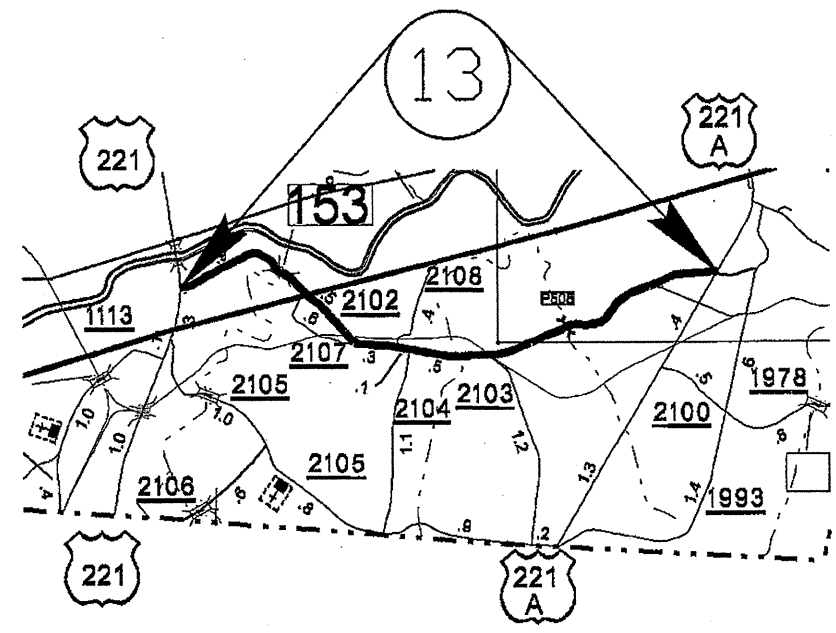
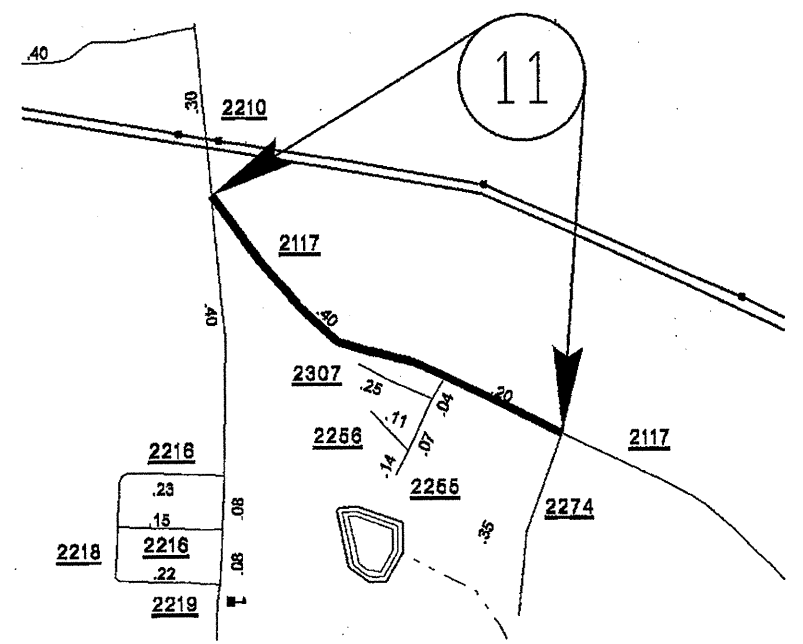
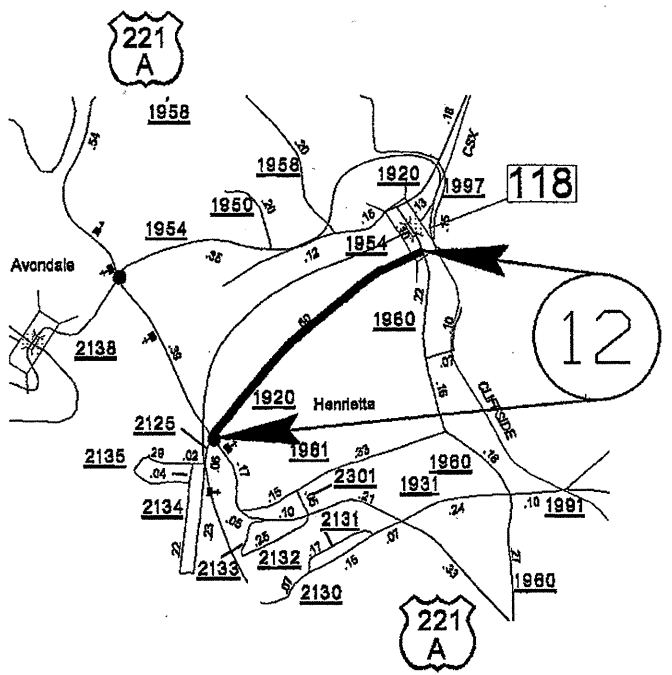
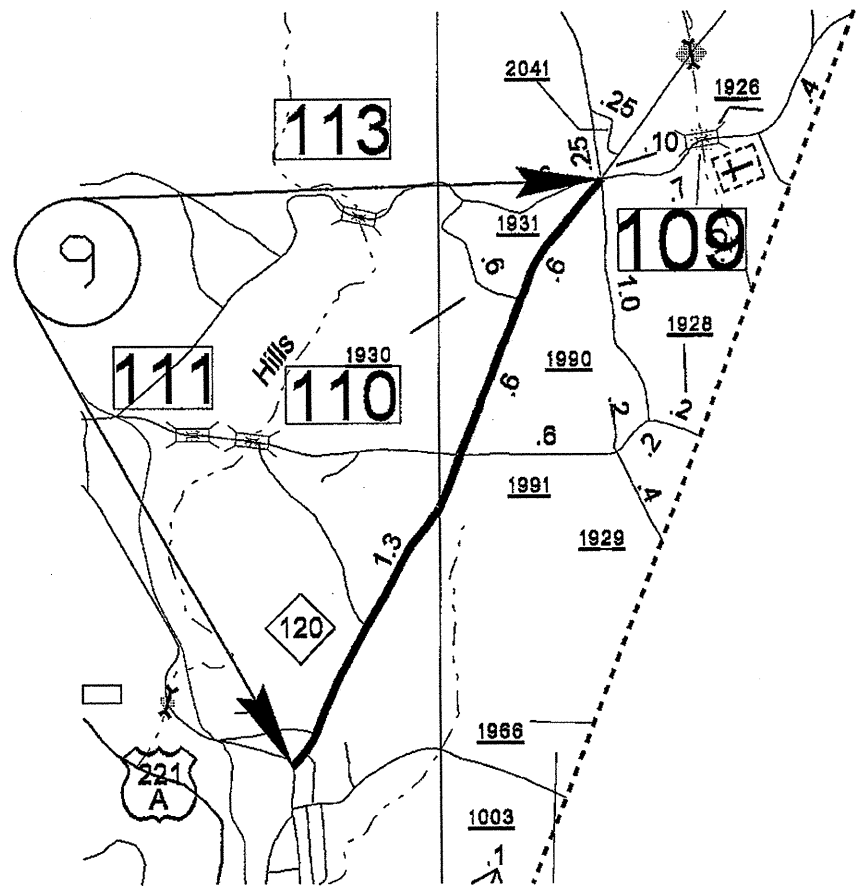
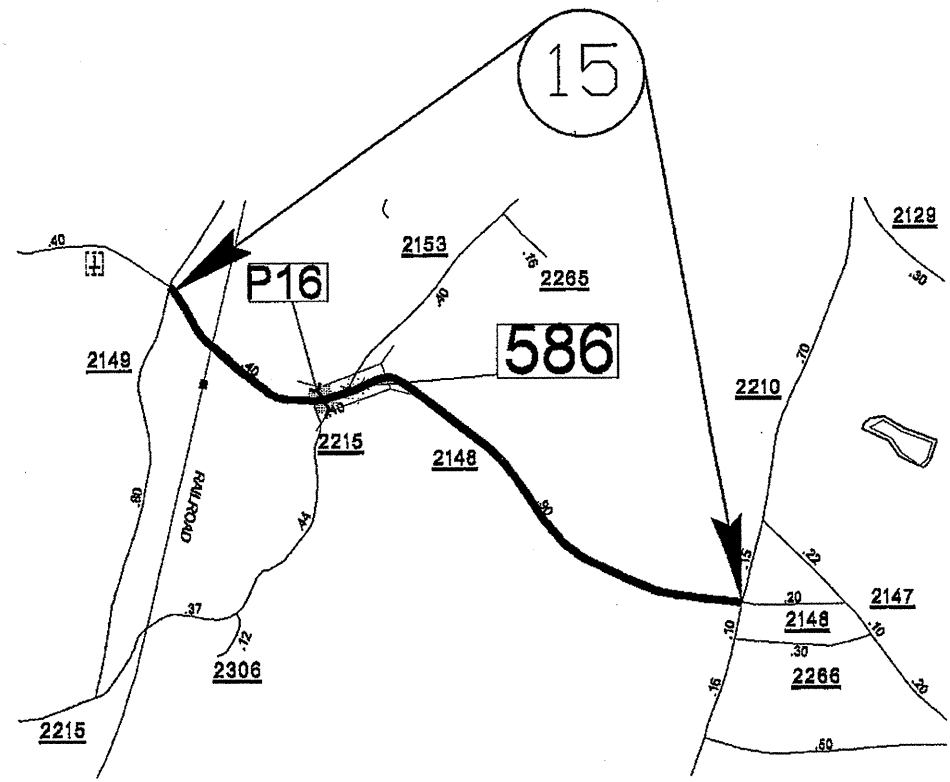
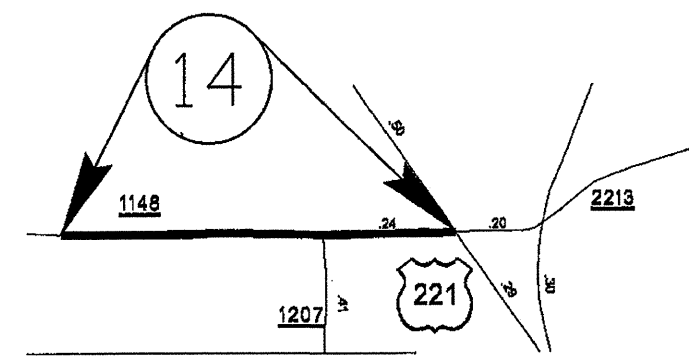
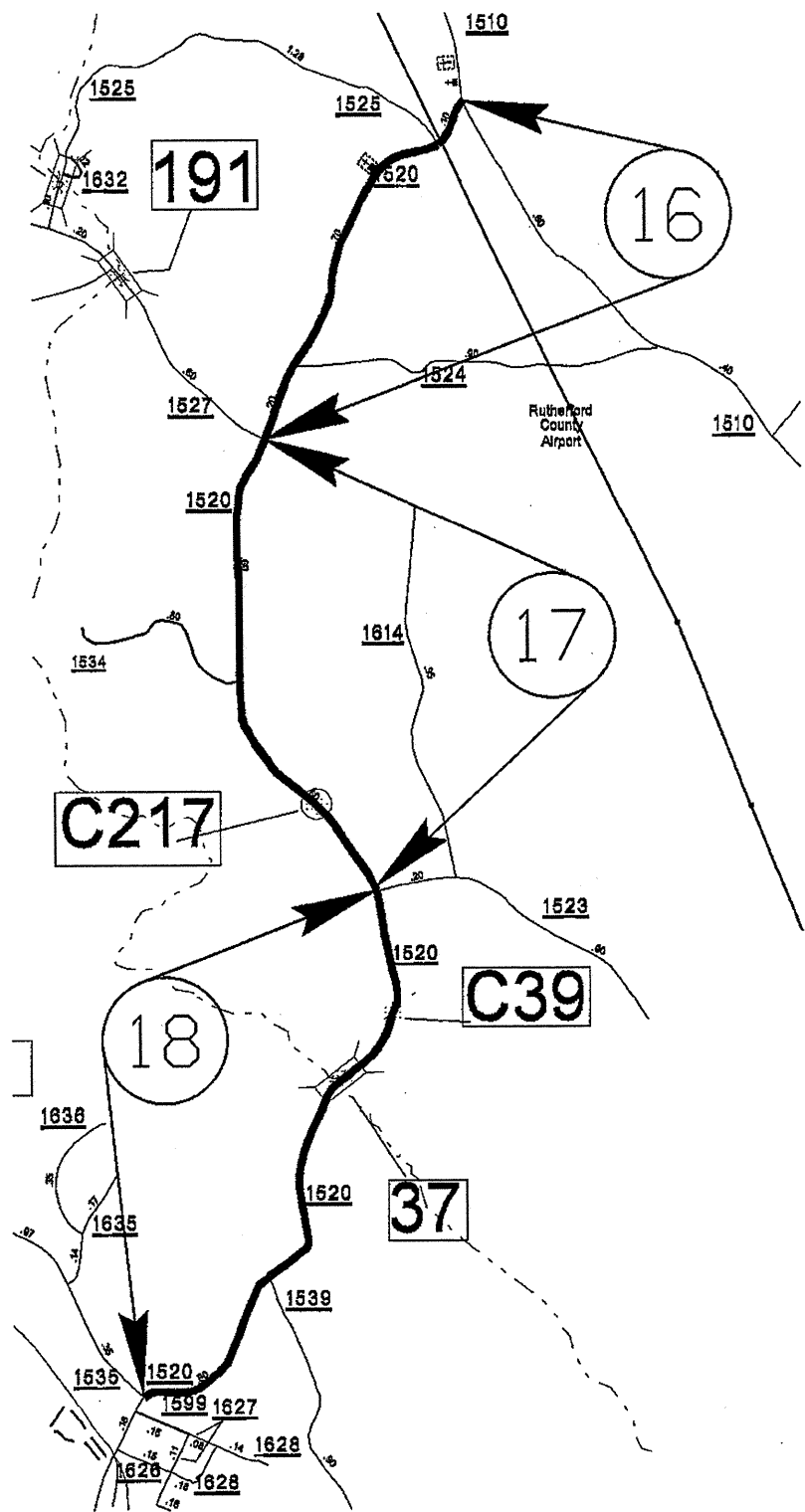


PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10811.11, 13CR.20811.11 13C.081105	2	



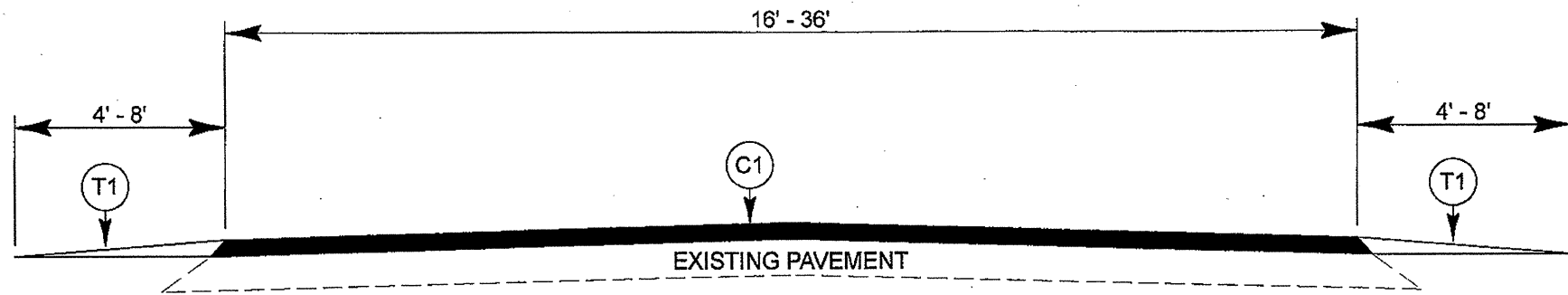
RUTHERFORD COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10811.11, 13CR.20811.11 13C.081105	3	

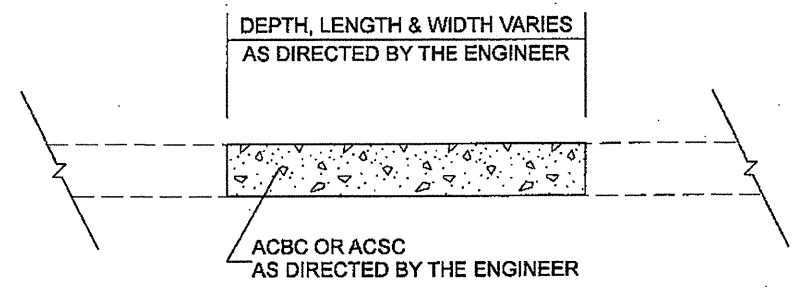


RUTHERFORD COUNTY

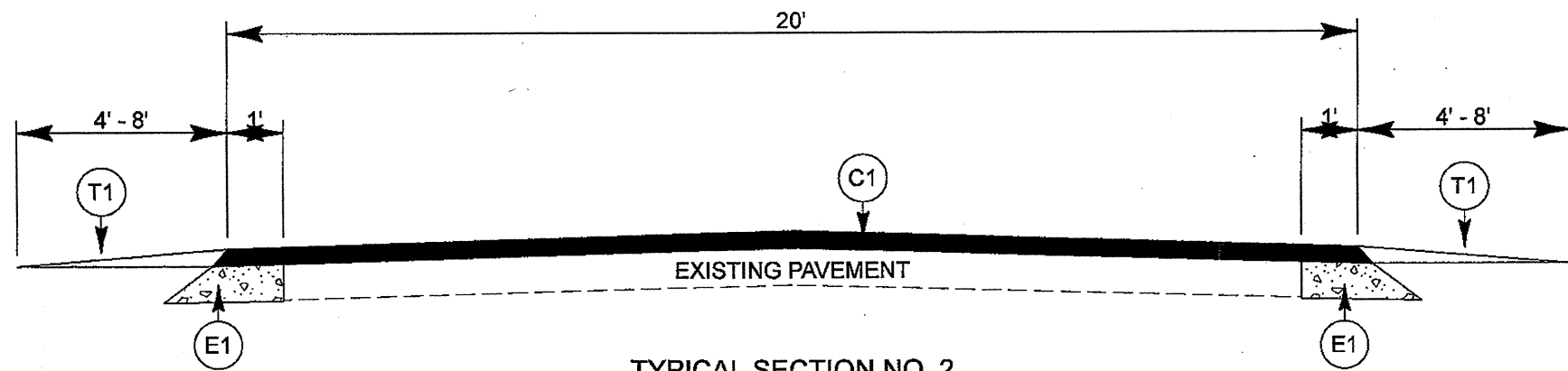
PROJECT NO. 13CR.10811.11, 13CR.20811.11, 13C.081105,	SHEET NO. 4	TOTAL SHEETS
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TYPICAL SECTION NO. 1

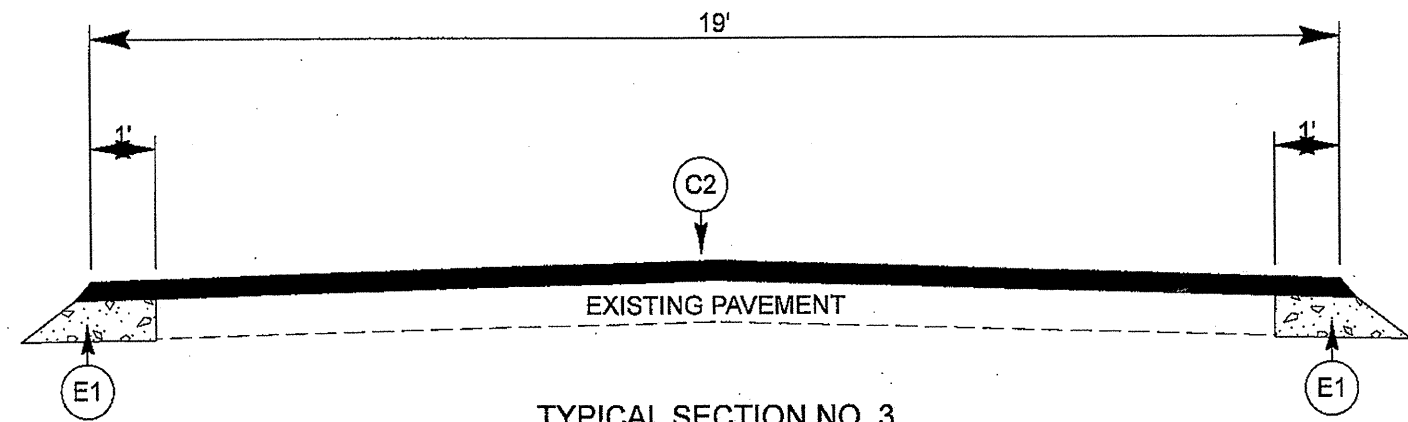


PATCHING EXISTING PAVEMENT



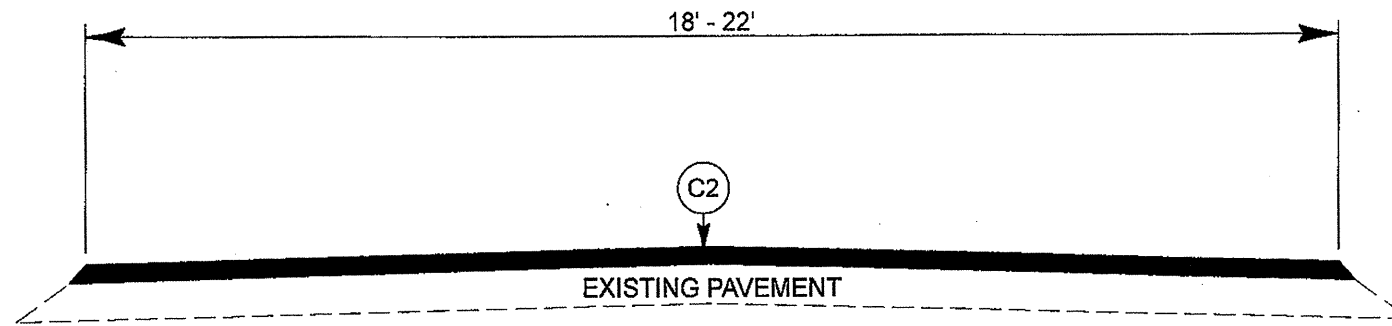
TYPICAL SECTION NO. 2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
D1	PROP. APPROX. 2-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
T1	SHOULDER RECONSTRUCTION

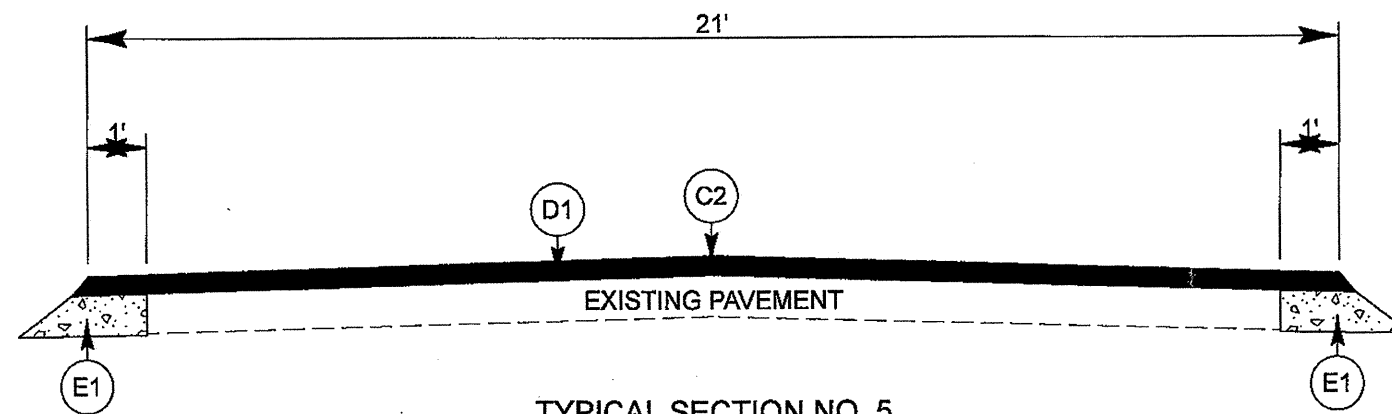


TYPICAL SECTION NO. 3

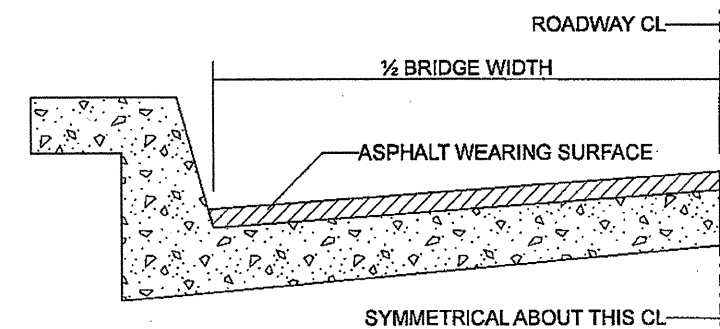
PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10811.11, 13CR.20811.11, 13C.081105,	5	



TYPICAL SECTION NO. 4



TYPICAL SECTION NO. 5



BRIDGE HALF TYPICAL SECTION

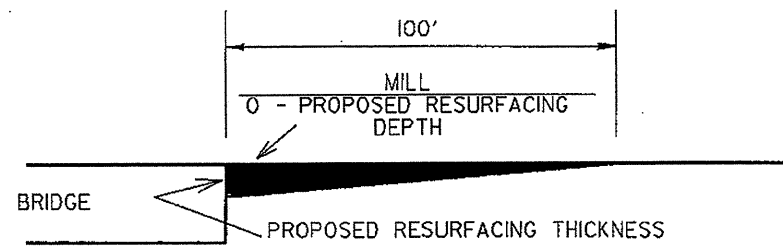
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. THE MINIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1/2", SF9.5A 1.0", S9.5X 1.5", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 1/2", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1.0", SF9.5A 1.5", S9.5X 2.0", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 1/2", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2".

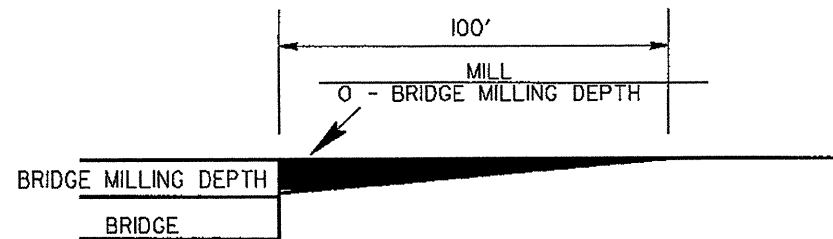
NOTES

ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADIUS, OR AS DIRECTED BY THE ENGINEER.
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.
SHOULDER AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE INDICATED.
BRIDGES ARE TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

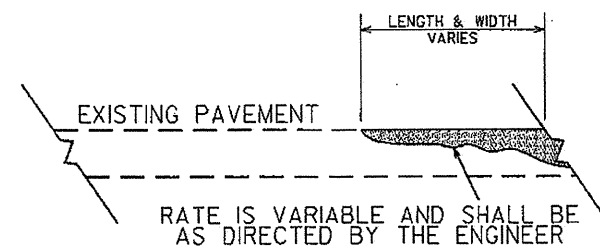
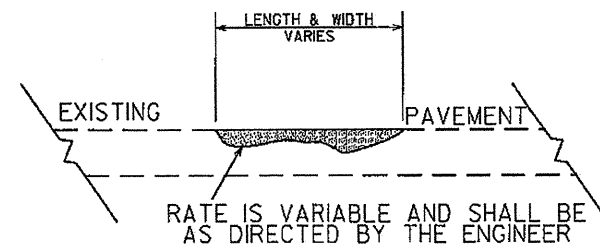
PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10811.11 , 13CR.20811.11 13C.081105	6	



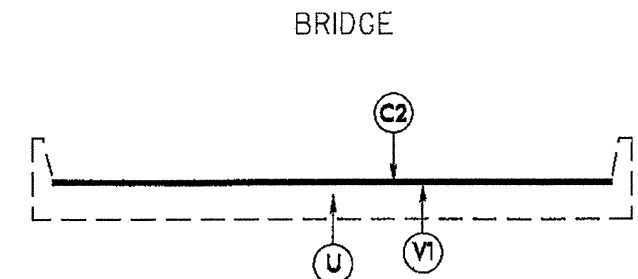
MILLING DETAIL AT BRIDGE APPROACHES
WHERE BRIDGES WILL NOT BE RESURFACED
COST OF BRIDGE APPROACH MILLING IS INCIDENTAL TO OTHER ITEMS



MILLING DETAIL AT BRIDGE APPROACHES
WHERE BRIDGES WILL BE MILLED THEN RESURFACED
COST OF BRIDGE APPROACH MILLING IS INCIDENTAL TO OTHER ITEMS

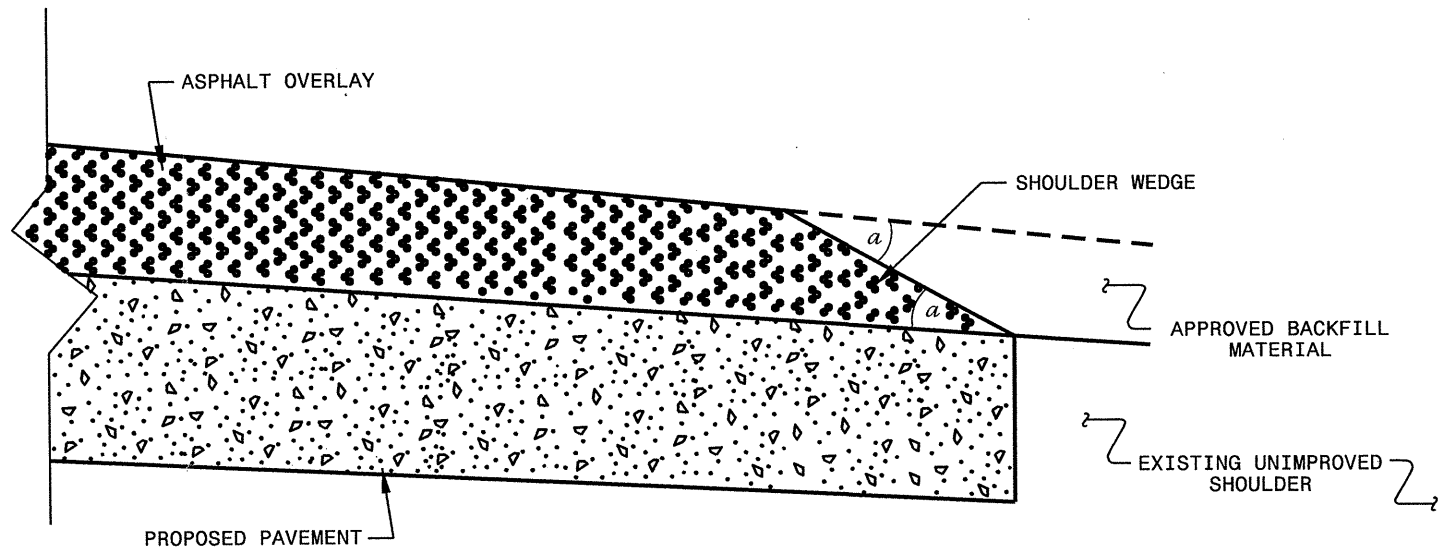


DETAIL SHOWING
METHOD OF WEDGING



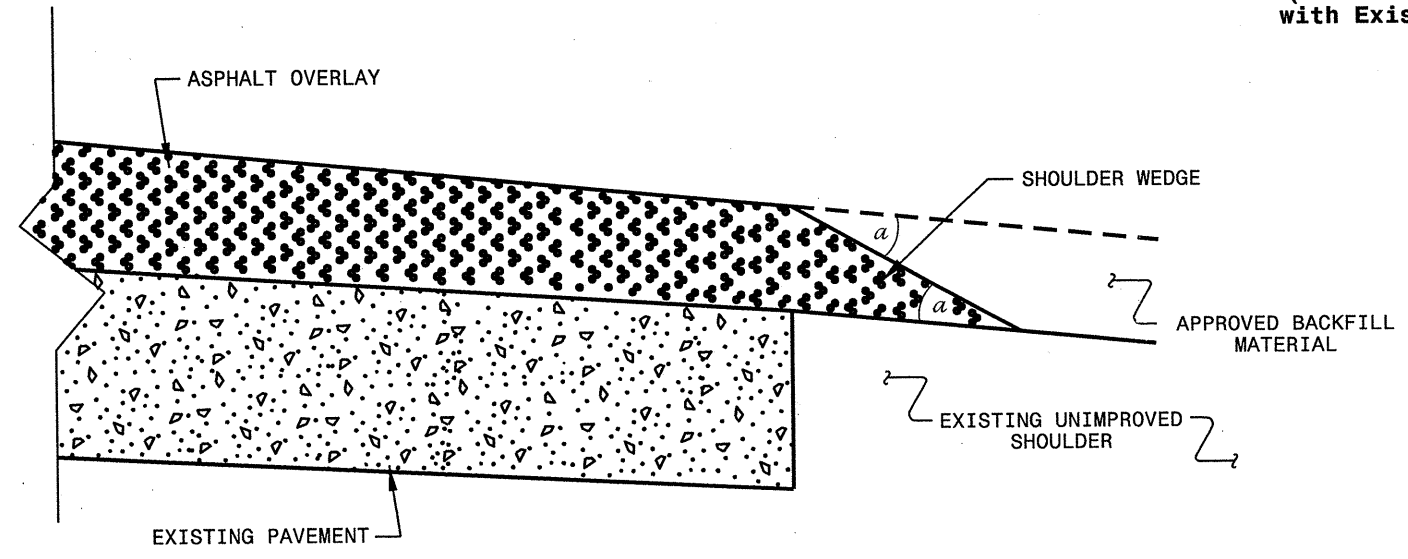
BRIDGE DETAIL
BRIDGE # 153 MAP 13
MILL 1 1/2" OFF EXISTING PAVEMENT
SEE MAPS FOR BRIDGE LOCATION

PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
U	EXISTING PAVEMENT
V1	MILLING ASPHALT PAVEMENT, 1 1/2" DEPTH



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ Widening or with Existing Paved Shoulder > 2 ft.)



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)

- 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.

a - 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: 10/16/12
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedge\detail.dgn	

 SYSTEMS

PROJECT NO.	SHEET NO.	TOTAL NO.
13CR.10811.11, 13CR.20811.11 13C.081105,	8	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TON	SHOULDER RECONSTRUCTION SMI	1½" MILLING SY	ASPHALT CONC BASE COURSE, TYPE B25.0B TON	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TON	ADJUSTMENT OF MANHOLES EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA				
13CR.10811.11	Rutherford	1	US 221	FROM 0.35 MI. N OF SR 1191 TO SR 2201 (MP 13.56-13.81)	1	NO	NO	0.25	22	12.50	0.50				300		18	275		1				
					2	US 221	FROM SR 1377 TO SR 1367 (MP 17.96-18.66)	1	NO	NO	0.70	36	35.00	1.40			1,371		82	350				
					3	US 221	FROM NCL OF RUTHERFORDTON TO SR 1377 (MP 16.94-17.96)	1	NO	NO	1.02	24	51.00	2.04			1,334		80	175				
					4	US 221	FROM END C&G TO NCL OF RUTHERFORDTON (MP16.55-16.94)	1	NO	NO	0.39	24	19.50	0.78			510		31	25	1			
					5	US 221	US 221 SB OFF RAMP AT US 64 (MP 0 - 0.14)	1	NO	NO	0.14	16	7.00	0.28			122		7	150				
					6	US 221	US 221 SB ON RAMP AT US 64 (MP 0 - 0.18)	1	NO	NO	0.18	16	9.00	0.36			157		9	10				
					7	US 221	US 221 NB OFF RAMP AT US 64 (MP 0 - 0.15)	1	NO	NO	0.15	16	7.50	0.30			131		8	10				
					8	US 221	US 221 NB ON RAMP AT US 64 (MP 0 - 0.13)	1	NO	NO	0.13	16	6.50	0.26			114		7	50				
					9	NC 120	FROM US 221A TO SR 1931 (MP 0.00-2.52)	2	NO	NO	2.52	20	126.00	5.04			1,103		2,749		213	900		
					10	US 221	FROM SR 2201 TO BEG. C&G (MP 13.81-15.23)	1	NO	NO	1.42	22	71.00	2.84					1,703		102	275		2
TOTAL FOR PROJ NO. 13CR.10811.11								6.90		345.00	13.80		1,103		8,491		557	2,220	1	3				
13CR.20811.11	Rutherford	11	SR 2117	FROM SR 2274 TO SR 2210 (MP 4.39-5.06)	3	NO	NO	0.67	19	33.50			336			682	60	375						
					12	SR 1920	FROM SR 1960 TO US 221A (MP 4.27-4.86)	4	NO	NO	0.59	20	29.50					632	42	450				
					13	SR 2102	FROM US 221A TO US 221 (MP 0.26-3.93)	4	NO	NO	3.67	18	183.50		200			3,541	237	1,850				
					14	SR 1148	FROM US 221 WEST 0.48 MILES (MP 0.0-0.48)	4	NO	NO	0.48	22	24.00					565	38	300				
					15	SR 2148	FROM SR 2210 TO SR 2149 (MP 0.2-1.54)	4	NO	NO	1.34	18	67.00					1,293	87	800				
					16	SR 1520	FROM SR 1510 TO SR 1527 (MP 0.0-1.03)	4	NO	NO	1.03	18	51.50					994	67	275				
					17	SR 1520	FROM SR 1527 TO SR 1523 (MP 1.03-2.31)	4	NO	NO	1.28	18	64.00					1,235	83	325				
					18	SR 1520	FROM SR 1523 TO SR 1535 (MP 2.31-3.89)	4	NO	NO	1.58	19	79.00					1,609	108	550				
TOTAL FOR PROJ NO. 13CR.20811.11								10.64		532.00		200	336		10,551	722	4,925							
13C.081105	Rutherford	19	SR 2271	FROM SR 2203 TO US 221 (MP 0.0-0.83)	5	NO	NO	0.83	21	41.50			749	1,642		933	174	250	1	2				
TOTAL FOR PROJ NO. 13C.081105								0.83		41.50			749	1,642		933	174	250	1	2				
GRAND TOTAL								18.37		918.50	13.80	200	2,188	1,642	8,491	11,484	1,453	7,395	2	5				

PROJECT NO.	SHEET NO.	TOTAL NO.
13CR.10811.11, 13CR.20811.11 13C.081105,	9	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4685000000-E		4686000000-E		4695000000-E	4710000000-E	4721000000-E	4725000000-E	4810000000-E		4830000000-E	4835000000-E	4840000000-N		4905000000-N	
							4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	4" X 120 M YELLOW THERMO	4" X 120 M WHITE THERMO	8" X 90 M WHITE THERMO	24" X 120 M WHITE THERMO	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS, SCHOOL)	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS, LT ARROW)	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	PAINT PAVEMENT MARKING LINES (16") WHITE	PAINT PAVEMENT MARKING LINES (24") WHITE	PAINT PAVEMENT MARKING CHARACTER (RXR)	PAINT PAVEMENT MARKING CHARACTER (SCHOOL)	SNOWPLOWABLE PAVEMENT MARKERS	
							LF	LF	LF	LF	LF	LF	EA	EA	LF	LF	LF	LF	EA	EA	EA	
13CR.10811.11	Rutherford	1	US 221	FROM 0.35 MI. N OF SR 1191 TO SR 2201 (MP 13.56-13.81)	0.25	22	2,640		2,640			70										17
		2	US 221	FROM SR 1377 TO SR 1367 (MP 17.96-18.66)	0.70	36	7,392		9,240	200		60	12	16								47
		3	US 221	FROM NCL OF RUTHERFORDTON TO SR 1377 (MP 16.94-17.96)	1.02	24	10,771		10,771													67
		4	US 221	FROM END C&G TO NCL OF RUTHERFORDTON (MP16.55-16.94)	0.39	24	4,118		4,118	200	400											26
		5	US 221	US 221 SB OFF RAMP AT US 64 (MP 0-0.14)	0.14	16	739	739			100											10
		6	US 221	US 221 SB ON RAMP AT US 64 (MP 0-0.18)	0.18	16	950	950			100											14
		7	US 221	US 221 NB OFF RAMP AT US 64 (MP 0-0.15)	0.15	16	792	792			100											11
		8	US 221	US 221 NB ON RAMP AT US 64 (MP 0-0.13)	0.13	16	686	686			100											8
		9	NC 120	FROM US 221A TO SR 1931 (MP 0.00-2.52)	2.52	20	26,611		26,611			20	6									330
		10	US 221	FROM SR 2201 TO BEG. C&G (MP 13.81-15.23)	1.42	22	14,995		14,995	400	800	175	18	16								94
TOTAL FOR PROJ NO. 13CR.10811.11					6.90		69,694	3,167	68,375	400	800	175	18	16								624
							72,861		68,775													
13CR.20811.11	Rutherford	11	SR 2117	FROM SR 2274 TO SR 2210 (MP 4.39-5.06)	0.67	19									14,150	14,150						
		12	SR 1920	FROM SR 1960 TO US 221A (MP 4.27-4.86)	0.59	20									12,461	12,461						
		13	SR 2102	FROM US 221A TO US 221 (MP 0.26-3.93)	3.67	18									77,510	77,510	200	75	4			
		14	SR 1148	FROM US 221 WEST 0.48 MILES (MP 0.0-0.48)	0.48	22									10,138	10,138						
		15	SR 2148	FROM SR 2210 TO SR 2149 (MP 0.2-1.54)	1.34	18									28,301	28,301	200	180	4	12		
		16	SR 1520	FROM SR 1510 TO SR 1527 (MP 0.0-1.03)	1.03	18									21,754	21,754						
		17	SR 1520	FROM SR 1527 TO SR 1523 (MP 1.03-2.31)	1.28	18									27,034	27,034						
		18	SR 1520	FROM SR 1523 TO SR 1535 (MP 2.31-3.89)	1.58	19									33,370	33,370						
TOTAL FOR PROJ NO. 13CR.20811.11					10.64										224,718	224,718	400	255	8	12		
															449,436					20		
13C.081105	Rutherford	19	SR 2271	FROM SR 2203 TO US 221 (MP 0.0-0.83)	0.83	21									17,530	17,530						
TOTAL FOR PROJ NO. 13C.081105					0.83										17,530	17,530						
															35,060							
GRAND TOTAL					18.37		69,694	3,167	68,375	400	800	175	18	16	242,248	242,248	400	255	8	12		624
							72,861		68,775						484,496				20			