

CONTRACT: **DA00534** WBS NO.: **2023CPT.01.03.20081.1, ETC.**

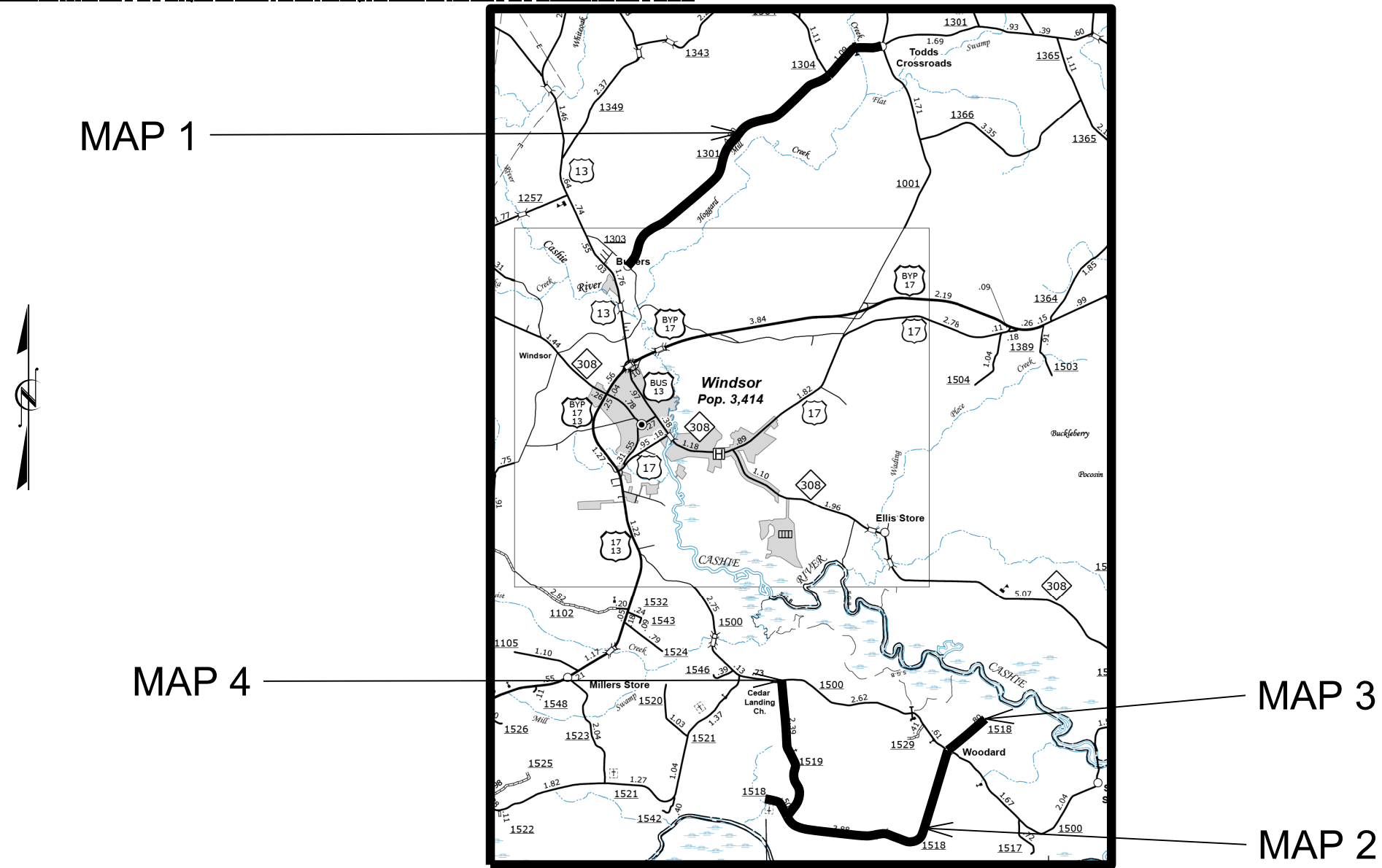
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BERTIE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2023CPT.01.03.20081.1, ETC	1
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2023CPT.01.03.20081.1		PE_CONST.

LOCATION: MAP 1 - SR 1301 (BULL HILL RD) FROM SR 1303 TO SR 1001
MAP 2 - SR 1518 (MIDDLE TRACK RD) FROM EOP TO SR 1500
MAP 3 - SR 1518 (BLANCHARDS RD) FROM SR 1500 TO EOP
MAP 4 - SR 1519 (MORNING RD) FROM SR 1518 TO SR 1500

TYPE OF WORK: AST, RESURFACING AND SHOULDER RECONSTRUCTION



GRAPHIC SCALES

NTS

PROJECT LENGTH

MAP 1 = 5.90 MILES
 MAP 2 = 4.47 MILES
 MAP 3 = 0.80 MILES
 MAP 4 = 2.39 MILES

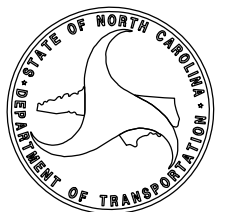
Prepared in the Office of:
DIVISION OF HIGHWAYS
 113 AIRPORT DR., EDENTON NC, 27932

2018 STANDARD SPECIFICATIONS

W. B. HOBBS, PE
 DIVISION PROJECT TEAM LEAD

CHRIS SLACHTA
 DIVISION CONTRACT ENGINEER

S. P. FENWICK, PLS
 DIVISION DESIGN ENGINEER



CONTRACT: DA00534 WBS NO.: 2023CPT.01.03.20081.1, ETC.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

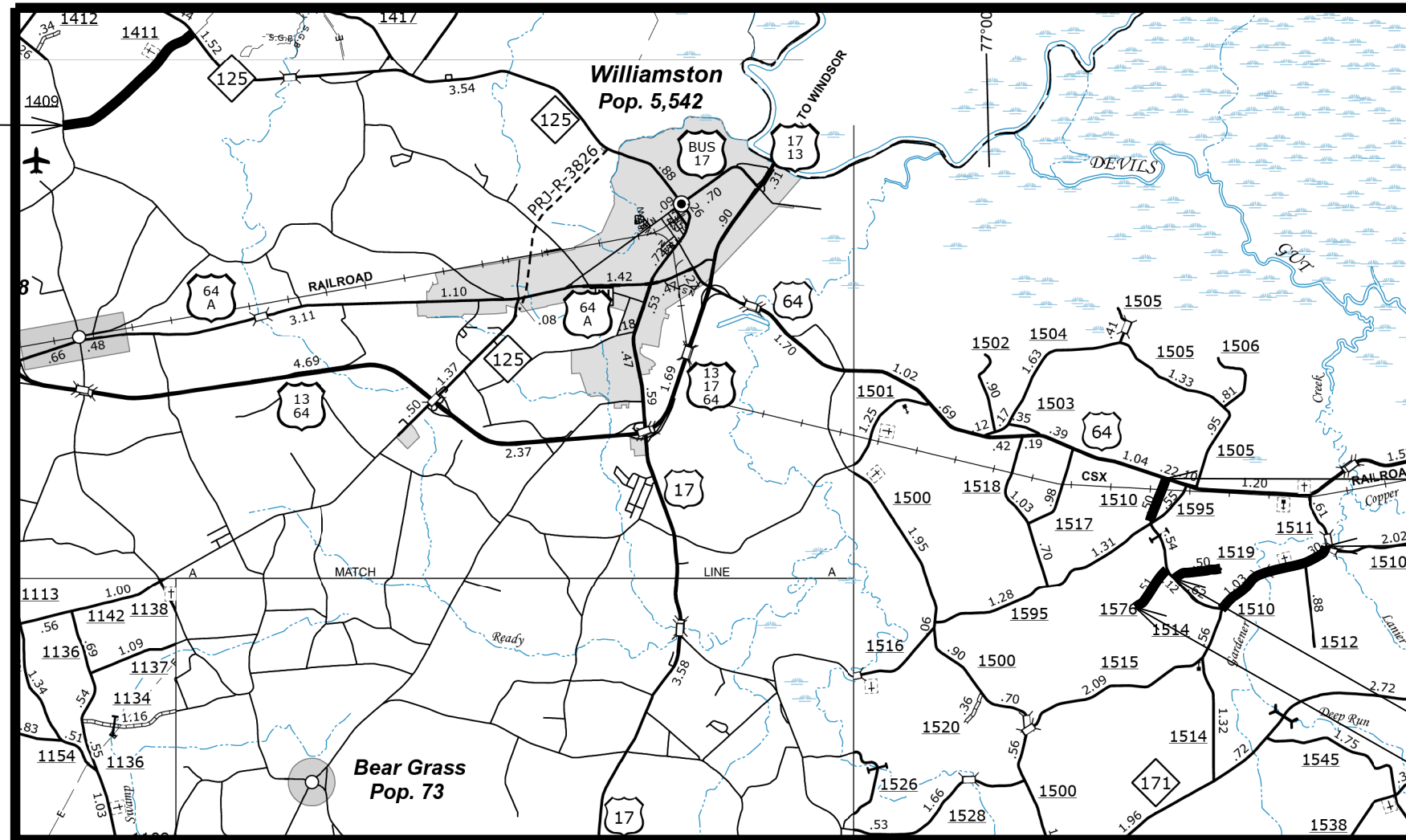
MARTIN COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2023CPT.01.03.20081.1, ETC	2
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2023CPT.01.03.20581.1		PE, CONST

LOCATION: MAP 5 - SR 1411 (CAMPBELL HILL RD) FROM SR 1409 TO NC 125
MAP 6 - SR 1510 (TAR LANDING RD) FROM SR 1514 TO SR 1511
MAP 7 - SR 1510 (REASON RD) FROM SR 1595 TO US 64
MAP 8 - SR 1519 (BENNETT RD) FROM SR 1510 TO EOP
MAP 9 - SR 1576 (HARDISON RD) FROM DEAD END TO SR 1510

TYPE OF WORK: AST, RESURFACING AND SHOULDER RECONSTRUCTION

MAP 5



MAP 7
MAP 6

MAP 8
MAP 9

GRAPHIC SCALES

NTS

PROJECT LENGTH

MAP 5 = 1.74 MILES
 MAP 6 = 1.35 MILES
 MAP 7 = 0.50 MILES
 MAP 8 = 0.50 MILES
 MAP 9 = 0.50 MILES

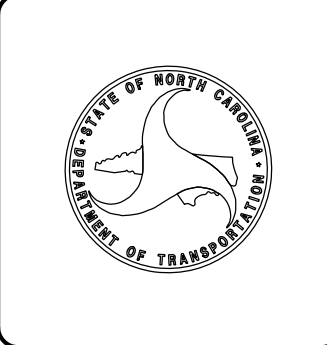
Prepared in the Office of:
DIVISION OF HIGHWAYS
 113 Airport Dr., Edenton NC, 27932

2018 STANDARD SPECIFICATIONS

W. B. HOBBS, PE
 DIVISION PROJECT TEAM LEAD

CHRIS SLACHTA
 DIVISION CONTRACT ENGINEER

S. P. FENWICK, PLS
 DIVISION DESIGN ENGINEER

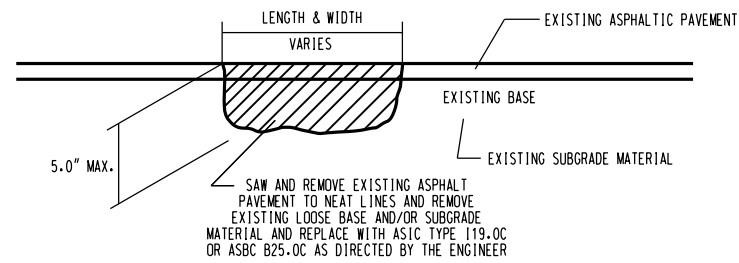


PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MAT COAT, #67 STONE
T	EARTH MATERIAL
U	EXISTING PAVEMENT.

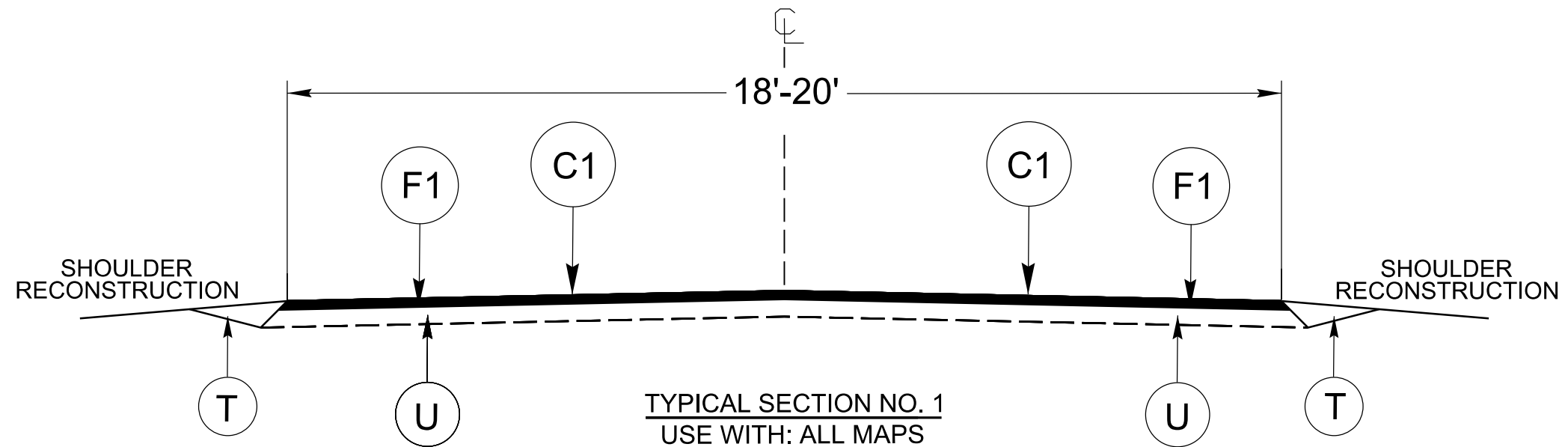
NOTES:

- * 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 (MAT COAT) CONSISTS OF: ONE LAYER OF EMULSIFIED ASPHALT GRADE CRS-2L AT A RATE OF 0.40± GAL/SY AND ONE LAYER OF # 67 STONE AT A RATE OF 35-40± LBS/SY.
- * CONSTRUCT THE MAT COAT IN ACCORDANCE WITH SUBARTICLE 660-8(D) OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. AFTER THE MAT COAT HAS BEEN SATISFACTORILY APPLIED AND ROLLED, THE SAME GRADE OF EMULSION USED FOR THE MAT COAT MAY BE USED FOR THE TACK COAT OF THE ASPHALT OVERLAY. APPLY TACK COAT UNIFORMLY ACROSS THE EXISTING SURFACE AT TARGET APPLICATION RATES SHOWN IN TABLE 605-1 OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. THE APPLICATION OF THE PLANT MIX OVERLAY SHALL BE COMPLETED WITHIN THE SAME DAY.
- * ASPHALT SURFACE TREATMENT, MAT COAT, #67 (GRANITE) STONE SHALL ONLY BE APPLIED TO THE MAINLINE AND NOT TO THE RADIUS OF ANY SIDE ROAD OR DRIVEWAY.
- ** THE CONTRACTOR MUST PROVIDE A SPREADER THAT IS AT LEAST 12' WIDE FOR IRREGULAR AREAS ALONG THE MAPS.

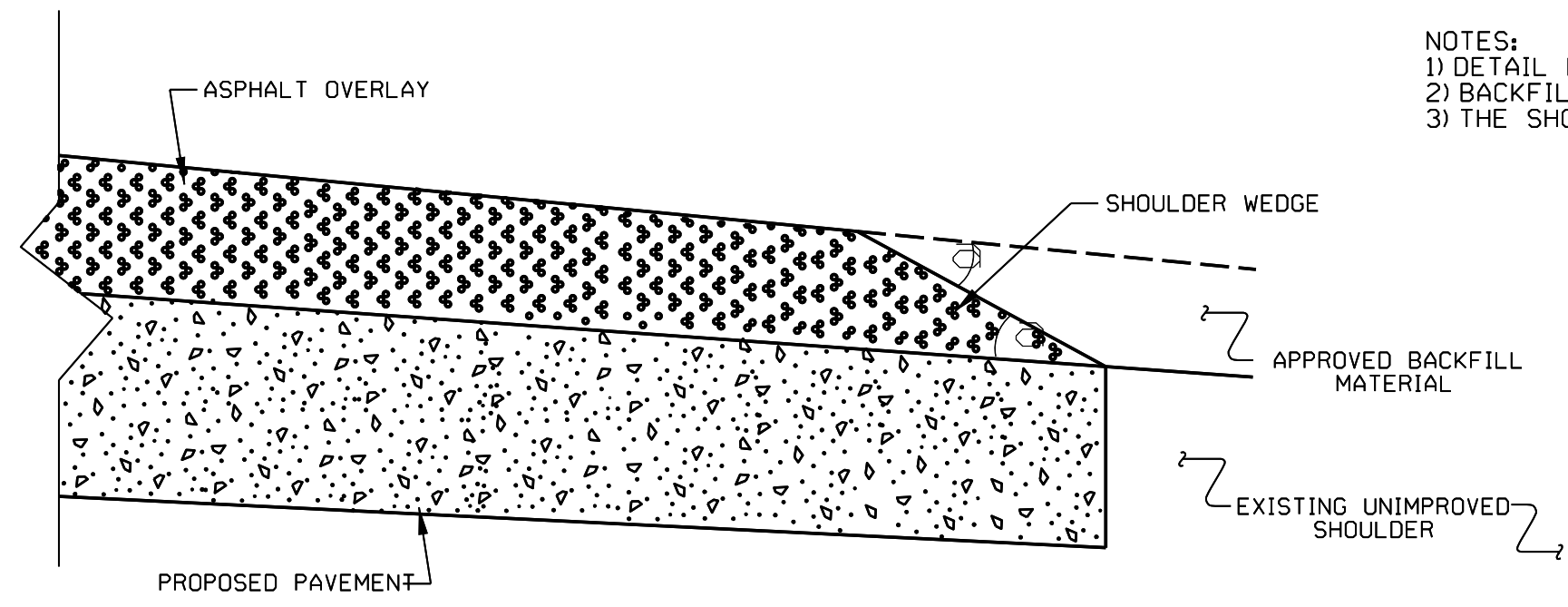


*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

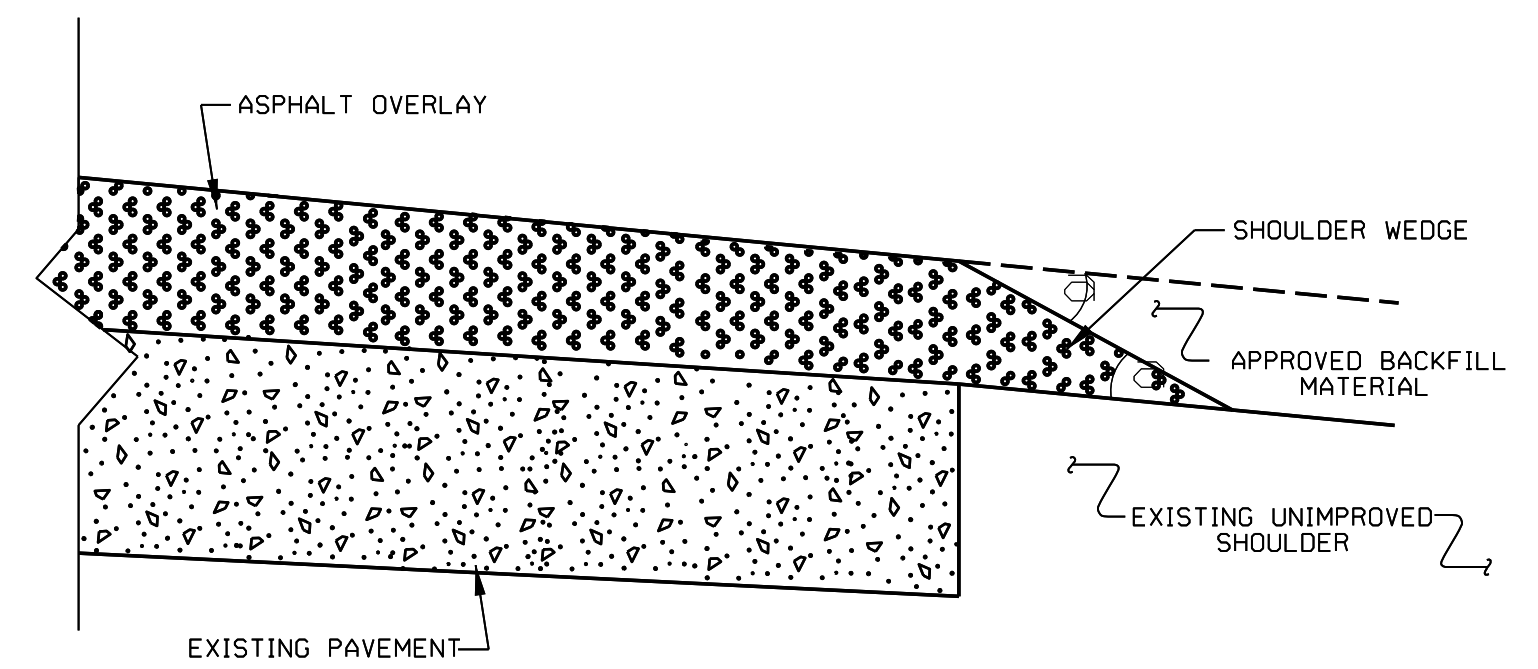
FULL DEPTH PATCHING 0 - 5"



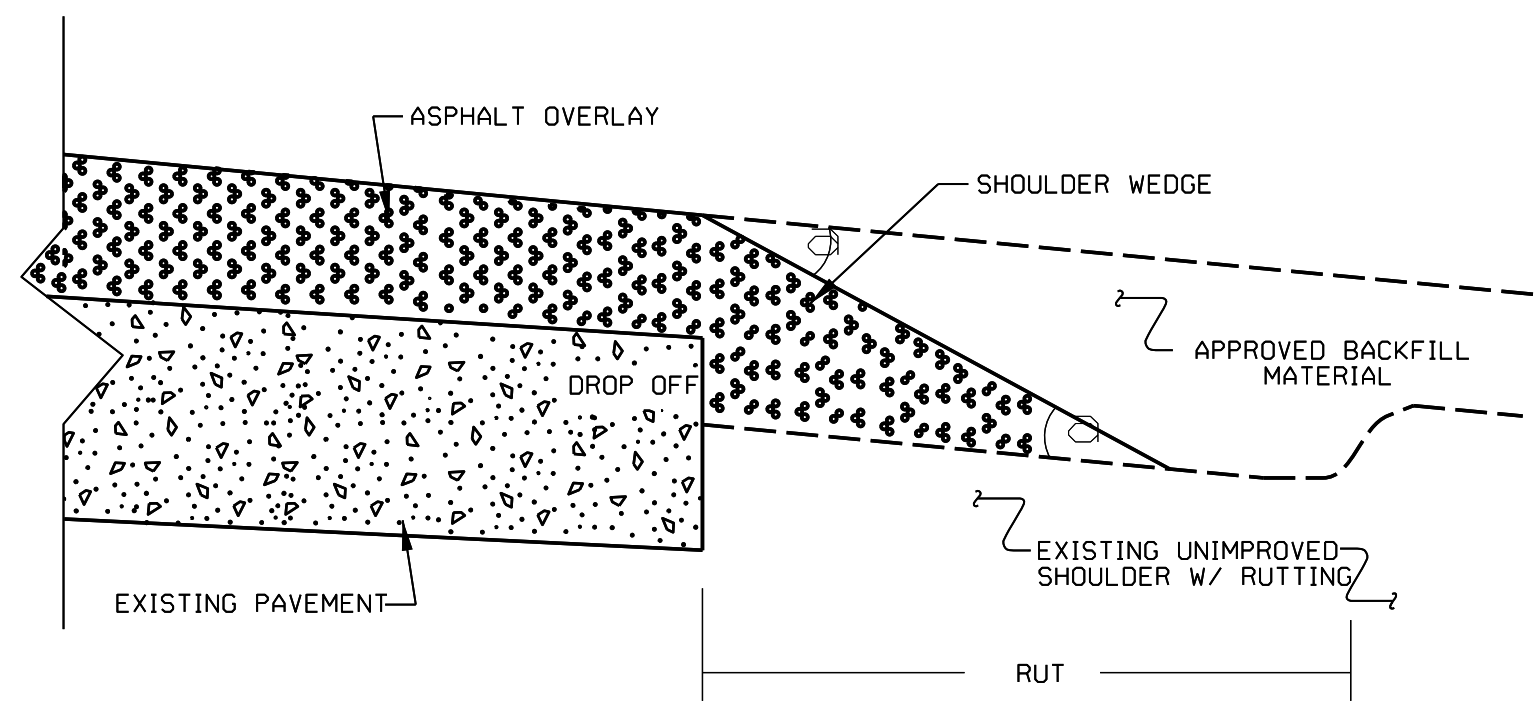
NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT		
Office 919-707-6950		FAX 919-250-4119
SHOULDER WEDGE DETAILS		
ORIGINAL BY: T.SPELL	DATE: 7-19-11	
MODIFIED BY:	DATE: 10/16/12	
CHECKED BY:	DATE:	
FILE SPEC.: sswr/details/stand/shoulderwedgedetail.dgn		

SUMMARY OF QUANTITIES




PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	MOBILIZATION	BORROW EXCAVATION	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	INCIDENTAL MILLING	ASPHALT CONCRETE SURFACE COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	ASPHALT SURFACE TREATMENT MAT COAT #67 STONE	EMULSION FOR ASPHALT SURFACE TREATMENT	PATCHING EXISTING PAVEMENT (FULL DEPTH)	TEMPORARY SILT FENCE	COIR FIBER WATTLE	SEEDING & MULCHING	RESPONSE FOR EROSION CONTROL	MATTING FOR EROSION CONTROL	
										MI	FT																LS
2023CPT.01.03.20081.1	Bertie	1	SR 1301 BULL HILL RD	SR 1303 HOGGARD MILL RD TO SR 1001 WAKELON RD	1	2	2WU	NO	NO	5.9	20	1	1,770	118	11.80	300	6,381	431	69,227	27,690	70	25	25	5.9	3	12.5	
2023CPT.01.03.20081.1	Bertie	2	SR 1518 MIDDLE TRACK RD	EOP TO SR 1500 WOODARD RD	1	2	2WU	NO	NO	4.47	20	*	1,341	89	8.94	400	4,874	339	52,448	20,980	240	25	25	4.5	2	12.5	
2023CPT.01.03.20081.1	Bertie	3	SR 1518 BLANCHARDS RD	SR 1500 WOODARD RD TO EOP	1	2	2WU	NO	NO	0.8	18	*	240	16	1.60	100	772	53	8,448	3,380	10	25	25	0.8	1	12.5	
2023CPT.01.03.20081.1	Bertie	4	SR 1519 MORNING RD	SR 1518 MIDDLE TRACK RD TO SR 1500 WOODARD RD	1	2	2WU	NO	NO	2.39	20	*	717	48	4.78	100	2,560	184	28,043	11,220	257	50	25	2.4	1	12.5	
TOTAL FOR PROJ NO. 2023CPT.01.03.20081.1										13.56			4,068	271	27.12	900	14,587	1,007	158,166	63,270	577	125	100	13.6	7	50	
2023CPT.01.03.20581.1	Martin	5	SR 1411 CAMPBELL HILL RD	SR 1409 SPRING GREEN RD TO NC 125	1	2	2WU	NO	NO	1.74	18	*	522	35	3.48	200	1,679	116	18,374	7,350	58	50	50	1.7	1	25.0	
2023CPT.01.03.20581.1	Martin	6	SR 1510 TAR LANDING RD	SR 1514 FAIRVIEW CHURCH RD TO SR 1511 TAR LANDING RD	1	2	2WU	NO	NO	1.35	18	*	405	27	2.70	500	1,401	95	14,256	5,710	20	50	50	1.4	1	25.0	
2023CPT.01.03.20581.1	Martin	7	SR 1510 REASON RD	SR 1595 JONES RD TO US 64	1	2	2WU	NO	NO	0.5	20	*	150	10	1.00	400	535	37	5,867	2,350	20			0.5			
2023CPT.01.03.20581.1	Martin	8	SR 1519 BENNETT RD	SR 1510 REASON RD TO EOP	1	2	2WU	NO	NO	0.5	20	*	150	10	1.00	100	535	37	5,867	2,350	20			0.5			
2023CPT.01.03.20581.1	Martin	9	SR 1576 HARDISON RD	DEAD END TO SR 1510 REASON RD	1	2	2WU	NO	NO	0.5	18	*	150	10	1.00	100	490	34	5,280	2,115	10			0.5			
TOTAL FOR PROJ NO. 2023CPT.01.03.20581.1										4.59			1,377	92	9.18	1,300	4,640	319	49,644	19,875	128	100	100	4.6	2	50	
GRAND TOTAL										18.15			1	5,445	363	36.30	2,200	19,227	1,326	207,810	83,145	705	225	200	18.2	9	100

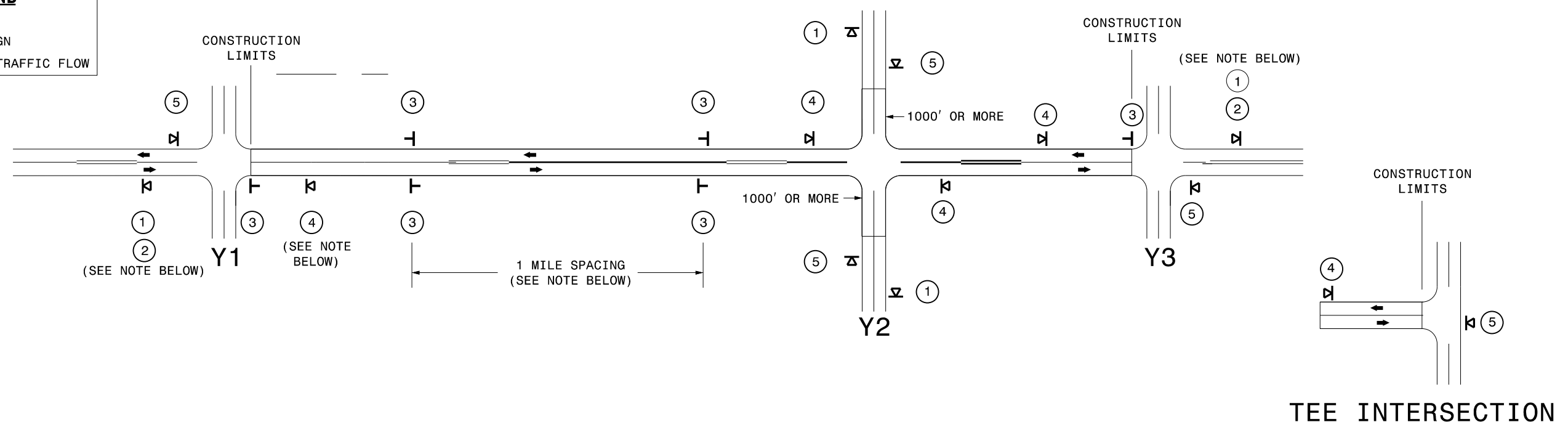
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	WORK ZONE ADV/GEN WARNING SIGNING	TEMPORARY TRAFFIC CONTROL (SP)	THERMO PAVEMENT MARKING CHARACTER, 90 MILS (RXR)	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	PAINT PAVEMENT MARKING LINES (16")	PAINT PAVEMENT MARKING LINES (24")	PAINT PAVEMENT MARKING CHARACTER (MSG RXR)	GENERIC PAVEMENT MARKING ITEM, THERMO HOT SPRAY LINES (4" 55 MILS) WHITE	GENERIC PAVEMENT MARKING ITEM, THERMO HOT SPRAY LINES (4" 55 MILS) YELLOW	THERMO PAVEMENT MARKING LINES, (16", 90 MILS)	THERMO PAVEMENT MARKING LINES (24", 90 MILS)			
										MI	FT													SF	LS	EA
2023CPT.01.03.20081.1	Bertie	1	SR 1301 BULL HILL RD	SR 1303 HOGGARD MILL RD TO SR 1001 WAKELON RD	1	2	2WU	NO	NO	5.9	20	278	1		63,484	38,940				63,484	38,940					
2023CPT.01.03.20081.1	Bertie	2	SR 1518 MIDDLE TRACK RD	EOP TO SR 1500 WOODARD RD	1	2	2WU	NO	NO	4.47	20	246	*		48,097	29,502				48,097	29,502					
2023CPT.01.03.20081.1	Bertie	3	SR 1518 BLANCHARDS RD	SR 1500 WOODARD RD TO EOP	1	2	2WU	NO	NO	0.8	18	80	*		8,608	5,280				8,608	5,280					
2023CPT.01.03.20081.1	Bertie	4	SR 1519 MORNING RD	SR 1518 MIDDLE TRACK RD TO SR 1500 WOODARD RD	1	2	2WU	NO	NO	2.39	20	150	*		25,716	15,774				25,716	15,774					
TOTAL FOR PROJ NO. 2023CPT.01.03.20081.1										13.56		754			145,905	89,496				145,905	89,496					
															235,401				235,401							
2023CPT.01.03.20581.1	Martin	5	SR 1411 CAMPBELL HILL RD	SR 1409 SPRING GREEN RD TO NC 125	1	2	2WU	NO	NO	1.74	18	80	*		18,722	11,484				18,722	11,484					
2023CPT.01.03.20581.1	Martin	6	SR 1510 TAR LANDING RD	SR 1514 FAIRVIEW CHURCH RD TO SR 1511 TAR LANDING RD	1	2	2WU	NO	NO	1.35	18	80	*		14,526	8,910				14,526	8,910					
2023CPT.01.03.20581.1	Martin	7	SR 1510 REASON RD	SR 1595 JONES RD TO US 64	1	2	2WU	NO	NO	0.5	20	80	*	4	5,380	3,300	200	200	4	5,380	3,300	200	200			
2023CPT.01.03.20581.1	Martin	8	SR 1519 BENNETT RD	SR 1510 REASON RD TO EOP	1	2	2WU	NO	NO	0.5	20	80	*		5,380	3,300				5,380	3,300					
2023CPT.01.03.20581.1	Martin	9	SR 1576 HARDISON RD	DEAD END TO SR 1510 REASON RD	1	2	2WU	NO	NO	0.5	18	80	*		5,380	3,300				5,380	3,300					
TOTAL FOR PROJ NO. 2023CPT.01.03.20581.1										4.59		400		4	49,388	30,294	200	200	4	49,388	30,294	200	200			
															79,682				79,682							
GRAND TOTAL										18.15		1,154	1	4	315,083	200	200	4	315,083	200	200					

SIGNING FOR ASPHALT SURFACE TREATMENT






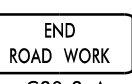
LEGEND

-  PORTABLE SIGN
-  STATIONARY SIGN
-  DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

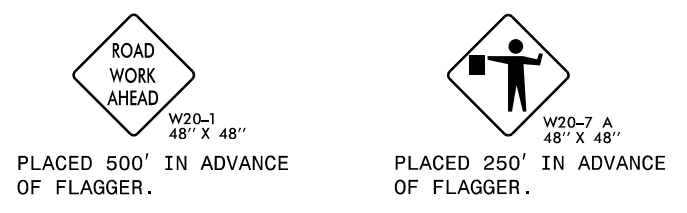
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	①		- PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.
	②		- 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.
	③	 	- 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.
	④		- 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		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.

STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:

- 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

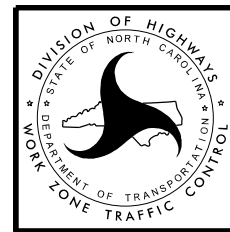
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



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 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.

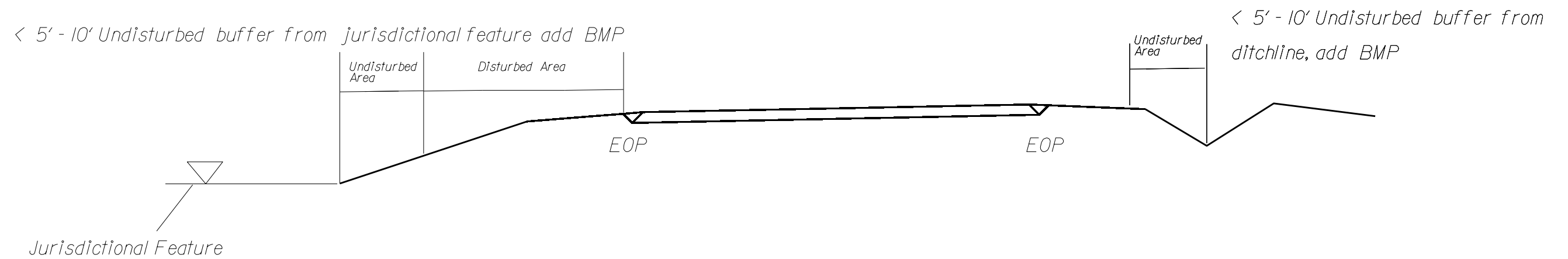
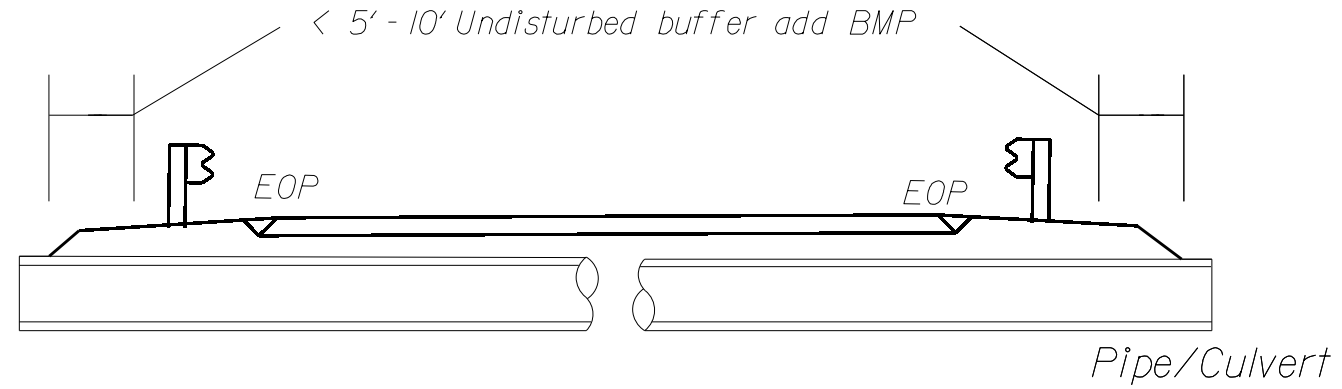


ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

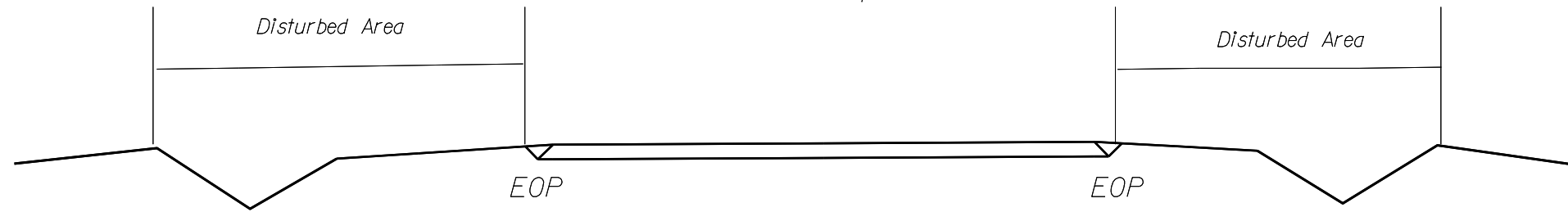
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

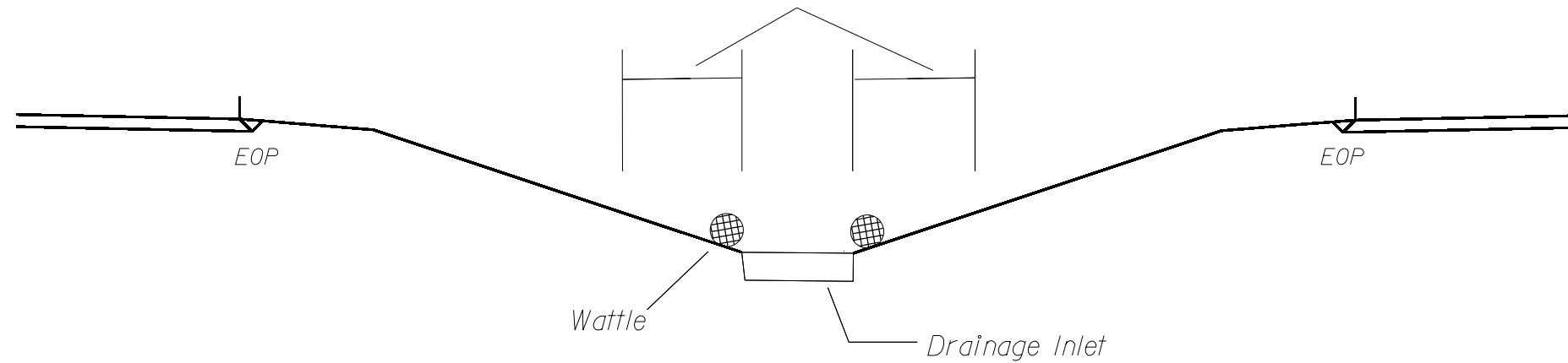
EROSION CONTROL DETAIL



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

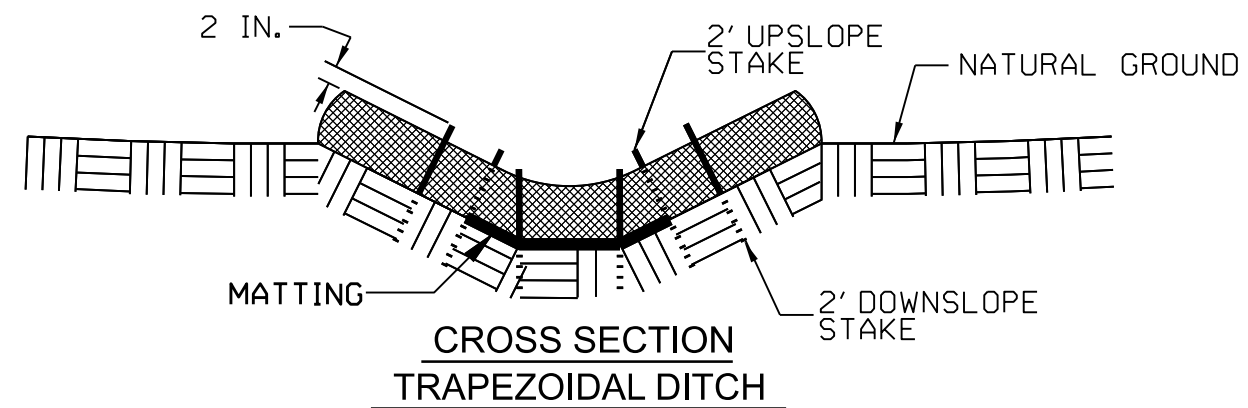
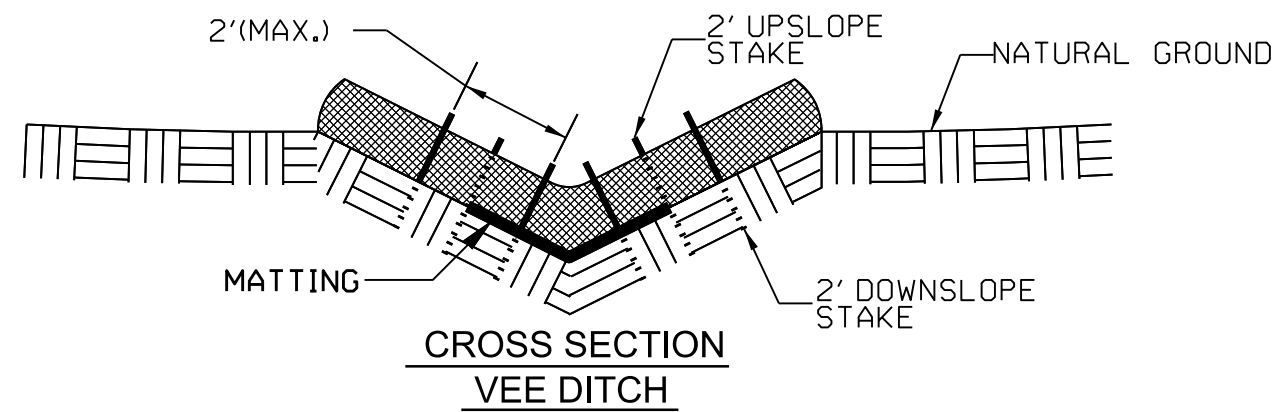
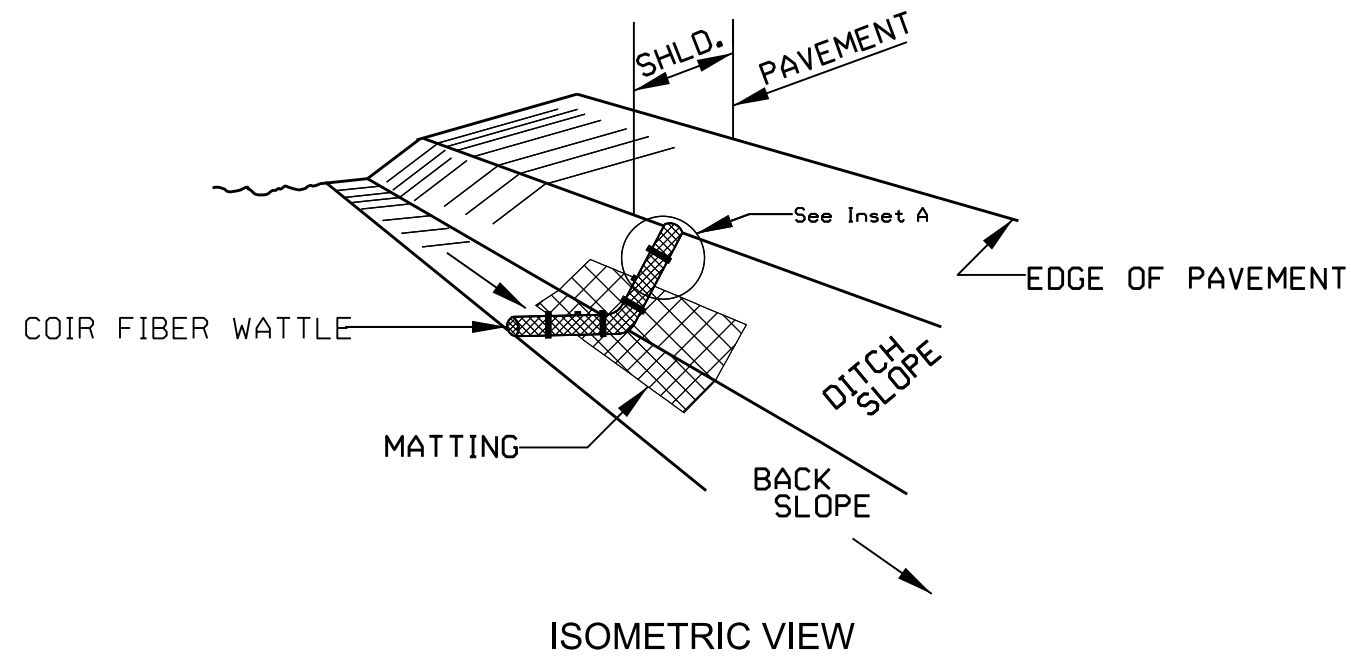


< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

COIR FIBER WATTLE DETAIL



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.

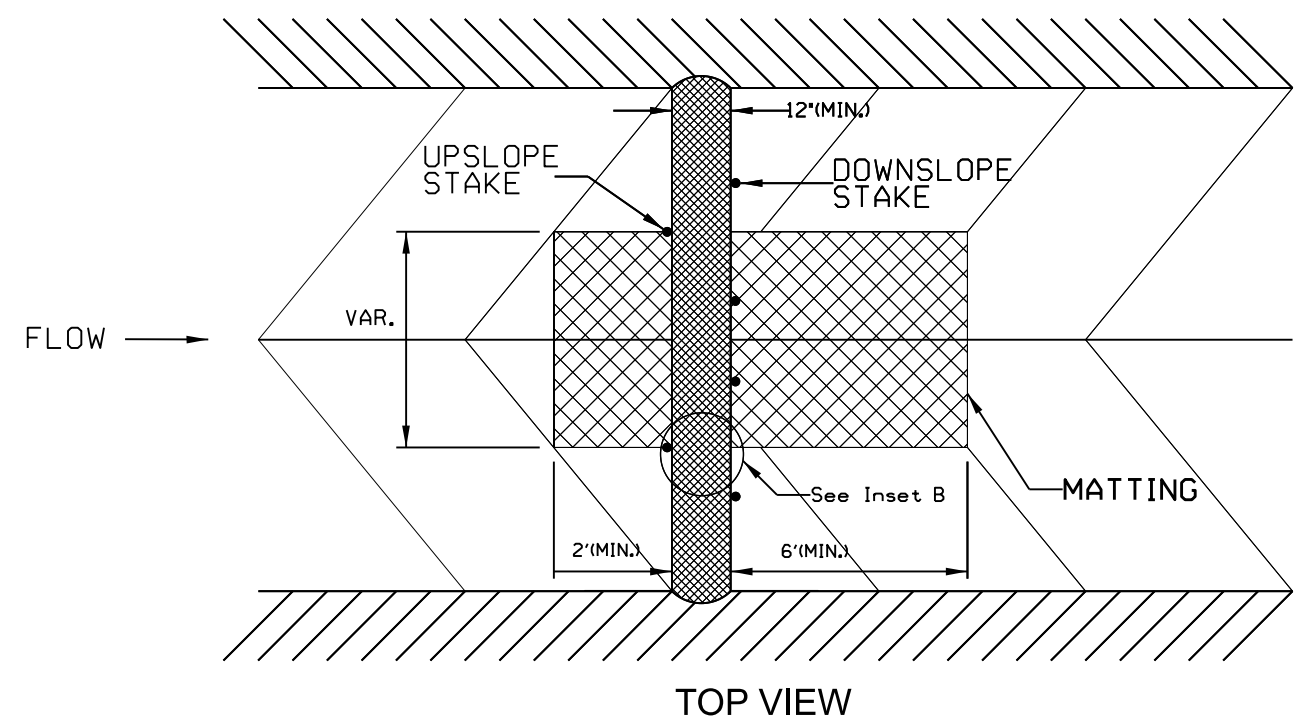
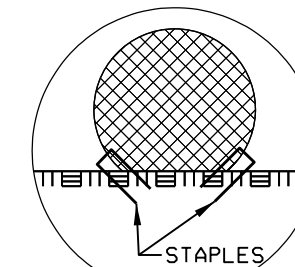
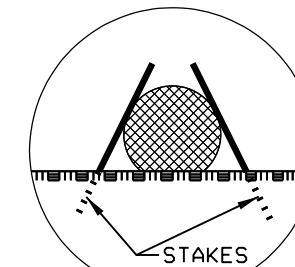
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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.