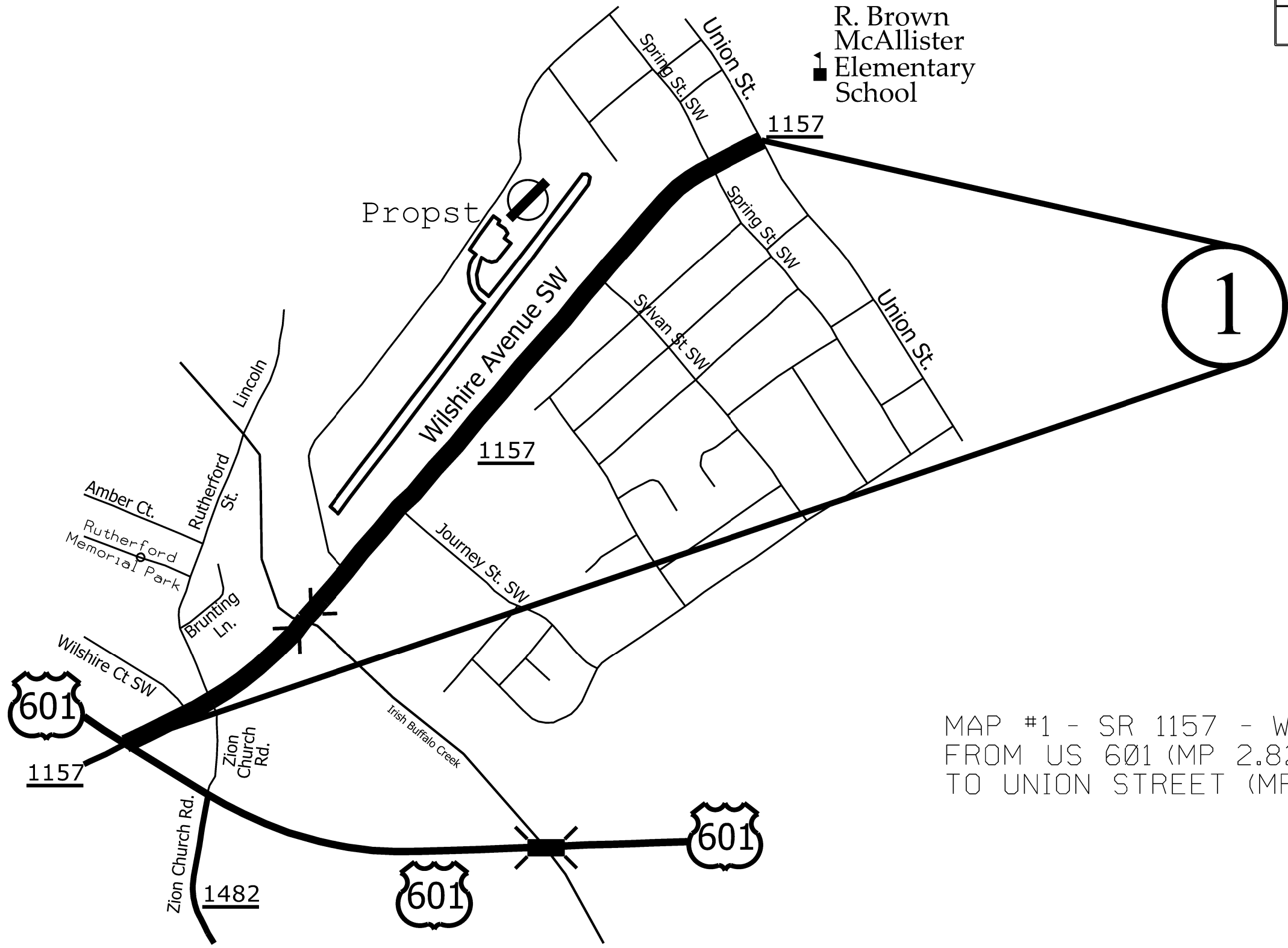


STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	1	17
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
CABARRUS COUNTY
 NORTH CAROLINA
PREPARED BY:
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 1

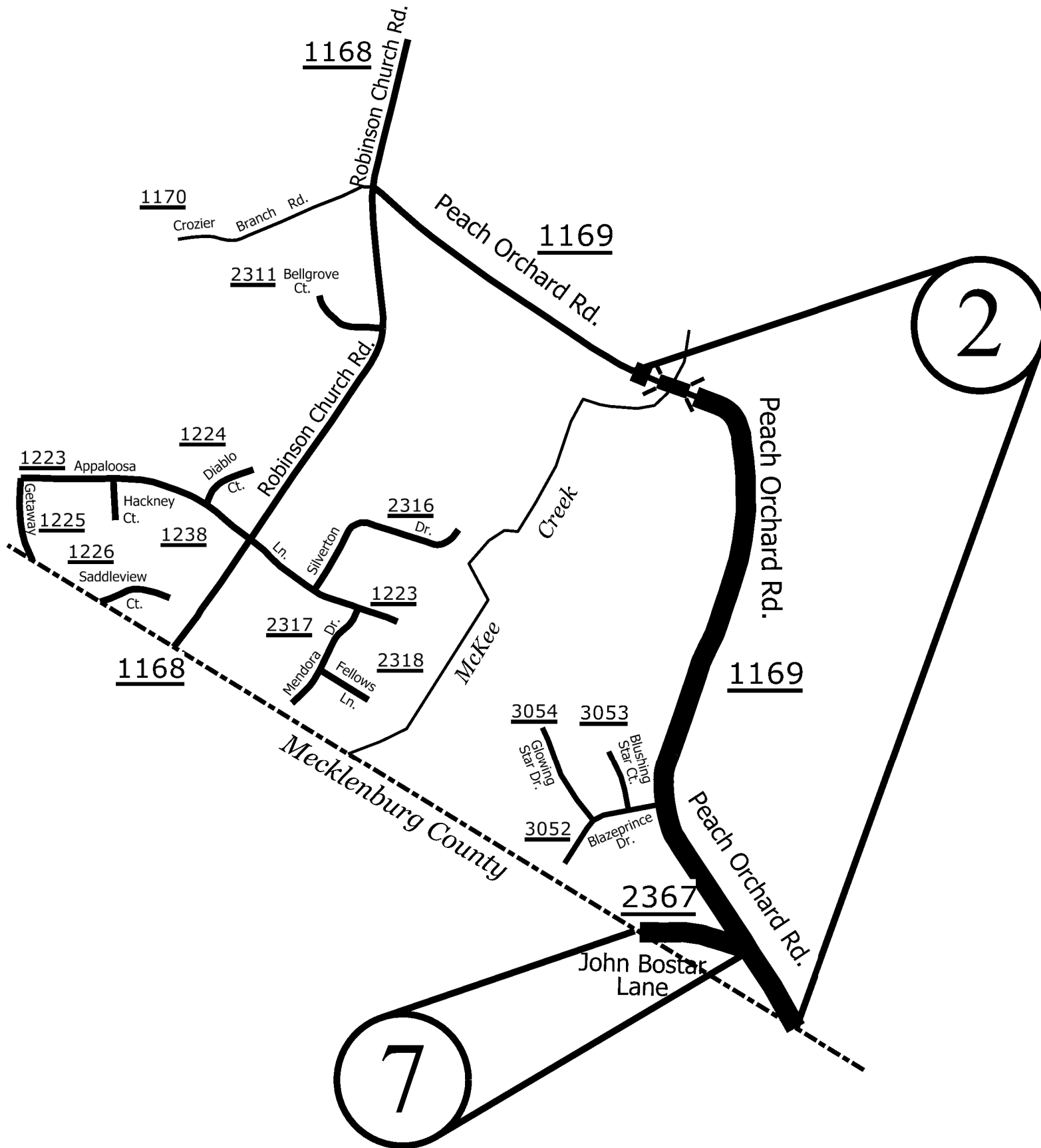


MAP #1 - SR 1157 - WILSHIRE AVENUE SW 1.30 MILES
 FROM US 601 (MP 2.82)
 TO UNION STREET (MP 4.12)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	2	17
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
CABARRUS COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 1



MAP #2 - SR 1169 - PEACH ORCHARD ROAD 1.14 MILES FROM MECKLENBURG COUNTY LINE (MP 0.00) TO BEGIN CURB & GUTTER (MP 1.18)

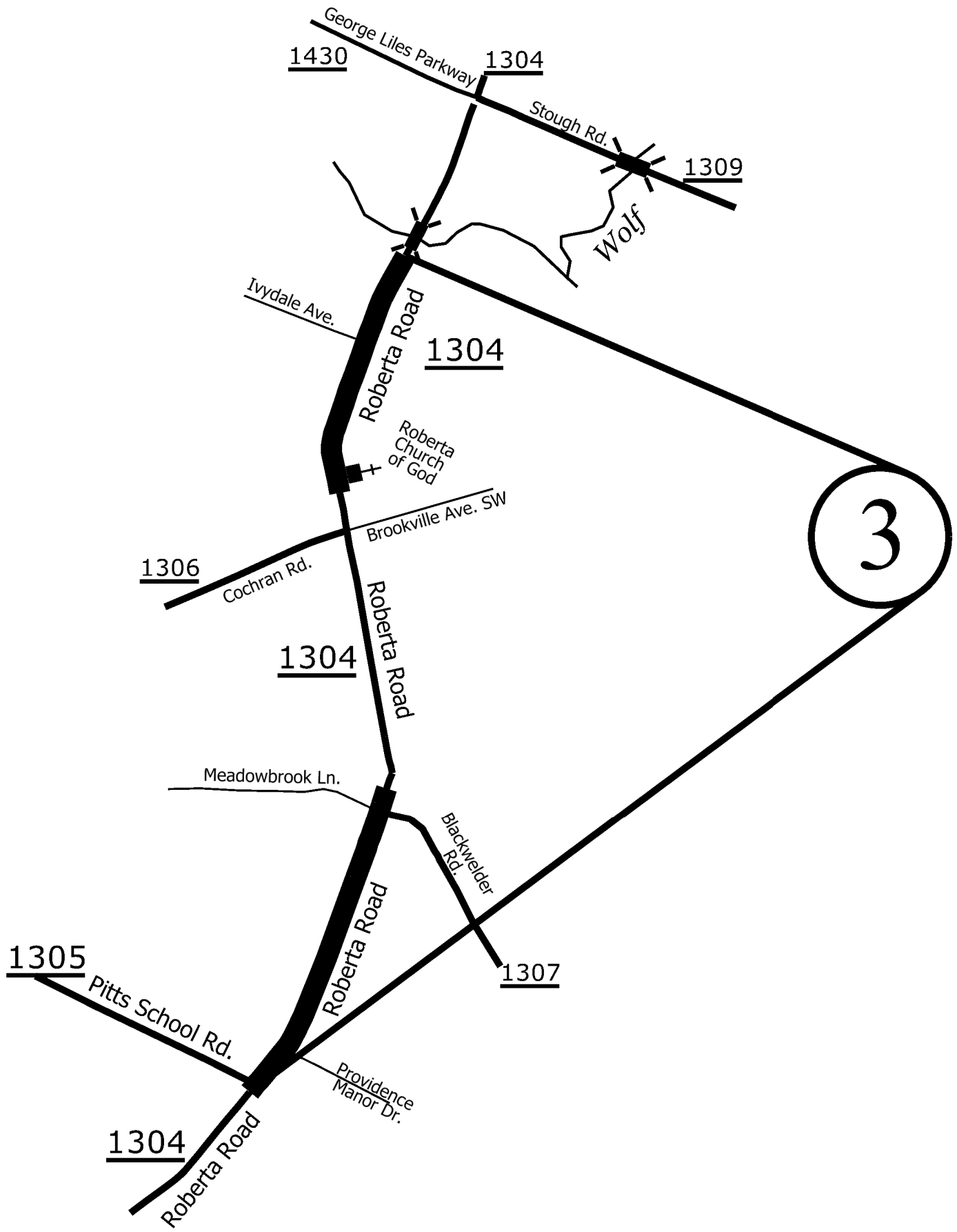
(NOTE: SKIP APPROXIMATELY 0.04 MILES AT BRIDGE.)

MAP #7 - SR 2367 - JOHN BOSTAR LANE 0.14 MILES FROM SR 1169 (PEACH ORCHARD ROAD) (MP 0.00) TO MECKLENBURG COUNTY LINE (MP 0.14)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	3	17
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
CABARRUS COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 1



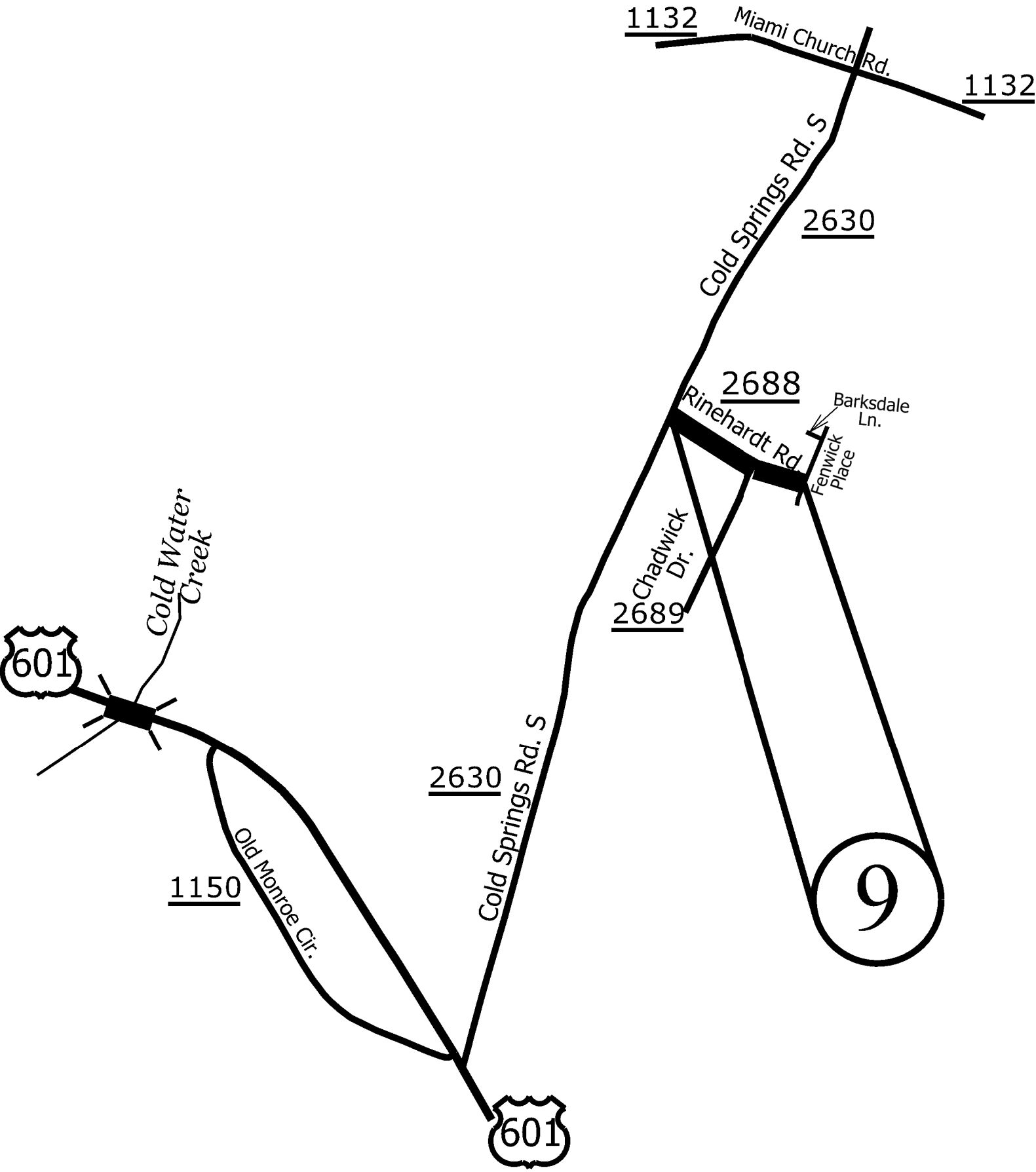
MAP #3 - SR 1304 - ROBERTA ROAD 0.87 MILES
 FROM SR 1305 (PITTS SCHOOL ROAD (MP 1.99)
 TO BRIDGE (MP 3.27)

(NOTE: SKIP APPROXIMATELY 0.41 MILES
 DUE TO NEWLY CONSTRUCTED ROUND-ABOUTS)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	6	17
F.A. PROJECT NO.			

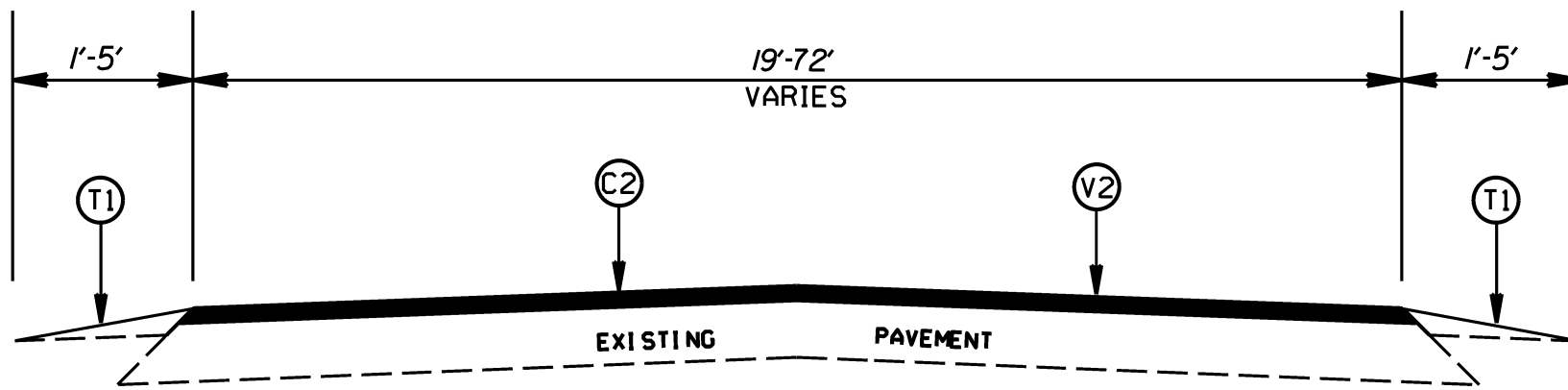


ENLARGED MUNICIPAL AND SUBURBAN AREAS
CABARRUS COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 1



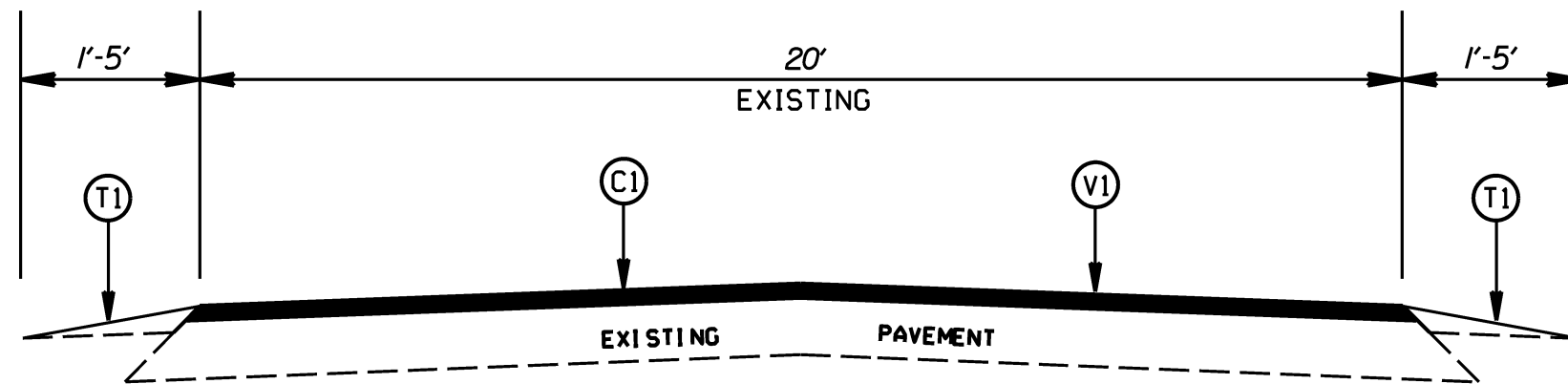
MAP #9 - SR 2688 - RINEHARDT ROAD 0.22 MILES FROM SR 2630 (COLD SPRINGS ROAD S.) (MP 0.00) TO FENWICK PLACE (MP 0.22)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	7	17
F.A. PROJECT NO.			



TYPICAL SECTION NO. 1

- MAP 1 - SR 1157 (WILSHIRE AVENUE SW)
- MAP 3 - SR 1304 (ROBERTA ROAD)
- MAP 4 - SR 1627 (MILLER ROAD)
- MAP 5 - SR 1628 (CHARLIE WALKER ROAD)
- MAP 8 - SR 2606 (B STREET)




TYPICAL SECTION NO. 2

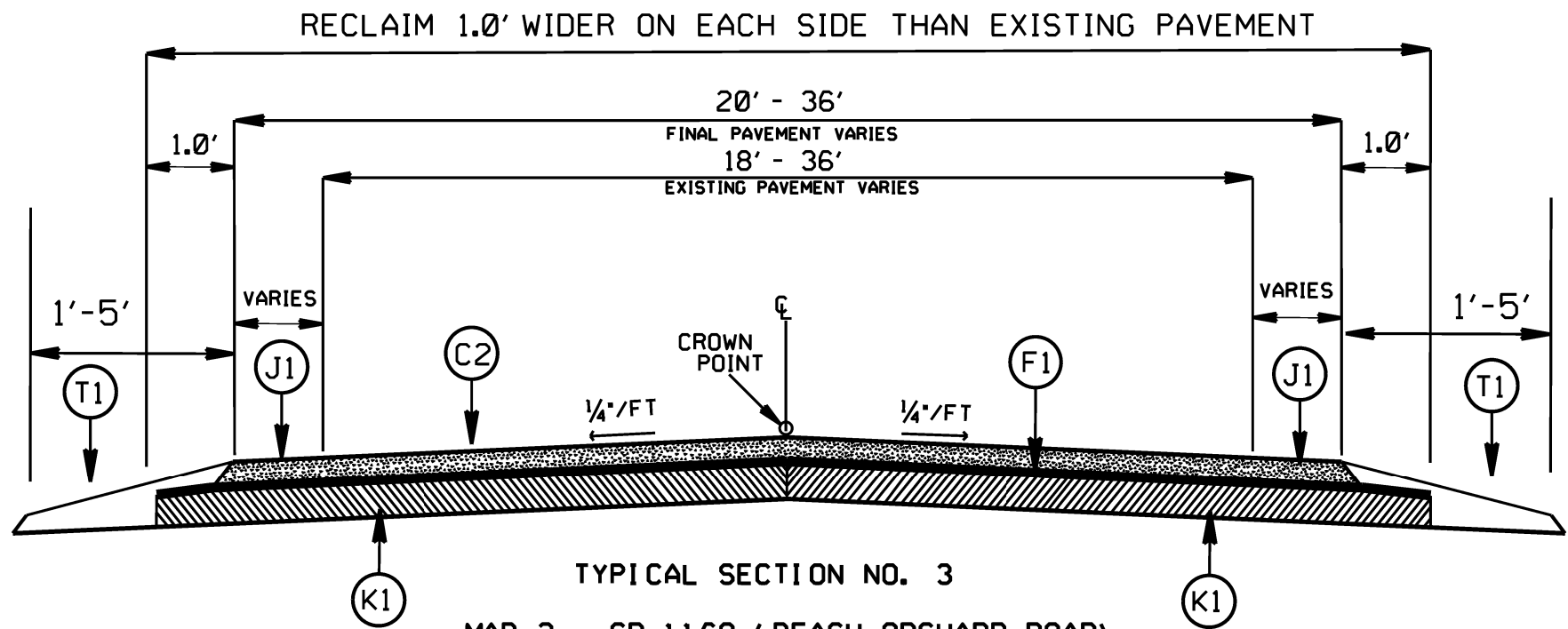
MAP 6 - SR 1632 (PRINCETON AVENUE))

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 138 LBS. PER SQ. YDS.
C2	PROP. APPROX. 1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YDS.
F1	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
J1	PROP. 8" AGGREGATE BASE COURSE (SEE S.P. - TRENCHING FOR AGGREGATE BASE COURSE)
K1	BASE TO BE TREATED WITH PORTLAND CEMENT AT A DEPTH OF 12", AT A RATE AS DIRECTED BY THE ENGINEER
T1	SHOULDER RECONSTRUCTION
V1	MILLING OF EXISTING PAVEMENT, 1.25"
V2	MILLING OF EXISTING PAVEMENT, 1.50"

NOTES:
1. LEVELING COURSE TO BE PLACED AS DIRECTED BY THE ENGINEER

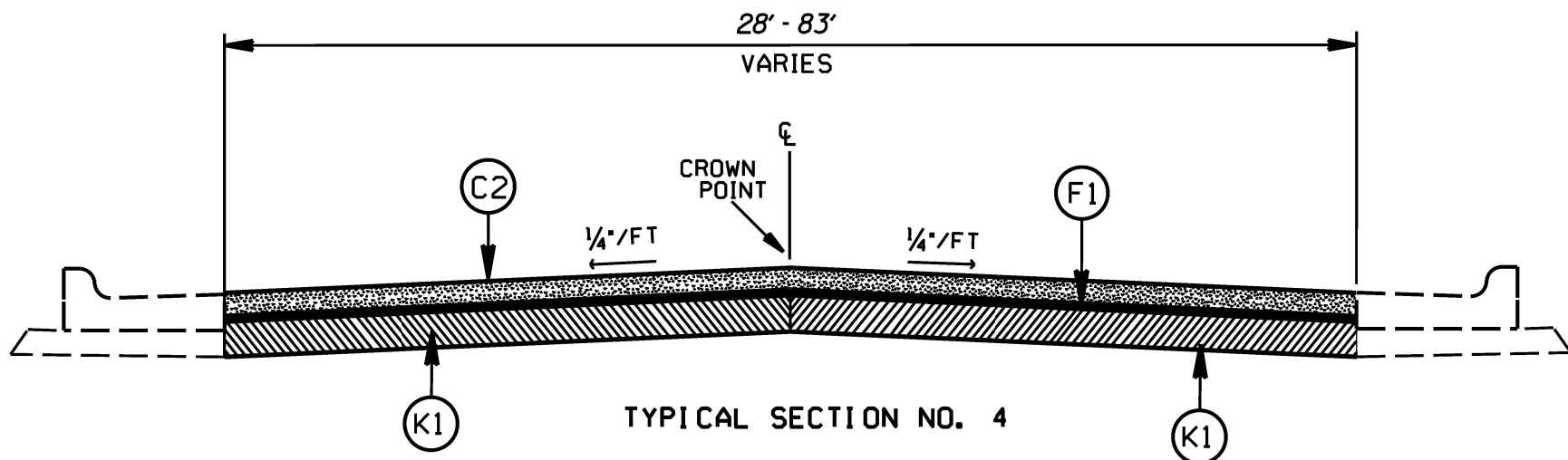
CABARRUS COUNTY
RESURFACING SPRING 2023

SCALE	-NA-		REVISIONS
DATE	1/23		
DWG. BY	JWH		
DESIGN BY	JWH		
APPROVED			



TYPICAL SECTION NO. 3
MAP 2 - SR 1169 (PEACH ORCHARD ROAD)

NOTE 1) WIDEN TO 20' ONLY IN AREAS WHERE EXISTING PAVEMENT IS LESS THAN 20'.
NOTE 2) STOP FDR NO LESS THAN 50' ON EACH SIDE OF BRIDGE.



TYPICAL SECTION NO. 4
MAP 7 - SR 2367 (JOHN BOSTAR LANE)

NOTE: FULL DEPTH RECLAMATION AND AST SHALL BE COMPLETED ON MAPS 2, 7, AND 9 PRIOR TO THE ASPHALT OVERLAY.

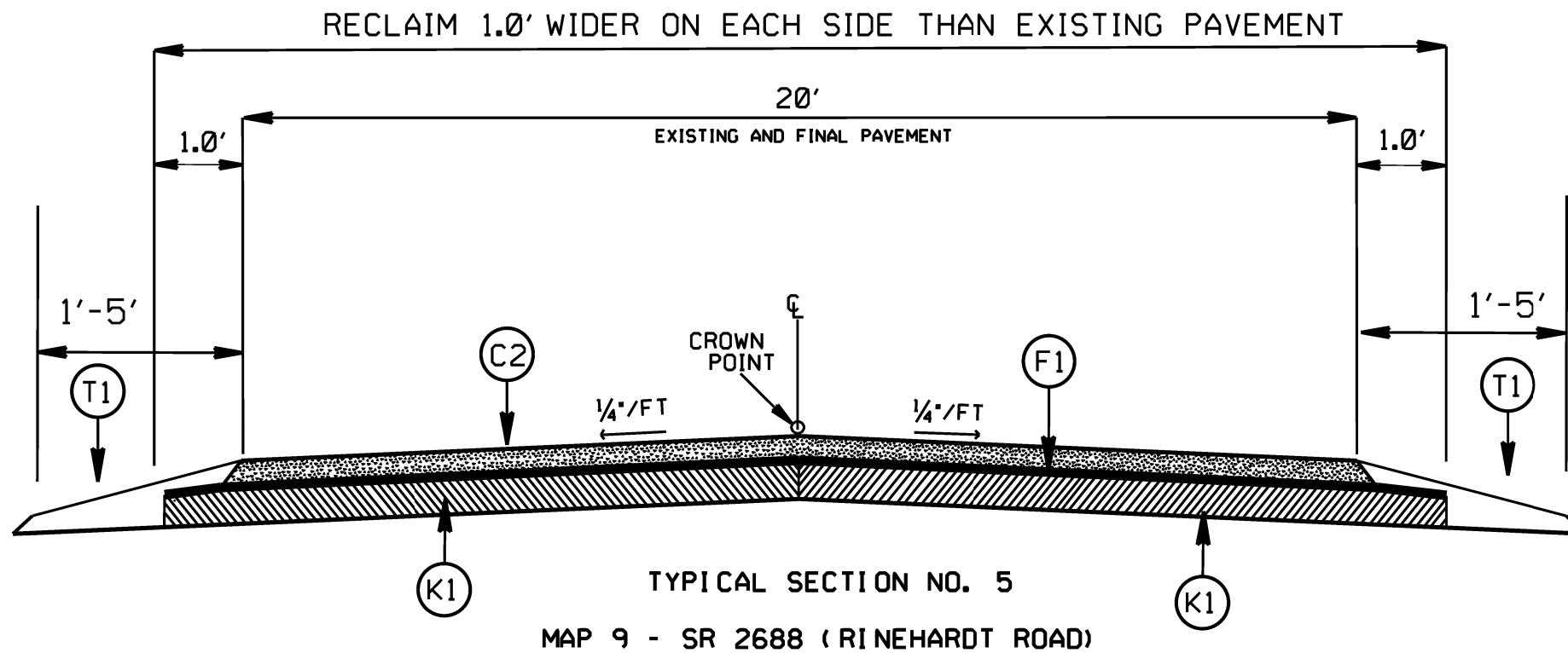
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	8	17
F.A. PROJECT NO.			

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 138 LBS. PER SQ. YDS.
C2	PROP. APPROX. 1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YDS.
F1	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
J1	PROP. 8" AGGREGATE BASE COURSE (SEE S.P. - TRENCHING FOR AGGREGATE BASE COURSE)
K1	BASE TO BE TREATED WITH PORTLAND CEMENT AT A DEPTH OF 12", AT A RATE AS DIRECTED BY THE ENGINEER
T1	SHOULDER RECONSTRUCTION
V1	MILLING OF EXISTING PAVEMENT, 1.25"
V2	MILLING OF EXISTING PAVEMENT, 1.50"

NOTES:
1. LEVELING COURSE TO BE PLACED AS DIRECTED BY THE ENGINEER

CABARRUS COUNTY
RESURFACING SPRING 2023

SCALE	NA		REVISIONS
DATE	1/23		
DWG. BY	JWH		
DESIGN BY	JWH		
APPROVED			



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	9	17
F.A. PROJECT NO.			

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 138 LBS. PER SQ. YDS.
C2	PROP. APPROX. 1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YDS.
F1	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
J1	PROP. 8" AGGREGATE BASE COURSE (SEE S.P. - TRENCHING FOR AGGREGATE BASE COURSE)
K1	BASE TO BE TREATED WITH PORTLAND CEMENT AT A DEPTH OF 12", AT A RATE AS DIRECTED BY THE ENGINEER
T1	SHOULDER RECONSTRUCTION
V1	MILLING OF EXISTING PAVEMENT, 1.25"
V2	MILLING OF EXISTING PAVEMENT, 1.50"

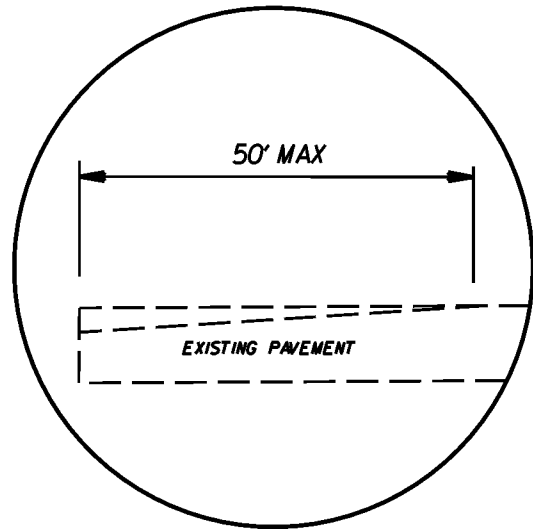
NOTES:

1. LEVELING COURSE TO BE PLACED AS DIRECTED BY THE ENGINEER

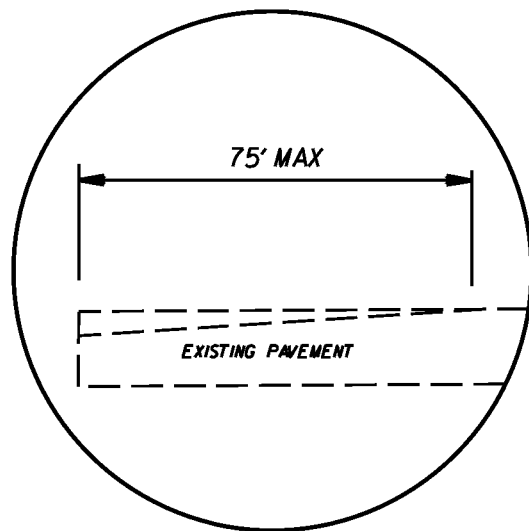
NOTE: FULL DEPTH RECLAMATION AND AST SHALL BE COMPLETED ON MAPS 2, 7, AND 9 PRIOR TO THE ASPHALT OVERLAY.

CABARRUS COUNTY RESURFACING SPRING 2023			
SCALE	NA		REVISIONS
DATE	1/23		
DWG. BY	JWH		
DESIGN BY	JWH		
APPROVED			

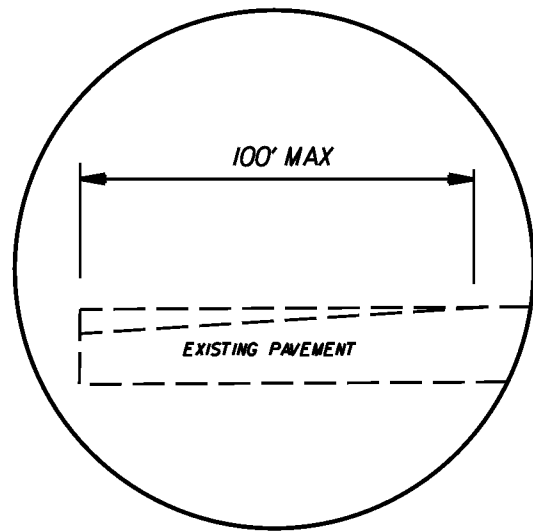
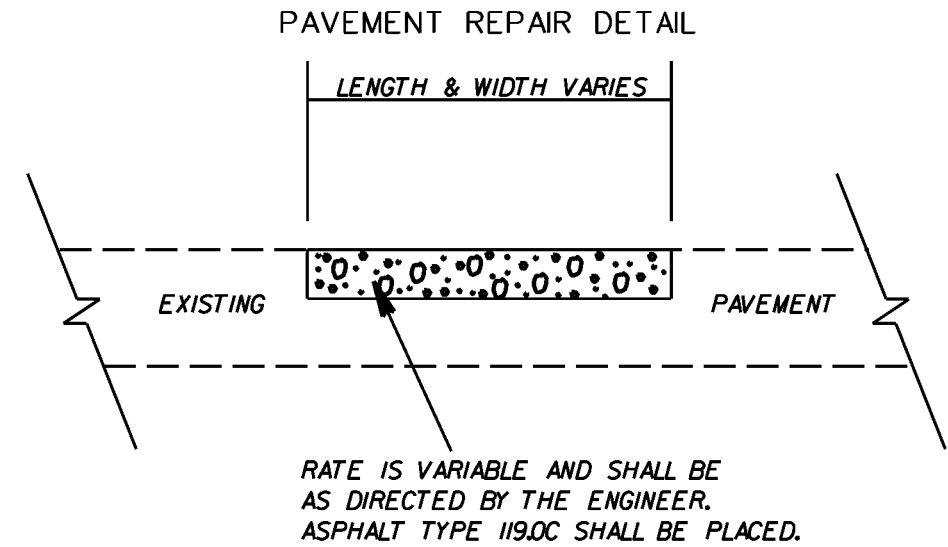
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	10	17
F.A. PROJECT NO.			



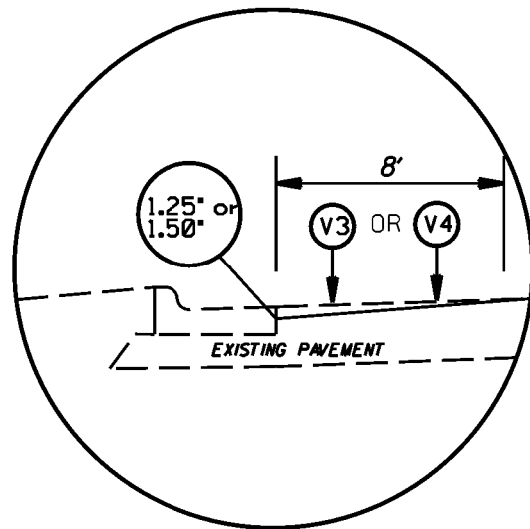
DETAIL FOR INCIDENTAL MILLING (0' TO 1.0')
TIE-IN



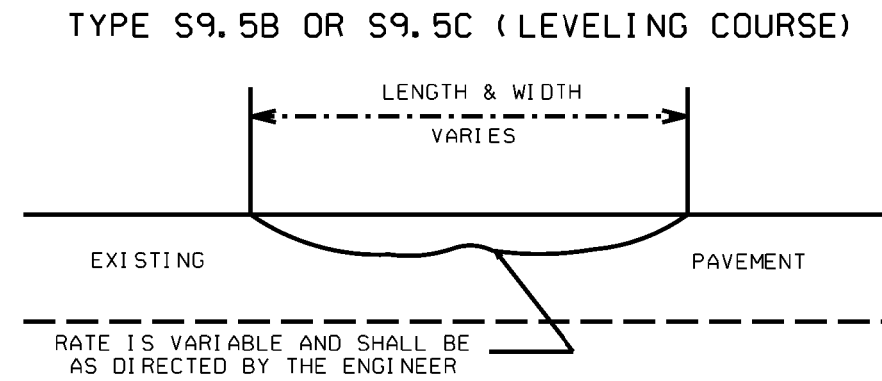
DETAIL FOR INCIDENTAL MILLING (0' TO 1.5')
TIE-IN



DETAIL FOR INCIDENTAL MILLING (0' TO 2.0')
TIE-IN



DETAIL FOR PROFILE MILLING (0' TO 1.25') OR (0' TO 1.50')



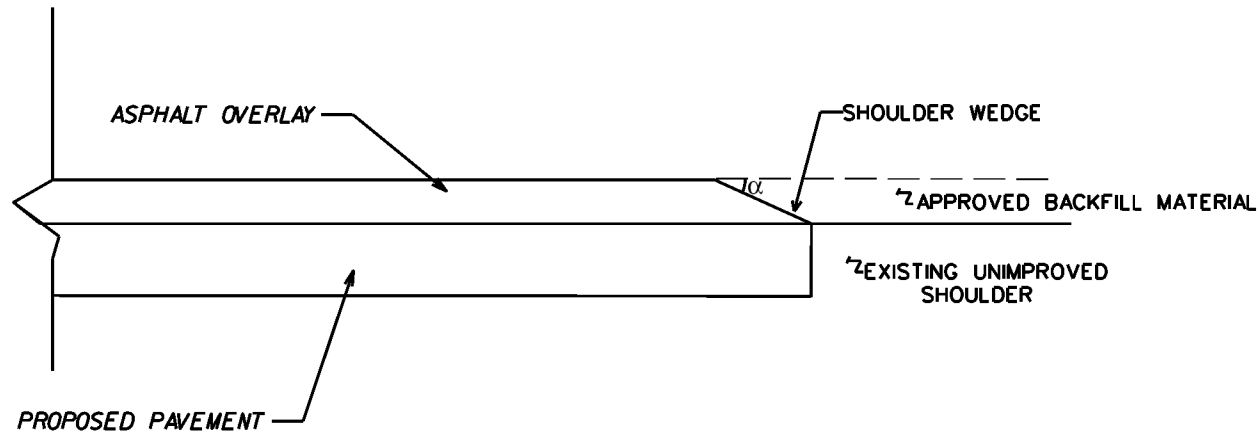
PATCHING, LEVELING, MILLING, PROFILE MILLING DETAILS		
SCALE	-NA-	REVISIONS
DATE	11/21	
DWG. BY	JAB	
DESIGN BY	JAB	
APPROVED	JAB	



NOTES:

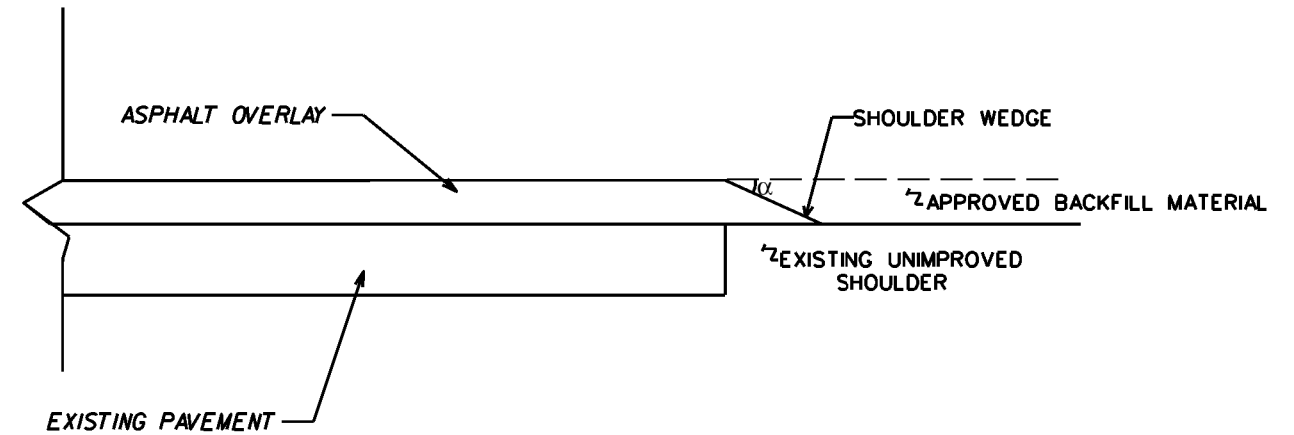
- 1) DETAIL DOES NOT APPLY TO OGAF C AND ULTRA-THIN BONDED WEARING COURSE.
- 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
- 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	11	17
F.A. PROJECT NO.			



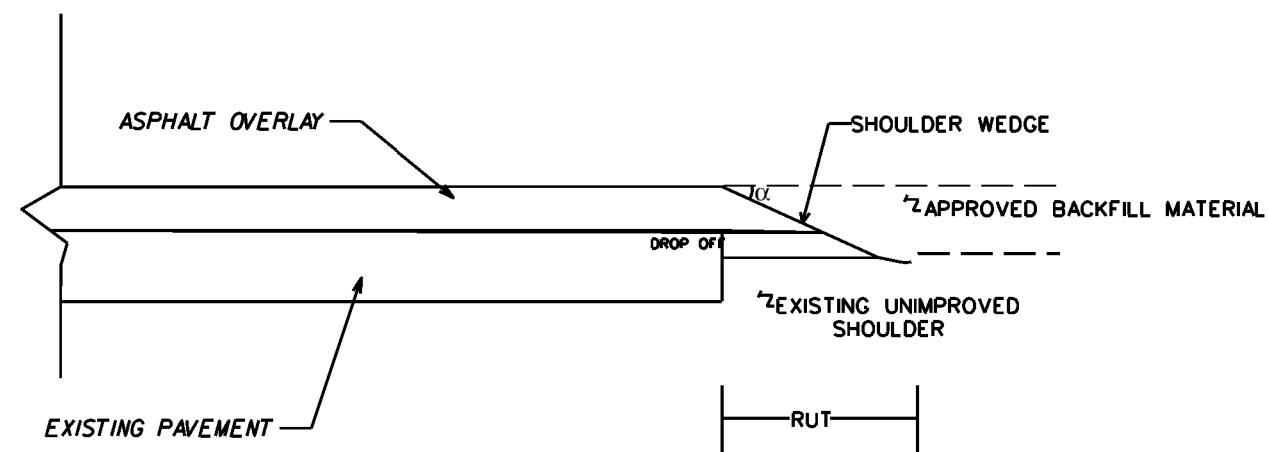
SHOULDER WEDGE DETAIL

(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)

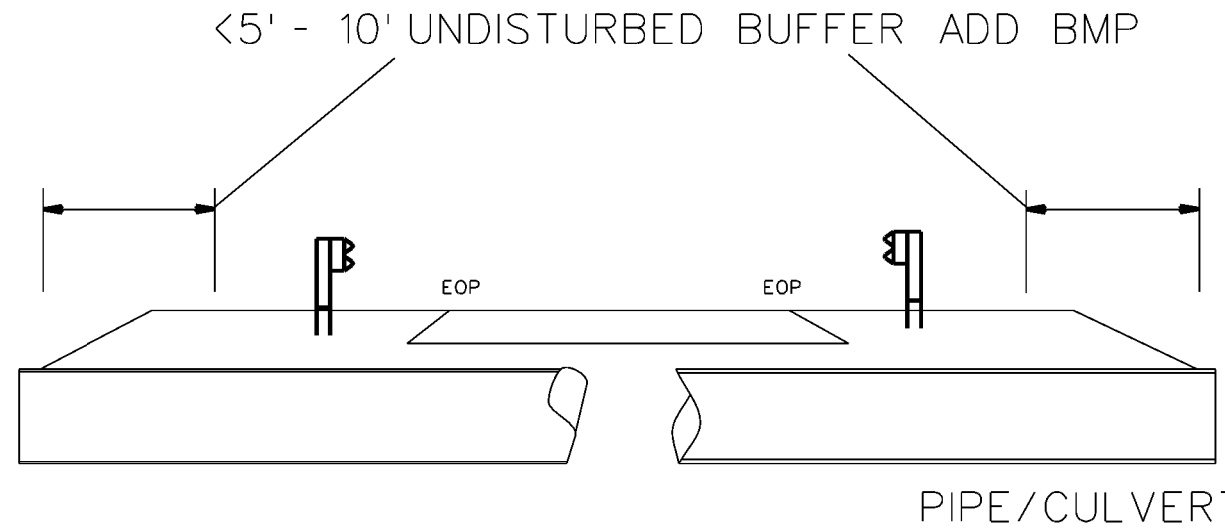
$\alpha = 30$ DEGREES

SHOULDER WEDGE DETAILS			
SCALE	NA		REVISIONS
DATE	2/18		
ENG. BY	JAB		
DESIGN BY	JAB		
APPROVED	JAB		

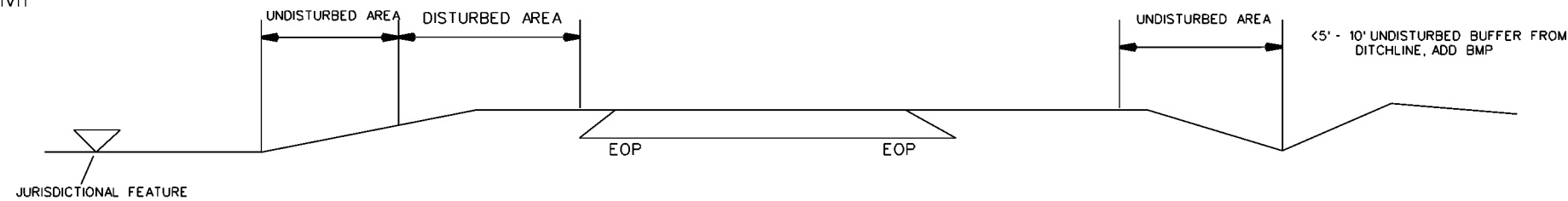
NOTES: LESS THAN 5' - 10' UNDISTURBED BUFFER FROM ROW, DITCHLINE, WATER FEATURE, OR DRAINAGE INLET, ADD BMP.

BMP OPTIONS: WATTLE OR SILT FENCE

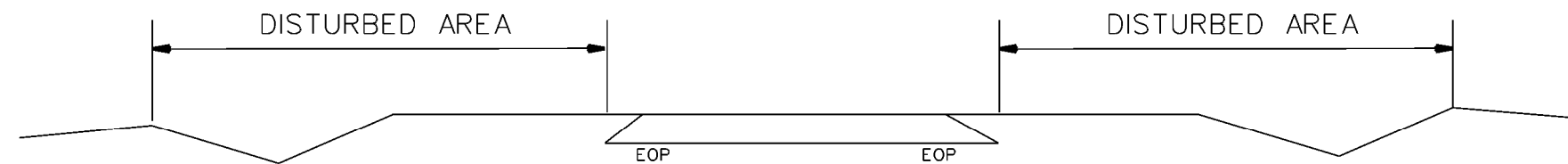
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	12	17
F.A. PROJECT NO.			



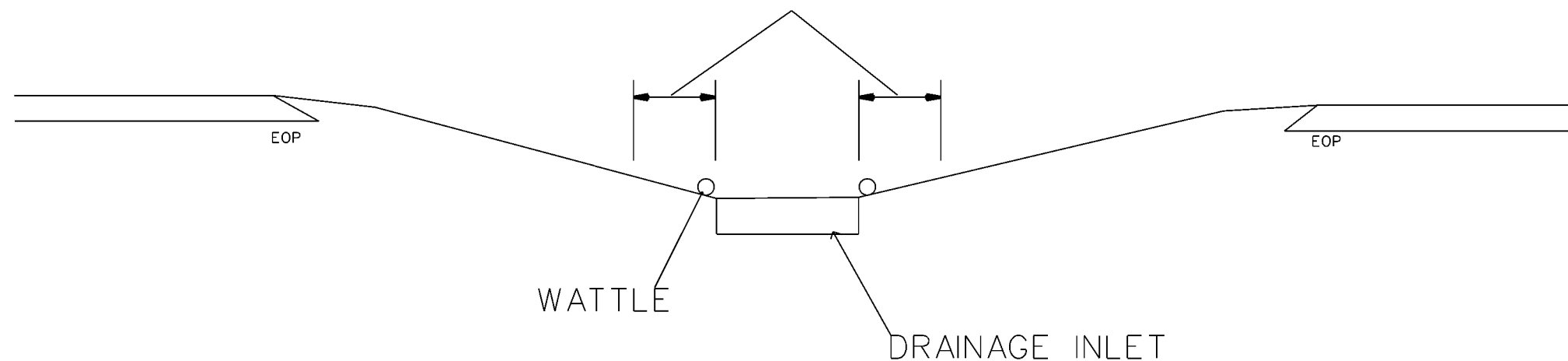
<5' - 10' UNDISTURBED BUFFER FROM JURISDICTIONAL FEATURE ADD BMP



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



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

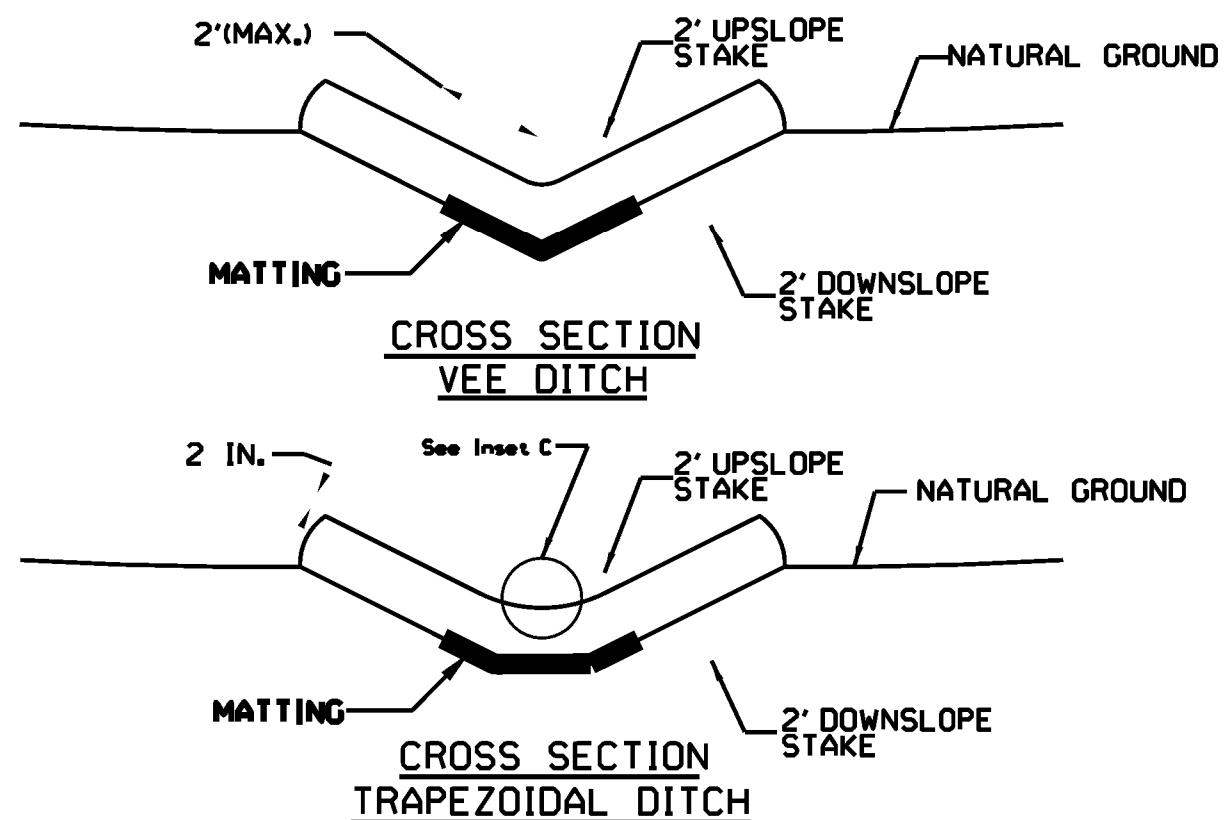
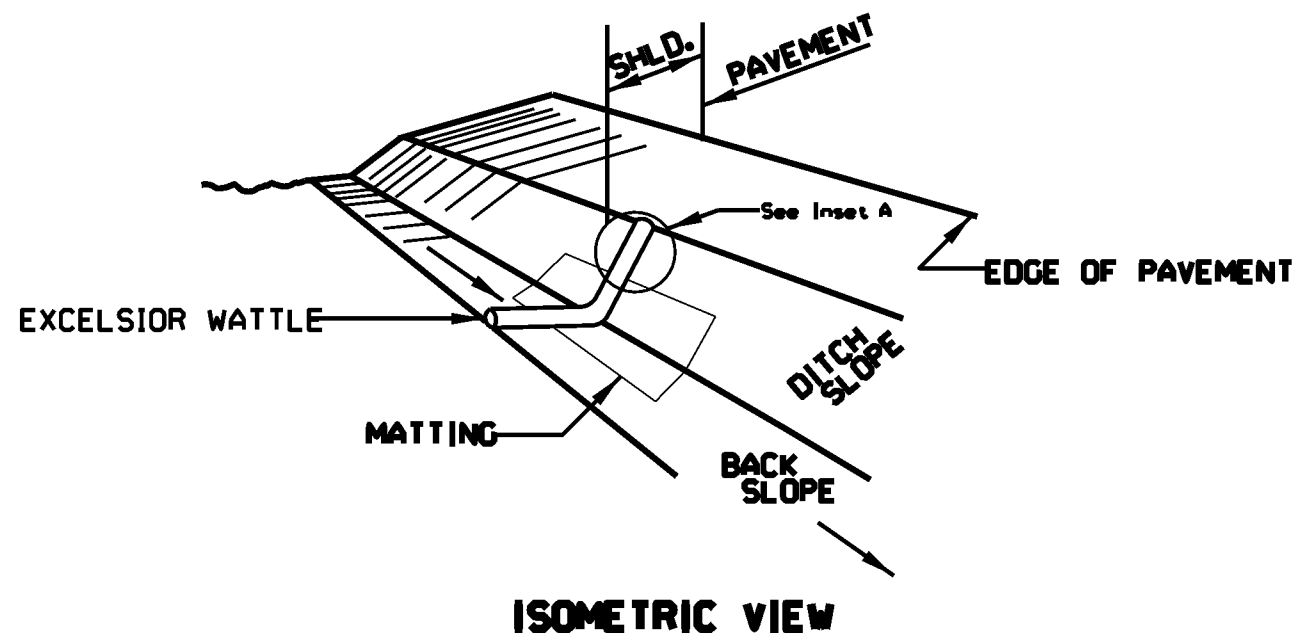


EROSION CONTROL DETAIL

SCALE	-NA-		REVISIONS
DATE	2/18		
DWG. BY	JAB		
DESIGN BY	JAB		
APPROVED	JAB		

WATTLE WITH POLYACRYLAMIDE DETAIL

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	13	17
F.A. PROJECT NO.			



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. CROSS SECTION.

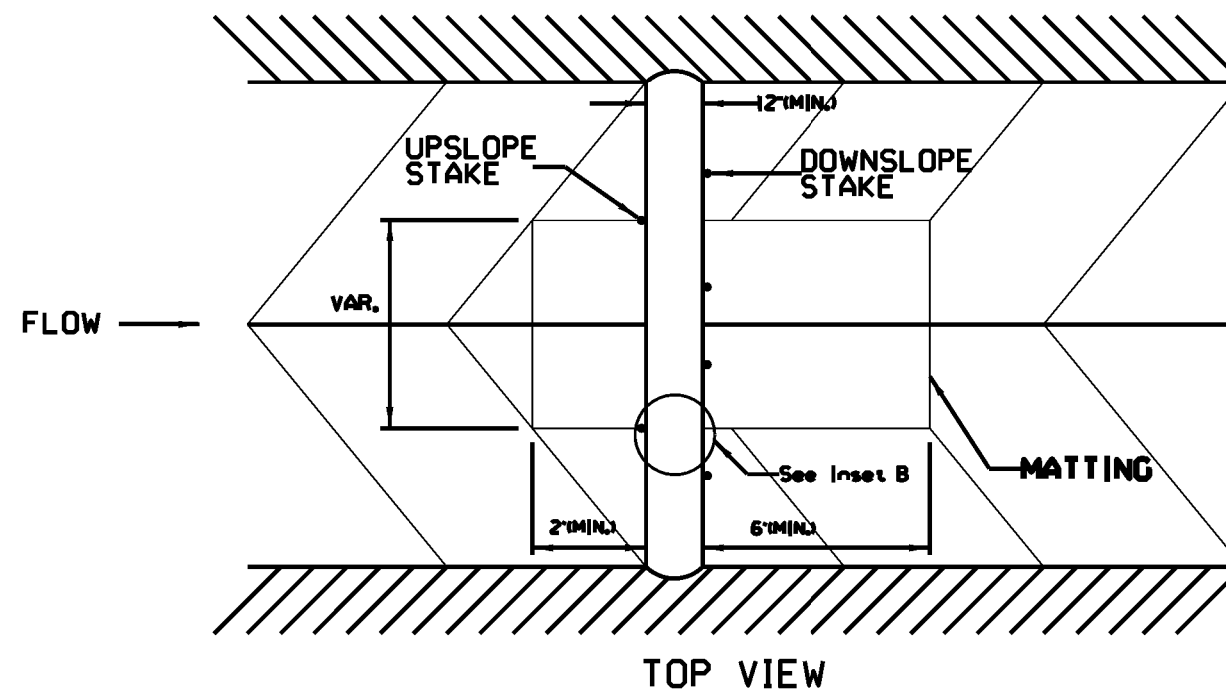
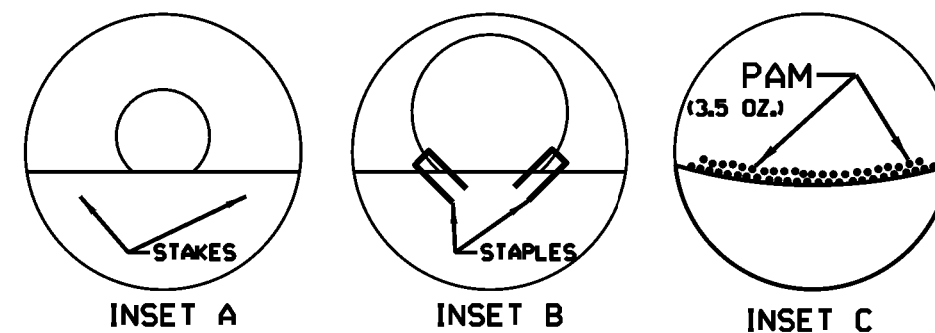
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

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.

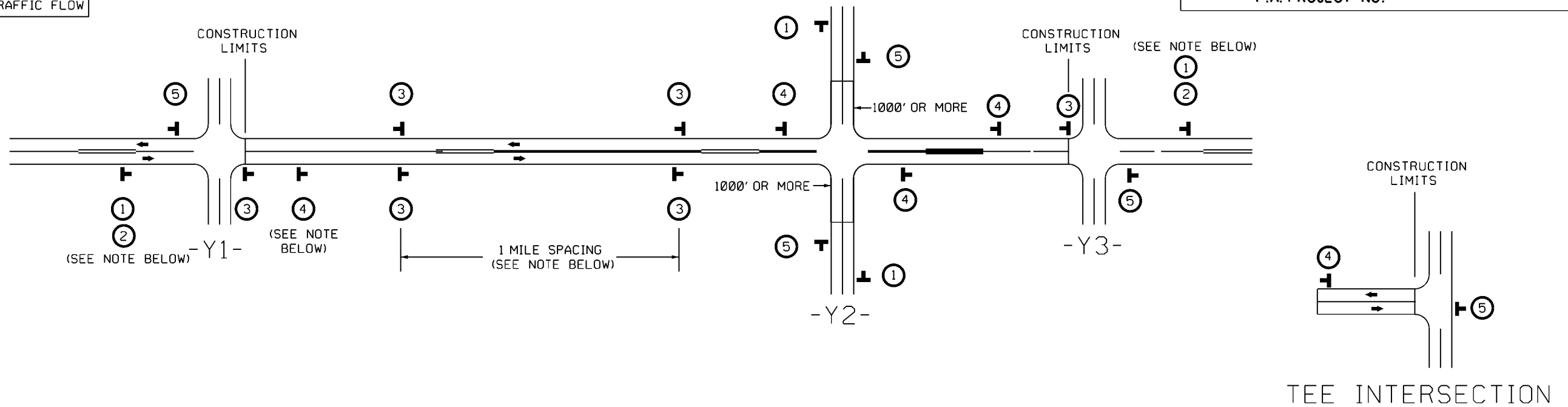
INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



SIGNING FOR RESURFACING PROJECTS

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	14	17
F.A. PROJECT NO.			

LEGEND	
▬	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW



SIGNING NOTES AND PLACEMENT PER DIRECTION		
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 5px;"> 1 </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> 2 </div> </div>	<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 CONSTRUCTION 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
<div style="display: flex; align-items: center;"> 3 </div>	<p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	<p>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.</p>
<div style="display: flex; align-items: center;"> 4 </div>	<p>- THESE ARE FOR -Y- LINES THAT ARE 'THROUGH' ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT 'THROUGH' ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- 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.</p> <p>- 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>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> </div> <div style="text-align: center;"> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p> </div> </div>
<div style="display: flex; align-items: center;"> 5 </div>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	

MAPS LESS THAN 2 MILES

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.

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 WARNING SIGNS.

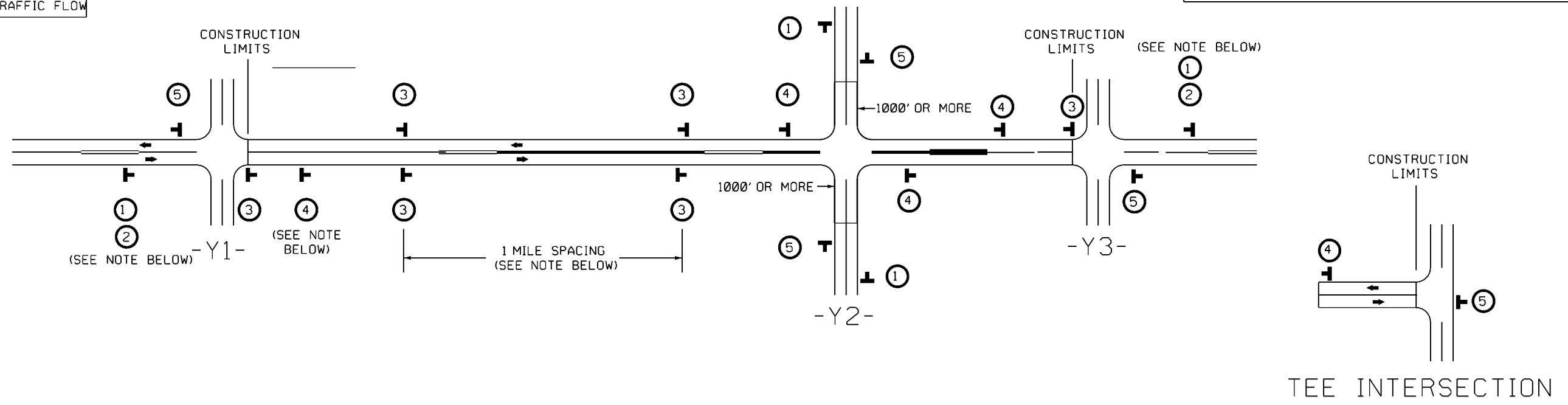


ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

SIGNING FOR ASPHALT SURFACE TREATMENT

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2023CPT.10.15.20131 2023CPT.10.15.20132	15	17
F.A. PROJECT NO.			

LEGEND	
⊣	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">①</div> </div>	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	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. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> W20-1 48" X 48" </div> <div style="text-align: center;"> W20-7 A 48" X 48" </div> </div> PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">②</div> </div>	*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)	
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">③</div> </div>	- ALTERNATE THE FOLLOWING TWO SIGNS: - STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT" - 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.	
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">④</div> </div>	- 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.	
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">⑤</div> </div>	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

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 RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

