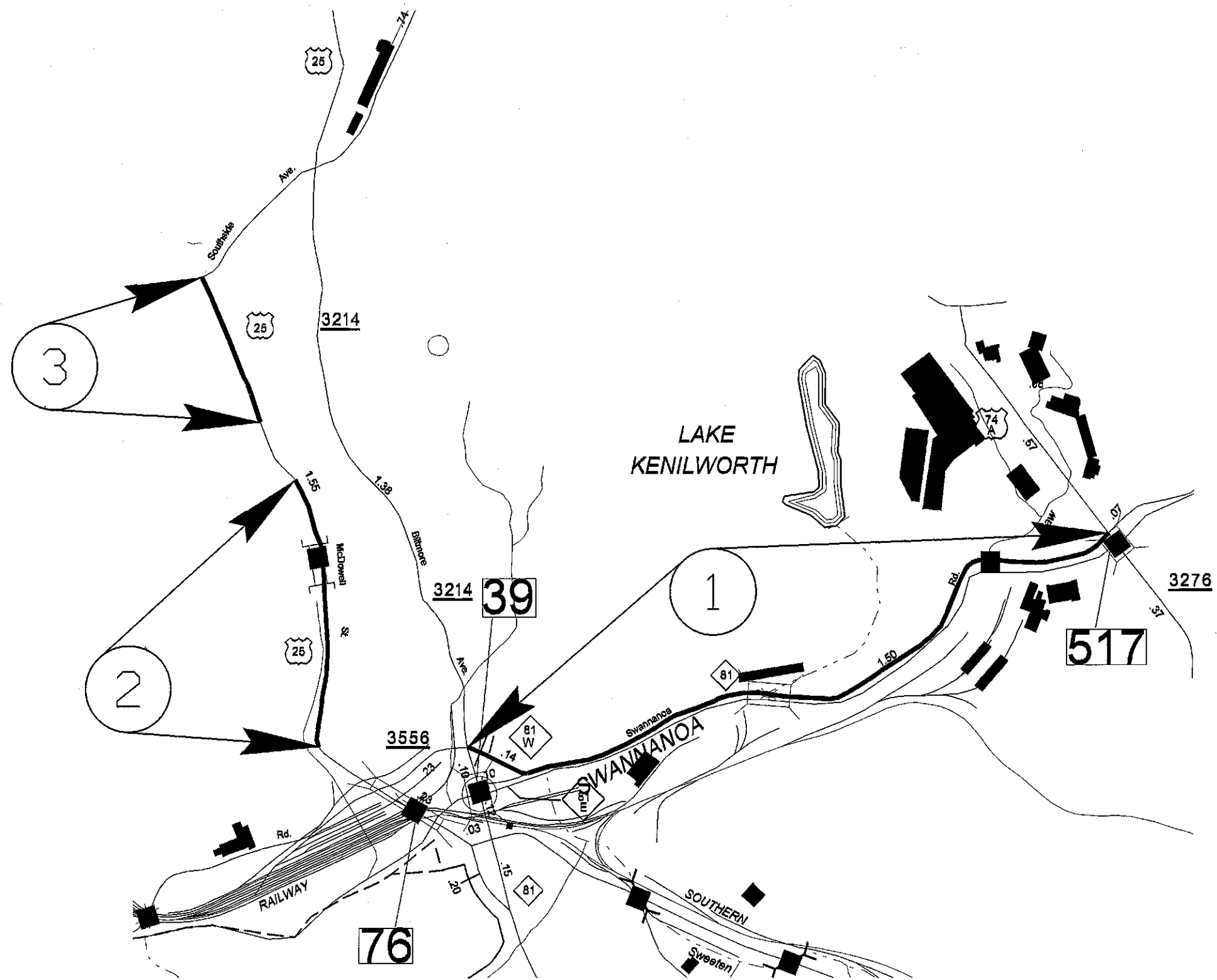
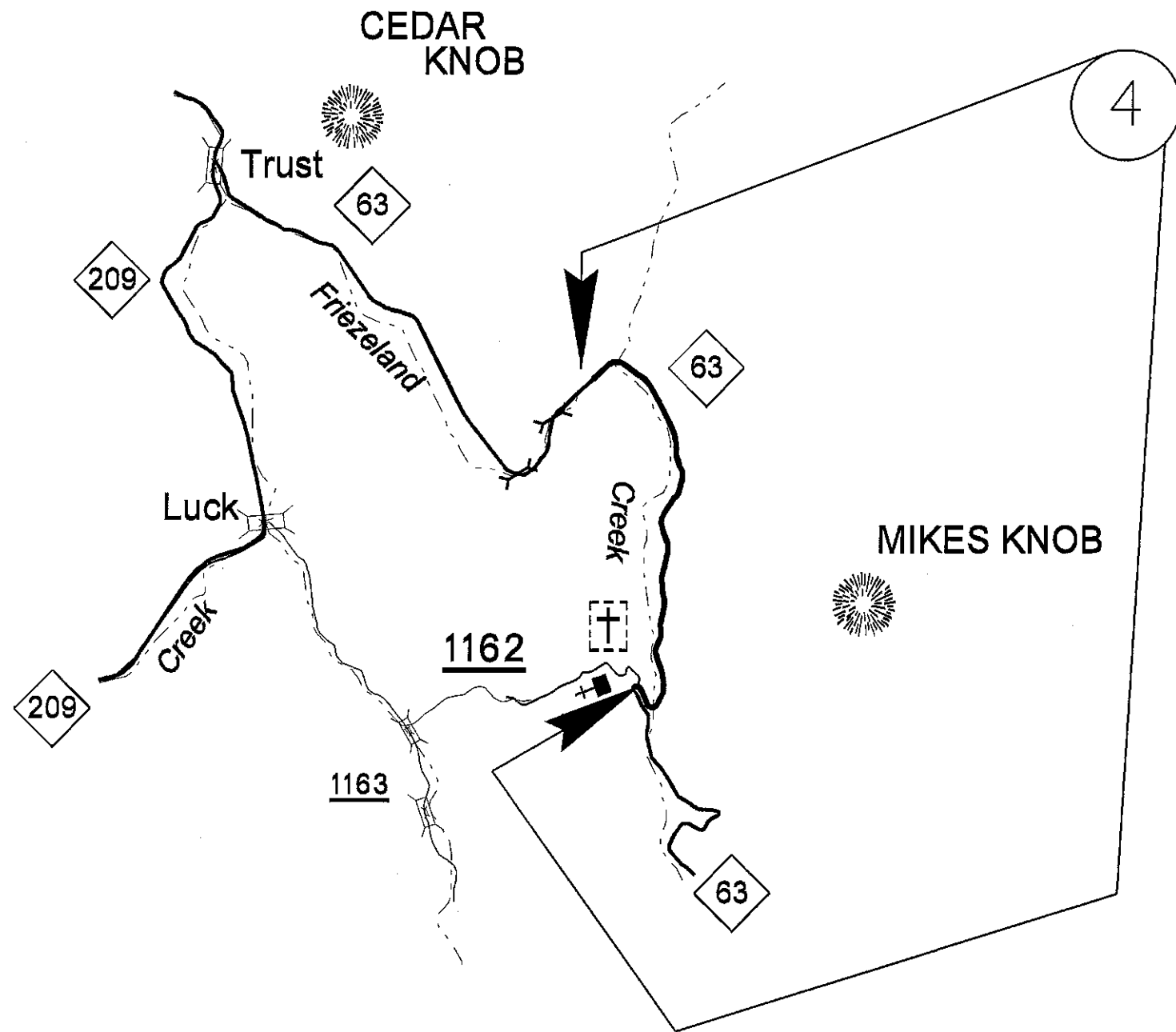


PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10111.16		



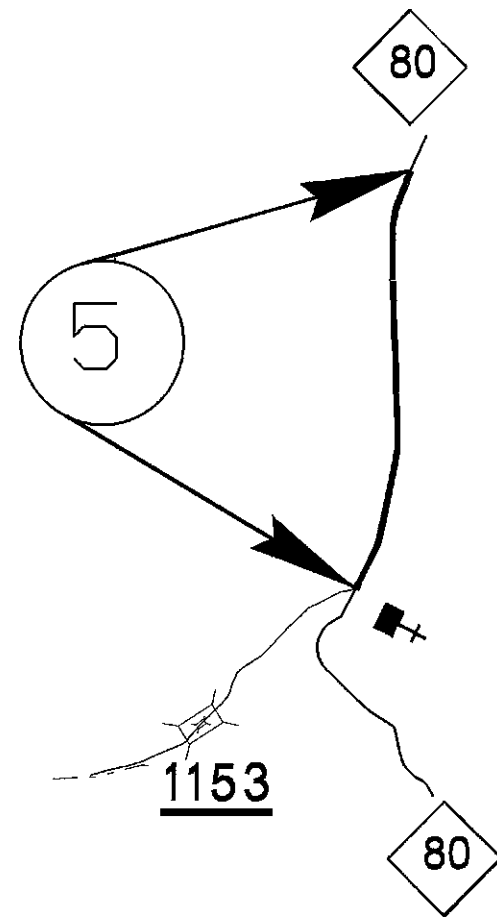
**BUNCOMBE COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10571.12		



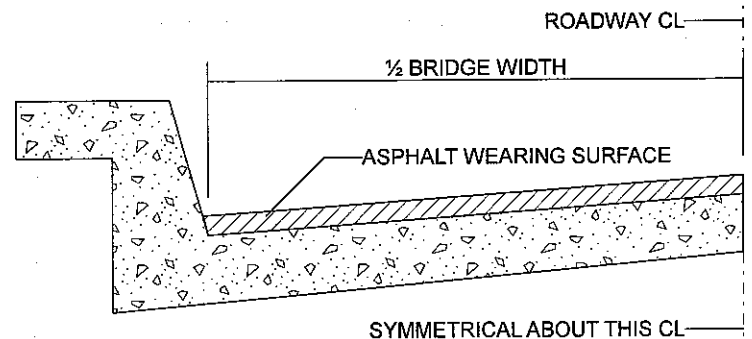
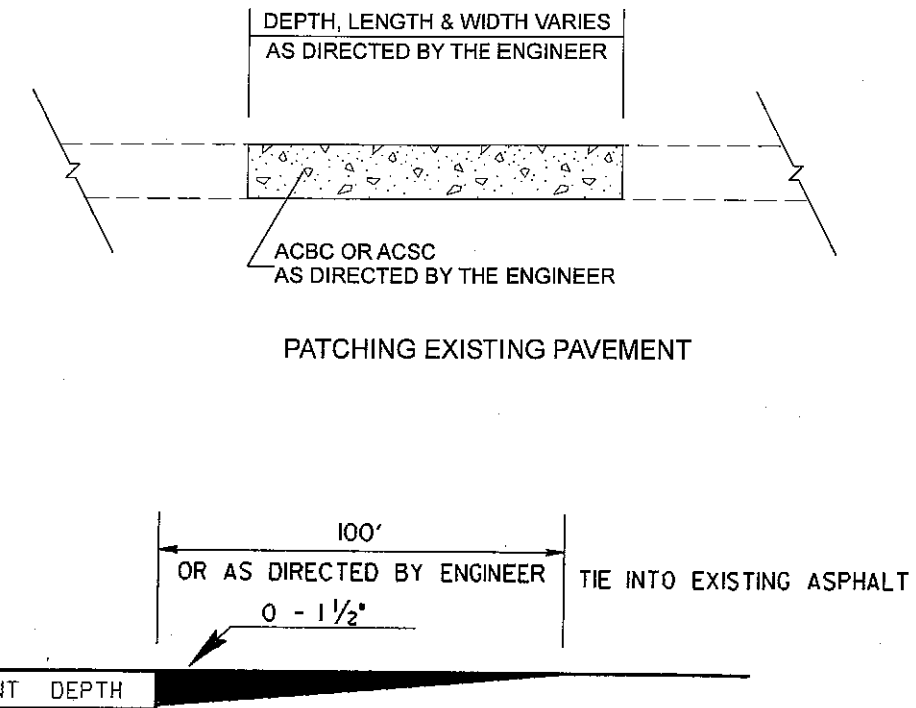
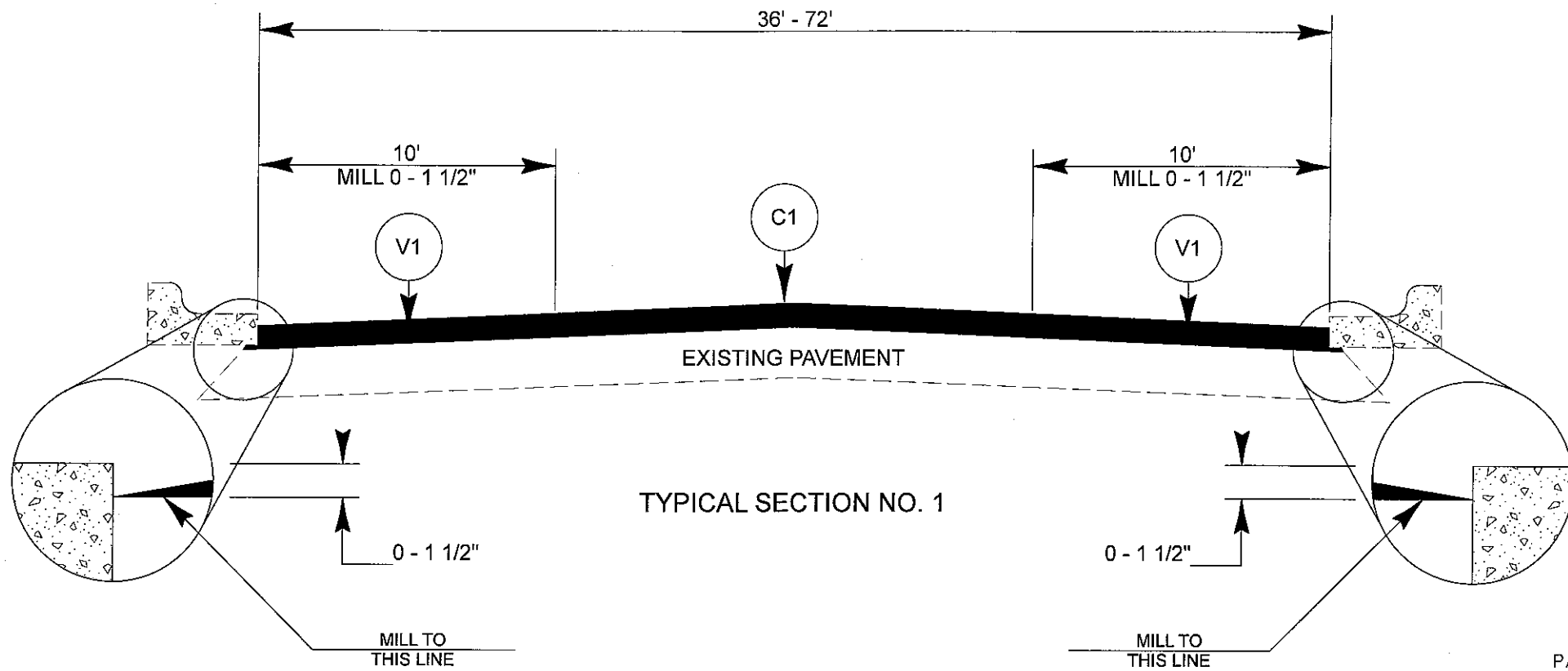
**MADISON COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.11001.13		



**YANCEY COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10111.16, 13CR.10571.12, 13CR.11001.13,		



**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 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**

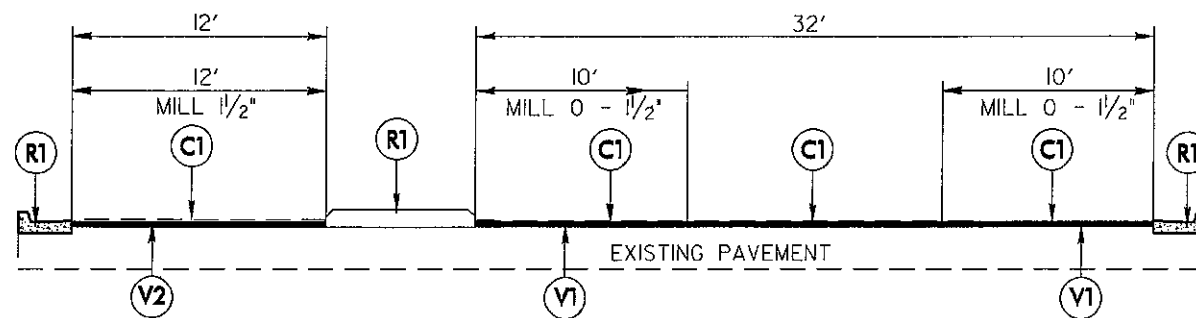
ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.  
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.  
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.  
SHOULDERS AND DITCHES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

**DETAIL TO TIE INTO EXIST PAVEMENT**

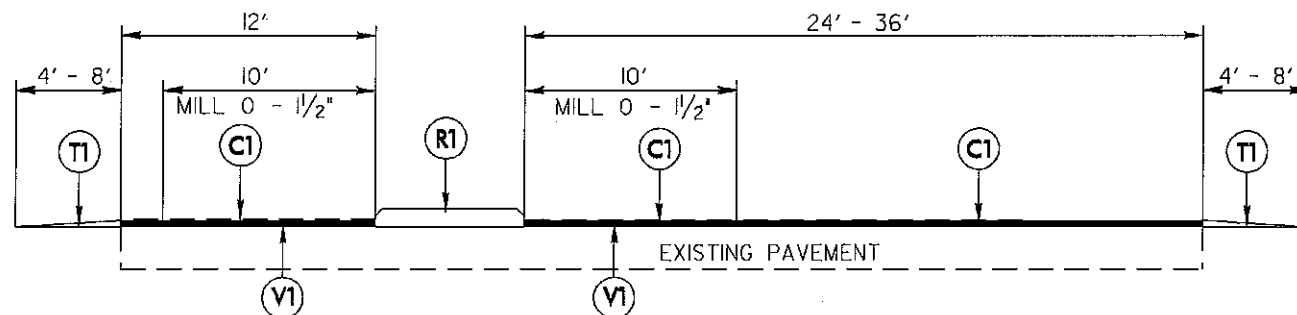
THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5B. THIS WILL BE PAID FOR AS MILLING ASPHALT PAVEMENT, 0 TO 1- 1/2' DEPTH.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH

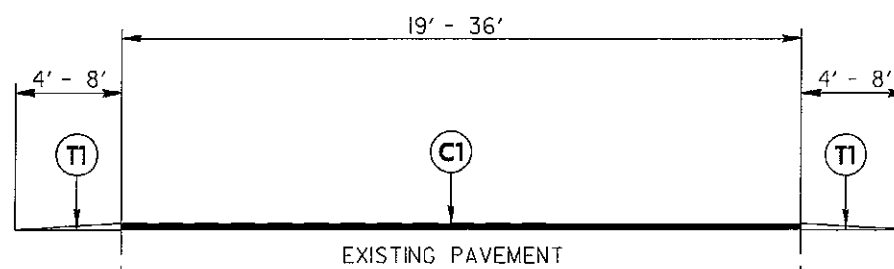
PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.1011.16, 13CR.10571.12 13CR.11001.13		



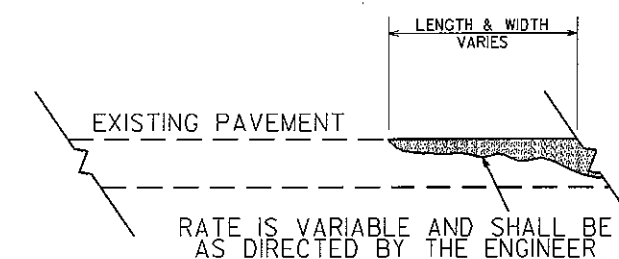
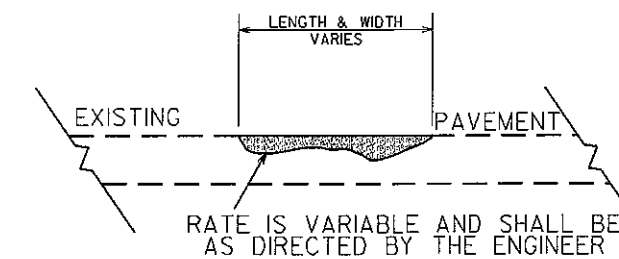
**TYPICAL SECTION NO. 2**



**TYPICAL SECTION NO. 3**



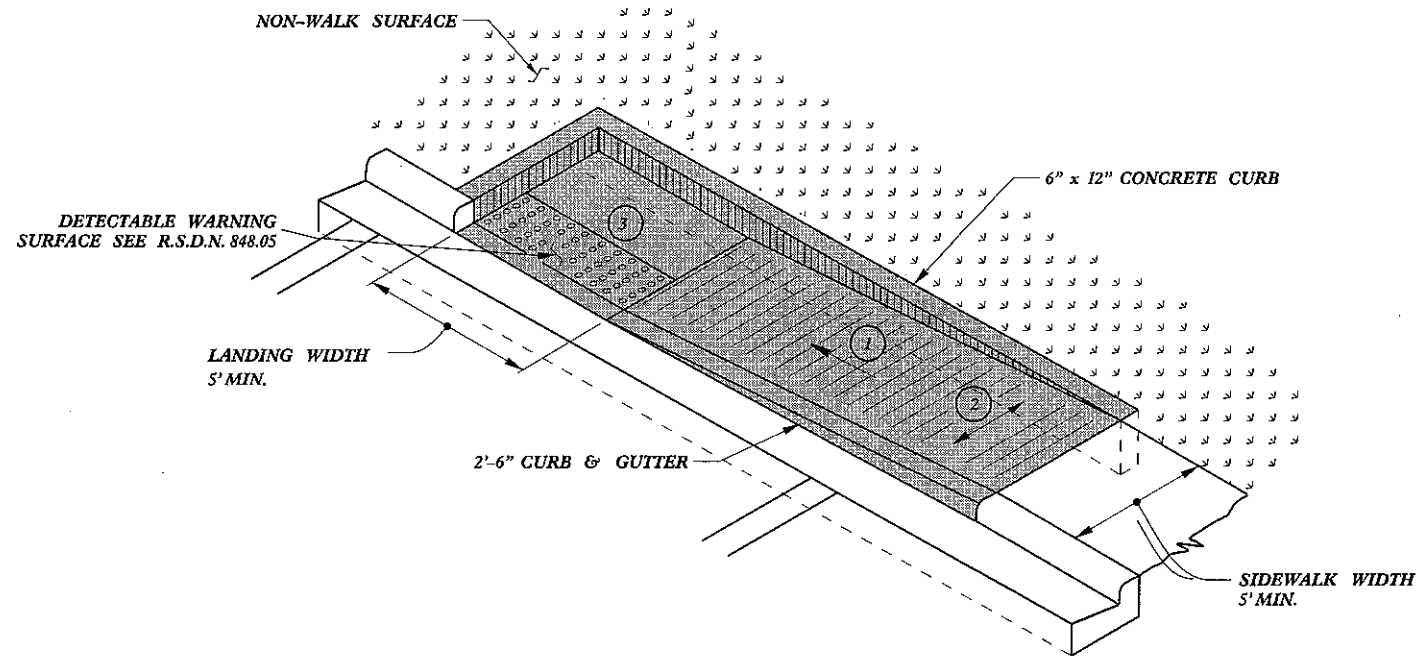
**TYPICAL SECTION NO. 4**




**DETAIL SHOWING METHOD OF WEDGING**

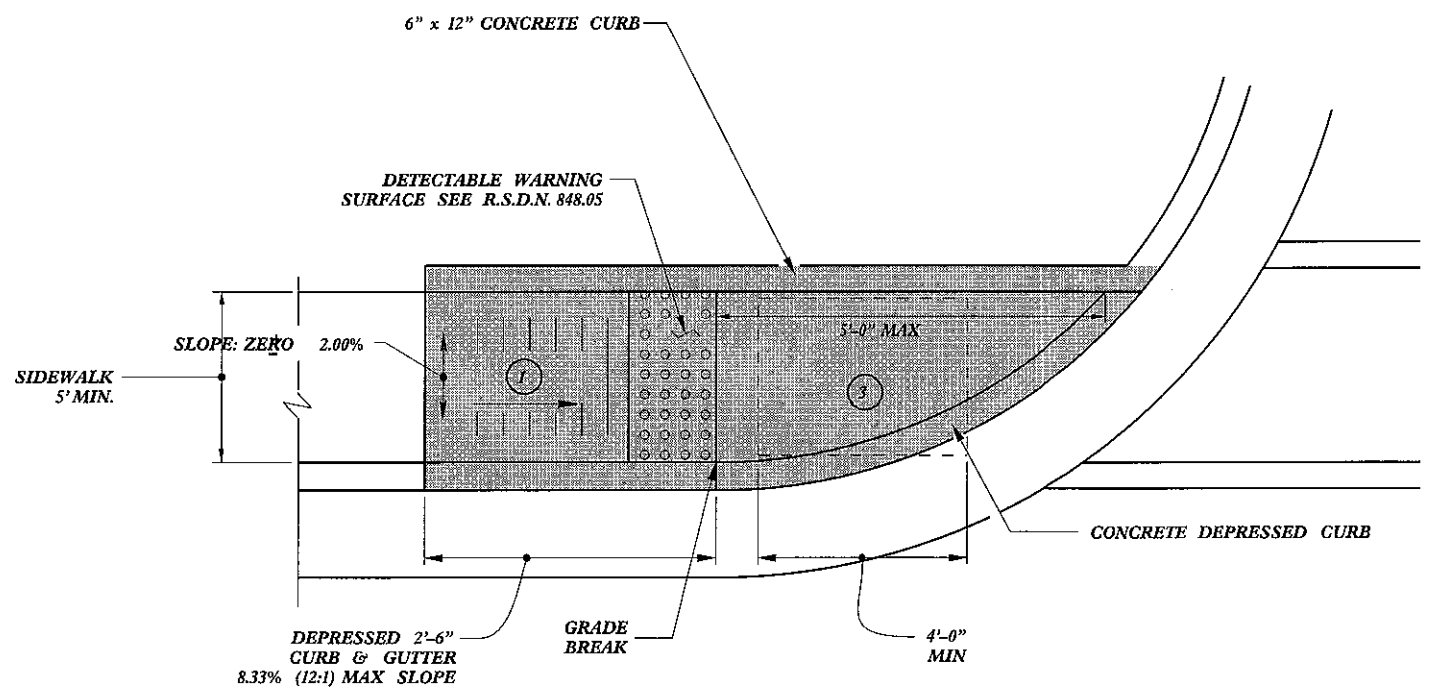
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
R1	EXISTING CONCRETE CURB OR CONCRETE ISLAND
T1	SHOULDER RECONSTRUCTION
V1	MILLING ASPHALT PAVEMENT, 0 TO 1 1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 1 1/2" DEPTH

5/14/99



**TYPE 1A**

 PAY LIMITS FOR CURB RAMP



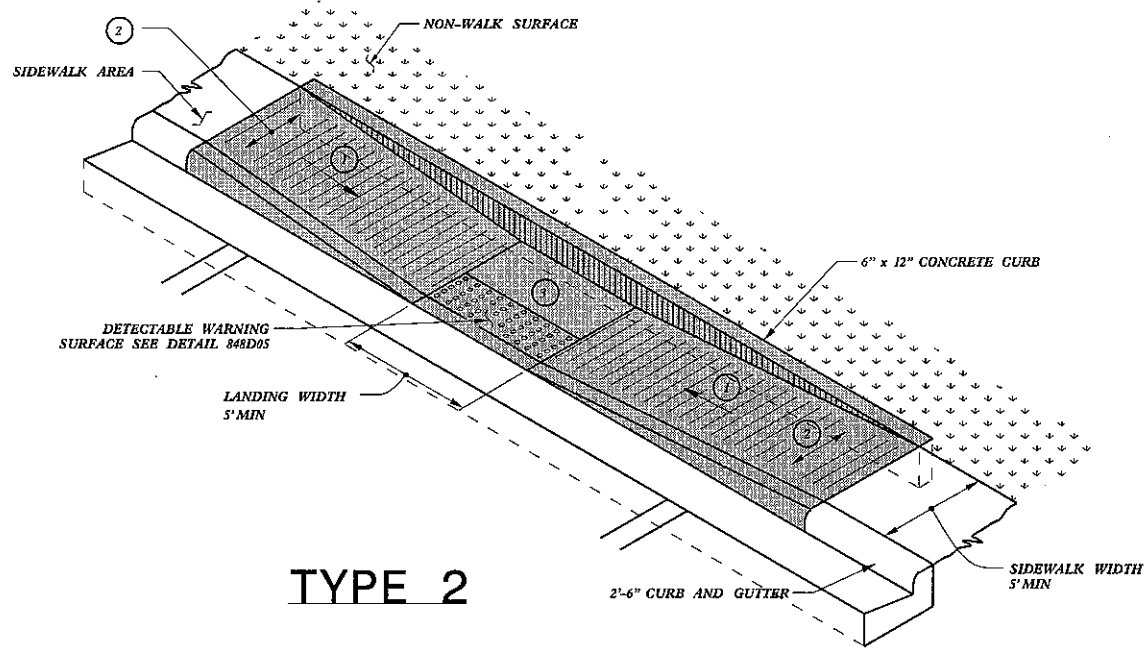
**TYPE 1**

- 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.


I:\SEP-2011\0817\Contractors\Special Details\Standard Drawings\2012 Curb Ramp Special Details\Curb Ramp Details.dgn  
 J:\Howerton\AT 050237561

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

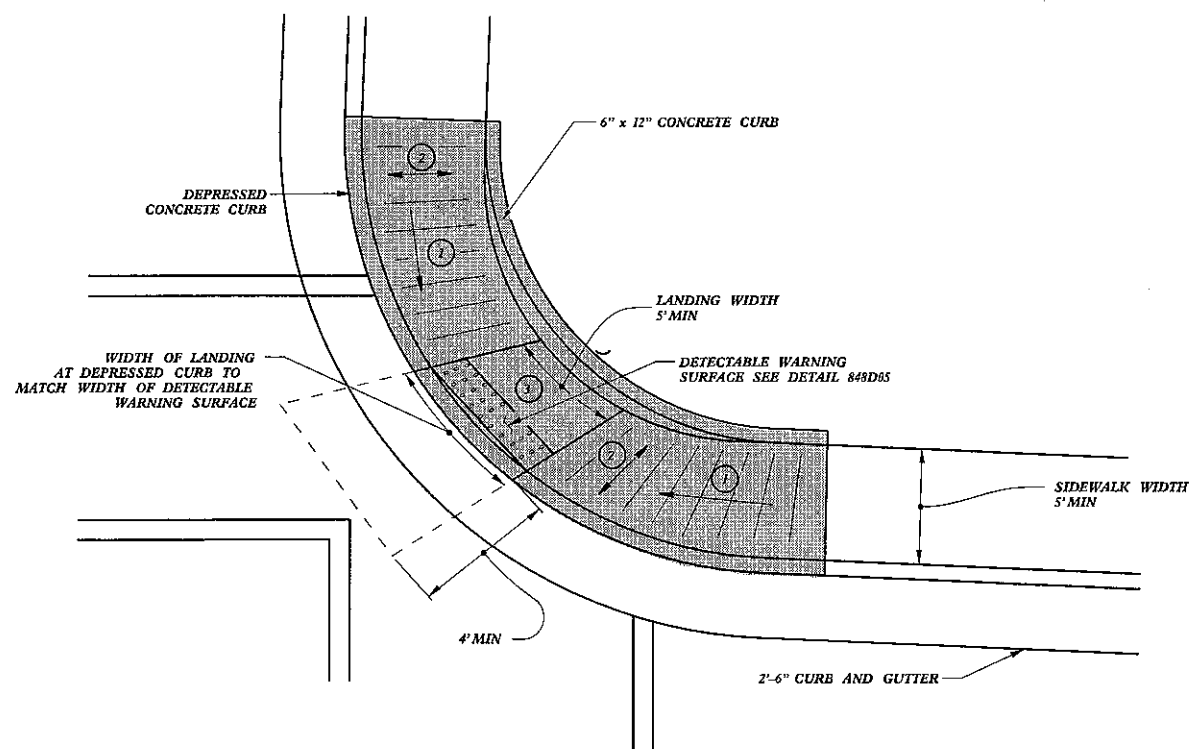
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b> Office 919-707-6950 FAX 919-250-4119	
<b>CURB RAMPS</b> Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	



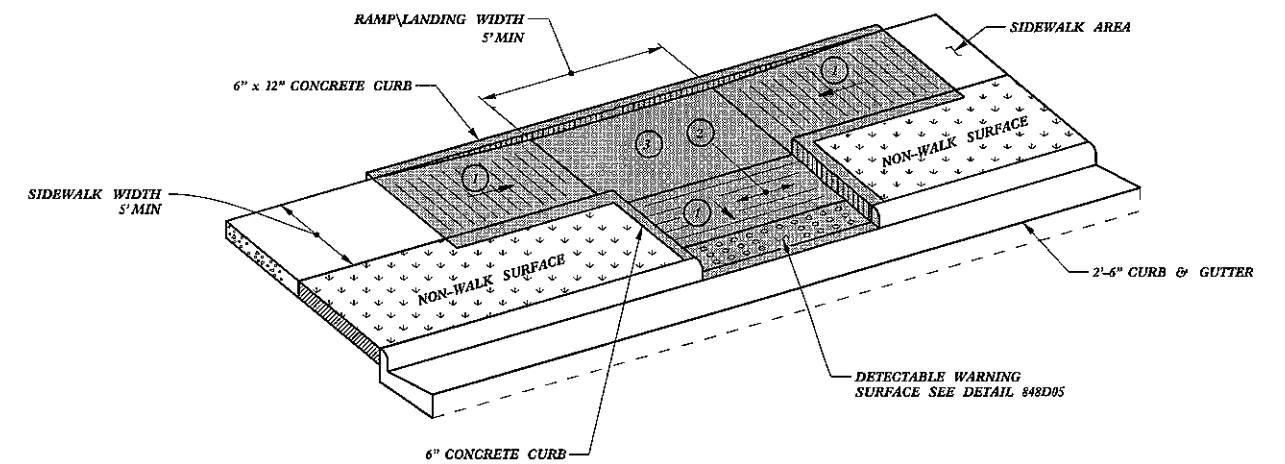
**TYPE 2**

 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**

14-SEP-2011 08:04 S:\Contracts\Contractors\Special Details\Howerton\Standard Drawings\2012 Curb Ramp Special Details\Curb Ramp Details.dgn

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	





PROJECT NO.	SHEET NO.	TOTAL NO.
13CR.10111.16, 13CR.10571.12 13CR.11001.13,		

### 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 TON	SHOULDER RECONSTRUCTION SMI	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH SY	MILLING ASPHALT PAVEMENT, 0" TO 1 1/2" DEPTH SY	ASPHALT CONC SURFACE COURSE, TYPE S9.5B TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TON	CONCRETE CURB RAMP EA	ADJUSTMENT OF DROP INLET EA	ADJUSTMENT OF MANHOLES EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA	PORTABLE LIGHTING LS
13CR.10111.16	Buncombe	1	NC 81	FROM SR 3214 TO SR 3276 (MP 3.96 - MP 3.82 AND MP 0.42 - MP 1.89)		2	M2	NO	NO	1.61	24 - 48	81	2.87	431	3,585	2,946	177	50			8	11	
13CR.10111.16	Buncombe	2	US 25	FROM 300' NORTH OF SHORT MCDOWELL ST. TO CHANGE IN PAVEMENT AT HOSPITAL DR. MP 9.44 - MP 10.03	1	4	M2	NO	NO	0.59	40 - 54				7,412	1,347	81	75	12	3	12	3	
13CR.10111.16	Buncombe	3	US 25	FROM CHANGE IN PAVEMENT AT MYRTLE AVE. TO SOUTHSIDE AVE. MP 10.13 - MP 10.53	1	5	M2	NO	NO	0.4	60 - 72				5,671	1,390	83	75	15		15	5	
TOTAL FOR PROJ NO. 13CR.10111.16										2.6		81	2.87	431	16,668	5,683	341	200	27	3	35	19	1
13CR.10571.12	Madison	4	NC 63	FROM SR 1162 (MOUNTAINVIEW RD.) TO 1.5 MILES NORTH OF SR 1162 (MP 8.259 - MP 9.759)	4	2	2WU	NO	NO	1.5	19	75	3.00		422	1,555	93	620					
TOTAL FOR PROJ NO. 13CR.10571.12										1.5		75	3.00		422	1,555	93	620					
13CR.11001.13	Yancey	5	NC 80 S	FROM SR 1153 (HICKORY SPRINGS ROAD) TO 1 MILE NORTH OF SR 1153 (MP 12.122 - MP 13.122)	4	2	2WU	NO	NO	1	22	50	2.00		489	1,199	72	110					
TOTAL FOR PROJ NO. 13CR.11001.13										1		50	2.00		489	1,199	72	110					
GRAND TOTAL										5.1		206	7.87	431	17,579	8,437	506	930	27	3	35	19	1

Note: Portable Lighting is for night work on maps 1,2 and 3

### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	469700000-E	471000000-E	472100000-E		472500000-E		484700000-E		490500000-N				
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS) WHITE LF	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE LF	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) ONLY EA	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) SCHOOL EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) RT ARROW EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR AND RT ARROW EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR ARROW EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & LT EA	POLYUREA PAVEMENT MARKING LINES (4") WHITE (HIGHLY REFLECTIVE ELEMENTS) LF	POLYUREA PAVEMENT MARKING LINES (4") YELLOW (HIGHLY REFLECTIVE ELEMENTS) LF	SNOW/PLOWABLE PAVEMENT MARKERS EA	
13CR.10111.16	Buncombe	1	NC 81	FROM SR 3214 TO SR 3276 (MP 3.96 - MP 3.82 AND MP 0.42 - MP 1.89)		2	M2	1.61	24 - 48	273			80	12		13	4	2	2		17,002	17,002	205	
13CR.10111.16	Buncombe	2	US 25	FROM 300' NORTH OF SHORT MCDOWELL ST. TO CHANGE IN PAVEMENT AT HOSPITAL DR. MP 9.44 - MP 10.03	1	4	M2	0.59	40 - 54	126		480	176	4	12	2	4	5	6	7	1,558	6,230	190	
13CR.10111.16	Buncombe	3	US 25	FROM CHANGE IN PAVEMENT AT MYRTLE AVE. TO SOUTHSIDE AVE. MP 10.13 - MP 10.53	1	5	M2	0.4	60 - 72	126		120	108	4		18	4	5	11		1,156	5,280	200	
TOTAL FOR PROJ NO. 13CR.10111.16								2.6		525	1	600	364	20	12	33	12	12	19	7	19,716	28,512	595	
													32			83				48,228				
13CR.10571.12	Madison	4	NC 63	FROM SR 1162 (MOUNTAINVIEW RD.) TO 1.5 MILES NORTH OF SR 1162 (MP 8.259 - MP 9.759)	4	2	2WU	1.5	19	168											15,840	15,840	198	
TOTAL FOR PROJ NO. 13CR.10571.12								1.5		168	1											15,840	15,840	198
																					31,680			
13CR.11001.13	Yancey	5	NC 80 S	FROM SR 1153 (HICKORY SPRINGS ROAD) TO 1 MILE NORTH OF SR 1153 (MP 12.122 - MP 13.122)	4	2	2WU	1	22	112											10,560	10,560	66	
TOTAL FOR PROJ NO. 13CR.11001.13								1		112	1											10,560	10,560	66
																					21,120			
GRAND TOTAL								5.1		805	1	600	364	20	12	33	12	12	19	7	46,116	54,912	859	
														32			83				101,028			

Note: Temporary Traffic Control is for maps 1,2,3,4 and 5