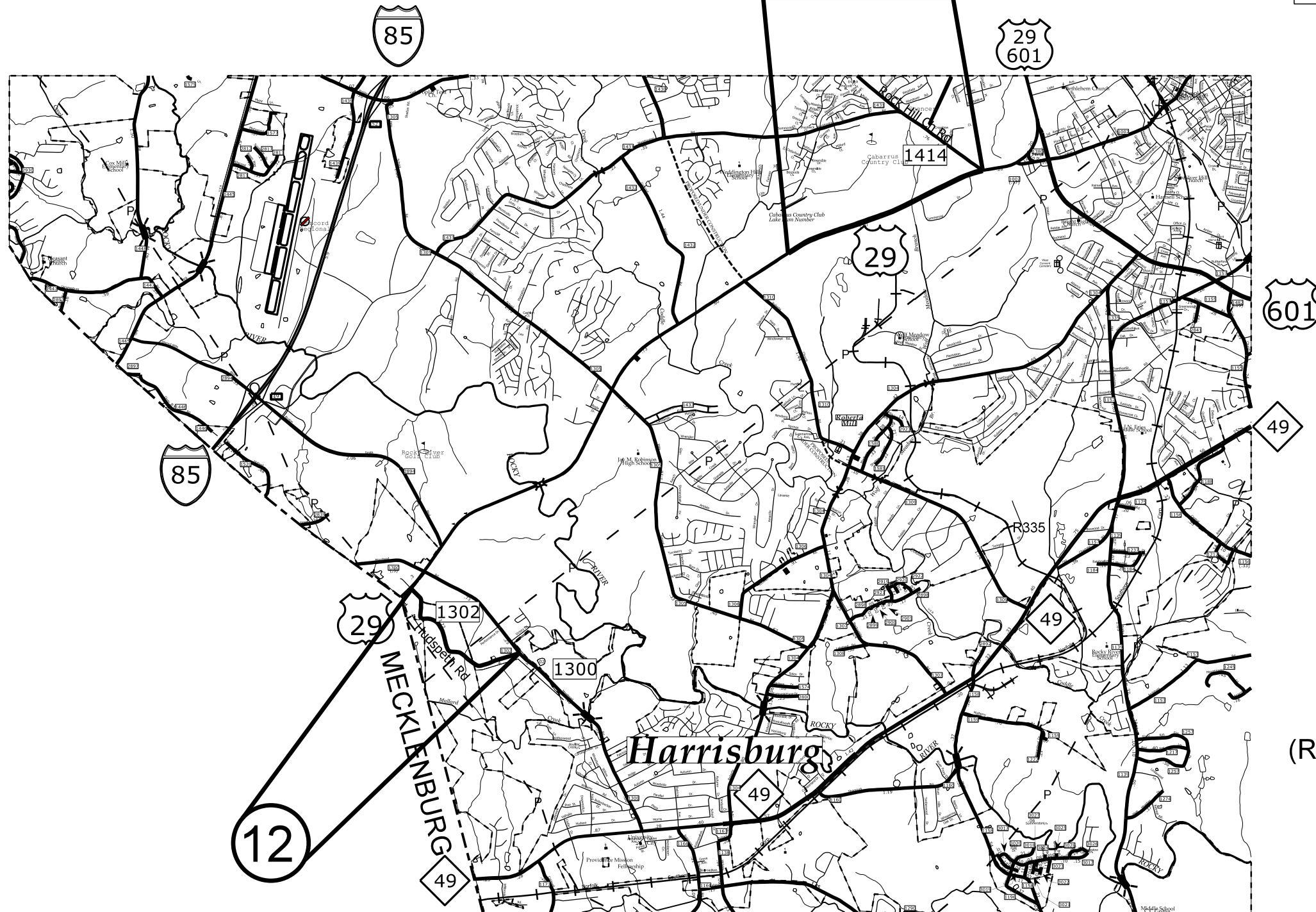



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1, ETC.	1	
F.A. PROJECT NO.			

1, & 2




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

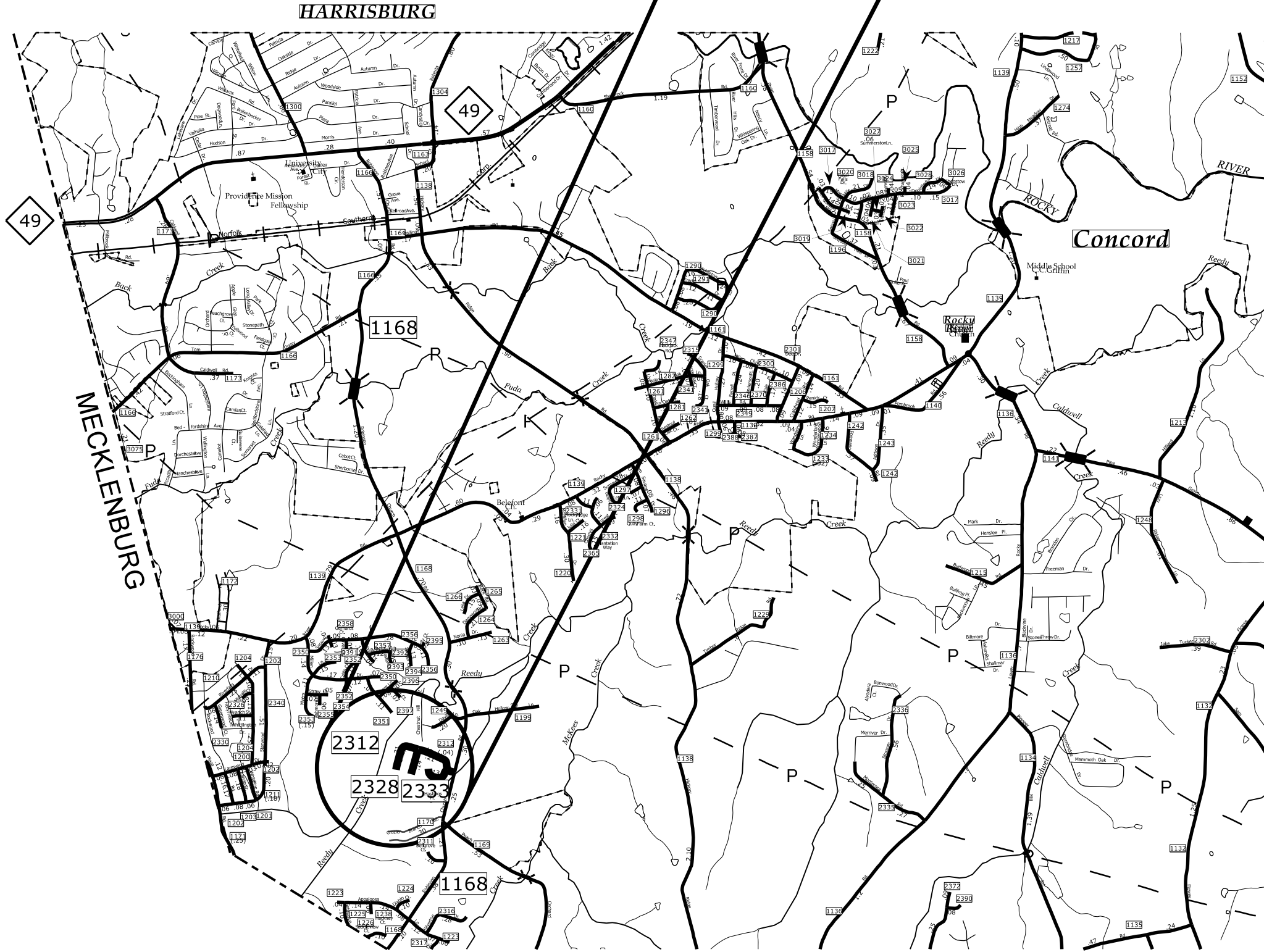
MAP #1 US 29 1.49 MILES
FROM PAVEMENT JOINT OF BYPASS PROJECT
(MP 4.21) TO PAVEMENT JOINT AT SR-1414
(ROCK HILL CH RD) (MP 5.7)

MAP #2 US 29 SOUTH 1.49 MILES
FROM PAVEMENT JOINT AT SR-1414
(ROCK HILL CH RD) (MP 8.32) TO PAVEMENT JOINT
AT BYPASS PROJECT (MP 9.81)

MAP #12 SR-1302 (HUDSPETH RD) 1.21 MILES
FROM PAVEMENT JOINT AT SR-1300
(MOREHEAD RD) (MP 0.0) TO PAVEMENT JOINT
AT US HWY 29 (MP 1.21)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1, ETC.	2	
F.A. PROJECT NO.			

3, 4, & 5



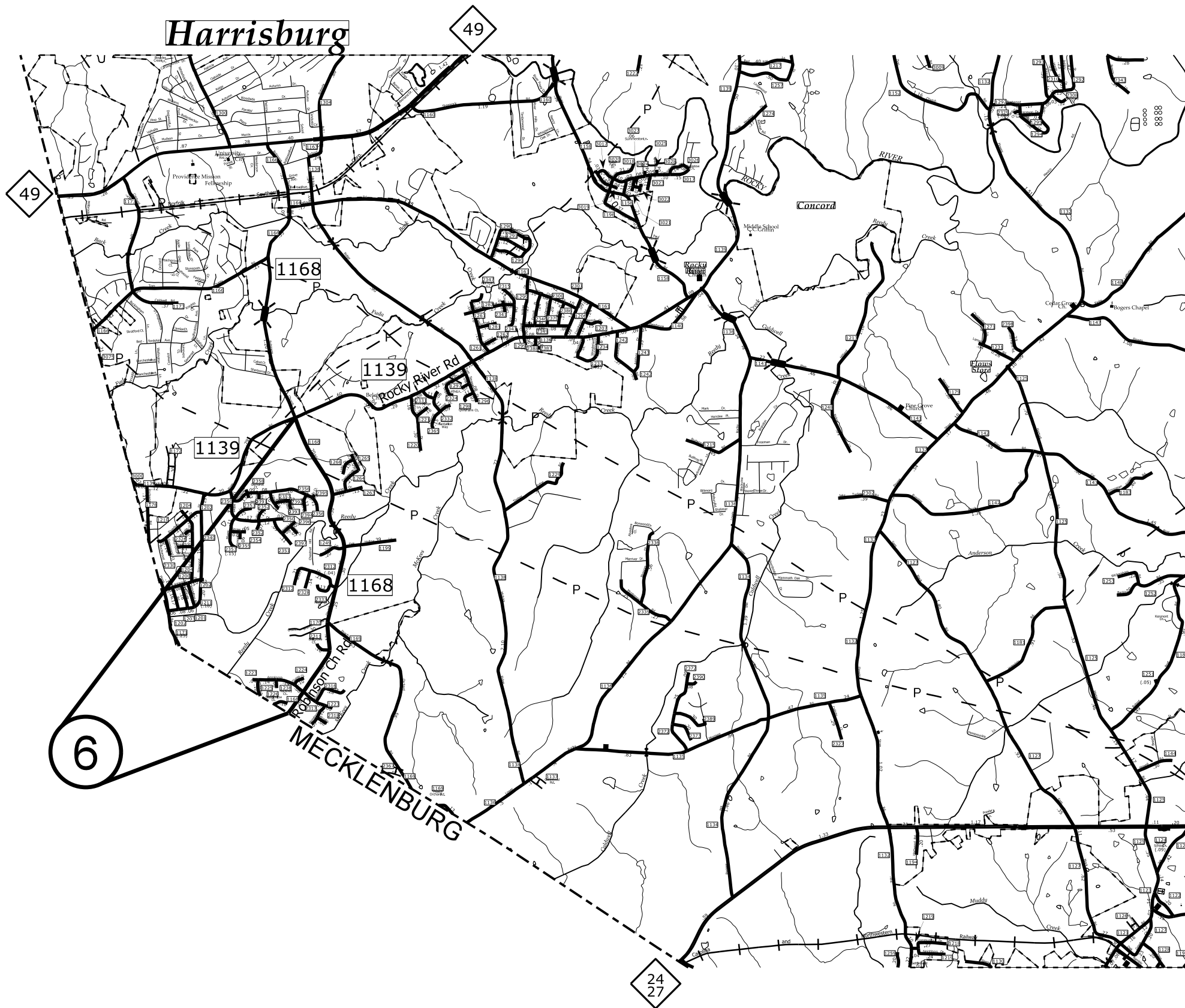
ENLARGED MUNICIPAL AND SUBURBAN AREAS
CABARRUS COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 1

MAP #3 SR-2312 (BRITLEY LN) 0.46 MILES FROM PAVEMENT JOINT AT SR 1168 (ROBINSON CH RD) (MP 0.0) TO CUL DE SAC (MP 0.46)

MAP #4 SR-2328 (CULPEPPER CT) 0.13 MILES FROM SR 2312 (BRITLEY LN) (MP 0.0) TO CUL DE SAC (MP 0.13)

MAP #5 SR-2333 (HASTINGS PL) 0.15 MILES FROM SR 2312 (BRITLEY LN) (MP 0.0) TO CUL DE SAC (MP 0.15)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.I, ETC.	3	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

CABARRUS COUNTY

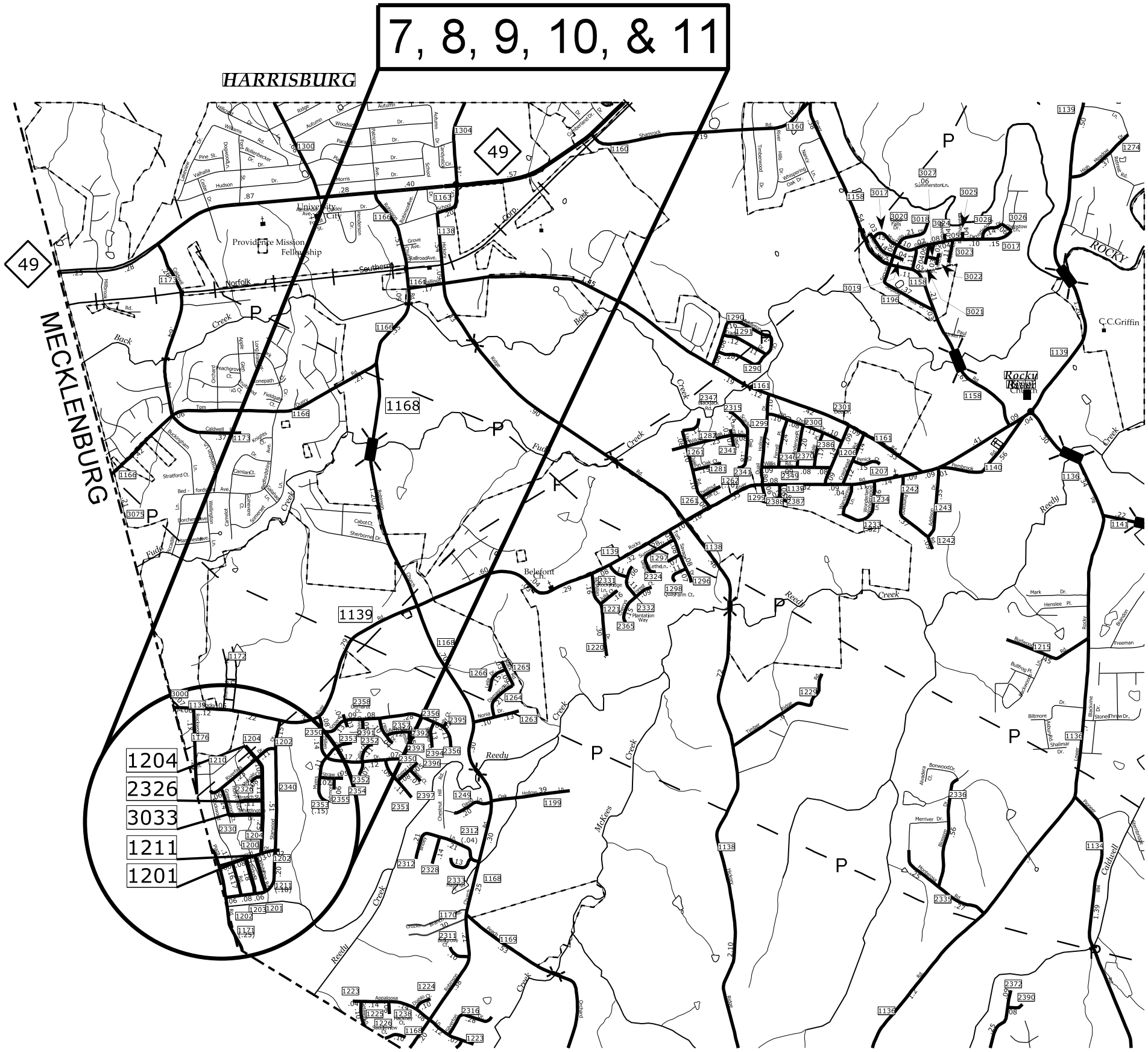
NORTH CAROLINA

PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 1

MAP #6 SR-1168 (ROBINSON CH RD) 2.4 MILES FROM PAVEMENT JOINT OF AT SR-1139 (ROCKY RIVER RD) (MP 2.4) TO MECKLENBURG LINE (MP 0.0)

NOTE: MAP #6 -- EXCLUDE 0.4 MILE SECTION DUE TO NEW PAVEMENT ALREADY IN PLACE

7, 8, 9, 10, & 11



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1, ETC.	4	
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 #7 SR-1211 (WHITE PINE RD) 0.17 MILES FROM PAVEMENT JOINT AT SR-1200 (LAREWOOD DR) (MP 0.0) TO PAVEMENT JOINT AT SR-1202 (STARWOOD DR) (MP 0.17)

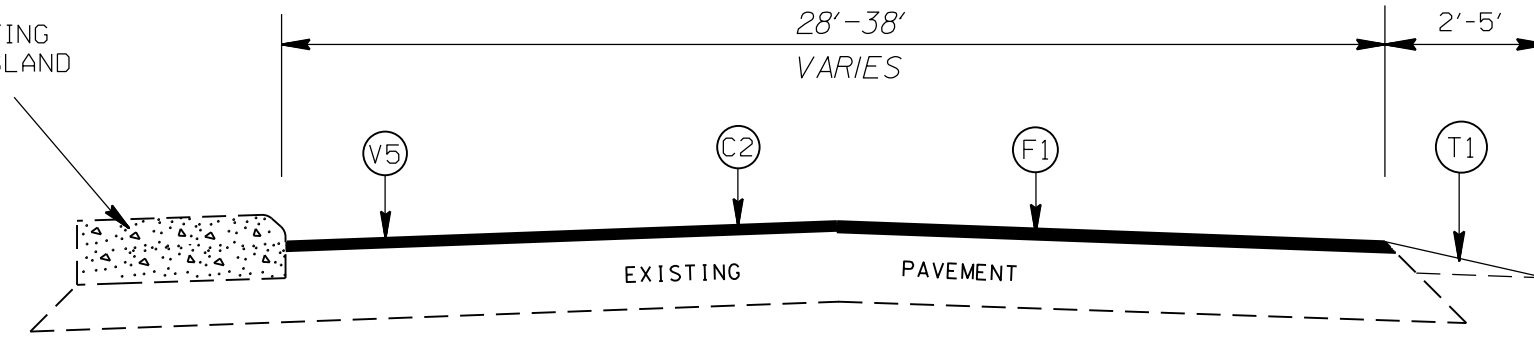
MAP #8 SR-1201 (LONDON ST) 0.17 MILES FROM PAVEMENT JOINT AT SR-1200 (LAREWOOD DR) (MP 0.0) TO PAVEMENT JOINT AT SR-1202 (STARWOOD DR) (MP 0.17)

MAP #9 SR-1204 (ARBOR DALE AVE) 0.58 MILES FROM PAVEMENT JOINT AT SR-1200 (LAREWOOD DR) (MP 0.0) TO DEAD END (MP 0.58)

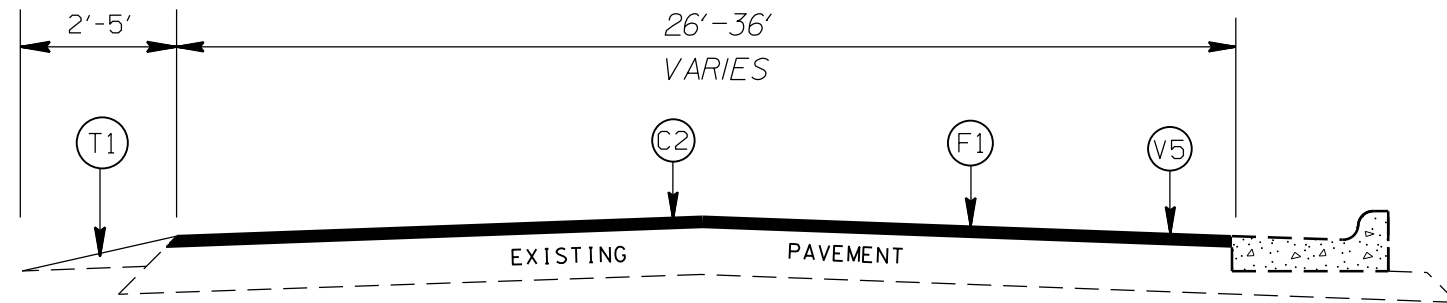
MAP #10 SR-2326 (BRANCH ST) 0.11 MILES FROM PAVEMENT JOINT AT SR-1204 (ARBOR DALE AVE) (MP 0.0) TO THE PAVEMENT JOINT AT SR-3032 (HOLLY TREE DR) (MP 0.11)

MAP #11 SR-3033 (WHITLINGTON DR) 0.16 MILES FROM PAVEMENT JOINT AT SR-1204 (ARBOR DALE AVE) (MP 0.16) TO PAVEMENT JOINT AT SR-2330 (GREENWOOD CT) (MP 0.00)

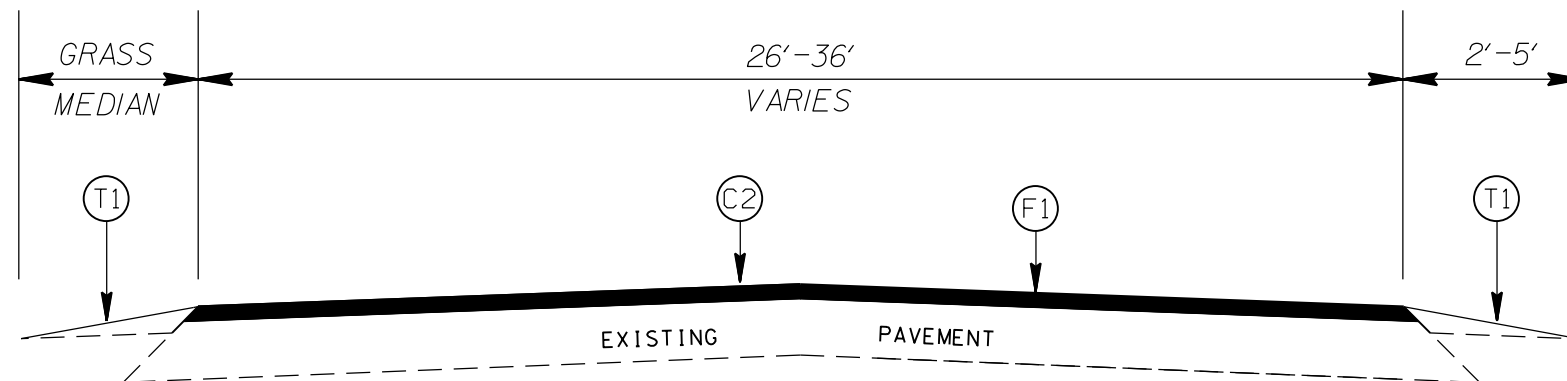
EXISTING CONC. ISLAND



TYPICAL SECTION NO. 3
US 29
US 29 S

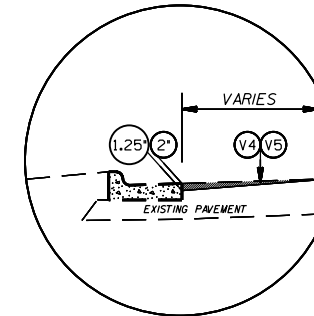
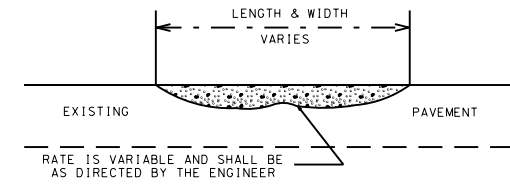


TYPICAL SECTION NO. 2
US 29



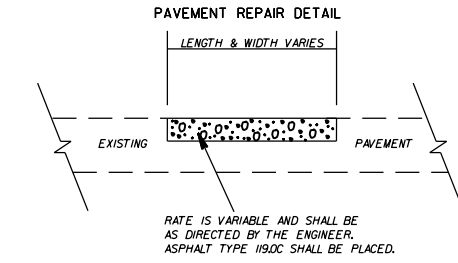
TYPICAL SECTION NO. 1
US 29
US 29 S

TYPE S9.5C (LEVELING COURSE)



DETAIL FOR PROFILE MILLING (0" TO 1.25")
DETAIL FOR PROFILE MILLING (0" TO 2")

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1 ETC.	5	
F.A. PROJECT NO.			

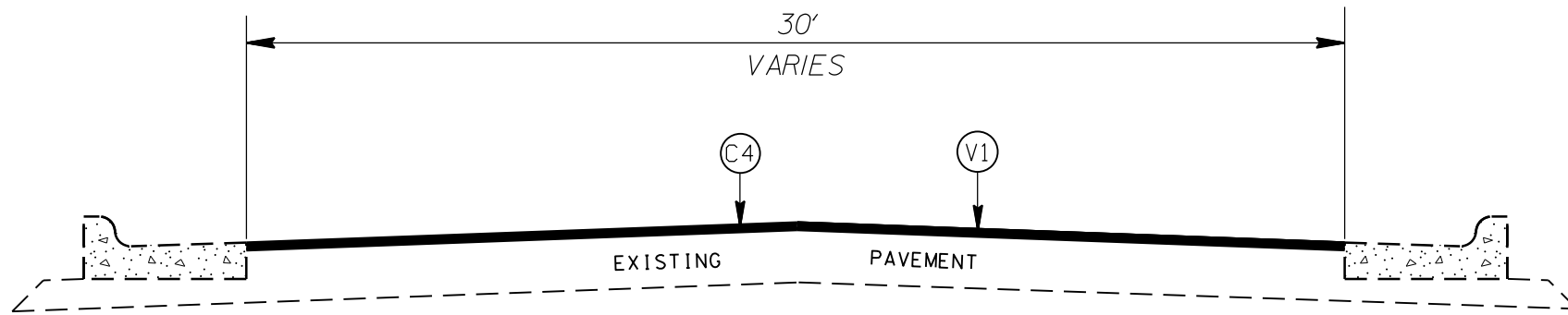


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MATCOAT, #67 STONE
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
J	AGGREGATE BASE COURSE, PLACED AT 12" IN DEPTH FOR 2' ON BOTH SIDES
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	MILLING OF EXISTING PAVEMENT, 1.25"
V2	MILLING OF EXISTING PAVEMENT, 1.5"
V3	MILLING OF EXISTING PAVEMENT, 2"
V4	PROFILE MILLING OF EXISTING ASPHALT, 0"-1.25" (10' WIDTH)
V5	PROFILE MILLING OF EXISTING ASPHALT, 0"-2" (10' WIDTH)
Z	FULL DEPTH RECLAMATION

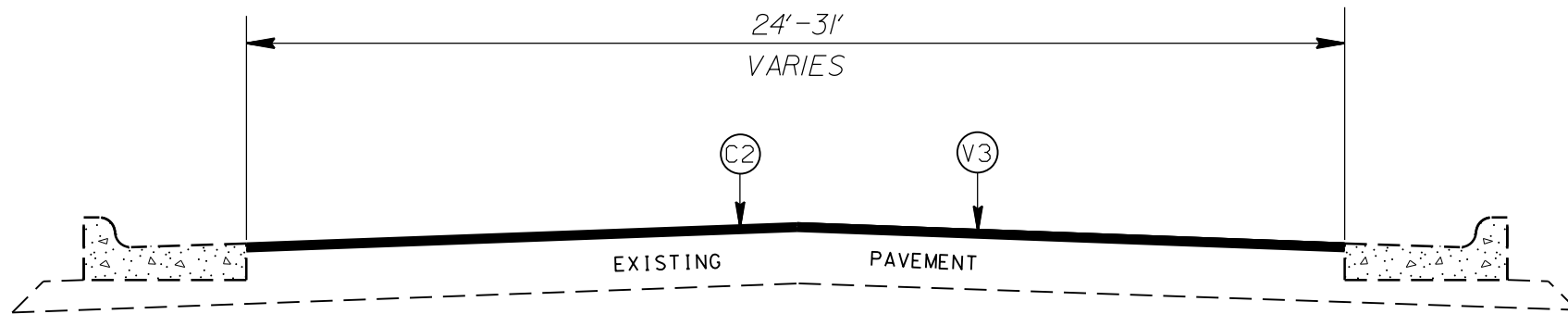
CABARRUS COUNTY
RESURFACING 2018-2019

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

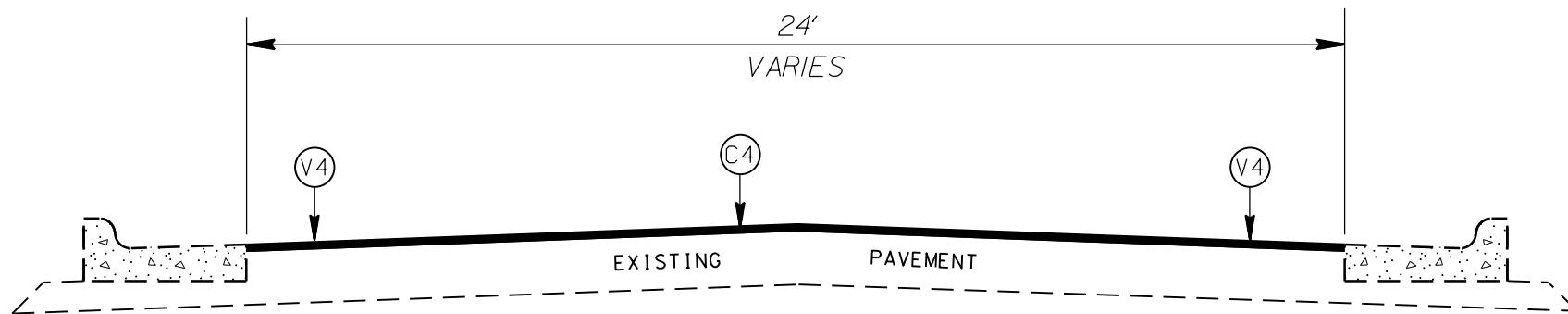
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1 ETC.	6	
F.A. PROJECT NO.			



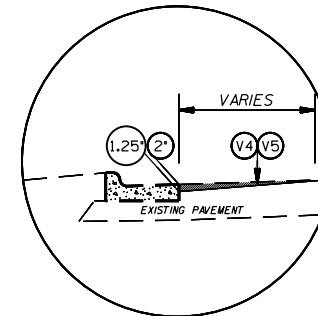
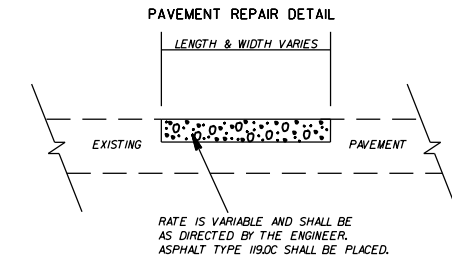
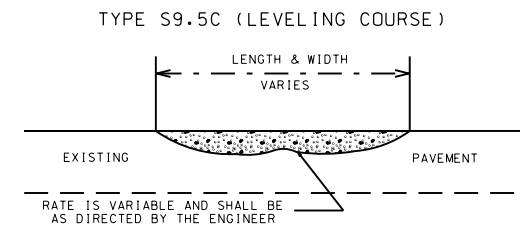
TYPICAL SECTION NO. 6
SR-1211 (WHITE PINE RD)



TYPICAL SECTION NO. 5
SR-1204 (ARBOR DALE AVE)
SR-1201 (LONDON ST)
SR-3033 (WHITLINGTON DR)



TYPICAL SECTION NO. 4
SR-2312 (BRITLEY LN)
SR-2333 (HASTINGS PL)
SR-2328 (CULPEPPER CT)



DETAIL FOR PROFILE MILLING (0" TO 1.25")
DETAIL FOR PROFILE MILLING (0" TO 2")

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MATCOAT, #67 STONE
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
J	AGGREGATE BASE COURSE, PLACED AT 12" IN DEPTH FOR 2' ON BOTH SIDES
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	MILLING OF EXISTING PAVEMENT, 1.25"
V2	MILLING OF EXISTING PAVEMENT, 1.5"
V3	MILLING OF EXISTING PAVEMENT, 2"
V4	PROFILE MILLING OF EXISTING ASPHALT, 0"-1.25" (10' WIDTH)
V5	PROFILE MILLING OF EXISTING ASPHALT, 0"-2" (10' WIDTH)
Z	FULL DEPTH RECLAMATION

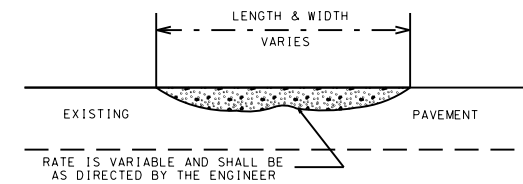
NOTES: 1. LEVELING COURSE TO BE PLACED AS DIRECTED BY THE ENGINEER
2. ON MAP #1, & #2, PLACE AST IMMEDIATELY BEFORE RESURFACING

CABARRUS COUNTY
RESURFACING 2018-2019

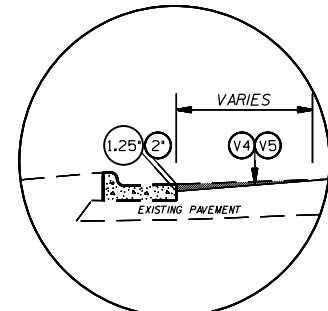
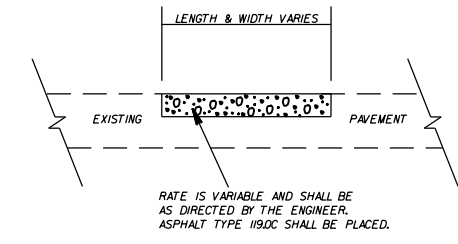
SCALE	-NA-		REVISIONS
DATE	2/18		
DWG. BY	JWH		
DESIGN BY	JWH		
APPROVED	JAB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1 ETC.	7	
F.A. PROJECT NO.			

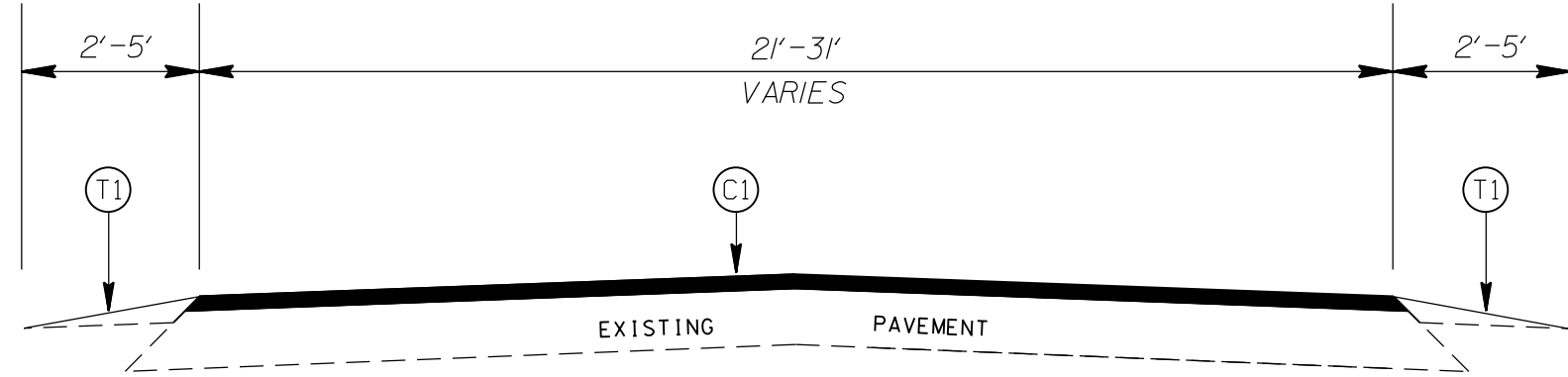
TYPE S9.5C (LEVELING COURSE)



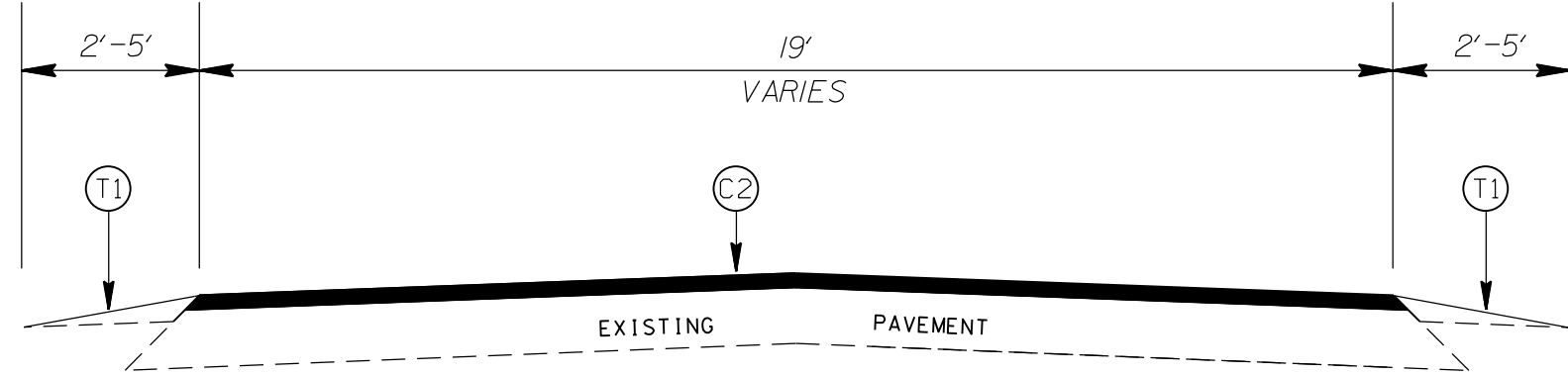
PAVEMENT REPAIR DETAIL



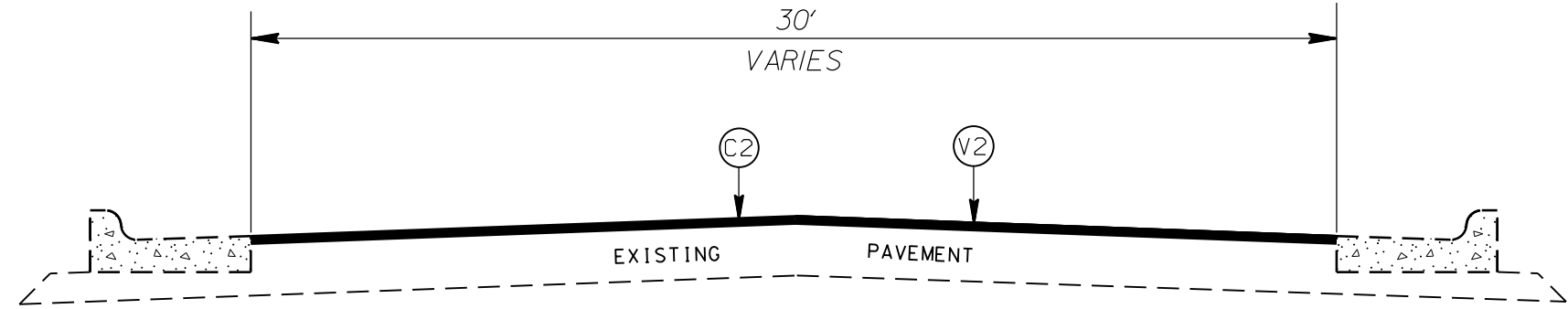
DETAIL FOR PROFILE MILLING (0" TO 1.25")
 DETAIL FOR PROFILE MILLING (0" TO 2")



TYPICAL SECTION NO. 9
 SR-1168 (ROBINSON CH RD)



TYPICAL SECTION NO. 8
 SR-2326 (BRANCH ST)
 SR-3033 (WHITLINGTON DR)



TYPICAL SECTION NO. 7
 SR-2326 (BRANCH ST)

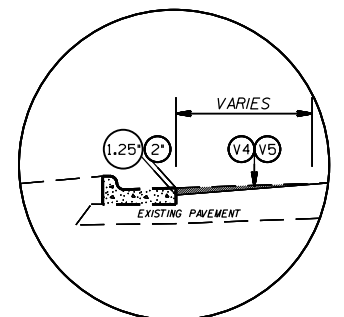
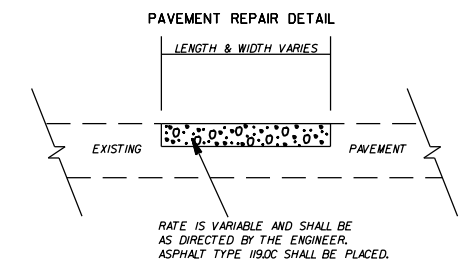
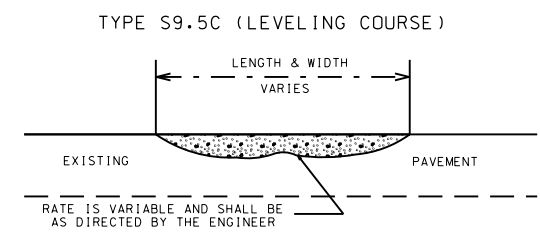
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MATCOAT, #67 STONE
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
J	AGGREGATE BASE COURSE, PLACED AT 12" IN DEPTH FOR 2' ON BOTH SIDES
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	MILLING OF EXISTING PAVEMENT, 1.25"
V2	MILLING OF EXISTING PAVEMENT, 1.5"
V3	MILLING OF EXISTING PAVEMENT, 2"
V4	PROFILE MILLING OF EXISTING ASPHALT, 0"-1.25" (10' WIDTH)
V5	PROFILE MILLING OF EXISTING ASPHALT, 0"-2" (10' WIDTH)
Z	FULL DEPTH RECLAMATION

NOTES: 1. LEVELING COURSE TO BE PLACED AS DIRECTED BY THE ENGINEER
 2. ON MAP #1, & #2, PLACE AST IMMEDIATELY BEFORE RESURFACING

CABARRUS COUNTY
 RESURFACING 2018-2019

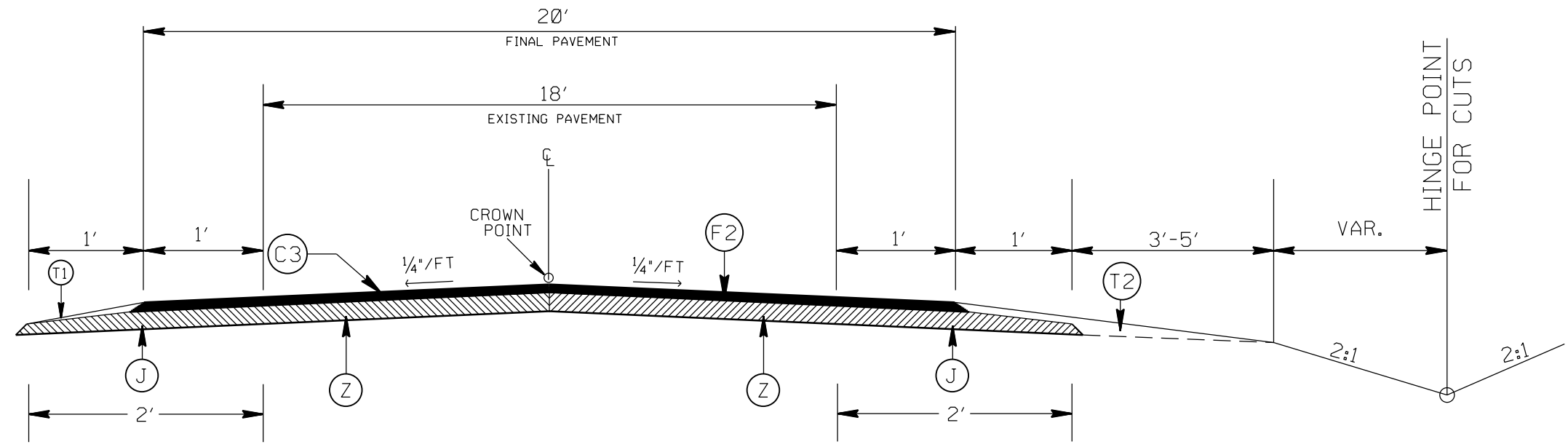
SCALE	-NA-		REVISIONS
DATE	2/18		
DWG. BY	JWH		
DESIGN BY	JWH		
APPROVED	JAB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1 ETC.	8	
F.A. PROJECT NO.			



DETAIL FOR PROFILE MILLING (0" TO 1.25")
 DETAIL FOR PROFILE MILLING (0" TO 2")

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MATCOAT, #67 STONE
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
J	AGGREGATE BASE COURSE, PLACED AT 12" IN DEPTH FOR 2' ON BOTH SIDES
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	MILLING OF EXISTING PAVEMENT, 1.25"
V2	MILLING OF EXISTING PAVEMENT, 1.5"
V3	MILLING OF EXISTING PAVEMENT, 2"
V4	PROFILE MILLING OF EXISTING ASPHALT, 0"-1.25" (10' WIDTH)
V5	PROFILE MILLING OF EXISTING ASPHALT, 0"-2" (10' WIDTH)
Z	FULL DEPTH RECLAMATION



TYPICAL SECTION NO. 10
 SR-1302 (HUDSPETH RD)

SEE NOTES

NOTES: 1. LEVELING COURSE TO BE PLACED AS DIRECTED BY THE ENGINEER
 2. ON MAP #1, & #2, PLACE AST IMMEDIATELY BEFORE RESURFACING

CABARRUS COUNTY
 RESURFACING 2018-2019

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

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1 ETC.	9	
F.A. PROJECT NO.			

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

2. ON MAP #1, & #2, PLACE AST IMMEDIATELY BEFORE RESURFACING

3. FULL DEPTH RECLAMATION AND AST SHALL BE COMPLETED ON
MAP #12 PRIOR TO THE ASPHALT OVERLAY.

4. ON MAP #12, WIDENING WITH ABC STONE SHALL BE DONE BY THE
CONTRACTOR AND NOT STATE FORCES.

5. ON MAP #12, SHOULDER CONSTRUCTION WILL BE AS DIRECTED BY
THE ENGINEER.

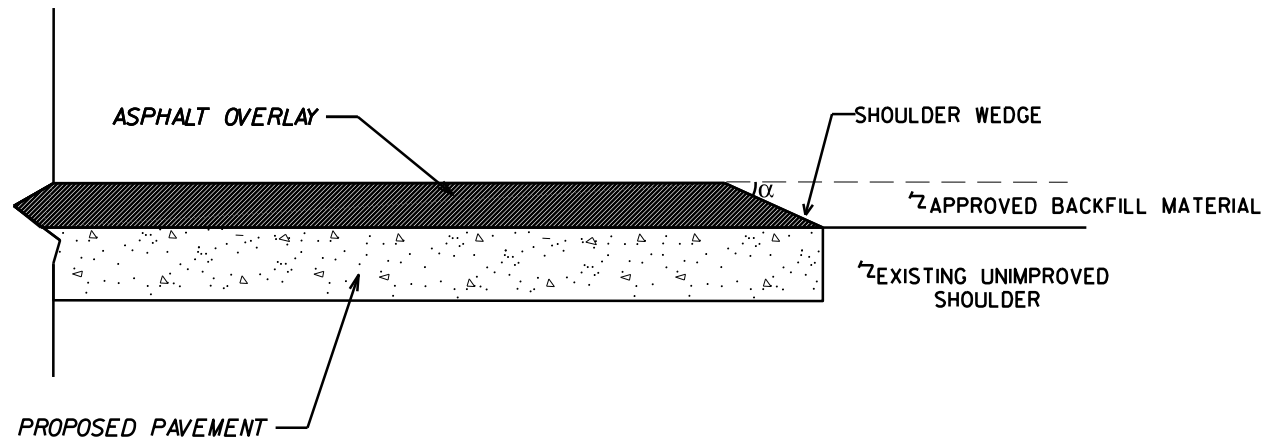
CABARRUS COUNTY
RESURFACING 2018-2019

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

NOTES:

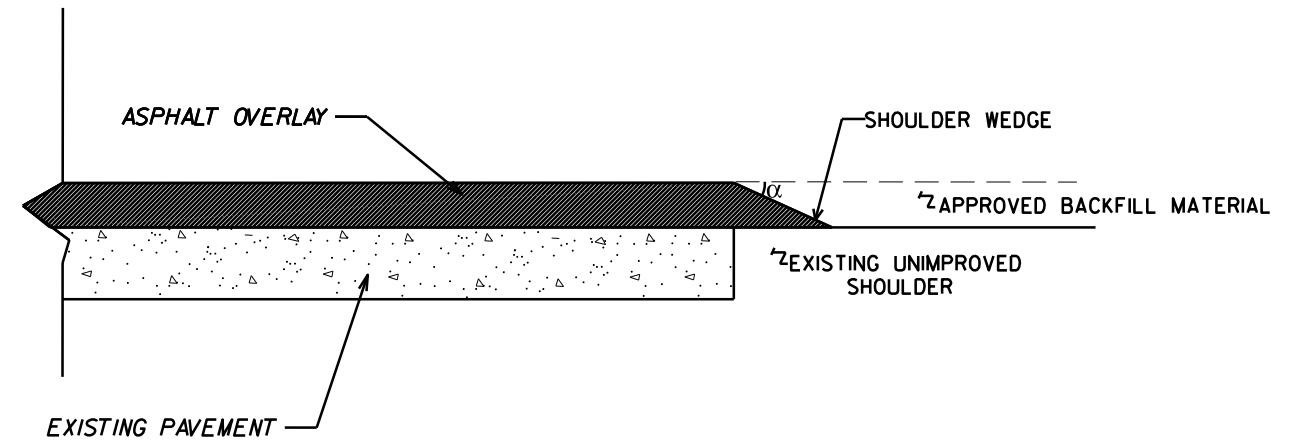
- 1) DETAIL DOES NOT APPLY TO OGAFCC AND ULTRA-THIN BONDED WEARING COURSE.
- 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
- 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1 ETC.	10	
F.A. PROJECT NO.			



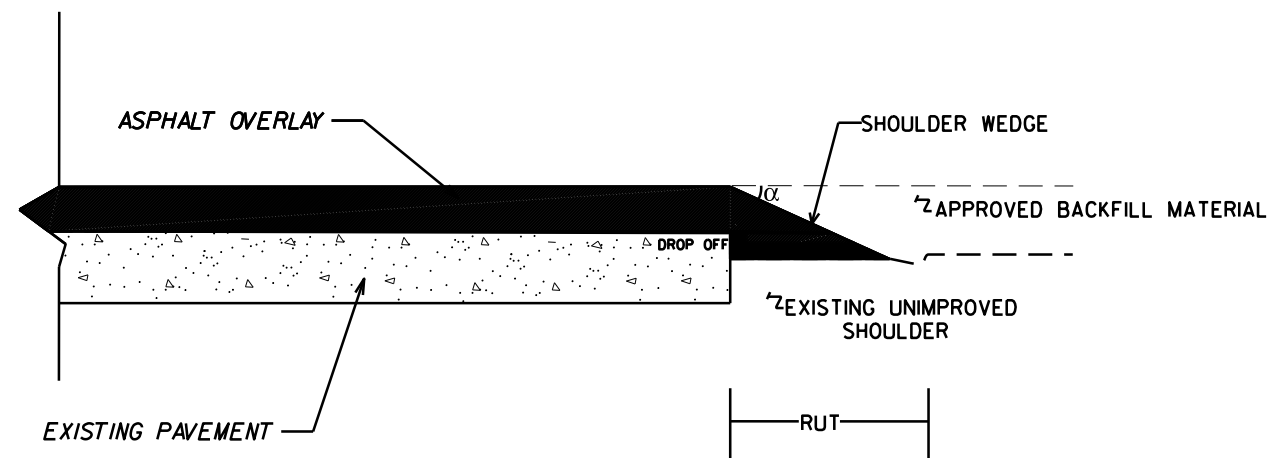
SHOULDER WEDGE DETAIL

(RESURFACING PROJECTS W/ WIDENING OR WITH EXISTING PAVED SHOILDER 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	
DWG. BY	JAB	
DESIGN BY	JAB	
APPROVED	JAB	



PROJECT NO.	SHEET NO.	TOTAL NO.
2019CPT.10.03.10131.1, Etc	11	17

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	010600000-E	024100000-E	036600000-E	112100000-E	118700000-E	122000000-E	124300000-E	124500000-E	129700000-E			130800000-E	133000000-E	151900000-E	152300000-E	157500000-E	170400000-E	177500000-E	180350000-E	183800000-E	261200000-E	283000000-N	284500000-N	525500000-N	600000000-E	607101000-E	607102000-E	608400000-E																		
											BORROW	SOIL CEMENT BASE (FULL DEPTH RECLAMATION)	15" RC PIPE CULVERTS, CLASS III	AGGREGATE BASE COURSE	PORTLAND CEMENT FOR SOIL CE- MENT BASE	INCIDENTAL STONE BASE	SHOULDER CONSTRUCTION	SHOULDER RECONSTRUCTI ON	1.25" MILLING	2.0" MILLING	1 1/4" MILLING	0" TO 1.25" MILLING	0" TO 2" MILLING	INCIDENTAL MILLING	SURFACE COURSE, \$9.5B	SURFACE COURSE, \$9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ASPHALT SURFACE TREATMENT, MATCOAT, #67 STONE	ASPHALT SURFACE TREATMENT, DOUBLE SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	6" DRIVEWAYS	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	PORTABLE LIGHTING	TEMPORARY SILT FENCE	WATTLE	POLYACRYLAMI DE (PAM)	SEEDING & MULCHING																	
2019CPT.10.03.10131.1	Cabarrus	1	US 29 NORTHBOUND	FROM THE BYPASS PROJECT (MP 4.21) TO SR 1414 (ROCKHILL CHURCH RD) (MP 5.70)	1, 2, 3	2	NO	NO	1.49	26.5	180							2.46					1,400	1,100		3,500	210	400					9,715				2		4	0.5																
TOTAL FOR MAP NO. 1									1.49		180						2.46						1,400	1,100		3,500	210	400					9,715				2		4	0.5																
TOTAL FOR PROJ NO. 2019CPT.10.03.10131.1									1.49		180					2.46												1,400	1,100		3,500	210	400					9,715				2		4	0.5											
2019CPT.10.03.10131.2	Cabarrus	2	US 29 SOUTHBOUND	FROM SR 1414 (ROCKHILL CHURCH RD)(MP 8.32) TO BYPASS PROJECT (MP 9.81)	1, 3	2	NO	NO	1.49	26.5	200					5			2.72					600	400		3,600	216	400					9,975				1		1	0.5															
TOTAL FOR MAP NO. 2									1.49		200			5			2.72											600	400		3,600	216	400					9,975				1		1	0.5											
TOTAL FOR PROJ NO. 2019CPT.10.03.10131.2									1.49		200			5			2.72													600	400		3,600	216	400					9,975				1		1	0.5									
2019CPT.10.03.20131.1	Cabarrus	3	SR 2312 - BRITLEY LANE	FROM SR 1168 (ROBINSON CH. RD) (MP 0.0) TO CUL-DE-SAC (MP 0.46)	4	2	NO	NO	0.46	24												4,400		200		650																														
TOTAL FOR MAP NO. 3									0.46																																															
2019CPT.10.03.20131.1	Cabarrus	4	SR 2328 - CULPEPPER COURT	FROM SR 2312 (BRITLEY LN)(MP 0.0) TO CUL-DE-SAC (MP 0.13)	4	2	NO	NO	0.13	24													1,400		70		300																													
TOTAL FOR MAP NO. 4									0.13																																															
2019CPT.10.03.20131.1	Cabarrus	5	SR 2333 - HASTINGS PLACE	FROM SR 2312 (BRITLEY LANE)(MP 0.00) TO CUL-DE-SAC (MP 0.15)	4	2	NO	NO	0.15	24													1,600		70		350																													
TOTAL FOR MAP NO. 5									0.15																																															
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.1									0.74																				1,600		70		350																							
2019CPT.10.03.20131.2	Cabarrus	6	SR 1168 - ROBINSON CHURCH ROAD	FROM THE PAVEMENT JOINT AT SR 1139 (ROCKY RIVER RD) (MP 0.00) TO THE MECKLENBURG COUNTY LINE (MP 2.4)	9	2	NO	NO	2.4	22	250						60																																							
TOTAL FOR MAP NO. 6									2.4		250				60																																									
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.2									2.4		250				60																																									
2019CPT.10.03.20131.3	Cabarrus	7	SR 1211 - WHITE PINE ROAD	FROM SR 1200 (LAREWOOD DR.) (MP 0.0) TO SR 1202 (STARWOOD DR.) (MP 0.17)	6	2	NO	NO	0.17	30																																														
TOTAL FOR MAP NO. 7									0.17																																															
2019CPT.10.03.20131.3	Cabarrus	8	SR 1201 - LANDON STREET	FROM SR 1200 (LAREWOOD DR.) (MP 0.0) TO SR 1202 (STARWOOD DR.) (MP 0.17)	5	2	NO	NO	0.17	24																																														
TOTAL FOR MAP NO. 8									0.17																																															
2019CPT.10.03.20131.3	Cabarrus	9	SR 1204 - ARBOR DALE AVENUE	FROM SR 1200 (LAREWOOD DR.) (MP 0.0) TO DEAD END (MP 0.58)	5	2	NO	NO	0.58	30																																														
TOTAL FOR MAP NO. 9									0.58																																															
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.3									0.92																																															
2019CPT.10.03.20131.4	Cabarrus	10	SR 2326 - BRANCH STREET	FROM SR 1204 (ARBOR DALE AVE.) (MP 0.0) TO SR 3032 (HOLLY TREE DR.) (MP 0.11)	7, 8	2	NO	NO	0.11	30	11																																													
TOTAL FOR MAP NO. 10									0.11		11																																													
2019CPT.10.03.20131.4	Cabarrus	11	SR 3033 - WHITTLINGTON DRIVE	FROM SR 1204 (ARBOR DALE AVE.) (MP 0.16) TO SR 2330 (GREENWOOD CT.) (MP 0.00)	5, 8	2	NO	NO	0.16	19.5	25																																													
TOTAL FOR MAP NO. 11									0.16		25																																													
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.4									0.27		36																																													
2019CPT.10.03.20131.5	Cabarrus	12	SR 1302 - HUDSPETH ROAD	FROM SR 1300 (MOREHEAD RD)(MP 0.0) TO US 29 (MP 1.21)	10	2	NO	NO	1.21	20							64	1,950																																						
TOTAL FOR MAP NO. 12									1.21						64	1,950																																								
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.5									1.21						64	1,950																																								
2019CPT.10.03.20132.1	Cabarrus	12	SR 1302 - HUDSPETH ROAD	FROM SR 1300 (MOREHEAD RD)(MP 0.0) TO US 29 (MO 1.21)	10	2	NO	NO	1.21	20							520																																							
TOTAL FOR MAP NO. 12									1.21						520																																									
TOTAL FOR PROJ NO. 2019CPT.10.03.20132.1									1.21						520																																									
GRAND TOTAL									9.73		666			15,650		64	1,950		520	165	2.42	9.54	3,100	15,050	1,500	7,400	2,000	3,940	2,475	12,325	889	2,255	56,250	15,650	28,295	254	18	5	1	180	385	2	3													

NOTE: The Contractor shall not work or park equipment outside of the Right of Way in Historic Areas.

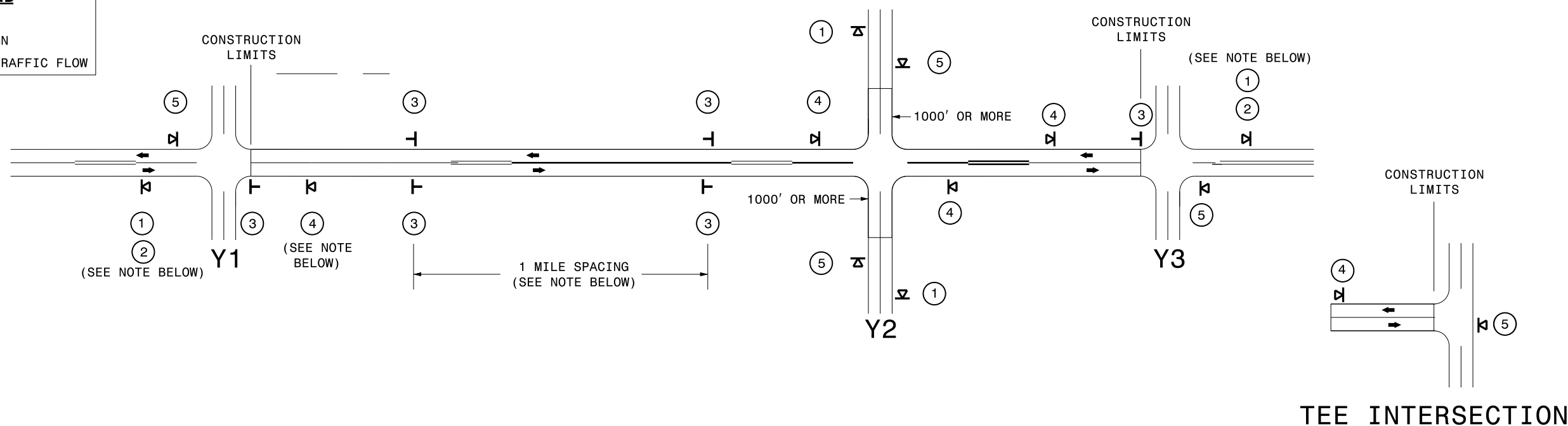
PROJECT NO.	SHEET NO.	TOTAL NO.
2019CPT.10.03.10131.1, Etc	12	17

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4510000000-N	4695000000-E	4710000000-E	4725000000-E				4770000000-E	4810000000-E		4835000000-E	4891000000-E		4905000000-N		
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	8" X 90 M YELLOW THERMO	24" X 120 M WHITE THERMO	THERMO LT ARROW 90 M	THERMO STR ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR & RT ARROW 90 M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE II (4")	4" WHITE PAINT	4" YELLOW PAINT	24" WHITE PAINT	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS) (HRM)	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS) (HRM)	SNOW PLOWABLE MARKERS		
									MI	FT	SF	LS	HR	LF	LF	EA	EA	EA	EA	LF	LF	LF	LF	LF	EA		
2019CPT.10.03.10131.1	Cabarrus	1	US 29 NORTHBOUND	FROM THE BYPASS PROJECT (MP 4.21) TO SR 1414 (ROCKHILL CHURCH RD) (MP 5.70)	1, 2, 3	2		1.49	26.5	126.0	0.18	120	100	200	5	13	10	3		4,000				12,200	8,000	270	
TOTAL FOR MAP NO. 1									1.49		126.0	0.18	120	100	200	5	13	10	3		4,000				12,200	8,000	270
TOTAL FOR PROJ NO. 2019CPT.10.03.10131.1									1.49		126.0	0.18	120	100	200	5	13	10	3		4,000				12,200	8,000	270
															31				4,000								
2019CPT.10.03.10131.2	Cabarrus	2	US 29 SOUTHBOUND	FROM SR 1414 (ROCKHILL CHURCH RD)(MP 8.32) TO BYPASS PROJECT (MP 9.81)	1, 3	2		1.49	26.5	126.0	0.18	120	60	200	17	9	2			2,000				11,300	8,000	300	
TOTAL FOR MAP NO. 2									1.49		126.0	0.18	120	60	200	17	9	2			2,000				11,300	8,000	300
TOTAL FOR PROJ NO. 2019CPT.10.03.10131.2									1.49		126.0	0.18	120	60	200	17	9	2			2,000				11,300	8,000	300
															28				2,000								
2019CPT.10.03.20131.1	Cabarrus	3	SR 2312 - BRITLEY LANE	FROM SR 1168 (ROBINSON CH. RD) (MP 0.0) TO CUL-DE-SAC (MP 0.46)	4	2		0.46	24		0.06																
TOTAL FOR MAP NO. 3									0.46			0.06															
2019CPT.10.03.20131.1	Cabarrus	4	SR 2328 - CULPEPPER COURT	FROM SR 2312 (BRITLEY LN)(MP 0.0) TO CUL-DE-SAC (MP 0.13)	4	2		0.13	24		0.02																
TOTAL FOR MAP NO. 4									0.13			0.02															
2019CPT.10.03.20131.1	Cabarrus	5	SR 2333 - HASTINGS PLACE	FROM SR 2312 (BRITLEY LANE)(MP 0.00) TO CUL-DE-SAC (MP 0.15)	4	2		0.15	24		0.02																
TOTAL FOR MAP NO. 5									0.15			0.02															
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.1									0.74			0.10															
2019CPT.10.03.20131.2	Cabarrus	6	SR 1168 - ROBINSON CHURCH ROAD	FROM THE PAVEMENT JOINT AT SR 1139 (ROCKY RIVER RD) (MP 0.00) TO THE MECKLENBURG COUNTY LINE (MP 2.4)	9	2		2.4	22	270.0	0.25		90		1					650				27,125	25,500		
TOTAL FOR MAP NO. 6									2.4		270.0	0.25	90		1				650				27,125	25,500			
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.2									2.4		270.0	0.25	90		1				650				27,125	25,500			
															1												
2019CPT.10.03.20131.3	Cabarrus	7	SR 1211 - WHITE PINE ROAD	FROM SR 1200 (LAREWOOD DR.) (MP 0.0) TO SR 1202 (STARWOOD DR.) (MP 0.17)	6	2		0.17	30		0.02																
TOTAL FOR MAP NO. 7									0.17			0.02															
2019CPT.10.03.20131.3	Cabarrus	8	SR 1201 - LONDON STREET	FROM SR 1200 (LAREWOOD DR.) (MP 0.0) TO SR 1202 (STARWOOD DR.) (MP 0.17)	5	2		0.17	24		0.02																
TOTAL FOR MAP NO. 8									0.17			0.02															
2019CPT.10.03.20131.3	Cabarrus	9	SR 1204 - ARBOR DALE AVENUE	FROM SR 1200 (LAREWOOD DR.) (MP 0.0) TO DEAD END (MP 0.58)	5	2		0.58	30		0.07																
TOTAL FOR MAP NO. 9									0.58			0.07															
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.3									0.92			0.11															
2019CPT.10.03.20131.4	Cabarrus	10	SR 2326 - BRANCH STREET	FROM SR 1204 (ARBOR DALE AVE.) (MP 0.0) TO SR 3032 (HOLLY TREE DR.) (MP 0.11)	7, 8	2		0.11	30		0.01																
TOTAL FOR MAP NO. 10									0.11			0.01															
2019CPT.10.03.20131.4	Cabarrus	11	SR 3033 - WHITTLINGTON DRIVE	FROM SR 1204 (ARBOR DALE AVE.) (MP 0.16) TO SR 2330 (GREENWOOD CT.) (MP 0.00)	5, 8	2		0.16	19.5		0.02																
TOTAL FOR MAP NO. 11									0.16			0.02															
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.4									0.27			0.03															
2019CPT.10.03.20131.5	Cabarrus	12	SR 1302 - HUDSPETH ROAD	FROM SR 1300 (MOREHEAD RD) (MP 0.0) TO US 29 (MP 1.21)	10	2		1.21	20	140.0	0.12			42							13,000	12,400	42	12,400	13,000		
TOTAL FOR MAP NO. 12									1.21		140	0.12			42							13,000	12,400	42	12,400	13,000	
TOTAL FOR PROJ NO. 2019CPT.10.03.20131.5									1.21		140	0.12			42							13,000	12,400	42	12,400	13,000	
															25,400												
2019CPT.10.03.20132.1	Cabarrus	12	SR 1302 - HUDSPETH ROAD	FROM SR 1300 (MOREHEAD RD) (MP 0.0) TO US 29 (MO 1.21)	10	2		1.21	20		0.03																
TOTAL FOR MAP NO. 12									1.21			0															
TOTAL FOR PROJ NO. 2019CPT.10.03.20132.1									1.21			0															
GRAND TOTAL									9.73		662	1	240	250	442	23	22	12	3	650	19,000	12,400	42	63,025	54,500	570	
															60				31,400								

SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND	
	PORTABLE SIGN
	STATIONARY SIGN
	DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	 <p>1 - 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 #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.</p>	<p>STATIONARY SIGNING NOT REQUIRED 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, PORTABLE ADVANCE WARNING 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" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	 <p>3 - ALTERNATE THE FOLLOWING TWO SIGNS:</p> <ul style="list-style-type: none"> - STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT". - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. 	
	 <p>4 - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <ul style="list-style-type: none"> - 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 PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	
	<p>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.</p>	

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.



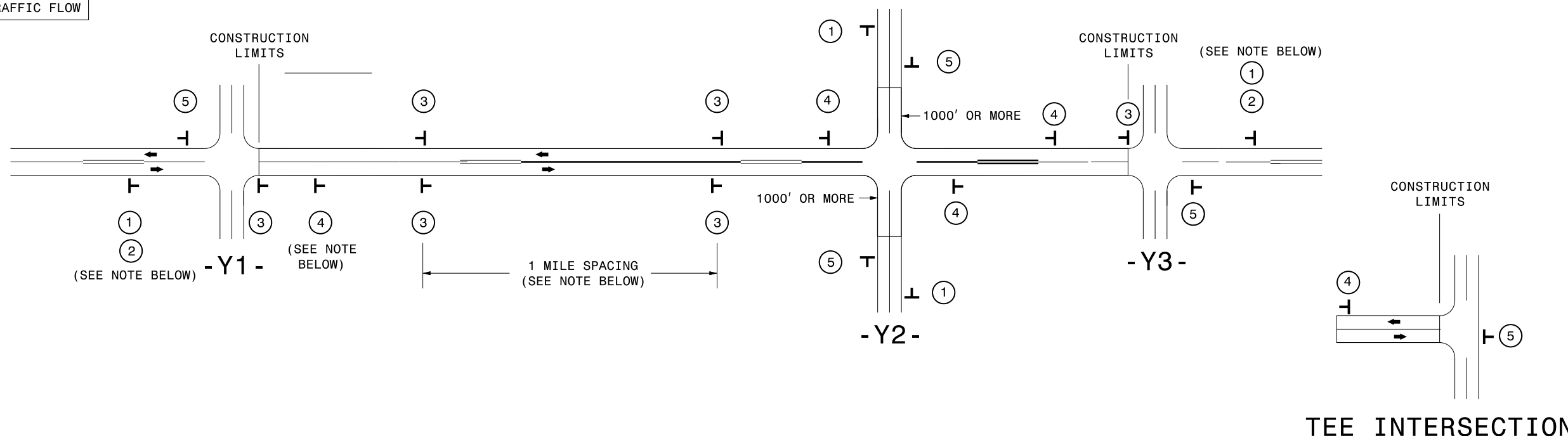
ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

SIGNING FOR RESURFACING PROJECTS

LEGEND

└ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	①	 <small>W20-1 48" X 48"</small>	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, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p>
	②	 <small>W7-3aP 24" X 18"</small>	#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)	
	③	 <small>SP 13107 48" X 48"</small>	<ul style="list-style-type: none"> - 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. 	
	④	 <small>SP 13106 48" X 48"</small>	<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	 <small>G20-2 A 48" X 24"</small>	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

MAPS LESS THAN 2 MILES

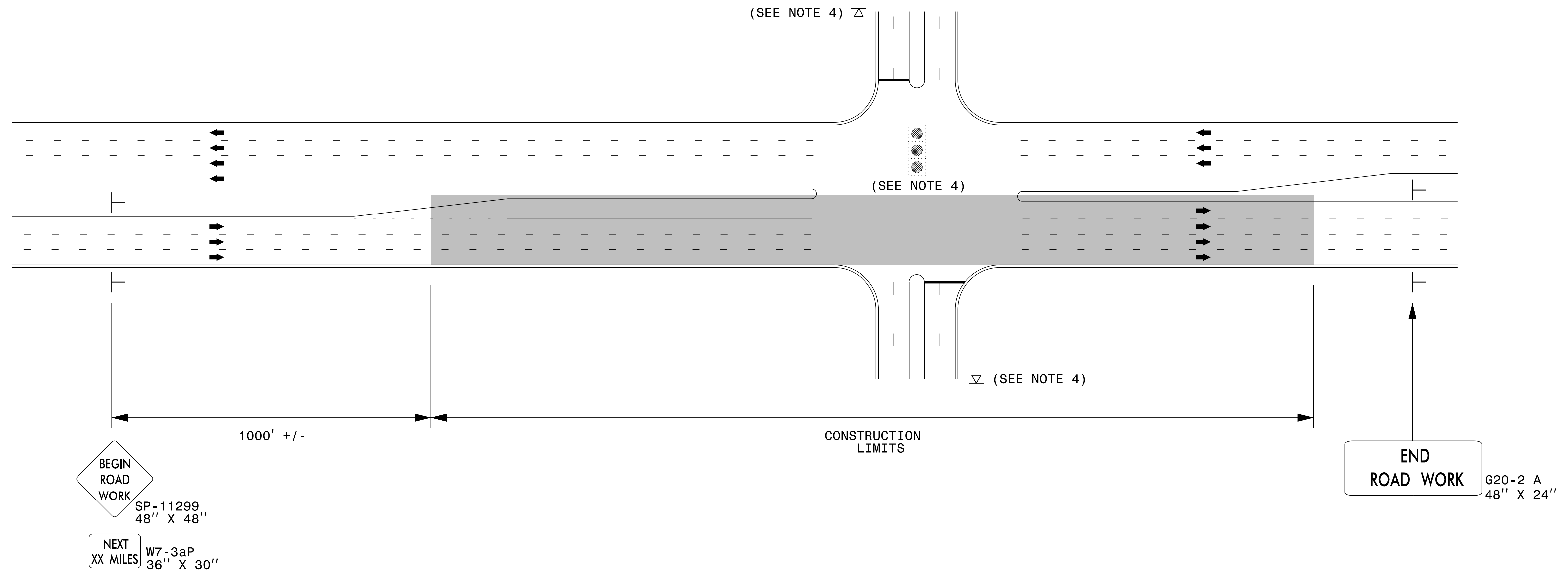
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



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

08-MAR-2018 15:55 S:\Storage\DISTRICT\2018-2019 District 01\Contract Resurfacing\2018-2019 Cabarrus Resurfacing\2018-2019 Cabarrus Resurf. Typical.dgn

URBAN / SUBURBAN WORKZONES

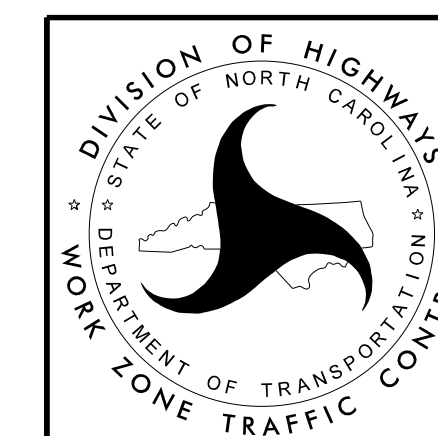


NOTES:

- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) 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.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- ┆ STATIONARY SIGN
- ➔ DIRECTION OF TRAFFIC FLOW

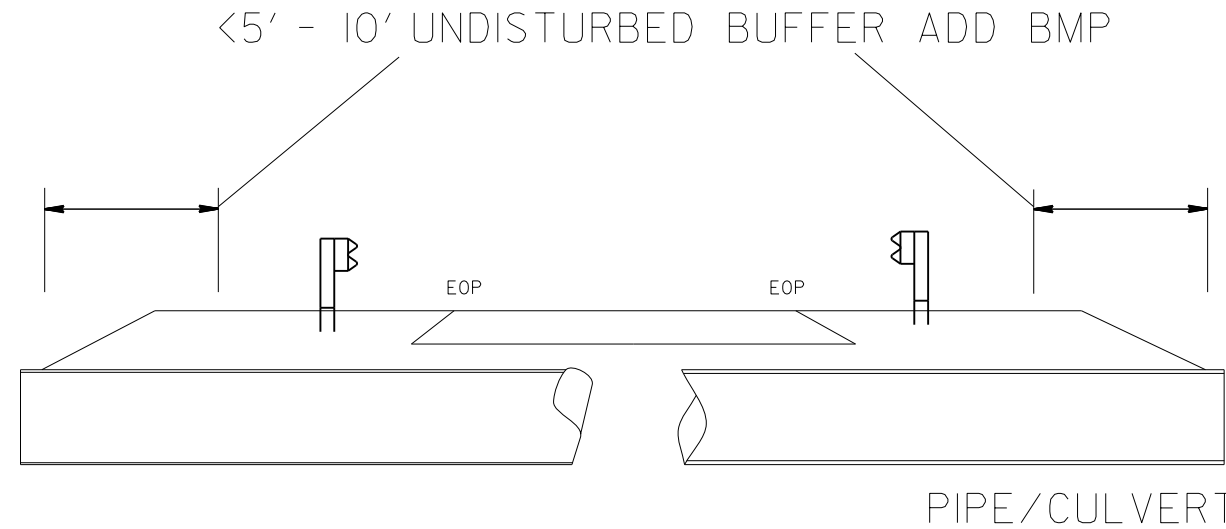


**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**

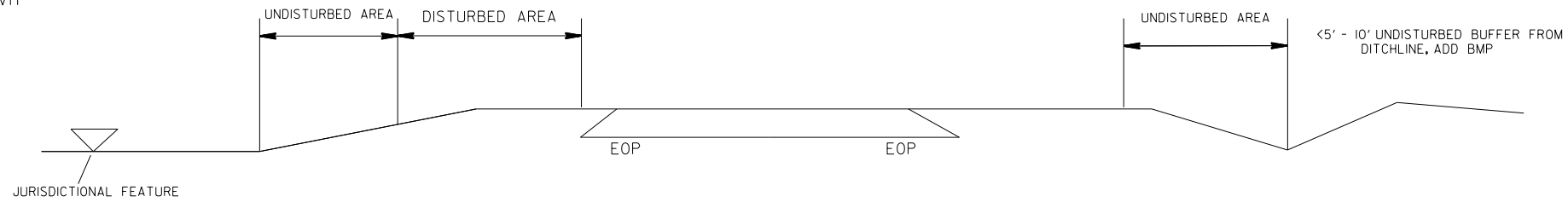
NOTES: LESS THAN 5' - 10' UNDISTURBED BUFFER FROM ROW, DITCHLINE, WATER FEATURE, OR DRAINAGE INLET, ADD BMP.

BMP OPTIONS: WATTLE OR SILT FENCE

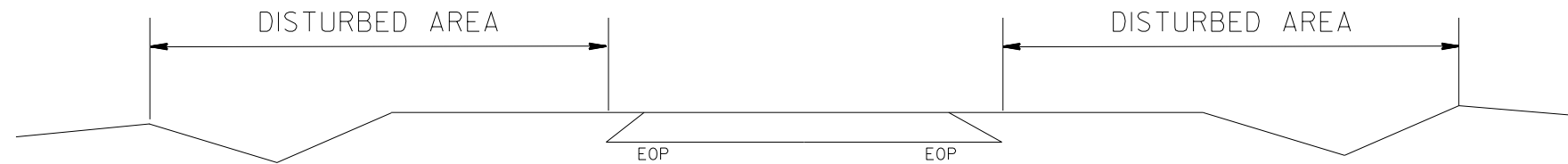
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2019CPT.10.03.10131.1 ETC.	16	
F.A. PROJECT NO.			



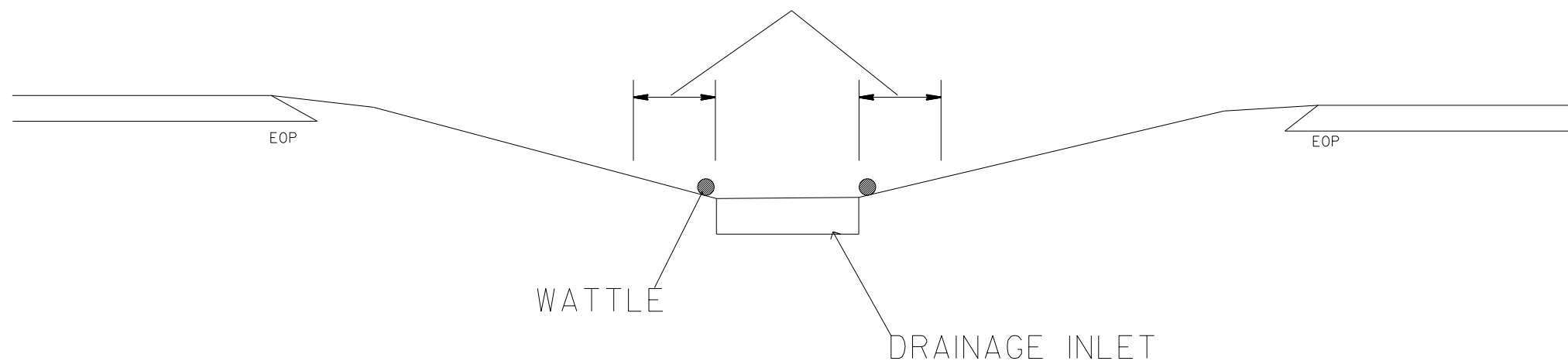
<5' - 10' UNDISTURBED BUFFER FROM JURISDICTIONAL FEATURE ADD BMP



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



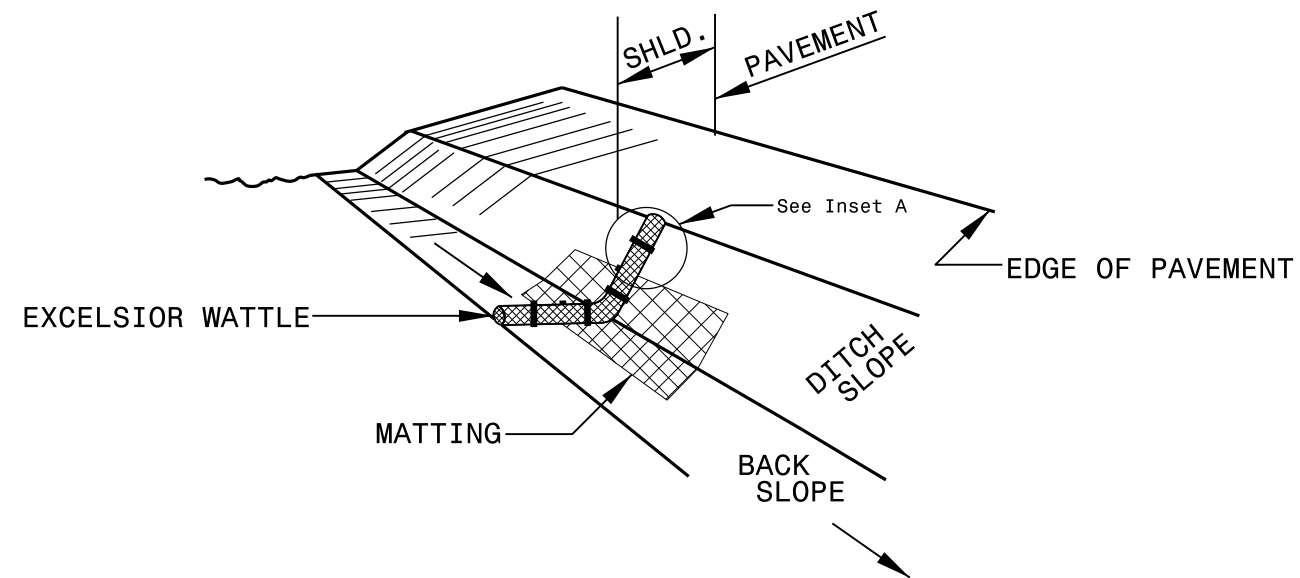
<5' - 10' UNDISTURBED BUFFER FROM INLET, ADD WATTLE



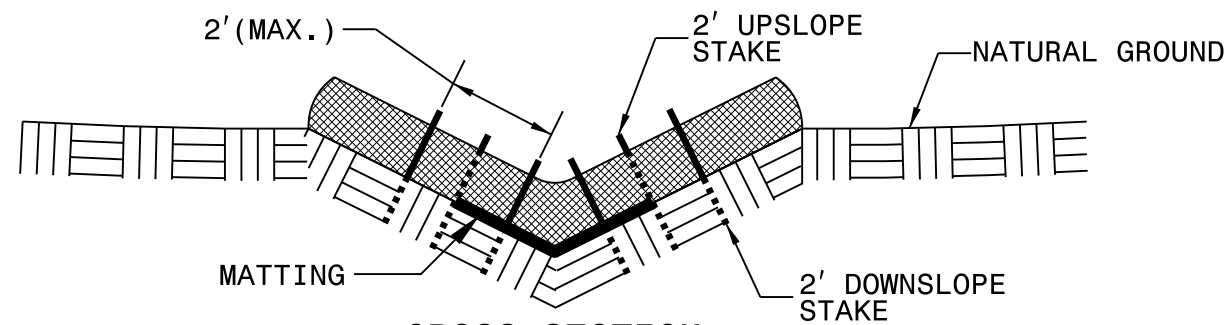
EROSION CONTROL DETAIL

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

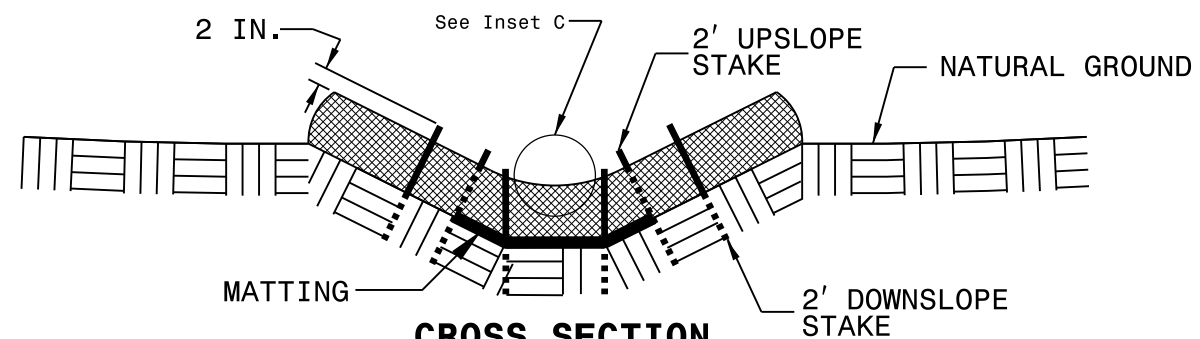
WATTLE WITH POLYACRYLAMIDE DETAIL



ISOMETRIC VIEW



**CROSS SECTION
VEE DITCH**



**CROSS SECTION
TRAPEZOIDAL DITCH**

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

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

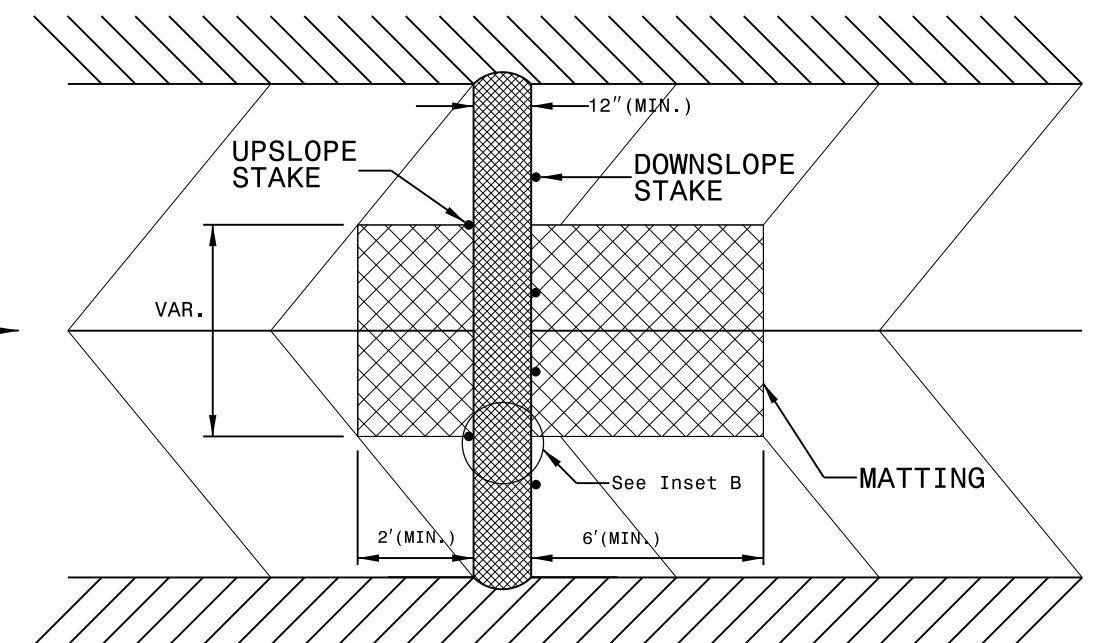
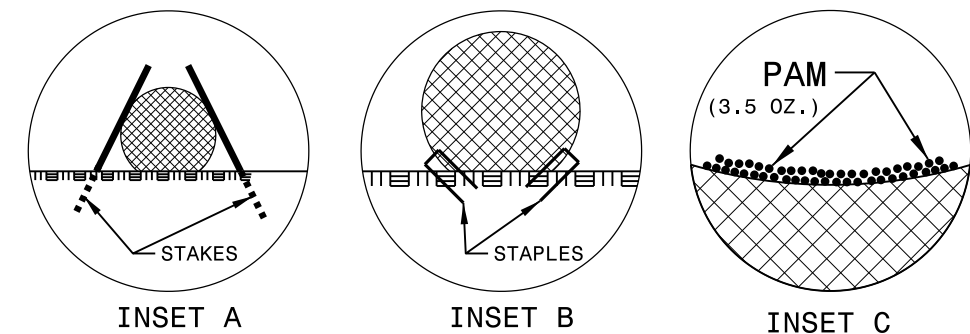
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

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

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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



TOP VIEW