



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

1200 New Jersey Ave., SE  
Washington, D.C. 20590

MAR 28 2016

In Reply Refer To:  
HOTO-1

Ms. Amy Branstetter  
Traffic Engineer III  
Department of Public Works Engineering  
Douglas County  
100 Third Street  
Castle Rock, CO 80104

Dear Ms. Branstetter:

Thank you for your October 20 letter requesting an official interpretation as to whether the rectangular rapid flashing beacon (RRFB) units may alternatively be placed above a post-mounted crossing warning sign instead of below the sign as required by Condition 4d of the Interim Approval 11 memorandum dated July 16, 2008.

You mentioned that you were prompted to request this official interpretation based on results of a research study recently completed by the Texas A&M Transportation Institute (TTI) regarding the optimal placement of the RRFB units. Your county was one of the four local agencies that participated in the open road portion of the TTI research study. The other local agencies were the Cities of Aurora, IL; Marshall, TX; and Phoenix, AZ. Other portions of the study were conducted at an off-road closed course that is located near the Texas A&M campus in College Station, TX.

You also mention that your request is based on your concern that the intensity of and glare from the RRFB indications might make it more difficult for drivers to see pedestrians, especially during nighttime conditions, when the RRFB units are placed in the required position below the sign.

The TTI research study, which can be accessed at <http://trid.trb.org/view.aspx?id=1392392>, found in the open road portion of the study that the position of the RRFB (either above or below the sign) does not affect a driver's decision to yield. The closed course portion of the study identified benefits such as lower discomfort for the approaching driver and an improved ability to detect pedestrians.

Based on the results of the research study, it is the FHWA's official interpretation that any new RRFB units that are installed under the terms of Interim Approval 11 may be placed either above or below the crossing warning sign. Existing RRFB units that are placed below the crossing warning sign may be retained in their current position or may be relocated to be above the sign.

For recordkeeping purposes, we have assigned the following official ruling number and title: "4(09)-58 (I) – Placement of RRFB Units above Sign." Please refer to this number and title in any future correspondence regarding this topic.

Thank you for your interest in improving the clarity of the provisions contained in the MUTCD.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Mark R. Kehrl", with a large, stylized initial "M" and a period at the end.

Mark R. Kehrl  
Director, Office of Transportation  
Operations