

August 25, 2008

In Reply Refer To: HOTO-1

David C. Woodin, P.E., PTOE Director, Office of Traffic Safety and Mobility New York State Department of Transportation 50 Wolf Road Albany, NY 12232

Dear Mr. Woodin:

Thank you for your August 21 letter requesting an official interpretation of the 2003 Manual on Uniform Traffic Control Devices (MUTCD) regarding the use of channelizing lines. Specifically, you have referred to text about channelizing lines in MUTCD Sections 3G.01 and 3B.05 and asked for clarification on where the use of channelizing lines is optional, recommended, or mandatory.

Section 1A.13 "Definitions of Words and Phrases in This Manual" contains the following two pertinent definitions:

- Channelizing Line Marking—a wide or double solid white line used to form islands where traffic in the same direction of travel is permitted on both sides of the island.
- Island—a defined area between traffic lanes for control of vehicular movements or for pedestrian refuge. It includes all end protection and approach treatments. Within an intersection area, a median or an outer separation is considered to be an island.

Chapter 3G of the MUTCD addresses the characteristics of islands for traffic control purposes. The Option statement in Section 3G.01 states: "An island may be designated by pavement markings, channelizing devices, curbs, pavement edges, or other devices." This text is intended to indicate that there are several different ways that an island can be formed in order to perform a traffic control purpose. It indicates that an island need not be formed by physical roadway features, such as curbs or pavement edges, but can also be formed by pavement markings (such as edge lines or channelizing lines) or by channelizing devices (such as tubular markers or traffic cones, as per Chapter 3F.) Thus, the Option in Section 3G.01 makes the use of channelizing lines optional as one of the several ways to form an island.

Section 3B.05 is concerned with "other" white longitudinal pavement markings; i.e., white longitudinal lines other than lane lines (which are covered in Section 3B.04) and edge lines (which are covered in Section 3B.06.) This section discusses the use of channelizing lines and



contains text that makes the use of channelizing lines optional, recommended, or mandatory, depending on the type of island and where the island is located:

- "Option: Channelizing lines may be used to form channelizing islands where traffic traveling in the same direction is permitted on both sides of the island." This text, taken in context with that of Section 3G.01, allows an island to be formed with channelizing lines but only when traffic on both sides of the island are traveling in the same direction. This is because channelizing lines must be white and white longitudinal lines can only be used to separate traffic flows in the same direction. Thus, if an island separates traffic flows in opposite directions, channelizing lines cannot be used to form the island.
- "Standard: For exit ramps, channelizing lines shall be placed along the sides of the neutral area adjacent to the through traffic lane and the ramp lane." This text requires the placement of white channelizing lines to form the triangular neutral area between the theoretical gore point and the physical gore of <u>all</u> exit ramps (as shown in Figure 3B-8.) The reason for this requirement is the need for the additional conspicuity and emphasis the wide white lines provide for the area separating diverging flows under the high speed conditions of freeway or expressway traffic.
- "Guidance: For entrance ramps, a channelizing line should be placed along the side of the neutral area adjacent to the ramp lane." This text <u>recommends</u> the placement of white channelizing lines to form the triangular neutral area between the physical gore and the theoretical gore point of entrance ramps (as shown in Figure 3B-9.) This recommendation is based on similar issues of high speed traffic at entrance ramps.

The neutral area at the gore of a freeway or expressway exit or entrance ramp is an island under the Section 1A.13 definition of that term and the text in Section 3G.01. However, the exit or entrance ramp neutral area is just one of the several forms or types of islands, such as a physical or painted island for a right turn movement within an intersection on a conventional road (as shown in Figure 3B-11, drawing "d"), a median island at an intersection, and other island applications.

In consideration of the text of the applicable sections of the 2003 MUTCD, it is our official interpretation that for the specific case of islands formed by pavement markings at the gore of a freeway or expressway exit or entrance ramp, the Standard and Guidance language of Section 3B.05 takes precedence over the more general Option statements in Section 3G.01 and 3B.05. Thus, channelizing lines are required at all exit ramp gores and are recommended at entrance ramp gores. At locations other than freeway or expressway exit and entrance ramps, channelizing lines are optional and may be used for the formation or emphasis of islands where a need is determined by engineering judgment, but only if the island separates traffic flows in the same direction.

Please note that we have assigned your request the following official interpretation number and title: "3-223(I)—Channelizing Lines." Please refer to this number in any future correspondence. If you have any questions, please contact Mr. Scott Wainwright of our staff by e-mail at <a href="mailto:scott.wainwright@dot.gov">scott.wainwright@dot.gov</a> or by telephone at 202-366-0857.

Sincerely yours,

Robert Arnold

Director, Office of Transportation

Operations

FHWA:HOTO-1:SWainwright:ds:60857:8-22-08

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