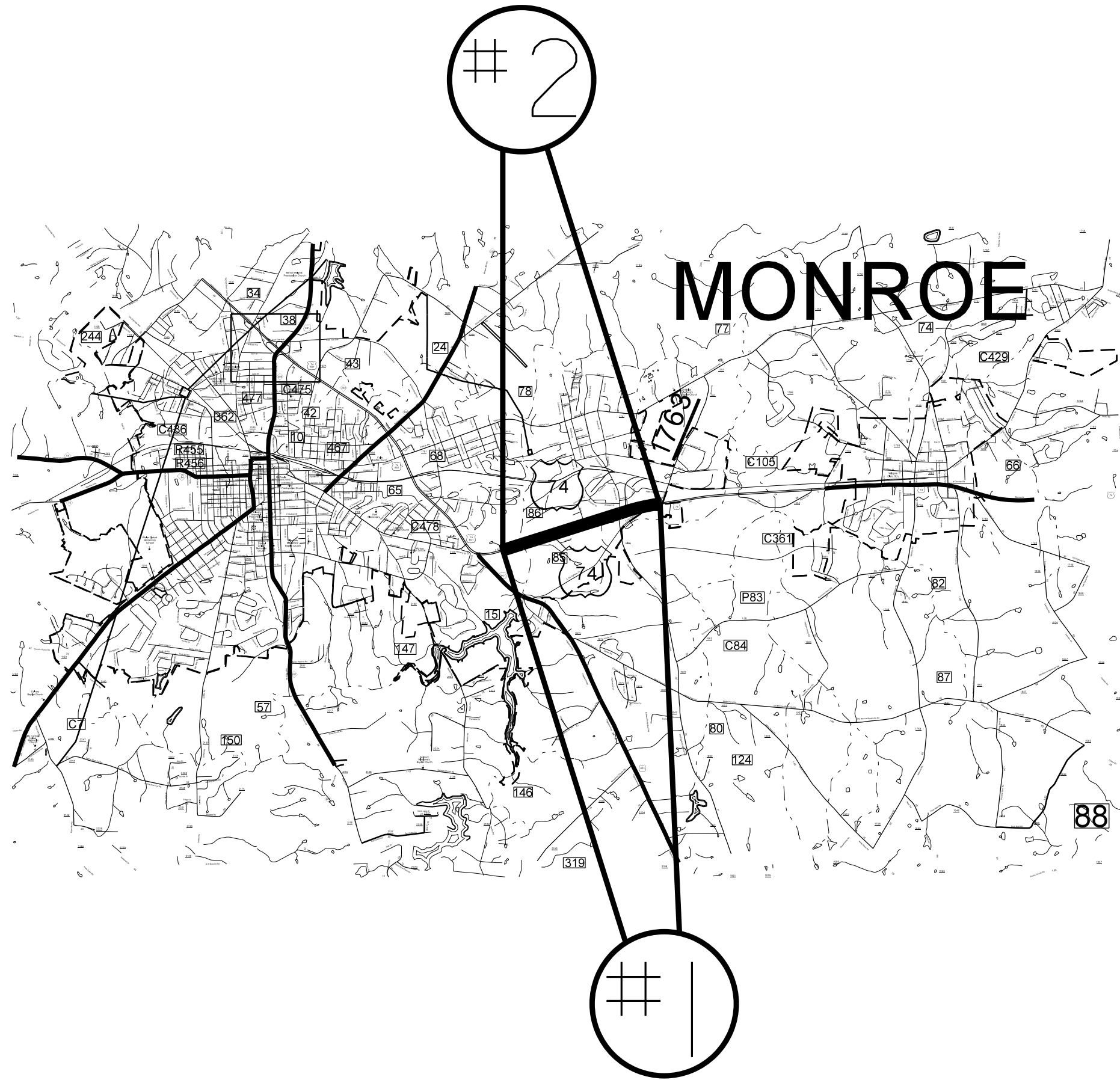


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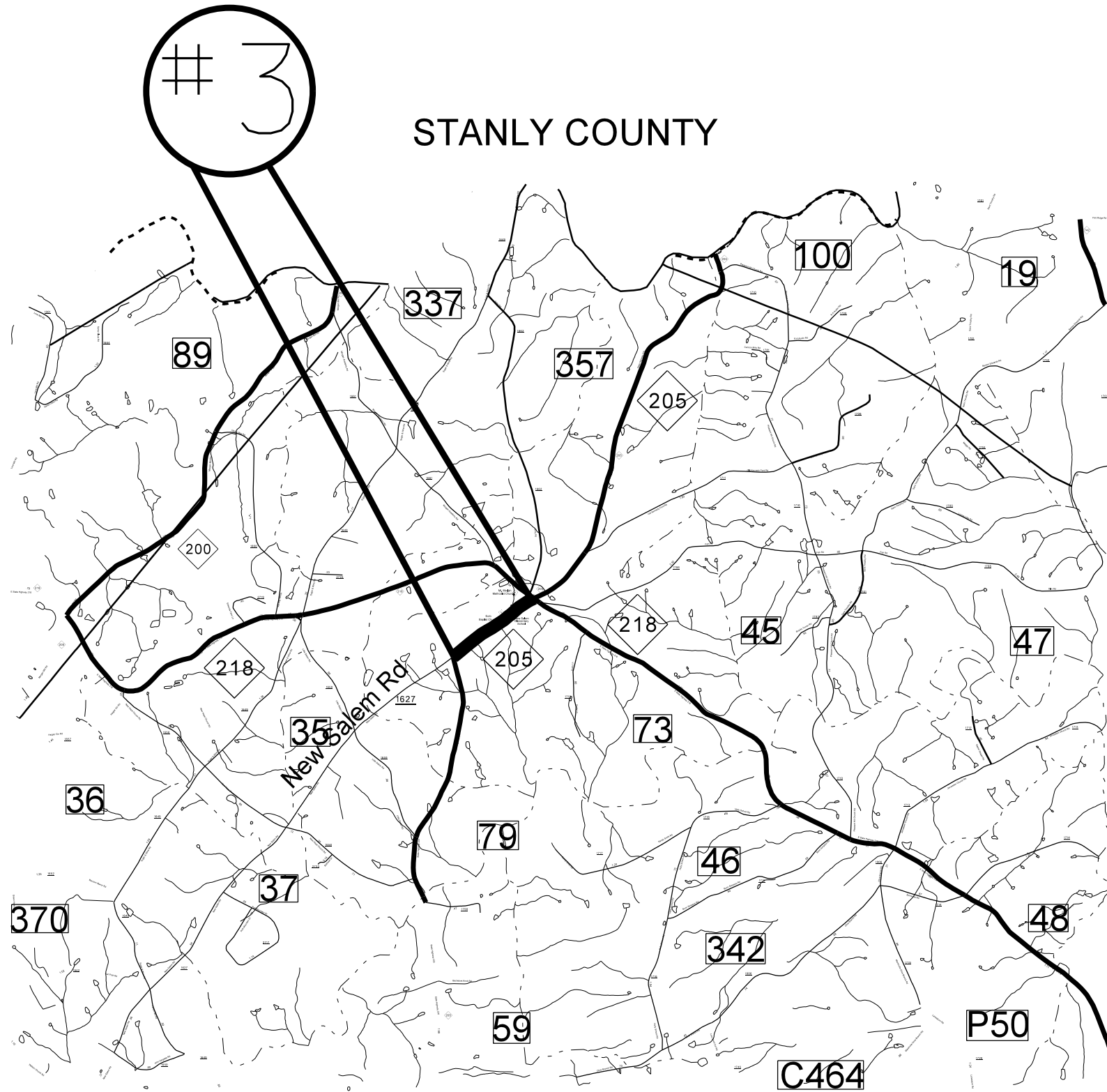
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	1	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
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**MAP #1 US 74 EAST BOUND (1.47 MILES)
 FROM END CURB AND GUTTER SECTION CLOSE TO
 SOUTHERN STATES TO SR 1763 S.BIVENS ROAD**

**MAP #2 US 74 WEST BOUND (1.35 MILES)
 FROM SR 1763 S.BIVENS ROAD TO BEGINNING
 CURB AND GUTTER SECTION
 CLOSE TO SOUTHERN STATES**



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	2	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

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MAP #3 NC 205 (0.72 MILES)
FROM SR 1627 NEW SALEM ROAD PAVEMENT JOINT
TO NC 218

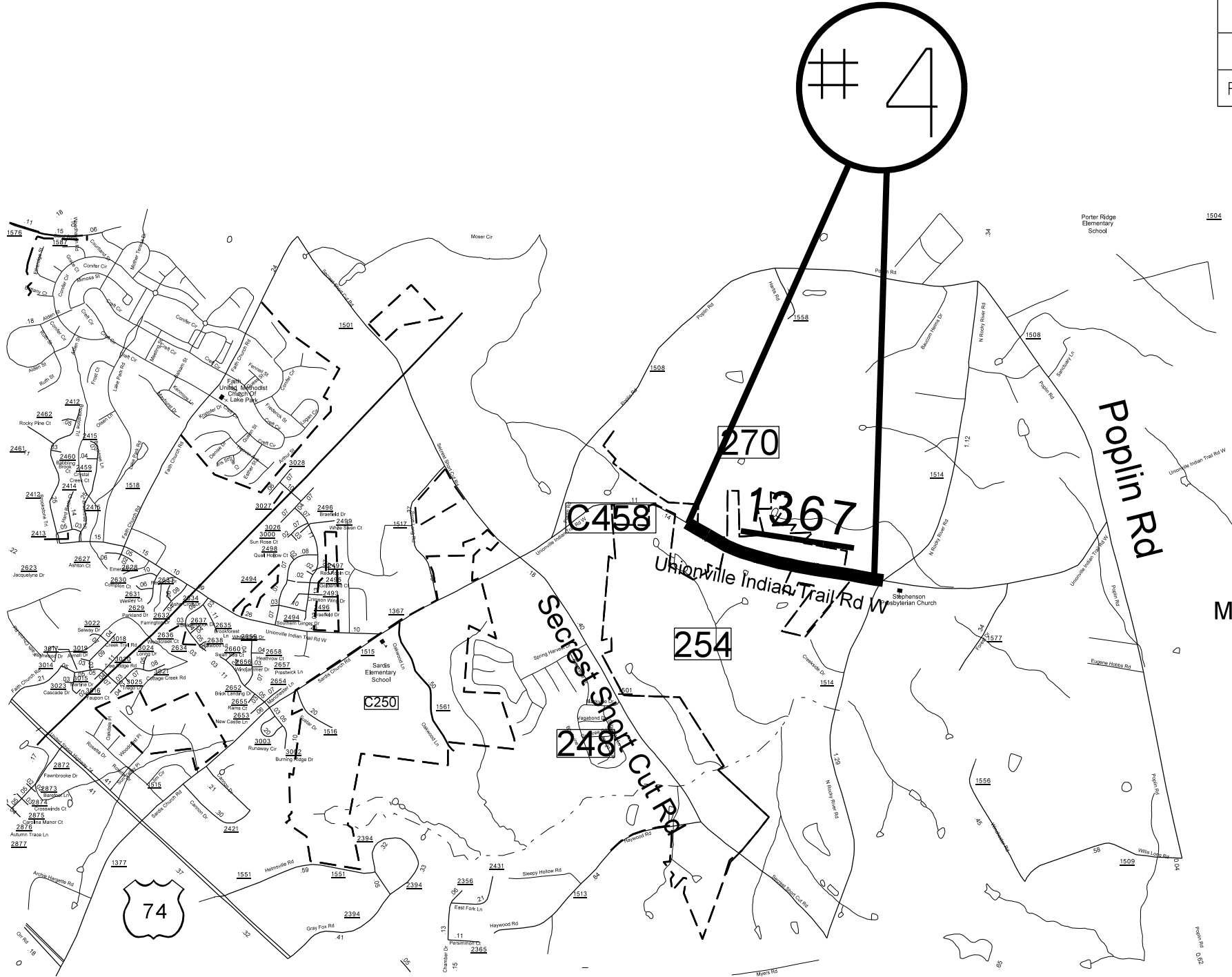
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.I0.64.I0901.2-ETC. 2016CPT.I0.64.20901.5-ETC. 2016CPT.I0.58.20902.1-ETC.	3	
F.A. PROJECT NO.			



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UNION COUNTY
 NORTH CAROLINA

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MAP #4 SR 1367 W. UNIONVILLE - INDIAN TRAIL ROAD
 (0.69 MILES)
 FROM SR 1514 ROCKY RIVER ROAD
 GOING WEST FOR 0.69 MILES TO TIP PROJECT
 R2559



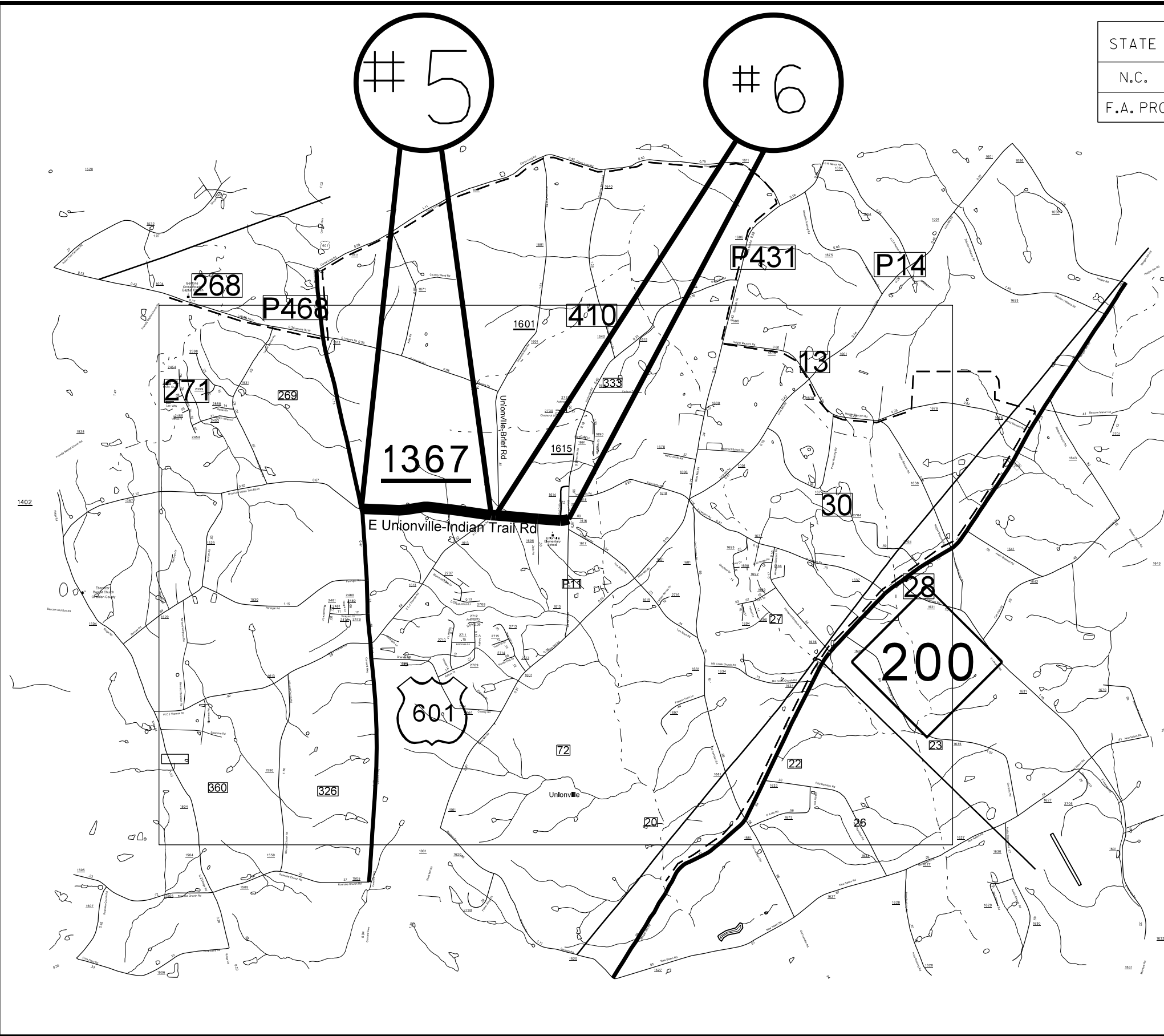
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.J0.64.I090I.2-ETC. 2016CPT.J0.64.2090I.5-ETC. 2016CPT.J0.58.20902.I-ETC.	4	
F.A. PROJECT NO.			



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UNION COUNTY
 NORTH CAROLINA
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MAP #5 SR 1367 UNIONVILLE - INDIAN TRAIL ROAD
 (0.87 MILES)
 FROM US 601 NORTH
 TO PAVEMENT JOINT AT SR 1601
 UNIONVILLE - BRIEF ROAD

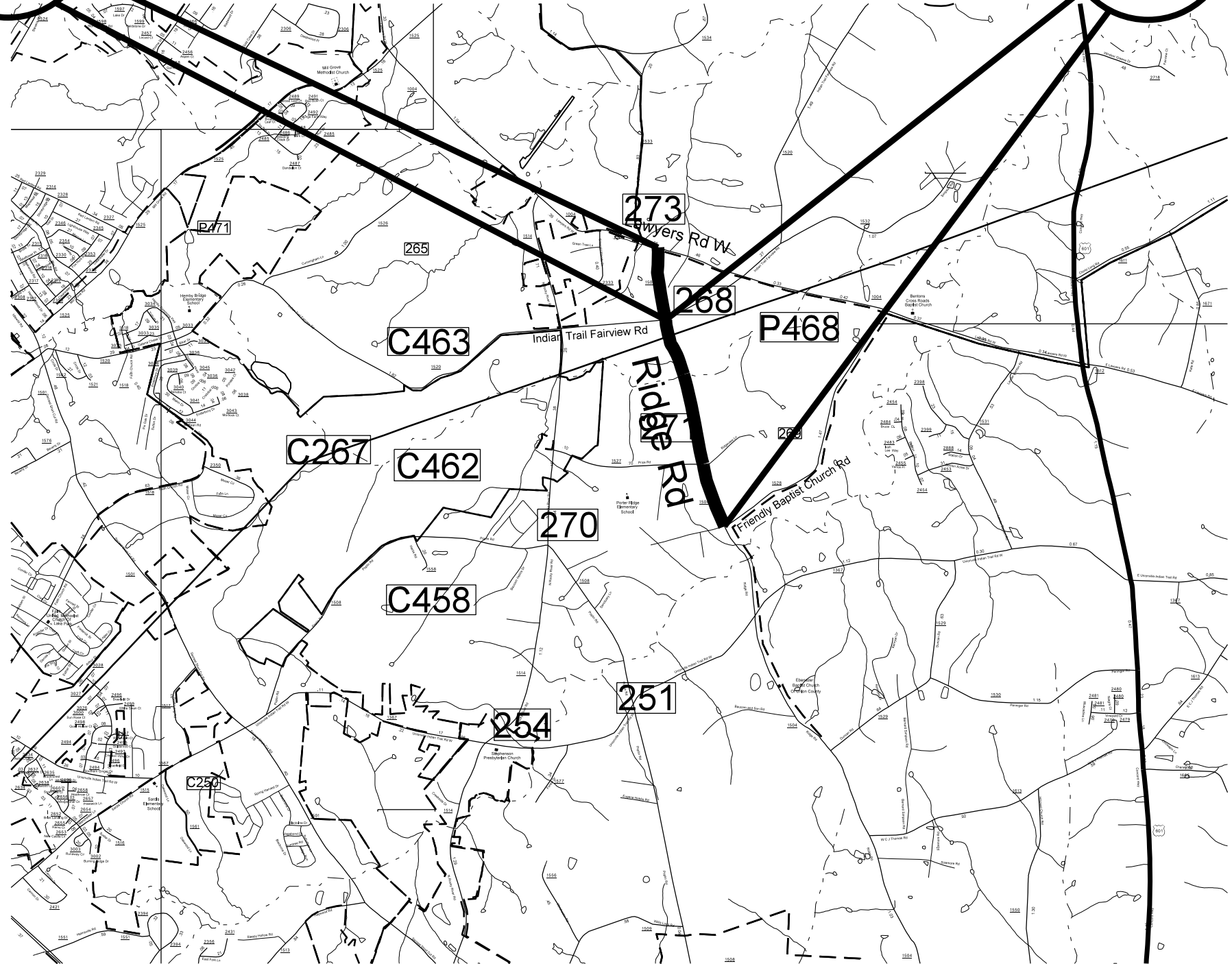
MAP #6 SR 1367 E. UNIONVILLE INDIAN TRAIL ROAD
 (0.49 MILES)
 FROM SR 1601 UNIONVILLE-BRIEF ROAD
 TO SR 1615 UNIONVILLE ROAD



7

8

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.I0.64.I090I.2-ETC. 2016CPT.I0.64.2090I.5-ETC. 2016CPT.I0.58.20902.I-ETC.	5	
F.A. PROJECT NO.			

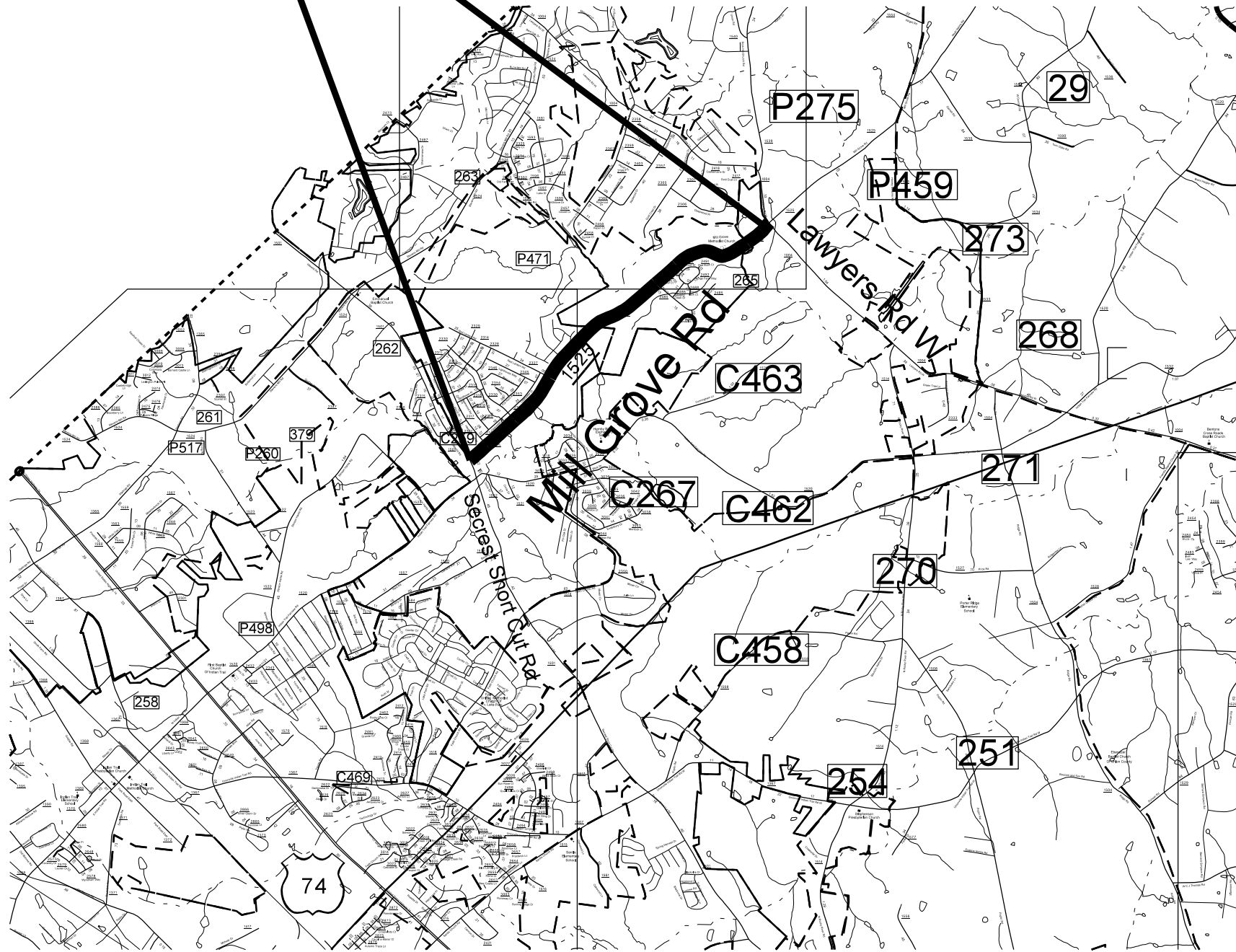


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UNION COUNTY
 NORTH CAROLINA
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MAP #7 SR 1504 RIDGE ROAD
 (0.36 MILES)
 FROM SR 1520 INDIAN TRAIL FAIRVIEW ROAD
 TO SR 1004 W LAWYERS ROAD

MAP #8 SR 1504 RIDGE ROAD
 (1.04 MILES)
 FROM PAVEMENT JOINT EAST OF FRIENDLY
 BAPTIST CHURCH ROAD
 TO SR 1520 INDIAN TRAIL FAIRVIEW ROAD

#9



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	6	
F.A. PROJECT NO.			



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UNION COUNTY

NORTH CAROLINA

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MAP #9 SR 1525 MILL GROVE ROAD
(2.43 MILES)
FROM SR 1501 SECREST SHORT CUT ROAD
TO SR 1004 W LAWYERS ROAD

#10

#11

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.I0.64.I0901.2-ETC. 2016CPT.I0.64.20901.5-ETC. 2016CPT.I0.58.20902.1-ETC.	7	
F.A. PROJECT NO.			

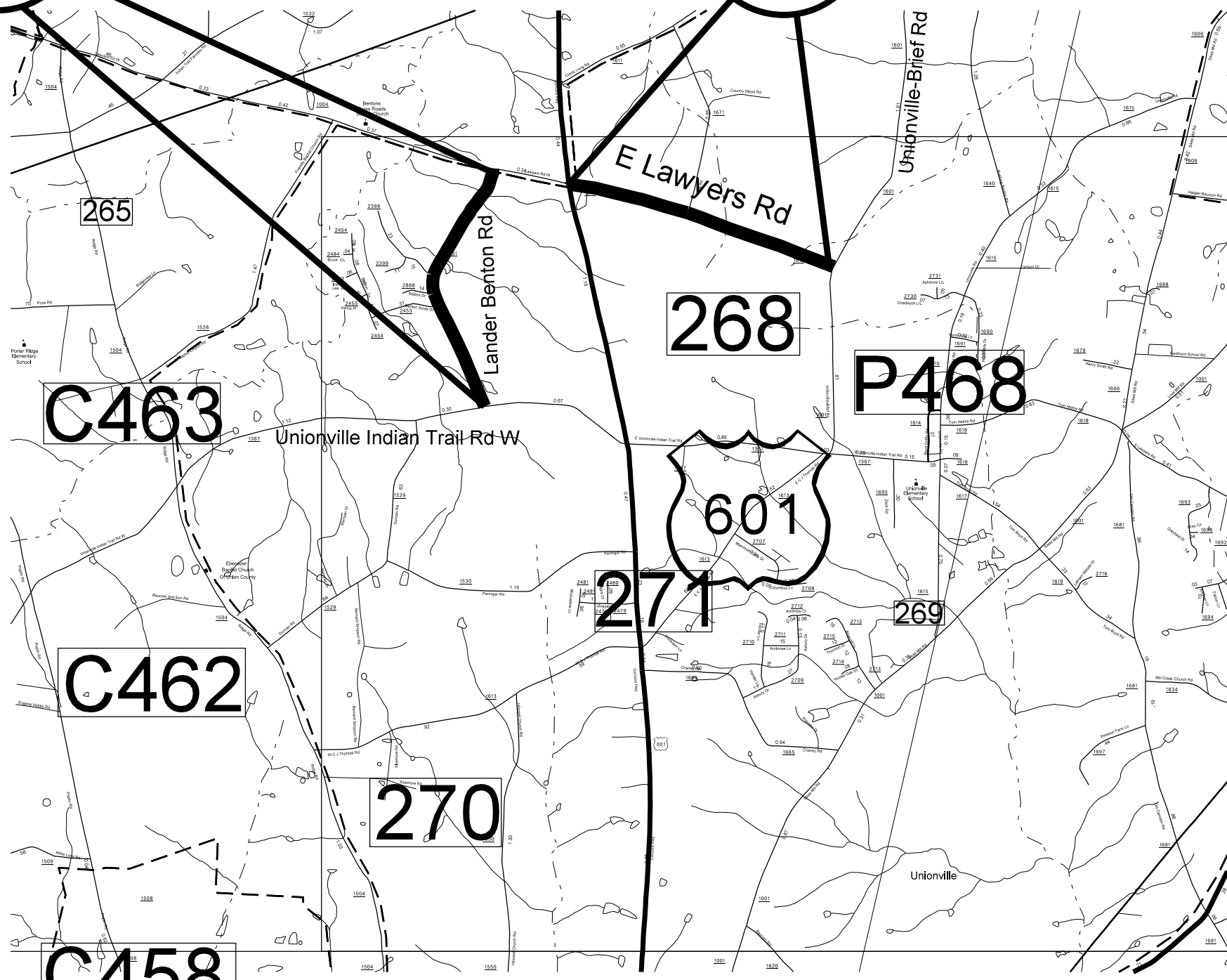


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UNION COUNTY
 NORTH CAROLINA

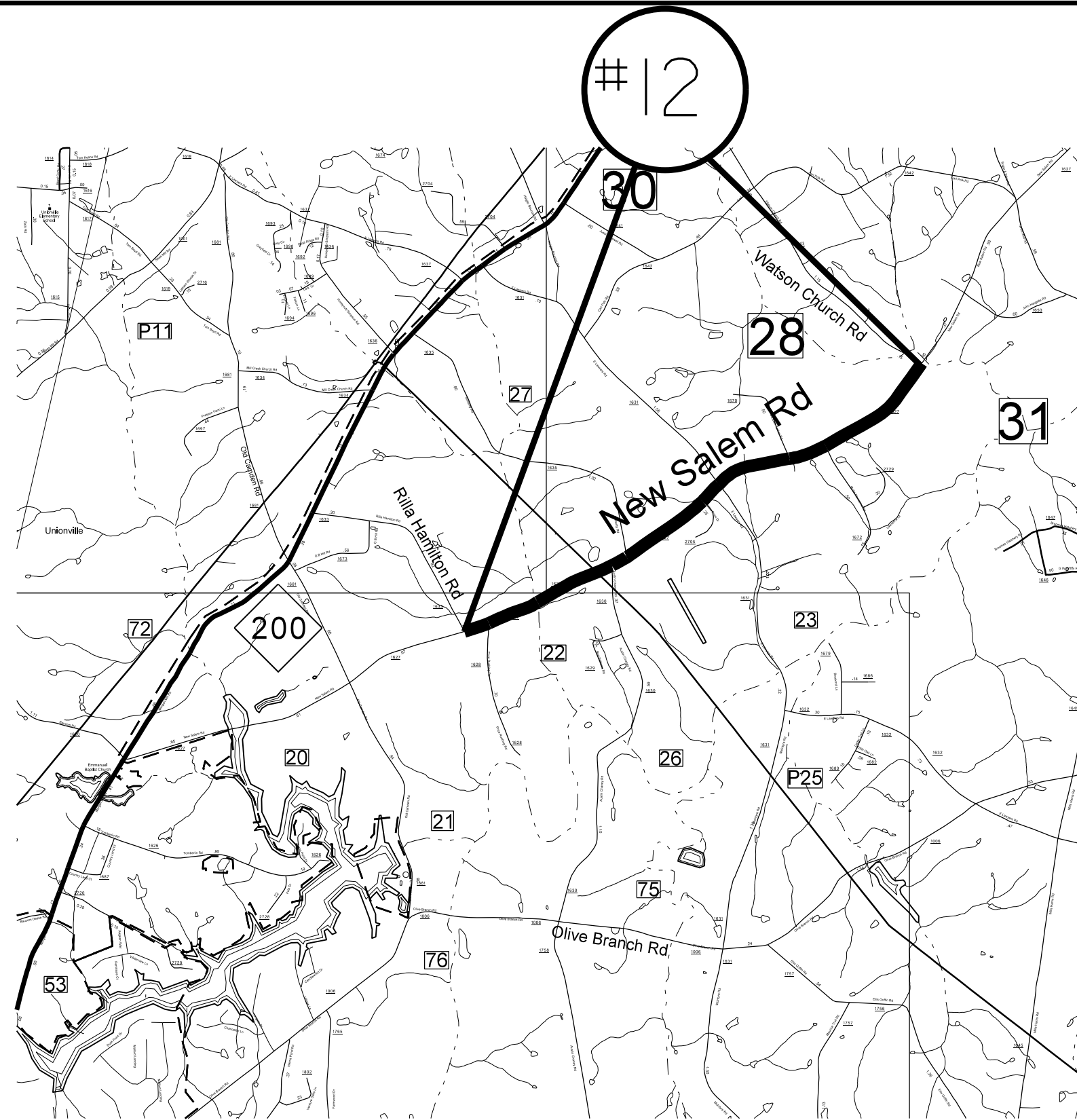
PREPARED BY THE
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**MAP #10 SR 1531 LANDER BENTON ROAD
 (1.13 MILES)
 FROM SR 1004 W. LAWYERS ROAD
 TO SR 1367 W. UNIONVILLE INDIAN TRAIL ROAD**

**MAP #11 SR 1612 E. LAWYERS ROAD
 (1.2 MILES)
 FROM US 601 TO SR 1601
 UNIONVILLE BRIEF ROAD**



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	8	
F.A. PROJECT NO.			

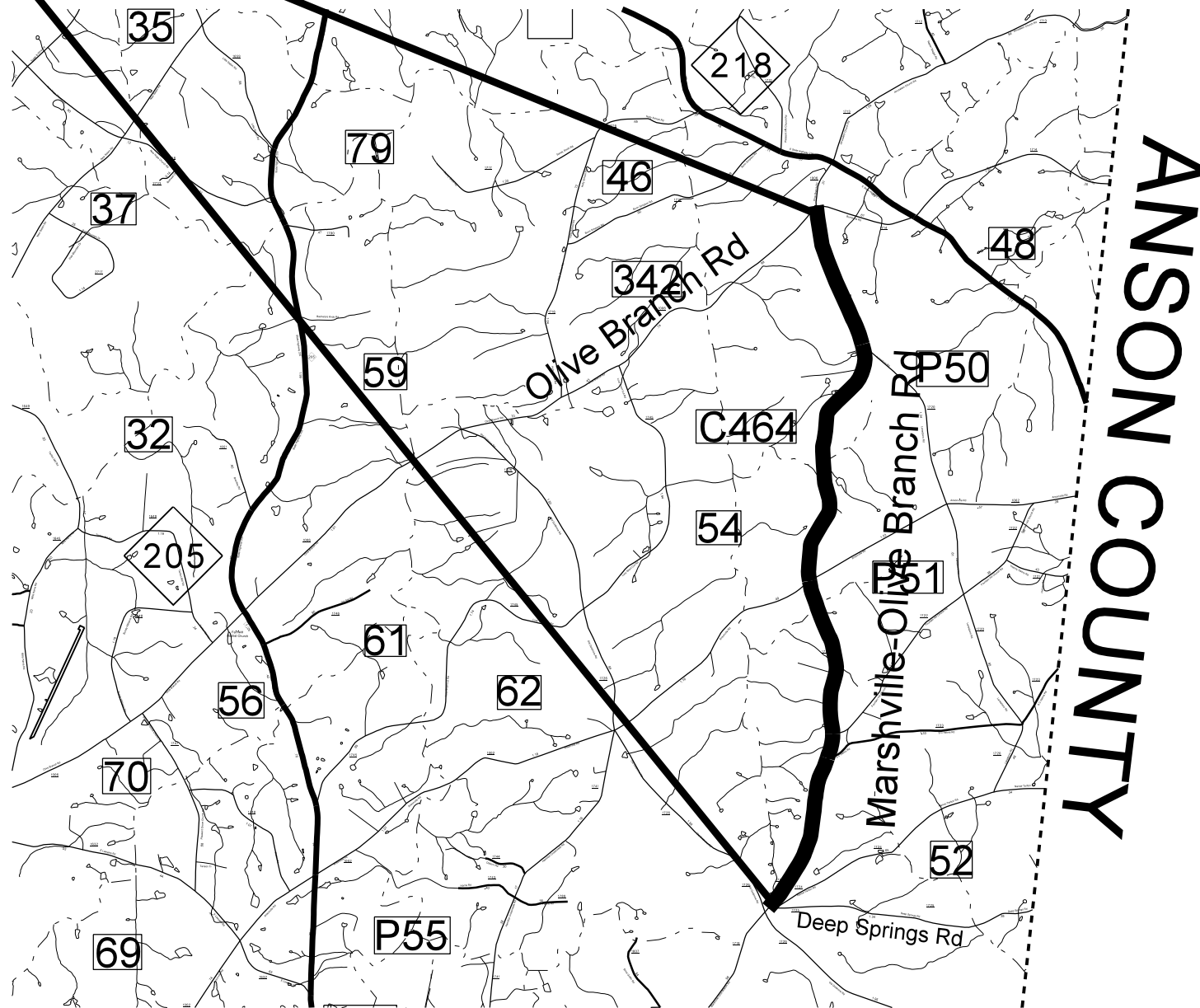


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UNION COUNTY
 NORTH CAROLINA

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**MAP #12 SR 1627 NEW SALEM ROAD
 (2.86 MILES)
 FROM SR 1633 RILLA HAMILTON ROAD
 TO SR 1643 WATSON CHURCH ROAD**

#13



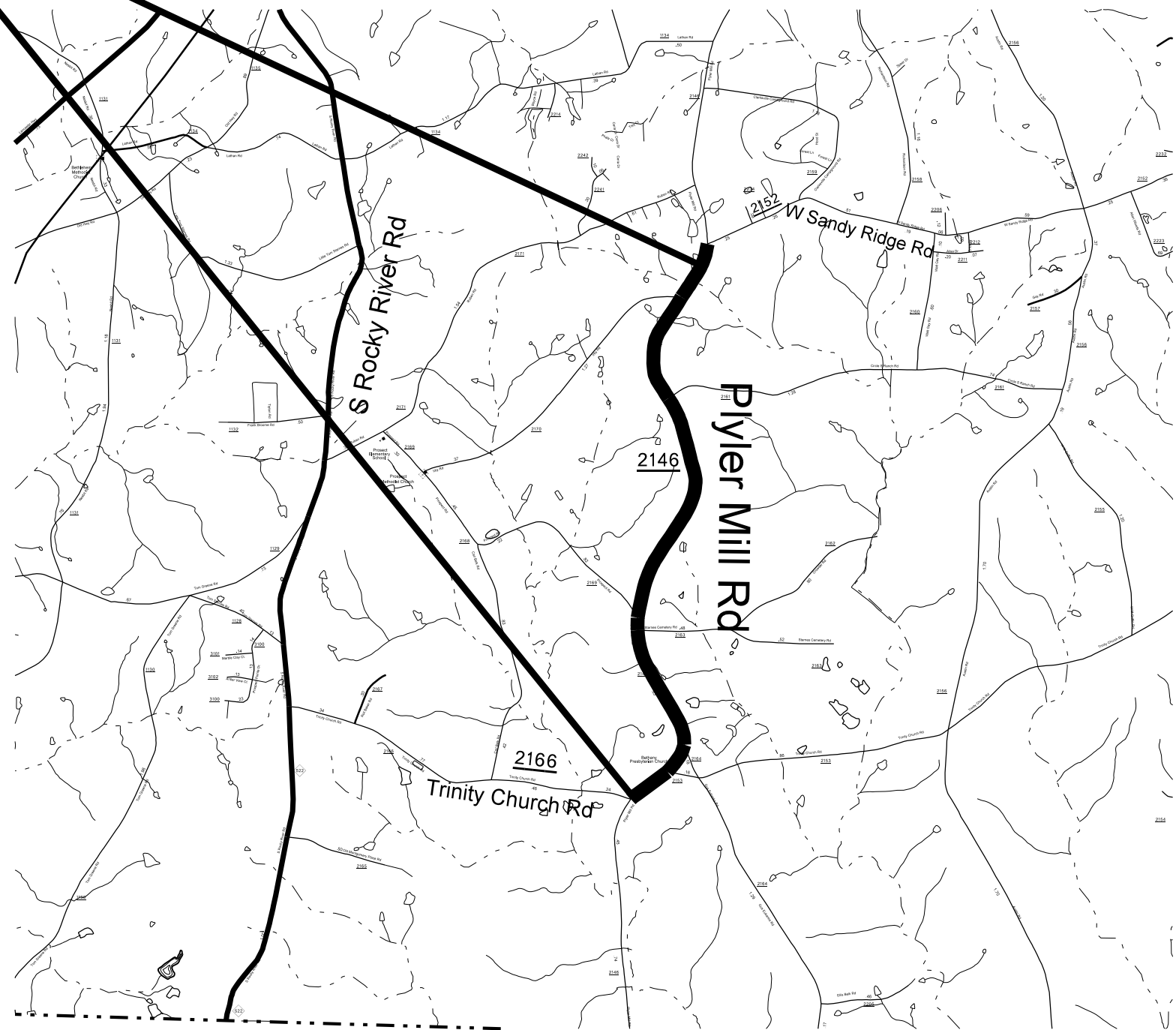
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.I0.64.I090I.2-ETC. 2016CPT.I0.64.2090I.5-ETC. 2016CPT.I0.58.20902.I-ETC.	9	
F.A. PROJECT NO.			



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MAP #13 SR 1719 MARSHVILLE OLIVE BRANCH ROAD
(4.92 MILES)
FROM SR 1006 OLIVE BRANCH ROAD
TO SR 1725 DEEP SPRINGS ROAD

#15



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.I0.64.I090I.2-ETC. 2016CPT.I0.64.2090I.5-ETC. 2016CPT.I0.58.20902.I-ETC.	11	
F.A. PROJECT NO.			



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UNION COUNTY
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MAP #15 SR 2146 PLYLER MILL ROAD
(3.10 MILES)
FROM SR 2152 SANDY RIDGE ROAD
TO SR 2166 TRINITY CHURCH ROAD

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.I0.64.I090I.2-ETC. 2016CPT.I0.64.2090I.5-ETC. 2016CPT.I0.58.20902.I-ETC.	12	
F.A. PROJECT NO.			

#16

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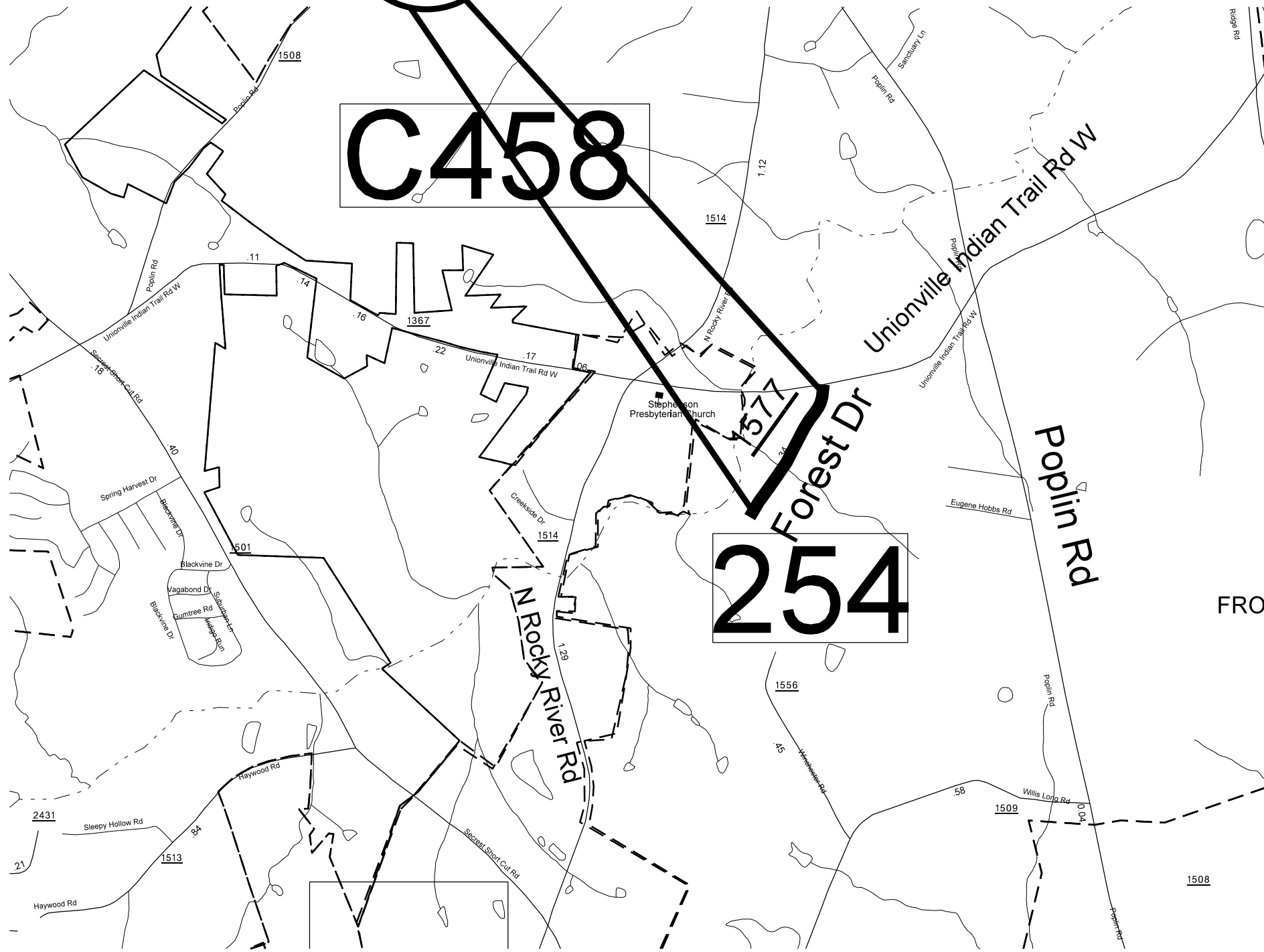
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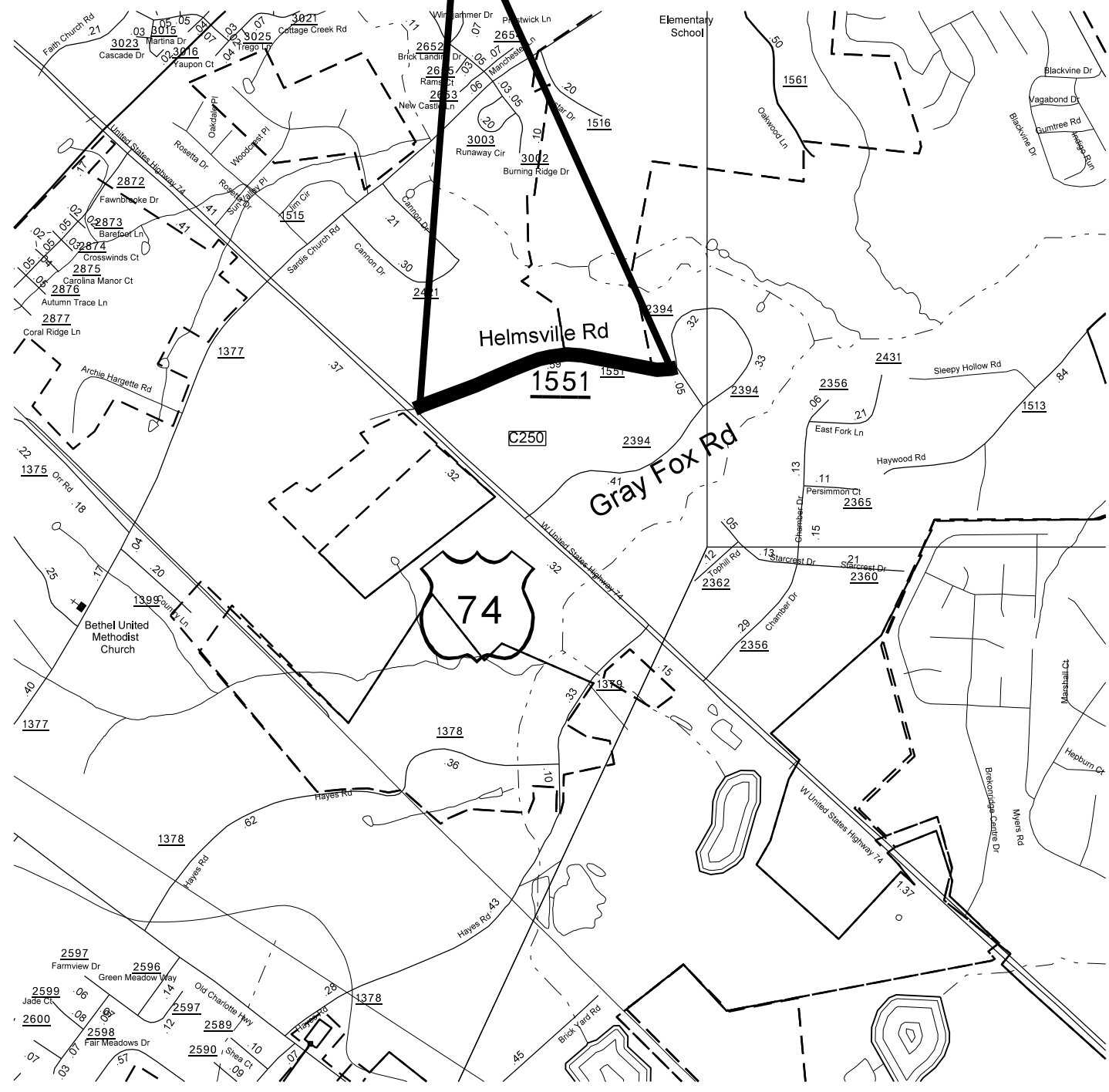
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MAP #16 SR 1577 FOREST DRIVE
(0.30 MILES)
FROM SR 1367 UNIONVILLE-INDIAN TRAIL ROAD
TO DEAD END



#17



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	13	
F.A. PROJECT NO.			

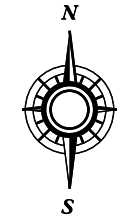
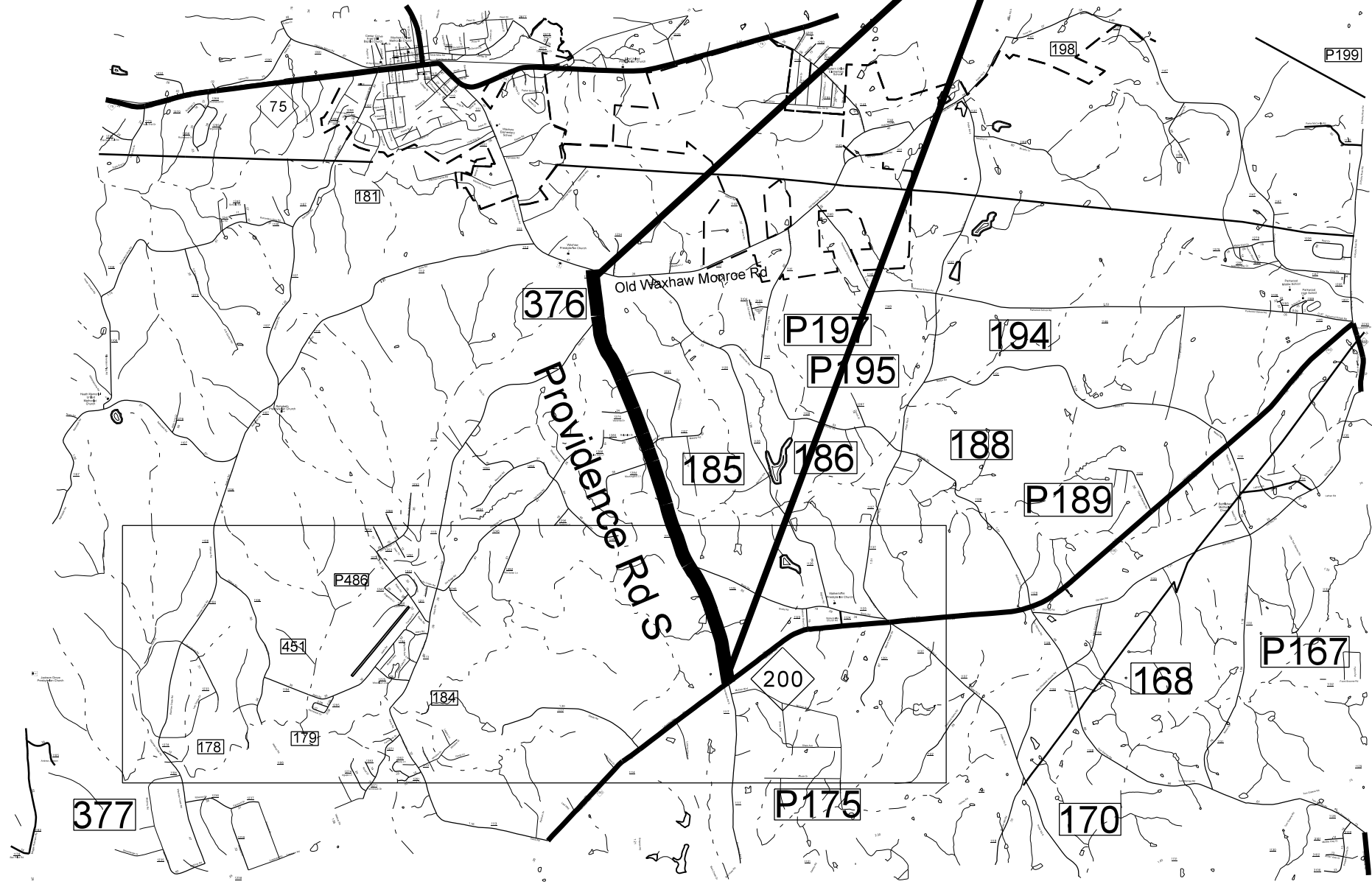


ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
NORTH CAROLINA
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MAP #17 SR 1551 HELMSVILLE ROAD
(0.53 MILES)
FROM US 74
TO SR 2394 GRAY FOX ROAD

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	14	
F.A. PROJECT NO.			

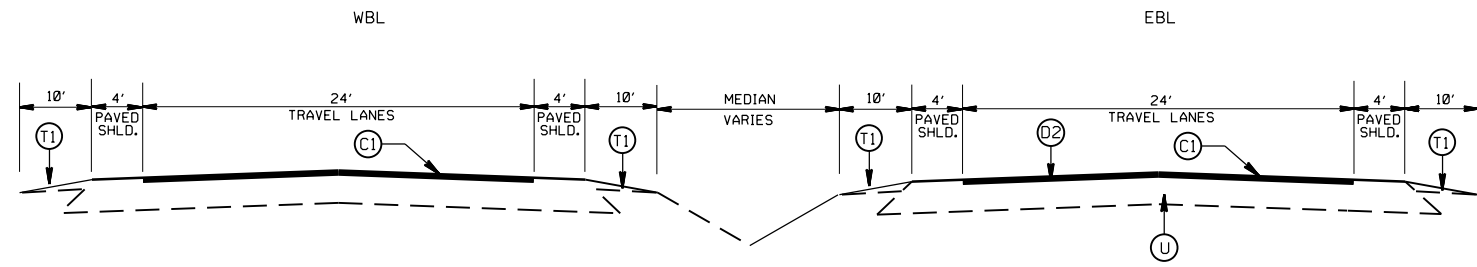
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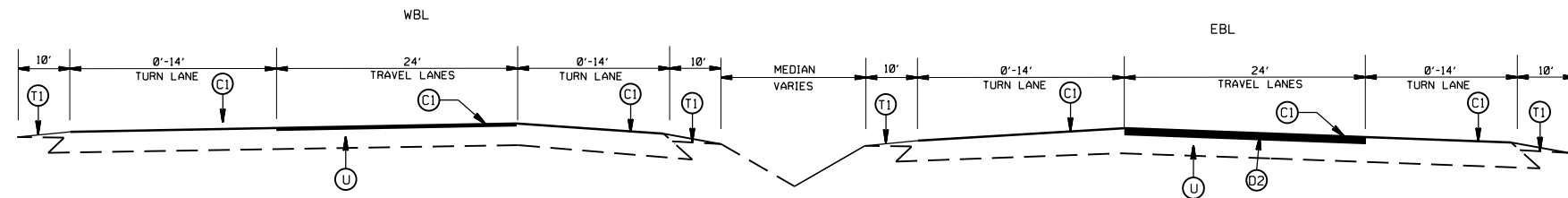
ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
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MAP #18 SR 1117 S. PROVIDENCE ROAD
 (3.17 MILES)
 FROM NC 200 TO SR 1110
 OLD WAXHAW - MONROE ROAD

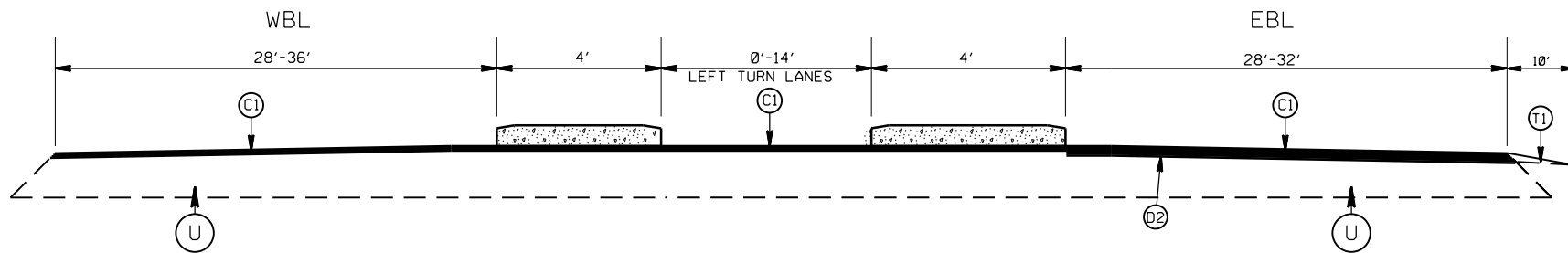
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.I0.64.I0901.2-ETC. 2016CPT.I0.64.20901.5-ETC. 2016CPT.I0.58.20902.1-ETC.	15	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 1
US 74 EB (MAP 1)
US 74 WB (MAP 2)
*SEE NOTE 2



TYPICAL SECTION NO. 2
US 74 EB (MAP 1)
US 74 WB (MAP 2)
SECTIONS WITH TURNLANES
*SEE NOTE 2



TYPICAL SECTION NO. 3
US 74 EB (MAP 1)
US 74 WB (MAP 2)
*SEE NOTE 2

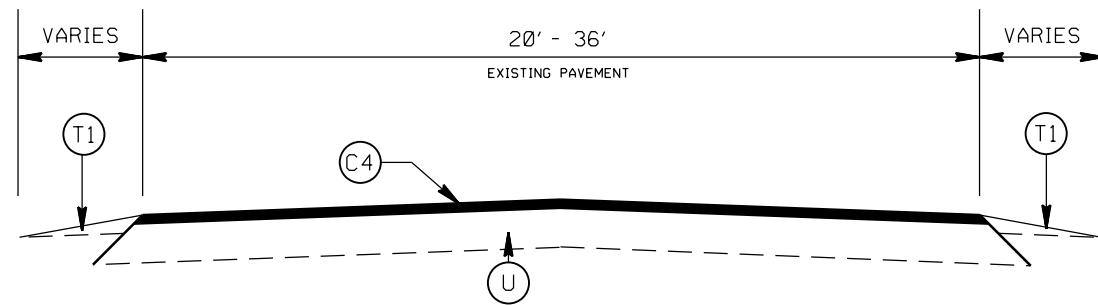
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C5)	PROP. APPROX. 1.5" SF9.5A ASPHALT CON. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C6)	PROP. ASPHALT SURFACE TREATMENT, DOUBLE SEAL #78M, TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 6M
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	PROFILE MILLING OF EXISTING PAVEMENT, 0 - 2.0" DEPTH.
(Z)	FULL DEPTH RECLAMATION

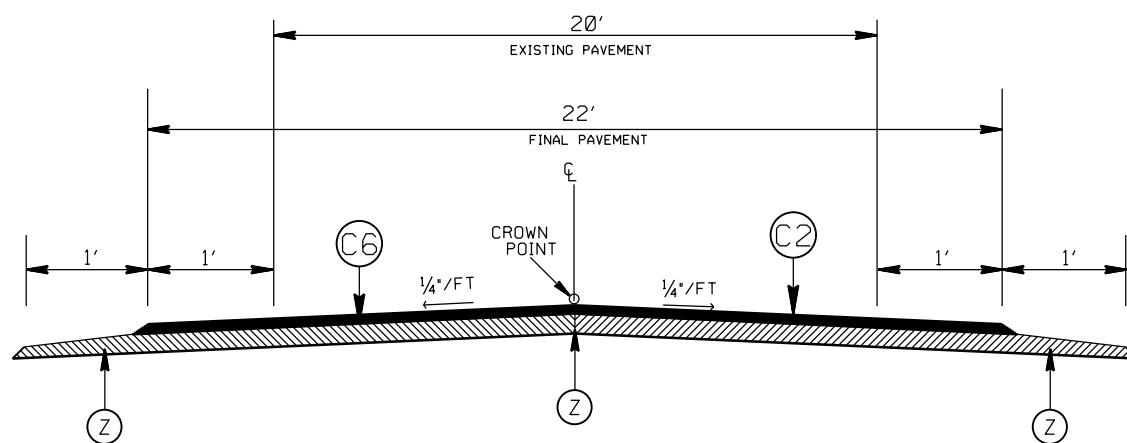
2016-2017
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	01/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	16	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 4
 NC 205 (MAP 3)
 SR 1367 UNIONVILLE-INDIAN TRAIL ROAD
 (MAP 4), (MAP 5) & (MAP 6)
 *SEE NOTE 7 FOR MAP 4
 SR 1627 NEW SALEM ROAD (MAP 12)
 *SEE NOTE 6



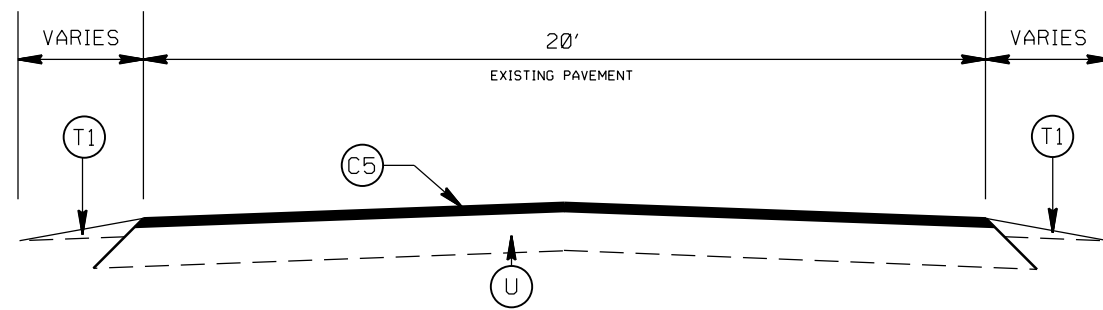
TYPICAL SECTION NO. 5
 SR 1504 RIDGE ROAD (MAP 7)
 *SEE NOTE 5

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C5)	PROP. APPROX. 1.5" SF9.5A ASPHALT CON. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C6)	PROP. ASPHALT SURFACE TREATMENT, DOUBLE SEAL #78M, TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 6M
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	PROFILE MILLING OF EXISTING PAVEMENT, 0 - 2.0" DEPTH.
(Z)	FULL DEPTH RECLAMATION

2016-2017 UNION COUNTY RESURFACING			REVISIONS	
SCALE	-NA-			
DATE	01/16			
DWG. BY	AMO			
DESIGN BY	AMO			
APPROVED	CLA			

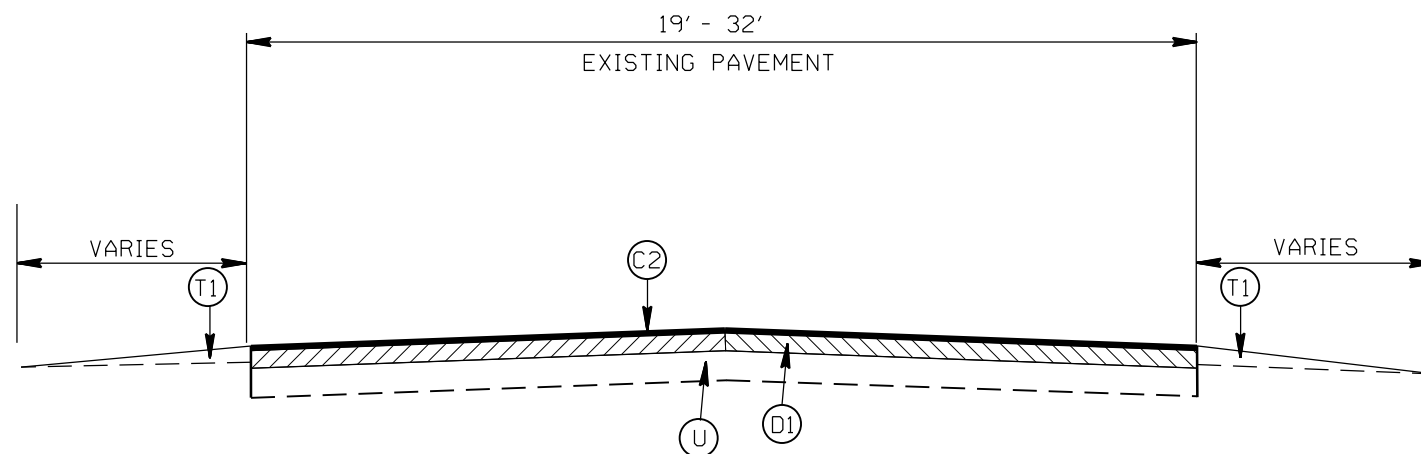
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	17	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 6
SR 1504 RIDGE ROAD (MAP 8)
*SEE NOTE 6

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C5)	PROP. APPROX. 1.5" SF9.5A ASPHALT CON. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C6)	PROP. ASPHALT SURFACE TREATMENT, DOUBLE SEAL #78M, TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 6M
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	PROFILE MILLING OF EXISTING PAVEMENT, 0 - 2.0" DEPTH.
(Z)	FULL DEPTH RECLAMATION

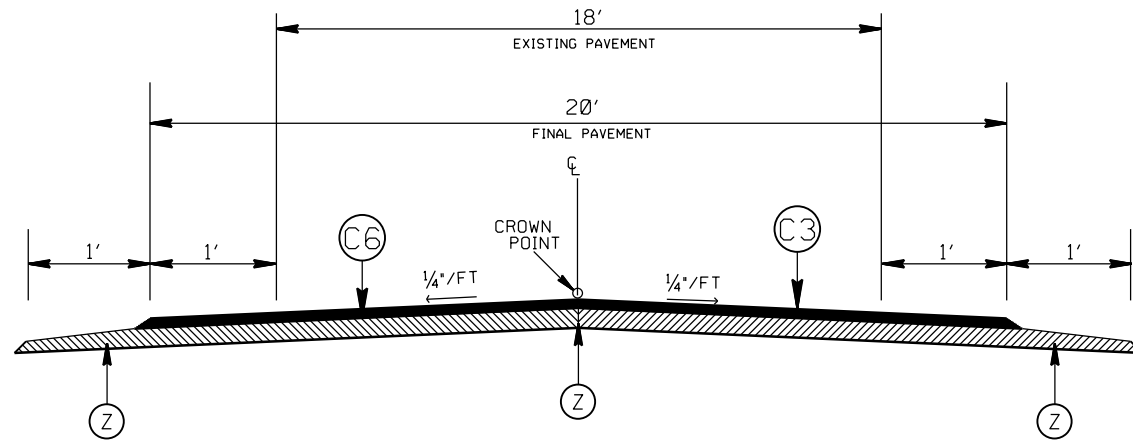


TYPICAL SECTION NO. 7
SR 1719 MARSHVILLE-OLIVE BRANCH ROAD
(MAP 13)
SR 1525 MILL GROVE ROAD (MAP 9)
FROM STA: 68+95 TO END OF MAP
*SEE NOTE 6

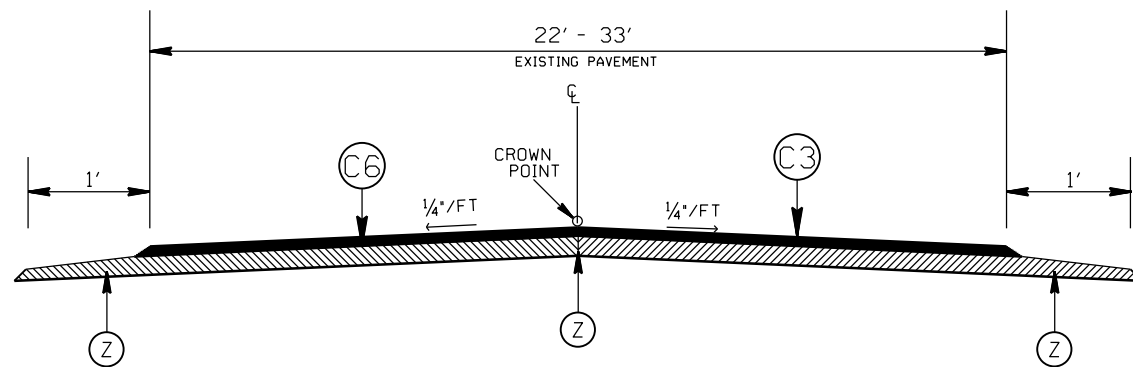
2016-2017
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	01/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	18	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 8
 SR 1531 LANDER BENTON ROAD (MAP 10)
 SR 1612 E. LAWYERS ROAD (MAP 11)
 SR 2146 PLYLER MILL ROAD (MAP 15)
 SR 1577 FOREST DRIVE (MAP 16)
 SR 1551 HELMSVILLE ROAD (MAP 17)
 *SEE NOTE 5



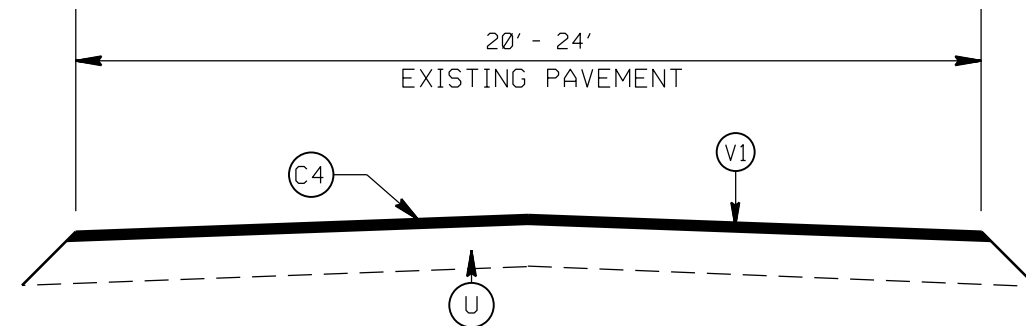
TYPICAL SECTION NO. 9
 SR 1612 E. LAWYERS ROAD (MAP 11)
 *SEE NOTE 5

PAVEMENT SCHEDULE

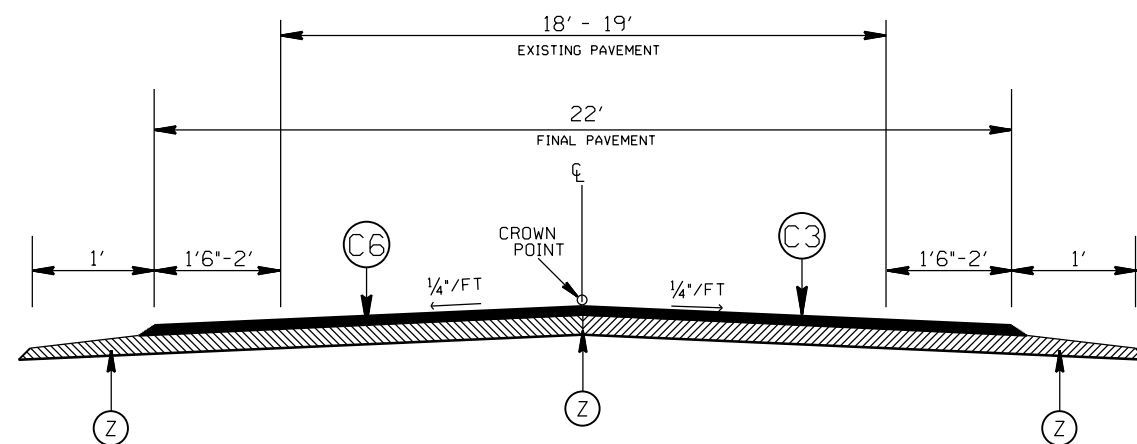
(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
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(U)	EXISTING PAVEMENT
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(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	PROFILE MILLING OF EXISTING PAVEMENT, 0 - 2.0" DEPTH.
(Z)	FULL DEPTH RECLAMATION

2016-2017 UNION COUNTY RESURFACING			REVISIONS	
SCALE	-NA-			
DATE	01/16			
DWG. BY	AMO			
DESIGN BY	AMO			
APPROVED	CLA			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.J0.64.10901.2-ETC. 2016CPT.J0.64.20901.5-ETC. 2016CPT.J0.58.20902.1-ETC.	19	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 10
SR 1736 OLD LAWYERS ROAD (MAP 14)
FROM STA: 10+00 TO 83+75



TYPICAL SECTION NO. 11
SR 1117 SOUTH PROVIDENCE ROAD (MAP 18)
*SEE NOTES 5 AND 6

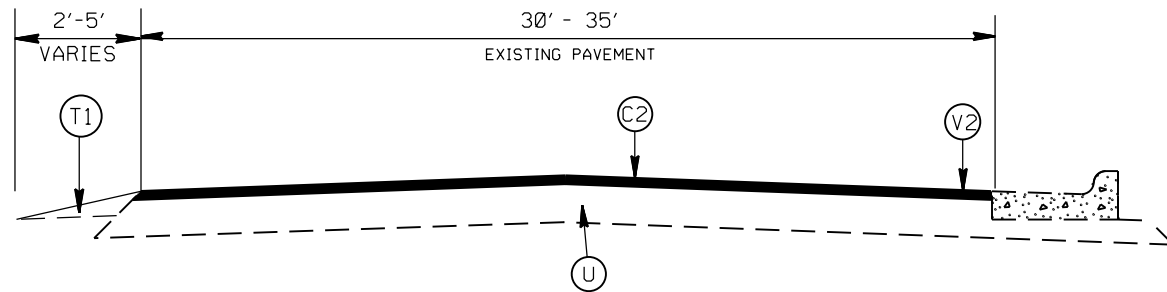
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C5)	PROP. APPROX. 1.5" SF9.5A ASPHALT CON. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C6)	PROP. ASPHALT SURFACE TREATMENT, DOUBLE SEAL #78M, TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 6M
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	PROFILE MILLING OF EXISTING PAVEMENT, 0 - 2.0" DEPTH.
(Z)	FULL DEPTH RECLAMATION

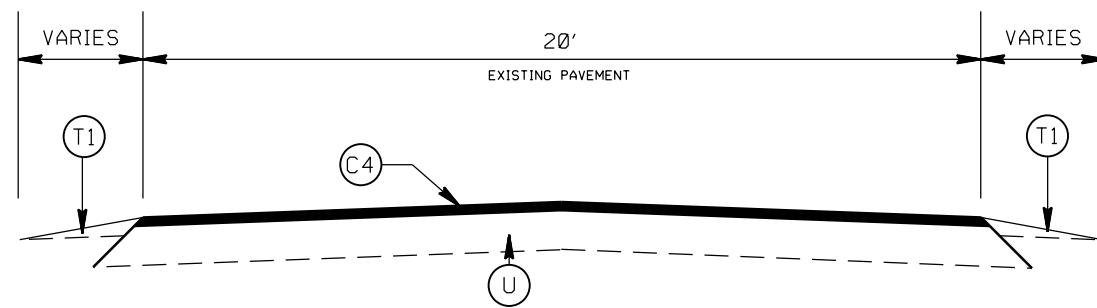
2016-2017
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	01/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	20	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 12
SR 1525 MILL GROVE ROAD (MAP 9)
FROM STA: 10+00 TO STA: 68+95




TYPICAL SECTION NO. 13
SR 1736 OLD LAWYERS ROAD (MAP 14)
FROM STA: 83+75 TO END OF MAP

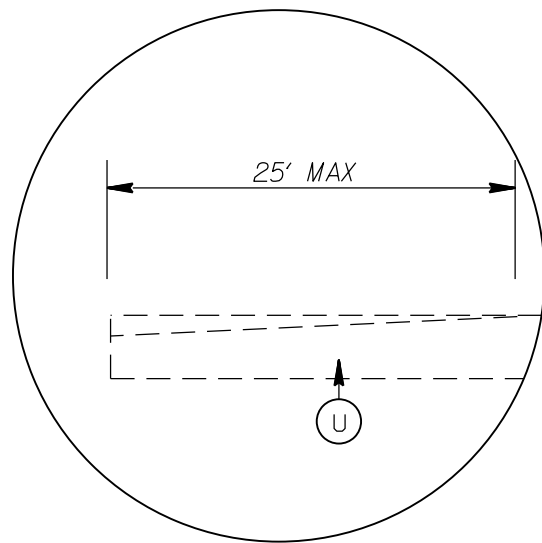
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C5)	PROP. APPROX. 1.5" SF9.5A ASPHALT CON. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C6)	PROP. ASPHALT SURFACE TREATMENT, DOUBLE SEAL #78M, TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 6M
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	PROFILE MILLING OF EXISTING PAVEMENT, 0 - 2.0" DEPTH.
(Z)	FULL DEPTH RECLAMATION

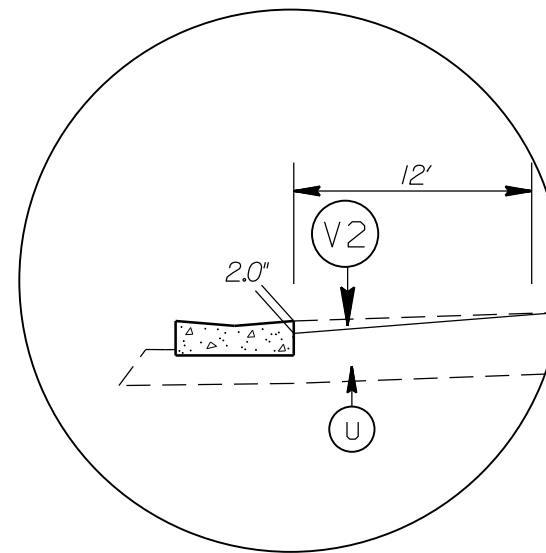
2016-2017
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	01/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	21	
F.A. PROJECT NO.			



DETAIL FOR INCIDENTAL MILLING (0" TO 2.0")

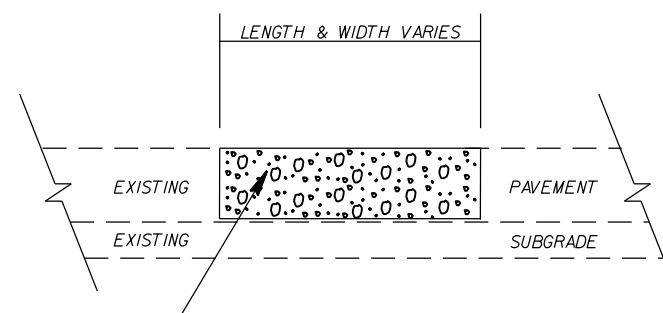


DETAIL FOR PROFILE MILLING (0" TO 2.0")

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C5)	PROP. APPROX. 1.5" SF9.5A ASPHALT CON. SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C6)	PROP. ASPHALT SURFACE TREATMENT, DOUBLE SEAL #78M, TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 6M
(U)	EXISTING PAVEMENT
(T1)	SHOULDER RECONSTRUCTION
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	PROFILE MILLING OF EXISTING PAVEMENT, 0 - 2.0" DEPTH.
(Z)	FULL DEPTH RECLAMATION

PATCHING DETAIL



RATE IS VARIABLE AND SHALL BE AS DIRECTED BY THE ENGINEER. ASPHALT TYPE I19.0C SHALL BE PLACED.


2016-2017
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	01/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

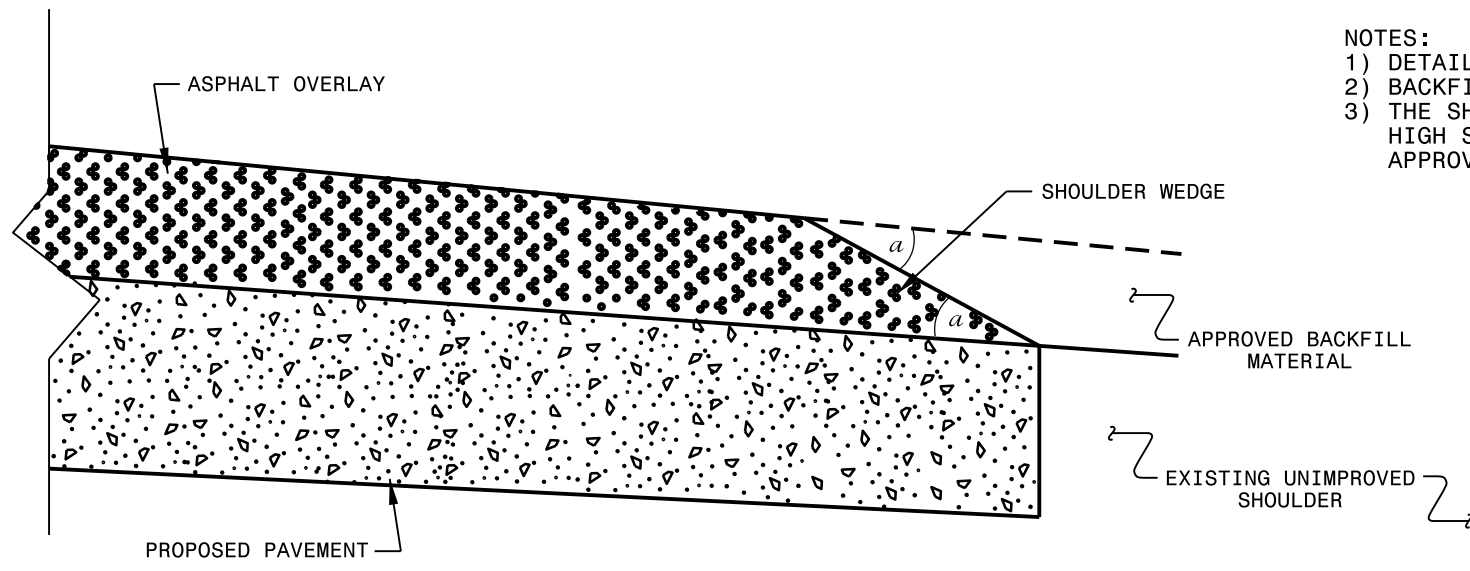
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.64.10901.2-ETC. 2016CPT.10.64.20901.5-ETC. 2016CPT.10.58.20902.1-ETC.	22	
F.A. PROJECT NO.			

NOTES:

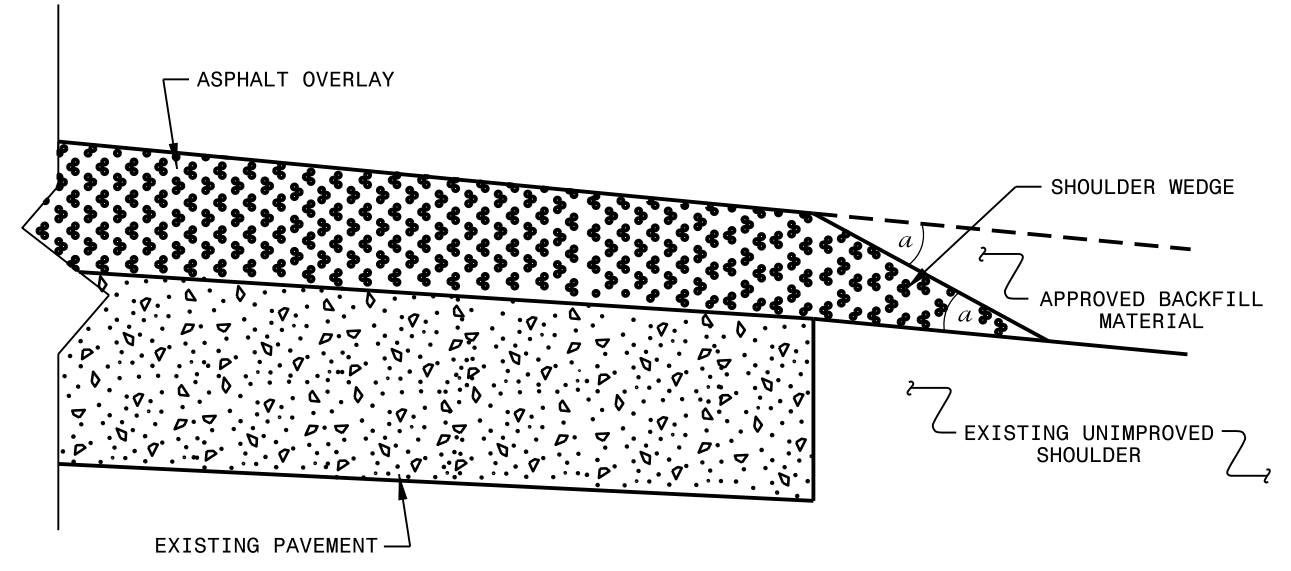
- 1: LEVELING COURSE TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 2: ON MAP 1 AND 2, DO NOT MILL OR RESURFACE OVER BRIDGE.
3. ALL WIDENING, WITH AGGREGATE BASE COURSE, ON FULL DEPTH RECLAMATION MAPS TO BE DONE BY STATE FORCES.
- 4: SHOULDER RECONSTRUCTION WILL BE AS DIRECTED BY THE ENGINEER.
- 5: FULL DEPTH RECLAMATION AND AST SHALL BE COMPLETED ON MAPS 7, 10, 11, 15, 16, 17, and 18 PRIOR TO THE ASPHALT OVERLAY.
- 6: ON MAPS 8, 9, 12, and 18 MILL AND FILL BRIDGE.
- 7: ON MAP 4, CONTRACTOR SHALL SKIP OVER SR 1514 ROCKY RIVER ROAD, AND MILL AND FILL 2" FOR APPROXIMATELY 80 FEET AND TIE INTO NEW PAVEMENT JOINT.

2016-2017 ANSON COUNTY RESURFACING		
SCALE	-NA-	
DATE	11/15	
DWG. BY	AMO	
DESIGN BY	AMO	
APPROVED	CLA	
		REVISIONS

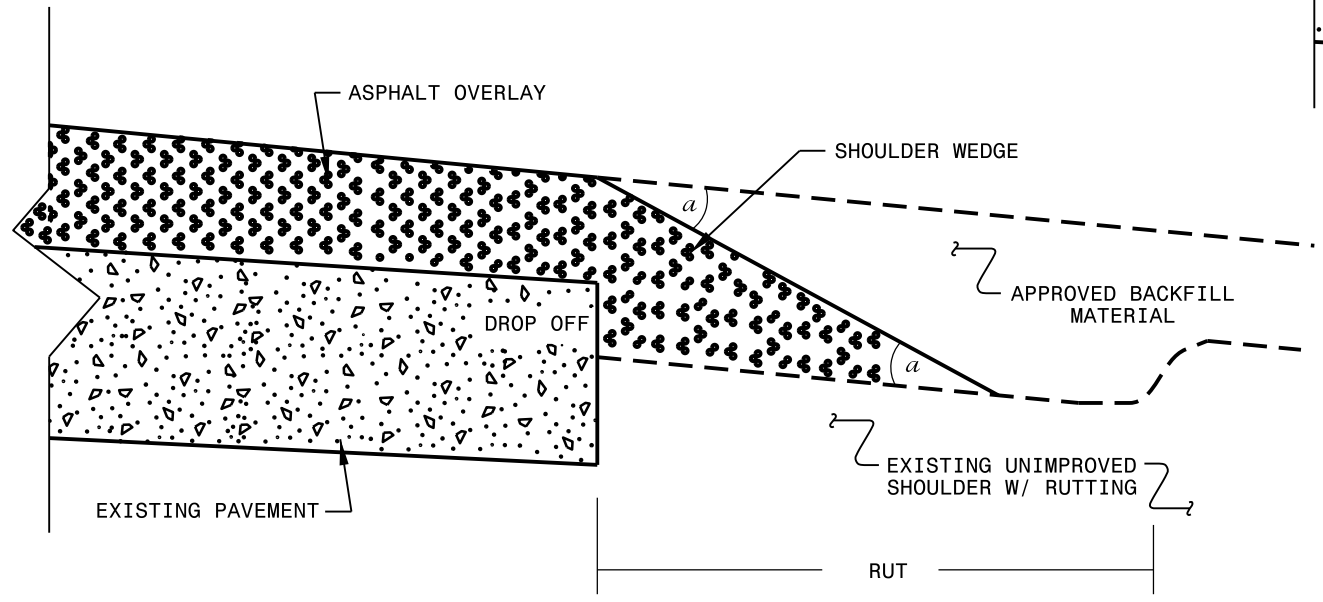
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ Widening or
 with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)

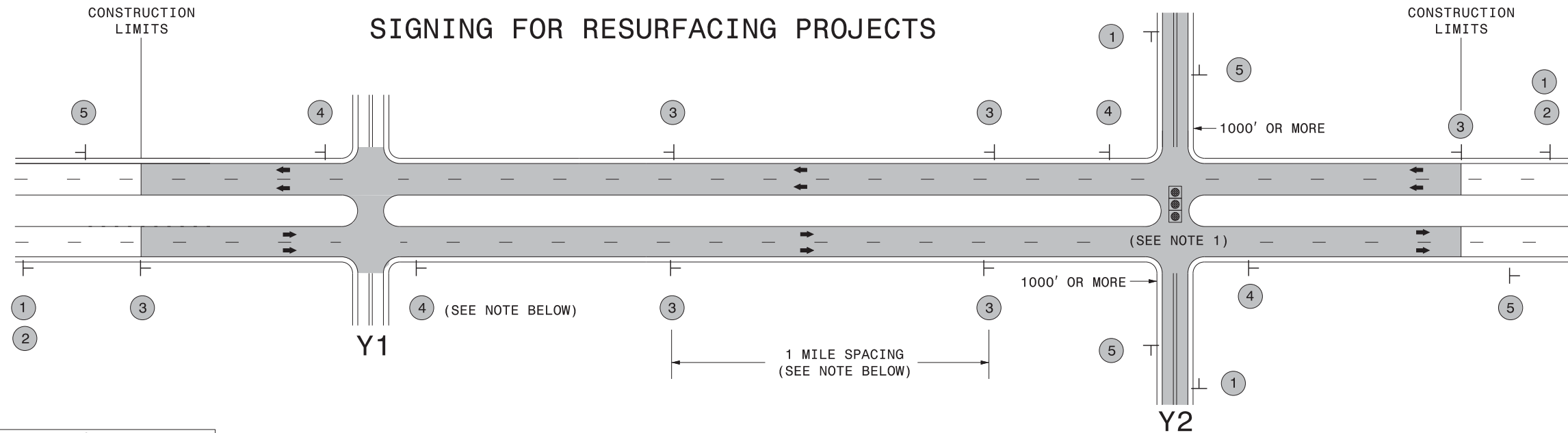


SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- 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: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedge\detail.dgn	

24-FEB-2016 15:59
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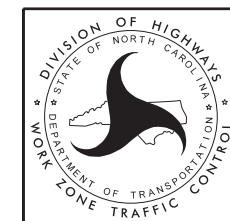


LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

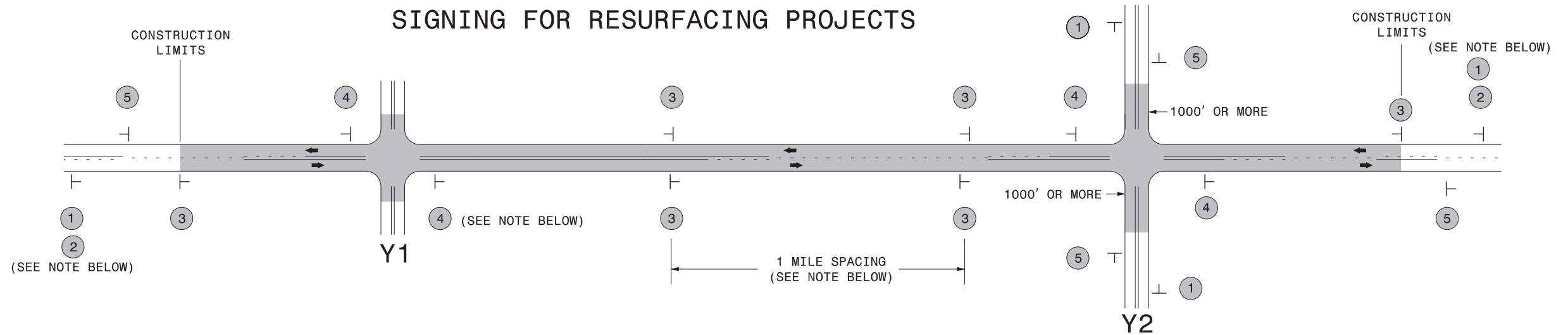
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING		
	1	 W20-1 48" X 48"	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: <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS 	
	2	 W7-3aP 24" X 18"	#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)	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.	
	3	 SP 13107 48" X 48"	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.	 W20-1 48" X 48" W20-7 A 48" X 48"	
	4	 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.	PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.	
5	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	NOTES: <ol style="list-style-type: none"> 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

SIGNING FOR RESURFACING PROJECTS

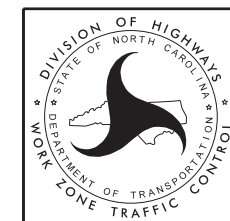


LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

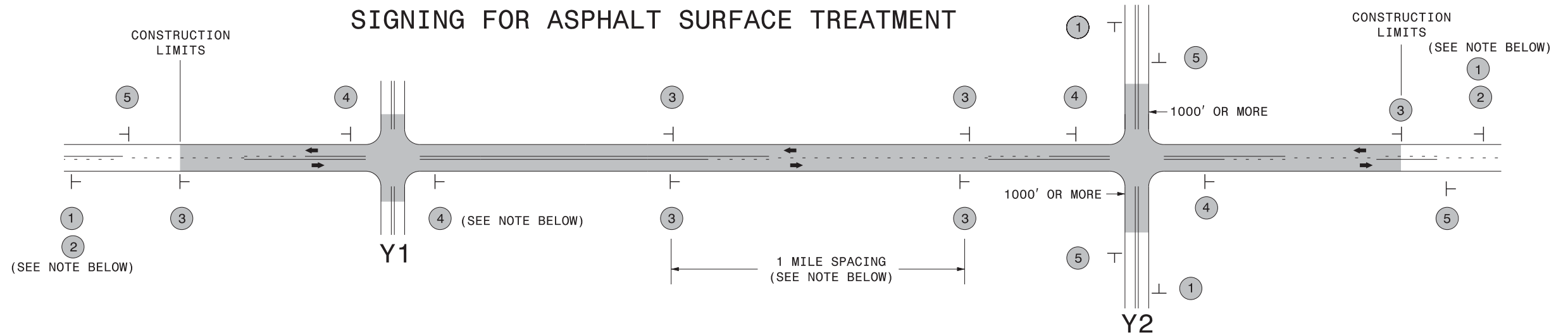
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p>	NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:	
	2	<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>		<ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS
	3	<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>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>
	4	<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>		<div style="display: flex; justify-content: space-around;"> <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>
	5	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>		



SIGNING FOR ASPHALT SURFACE TREATMENT



LEGEND	
T	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
1 2	 W20-1 48" X 48" W7-3aP 24" X 18"	<p style="text-align: center;">PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p style="text-align: center;">#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>
3	 W8-7 48" X 48" SP 48" X 48"	<p style="text-align: center;">ALTERNATE THE FOLLOWING TWO SIGNS: STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</p> <p style="text-align: center;">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>
4	 SP 13106 48" X 48"	<p style="text-align: center;">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>
5	 G20-2 A 48" X 24"	<p style="text-align: center;">PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>

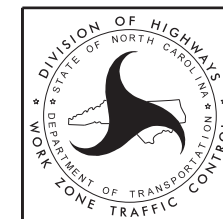
NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

- 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.

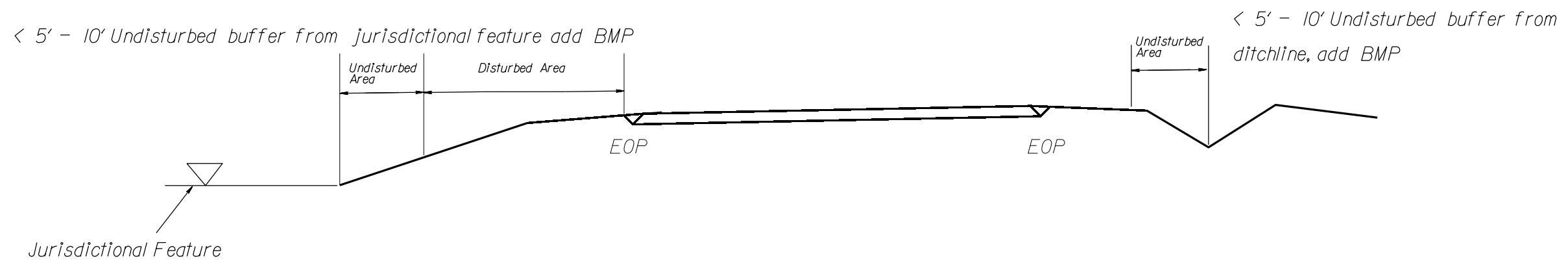
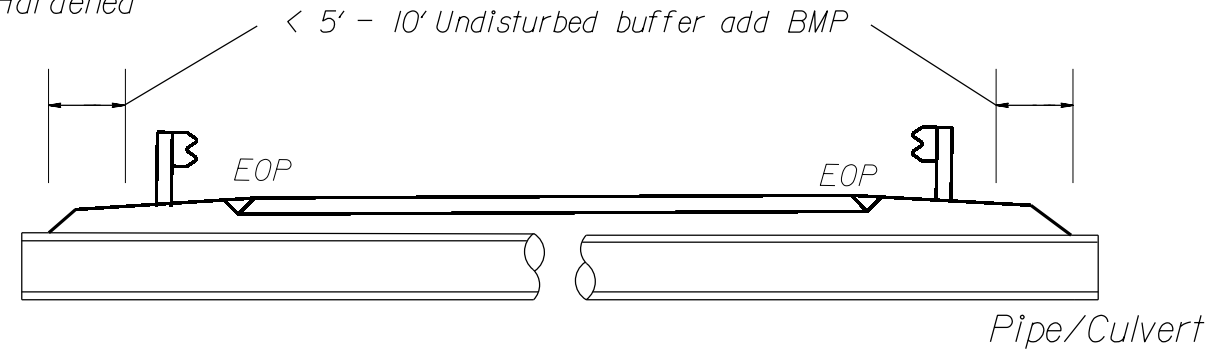


ADVANCE WARNING SIGNS
FOR
ASPHALT SURFACE TREATMENTS
2 LANE ROADWAYS

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.

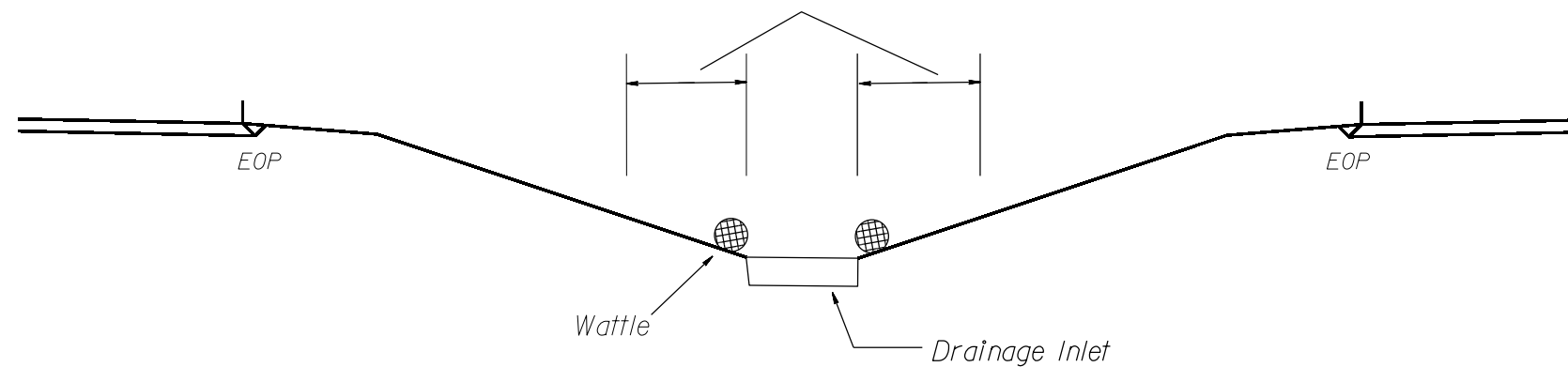
EROSION CONTROL DETAIL



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

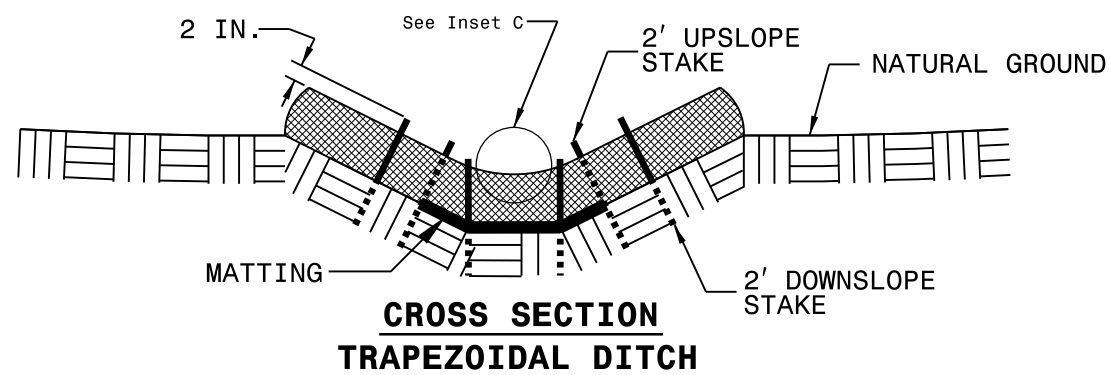
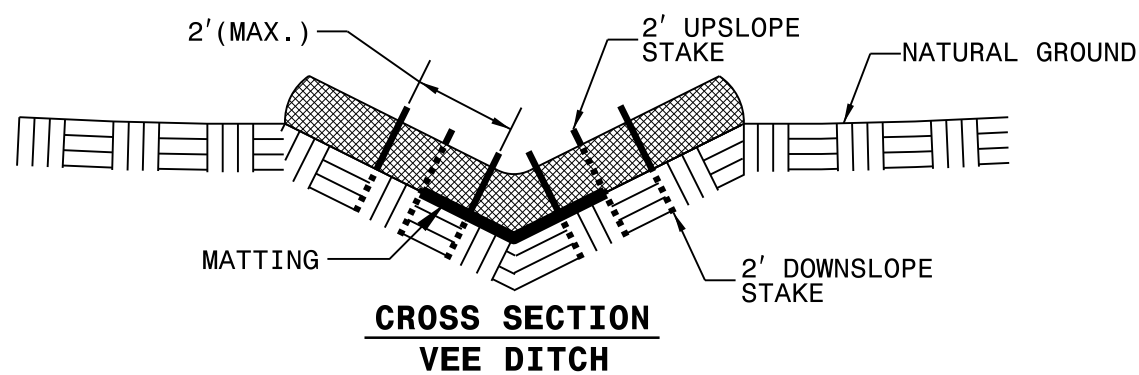
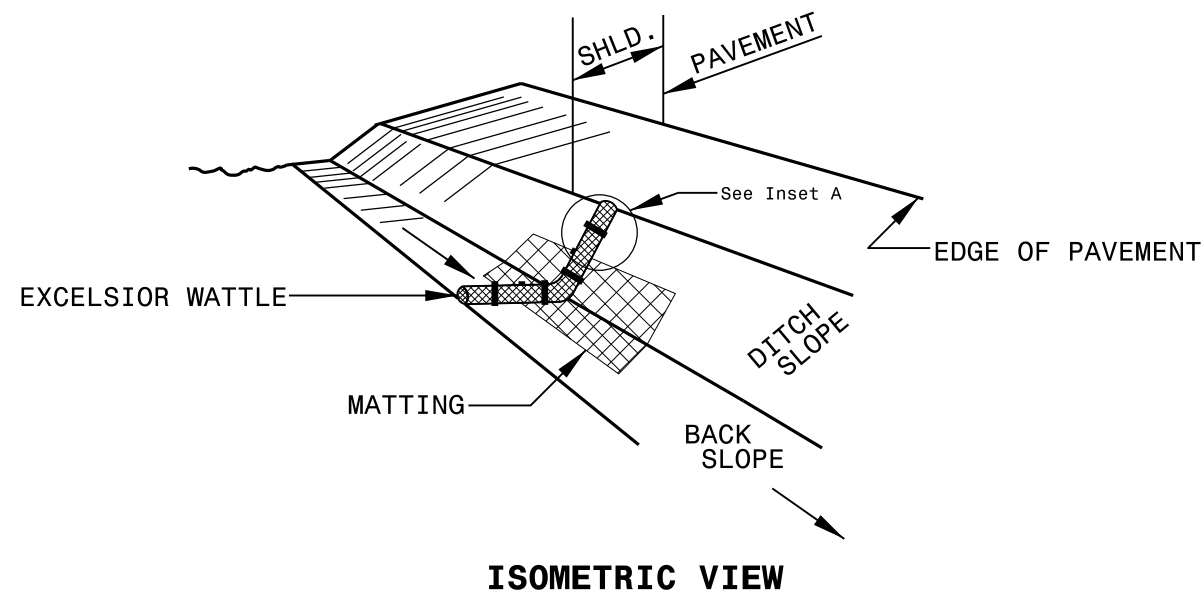


< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

WATTLE WITH POLYACRYLAMIDE (PAM) 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.
- 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 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

