



Meeting Date: November 03, 2022 Item Number: 22-11	From: John Bamfield, PE, Caltrans
Sponsored By: Yue Wang, PE, Caltrans	<b>Presented By:</b> John Bamfield, PE, Caltrans
<b>Description:</b> Revision to California Manual on Uniform Traffic Control Devices (CA MUTCD) Section 6F.64 to address the inclusion of additional	

retroreflective bands on cones equaling 36" in height.

## Recommendation:

Motion by committee to recommend inclusion of the proposed changes to the CA MUTCD Section 6F.64 "Cones" to address inclusion of additional retroreflective bands on cones equaling 36" in height.

# Agency Making Request/Sponsor:

Caltrans

# Background:

As typical temporary channelizing traffic control devices get larger, the development of 36" cones increase visibility and safety for field workers. The current text of the CA MUTCD does not include the 36" cone for the additional reflective banding to increase the visibility of the cones increased height. The suggested change is to allow the additional reflective banding on cones that are equal to 36" in height.

# Attachments:

Attachment – Proposed Revision to CA MUTCD Section 6F.64.





# ATTACHMENT





## Attachment – Proposed Revision to CA MUTCD Section 6F.64.

### Proposal:

Note:

Black text is unedited National MUTCD text adopted for use in current CA MUTCD. Black strikethrough text is National MUTCD text that is not applicable in California as shown in current CA MUTCD.

Blue text is California text additions adopted for use in current CA MUTCD.

Red strikethrough text is text that is proposed to be deleted from the current CA MUTCD by this proposal.

Red text is text that is proposed to be included in the current CA MUTCD by this proposal.

## Revise Section 6F.64 as shown

Section 6F.64 Cones

#### Standard:

<sup>01</sup> Cones (see Figure 6F-7) shall be predominantly orange and shall be made of a material that can be struck without causing damage to the impacting vehicle. For daytime and low-speed roadways, cones shall be not less than 18 inches in height. When cones are used on freeways and other high-speed highways or at night on all highways, or when more conspicuous guidance is needed, cones shall be a minimum of 28 inches in height.

<sup>02</sup> For nighttime use, cones shall be retroreflectorized or equipped with lighting devices for maximum visibility. Retroreflectorization of cones that are 28 to 36 inches in height shall be provided by a 6-inch wide white band located 3 to 4 inches from the top of the cone and an additional 4-inch wide white band located approximately 2 inches below the 6-inch band.

<sup>03</sup> Retroreflectorization of cones that are more than 36 inches in height shall be provided by horizontal, circumferential, alternating orange and white retroreflective stripes that are 4 to 6 inches wide. Each cone shall have a minimum of two orange and two white stripes with the top stripe being orange. Any nonretroreflective spaces between the orange and white stripes shall not exceed 3 inches in width. Option:

Cones that equal 36 inches in height may be provided with either a 6-inch wide white band located 3 to 4 inches from the top of the cone and an additional 4-inch wide white band located approximately 2 inches below the 6-inch band or alternating orange and white retroreflective stripes that are 4 to 6 inches wide.

#### Standard:

Each cone provided with alternating orange and white stripes shall have a minimum of two orange and two white stripes with the top stripe being orange.

#### Support:

<sup>03a</sup> The 36 inch and 42 inch high cones provide additional conspicuity in visually complex environments and for older road users.

#### Option:

<sup>04</sup> Traffic cones may be used to channelize road users, divide opposing vehicular traffic lanes, divide lanes when two or more lanes are kept open in the same direction, and delineate short duration maintenance and utility work. *Guidance:* 

05 Steps should be taken to minimize the possibility of cones being blown over or displaced by wind or moving vehicular traffic.





Option:

<sup>06</sup>Cones may be doubled up to increase their weight.

Support:

<sup>07</sup>Some cones are constructed with bases that can be filled with ballast. Others have specially weighted bases, or weight such as sandbag rings that can be dropped over the cones and onto the base to provide added stability. *Guidance:* 

08 Ballast should be kept to the minimum amount needed.

Option:

<sup>09</sup> Retroreflectorization of 28 inch in height or higher cones may be provided by a 13 inch band (sleeve).

## Standard:

10 On State highways, the retroreflectorized bands shall be visible at 1000 feet at night under illumination of legal high beam headlights, by persons with vision of or corrected to 20/20. *Guidance:* 

<sup>11</sup> On local roads, the retroreflectorized bands should be visible at 1000 feet at night under illumination of legal high beam headlights, by persons with vision of or corrected to 20/20. Support:

<sup>12</sup> Refer to Caltrans' Standard Specifications Section 12-3.01A(4) for visibility criteria cited. See Section 1A.11 for information regarding this publication.