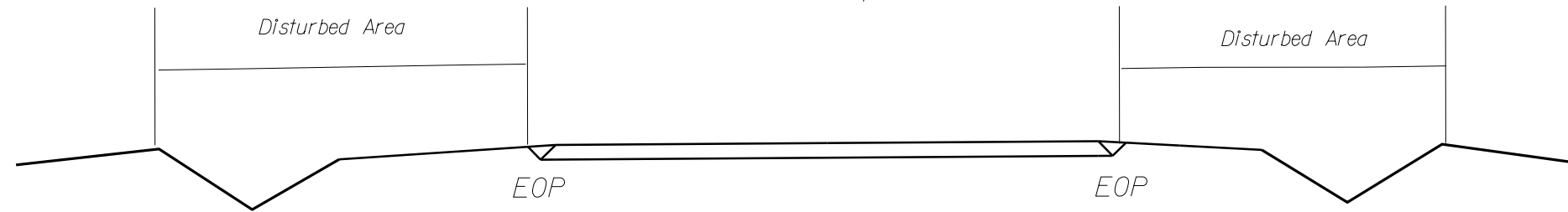
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

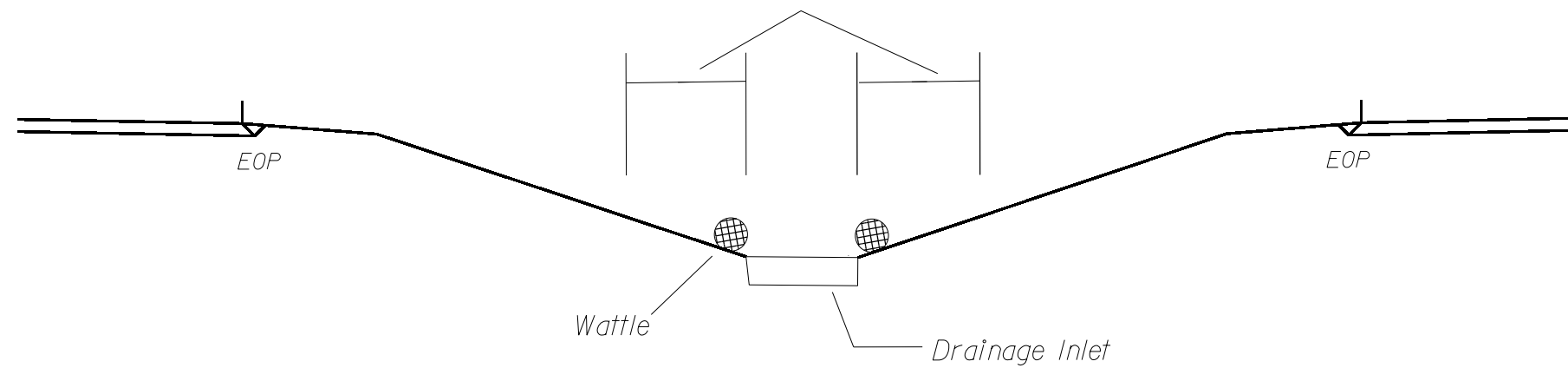
# EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

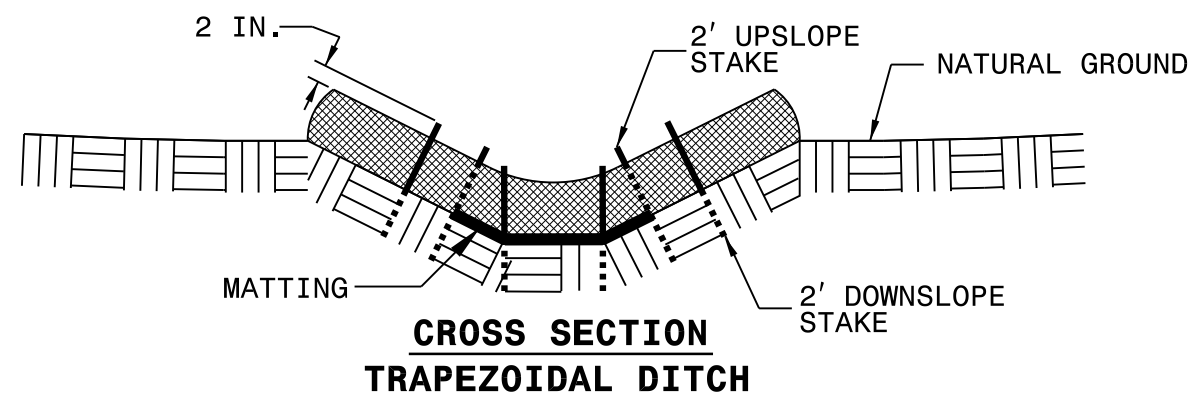
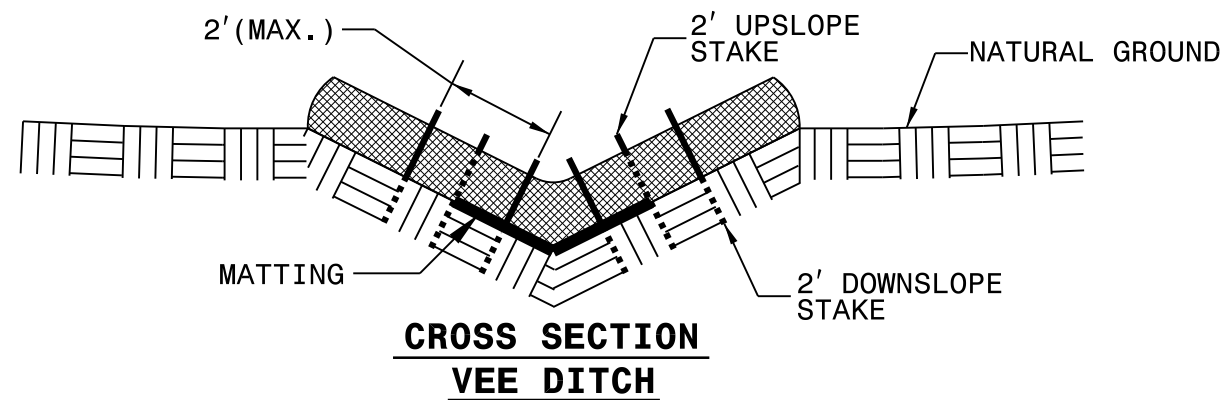
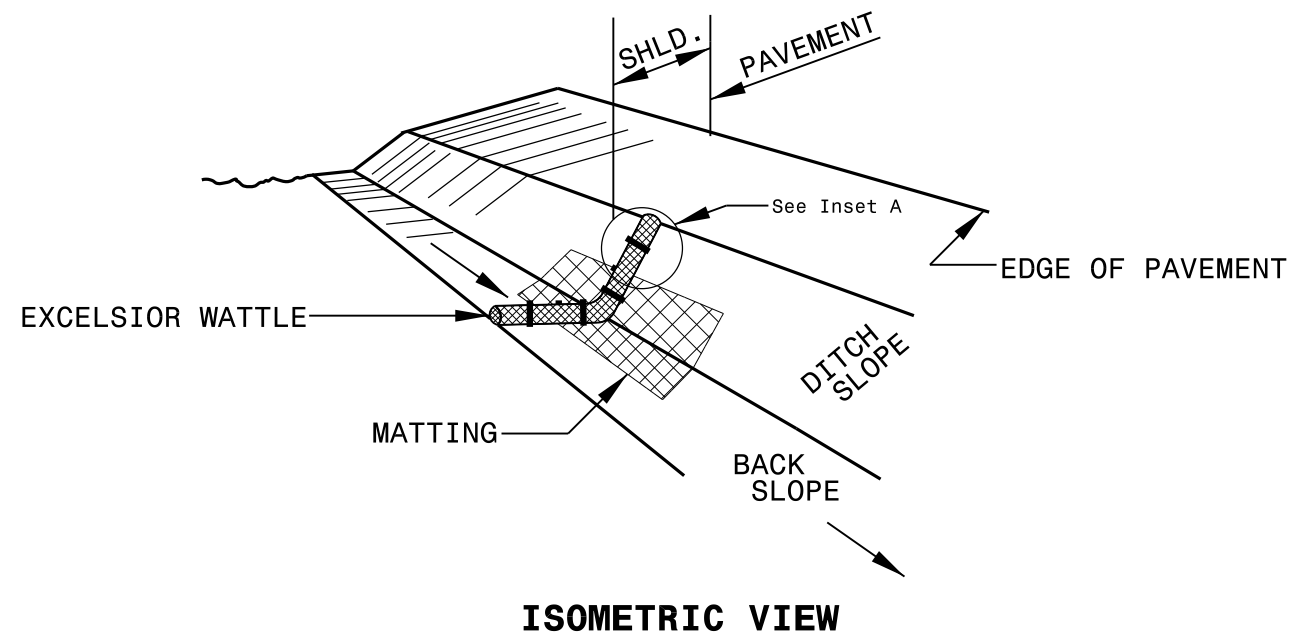


< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

# WATTLE DETAIL



**NOTES:**

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

