

CARTERET & CRAVEN COUNTY

DB00512

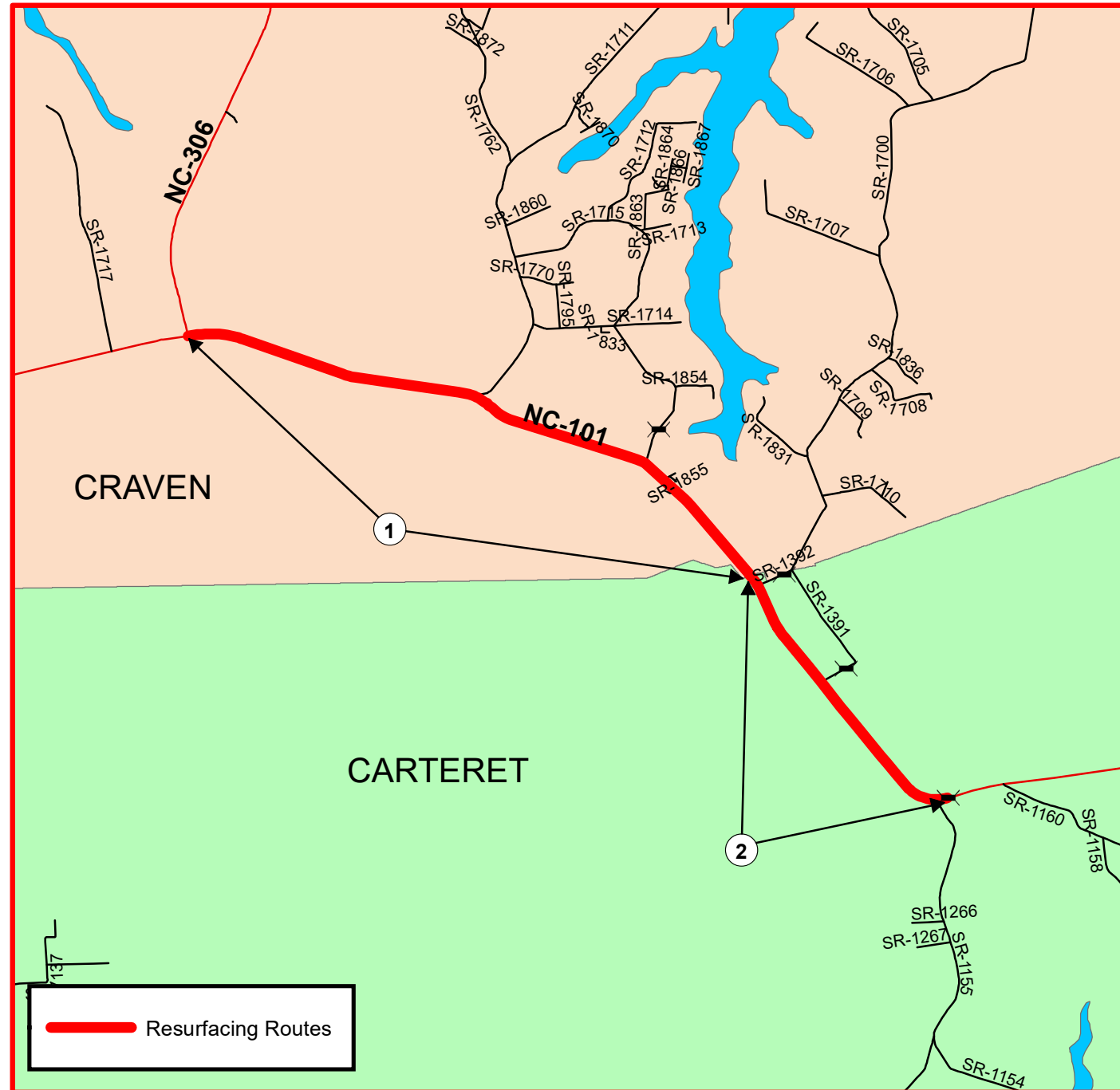
WBS# 2022CPT.02.07.10161
 WBS# 2022CPT.02.08.10251
 WBS# 2022CPT.02.09.20161

TYPE OF WORK: STRENGTHENING, RESURFACING, SHOULDER RECONSTRUCTION

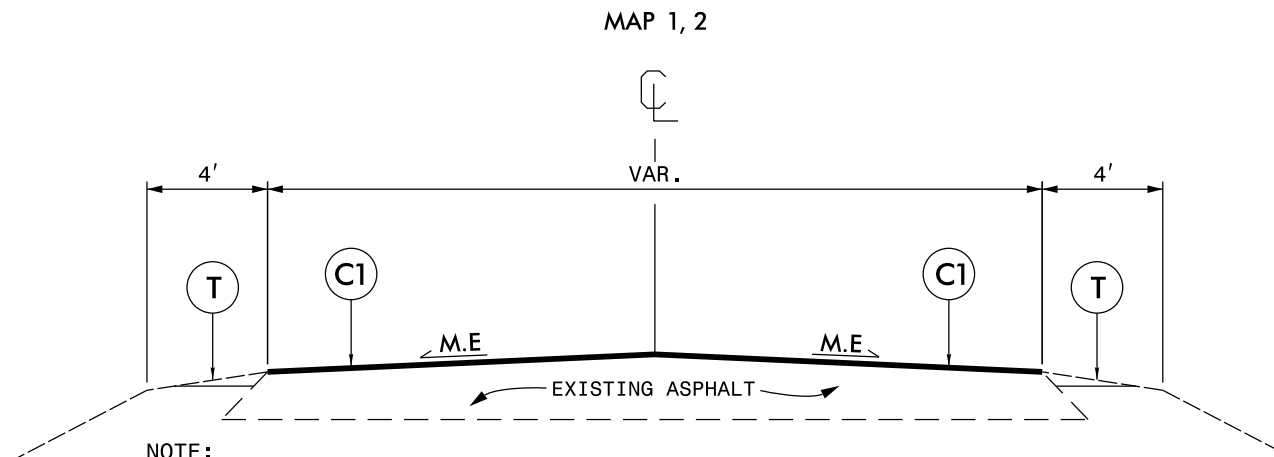
PROJECT REFERENCE NO.	SHEET NO.
DB00512	1



NCDOT
 DIVISION 2



TYPICAL SECTION NO. 1



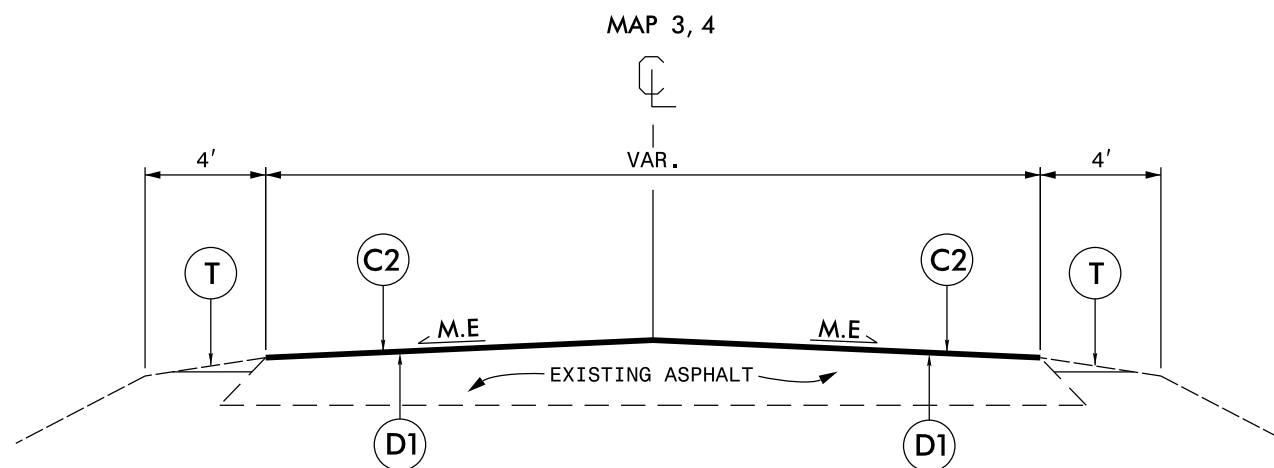
NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168.0 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
C4	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, IN TWO LIFTS AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER LIFT.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING
DRAWINGS NOT TO SCALE	

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

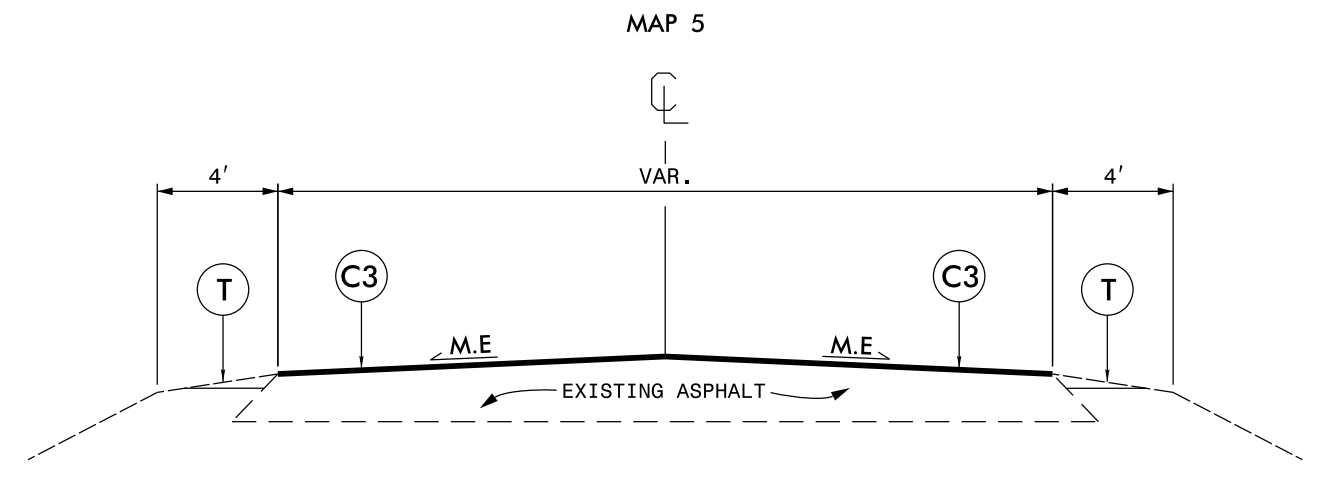
TYPICAL SECTION NO. 2



NOTE:

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 4.
2. PLACE ASPHALT LEVELING COURSE AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 4.
3. PLACE ASPHALT INTERMEDIATE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
4. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
5. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
6. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

TYPICAL SECTION NO. 3

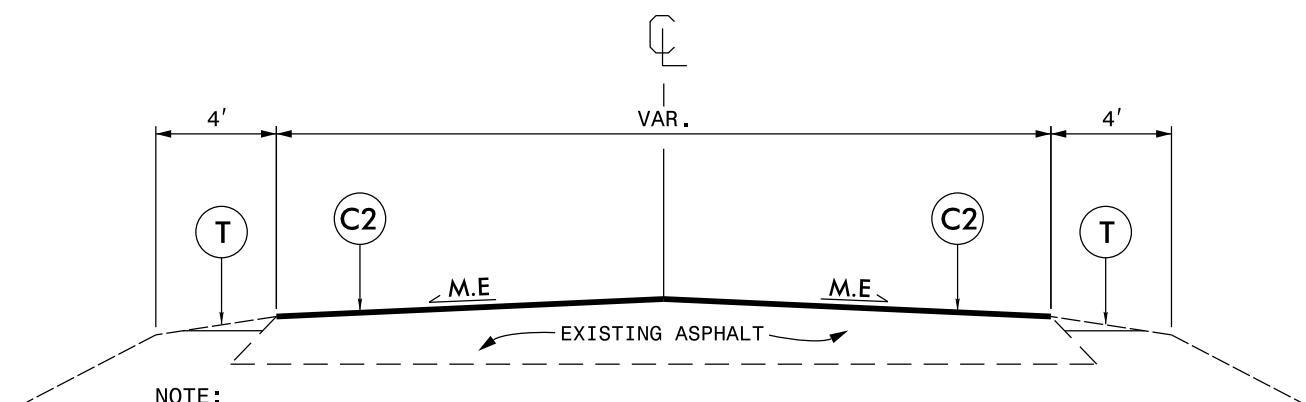


NOTE:

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 4.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
4. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

TYPICAL SECTION NO. 4

MAP 6, 7, 8, 9



NOTE:

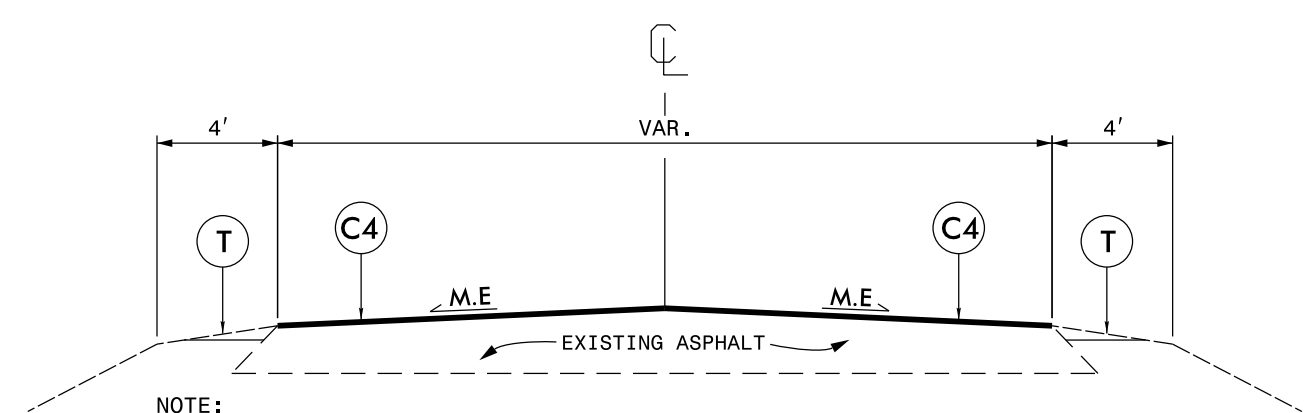
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T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING
DRAWINGS NOT TO SCALE	

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

TYPICAL SECTION NO. 5

MAP 10



NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

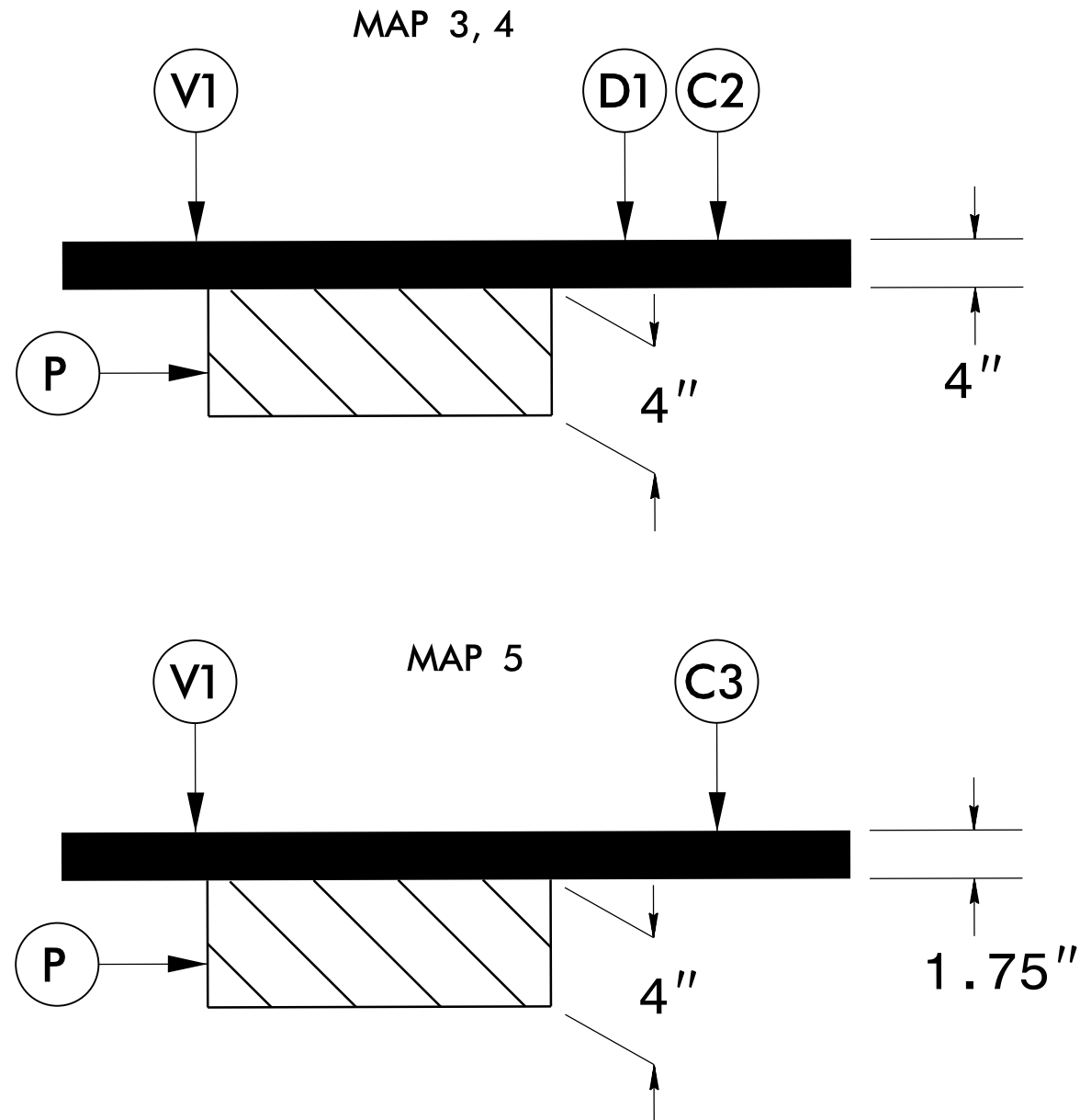
PROJECT NO.	SHEET NO.	TOTAL NO.
DB00512	4	

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	0262000000-N	1220000000-E	1245000000-E	1330000000-E	1503000000-E	1519000000-E	1523000000-E	1575000000-E	1880000000-E		6000000000-E	6071010000-E	6084000000-E	6117000000-N	4413000000-E	4457000000-N		
												HAULING NCDOT SUPPLIED SHOULDER MATERIAL	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	INCIDENTAL MILLING	INTERMEDIATE COURSE, I19.0C	SURFACE COURSE, S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	ASPHALT LEVELING COURSE, I19.0C	4" DEPTH MILL PATCHING EXISTING PAVEMENT - B25.0 C	TEMPORARY SILT FENCE	WATTLE	SEED & MULCHING	RESPONSE FOR EROSION CONTROL	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL		
											MI	FT	EA	TONS	SMI	SY	TONS	TONS	TONS	TONS	TON	TON	LF	LF	AC	EA	SF	LS	
2022CPT.02.08.10251	Craven	1	NC 101	FROM NC 306 TO CARTERET COUNTY	1	2	2WU	NO	NO	4.20	28	168	210	8.40	1,250			6,400	384			200	120	5.25	1	475	0.25		
TOTAL FOR MAP NO. 1											4.20		168	210	8.40	1,250			6,400	384			200	120	5.25	1	475	0.25	
TOTAL FOR PROJ NO. 2022CPT.02.08.10251											4.20		168	210	8.40	1,250			6,400	384			200	120	5.25	1	475	0.25	
2022CPT.02.07.10161	Carteret	2	NC 101	FROM CRAVEN COUNTY TO HARLOWE CREEK BRIDGE #10	1	2	2WU	NO	NO	2.25	29	90	113	4.50	1,250			3,500	210			100	60	2.81		260	0.13		
TOTAL FOR MAP NO. 2											2.25		90	113	4.50	1,250			3,500	210			100	60	2.81		260	0.13	
TOTAL FOR PROJ NO. 2022CPT.02.07.10161											2.25		90	113	4.50	1,250			3,500	210			100	60	2.81		260	0.13	
2022CPT.02.09.20161	Carteret	3	SR 1300 MERRIMON RD	FROM NELSON BAY RD TO SR 1318 S RIVER RD	2	2	2WU	NO	NO	5.36	22	322	268	10.72	1,500	8,600	5,300		771	60	725	300	160	6.70	1	600	0.30		
TOTAL FOR MAP NO. 3											5.36		322	268	10.72	1,500	8,600	5,300		771	60	725	300	160	6.70	1	600	0.30	
2022CPT.02.09.20161	Carteret	4	SR 1318 S RIVER RD	FROM SR 1300 MERRIMON RD TO SR 1407 VILLAGE DR	2	2	2WU	NO	NO	2.34	22	140	117	4.68	500	4,500	2,700		397		1,550	150	80	2.93		265	0.14		
TOTAL FOR MAP NO. 4											2.34		140	117	4.68	500	4,500	2,700		397		1,550	150	80	2.93		265	0.14	
2022CPT.02.09.20161	Carteret	5	SR 1319 BIG CREEK RD	FROM SR 1318 S RIVER RD TO DEAD END	3	2	2WU	NO	NO	0.78	18	31	39	1.56			825		55		60	100	40	0.98		90	0.05		
TOTAL FOR MAP NO. 5											0.78		31	39	1.56			825		55		60	100	40	0.98		90	0.05	
2022CPT.02.09.20161	Carteret	6	SR 1477 THURMAN RD	FROM CUL-DE-SAC TO DEAD END	4	2	2WU	NO	NO	0.43	20	17	22	0.86			450		30		90			0.54		50	0.03		
TOTAL FOR MAP NO. 6											0.43		17	22	0.86			450		30		90			0.54		50	0.03	
2022CPT.02.09.20161	Carteret	7	SR 1487 CUMMINS CREEK RD	FROM SR 1488 JONAQUINS DR TO SR 1300 MERRIMON RD	4	2	2WU	NO	NO	0.65	20	26	33	1.30	600		675		45			100	20	0.81		75	0.04		
TOTAL FOR MAP NO. 7											0.65		26	33	1.30	600		675		45		100	20	0.81		75	0.04		
2022CPT.02.09.20161	Carteret	8	SR 1488 JONAQUINS DR	FROM CUL-DE-SAC TO SR 1487 CUMMINS CREEK RD	4	2	2WU	NO	NO	0.43	20	17	22	0.86			475		32					0.54		50	0.03		
TOTAL FOR MAP NO. 8											0.43		17	22	0.86			475		32				0.54		50	0.03		
2022CPT.02.09.20161	Carteret	9	SR 1490 SANDY HUSS DR	FROM CUL-DE-SAC TO CUL-DE-SAC	4	2	2WU	NO	NO	0.27	20	11	14	0.54	1,000		280		19					0.34		30	0.02		
TOTAL FOR MAP NO. 9											0.27		11	14	0.54	1,000		280		19				0.34		30	0.02		
2022CPT.02.09.20161	Carteret	10	SR 1491 HIDDEN HARBOR LN	FROM SR 1490 SANDY HUSS DR TO SR 1321 4-H RD	5	2	2WU	NO	NO	0.24	20	10	12	0.48	500		375		25					0.30		30	0.01		
TOTAL FOR MAP NO. 10											0.24		10	12	0.48	500		375		25				0.30		30	0.01		
TOTAL FOR PROJ NO. 2022CPT.02.09.20161											10.50		574	527	21.00	4,100	13,100	11,080		1,374	60	2,425	650	300	13.13	1	1,190	0.62	
GRAND TOTAL											16.95		832	850	33.90	6,600	13,100	11,080		9,900	1,968	60	2,425	950	480	21.19	2	1,925	1

MAP NO	4" DEPTH MILL PATCH - B25.0C		STATION	STATION	LT	RT
3			14+85	17+27	7'	
3			140+04	146+26	7'	
3			222+15	231+17	7'	
3			243+40	247+52	7'	
3			264+20	274+77		7'
3			273+39	277+15	7'	
3			280+31	283+00		7'
4			0+00	35+20		7'
4			19+34	38+61	7'	
4			39+69	50+60		7'
4			44+97	50+60	7'	
4			53+82	60+90	7'	
4			58+00	59+50		7'
4			111+63	113+33		7'
4			107+31	108+98		7'
5			1+58	3+97		7'
5			38+85	39+11		18'
6			12+67	13+88		7'
6			13+64	14+16	10'	
6			16+52	17+01		20'
6			19+10	19+54		20'
	4" LEVELING COURSE - I19.0C					
3			50+47	51+36	11.5'	
3			53+60	54+62	11.5'	

4" DEPTH MILL PATCHING DETAIL

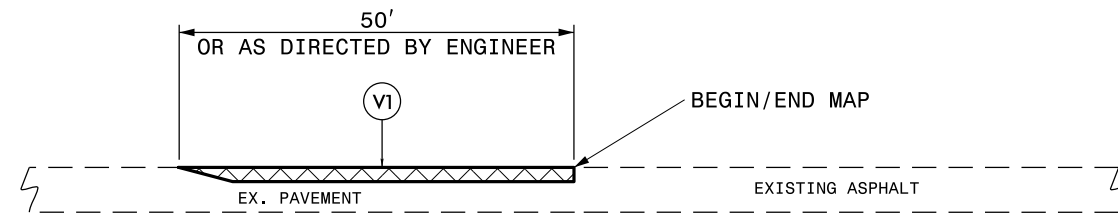


PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
P	4" DEPTH MILL PATCHING W/ B 25.0C
DRAWINGS NOT TO SCALE	

NOTE:

1. THE CONTRACTOR SHALL PERFORM ANY UNIFORM OR INCIDENTAL MILLING AT TIE-INS BEFORE PERFORMING THE 4" DEPTH MILL PATCHING.
2. THE CONTRACTOR SHALL PERFORM THE MILL PATCHING REMOVAL AND REPLACEMENT IN THE SAME DAY.
3. 4" DEPTH MILL PATCHING SHALL BE PERFORMED AT LOCATIONS AS SHOWN ON SHEET 4, AND AS DIRECTED BY THE ENGINEER.

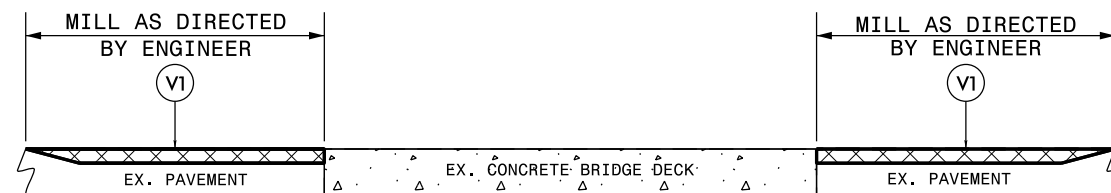
MILLING TYPICALS



DETAIL 1
BEGIN/END MAP TIE-IN

NOTE:

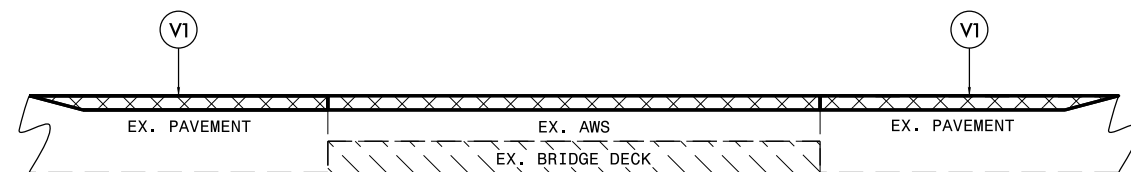
- MILLING SHALL BE PERFORMED AT MAIN LINE TIE-INS AND Y-LINE TIE-INS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



DETAIL 2
BRIDGE MILLING

NOTE:

- MILLING SHALL BE PERFORMED AT THE BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.

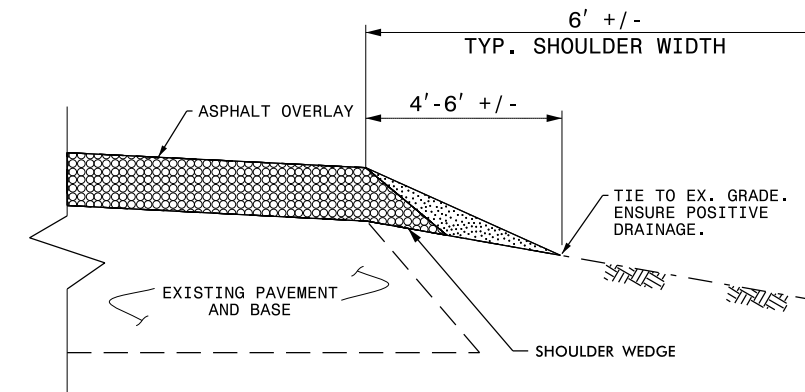


DETAIL 3
BRIDGE MILLING

NOTE:

- INCLUDES MILLING FOR THE ENTIRE WIDTH OF THE BRIDGE WEARING SURFACE, AS DIRECTED BY THE ENGINEER.

SHOULDER RECONSTRUCTION TYPICAL

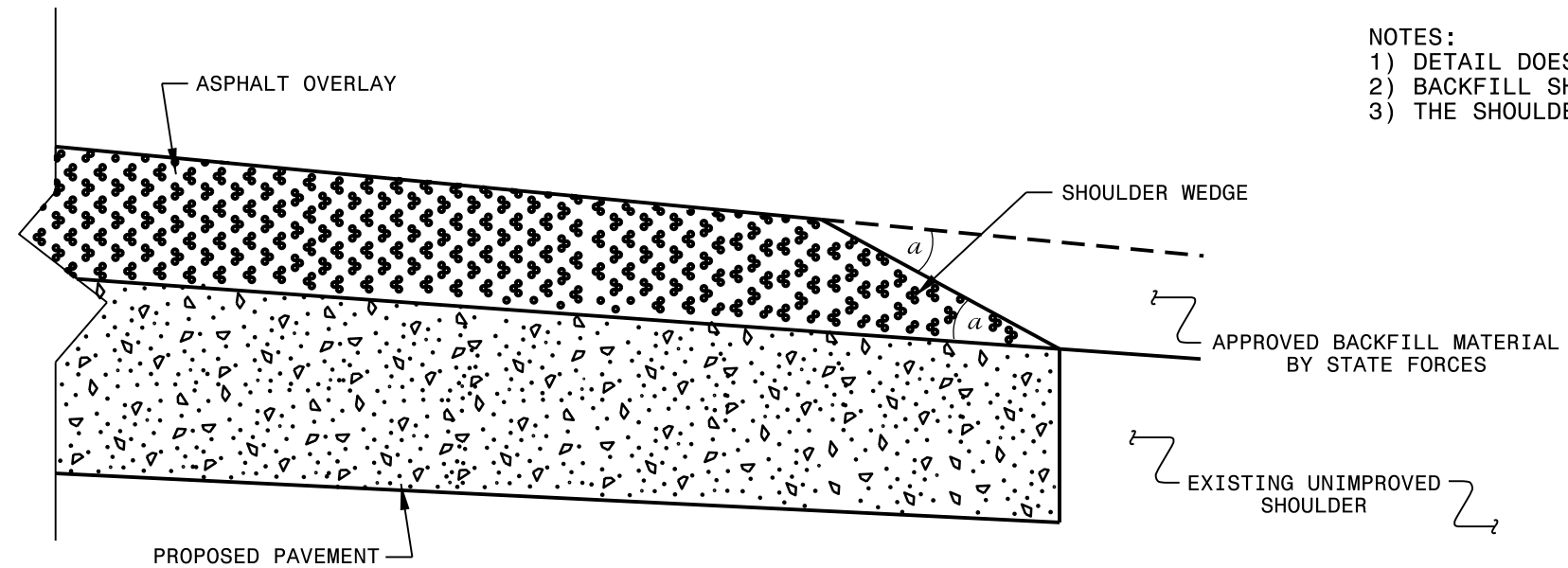


SHOULDER RECONSTRUCTION DETAIL

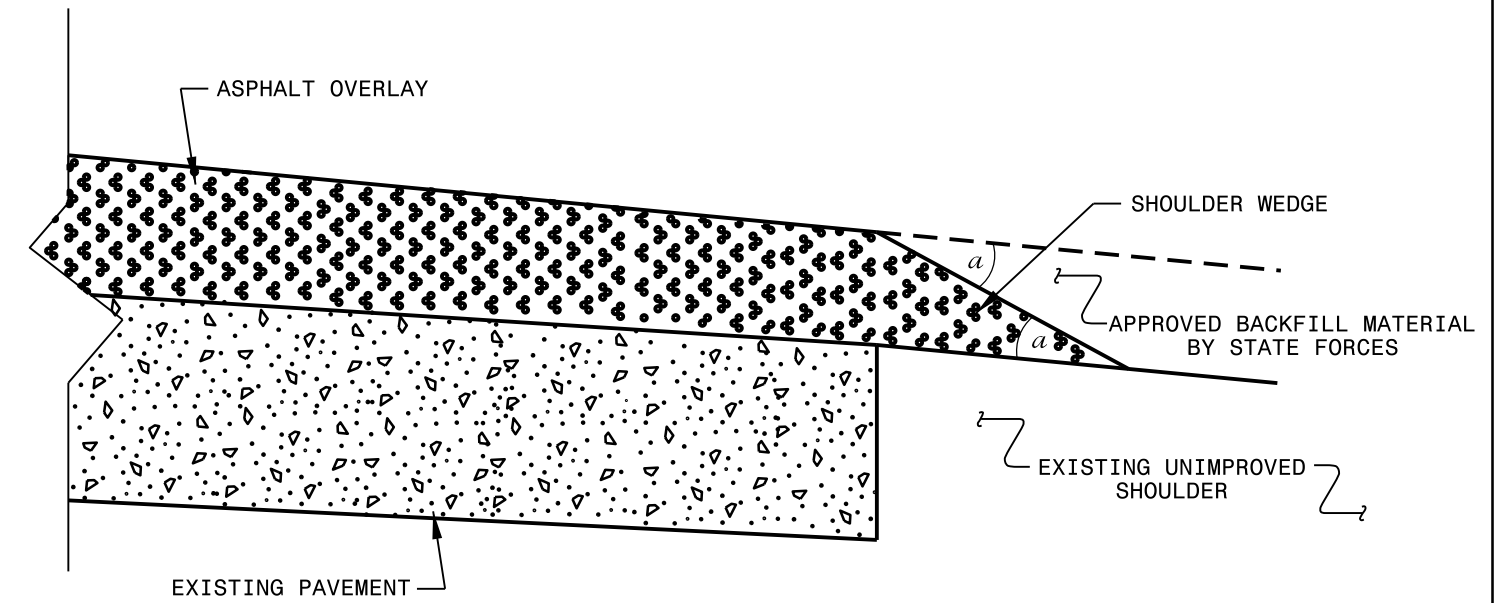
NOTE:

- SHOULDERS SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM THE ROADWAY.
- A VEGETATIVE BUFFER SHALL BE MAINTAINED BETWEEN THE DISTURBED AREA ALONG THE EDGE OF PAVEMENT AND THE DITCH SHOULDER POINT TO MINIMIZE EROSION. PULLING DITCHES OR CUTTING SHOULDERS TO GENERATE BORROW MATERIAL WILL NOT BE ALLOWED.
- REQUIRED BORROW MATERIAL MAY BE OBTAINED FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

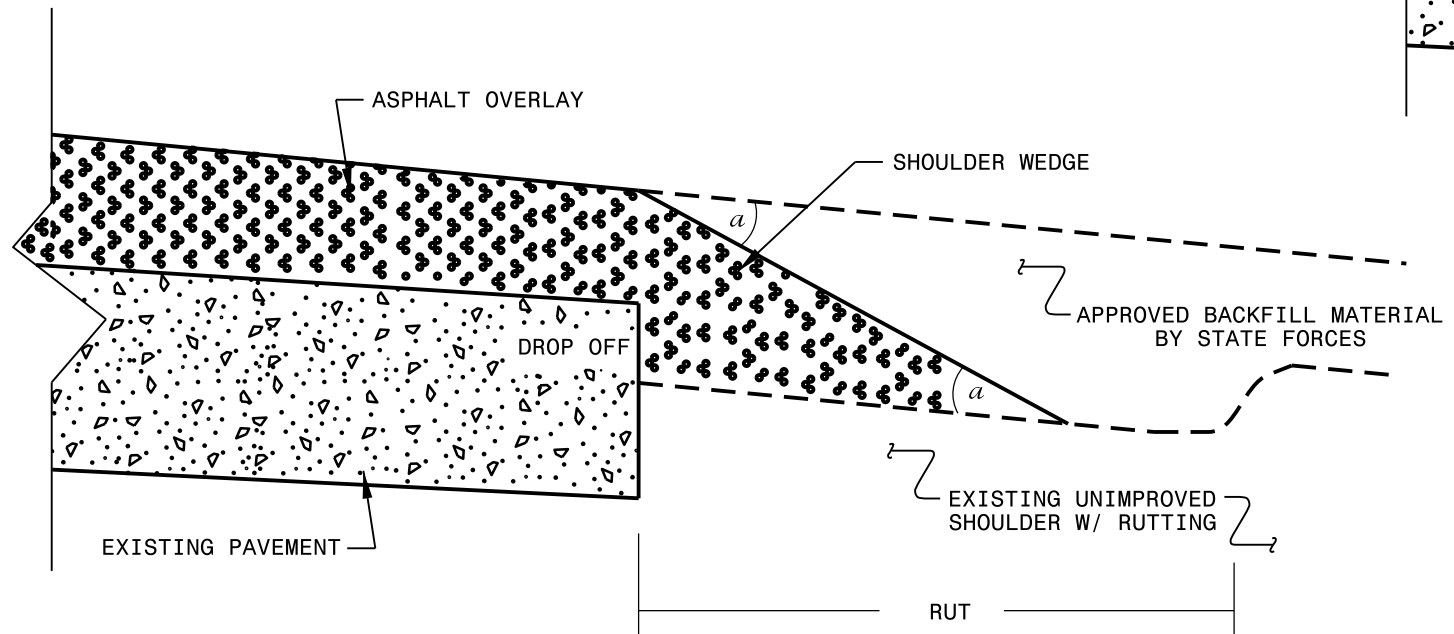
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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)

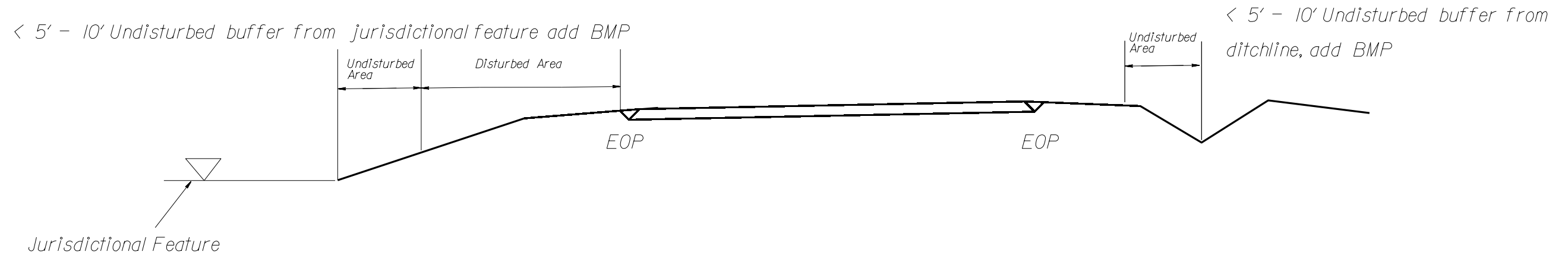
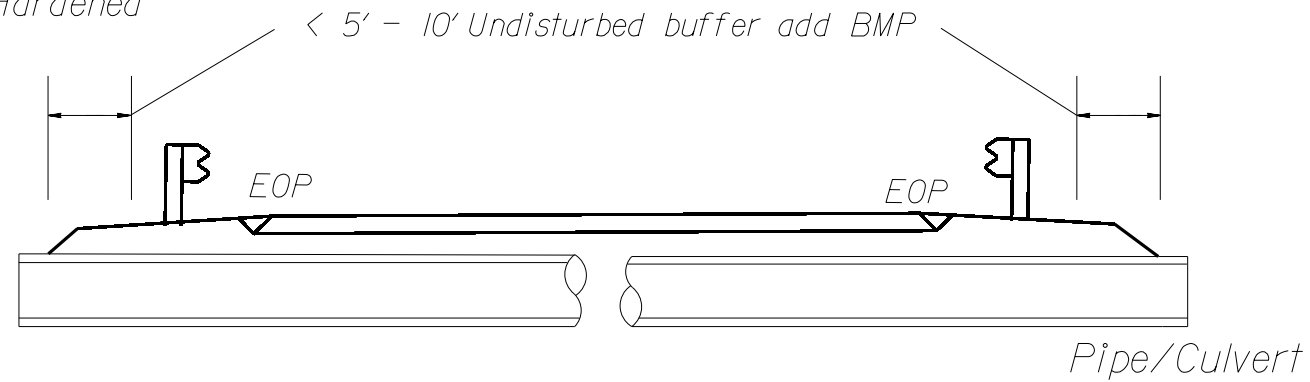
- SHOULDER WEDGE ANGLE = 30°

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.: s:\usr\details\stand\shoulderwedgedetail.dgn	

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

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

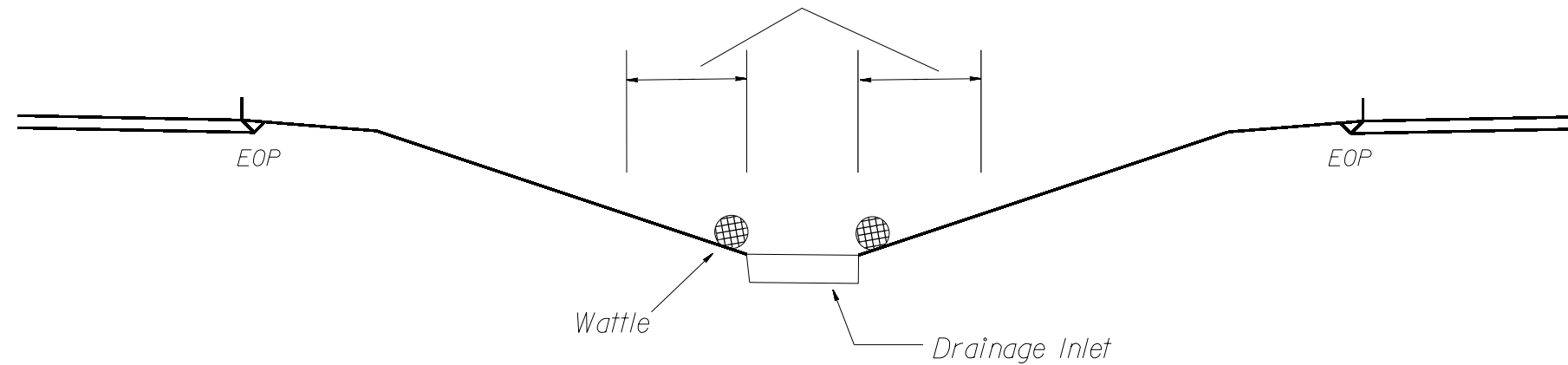
EROSION CONTROL DETAIL



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

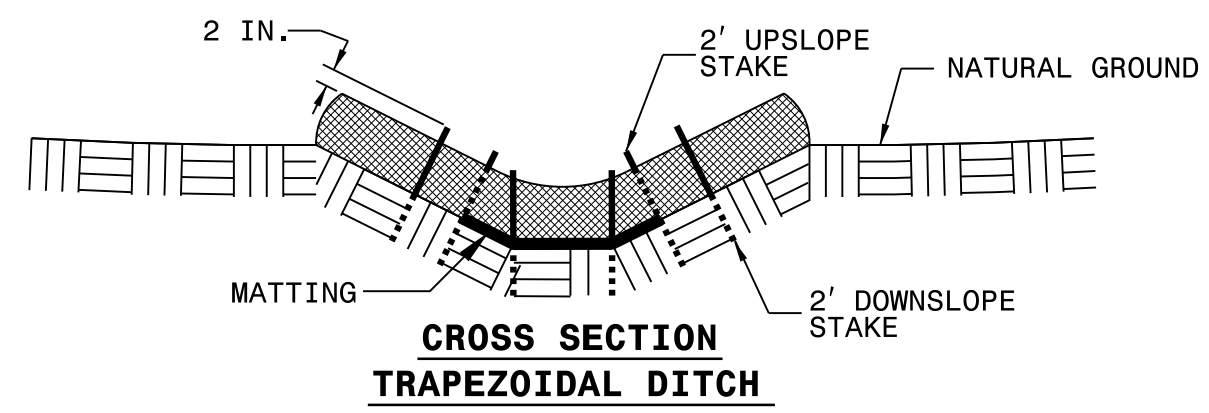
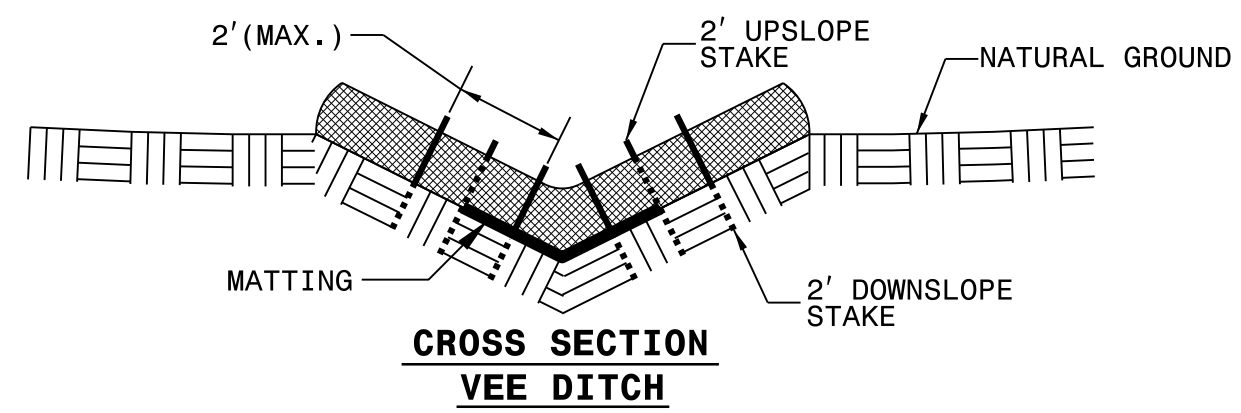
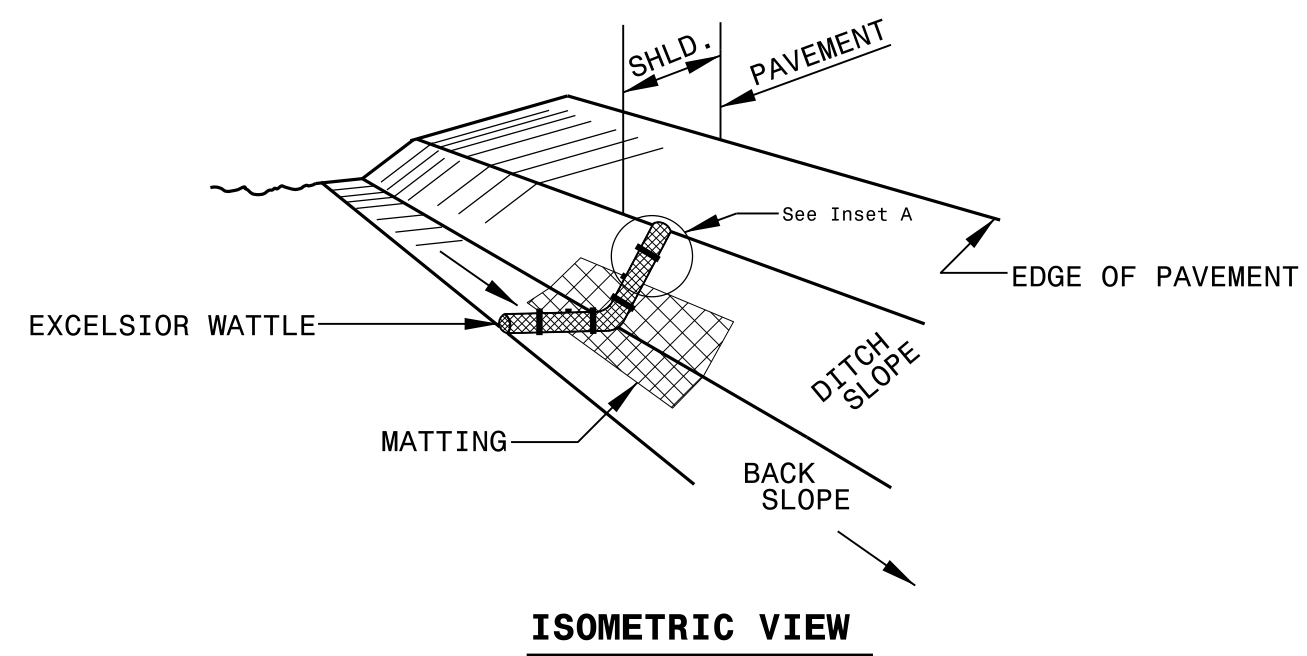


< 5' - 10' Undisturbed buffer from inlet, add wattle

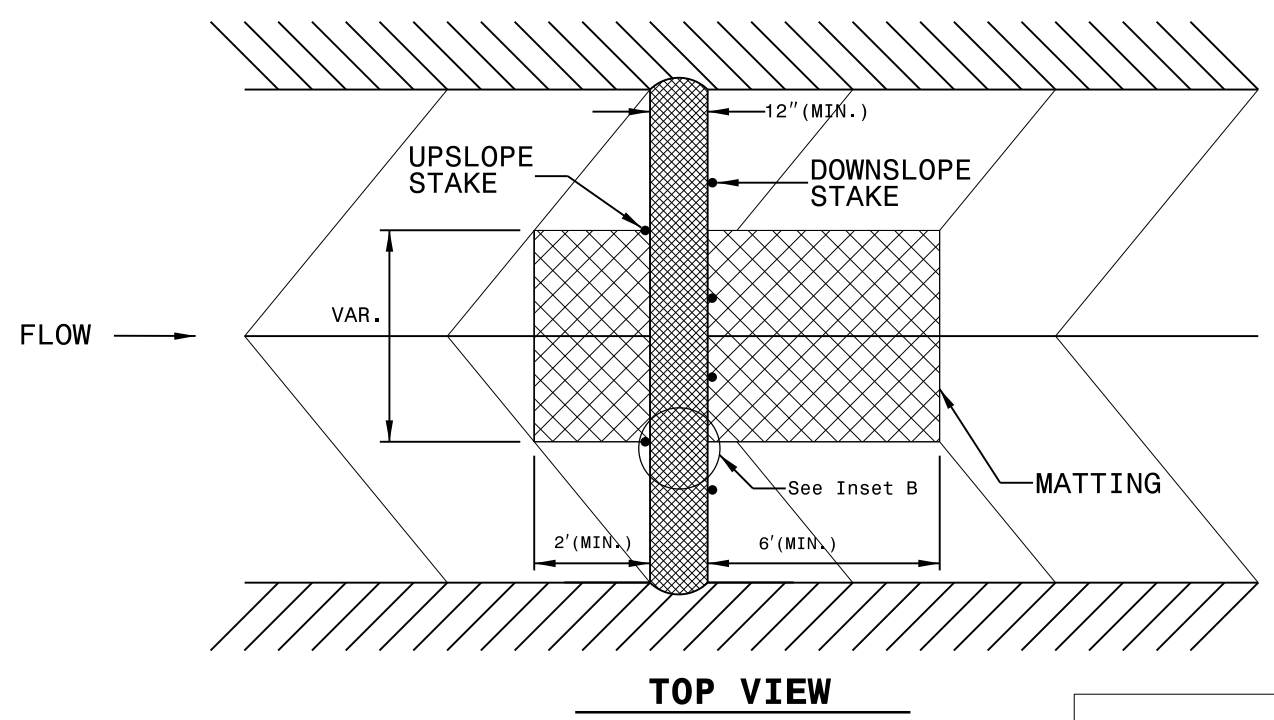
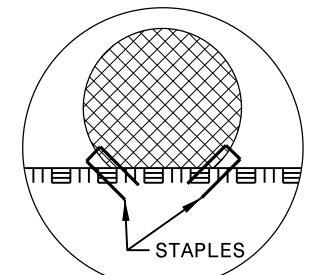
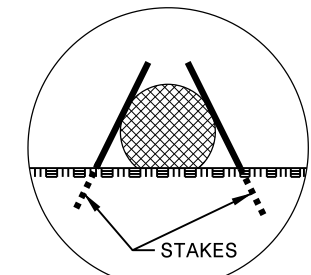


NOT TO SCALE

WATTLE DETAIL

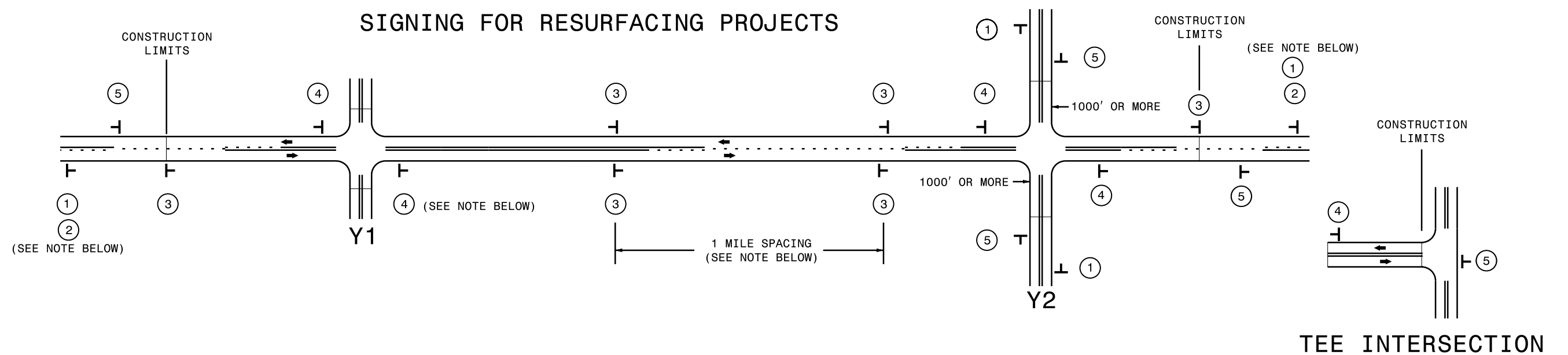


- NOTES:
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
 - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
 - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE 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.



NOT TO SCALE

SIGNING FOR RESURFACING PROJECTS



LEGEND	
	STATIONARY SIGN
	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	2	3	4	5	
			PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.			
			#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)			
			- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - 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.			
					PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

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.