

February 26, 2003

Refer to: HOTO-1

Mr. David C. Krauth
Principal Traffic Engineer
City of Colorado Springs
P.O. Box 1575, Mail Code 450
Colorado Springs, CO 80901-1575

Dear Mr. Krauth:

Thank you for your January 30 letter requesting experimentation with yellow-green pavement markings for several school zone crossings. You have our approval to begin installing the marking material. This experimentation is approved for a maximum of 3 years.

We have received several inquiries on experimentation with the yellow-green pavement marking materials. We are working with the research staff at the Federal Highway Administration's (FHWA) Turner Fairbank Highway Research Center in developing guidance for an effective evaluation plan and data gathering for experimentation with yellow-green crosswalks. The following is a non-exclusive list of data that we recommend be collected for both before and after conditions.

- Vehicle speeds
- Vehicle volumes
- Pedestrian volumes
- Driver behavior (on-set of braking, yielding, etc.)
- Pedestrian behavior (when there is no crossing guard)
- Weather conditions
- Time of day
- Time of year

As soon as more detailed guidance regarding the required evaluation plan is available, we will send it to you along with a sample data collection form. Please note that it is not critical that your "after" data collection take place immediately after installation. Starting the collection of that data several months later would be acceptable and may even be preferred, since the novelty effect may wear off and it would also allow for some weathering of the material.

We believe there is a need to contrast the fluorescent yellow-green markings with white markings. The reason for this recommendation is both for daytime visibility, where the fluorescent yellow-green can lose contrast in dirty areas; and nighttime where the fluorescent color would not be as bright. All other jurisdictions for which we have granted experimentation approval for these markings have agreed to use yellow-green markings that supplement rather

than fully replace the white markings. However, we are willing to allow your proposed experimentation at a few sites with a pattern using only 24-inch wide yellow-green bars, as a part of your comprehensive experimentation plan to evaluate four different marking patterns (the other three of which include both white and yellow-green.)

We also recommend including one or more control sites with just the standard white crosswalks at comparable school (elementary, middle, or high school) crossing locations. It is recommended that the white markings at the control sites and the contrasting yellow-green markings at the evaluation sites be installed at the same time. The same before and after data would also be collected at the control sites. If crossing guards are used, then they should be used at both the experimentation sites and the control sites.

Also, please note that you must agree to terminate the experimentation at any time it is determined significant safety concerns are directly or indirectly attributable to the experimentation. In addition, the FHWA has the authority to terminate this experimentation at any time there is an indication of safety concerns.

For reference purposes, we have assigned your request the following official experimentation number and title: "7-55(E)–Colorado Springs Yellow-Green Pavement Markings for School Zone Crossings." Please refer to this number in future correspondence.

Thank you for your interest in improving the safety of school crosswalks. If you have any questions, please call Mr. Scott Wainwright at 202-366-0857.

Sincerely yours,

/s/

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