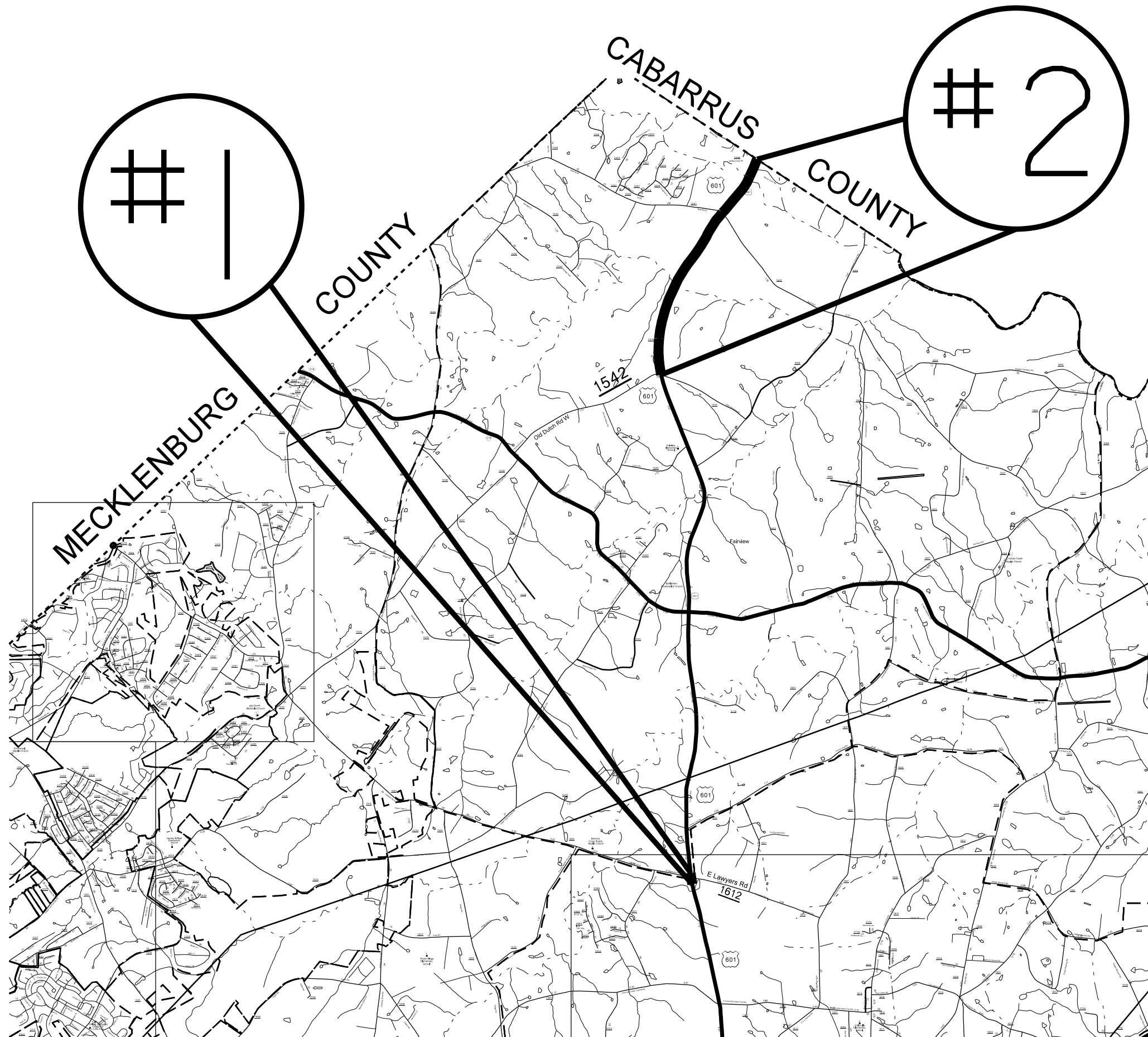


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STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.1 - ETC. 2017CPT.10.07.20901.1 - ETC	1	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA

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

MAP #1 US 601 NORTH (0.1 MILES)
 SR 1612 E. LAWYERS ROAD INTERSECTION
 FROM BEGINNING OF GORE LINE IN
 NORTHBOUND LANE
 TO BEGINNING OF GORE LINE IN
 SOUTHBOUND LANE

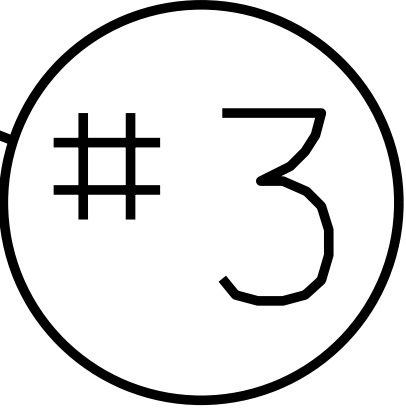
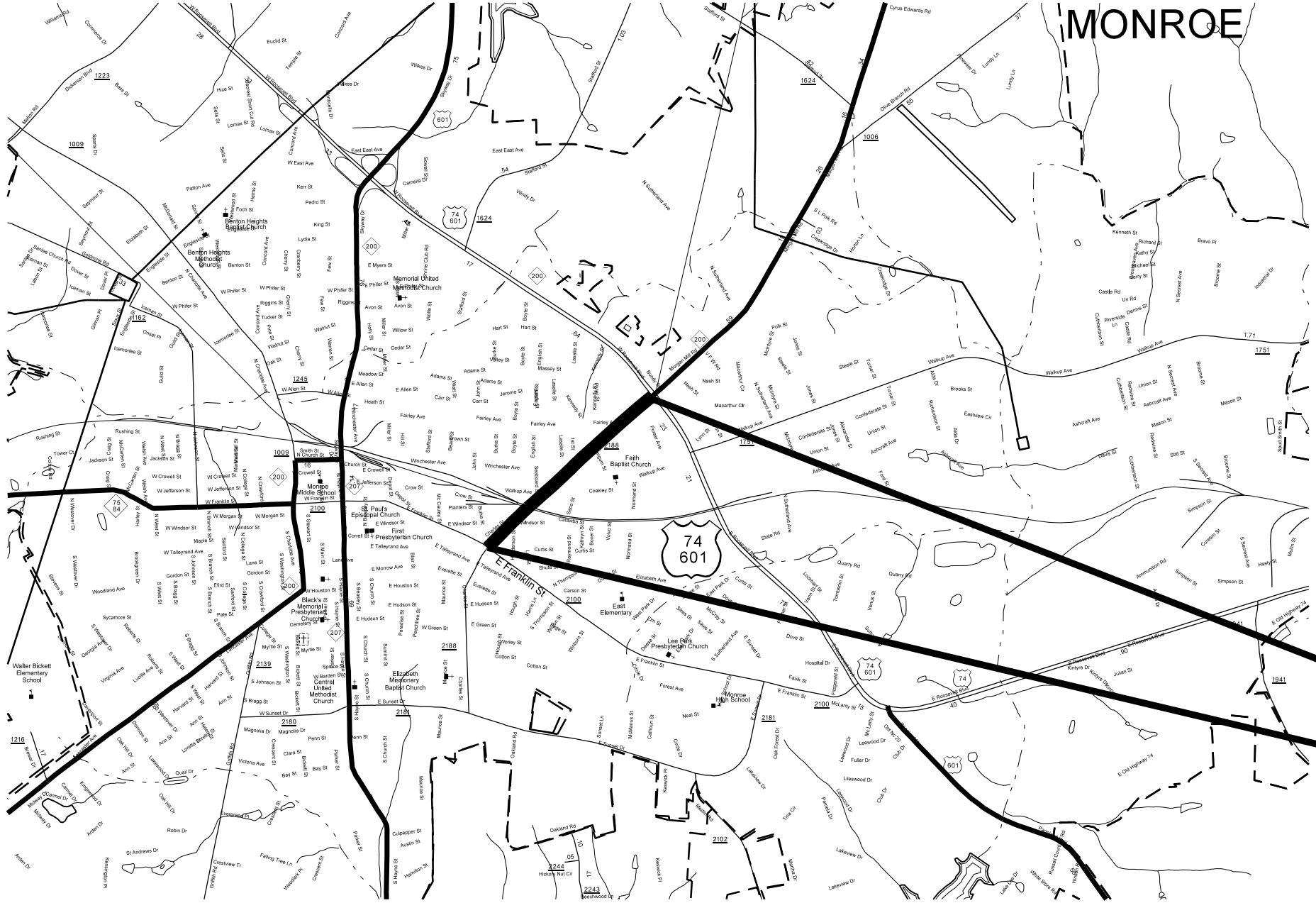
MAP #2 US 601 NORTH (2.1 MILES)
 FROM CABARRUS COUNTY LINE
 TO PAVEMENT JOINT AT SR 1542
 OLD DUTCH ROAD

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.I - ETC. 2017CPT.10.07.20901.I - ETC	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

**MAP #3 SR 2188 MORGAN MILL ROAD (0.525 MILES)
 FROM US 74 TO BRIDGE AT
 SR 2100 E. FRANKLIN STREET**



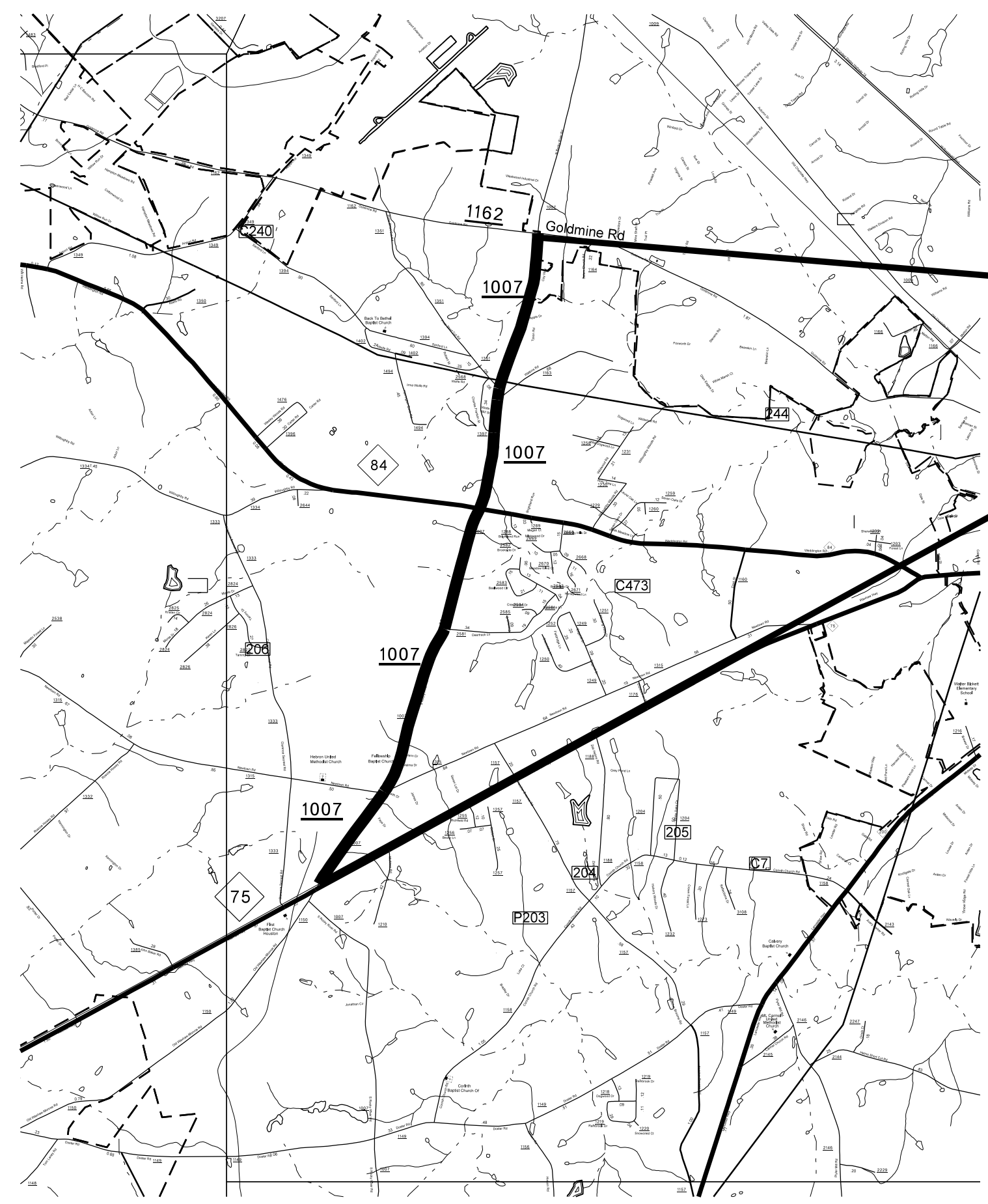
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.I - ETC. 2017CPT.10.07.20901.I - ETC	3	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

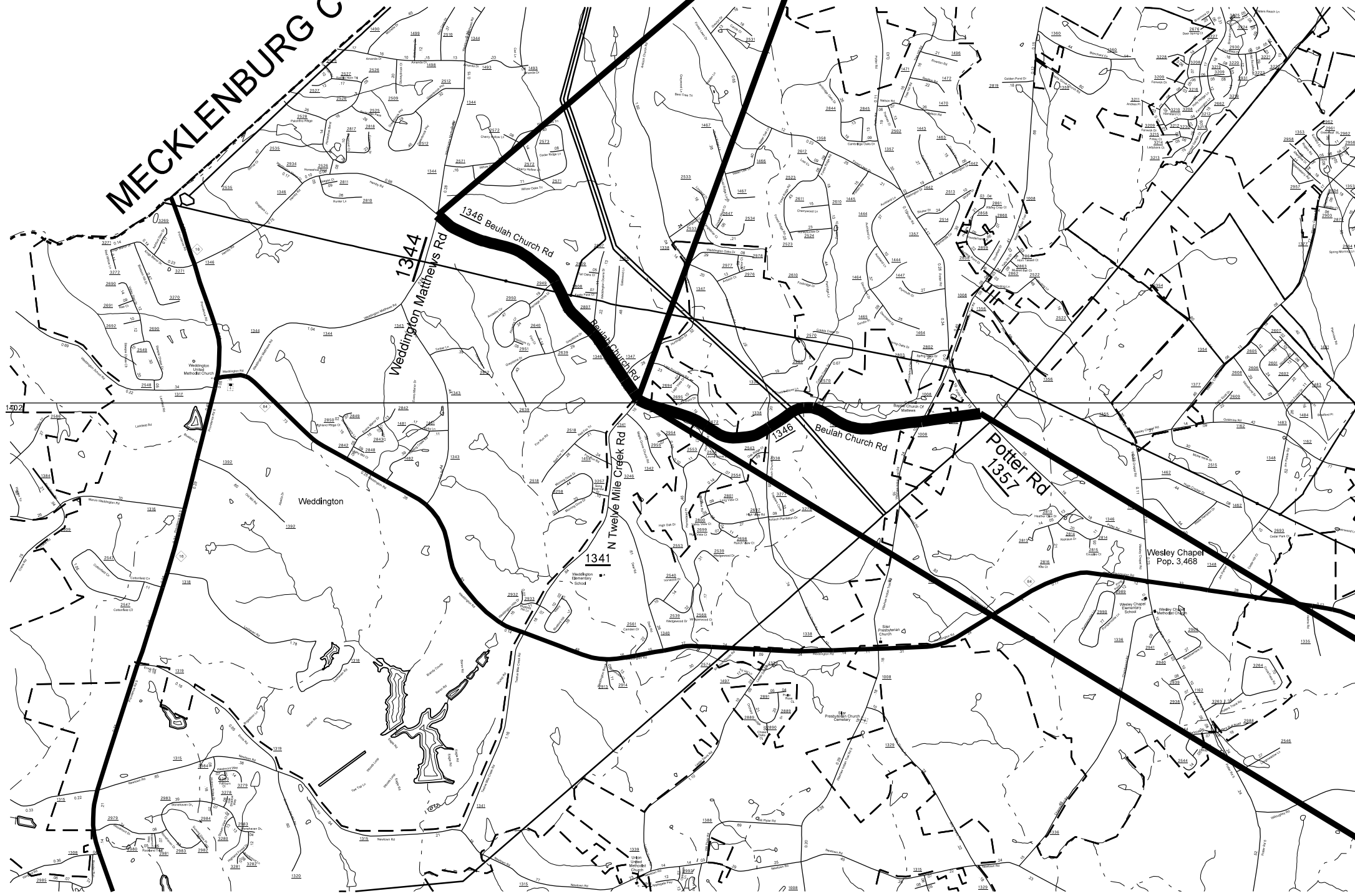
4

MAP #4 SR 1007 ROCKY RIVER ROAD
 (3.71 MILES)
 FROM NC 75 TO SR 1162 GOLDMINE ROAD



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.I0.07.I090I.I - ETC. 2017CPT.I0.07.2090I.I - ETC	4	
F.A. PROJECT NO.			

#5



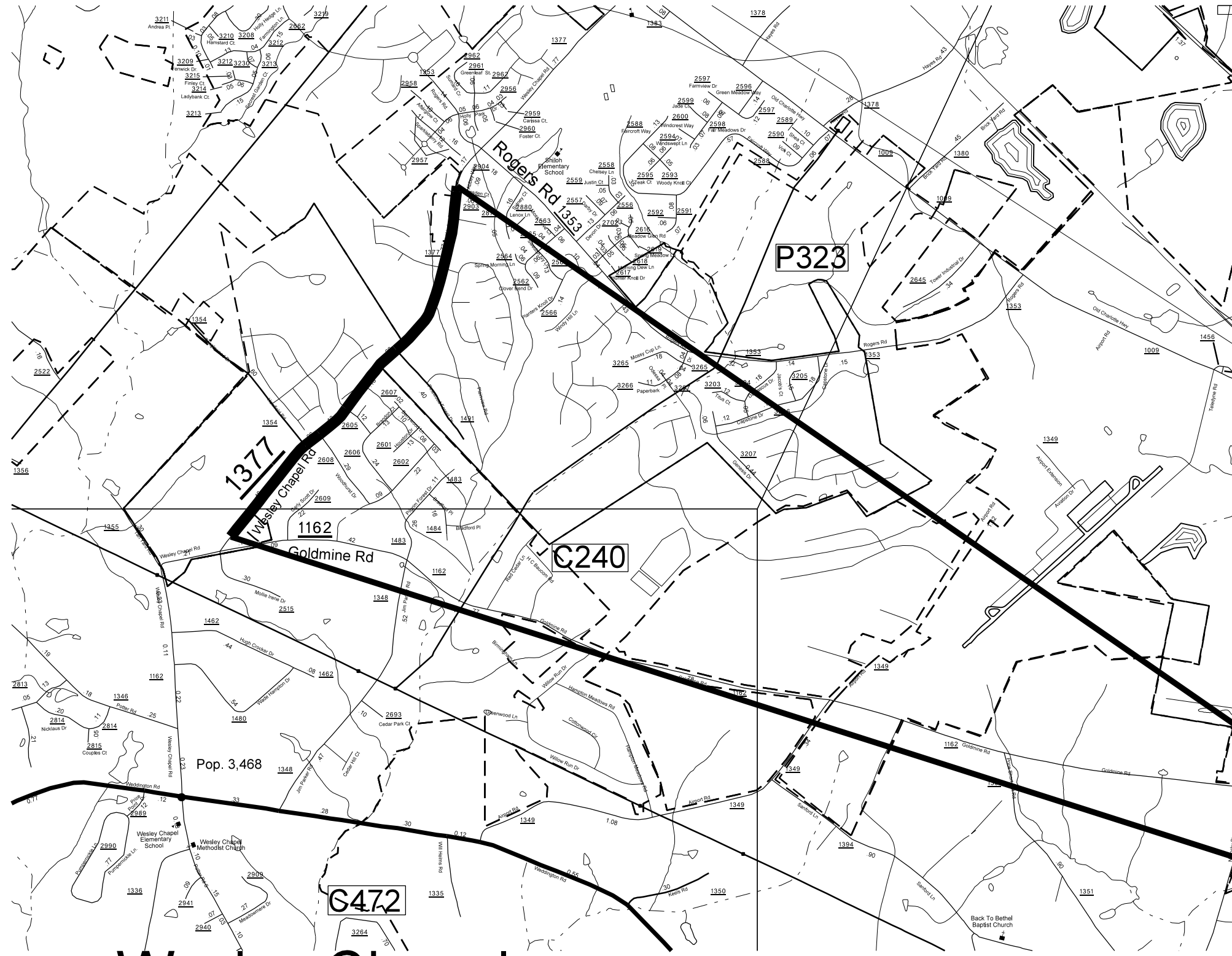
ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #5 SR 1346 BEULAH CHURCH ROAD
 (1.48 MILES)
 FROM SR 1344 MATTHEWS-WEDDINGTON ROAD
 TO SR 1341 TWELVE MILE CREEK ROAD

MAP #6 SR 1346 BEULAH CHURCH ROAD
 (2.0 MILES)
 FROM SR 1341 TWELVE MILE CREEK ROAD
 TO SR 1357 POTTER ROAD

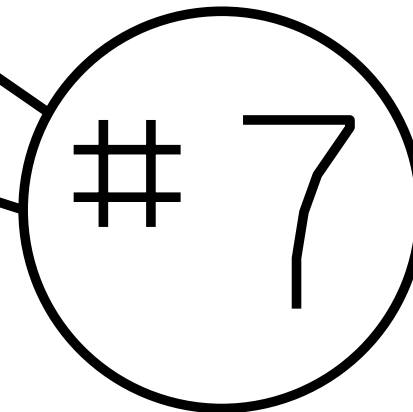
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STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.I0.07.I090I.I - ETC. 2017CPT.I0.07.2090I.I - ETC	5	
E.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

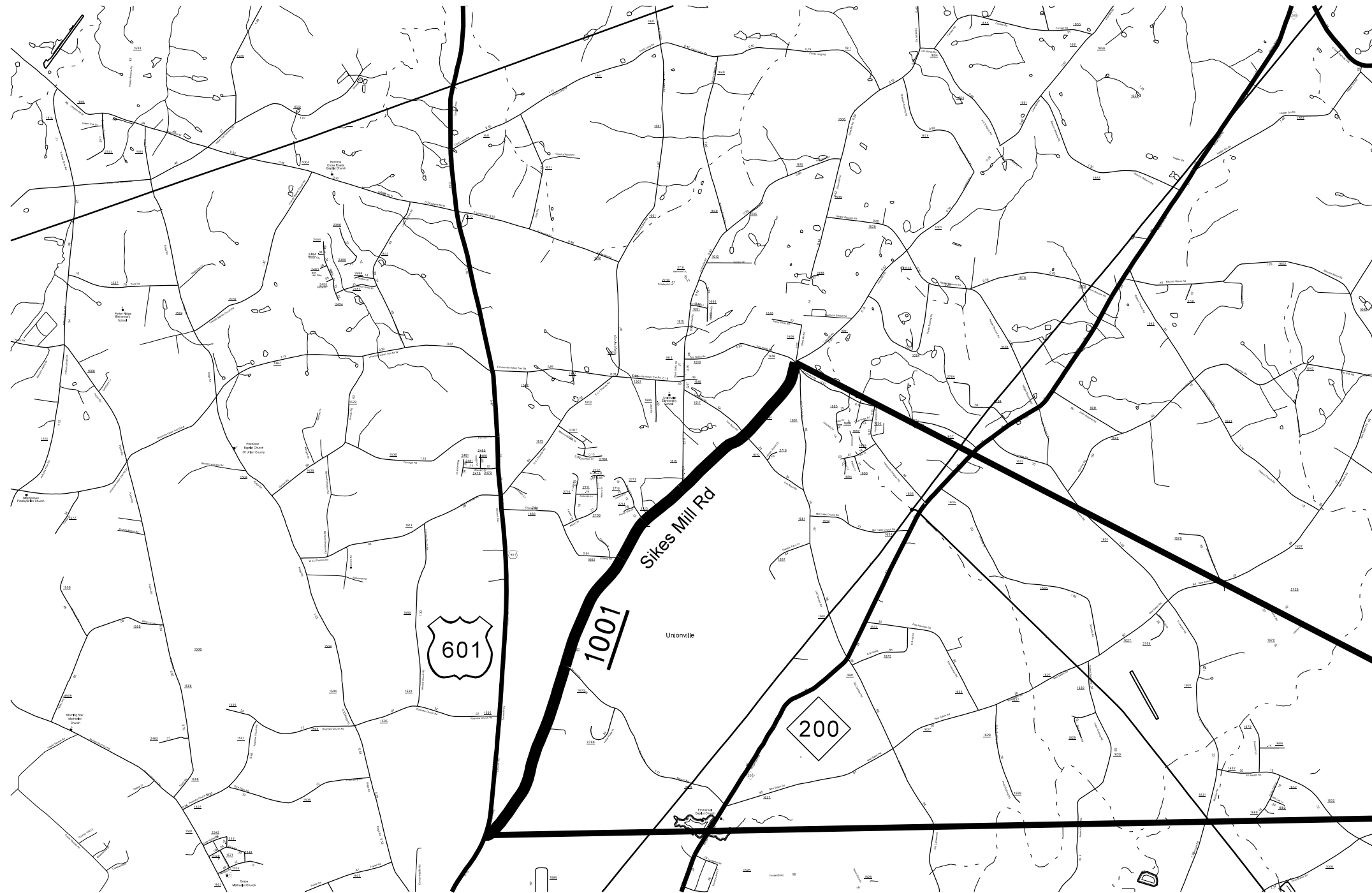
**MAP #7 SR 1377 WESLEY CHAPEL ROAD
 (1.14 MILES)
 FROM PAVEMENT JOINT 940 FT NORTH OF
 SR 1162 GOLDMINE ROAD
 TO PAVEMENT JOINT APPROX. 100 FT NORTH
 OF GRACE FELLOWSHIP CHURCH**



Wesley Chapel

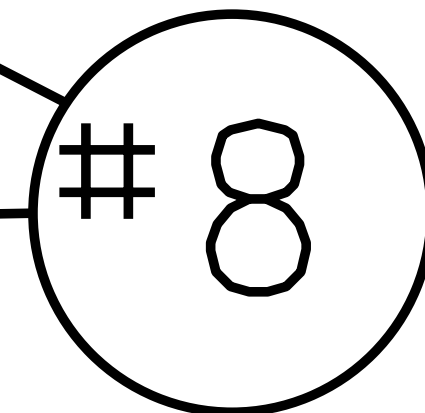
Pop. 3,468

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.I - ETC. 2017CPT.10.07.20901.I - ETC	6	
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

MAP #8 SR 1001 SIKES MILL ROAD
 (3.95 MILES)
 FROM US 601 NORTH TO PAVEMENT
 JOINT AT ROUNDABOUT



9

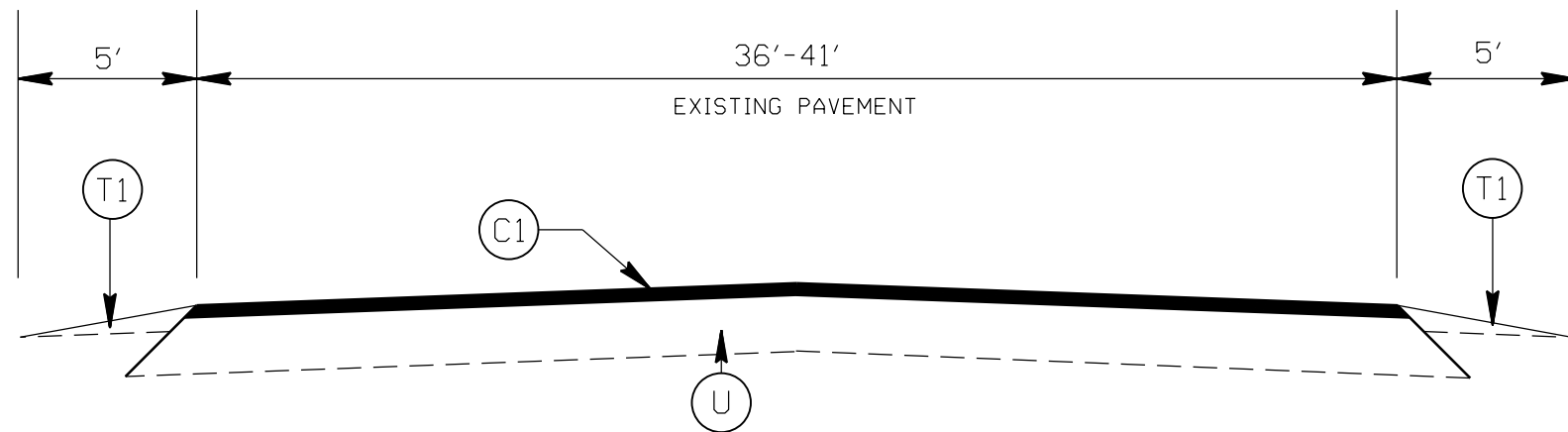
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.I - ETC. 2017CPT.10.07.20901.I - ETC	7	
F.A. PROJECT NO.			



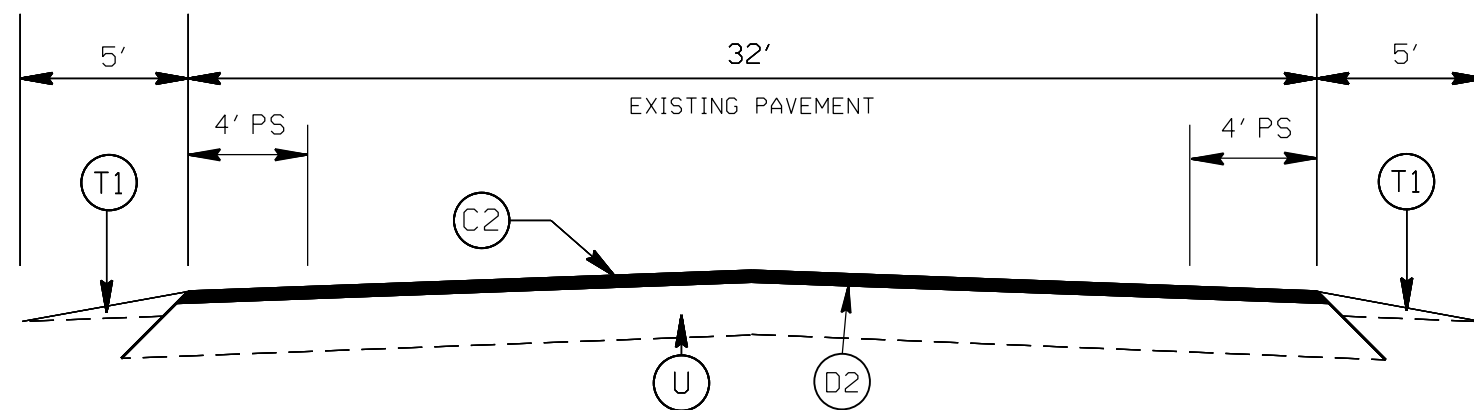
ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
NORTH CAROLINA
PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #9 SR 2100 EAST FRANKLIN STREET
(1.5 MILES)
FROM 5 POINTS INTERSECTION TO US 74

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.I - ETC. 2017CPT.10.07.20901.I - ETC.	8	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 1
US 601 NORTH (MAP 1)



TYPICAL SECTION NO. 2
US 601 NORTH (MAP 2)

* SEE NOTE 2 AND PROFILE MILLING DETAIL

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 S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 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.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE CORSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 78M
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 2.0" IN DEPTH.
(V2)	PROFILE MILLING EXISTING ASPHALT, 0 - 1.5"

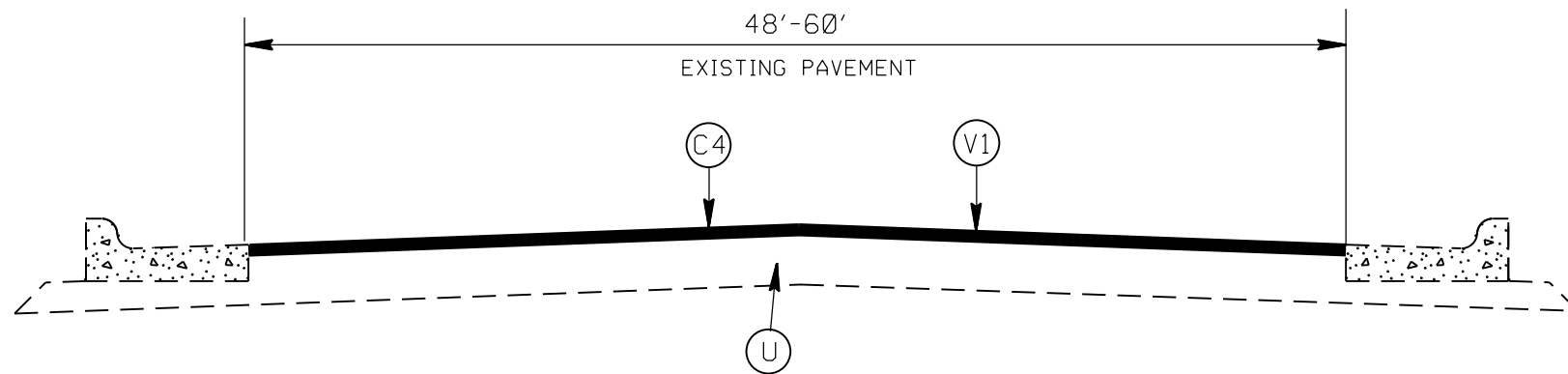
2017-2018
UNION COUNTY RESURFACING
CONTRACT #1

SCALE	-NA-
DATE	12/16
DWG. BY	AMO
DESIGN BY	AMO
APPROVED	CLA

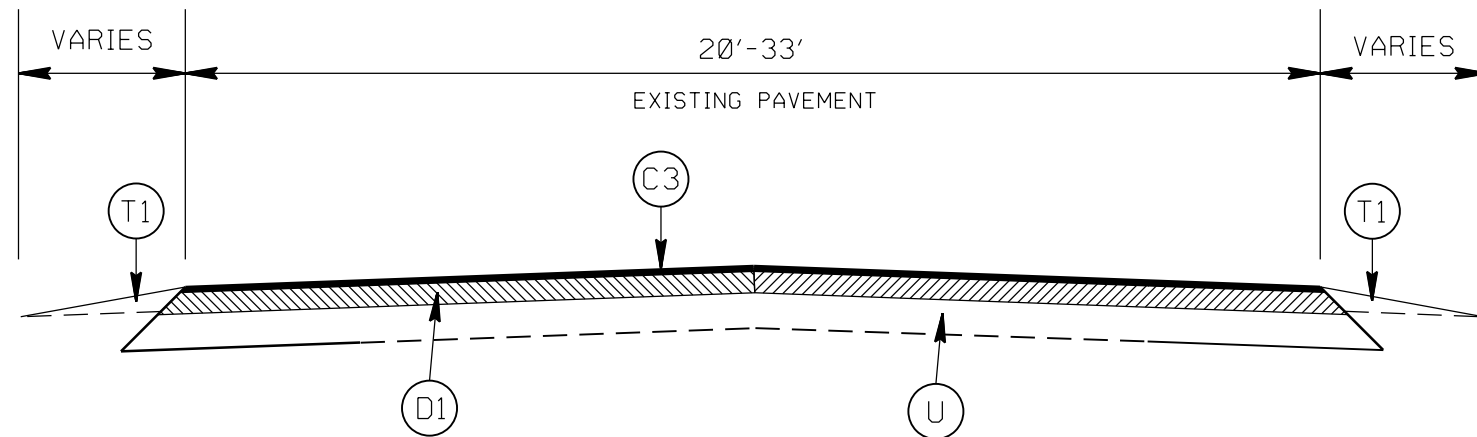


REVISIONS

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.I - ETC. 2017CPT.10.07.20901.I - ETC.	9	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 3
SR 2100 MORGAN MILL ROAD (MAP 3)



TYPICAL SECTION NO. 4
SR 1007 ROCKY RIVER ROAD (MAP 4)

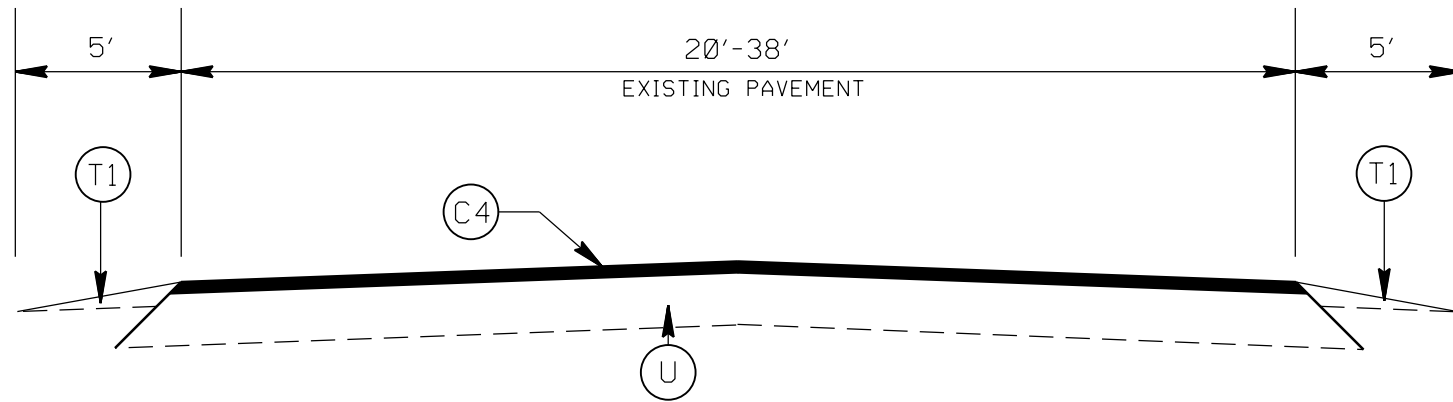
PAVEMENT SCHEDULE

(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 S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 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.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE CORSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT * 78M
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 2.0" IN DEPTH.
(V2)	PROFILE MILLING EXISTING ASPHALT, 0 - 1.5"

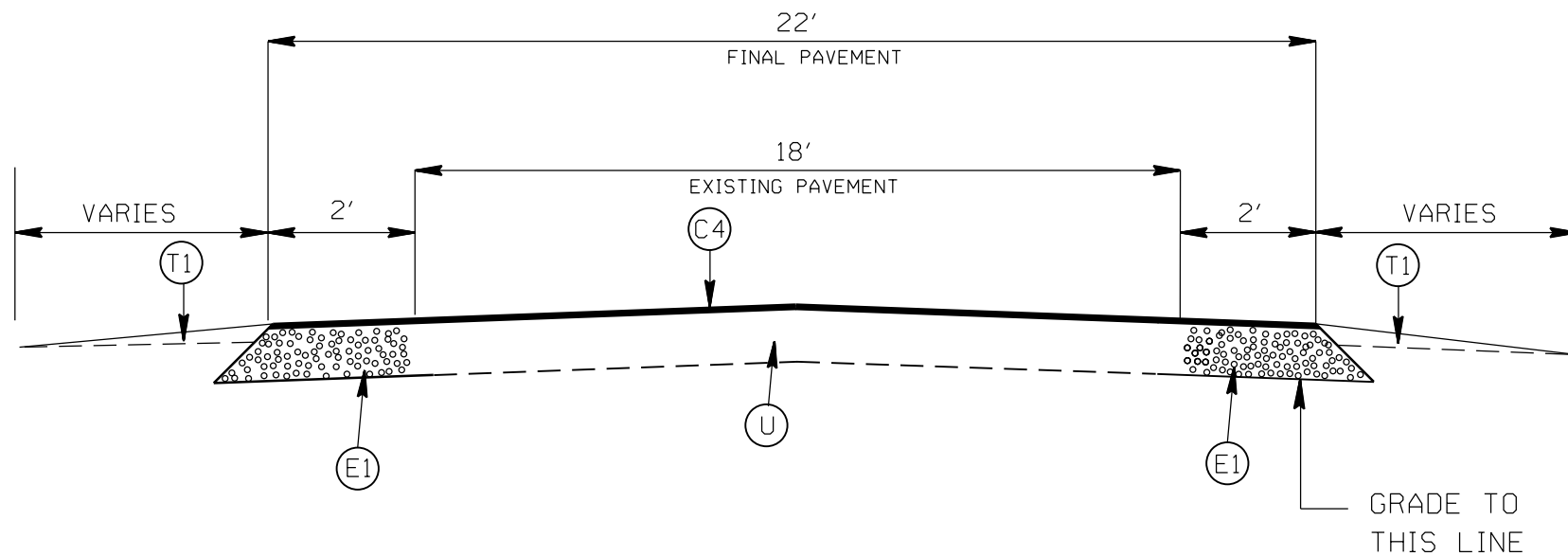
2017-2018
UNION COUNTY RESURFACING
CONTRACT #1

SCALE	-NA-		REVISIONS
DATE	12/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.1090.II - ETC. 2017CPT.10.07.2090.II - ETC.	10	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 5
SR 1377 WESLEY CHAPEL ROAD (MAP 7)
SR 1606 SIKES MILL ROAD (MAP 8)



TYPICAL SECTION NO. 6
SR 1346 BEULAH CHURCH ROAD (MAP 6)
FROM SR 1341 (STA: 10+00) TO STA: 54+80

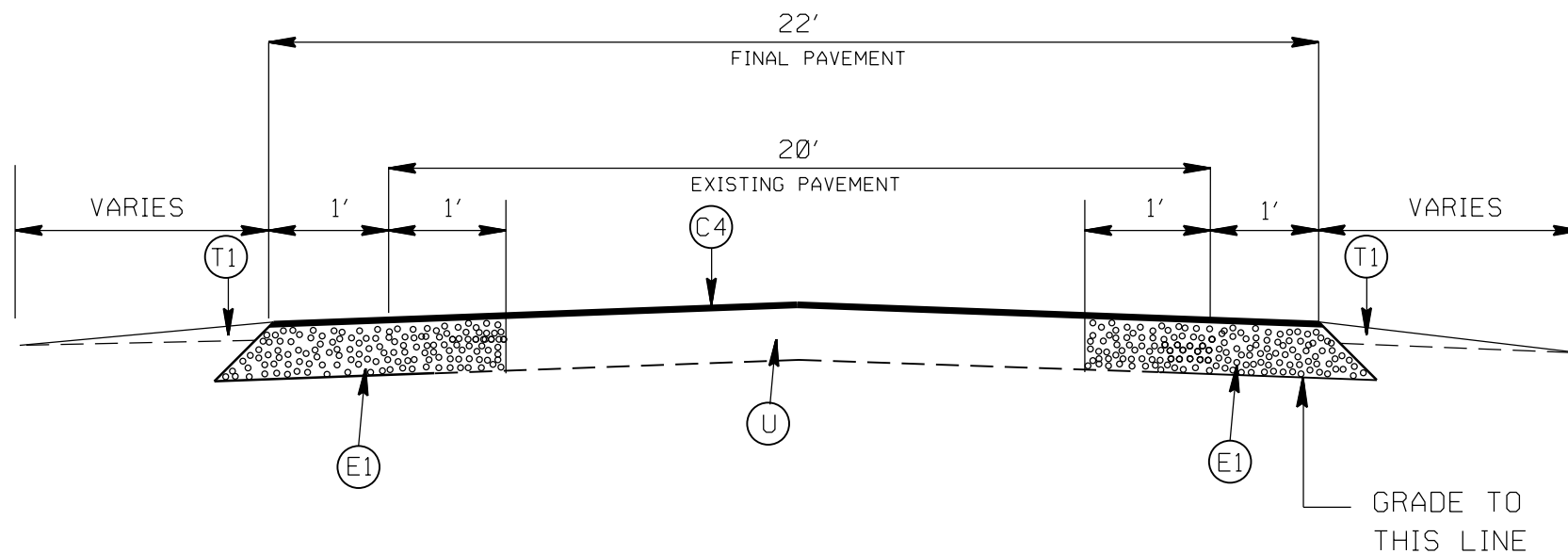
PAVEMENT SCHEDULE

(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 S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 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.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE CORSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 78M
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 2.0" IN DEPTH.
(V2)	PROFILE MILLING EXISTING ASPHALT, 0 - 1.5"

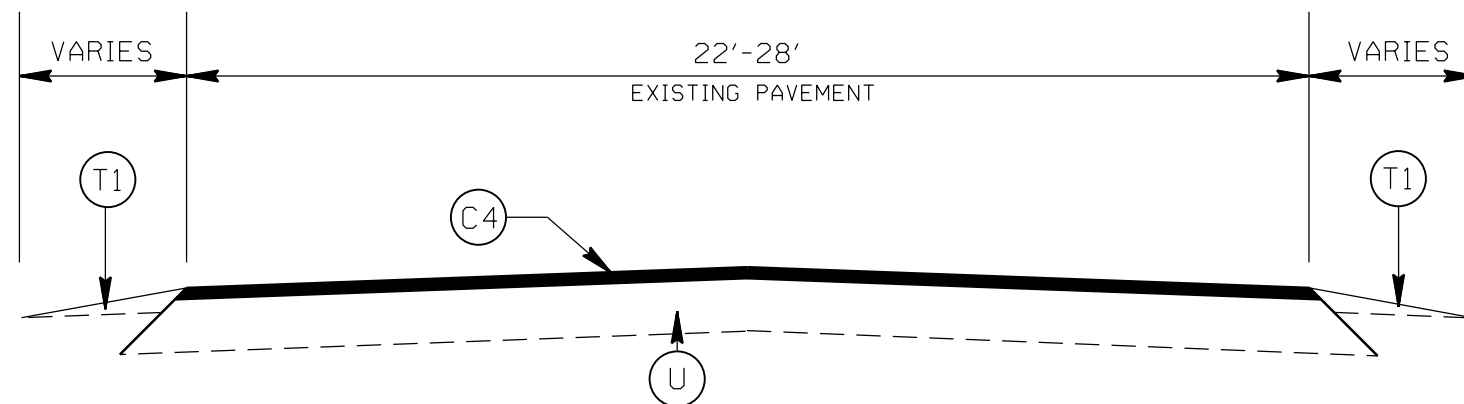
2017-2018
UNION COUNTY RESURFACING
CONTRACT #1

SCALE	-NA-		REVISIONS
DATE	12/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901J - ETC. 2017CPT.10.07.20901J - ETC.	11	
F.A. PROJECT NO.			




TYPICAL SECTION NO. 7
 SR 1346 BEULAH CHURCH ROAD (MAP 5)
 FROM SR 1344 (STA: 10+00 TO STA: END OF MAP)
 SR 1346 BEULAH CHURCH ROAD (MAP 6)
 FROM (STA: 64+20 TO END OF MAP)



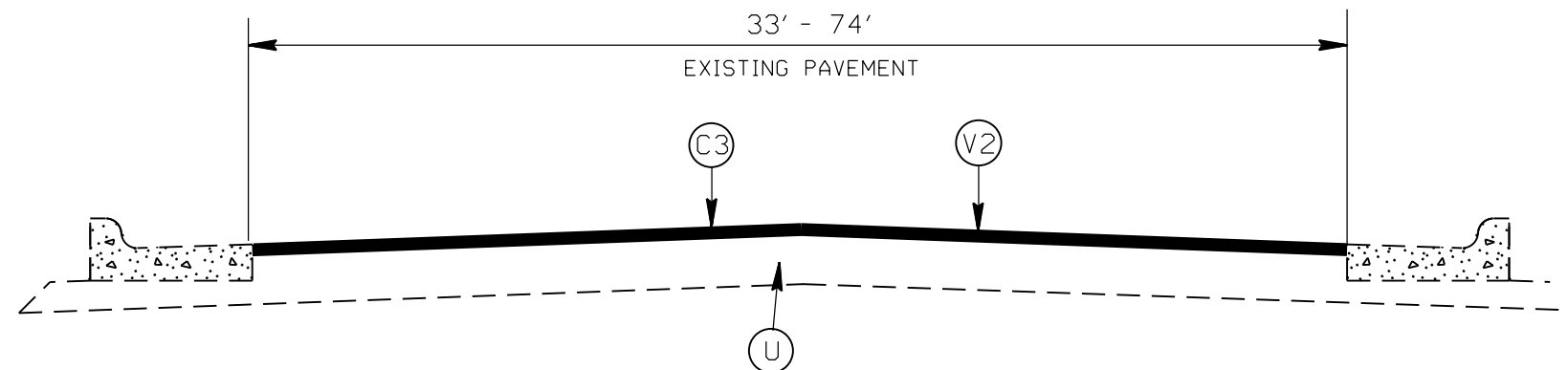
TYPICAL SECTION NO. 8
 SR 1346 BEULAH CHURCH ROAD (MAP 5 & 6)

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 S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 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.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE CORSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 78M
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 2.0" IN DEPTH.
(V2)	PROFILE MILLING EXISTING ASPHALT, 0 - 1.5"

2017-2018 UNION COUNTY RESURFACING CONTRACT #1		
SCALE	-NA-	
DATE	12/16	
DWG. BY	AMO	
DESIGN BY	AMO	
APPROVED	CLA	
REVISIONS		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.J0.07.J090.II - ETC. 2017CPT.J0.07.2090.II - ETC.	12	
F.A. PROJECT NO.			




TYPICAL SECTION NO. 9
SR 2100 EAST FRANKLIN STREET (MAP 9)

PAVEMENT SCHEDULE

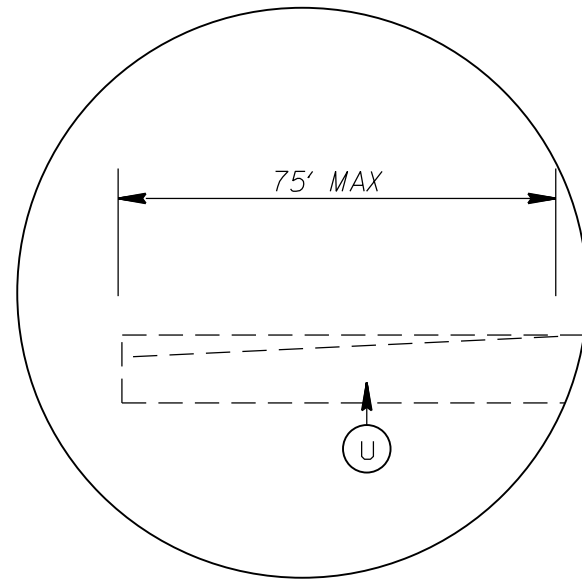
(C1)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 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.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE CORSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 78M
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 2.0" IN DEPTH.
(V2)	PROFILE MILLING EXISTING ASPHALT, 0 - 1.5"

NOTES:

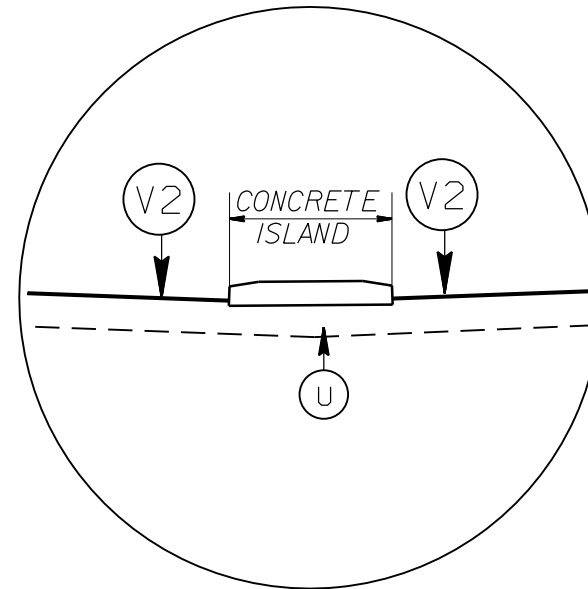
- 1: LEVELING COURSE TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 2: ON MAP 2 DO NOT MILL OR RESURFACE BRIDGE.
- 3: SHOULDER RECONSTRUCTION WILL BE AS DIRECTED BY THE ENGINEER.

2017-2018 UNION COUNTY RESURFACING CONTRACT #1		
SCALE	-NA-	
DATE	12/16	
DWG. BY	AMO	
DESIGN BY	AMO	
APPROVED	CLA	
		REVISIONS

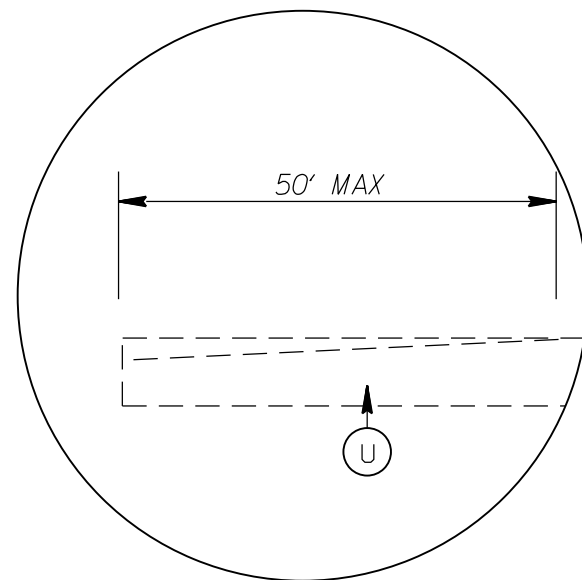
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2017CPT.10.07.10901.I - ETC. 2017CPT.10.07.20901.I - ETC.	13	
F.A. PROJECT NO.			



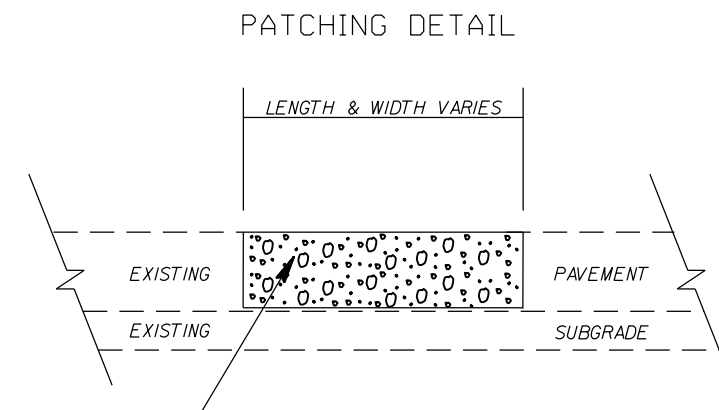
DETAIL FOR INCIDENTAL MILLING (0" TO 2.0")



DETAIL FOR PROFILE MILLING (0" TO 1.5")
MAXIMUM 6' AROUND ISLAND



DETAIL FOR INCIDENTAL MILLING (0" TO 1.5")



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

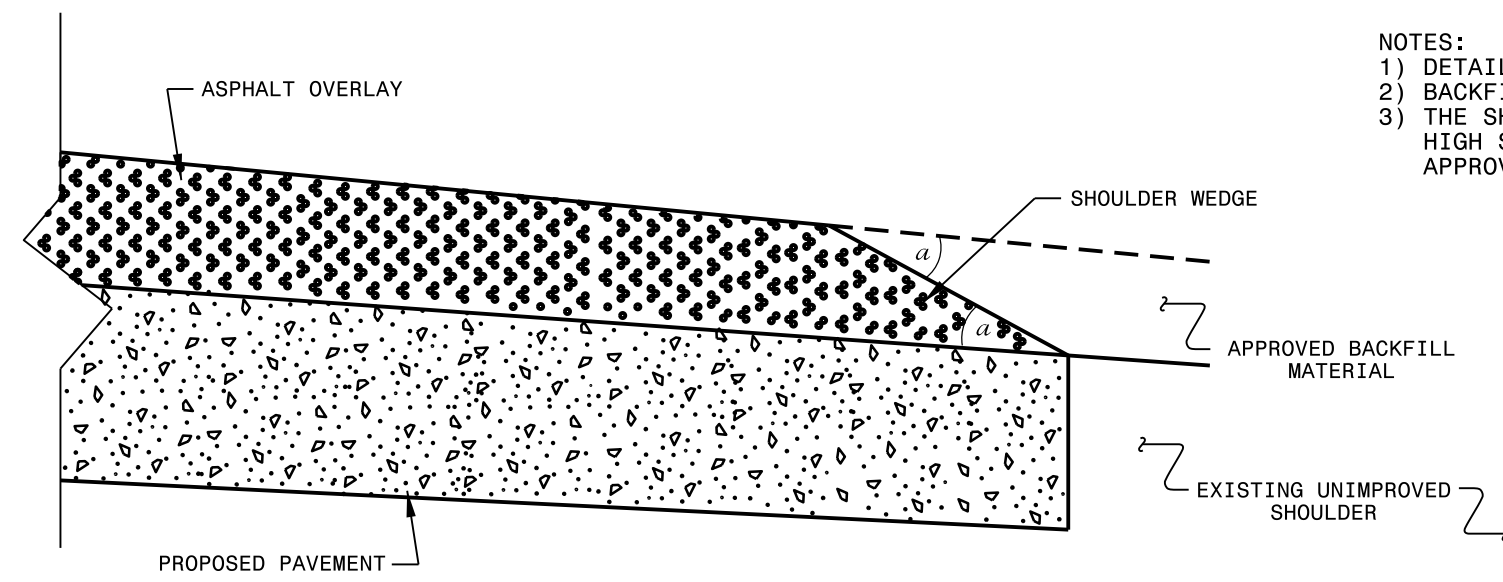
PAVEMENT SCHEDULE

(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 S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 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.
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE CORSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(D2)	AST MAT COAT # 78M
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 2.0" IN DEPTH.
(V2)	PROFILE MILLING EXISTING ASPHALT, 0 - 1.5"

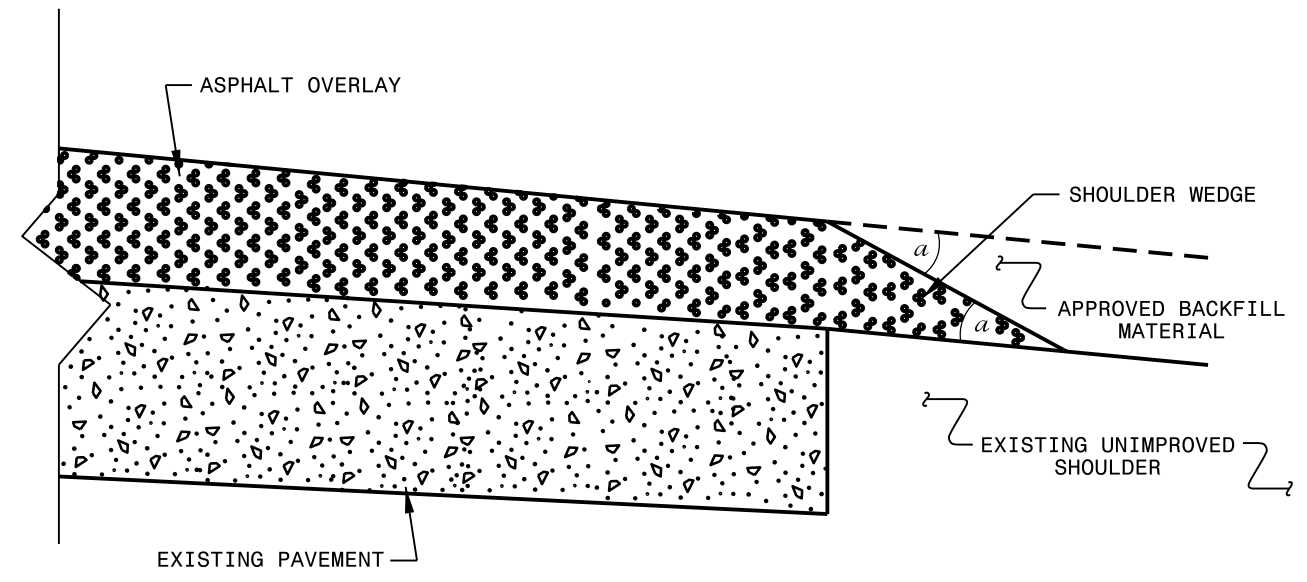
2017-2018
UNION COUNTY RESURFACING
CONTRACT #1

SCALE	-NA-		REVISIONS
DATE	12/16		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

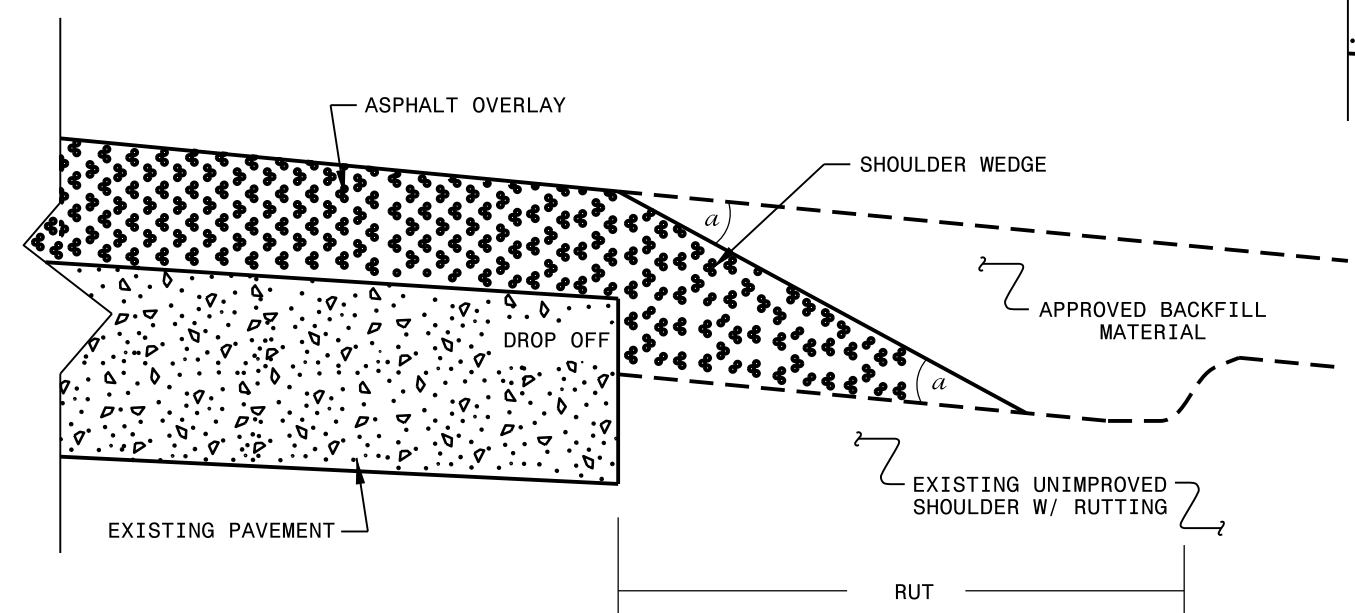
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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.: szusr/details/stand/shoulderwedgedetail.dgn			

24-MAR-2016 11:45
 S:\Contracts\Resurfacing Projects\Shoulder Wedge Details\Revised Shoulder Wedge Detail.dgn
 \$\$\$USERNAME\$\$\$

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.10.07.10901.1, ETC.	15	

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	2" MILLING SY	1.5" MILLING SY	0" TO 1.5" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0C TONS	INTER-MEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	LEVELING COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	ASPHALT SURFACE TREATMENT, MATCOAT, #78M STONE SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL	RETROFIT EXISTING CURB RAMP (STD. 848.06) EA	CURB RAMPS (STD. 848.05) EA	6" DRIVEWAYS (STD. 848.02 and/or 848.03) SY	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	PORTABLE LIGHTING LS	TEMP SILT FENCE LF	STONE FOR EROSION CONTROL, CLASS B TN	SEDIMENT CONTROL STONE TN	WATTLE LF	POLY-ACRYLAMIDE (PAM) LB	
2017CPT.10.07.10901.1	Union	1	US 601 NORTH/ ROUTE #3000060189	SR 1612 LAWYERS ROAD INTERSECTION MILEPOST 22.5 TO 22.4		2	2WU	NO	NO	0.1	36-41	50		0.20				700					330	19	45								15	2	1	15			
TOTAL FOR PROJ NO. 2017CPT.10.07.10901.1										0.1		50		0.20				700					330	19	45							15	2	1	15				
2017CPT.10.07.10901.2	Union	2	US 601 NORTH/ ROUTE # 3000060189	FROM CABARRUS COUNTY LINE TO PAVEMENT JOINT @ SR 1542 OLD DUTCH ROAD MILEPOST 29.2 TO 27.1		2	2WU	NO	NO	2.1	32	386	168	4.20			215	557					3,772	223	925	39,456	11,840			150			315	42	21	315	0.8		
TOTAL FOR PROJ NO. 2017CPT.10.07.10901.2										2.1		386	168	4.20			215	557					3,772	223	925	39,456	11,840			150			315	42	21	315	0.8		
2017CPT.10.07.20901.1	Union	3	SR 2188 MORGAN MILL ROAD/ ROUTE # 4000218889	FROM US 74 TO BRIDGE @ SR 2100 EAST FRANKLIN STREET MILEPOST 1.33-0.8		3	2WU	NO	NO	0.525	48-60				18,215							2,120		127	260		6			8	3	*							
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.1										0.525					18,215								2,120		127	260		6			8	3	*						
2017CPT.10.07.20901.2	Union	4	SR 1007 ROCKY RIVER ROAD/ ROUTE # 4000100789	FROM NC 75 TO SR 1162 GOLDMINE ROAD MILEPOST 5.78 TO 2.07		4	2WU	NO	NO	3.71	20-33	4,905	1,053	7.50				400	7,623	4,670			646	1,862				150	1	2		564	76	38	564	2.0			
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.2										3.71		4,905	1,053	7.50				400	7,623	4,670			646	1,862				150	1	2		564	76	38	564	2.0			
2017CPT.10.07.20901.3	Union	5	SR 1346 BEULAH CHURCH ROAD/ ROUTE # 4000134689	FROM SR 1344 MATTHEWS-WEDDINGTON ROAD TO SR 1341 TWELVE MILE CREEK MILEPOST 4.73 TO 3.17		7,8	2WU	NO	NO	1.48	22-28	272	97	3.00				167	820	2,581	570			228	733				300			222	30	15	222	0.6			
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.3										1.48		272	97	3.00				167	820	2,581	570			228	733				300			222	30	15	222	0.6			
2017CPT.10.07.20901.4	Union	6	SR 1346 BEULAH CHURCH ROAD/ ROUTE # 4000134689	FROM SR 1341 TWELVE MILE CREEK ROAD TO SR 1357 POTTER ROAD MILEPOST 3.17 TO 1.17		6,7,8	2WU	NO	NO	2	22-28	650	160	4.00				333	1,338	2,898	770		283	990				550			300	40	20	300	0.8				
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.4										2		650	160	4.00				333	1,338	2,898	770		283	990				550			300	40	20	300	0.8				
2017CPT.10.07.20901.5	Union	7	SR 1377 WESLEY CHAPEL ROAD/ ROUTE # 4000137789	FROM PAVEMENT JOINT 940 FT NORTH OF SR 1162 GOLDMINE ROAD TO PAVEMENT JOINT APPROX. 100 FT NORTH OF GRACE FELLOWSHIP CHURCH MILEPOST 0.33 TO 1.47		5	2WU	NO	NO	1.14	20-38	278	100	2.30				430		2,516	439			179	564				200			*	171	23	12	171	0.4		
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.5										1.14		278	100	2.30				430		2,516	439			179	564				200			*	171	23	12	171	0.4		
2017CPT.10.07.20901.6	Union	8	SR 1001 SIKES MILL ROAD/ ROUTE # 4000100189	FROM US 601 NORTH TO PAVEMENT JOINT @ ROUNDABOUT MILEPOST 0.00-3.95		5	2WU	NO	NO	3.95	20	964	1,422	7.90				333		5,831	1,659		458	1,956				350			5		593	79	40	593	2.0		
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.6										3.95		964	1,422	7.90				333		5,831	1,659		458	1,956				350			5		593	79	40	593	2.0		
2017CPT.10.07.20901.7	Union	9	SR 2100 E. FRANKLIN STREET/ ROUTE # 4000210089	FROM 5 POINTS INTERSECTION TO US 74 MILEPOST 2.14-3.68		9	MU	NO	NO	1.5	33-74												177	743			12	7		21	15	*							
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.7										1.5														177	743			12	7		21	15	*						
GRAND TOTAL										16.505		7,505	3,000	29.10		18,215	30,733	215	2,920	2,158	7,623	23,572	3,438	4,102	2,340	8,078	39,456	11,840	18	7	1,700	30	25	1	2,180	292	147	2,180	6.6

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.10.07.10901.1, ETC.	16	

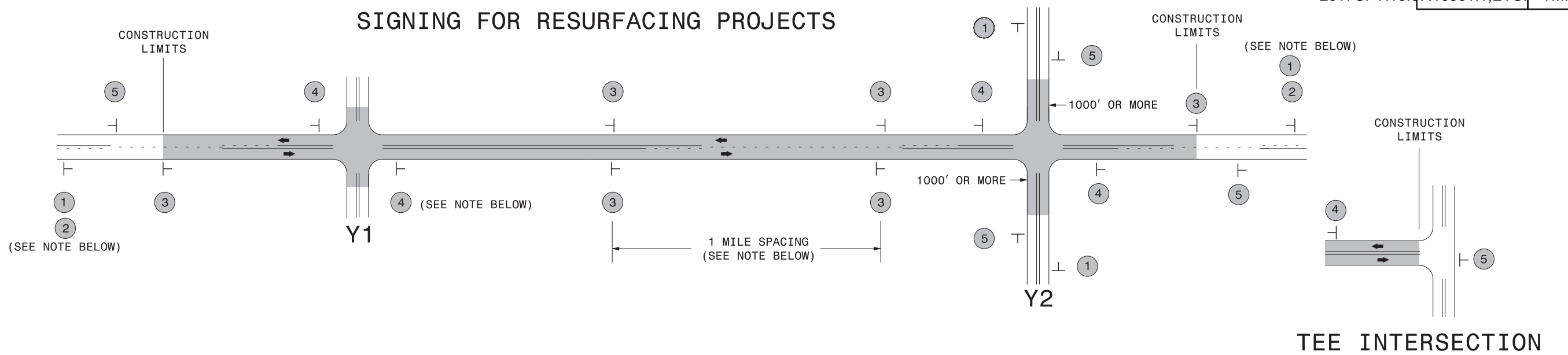
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4510000000-E	4890000000-E	4890000000-E	4695000000-E	4697000000-E	4700000000-E	4705000000-E	4710000000-E	4721000000-E														
										WORK ZONE ADVANCE/ GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	LAW ENFORCEMENT HR	4" X 90 M WHITE THERMO (HRM) LF	4" X 120 M YELLOW THERMO (HRM) LF	4" X 120 M WHITE THERMO (HRM) LF	8" X 90 M YELLOW THERMO LF	8" X 90 M WHITE THERMO LF	8" X 120 M WHITE THERMO LF	12" X 90 M WHITE THERMO LF	12" X 90 M YELLOW THERMO LF	16" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO MSG ONLY 120 M EA	THERMO RXR 120 M EA	THERMO MSG SCHOOL 120 M EA	THERMO MSG STOP 120 M EA	THERMO MSG AHEAD 120 M EA							
2017CPT.10.07.10901.1	Union	1	US 601 NORTH/ ROUTE #300060189	SR 1612 LAWYERS ROAD INTERSECTION MILEPOST 22.5 TO 22.4	1	2	2WU	0.1	36-41	212.9	*		1,056	575	170			810			70													
TOTAL FOR PROJ NO. 2017CPT.10.07.10901.1																																		
2017CPT.10.07.10901.2	Union	2	US 601 NORTH/ROUTE # 300060189	FROM CABARRUS COUNTY LINE TO PAVEMENT JOINT @ SR 1542 OLD DUTCH ROAD MILEPOST 29.2 TO 27.1	2	2	2WU	2.1	32	212.9	*		22,194	19,478	65																			
TOTAL FOR PROJ NO. 2017CPT.10.07.10901.2																																		
2017CPT.10.07.20901.1	Union	3	SR 2188 MORGAN MILL ROAD/ ROUTE # 4000218889	FROM US 74 TO BRIDGE @ SR 2100 EAST FRANKLIN STREET MILEPOST 1.33-0.8	3	3	MU	0.525	48-60	212.9	*	120	643	6,353	1,436	315		290			115	8												
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.1																																		
2017CPT.10.07.20901.2	Union	4	SR 1007 ROCKY RIVER ROAD/ ROUTE # 4000100789	FROM NC 75 TO SR 1162 GOLDMINE ROAD MILEPOST 5.78 TO 2.07	4	2	2WU	3.71	20-33	212.9	*	120	39,921	38,093	1,015					155	295	100	550			4	12							
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.2																																		
2017CPT.10.07.20901.3	Union	5	SR 1346 BEULAH CHURCH ROAD/ ROUTE # 4000134689	FROM SR 1344 MATTHEWS-WEDDINGTON ROAD TO SR 1341 TWELVE MILE CREEK MILEPOST 4.73 TO 3.17	7,8	2	2WU	1.48	22-28	212.9	*		15,642	17,658	336						150			29										
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.3																																		
2017CPT.10.07.20901.4	Union	6	SR 1346 BEULAH CHURCH ROAD/ ROUTE # 4000134689	FROM SR 1341 TWELVE MILE CREEK ROAD TO SR 1357 POTTER ROAD MILEPOST 3.17 TO 1.17	6,7,8	2	2WU	2	22-28	212.9	*		21,078	18,434							85							24	10					
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.4																																		
2017CPT.10.07.20901.5	Union	7	SR 1377 WESLEY CHAPEL ROAD/ ROUTE # 4000137789	FROM PAVEMENT JOINT 940 FT NORTH OF SR 1162 GOLDMINE ROAD TO PAVEMENT JOINT APPROX. 100 FT NORTH OF GRACE FELLOWSHIP CHURCH MILEPOST 0.33 TO 1.47	5	2	2WU	1.14	20-38	212.9	*		12,032	14,138	783		125				65													
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.5																																		
2017CPT.10.07.20901.6	Union	8	SR 1001 SIKES MILL ROAD/ ROUTE # 4000100189	FROM US 601 NORTH TO PAVEMENT JOINT @ ROUNDABOUT MILEPOST 0.00-3.95	5	2	2WU	3.95	20	212.9	*		41,632	38,854	120																			
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.6																																		
2017CPT.10.07.20901.7	Union	9	SR 2100 E. FRANKLIN STREET/ ROUTE # 4000210089	FROM 5 POINTS INTERSECTION TO US 74 MILEPOST 2.14-3.68	9	3	MU	1.5	33-74	212.9	*	120	1,791	17,313	1,780	110		175			368							12						
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.7																																		
GRAND TOTAL														16,505		1,916.1	1	360	155,989	170,896	5,705	425	125	465	965	510	100	1,217	8	4	24	24	10	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4725000000-E					4810000000-E		4830000000-E	4840000000-E			4845000000-N				4900000000-N										
										THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	THERMO STR ARROW 90 M EA	THERMO STR & RT ARROW 90 M EA	MERGE ARROW EA	4" YELLOW PAINT LF	4" WHITE PAINT LF	16" WHITE PAINT LF	24" WHITE PAINT LF	PAINT MSG ONLY EA	PAINT MSG SCHOOL EA	PAINT MSG RXR EA	PAINT LT ARROW EA	PAINT STR ARROW EA	PAINT RT ARROW EA	PAINT STR & RT ARROW EA	YELLOW & YELLOW MARKERS EA	CRYSTAL & RED MARKERS EA								
2017CPT.10.07.10901.1	Union	1	US 601 NORTH/ ROUTE #300060189	SR 1612 LAWYERS ROAD INTERSECTION MILEPOST 22.5 TO 22.4	1	2	2WU	0.1	36-41	7																									
TOTAL FOR PROJ NO. 2017CPT.10.07.10901.1																																			
2017CPT.10.07.10901.2	Union	2	US 601 NORTH/ROUTE # 300060189	FROM CABARRUS COUNTY LINE TO PAVEMENT JOINT @ SR 1542 OLD DUTCH ROAD MILEPOST 29.2 TO 27.1	2	2	2WU	2.1	32						22,194															139	13				
TOTAL FOR PROJ NO. 2017CPT.10.07.10901.2																																			
2017CPT.10.07.20901.1	Union	3	SR 2188 MORGAN MILL ROAD/ ROUTE # 4000218889	FROM US 74 TO BRIDGE @ SR 2100 EAST FRANKLIN STREET MILEPOST 1.33-0.8	3	3	MU	0.525	48-60	17	4	5	5		6,353	2,100				8			18	6	4	4			72	179					
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.1																																			
2017CPT.10.07.20901.2	Union	4	SR 1007 ROCKY RIVER ROAD/ ROUTE # 4000100789	FROM NC 75 TO SR 1162 GOLDMINE ROAD MILEPOST 5.78 TO 2.07	4	2	2WU	3.71	20-33	11	3				39,728	1,015	100	550				12	4						272	48					
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.2																																			
2017CPT.10.07.20901.3	Union	5	SR 1346 BEULAH CHURCH ROAD/ ROUTE # 4000134689	FROM SR 1344 MATTHEWS-WEDDINGTON ROAD TO SR 1341 TWELVE MILE CREEK MILEPOST 4.73 TO 3.17	7,8	2	2WU	1.48	22-28	4	2																		111	18					
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.3																																			
2017CPT.10.07.20901.4	Union	6	SR 1346 BEULAH CHURCH ROAD/ ROUTE # 4000134689	FROM SR 1341 TWELVE MILE CREEK ROAD TO SR 1357 POTTER ROAD MILEPOST 3.17 TO 1.17	6,7,8	2	2WU	2	22-28	2																			132						
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.4																																			
2017CPT.10.07.20901.5	Union	7	SR 1377 WESLEY CHAPEL ROAD/ ROUTE # 4000137789	FROM PAVEMENT JOINT 940 FT NORTH OF SR 1162 GOLDMINE ROAD TO PAVEMENT JOINT APPROX. 100 FT NORTH OF GRACE FELLOWSHIP CHURCH MILEPOST 0.33 TO 1.47	5	2	2WU	1.14	20-38	10																			89	50					
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.5																																			
2017CPT.10.07.20901.6	Union	8	SR 1001 SIKES MILL ROAD/ ROUTE # 4000100189	FROM US 601 NORTH TO PAVEMENT JOINT @ ROUNDABOUT MILEPOST 0.00-3.95	5	2	2WU	3.95	20																				261						
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.6																																			
2017CPT.10.07.20901.7	Union	9	SR 2100 E. FRANKLIN STREET/ ROUTE # 4000210089	FROM 5 POINTS INTERSECTION TO US 74 MILEPOST 2.14-3.68	9	3	MU	1.5	33-74	58	4	2		4	16,000	3,306													189	155					
TOTAL FOR PROJ NO. 2017CPT.10.07.20901.7																																			
GRAND TOTAL														16,505		107	13	7	5	4			84,275	6,421	100	550	8	12	4	18	6	4	4	1,272	471

SIGNING FOR RESURFACING PROJECTS



LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

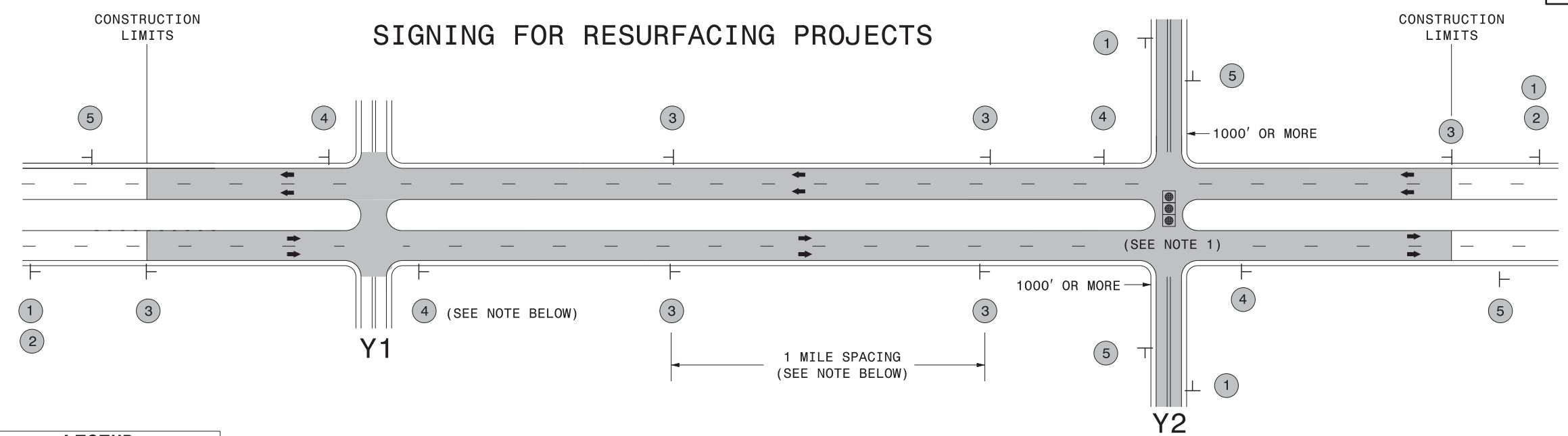
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	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.	<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;"> <div style="text-align: center;"> W20-1 48" X 48" </div> <div style="text-align: center;"> W20-7 A 48" X 48" </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	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)	
	3	 SP 13107 48" X 48"	<ul style="list-style-type: none"> - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. 	
	4	 SP 13106 48" X 48"	<ul style="list-style-type: none"> - 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	 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.	

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

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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;"> <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>NOTES:</p> <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.
		<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>	

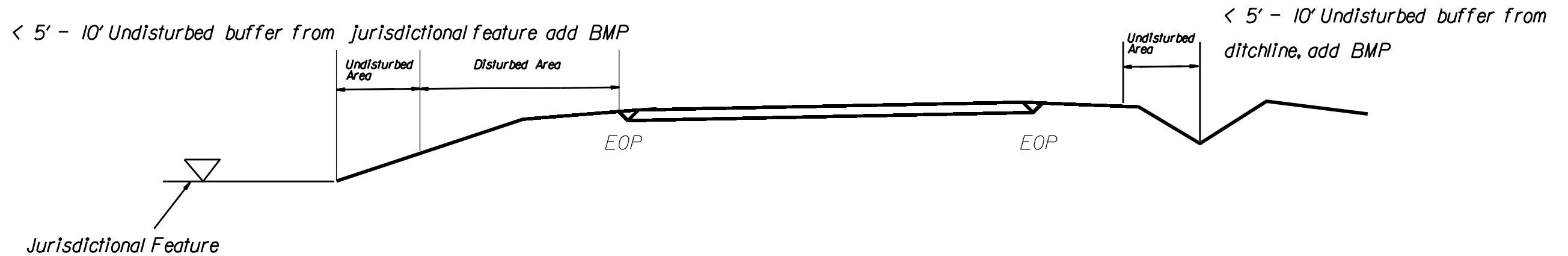
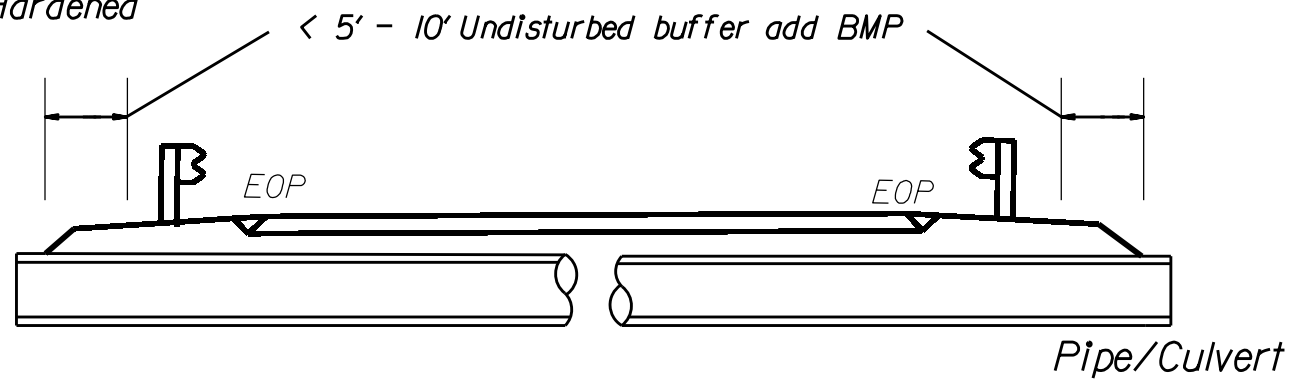
**RESURFACING
ADVANCE WARNING SIGNS
FOR RURAL AND SUBURBAN
MULTI-LANE ROADWAYS
W/ SHOULDER SECTIONS**

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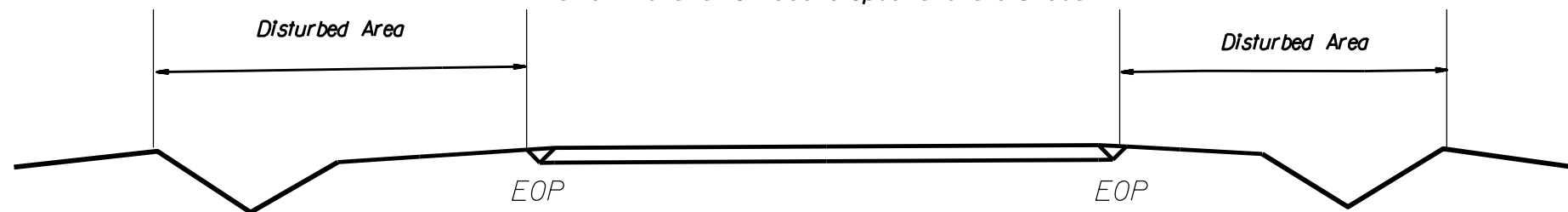
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

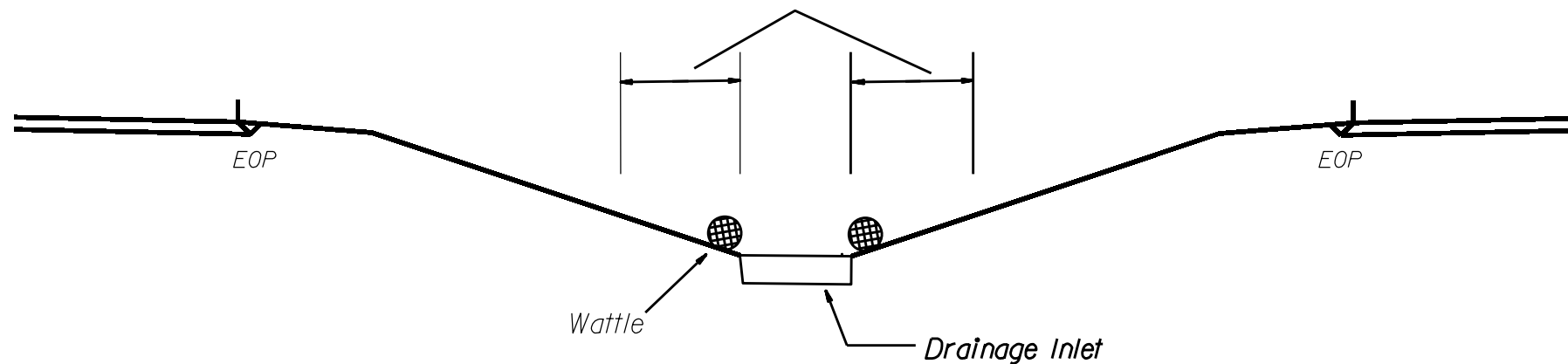
EROSION CONTROL DETAIL



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

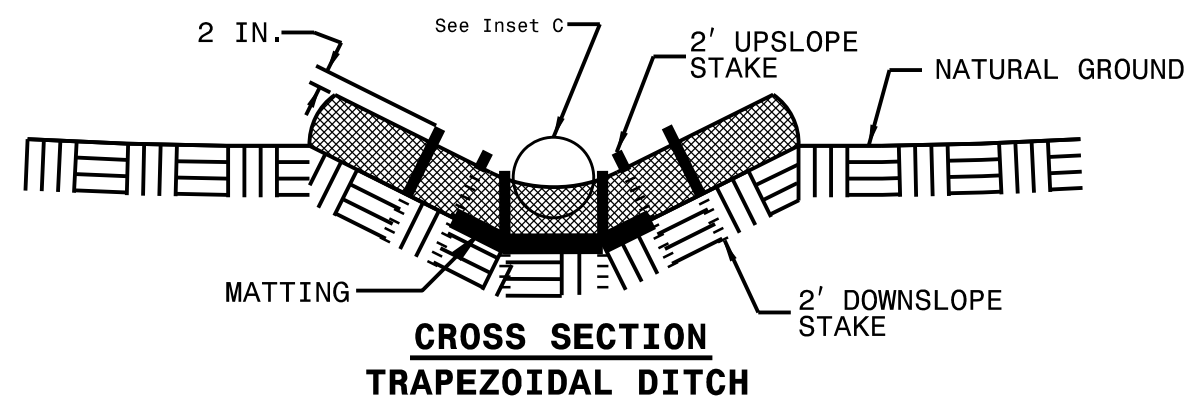
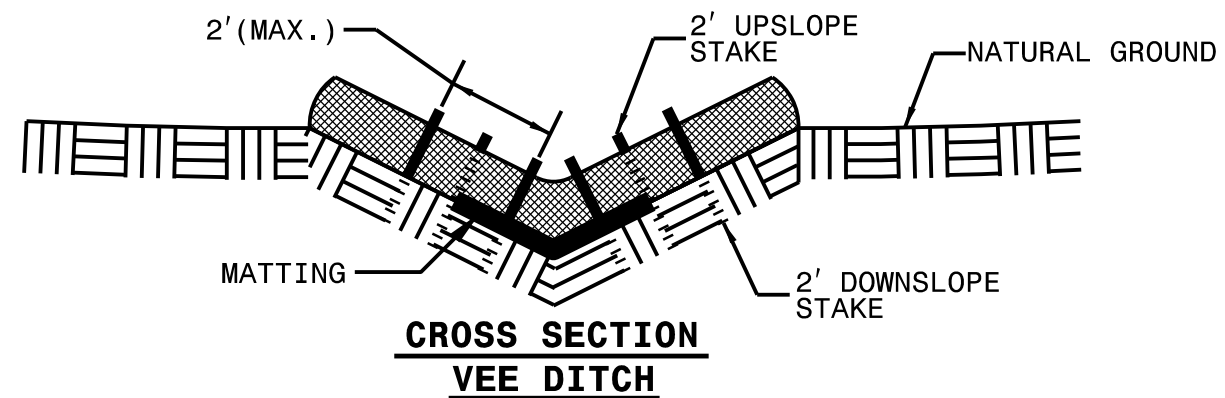
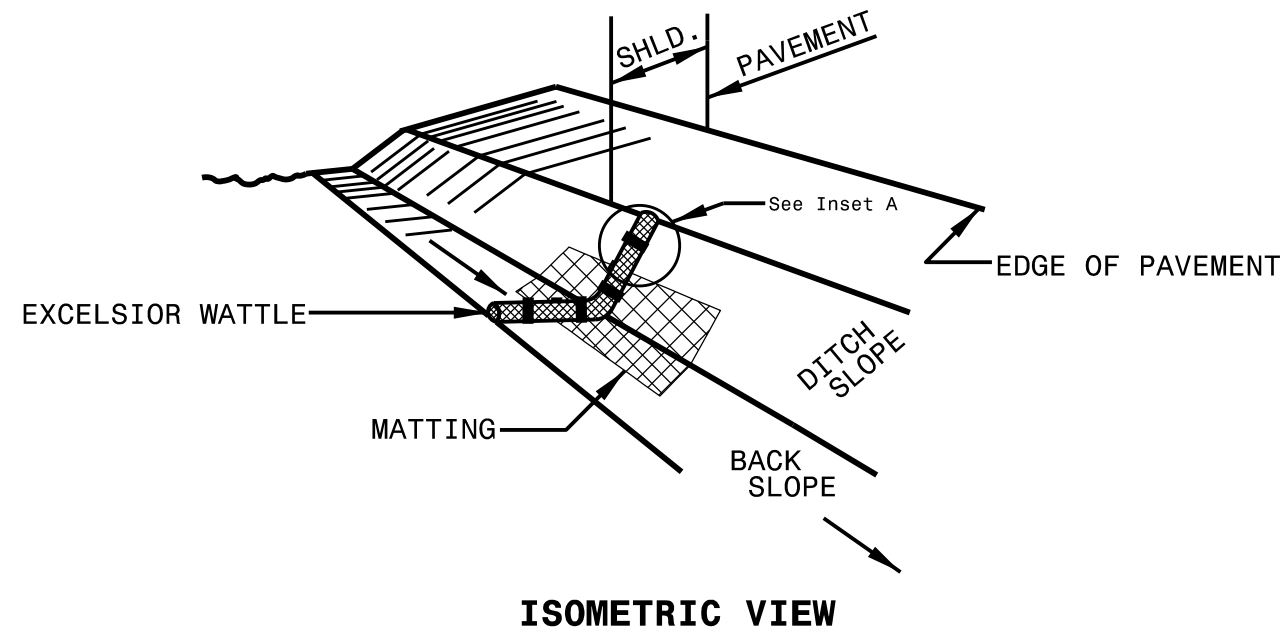


< 5' - 10' Undisturbed buffer from inlet, add wattle



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.

