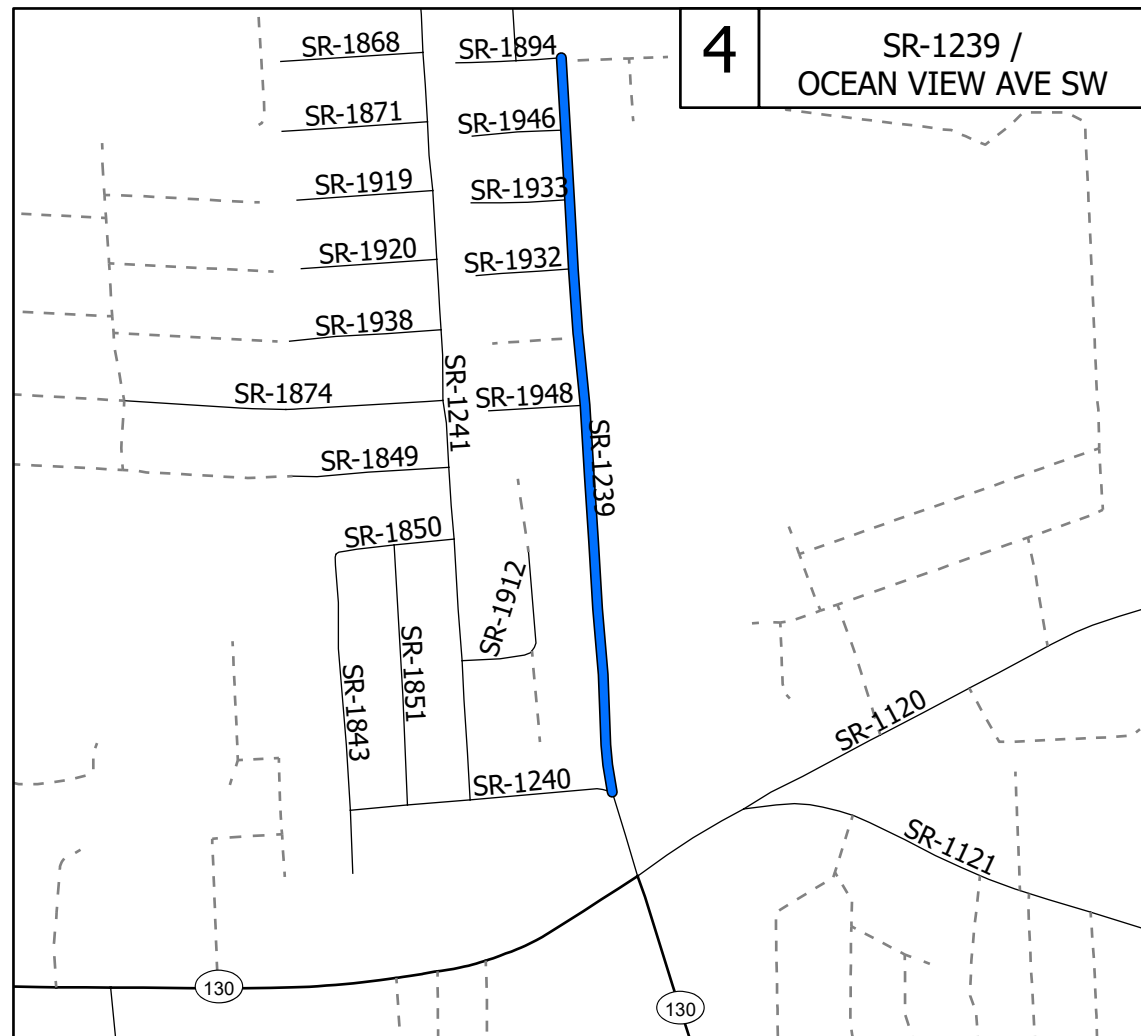
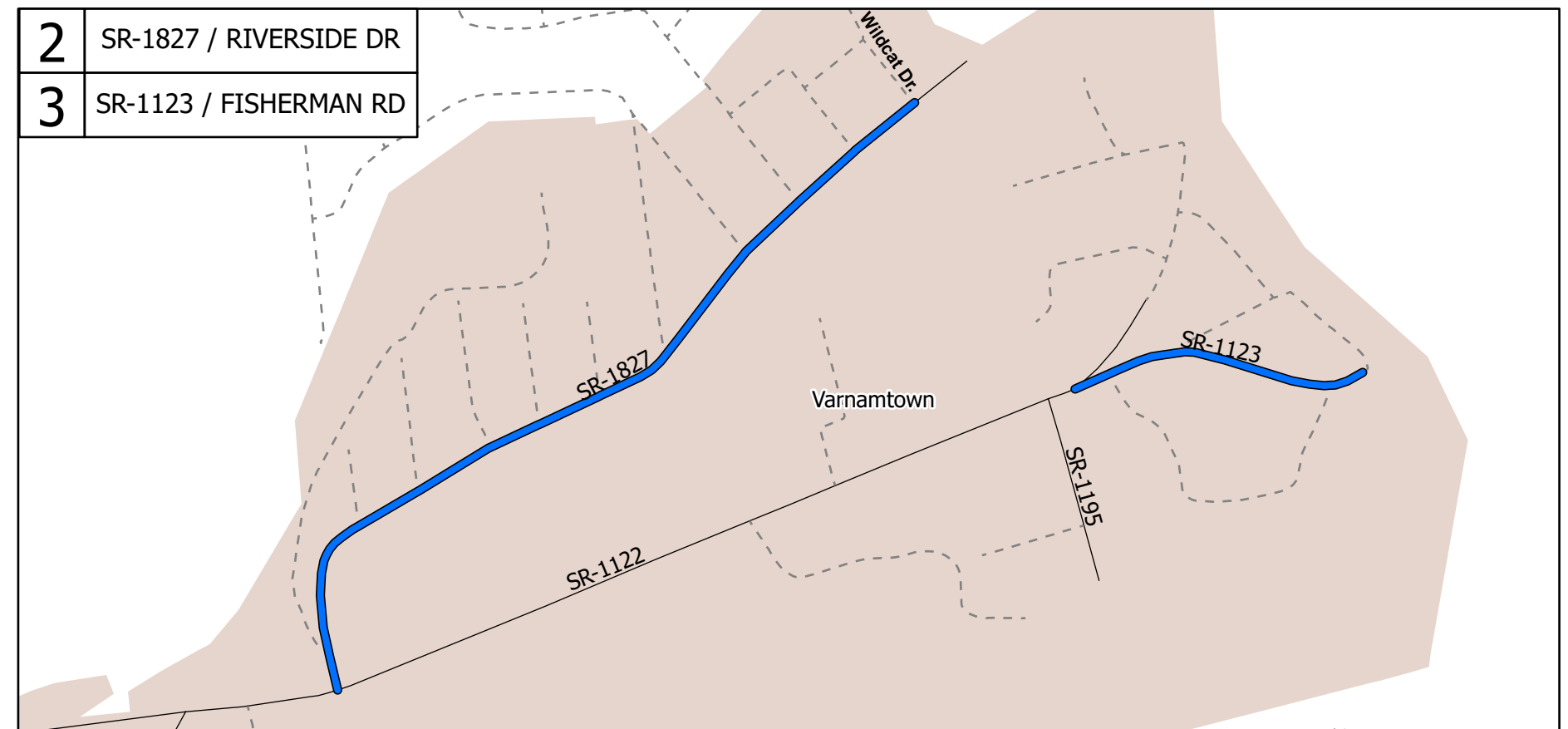
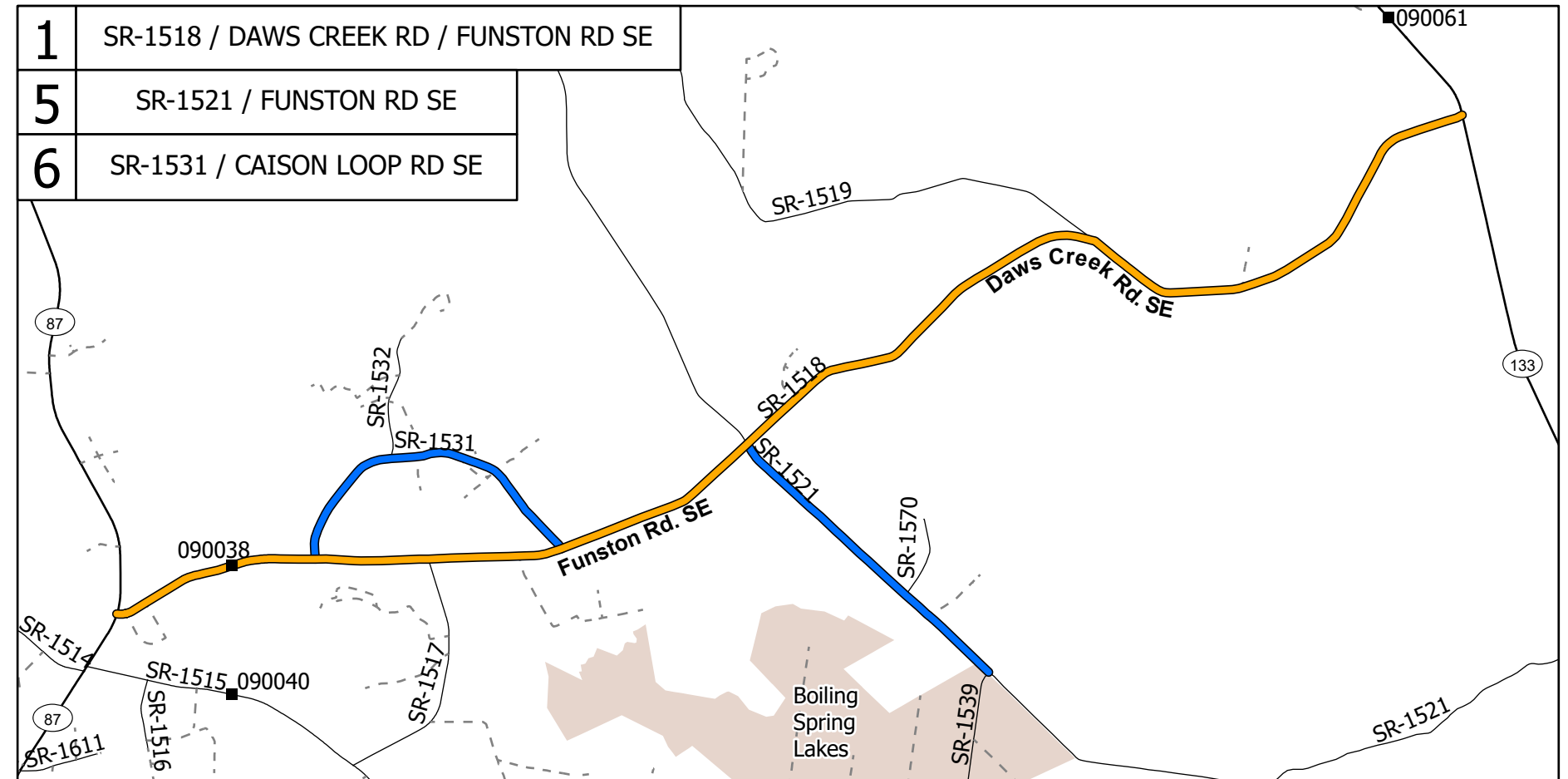
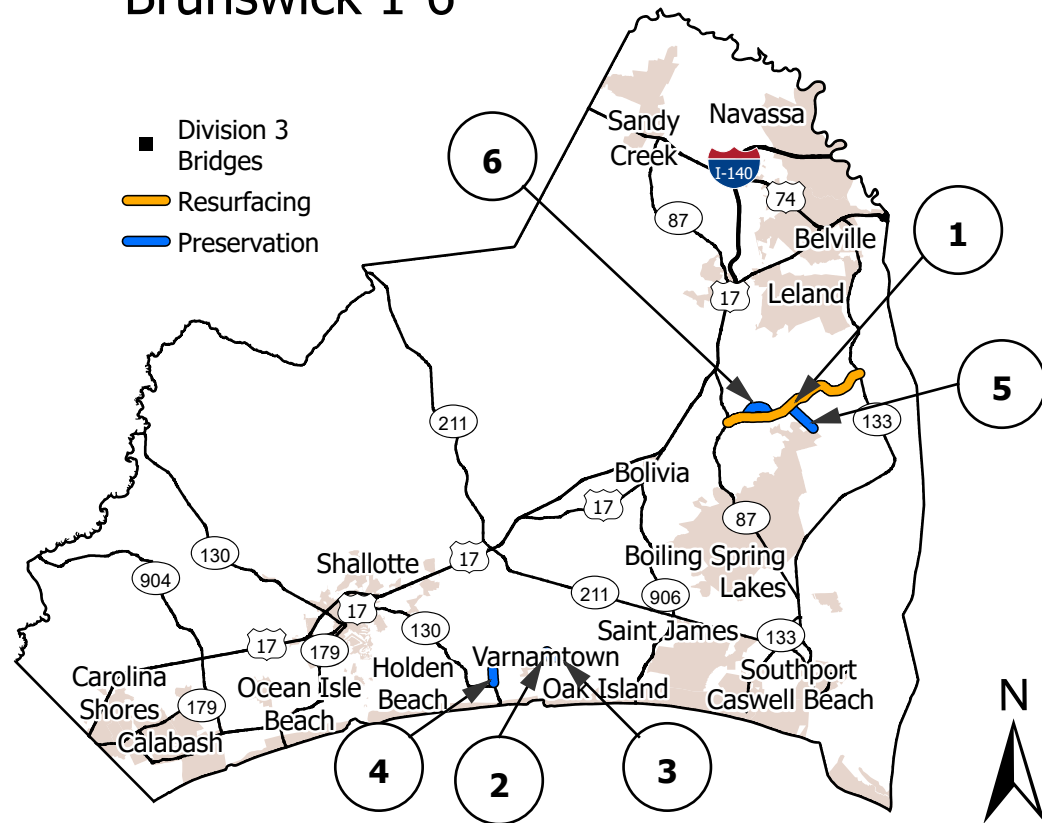
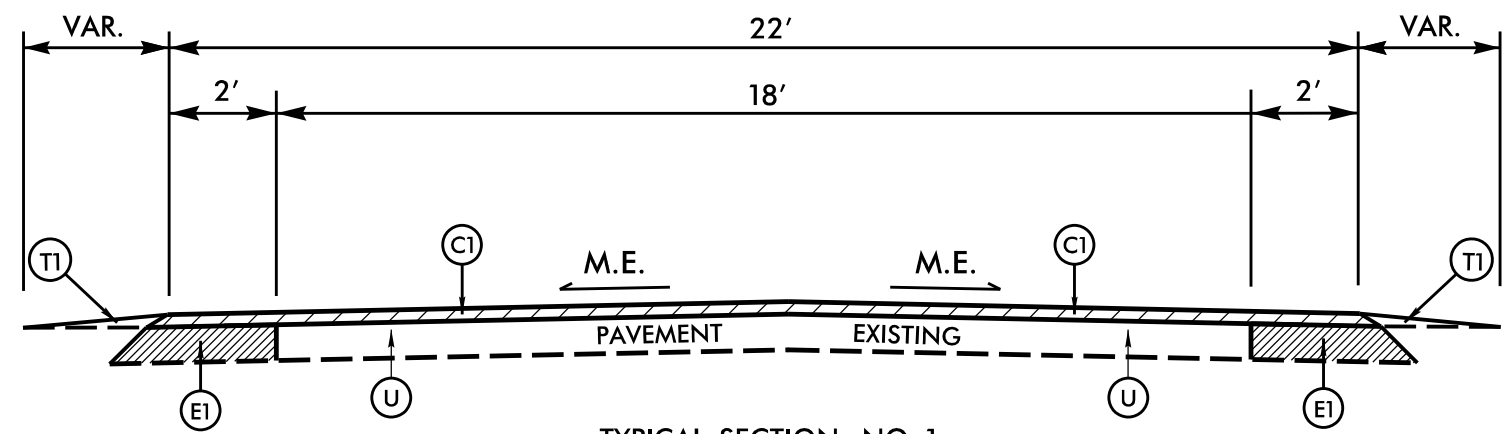


# Brunswick 1-6

PROJECT REFERENCE NO.	SHEET NO.
2024CPT.03.01.20101, ETC.	1

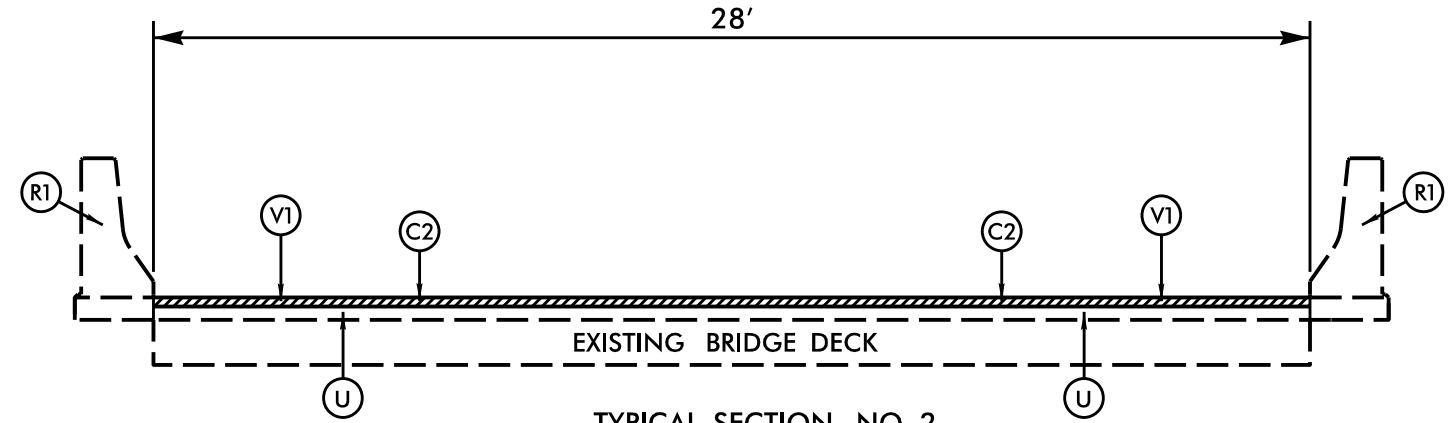
- Division 3 Bridges
- Resurfacing
- Preservation





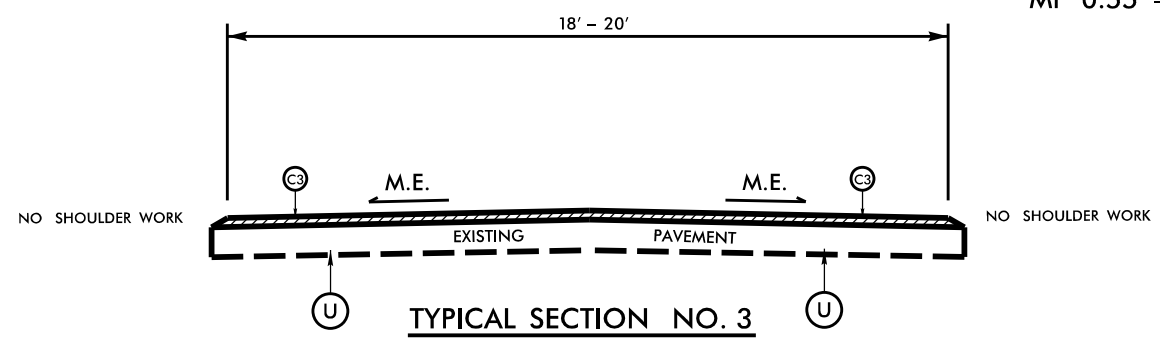
**TYPICAL SECTION NO. 1**

MAP NO. 1  
SR 1518 (FUNSTON / DAWS CREEK RD.)  
MP 0.00 – MP 0.55  
MP 0.58 – MP 6.90  
(SEE TYPICAL 2)



**TYPICAL SECTION NO. 2**

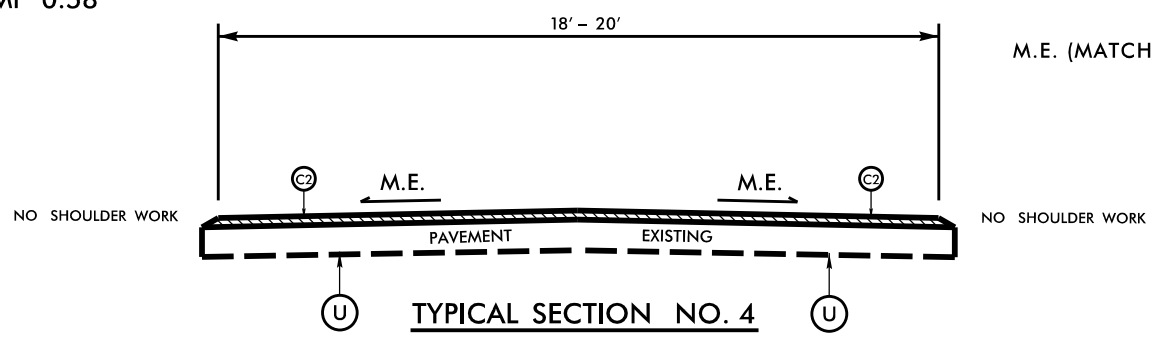
MAP NO. 1  
SR 1518 (FUNSTON RD.)  
BRIDGE NO. 38  
MP 0.55 – MP 0.58



**TYPICAL SECTION NO. 3**

MAP NO. 2  
SR 1827 (RIVERSIDE DR.)  
MP 0.00 – MP 0.85

MAP NO. 3  
SR 1123 (FISHERMAN RD.)  
MP 0.00 – MP 0.27



**TYPICAL SECTION NO. 4**

MAP NO. 4  
SR 1239 (OCEAN VIEW AVE.)  
MP 0.07 – MP 0.68

MAP NO. 5  
SR 1521 (FUNSTON RD.)  
MP 3.32 – MP 4.80

MAP NO. 6  
SR 1531 (CAISON LOOP RD.)  
MP 0.00 – MP 1.55

**PAVEMENT SCHEDULE**

C1	PROP. APPROX. 1 1/2" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
C2	PROP. APPROX. 1" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ.YD.
C3	PROP. APPROX. 3/4" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ.YD.
E1	PROP. APPROX. 5" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ.YD.
R1	EXISTING CONCRETE BRIDGE RAIL
T1	ASB SHOULDER MATERIAL (SHOULDER RECONSTRUCTION)
U	EXISTING PAVEMENT
V1	1" MILLING

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

NOTES: SHOULDER WORK ON MAP NO. 1 – 2 AS NEEDED, TO BE DETERMINED BY ENGINEER.

MAPS NO. 1 – 2 SHALL HAVE ASB SHOULDER MATERIAL (T1)

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

MAPS NO. 1-2: THE CONTRACTOR SHALL RETAIN EXISTING LANE WIDTHS AND RESTRIPE WITH 2' PAVED SHOULDERS

M.E. (MATCH EXISTING SLOPE)

REVISIONS

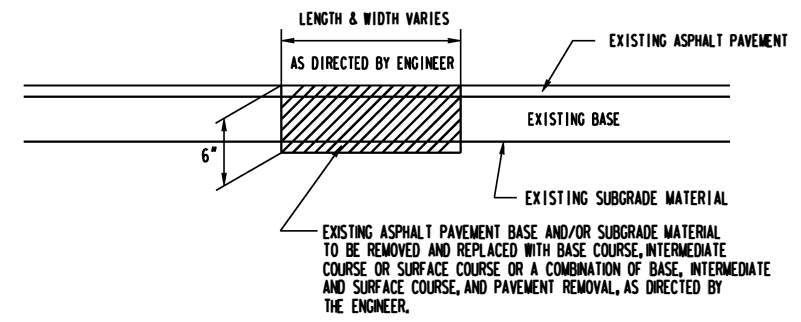
SECTION 12 - PAVEMENT MARKINGS, MARKERS AND DELINEATION

2018 ROADWAY ENGLISH STANDARD DRAWINGS  
EFF. 01-16-2018

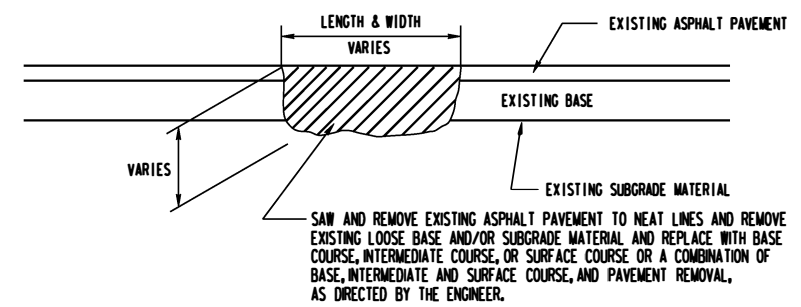
The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 12 - PVMT MARKING, MARKERS AND DELINEATION	
1205.08	Pavement Markings - Symbols & Word Messages

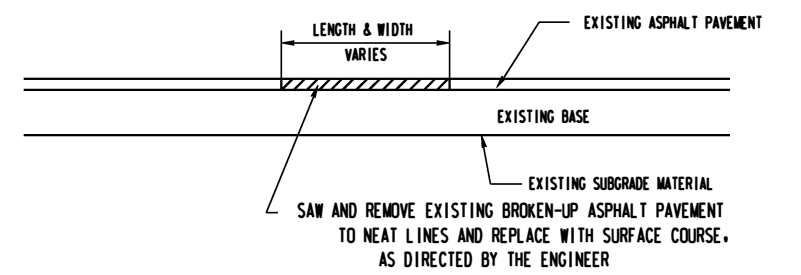
DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



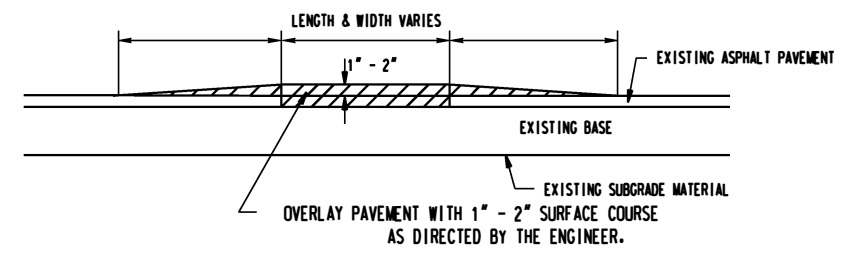
DETAIL NO. 1



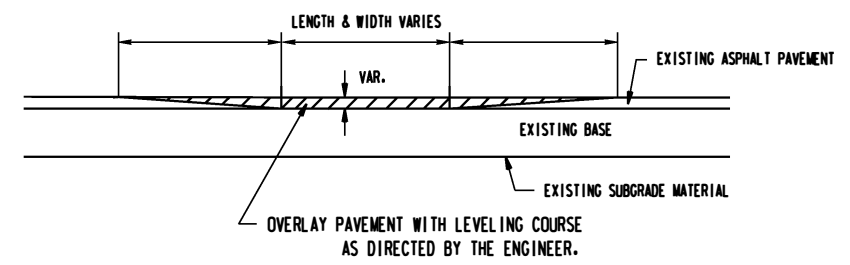
DETAIL NO. 2



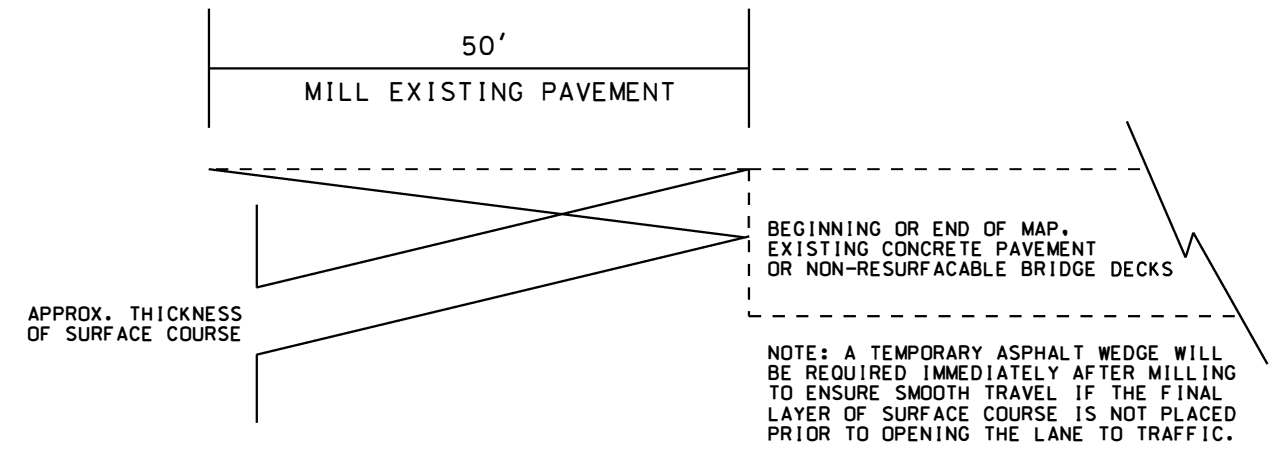
DETAIL NO. 3



DETAIL NO. 4



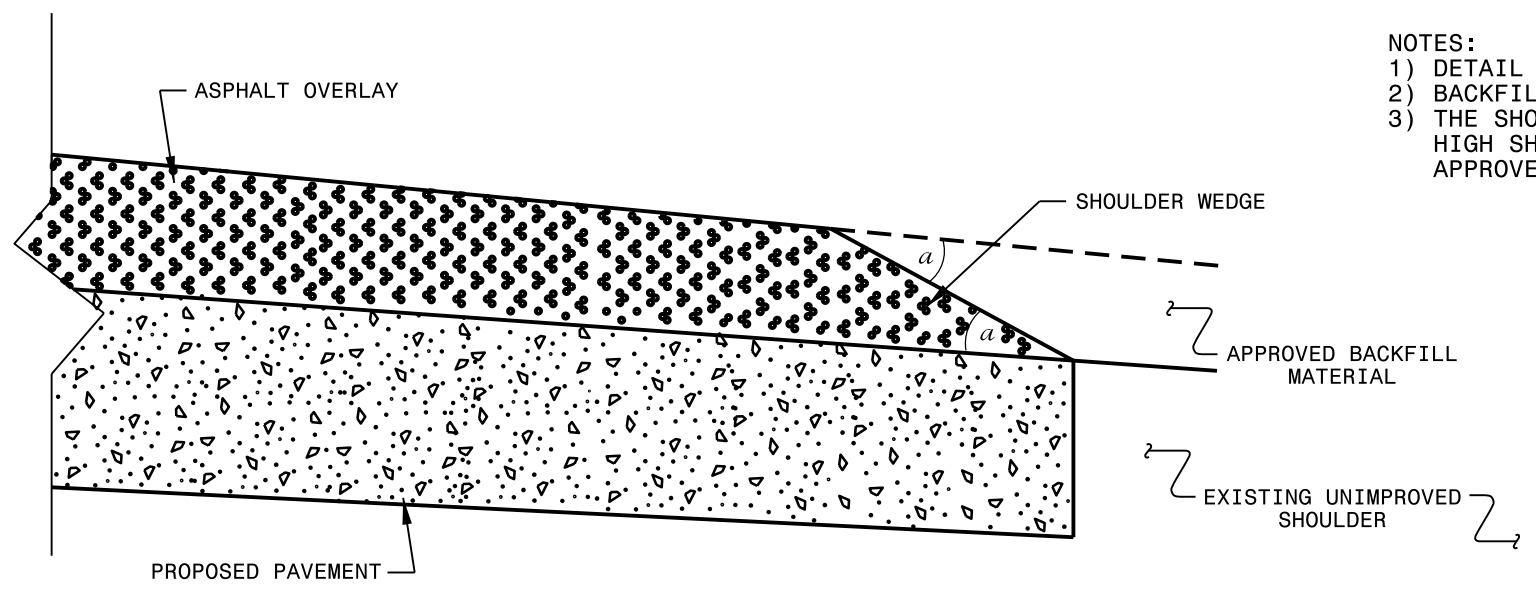
DETAIL NO. 5



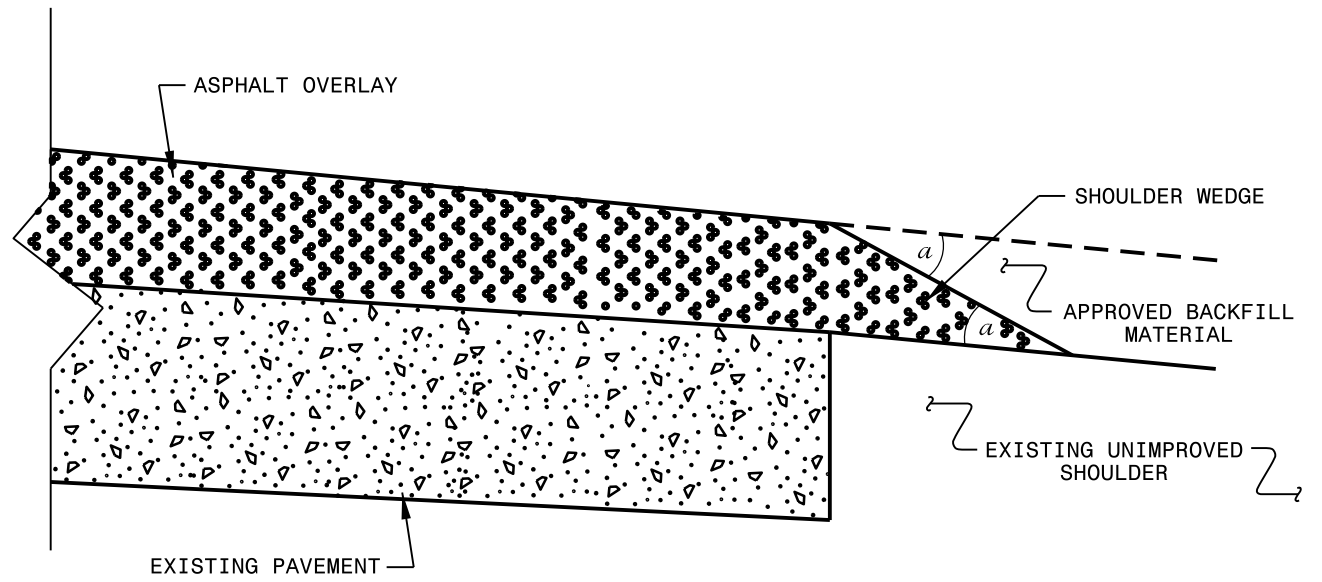
DETAIL FOR MILLING & INCIDENTAL MILLING PAY ITEMS:  
MAY BE USED AT THE BEGINNING & END OF MAPS  
AND AT APPROACH & TRAILING ENDS OF BRIDGES

5/14/199 28-SEP-2018 12:50 c:\p\cadd\station\files\rdy\_patch.dgn

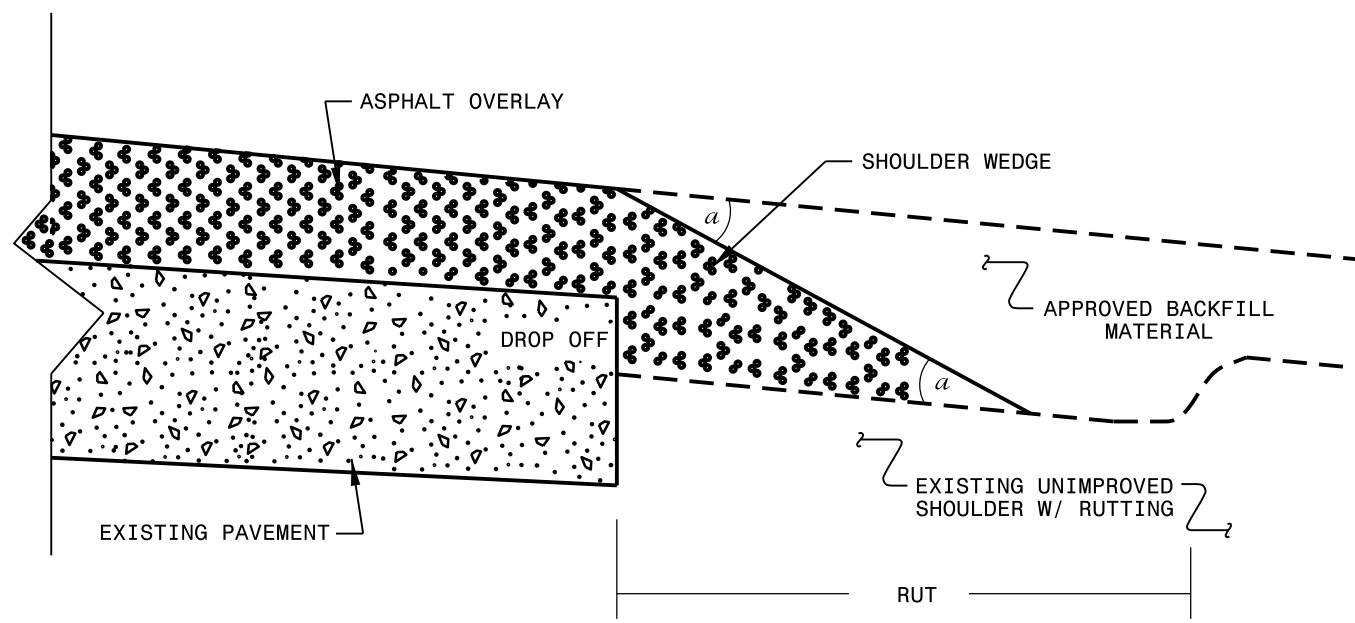
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



**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			

27 JUN 2018 13:22 s:\projects\Resurfacing Projects\Division 3\Sampson August 2018\Revised Shoulder Wedge Detail.dgn  
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DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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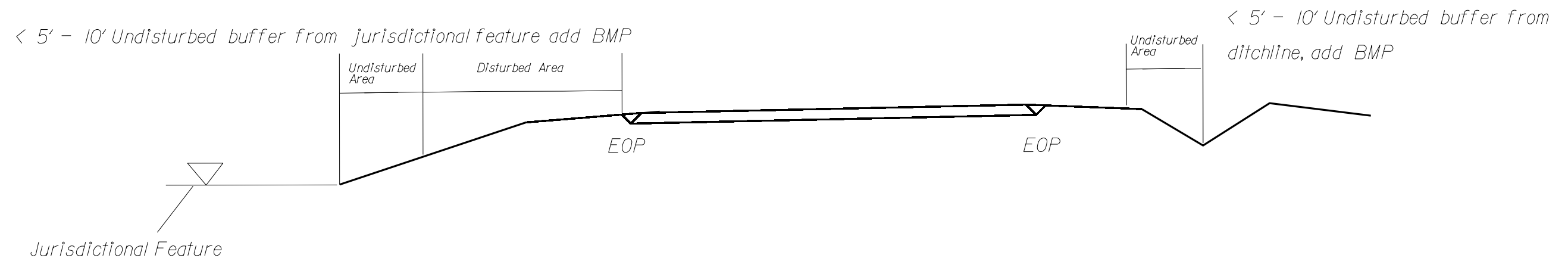
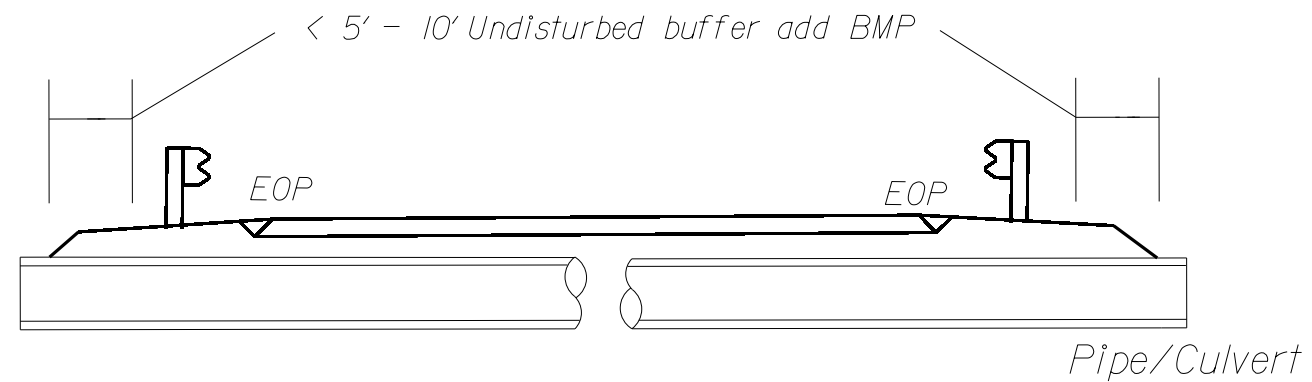
## ***SOIL STABILIZATION TIMEFRAMES***

<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.

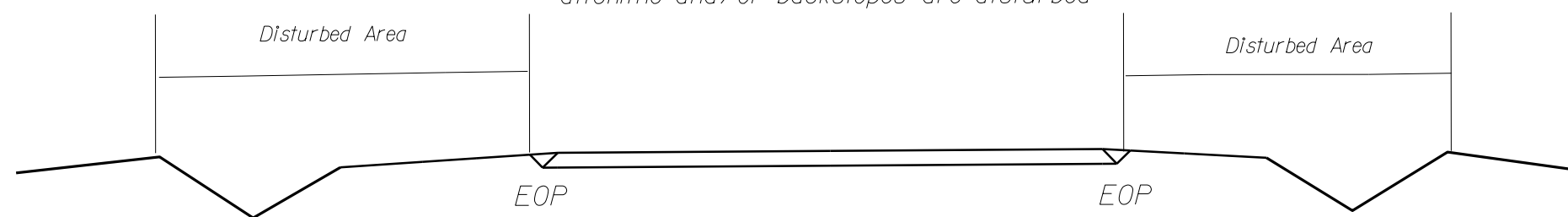
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

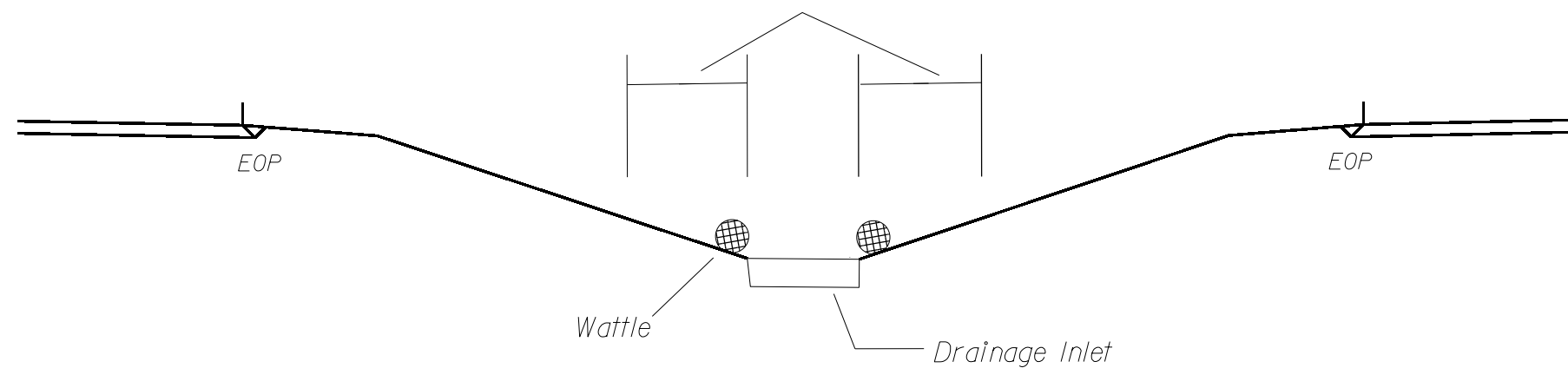
# EROSION CONTROL DETAIL



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

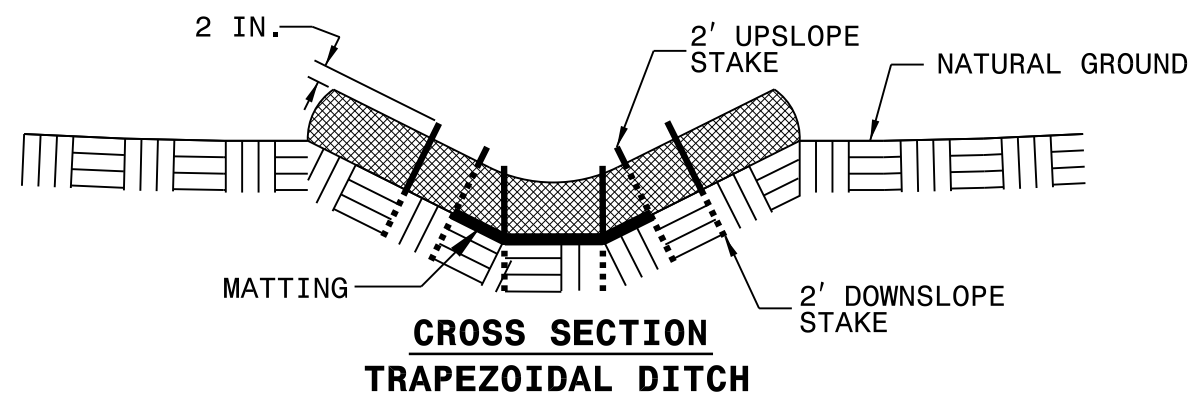
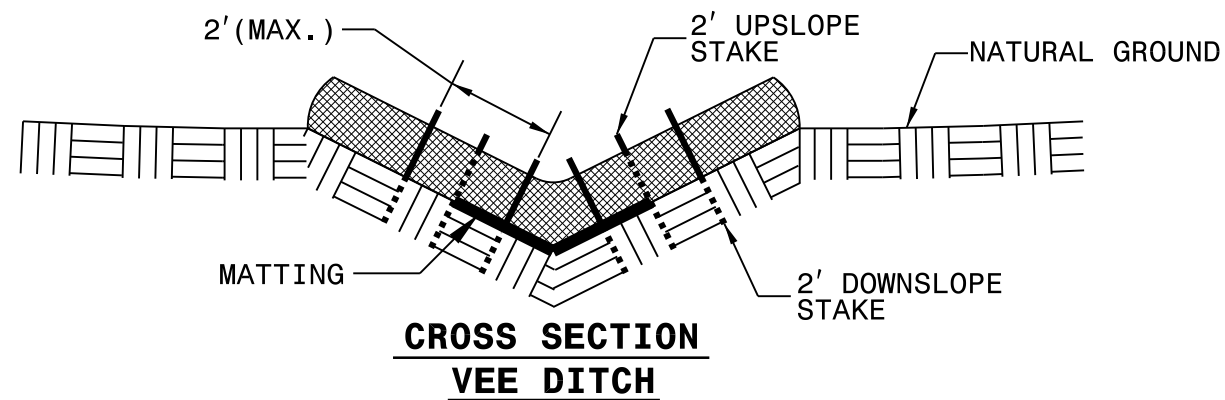
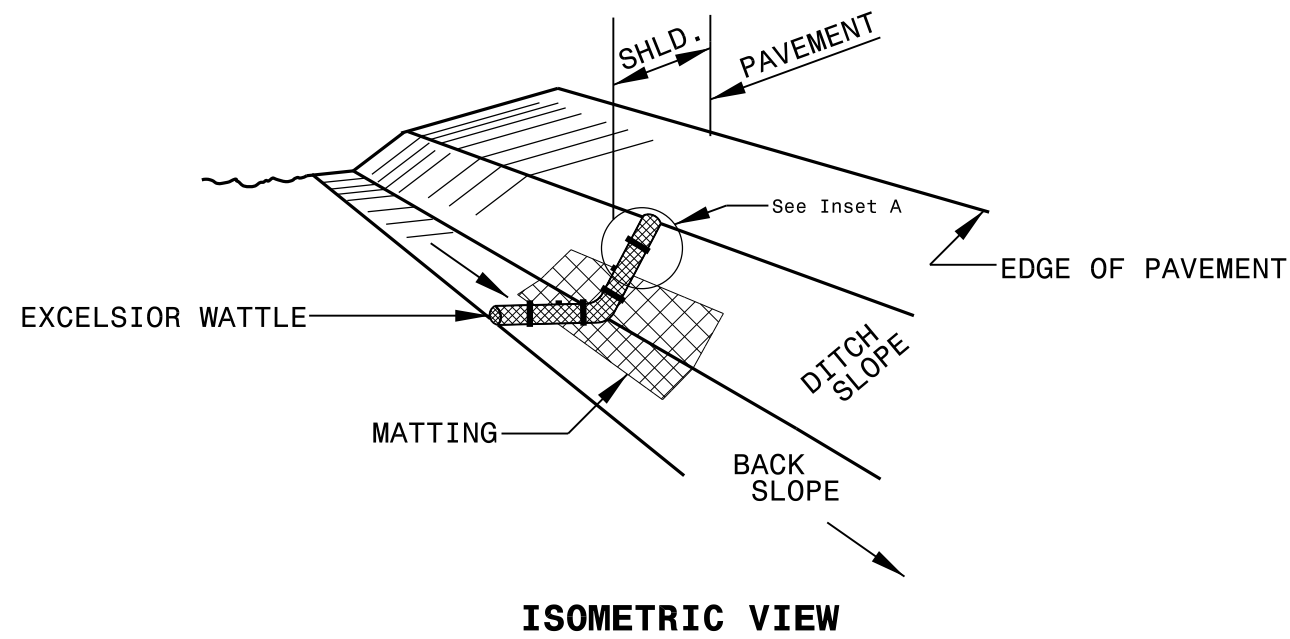


< 5' - 10' Undisturbed buffer from inlet, add wattle



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.

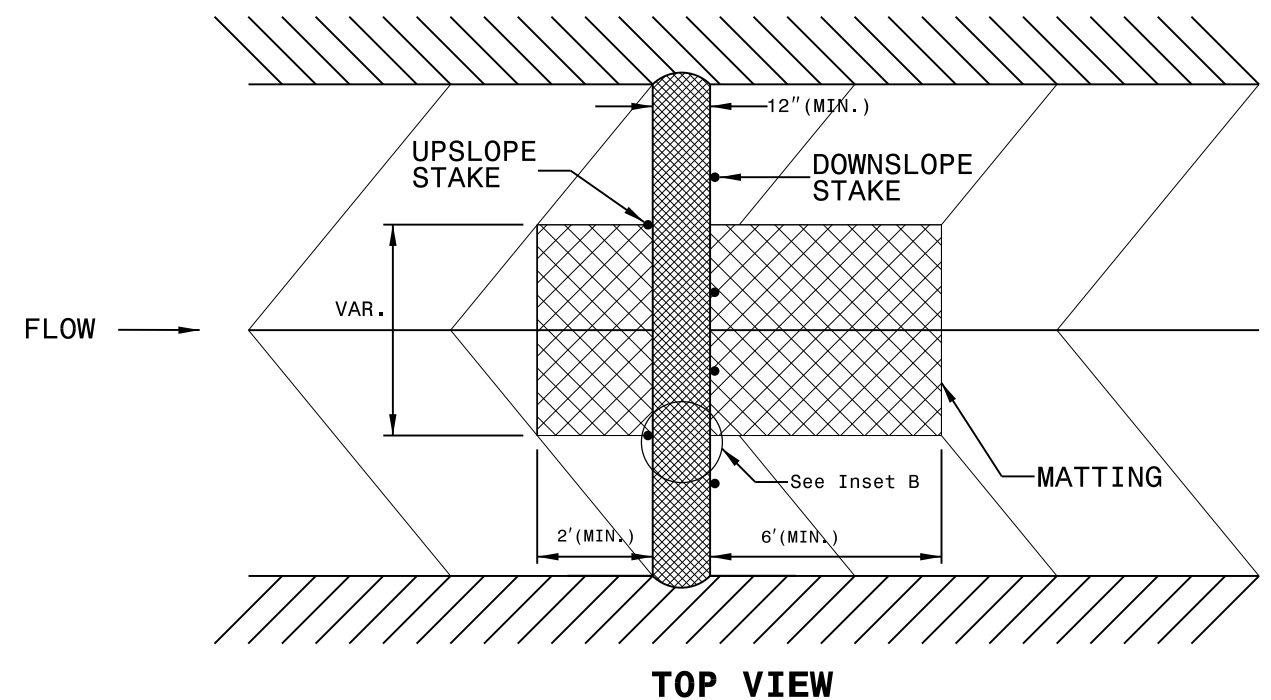
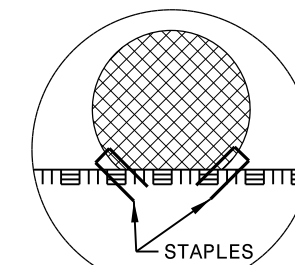
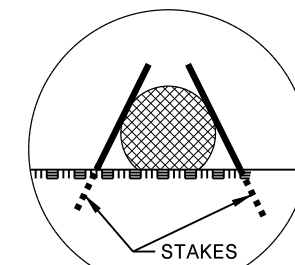
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.



I:\FFB-2015 Iir41  
 0:\Resurfacing\03\2015\Resurfacing\Pender County\Plan Sheets\3CR\20711.173. EC RESURF\_2015.dgn  
 11/19/2015 10:41:10 AM





PROJECT NO.	SHEET NO.
2024CPT.03.01.20101, Etc.	6

**SUMMARY OF QUANTITIES**

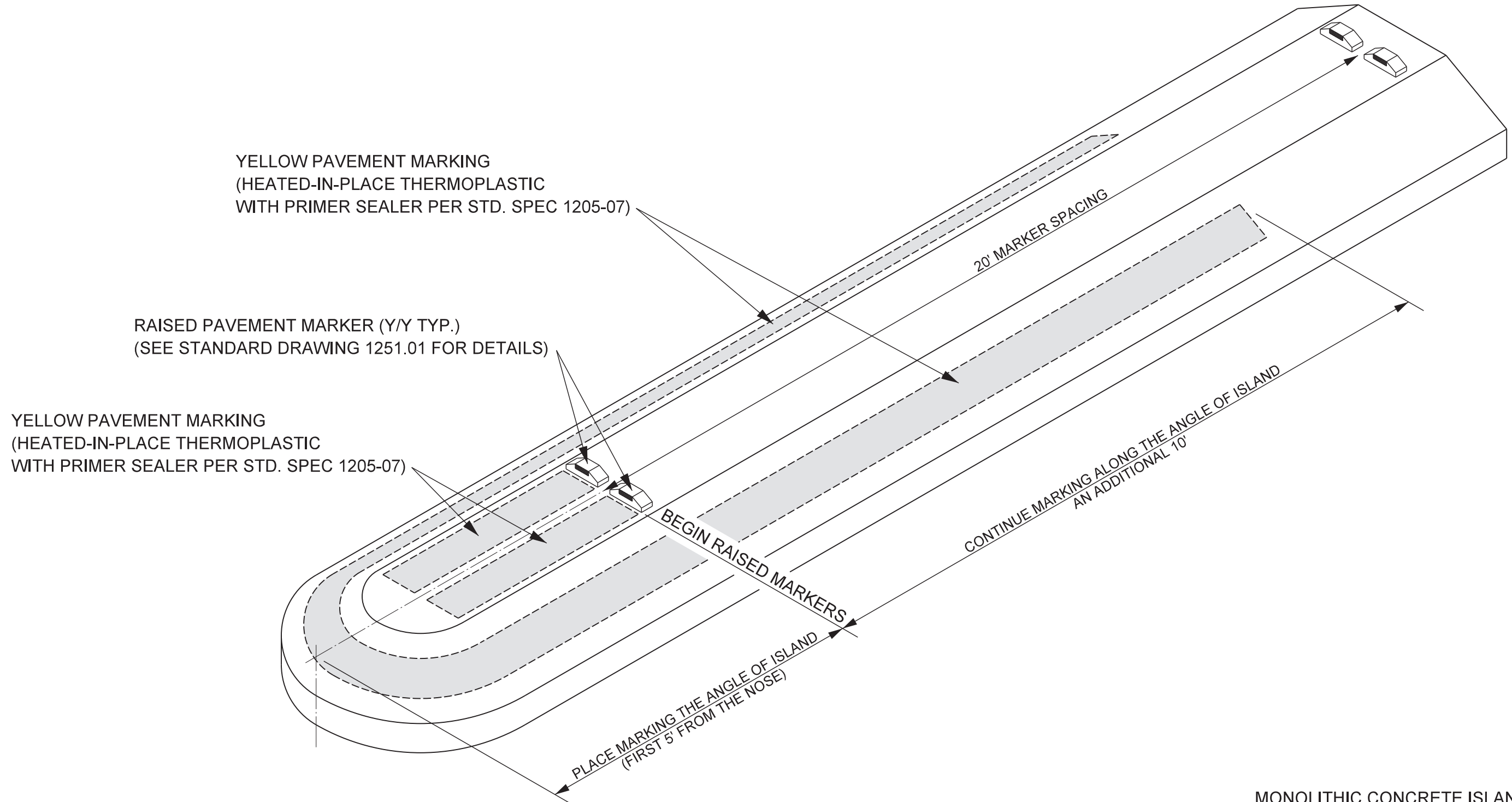
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH		BEGIN MP	END MP	6009000000-E	6012000000-E	6015000000-E	6018000000-E	6021000000-E	6036000000-E	6042000000-E	6071010000-E	6084000000-E	6090000000-E	6093000000-E	6117000000-N	
										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			TON	TON	ACR	LBS	TON	SY	LF	LF	AC	LB	TON	EA	
2024CPT.03.01.20101	Brunswick	1	SR-1518 / DAWS CREEK FUNSTON RDS	FROM NC HWY 87 (GEORGE II HWY) TO NC 133 (RIVER RD) [MP 0.00 - MP 6.90]	1,2	2	2WU	NO	NO	6.90	22	0	6.90	175	175	7.00	345	1.75	50	345	110	6.70	345	1.75	14	
<b>TOTAL FOR MAP NO. 1</b>										<b>6.90</b>				<b>175</b>	<b>175</b>	<b>7.00</b>	<b>345</b>	<b>1.75</b>	<b>50</b>	<b>345</b>	<b>110</b>	<b>6.70</b>	<b>345</b>	<b>1.75</b>	<b>14</b>	
<b>TOTAL FOR PROJ NO. 2024CPT.03.01.20101</b>										<b>6.90</b>		<b>0</b>	<b>6.90</b>	<b>175</b>	<b>175</b>	<b>7.00</b>	<b>345</b>	<b>1.75</b>	<b>50</b>	<b>345</b>	<b>110</b>	<b>6.70</b>	<b>345</b>	<b>1.75</b>	<b>14</b>	
2024CPT.03.01.20102	Brunswick	2	SR-1827 / RIVERSIDE DR	FROM SR 1122 ( VARNAMTOWN RD SW) TO END MAINTENANCE [MP 0.00 - MP 0.79]	3	2	2WU	NO	NO	0.79	20	0	0.79													
<b>TOTAL FOR MAP NO. 2</b>										<b>0.79</b>																
2024CPT.03.01.20102	Brunswick	3	SR-1123 / FISHERMAN RD	FROM SR 1122 (VARNAMTOWN RD SW) TO END OF MAINTENANCE [MP 0.00 - MP 0.27]	3	2	2WU	NO	NO	0.27	18	0	0.27													
<b>TOTAL FOR MAP NO. 3</b>										<b>0.27</b>																
2024CPT.03.01.20102	Brunswick	4	SR-1239 / OCEAN VIEW AVE SW	FROM SR 1240 (CAISON AVE SW) TO SR 1894 (SEA WAY ST SW) [MP 0.07 - MP 0.68]	4	2	2WU	NO	NO	0.61	18	0.07	0.68													
<b>TOTAL FOR MAP NO. 4</b>										<b>0.61</b>																
2024CPT.03.01.20102	Brunswick	5	SR-1521 / FUNSTON RD SE	FROM SR 1539 (E. BOILING SPRING RD) TO SR 1518 (DAWS CREEK RD) [MP 3.32 - MP 4.80]	4	2	2WU	NO	NO	1.48	20	3.32	4.8													
<b>TOTAL FOR MAP NO. 5</b>										<b>1.48</b>																
2024CPT.03.01.20102	Brunswick	6	SR-1531 / CAISON LOOP RD SE	FROM SR 1518 (FUNSTON RD) TO SR 1518 (FUNSTON RD) [MP 0.00 - MP 1.55]	4	2	2WU	NO	NO	1.55	20	0	1.55													
<b>TOTAL FOR MAP NO. 6</b>										<b>1.55</b>																
<b>TOTAL FOR PROJ NO. 2024CPT.03.01.20102</b>										<b>4.7</b>		<b>3.39</b>	<b>8.09</b>													
<b>GRAND TOTAL</b>										<b>11.6</b>		<b>3.39</b>	<b>14.99</b>	<b>175</b>	<b>175</b>	<b>7.00</b>	<b>345</b>	<b>1.75</b>	<b>50</b>	<b>345</b>	<b>110</b>	<b>6.70</b>	<b>345</b>	<b>1.75</b>	<b>14</b>	

PROJECT NO.	SHEET NO.
2024CPT.03.01.20101, Etc.	7

### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4457000000-N	4685000000-E		4704000000-E	4709000000-E	4720000000-E	4900000000-N	
								MI	FT			WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	THERMO PAVEMENT MARKING LINES (16" X 90 MILS)	THERMO PAVEMENT MARKING LINES (24" X 90 MILS)	THERMO RXR 90 MILS	YELLOW & YELLOW MARKERS	
								SF				LF	LF	LF	LF	EA	EA			
2024CPT.03.01.20101	Brunswick	1	SR-1518 / DAWS CREEK RD - FUNSTON RD	FROM NC HWY 87 (GEORGE II HWY) TO NC 133 (RIVER RD) [MP 0.00 - MP 6.90]	1,2	2	2WU	6.90	22	0	6.90	3,784	0.60	72,912	45,117	120	108	6	481	
<b>TOTAL FOR MAP NO. 1</b>								<b>6.90</b>				<b>3,784</b>	<b>0.60</b>	<b>72,912</b>	<b>45,117</b>	<b>120</b>	<b>108</b>	<b>6</b>	<b>481</b>	
<b>TOTAL FOR PROJ NO. 2024CPT.03.01.20101</b>								<b>6.90</b>		<b>0</b>	<b>6.90</b>	<b>3,784</b>	<b>0.60</b>	<b>72,912</b>	<b>45,117</b>	<b>120</b>	<b>108</b>	<b>6</b>	<b>481</b>	
												<b>118,029</b>								
2024CPT.03.01.20102	Brunswick	2	SR-1827 / RIVERSIDE DR	FROM SR 1122 ( VARNAMTOWN RD SW) TO END MAINTENANCE [MP 0.00 - MP 0.79]	3	2	2WU	0.79	20	0	0.79		0.07	8,976	8,976				55	
<b>TOTAL FOR MAP NO. 2</b>								<b>0.79</b>					<b>0.07</b>	<b>8,976</b>	<b>8,976</b>				<b>55</b>	
2024CPT.03.01.20102	Brunswick	3	SR-1123 / FISHERMAN RD	FROM SR 1122 (VARNAMTOWN RD SW) TO END OF MAINTENANCE [MP 0.00 - MP 0.27]	3	2	2WU	0.27	18	0	0.27		0.02	2,851	2,851				18	
<b>TOTAL FOR MAP NO. 3</b>								<b>0.27</b>					<b>0.02</b>	<b>2,851</b>	<b>2,851</b>				<b>18</b>	
2024CPT.03.01.20102	Brunswick	4	SR-1239 / OCEAN VIEW AVE SW	FROM SR 1240 (CAISON AVE SW) TO SR 1894 (SEA WAY ST SW) [MP 0.07 - MP 0.68]	4	2	2WU	0.61	18	0.07	0.68		0.05							
<b>TOTAL FOR MAP NO. 4</b>								<b>0.61</b>					<b>0.05</b>							
2024CPT.03.01.20102	Brunswick	5	SR-1521 / FUNSTON RD SE	FROM SR 1539 (E. BOILING SPRING RD) TO SR 1518 (DAWS CREEK RD) [MP 3.32 - MP 4.80]	4	2	2WU	1.48	20	3.32	4.8		0.13	15,764	11,723				98	
<b>TOTAL FOR MAP NO. 5</b>								<b>1.48</b>					<b>0.13</b>	<b>15,764</b>	<b>11,723</b>				<b>98</b>	
2024CPT.03.01.20102	Brunswick	6	SR-1531 / CAISON LOOP RD SE	FROM SR 1518 (FUNSTON RD) TO SR 1518 (FUNSTON RD) [MP 0.00 - MP 1.55]	4	2	2WU	1.55	20	0	1.55		0.13	16,368	12,325				102	
<b>TOTAL FOR MAP NO. 6</b>								<b>1.55</b>					<b>0.13</b>	<b>16,368</b>	<b>12,325</b>				<b>102</b>	
<b>TOTAL FOR PROJ NO. 2024CPT.03.01.20102</b>								<b>4.7</b>		<b>3.39</b>	<b>8.09</b>		<b>0.40</b>	<b>43,959</b>	<b>35,875</b>					<b>273</b>
												<b>79,834</b>								
<b>GRAND TOTAL</b>								<b>11.6</b>		<b>3.39</b>	<b>14.99</b>	<b>3,784</b>	<b>1</b>	<b>116,871</b>	<b>80,992</b>	<b>120</b>	<b>108</b>	<b>6</b>	<b>754</b>	
												<b>197,863</b>								

# CONCRETE ISLAND PAVEMENT MARKING & MARKER DETAIL



(DRAWING NOT TO SCALE)

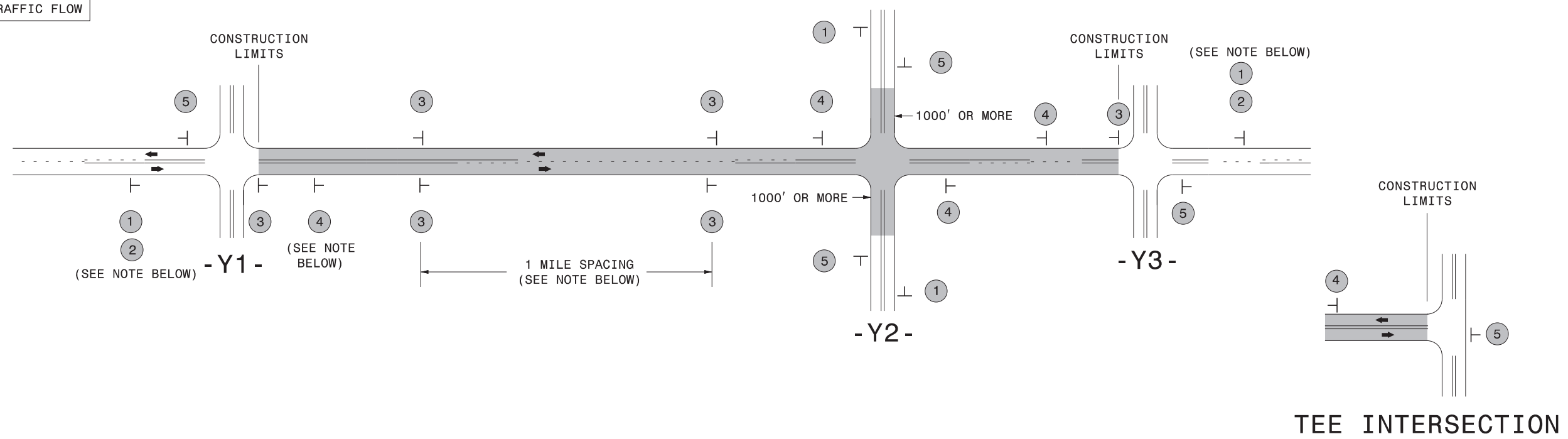
**MONOLITHIC CONCRETE ISLAND**  
(SEE STANDARD DRAWINGS 852.01,  
852.02, & 852.06 FOR DETAILS.)

# SIGNING FOR RESURFACING PROJECTS

**LEGEND**

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

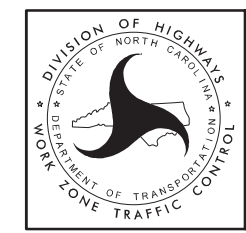
## -Y- LINE SIGNING

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 CONSTRUCTION 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"> <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;"> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> </div> <div style="text-align: center;"> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p> </div> </div>
		<p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	
		<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</p> <p>- 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>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</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.

**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**