

February 19, 2003

Refer to: HOTO-1

Mr. Christopher W. Faulk  
City of Omaha Public Works Department  
Traffic Engineering  
1819 Farnam Street, Suite 603  
Omaha, NE 68183

Dear Mr. Faulk:

Thank you for your recent email communications with Mr. Scott Wainwright of this office, requesting an Official Interpretation regarding Section 4D.10 of the Manual on Uniform Traffic Control Devices (MUTCD.)

You indicated that you are designing a signal for a T-intersection. Only right turns are to be allowed from the stem of the T (minor road) onto the major road, and there will be no pedestrian crossings across the major road. You intend to provide a protected-permissive left-turn (PPLT) phase for the left-turn movement into the minor road from the major road. The sequence would be such that the parallel through movement on the major road would have no conflicting traffic at any time in the cycle, so you would provide that movement with two single-section signal faces, each consisting of a continuously illuminated vertical green arrow. There would be a five-section signal face for the major road left-turn lane, consisting of circular red, circular yellow, circular green, yellow arrow, and green arrow lenses. The circular red and circular yellow indications in that signal face would never be illuminated except in emergency flashing operation.

In your e-mail exchange with Mr. Wainwright, it was clarified that the PPLT operation and display you are providing would be considered a "shared" left-turn signal face, rather than a "separate" left-turn signal face, for the purposes of Section 4D.06, item C in the Standard statement on pages 4D-9 through 4D-11. The "separate" left-turn signal face is intended to specifically describe requirements for the PPLT display in what is commonly referred to as "Dallas Phasing," which is a special phasing sequence and display in which a separate left-turn signal face displays a circular green while the adjacent through signals display circular red. In the proposed Revision No. 2 of the MUTCD, the Federal Highway Administration has proposed new definitions of terms and additional text to clarify this particular issue.

You have asked for an interpretation of whether the use of continuously-illuminated vertical green arrow indications rather than circular indications for the adjacent through lanes affects the requirements of Section 4D.06 item C, specifically pertaining to the requirements for shared signal faces as stated in the top half of page 4D-10. The language there that is of concern includes:

- "During the permissive left-turn movement, all signal faces on the approach shall display CIRCULAR GREEN signal indications."
- "All signal faces on the approach shall simultaneously display the same color of circular signal indications to both through and left-turn road users."

The above-cited language in the MUTCD was based on an assumption of more typical intersection operations in which circular indications, rather than a continuously-illuminated vertical green arrow indication, would be displayed to the through movement. As such, the language did not take into account the possibility of continuously-illuminated vertical green arrow indications for the through movement, which is a perfectly valid display under the situation anticipated at the Omaha intersection in question. Therefore, it is our interpretation that, for the situation you described, the continuously-illuminated vertical green arrow display for the through movement does not violate the intent of Section 4D.06, specifically the language cited above. In a future rulemaking, we will propose revisions to the text of Section 4D.06 to clarify this allowable use of continuously-illuminated vertical green arrows for the through movement, under appropriate conditions, in a PPLT operation.

If you have any questions, please call Mr. Scott Wainwright at 202-366-0857. Please note that we have assigned your request the following official interpretation number and title: "4-255 (I)—Omaha Continuous Green Arrow." Please refer to this number in any future correspondence.

Sincerely yours,

/s/ Shelley Row

Shelley J. Row, P.E.  
Director, Office of Transportation  
Operations