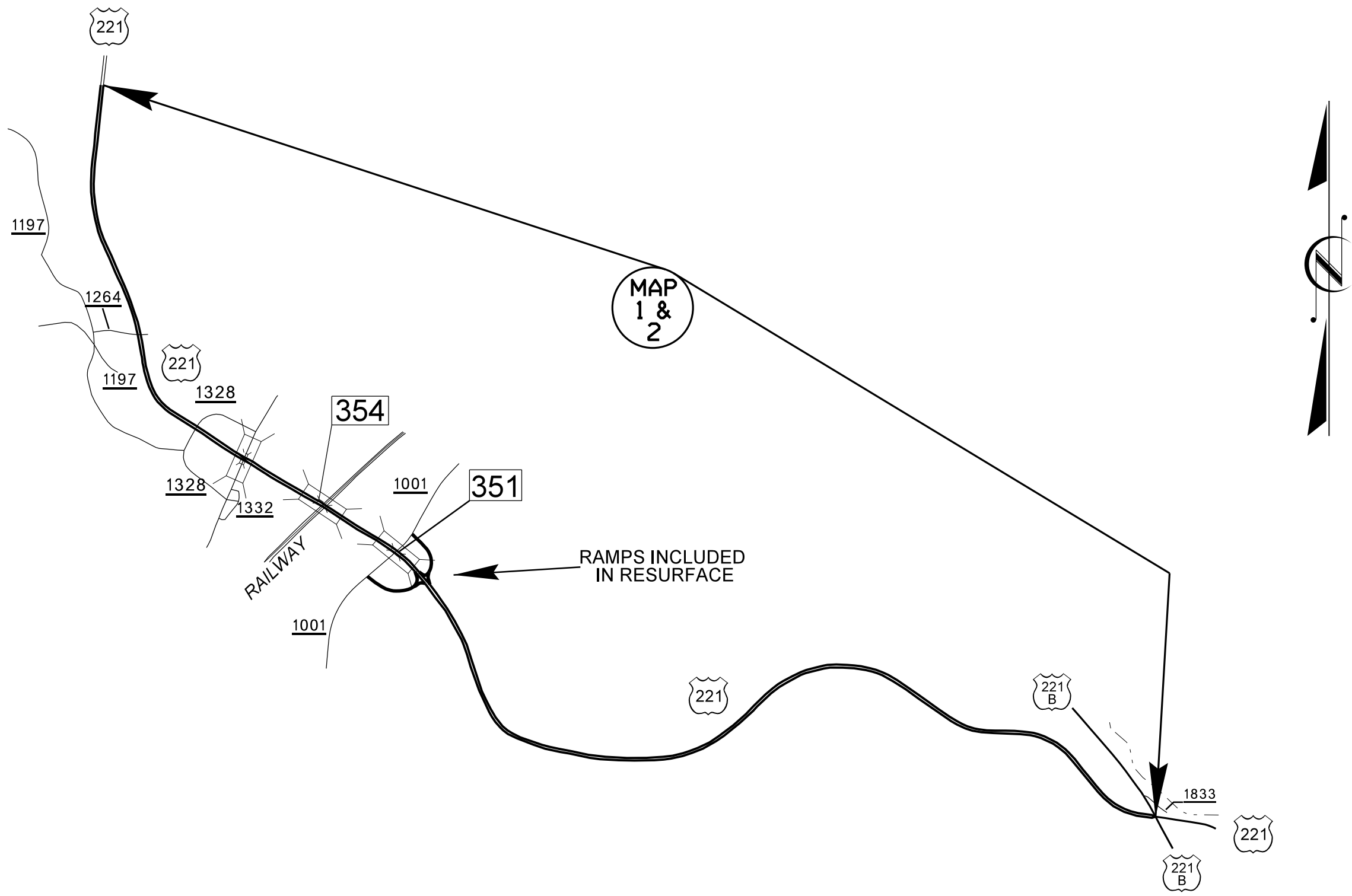


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and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

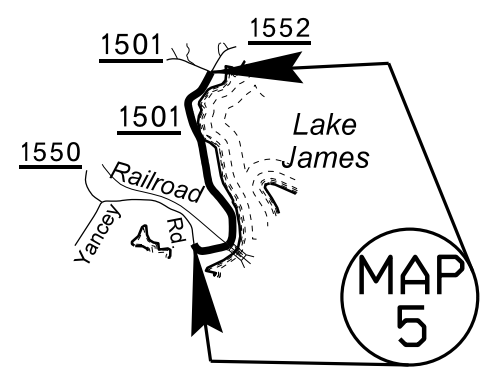
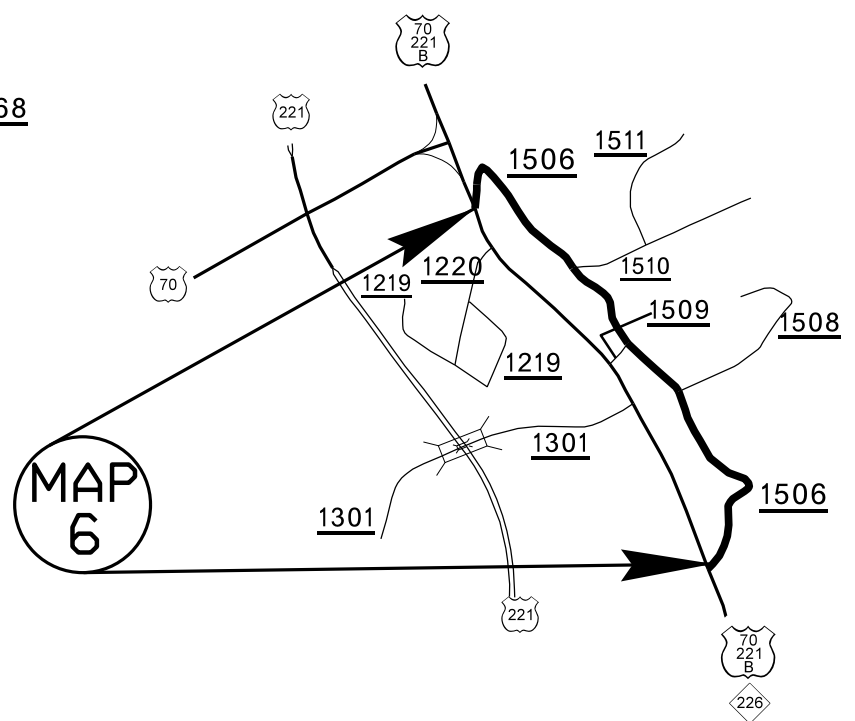
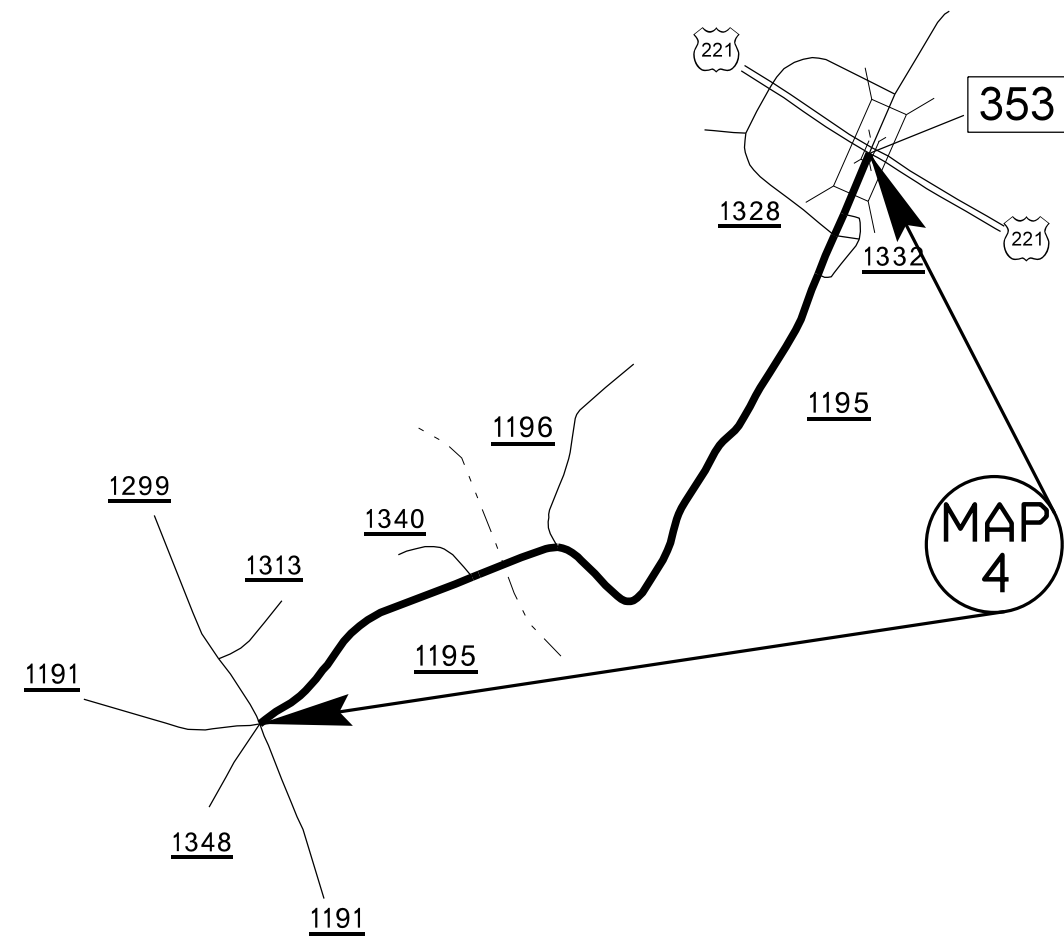
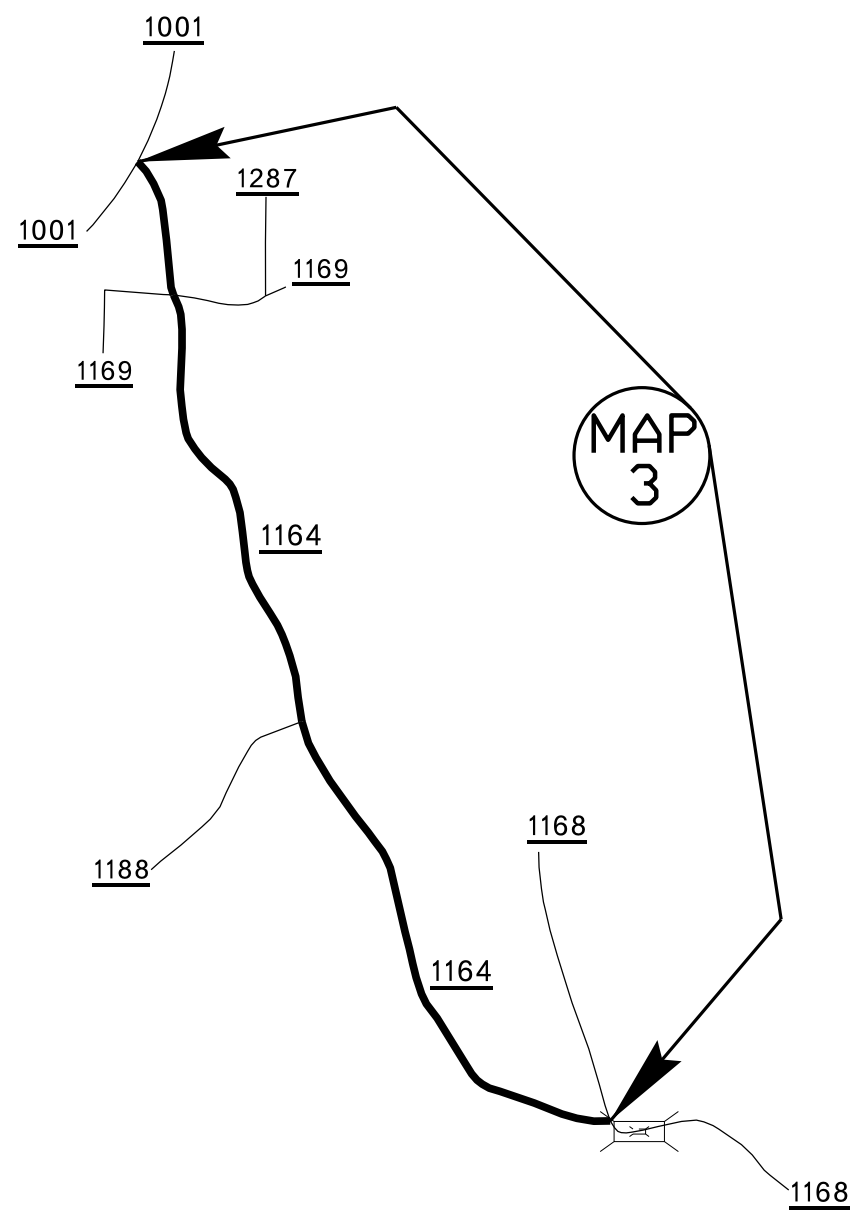
**This file or an individual page
shall not be considered a certified document.**

<i>PROJECT NO.</i>	<i>SHEET NO.</i>	<i>TOTAL SHEETS</i>
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	1	



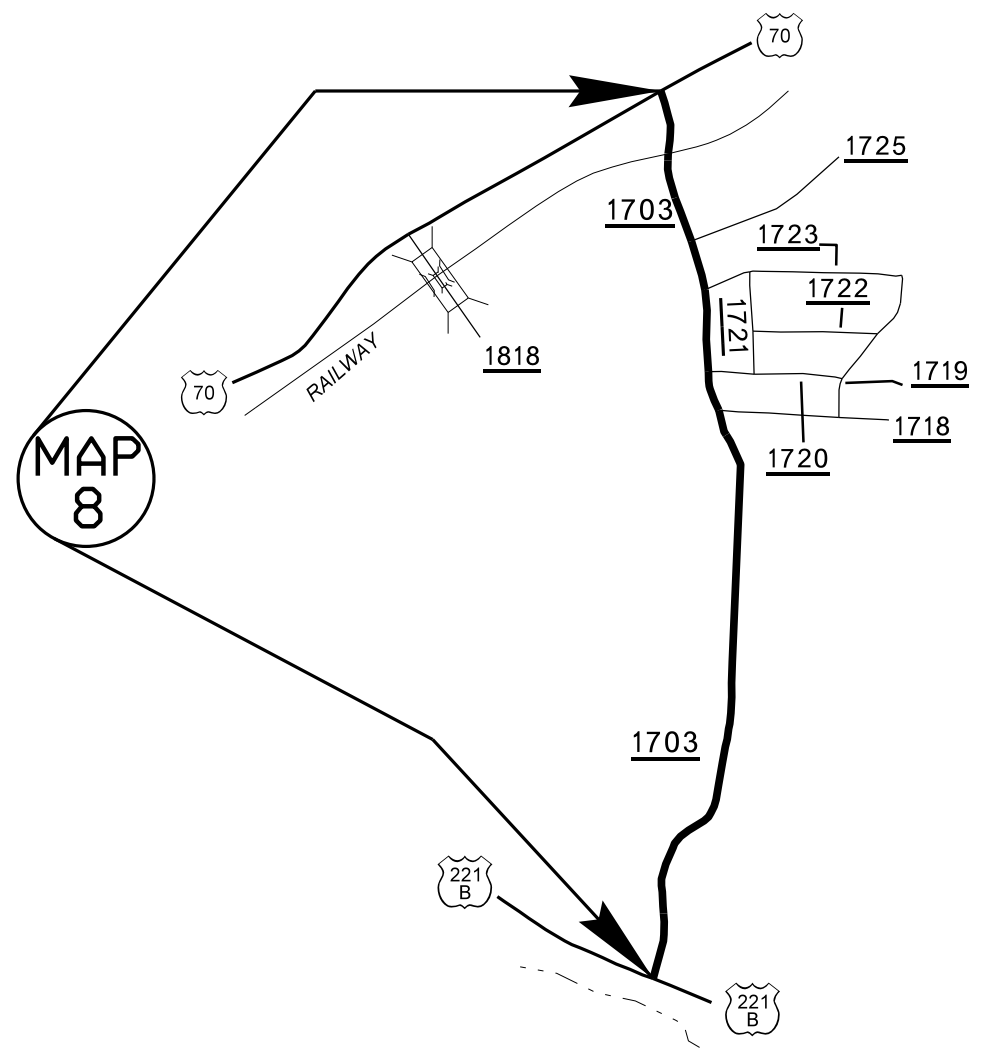
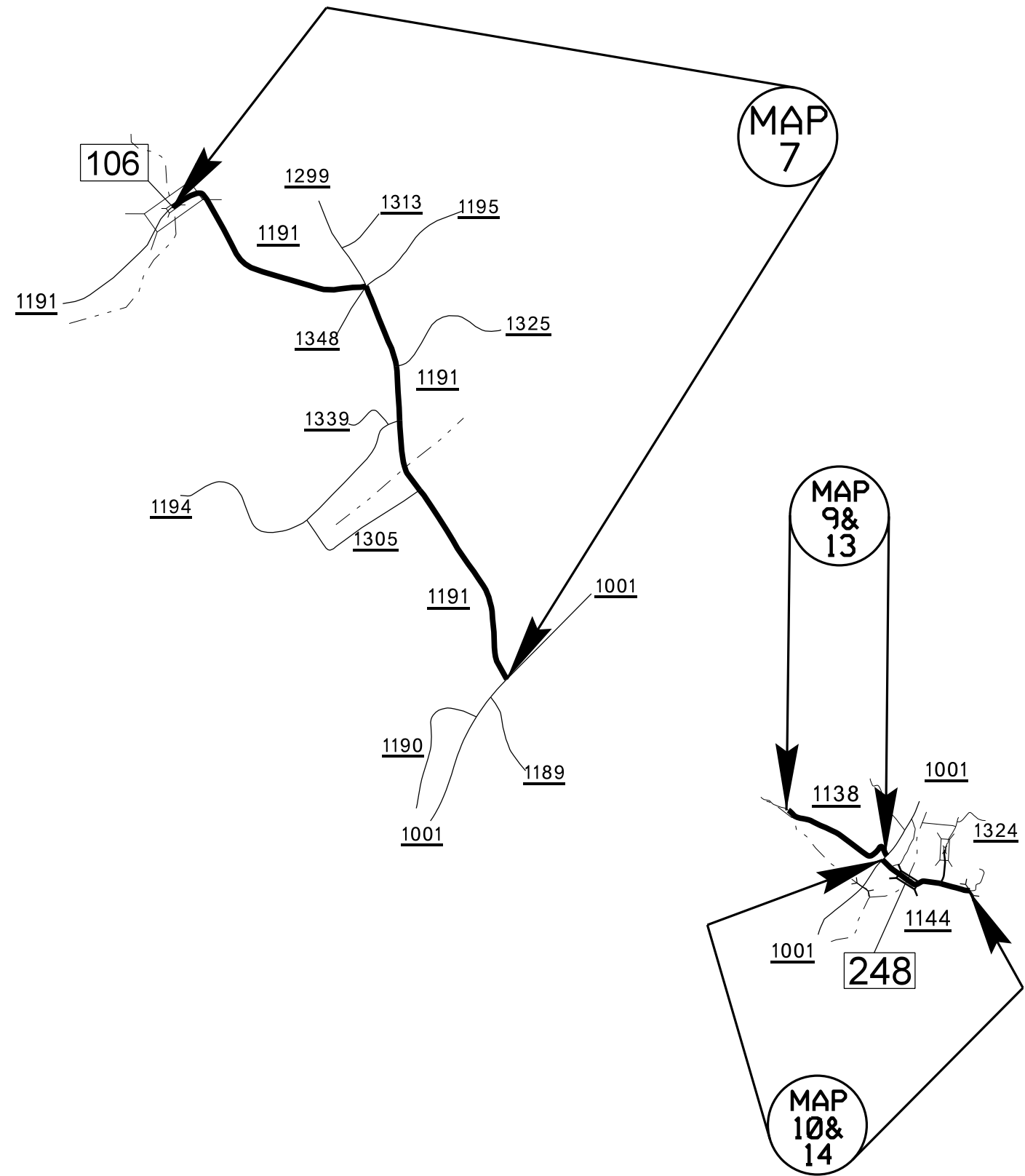
McDOWELL COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	2	



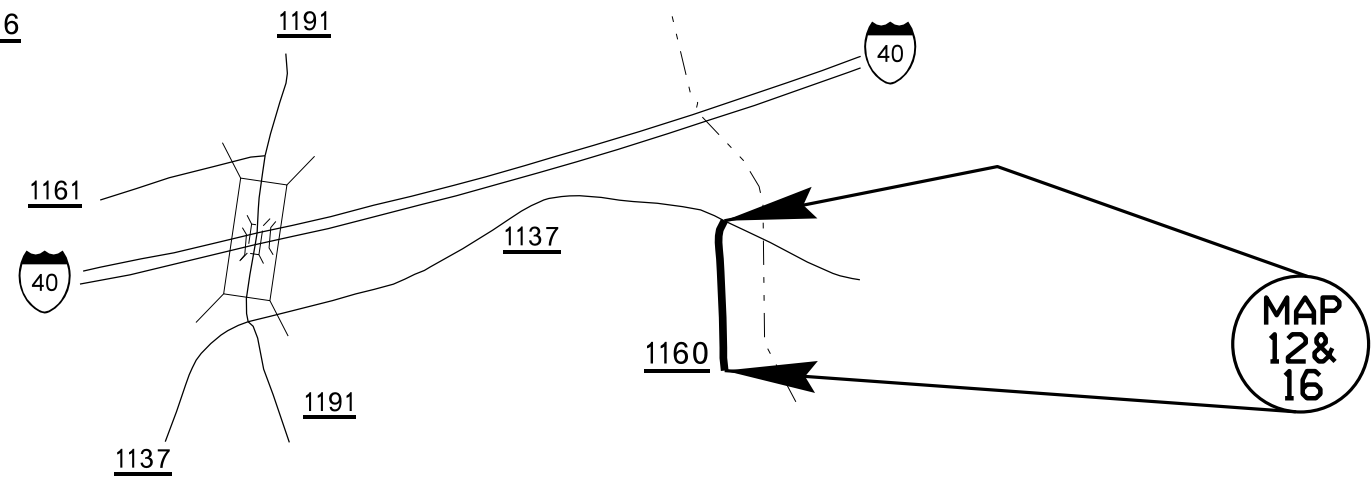
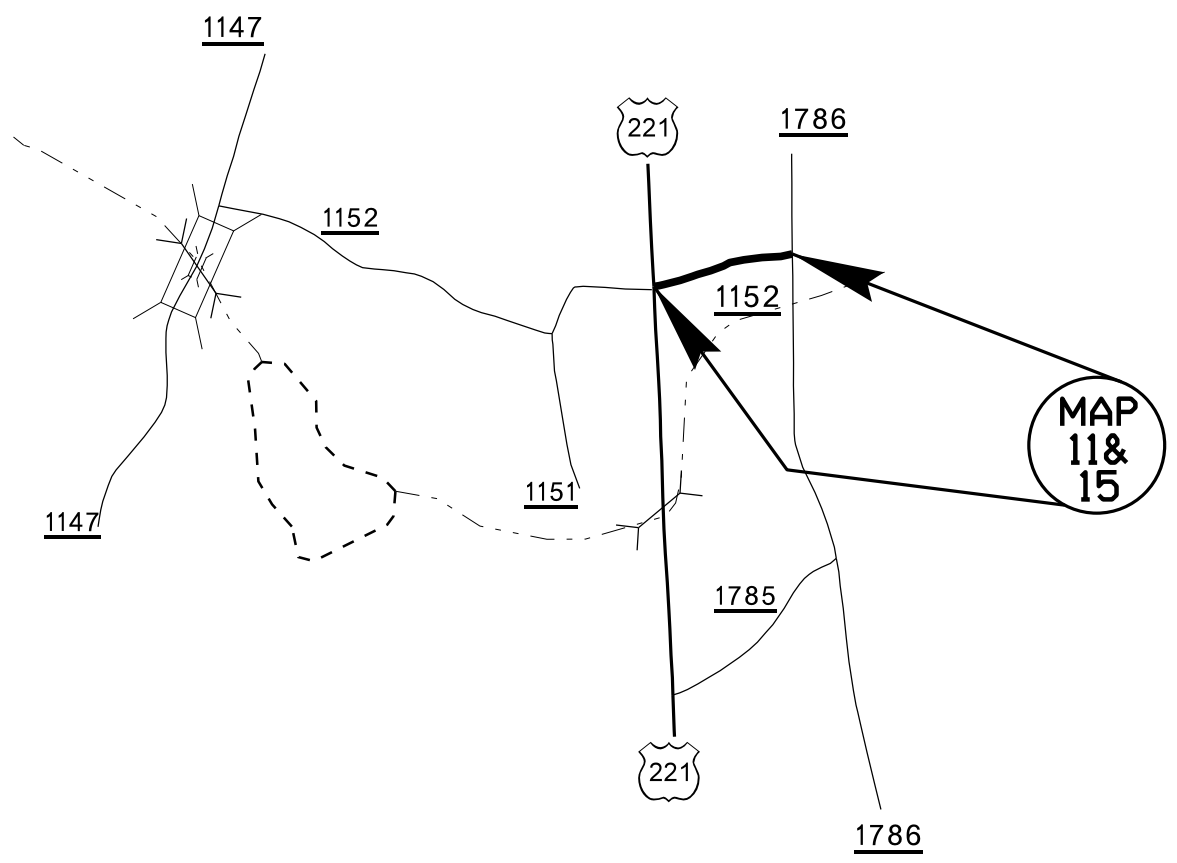
McDOWELL COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	3	



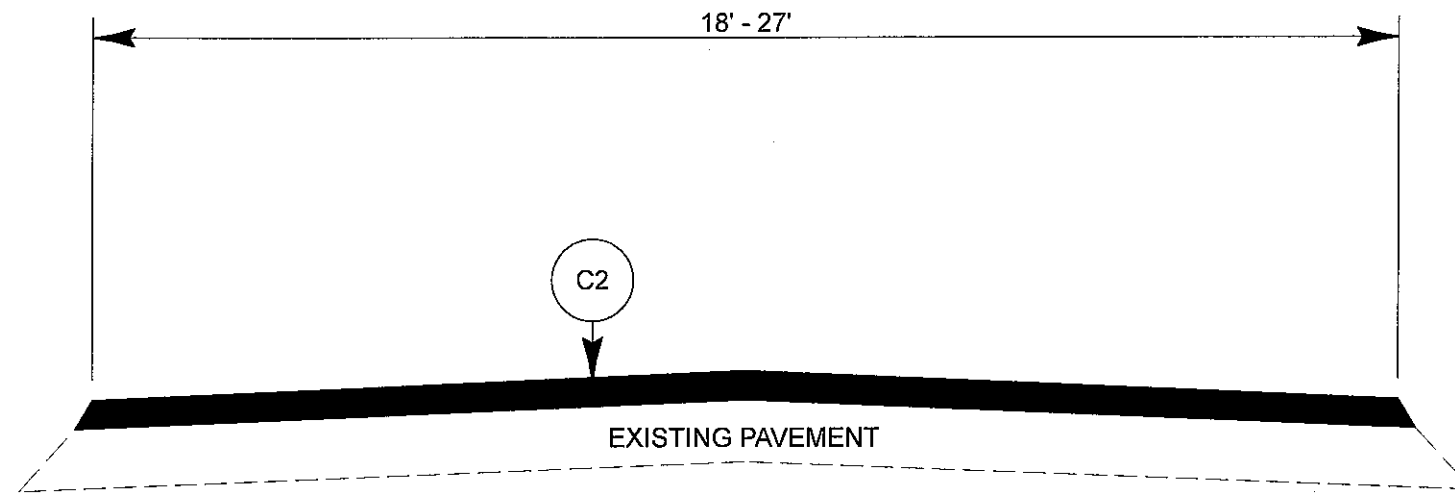
McDOWELL COUNTY

<i>PROJECT NO.</i>	<i>SHEET NO.</i>	<i>TOTAL SHEETS</i>
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	4	

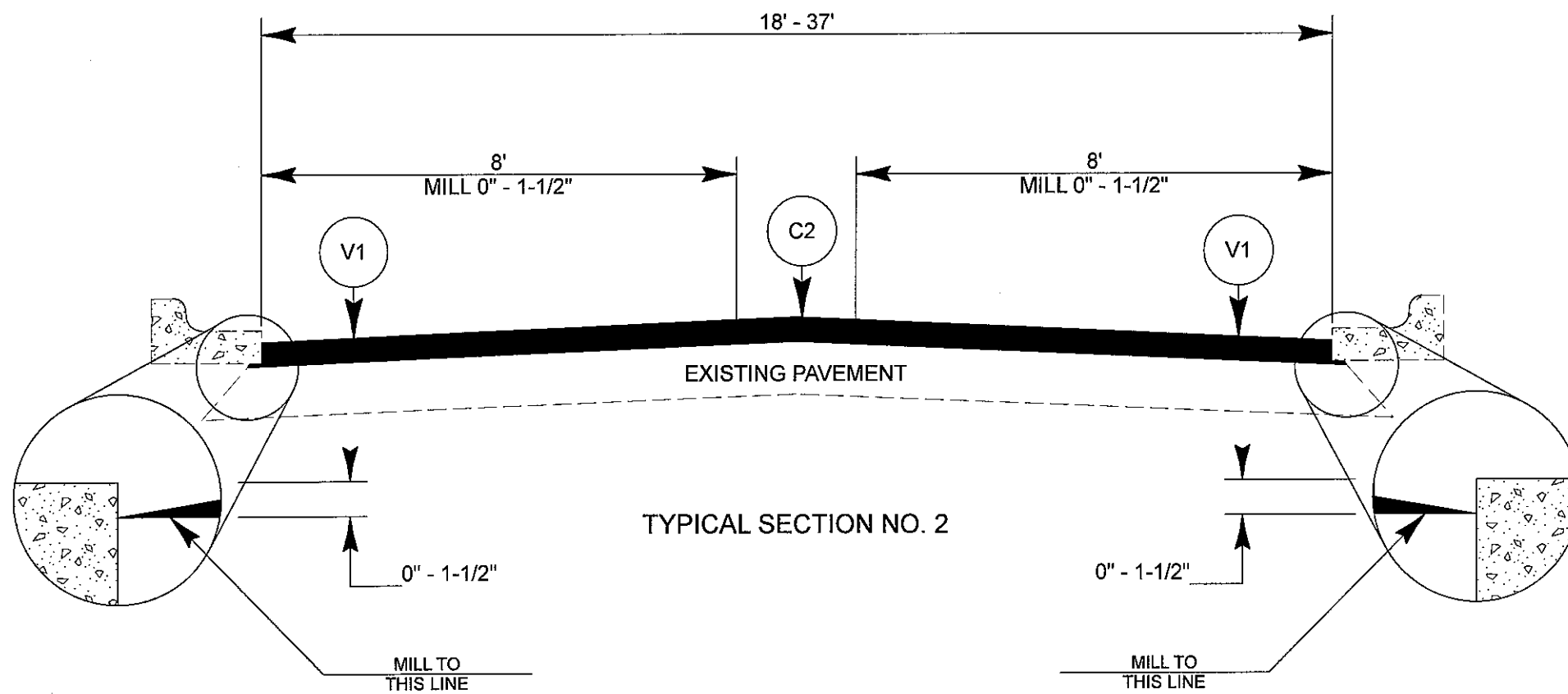
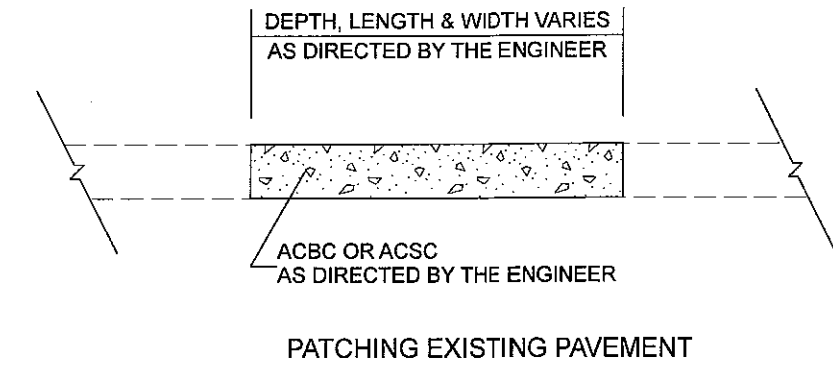


McDOWELL COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1,	5	



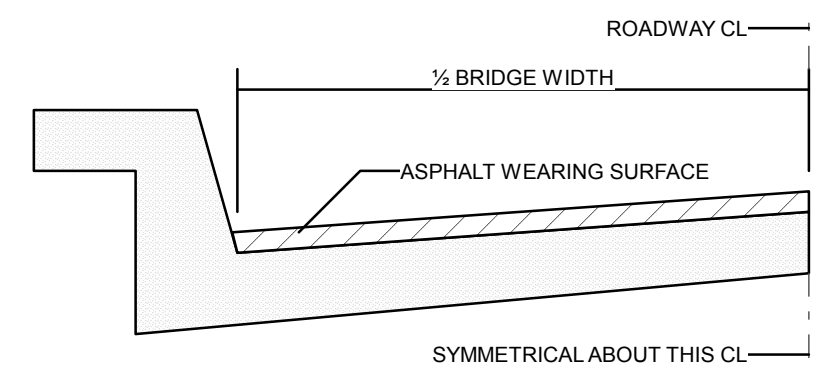
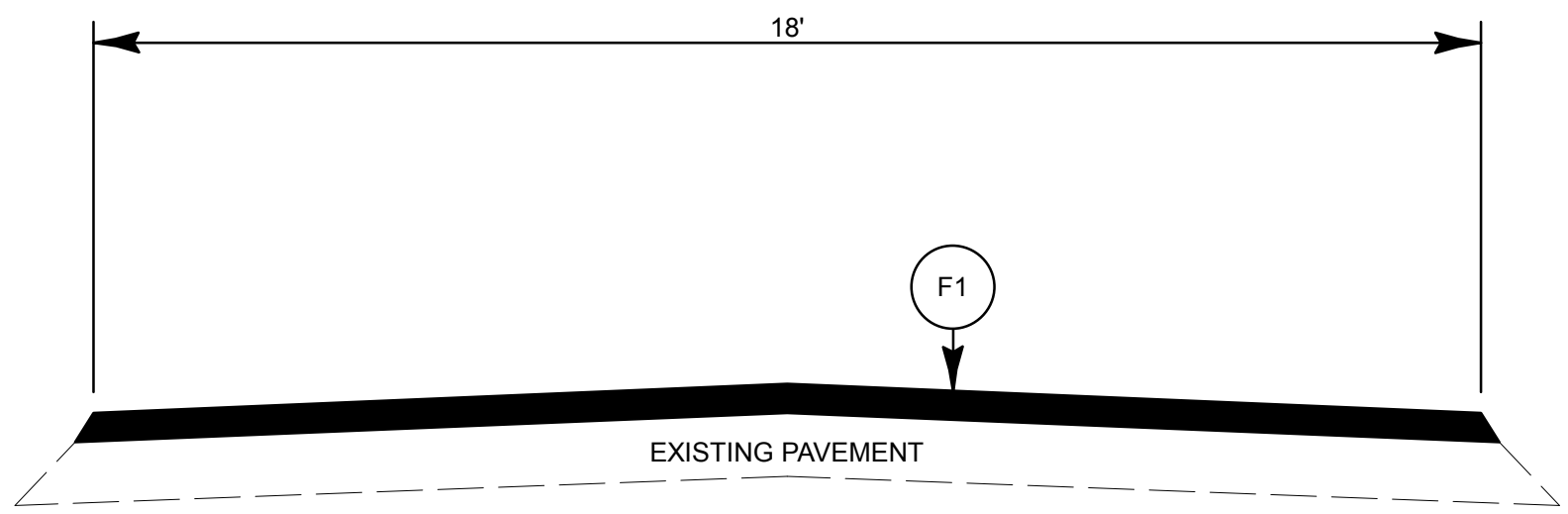
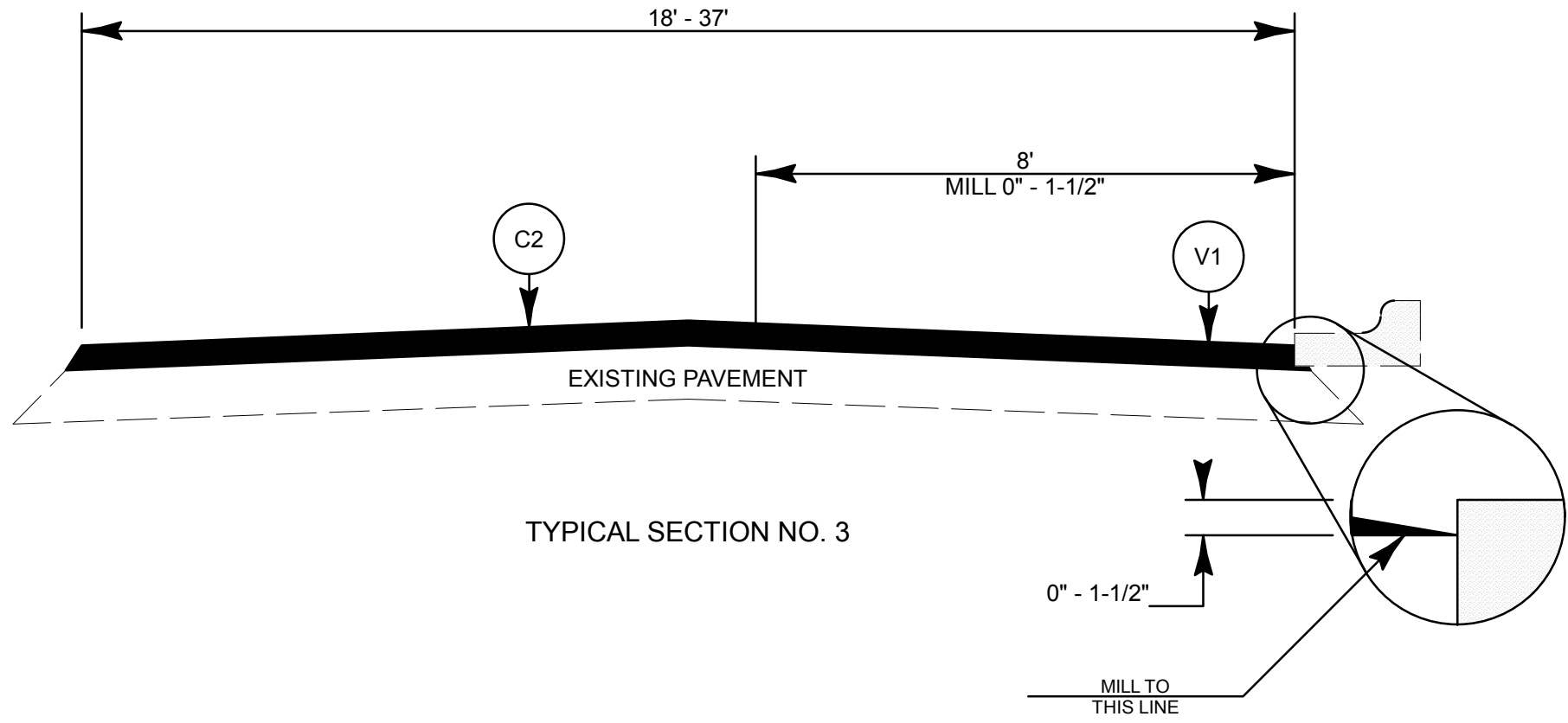
TYPICAL SECTION NO. 1



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. YARD
C2	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YARD
F1	ASPHALT SURFACE TREATMENT, DOUBLE SEAL (LIGHTWEIGHT AGGREGATE)
T1	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH
V3	INCIDENTAL MILLING
Z1	MILLED RUMBLE STRIPS

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1,	6	



BRIDGE HALF TYPICAL SECTION

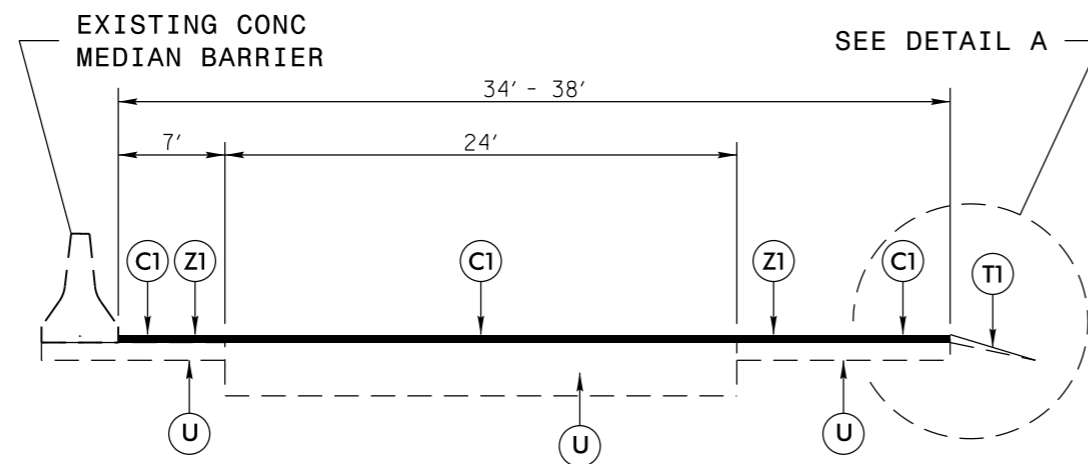
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN

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".

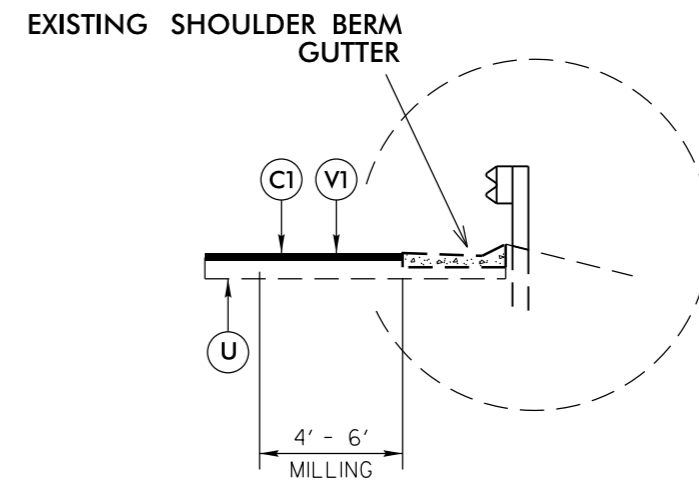
NOTES

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.

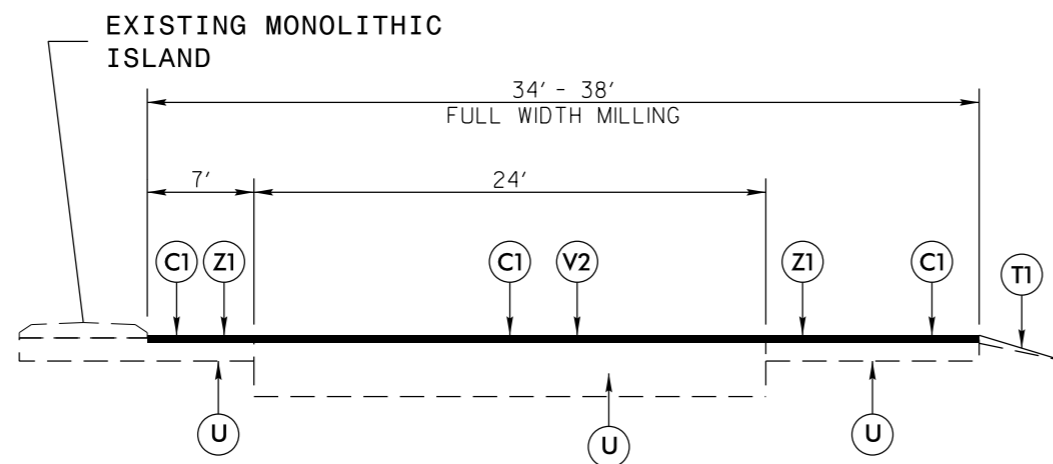
PROJECT NO.	SHEET NO.	TOTAL SHEETS
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	7	



TYPICAL SECTION NO. 5

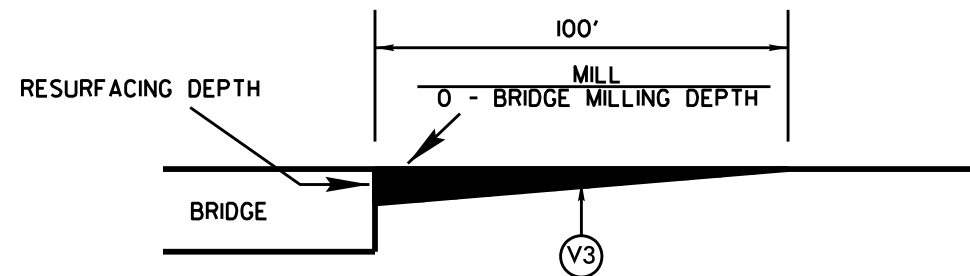


DETAIL A
VARIOUS LOCATIONS



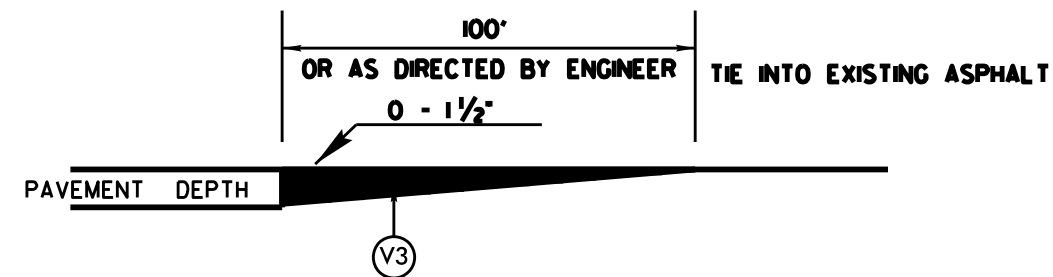
TYPICAL SECTION NO. 6

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	8	



MILLING DETAIL AT BRIDGE APPROACHES

**WHERE BRIDGES WILL NOT BE RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.
USE AT BRIDGE NUMBERS 106, 351, 353, and 354.**



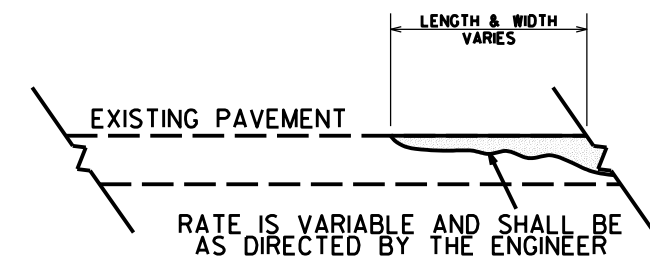
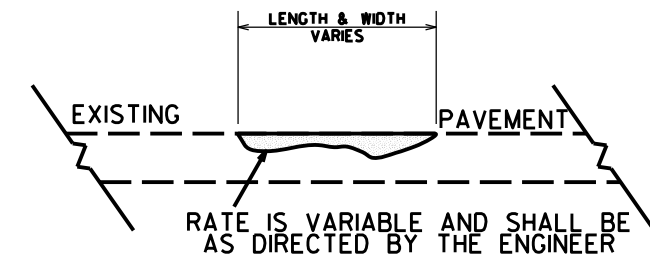
DETAIL TO TIE INTO EXIST PAVEMENT

**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.**

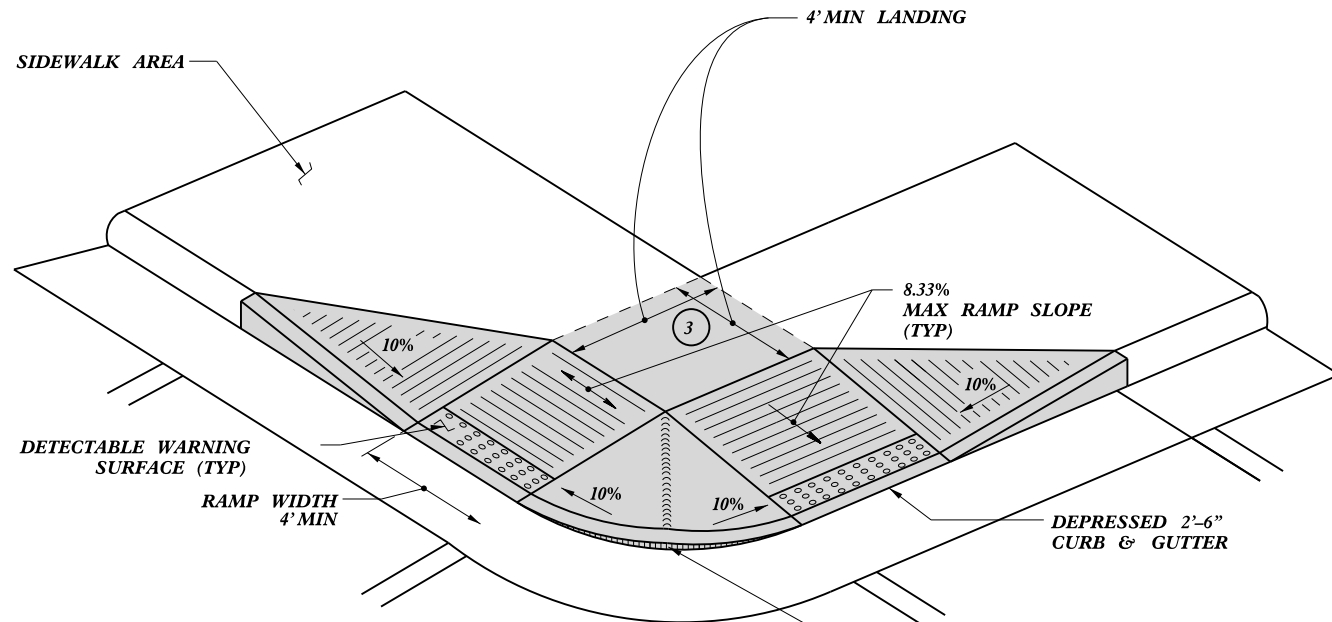
2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

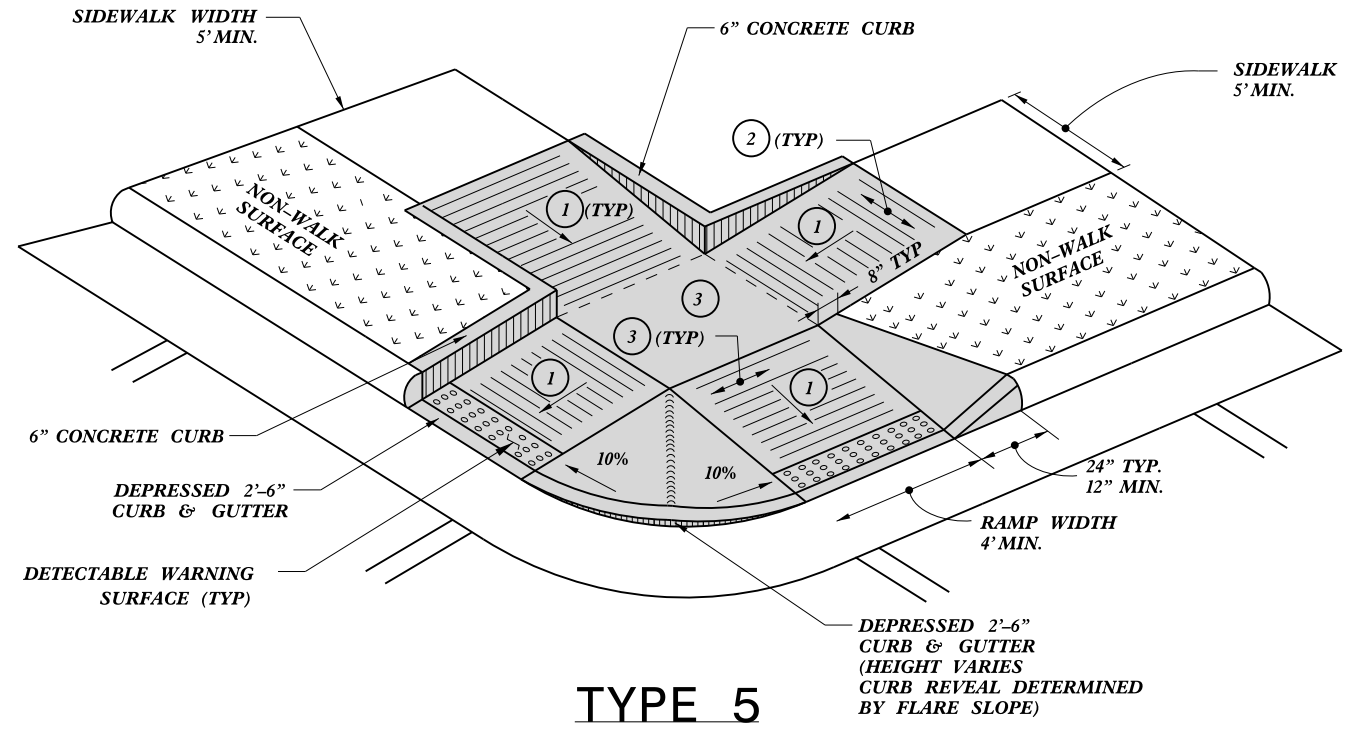
STD.NO.	TITLE
DIVISION 8 - INCIDENTALS	
665.01	Asphalt Shoulders - Milled Rumble Strips
848.05	Curb Ramp - Proposed Curb & Gutter



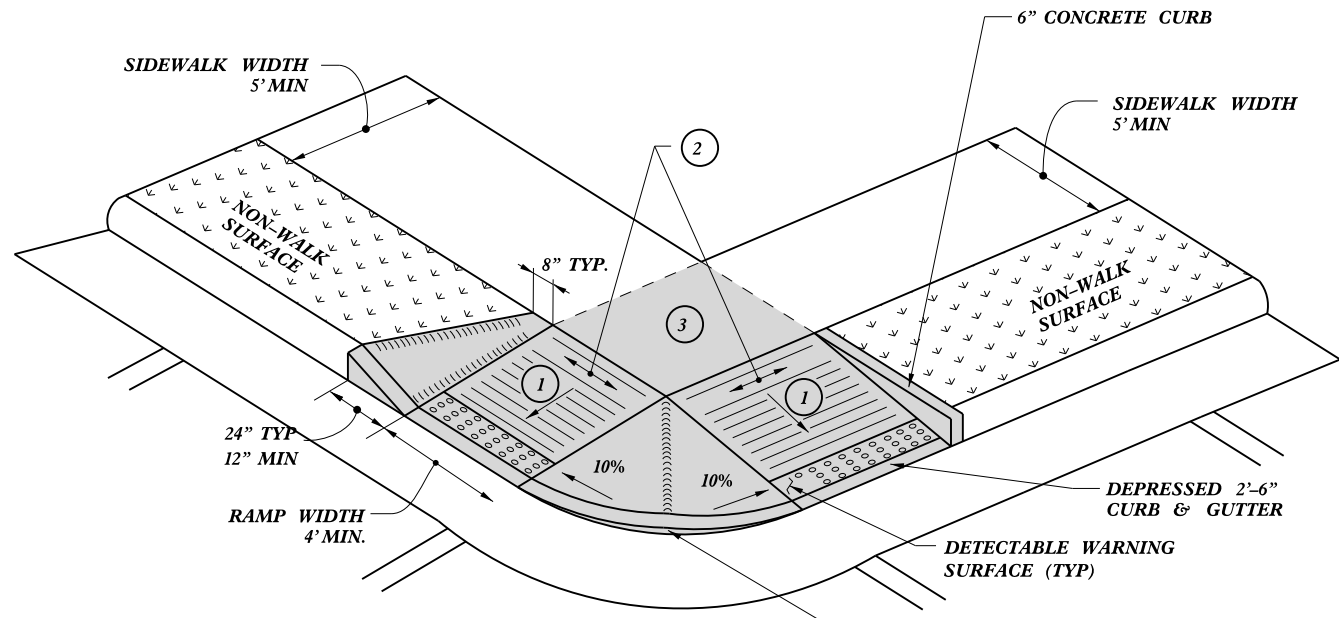
DETAIL SHOWING METHOD OF WEDGING



TYPE 4



TYPE 5



TYPE 4A

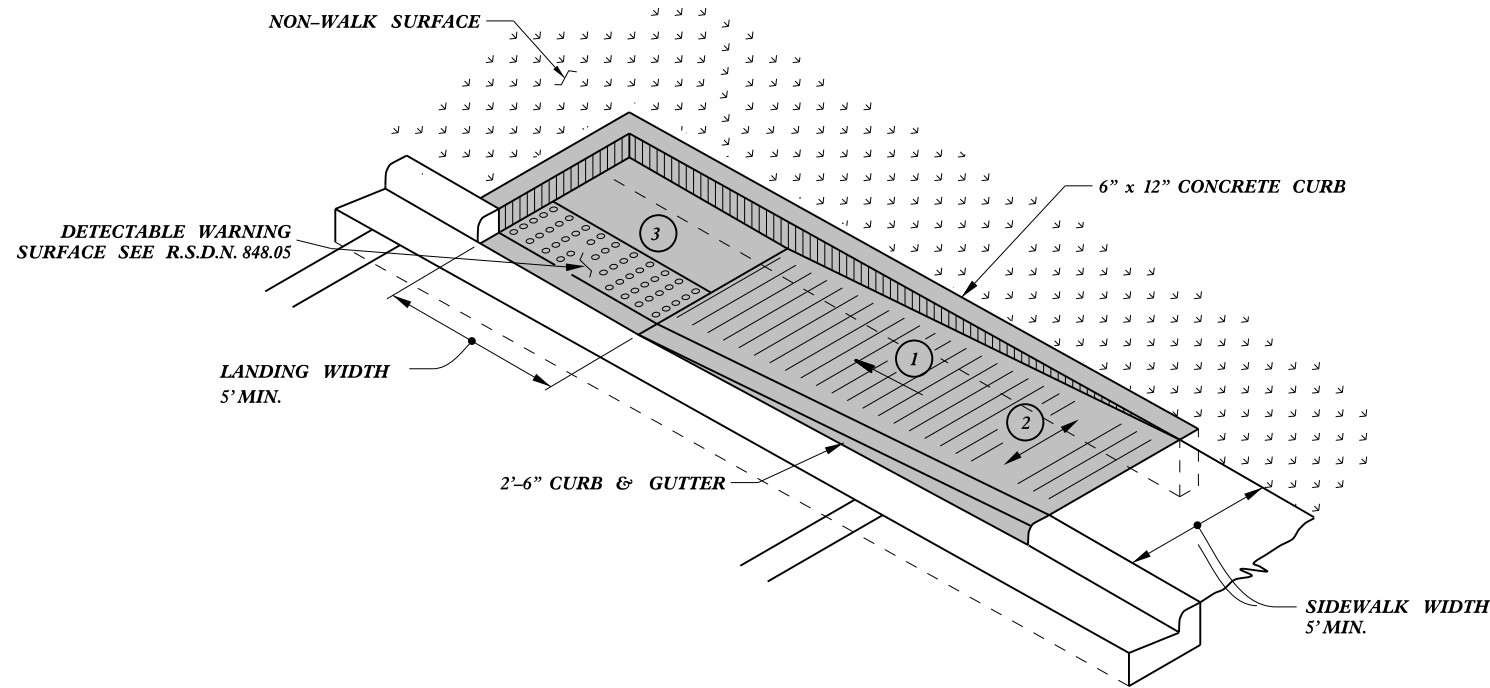
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

PAY LIMITS FOR CURB RAMP

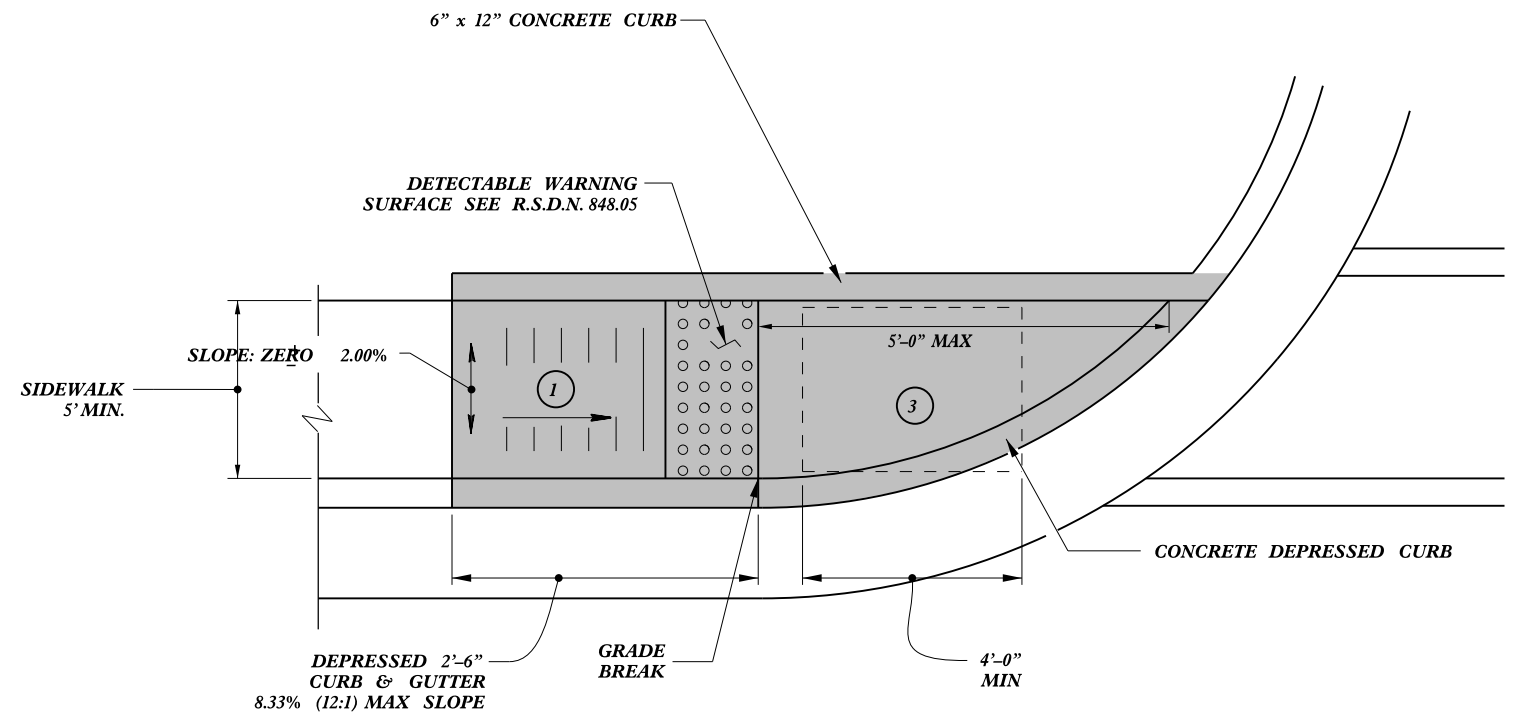
I6-SEP-2011/5:06 PM J.S. Howerton\Standard Drawings\2012 Standard Drawings\2012 Curb Ramp Special Details\Curb Ramp Details.dgn

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

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



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.

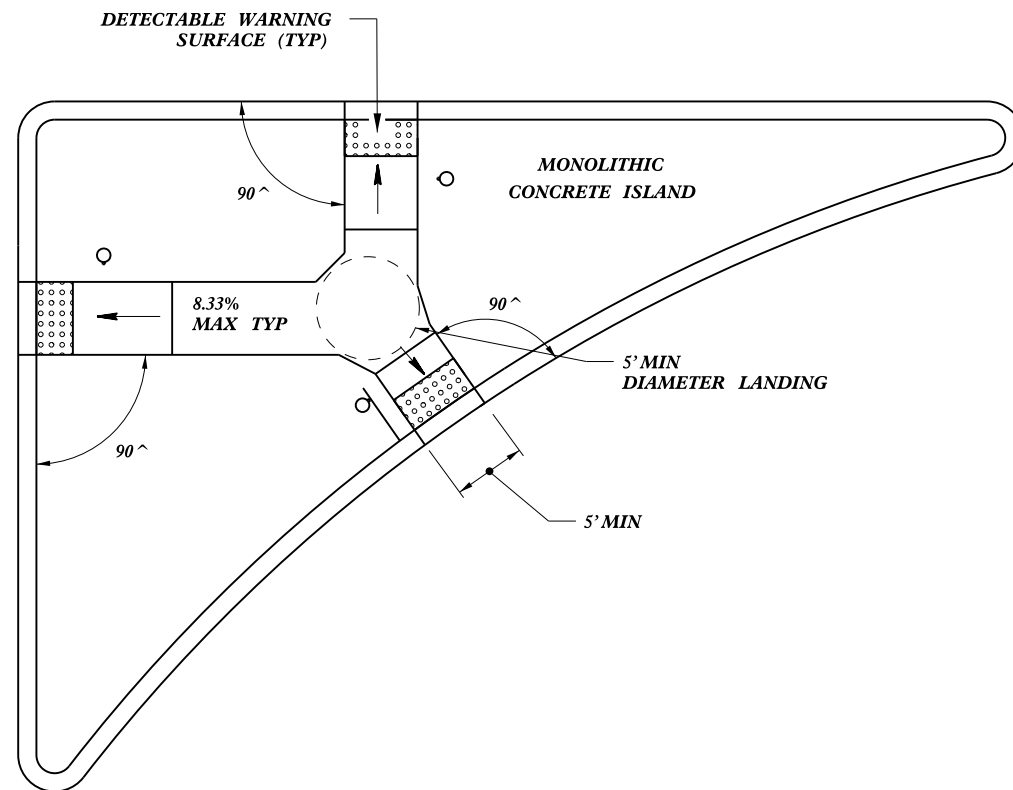
PAY LIMITS FOR CURB RAMP

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

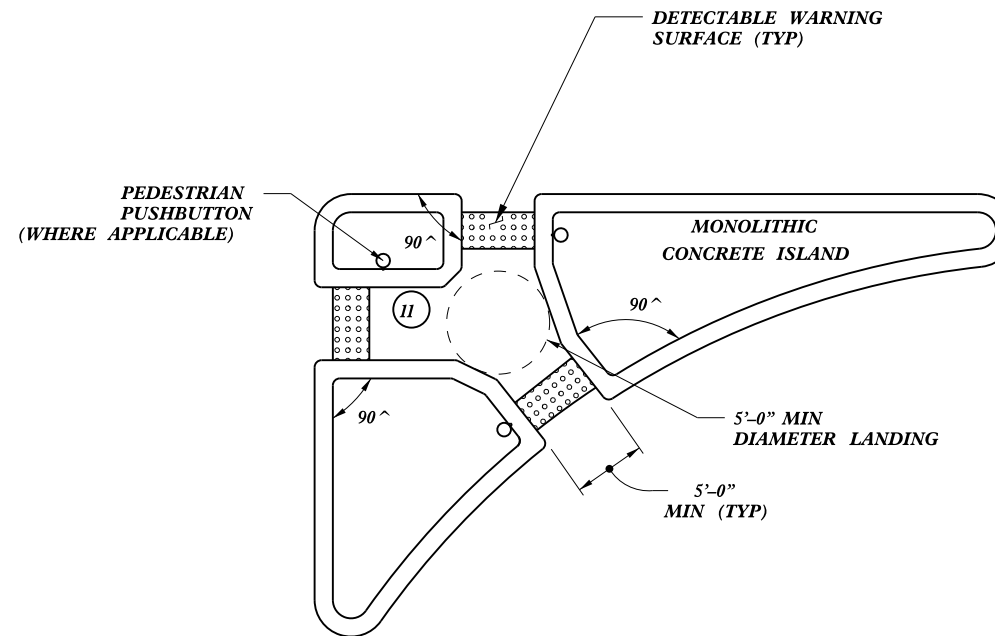
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC. :stds/2012CurbRamp/CurbRampDetails.dgn	

14-SEP-2011 08:03 S:\Contracts\2012\Standard Drawings\2012 Curb Ramp Special Details\Curb Ramp Details.dgn jhowerton AT CS0237501

5/14/99



**LARGE ISLAND
CURB RAMPS**



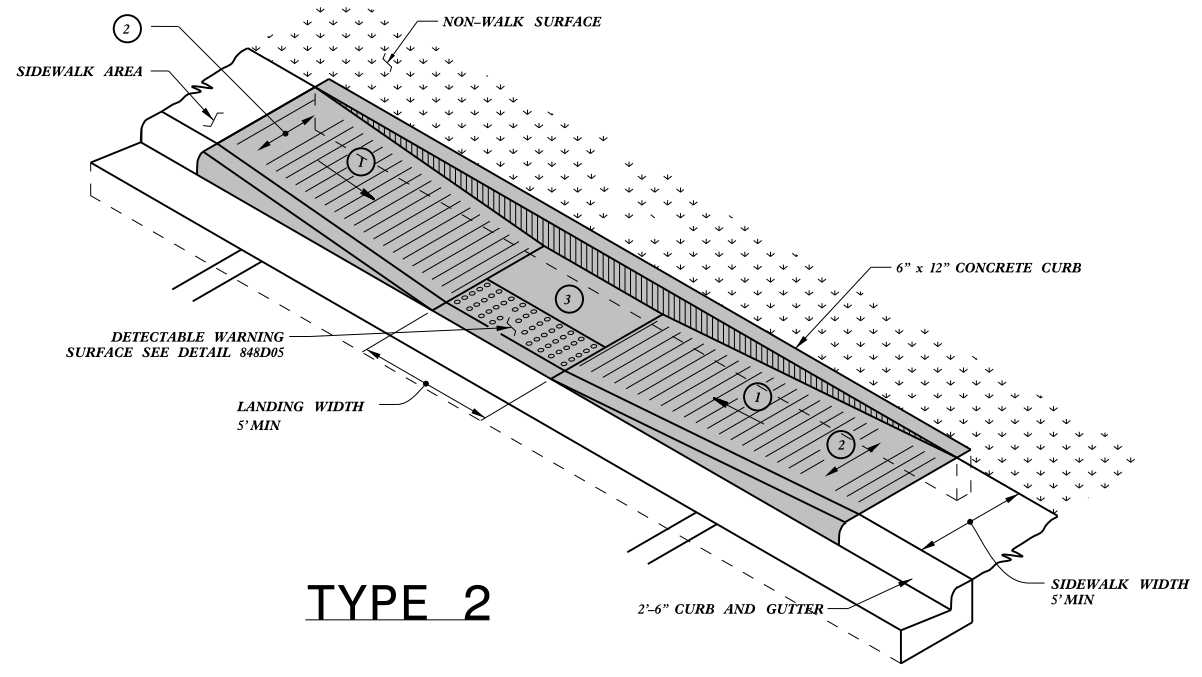
**SMALL ISLAND
WITH CUT THROUGH**

-SEE ROADWAY DETAIL DRAWING 848D05 FOR DETECTABLE WARNING SURFACE AND FOR RAMP NOTES.

-SEE ROADWAY STANDARD DRAWING 852.01 FOR CONCRETE ISLAND DIMENSIONS.

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950 FAX 919-250-4119	
CURB RAMPS	
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	

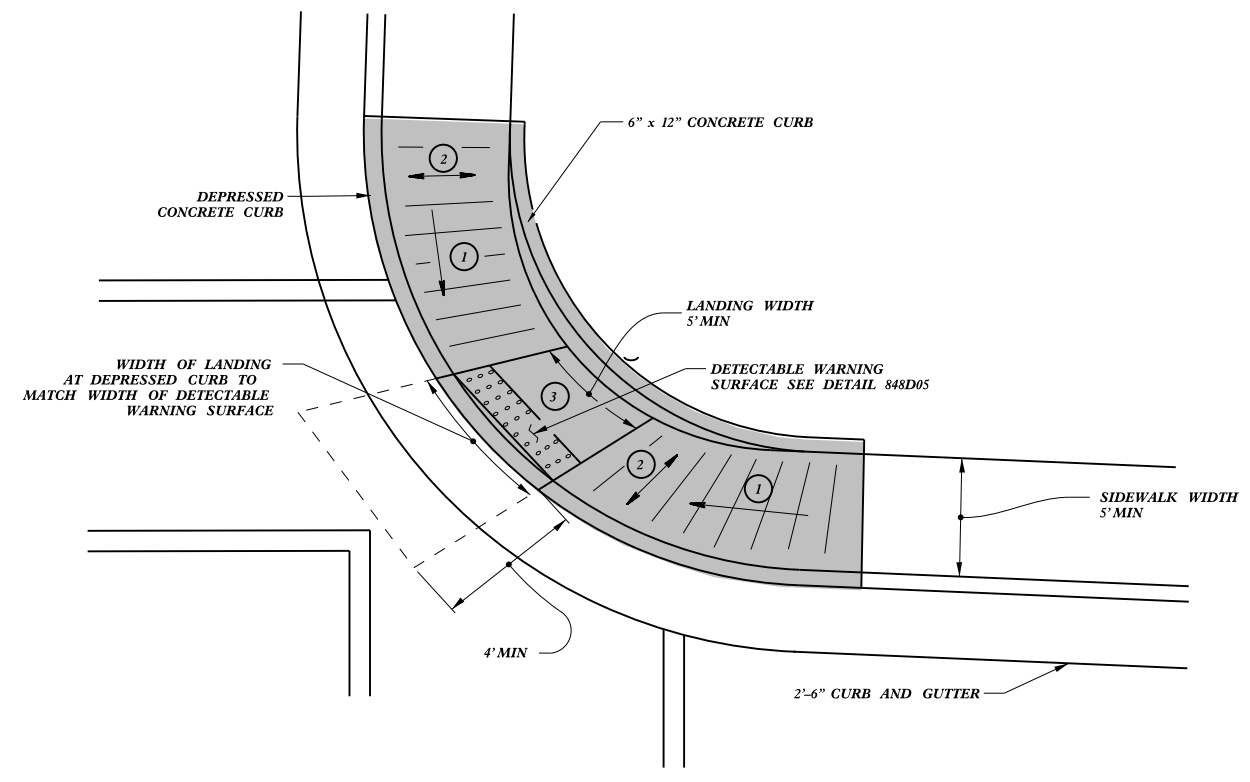
5/14/99
 04-AUG-2011 09:03
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 \$\$\$USERNAME\$\$\$



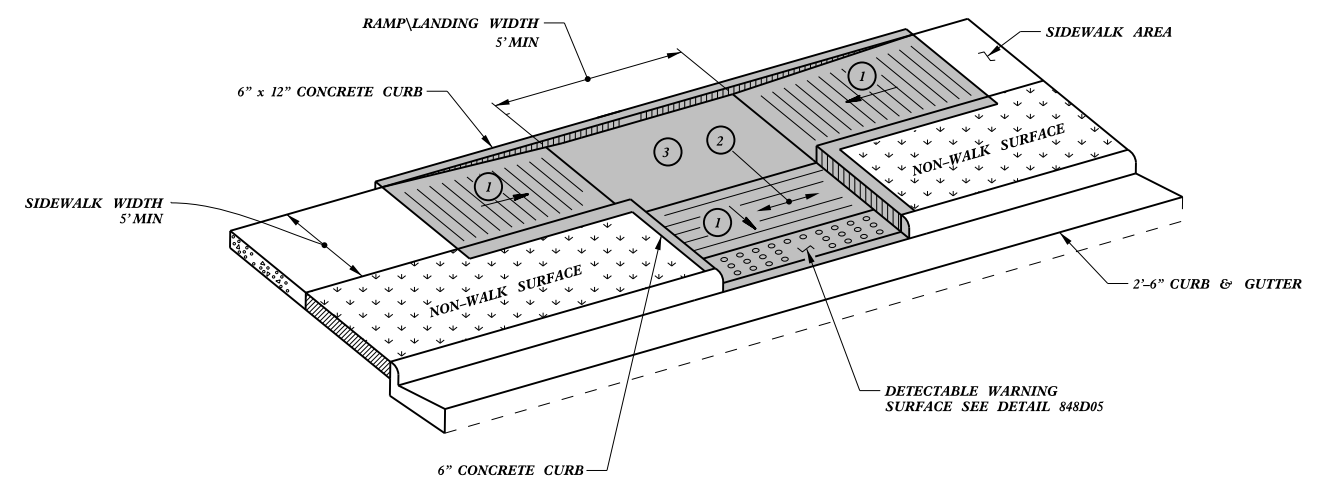
TYPE 2

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



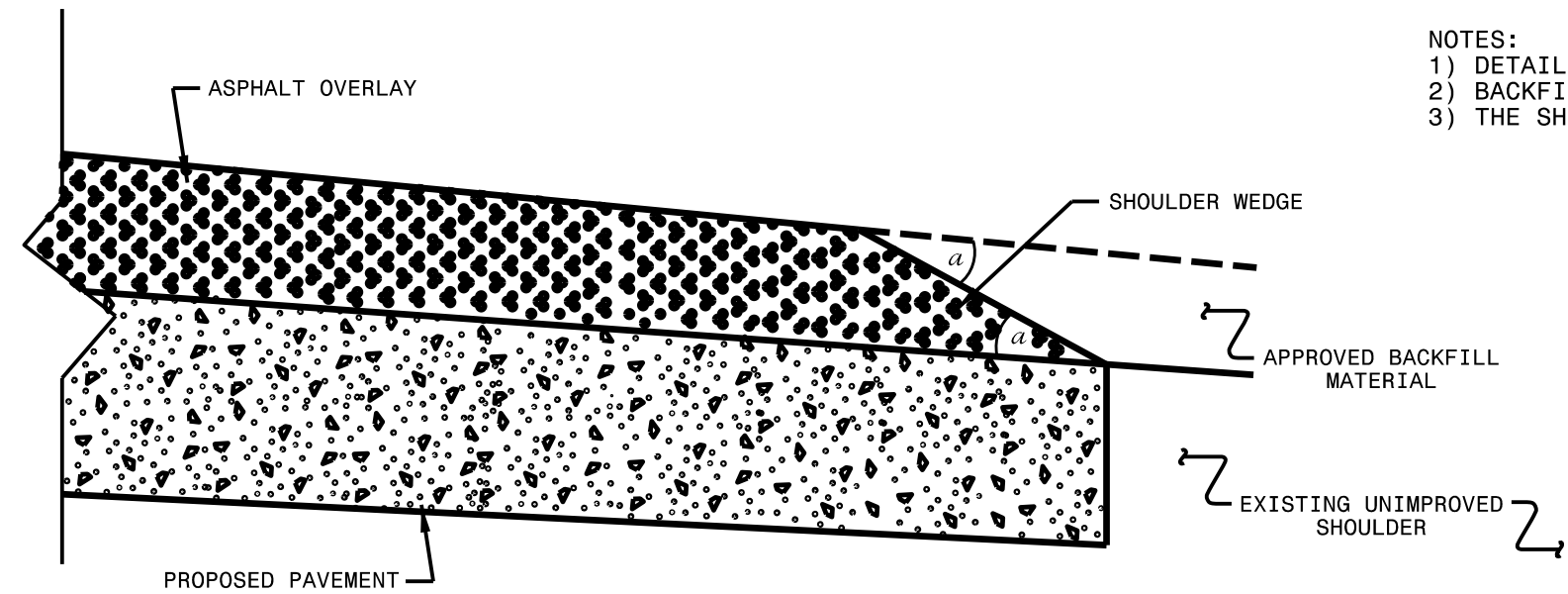
TYPE 3

14-SEP-2010 08:04
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 J.Howerton AT CS0237501

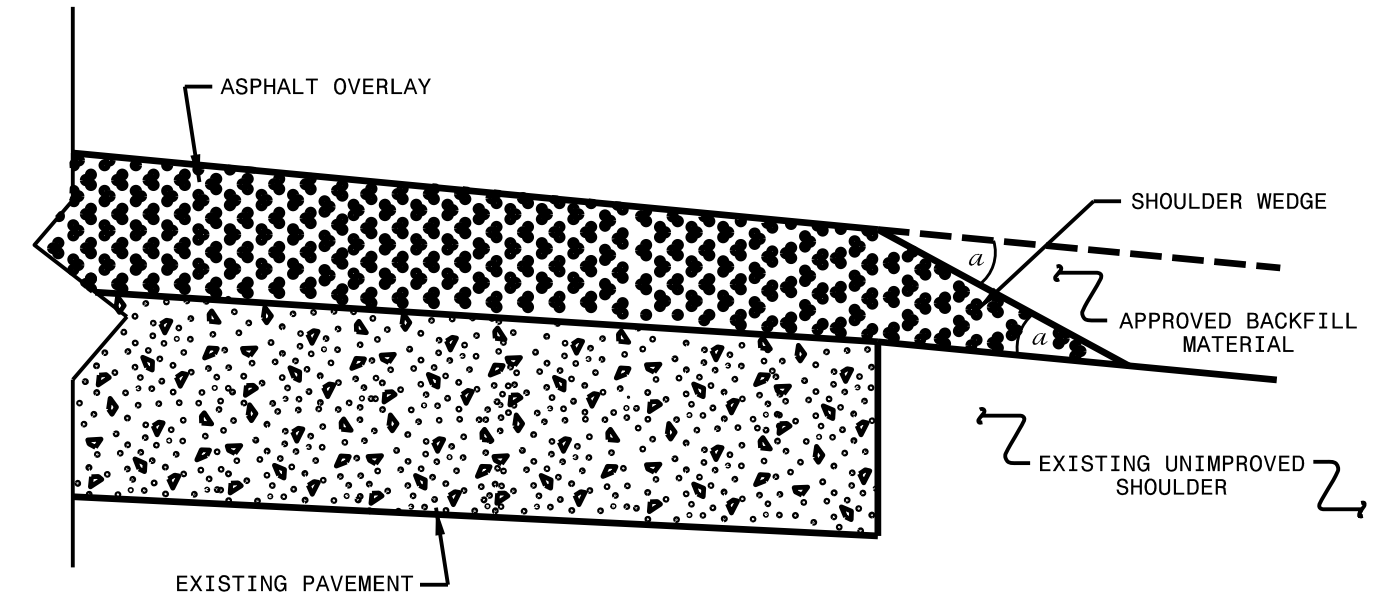
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

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

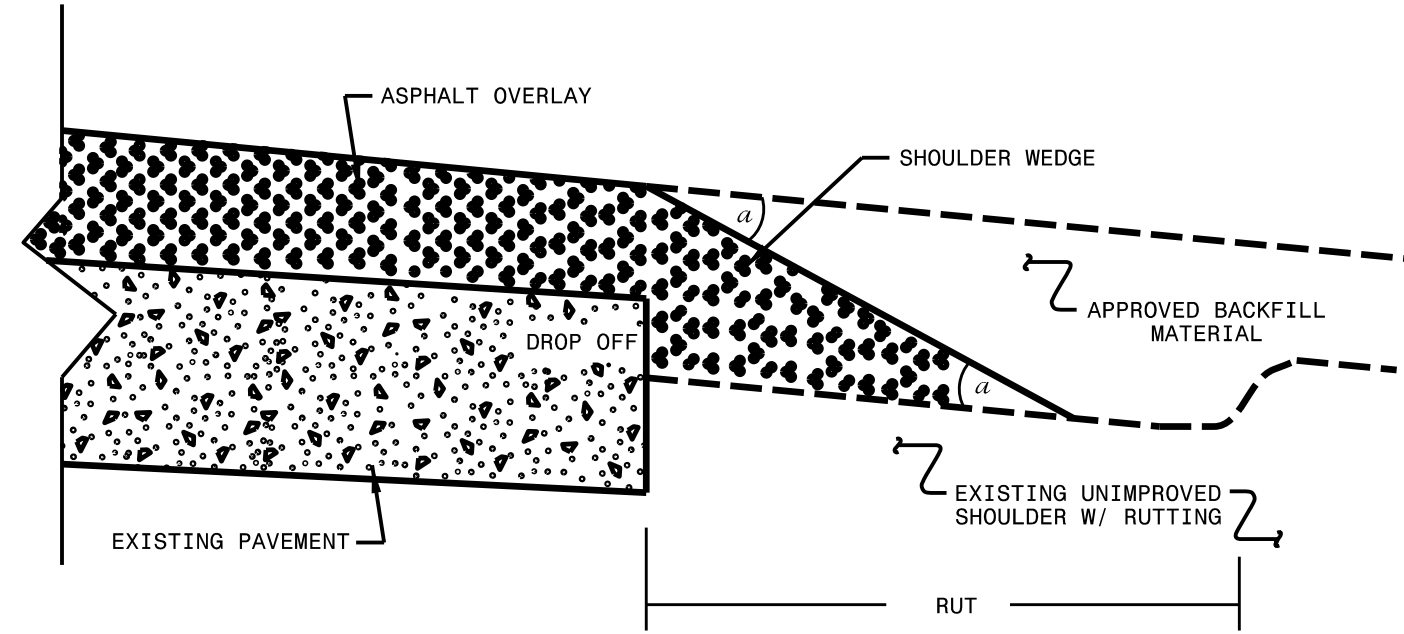
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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°

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\std1.dgn		

\$\$\$\$SYTIME\$\$\$\$
 \$\$\$SUSERNAME\$\$\$

PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	14	

SUMMARY OF QUANTITIES

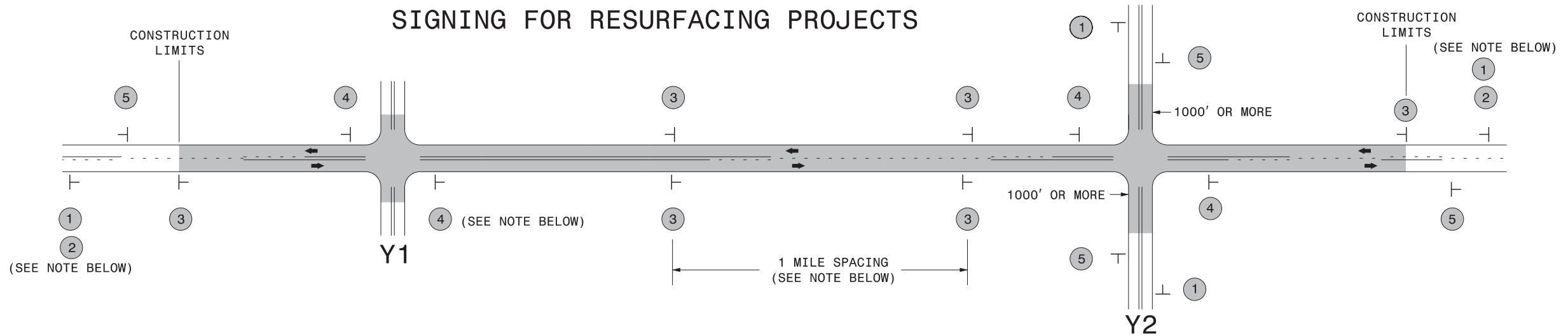
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TON	SHOULDER RECONSTRUCTION SMI	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH SY	MILLING ASPHALT PAVEMENT, 0" TO 1-1/2" DEPTH SY	INCIDENTAL MILLING SY	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	ASPHALT SURFACE TREATMENT, DOUBLE SEAL SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL	MILLED RUMBLE STRIPS (ASPHALT CONCRETE) LF	CONCRETE CURB RAMP EA	ADJUSTMENT OF DROP INLET EA	ADJUSTMENT OF MANHOLES EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA	
2016CPT.13.04.10591.1	McDowell	1	US 221 NBL	FROM US 221 BUSINESS TO 1.39 MILES NORTH OF SR 1328 (MP 10.29 - MP 14.54)		5,6	2	MD	NO	4.6	34-38		4.25	1,250	1,600	3,575	9,410		565	1,130			44,880		25	25		
		2	US 221 SBL	FROM 1.39 MILES NORTH OF SR 1328 TO US 221 BUSINESS (MP 21.86 - MP 26.11)		5,6	2	MD	NO	4.6	34-38		4.60	1,400		3,795	9,476		569	1,350			44,880		22	22		
TOTAL FOR PROJ NO. 2016CPT.13.04.10591.1										9.2			8.85	2,650	1,600	7,370	18,886		1,134	2,480			89,760		47	47		
2016CPT.13.04.20591.1	McDowell	3	SR 1164	FROM SR 1001 TO SR 1168 (MP 0.00 - MP 1.51)		1	2	2WU	NO	1.51	20	76						1,618	108	525							1	
		4	SR 1195	FROM BRIDGE NO. 353 TO SR 1191 (MP 1.06 - MP 2.31)		1	2	2WU	NO	1.25	20	63				222		1,427	96	500								
		5	SR 1501	FROM 0.50 MILES EAST OF SR 1550 TO SR 1552 (MP 3.13 - MP 4.11)		1	2	2WU	NO	0.98	18	49						946	63	450								
		6	SR 1506	FROM US 70 TO US 70 (MP 0.00 - MP 0.88)		1,2	2	2WU	NO	0.88	18-36	44			335			849	57	250								
		7	SR 1191	FROM SR 1001 TO BRIDGE NO. 106 (MP 0.00 - MP 1.49)		1,3	2	2WU	NO	1.49	18-37	75			267			1,517	102	500								
		8	SR 1703	FROM US 70 TO US 221 BUSINESS (MP 0.00 - MP 1.22)		1,2	2	2WU	NO	1.22	20-37	61			4,800			1,762	118	525				28	6	8	12	
		9	SR 1138	FROM SR 1001 TO EOP (MP 0.00 - 0.63)			2	2WU	NO	0.63	18									185								
		10	SR 1144	FROM SR 1001 TO EOM (MP 0.00 - MP 0.57)			2	2WU	NO	0.57	18									185								
		11	SR 1152	FROM SR 1786 TO US 221 (MP 0.00 - MP 0.19)			2	2WU	NO	0.19	18									80								
		12	SR 1160	FROM SR 1137 TO EOM (MP 0.00 - MP 0.16)			2	2WU	NO	0.16	18									65								
TOTAL FOR PROJ NO. 2016CPT.13.04.20591.1										8.88		368			5,402	222		8,119	544	3,265				28	6	8	13	
2016CPT.13.04.20592.1	McDowell	13	SR 1138	FROM SR 1001 TO EOP (MP 0.00 - 0.63)		4	2	2WU	NO	0.63	18									6,653		3,660						
		14	SR 1144	FROM SR 1001 TO EOM (MP 0.00 - MP 0.57)		4	2	2WU	NO	0.57	18									6,019		3,315						
		15	SR 1152	FROM SR 1786 TO US 221 (MP 0.00 - MP 0.19)		4	2	2WU	NO	0.19	18									2,006		1,105						
		16	SR 1160	FROM SR 1137 TO EOM (MP 0.00 - MP 0.16)		4	2	2WU	NO	0.16	18									1,690		930						
TOTAL FOR PROJ NO. 2016CPT.13.04.20592.1										1.55										16,368		9,010						
GRAND TOTAL										19.63		368		8.85	2,650	7,002	7,592	18,886	8,119	1,678	5,745	16,368	9,010	89,760	28	53	55	13

PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.13.04.10591.1, 2016CPT.13.04.20591.1, 2016CPT.13.04.20592.1	15	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4697000000-E	4705000000-E	4710000000-E	4721000000-E	4725000000-E					4810000000-E		4845000000-E			4847000000-E		4847110000-E	4905000000-N							
										WORK ZONE ADVANCE/ GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) RXR	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & LT ARROW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	PAINT PAVEMENT MARKING SYMBOL (LT ARROW)	PAINT PAVEMENT MARKING SYMBOL (STR ARROW)	PAINT PAVEMENT MARKING SYMBOL (STR & RT ARROW)	POLYUREA PAVEMENT MARKING LINES (4") WHITE (HIGHLY REFLECTIVE ELEMENTS) LF	POLYUREA PAVEMENT MARKING LINES (4") YELLOW (HIGHLY REFLECTIVE ELEMENTS) LF	POLYUREA PAVEMENT MARKING LINES (8") WHITE (HIGHLY REFLECTIVE ELEMENTS) LF	SNOWPLOWABLE PAVEMENT MARKERS							
2016CPT.13.04.10591.1	McDowell	1	US 221 NBL	FROM US 221 BUSINESS TO 1.39 MILES NORTH OF SR 1328 (MP 10.29 - MP 14.54)	5,6	2	MD	4.6	34-38	366	*											400	315						31,660	25,588	400	335				
		2	US 221 SBL	FROM 1.39 MILES NORTH OF SR 1328 TO US 221 BUSINESS (MP 21.86 - MP 26.11)	5,6	2	MD	4.6	34-38					38		4	2	2				440	350	4	2	2			32,100	25,808	420	335				
TOTAL FOR PROJ NO. 2016CPT.13.04.10591.1										366	1			38		4	2	2				840	665	4	2	2			63,760	51,396	820	670				
																8					1,505			8			115,156									
2016CPT.13.04.20591.1	McDowell	3	SR 1164	FROM SR 1001 TO SR 1168 (MP 0.00 - MP 1.51)	1	2	2WU	1.51	20	996	*			26		1														15,946	15,946					
		4	SR 1195	FROM BRIDGE NO. 353 TO SR 1191 (MP 1.06 - MP 2.31)	1	2	2WU	1.25	20					88	72	4															13,200	13,200				
		5	SR 1501	FROM 0.50 MILES EAST OF SR 1550 TO SR 1552 (MP 3.13 - MP 4.11)	1	2	2WU	0.98	18																						10,349	10,349				
		6	SR 1506	FROM US 70 TO US 70 (MP 0.00 - MP 0.88)	1,2	2	2WU	0.88	18-36							72		1													9,293	9,293	60			
		7	SR 1191	FROM SR 1001 TO BRIDGE NO. 106 (MP 0.00 - MP 1.49)	1,3	2	2WU	1.49	18-37							87															15,734	15,734				
		8	SR 1703	FROM US 70 TO US 221 BUSINESS (MP 0.00 - MP 1.22)	1,2	2	2WU	1.22	20-37					88	88	204	4	2													12,883	12,883				
		9	SR 1138	FROM SR 1001 TO EOP (MP 0.00 - 0.63)		2	2WU	0.63	18																											
		10	SR 1144	FROM SR 1001 TO EOM (MP 0.00 - MP 0.57)		2	2WU	0.57	18																											
		11	SR 1152	FROM SR 1786 TO US 221 (MP 0.00 - MP 0.19)		2	2WU	0.19	18																											
		12	SR 1160	FROM SR 1137 TO EOM (MP 0.00 - MP 0.16)		2	2WU	0.16	18																											
TOTAL FOR PROJ NO. 2016CPT.13.04.20591.1												996	1	88	176	461	8	4	10	5	1									77,405	77,405	60				
																														154,810						
2016CPT.13.04.20592.1	McDowell	13	SR 1138	FROM SR 1001 TO EOP (MP 0.00 - 0.63)	4	2	2WU	0.63	18	174	*																									
		14	SR 1144	FROM SR 1001 TO EOM (MP 0.00 - MP 0.57)	4	2	2WU	0.57	18																											
		15	SR 1152	FROM SR 1786 TO US 221 (MP 0.00 - MP 0.19)	4	2	2WU	0.19	18																											
		16	SR 1160	FROM SR 1137 TO EOM (MP 0.00 - MP 0.16)	4	2	2WU	0.16	18																											
TOTAL FOR PROJ NO. 2016CPT.13.04.20592.1										174	1												16,051	16,051												
																												32,102								
GRAND TOTAL									19.63	1,536	1	88	176	499	8	8	2	18	5	1	16,891	16,716	4	2	2	141,165	128,801	880	670							
																											269,966									

SIGNING FOR RESURFACING PROJECTS



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

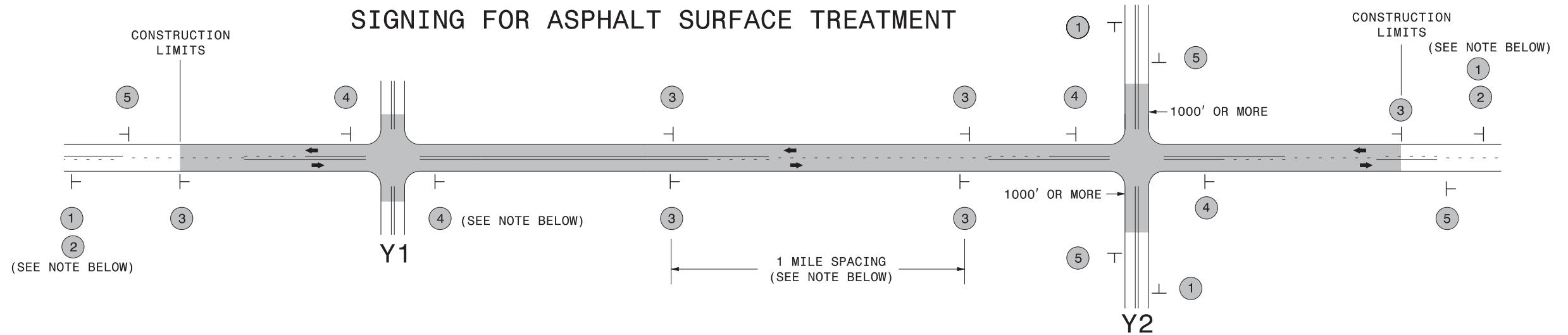
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		<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"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, 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;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
		<p>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.</p>	
		<p>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.</p>	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>	

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

SIGNING FOR ASPHALT SURFACE TREATMENT



LEGEND	
T	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

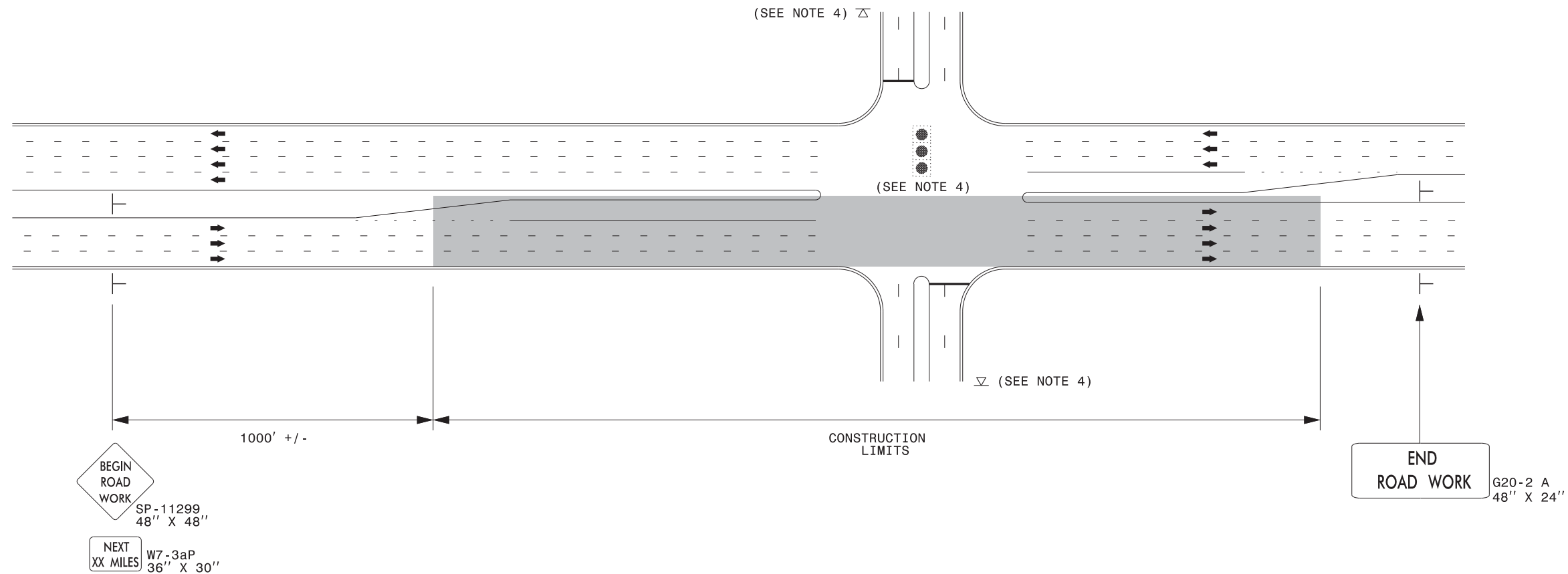
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
1 2	 W20-1 48" X 48" W7-3aP 24" X 18"	<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>
3	 W8-7 48" X 48" SP 48" X 48"	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, 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>
4	 SP 13106 48" X 48"	<p>ALTERNATE THE FOLLOWING TWO SIGNS: STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</p> <p>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.</p> <p>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.</p>
5	 G20-2 A 48" X 24"	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>

**ADVANCE WARNING SIGNS
FOR
ASPHALT SURFACE TREATMENTS
2 LANE ROADWAYS**

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URBAN / SUBURBAN WORKZONES

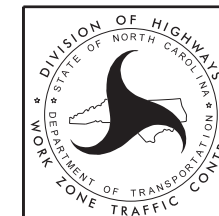


NOTES:

- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- ┆ STATIONARY SIGN
- ➔ DIRECTION OF TRAFFIC FLOW



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