

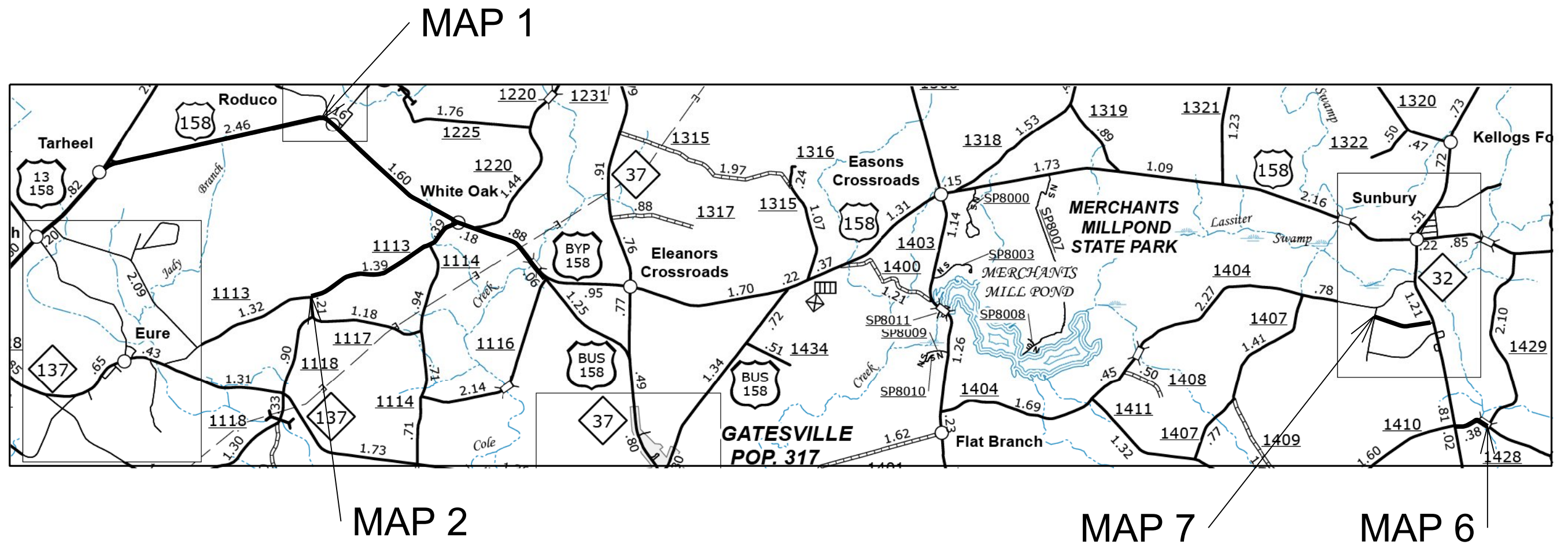
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2022CPT.01.04.10371.1, ETC.	1
	STATE PROJ. NO.	DESCRIPTION
	2022CPT.01.04.10371.1	PE, CONST.
	2022CPT.01.04.20371.1	PE, CONST.

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**GATES COUNTY**

**LOCATION:** MAP 1 - US 158 FROM US 13 TO US 158 ALT  
MAP 2 - SR 1113 (WHITE OAK RD.) FROM SR 1118 TO US 158  
MAP 6 - SR 1428 (BOSLEY RD.) FROM NC 32 TO SR 1429  
MAP 7 - SR 1436 (COSTEN RD.) FROM SR 1405 TO NC 32

**TYPE OF WORK:** AST (SINGLE/DOUBLE SEAL), MILLING, RESURFACING & SHOULDER RECONSTRUCTION



GRAPHIC SCALES

NTS

PROJECT LENGTH

MAP 1 = 5.17 MILES  
MAP 2 = 1.80 MILES  
MAP 6 = 0.38 MILES  
MAP 7 = 0.63 MILES

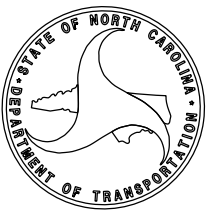
Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
113 Airport Dr., Edenton NC, 27932

2018 STANDARD SPECIFICATIONS

W. B. HOBBS, PE  
DIVISION PROJECT TEAM LEAD

C. E. SLACHTA  
DIVISION CONTRACT ENGINEER

S. P. FENWICK, PLS  
DIVISION DESIGN ENGINEER



13-AUG-2021 11:11 AM S:\Contracts\6) Proposed\_Resurfacing\DA00511-Gates\_Pri\_Sec\Design\_Files\DA00511\_DL\_shl.dgn 09/08/99 CONTRACT: DA00511 WBS ELEMENT: 2022CPT.01.04.10371.1, ETC

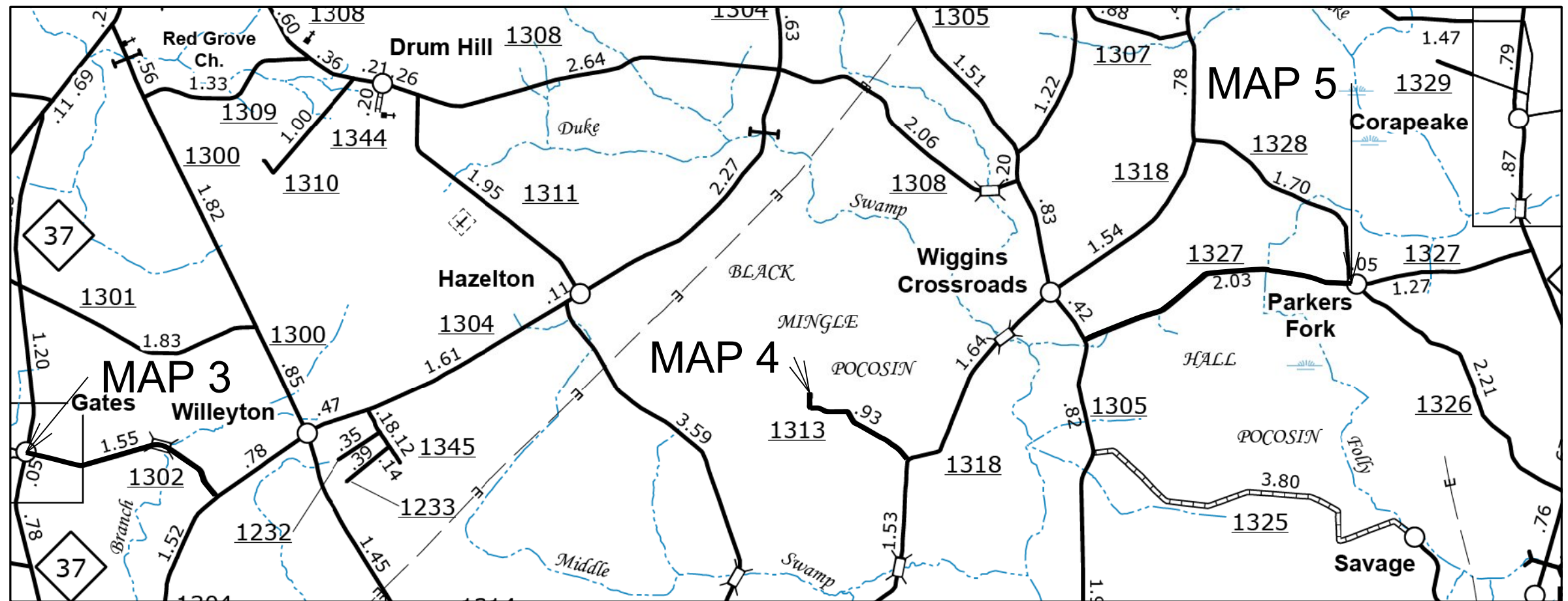
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2022CPT.01.04.10371.1, ETC.	
STATE PROJ. NO.		DESCRIPTION
2022CPT.01.04.20371.1		PE, CONST.

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**GATES COUNTY**

**LOCATION:** MAP 3 - SR 1302 (GATES BANK RD) FROM SR 1304 TO NC 37  
MAP 4 - SR 1313 (SAUNDERSTOWN RD) FROM SR 1318 TO DEAD END  
MAP 5 - SR 1327 (PARKERS FORK RD) FROM SR1305 TO SR 1328

**TYPE OF WORK:** AST (SINGLE/DOUBLE SEAL), MILLING, RESURFACING & SHOULDER RECONSTRUCTION



GRAPHIC SCALES

NTS

PROJECT LENGTH

MAP 3 = 1.55 MILES  
MAP 4 = 0.77 MILES  
MAP 5 = 2.03 MILES

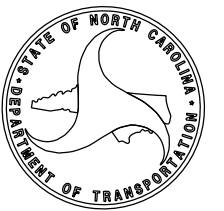
Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
113 Airport Dr., Edenton NC, 27932

2018 STANDARD SPECIFICATIONS

W. B. HOBBS, PE  
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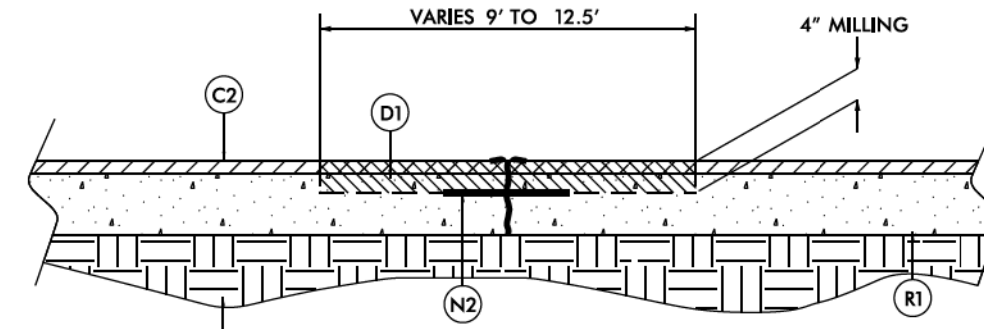
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At DIV01-304734  
Sfenwick  
09/08/99  
CONTRACT: DA00511 WBS ELEMENT: 2022CPT.01.04.10371.1, ETC

# PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	EXISTING ASPHALT CONCRETE SURFACE COURSE
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, SINGLE SEAL
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
N2	PROPOSED SELF-ADHESIVE PAVEMENT INTERLAYER
R1	EXISTING CONCRETE PAVEMENT.
T	EARTH MATERIAL
U	EXISTING PAVEMENT.
V1	MILLING ASPHALT PAVEMENT. 1.5" IN DEPTH.
V2	MILLING DEPTH PER DETAIL FOR JOINT REPAIR

**NOTES:**

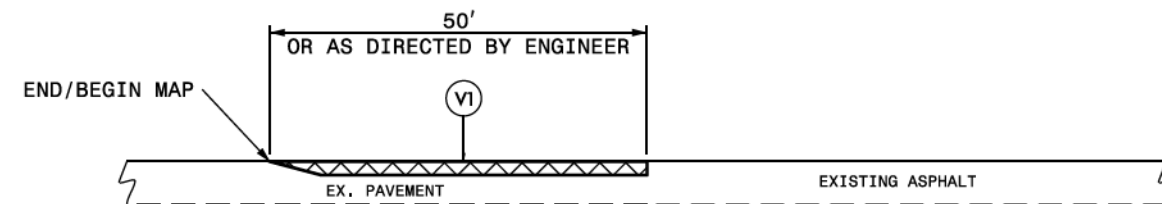
- \* ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- \* EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES
- \* PLACE PROPOSED SELF-ADHESIVE PAVEMENT INTERLAYER AND CONCRETE INTERMEDIATE COURSE TYPE I19.0C ON MAP1 IN LOCATIONS APPROVED BY ENGINEER, SEE DETAIL 2 & SPECIAL PROVISION.



**DETAIL 2**  
JOINT REPAIR DETAIL

**NOTE:**

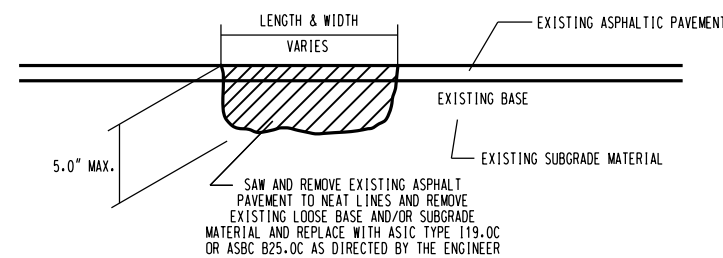
1. SAW CUT 4.5' TO 6.25' ON BOTH SIDES OF CRACK.
2. REMOVE EXISTING PAVEMENT STRUCTURE TO A DEPTH OF 4 INCHES.
3. SCHEDULE OPERATIONS SO ALL AREAS WHERE PAVEMENT HAS BEEN REMOVED WILL BE REPAIRED AND ALL LANES OF TRAFFIC RESTORED ON THE SAME DAY OF THE PAVEMENT REMOVAL. THE CONTRACTOR WILL BE RESTRICTED TO REPAIRING ONE SIDE OF THE EXISTING PAVEMENT AT A TIME UNLESS OTHERWISE PERMITTED BY THE ENGINEER.



**DETAIL 1**  
MAIN LINE MILLING

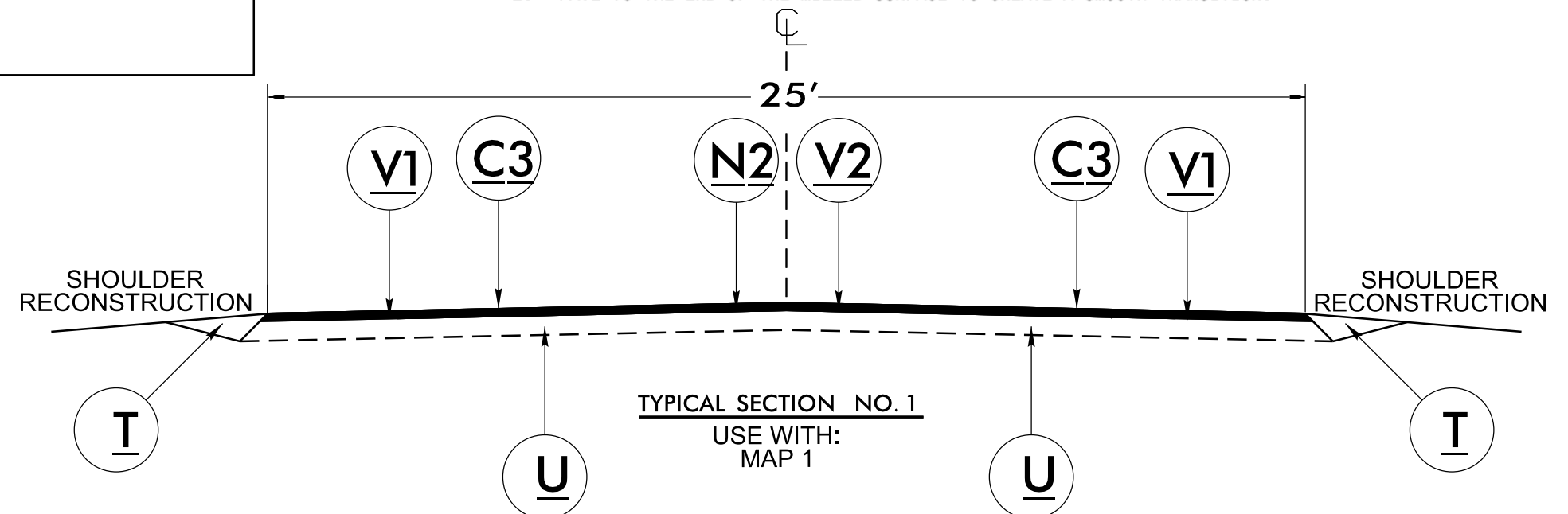
**NOTE:**

1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



#NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

**FULL DEPTH PATCHING 0 - 5"**



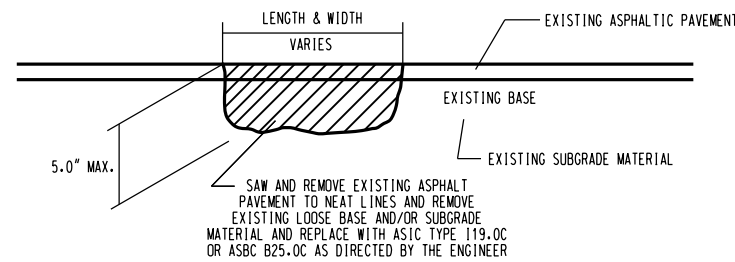
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 11/01/2021 11:35 AM

# PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, SINGLE SEAL
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
T	EARTH MATERIAL
U	EXISTING PAVEMENT.
V1	MILLING ASPHALT PAVEMENT. 1.5" IN DEPTH.

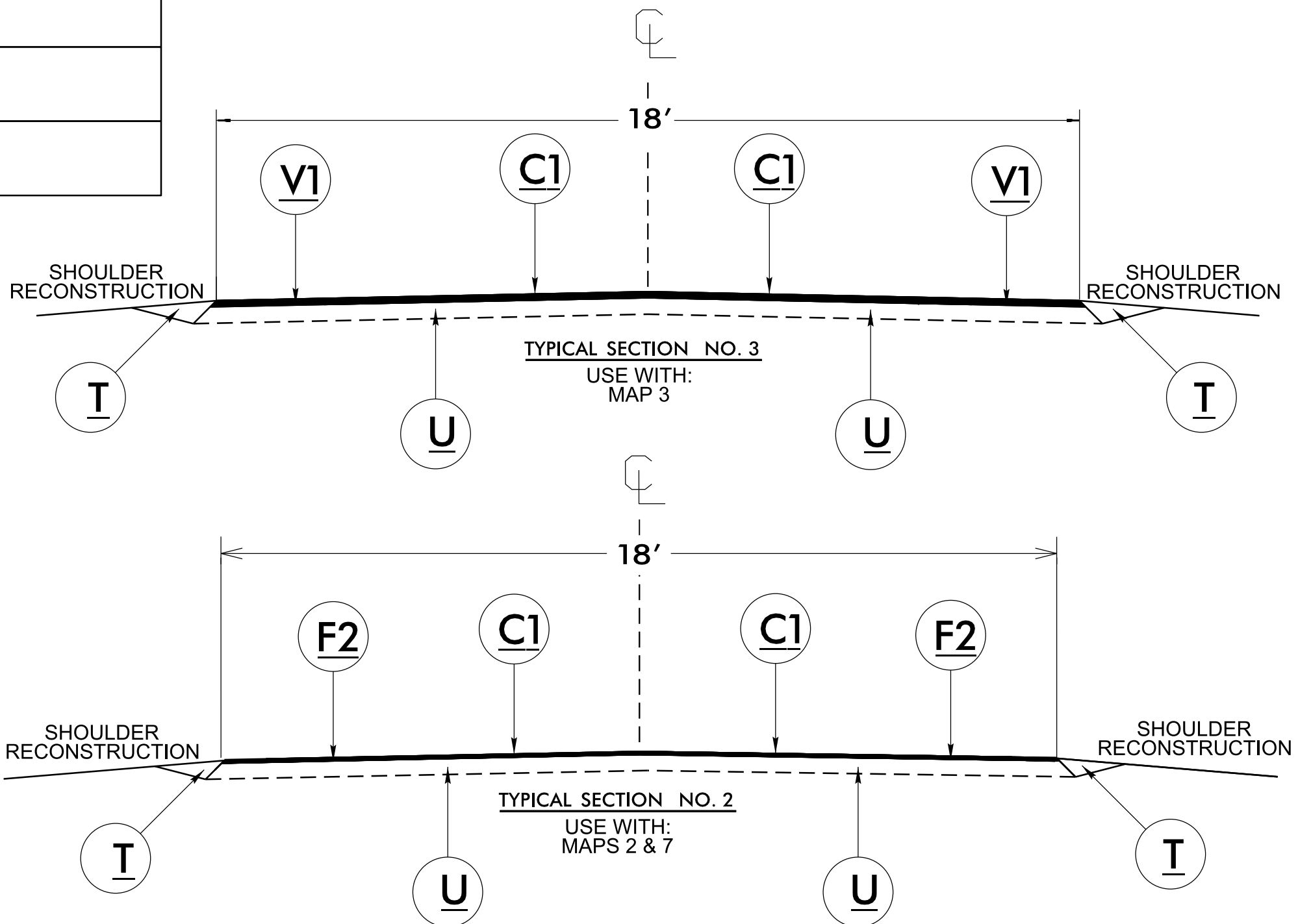
**NOTES:**

- \* ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- \* EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES
- \* ASPHALT SURFACE TREATMENT SHALL BE ALLOWED TO SET UP FOR A MINIMUM OF 10 DAYS AND A MAXIMUM OF 60 DAYS BEFORE ANY OTHER WORK CAN BE PERFORMED. ASPHALT SURFACE TREATMENT SHALL BE THOROUGHLY BROOMED TO REMOVE EXCESS AGGREGATE, PRIOR TO FINAL SURFACE LAYER BEING INSTALLED
- \* ASPHALT SURFACE TREATMENT (DOUBLE SEAL) CONSISTS OF TWO LAYERS OF TREATMENT: BOTTOM LAYER CONSISTS OF EMULSIFIED ASPHALT, GRADE CRS-2L AT A RATE OF APPROX. 0.30± GAL/SY AND A LAYER OF 78M AGGREGATE AT A RATE OF APPROX. 18± LBS/SY. TOP LAYER CONSISTS OF EMULSIFIED ASPHALT, GRADE CRS-2L AT A RATE OF APPROX. 0.25± GAL/SY AND A LAYER OF 5/16" LIGHTWEIGHT AGGREGATE AT A RATE OF APPROX. 9± LBS/SY.



\*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

## FULL DEPTH PATCHING 0 - 5"

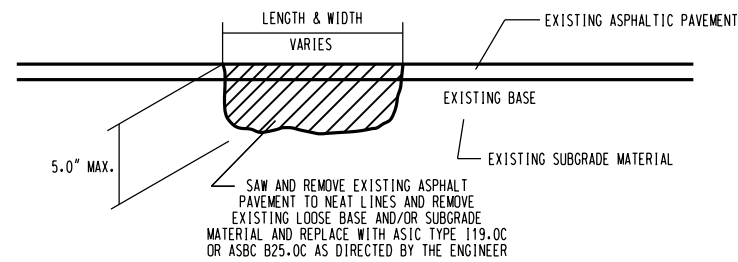


# PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, SINGLE SEAL
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
T	EARTH MATERIAL
U	EXISTING PAVEMENT.
V1	MILLING ASPHALT PAVEMENT. 1.5" IN DEPTH.

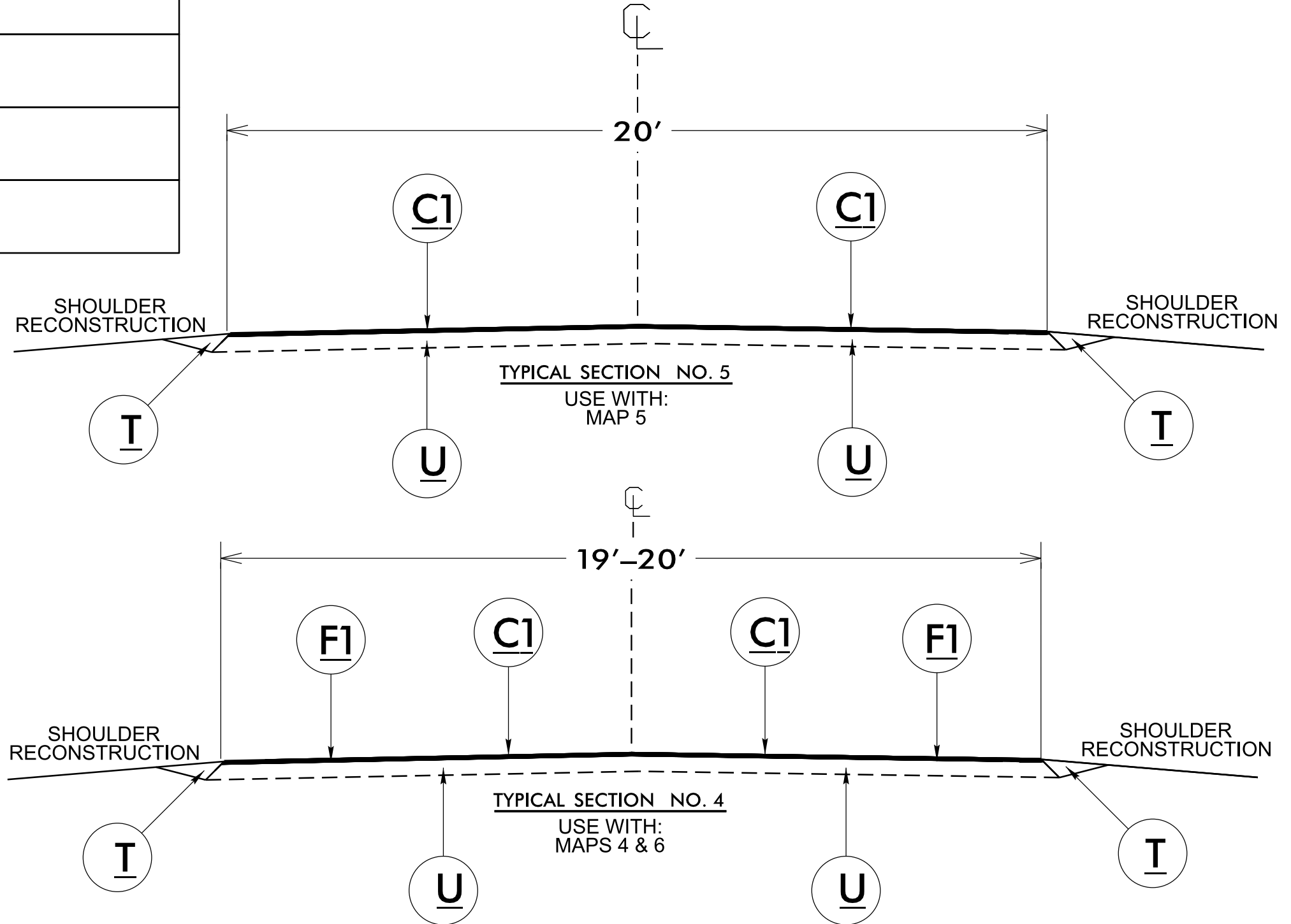
**NOTES:**

- \* ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- \* EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES
- \* ASPHALT SURFACE TREATMENT SHALL BE ALLOWED TO SET UP FOR A MINIMUM OF 10 DAYS AND A MAXIMUM OF 60 DAYS BEFORE ANY OTHER WORK CAN BE PERFORMED. ASPHALT SURFACE TREATMENT SHALL BE THOROUGHLY BROOMED TO REMOVE EXCESS AGGREGATE, PRIOR TO FINAL SURFACE LAYER BEING INSTALLED
- \* ASPHALT SURFACE TREATMENT (SINGLE SEAL) CONSISTS OF: ONE LAYER OF EMULSIFIED ASPHALT GRADE CRS-2L AT A RATE OF 0.28± GAL/SY AND ONE LAYER OF 5/16 LIGHTWEIGHT AGGREGATE AT A RATE OF 9± LBS/SY.



\*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

## FULL DEPTH PATCHING 0 - 5"



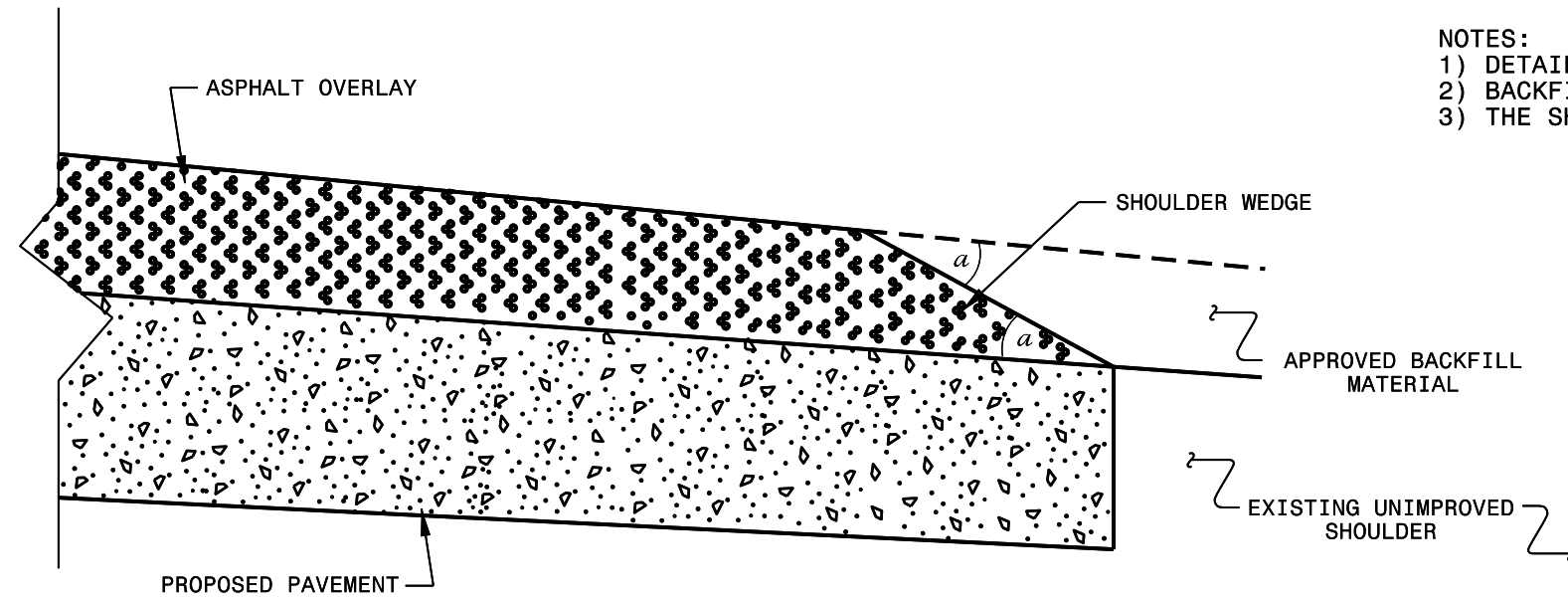
### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	MATERIAL TRANSFER VEHICLE REQUIRED	LENGTH	WIDTH	MOBILIZATION	BORROW EXCAVATION	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	MILLING ASPHALT PAVEMENT (1 1/2")	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, S9.5B	ASPHALT CONC SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	ASPHALT SURFACE TREATMENT, DOUBLE SEAL	ASPHALT SURFACE TREATMENT, SINGLE SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	GENERIC PAVING ITEM, PATCHING EXISTING PVT FULL DEPTH 0-5"	GENERIC PAVING ITEM, JOINT REPAIR	GENERIC PAVING ITEM, SELF ADHESIVE PAVEMENT INTERLAYER	STEEL BEAM GUARDRAIL	GUARDRAIL END UNITS, TYPE TL-3	GUARDRAIL ANCHOR UNITS, TYPE B-83	REMOVE EXISTING GUARDRAIL	TEMPORARY SILT FENCE	COIR FIBER WATTLE	SEEDING & MULCHING	RESPONSE FOR EROSION CONTROL			
																																				MI	FT	LS
2022CPT.01.04.10371.1	Gates	1	US158	US13 TO US158 ALT	1	2	2WU	NO	NO	YES	5.17	25	1	1,034	103	10.34	77,336	7,700		7,741	464				500	570	4,000	670	4	4	670	100	100	5.2	5			
<b>TOTAL FOR PROJ NO. 2022CPT.01.04.10371.1</b>											<b>5.17</b>	<b>*</b>	<b>1,034</b>	<b>103</b>	<b>10.34</b>	<b>77,336</b>	<b>7,700</b>		<b>7,741</b>	<b>464</b>				<b>500</b>	<b>570</b>	<b>4,000</b>	<b>670</b>	<b>4</b>	<b>4</b>	<b>670</b>	<b>100</b>	<b>100</b>	<b>5.2</b>	<b>5</b>				
2022CPT.01.04.20371.1	Gates	2	SR1113 WHITE OAK RD	SR1118 TAYLORS MILL RD TO US 158	2	2	2WU	NO	NO	NO	1.8	18	*	360	36	3.60		500	1,790		120	19,651		11,800	20							100	100	1.8	2			
2022CPT.01.04.20371.1	Gates	3	SR1302 GATES BANK RD	SR1304 WILLEYTON RD TO NC37	3	2	2WU	NO	NO	NO	1.55	18	*	310	31	3.10	16,368			100				20								100	100	1.6	2			
2022CPT.01.04.20371.1	Gates	4	SR1313 SAUNDERSTOWN RD	SR1318 MIDDLE SWAMP RD TO DEAD END	4	2	2WU	NO	NO	NO	0.77	20	*	154	15	1.54		200	835		56		9,160	2,750	25							100	100	0.8	1			
2022CPT.01.04.20371.1	Gates	5	SR1327 PARKERS FORK RD	SR1305 UNION BRANCH RD TO SR1328 PARKERS CHURCH RD	5	2	2WU	NO	NO	NO	2.03	20	*	406	41	4.06		300	2,209		148			20								100	100	2.0	2			
2022CPT.01.04.20371.1	Gates	6	SR 1428 BOSLEY RD	NC 32 TO SR 1429 SUGAR RUN RD	4	2	2WU	NO	NO	NO	0.38	19	*	76	8	0.76		500	441		30			1,500	20							100	100	0.4	1			
2022CPT.01.04.20371.1	Gates	7	SR 1436 COSTEN RD	SR 1405 BEAMON RD TO NC 32	2	2	2WU	NO	NO	NO	0.63	18	*	126	13	1.26		200	608		41	6,653		4,896	1,500	20					100	100	0.6	1				
<b>TOTAL FOR PROJ NO. 2022CPT.01.04.20371.1</b>											<b>7.16</b>	<b>*</b>	<b>1,432</b>	<b>144</b>	<b>14.32</b>	<b>16,368</b>	<b>1,700</b>	<b>7,379</b>		<b>495</b>	<b>26,304</b>	<b>14,056</b>	<b>20,050</b>	<b>125</b>											<b>600</b>	<b>600</b>	<b>7.2</b>	<b>8</b>
<b>GRAND TOTAL</b>											<b>12.33</b>	<b>1</b>	<b>2,466</b>	<b>247</b>	<b>24.66</b>	<b>93,704</b>	<b>9,400</b>	<b>7,379</b>	<b>7,741</b>	<b>959</b>	<b>26,304</b>	<b>14,056</b>	<b>20,050</b>	<b>625</b>	<b>570</b>	<b>4,000</b>	<b>670</b>	<b>4</b>	<b>4</b>	<b>670</b>	<b>700</b>	<b>700</b>	<b>12.4</b>	<b>13</b>				

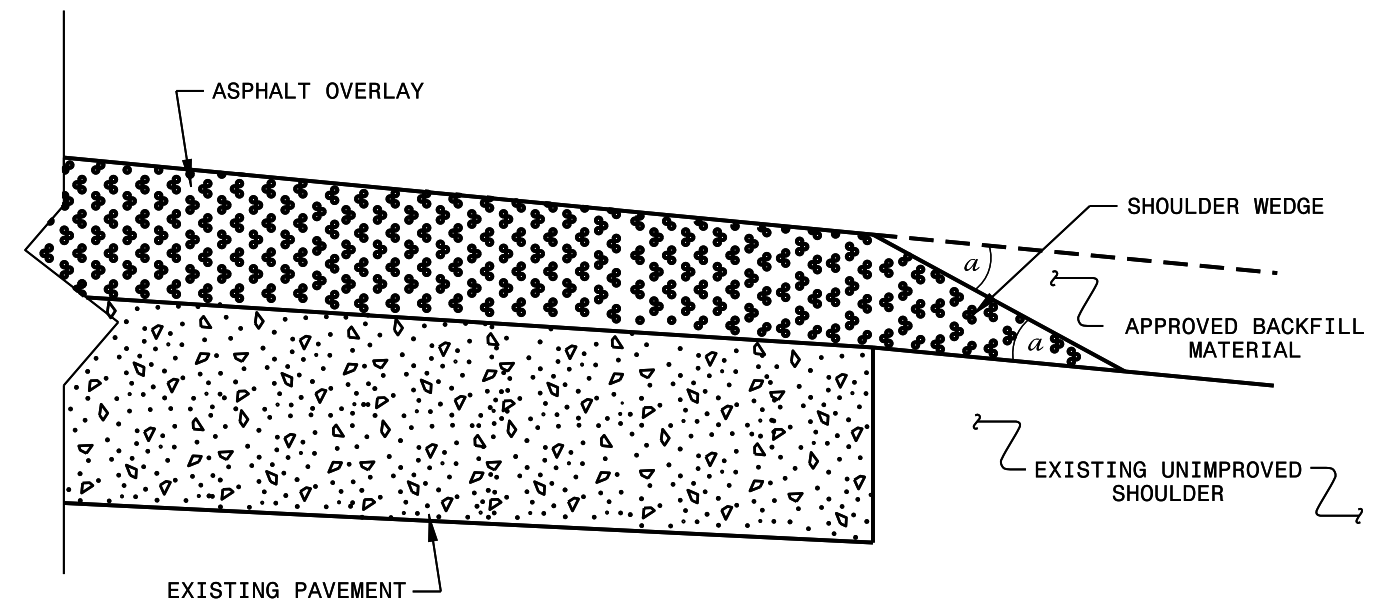
### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	MATERIAL TRANSFER VEHICLE REQUIRED	LENGTH	WIDTH	WORK ZONE ADV/GEN WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMO PAVEMENT MARKING LINES (6", 90 MILS) WHITE	THERMO PAVEMENT MARKING LINES (6", 90 MILS) YELLOW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	GENERIC PAVEMENT MARKING THERMO HOT SPRAY LINES (4" 55 MILS) WHITE	GENERIC PAVEMENT MARKING THERMO HOT SPRAY LINES (4" 55 MILS) YELLOW	GENERIC PAVEMENT MARKING ITEM, SNOWPLOWABLE PAVEMENT MARKER	
																						MI
2022CPT.01.04.10371.1	Gates	1	US158	US13 TO US158 ALT	1	2	2WU	NO	NO	YES	5.17	25	518	1	55,629	34,122	55,629	34,122				342
<b>TOTAL FOR PROJ NO. 2022CPT.01.04.10371.1</b>											<b>5.17</b>	<b>518</b>	<b>*</b>	<b>55,629</b>	<b>34,122</b>	<b>55,629</b>	<b>34,122</b>					<b>342</b>
2022CPT.01.04.20371.1	Gates	2	SR1113 WHITE OAK RD	SR1118 TAYLORS MILL RD TO US 158	2	2	2WU	NO	NO	NO	1.8	18	80	*			19,368	23,760	19,368	11,880		
2022CPT.01.04.20371.1	Gates	3	SR1302 GATES BANK RD	SR1304 WILLEYTON RD TO NC37	3	2	2WU	NO	NO	NO	1.55	18	80	*			16,678	10,230	16,678	10,230		
2022CPT.01.04.20371.1	Gates	4	SR1313 SAUNDERSTOWN RD	SR1318 MIDDLE SWAMP RD TO DEAD END	4	2	2WU	NO	NO	NO	0.77	20	80	*			8,285	10,164	8,285	5,082		
2022CPT.01.04.20371.1	Gates	5	SR1327 PARKERS FORK RD	SR1305 UNION BRANCH RD TO SR1328 PARKERS CHURCH RD	5	2	2WU	NO	NO	NO	2.03	20	256	*			21,843	13,398	21,843	13,398		
2022CPT.01.04.20371.1	Gates	6	SR 1428 BOSLEY RD	NC 32 TO SR 1429 SUGAR RUN RD	4	2	2WU	NO	NO	NO	0.38	19	80	*			4,089	5,016	4,089	2,508		
2022CPT.01.04.20371.1	Gates	7	SR 1436 COSTEN RD	SR 1405 BEAMON RD TO NC 32	2	2	2WU	NO	NO	NO	0.63	18	80	*			6,779	8,316	6,779	4,158		
<b>TOTAL FOR PROJ NO. 2022CPT.01.04.20371.1</b>											<b>7.16</b>	<b>576</b>	<b>*</b>	<b>77,042</b>	<b>70,884</b>	<b>77,042</b>	<b>47,256</b>					
<b>GRAND TOTAL</b>											<b>12.33</b>	<b>1,094</b>	<b>1</b>	<b>55,629</b>	<b>34,122</b>	<b>132,671</b>	<b>105,006</b>	<b>77,042</b>	<b>47,256</b>			

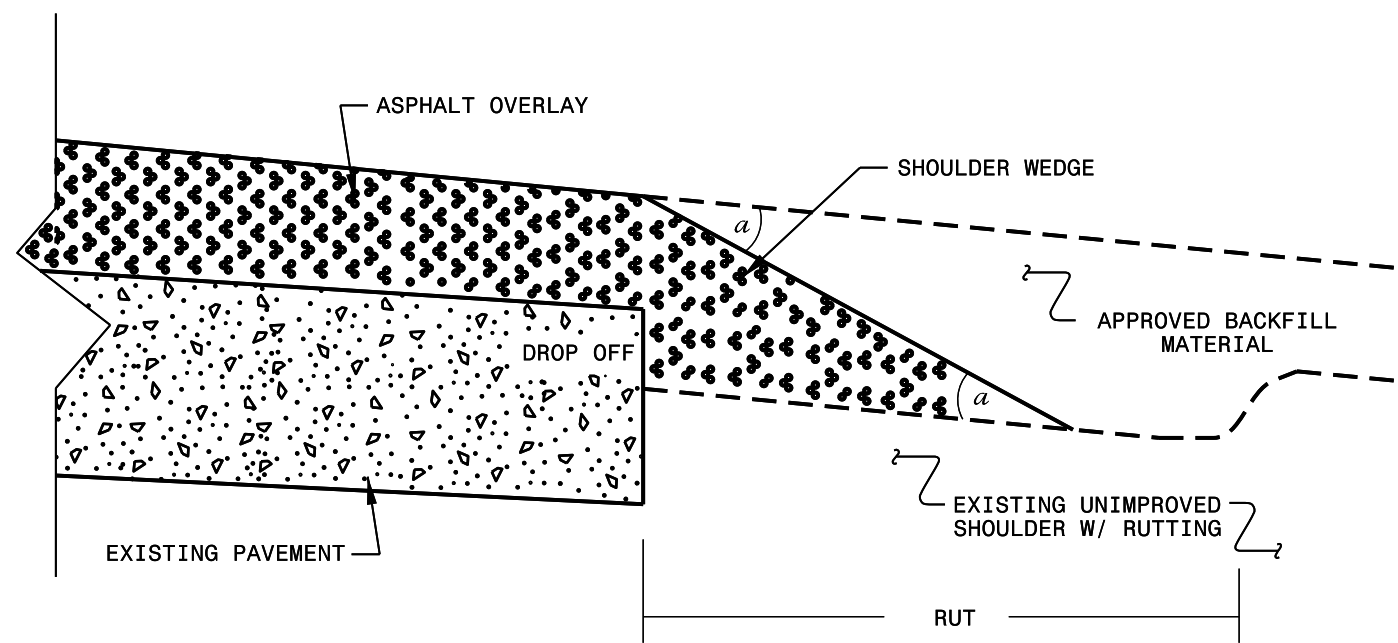
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



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





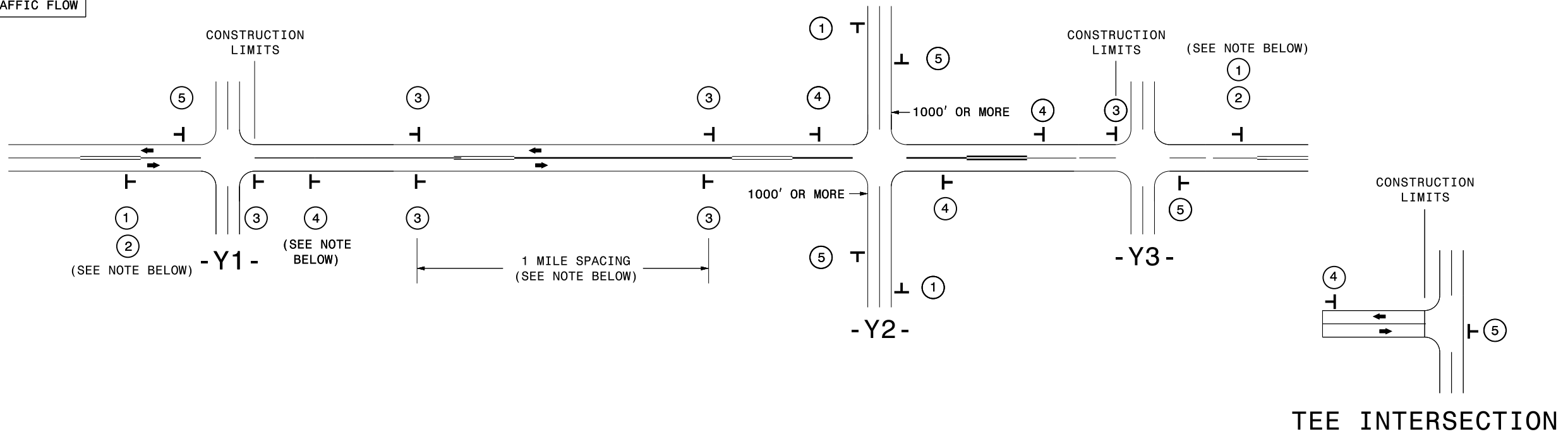
**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

<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: 10/16/12
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	








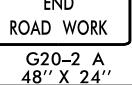
# SIGNING FOR RESURFACING PROJECTS

**LEGEND**  
 STATIONARY SIGN  
 DIRECTION OF TRAFFIC FLOW



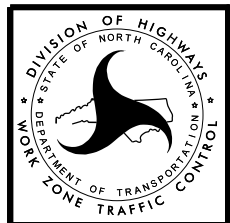
## MAINLINE (-L-) SIGNING

## -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>   <p>PLACED 500' IN ADVANCE OF FLAGGER.</p>
	 	<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>	
		<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>	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	
	<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 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.

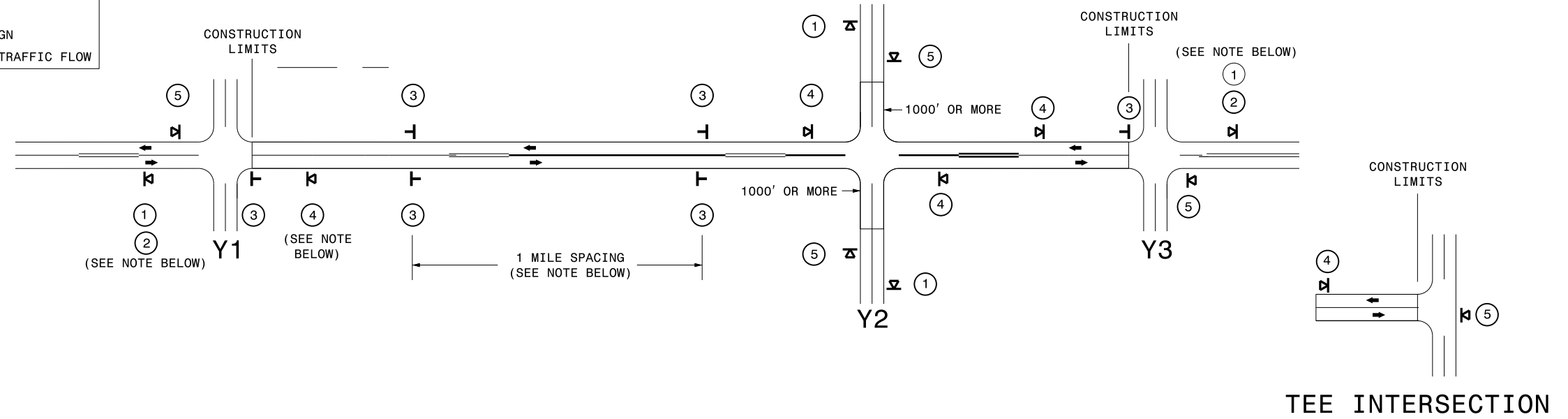


**ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING**



# SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND	
	PORTABLE SIGN
	STATIONARY SIGN
	DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

## -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	W20-1 48" X 48" W7-3aP 24" X 18" - PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. - 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.	STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:
	3	W8-7 48" X 48" SP 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.	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, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.
	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.	W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER.
	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.	
	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.		
<b>MAPS LESS THAN 2 MILES</b>	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.		

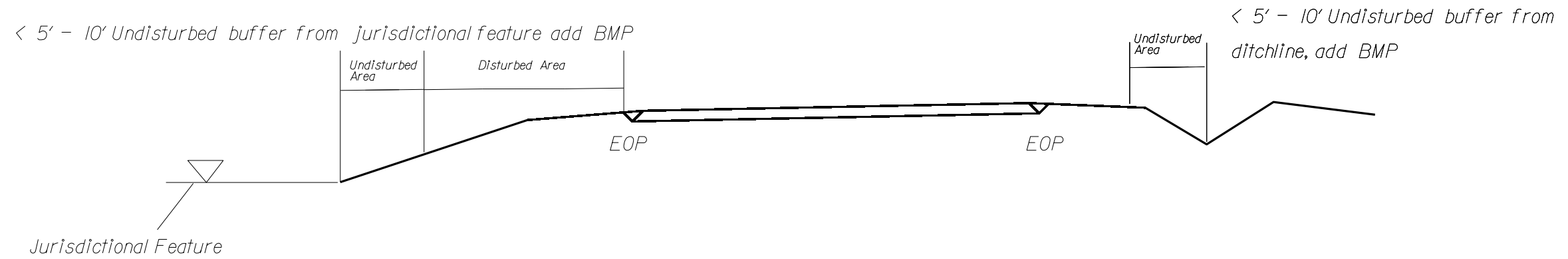
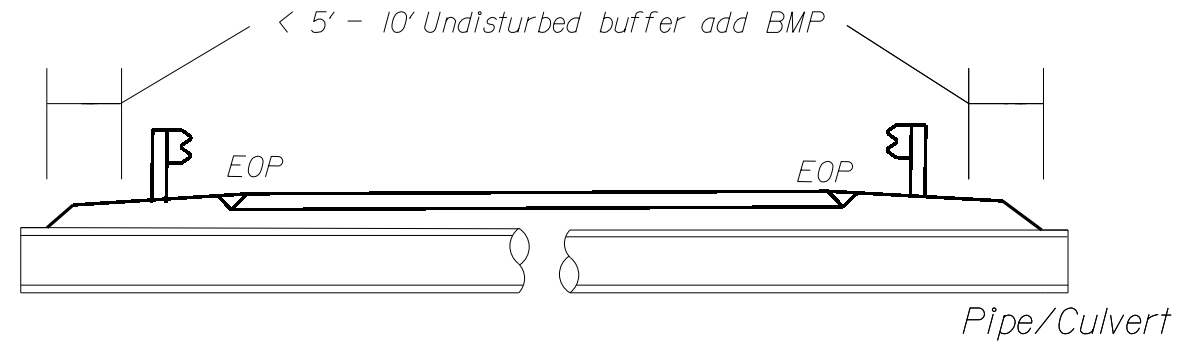
ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

I3-AUG-2021 10:03  
 S:\Contracts\6\Proposed\Resurfacing\DA00511-Cates\_Pri1\_Sec\Design\_Files\DA00511-DL-sh5.7-12.dgn  
 STENWICK AT D:\01-504734

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

BMP Options: Wattle or Silt Fence

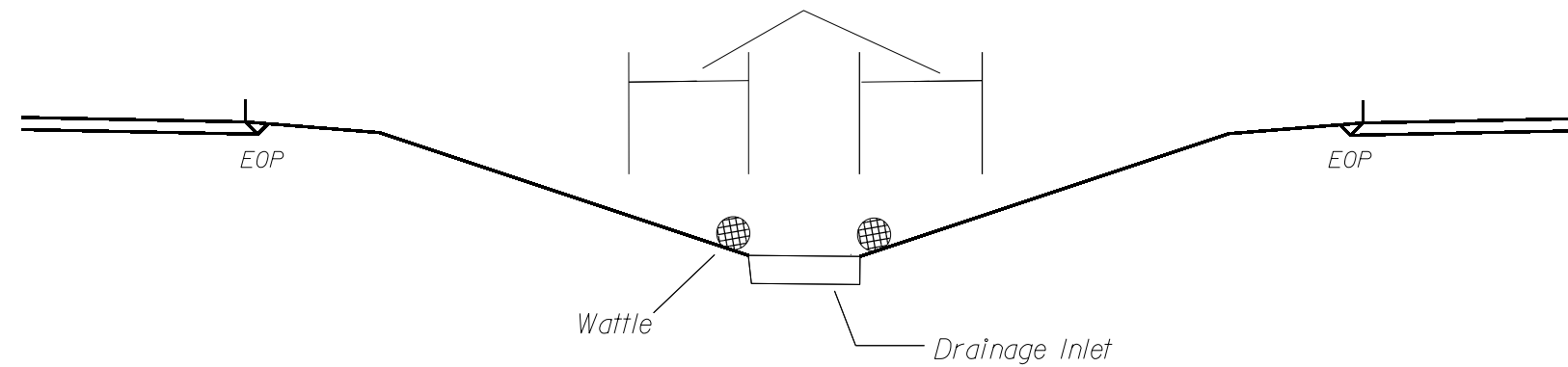
# EROSION CONTROL DETAIL



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

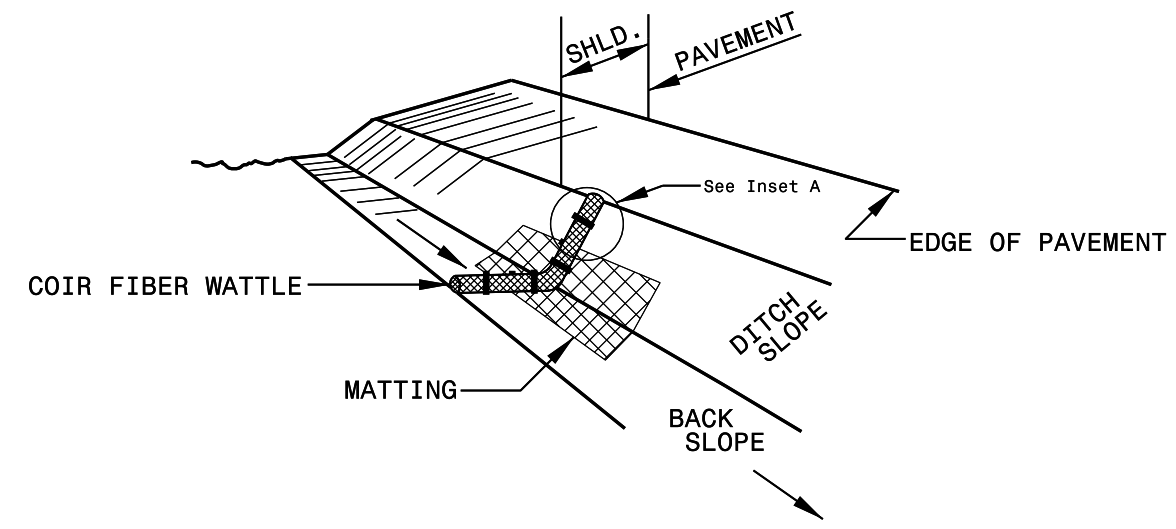


< 5' - 10' Undisturbed buffer from inlet, add wattle

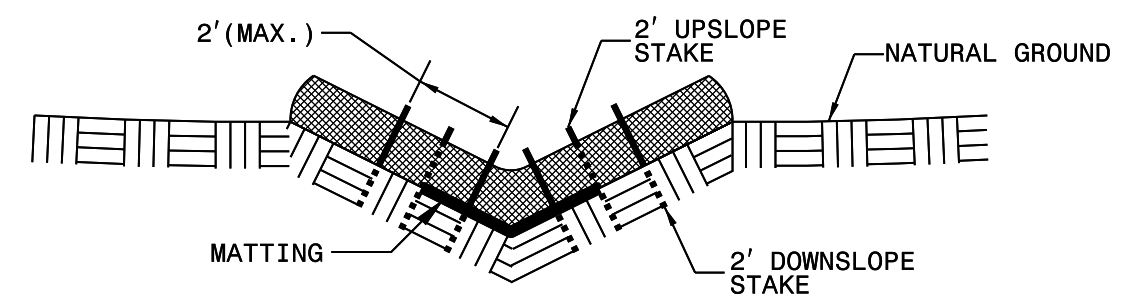


NOT TO SCALE

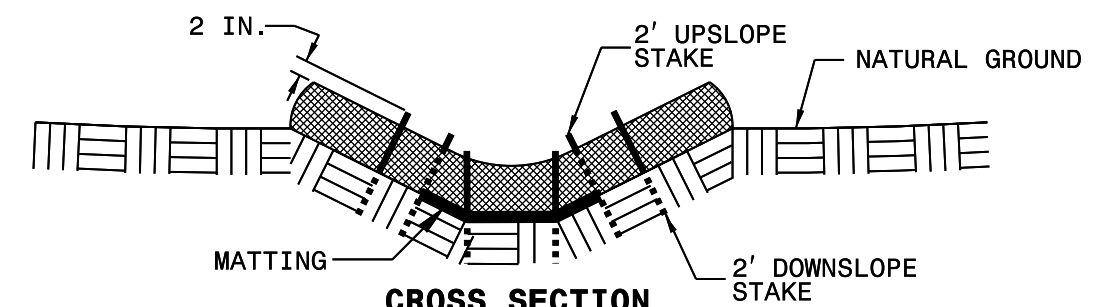
# COIR FIBER WATTLE DETAIL



**ISOMETRIC VIEW**



**CROSS SECTION VEE DITCH**



**CROSS SECTION TRAPEZOIDAL DITCH**

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

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

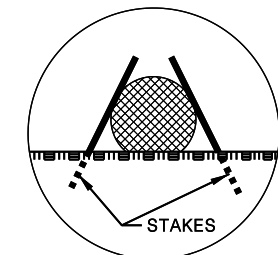
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

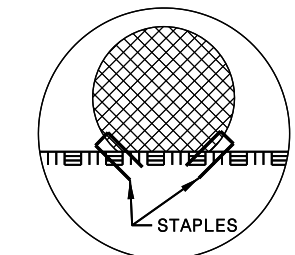
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

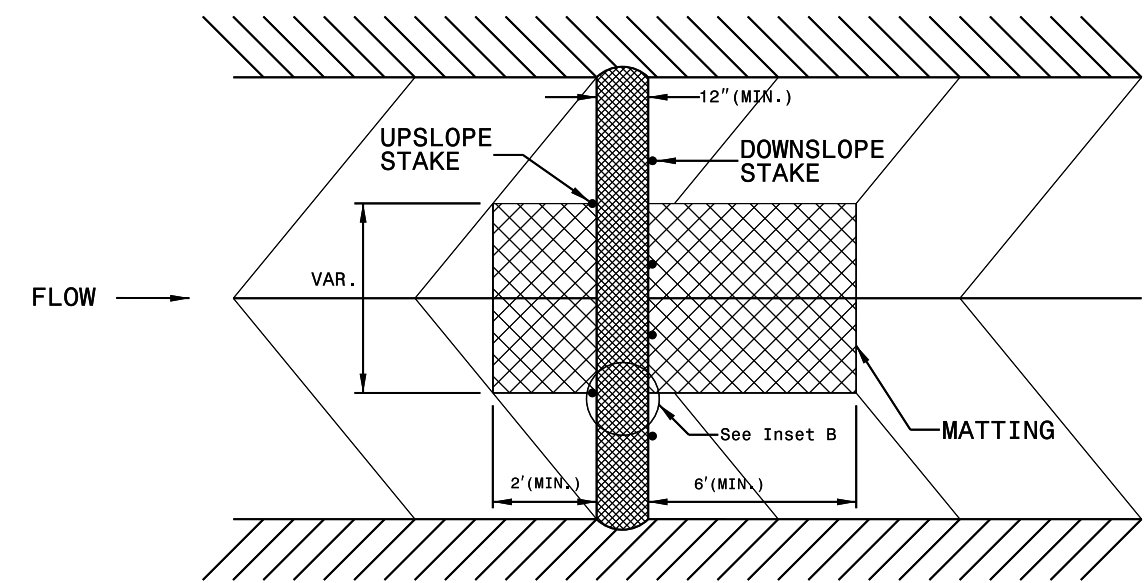
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



**TOP VIEW**

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.