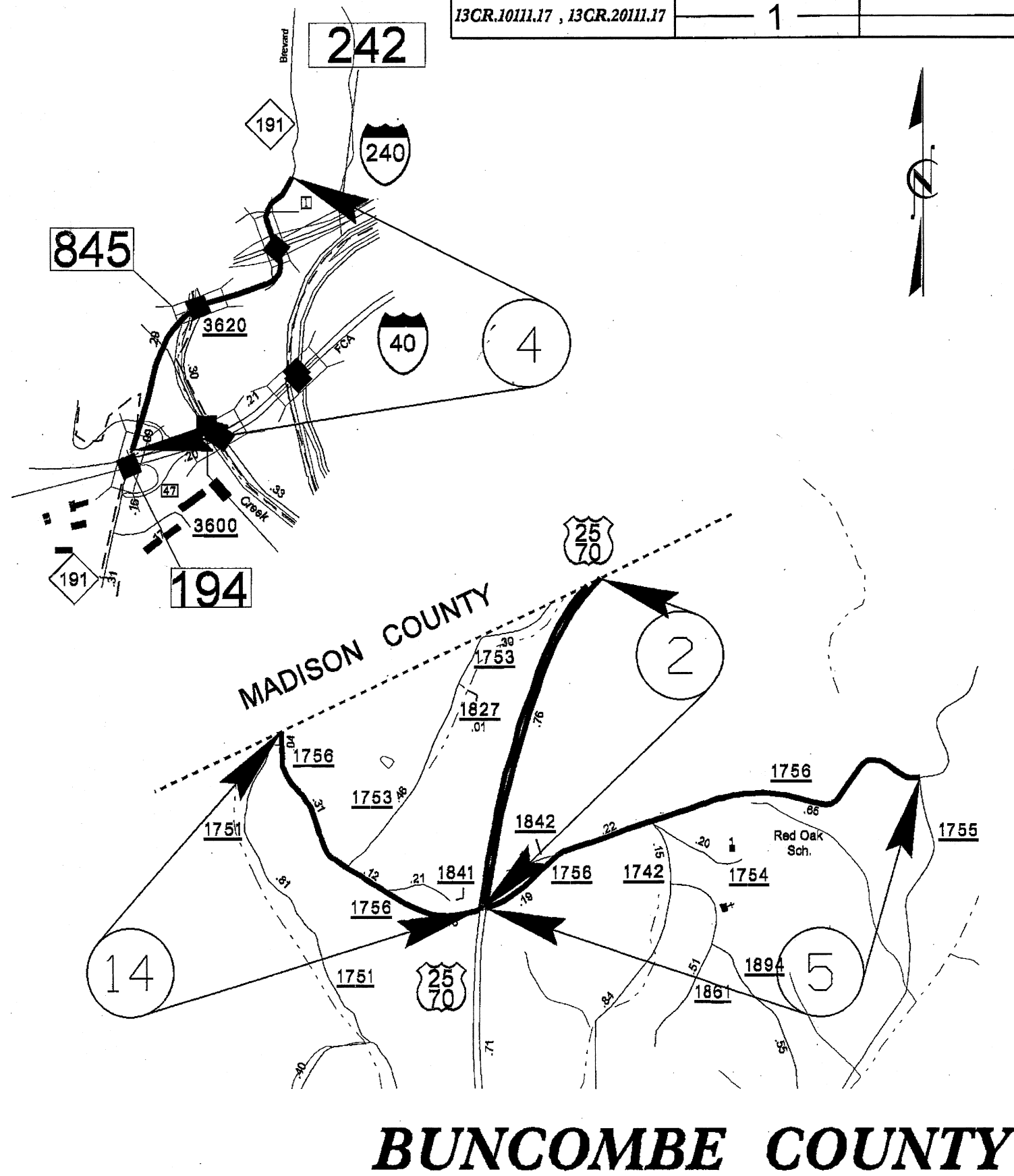
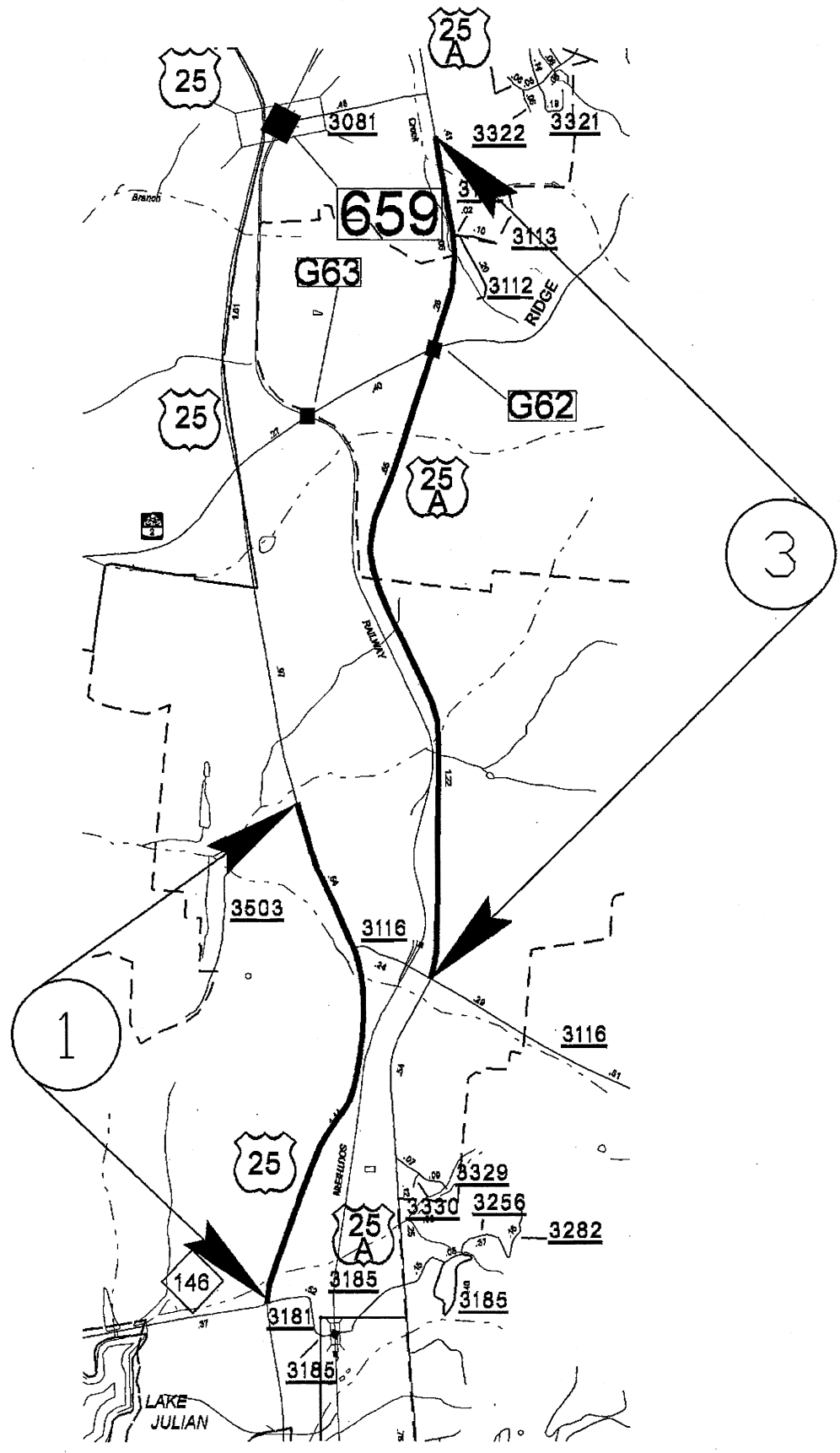
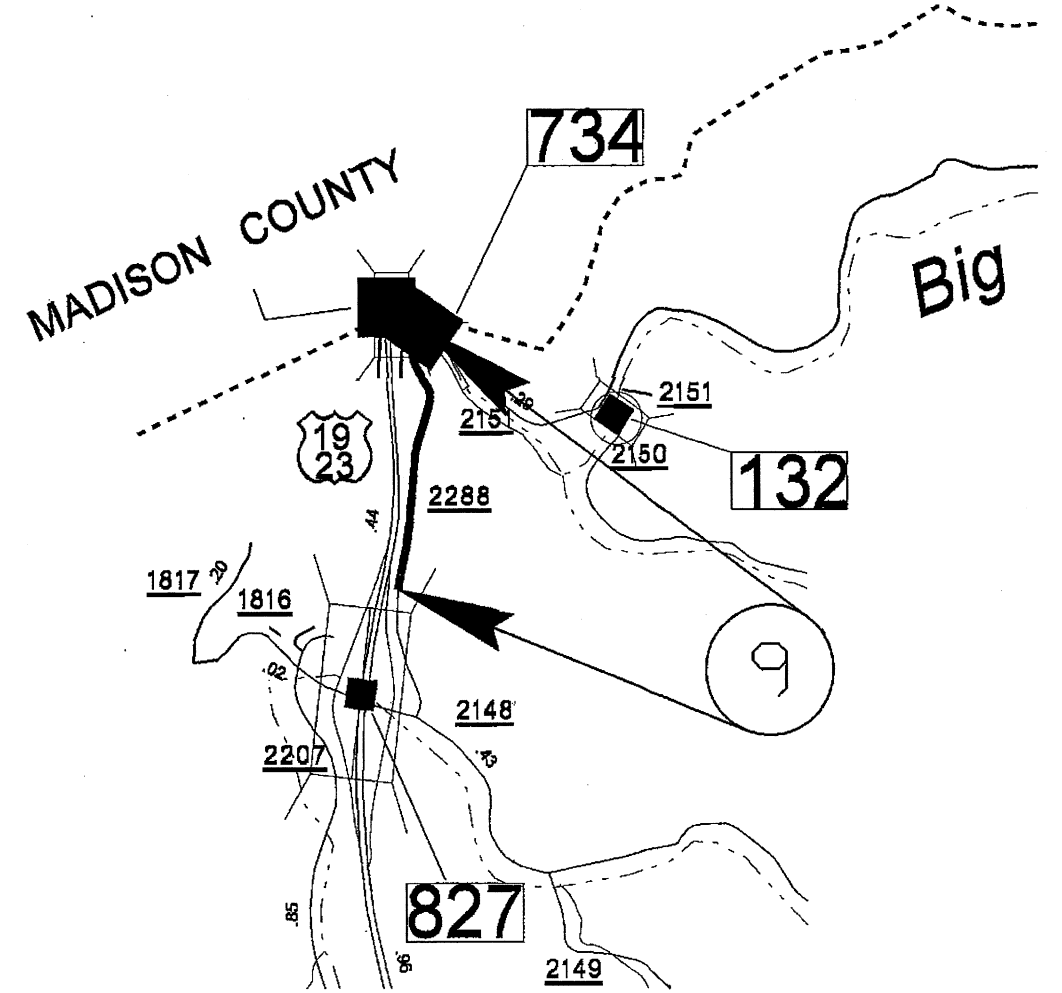
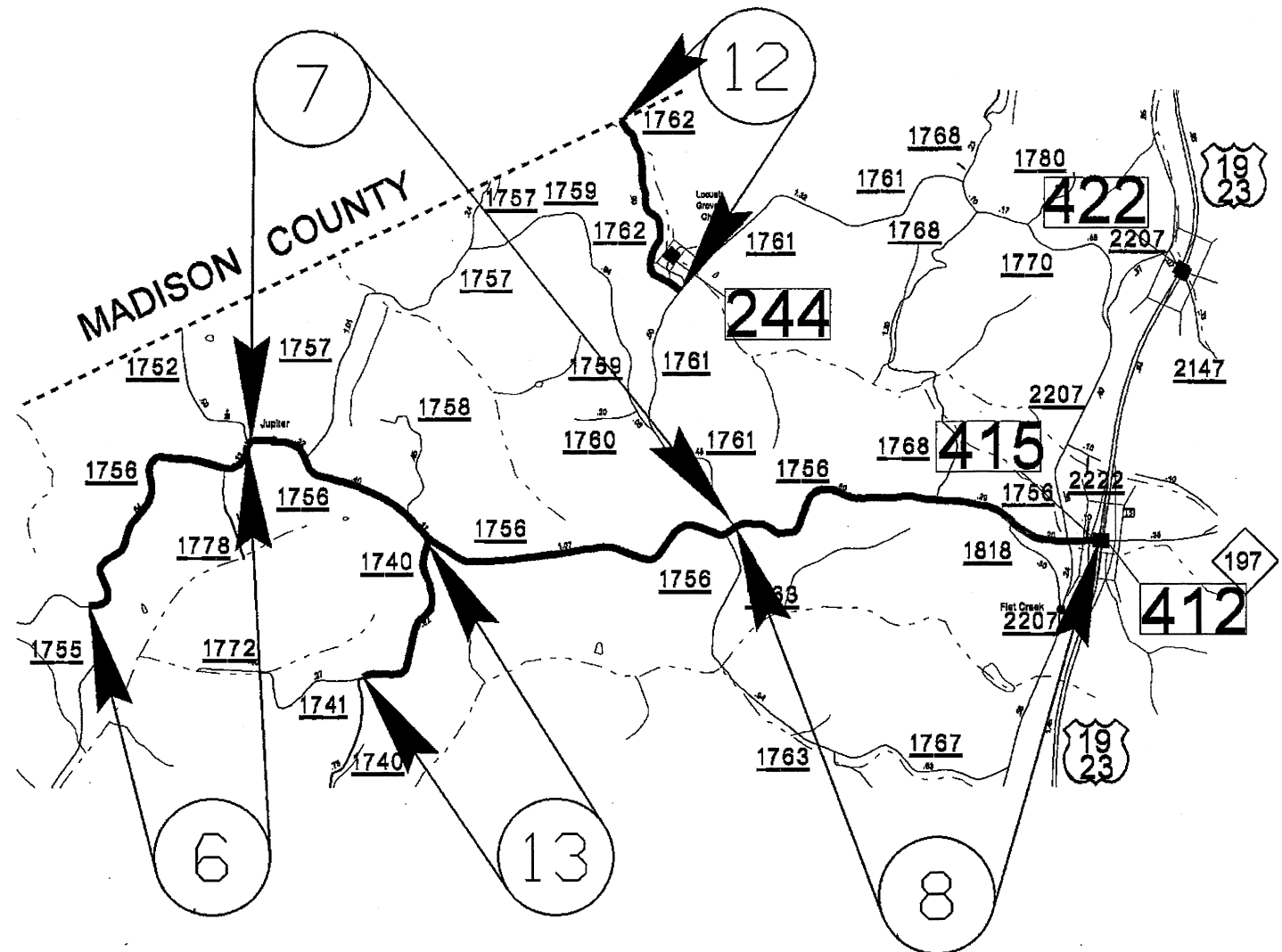


PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10111.17 , 13CR.20111.17	1	



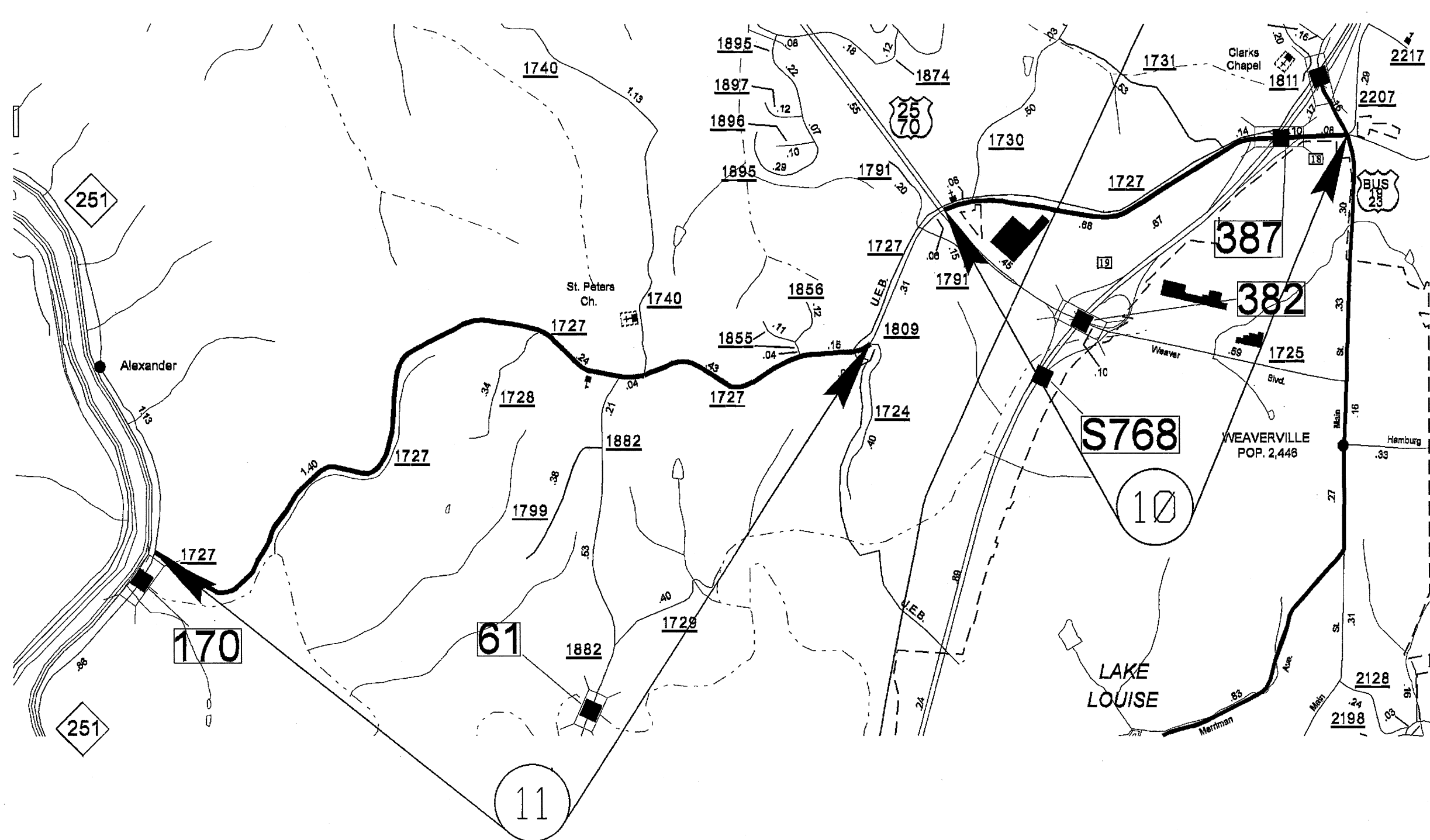
**BUNCOMBE COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10111.17 , 13CR.20111.17	2	



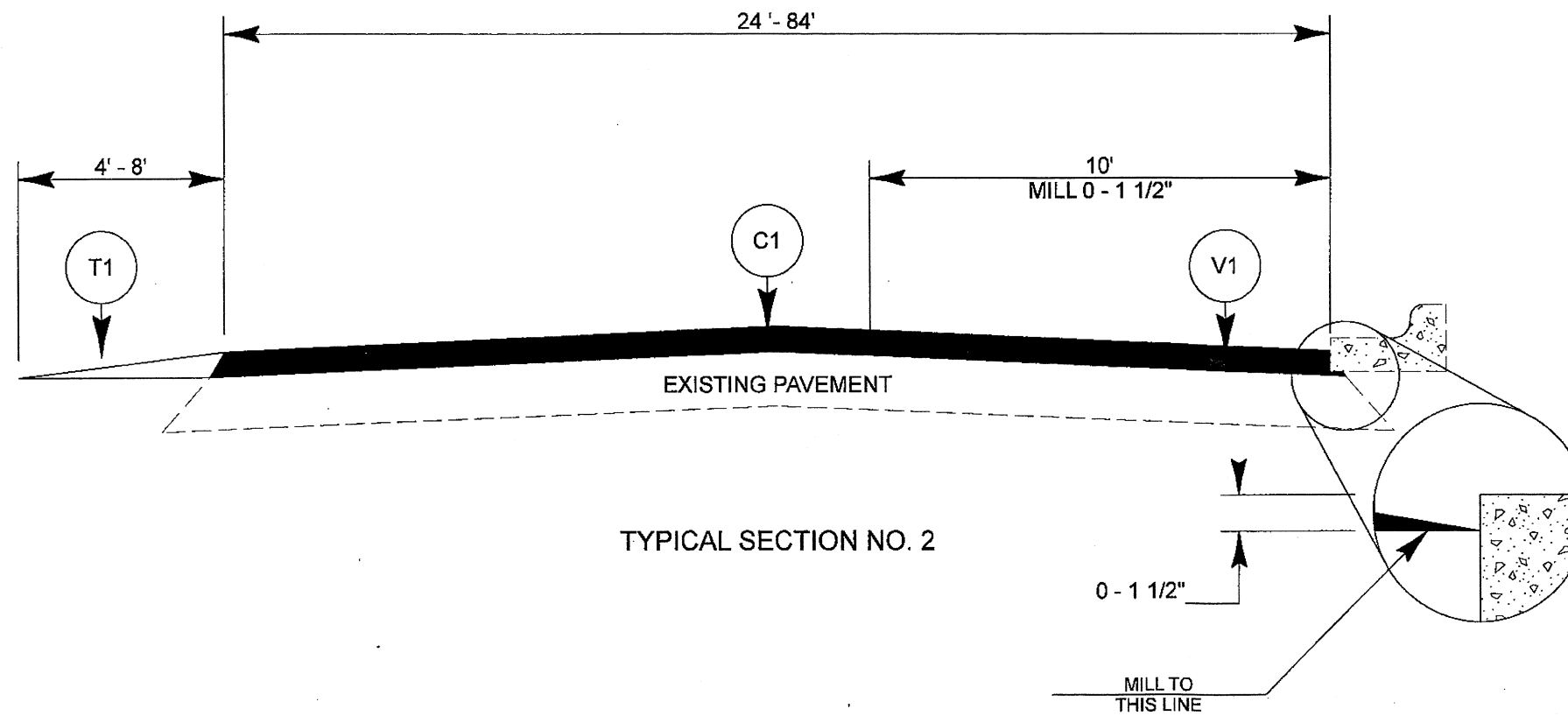
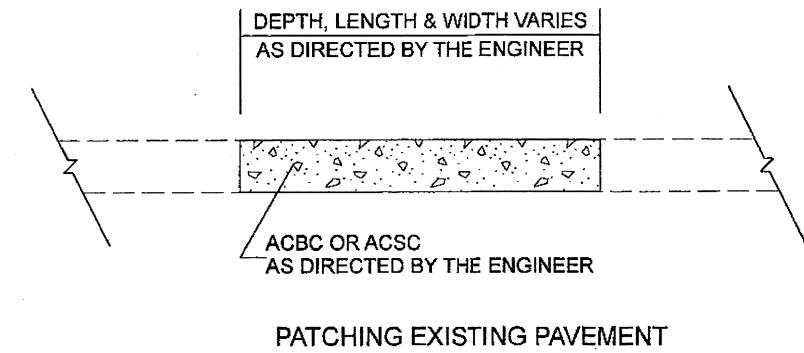
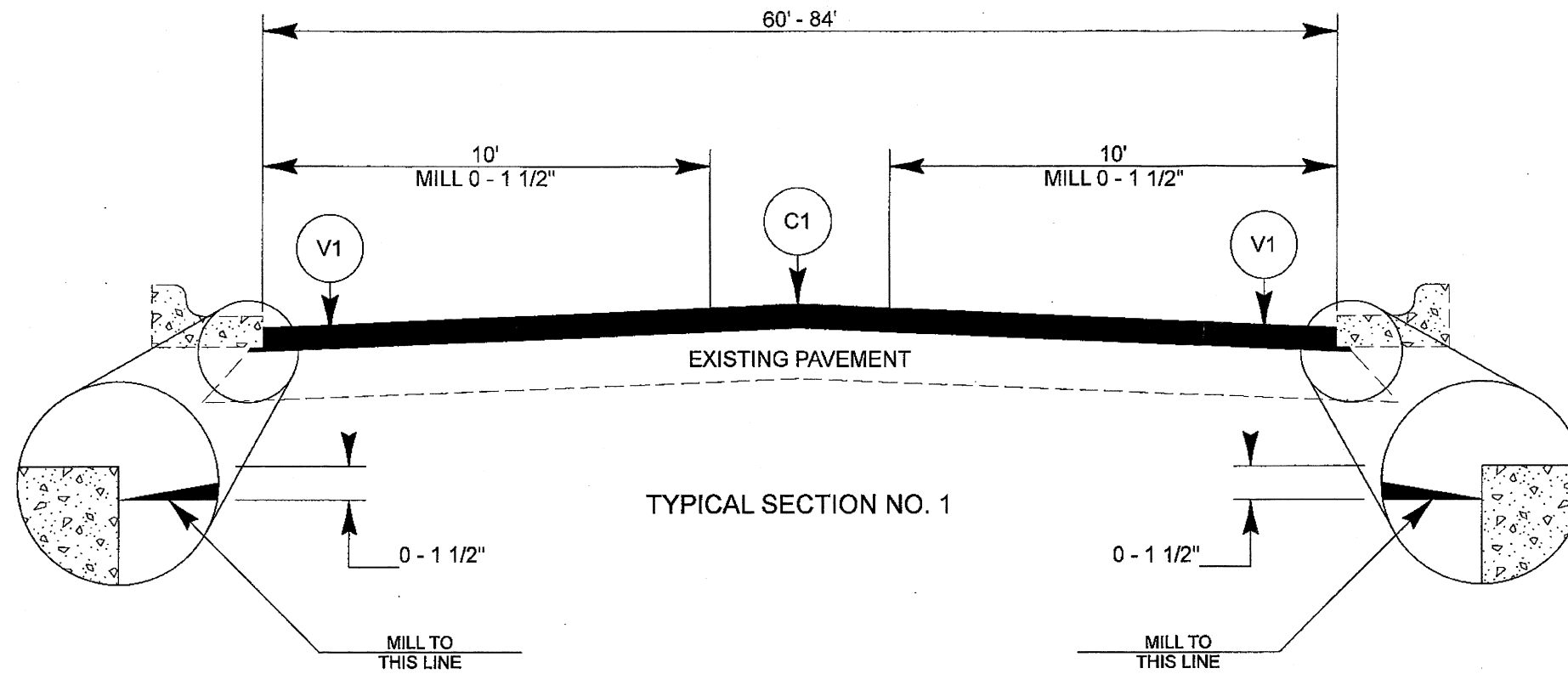
**BUNCOMBE COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10111.17 , 13CR.20111.17	3	



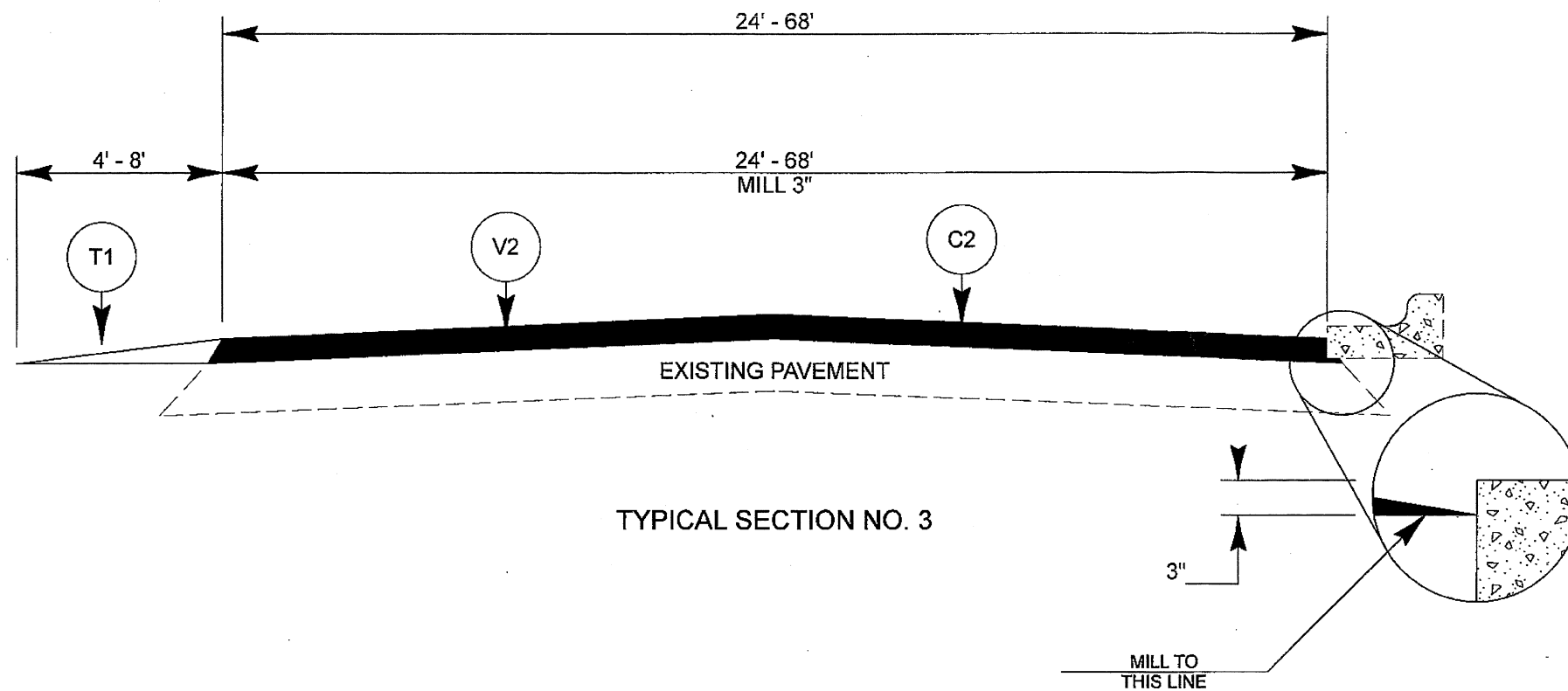
**BUNCOMBE COUNTY**

PROJECT NO. 13CR.10111.17, 13CR.20111.17	SHEET NO. 4	TOTAL SHEETS
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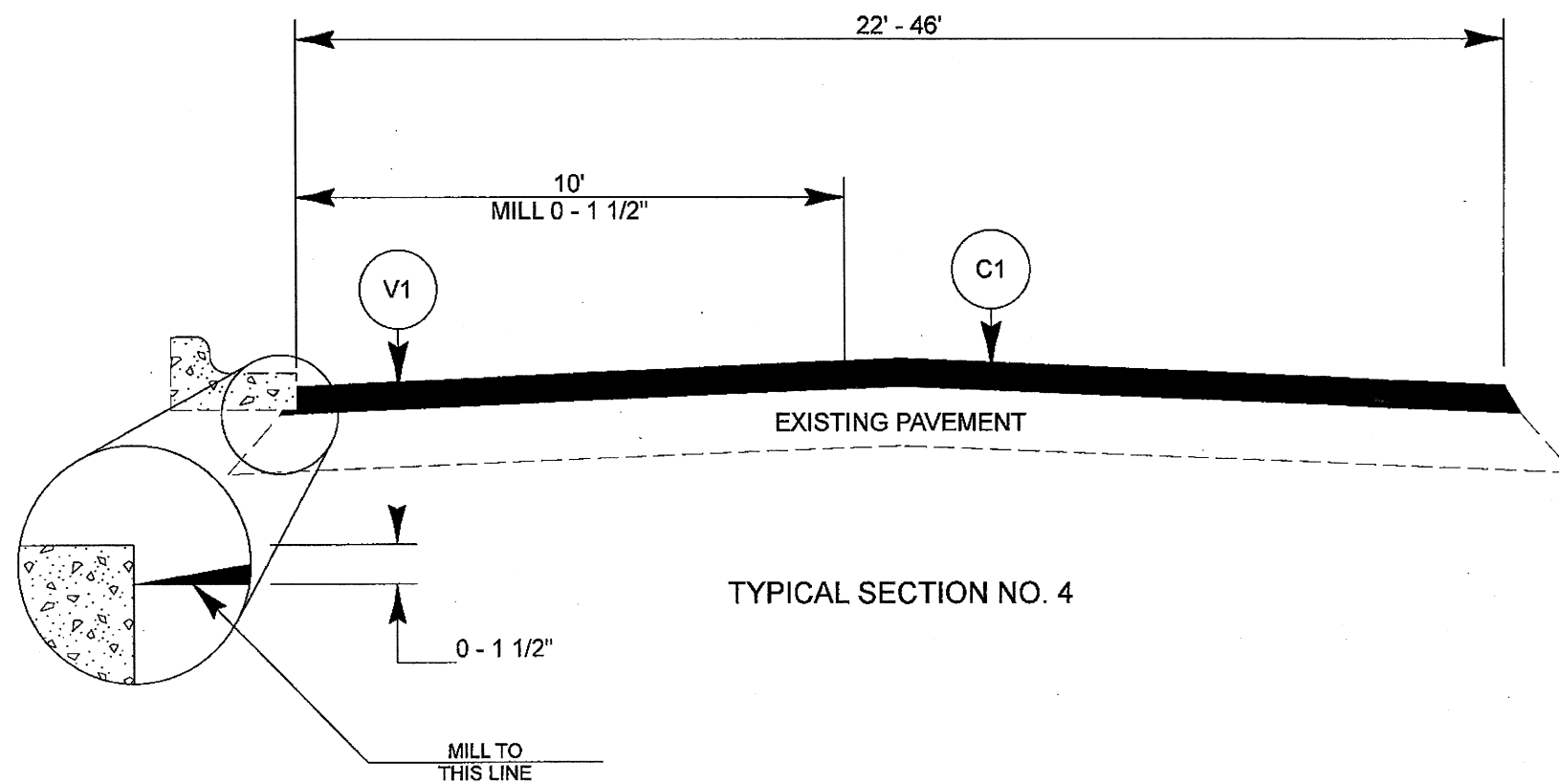


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
T1	SHOULDER RECONSTRUCTION
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 3" DEPTH
V3	INCIDENTAL MILLING
M	MILLED RUMBLE STRIPS

PROJECT NO. 13CR.10111.17, 13CR.20111.17	SHEET NO. 5	TOTAL SHEETS
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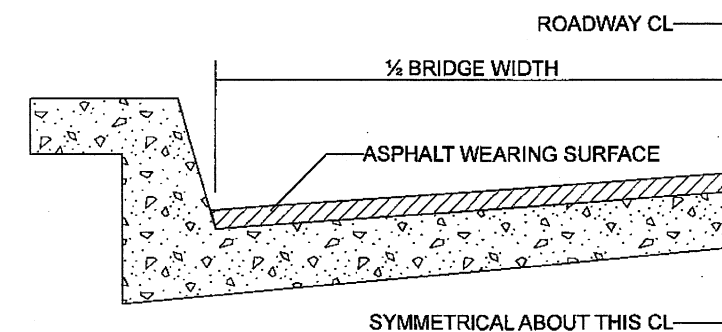


TYPICAL SECTION NO. 3



TYPICAL SECTION NO. 4

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
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
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 3" DEPTH
V3	INCIDENTAL MILLING
M	MILLED RUMBLE STRIPS



BRIDGE HALF TYPICAL SECTION

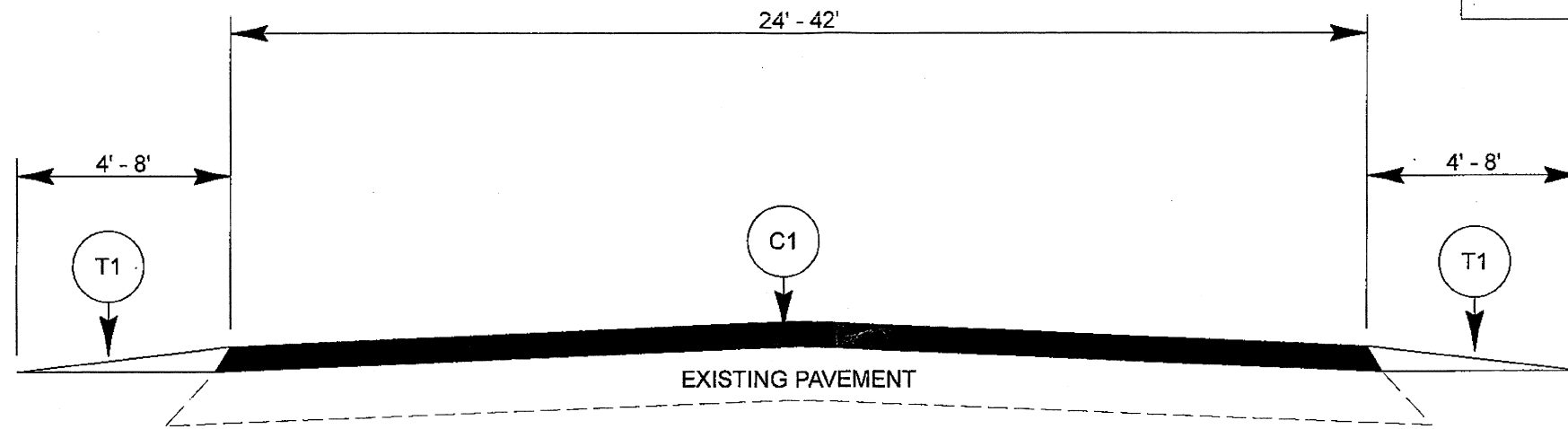
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN

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 1/4", SF9.5A 1.0", S9.5X 1.5", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 3/4", 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 3/4", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2".

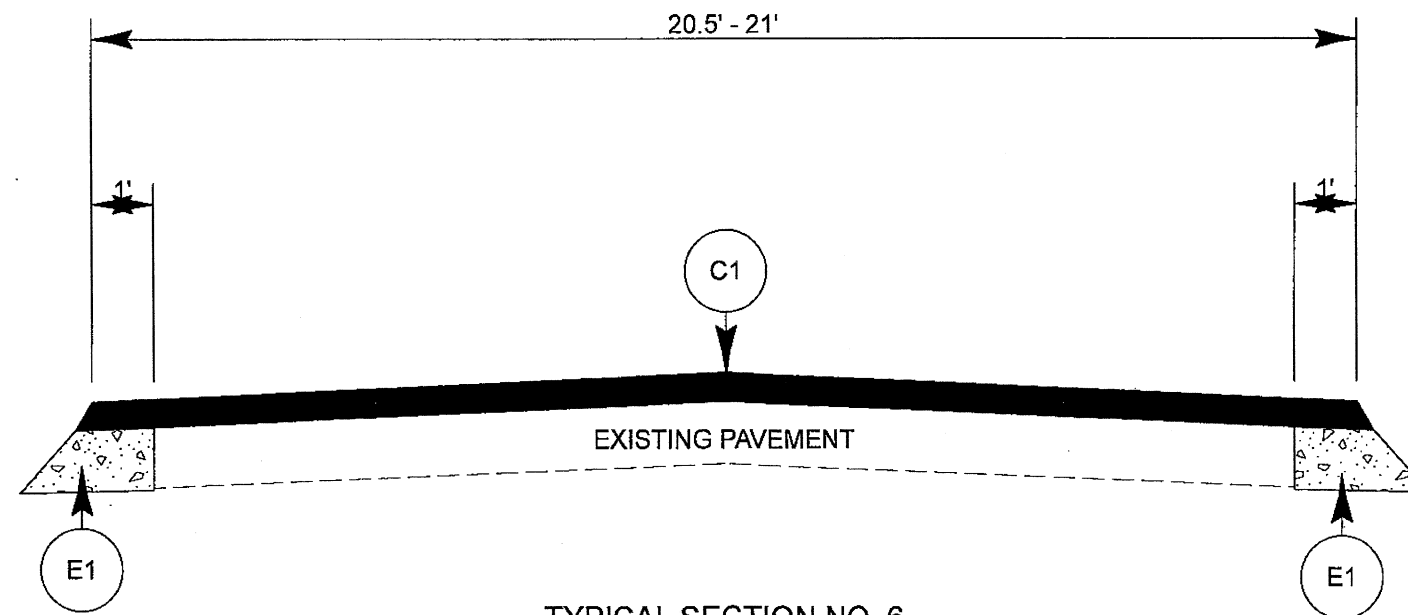
**NOTES**

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 RADI, OR AS DIRECTED BY THE ENGINEER.  
 EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.  
 SHOULDERS 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. 13CR.10111.17, 13CR.20111.17	SHEET NO. 6	TOTAL SHEETS
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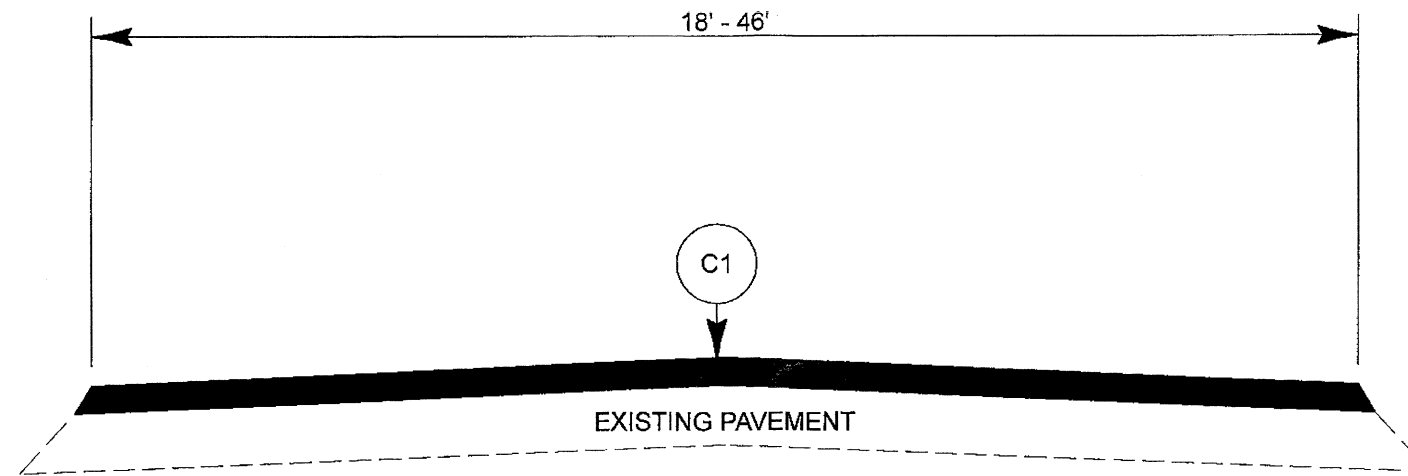
TYPICAL SECTION NO. 5



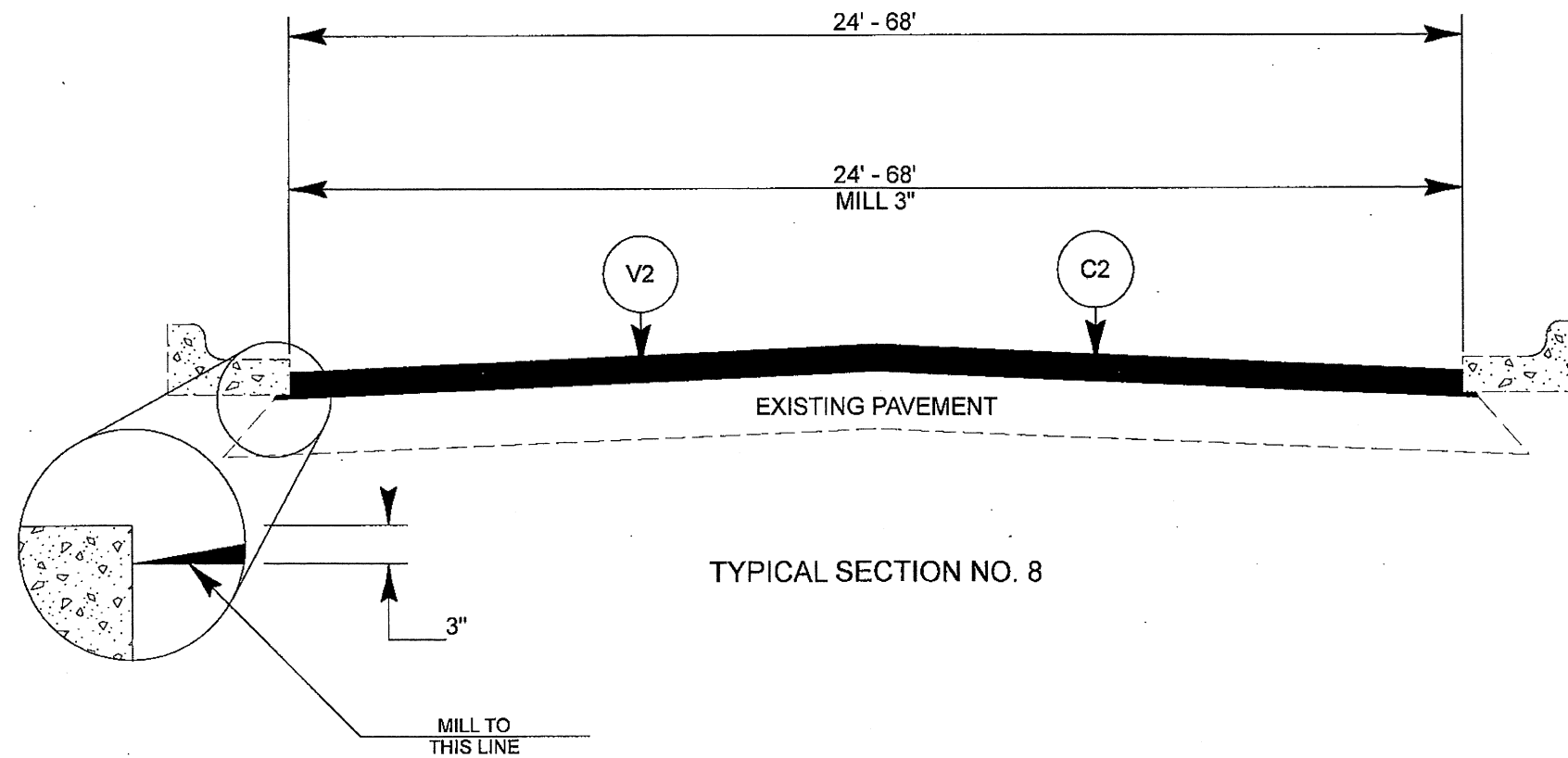
TYPICAL SECTION NO. 6

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
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
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 3" DEPTH
V3	INCIDENTAL MILLING
M	MILLED RUMBLE STRIPS

PROJECT NO. 13CR.10111.17, 13CR.20111.17	SHEET NO. 7	TOTAL SHEETS
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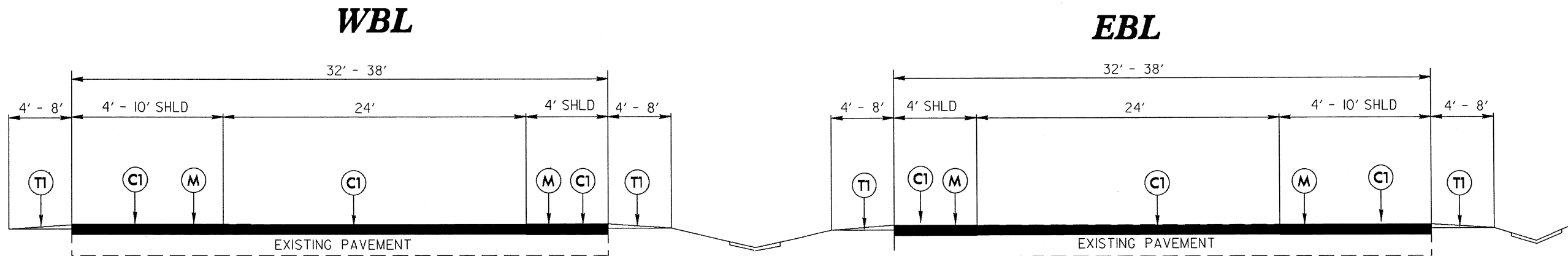
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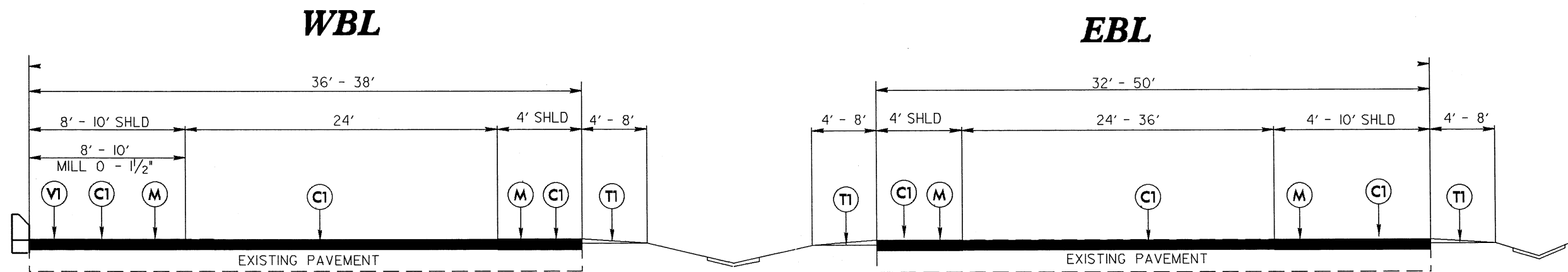
TYPICAL SECTION NO. 8

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
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
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 3" DEPTH
V3	INCIDENTAL MILLING
M	MILLED RUMBLE STRIPS

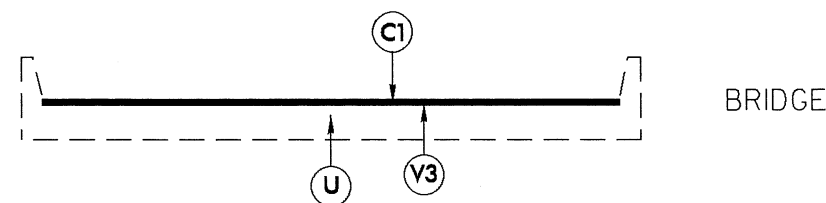
<b>PROJECT NO.</b>	<b>SHEET NO.</b>	<b>TOTAL SHEETS</b>
13CR.10111.17 , 13CR.20111.17	8	



**TYPICAL SECTION NO. 9**



**TYPICAL SECTION NO. 10**



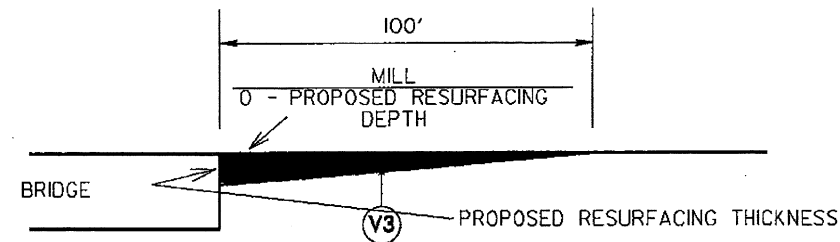
**BRIDGE DETAIL**

**BRIDGE # 242 MAP 4,  
MILL 1½" OFF EXISTING PAVEMENT  
SEE MAPS FOR BRIDGE LOCATION**

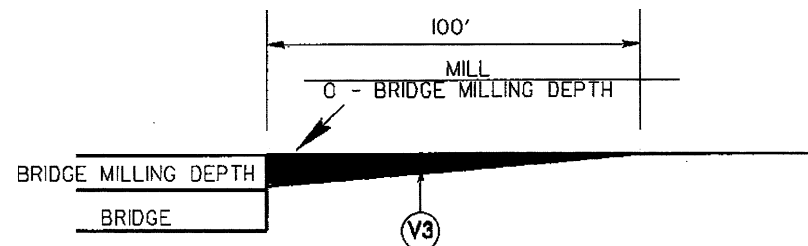
PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	V1	MILLING ASPHALT PAVEMENT, 0 TO 1½" DEPTH
M	MILLED RUMBLE STRIPS	V3	INCIDENTAL MILLING
T1	SHOULDER RECONSTRUCTION	U	EXISTING PAVEMENT



<b>PROJECT NO.</b>	<b>SHEET NO.</b>	<b>TOTAL SHEETS</b>
13CR.10111.17 , 13CR.20111.17	9	

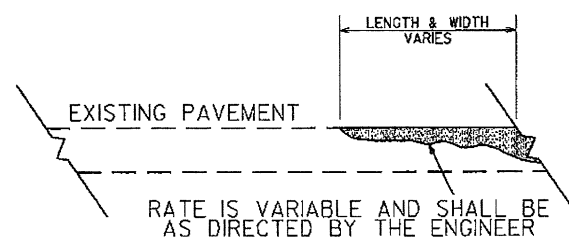
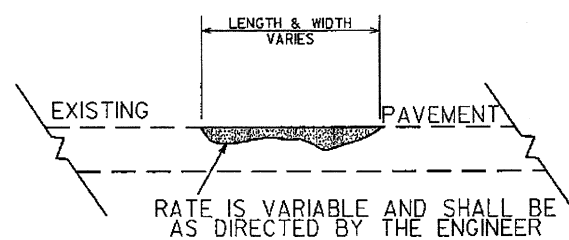


**INCIDENTAL MILLING DETAIL AT BRIDGE APPROACHES**  
**WHERE BRIDGES WILL NOT BE RESURFACED.**  
**THIS WILL BE PAID FOR AS INCIDENTAL MILLING.**

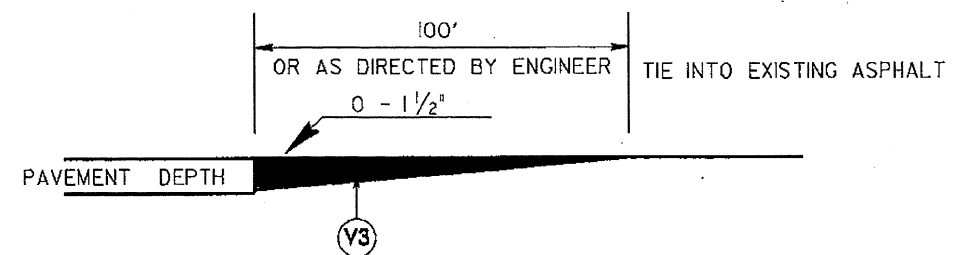


**INCIDENTAL MILLING DETAIL AT BRIDGE APPROACHES**  
**WHERE BRIDGES WILL BE MILLED THEN RESURFACED.**  
**THIS WILL BE PAID FOR AS INCIDENTAL MILLING.**

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
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
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 3" DEPTH
V3	INCIDENTAL MILLING
M	MILLED RUMBLE STRIPS

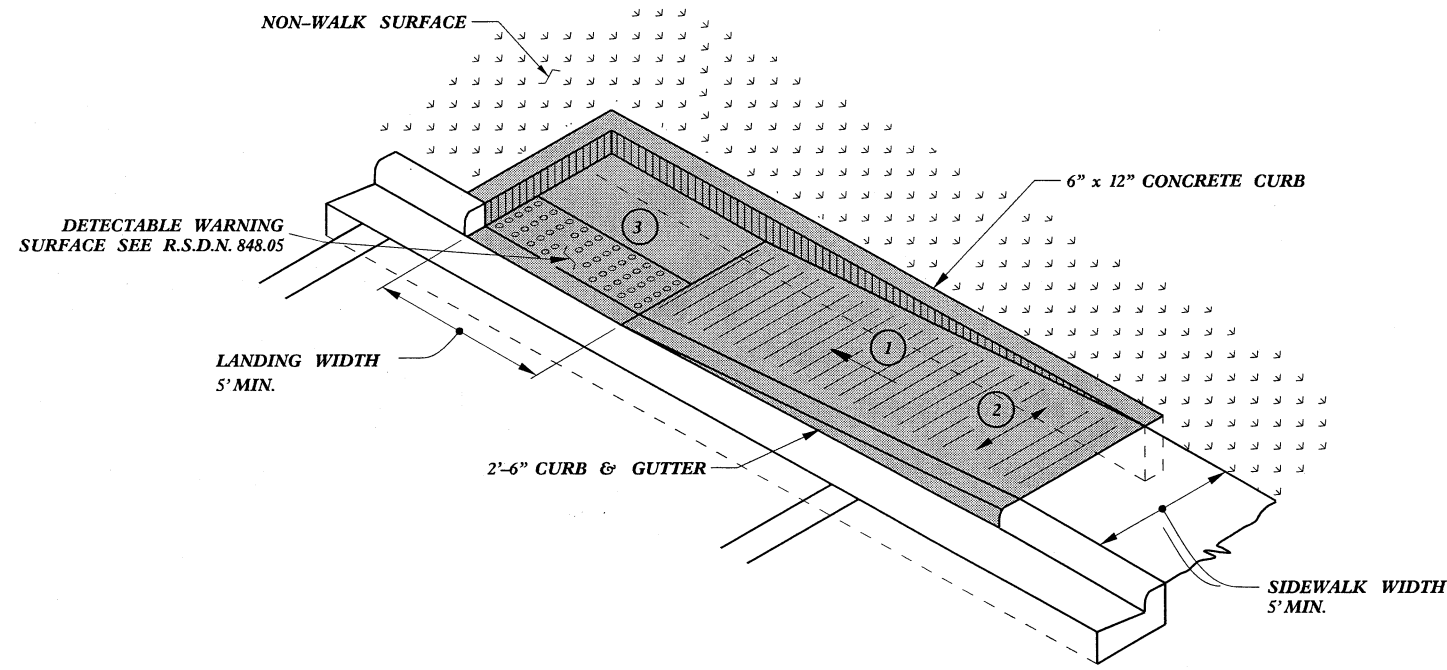


**DETAIL SHOWING  
METHOD OF WEDGING**

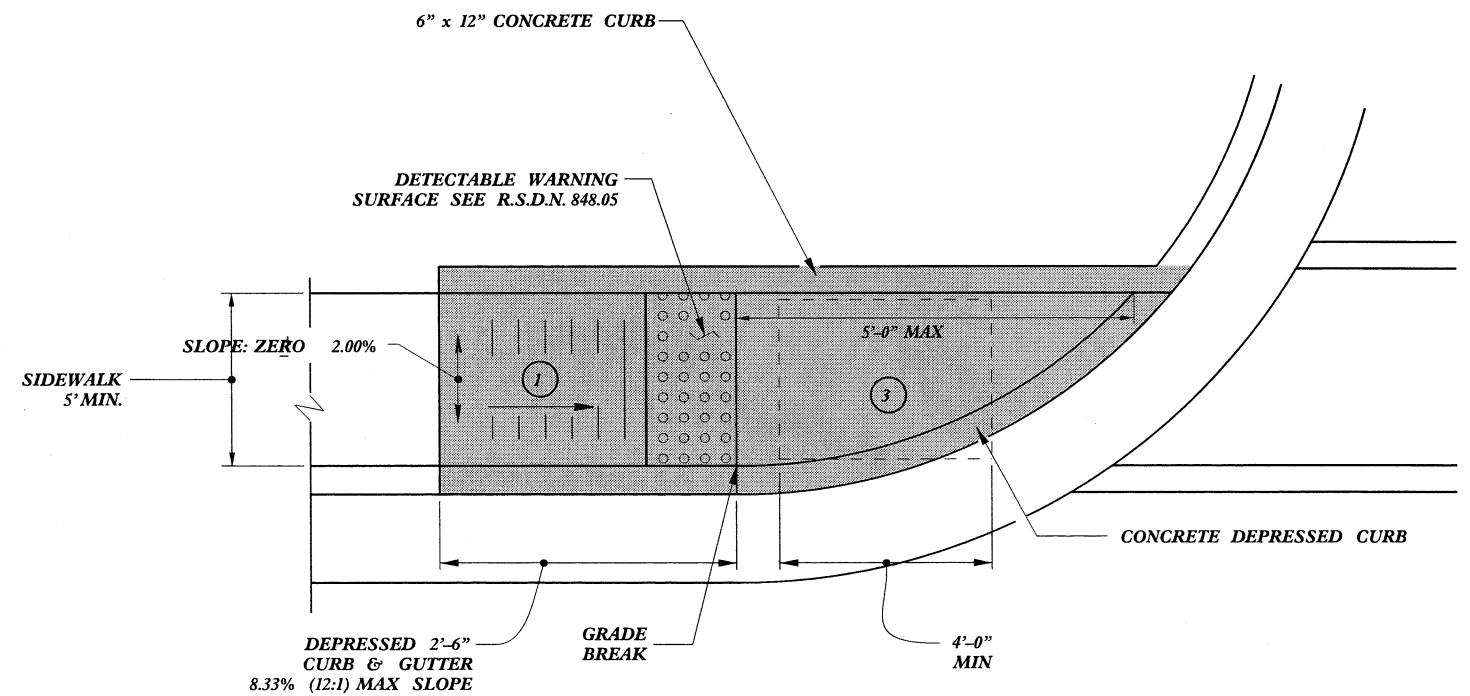


**DETAIL TO TIE INTO EXIST PAVEMENT**

**THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5B. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.**



**TYPE 1A**



**TYPE 1**

- ① 8.33% (12:1) MAX RAMP SLOPE
- ② CROSS SLOPE: 2.00%
- ③ CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

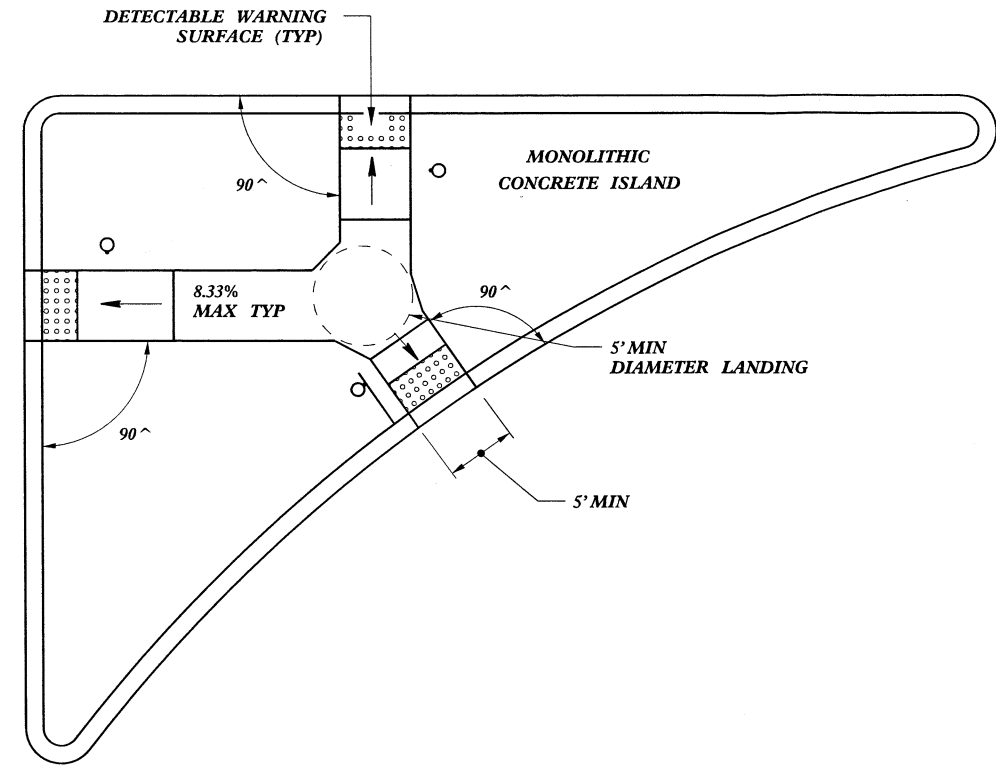
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

PAY LIMITS FOR CURB RAMP

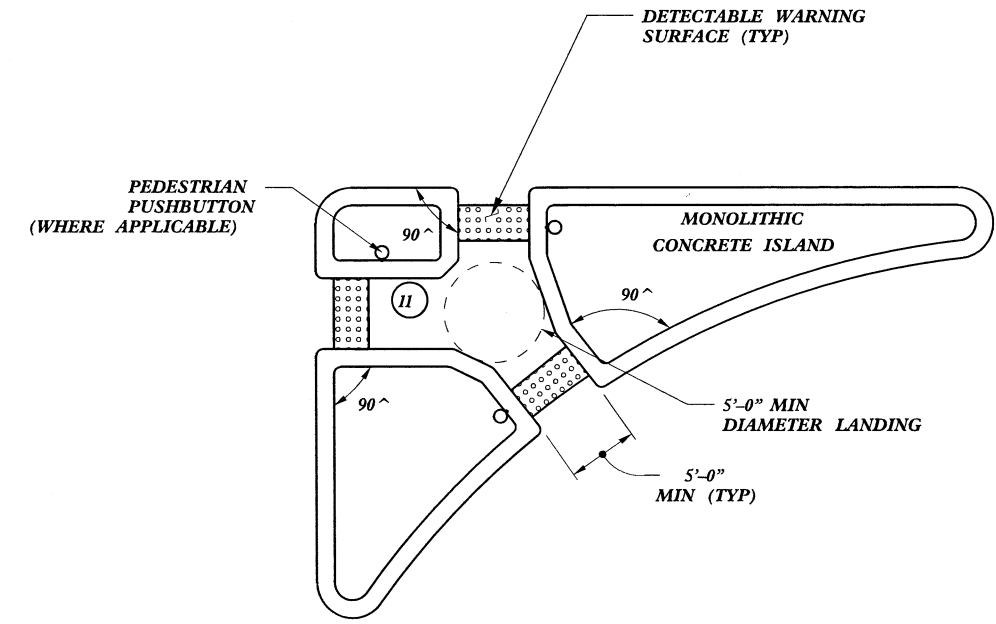
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950 FAX 919-250-4119	
<b>CURB RAMPS</b>	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg	

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 5/14/99  
 J.Howerton

04-AUG-2010 09:03  
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 5/14/99



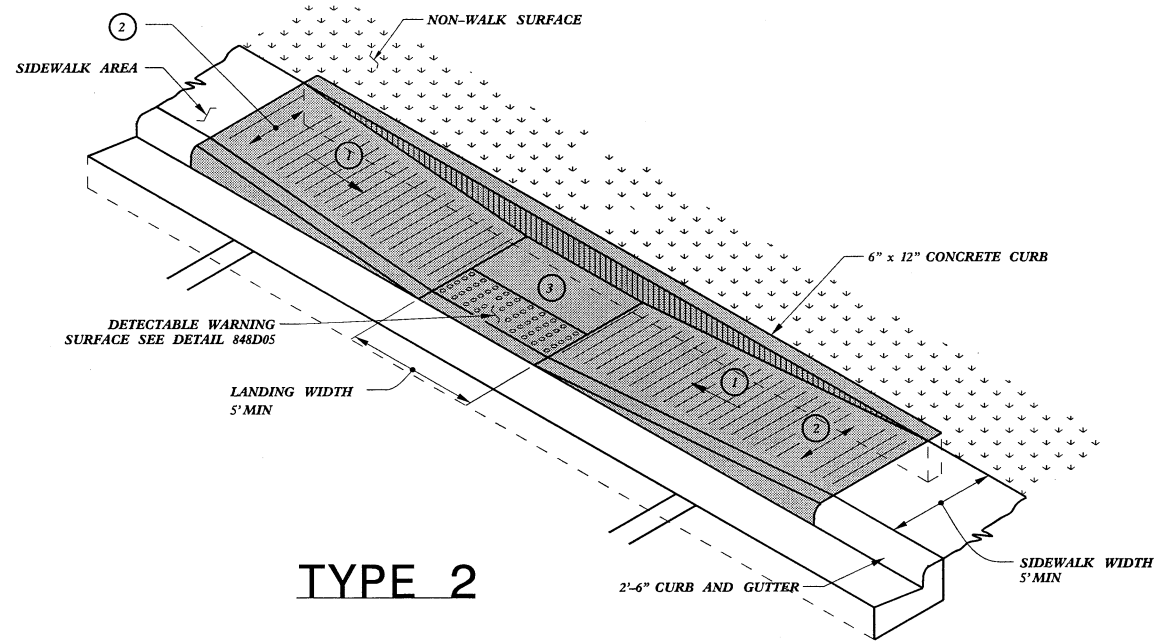
**LARGE ISLAND  
CURB RAMPS**



**SMALL ISLAND  
WITH CUT THROUGH**

-SEE ROADWAY DETAIL DRAWING 848D05 FOR DETECTABLE WARNING SURFACE AND FOR RAMP NOTES.  
 -SEE ROADWAY STANDARD DRAWING 852.01 FOR CONCRETE ISLAND DIMENSIONS.

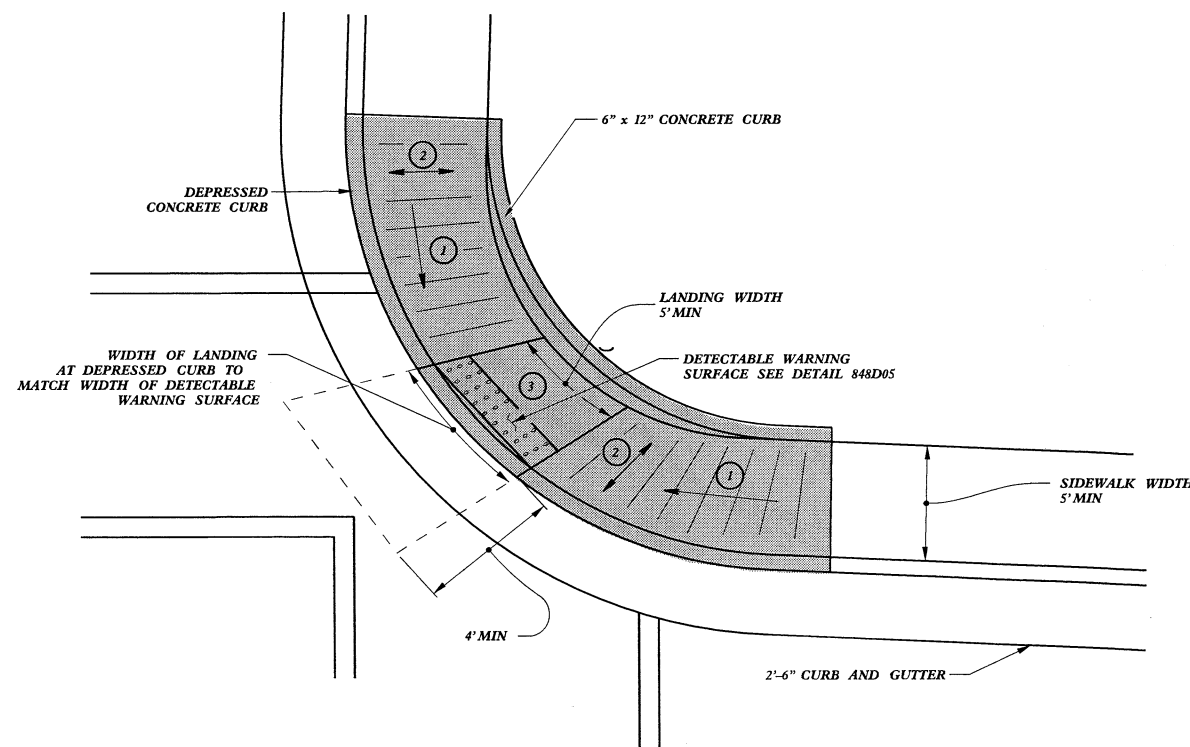
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Median or Turn Lane Islands	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	



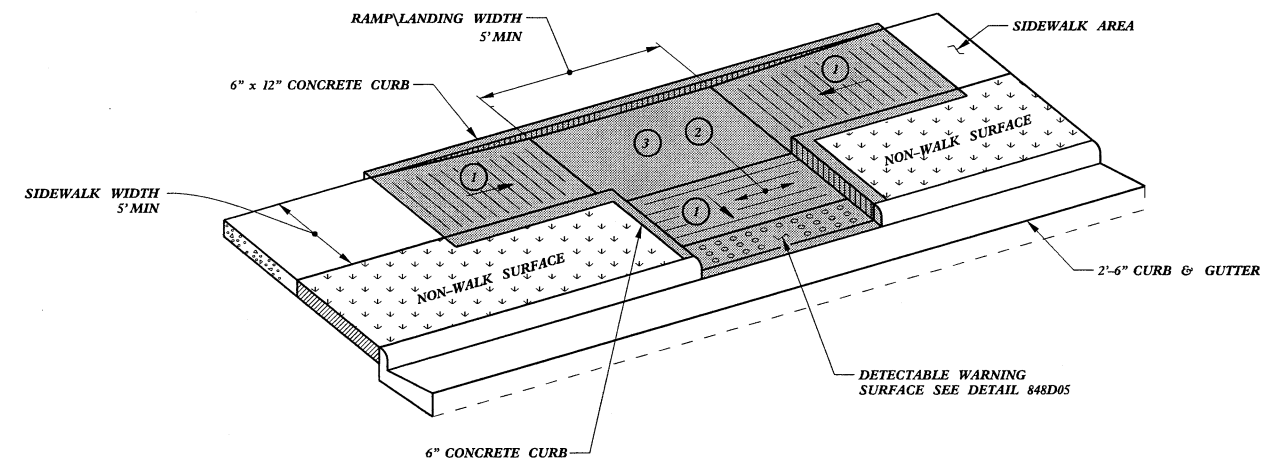
**TYPE 2**

**PAY LIMITS FOR CURB RAMP**

- ① 8.33% (12:1) MAX RAMP SLOPE
- ② CROSS SLOPE: 2.00%
- ③ CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



**TYPE 2A**

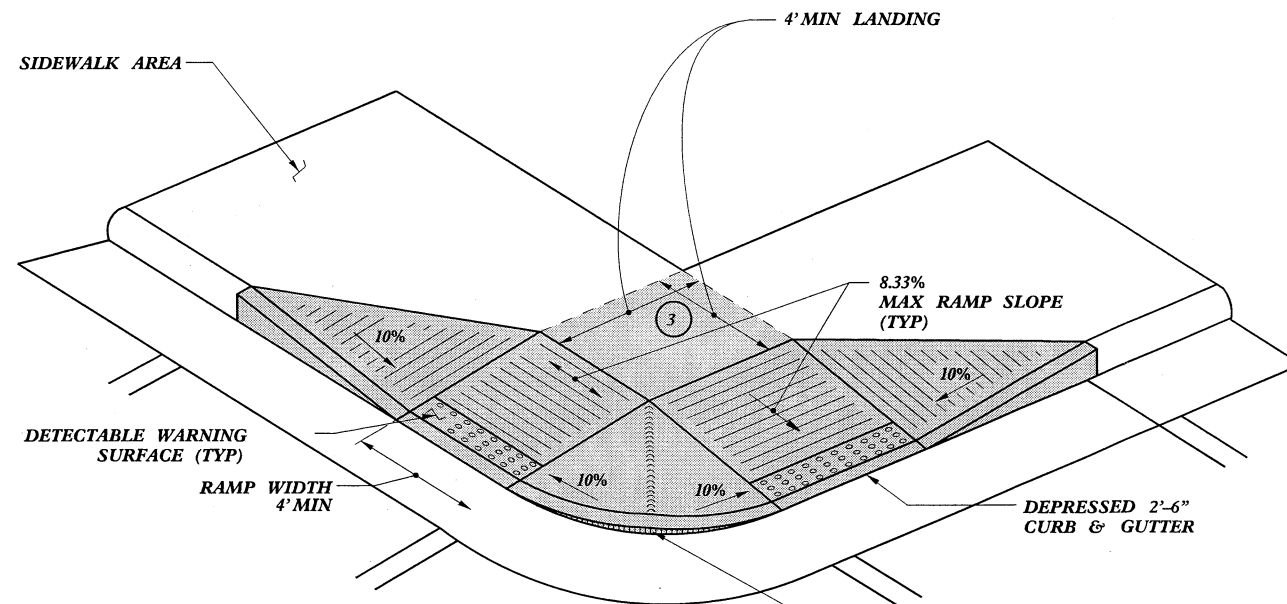


**TYPE 3**

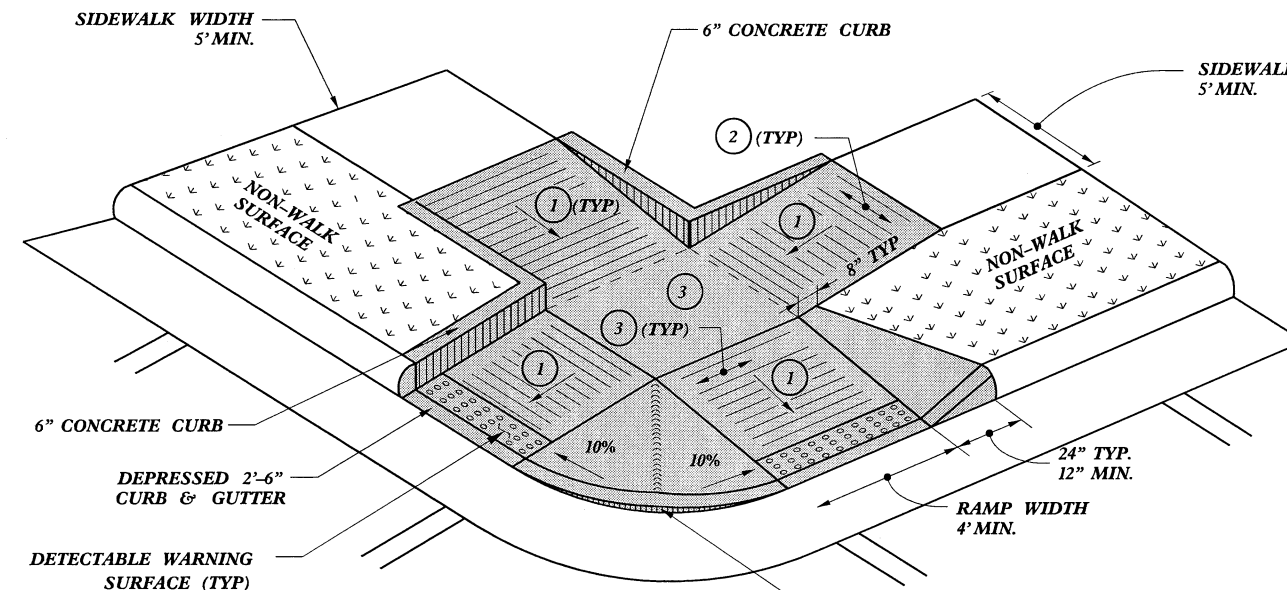
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Parallel Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg	

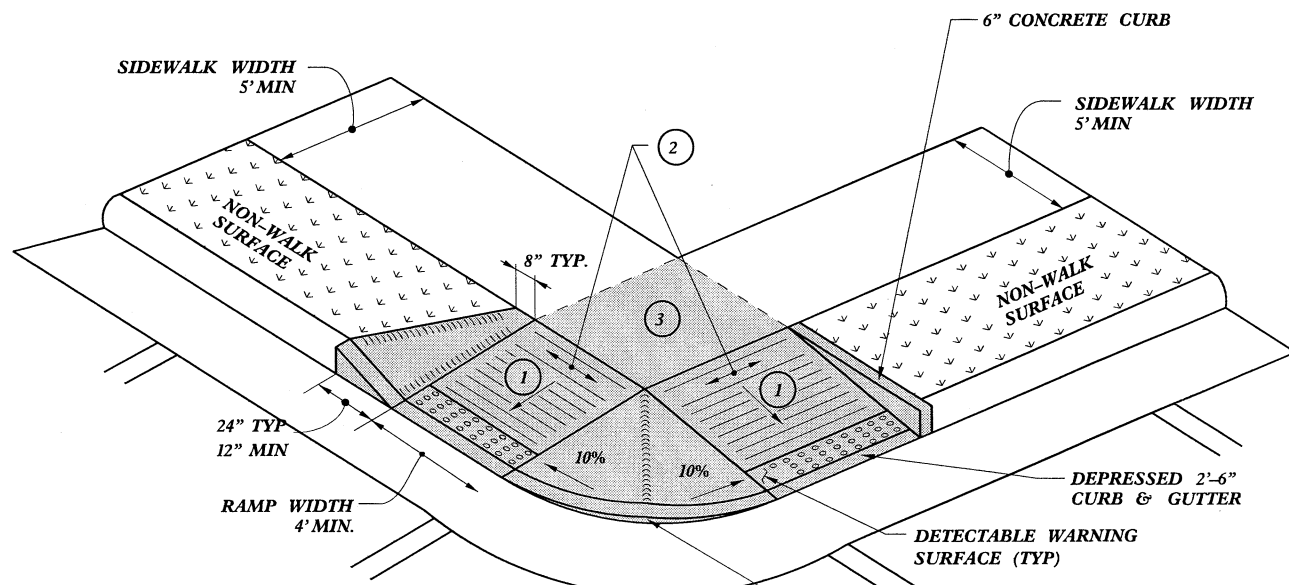
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 Jhowerton



**TYPE 4**



**TYPE 5**



**TYPE 4A**

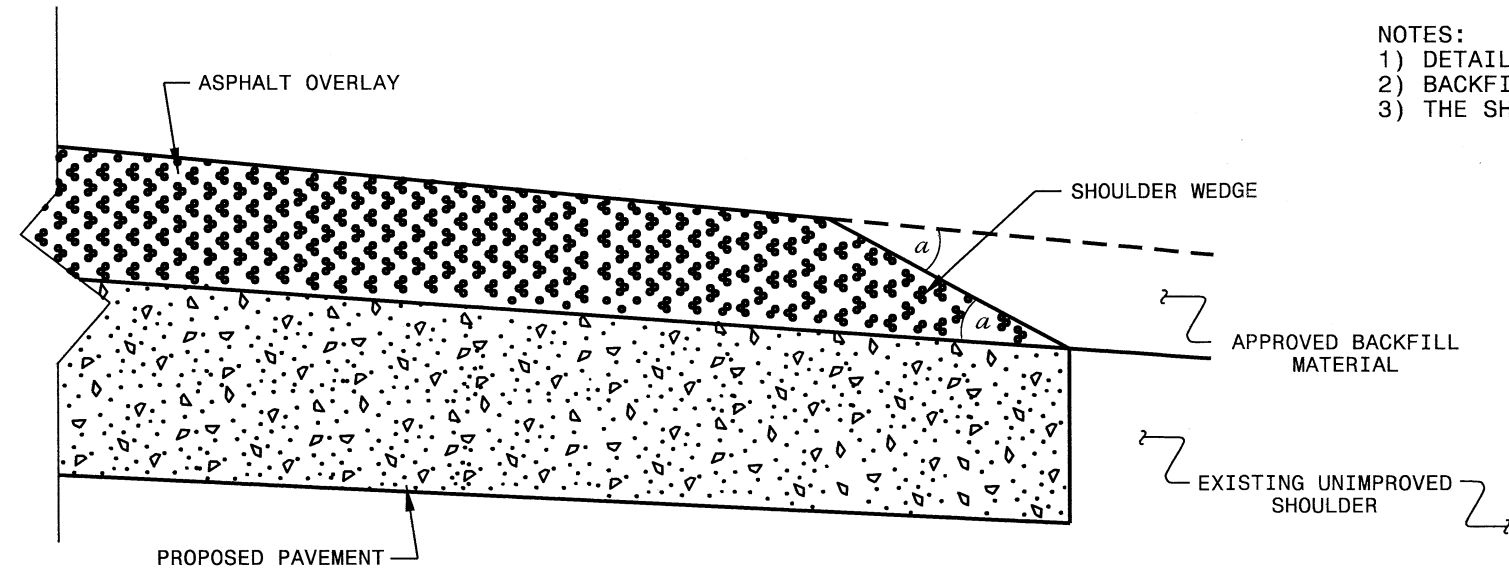
- ① 8.33% (12:1) MAX RAMP SLOPE
- ② CROSS SLOPE: 2.00%
- ③ CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

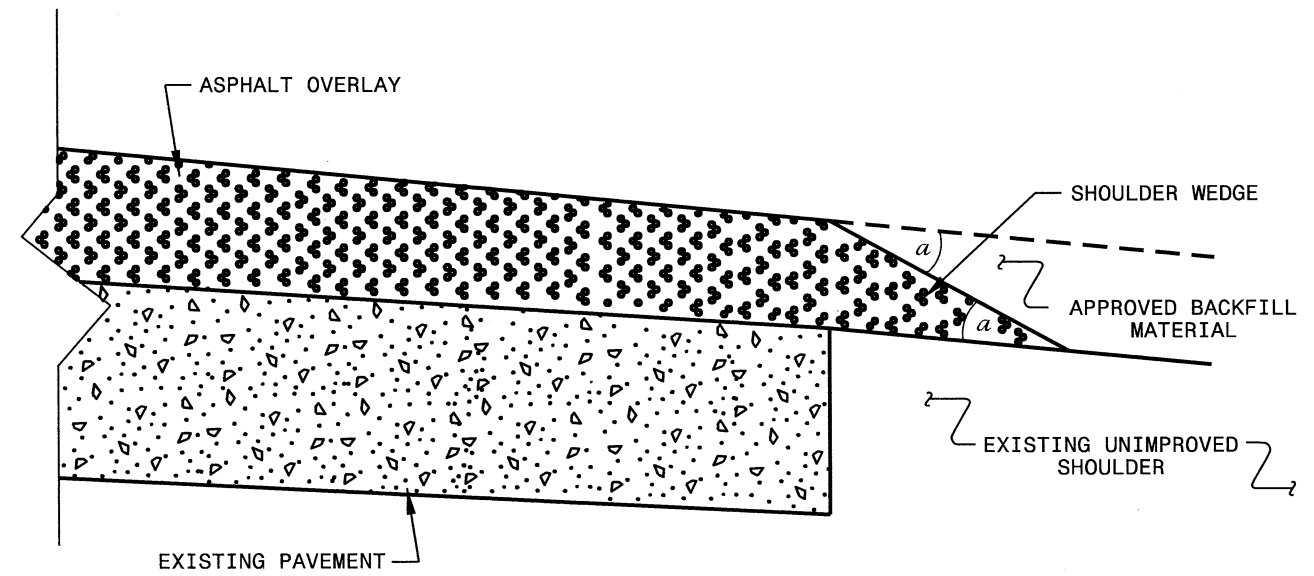
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Shared Landing	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

5/14/99  
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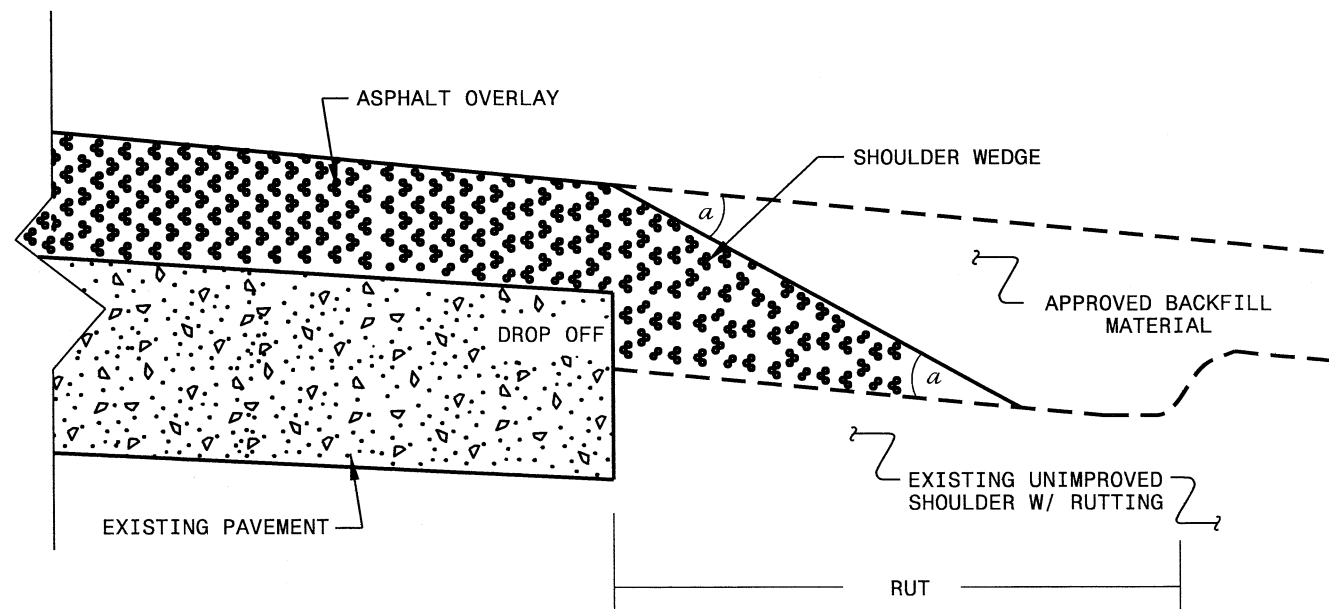
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



**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: 10/16/12
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	

\*\*\*\*\*  
 SYSTEMS  
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PROJECT NO.	SHEET NO.	TOTAL NO.
13CR.10111.17, 13CR.20111.17	15	

### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	3" MILLING	MILLING ASPHALT PAVEMENT, 0" TO 1 1/2" DEPTH	INCIDENTAL MILLING	ASPHALT CONC BASE COURSE, TYPE B25.0B	INTERMEDIATE COURSE, I19.0B	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) std. 665.01	CONCRETE CURB RAMP	ADJUSTMENT OF DROP INLETS	ADJUSTMENT OF MANHOLES	ADJUSTMENT OF METER BOXES OR VALVE BOXES	PORTABLE LIGHTING	TEMPORARY SILT FENCE	WATTLE		
					NO					MI	FT	TON	SMI	SY	SY	SY	TON	TON	TON	TON	TON	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA
13CR.10111.17	Buncombe	1	US 25	FROM NC 146 LONG SHOALS RD TO SR 3503 OVERLOOK RD ( MP 3.0 - MP 4.55)	1,2	5	M2 - Multi-lane two-way traffic	NO	NO	1.55	60 - 84	3	0.12		17,483	1,567			5,136	308	100		35	2	21	26	1				
13CR.10111.17	Buncombe	2	US 25/70	FROM SR 1756 JUPITER RD TO MADISON CO. LINE (MP 24.60 - MP 25.36) (MP 0.75 - MP 0)	9,10	4	MD - Multi-lane divided traffic	NO	NO	0.8	64 - 88	40	3.10		950	1,689			3,345	201	120	16,896									
13CR.10111.17	Buncombe	3	US 25A	FROM SR 3116 MILLS GAP RD. TO BEGIN 5 LANE (MP 2.836 - MP 5.266)	2,5	2	lane two-way undivided traffic	NO	NO	2.43	24 - 42	122	4.68		1,385	1,950			4,257	255	500						*				
13CR.10111.17	Buncombe	4	NC 191	FROM I-40 BRIDGE #194 TO BEGIN OF 2 LANE (MP 9.49 - MP 10.24)	3,8	4	M2	NO	NO	0.75	24 - 68	3	0.05	26,400		596			4,944	297	120		8				*				
<b>TOTAL FOR PROJ NO. 13CR.10111.17</b>										<b>5.53</b>		<b>168</b>	<b>7.95</b>	<b>26,400</b>	<b>19,818</b>	<b>5,802</b>			<b>17,682</b>	<b>1,061</b>	<b>840</b>	<b>16,896</b>	<b>43</b>	<b>2</b>	<b>21</b>	<b>26</b>	<b>1</b>				
13CR.20111.17	Buncombe	5	SR 1756 JUPITER RD	US 25/70 TO INDIAN CAMP BR RD (SR 1755), (MP 0.68 - MP 1.75)	6	2	2WU	NO	NO	1.05	20.5	53				800	527		1,174	94	375								120	24	
13CR.20111.17	Buncombe	6	SR 1756 JUPITER RD	INDIAN CAMP (SR 1755) TO ELLER FORD RD (SR 1752), (MP 1.751 - MP 2.781)	6	2	2WU	NO	NO	1.03	20.5	52				550	517		1,152	92	390										
13CR.20111.17	Buncombe	7	SR 1756 JUPITER RD	ELLER FORD RD. (SR 1752) TO LOCUST GROVE RD. (SR 1761), (MP 2.781 - MP 4.601)	6	2	2WU	NO	NO	1.82	20.5	91				725	913		2,035	162	640										
13CR.20111.17	Buncombe	8	SR 1756 JUPITER RD	LOCUST GROVE RD (SR 1761) TO NC 197, (MP 4.601 - MP 6.00)	6	2	2WU	NO	NO	1.4	21	70				2,065	702		1,603	127	510							40	8		
13CR.20111.17	Buncombe	9	MARS HILL HWY/ STOCKTON RD	FROM NEW JOINT TO BRIDGE #734 (MP 0.245 - MP 0.579)	7	2	2WU	NO	NO	0.36	25	18				555			535	32	150										
13CR.20111.17	Buncombe	10	SR 1727 MONTICELLO RD	FROM US 19 BUS (N. MAIN ST.) TO US 25/70 (MP 0.00 - MP 1.077)	4,7	2	2WU	NO	NO	1.07	22 - 46	54			258	1,675		200	1,412	94	325						1				
13CR.20111.17	Buncombe	11	SR 1727 MONTICELLO RD	FROM SR 1809 TO NC 251 (MP 1.467 - MP 3.782)	7	2	2WU	NO	NO	2.32	20	116				860			2,531	152	140										
13CR.20111.17	Buncombe	12	SR 1762 CHANDLER BRANCH RD	FROM SR 1761 TO COUNTY LINE (MP 0.00 - MP 0.700)	7	2	2WU	NO	NO	0.74	18	37				400			727	44	165										
13CR.20111.17	Buncombe	13	SR 1740 NEW STOCK RD	FROM SR 1741 TO SR 1756 (MP 4.025 - MP 4.639)	7	2	2WU	NO	NO	0.6	18	30				400			590	35	103										
13CR.20111.17	Buncombe	14	SR 1756 JUPITER RD	FROM COUNTY LINE TO US 25/70 (MP 0.00 - MP 0.656)	7	2	2WU	NO	NO	0.72	24	36							942	56	110										
<b>TOTAL FOR PROJ NO. 13CR.20111.17</b>										<b>11.11</b>		<b>557</b>			<b>258</b>	<b>9,230</b>	<b>2,659</b>	<b>200</b>	<b>12,701</b>	<b>888</b>	<b>2,908</b>						<b>1</b>	<b>160</b>	<b>32</b>		
<b>GRAND TOTAL</b>										<b>16.64</b>		<b>725</b>	<b>7.95</b>	<b>26,400</b>	<b>20,076</b>	<b>15,032</b>	<b>2,659</b>	<b>200</b>	<b>30,383</b>	<b>1,949</b>	<b>3,748</b>	<b>16,896</b>	<b>43</b>	<b>2</b>	<b>21</b>	<b>26</b>	<b>1</b>	<b>160</b>	<b>32</b>		

Note: I19.0B on map 10 is for wedging.  
 Note: Portable lighting on map 1 is for night work on maps 1, 3-4.  
 Note: Portable lighting on map 10 is for night work.  
 Note: Shoulder work on maps 5-14 will be done by State Forces.  
 Note: Any signal loop work done by FA.

## THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	441300000	445700000	469500000	469700000	471000000	472100000	472500000-E					481000000-E		482000000-E		483500000	484500000-N				484700000-E		484710000	490500000-N			
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMO-PLASTIC PAVEMENT MARKING LINES (8", 90 MILS) WHITE	THERMO-PLASTIC PAVEMENT MARKING LINES (8", 120 MILS) WHITE	THERMO-PLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE	THERMO-PLASTIC PAVEMENT MARKING CHARACTER ONLY (120 MILS)	THERMO-PLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW	THERMO-PLASTIC PAVEMENT MARKING SYMBOL (90 MILS) RT ARROW	THERMO-PLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR ARROW	THERMO-PLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & RT ARROW	THERMO-PLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & LT ARROW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	PAINT PAVEMENT MARKING LINES (8") WHITE	PAINT PAVEMENT MARKING LINES (8") YELLOW	PAINT PAVEMENT MARKING LINES (24") WHITE	PAINT LT ARROW	PAINT RT ARROW	PAINT STR ARROW	PAINT STR & RT ARROW	POLYUREA PAVEMENT MARKING LINES (4") WHITE (HIGHLY REFLECTIVE ELEMENTS)	POLYUREA PAVEMENT MARKING LINES (4") YELLOW (HIGHLY REFLECTIVE ELEMENTS)	POLYUREA PAVEMENT MARKING LINES (8") WHITE (HIGHLY REFLECTIVE ELEMENTS)	SNOWPLOWABLE PAVEMENT MARKERS			
NO		NO			NO					SF	LS	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA			
13CR.10111.17	Buncombe	1	US 25	FROM NC 146 LONG SHOALS RD TO SR 3503 OVERLOOK RD (MP 3.0 - MP 4.55)	1,2	5	M2 - Multi-lane two-way traffic	1.55	60 - 84	430	*	108	392	756	12	64	4	38	38													4,092	20,460	950		
13CR.10111.17	Buncombe	2	US 25/70	JUPITER RD TO MADISON CO. LINE (MP 24.60 - MP 25.36) (MP 0.75 - MP 0)	9,10	4	MD - Multi-lane divided traffic	0.8	64 - 88	430	*			178		2																10,560	8,448	106		
13CR.10111.17	Buncombe	3	US 25A	FROM SR 3116 MILLS GAP RD. TO BEGIN 5 LANE (MP 2.836 - MP 5.266)	2,5	2	2WU - Two-lane two-way undivided traffic	2.43	24 - 42	430	*			119		33	2															25,661	30,661	328		
13CR.10111.17	Buncombe	4	NC 191	FROM I-40 BRIDGE TO BEGIN OF 2 LANE (MP 9.49 - MP 10.24)	3,8	4	M2	0.75	24 - 68	430	*	70		368		9	15	11	10		2,480	7,920	800		368	9	15	11	10	2,480	7,920	730	325			
<b>TOTAL FOR PROJ NO. 13CR.10111.17</b>										<b>430</b>	<b>1</b>	<b>178</b>	<b>392</b>	<b>1,421</b>	<b>12</b>	<b>108</b>	<b>21</b>	<b>49</b>	<b>48</b>		<b>2,480</b>	<b>7,920</b>	<b>800</b>		<b>368</b>	<b>9</b>	<b>15</b>	<b>11</b>	<b>10</b>	<b>42,793</b>	<b>67,489</b>	<b>730</b>	<b>1,709</b>			
																						<b>226</b>		<b>10,400</b>		<b>800</b>				<b>45</b>		<b>110,282</b>				
13CR.20111.17	Buncombe	5	SR 1756 JUPITER RD	US 25/70 TO INDIAN CAMP BR RD (SR 1755), (MP 0.68 - MP 1.75)	6	2	2WU	1.05	20.5	1,244	*			50																						
13CR.20111.17	Buncombe	6	SR 1756 JUPITER RD	INDIAN CAMP (SR 1755) TO ELLER FORD RD (SR 1752), (MP 1.751 - MP 2.781)	6	2	2WU	1.03	20.5	1,244	*																									
13CR.20111.17	Buncombe	7	SR 1756 JUPITER RD	ELLER FORD RD. (SR 1752) TO LOCUST GROVE RD. (SR 1761), (MP 2.781 - MP 4.601)	6	2	2WU	1.82	20.5	1,244	*																									
13CR.20111.17	Buncombe	8	SR 1756 JUPITER RD	LOCUST GROVE RD (SR 1761) TO NC 197, (MP 4.601 - MP 6.00)	6	2	2WU	1.4	21	1,244	*				4	2																				
13CR.20111.17	Buncombe	9	SR2288 OLD MARS HILL HWY/ STOCKTON RD	FROM NEW JOINT TO BRIDGE #734 (MP 0.245 - MP 0.579)	7	2	2WU	0.36	25	1,244	*																									
13CR.20111.17	Buncombe	10	SR 1727 MONTICELLO RD	FROM US 19 BUS (N. MAIN ST.) TO US 25/70 (MP 0.00 - MP 1.077)	4,7	2	2WU	1.07	22-46	1,244	*			70	4	2	2		2	1														178		
13CR.20111.17	Buncombe	11	SR 1727 MONTICELLO RD	FROM SR 1809 TO NC 251 (MP 1.467 - MP 3.782)	7	2	2WU	2.32	20	1,244	*																									
13CR.20111.17	Buncombe	12	SR 1762 CHANDLER BRANCH RD	FROM SR 1761 TO COUNTY LINE (MP 0.00 - MP 0.700)	7	2	2WU	0.74	18	1,244	*																									
13CR.20111.17	Buncombe	13	SR 1740 NEW STOCK RD	FROM SR 1741 TO SR 1756 (MP 4.025 - MP 4.639)	7	2	2WU	0.6	18	1,244	*																									
13CR.20111.17	Buncombe	14	SR 1756 JUPITER RD	FROM COUNTY LINE TO US 25/70 (MP 0.00 - MP 0.656)	7	2	2WU	0.72	24	1,244	*			40																						
<b>TOTAL FOR PROJ NO. 13CR.20111.17</b>										<b>1,244</b>	<b>1</b>			<b>160</b>	<b>8</b>	<b>2</b>	<b>4</b>			<b>2</b>	<b>1</b>		<b>235,142</b>	<b>235,042</b>	<b>133</b>	<b>133</b>										<b>178</b>
																						<b>470,184</b>		<b>266</b>												
<b>GRAND TOTAL</b>								<b>16.64</b>		<b>1,674</b>	<b>1</b>	<b>178</b>	<b>392</b>	<b>1,581</b>	<b>20</b>	<b>110</b>	<b>25</b>	<b>49</b>	<b>50</b>	<b>1</b>	<b>237,622</b>	<b>242,962</b>	<b>933</b>	<b>133</b>	<b>368</b>	<b>9</b>	<b>15</b>	<b>11</b>	<b>10</b>	<b>42,793</b>	<b>67,489</b>	<b>730</b>	<b>1,887</b>			
																						<b>235</b>		<b>480,584</b>		<b>1,066</b>			<b>45</b>		<b>110,282</b>					

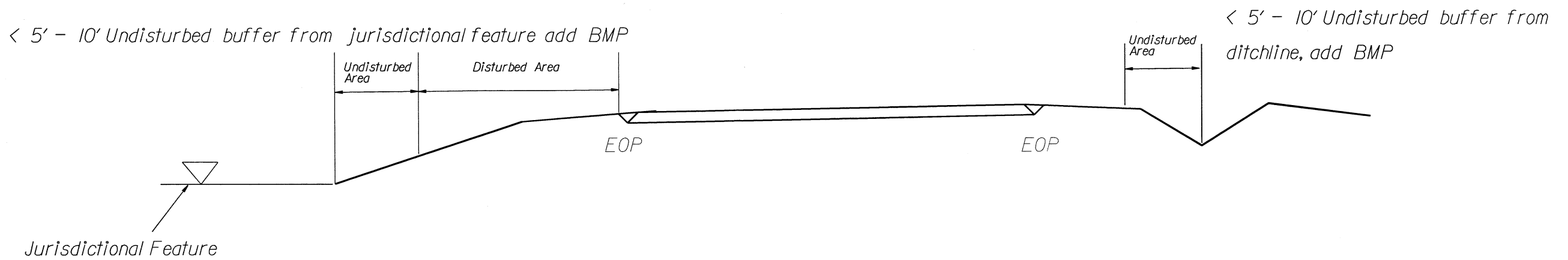
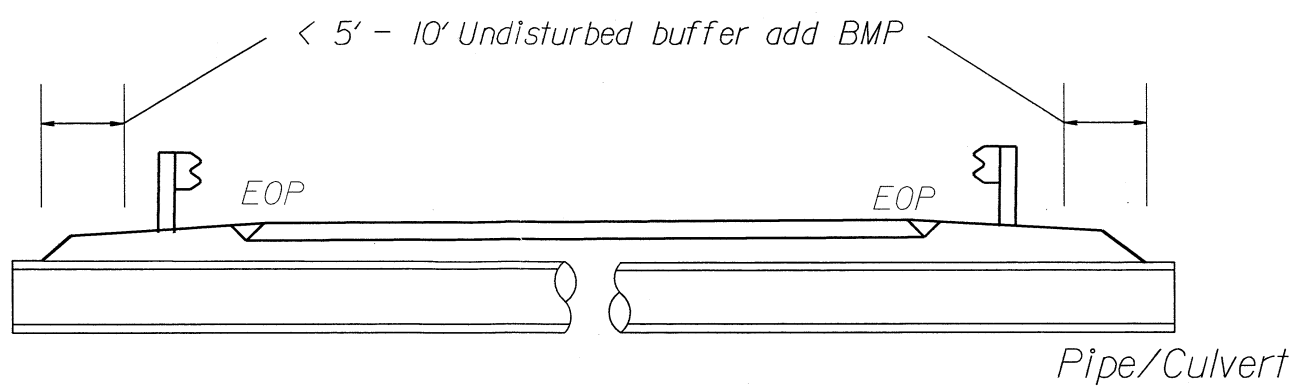


PROJECT REFERENCE NO. 13CR.10111.17, ETC	SHEET NO. EC-1
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

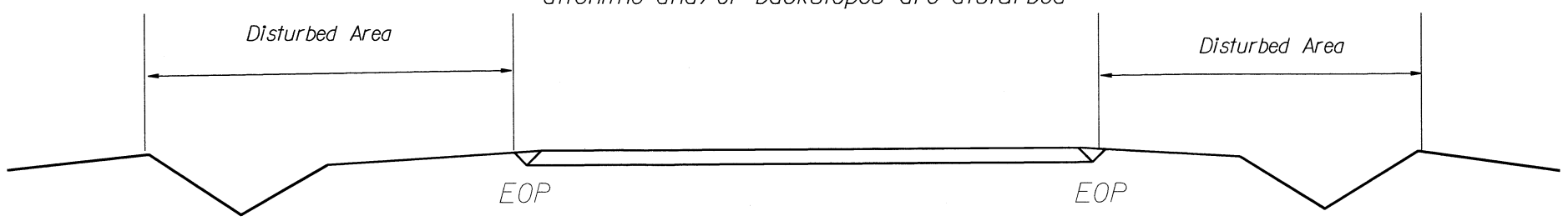
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

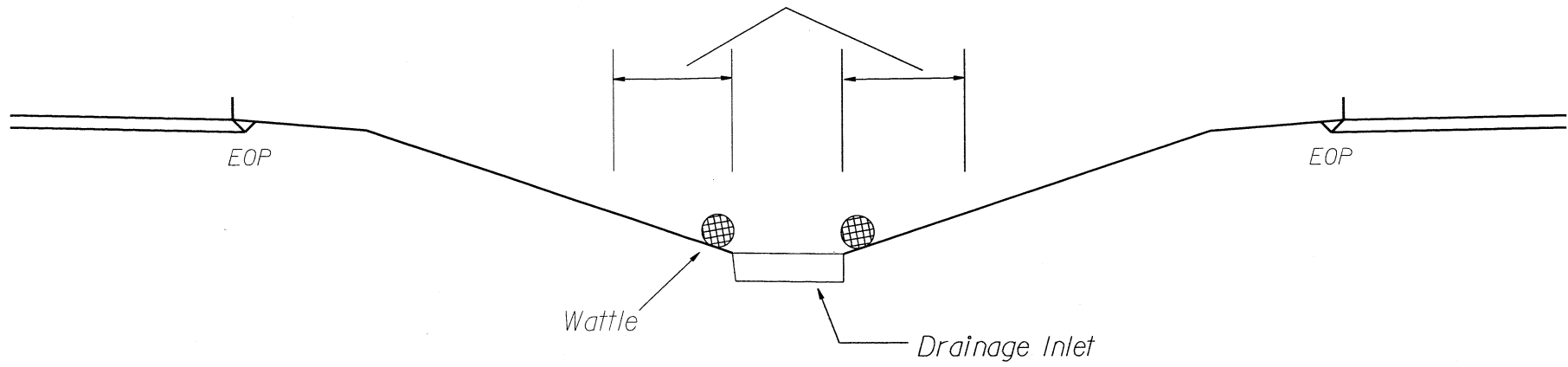
# EROSION CONTROL DETAIL



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



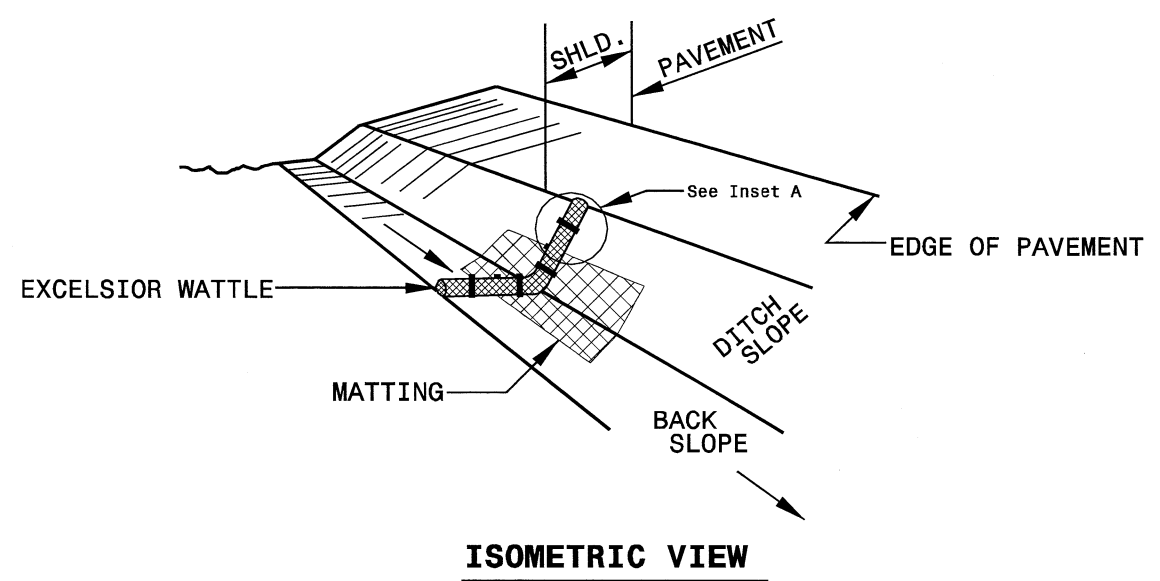
< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

PROJECT REFERENCE NO. 13CR.10111.17, ETC	SHEET NO. EC-2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# WATTLE DETAIL



**NOTES:**

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

