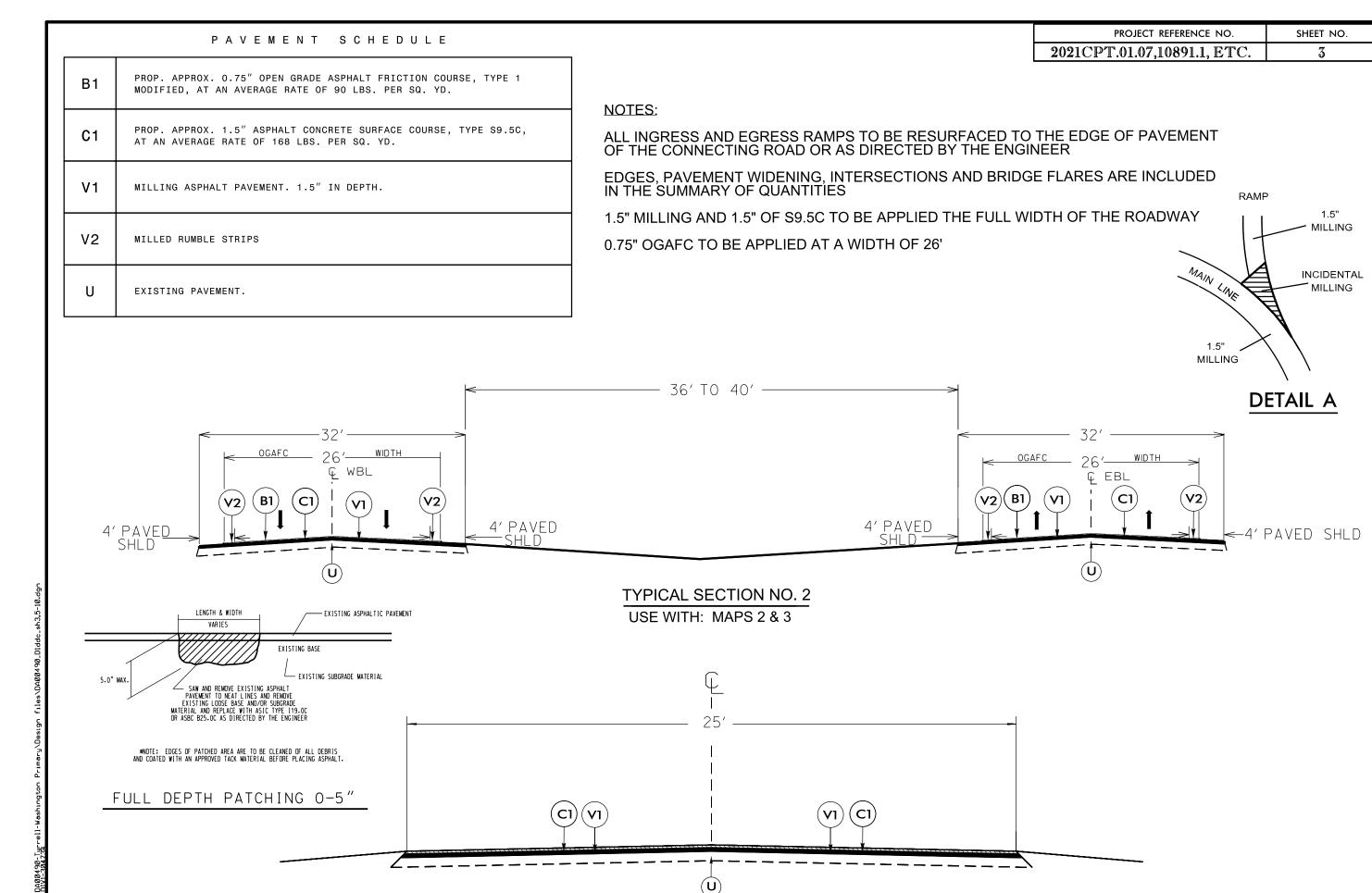
STATE OF NORTH CAROLINA N.C. 2021CPT.01.07.10891.1, ETC DIVISION OF HIGHWAYS STATE PROJ.NO. 2021CPT.01.07.10891.1 EPE, CONST TYRRELL COUNTY 2021CPT.01.07.10891 LOCATION: MAP 1 – US 64 FROM ECL OF COLUMBIA TO SR 1229 (OLD US 264) TYPE OF WORK: GUARDRAIL REPLACEMENT, MILLING & RESURFACING Newfoundland 1229 ELEMENT 1214 © <u>1209</u> Columbia Pop. 841 **POCOSIN LAKES** 1229 NATIONAL \* 64 WILDLIFE WB. **Alligator** REFUGE Morgan **Futch** Gmld Sys A00490 1302 MAP GRAPHIC SCALES Prepared in the Office of: PROJECT LENGTH **DIVISION OF HIGHWAYS** 113 Airport Dr., Suite 100, Edenton NC, 27932 2018 STANDARD SPECIFICATIONS NTS S.P. FENWICK, PLS W. B. HOBBS, PE DIVISION PROJECT TEAM LEAD MAP 1 = 7.050 MILESCHRIS SLACHTA

STATE OF NORTH CAROLINA N.C. 2021CPT.01.07.10891.1, ETC DIVISION OF HIGHWAYS E2021CPT.01.07.10941.1 PE, CONST WASHINGTON COUNTY 01.07.10891 **LOCATION:** MAP 2 - US 64 EBL FROM SR 1125 (E. MILLPOND RD.) TO SR 1375 (NORTHLINE RD.) /NC 37 MAP 3 - US 64 WBL FROM SR 1375 (NORTHLINE RD.) /NC 37 TO SR 1125 (E. MILLPOND RD.) TYPE OF WORK: MILLING & RESURFACING (OGAFC) 1193 EMENT:2021CPT. Mackeys **Pleasant Grove** (308)1132 <u>1334</u> Beasley 1356 1133 1301 <u>1333</u> 1132 .75 1214 1135 1198 <u>1332</u> .48 1134  $[\pm]$ 331 1132 1175 MAP 2 1119 1126 DA00490 Roper Pop. 572 64 1119 1218 1119 3.85 1180 Prepared in the Office of: **GRAPHIC SCALES** PROJECT LENGTH **DIVISION OF HIGHWAYS** 113 Airport Dr., Suite 100, Edenton NC, 27932 2018 STANDARD SPECIFICATIONS MAP 2 = 4.750 MILESS. P. FENWICK, PLS NTS W. B. HOBBS, PE DIVISION PROJECT TEAM LEAD MAP 3 = 4.740 MILESCHRIS SLACHTA



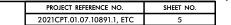
USE WITH: MAP 1

TYPICAL SECTION NO. 1

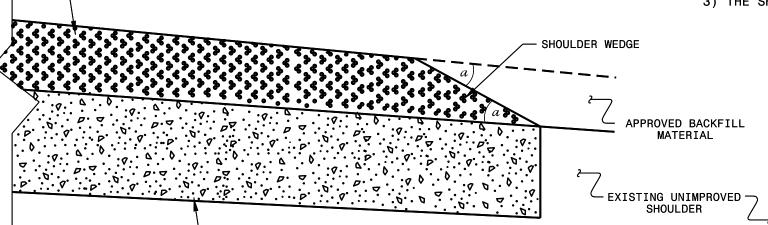
PROJECT NO.	SHEET NO.
2021CPT.01.07.10891, ETC.	4

											SL	MM	ARY	OF Q	UAN	TITI	ES										
PROJECT NO COUNTY		MAP RO	JTE	DESCRIPTION	TYP NO	LANES	TYPE	SURFACE TESTING		1	LENGTH	WIDTH	MOBILIZATION	STONE BASE		INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	BINDER FOR PLANT MIX		OGAFC, TYPE FC-1 MOD	MILLED RUMBLE STRIPS (ASPHALT CONCRETE)	GENERIC PAVING ITEM, PATCHING EXISTING PAVEMENT FULL DEPTH 0-5"	STEEL BEAM GUARDRAIL	GUARDRAIL END UNITS, TYPE TL-3	REMOVE EXISTING GUARDRAIL	WORK ZONE ADV/GEN WARNING SIGNING	TEMPORARY TRAFFIC CONTROL
											MI	FT	LS	TONS	SY	SY	TONS	TONS	TON	TONS	LF	TON	LF	EA	LF	SF	LS
2021CPT.01.07.10891.1	Tyrrell	1 US	64	PAVEMENT JOINT AT ECL OF COLUMBIA TO SR 1229 (OLD US 64)	1	2	2WU	NO	NO	YES	7.05	25	1	141	103,400	523	8,831	530				30	19,470	22	20,570	532	1
				SR 1125 (E. MILLPOND RD) TO SR 1375											,		1						,		,		
2021CPT.01.07.10941.1	Washington	2 US 6	4 EBL	(NORTHLINE RD)/ NC 37	2	2	MU	NO	NO	YES	4.75	32	*	20	92,054	14,764	9,216	553	212	3,480	48,646	30				524	*
2021CPT.01.07.10941.1	Washington	3 US 64		SR 1375 (NORTHLINE RD)/ NC 37 TO S 1125 (E MILLPOND RD)	R 2	2	MU	NO	NO	YES	4.74	32	*	20	90,190	13,608	9,877	593	211	3,451	48,540	30				524	*
GR	AND TOTAL										16.54		1	181	285,644	28,895	27,924	1,676	423	6,931	97,186	90	19,470	22	20,570	1,580	1

									THE	RMC	PLA	STIC	AND	D PA	INT	QUA	NTIT	IES								
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP L		LANE TYPE	LENGTH	WIDTH	GENERIC PAVEMENT MARKING ITEM, HOT SPRAY THERMO LINES (6", WHITE)	MARKING	PAVEMENT MARKING LINES (6",	THERMO PAVEMENT MARKING LINES (6", 90 MILS) YELLOW	1	MARKING	THERMO PAVEMENT MARKING SYMBOL (90 MILS), MERGE ARROW	PAINT PAVEMENT MARKING LINES (4") WHITE	MARKING	1		MARKING	GENERIC PAVEMENT MARKING ITEM, THERMO LINE (24", 90 MILS)	GENERIC PAVEMENT MARKING ITEM, NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER	TEMPORARY SILT FENCE	COIR FIBER WATTLE	RESPONSE FOR EROSION CONTROL
							-	MI	FT	LF	LF	LF	LF	LF	EA	LF	LF	LF	LF	EA	LF	LF	EA	LF	LF	EA
2021CPT.01.07.10891.1	1 Tyrrell	1	US 64	PAVEMENT JOINT AT ECL OF COLUMBIA TO SR 1229 (OLD US 64)	1	2	2WU	7.05	25			75,858	46,530				151,716	93,060	40			40	465	100	40	2
2021CPT.01.07.10941.1	1 Washington	2	US 64 EBL	SR 1125 (E. MILLPOND RD) TO SR 1375 (NORTHLINE RD)/ NC 37	2	2	MU	4.75	32	946	757	50,164	30,593	125	3	3	103,274	61,943	30	3	3	30	314	100	40	1
2021CPT.01.07.10941.1	1 Washington	3	US 64 WBL	SR 1375 (NORTHLINE RD)/ NC 37 TO SF 1125 (E MILLPOND RD)	2	2	MU	4.74	32	946	757	50,056	30,527	112	3	3	101,058	61,811	30	3	3	30	313	100	40	1
GR	RAND TOTAL							16.54		1,892	1,514 406	176,078	107,650 83,728	237	6	12	356,048 572	216,814 2,862	100	6	12	100	1,092	300	120	4

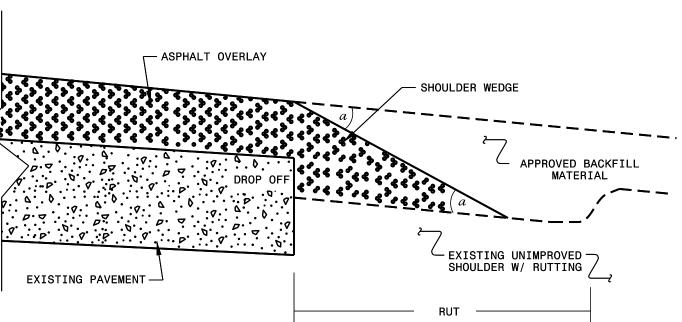


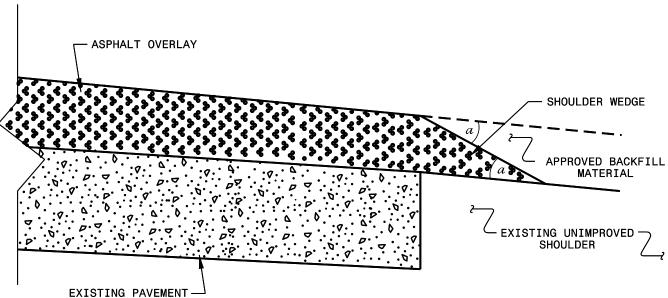
- 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
- 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



### 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 ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119

### SHOULDER WEDGE **DETAILS**

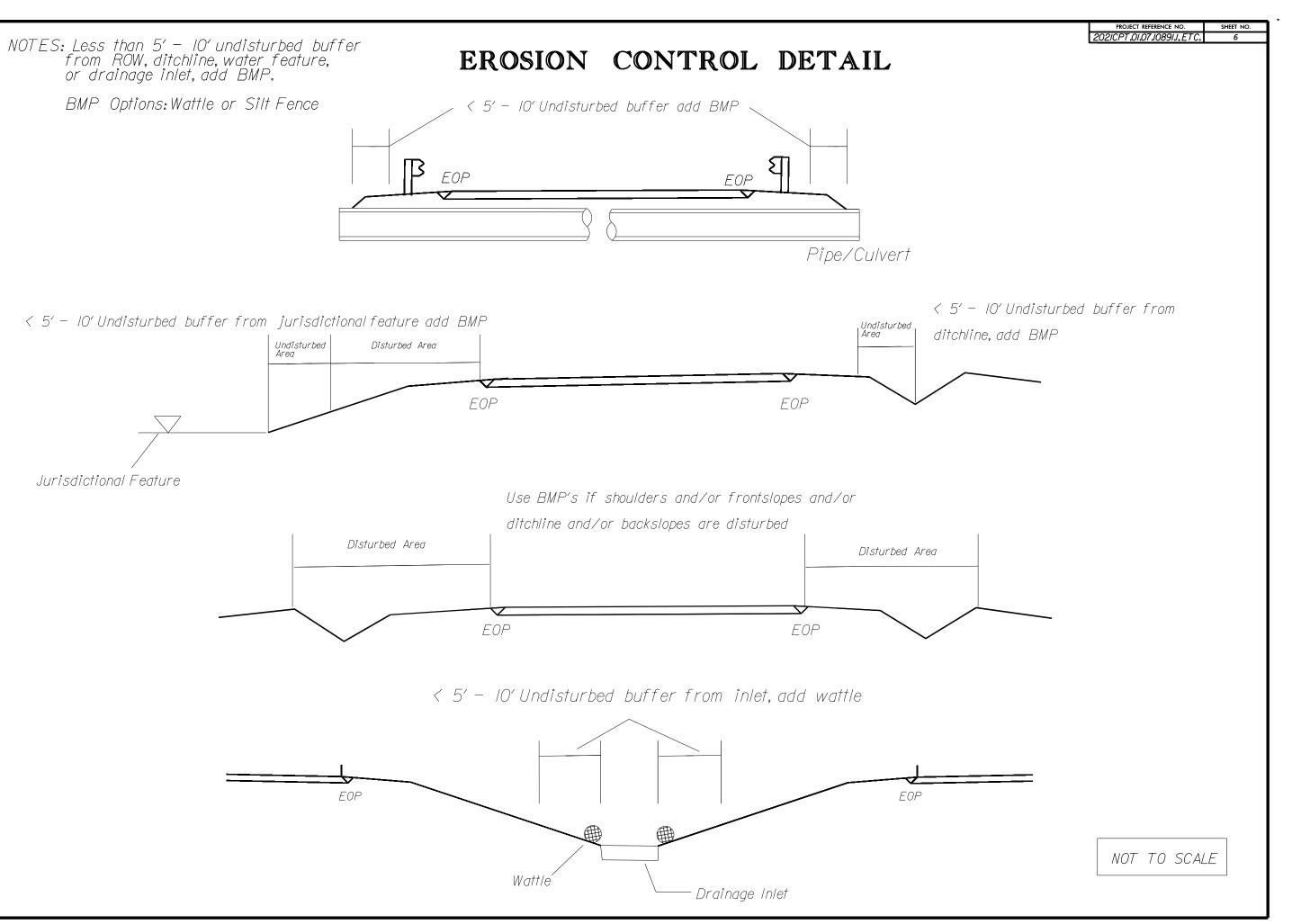
ORIGINAL BY:	T.SPELL	DATE:	7-19-11
MODIFIED BY:		DATE:	10/16/12
CHECKED BY:_		DATE:	
FILE SPEC.:	s:usr/details/stand/sho	ulderwedge	edetail.dgn

### SHOULDER WEDGE DETAIL

- ASPHALT OVERLAY

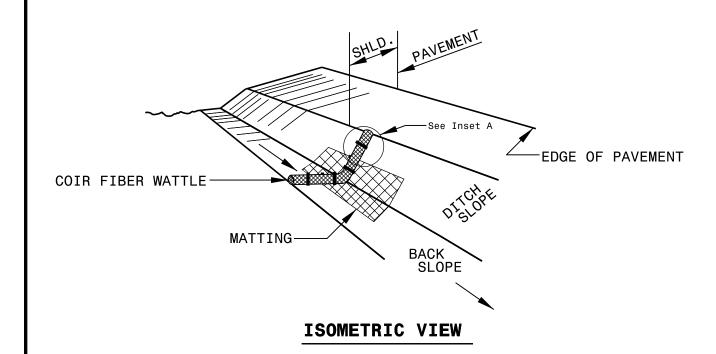
PROPOSED PAVEMENT -

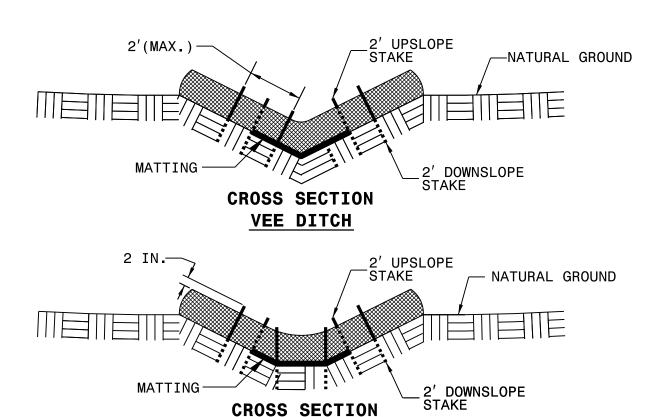
(Resurfacing Adjacent to Rutted Shoulder)



PROJECT REFERENCE NO. SHEET NO. 202ICPT.0I.07.J089I.J.ETC. 7

## COIR FIBER WATTLE DETAIL





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.

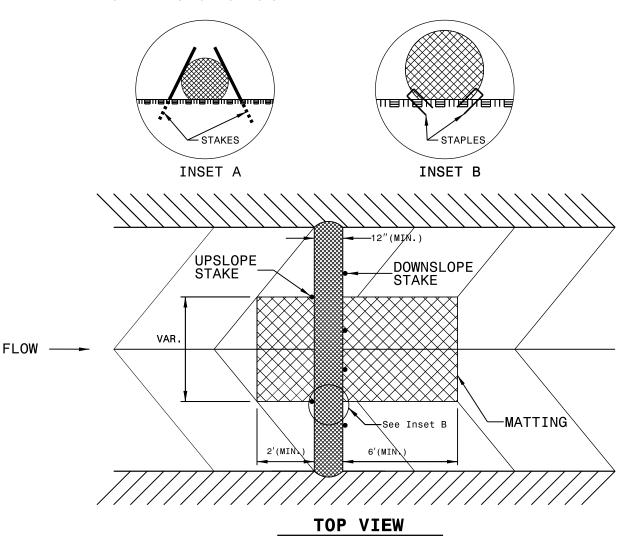
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.



PROJECT REFERENCE NO. SHEET NO.

### 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	I4 DAYS	7 DAYS FOR SLOPES GREATER THAN 50'IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	I4 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.

9 2021CPT.01.07.10891.1, ETC

#### SIGNING FOR RESURFACING PROJECTS

4

(5)

1000' OR MORE

**LEGEND** - STATIONARY SIGN

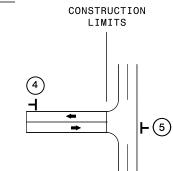
- DIRECTION OF TRAFFIC FLOW CONSTRUCTION LIMITS (3)

(SEE NOTE

BELOW)

(3)

CONSTRUCTION (SEE NOTE BELOW) LIMITS (5) 2 (3) (4) --1000′ OR MORE (4) (5)



TEE INTERSECTION

### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

### NOTES AND PER DIRECTION WORK (1)AHEAD W20-1 48" X 48" W7\_3aP 2

(4)

(2)

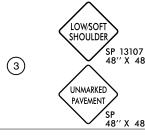
(SEE NOTE BELOW)

PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.

1 MILE SPACING

(SEE NOTE BELOW)

#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)



UNDER

- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART
- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.
- 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.
  - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.

END (5) ROAD WORK G20-2 A

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

Д

SIGNING PLACEMENT P

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.

#### NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

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

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

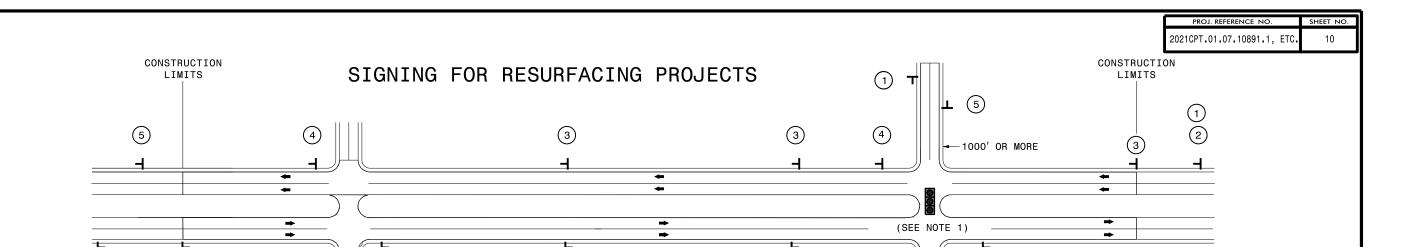


PLACED 500' IN ADVANCE OF FLAGGER.





ADVANCE WARNING SIGNS RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING



1 MILE SPACING (SEE NOTE BELOW)

#### <u>LEGEND</u>

(2)

- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW

(3)

### MAINLINE (-L-) SIGNING

(SEE NOTE BELOW)

### -Y- LINE SIGNING

#### PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ROAD ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. WORK NOTES AND ER DIRECTION (1) AHEAD 48" X 48" #2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. <u>2</u> ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS) PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART LOW/SOFT (3) THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE SHOULDER CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER. Д SIGNING PLACEMENT P THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM ROAD EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT (4) UNDER 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. END (5) PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS. ROAD WORK G20-2 A 48" X 24"

## NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

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

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





PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER

#### NOTES:

1000' OR MORE

(5)

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.



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

.DDC\DA00490-Tyrrell-Washington Primary\Design files\DA00490\_DIddc\_sh3,5-10.dgn \_AT\_DIVI-304734

COMPUTED BY:	DATE:	
CHECKED BY: _	DATE:	

### STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.
2021CPT.01.07.J0891J.ETC. SHEET NO.

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.

TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.

W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.

G = GATING IMPACT ATTENUATOR TYPE 350

#### GUARDRAIL SUMMARY

G = GATI NG = NC	NG IMPACT ATTENUA N-GATING IMPACT A	ATOR TYPE 350 ATTENUATOR TYPE 35:	0								GU.	ANDI	MIL S	3 CIVIIV	IAKI										
SURVEY	BEG. STA.	END STA.	LOCATION		LENGTH		WARRA	ANT POINT	"N" DIST.	TOTAL SHOUL.	FLARE	LENGTH	\	w			ANCH	HORS			A	IMPACT TTENUAT	OR	REMOVE EXISTING	
LINE	BEG. STA.	END STA.	LOCATION	STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH TRAILING END END		FROM E.O.L.	WIDTH			APPROACH END	TRAILING END	TYPE III *	GREU T-3	•	٠	CAT-1 +	B-83		TYPE TL-		GUARDRAI	L REMARKS
																							$\perp$		
US 64																						$\perp$			STATIONING BEGINS AT PAVEMENT JOINT AT ECL COLUMBIA AND AT END TAPER
TYRRELL CO.							~	2	₹	~	<u> </u>	2	-	7											FOR C&G SECTION
-E-	19+32.00	41+84.00	RT	2252.00			1ATC	1ATC	1ATC	MATC	IATC	IATC	IA TC	IATC		2						+	+	2252.00	
-E-	93+80.00	101+72,00	RT	792.00												2						+	_	792.00	
-E-	194+30.00	206+33.00	RT	1203.00			ŝ	ŝ	- ŝ	ŝ	ŝ	- ŝ	<u> </u>	<u></u>		2					-	+	_	1203.00	
-E-	206+45.00	225+84.00	RT	1939.00			NG P	NG F	NG F	NG FI	S F	NG.	N N	NG Fi		2					-+	+	_	1939.00	
-E-	226+5I.00 244+46.00	243+42.00	RT	1691.00			9	9	9	<u> </u>	gi H	g g	g g	9		2						+	-	1691.00	
-E-		262+92.00	RT	1846.00			- F	<del>1</del>	泉	묶	HO R	-	ૂ	묽		2						+		1846.00	
-E-	263+47.00	282+67.00 308+56.00	RT RT	1920.00			Z	20	Ž Q	Z Q	ZON	Ž V	N N	Z N		2						+		1920.00	
-E-	283+01.00	333+93.00	RT	2555.00			T <sub>A</sub> L	T <sub>A</sub>	₽	Ā	P	₽	<u> </u>	<u> </u>		2						+		2555.00	
-E-	308+67.00		<b>.</b>	2526.00 2616.00			<u> </u>	5	<del>                                     </del>	<del>- </del> 5	<u> </u>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>		2						+	-	2526.00 2616.00	
-E-	334+80.00 36I+73.00	360+96.00 374+03.00	RT RT				:A	Ä	i i	Ä	Ä	Ä	<u> </u>	Ä		2								1230.00	
-E-	361+73.00	374+03.00	кі	1230.00			ž	ž	ž	ž	ž	ž	ž	ž		2						+	-	1230.00	
SUB TOTAL				20,570.00'									<u> </u>												
SUB TOTAL				20,310.00																					-
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				1																		+++	-		+
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	LESS ANCHOR DEDUCT	TIONS											<u> </u>										-	<del>-  </del>	
	TL-3	22 @ 50.0′	=	-1100.01																					
	16.3	22 & 30.0	-	1100.0									<u> </u>										-		+
									<del> </del>		1		<del> </del>					-				+	+		+
									<b>†</b>		1		<b>†</b>					-				+	+		+
																		$\dashv$				+	-		+
																		$\rightarrow$				+	+		+
TOTAL			=	19,470.00′									<b>+</b>			22		-			-+	+	+	20,570.00	) <sub>1</sub>
				13, 113,30							1		<u> </u>					$\dashv$				+	+	20,5.0.00	+
																		$\rightarrow$				+	-		
		1			l			1																	_1