# 2014 CA MUTCD Revision 8 Draft

# California Manual on Uniform Traffic Control Devices

FHWA's MUTCD 2009 Edition, including Revisions 1,2,&3 as amended for use in California.

# 2014 Edition Revision 8 (DRAFT Version)

State of California California State Transportation Agency Department of Transportation



CALIFORNIA STATE TRANSPOR

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# EDITORIAL CHANGES FOR 2014 CA MUTCD REVISION 8

The following are the changes incorporated in 2014 CA MUTCD Revision 8. Text, figures, and table additions or changes to CA MUTCD Revision 8 are highlighted or boxed in yellow and identified by a neon green-colored bar along the left side of the paragraph, figure, or table.

The following items are included in Revision 8:

- 14 CTCDC Items (pages 3-66):
  - 1) 21-02 (5-13-21): Modify Existing NO IDLING Sign
  - 2) 21-07 (8-12-21): Proposed Changes to CA MUTCD on Bikeway Memorial Signage
  - 3) 21-12 (8-12-21): Modify Preferential Lane Striping in the CA MUTCD
  - 4) 21-15 (11-4-21): TRUCK OK Panels on Overhead Arrow-per-Lane Signs
  - 5) 21-22 (11-4-21): Changes to Part 3 and Part 9 (Green Pavement, Bikeway Posts)
  - 6) 22-04 (5-5-22): WILDLIFE CROSSING Word Message Warning Sign
  - 7) 22-06 (11-3-22): BIKE TURN-OUT Signs
  - 8) 22-07 (11-3-22): PEDESTRIANS PROHIBITED CALL 911 (G81-67(CA)) Sign
  - 9) 22-12 (11-3-22): 2009 National MUTCD Revision 3 Final Pavement Ruling
  - 10) 23-01 (5-4-23): Clarifying Authority Regarding Destination Signs
  - 11) 23-02 (5-4-23): Scaling of Pavement Word, Symbol, and Arrow Markings
  - 12) 23-06 (8-3-23): Placement of Exit Plaques on Guide Signs
  - 13) 23-08 (8-3-23): No Overnight Camping or Sleeping in Vehicle Sign
  - 14) 23-11 (11-2-23): Guide Sign LEDs
- Editorial Changes (pages 67-77)
- Prior Substantial Conformance, for publishing purposes (pages 78-81)
   15) 23-07 (8-3-23): Construction Project Funding Identification Signs

Table I-21. Region boxed in yellow is edited. These edits originate from CTCDC Item 22-12 (11-3-22 meeting).

# Table I-2. Target Compliance Dates Established by the FHWA

2009 MUTCD Section Number(s)	2009 MUTCD Section Title	Specific Provision	Compliance Date
2A.08	Maintaining Minimum Retroreflectivity	Implementation and continued use of an assessment or management method that is designed to maintain regulatory and warning sign retroreflectivity at or above the established minimum levels (see Paragraph 2)	June 13, 2014*
-2A.19-	Lateral Offset	Grashworthiness of sign supports on roads with posted speed limit of- 50 mph or higher (see Paragraph 2)-	January 17, 2013 (date established in- the 2000 MUTCD)-
2B.40	ONE WAY Signs (R6-1, R6-2)	New requirements in the 2009 MUTCD for the number and locations of ONE WAY signs (see Paragraphs 4, 9, and 10)	December 31, 2019
2C.06 through 2C.14	Horizontal Alignment Warning Signs	Revised requirements in the 2009 MUTCD regarding the use of various horizontal alignment signs (see Table 2C-5)	December 31, 2019
2E.31, 2E.33, and 2E.36	Plaques for Left-Hand Evits	New requirement in the 2009 MUTCD to use E1-5aP and E1-5bP plaques for left-hand exits	December 31, 2014
3A.03	Maintaining Minimum Retroreflectivity	Implementation and continued use of a method that is designed to maintain retroreflectivity of longitudinal pavement markings (see Paragraph 1)	September 6, 2026 -4 years from the effective date of this revision of the MUTCE
4D.26	Yellow Change and Red Clearance Intervals	New requirement in the 2009 MUTCD that durations of yellow change and red clearance intervals shall be determined using engineering practices (see Paragraphs 3 and 6)	June 13, 2014, or whe timing adjustments are made to the individual intersection and/or corridor, whichever occurs first
4E.06	Pedestrian Intervals and Signal Phases	New requirement in the 2009 MUTCD that the pedestrian change interval shall not extend into the red clearance interval and shall be followed by a buffer interval of at least 3 seconds (see Paragraph 4)	June 13, 2017, timing adjustments are made to the individual intersection and/or corridor, whichever occurs first
6D.03**	Worker Safety Considerations	New requirement in the 2009 MUTCD that all workers within the right-of-way shall wear high-visibility apparel (see Paragraphs 4, 6, and 7)	December 31, 2011
6E.02**	High-Visibility Safety Apparel	New requirement in the 2009 MUTCD that all flaggers within the right-of-way shall wear high-visibility apparel	December 31, 2011
7D.04**	Uniform of Adult Crossing Guards	New requirement in the 2009 MUTCD for high-visibility apparel for adult crossing guards	December 31, 2011
8B.03, 8B.04	Grade Crossing (Crossbuck) Signs and Supports	Retroreflective strip on Crossbuck sign and support (see Paragraph 7 in Section 8B.03 and Paragraphs 15 and 18 in Section 8B.04)	December 31, 2019
8B.04	Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings	New requirement in the 2009 MUTCD for the use of STOP or YIELD signs with Crossbuck signs at passive grade crossings	December 31, 2019

\* Types of signs other than regulatory or warning are to be added to an agency's management or assessment method as resources allow.

\*\* MUTCD requirement is a result of a legislative mandate.

Note: All compliance dates that were previously published in Table I-2 of the 2009 MUTCD and that do not appear in this revised table have been eliminated.

Section 1A.11. Yellow highlighted text is edited. These edits originate from CTCDC Item 22-12 (11-3-22 meeting).

### Section 1A.11 Relation to Other Publications

#### Standard:

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<sup>01</sup> To the extent that they are incorporated by specific reference, the latest editions of the following publications, or those editions specifically noted, shall be a part of this Manual: "Standard Highway Signs and Markings" book (FHWA); and "Color Specifications for Retroreflective Sign and Pavement Marking Materials" (appendix to subpart F of Part 655 of Title 23 of the Code of Federal Regulations). Support:

<sup>02</sup> The "Standard Highway Signs and Markings" book includes standard alphabets and symbols and arrows for signs and pavement markings.

<sup>03</sup> For information about the publications mentioned in Paragraph 1, visit the Federal Highway Administration's MUTCD website at

http://mutcd.fhwa.dot.gov,

or write to the

FHWA,

1200 New Jersey Avenue, SE, HOTO,

Washington, DC 20590.

<sup>04</sup> Other publications that are useful sources of information with respect to the use of this Manual are listed in this paragraph. See Page i of this Manual for ordering information for the following publications (later editions might also be available as useful sources of information):

- 1. "AAA School Safety Patrol Operations Manual," 2006 Edition (American Automobile Association-AAA)
- 2. "A Policy on Geometric Design of Highways and Streets," 2004 Edition (American Association of State Highway and Transportation Officials—AASHTO)
- 3. "Guide for the Development of Bicycle Facilities," 1999 Edition (AASHTO)
- 4. "Guide for the Planning, Design, and Operation of Pedestrian Facilities," 2004 Edition (AASHTO)
- . . .
- 41. "Recommended Procedures for the Safety Performance Evaluation of Highway Features," (NCHRP Report 350), 1993 Edition (TRB)
- 42. "The Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)," July 1998 Edition (The U.S. Access Board)
- 43. "Methods for Maintaining Pavement Marking Retroreflectivity," (FHWA-SA-22-028), 2022 Edition (FHWA)

Section 2A.07. Yellow highlighted text is edited. Table 2A-1 is also edited. These edits originate from CTCDC Item 23-11 (11-2-23 meeting).

# Section 2A.07 <u>Retroreflectivity and Illumination</u>

Support:

<sup>01</sup> There are many materials currently available for retroreflection and various methods currently available for the illumination of signs and object markers. New materials and methods continue to emerge. New materials and methods can be used as long as the signs and object markers meet the standard requirements for color, both by day and by night. **Standard:** 

<sup>02</sup> Regulatory, warning, and guide signs and object markers shall be retroreflective (see Section 2A.08) or illuminated to show the same shape and similar color by both day and night, unless otherwise provided in the text discussion in this Manual for a particular sign or group of signs.

03 The requirements for sign illumination shall not be considered to be satisfied by street or highway lighting. Option:

04 Sign elements may be illuminated by the means shown in Table 2A-1.

05 Retroreflection of sign elements may be accomplished by the means shown in Table 2A-2.

<sup>06</sup> Light Emitting Diode (LED) units may be used individually within the legend or symbol of a sign and in the border of a sign, except for changeable message signs, to improve the conspicuity, increase the legibility of sign legends and borders, or provide a changeable message.

<sup>06a</sup> Light Emitting Diode (LED) units may be used in the border of regulatory or warning signs, except for Changeable Message Signs, to improve the conspicuity of signs.

#### Standard:

07 Except as provided in Paragraphs 11 and 12, neither individual LEDs nor groups of LEDs shall be placed within the background area of a sign.

**ON** If used, the LEDs shall have a maximum diameter of 1/4 inch and shall be the following colors based on the type of sign:

A. White or Red, if used with STOP, DO NOT ENTER, or WRONG WAY signs. or YIELD signs.

B. White, if used with regulatory signs including other than STOP or YIELD signs.

- C. White or Yellow, if used with warning signs.
- D. White, if used with guide signs.
- E. White, yellow, or Amber, if used with temporary traffic control signs of warning type.

F. White or yellow, if used with school area signs.

09 If flashed, all LED units shall flash simultaneously at a rate of more than 50 and less than 60 times per minute.

<sup>10</sup> The uniformity of the sign design shall be maintained without any decrease in visibility, legibility, or driver comprehension during either daytime or nighttime conditions.

Means of Illumination	Sign Element to be Illuminated
Light behind the sign face	<ul> <li>Symbol or word message</li> <li>Background</li> <li>Symbol, word message, and background (through a translucent material)</li> </ul>
Attached or independently mounted light source designed to direct essentially uniform illumination onto the sign face	• Entire sign face
Light emitting diodes (LEDs)	<ul> <li>Border of regulatory or warning signs</li> <li>Symbol or word message</li> <li>Portions of the sign border</li> </ul>
Other devices, or treatments that highlight the sign shape, color, or message: Luminous tubing Fiber optics Incandescent light bulbs Luminescent panels	• Symbol or word message • Entire sign face

# Table 2A-1. Illumination of Sign Elements

**Section 2B.31.** Yellow highlighted text is edited. Figure 2B-10(CA) and Table 2B-1(CA) are also edited. These edits originate from CTCDC Item 21-15 (11-4-21 meeting).

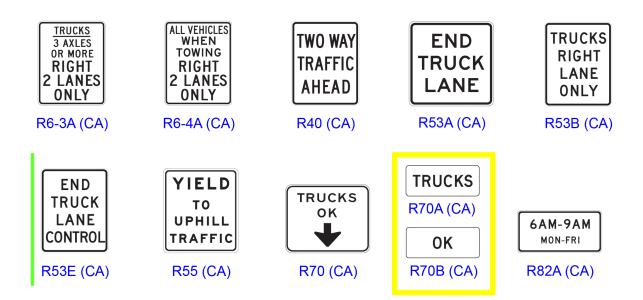
# Section 2B.31 TRUCKS USE RIGHT LANE Sign (R4-5)

# Option:

<sup>01a</sup> The TRUCKS OK (R70(CA)) sign (see Figure 2B-10(CA)) may be used to allow trucks to legally use a lane other than the right lane or lanes to facilitate the safe and orderly movement of traffic, such as in advance of freeway branch connections, lane drops, etc. If the TRUCKS OK (R70(CA)) sign cannot fit on an overhead sign structure with an arrow-per-lane sign, the TRUCKS (R70A(CA)) and OK (R70B(CA)) sign panels may be used in place of the TRUCKS OK (R70(CA)) sign. See CVC 21655. Standard:

onb The TRUCKS OK (R70(CA)) sign shall be placed directly over the appropriate lane. The TRUCKS (R70A(CA)) and OK (R70B(CA)) sign panels shall be placed on either side of and adjacent to the lower end of the appropriate white up arrow. See Figures 2B-10(CA) and 2E-4(CA).

# Figure 2B-10 (CA). Passing, Keep Right, and Slow Traffic Signs



# Table 2B-1(CA). California Regulatory Sign and Plaque Sizes (Sheet 4 of 7)

Size or Discus	Sign	Section		entional oad	Everence	Ereeway	Minimum	Oversized	
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	WITHINGTH	Oversized	
TRUCKS	R70A(CA)	2B.31	<mark></mark>			72 x 30	<mark></mark>	<mark></mark>	
OK	R70B(CA)	2 <mark>8.31</mark>				<mark>72 x 30</mark>			

**Section 2B.46.** Yellow highlighted text is edited. Figure 2B-24(CA) and Table 2B-1(CA) are also edited. These edits originate from CTCDC Item 21-02 (5-13-21 meeting).

# Section 2B.46 Parking, Standing, and Stopping Signs (R7 and R8 Series)

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Option:

<sup>59</sup> The NO IDLING COMMERCIAL VEHICLES AND ALL BUSES SR62(CA) or NO IDLING All Buses and Commercial Vehicles SR63(CA) symbol sign may be placed to remind commercial vehicle operators that idling is prohibited for commercial vehicles and all buses for a duration greater than 5 minutes.

Support:

<sup>60</sup> Refer to California Code of Regulations, Title 13, Division 3, Chapter 10, Article 1, Sections 2480 and 2485 which prohibits unnecessary idling of commercial vehicles and all buses.

#### Standard:

61 If used, the NO IDLING COMMERCIAL VEHICLES AND ALL BUSES (SR62(CA)) sign or NO IDLING All Buses and Commercial Vehicles (SR63(CA)) symbol sign or NO IDLING All Buses and Commercial Vehicles REPORT VIOLATIONS (SR63A(CA)) sign shall be placed in areas where idling commonly occurs.

Option:

<sup>62</sup> The NO IDLING All Buses and Commercial Vehicles REPORT VIOLATIONS (SR63A(CA)) sign may be used in areas with idling concern for heavy-duty diesel trucks and buses to report violators directly to California Air Resources Board (CARB) or local law enforcement agencies.

Standard:

Ba The phone number used on the SR63A(CA) sign shall be either 1-800-CUT-SMOG or 1-800-END-SMOG, or another local law enforcement agency's number for signs located in the South Coast Air Quality Management District. SR63A(CA) signs located elsewhere in the State shall use the 1-800-END-SMOG or another local law enforcement agency's number. Support:

64 Refer to Health and Safety Code, Division 26, Part 4, Chapter 5, Section 42705.5 and Health and Safety Code, Division 26, Part 6, Chapter 6, Section 44391.2.

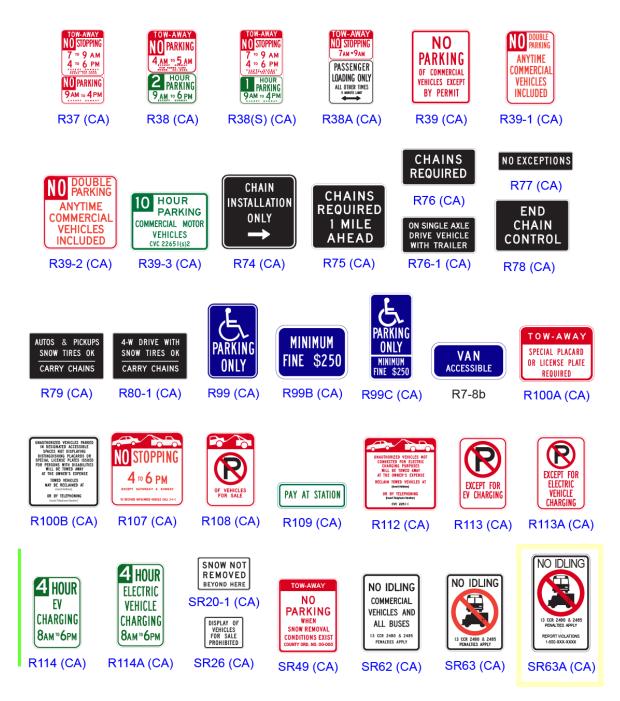
Guidance:

<sup>65</sup> If using the SR63A(CA) sign, these signs should be placed within 100 feet of sensitive receptors, like daycares, school, senior care facilities, hospitals, and residential neighborhoods.

Support:

<sup>66</sup> CCR Title 13, Sections 2480 and 2485, of the California Code of Regulations prohibit unnecessary idling of commercial vehicles and all buses for a duration greater than 5 minutes. The sign locations will be determined by Air Resources Board representatives and officials of the law enforcement agency responsible for enforcement and the jurisdiction who owns the roadway will install the signs.

#### Figure 2B-24 (CA). Parking and Standing Signs and Plaques (R7 Series) (Sheet 3 of 3)



#### Table 2B-1(CA). California Regulatory Sign and Plaque Sizes (Sheet 6 of 7)

Sign or Plaque	Sign	Section		entional oad	Expressiver	Freeway	Minimum	Oversized	
Sign of Flaque	Designation	Section	Single Lane	Multi- Lane	Expressway	Fleeway	WITHITUTH	Oversized	
NO IDLING All Buses and Commercial Vehicles REPORT VIOLATIONS	SR63A(CA)	<mark>2B.46</mark>	<mark>18 x 30</mark>	<mark>18 x 30</mark>					

**Section 2B.113(CA).** New Section 2B.113(CA) is added (yellow highlighted text). Figure 2B-106(CA) and Table 2B-1(CA) are also edited. These edits originate from CTCDC Item 23-08 (8-3-23 meeting).

#### Section 2B.113(CA) NO CAMPING OR SLEEPING IN VEHICLE Sign (R119(CA))

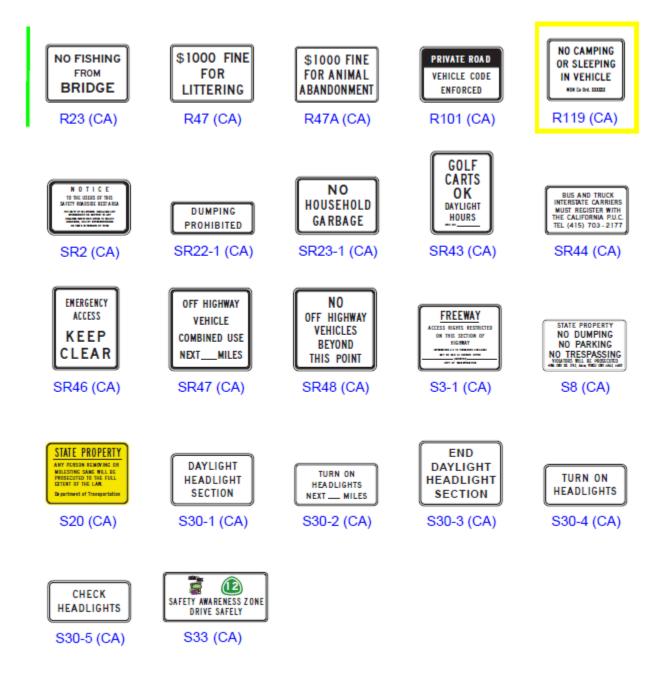
#### Guidance:

<sup>b1</sup> The NO CAMPING OR SLEEPING IN VEHICLE (R119(CA)) sign (see Figure 2B-106) may be used to inform the public that it is unlawful to camp or sleep in the vehicle in the right of way of a state highway or local roadway where there is an adopted resolution or ordinance that prohibits camping or sleeping in vehicle and allows use of the sign. The resolution or ordinance number and adopting agency shall be included on the bottom of the sign. Option:

<sup>02</sup> The NO CAMPING OR SLEEPING IN VEHICLE (R119(CA)) sign may have a supplemental plaque (R2-6bP) installed below the sign for the applicable fine amount per the adopted resolution or ordinance (e.g., \$XXXX FINE). Support:

<sup>03</sup> Do not use the NO CAMPING OR SLEEPING IN VEHICLE (R119(CA)) sign when there is no adopted resolution or ordinance to support its use or enforcement of the sign.

# Figure 2B-106 (CA). California Miscellaneous Regulatory Signs



# Table 2B-1(CA). California Regulatory Sign and Plaque Sizes (Sheet 5 of 7)

Sime or Diague	Sign	Section		entional oad	Everence	Executer	Minimum	Oversized	
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized	
NO CAMPING OR SLEEPING IN VEHICLE XXX Co Ord XXXX	R119(CA)	2B.113	<mark>30 x 24</mark>	<mark>30 x 24</mark>					

Section 2C.50. Yellow highlighted text is edited. Figure 2C-11(CA) and Table 2C-2(CA) are also edited. These edits originate from CTCDC Item 22-04 (5-5-22 meeting).

# Section 2C.50 <u>Non-Vehicular Warning Signs (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9, and W11-16</u> <u>through W11-22</u>, and W11-23(CA))

#### Option:

<sup>01</sup> Non-Vehicular Warning (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9, and W11-16 through W11-22, and W11-23(CA)) signs (see Figure 2C-11 and 2C-11(CA)) may be used to alert road users in advance of locations where unexpected entries into the roadway might occur or where shared use of the roadway by pedestrians, animals, or equestrians might occur.

Support:

<sup>02</sup> These conflicts might be relatively confined, or might occur randomly over a segment of roadway. *Guidance:* 

<sup>03</sup> If used in advance of a pedestrian, snowmobile, or equestrian crossing, the W11-2, W11-6, W11-7, and W11-9 signs should be supplemented with plaques (see Section 2C.55) with the legend AHEAD or XX FEET to inform road users that they are approaching a point where crossing activity might occur.

p3a The WILDLIFE CROSSING (W11-23(CA)) sign should be used to alert road users of multiple types of wild animals present in or by the sides of the roadways. The W11-23(CA) sign should not be used in lieu of the individual symbol signs for animals. Option:

DIB The WILDLIFE CROSSING (W11-23(CA)) sign may be used to alert road users of a wild animal which may cause traffic safety hazard and for which there are currently no symbol signs available.

# Figure 2C-11 (CA). Non-Vehicular Warning Signs





#### Table 2C-2(CA). California Warning Sign and Plaque Sizes (Sheet 2 of 2)

NAME & A MARKY PARTY OF	Pian	a la la come	Conventio	nal Road		1	Freeway Minimum 48X48 30X30	Oversized
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway		
	100	and the second	(	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		3 m - 6		
WILDLIFE CROSSING	W11-23(CA)	2C.50	36X36	36X36	48X48	48X48	30X30	
WATCH FOR STOPPED VEHICLES	SW60(CA)	20.36	36X36	36X36	48X48	48X48		12

Section 2D.37. Yellow highlighted text is edited. These edits originate from CTCDC Item 23-01 (5-4-23 meeting).

# Section 2D.37 Destination Signs (D1 Series)

#### Standard:

<sup>19</sup> Criteria for supplemental destination signs shall be as shown in Table 2D-102(CA).

20 Signs shall not be provided for privately owned, profit making enterprises regardless of their size.

Option:

<sup>21</sup> If unusual operational or safety issues become apparent that would be mitigated by signing to the private enterprise, signs on State highways may be used with the approval of Caltrans' District Director.

**Section 2E.19.** Yellow highlighted text is edited. New Figure 2E-4(CA) is also added. These edits originate from CTCDC Item 21-15 (11-4-21 meeting).

# Section 2E.19 Arrows for Interchange Guide Signs

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#### Support:

DER Refer to Section 2B.31 for allowing trucks to legally use a lane other than the right lane or lanes to facilitate the safe and orderly movement of traffic.

<sup>07</sup> Directional and down arrows for use on guide signs are shown in Figure 2D-2. Detailed drawings and standardized sizes based on ranges of letter heights for these arrows are provided in the "Standard Highway Signs and Markings" book (see Section 1A.11). Information on the dimensions for arrows used in Overhead Arrow-per-Lane and Diagrammatic guide signing is also provided in the "Standard Highway Signs and Markings" book.



Section 2E.31. Yellow highlighted text is edited. These edits originate from CTCDC Item 23-06 (8-3-23 meeting).

#### Section 2E.31 Interchange Exit Numbering

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#### Standard:

<sup>02</sup> Interchange numbering shall be used in signing each freeway interchange exit. Interchange exit numbers shall be displayed with each Advance Guide sign, Exit Direction sign, and Exit Gore sign. The exit number shall be <del>displayed</del> placed on a separate plaque <del>at</del> above and abutting the top of the Advance Guide or Exit Direction sign. The exit number (E1-5P) plaque (see Figure 2E-26) shall be 30 inches in height and shall include the word EXIT and the appropriate exit number in a single-line format. Suffix letters shall be used for exit numbering at a multi-exit interchange. The suffix letter shall also be included on the exit number plaque and shall be separated from the exit number by a space having a width of between 1/2 and 3/4 of the height of the suffix letter. Exit numbers shall not include the cardinal initials corresponding to the directions of the cross route. Minimum numeral and letter sizes are given in Tables 2E-2 through 2E-5. If used, the interchange numbering system for expressways shall comply with the provisions prescribed for freeways.

#### <del>Guidance:</del>

. . .

→ *Exit number (E1-5P) plaques should be placed above and abutting the top right-hand edge of the sign for an exit to* the right.

21 To the extent practical, interchange exit numbers shall be displayed with each Advance Guide sign, Exit Direction sign, and Gore sign on freeways.

#### Support:

<sup>24</sup> For new sign installations or if the existing sign is due for replacement, consider ordering a new sign with the exit number included as part placed above and abutting the top of the sign.

#### Support:

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<sup>26</sup> Where one or more lanes of traffic diverge from the main line at a single exit, the exit is numbered and signed at the main line diverge as one exit. Generally, there is adequate information displayed on guide signs downstream of the main line diverge to direct a road user to the desired destination, route or street.

#### Option:

<sup>27</sup> A multiple exit number add-on plaque (such as E1-5P with message EXITS 33 A-B in Figure 2E-22) is to be placed at the mainline diverge.

#### **Option:**

<sup>36</sup> The Exit Numbered Advance Guide (G83-5(CA)) sign with a single border may be used as an alternate to the G83-4(CA) when the sign message requires additional space on the sign.

Section 2E.36. Yellow highlighted text is edited. These edits originate from CTCDC Item 23-06 (8-3-23 meeting).

# Section 2E.36 Exit Direction Signs

<del>Guidance:</del>

. . .

98 For numbered exits to the right, an exit number (E1-5P) plaque (see Figure 2E-22) should be added to the top right-hand edge of the sign.

Standard:

<sup>08a</sup> For numbered exits to the right, an exit number (E1-5P) plaque (see Figure 2E-26) shall be placed above and abutting the top right-hand edge of the sign.

**Section 2I.09.** Yellow highlighted text is edited. Figure 2I-8(CA) and Table 2I-1(CA) are also updated. These edits originate from CTCDC Item 22-07 (11-3-22 meeting).

# Section 21.09 Radio Information Signing

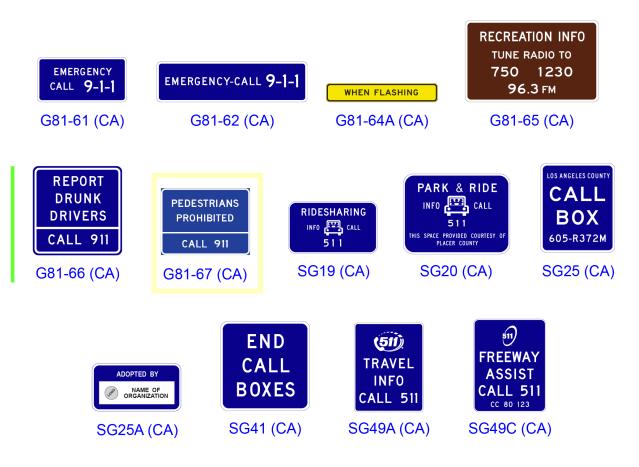
#### PEDESTRIANS PROHIBITED CALL 911 (G81-67(CA)) Sign

**Option:** 

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<sup>17</sup> When pedestrians are prohibited on the roadway, the PEDESTRIANS PROHIBITED CALL 911 (G81-67(CA)) Sign (see Figure 2I-8(CA)) may be installed to report the presence of pedestrians on highways by calling 911 to improve roadway safety.

# Figure 2I-8 (CA). Radio, Telephone, and Carpool Information Signs



#### Table 2I-1(CA). California General Service Sign and Plaque Sizes (Sheet 2 of 2)

Sign or Plaque	Sign Designation	Section	Conventional Road	Freeway or Expressway
PEDESTRIANS PROHIBITED CALL 911	G81-67(CA)	<mark>21.09</mark>		<mark>72 x 54</mark>

Section 2M.10. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-07(8-12-21 meeting).

# Section 2M.10 Memorial or Dedication Signing

# Standard:

. . .

17 When highway facilities are named by the Legislature, the following guidelines shall apply according to the type of facility:

- 1. *Bridges.* One sign shall be placed at the approach ends of the bridge, underpass, tunnel or other structure with the name of the memorialized individual. Normally this would consist of an additional plate attached to the existing Memorial Bridge (G11(CA) series) sign. The color and size of the plate shall match the sign. The memorial name shall be smaller so that it does not dominate the G11(CA) sign.
- 2. Freeways and Highways. One sign shall be placed at each terminal. Signs shall be white on green. When used, the Memorial Highway (G12-1(CA) & G12-2(CA)) signs (see Figure 2M-101(CA)) shall be placed at the beginning of the highway segment memorialized by the Legislature.
- 3. *Rest Areas.* One sign shall be placed in advance of each named rest area. Normally a one line message would be placed above the REST AREA (X MILE) (D5-1) sign. The sign shall be white on blue.
- 4. *Interchanges.* One bronze plaque shall be installed at each legislatively named interchange. Memorial name signs shall not be erected at interchanges.
- 5. *Vista Points.* One bronze plaque shall be installed at each legislatively named vista point. Memorial name signs shall not be installed in advance of vista points.
- 6. *Roundabout.* One sign shall be placed at a minimum of two approaches to the roundabout. Signs shall be white on green. When used, the G12-1(CA) & G12-2(CA) signs (see Figure 2M-101(CA)) shall be placed.
- 7. Bikeways. Refer to Section 9B.20.

Section 3A.03. Yellow highlighted text is edited. These edits originate from CTCDC Item 22-12 (11-3-22 meeting).

#### Section 3A.03 Maintaining Minimum Pavement Marking Retroreflectivity

#### (This Section is reserved for future text based on FHWA rulemaking.)

#### Standard:

on Except as provided in Paragraph 5, a method designed to maintain retroreflectivity at or above 50 mcd/m<sup>2</sup>/lx under dry conditions shall be used for longitudinal markings on roadways with speed limits of 35 mph or greater. *Guidance:* 

<sup>02</sup> Except as provided in Paragraph 5, a method designed to maintain retroreflectivity at or above 100 mcd/m²/lx under dry conditions should be used for longitudinal markings on roadways with speed limits of 70 mph or greater.

<sup>p3</sup> The method used to maintain retroreflectivity should be one or more of those described in "Methods for Maintaining Pavement Marking Retroreflectivity" (see Section 1A.11) or developed from an engineering study based on the values in Paragraphs 1 and 2. Support:

<sup>94</sup> Retroreflectivity levels for pavement markings are measured with an entrance angle of 88.76 degrees and an observation of 1.05 degrees. This geometry is also referred to as 30-meter geometry. The units of pavement marking retroreflectivity are reported in mcd/m<sup>2</sup>/lx, which means millicandelas per square meter per lux.

#### Option:

<sup>05</sup> The following markings may be excluded from the provisions established in Paragraphs 1 and 2:

- A. Markings where ambient illumination assures that the markings are adequately visible;
- B. Markings on streets or highways that have an ADT of less than 6,000 vehicles per day;
- C. Dotted extension lines that extend a longitudinal line through an intersection, major driveway, or interchange area (see Section 3B.08);
- D. Curb markings;
- E. Parking space markings; and
- F. Shared-use path markings.

#### Support:

of The provisions of this Section do not apply to non-longitudinal pavement markings including, but not limited to, the following:

- A. Transverse markings;
- B. Word, symbol, and arrow markings;
- C. Crosswalk markings; and
- D. Chevron, diagonal, and crosshatch markings.

or Special circumstances will periodically cause pavement marking retroreflectivity to be below the minimum levels. These

#### circumstances include, but are not limited to, the following:

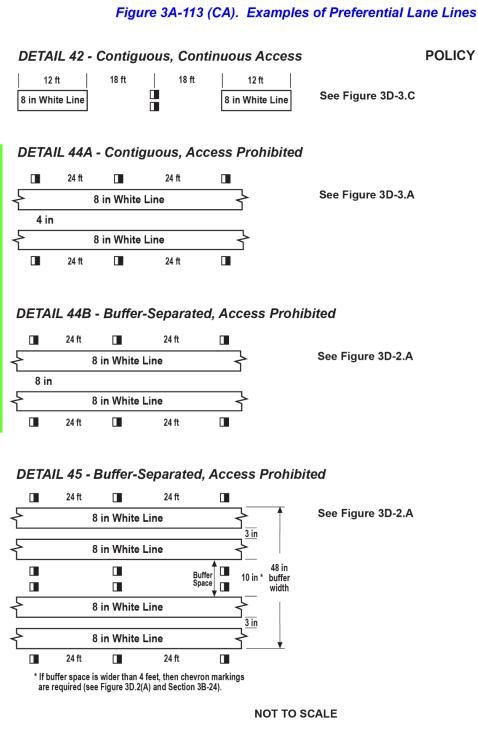
- A. Isolated locations of abnormal degradation;
- B. Periods preceding imminent resurfacing or reconstruction;
- C. Unanticipated events such as equipment breakdowns, material shortages, and contracting problems; and
- D. Loss of retroreflectivity resulting from snow maintenance operations.

When such circumstances occur, compliance with Paragraphs 1 and 2 is still considered to be

achieved if a reasonable course of action is taken to resume maintenance of minimum retroreflectivity

in a timely manner according to the maintaining agency's method(s), policies, and procedures.

**Figure 3A-113(CA).** Regions boxed in yellow are edited. These edits originate from CTCDC Item 21-12 (8-12-21 meeting).



#### LEGEND

White Line

One-Way Clear Retroreflective Markers

Section 3B.20. Yellow highlighted text is edited. These edits originate from CTCDC Item 23-02 (5-4-23 meeting).

#### Standard:

<sup>03</sup> Word, symbol, and arrow markings shall be white, except as otherwise provided in this Section. <sup>04</sup> Pavement marking letters, numerals, symbols, and arrows shall be installed in accordance with the design details in the Pavement Markings chapter of the "Standard Highway Signs and Markings" book (see Section 1A.11).

Guidance:

05 Letters and numerals should be 6 feet or more in height.

06 Word and symbol markings should not exceed three lines of information.

or If a pavement marking word message consists of more than one line of information, it should read in the direction of travel. The first word of the message should be nearest to the road user.

<sup>08</sup> Except for the two opposing arrows of a two-way left-turn lane marking (see Figure 3B-7), the longitudinal space between word or symbol message markings, including arrow markings, should be at least four times the height of the characters for low-speed roads, but not more than ten times the height of the characters under any conditions.

<sup>09</sup> The number of different word and symbol markings used should be minimized to provide effective guidance and avoid misunderstanding.

<sup>10</sup> Except for the SCHOOL word marking (see Section 7C.03), pavement word, symbol, and arrow markings should be no more than one lane in width.

#### **Option:**

11 Pavement word, symbol, and arrow markings <mark>should</mark> be proportionally <mark>scaled</mark> to fit within the width of the facility upon which they are applied.

**Section 3D.02.** Yellow highlighted text is edited. Figure 3D-2, Figure 3D-3, and Table 3D-1 are also edited. These edits originate from CTCDC Item 21-12 (8-12-21 meeting).

#### Section 3D.02 Preferential Lane Longitudinal Markings for Motor Vehicles

#### •••

Standard:

03 Longitudinal pavement markings for preferential lanes shall be as follows (these same requirements are presented in tabular form in Table 3D-1):

C. Buffer-separated (left-hand side) preferential lane—the longitudinal pavement markings for a full-time or part-time preferential lane on the left-hand side of and separated from the other travel lanes by a neutral buffer space shall consist of a normal solid single yellow line at the left-hand edge of the preferential travel lane(s) and one of the following at the right-hand edge of the preferential travel

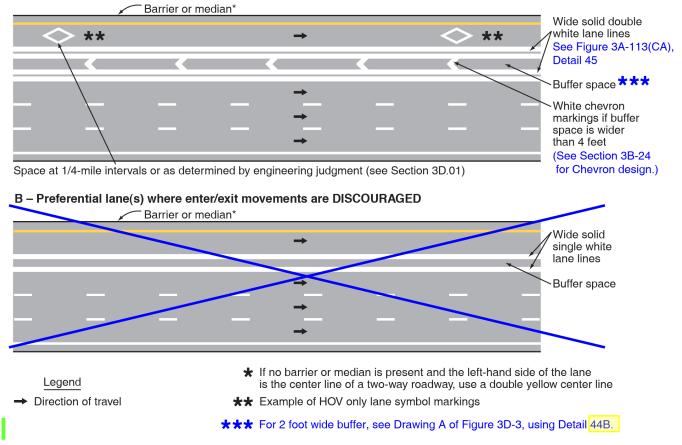
**1.** A wide solid double white line along both edges of the buffer space where crossing the buffer space is prohibited (see Drawing A in Figure 3D-2).

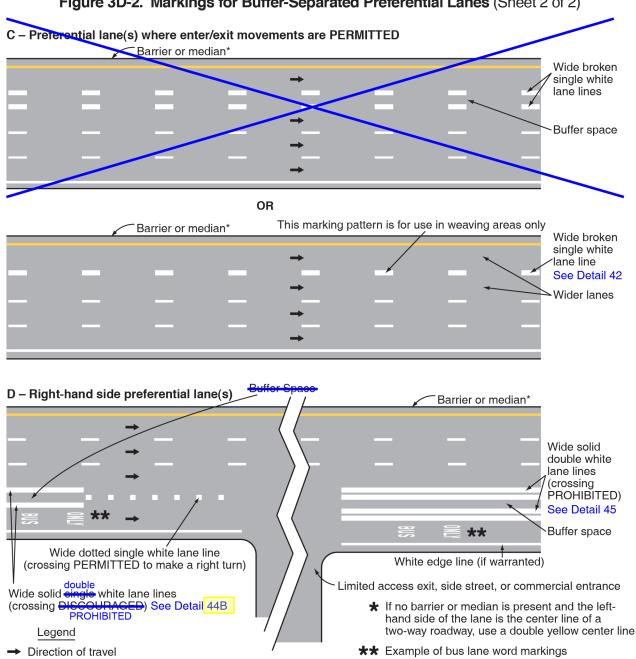
- 1. Two sets of wide solid double white lines where crossing the buffer space is prohibited and the buffer space is 4 feet or greater (see Drawing A in Figure 3D-2 and Detail 45 in Figure 3A-113(CA)).
- 2. A wide solid single white line along both edges of the buffer space where crossing the buffer space is discouraged (see Drawing B in Figure 3D-2).
- 2. A set of wide solid double white lines where crossing the buffer space is prohibited and the buffer space is 2 feet (see Drawing A in Figure 3D-2 and Detail 44B in Figure 3A-113(CA)).
- 3. A wide broken single white line along both edges of the buffer space, or a A wide broken single white lane line within the allocated buffer space (resulting in wider lanes), where crossing the buffer space is permitted (see bottom half of Drawing C in Figure 3D-2 and Detail 42 in Figure 3A-113(CA)).

- D. Buffer-separated (right-hand side) preferential lane—the longitudinal pavement markings for a full-time or part-time preferential lane on the right-hand side of and separated from the other travel lanes by a neutral buffer space shall consist of a normal solid single white line at the right-hand edge of the preferential travel lane(s) if warranted (see Section 3B.07) and one of the following at the left-hand edge of the preferential travel travel lane(s) (see Drawing D in Figure 3D-2):
  - 1. A wide solid double white line along both edges of the buffer space where crossing the buffer space is prohibited.
  - 1. Two sets of wide solid double white lines where crossing the buffer space is prohibited and the buffer space is 4 feet or greater (see Detail 45 in Figure 3A-113(CA)).
  - 2. A wide solid single white line along both edges of the buffer space where crossing of the buffer space is discouraged.
  - 2. A set of wide solid double white lines where crossing the buffer space is prohibited and the buffer space is 2 feet (see Detail 44B in Figure 3A-113(CA)).
  - 3. A wide broken single white line along both edges of the buffer space, or a A wide broken single white line within the allocated buffer space (resulting in wider lanes), where crossing the buffer space is permitted (see Detail 42 in Figure 3A-113(CA)).
  - 4. A wide dotted single white lane line within the allocated buffer space (resulting in wider lanes) where crossing the buffer space is permitted for any vehicle to perform a right-turn maneuver (see Detail 37 in Figure 3A-111(CA)).
- E. Contiguous (left-hand side) preferential lane—the longitudinal pavement markings for a full-time or parttime preferential lane on the left-hand side of and contiguous to the other travel lanes shall consist of a normal solid single yellow line at the left-hand edge of the preferential travel lane(s) and one of the following at the right-hand edge of the preferential travel lane(s):
  - 1. A wide solid double white lane line where crossing is prohibited (see Drawing A in Figure 3D-3 and Detail 44A in Figure 3A-112(CA)).
  - 2. A wide solid single white lane line where crossing is discouraged (see Drawing B in Figure 3D 3 and Detail 38B in Figure 3A-113(CA)).
  - 3. A wide solid broken single white lane line where crossing is permitted (see Drawing C in Figure 3D-3 and Detail 42 in Figure 3A-113(CA)).
- F. Contiguous (right-hand side) preferential lane—the longitudinal pavement markings for a full-time or parttime preferential lane on the right-hand side of and contiguous to the other travel lanes shall consist of a normal solid single white line at the right-hand edge of the preferential travel lane(s) if warranted (see Section 3B.07) and one of the following at the left-hand edge of the preferential travel lane(s) (see Drawing D in Figure 3D-3):
  - 1. A wide solid double white lane line where crossing is prohibited (see Detail 44A in Figure 3A-113(CA)).
  - 2. A wide solid single white lane line where crossing is discouraged (see Detail 38B in Figure 3A-112(CA)).
  - 3. A wide broken single white lane line where crossing is permitted (see Detail 42 in Figure 3A-113(CA)).
  - 4. A wide dotted single white lane line where crossing is permitted for any vehicle to perform a right-turn maneuver (see Detail 37 in Figure 3A-111(CA)).

#### Figure 3D-2. Markings for Buffer-Separated Preferential Lanes (Sheet 1 of 2)

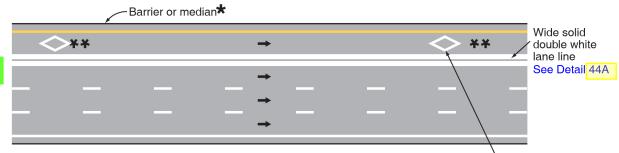
A - Full-time preferential lane(s) where enter/exit movements are PROHIBITED



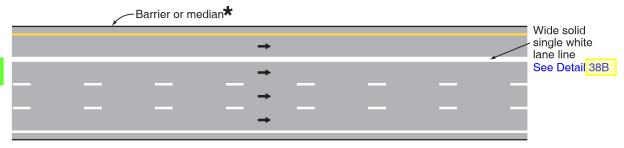


# Figure 3D-3. Markings for Contiguous Preferential Lanes

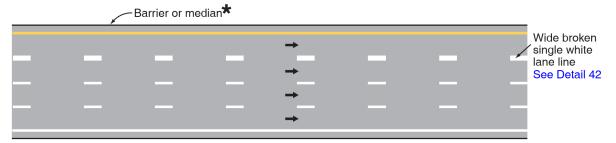
A - Full-time preferential lane(s) where enter/exit movements are PROHIBITED

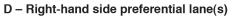


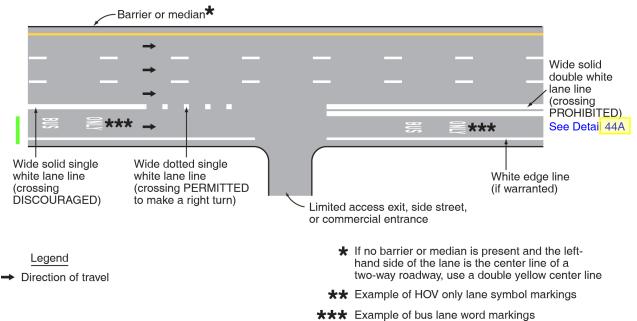
B - Preferential lane(s) where enter/exit movements are DISCOURAGED Space at 1/4-mile intervals



C - Preferential lane(s) where enter/exit movements are PERMITTED







Tupo of Proformation Lang	Loft Hand Edge Line	Pight Hand Edge Line		
Type of Preferential Lane	Left-Hand Edge Line	Right-Hand Edge Line		
Barrier-Separated, Non-Reversible	A normal solid single yellow line	A normal solid single white line (see Drawing A of Figure 3D-1)		
Barrier-Separated, Reversible	A normal solid single white line	A normal solid single white line (see Drawing B of Figure 3D-1)		
		A wide solid double white line along both edges of the buffer space where crossing is prohibited (see Drawing A of Figure 3D-2)		
Buffer-Separated, Left-Hand Side	A normal solid single yellow line	A wide solid single white line along both edges of the buffer space (less than 4 feet) where crossing is discouraged prohibited (see Drawing B of Figure 3D-2)		
		A wide broken single white line along both edges of the buffer space, or a wide broken single white line- within the buffer space (resulting in wider lanes), where- crossing is permitted (see Drawing C of Figure 3D-2)-		
	A wide solid double white line along both edges of the buffer space where crossing is prohibited (see Drawing D of Figure 3D-2)			
	A wide selid single white line along both edges of the buffer space (loss than 4 feet) where crossing- is discouraged prohibited (see Drawing D of Figure 3D 2)			
Buffer-Separated, Right-Hand Side	A wide broken single white line along both edges of the buffer space, or a wide broken single white- line within the buffer space (resulting in wider lance), where erossing is permitted- (see Drawing D of Figure 3D 2)	A normal solid single white line (if warranted)		
	A wide dotted single white line within the buffer space (resulting in wider lanes) where crossing is permitted for any vehicle to perform a right-turn maneuver (see Drawing D of Figure 3D-2)			
		A wide solid double white line where crossing is prohibited (see Drawing A of Figure 3D-3)		
Contiguous, Left-Hand Side	A normal solid single yellow line	A wide solid single white line where crossing is discouraged (see Drawing B of Figure 3D-3)		
		A wide broken single white line where crossing is permitted (see Drawing C of Figure 3D-3)		
	A wide solid double white line where crossing is prohibited (see Drawing D of Figure 3D-3)			
	A wide solid single white line where crossing is discouraged (see Drawing D of Figure 3D-3)			
Contiguous, Right-Hand Side	A wide broken single white line where crossing is permitted (see Drawing D of Figure 3D-3)	A normal solid single white line		
	A wide dotted single white line where crossing is permitted for any vehicle to perform a right-turn maneuver (see Drawing D of Figure 3D-3)			

# Table 3D-1. Standard Edge Line and Lane Line Markings for Preferential Lanes

Notes: 1. If there are two or more preferential lanes, the lane lines between the preferential lanes shall be normal broken white lines.
2. The standard lane markings listed in this table are provided in a tabular format for reference.
3. This information is also described in Paragraph 3 of Section 3D.02.

Section 3F.03. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 3F.03 Delineator Application

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Support:

<sup>20</sup> As shown in Figure 3F-102(CA) and Figure 3F-104(CA), Type K(CA), Type P (CA), and Type R(CA) Object Markers are used along with delineators. See Figure 2C-13(CA) for object marker details.

<sup>21</sup> Bikeway separator posts are a type of delineator used as vertical elements to define Class IV bikeways. Refer to FHWA "Separated Bike Lane Planning and Design Guide" for information on design of bikeway separator posts. See Section 9C.102(CA) Class IV Bikeways for more details.

**Section 3G.101(CA).** New Section 3G.101(CA) is added (yellow highlighted text). These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 3G.101(CA) Green-Colored Pavement for Bicycle Facilities

Support:

p1 Green-colored pavement is used to enhance the conspicuity of locations where bicyclists are expected to operate, and areas where bicyclists and other roadway traffic might have potentially conflicting weaving or crossing movements. Green-colored pavement is also used to enhance the conspicuity of word, symbol, and/or arrow pavement markings when these markings are used in certain bicycle facilities (See Figure 9C-114(CA)).

Guidance:

<sup>02</sup> Appropriate regulatory (See Chapter 9B) or guide signing (See Chapter 9D) should be installed to provide related information to the presence of the colored pavement.

Section 9A.05. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9A.05 Relation to Other Documents

Support:

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<sup>02</sup> Informational documents used during the development of the signing and marking recommendations in Part 9 include the following:

- A. "Guide for Development of Bicycle Facilities," which is available from the American Association of State Highway and Transportation Officials (see Page i for the address); and
- B. State and local government design guides.
- C. "Highway Design Manual" (Caltrans).
- D. "Complete Intersections: A Guide to Reconstructing Intersections and Interchanges for Bicyclists and Pedestrians" (Caltrans).
- E. "Separated Bike Lane Planning and Design Guide," which is available from the Federal Highway Administration (see Page ii for the address).

F. NACTO Urban Bikeway Design Guide and Urban Street Design Guide (see Page iii for the address); and

G. Design Information Bulletin Number 89 Class IV Bikeway Guidance (DIB 98) (Caltrans).

Section 9B.01. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9B.01 Application and Placement of Signs

Standard:

01 Bicycle signs shall be standard in shape, legend, and color.

02 All signs shall be retroreflectorized for use on bikeways, including shared-use paths, separated bikeways, and bicycle lane facilities.

<sup>03</sup> Where signs serve both bicyclists and other road users, vertical mounting height and lateral placement shall be as provided in Part 2.

<sup>04</sup> Where used on a shared-use path or separated bikeway, no portion of a sign or its support shall be placed less than 2 feet laterally from the near edge of the path, or less than 8 feet vertically over the entire width of the shared-use path (see Figure 9B-1).

os Mounting height for post-mounted signs on shared-use paths or separated bikeways shall be a minimum of 4 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the path surface (see Figure 9B-1).

Guidance:

<sup>06</sup> Signs for the exclusive use of bicyclists should be located so that other road users are not confused by them.

<sup>07</sup> The clearance for overhead signs on shared-use paths or separated bikeways should be adjusted when appropriate to accommodate path users requiring more clearance, such as equestrians, or typical maintenance or emergency vehicles.

Section 9B.02. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9B.02 Design of Bicycle Signs

Standard:

<sup>01</sup> If the sign or plaque applies to motorists and bicyclists, then the size shall be as shown for conventional roads in Tables 2B-1, 2C-2, or 2D-1.

<sup>02</sup> The minimum sign and plaque sizes for shared-use paths or separated bikeways shall be those shown in Table 9B-1, and shall be used only for signs and plaques installed specifically for bicycle traffic applications. The minimum sign and plaque sizes for bicycle facilities shall not be used for signs or plaques that are placed in a location that would have any application to other vehicles.

Section 9B.03. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9B.03 STOP and YIELD Signs (R1-1, R1-2)

#### Standard:

of STOP (R1-1) signs (see Figure 9B-2) shall be installed on shared-use paths or separated bikeways at points where bicyclists are required to stop.

<sup>02</sup> YIELD (R1-2) signs (see Figure 9B-2) shall be installed on shared-use paths or separated bikeways at points where bicyclists have an adequate view of conflicting traffic as they approach the sign, and where bicyclists are required to yield the right-of-way to that conflicting traffic.

#### Option:

<sup>03</sup> A 30 x 30-inch STOP sign or a 36 x 36 x 36-inch YIELD sign may be used on shared-use paths or separated bikeways for added emphasis.

#### Guidance:

<sup>04</sup> Where conditions require path users or bikeway users, but not roadway users, to stop or yield, the STOP or YIELD sign should be placed or shielded so that it is not readily visible to road users.

<sup>05</sup> When placement of STOP or YIELD signs is considered, priority at a shared-use path/bikeway with roadway intersection should be assigned with consideration of the following:

A. Relative speeds of shared-use path, bikeway, and roadway users,

B. Relative volumes of shared-use path, bikeway, and roadway traffic, and

*C.* Relative importance of shared-use path, bikeways, and roadway.

<sup>06</sup> Speed should not be the sole factor used to determine priority, as it is sometimes appropriate to give priority to a high-volume shared-use path crossing a low-volume street, or to a regional shared-use path crossing a minor collector street, or where a separated bikeway begins, ends, or it merges with other types of roadway.

Section 9B.08. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9B.08 NO MOTOR VEHICLES Sign (R5-3)

#### Option:

<sup>01</sup> The NO MOTOR VEHICLES (R5-3) sign (see Figure 9B-2) may be installed at the entrance to a shared-use path <mark>or separated bikeway</mark>.

<sup>02</sup> The Bike Path Exclusion (R44A(CA)) sign may be used to identify a bike path or separated bikeway and prohibit motor vehicles and motorized bicycles from entering the bike path. If motorized bicycles are permitted, the "Motorized Bicycles" portion may be replaced with "Motorized Bicycles Permitted".

Section 9B.12. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 9B.12 Shared-Use Path Restriction Sign (R9-7)

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Guidance:

<sup>02</sup> If two-way operation is permitted on the facility for pedestrians and/or bicyclists, the designated pavement area that is provided for each two-way mode of travel should be wide enough to accommodate both directions of travel for that mode. The two-way facility should be marked according to Section 9C.03.

Section 9B.15. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 9B.15 Turn or Curve Warning Signs (W1 Series)

Guidance:

<sup>01</sup> To warn bicyclists of unexpected changes in shared-use path or separated bikeway direction, appropriate turn or curve (W1-1 through W1-7) signs (see Figure 9B-3) should be used.

<sup>02</sup> The W1-1 through W1-5 signs should be installed at least 50 feet in advance of the beginning of the change of alignment.

Section 9B.16. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9B.16 Intersection Warning Signs (W2 Series)

Option:

<sup>01</sup> Intersection Warning (W2-1 through W2-5) signs (see Figure 9B-3) may be used on a roadway, street, separated bikeway, or shared-use path in advance of an intersection to indicate the presence of an intersection and the possibility of turning or entering traffic.

Guidance:

<sup>02</sup> When engineering judgment determines that the visibility of the intersection is limited on the shared-use path <mark>of separated bikeway</mark> approach, Intersection Warning signs should be used.

<sup>03</sup> Intersection Warning signs should not be used where the shared-use path approach to the intersection is controlled by a STOP sign, a YIELD sign, or a traffic control signal.

Section 9B.17. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9B.17 Bicycle Surface Condition Warning Sign (W8-10)

Option:

<sup>01</sup> The Bicycle Surface Condition Warning (W8-10) sign (see Figure 9B-3) may be installed where roadway, bikeway, or shared-use path conditions could cause a bicyclist to lose control of the bicycle.

02 Signs warning of other conditions that might be of concern to bicyclists, including BUMP (W8-1), DIP (W8-2),

PAVEMENT ENDS (W8-3), and any other word message that describes conditions that are of concern to bicyclists, may also be used.

03 A supplemental plaque may be used to clarify the specific type of surface condition.

Section 9B.19. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

### Section 9B.19 Other Bicycle Warning Signs

Option:

Other bicycle warning signs (see Figure 9B-3) such as PATH NARROWS (W5-4a) and Hill (W7-5) may be installed on shared-use paths or separated bikeways to warn bicyclists of conditions not readily apparent.
In situations where there is a need to warn motorists to watch for bicyclists traveling along the highway, the SHARE THE ROAD (W16-1P) plaque (see Figure 9B-3) may be used in conjunction with the W11-1 sign.

**Section 9B.20.** Yellow highlighted text is edited. Table 9B-1(CA), Figure 9B-4(CA), and Figure 9B-5 are also edited. These edits originate from CTCDC Item 21-07 (8-12-21 meeting).

# Section 9B.20 <u>Bicycle Guide Signs (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c, D11-1, D11-1c, D3-1, D3-1a</u> and G7-1(CA))

Guidance:

04a Street Name (D3-1 or D3-1a or G7-1(CA)) signs should be installed at intersections of Class I bikeways with other bikeways and with streets.

os Adequate separation should be made between any destination or group of destinations in one direction and those in other directions by suitable design of the arrow, spacing of lines of legend, heavy lines entirely across the sign, or separate signs.

**Option:** 

. . .

DEa Street Name (D3-1 or D3-1a or G7-1(CA)) signs may be installed at all street and separated bikeway intersections.

#### Standard:

<sup>06</sup> An arrow pointing to the right, if used, shall be at the extreme right-hand side of the sign. An arrow pointing left or up, if used, shall be at the extreme left-hand side of the sign. The distance numerals, if used, shall be placed to the right of the destination names.

<sup>07</sup> On Bicycle Destination signs, a bicycle symbol shall be placed next to each destination or group of destinations. If an arrow is at the extreme left, the bicycle symbol shall be placed to the right of the respective arrow.

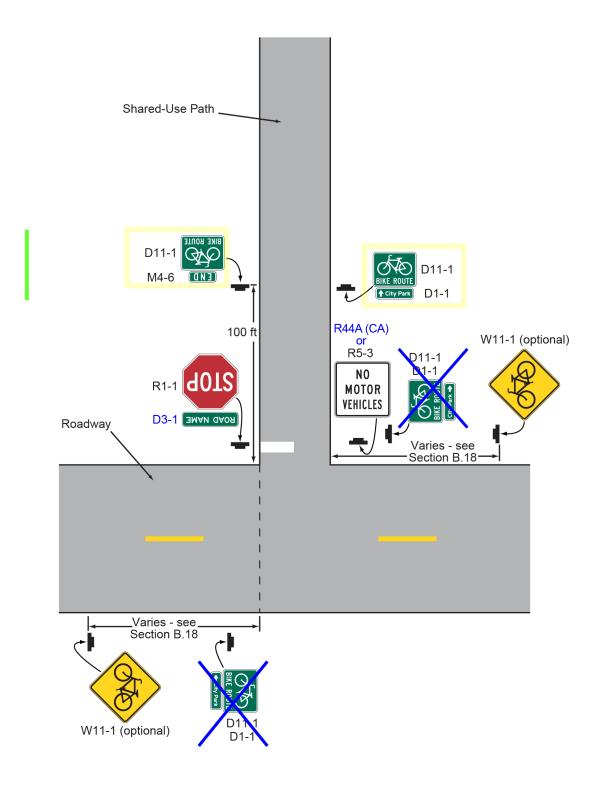
<sup>07a</sup> For Memorial Bikeway signs, one sign shall be placed at each terminal. Signs shall be white on green. When used, Memorial Bikeway (G12-3(CA)) sign (see Figure 9B-4(CA)) shall be placed at the beginning of the bikeway segment memorialized by the Legislature.

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Sign or Plaque	Sign Designation	Section	Shared-Use Path	Roadway			
Bicycle Parking	G93C(CA)	9B.23	24 x 18	24 x 18			
Memorial Bikeway	G12-3(CA)	9B.20	<mark>36 x 16</mark>				
Bike Path Exclusion	R44A(CA)	9B.08	12 x 24				
Bicycle Route Name Marker	S17(CA)	9B.21	24 x 6	24 x 6			

Table 9B-1(CA). California Bicycle Facility Sign and Plaque Minimum Sizes

#### Figure 9B-4 (CA). California Guide Signs for Bicycle Facilities





# Figure 9B-5. Example of Signing for the Beginning and End of a Designated Bicycle Route on a Shared-Use Path

Section 9B.21. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

### Section 9B.21 <u>Bicycle Route Signs (M1-8, M1-8a, M1-9)</u>

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Option: 07 Bicycle Route or U.S. Bicycle Route signs may be installed on shared roadways or on shared-use paths, separated bikeways, or bike lane facilities to provide guidance for bicyclists.

<sup>08</sup> The Bicycle Route Guide (D11-1) sign (see Figure 9B-4) may be installed where no unique designation of routes is desired.

Section 9B.24. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9B.24 <u>Reference Location Signs (D10-1 through D10-3) and Intermediate Reference Location</u> <u>Signs (D10-1a through D10-3a)</u>

Support:

01 There are two types of reference location signs:

- A. Reference Location (D10-1, 2, and 3) signs show an integer distance point along a shared-use path or a separated bikeway; and
- B. Intermediate Reference Location (D10-1a, 2a, and 3a) signs also show a decimal between integer distance points along a shared-use path or a separated bikeway.

#### Option:

<sup>02</sup> Reference Location (D10-1 to D10-3) signs (see Figure 9B-4) may be installed along any section of a shared-use path or a separated bikeway to assist users in estimating their progress, to provide a means for identifying the location of emergency incidents and crashes, and to aid in maintenance and servicing.

<sup>03</sup> To augment the reference location sign system, Intermediate Reference Location (D10-1a to D10-3a) signs (see Figure 9B-4), which show the tenth of a mile with a decimal point, may be installed at one tenth of a mile intervals, or at some other regular spacing.

#### Standard:

<sup>04</sup> If Intermediate Reference Location (D10-1a to D10-3a) signs are used to augment the reference location sign system, the reference location sign at the integer mile point shall display a decimal point and a zero numeral.

os If placed on shared-use paths or separated bikeways, reference location signs shall contain 4.5-inch white numerals on a green background that is at least 6 inches wide with a white border. The signs shall contain the word MILE in 2.25-inch white letters.

<sup>06</sup> Reference location signs shall have a minimum mounting height of 2 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the shared-use path, and shall not be governed by the mounting height requirements prescribed in Section 9B.01. Option:

<sup>07</sup> Reference location signs may be installed on one side of the shared-use path or a separated bikeway only and may be installed back-to-back.

<sup>08</sup> If a reference location sign cannot be installed in the correct location, it may be moved in either direction as much as 50 feet.

Guidance:

<sup>09</sup> If a reference location sign cannot be placed within 50 feet of the correct location, it should be omitted.
<sup>10</sup> Zero distance should begin at the south and west terminus points of shared-use paths or separated bikeways.

**Section 9B.102(CA).** Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 9B.102(CA) PASS Bicycle 3 FT MIN Sign (R117(CA))

Option:

<sup>01</sup> In situations where there is a need to remind motorists to pass bicyclists with sufficient lateral clearance in compliance with CVC 21760 (Three Feet for Safety Act) the PASS Bicycle 3 FT MIN (R117(CA)) sign (see Figure 9B-2(CA)) may be used. Support:

Section 9B.103(CA). Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 9B.103(CA) EXCEPT Bicycle Plaque (R118(CA))

Guidance:

<sup>01</sup> Where signs are provided to prohibit or regulate turns from streets or driveways that intersect with a roadway and those signs are not intended for bicycle traffic, the supplemental EXCEPT Bicycle (R118(CA)) plaque (see Figure 9B-2(CA)) should be used.

**Section 9B.104(CA).** Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 9B.104 (CA) Signs on Overcrossing Structures

Support:

<sup>01</sup> Signage identifying overcrossing structures over a Class I or IV bikeway can be useful in orienting bikeway users.

<sup>02</sup> Consider the skew of the structure (greater than 45 degrees), height of the overcrossing structure, and other pertinent factors while determining the feasibility of installing the sign.

Option:

<sup>03</sup> Street Name (D3-1 or D3-1a or G7-1(CA)) signs identifying the overcrossing structure over a Class I or IV bikeway may be installed on the overcrossing structure. If sign installation on the overcrossing is not practical, roadside sign installation may be considered.

**Section 9B.105(CA).** New Section 9B.105(CA) is added (yellow highlighted text). Figure 9B-4(CA) and Table 9B-1(CA) are also edited. These edits originate from CTCDC Item 22-06 (11-3-22 meeting).

# Section 9B.105 (CA) Bike Turn-out Signs SR64A(CA) and SR64B(CA)

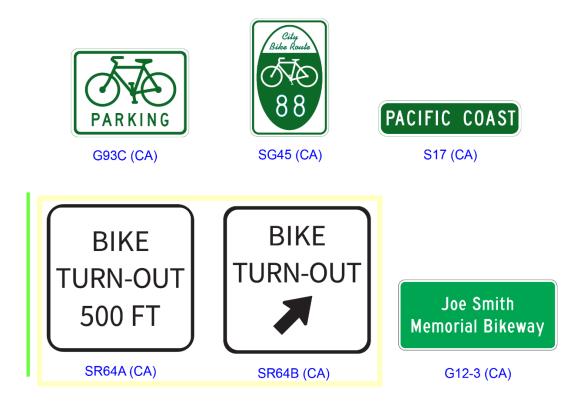
Support:

On two-lane highways in areas where bicyclists share the road with motorists and roadway width, traffic volumes and/or vertical or horizontal curvature make passing bicyclists difficult for motorists, turn-out areas for bicyclists are sometimes provided for the purpose of allowing vehicles an opportunity to pass bicyclists.

Guidance:

<sup>02</sup> Where an area has been provided for bicyclists to use as a turn-out to allow vehicles an opportunity to pass bicyclists, a BIKE TURN-OUT XX FEET (SR64A(CA)) sign (see Figure 9B-4(CA)) should be installed in advance of the turn-out area.
 <sup>02</sup> A BIKE TURN-OUT (with arrow) (SR64B(CA)) sign should be installed at the entrance of the turn-out area provided for bicyclists.

# Figure 9B-4 (CA). California Guide Signs for Bicycle Facilities



# Table 9B-1(CA). California Bicycle Facility Sign and Plaque Minimum Sizes

Sign or Plaque	Sign Designation	Section	Shared-Use Path	Roadway
Bicycle Parking	G93C(CA)	9B.23	24 x 18	24 x 18
BIKE TURN-OUT XX FT	SR64A(CA)	9B.105(CA)	<mark></mark>	<mark>30 x 30</mark>
BIKE TURN-OUT (with arrow)	SR64B(CA)	9B.105(CA)	<mark></mark>	<mark>30 x 30</mark>
Bicycle Route Name Marker	S17(CA)	9B.21	24 x 6	24 x 6

**Section 9C.02.** Yellow highlighted text is edited and added. Figure 9C-1 is also edited. New Figures 9C-1(CA), 9C-113(CA), and 9C-114(CA) are added as well. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 9C.02 General Principles

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Guidance:

<sup>03</sup> Pavement marking word messages, symbols, and/or arrows, and/or colored pavement should be used in bikeways where appropriate. Consideration should be given to selecting pavement marking materials that will minimize loss of traction for bicycles under wet conditions.

Standard:

<sup>04</sup> The colors, width of lines, patterns of lines, symbols, and arrows used for marking bicycle facilities shall be as defined in Sections 3A.05, 3A.06, and 3B.20. The green-colored pavement used for marking bicycle facilities shall be as defined in this Section and Section 3G-101(CA).

Support:

<sup>05</sup> Figures 9B-7 and 9C-1(CA) through 9C-9 show examples of the application of lines, word messages, symbols, and arrows on designated bikeways.

Option:

<sup>06</sup> A dotted line may be used to define a specific path for a bicyclist crossing an intersection (see Figure 9C-1(CA) and Figure 9C-113(CA)) as described in Sections 3A.06 and 3B.08.

#### Green-Colored Pavement for Bicycle Facilities

Standard:

or If used, green-colored pavement shall be limited to:

- A. Bicycle lanes (See Section 9C.04),
- B. Extension of bicycle lanes through intersections (See Section 9C.04),
- C. Extensions of bicycle lanes through areas where motor vehicles enter an exclusive turn lave in which motor vehicles must weave across bicycle traffic in bicycle lanes,
- D. Two-stage turn boxes,
- E. Bicycle Box,
- F. Bicycle detector symbol (See Section 9C.05),
- G. Separated bicycle lanes within the roadway, and
- H. Shared Lane Markings.

#### <sup>08</sup> Green-colored pavement shall not be incorporated into electric-vehicle parking stations or parking stalls.

Option:

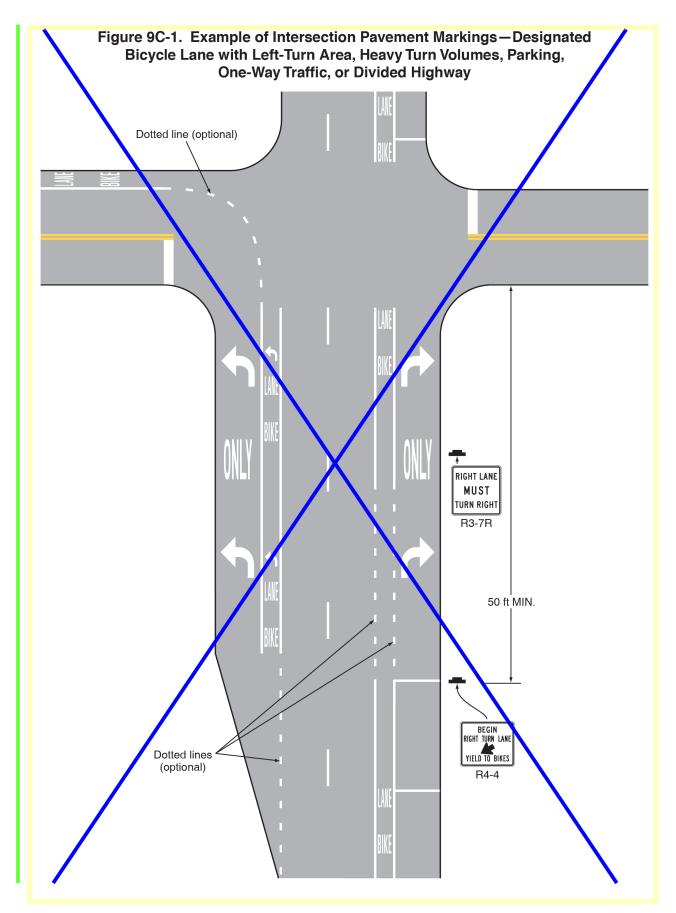
<sup>09</sup> Green-colored pavement may be installed for the entire length of a bicycle lane or bicycle lane extension or for only a portion (or portions) of the bicycle lane or bicycle lane extension. (See Figure 9C-114(CA)).

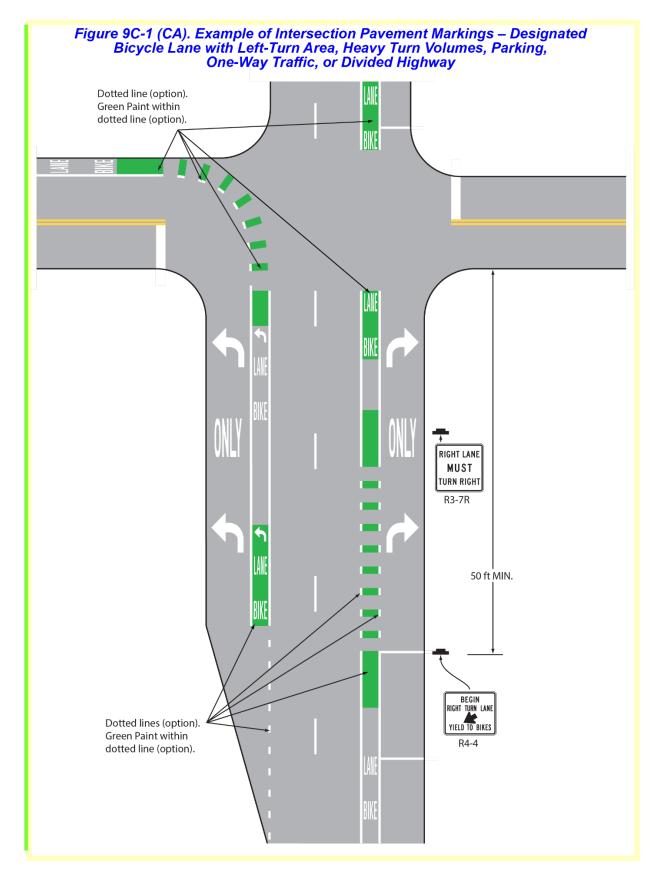
<sup>10</sup> Green-colored pavement may be installed for the entire length of a Class IV physically separated bikeway within the roadway or for only a portion (or portions) of the Class IV physically separated bikeway.

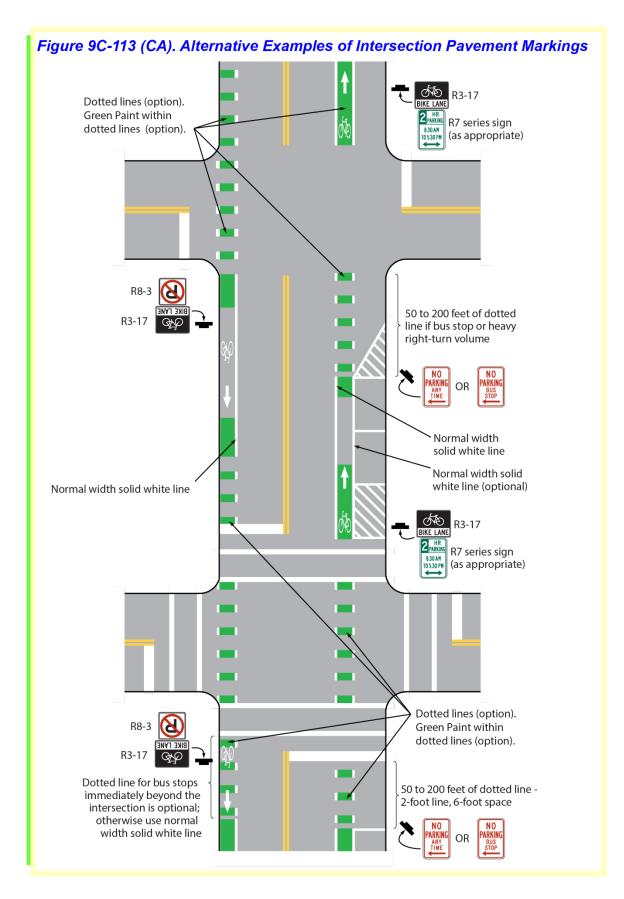
Standard:

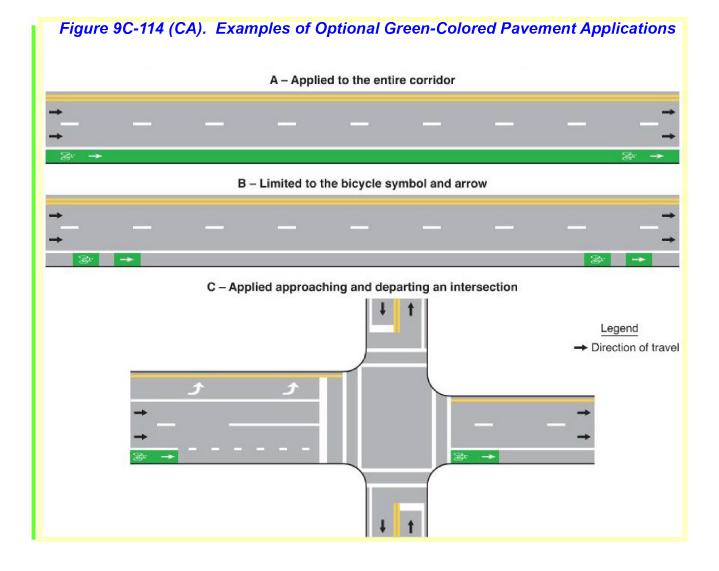
11 Green-colored pavement shall not be used instead of dotted lines used to extend a bicycle lane or a Class IV separated bicycle lane within a roadway across an intersection, driveway, or ramp. The pattern of the green-colored pavement shall match the pattern of the dotted lines, thus filling in only the areas that are directly between a part of dotted line segments. Standard:

<sup>12</sup> Green-colored pavement shall conform to FHWA Interim Approvals for "Green Colored Pavement for Bike Lanes – California Statewide (IA-14.10)", "Optional Use of an Intersection Bicycle Boxes (IA-18)", and "Optional Use of Two-Stage Bicycle Turn Boxes (IA-20)".









Section 9C.03. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9C.03 Marking Patterns and Colors on Shared-Use Paths

Option:

<sup>01</sup> Where shared-use paths and separated bikeways are of sufficient width to designate two minimum width lanes, a solid yellow line may be used to separate the two directions of travel where passing is not permitted, and a broken yellow line may be used where passing is permitted (see Figure 9C-2).

Guidance:

02 Broken lines used on shared-use paths should have the usual 1-to-3 segment-to-gap ratio. A nominal 3-foot segment with a 9-foot gap should be used.

<sup>03</sup> If conditions make it desirable to separate two directions of travel on shared-use paths or separated bikeways at particular locations, a solid yellow line should be used to indicate no passing and no traveling to the left of the line.

Section 9C.04. Yellow highlighted text is edited. Figures 9C-4, 9C-4(CA), 9C-5, 9C-6, 9C-102(CA), 9C-103(CA), 9C-104(CA), 9C-105(CA), 9C-106(CA), 9C-109(CA), and 9C-110(CA) are also edited. New Figures 9C-5(CA) and 9C-6(CA) are added as well. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

### Section 9C.04 Markings For Bicycle Lanes

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Guidance:

<sup>03</sup> If used, bicycle lane word, symbol, <del>and/or</del> arrow markings, and/or green-colored pavement (see Figure 9C-3) should be placed at the beginning of a bicycle lane and at periodic intervals along the bicycle lane based on engineering judgment.

### **Bicycle Lane Treatment at Intersections**

Option:

<sup>05a</sup> When a bike lane approaches an intersection with right- or left-turn only lanes, Figures 9C-1(CA), 9C-4(CA) or 9C-5(CA) may be used.

Guidance:

<sup>05b</sup> Where through motor vehicle lanes approaching an intersection become mandatory turn lanes adjacent bike lanes should be delineated using Figure 9C-109(CA).

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Option:

<sup>09b</sup> A Bicycle Crossing (W11-1) sign may be used to warn road users of the potential for bicyclists crossing their path. See Section 9B.18.

<sup>09c</sup> When a bike lane approaches ramp intersection that intersects the local facility at or close to 90° (typical of a compact or spread diamond configuration), then Figures 9C-4(CA) and 9C-5(CA) may be used.

Guidance:

10 Posts or raised pavement markers should not be used to separate bicycle lanes from adjacent travel lanes except situations provided in Section 9C.101(CA) and 9C.102(CA).

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#### Support:

<sup>14</sup> Examples of bicycle lane markings at right-turn lanes are shown in Figures 9C-1(CA), <del>9C-4</del>, 9C-4(CA), <del>and 9C-5</del> 9C-109(CA), and 9C-111(CA)</del>. Examples of pavement markings for bicycle lanes on a two-way street are shown in Figure 9C-4(CA), <del>9C-6</del>, 9C-6(CA), 9C-106(CA) and 9C-112(CA). Pavement word message, symbol, and arrow markings for bicycle lanes are shown in Figure 9C-3.

#### Bicycle Lane Markings on Class II Bikeways (Bike Lane)

#### •••

Guidance:

<sup>19</sup> Where right turns are not permitted, the solid bike lane stripe should extend to the edge of the intersection, and begin again on the far side. Where there is no right turn only lane, but right turns are permitted, the solid stripe should terminate 50 feet to 200 feet prior to the intersection.

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#### Option:

<sup>25</sup> Physical barriers or other vertical elements may be used to convert a Class II Bikeway (Bike Lane) to Class I Bikeway (Bike Path) or Class IV Bikeway (Separated Bikeway).

#### **Bicycle Lane Treatment Where Vehicle Parking is Prohibited/Permitted**

Support:

31 Markings for a bike lane where vehicle parking is prohibited or permitted are shown in Figure 9C-102(CA).

Standard:

<sup>32</sup> Where motorist right turns are permitted, the solid bike lane shall either be dropped entirely, or dashed (Refer Bike Lane Intersection Line, Detail 39A, shown in Figure 9C-101(CA)) beginning at a point between 50 feet and 200 feet in advance of the intersection.

#### **Buffered Bicycle Lanes**

...

Guidance:

<sup>47</sup> If used and where there is parking on the right side of the buffered bicycle lane, the rightmost line should be broken. Where vehicles are expected to cross the buffer area at driveways, both lines should be broken. Where neither condition exists, both lines should be solid.

<sup>48</sup> Buffer areas should end on the approach to the intersection of side streets or major commercial driveways as shown in Figure 9C-104(CA).

#### **Bicycle Lane Line Extensions through Intersections**

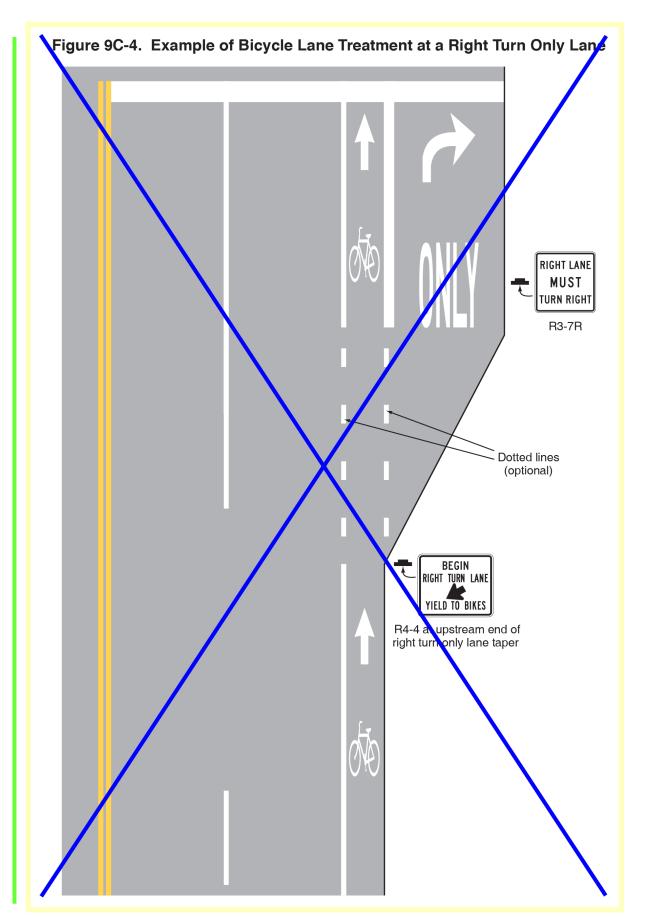
Support:

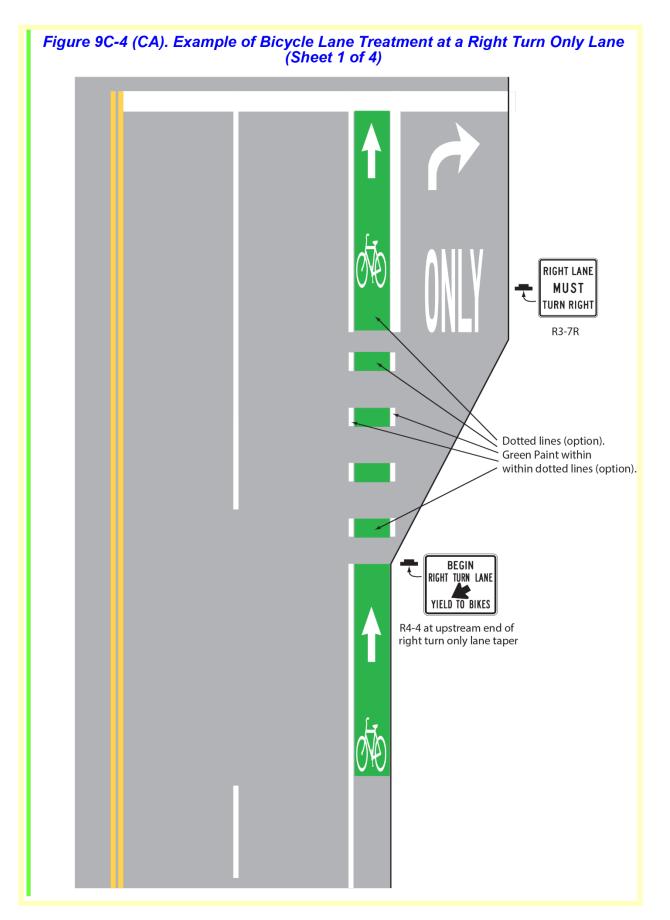
<sup>59</sup> The extension of bicycle lanes through intersections advises motorists that bicyclists are likely to use the intended path. Option:

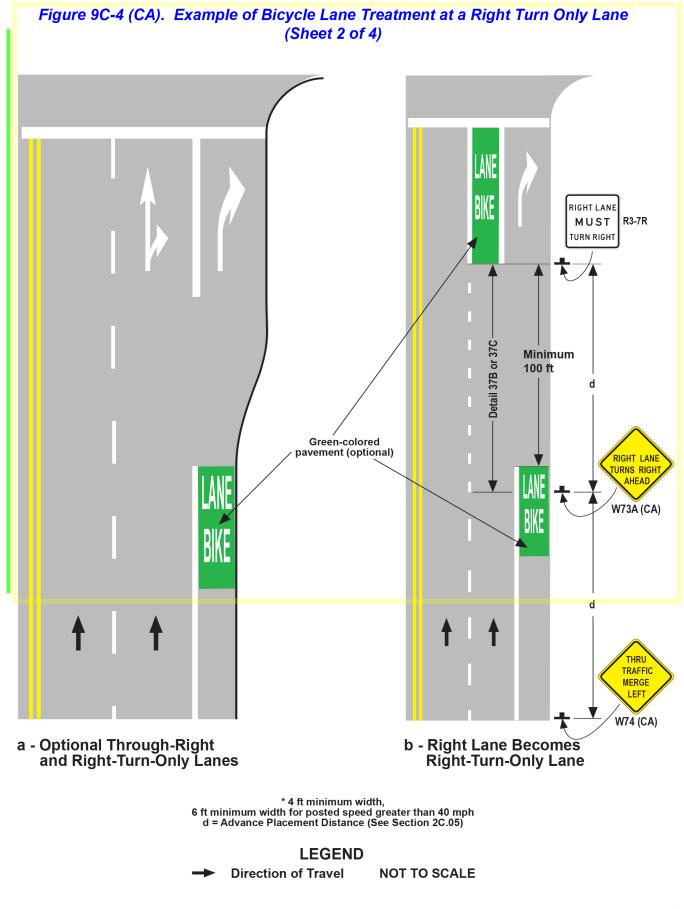
60 Bicycle lane markings may be extended through intersections consistent with the provisions of Section 3B.08.

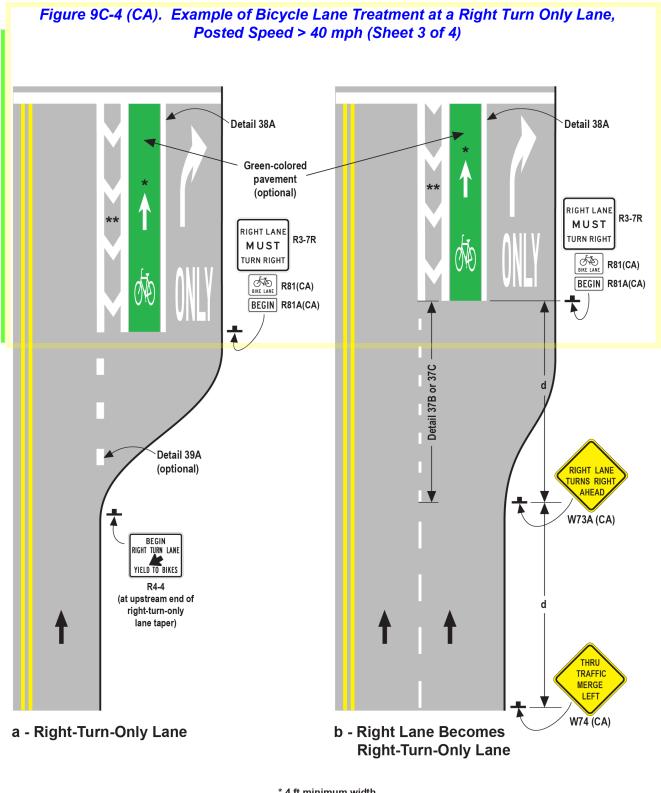
61 Bicycle lane markings as shown in Figure 9C-106(CA) may be used within the boundaries of bicycle lane extensions.

<sup>62</sup> Green-colored pavements may be used in a bicycle lane extension through an intersection or a driveway consistent with Section 3G.101(CA). See Figures 9C-1(CA), 9C-103(CA), 9C-105(CA), 9C-106(CA), 9C-110(CA), and 9C-113(CA).



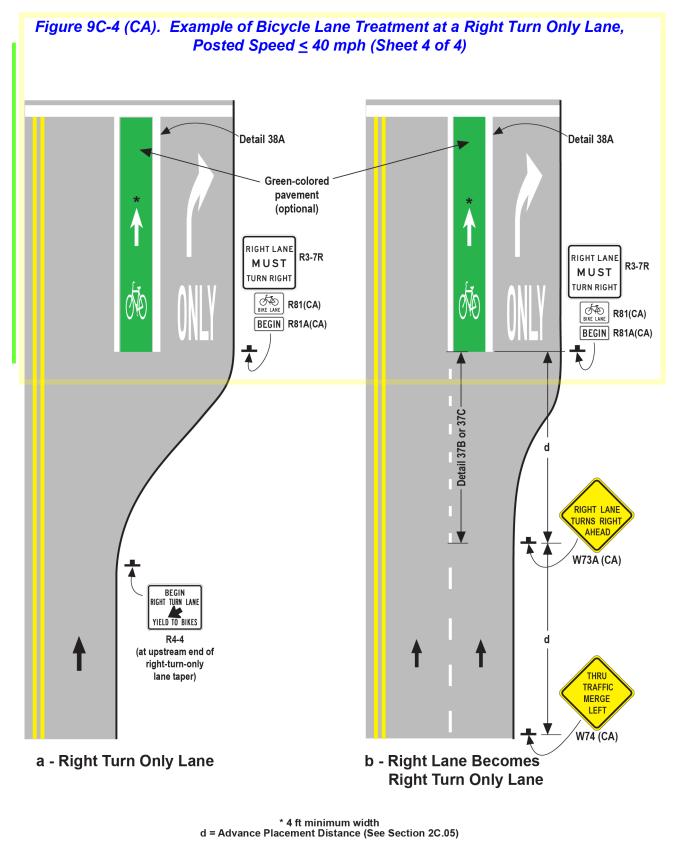




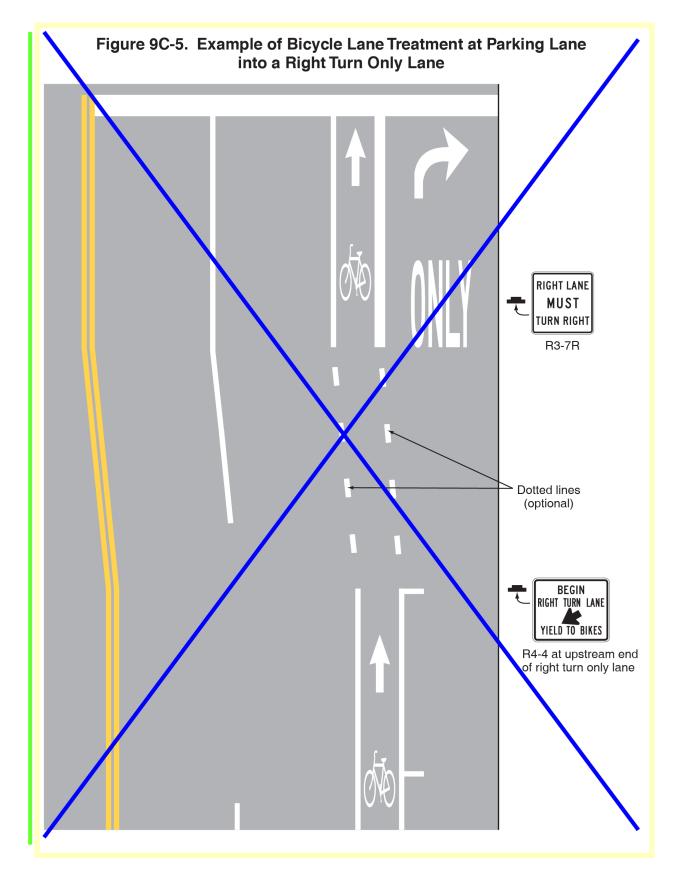


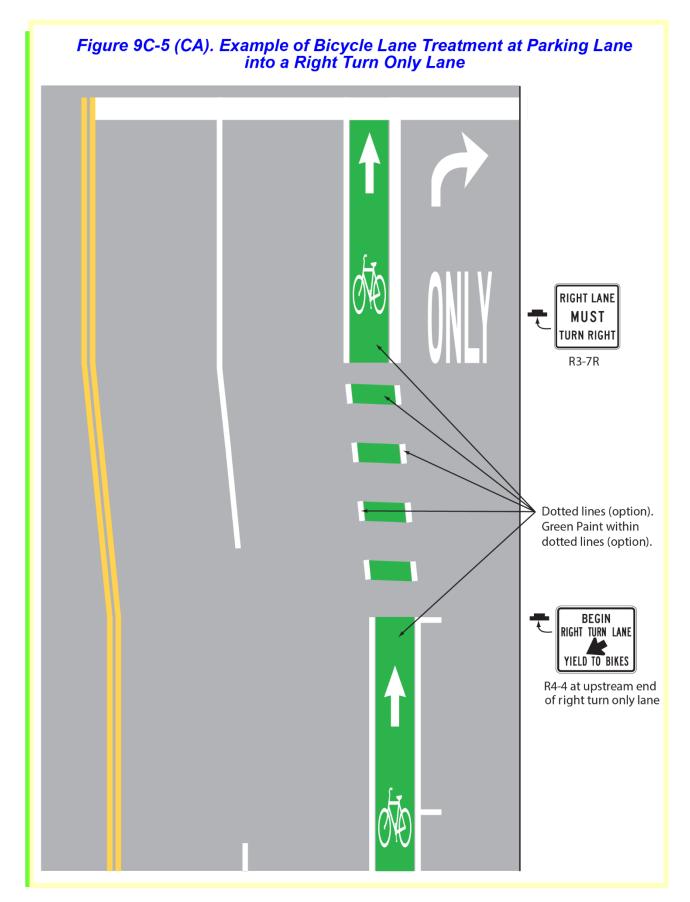
\* 4 ft minimum width \*\* 2 ft (minimum 18 in) buffered area may be striped on the left or on the right within the space for bicycle use d = Advance Placement Distance (See Section 2C.05)

> LEGEND Direction of Travel NOT TO SCALE

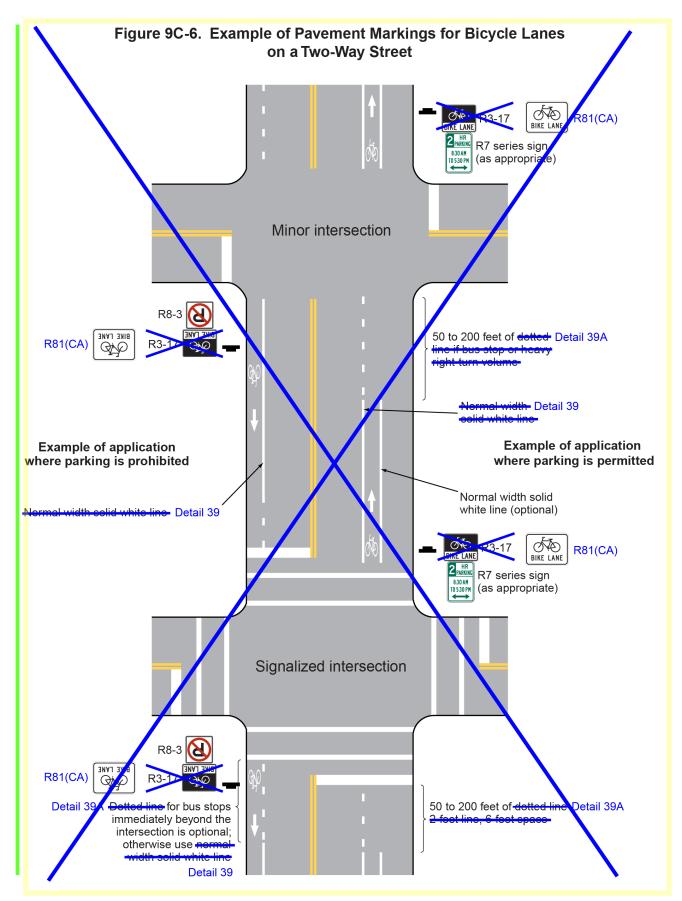


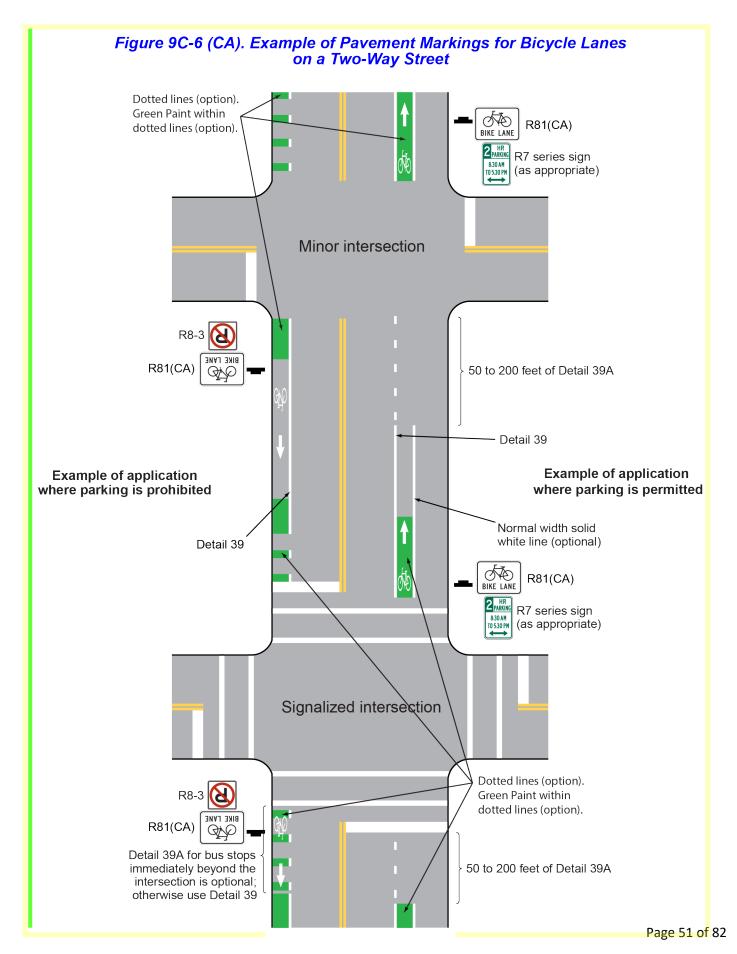
LEGEND Direction of Travel NOT TO SCALE



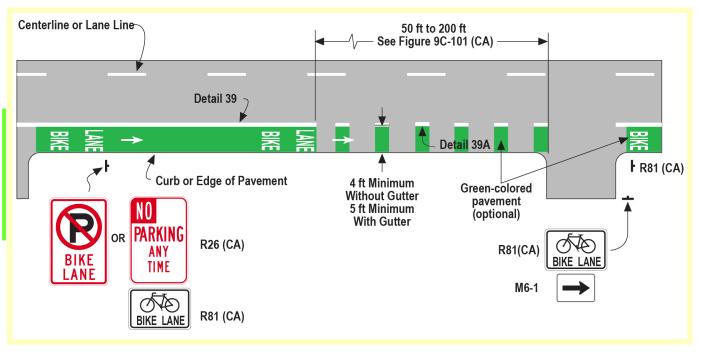


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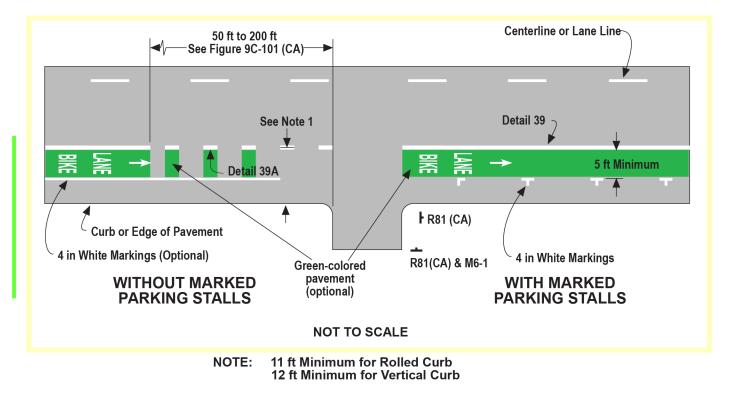


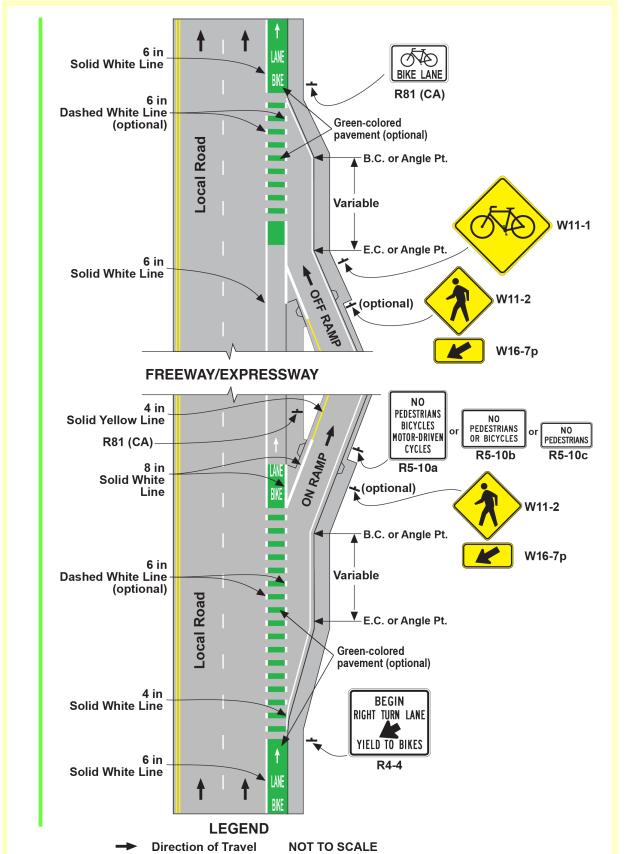
#### Figure 9C-102 (CA). Examples of Bicycle Lane Treatment Where Vehicle Parking is Prohibited/Permitted



# WHERE VEHICLE PARKING IS PROHIBITED

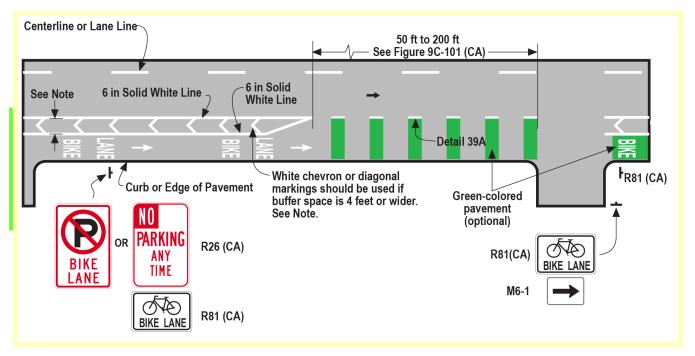
# WHERE VEHICLE PARKING IS PERMITTED





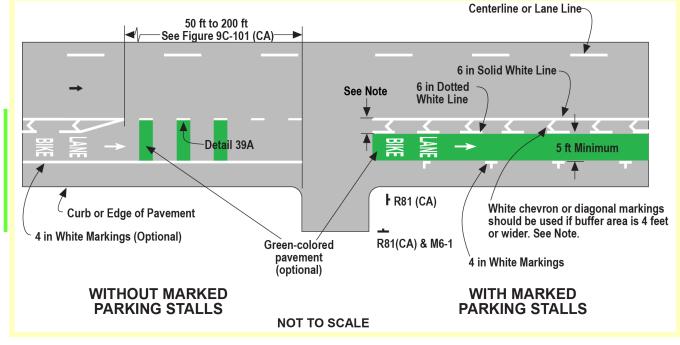
#### Figure 9C-103 (CA). Example of Bicycle Lane Treatment Through an Interchange

#### Figure 9C-104(CA). Examples of Markings for Buffered Bicycle Lanes Where Vehicle Parking is Prohibited/Permitted (1 of 2)



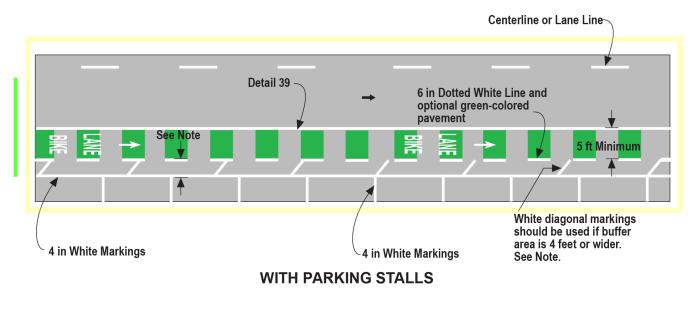
#### BUFFER BETWEEN BICYCLE LANE AND GENERAL PURPOSE LANE WHERE VEHICLE PARKING IS PROHIBITED

BUFFER BETWEEN BICYCLE LANE AND GENERAL PURPOSE LANE WHERE VEHICLE PARKING IS PERMITTED



NOTE: 18 in Minimum for Buffered Area Width. The Buffer Area Width includes the width of the parallel White Lines

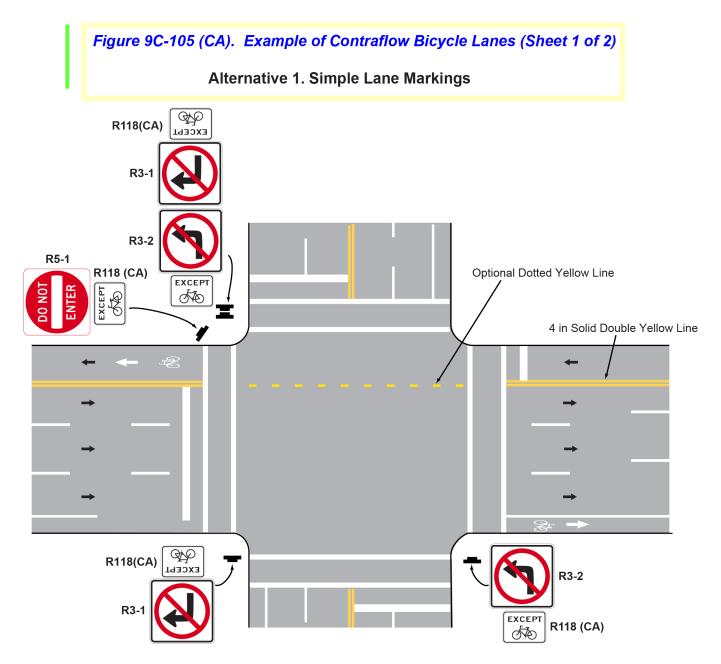
#### Figure 9C-104(CA). Examples of Markings for Buffered Bicycle Lanes Where Vehicle Parking is Prohibited/Permitted (Sheet 2 of 2)

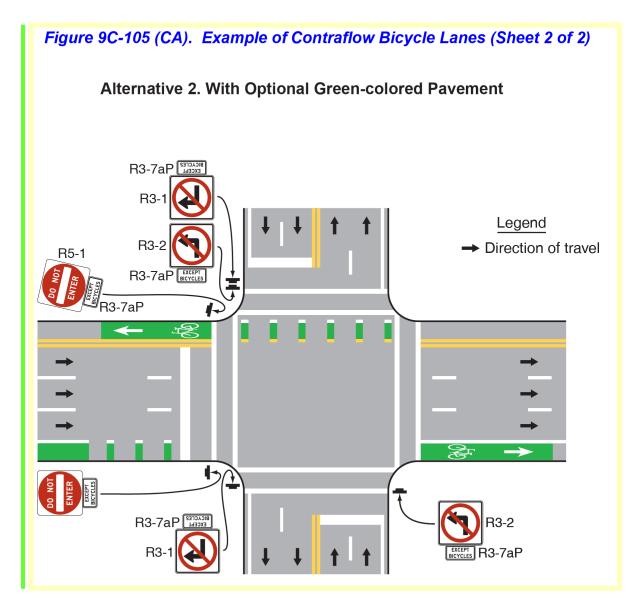


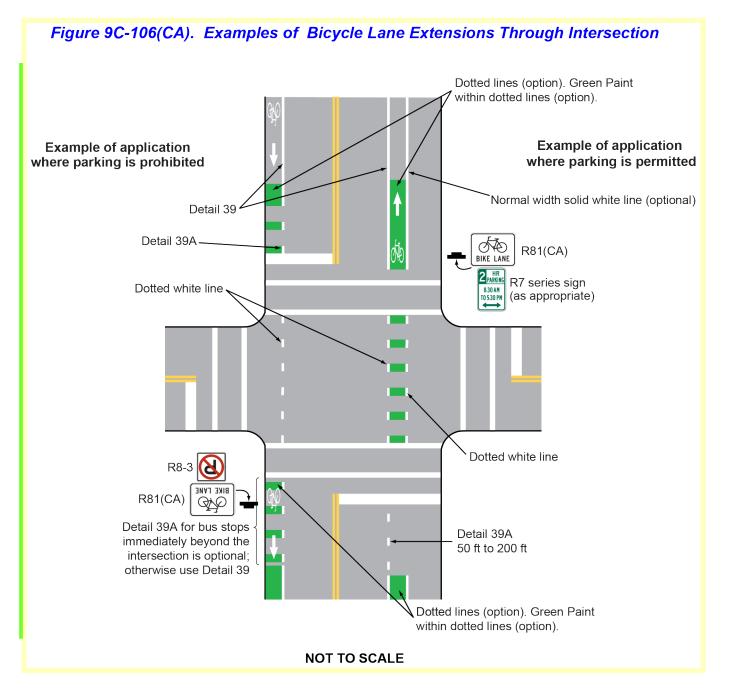
#### **BUFFER BETWEEN BICYCLE LANE AND PARKING LANE**

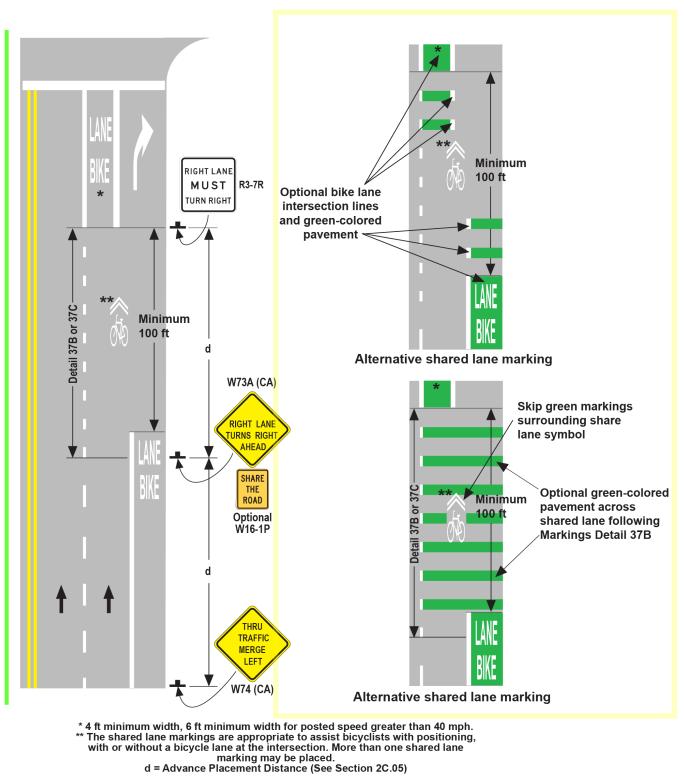
NOT TO SCALE

NOTE: 18 in Minimum for Buffered Area Width. The Buffer Area Width includes the width of the parallel White Lines









#### Figure 9C-109 (CA). Example of Shared Lane Marking While Approaching an Intersection

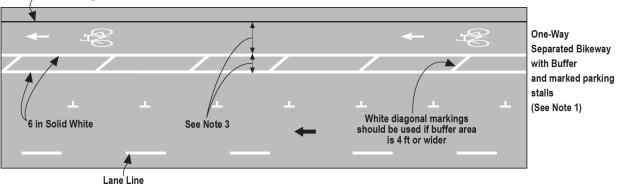
LEGEND

NOT TO SCALE

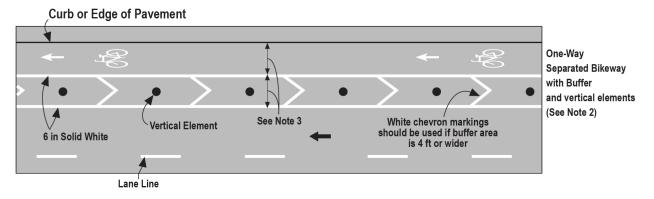
Curb or Edge of Pavement

# Figure 9C-110 (CA). Examples of Markings for Separated Bikeways (Sheet 1 of 4)

# **One-Way Separated Bikeway With On-Street Parking**



# **One-Way Separated Bikeway On Street With No Parking**

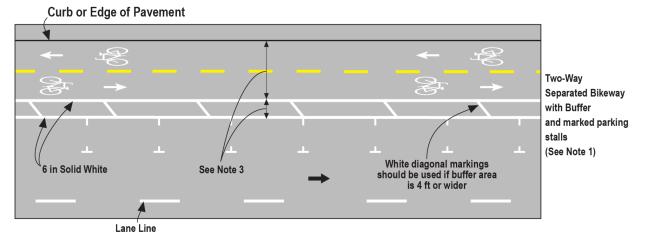


#### NOT TO SCALE

NOTES:

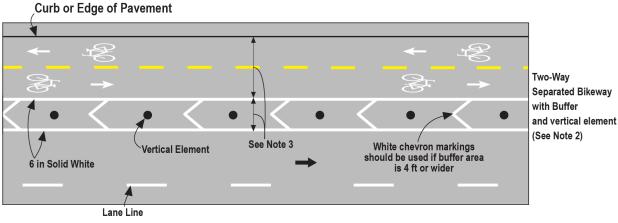
- 1. See Figure 3B-21(CA) for examples of parking space markings.
- 2. Vertical elements in the buffer are an important separation feature of the Separated Bikeway. These may include grade separation, flexible posts, inflexible physical barriers, or on-street parking. See DIB 89 for more information.
- 3. See DIB 89 for separated bikeway width and buffer width.

# Figure 9C-110 (CA). Examples of Markings for Separated Bikeways (Sheet 2 of 4)



Two-Way Separated Bikeway With On-Street Parking

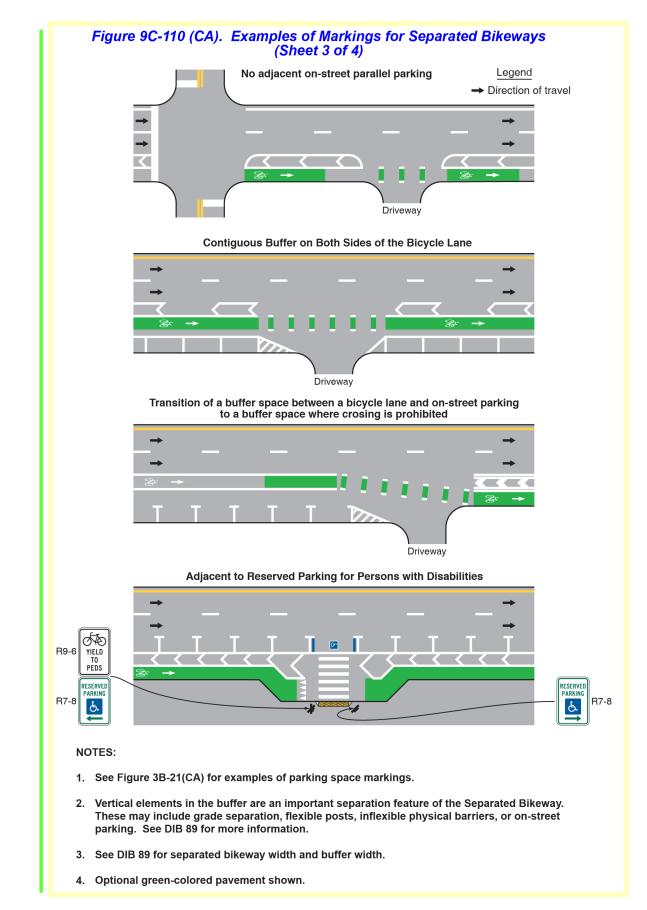
# Two-Way Separated Bikeway With No Parking

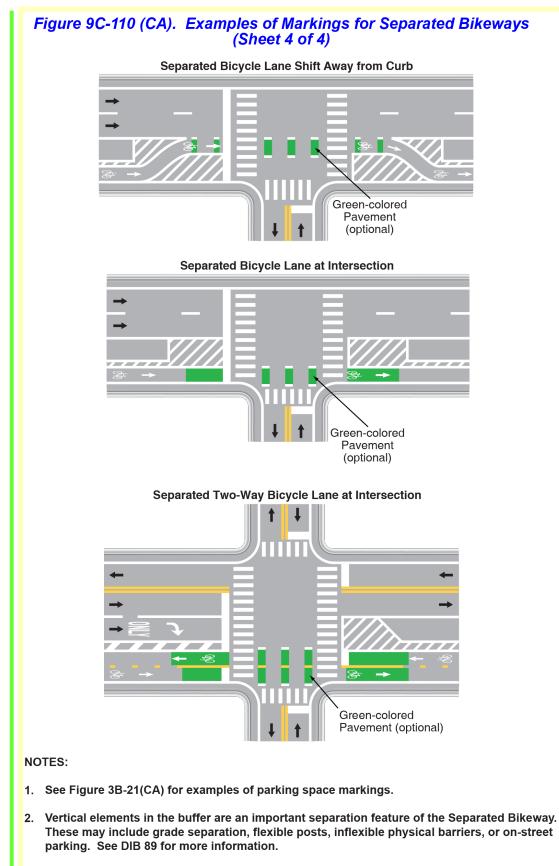


#### NOT TO SCALE

#### NOTES:

- 1. See Figure 3B-21(CA) for examples of parking space markings.
- 2. Vertical elements in the buffer are an important separation feature of the Separated Bikeway. These may include grade separation, flexible posts, inflexible physical barriers, or on-street parking. See DIB 89 for more information.
- 3. See DIB 89 for separated bikeway width and buffer width.





3. See DIB 89 for separated bikeway width and buffer width.

Section 9C.07. Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

#### Section 9C.07 Shared Lane Marking

Option:

<sup>01</sup> The Shared Lane Marking shown in Figure 9C-9 may be used to:

- A. Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist's impacting the open door of a parked vehicle,
- B. Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane,
- C. Alert road users of the lateral location bicyclists are likely to occupy within the traveled way,
- D. Encourage safe passing of bicyclists by motorists, and
- E. Reduce the incidence of wrong-way bicycling.
- F. Assist bicyclists with lateral positioning within a traffic circle or roundabout (See Figure 9C.107),
- G. Supplement a signed bicycle route that is identified as a Class III bicycle facility,
- H. Encourage the lateral positioning of bicyclists away from on-street angled parking, and
- I. Indicate that a bicycle can travel straight through a right-turn or left-turn only lane.

#### Lateral Positioning

Support:

<sup>03a</sup> The effective lane width as used in this section indicates the width of the pavement available after subtracting the width of the parked vehicle and door zone from the distance of the lane line/centerline to the face of the curb/edge of the pavement. *Guidance:* 

o4 If used in a shared lane with on-street parallel parking, if the effective lane width is 14 feet or greater, Shared Lane Markings should be placed so that the centers of the markings are at least ++ 13 feet from the face of the curb, or from the edge of the pavement where there is no curb. If the effective lane width is less than 14 feet, the marking should be centered within the effective lane width. See Figure 9C-108(CA).

os If used on a street without on-street parking that has an outside travel lane that is less than 14 feet wide, the centers of the Shared Lane Markings should be centered in the travel lane. If used on a street without on-street parking that has an outside travel lane with lane width equal to 14 feet or greater, the shared lane markings should be centered at least 4 feet from the face of the curb, or from the edge of the pavement where there is no curb.

<sub>05a</sub> If used on a shared right-turn or left-turn only lane that is less than 14 feet wide, to indicate that a bicycle may travel straight through an intersection, the centers of the Shared Lane Markings should be centered in the travel lane. If used on a shared right-turn or left-turn only lane that is 14 feet or greater, the Shared Lane Markings should be centered at least 4 feet from the edge of channelizing line. See Figure 9C-111(CA) and Figure 9C-112(CA).

056 Placing Shared Lane Markings on the wheel paths should be avoided where possible. Support:

<sup>05c</sup> When a shared lane is sufficiently wide that motor vehicles can pass bicyclists within the lane, the purpose of the Shared Lane Marking is to indicate a bicyclist line of travel that facilitates passing while avoiding fixed obstructions (e.g. drainage inlet, gutter joint). When a shared lane is not wide enough to enable passing with adequate clearance, the purpose of the marking is to indicate a bicyclist line of travel that lane.

# Spacing

Guidance:

<sup>06</sup> If used, the Shared Lane Marking should be placed immediately after an intersection and spaced at intervals not greater than 250 feet thereafter.

**Section 9C.101(CA).** Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

### Section 9C.101(CA) Barrier Posts on Class I Bikeways

#### Support:

<sup>01</sup> Before a decision is made to install barrier posts, consideration needs to be given to the implementation of other remedial measures, such as Bike Path Exclusion (R44A(CA)) signs (see Section 9B.08) and/or redesigning the path entry so that motorists do not confuse it with vehicle access.

<sup>02</sup> It could be necessary to install barrier posts at entrances to bike paths to prevent motor vehicles from entering. When locating such installations, care needs to be taken to assure that barriers are well marked and visible to bicyclists, day and night (i.e., install reflectors or reflectorized tape).

Section 9C.102(CA). Yellow highlighted text is edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).

# Section 9C.102 (CA) Class IV Bikeways

#### Standard:

#### **O3 Vertical elements shall be used to define separated bikeways.**

Support:

<sup>04</sup> Vertical elements in the buffer area are critical to separated bikeway design. Forms of vertical separation include, but are not limited to, grade separation, flexible delineator posts, bikeway separator posts, inflexible physical barriers, or on-street parking. See Figure 9C.110(CA). See Caltrans' Design Information Bulletin Number 89 Class IV Bikeway Guidance (DIB 89) for more information. <sup>05</sup> Vertical elements are not traffic control devices in themselves; however, when placed in a position identical to a line of channelizing devices and marked and/or equipped with appropriate channelization features to provide guidance and warning both day and night, they serve as traffic control devices.

#### Standard:

<sup>08</sup> The Bike Symbol pavement markings or Helmeted Bicyclist Symbol (Figure 9C-3 Option A or Option B) shall be placed on the far side of each intersection.

Option:

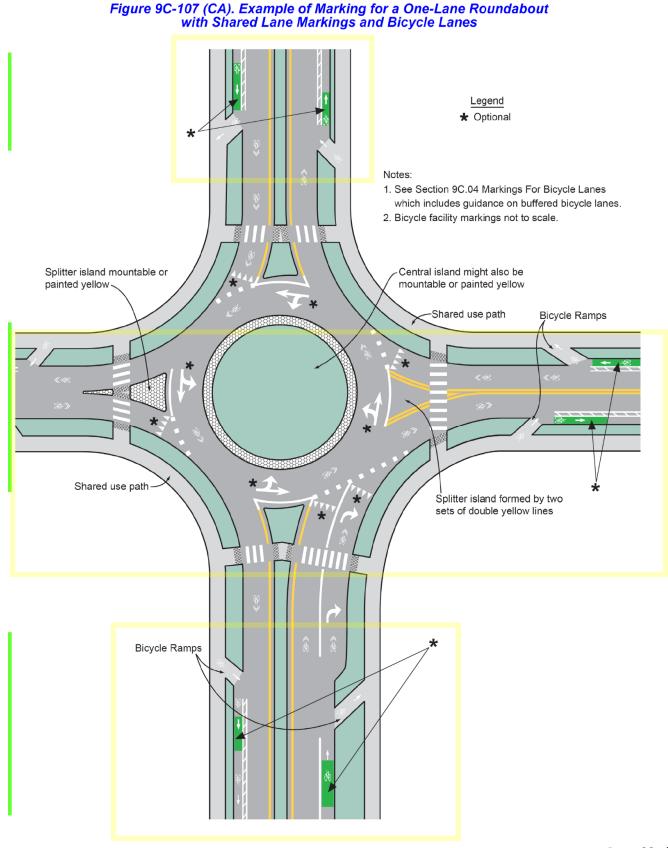
<sup>09</sup> The dashed bike lane marking, with or without green-colored pavement between left and right dash may be placed through an intersection.

#### Unobstructed passage

Standard:

15 If accessible parking or loading zones are provided on a roadway alongside a separated bikeway, then unobstructed access by bicycles shall be maintained.

Figure 9C-107(CA). Regions boxed in yellow are edited. These edits originate from CTCDC Item 21-22 (11-4-21 meeting).



# 2014 CA MUTCD Revision 8 Draft Editorial Changes

### Table 1A-101(CA). Yellow highlighted text is edited (editorial change).

# Table 1A-101(CA). Status of Interim Approvals Issued By FHWA in California

No.	Description	Date Issued by FHWA	Date Adopted in CA		
IA-1	Optional use of retroreflective borders on traffic signal backplates	2/6/04	12/7/06		
IA-2	Optional use of wayside horn system (WHS) at highway-rail grade crossings	8/2/04	12/7/06		
IA-4R	REVISED Interim Approval for Use of Automated Flagger Assistance Devices (AFADs) in Temporary Traffic Control Zones	1/28/05	5/9/06		
<del>IA-5</del>	Interim Approval for Use of Clearview Font for Positive Contrast Legends on Guide Signs	<del>9/2/04</del>	<del>12/7/06</del>		
IA-8	Interim Approval for Optional Use of RV Friendly Symbol Sign	9/6/05	12/7/06		
IA-9	Interim Approval to Display More than Six Specific Service Logo Panels for a Type of Service	9/21/06	Incorporated in the CA MUTCD 2012		
IA-10	Interim Approval for Optional Use of Flashing Yellow Arrow for Permissive Left	3/20/06	11/3/08		
<del>IA-11</del>	Optional Use of Rectangular Rapid Flashing Beacons	<del>7/16/08</del>	8/10/11		
IA-12	Interim Approval for Optional Use of Traffic Signal Photo Enforced Signs	11/12/10	Continue to use SR56(CA) sign spec		
IA-13	Interim Approval for Optional Use of an Alternative Electric Vehicle Charging General Service Symbol Sign	4/1/11	8/10/11		
IA-14	Interim Approval for the Optional Use of Green Colored Pavement for Bike Lanes	4/15/11	8/12/11		
IA-15	Interim Approval for the Optional Use of an Alternative Design for the U.S. Bicycle Route (M1-9) Sign	6/1/12	<mark>9</mark> /27/12		
IA-16	Interim Approval for the Optional Use of Bicycle Signal Faces	12/24/13	11/27/15		
IA-17	Interim Approval for Optional Use of Three-Section Flashing Yellow Arrow Signal Faces	8/12/14	4/ <mark>10</mark> /17		
IA-18	Interim Approval for Optional Use of an Intersection Bicycle box	10/12/16	4/6/17		
IA-19	Interim Approval for the Optional Use of an Alternative Signal Warrant 7 - Crash Experience	2/24/17	10/19/21		
IA-20	Interim Approval for the Optional Use of Two-Stage Bicycle Turn Boxes	7/13/17	8/15/17		
IA-21	Interim Approval for the Optional Use of Pedestrian-Actuated Rectangular Rapid-Flashing Beacons at Uncontrolled Marked Crosswalks	3/21/18	4/9/18		
IA-5(R)	Reinstatement of Interim Approval for Use of Clearview Font for Positive Contrast Legends on Guide Signs	3/28/18	12/7/06		
IA-22	Interim Approval for the Optional Use of Red-Colored Pavement for Transit Lanes	<mark>12/14/19</mark>	8/28/20		

Section 1A.13. Yellow highlighted text is edited (editorial change).

#### Section 1A.13 Definitions of Headings, Words, and Phrases in this Manual

...

- 25a. Business Activity District A "business activity district" is that portion of a highway and the property contiguous thereto that includes central or neighborhood downtowns, urban villages, or zoning designations that prioritize commercial land uses at the downtown or neighborhood scale and meets at least three of the following four requirements: (1) No less than 50 percent of the contiguous property fronting the highway consists of retail or dining commercial uses, including outdoor dining, that open directly onto sidewalks adjacent to the highway. (2) Parking, including parallel, diagonal, or perpendicular spaces located alongside the highway. (3) Traffic control signals or stop signs regulating traffic flow on the highway, located at intervals of no more than 600 feet. (4) Marked crosswalks not controlled by a traffic control device.
- 25b. Business District A "business district" is that portion of a highway and the property contiguous thereto (a) upon one side of which highway, for a distance of 600 feet, 50 percent or more of the contiguous property fronting thereon is occupied by buildings in use for business, or (b) upon both sides of which highway, collectively, for a distance of 300 feet, 50 percent or more of the contiguous property fronting thereon is so occupied. A business district may be longer than the distances specified in this section if the above ratio of buildings in use for business to the length of the highway exists. Refer to CVC 235.
- 25<mark>c</mark>. CVC California Vehicle Code.

25d. California Sign Specifications – Detailed drawings of signs approved by Caltrans for use in California.

Section 2B.13. Yellow highlighted text is edited (editorial change).

### Section 2B.13 Speed Limit Sign (R2-1)

• • •

#### CVC Section 22358.8 (Retain currently adopted or restore immediately prior speed limit)

#### Standard:

<sup>12ag</sup> Currently adopted speed limit or immediately prior adopted speed limit shall only be retained, by ordinance, if after completing an E&TS, local agency finds that the speed limit is still more than reasonable or safe, and that speed limit was established with an E&TS and if a registered engineer has evaluated the section of highway and determined that no additional general purpose lanes have been added to the roadway since completion of the traffic survey that established the prior speed limit.

12ah If local agency decides to use lower speed limit based on CVC Section 22358.8, after completing an E&TS and finding that the speed limit is still more than is reasonable or safe, it shall not be reduced by any more than 5 mph from the currently adopted speed limit nor below the immediately prior speed limit. Refer to CVC Section 22358.8(b).

Option:

<sup>100</sup> This time provision for an E&TS may be extended to fourteen years when all of the above conditions are met and no significant changes in roadway or traffic conditions have occurred, including changes in adjoining property or land use, roadway width, or traffic volume as determined by a registered engineer.

Table 2B-1(CA). Yellow highlighted text is edited (editorial change).

# Table 2B-1(CA). California Regulatory Sign and Plaque Sizes (Sheet 6 of 7)

Sime or Blonus	Sign Designation	Section	Conventional Road		Everence	<b>F</b>	Minimum	Oversized
Sign or Plaque			Single Lane	Multi- Lane	Expressway	Freeway	winninum	Oversized
NO IDLING COMMERCIAL VEHICLES AND ALL BUSES	SR62(CA)	2B. <mark>46</mark>	18 x 24	18 x 24				
NO IDLING All Buses and Commercial Vehicles	SR63(CA)	2B. <mark>46</mark>	18 x 24	18 x 24				

Table 2B-103(CA). Yellow highlighted text is edited (editorial change).

Table 2B-103(CA). Examples showing applicability of rounding and additional speed reduction on State Highway System

Cystem							
85 <sup>th</sup> -Percentile Speed (mph)	Rounding to nearest 5 mph increment (CVC 22358.6(a))	If rounding to nearest is up, may round down (CVC 22358.6(c))	If rounding to nearest <mark>is</mark> down, may additionally lower by 5 mph (CVC 22358.6(b))				
47.5-50.0	50	45	N/A				
45.1-47.4	45	N/A	40				
42.5-45.0	45	40	N/A				
40.1-42.4	40	N/A	35				

Table 2B-104(CA). Yellow highlighted text is edited (editorial change).

### Table 2B-104(CA). Examples showing applicability of rounding and additional speed reduction on Local Agency's Roadways & Private Property Subjected to CVC

85 <sup>th</sup> -Percentile Speed (mph)	Rounding to nearest 5 mph increment (CVC 22358.6(a))	If rounding to nearest is up, may round down (CVC 22358.6(c))	If rounding to nearest <mark>is</mark> down, may additionally lower by 5 mph (CVC 22358.6(b))	If safety corridor or adjacent to high concentration of bicyclists & pedestrians, may additionally lower by 5 mph (CVC 22358.7)*
47.5-50.0	50	45	N/A	40
45.1-47.4	45	N/A	40	35
42.5-45.0	45	40	N/A	35
40.1-42.4	40	N/A	35	30

Section 2C.27. Yellow highlighted text is edited (editorial change).

#### Section 2C.27 Low Clearance Signs (W12-2 and W12-2a)

...

#### Standard:

**O7 The Low Clearance (W12-2) sign shall be used to warn motorists of low structure clearances.** 

<sup>08</sup> For clearance 15 feet 6 inch or less, in addition to the W12-2a sign, two advance Low Clearance signs shall be installed on the right side of the roadway. The first W12-2 sign shall be placed in advance of the nearest intersecting street or highway or wide point in the road at which a motorist can detour or safely turn around.

Guidance:

<sup>09</sup> A Distance Ahead (W34A(CA)) plaque should be placed below the W12-2 sign at this location.

#### Standard:

10 The second W12-2 sign shall be placed in advance of the structure.

Support:

11 No W34A(CA) plaque is needed at the second location.

#### Standard:

#### <sup>12</sup> The W12-2 sign shall display the same clearance as shown on the W12-2a sign.

Guidance:

13 The Distance Ahead (W34A(CA)) plaque when used, should be placed below a W12-2 sign.

#### Standard:

14 The \_\_ FT \_\_ IN sign (W12-2a) shall be used to warn motorists of structural clearance 15 feet 6 inch or less. Guidance:

<sup>15</sup> The W12-2a sign should be centered over the traveled way on the approach side of all underpasses, overheads, viaducts, overcrossings, undercrossings, and grade separations for State highways.

#### Standard:

16 The W12-2a sign shall not encroach over the shoulder area.

17 The W12-2a sign shall display the minimum vertical clearance to the nearest inch, not exceeding the measured value.

<sup>18</sup> The CAUTION, VERTICAL CLEARANCE \_\_\_\_' \_\_\_\_' Arrow (W34C(CA)) sign (see Figure 2C-5(CA)) shall be used on all blind approaches to structures with clearances 15 feet 6 inch or less.

Support:

<sup>19</sup> The W34C(CA) sign is used to warn motorists of low structure clearance around corners.

Guidance:

<sup>20</sup> The W34C(CA) sign should be placed at a location where the motorist can detour or safely turn around before making the turn. **Standard:** 

21 The W34C(CA) sign shall display the same clearance as shown on the W12-2a sign.

Section 2J.01. Yellow highlighted text is edited (editorial change).

#### Section 2J.01 Eligibility

#### Standard:

of Specific Service signs shall be defined as guide signs that provide road users with business identification and directional information for services <del>and for eligible attractions</del>. Eligible service categories shall be limited to gas, food, lodging, camping, <del>attractions,</del> and 24-hour pharmacies.

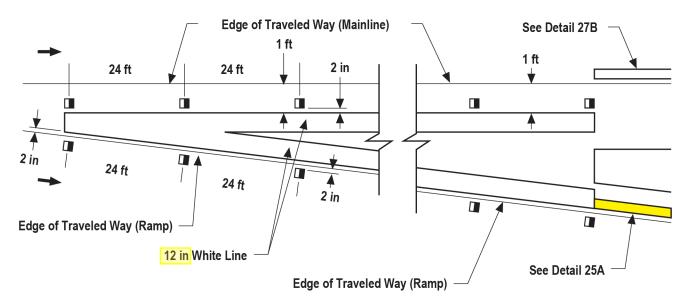
Support:

<sup>01a</sup> California Streets and Highways Code, Division 1, Chapter 1, Article 3, Section 101.7 and California Code of Regulations, Title 21, Division 2, Chapter 19, Sections 2100 through 2120, do not include the "attractions" category.

Figure 3A-110(CA). Yellow highlighted text is edited (editorial change).

# Figure 3A-110 (CA). Freeway Exit and Entrance Ramp Channelizing Line (Sheet 1 of 2)

#### DETAIL 36 - Exit Ramp Neutral Area (Gore) Channelizing Lines (See Figure 3B-8 (CA), Sheet 2 of 2)



NOT TO SCALE

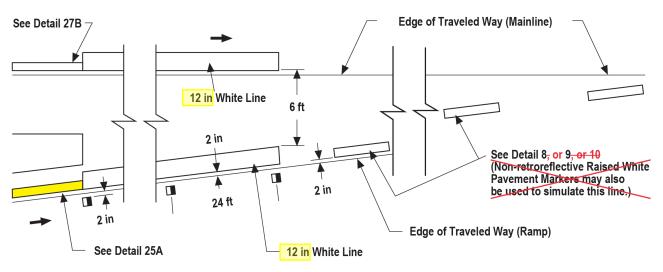
# LEGEND

4 to 6 in White (for local agencies) 6 in White (on State Highway System) One-Way Clear Retroreflective Markers

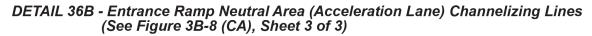
→ Direction of Travel

4 to 6 in Yellow (for local agencies) 6 in Yellow (on State Highway System)

#### Figure 3A-110 (CA). Freeway Exit and Entrance Ramp Channelizing Lines (Sheet 2 of 2)



DETAIL 36A - Entrance Ramp Neutral Area (Merge) Channelizing Lines (See Figure 3B-9 (CA), Sheet 1 of 2)



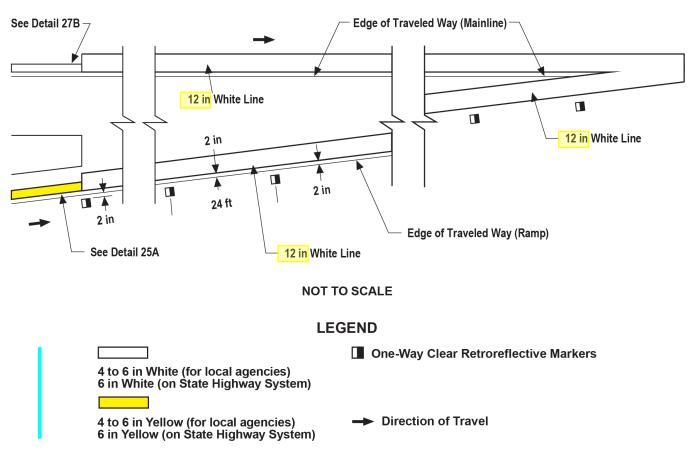
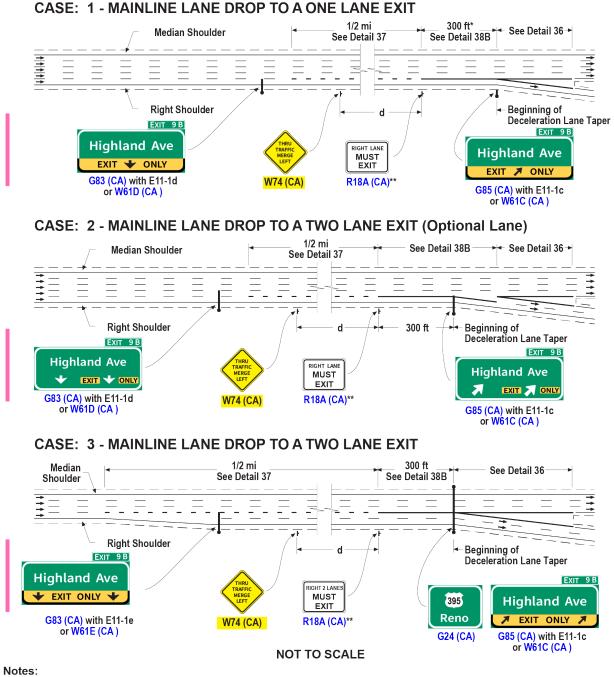


Figure 3B-10(CA). Yellow highlighted text is edited (editorial change).

#### Figure 3B-10 (CA). Examples of Applications of Freeway and Expressway Lane-Drop Markings



\* The solid line may be eliminated where additional weaving distance is needed. When it is eliminated,

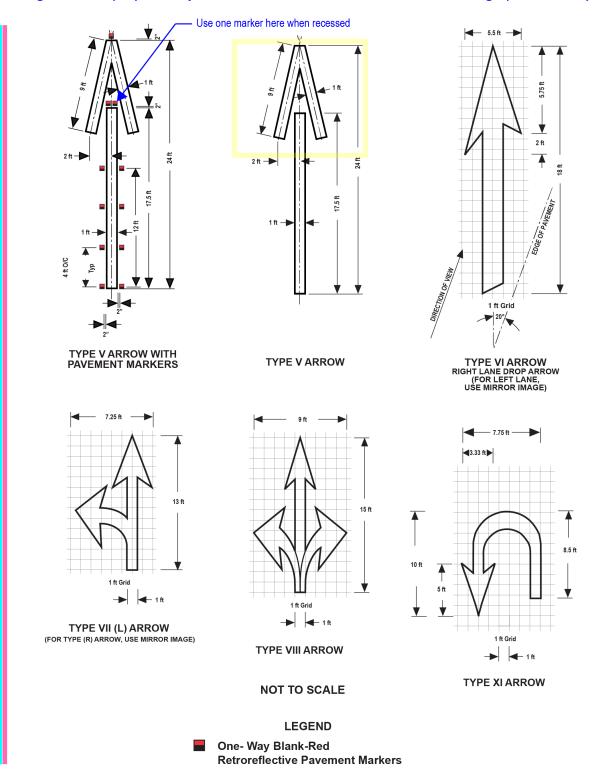
a RIGHT LANE EXITS AHEAD, W73 (CA) sign shall be used in lieu of the R18A sign.

\*\* At locations where the overhead EXIT ONLY (E11-1 Series or W61 (CA) Series) signs are not in place, a RIGHT LANE EXITS AHEAD, W73 (CA) sign shall be placed, approximately midway, between the W4-7 and the R18A signs.

### LEGEND

d = Advance Placement Distance (see Section 2C.05)

 Direction of Travel - - - Lane Drop Pattern Figure 3B-24(CA). Region boxed in yellow is edited (editorial change).



#### Figure 3B-24 (CA). Examples of Standard Arrows for Pavement Markings (Sheet 2 of 8)

NOTE: The design details for various arrows are also shown in Department of Transportation's Standard Plans.

Section 6F.53. Yellow highlighted text is edited (editorial change).

#### Section 6F.53 Supplementary Distance Plaque (W7-3aP)

#### Option:

of In combination with a warning sign, a Supplementary Distance (W7-3aP) plaque (see Figure 6F-4) with the legend NEXT XX MILES may be used to indicate the length of highway over which a work activity is being conducted, or over which a condition exists in the TTC zone.

<sup>02</sup> In long TTC zones, Supplementary Distance plaques with the legend NEXT XX MILES may be placed in combination with warning signs at regular intervals within the zone to indicate the remaining length of highway over which the TTC work activity or condition exists.

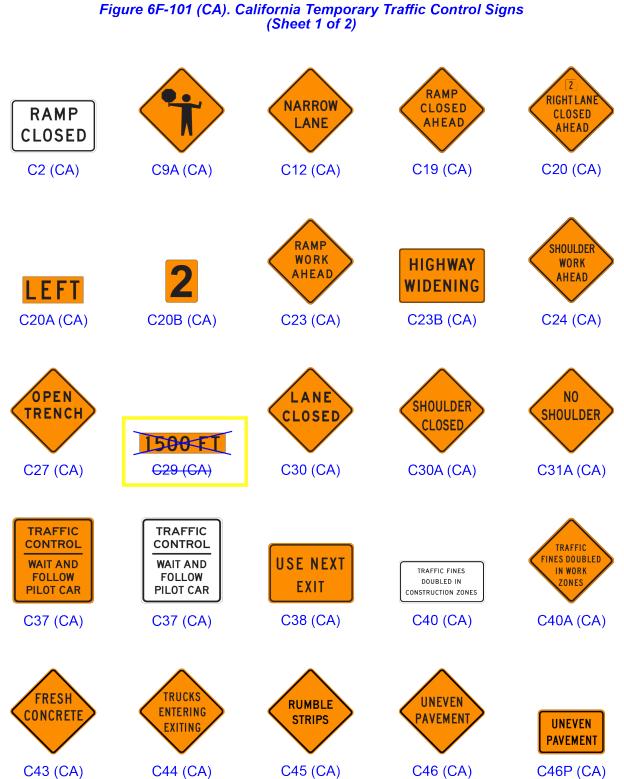
pare The XXXX FT (C29(CA)) panel may be used on the face of a warning sign to indicate the distance to where the work activity is being conducted, or to where a condition exists in the TTC zone.

 Table 6F-1(CA). Yellow highlighted text is edited (editorial change).

Sign or Plaque	Sign Designation	Section	Conventional Road (Minimum)	Expressway	Freeway	Oversized
RAMP CLOSED	C2(CA)	6F.28	48 x 30	48 x 30	48 x 30	
California Flagger Symbol	C9A(CA)	6F.31	36 x 36	48 x 48	48 x 48	
NARROW LANE(S)	C12(CA)	6F.26, 6F.102(CA)	36 x 36	48 x 48	48 x 48	
RAMP CLOSED AHEAD	C19(CA)	6F.28	36 x 36	48 x 48	48 x 48	
RIGHT LANE CLOSED AHEAD	C20(CA)	6F.22	36 x 36	48 x 48	48 x 48	72 x 72
LEFT plaque	C20A(CA)	6F.22	16 x 7	19 x 8	19 x 8	33 x 10
Numeral plaque	C20B(CA)	6F.22	6 x 8	8 x 10	8 x 10	10 x 12
RAMP WORK AHEAD	C23(CA)	6F.18	36 x 36	48 x 48	48 x 48	
ROAD (STREET) WORK Informational plaque	C23B(CA)	6F.18	Var x 18	Var x 24	Var x 24	
SHOULDER WORK AHEAD	C24(CA)	6F.37	30 x 30	48 x 48	48 x 48	
OPEN TRENCH	C27(CA)	6F.103(CA)	36 x 36	48 x 48	48 x 48	
XXXX FT	C29(CA)	6F.53	<mark>20 x 7</mark>	<mark>36 х 9</mark>	<mark>36 х 9</mark>	<mark></mark>
LANE CLOSED	C30(CA)	6F.22	30 x 30	48 x 48	48 x 48	

#### Table 6F-1(CA). California Temporary Traffic Control Zone Sign and Plaque Sizes

Figure 6F-101(CA). Region boxed in yellow is edited (editorial change).



# 2014 CA MUTCD Revision 8 Draft Prior Substantial Conformance, for publishing purposes

**Section 6F.109(CA).** Yellow highlighted text is edited. Figure 6F-101(CA) and Table 6F-1(CA) are also edited. These edits originate from CTCDC Item 23-07. Substantial conformance received for all Construction Project Funding Identification Signs on October 19, 2023.

#### Section 6F.109(CA) Construction Project Funding Identification Signs

#### Option:

<sup>01</sup> For use on projects with estimated contract costs of \$1,000,000 or more and 60 working days or more, or 70 working days minimum when Saturdays or holidays are counted as working days, the Construction Funding Identification signs may be used to identify funding sources for a highway project. Formats of the sign series are flexible to include federal, state and/or local agency funding sources. See Figure 6F-101(CA).

#### Standard:

<sup>102</sup> If used, header panel shall include type of project and anticipated year of completion, according to established contract completion schedule, limited to one line each with a minimum letter size based on sign panel size and the "Standard Highway Signs and Markings" book (see Section 1A.11), designed to fit within fluorescent orange portion for Rebuilding California (C48A(CA)), Bipartisan Infrastructure Law - Rebuilding CA (C50(CA) Series), and Local Funds Only (C51(CA)) signs, or shall include legend "Your Tax Dollars AT WORK" for Clean California (C49(CA) Series) signs. Installation shall be placed in advance of temporary traffic control zone signs and limited to one sign installed in each direction on up to two approaches. *Guidance:* 

<sup>03</sup> Information on the sign should include type of project, such as Highway Construction, Highway Repair, Highway Improvement, Bridge Construction, Bridge Repair, or Roadside Work for C48A(CA) and C51(CA) signs.

#### Rebuilding California (C48A(CA)) Sign

Option:

<sup>04</sup> The C48A(CA) sign may be used on projects funded by State Highway Funds (Rebuilding California Funds), formerly known as Senate Bill 1. Format of this sign is flexible to include up to four funding agency pictographs. See Figure 6F-101(CA).

# <u>Clean California (C49A(CA) or C49C(CA)) Signs</u>

Option:

D5 The C49(CA) Series signs may be used on projects funded by State General Funds (Clean California Funds), projects to beautify and revitalize public spaces across the State. Format of these signs is flexible to include up to four funding agency pictographs. See Figure 6F-101(CA).

#### Bipartisan Infrastructure Law - Rebuilding CA (C50A(CA) or C50B(CA)) Signs

Option:

De The C50(CA) Series signs may be used to identify funding source for a project using Federal Trust Funds (Infrastructure Investment and Job Act Funds). Format of these signs is flexible to include up to three funding agency pictographs. See Figure 6F-101(CA).

Standard:

07 The project description used on the C50(CA) Series signs shall be limited to the following project categories:

- 1. New Pavement
- 2. New Carpool Lane
- 3. Bridge Maintenance
- 4. Bridge Restoration
- 5. New Biking/Walking Paths
- 6. Broadband installation
- 7. Improved Drainage System

Guidance:

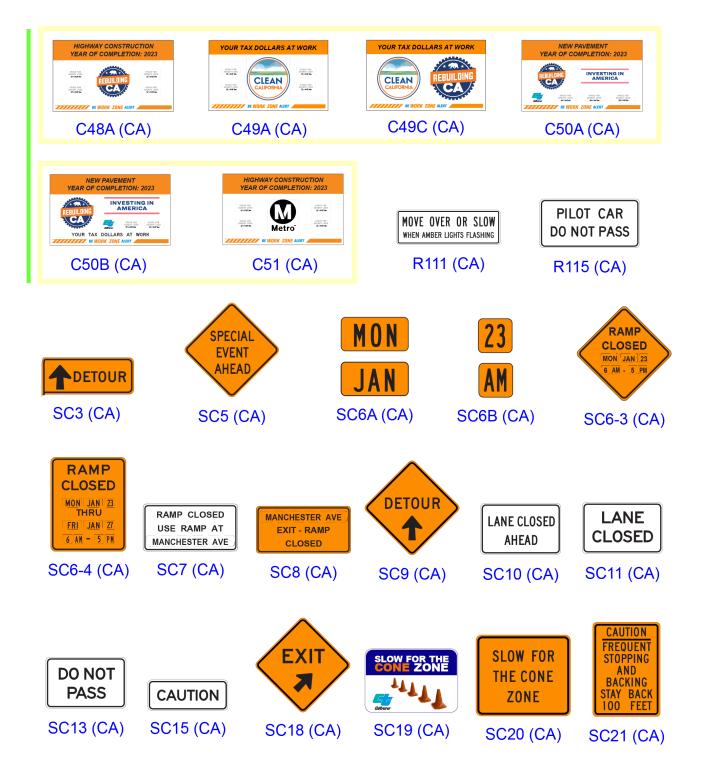
If the project scope does not fit any of the project categories, an alternated project category should be considered, such as Highway Construction, Highway Repair, Highway Improvement, Bridge Construction, or Roadside Work. Local Funds Only (C51(CA)) Sign

# EDITORIAL CHANGES FOR 2014 CA MUTCD REVISION 8

#### **Option:**

<sup>09</sup> The C51(CA) sign may be used on projects funded by local funds only (city, county, or other funding agencies). Format of this sign is flexible to include up to four funding agency pictographs. See Figure 6F-101(CA).

# Figure 6F-101 (CA). California Temporary Traffic Control Signs (Sheet 2 of 2)



# Table 6F-1(CA). California Temporary Traffic Control Zone Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road (Minimum)	Expressway	Freeway	Oversized
RAMP CLOSED	C2(CA)	6F.28	48 x 30	48 x 30	48 x 30	
California Flagger Symbol	C9A(CA)	6F.31	36 x 36	48 x 48	48 x 48	
NARROW LANE(S)	C12(CA)	6F.26, 6F.102(CA)	36 x 36	48 x 48	48 x 48	
RAMP CLOSED AHEAD	C19(CA)	6F.28	36 x 36	48 x 48	48 x 48	
RIGHT LANE CLOSED AHEAD	C20(CA)	6F.22	36 x 36	48 x 48	48 x 48	72 x 72
LEFT plaque	C20A(CA)	6F.22	16 x 7	19 x 8	19 x 8	33 x 10
Numeral plaque	C20B(CA)	6F.22	6 x 8	8 x 10	8 x 10	10 x 12
RAMP WORK AHEAD	C23(CA)	6F.18	36 x 36	48 x 48	48 x 48	
ROAD (STREET) WORK Informational plaque	C23B(CA)	6F.18	Var x 18	Var x 24	Var x 24	
SHOULDER WORK AHEAD	C24(CA)	6F.37	30 x 30	48 x 48	48 x 48	
OPEN TRENCH	C27(CA)	6F.103(CA)	36 x 36	48 x 48	48 x 48	
XXXX FT	C29(CA)	6F.53	20 x 7	36 x 9	36 x 9	
LANE CLOSED	C30(CA)	6F.22	30 x 30	48 x 48	48 x 48	
SHOULDER CLOSED	C30A(CA)	6F.37	30 x 30	48 x 48	48 x 48	
NO SHOULDER	C31A(CA)	6F.44, 6F.103(CA)	36 x 36	48 x 48	48 x 48	
TRAFFIC CONTROL - WAIT AND FOLLOW PILOT CAR	C37(CA)	6F.58	36 x 42	36 x 42		
USE NEXT EXIT	C38(CA)	6F.28		48 x 36	48 x 36	
TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	C40(CA)	6F.12	108 x 42	144 x 60	144 x 60	
TRAFFIC FINES DOUBLED IN WORK ZONES	C40A(CA)	6F.12	36 x 36	48 x 48	48 x 48	
FRESH CONCRETE	C40A(CA) C43(CA)	6F.107(CA)	36 x 36	40 x 40 48 x 48	40 x 40 48 x 48	
TRUCKS ENTERING EXITING	C43(CA)	6F.36	36 x 36			
RUMBLE STRIPS	C44(CA) C45(CA)	6F.87	36 x 36	48 x 48	48 x 48	
				48 x 48		
	C46(CA)	6F.45	36 x 36	48 x 48	48 x 48	
UNEVEN PAVEMENT plaque	C46P(CA)	6F.45	30 x 18	36 x 24	36 x 24	
Rebuilding California Sign	C48A(CA)	6F.109(CA)	48 x 30	132 x 78	132 x 78	
Clean California Signs	C49A(CA) & C49C(CA)	6F.109(CA)	48 x 30	132 x 78	132 x 78	
Bipartisan Infrastructure Law – Rebuilding CA Signs	C50A(CA) & C50B(CA)	6F.109(CA)	48 x 30	132 x 78	132 x 78	
Local Funds Only Sign MOVE OVER OR SLOW WHEN AMBER LIGHTS	C51(CA) R111(CA)	6F.109(CA) 6F.108(CA)	<mark>48 x 30</mark> 54 x 18	<mark>132 x 78</mark> 54 x 18	<mark>132 x 78</mark> 54 x 18	
FLASHING	. ,	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -				
PILOT CAR DO NOT PASS	R115(CA)	6F.58	36 x 18	36 x 18		
DETOUR with Arrow	SC3(CA)	6F.59	36 x 12	48 x 18	48 x 18	
SPECIAL EVENT AHEAD	SC5(CA)	6F.18	36 x 36	48 x 48	48 x 48	
RAMP CLOSED (Not more than one day)	SC6-3(CA)	6F.28	48 x 48	48 x 48	48 x 48	
RAMP CLOSED (More than one day)	SC6-4(CA)	6F.28	48 x 60	48 x 60	48 x 60	
Day/Month plaque	SC6A(CA)	6F.28	12 x 6	12 x 6	12 x 6	
Daymonul plaque			12.8.0	-		
Time plaque	SC6B(CA)	6F.28	6 x 6	6 x 6	6 x 6	
Time plaque RAMP CLOSED,	SC6B(CA)	6F.28	6 x 6	6 x 6	6 x 6	
Time plaque RAMP CLOSED, USE RAMP AT	SC6B(CA) SC7(CA)	6F.28 6F.28	6 x 6	6 x 6 84 x 42	6 x 6 84 x 42	
Time plaque RAMP CLOSED, USE RAMP AT EXIT - RAMP CLOSED	SC6B(CA) SC7(CA) SC8(CA)	6F.28 6F.28 6F.28	6 x 6 84 x 42 	6 x 6 84 x 42 84 x 42	6 x 6 84 x 42 84 x 42	
Time plaque RAMP CLOSED, USE RAMP AT EXIT - RAMP CLOSED (FWY) DETOUR with Arrow	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)	6F.28 6F.28 6F.28 6F.59	6 x 6 84 x 42  36 x 36	6 x 6 84 x 42 84 x 42 48 x 48	6 x 6 84 x 42 84 x 42 48 x 48	
Time plaque RAMP CLOSED, USE RAMP AT EXIT - RAMP CLOSED (FWY) DETOUR with Arrow LANE CLOSED AHEAD or ROAD WORK AHEAD	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)           SC9(CA)           SC10(CA)	6F.28 6F.28 6F.28 6F.59 6F.104(CA)	6 x 6 84 x 42  36 x 36 48 x 30	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36	
Time plaque RAMP CLOSED, USE RAMP AT EXIT - RAMP CLOSED (FWY) DETOUR with Arrow LANE CLOSED AHEAD or ROAD WORK AHEAD LANE CLOSED	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)           SC10(CA)           SC11(CA)           SC13(CA)	6F.28 6F.28 6F.28 6F.59 6F.104(CA) 6F.104(CA)	6 x 6 84 x 42  36 x 36 48 x 30 42 x 30 42 x 30	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42 54 x 42	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42 54 x 42	  
Time plaque RAMP CLOSED, USE RAMP AT EXIT - RAMP CLOSED (FWY) DETOUR with Arrow LANE CLOSED AHEAD or ROAD WORK AHEAD LANE CLOSED DO NOT PASS	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)           SC10(CA)           SC11(CA)           SC13(CA)           SC15(CA)	6F.28 6F.28 6F.59 6F.104(CA) 6F.104(CA) 6F.104(CA)	6 x 6 84 x 42  36 x 36 48 x 30 42 x 30	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 24	  
Time plaque RAMP CLOSED, USE RAMP ATEXIT - RAMP CLOSED (FWY) DETOUR with Arrow LANE CLOSED AHEAD or ROAD WORK AHEAD LANE CLOSED DO NOT PASS CAUTION EXIT with Arrow	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)           SC10(CA)           SC11(CA)           SC13(CA)           SC15(CA)           SC18(CA)	6F.28 6F.28 6F.59 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.28	6 x 6 84 x 42  36 x 36 48 x 30 42 x 30 42 x 30 42 x 18 	6 x 6 84 x 42 48 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 42 54 x 24 48 x 48	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 42 54 x 24 48 x 48	     
Time plaque RAMP CLOSED, USE RAMP ATEXIT - RAMP CLOSED (FWY) DETOUR with Arrow LANE CLOSED AHEAD or ROAD WORK AHEAD LANE CLOSED DO NOT PASS CAUTION EXIT with Arrow Slow For The Cone Zone	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)           SC10(CA)           SC11(CA)           SC13(CA)           SC15(CA)           SC18(CA)           SC19(CA)	6F.28 6F.28 6F.28 6F.59 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.28 6F.106(CA)	6 x 6 84 x 42  36 x 36 48 x 30 42 x 30 42 x 30 42 x 18  54 x 36	6 x 6 84 x 42 48 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 42 54 x 24 48 x 48 54 x 36	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 24 48 x 48 54 x 36	  
Time plaque RAMP CLOSED, USE RAMP ATEXIT - RAMP CLOSED (FWY) DETOUR with Arrow LANE CLOSED AHEAD or ROAD WORK AHEAD LANE CLOSED DO NOT PASS CAUTION EXIT with Arrow Slow For The Cone Zone SLOW FOR THE CONE ZONE CAUTION FREQUENT STOPPING AND BACKING	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)           SC10(CA)           SC11(CA)           SC13(CA)           SC15(CA)           SC18(CA)	6F.28 6F.28 6F.59 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.28	6 x 6 84 x 42  36 x 36 48 x 30 42 x 30 42 x 30 42 x 18 	6 x 6 84 x 42 48 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 42 54 x 24 48 x 48	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 42 54 x 24 48 x 48	     
Time plaque RAMP CLOSED, USE RAMP ATEXIT - RAMP CLOSED (FWY) DETOUR with Arrow LANE CLOSED AHEAD or ROAD WORK AHEAD LANE CLOSED DO NOT PASS CAUTION EXIT with Arrow Slow For The Cone Zone SLOW FOR THE CONE ZONE	SC6B(CA)           SC7(CA)           SC8(CA)           SC9(CA)           SC10(CA)           SC11(CA)           SC13(CA)           SC15(CA)           SC18(CA)           SC19(CA)           SC15(CA)           SC18(CA)           SC19(CA)	6F.28 6F.28 6F.59 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.104(CA) 6F.28 6F.106(CA) 6F.106(CA)	6 x 6 84 x 42  36 x 36 48 x 30 42 x 30 42 x 30 42 x 18  54 x 36 42 x 36	6 x 6 84 x 42 88 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 42 54 x 24 48 x 48 54 x 36 54 x 48	6 x 6 84 x 42 84 x 42 48 x 48 66 x 36 54 x 42 54 x 42 54 x 42 54 x 24 48 x 48 54 x 36 54 x 48	    114 x 78 