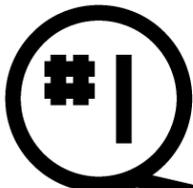


**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CR.2090I.127, 10CR.2090I.128	1	
F.A. PROJECT NO.			

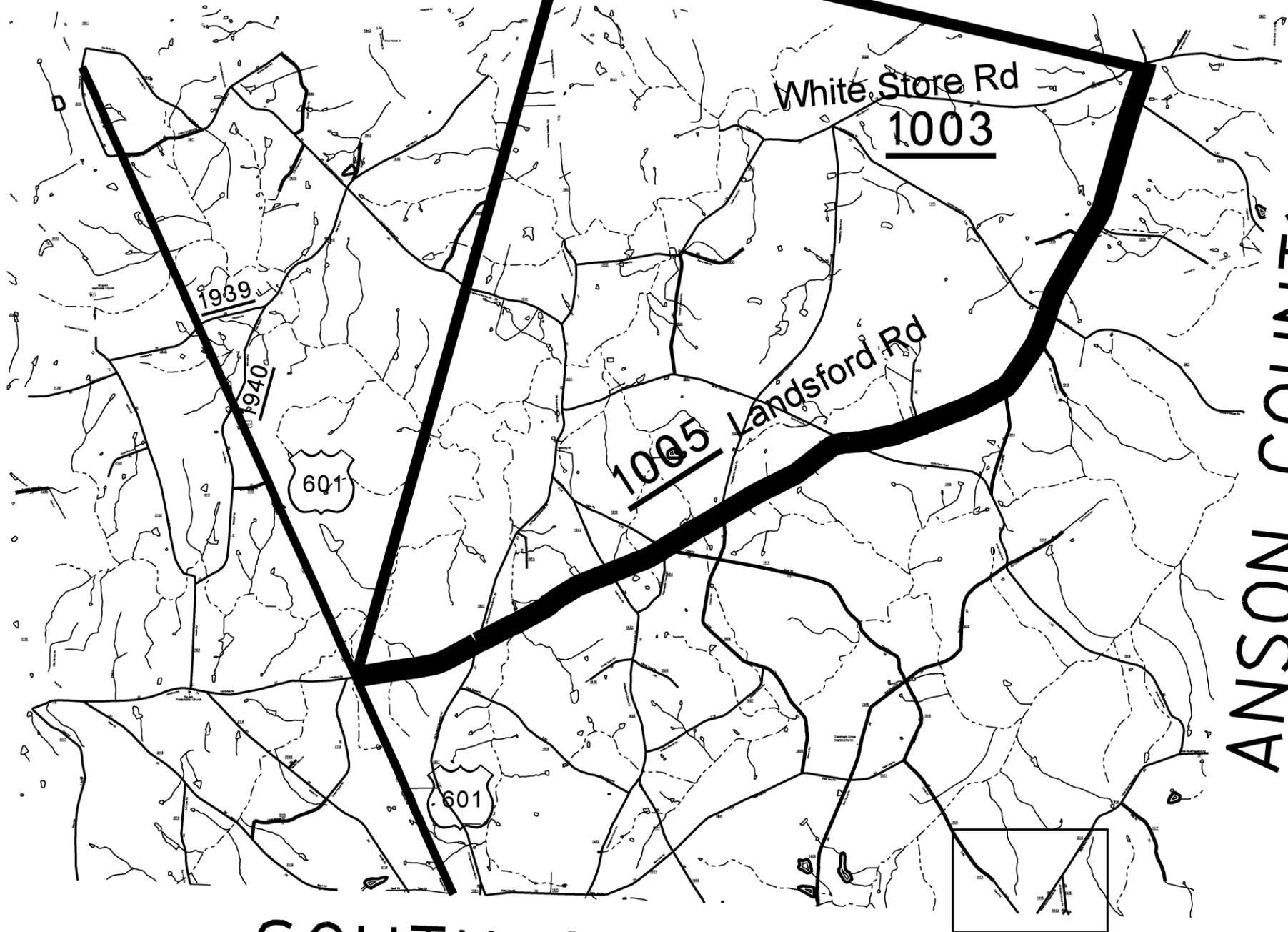


ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

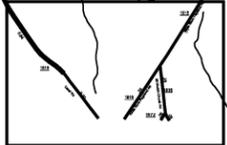


ANSON COUNTY

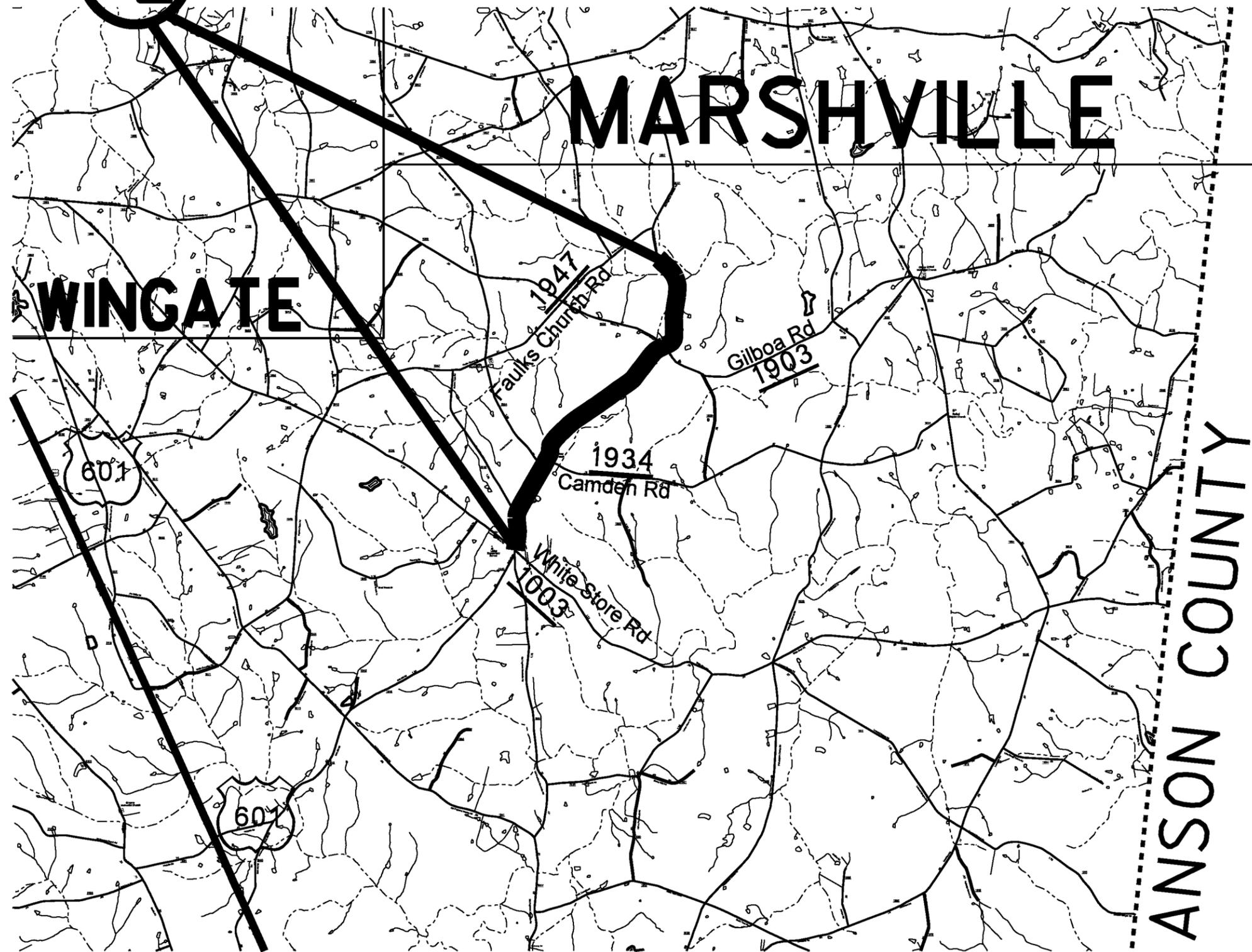
SOUTH CAROLINA

MAP #1 SR-1005 (LANDSFORD RD)
7.9 MILES

FROM PVMT JT @ US 601 SOUTH TO
SR 1003 WHITE STORE RD



#2



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		2	
F.A. PROJECT NO.			



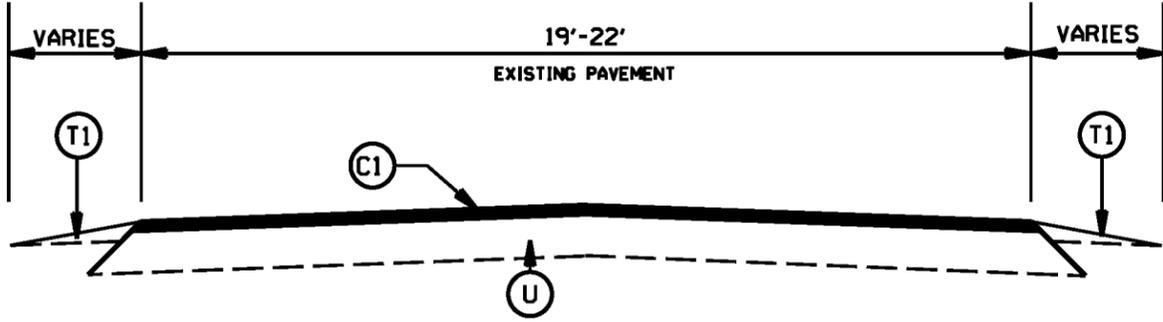
ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA

PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

ANSON COUNTY

MAP #2 SR-1937 OLD PAGELAND-MARSHVILLE ROAD
 3.2 MILES
 FROM SR 1003 WHITE STORE ROAD TO
 PAVEMENT JOINT 780' SOUTH OF
 SR 1947 FAULKS CHURCH ROAD

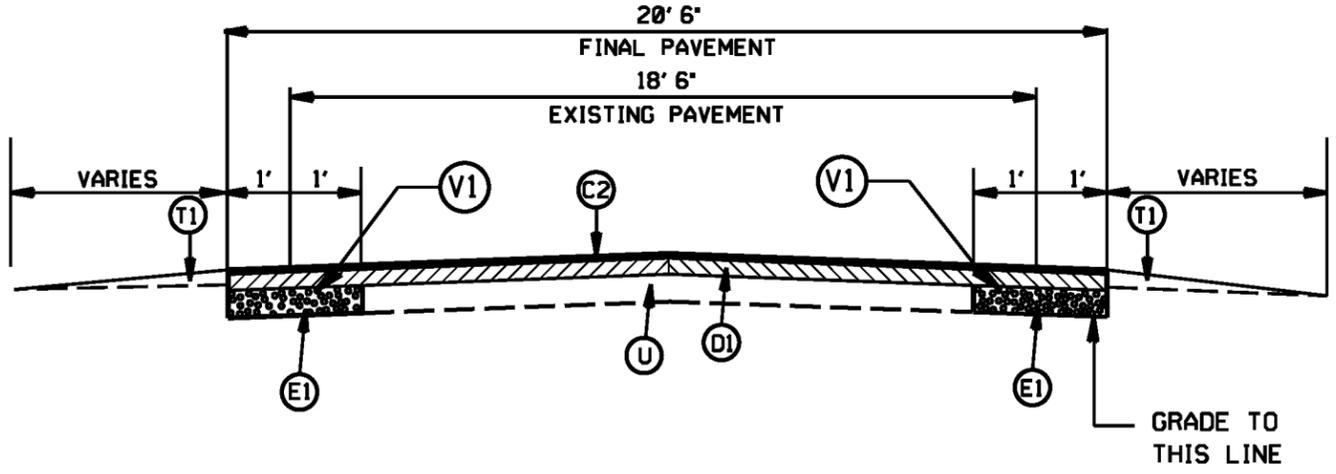
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CR.20901.127, ETC	3	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 1
SR 1005 LANDSFORD ROAD (MAP 1)

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(D1)	PROP. APPROX. 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0B AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING 1' OF EXISTING PAVEMENT, 5" IN DEPTH. (SEE S.P. FOR "TRENCHING FOR BASE COURSE BY MILLING.")



TYPICAL SECTION NO. 2
SR 1937 OLD PAGELAND-MARSHVILLE ROAD (MAP 2)
FROM SR 1934 CAMDEN ROAD
TO SR 1903 GILBOA RD

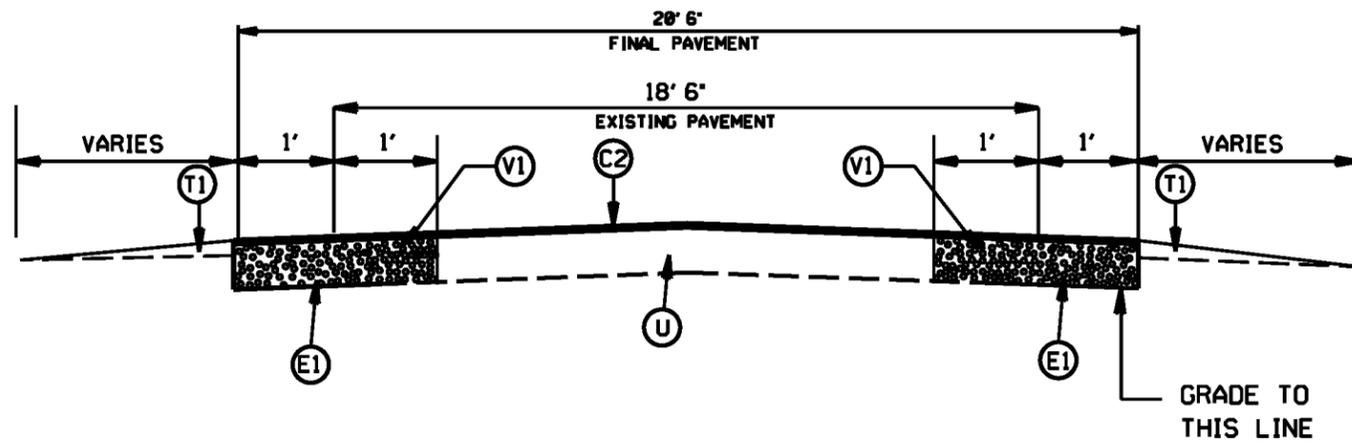
NOTES:

- 1: SHOULDER RECONSTRUCTION WILL BE AS DIRECTED BY THE ENGINEER.
- 2: MAP 2. BRIDGE TO BE MILLED 15" AND REPLACE WITH 15" S9.5B.
- 3: LEVELING COURSE TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 4: TRENCHING FOR BASE COURSE TO INCLUDE 1' OF MILLING EXISTING ASPHALT PAVEMENT.

2015-2016 UNION COUNTY
SR 1005 LANDSFORD ROAD
SR 1937 OLD PAGELAND- MARSHVILLE ROAD

SCALE	-1A-		REVISIONS
DATE	04/15		
DESIGNED BY	AND		
DESIGN BY	AND		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CR.20901.127, ETC	4	
F.A. PROJECT NO.			



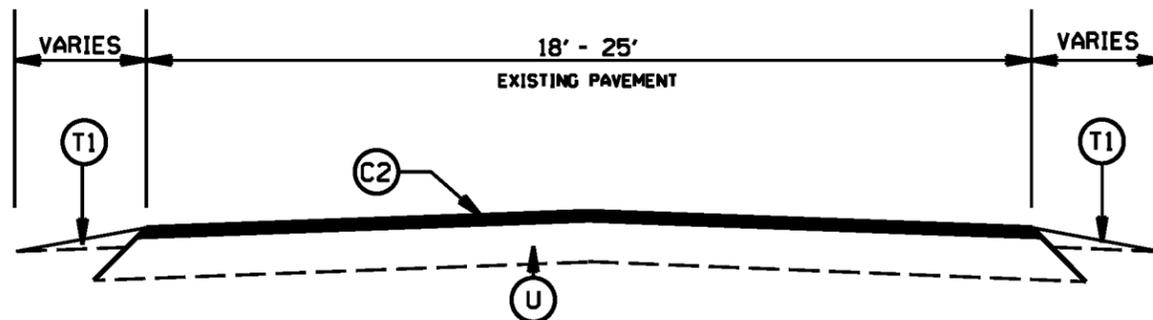
TYPICAL SECTION NO. 3
 SR 1937 OLD PAGELAND-MARSHVILLE ROAD (MAP 2)
 FROM SR 1003 WHITE STORE ROAD TO SR 1934 CAMDEN ROAD
 FROM SR 1903 GILBOA ROAD TO BRIDGE

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(D1)	PROP. APPROX. 2.5" ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC BASE COURSE, TYPE B25.0B AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING 1' OF EXISTING PAVEMENT, 5" IN DEPTH. (SEE S.P. FOR 'TRENCHING FOR BASE COURSE BY MILLING.')

NOTES:

- 1: SHOULDER RECONSTRUCTION WILL BE AS DIRECTED BY THE ENGINEER.
- 2: MAP 2, BRIDGE TO BE MILLED 1.5" AND REPLACE WITH 1.5" S9.5B.
- 3: LEVELING COURSE TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 4: TRENCHING FOR BASE COURSE TO INCLUDE 1' OF MILLING EXISTING ASPHALT PAVEMENT.



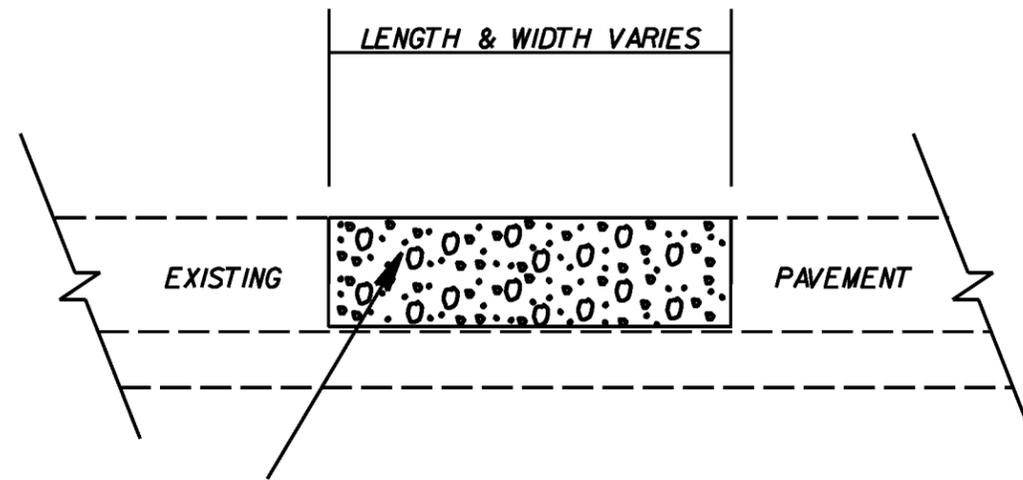
TYPICAL SECTION NO. 4
 SR 1937 OLD PAGELAND-MARSHVILLE ROAD (MAP 2)
 FROM BRIDGE TO PAVEMENT JOINT
 SOUTH OF SR 1947 FAULKS CHURCH ROAD

2015-2016 UNION COUNTY
 SR 1005 LANDSFORD ROAD
 SR 1937 OLD PAGELAND- MARSHVILLE ROAD

SCALE	-1A-		REVISIONS
DATE	4/15		
DWG. BY	AMG		
DESIGN BY	AMG		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CR.20901.127, ETC	5	
F.A. PROJECT NO.			

PATCHING DETAIL



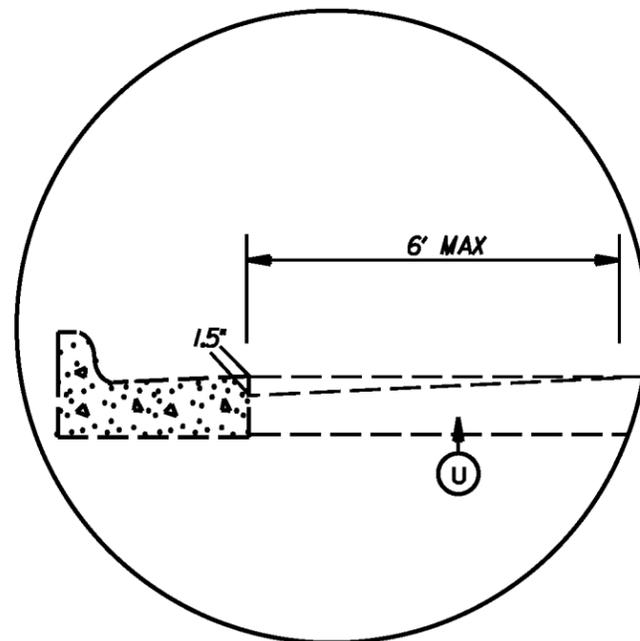
DEPTH IS VARIABLE AND SHALL BE AS DIRECTED BY THE ENGINEER. ASPHALT TYPE 119.0C SHALL BE PLACED.

PAVEMENT SCHEDULE

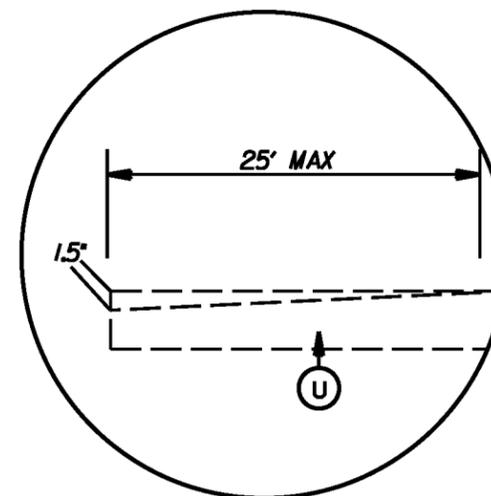
(C1)	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(D1)	PROP. APPROX. 2.5" ASPHALT CONC INTERMEDIATE COURSE, TYPE 119.0B AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC BASE COURSE, TYPE B25.0B AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING 1' OF EXISTING PAVEMENT, 5" IN DEPTH. (SEE S.P. FOR "TRENCHING FOR BASE COURSE BY MILLING.")

NOTES:

- 1: SHOULDER RECONSTRUCTION WILL BE AS DIRECTED BY THE ENGINEER.
- 2: MAP 2, BRIDGE TO BE MILLED 1.5" AND REPLACE WITH 1.5" S9.5B.
- 3: LEVELING COURSE TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 4: TRENCHING FOR BASE COURSE TO INCLUDE 1' OF MILLING EXISTING ASPHALT PAVEMENT.



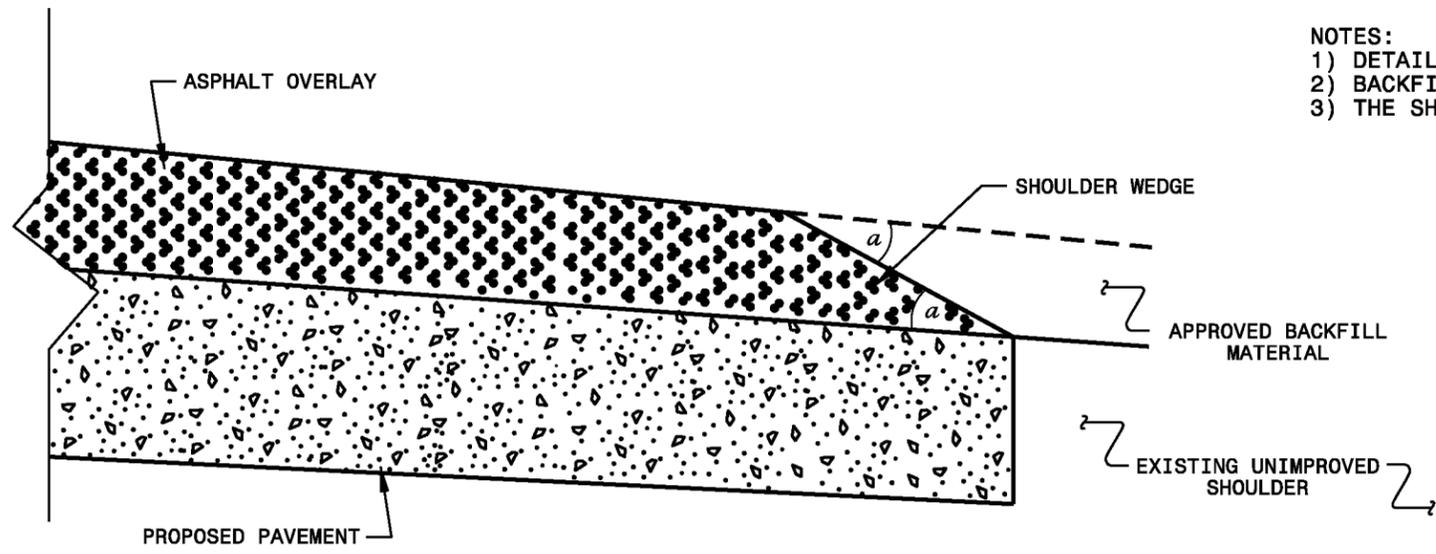
DETAIL FOR PROFILE MILLING (0" TO 1.5")
MAP 2



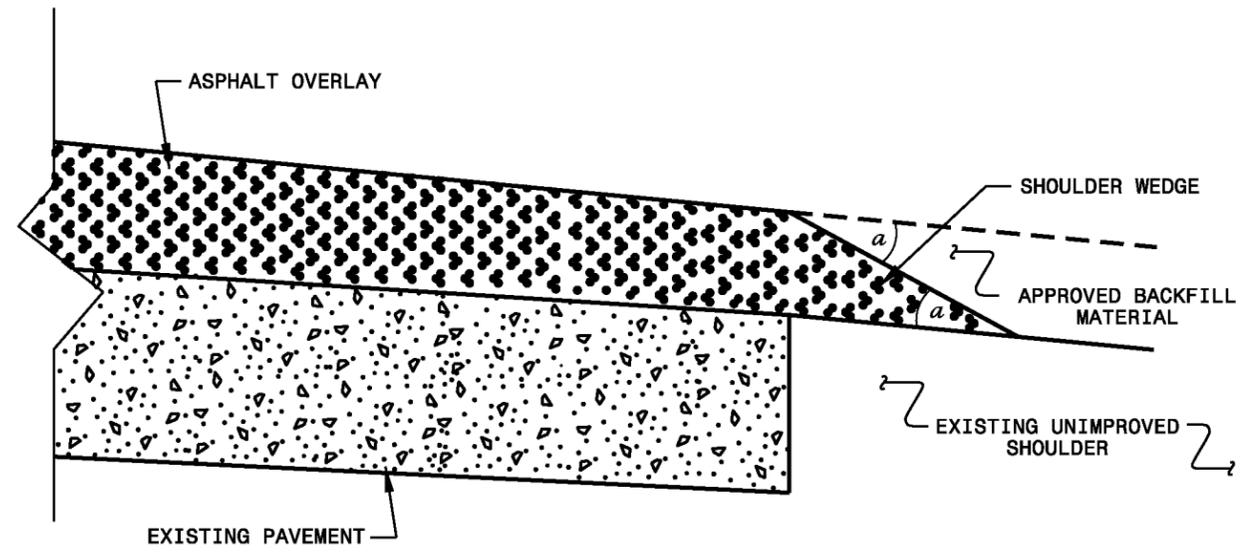
DETAIL FOR INCIDENTAL MILLING (0" TO 1.5")

2015-2016 UNION COUNTY SR 1005 LANDSFORD ROAD SR 1937 OLD PAGELAND- MARSHVILLE ROAD			
SCALE	-NA-		REVISIONS
DATE	4/15		
DESIGNED BY	AMD		
APPROVED	CLA		

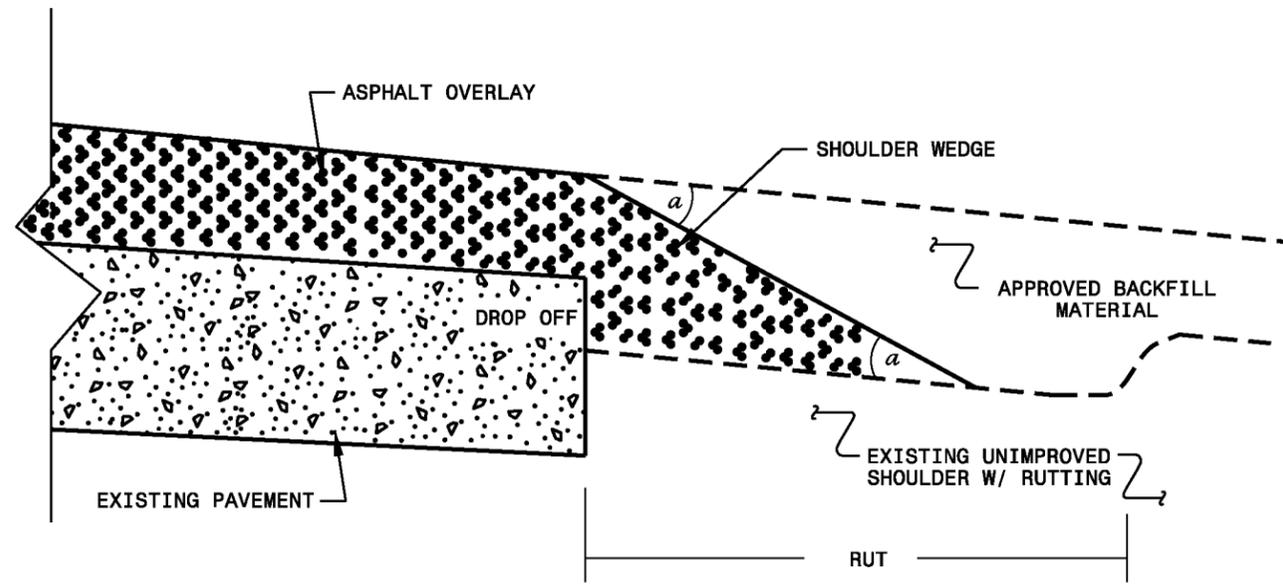
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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°

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: 10/18/12		
CHECKED BY:	DATE:		
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn			

 SYSTEMS DESIGN
 USER NAME

PROJECT NO.	SHEET NO.	TOTAL NO.
10CR.20901.127, 10CR.20901.128	7	

SUMMARY OF QUANTITIES

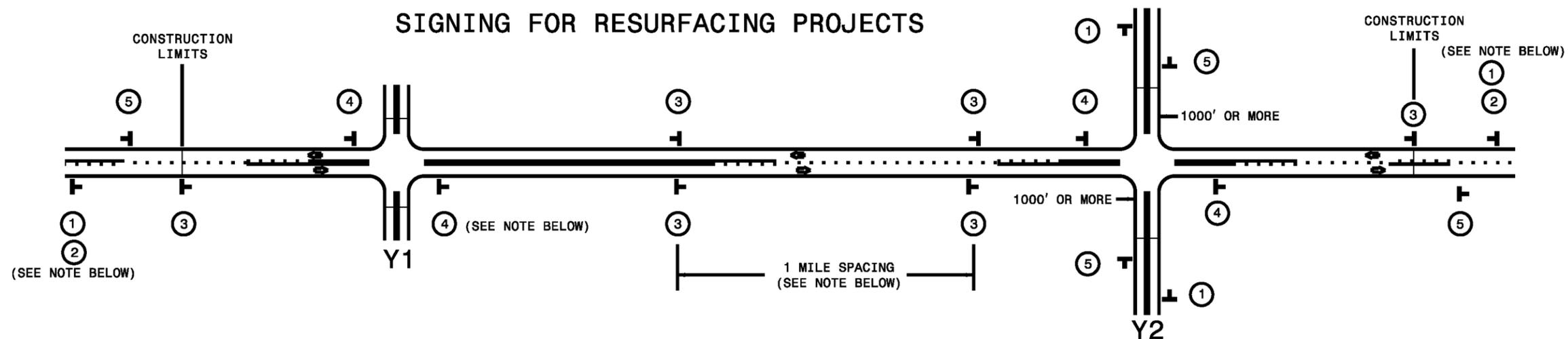
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	BORROW CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	1 1/2" MILLING SY	0" TO 1.5" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	LEVELING COURSE, S9.5B TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	6" DRIVEWAYS SY	TEMPORARY SILT FENCE LF	STONE FOR EROSION CONTROL, CLASS B TN	SEDIMENT CONTROL STONE TN	WATTLE LF	POLYACRYLAMIDE (PAM) LB
10CR.20901.127	Union	1	SR 1005 LANDSFORD ROAD	FROM PAVEMENT JOINT @ US 601 SOUTH TO SR 1003 WHITE STORE ROAD FROM MILEPOST .07 TO 8.0	1	2	2WU	YES	NO	7.9	20.5	2,315	400	16.00			265		18,351			1,101	4,345	125	1,185	158	79	1,185	3
TOTAL FOR MAP NO. 1										7.9		2,315	400	16.00			265		18,351			1,101	4,345	125	1,185	158	79	1,185	3
TOTAL FOR PROJ NO. 10CR.20901.127										7.9		2,315	400	16.00			265		18,351			1,101	4,345	125	1,185	158	79	1,185	3
10CR.20901.128	Union	2	SR 1937 OLD PAGELAND-MARSHVILLE ROAD	FROM SR 1003 WHITE STORE ROAD TO PAVEMENT JOINT 780' SOUTH OF SR 1947 FAULKS CHURCH ROAD FROM MILEPOST 7.07 TO 10.27	2,3,4	2	2WU	YES	NO	3.2	21.5	800	180	6.40	146	180	208	1,966	2,689	3,648	655	477	1,389		960	96	48	960	2
TOTAL FOR MAP NO. 2										3.2		800	180	6.40	146	180	208	1,966	2,689	3,648	655	477	1,389		960	96	48	960	2
TOTAL FOR PROJ NO. 10CR.20901.128										3.2		800	180	6.40	146	180	208	1,966	2,689	3,648	655	477	1,389		960	96	48	960	2
GRAND TOTAL										11.1		3,115	580	22.40	146	180	473	1,966	2,689	21,999	655	1,578	5,734	125	2,145	254	127	2,145	5

PROJECT NO.	SHEET NO.	TOTAL NO.
10CR.20901.127, 10CR.20901.128	8	

TRAFFIC CONTROL QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	
10CR.20901.127	Union	1	SR 1005 LANDSFORD ROAD	FROM PAVEMENT JOINT @ US 601 SOUTH TO SR 1003 WHITE STORE ROAD FROM MILEPOST .07 TO 8.0	1	2	2WU	7.9	20.5	885.0	1.00	
TOTAL FOR MAP NO. 1											885.0	1.00
TOTAL FOR PROJ NO. 10CR.20901.127											885.0	1.00
10CR.20901.128	Union	2	SR 1937 OLD PAGELAND-MARSHVILLE ROAD	FROM SR 1003 WHITE STORE ROAD TO PAVEMENT JOINT 780' SOUTH OF SR 1947 FAULKS CHURCH ROAD FROM MILEPOST 7.07 TO 10.27	2,3,4	2	2WU	3.2	21.5	358.0	1.00	
TOTAL FOR MAP NO. 2											358	1
TOTAL FOR PROJ NO. 10CR.20901.128											358	1
GRAND TOTAL											1,243	1

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 RESURFACING 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"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>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.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
		<p>PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.</p>	
		<p>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.</p>	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>	

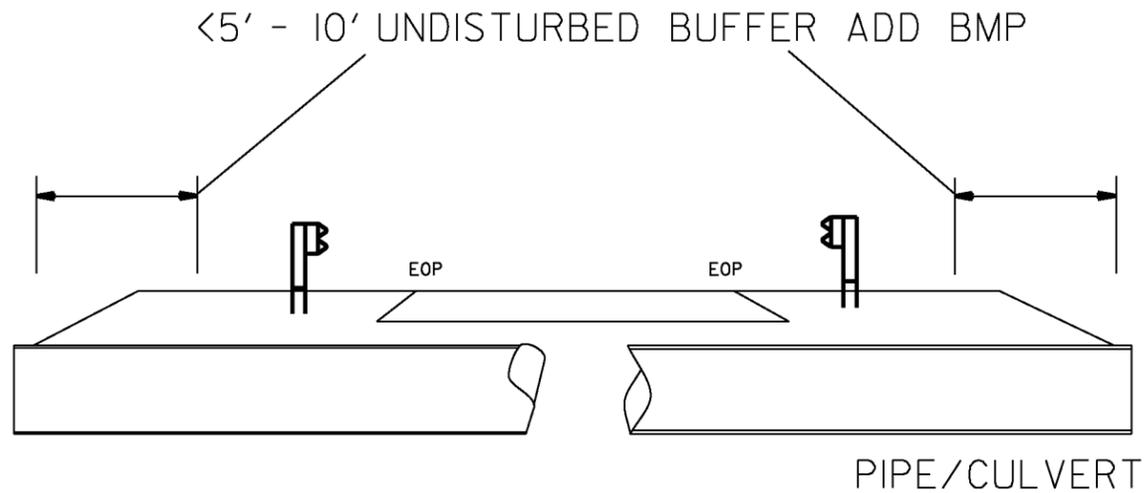
*****SYSTEMTIME*****
 *****\$\$\$\$DCN*****
 *****\$SRNAM\$*****



**RESURFACING
 ADVANCE WARNING SIGNS
 FOR
 RURAL AND SUBURBAN
 2 LANE ROADWAYS**

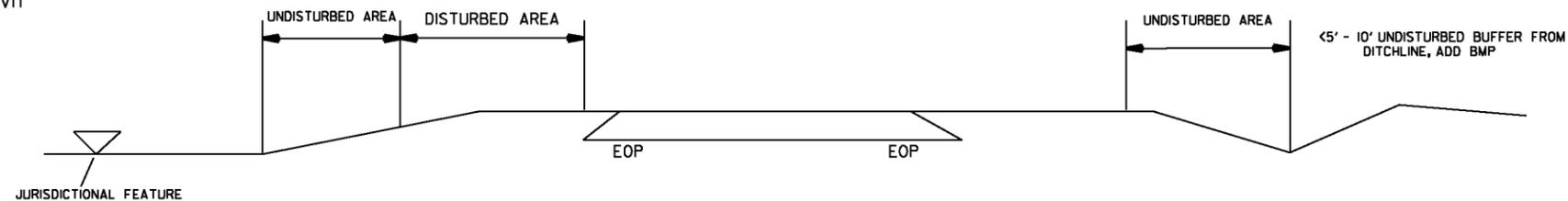
NOTES: LESS THAN 5' - 10' UNDISTURBED BUFFER FROM ROW, DITCHLINE, WATER FEATURE, OR DRAINAGE INLET, ADD BMP.

BMP OPTIONS: WATTLE OR SILT FENCE

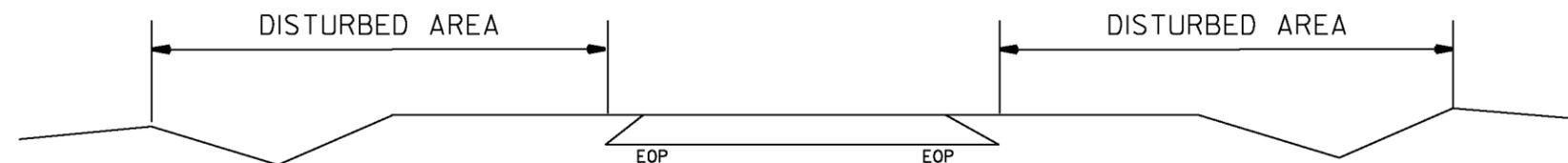


STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CR.20901.127, ETC	9	
F.A. PROJECT NO.			

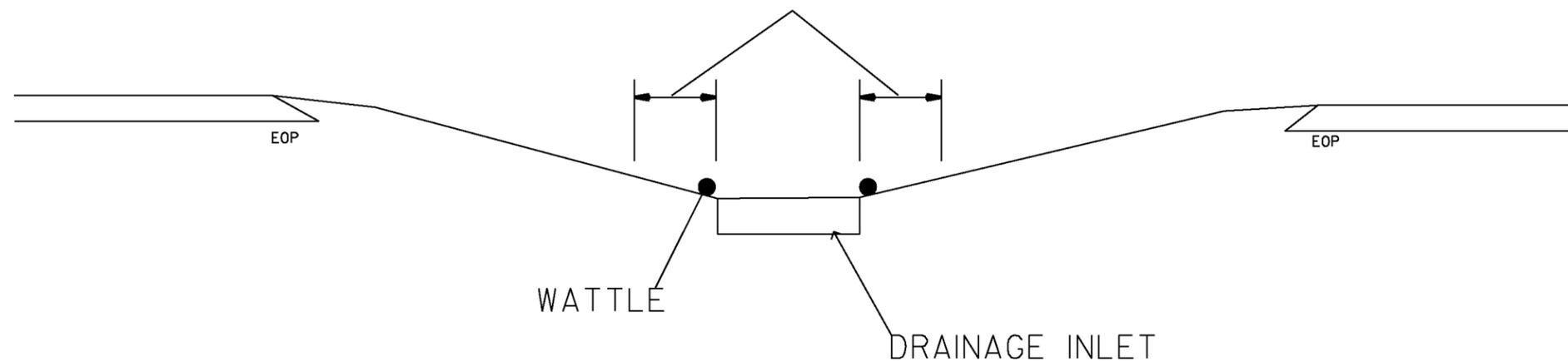
<5' - 10' UNDISTURBED BUFFER FROM JURISDICTIONAL FEATURE ADD BMP



USE BMP'S IF SHOULDERS AND/OR FRONTSLOPES AND/OR DITCHLINE AND/OR BACKSLOPES ARE DISTURBED



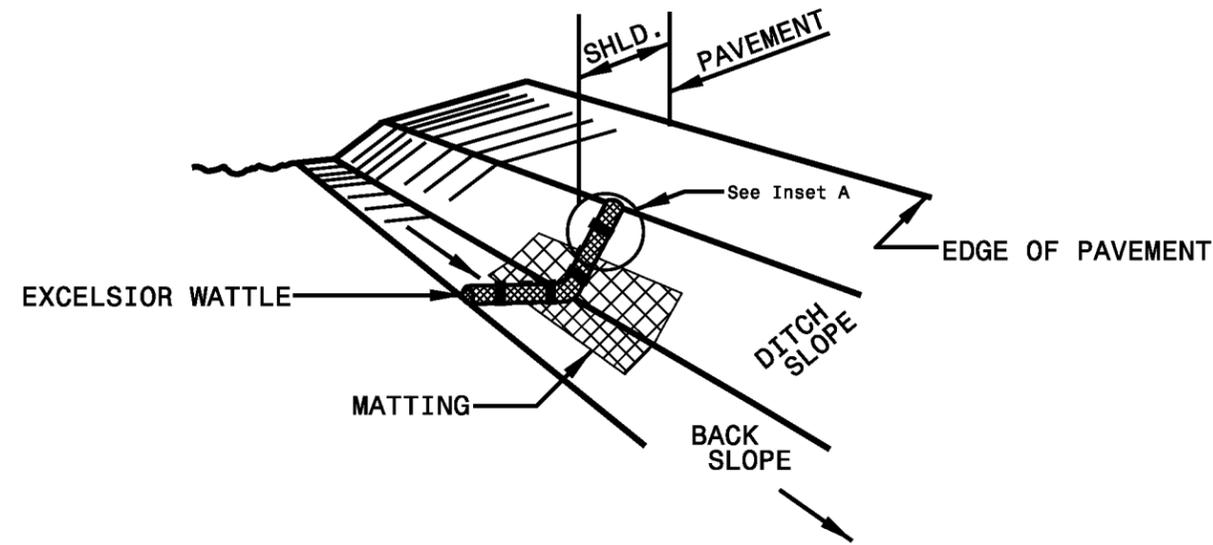
<5' - 10' UNDISTURBED BUFFER FROM INLET, ADD WATTLE



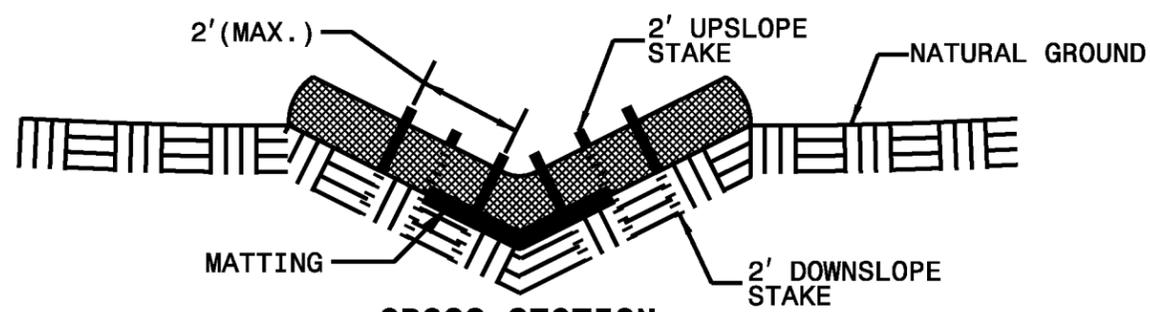
EROSION CONTROL DETAIL

SCALE	-1A-		REVISIONS
DATE	4/15		
DWG. BY	AMD		
DESIGN BY	AMD		
APPROVED	CLA		

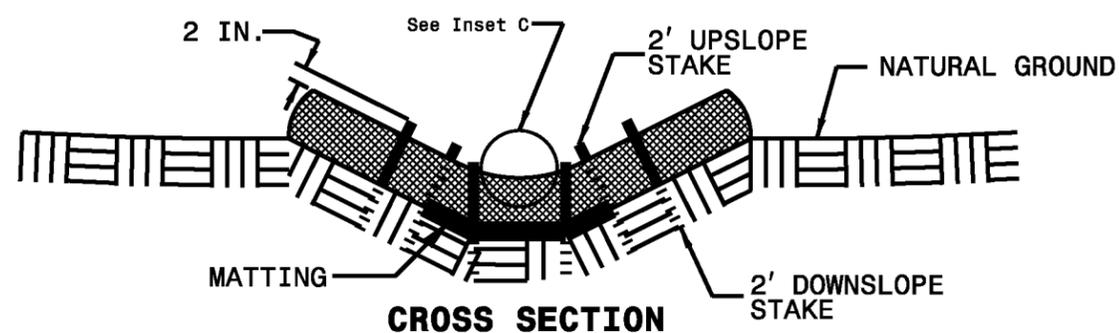
WATTLE WITH POLYACRYLAMIDE DETAIL



ISOMETRIC VIEW



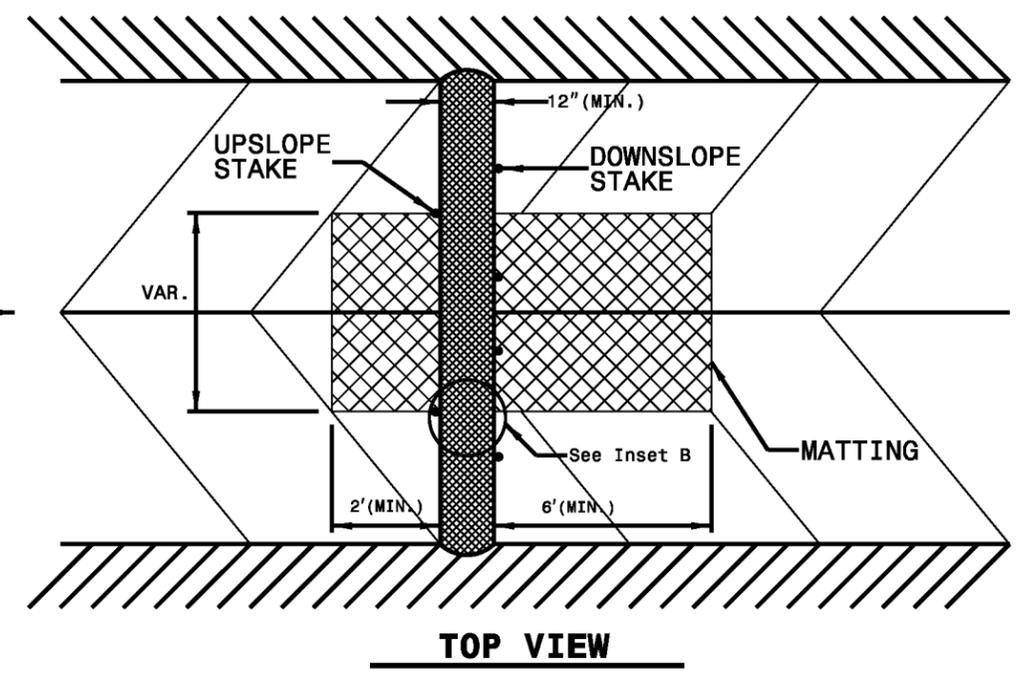
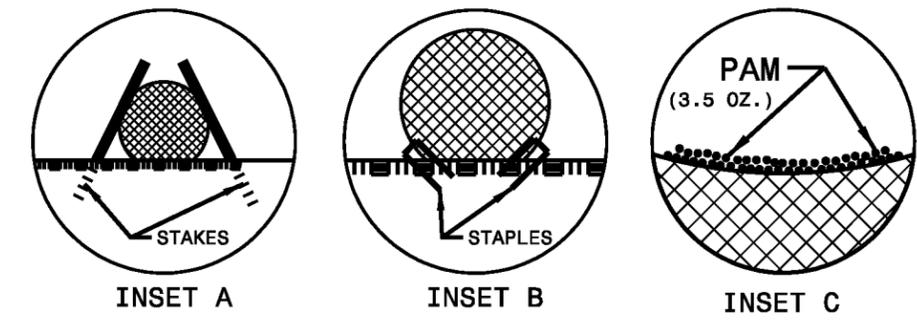
CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. CROSS SECTION.
- 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.
- PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.
- INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



TOP VIEW