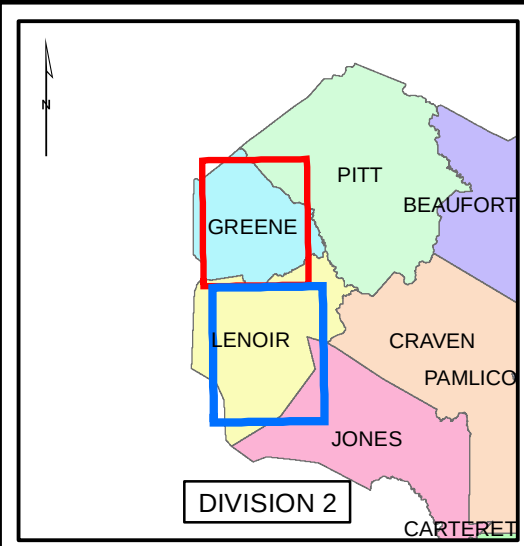




GREENE & LENOIR COUNTY

DB00386
WBS# 2018CPT.02.31.20401
2018CPT.02.33.20541

PROJECT REFERENCE NO.	SHEET NO.
DB00386	1

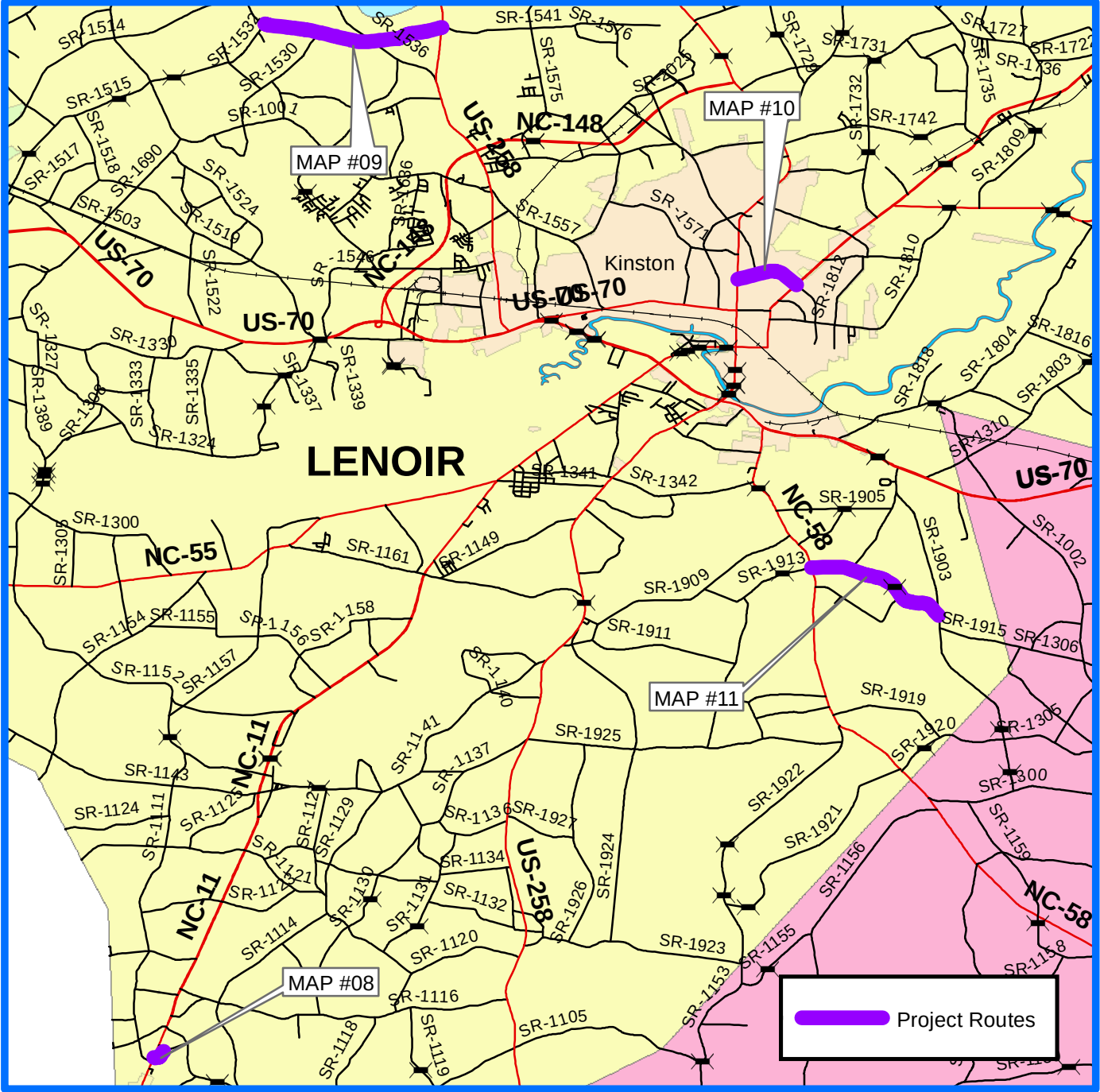
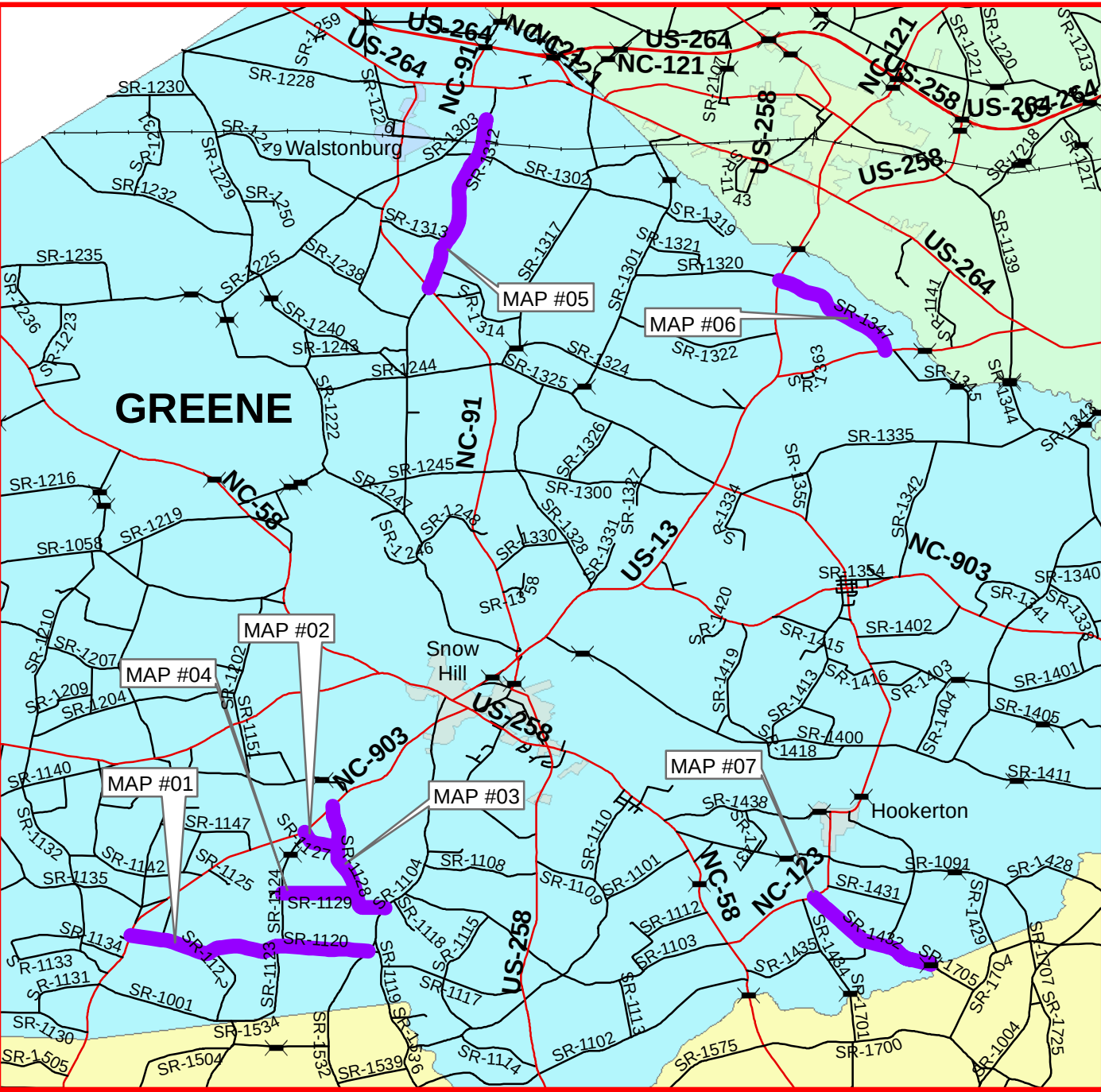


NCDOT
DIVISION 2

LOCATION:

MULTIPLE MAPS - SEE NEXT PAGE FOR DETAILS

**TYPE OF WORK: MILL PATCHING, WIDENING, STRENGTHENING, RESURFACING,
SHOULDER RECONSTRUCTION**

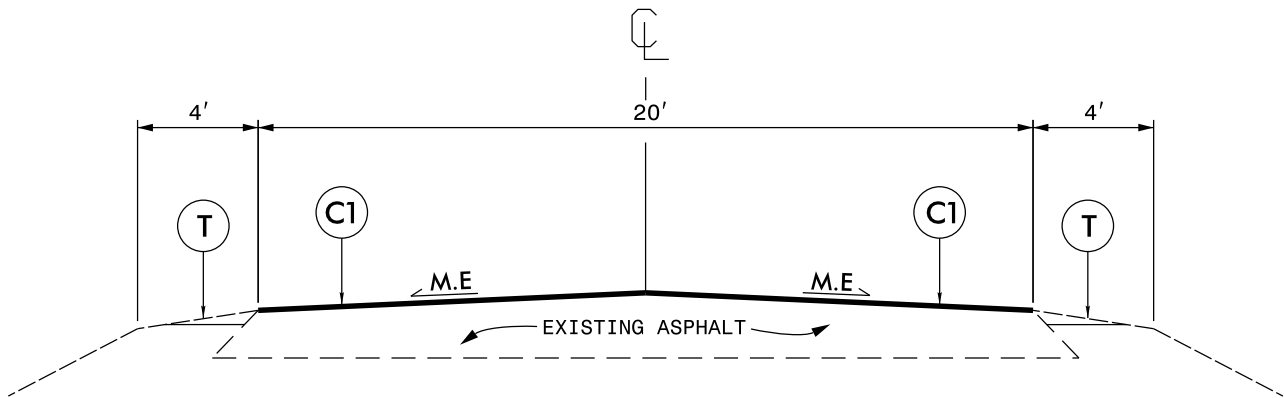


MAP LOCATION INFORMATION

WBS	Map Number	Typical Section Number	County	Route Name	From Description	To Description	Begin MP	To MP	Length	Width
2018CPT.02.31.20401	01	1	040-Greene	SR 1120	SR 1104	NC 903	0.15	3.66	3.50	18.00
2018CPT.02.31.20401	02	2	040-Greene	SR 1127	SR 1124	SR 1128	0.01	0.59	0.58	18.00
2018CPT.02.31.20401	03	2	040-Greene	SR 1128	SR 1104	NC 903	0.00	2.18	2.18	18.00
2018CPT.02.31.20401	04	1	040-Greene	SR 1129	SR 1124	SR 1128	0.00	1.05	1.05	18.00
2018CPT.02.31.20401	05	5	040-Greene	SR 1312	SR 1303	NC 91	0.00	3.08	3.08	18.00
2018CPT.02.31.20401	06	2	040-Greene	SR 1347	US 13	US 258	0.00	2.03	2.03	19.00
2018CPT.02.31.20401	07	2	040-Greene	SR 1432	NC 123	300FT WEST OF THE LENOIR CO LINE	0.00	2.10	2.10	18.00
2018CPT.02.33.20541	08	2	054-Lenoir	SR 1193	NC 11	107FT NE OF SR 1194	0.00	0.23	0.23	20.00
2018CPT.02.33.20541	09	3	054-Lenoir	SR 1541	SR 1532	US 258	0.00	2.76	2.76	19.00
2018CPT.02.33.20541	10	4	054-Lenoir	SR 1747	NC 11	NC 58	0.00	1.01	1.01	26.00
2018CPT.02.33.20541	11	2	054-Lenoir	SR 1913	NC 58	SR 1903	1.87	4.14	2.27	20.00

TYPICAL SECTION NO. 1

MAP 1,4

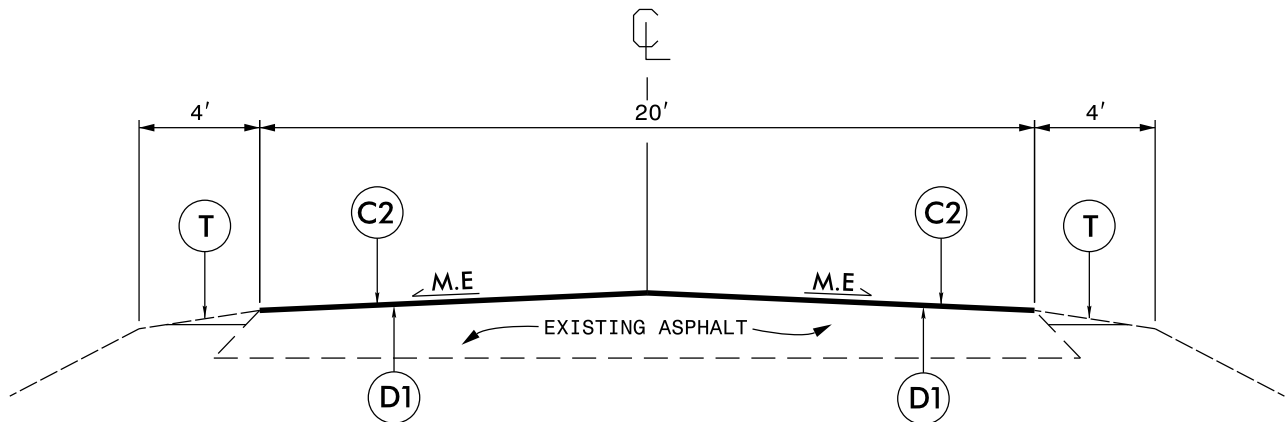


NOTE:

1. PLACE ASPHALT INTERMEDIATE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
4. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.
5. STRENGTHENING USING I19.0B SHALL BE PERFORMED AT LOCATIONS AS SHOWN IN THE TABLE ON PAGE 8.

TYPICAL SECTION NO. 2

MAP 2,3,6,7,8,11



NOTE:

1. PERFORM FULL DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN IN THE ATTACHED TABLES. PLACE ASPHALT BASE COURSE B 25.0B IN ONE LIFT TO BACKFILL.
2. PLACE ASPHALT INTERMEDIATE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
4. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
5. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

PAVEMENT SCHEDULE

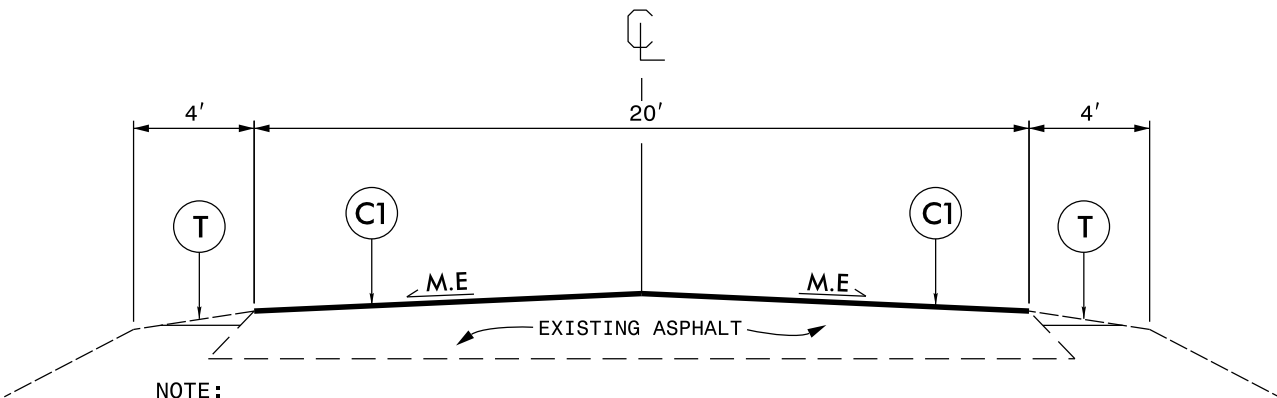
C1	PROP. APPROX. 1 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224.0 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ACBC, TYPE B25.0B AT AN AVERAGE RATE OF 684.0 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING.
V2	MILLING DEPTH 2" FOR THE ENTIRE WIDTH OF ROADWAY.
T	SHOULDER RECONSTRUCTION

DRAWINGS NOT TO SCALE

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

TYPICAL SECTION NO. 3

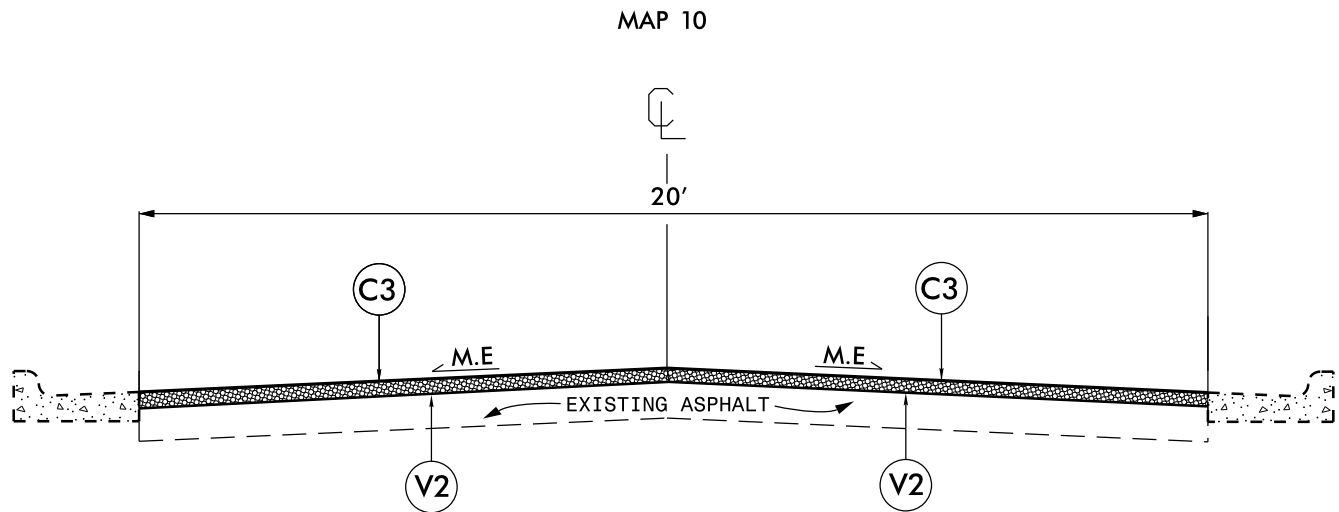
MAP 9



NOTE:

1. PERFORM FULL DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN IN THE ATTACHED TABLES. PLACE ASPHALT BASE COURSE B 25.0B IN ONE LIFT TO BACKFILL.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
4. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

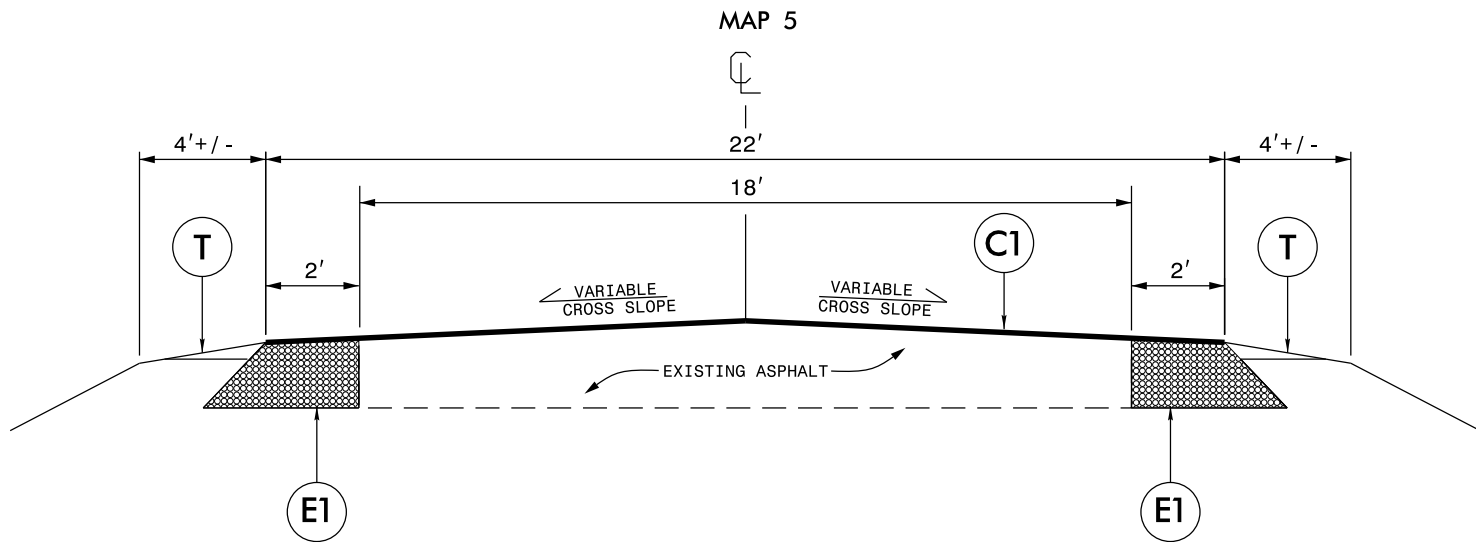
TYPICAL SECTION NO. 4



NOTE:

1. PERFORM FULL DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN IN THE ATTACHED TABLES. PLACE ASPHALT BASE COURSE B 25.0B IN ONE LIFT TO BACKFILL.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.

TYPICAL SECTION NO. 5



NOTE:

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

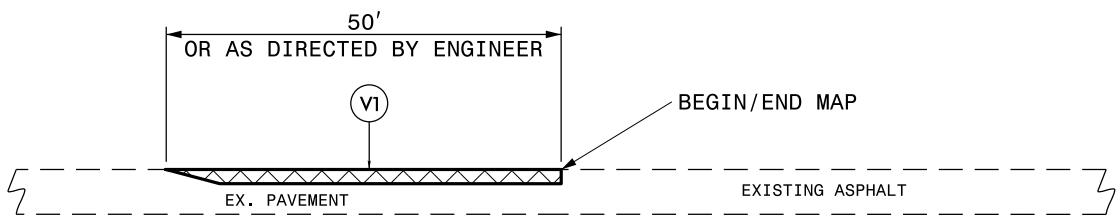
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224.0 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ACBC, TYPE B25.0B AT AN AVERAGE RATE OF 684.0 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING.
V2	MILLING DEPTH 2" FOR THE ENTIRE WIDTH OF ROADWAY.
T	SHOULDER RECONSTRUCTION

DRAWINGS NOT TO SCALE

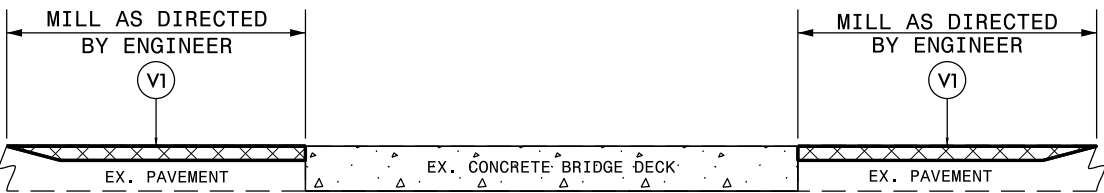
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

MILLING TYPICALS



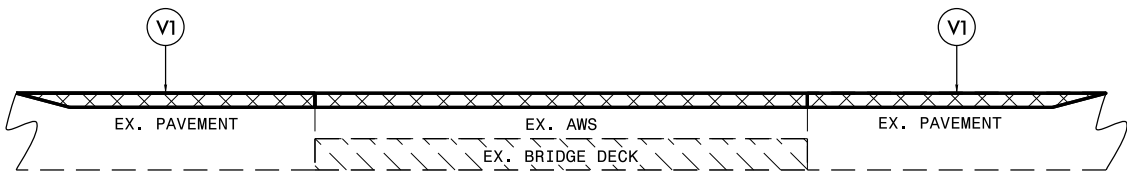
DETAIL 1
BEGIN/END MAP TIE-IN

NOTE:
1. 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

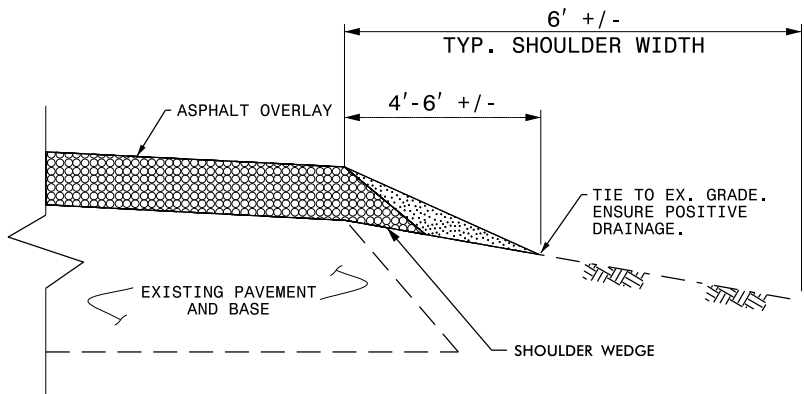
NOTE:
1. MILLING SHALL BE PERFORMED AT THE BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



DETAIL 3
BRIDGE MILLING

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

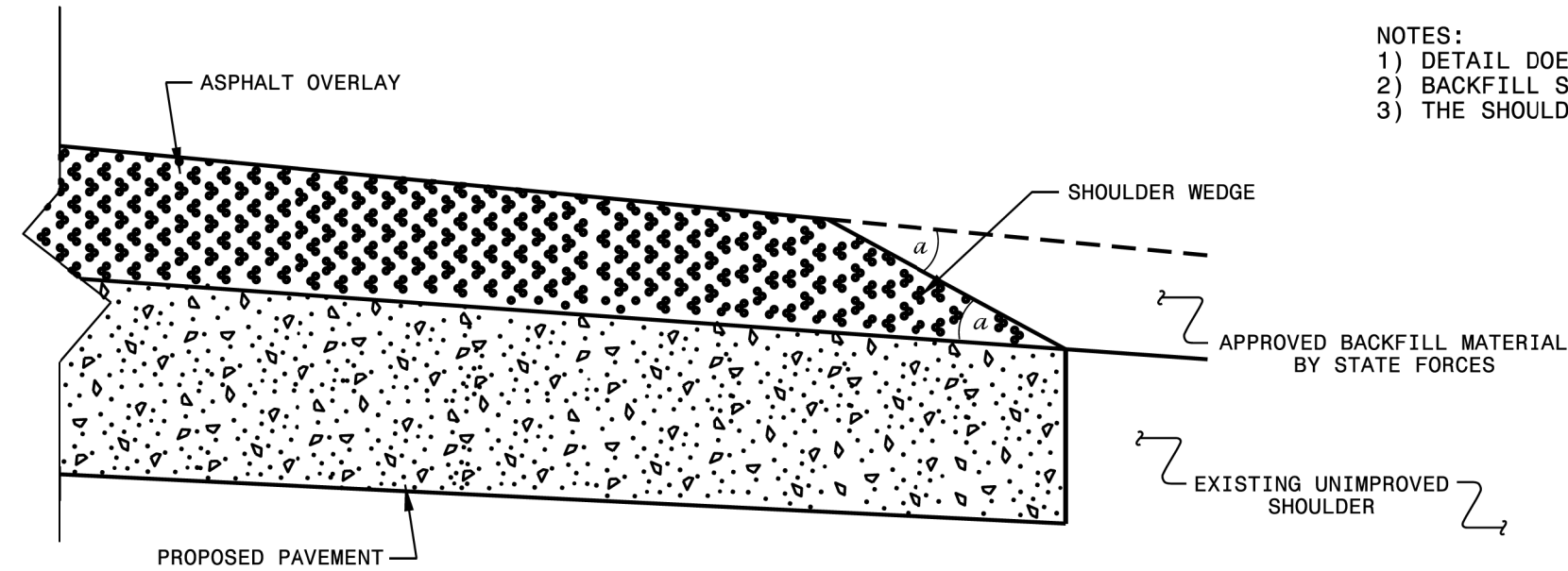
SHOULDER RECONSTRUCTION TYPICAL



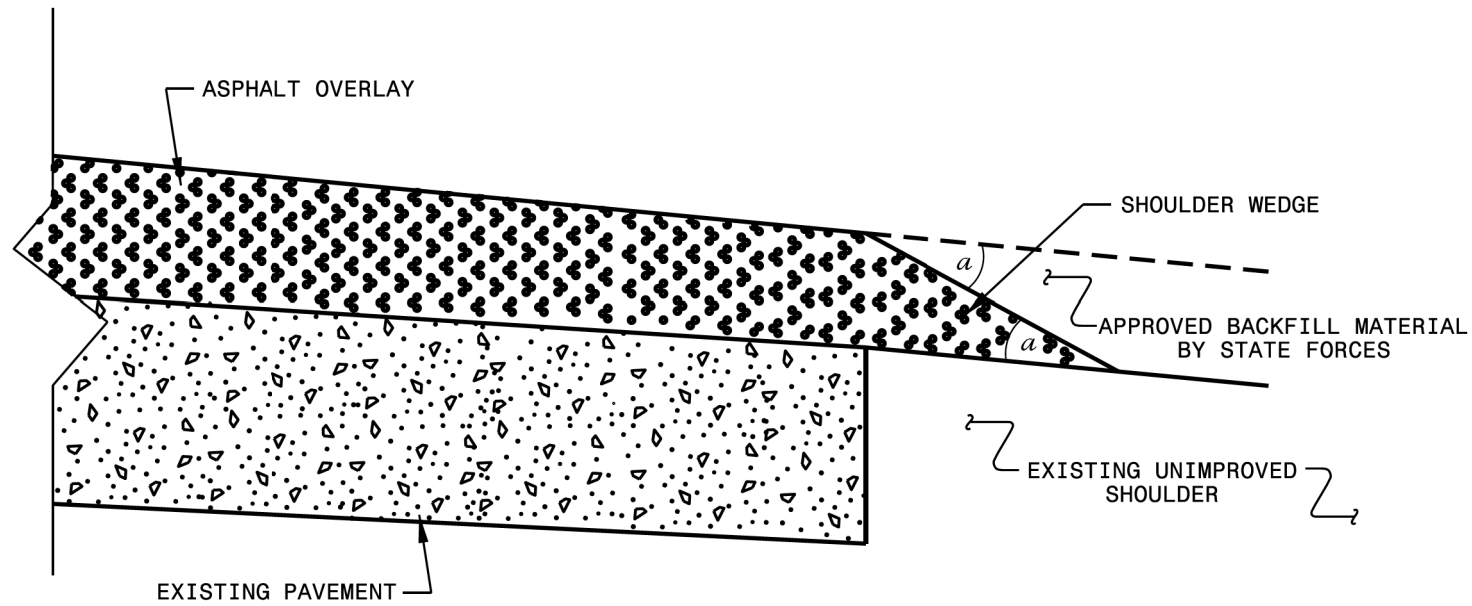
SHOULDER RECONSTRUCTION DETAIL

NOTE:
1. 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.
2. 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.
3. REQUIRED BORROW MATERIAL MAY BE OBTAINED FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

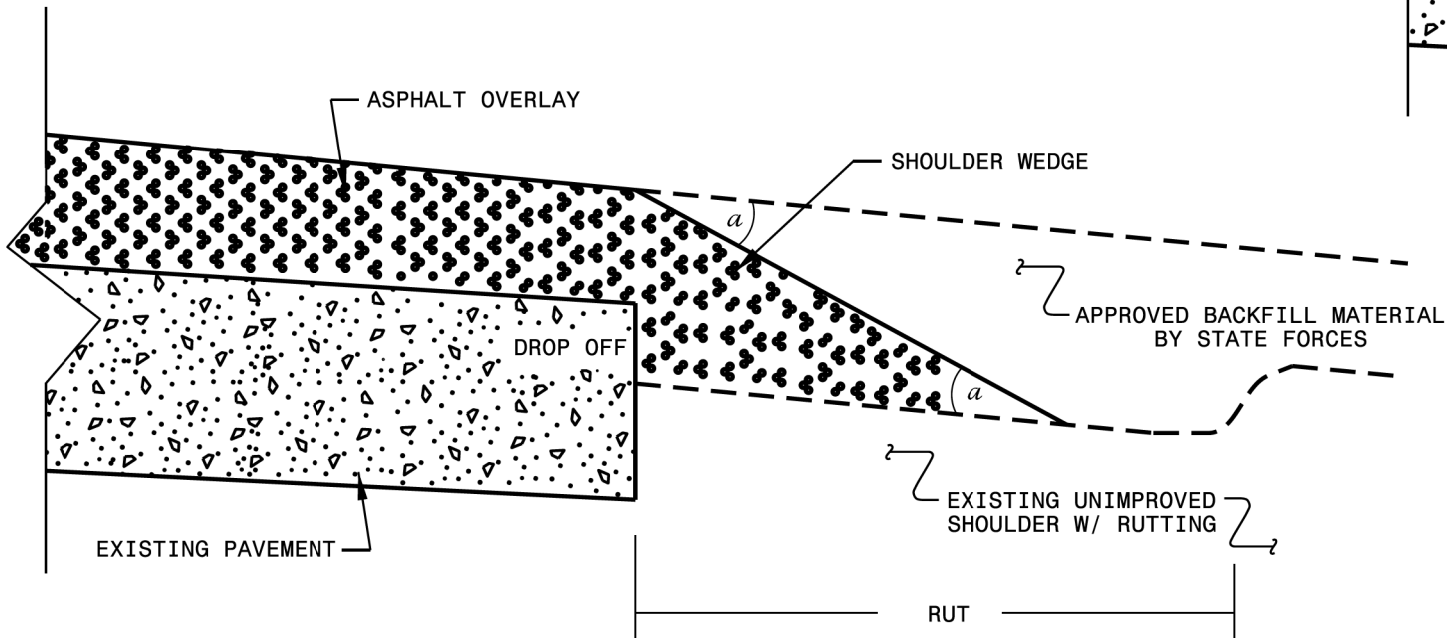
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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)

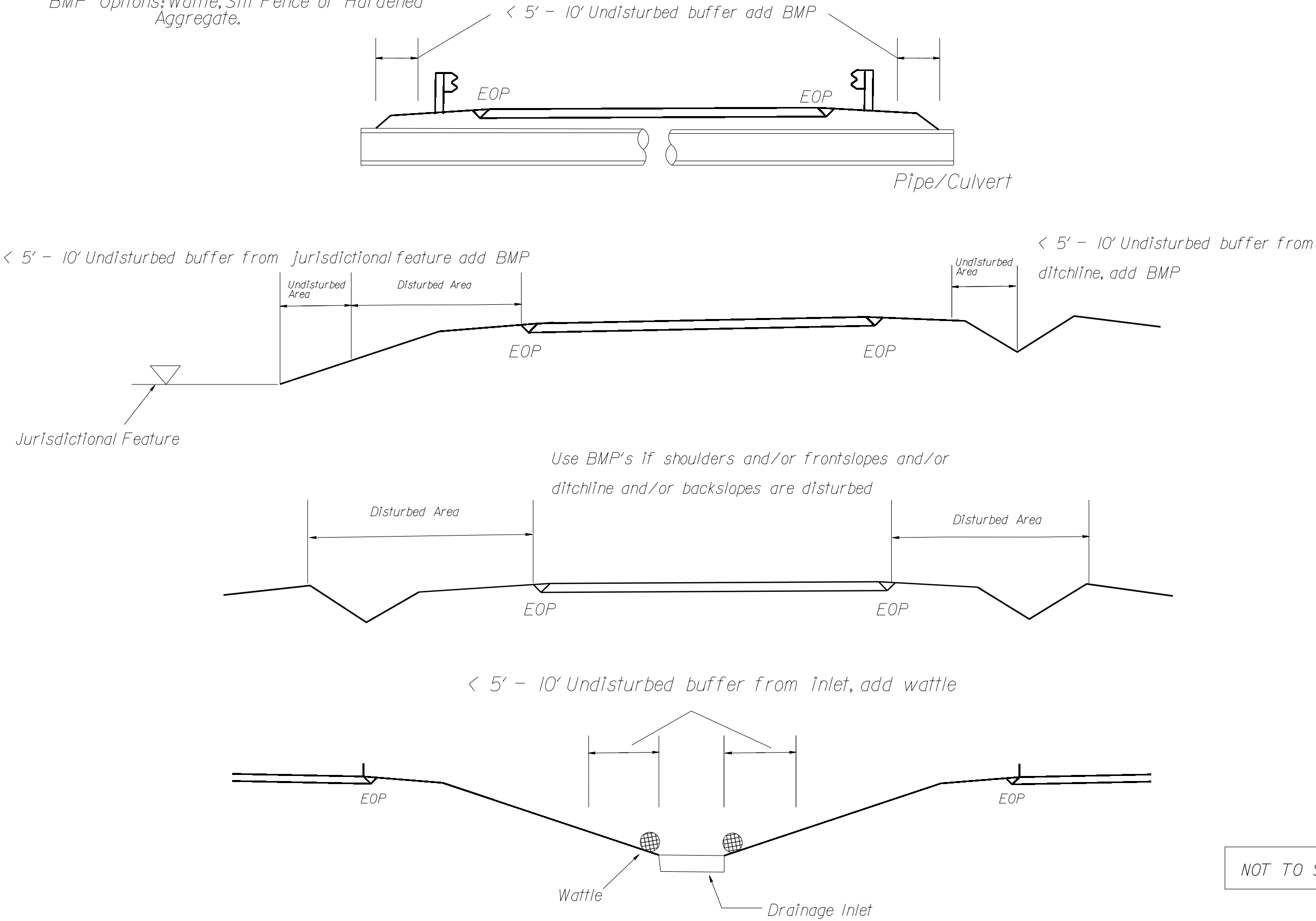
- SHOULDER WEDGE ANGLE = 30°

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		

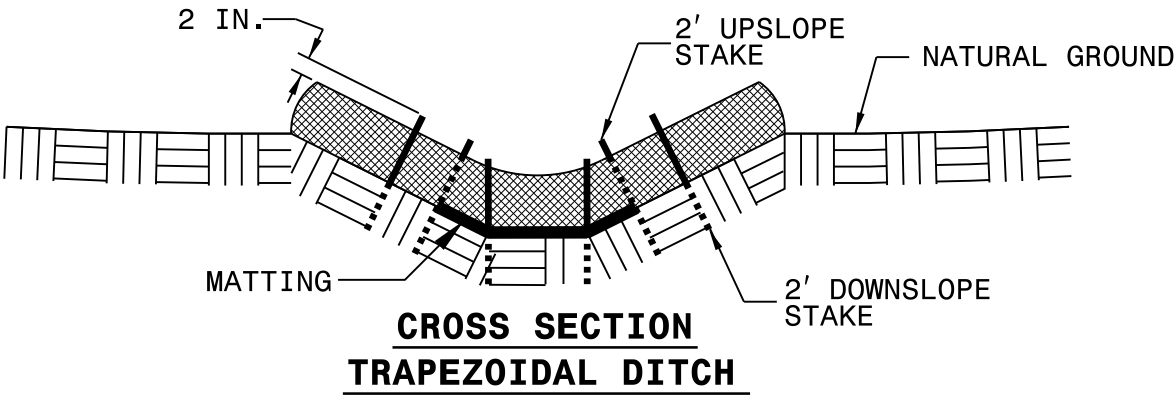
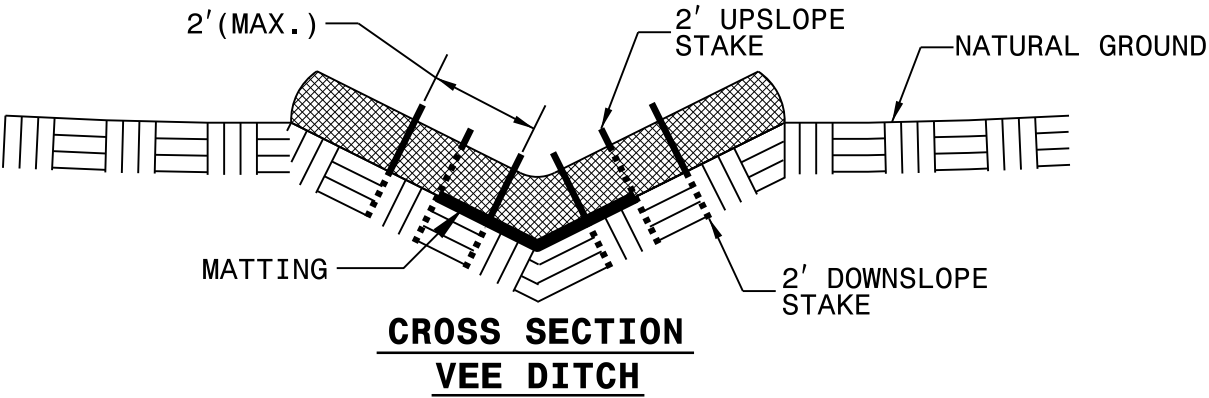
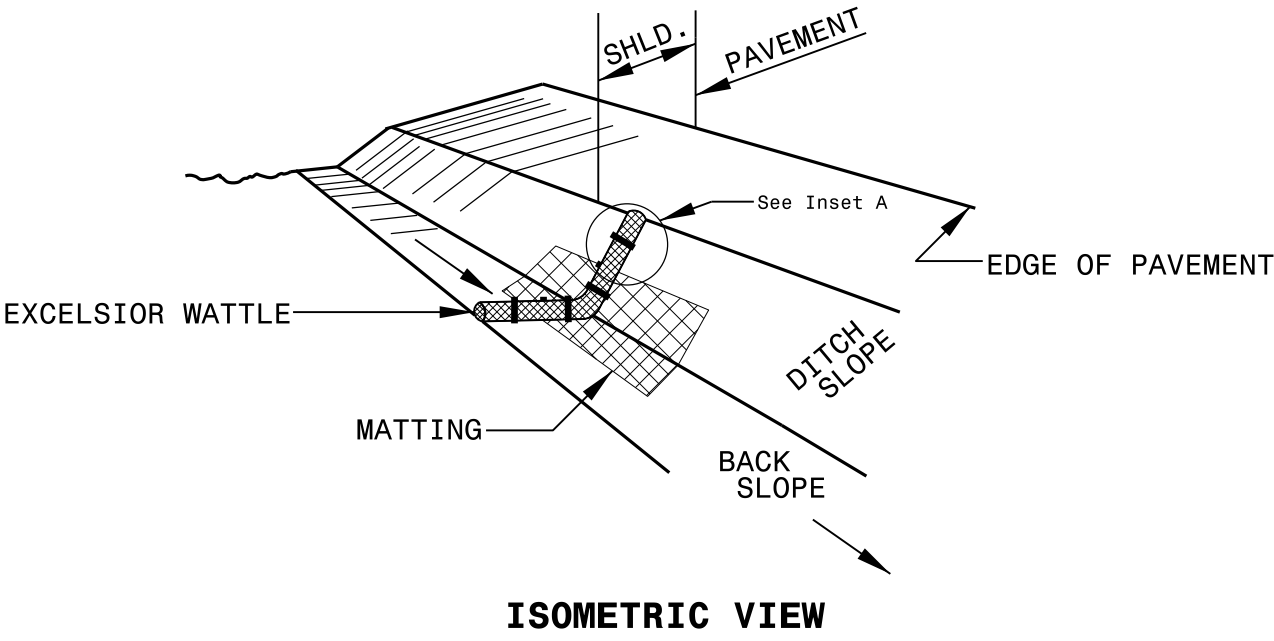
NOTES: Less than 5' – 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

EROSION CONTROL DETAIL



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.

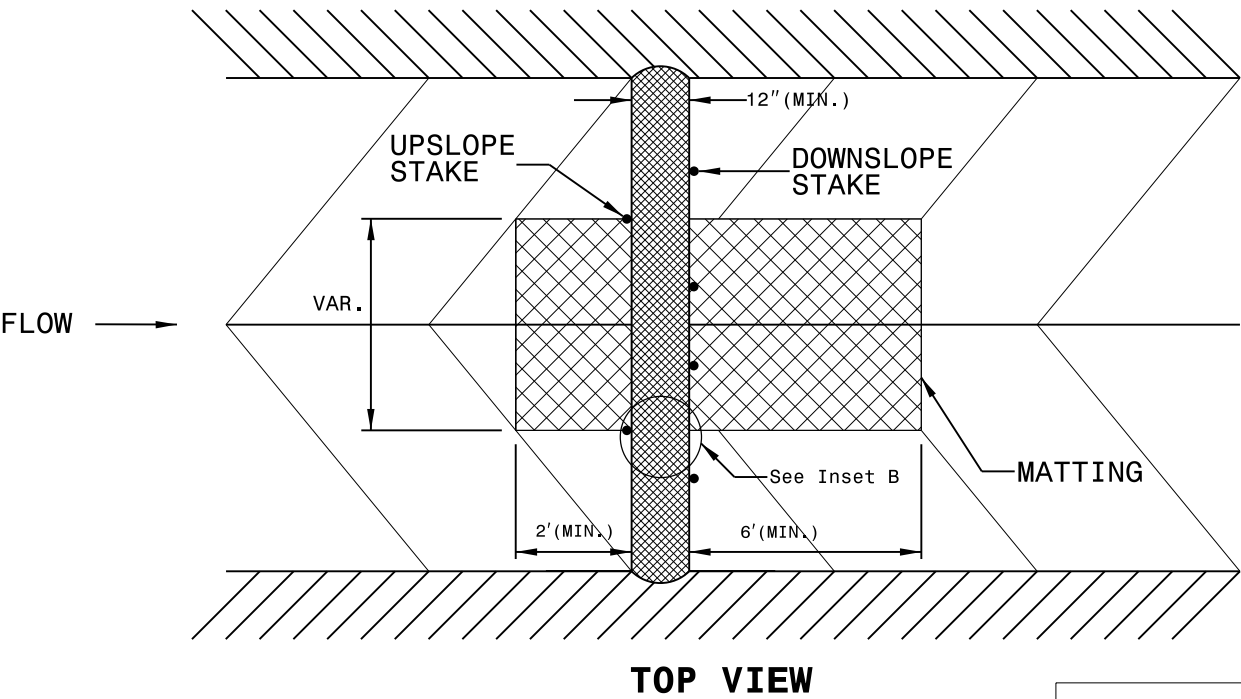
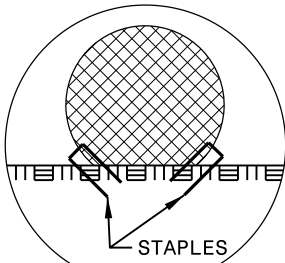
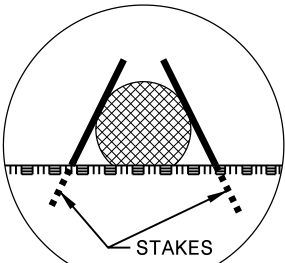
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.

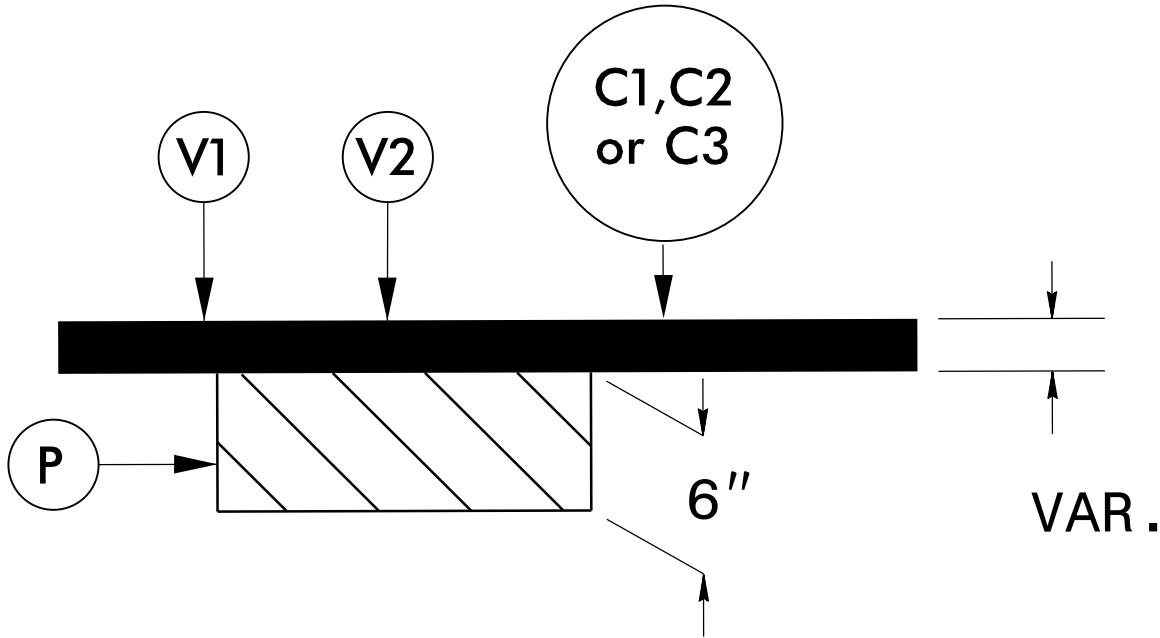
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

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



NOT TO SCALE

6" DEPTH MILL PATCHING DETAIL



PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" OF ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1¾" OF ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5A, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD. PER LAYER
V1	INCIDENTAL MILLING
V2	MILLING DEPTH 2" FOR THE ENTIRE WIDTH OF ROADWAY.
P	6" DEPTH MILL PATCHING W/ B 25.0B
DRAWINGS NOT TO SCALE	

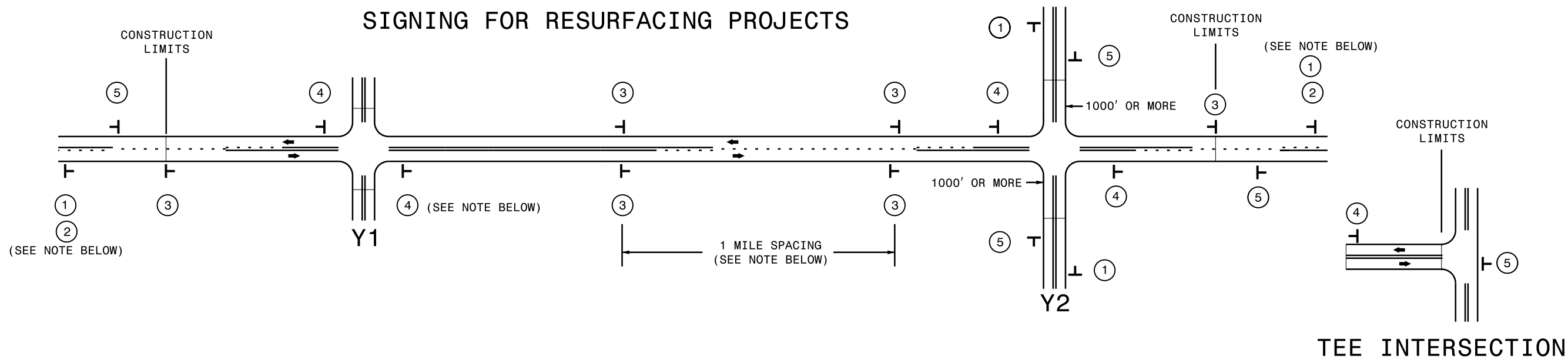
NOTE:

1.
- THE CONTRACTOR SHALL PERFORM ANY UNIFORM OR INCIDENTAL MILLING AT TIE-INS BEFORE PERFORMING THE 6" DEPTH MILL PATCHING.
2.
- THE CONTRACTOR SHALL PERFORM THE 6" DEPTH MILL PATCHING REMOVAL AND REPLACEMENT IN THE SAME DAY.
3.
- 6" DEPTH MILL PATCHING SHALL BE PERFORMED AT LOCATIONS AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

PROJECT NO.	SHEET NO.	TOTAL NO.
DB00386	11	

THERMOPLASTIC AND PAINT QUANTITIES

										4413000000-E	4457000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL
								MI	FT		
2018CPT.02.31.20401	Greene	1	SR 1120	FROM SR 1104 TO NC 903	1	2	2WU	3.50	18	400	0.17
TOTAL FOR MAP NO. 1								3.50		400	0.17
2018CPT.02.31.20401	Greene	2	SR 1127	FROM SR 1124 TO SR 1128	2	2	2WU	0.58	18	70	0.03
TOTAL FOR MAP NO. 2								0.58		70	0.03
2018CPT.02.31.20401	Greene	3	SR 1128	FROM SR 1104 TO NC 903	2	2	2WU	2.18	18	250	0.10
TOTAL FOR MAP NO. 3								2.18		250	0.10
2018CPT.02.31.20401	Greene	4	SR 1129	FROM SR 1124 TO SR 1128	1	2	2WU	1.05	18	125	0.05
TOTAL FOR MAP NO. 4								1.05		125	0.05
2018CPT.02.31.20401	Greene	5	SR 1312	SR 1303 TO NC 91	5	2	2WU	3.08	18	350	0.15
TOTAL FOR MAP NO. 5								3.08		350	0.15
2018CPT.02.31.20401	Greene	6	SR 1347	FROM US 13 TO US 258	2	2	2WU	2.03	19	225	0.10
TOTAL FOR MAP NO. 6								2.03		225	0.10
2018CPT.02.31.20401	Greene	7	SR 1432	FROM NC 123 TO 300FT WEST OF THE LENOIR CO. LINE	2	2	2WU	2.10	18	225	0.10
TOTAL FOR MAP NO. 7								2.10		225	0.10
TOTAL FOR PROJ NO. 2018CPT.02.31.20401								14.52		1,645	0.70
2018CPT.02.33.20541	Lenoir	8	SR 1193	FROM NC 11 TO 107FT NE OF SR 1194	2	2	2WU	0.23	20	30	0.01
TOTAL FOR MAP NO. 8								0.23		30	0.01
2018CPT.02.33.20541	Lenoir	9	SR 1541	FROM SR 1532 TO US 258	3	2	2WU	2.76	20	310	0.13
TOTAL FOR MAP NO. 9								2.76		310	0.13
2018CPT.02.33.20541	Lenoir	10	SR 1747	FROM NC 11 TO NC 58	4	2	2WU	1.01	29	180	0.05
TOTAL FOR MAP NO. 10								1.01		180	0.05
2018CPT.02.33.20541	Lenoir	11	SR 1913	FROM NC 58 TOSR 1903	2	2	2WU	2.27	20	255	0.11
TOTAL FOR MAP NO. 11								2.27		255	0.11
TOTAL FOR PROJ NO. 2018CPT.02.33.20541								6.27		775	0.30
GRAND TOTAL								20.79		2,420	1



LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 2 ROAD WORK AHEAD W20-1 48" X 48" NEXT XX MILES 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. #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)	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. ROAD WORK AHEAD W20-1 48" X 48" ROAD WORK AHEAD W20-7 A 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.
	3 LOW/SOFT SHOULDER SP 13107 48" X 48" - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY ½ MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4 ROAD UNDER CONST 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. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5 END ROAD WORK 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.	