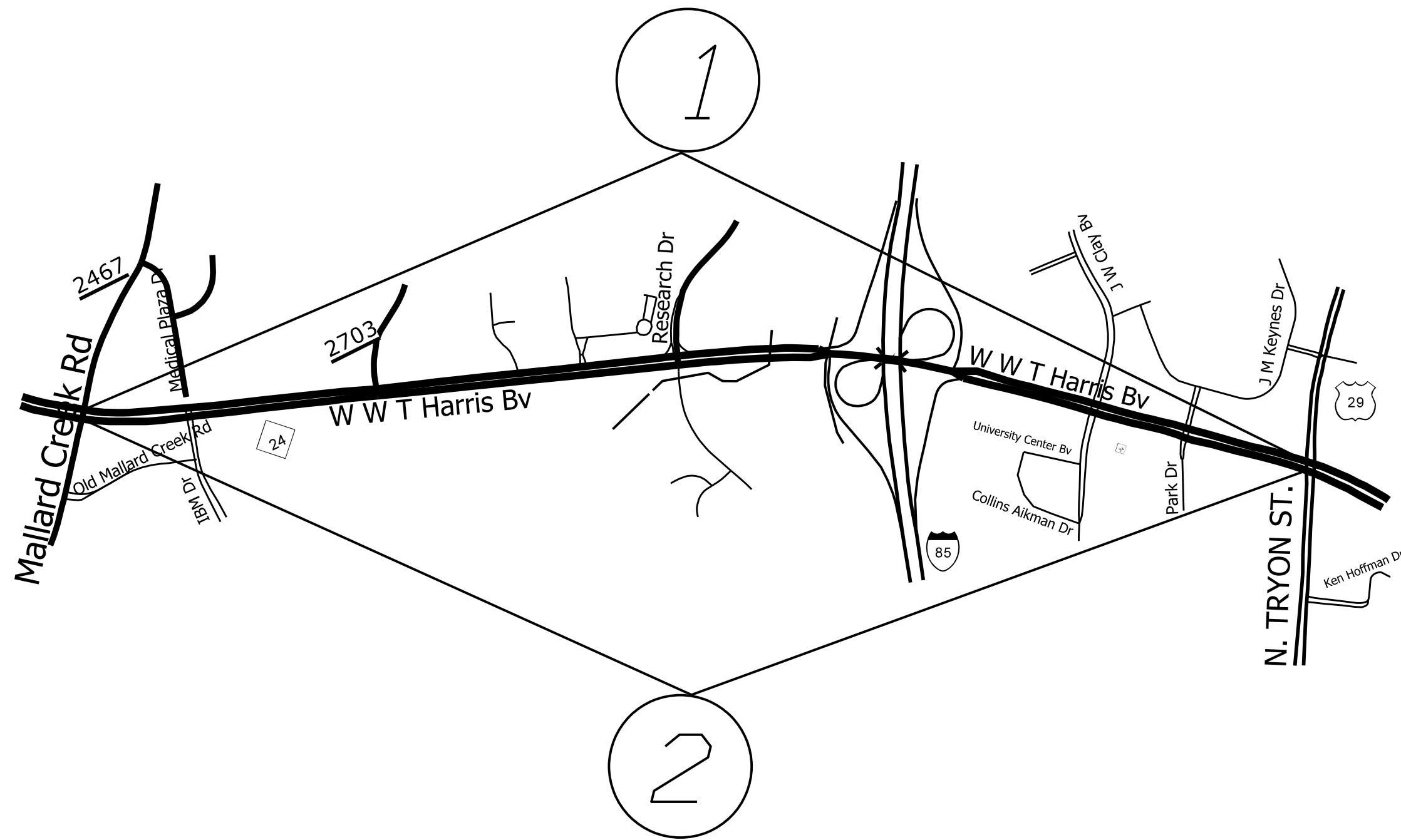


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shall not be considered a certified document.**

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		1	22
WBS NO.	2017CPT.10.09.10601.1		



MAP

DESCRIPTION

# 1 NC 24 (W.T. HARRIS BLVD, WB)

FROM US 29 N. TRYON ST. TO MALLARD CREEK RD.

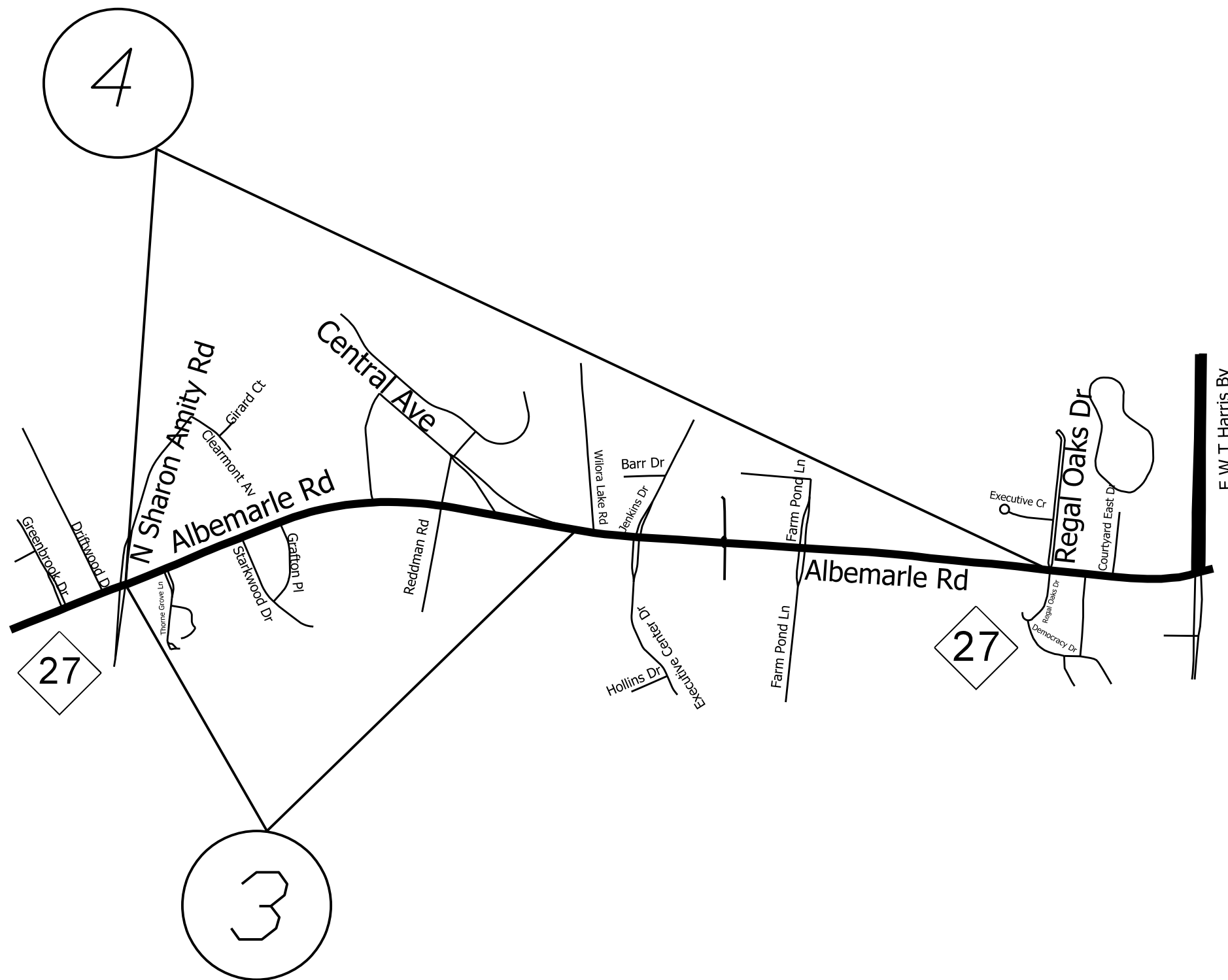
# 2 NC 24 (W.T. HARRIS BLVD, EB)

FROM MALLARD CREEK RD TO US 29 N. TRYON ST.

2017/2018 MECKLENBURG COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		2	22
WBS NO.	2017CPT.10.09.10601.2		



MAP

DESCRIPTION

# 3 NC 27 (ALBEMARLE RD, EB)

FROM SHARON AMITY RD TO CENTRAL AVE.

# 4 NC 27 (ALBEMARLE RD, WB)

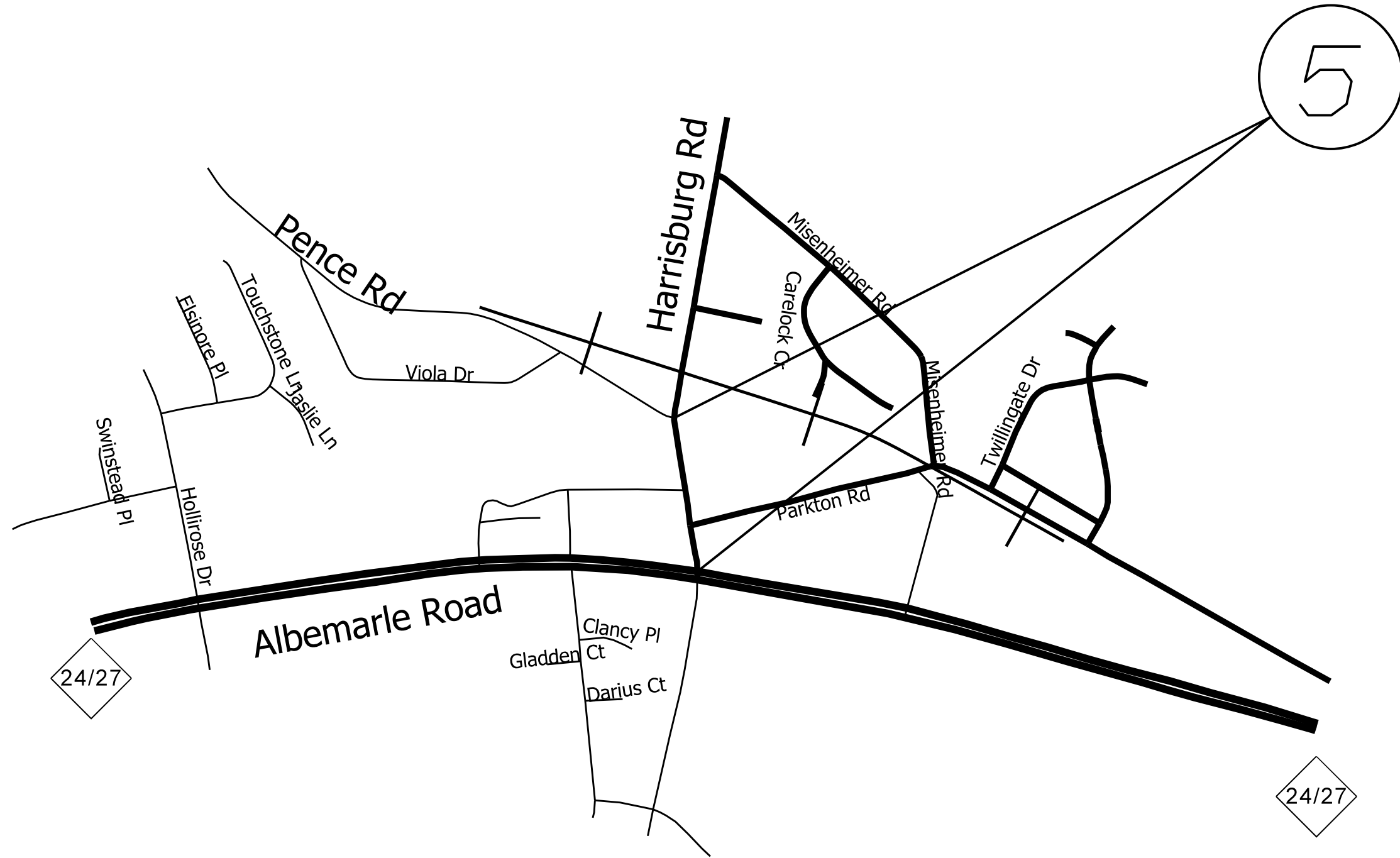
FROM REGAL OAKS DR. TO SHARON AMITY RD



2017/2018 MECKLENBURG COUNTY  
RESURFACING

SCALE	-NA-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		3	22
WBS NO.	2017CPT.10.09.20601.1		



MAP

#5 SR-2805 (HARRISBURG ROAD)

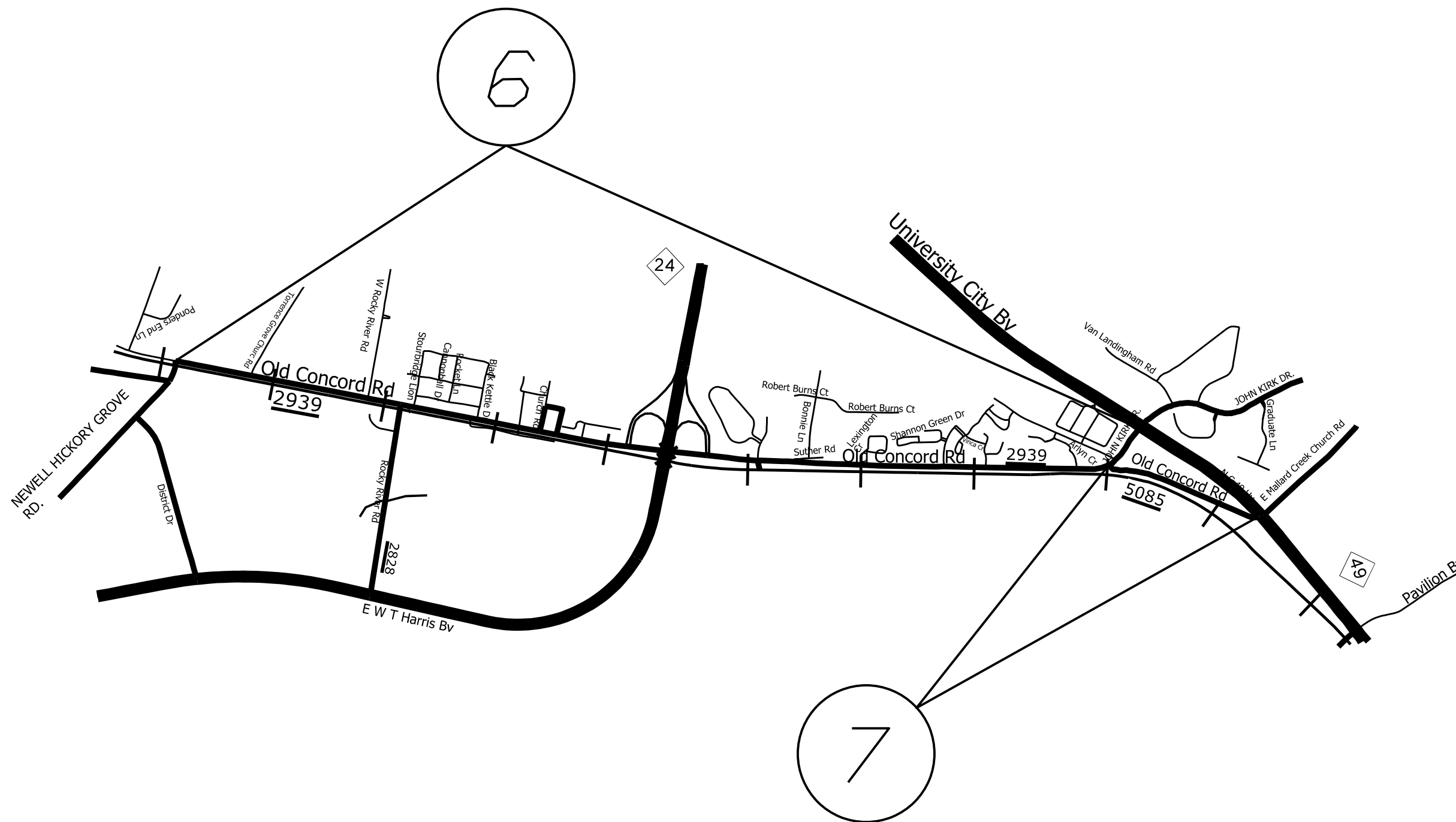
DESCRIPTION

FROM PENCE ROAD TO ALBEMARLE ROAD

2017/2018 MECKLENBURG COUNTY  
RESURFACING

SCALE	-NA-		REVISIONS	
DATE	4/17			
DWG. BY	JE			
DESIGN BY	JE			
APPROVED	TB			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		4	22
WBS NO.	2017CPT.10.09.20601.2		



MAP

#6 SR 2939 (OLD CONCORD RD./JOHN KIRK)

#7 SR 5085 (OLD CONCORD RD.)

DESCRIPTION

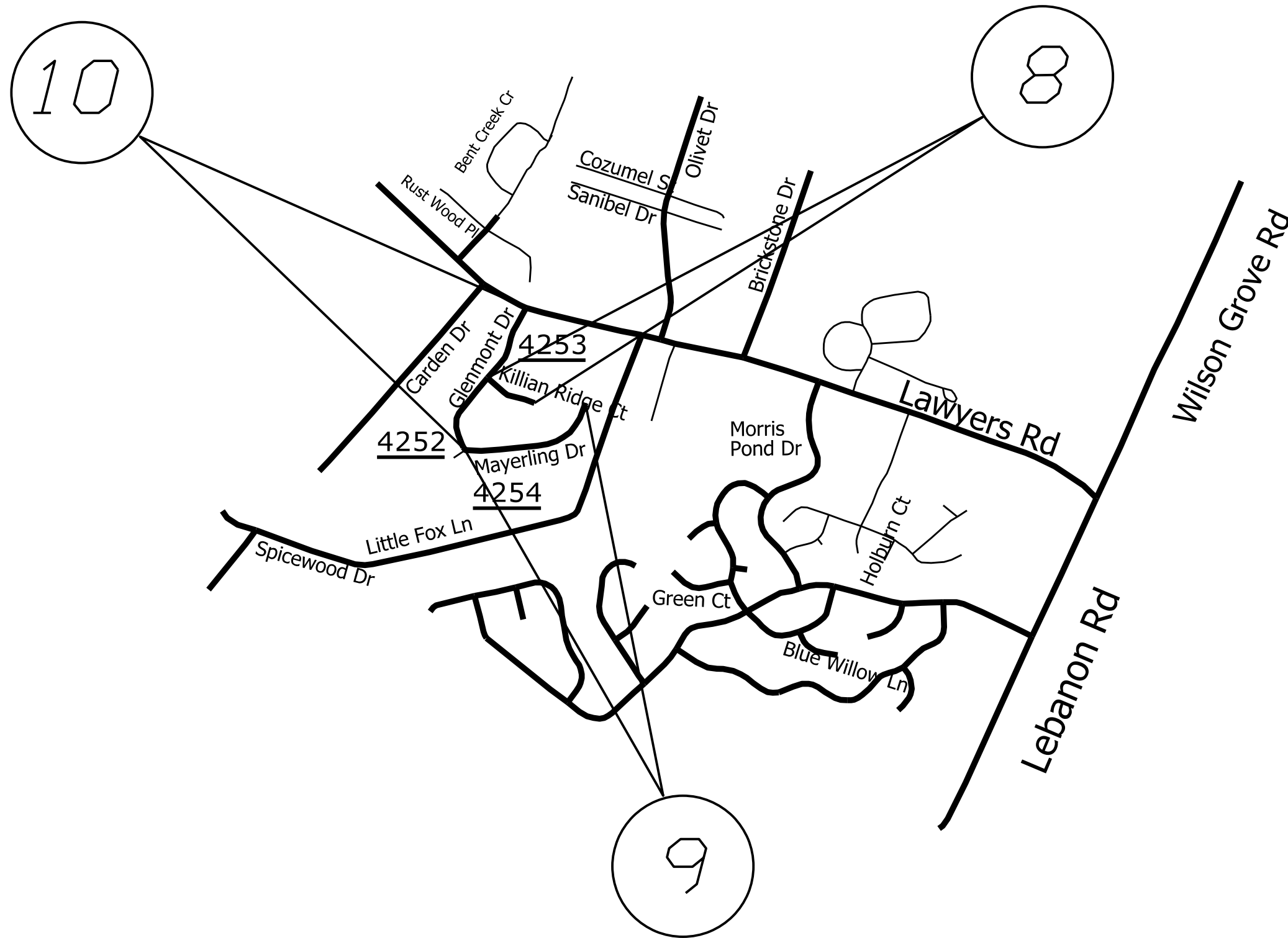
FROM NEWELL HICKORY GROVE RD. TO UNIVERCITY CITY BLVD.

FROM JOHN KIRK DR. TO END OF MAINTENANCE

2017/2018 MECKLENBURG COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		5	22
WBS NO.	2017CPT.10.09.20601.3		



MAP

DESCRIPTION

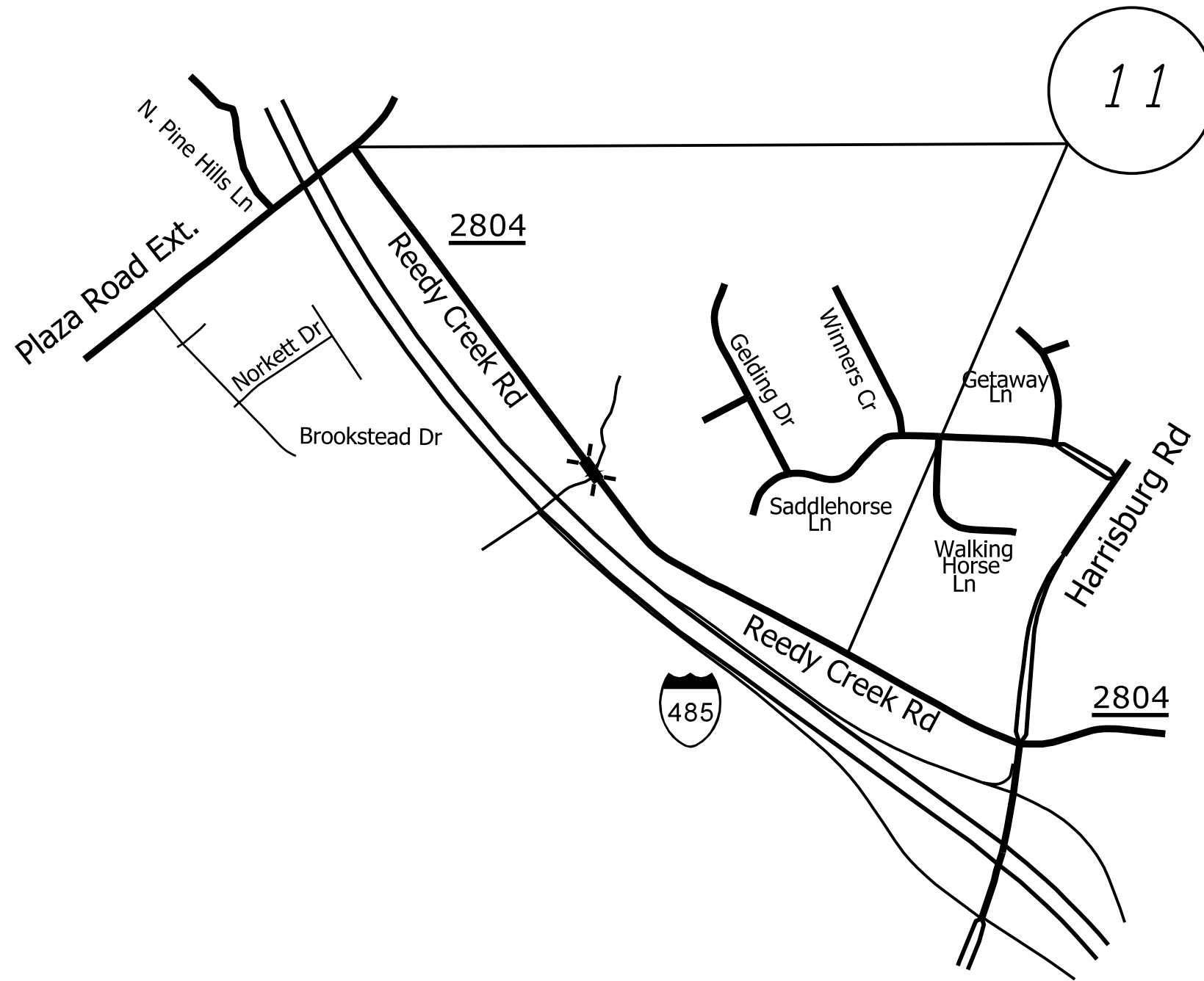
- # 8 SR-4253 (KILLIAN RIDGE CT.)
- # 9 SR 4254 (MAYERLING DR.)
- # 10 SR 4252 (GLENMONT DR.)

- FROM GLENMONT DR. TO CUL-DE-SAC
- FROM GLENMONT DR. TO CUL-DE-SAC
- FROM LAWYERS RD. TO MAYERLING DR.

2017/2018 MECKLENBURG COUNTY  
RESURFACING

SCALE	-1A-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		6	22
WBS NO.	2017CPT.10.09.20601.4		



MAP

# 11 SR 2804 (REEDY CREEK RD)

DESCRIPTION

FROM PLAZA ROAD EXTENSION TO PAVEMENT JOINT JUST WEST OF HARRISBURG RD.

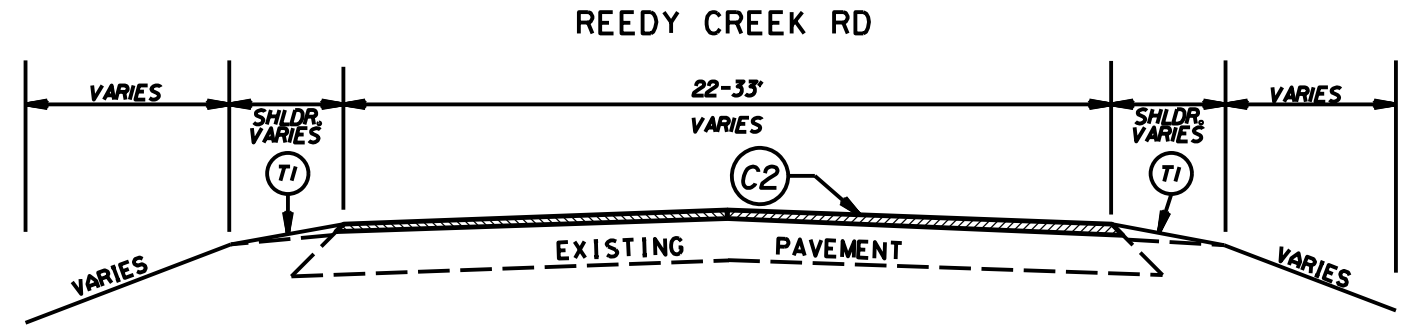


2017/2018 MECKLENBURG COUNTY  
RESURFACING

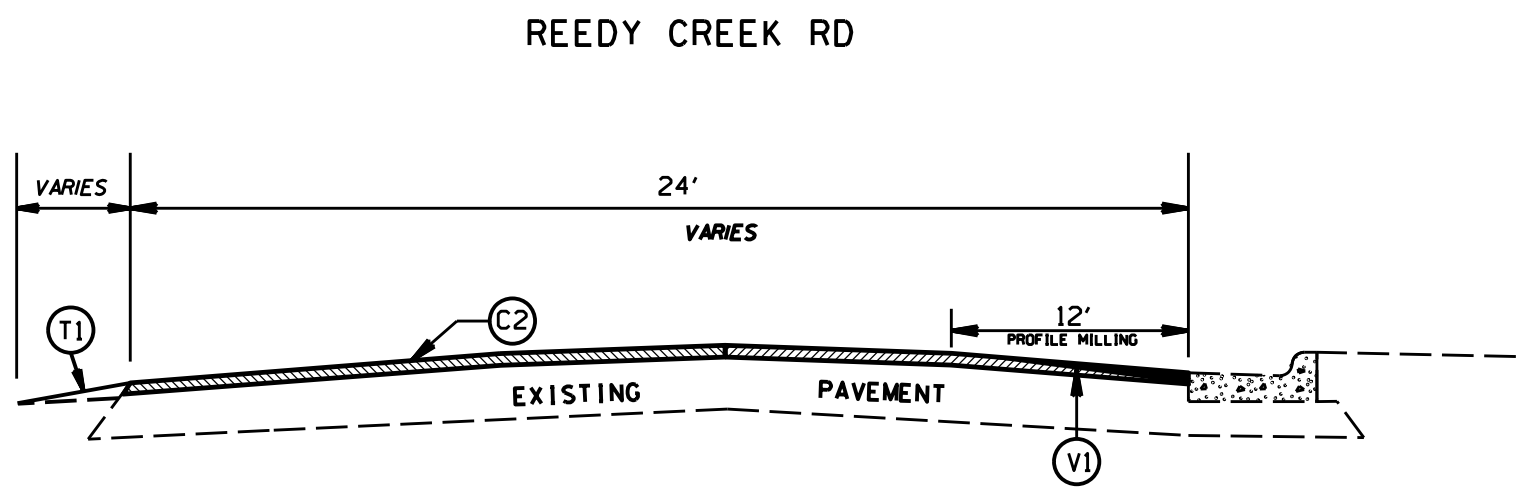
SCALE	-NA-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		7	22
WBS NO.		2017CPT.J0.09.2060L4	

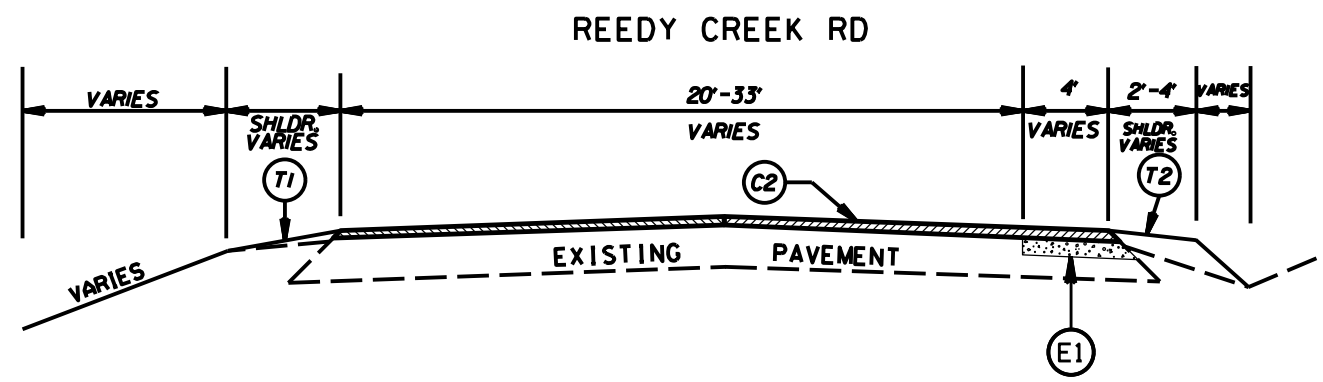
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C6	PROP. ASPHALT SURFACE TREATMENT, MATCOAT #67, AT AN AVERAGE RATE OF 38 LBS. PER SQ. YD. (STONE) AND 0.40 GALLONS PER SQ. YD. (LIQUID ASPHALT)
D2	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	PROFILE MILLING 0" TO 1.5"
V2	PROFILE MILLING 0" TO 2.0"
V3	MILLING 1.5" DEPTH
V4	MILLING 2.0" DEPTH
V5	MILLING 4" DEPTH



TYPICAL SECTION NO. 1



TYPICAL SECTION NO. 2



TYPICAL SECTION NO. 3  
WIDEN FROM STA. 13+50 TO 19+00

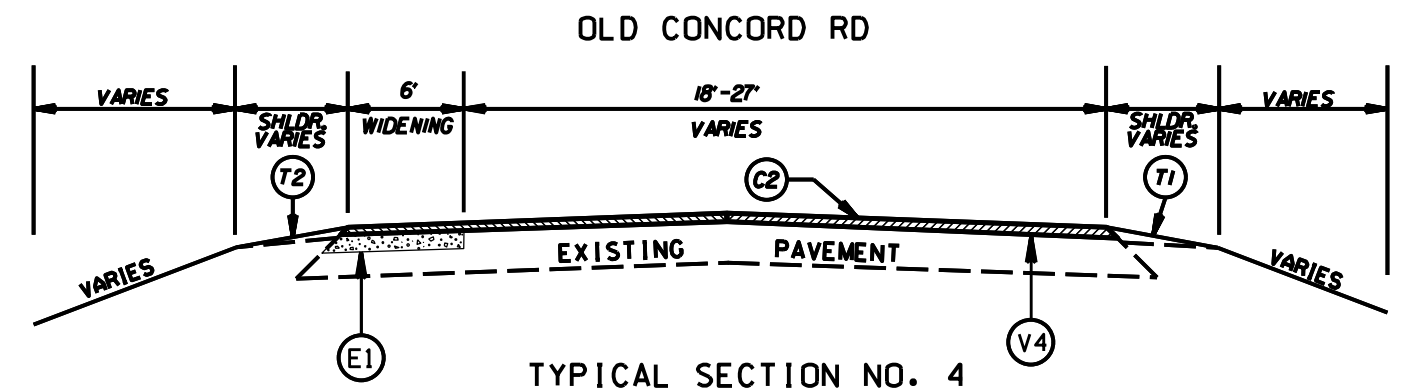
2017/2018 MECKLENBURG COUNTY  
RESURFACING

SCALE	-NA-		REVISIONS
DATE	3/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

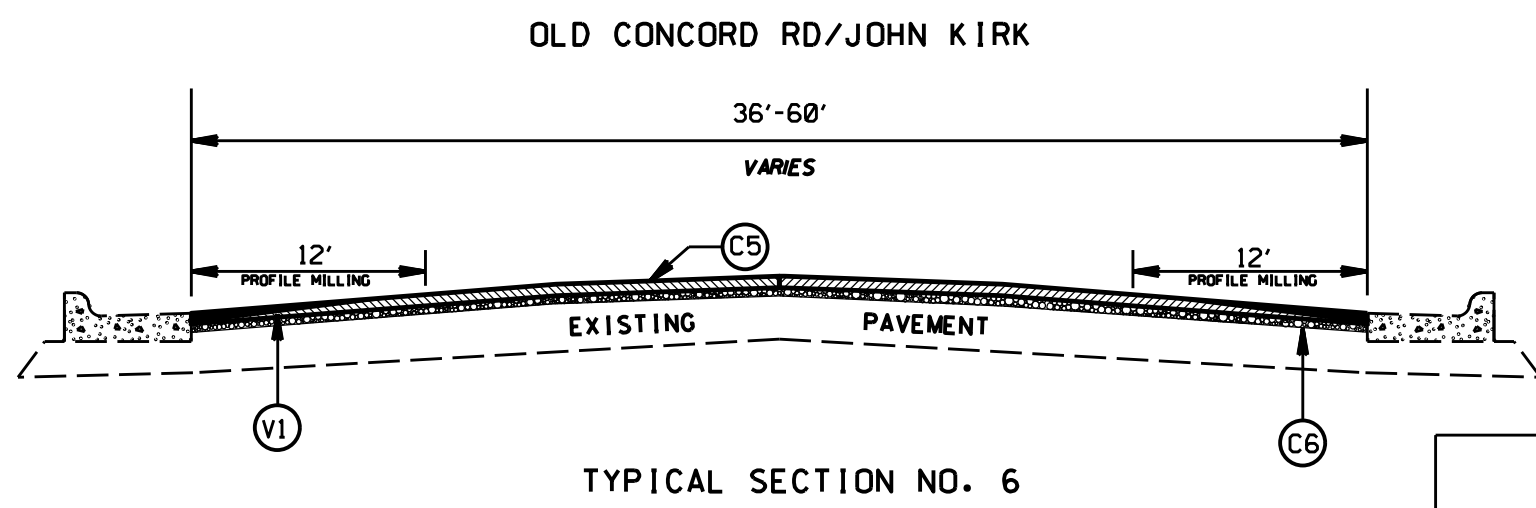
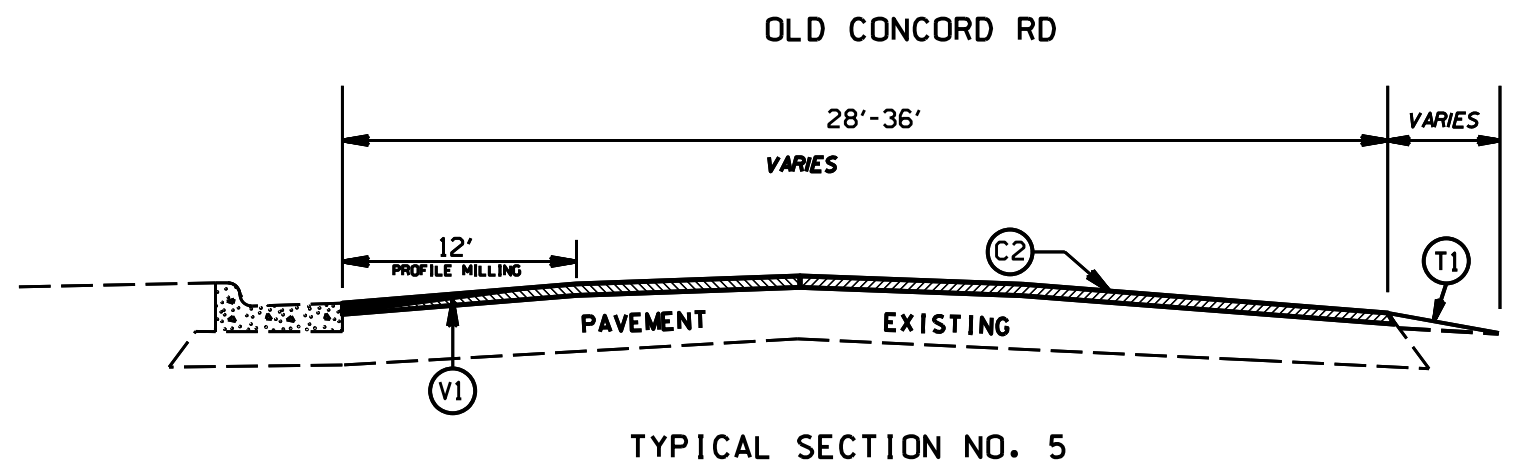


STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		8	22
WBS NO.	2017CPTJ0.0920601.2		


PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C6	PROP. ASPHALT SURFACE TREATMENT, MATCOAT #67, AT AN AVERAGE RATE OF 38 LBS. PER SQ. YD. (STONE) AND 0.40 GALLONS PER SQ. YD. (LIQUID ASPHALT)
D2	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	PROFILE MILLING 0" TO 1.5"
V2	PROFILE MILLING 0" TO 2.0"
V3	MILLING 1.5" DEPTH
V4	MILLING 2.0" DEPTH
V5	MILLING 4" DEPTH



2" FULL DEPTH MILLING WITH 5.5" B25.0C W/WIDENING FROM STA. 4+00 TO 6+50



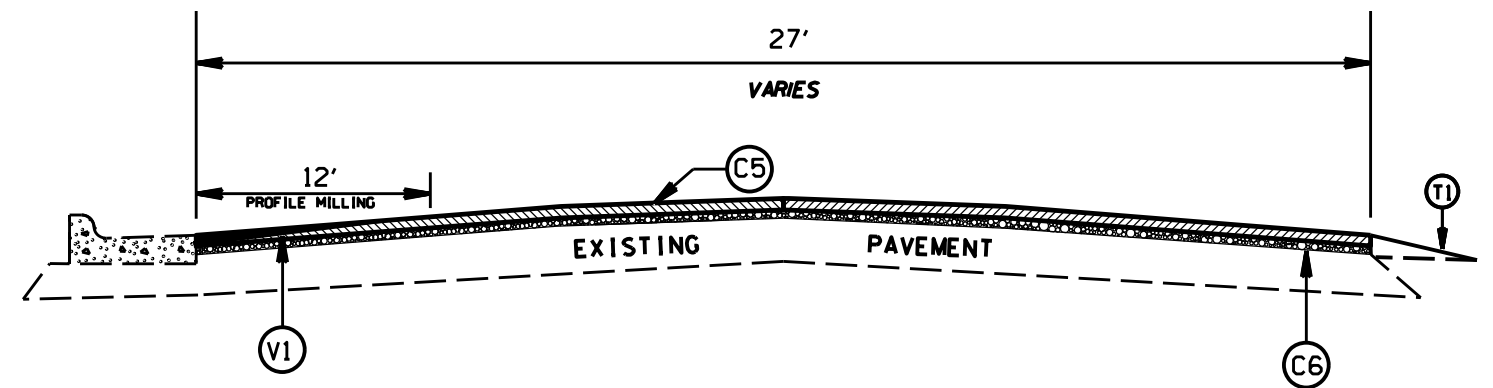
2017/2018 MECKLENBURG COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	JE		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		9	22
WBS NO. 2017CPT.J0.09.2060J, ETC.			

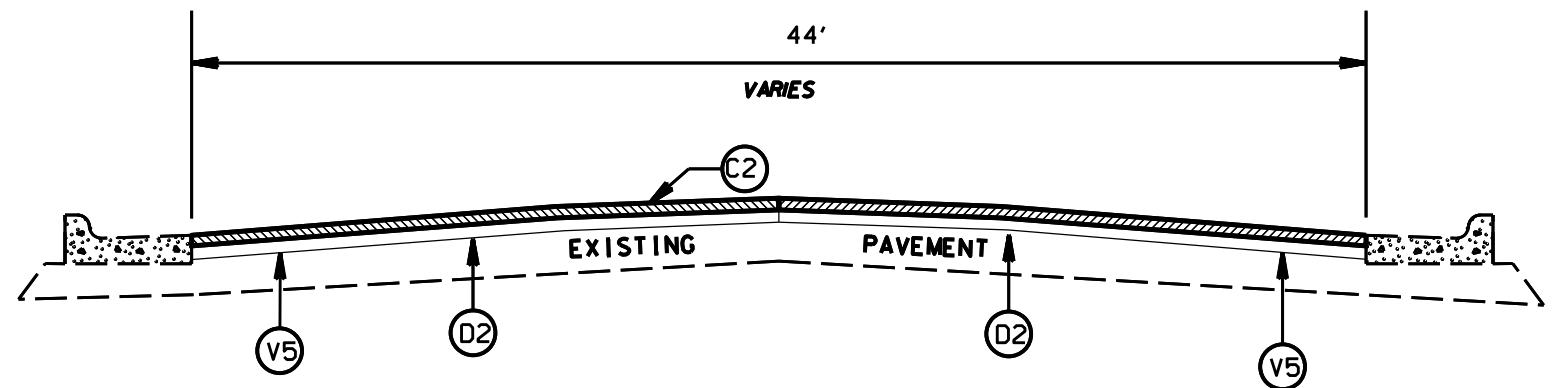
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C6	PROP. ASPHALT SURFACE TREATMENT, MATCOAT #67, AT AN AVERAGE RATE OF 38 LBS. PER SQ. YD. (STONE) AND 0.40 GALLONS PER SQ. YD. (LIQUID ASPHALT)
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E1	PROP. APPROX. 5.5" ASPHALT BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	PROFILE MILLING 0" TO 1.5"
V2	PROFILE MILLING 0" TO 2.0"
V3	MILLING 1.5" DEPTH
V4	MILLING 2.0" DEPTH
V5	MILLING 4" DEPTH

OLD CONCORD RD./JOHN KIRK



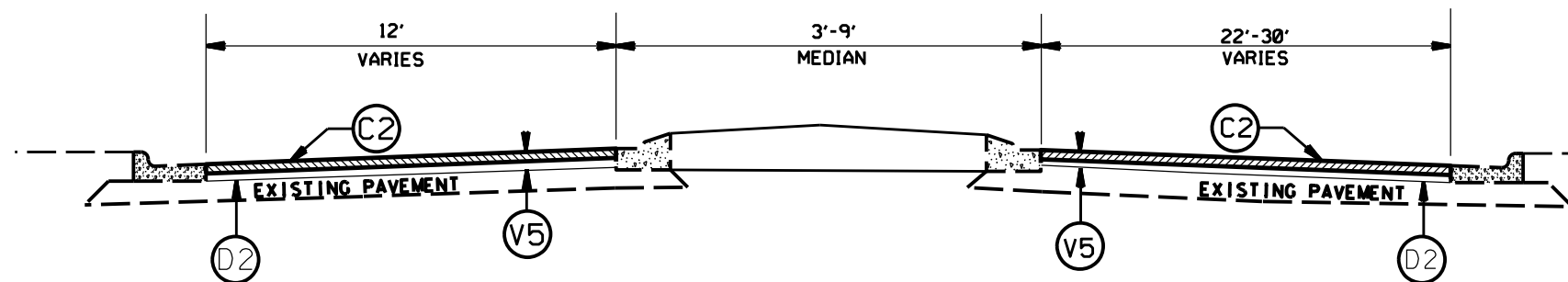
TYPICAL SECTION NO. 7

HARRISBURG RD



TYPICAL SECTION NO. 8

HARRISBURG RD.



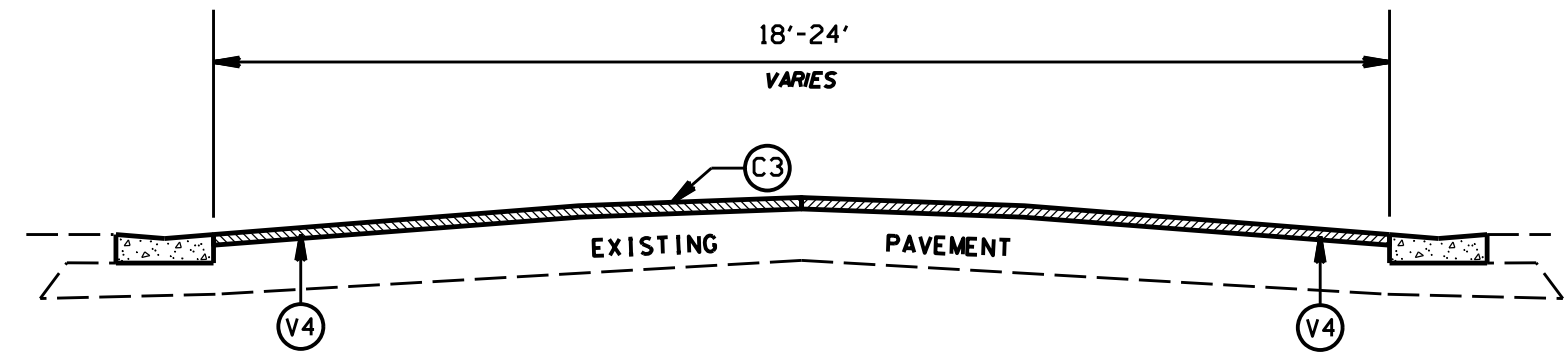
TYPICAL SECTION NO. 9

2017/2018 MECKLENBURG COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

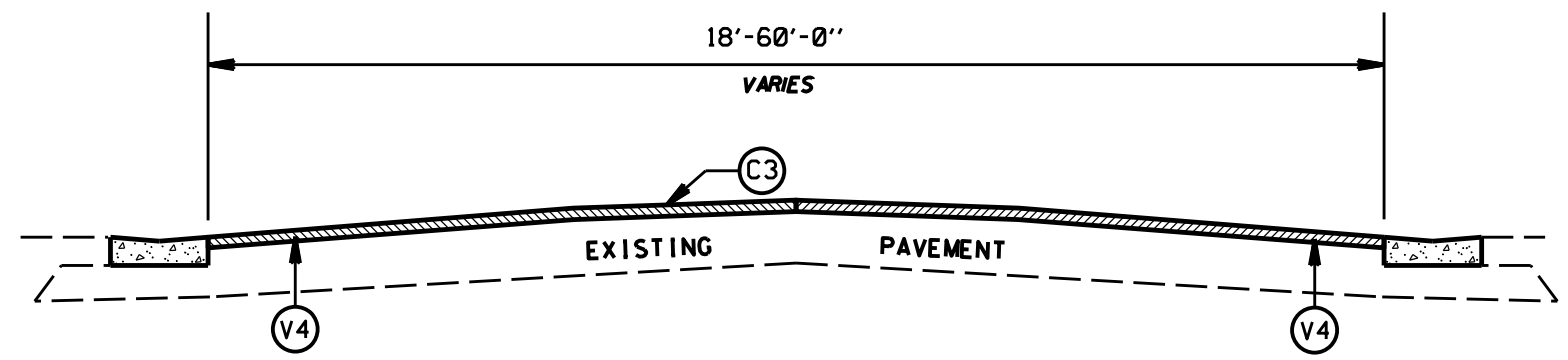
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		10	22
WBS NO.	2017CPTJ0.09.20601.3		

KILLIAN RIDGE CT.  
MAYERLING DR.  
GLENMONT DR.



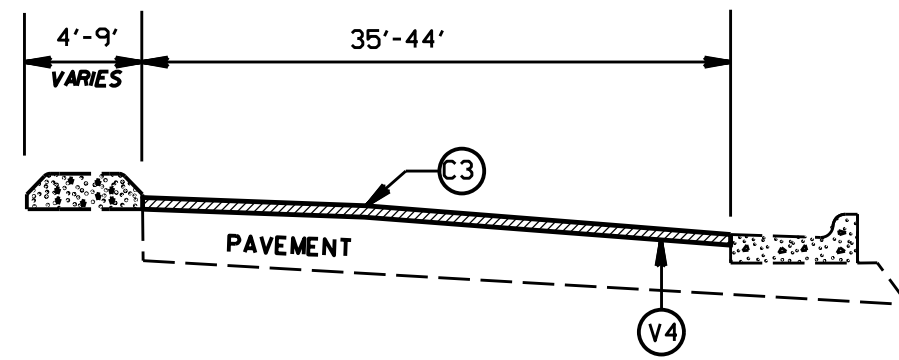
TYPICAL SECTION NO. 10

MAYERLING DR.  
KILLIAN RIDGE CT.



CUL-DE-SAC TYPICAL SECTION NO. 11

NC 27 ALBEMARLE RD. WB



TYPICAL SECTION NO. 12

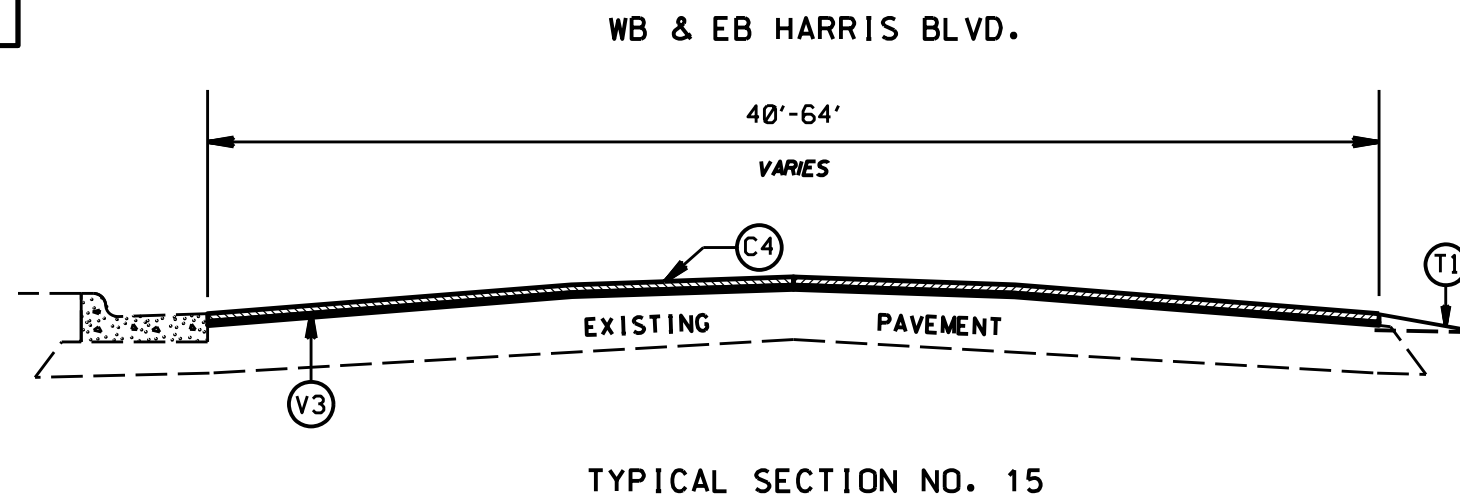
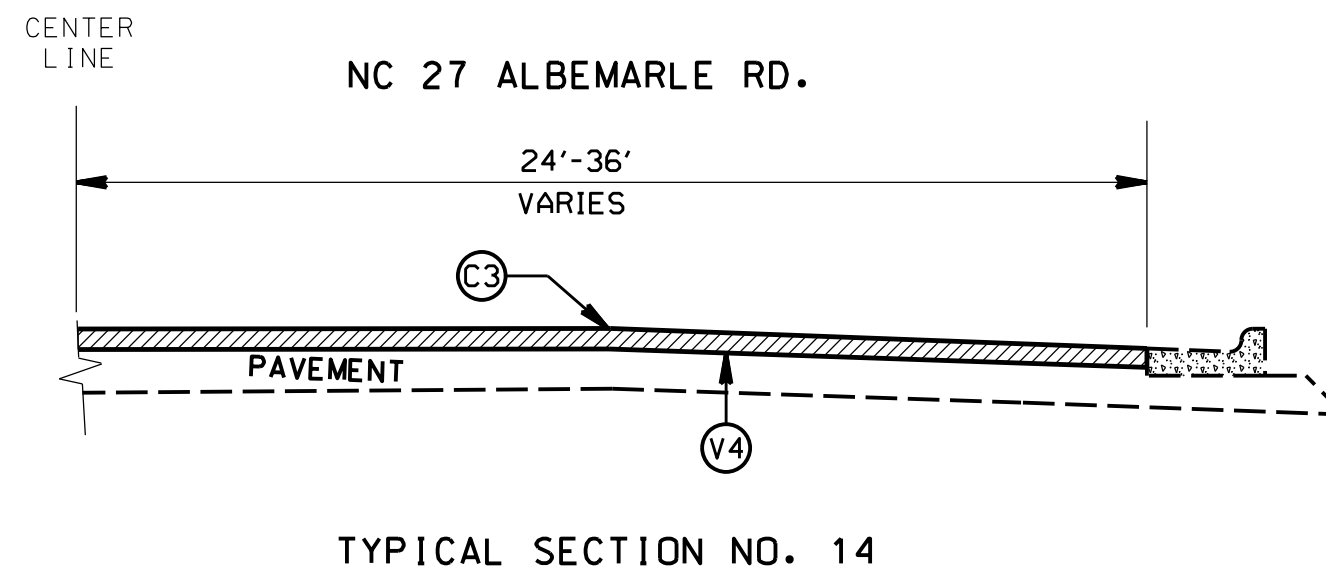
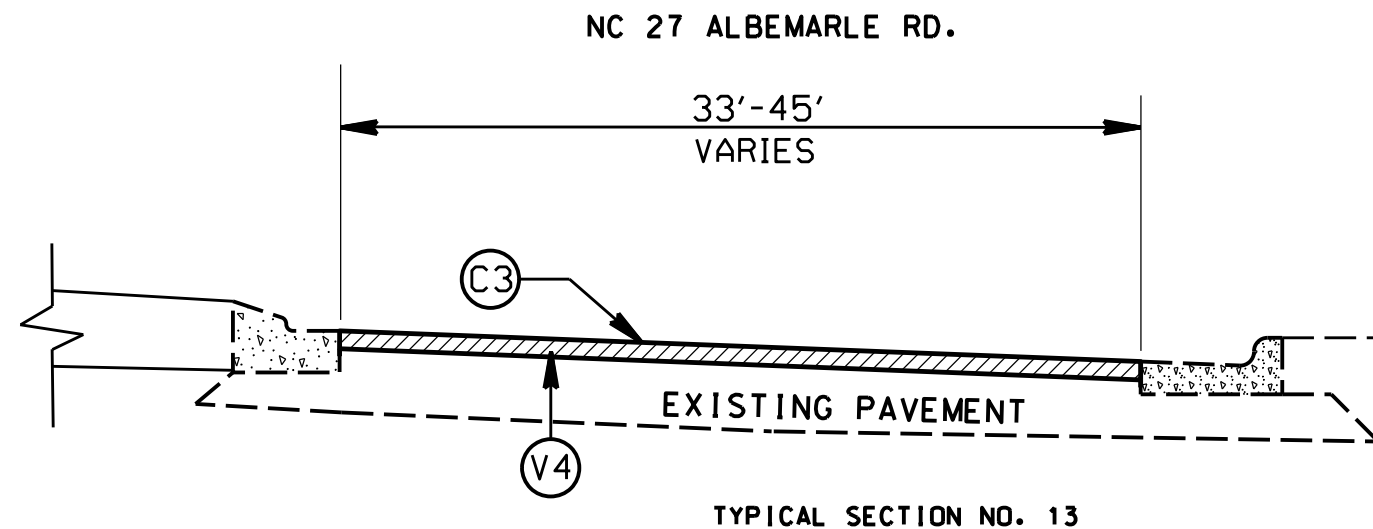
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C6	PROP. ASPHALT SURFACE TREATMENT, MATCOAT #67, AT AN AVERAGE RATE OF 38 LBS. PER SQ. YD. (STONE) AND 0.40 GALLONS PER SQ. YD. (LIQUID ASPHALT)
D2	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	PROFILE MILLING 0" TO 1.5"
V2	PROFILE MILLING 0" TO 2.0"
V3	MILLING 1.5" DEPTH
V4	MILLING 2.0" DEPTH
V5	MILLING 4" DEPTH

2017/2018 MECKLENBURG COUNTY  
RESURFACING

SCALE	-NA-		REVISIONS
DATE	3/17		
DWG. BY	WAT		
DESIGN BY	WAT		
APPROVED	BDC		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		11	22
WBS NO.		2017CPT.J0.09.10604, ETC.	

PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C6	PROP. ASPHALT SURFACE TREATMENT, MATCOAT #67, AT AN AVERAGE RATE OF 38 LBS. PER SQ. YD. (STONE) AND 0.40 GALLONS PER SQ. YD. (LIQUID ASPHALT)
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E1	PROP. APPROX. 5.5" ASPHALT BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	PROFILE MILLING 0" TO 1.5"
V2	PROFILE MILLING 0" TO 2.0"
V3	MILLING 1.5" DEPTH
V4	MILLING 2.0" DEPTH
V5	MILLING 4" DEPTH



2017/2018 MECKLENBURG COUNTY  
RESURFACING

SCALE	-NA-
DATE	4/17
DWG. BY	JE
DESIGN BY	JE
APPROVED	TB

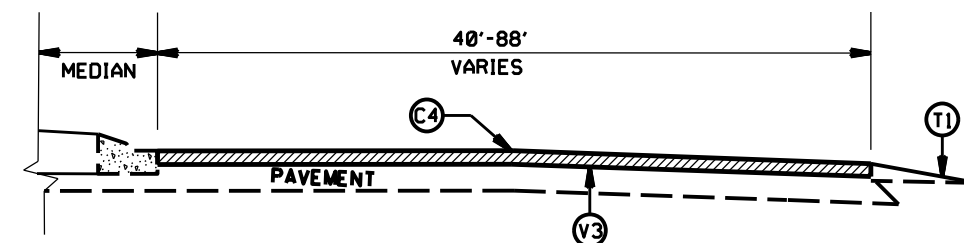


REVISIONS	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		12	22
WBS NO.	2017CPT.00.09.0601		

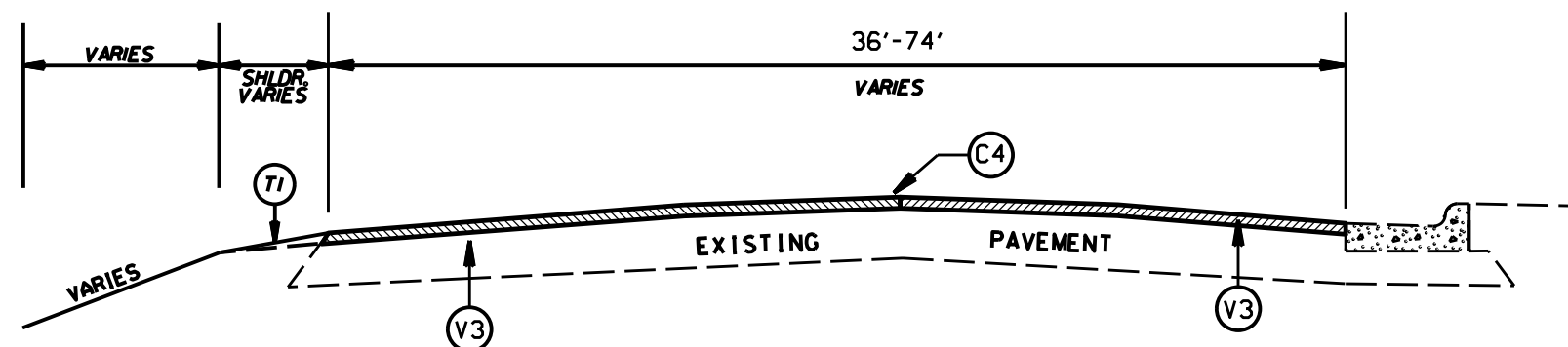
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C6	PROP. ASPHALT SURFACE TREATMENT, MATCOAT #67, AT AN AVERAGE RATE OF 38 LBS. PER SQ. YD. (STONE) AND 0.40 GALLONS PER SQ. YD. (LIQUID ASPHALT)
D2	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	PROFILE MILLING 0" TO 1.5"
V2	PROFILE MILLING 0" TO 2.0"
V3	MILLING 1.5" DEPTH
V4	MILLING 2.0" DEPTH
V5	MILLING 4" DEPTH

WB & EB HARRIS BLVD.



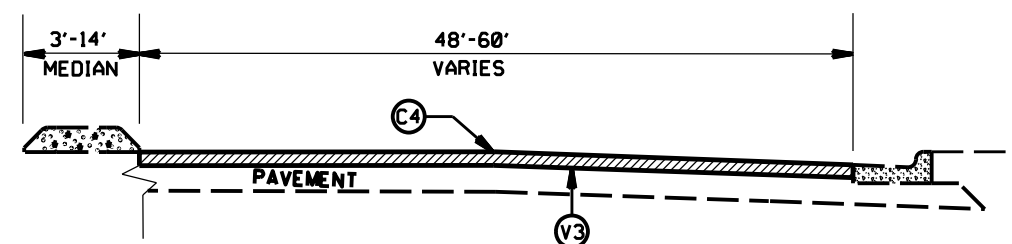
TYPICAL SECTION NO. 16

WB & EB HARRIS BLVD.



TYPICAL SECTION NO. 17

WB & EB HARRIS BLVD.



TYPICAL SECTION NO. 18

2017/2018 MECKLENBURG COUNTY RESURFACING

SCALE	-NA-
DATE	4/17
DWG. BY	JE
DESIGN BY	JE
APPROVED	TB

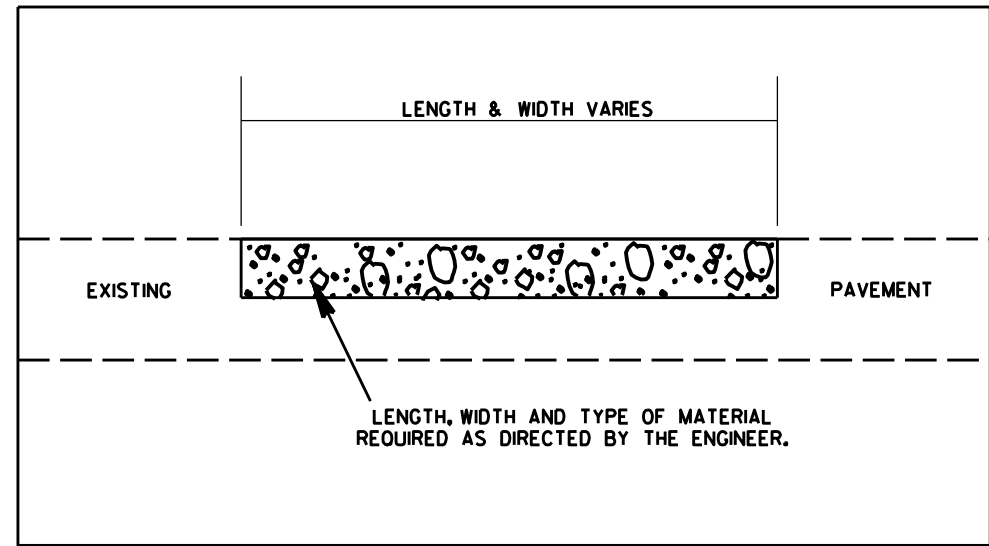


REVISIONS	

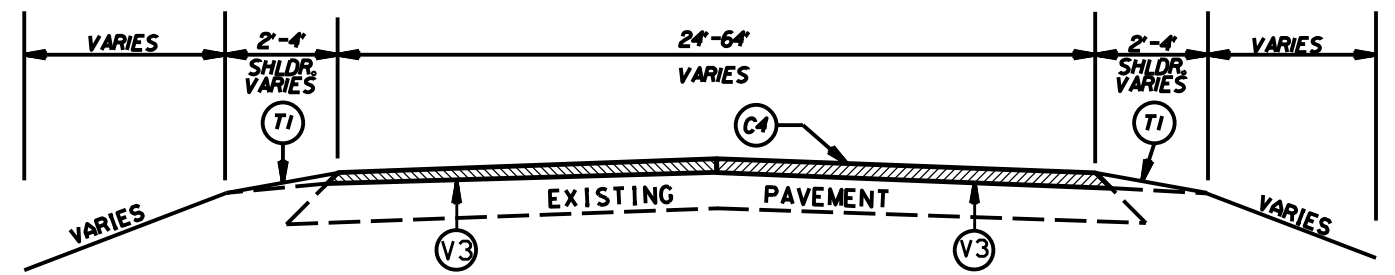
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		13	22
WBS NO.	2017CPT_10.09.0601		

PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C6	PROP. ASPHALT SURFACE TREATMENT, MATCOAT #67, AT AN AVERAGE RATE OF 38 LBS. PER SQ. YD. (STONE) AND 0.40 GALLONS PER SQ. YD. (LIQUID ASPHALT)
D2	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
T2	SHOULDER CONSTRUCTION
V1	PROFILE MILLING 0" TO 1.5"
V2	PROFILE MILLING 0" TO 2.0"
V3	MILLING 1.5" DEPTH
V4	MILLING 2.0" DEPTH
V5	MILLING 4" DEPTH

## PATCHING DETAIL

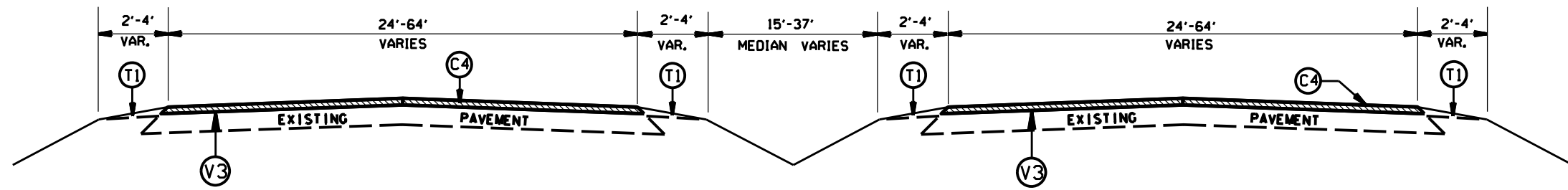


## WB & EB HARRIS BLVD.



TYPICAL SECTION NO. 19

## WB & EB HARRIS BLVD.

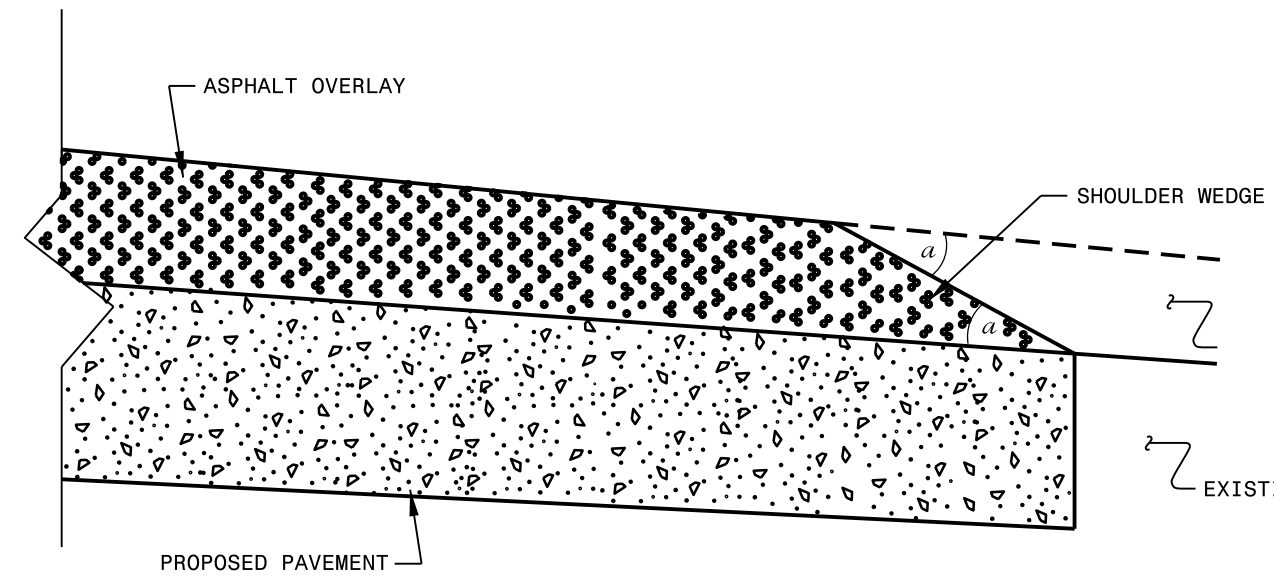


TYPICAL SECTION NO. 20

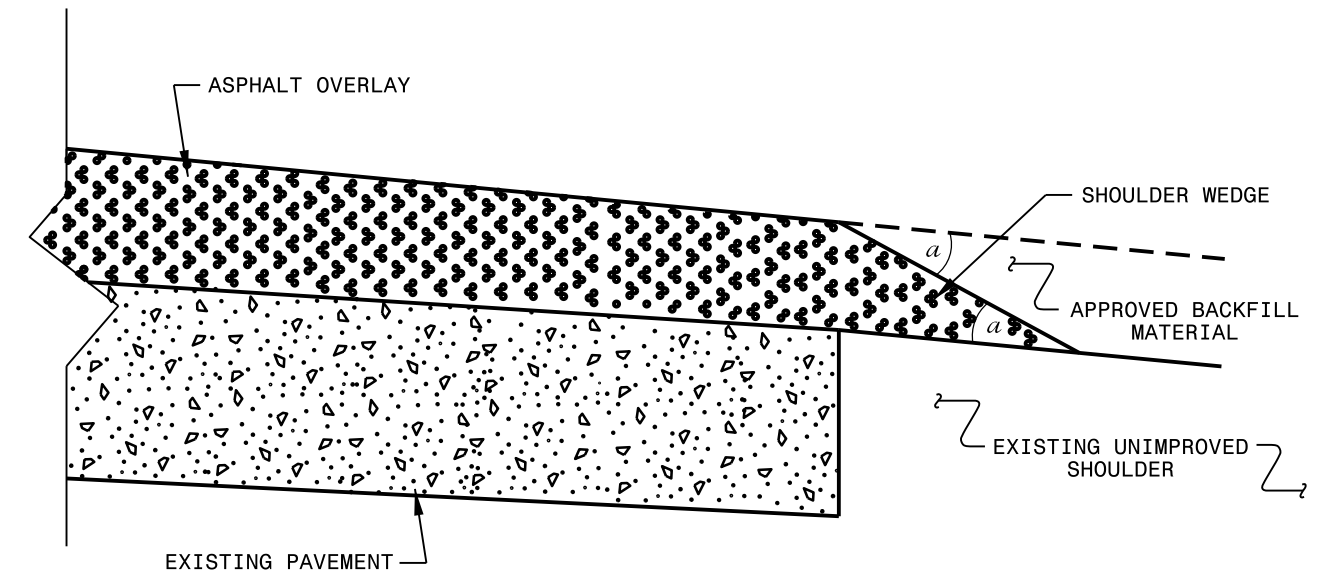
### 2017/2018 MECKLENBURG COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	4/17		
DWG. BY	JE		
DESIGN BY	JE		
APPROVED	TB		

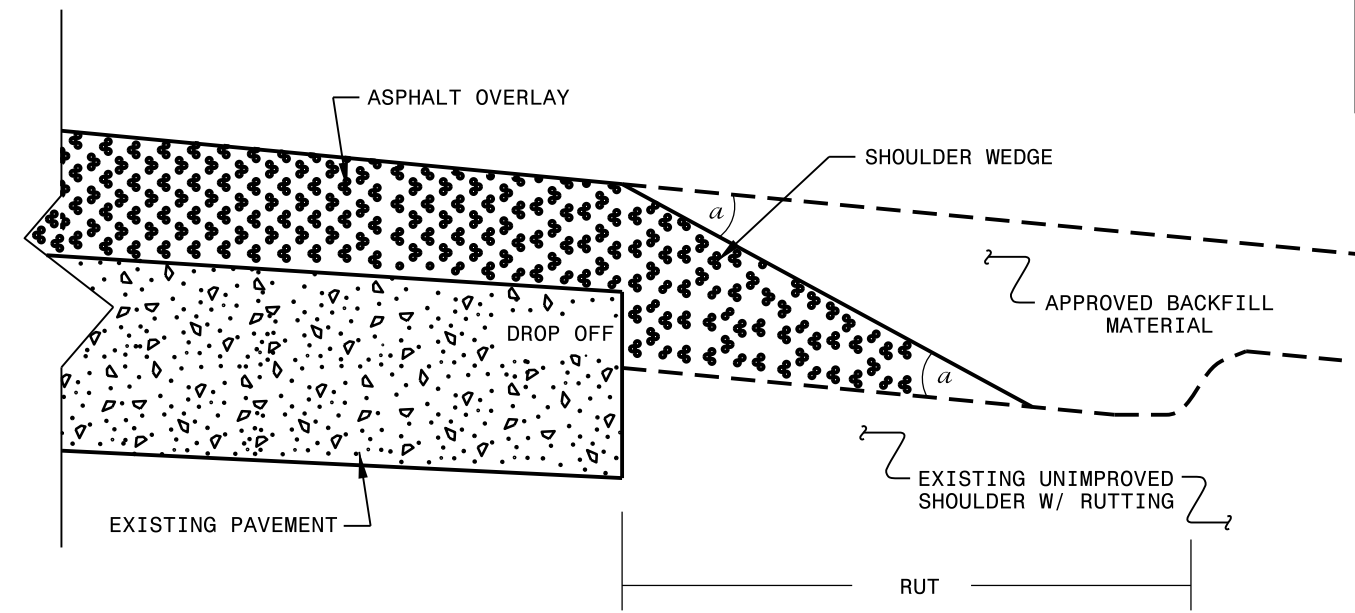
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



**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°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>			
Office 919-707-6950		FAX 919-250-4119	
<b>SHOULDER WEDGE DETAILS</b>			
ORIGINAL BY: T.SPELL	DATE: 7-19-11		
MODIFIED BY:	DATE: 2/2/16		
CHECKED BY:	DATE:		
FILE SPEC.: susr/details/stand/shoulderwedgedetail.dgn			

SYSTEMS DESIGN  
 USER NAME

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.10.09.10601.1 ETC.	15 Rev	22

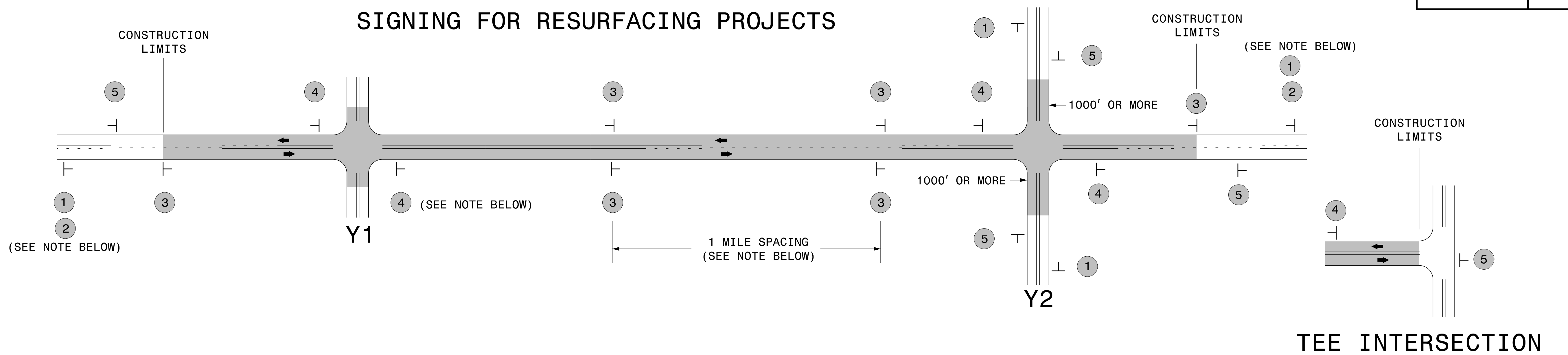
### SUMMARY OF QUANTITIES

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 CONSTRUCTION SMI	SHOULDER RECONSTRUCTION SMI	1 1/2" MILLING SY	2.0" MILLING SY	4" MILLING SY	0.0" TO 1.5" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0C TONS	INTERMEDIATE COURSE, I19.0C TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	LEVELING COURSE, S9.5C TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT (MILL) TONS	AST MAT COAT #67 SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL	WHEELCHAIR RAMP EA	6" DRIVEWAYS SY	RETROFIT EXISTING WHEELCHAIR RAMP EA	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	PORTABLE LIGHTING LS	TEMPORARY SILT FENCE LF	STONE FOR EROSION CONTROL, CLASS B TN	SEDIMENT CONTROL STONE TN	WATTLE LF	POLYACRYLAMIDE (PAM) LB	SEED & MULCHING AC			
2017CPT.10.09.10601.1	Mecklenburg	1	NC 24 HARRIS BLVD (WB)	FROM US 29 N. TRYON ST TO MALLARD CREEK ROAD (MP 16.16 TO 18.03)	NO	2		NO	NO	1.848	54.08	202			2.75	58.631							5,430		320	220							2	2	0.20	277	37	18	55	1				
<b>TOTAL FOR MAP NO. 1</b>										<b>1.848</b>		<b>202</b>			<b>2.75</b>	<b>58.631</b>							<b>5,430</b>		<b>320</b>	<b>220</b>						<b>2</b>	<b>2</b>	<b>0.20</b>	<b>277</b>	<b>37</b>	<b>18</b>	<b>55</b>	<b>1</b>					
2017CPT.10.09.10601.1	Mecklenburg	2	NC 24 HARRIS BLVD (EB)	FROM MALLARD CRK RD TO US 29 N. TRYON ST. (MP 6.09 TO 7.95)		2		NO	NO	1.823	53.1	249			3.40	56,790							5,260		310	220							12	6	0.20	273	36	18	55	1				
<b>TOTAL FOR MAP NO. 2</b>										<b>1.823</b>		<b>249</b>			<b>3.40</b>	<b>56,790</b>								<b>5,260</b>		<b>310</b>	<b>220</b>						<b>12</b>	<b>6</b>	<b>0.20</b>	<b>273</b>	<b>36</b>	<b>18</b>	<b>55</b>	<b>1</b>				
<b>TOTAL FOR PROJ NO. 2017CPT.10.09.10601.1</b>										<b>3.671</b>		<b>451</b>			<b>6.15</b>	<b>115,421</b>								<b>10,690</b>		<b>630</b>	<b>440</b>					<b>14</b>	<b>8</b>	<b>0.40</b>	<b>550</b>	<b>73</b>	<b>36</b>	<b>110</b>	<b>2</b>					
2017CPT.10.09.10601.2	Mecklenburg	3	NC 27 ALBEMARLE RD (EB)	FROM SHARON AMITY TO CENTRAL AVE (MP 17.08 TO 17.92)		2	M2	NO	NO	0.722	36												1,887		113	220							2	5	5	0.20	50	8	5	10	1			
<b>TOTAL FOR MAP NO. 3</b>										<b>0.722</b>														<b>1,887</b>		<b>113</b>	<b>220</b>						<b>2</b>	<b>5</b>	<b>5</b>	<b>0.20</b>	<b>50</b>	<b>8</b>	<b>5</b>	<b>10</b>	<b>1</b>			
2017CPT.10.09.10601.2	Mecklenburg	4	NC 27 ALBEMARLE RD (WB)	FROM REGAL OAKS TO SHARON AMITY RD (MP 8.13 TO 9.85)		2	MD	NO	NO	1.696	34.96												4,311		259	880				1		3	20	10	0.20	50	8	5	10	1				
<b>TOTAL FOR MAP NO. 4</b>										<b>1.696</b>														<b>4,311</b>		<b>259</b>	<b>880</b>			<b>1</b>		<b>3</b>	<b>20</b>	<b>10</b>	<b>0.20</b>	<b>50</b>	<b>8</b>	<b>5</b>	<b>10</b>	<b>1</b>				
<b>TOTAL FOR PROJ NO. 2017CPT.10.09.10601.2</b>										<b>2.418</b>														<b>6,198</b>		<b>372</b>	<b>1,100</b>			<b>1</b>		<b>5</b>	<b>25</b>	<b>15</b>	<b>0.40</b>	<b>100</b>	<b>16</b>	<b>10</b>	<b>20</b>	<b>2</b>				
2017CPT.10.09.20601.1	Mecklenburg	5	SR 2805 HARRISBURG RD.	FROM PENCE RD TO ALBEMARLE RD (MP 3.94 TO 4.11)		2	ZWU	NO	NO	0.178	40.94														56								3		0.20	15	2	1	6					
<b>TOTAL FOR MAP NO. 5</b>										<b>0.178</b>																<b>56</b>							<b>3</b>		<b>0.20</b>	<b>15</b>	<b>2</b>	<b>1</b>	<b>6</b>					
<b>TOTAL FOR PROJ NO. 2017CPT.10.09.20601.1</b>										<b>0.178</b>																<b>56</b>							<b>3</b>		<b>0.20</b>	<b>15</b>	<b>2</b>	<b>1</b>	<b>6</b>					
2017CPT.10.09.20601.2	Mecklenburg	6	SR 2939 OLD CONCORD RD/JOHN KIRK RD.	FROM NEWELL HICKORY GROVE RD TO UNIVERSITY CITY BLVD (MP 0.04 TO 2.57)		2	ZWU	NO	NO	2.544	27.44	587	35		8.01											300	880	45,395	18,158					5	8		382	51	25	76	1			
<b>TOTAL FOR MAP NO. 6</b>										<b>2.544</b>		<b>587</b>	<b>35</b>		<b>8.01</b>											<b>300</b>	<b>880</b>	<b>45,395</b>	<b>18,158</b>					<b>5</b>	<b>8</b>		<b>382</b>	<b>51</b>	<b>25</b>	<b>76</b>	<b>1</b>			
2017CPT.10.09.20601.2	Mecklenburg	7	SR 5085 OLD CONCORD RD.	FROM JOHN KIRK DR TO END OF MAINT. (MP 0.00 TO 0.39)		2	ZWU	NO	NO	0.408	34.24	81	60	0.09	1.11		167									48										61	8	4	12	1	0.1			
<b>TOTAL FOR MAP NO. 7</b>										<b>0.408</b>		<b>81</b>	<b>60</b>	<b>0.09</b>	<b>1.11</b>		<b>167</b>									<b>48</b>								<b>61</b>	<b>8</b>	<b>4</b>	<b>12</b>	<b>1</b>	<b>0.1</b>					
<b>TOTAL FOR PROJ NO. 2017CPT.10.09.20601.2</b>										<b>2.952</b>		<b>668</b>	<b>95</b>	<b>0.09</b>	<b>9.12</b>		<b>167</b>									<b>348</b>	<b>880</b>	<b>45,395</b>	<b>18,158</b>					<b>5</b>	<b>8</b>		<b>443</b>	<b>59</b>	<b>29</b>	<b>88</b>	<b>2</b>	<b>0.1</b>		
2017CPT.10.09.20601.3	Mecklenburg	8	SR 4253 KILLIAN RIDGE CT.	FROM GLENMONT DR. TO CUL-DE-SAC (MP 0.00 TO 0.06)		2	ZWU	NO	NO	0.064	23.58														7																			
<b>TOTAL FOR MAP NO. 8</b>										<b>0.064</b>																<b>7</b>																		
2017CPT.10.09.20601.3	Mecklenburg	9	SR 4254 MAYERLING DR.	FROM GLENMONT DR TO CUL-DE-SAC (MP 0.00 TO 0.18)		2	ZWU	NO	NO	0.196	19.59															17	165																	
<b>TOTAL FOR MAP NO. 9</b>										<b>0.196</b>																<b>17</b>	<b>165</b>																	
2017CPT.10.09.20601.3	Mecklenburg	10	SR 4252 GLENMONT DR.	FROM LAWYERS RD TO MAYERLING DR (MP 0.00 TO 0.20)		2	ZWU	NO	NO	0.202	24															21	110																	
<b>TOTAL FOR MAP NO. 10</b>										<b>0.202</b>																<b>21</b>	<b>110</b>																	
<b>TOTAL FOR PROJ NO. 2017CPT.10.09.20601.3</b>										<b>0.462</b>																<b>45</b>	<b>275</b>																	
2017CPT.10.09.20601.4	Mecklenburg	11	SR 2804 REEDY CREEK RD	FROM PLAZA RD. EXT TO HARRISBURG RD PVT. JT. (MP 0.00 TO 0.78)		2	ZWU	NO	NO	0.776	23.29	199	15	0.21	2.71																													
<b>TOTAL FOR MAP NO. 11</b>										<b>0.776</b>		<b>199</b>	<b>15</b>	<b>0.21</b>	<b>2.71</b>																													
<b>TOTAL FOR PROJ NO. 2017CPT.10.09.20601.4</b>										<b>0.776</b>		<b>199</b>	<b>15</b>	<b>0.21</b>	<b>2.71</b>																													
<b>GRAND TOTAL</b>										<b>10.457</b>		<b>1,318</b>	<b>110</b>	<b>0.30</b>	<b>17.98</b>	<b>115,421</b>	<b>56,169</b>	<b>4,275</b>	<b>5,346</b>	<b>988</b>	<b>155</b>	<b>673</b>	<b>8,096</b>	<b>16,760</b>	<b>440</b>	<b>1,542</b>	<b>3,303</b>	<b>45,395</b>	<b>18,158</b>	<b>2</b>	<b>80</b>	<b>5</b>	<b>57</b>	<b>31</b>	<b>1.00</b>	<b>1,254</b>	<b>171</b>	<b>87</b>	<b>261</b>	<b>10</b>	<b>0.2</b>			





# SIGNING FOR RESURFACING PROJECTS



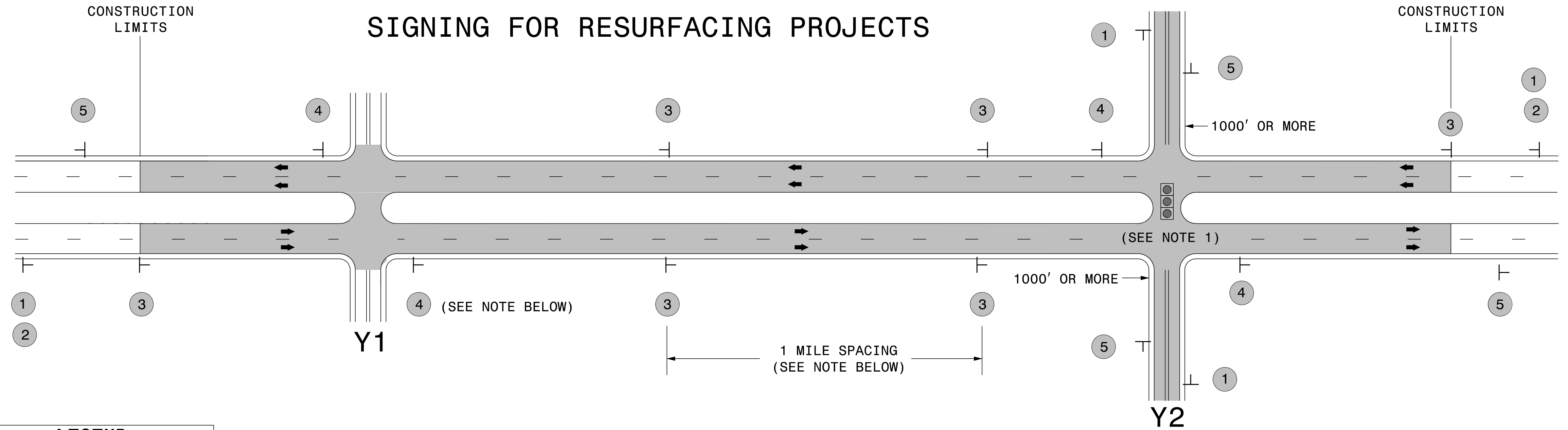
LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

## MAINLINE (-L-) SIGNING

## -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	2	3	4	5		
						<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"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <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> <p> </p> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
						<p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	
						<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH.</p> <p>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</p> <p>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p>	
						<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	

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



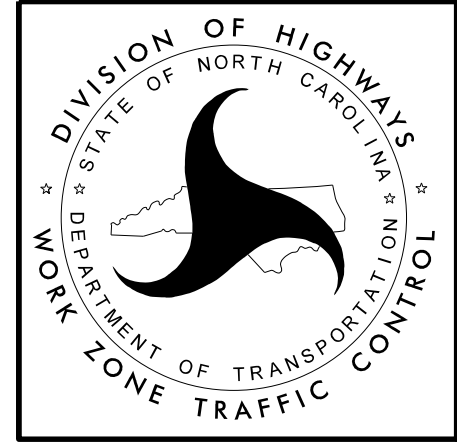
**LEGEND**  
 ┆ STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW

**MAINLINE (-L-) SIGNING**

**-Y- LINE SIGNING**

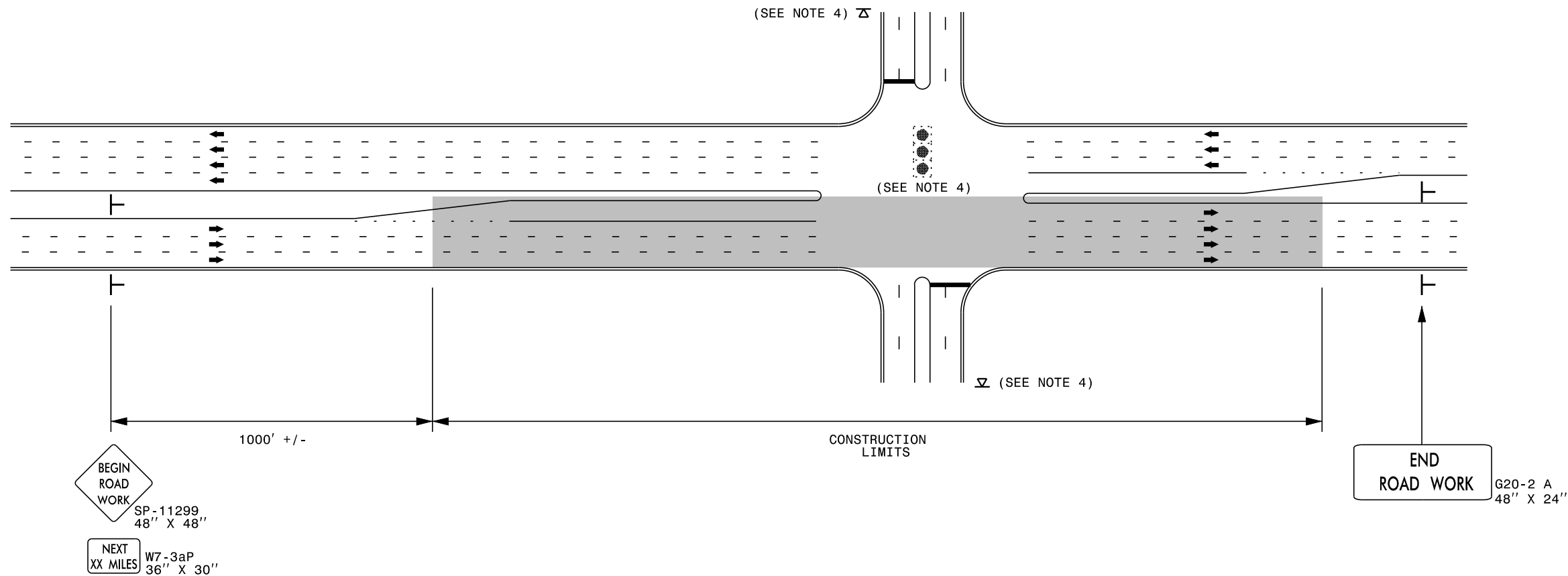
SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 W20-1 48" X 48"	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">           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> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>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.</li> </ol>
	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"	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.	
	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.	
	5	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	

3/23/2015  
 C:\Users\rmgarrrett\Downloads\Resurfacing\_AdvWarn\_Ltr-Su\_Shldr.dgn  
 User:rmgarrrett



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

## 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) USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AND 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

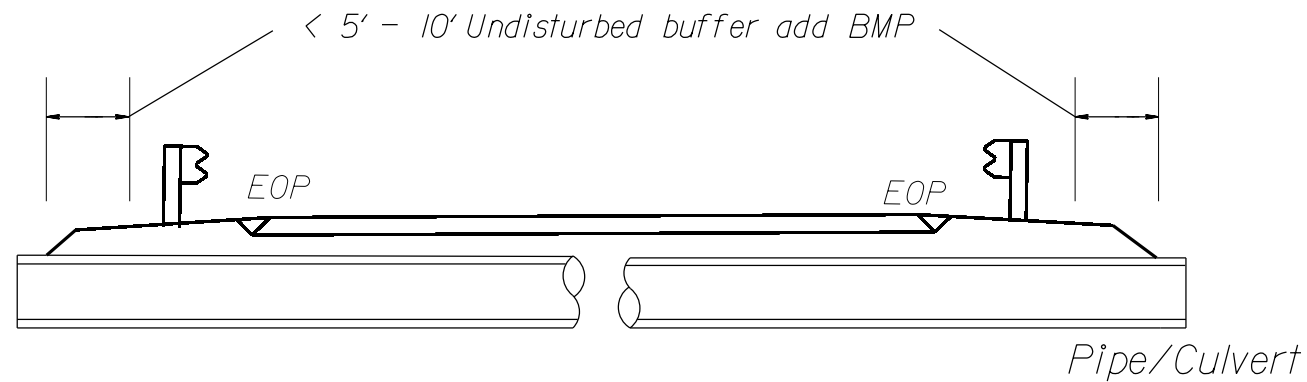


**RESURFACING ADVANCE  
WARNING SIGNS FOR  
URBAN / SUBURBAN  
FACILITIES**

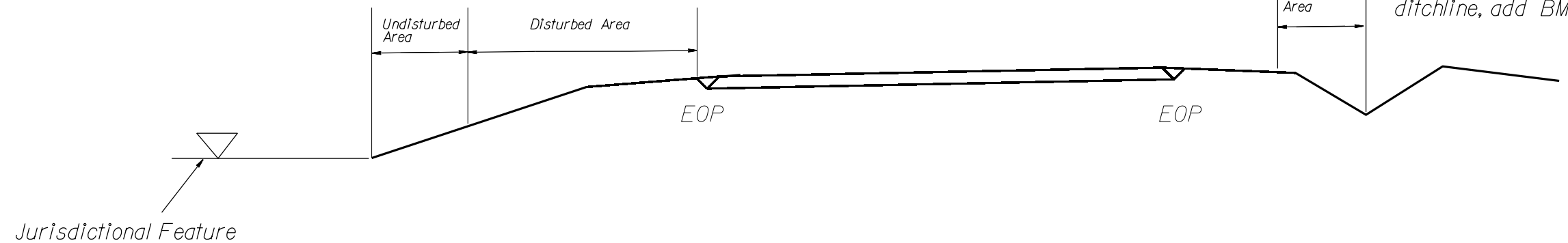
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

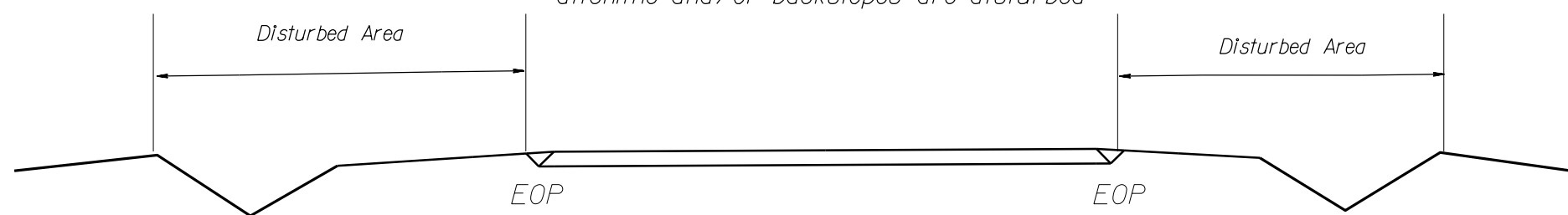
# EROSION CONTROL DETAIL



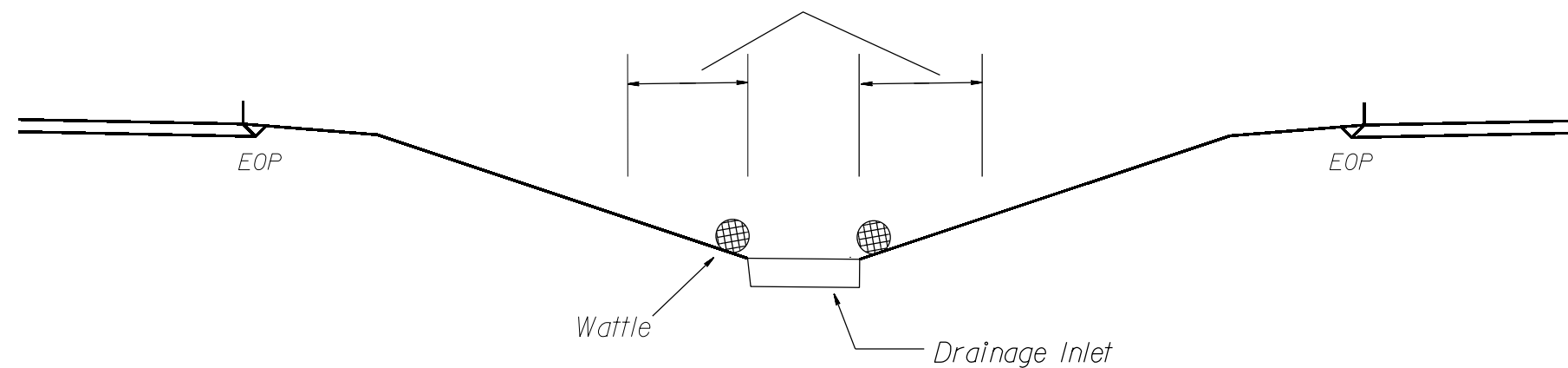
< 5' - 10' Undisturbed buffer from jurisdictional feature add BMP



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

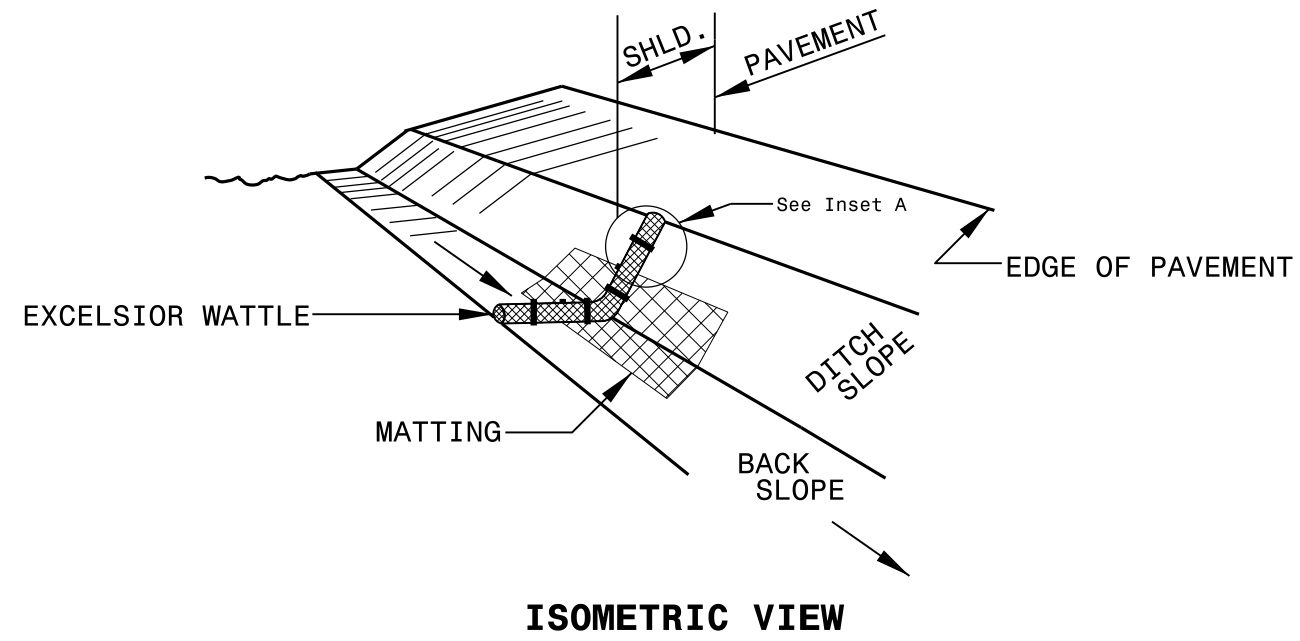


< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

# WATTLE DETAIL



**NOTES:**

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

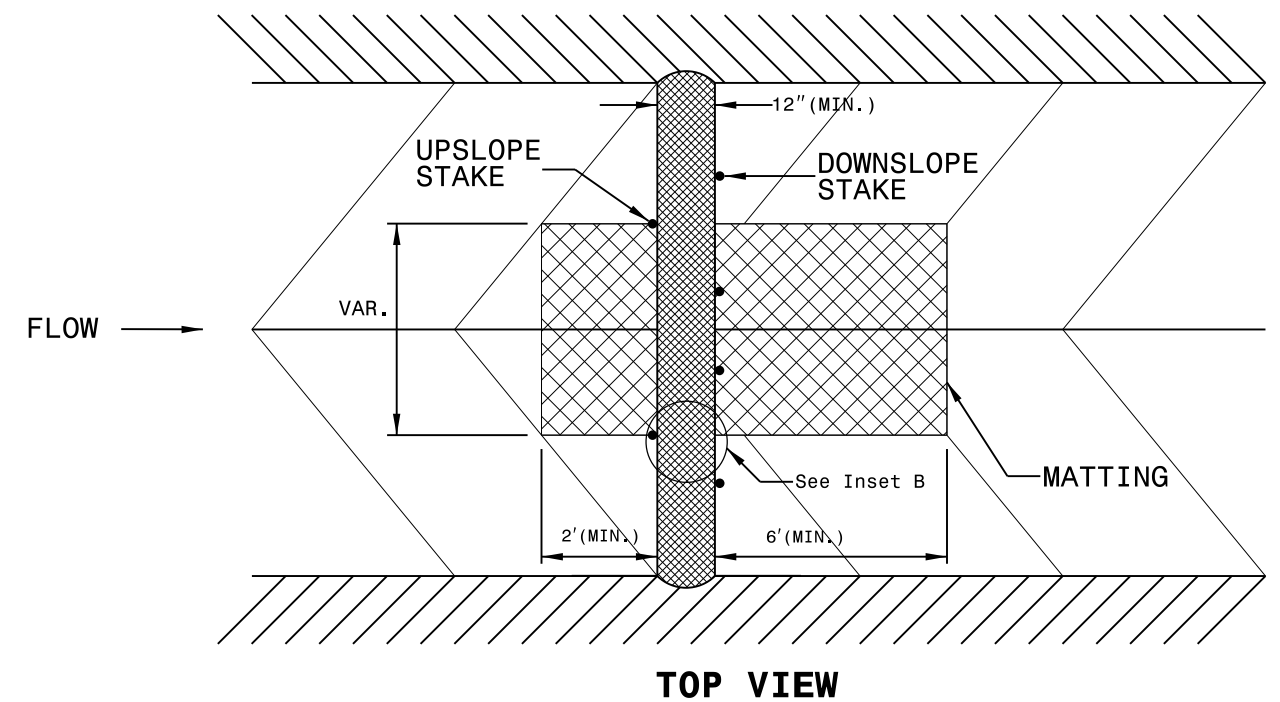
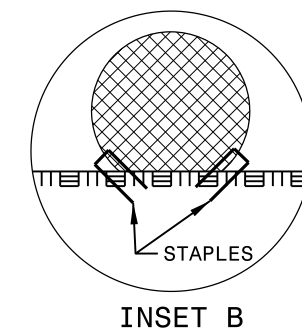
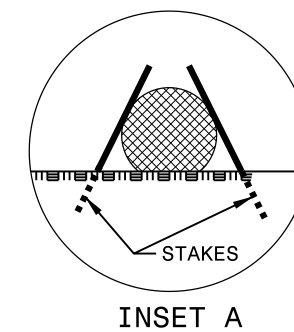
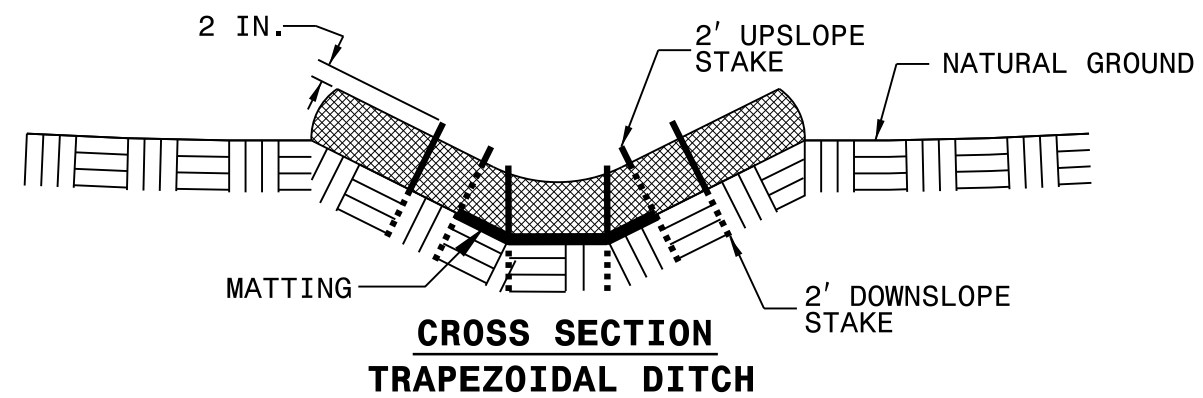
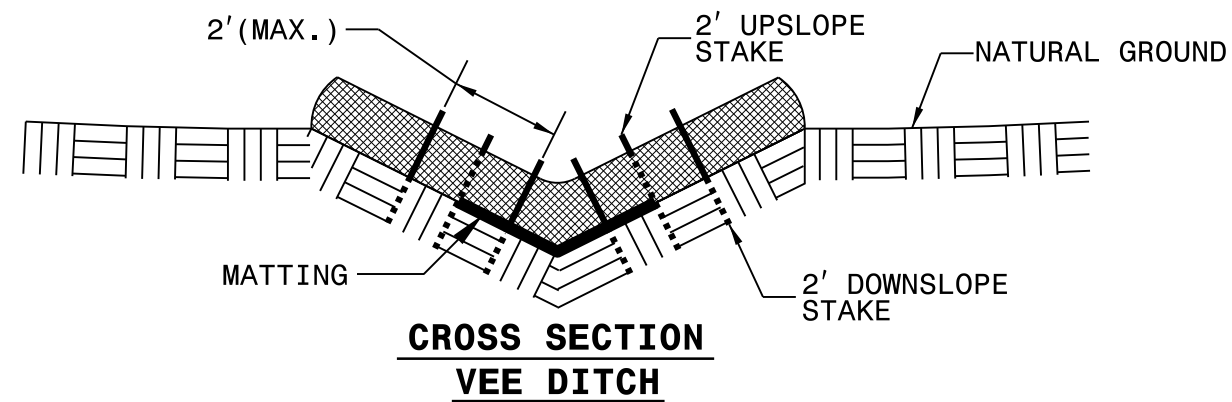
USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. CROSS SECTION.

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

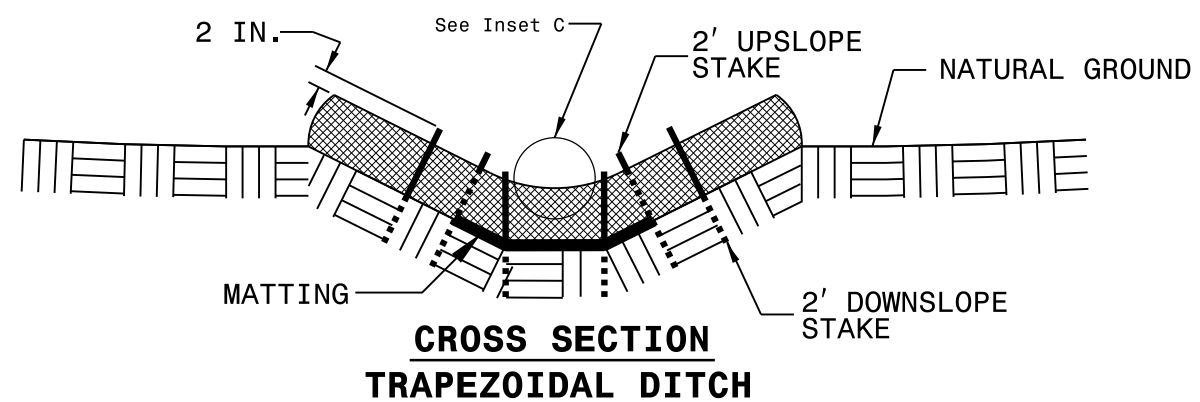
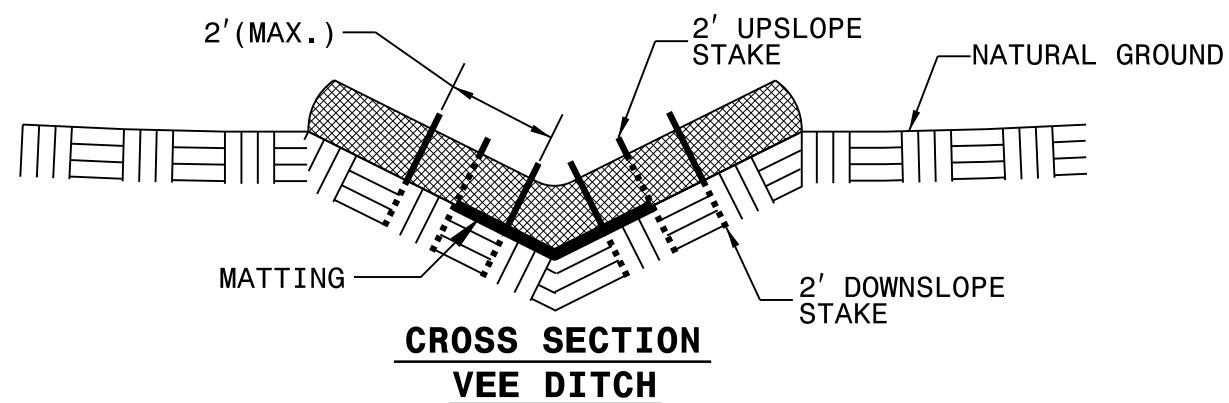
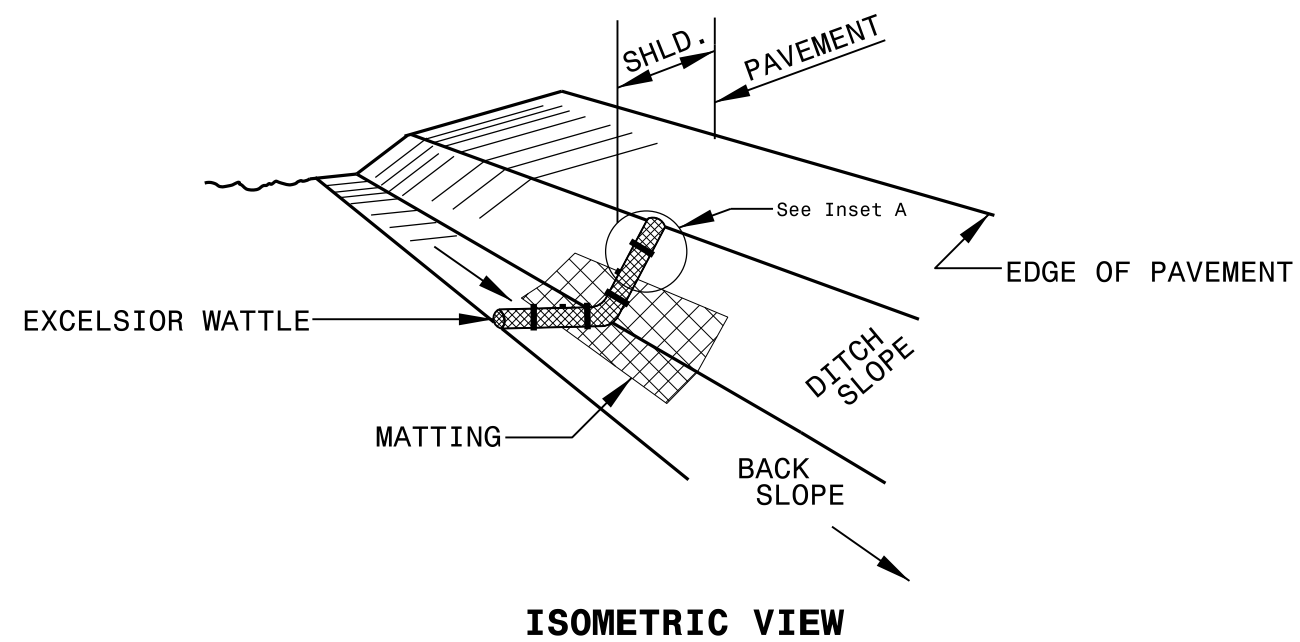
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.



# WATTLE WITH POLYACRYLAMIDE DETAIL



**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.

