

Wisconsin Department of Transportation

Division of Transportation Infrastructure Development

Bureau of Highway Operations 4802 Sheboygan Avenue, Room 501 P.O. Box 7986 Madison, WI 53707-7986

April 10, 2003

Federal Highway Administration Office of Transportation Operations 400 Seventh Street SW, HOTO Washington, DC 20590

To Whom It May Concern:

The Wisconsin Department of Transportation requests permission to experiment with Remote Control Flagman, a trailer-mounted device to substitute for a flagperson, manufactured by R.C. Flagman Inc. of Welland, Ontario, Canada. Our proposed experiment is as follows:

- A. Remote Control Flagman devices would substitute for flagpersons at a construction project equipment crossing. Use of the Remote Control Flagman would reduce the exposure of flagpersons to moving vehicular traffic at the work site.
- B. The remote flagman consists of a 2-section signal head (12-inch red and 12-inch yellow) mounted vertically on a trailer. The device would be deployed at each end of the work site only at times and locations that flagpersons would normally be used. An operator would control the signal indications remotely. Flashing yellow would be displayed when traffic is allowed to proceed. To stop traffic, the flashing yellow would change to steady yellow for a preset 4-second time period, then to a steady red indication. Several seconds after the red is displayed, a gate arm with fluorescent orange and white retroreflective sheeting would be lowered across the traffic lane. The operator would be stationed near the equipment crossing away from moving vehicular traffic. The operator would have a view of traffic from both directions and of indicator lights on the backside of each remote flagman unit that confirm the signal indications being displayed. If a vehicle driver failed to comply with a red signal, the operator would warn the equipment operator prior to crossing the roadway. In the event of a malfunction, the work crew would have standard Stop/Slow paddles on hand to control traffic with typical flagging methods.
- C. Temporary traffic control at the site would be according to MUTCD Figure 6H- 13, except the flaggers would be replaced by the remote flagman devices, and the Flagger advance warning signs would be replaced by orange Signal Ahead signs. The proposed devices would be delineated by cones or drums.
- D. The device was developed with the cooperation of the Ontario Ministry of Transportation in response to several flagger accidents. It has been used for several years in Ontario and underwent considerable evaluation by Ohio DOT, resulting in good response from motorists and workers.

- E. I understand the manufacturer has submitted a MUTCD release form to FHWA indicating the device is not protected by a patent or copyright.
- F. The proposed device would be deployed in May 2003 and continue in use until November 2003. The location for the experiment is the US Highway 12 construction project equipment crossing of Airport Road in Middleton, Wisconsin. Speed limit on the roadway is 35 miles per hour.
- G. Evaluation plan would include site observations of device operation and motorist compliance, a record of malfunctions as reported by the work crew, a study of vehicle speeds with flashing yellow signal compared to flagger "Slow" paddle, and any other comments from the work crew.
- H. Following the experimental time period, the site of the experiment will be restored to a condition that complies with the MUTCD unless a request is made to change the MUTCD to permit the device. The experiment will be terminated at any time there are adverse safety concerns.
- I. A progress report mid-way through the experiment will be provided to FHWA's Office of Transportation Operations. Final results will be provided within 3 months following completion of the experiment.

Thank you for your consideration of this proposed experiment.

Sincerely,

David I. Vieth, Director Bureau of Highway Operations

Devr Out

Cc: William Bremer, FHWA - Wisconsin Division
Peter Rusch, FHWA - Midwest Resource Center
David Huntley, WisDOT District 1
Curt Neuhauser, WisDOT District I
flank Simon, City of Middleton