

**Minnesota Department of Transportation****Office of Traffic Engineering**

Mail Stop 725, 2<sup>nd</sup> Floor  
395 John Ireland Blvd.  
St. Paul, MN 55155-1899

*Ernie/Fred Ranch*

December 10, 2001

Shelley J. Row, P.E.  
Director, Office of Transportation Operations  
FHWA (HOTO-1)  
400 7<sup>th</sup> Street SW  
Washington, D.C. 20590

In Reply Refer to: Roundabout Warning Sign  
Request to Experiment

Dear Ms. Row:

The Minnesota Department of Transportation requests to experiment with an advance warning sign design for roundabouts. In accordance with Section 1A.10 of the 2000 MUTCD, I offer the following for your consideration:

1. The first roundabouts scheduled for construction next year in Minnesota are at two interstate ramp terminals. In reviewing Section 2C.34, we do not feel that the roundabout warning symbol sign (Sign W2-6) adequately indicates the direction of traffic movement on the roundabout, especially to unfamiliar motorists.
2. Mn/DOT proposes to use a modified sign design that includes an arrow head to warn motorists approaching the roundabout. The December 28, 2000 Federal Register stated that three states had commented in favor of a different symbol (from the one proposed by the NCUTCD) that was similar to the roundabout symbol used in Europe. However, the register stated "...the FHWA believes it is important to take advantage of this opportunity to include a sign in the MUTCD for circular intersections. Until further research can be done on another symbol, the FHWA plans to include the symbol submitted by the NCUTCD...". We feel that our design will clearly indicate to motorists their direction of travel as they approach a roundabout.
3. Attached is a copy of our proposed sign design.
4. In the development of our modified sign design, we chose a design similar to the design depicted in the advance flyer of ROUNDABOUTS: AN INFORMATIONAL GUIDE published by the US DOT FHWA (copy attached). Although this sign design has not been used and since this will be motorists' first exposure to roundabouts on state highways in Minnesota, we feel that our proposed advance warning sign design more explicitly conveys how the upcoming roundabout affects their driving movement. Since motorists in Minnesota

An equal opportunity employer

- are used to turning left or right at intersections, our proposed design will indicate in advance of the intersection which direction they are required to turn to negotiate the roundabout.
5. This proposed sign design is not protected by a patent or copyright.
  6. The proposed locations for this sign are on the exit ramps on I-35 at Exit 48 north of Owatonna, Minnesota. This is a diamond interchange which will have both ramp terminals reconstructed to a roundabout design. Mn/DOT intends to fabricate and install these advance warning signs with state forces.
  7. Mn/DOT forces will monitor these roundabouts once they are constructed and permanent signing has been installed. The time period for experimentation will be for two years from the date of field installation of the proposed advance warning signs. During this time, we will have our maintenance forces periodically check the signs to make sure they are properly maintained. In addition, Mn/DOT will log any phone calls received regarding these two sign installations. Since Mn/DOT has a maintenance office within 5 miles of this interchange, our state forces can respond immediately to any problems arising regarding these signs. No before studies will be done since we are proposing to install this modified advance warning sign when the roundabouts initially open to traffic. If we determine that this advance warning sign is ineffective in any way (through contact with state patrol or responses from motorists), we will either replace or supplement this sign with appropriate signing to ensure motorists' safety. If these signs prove to be effective during the evaluation period and do not create any safety hazards, we will request that the 2000 MUTCD and MnMUTCD be changed to include this warning sign as an optional method to provide road users with advance warning of a roundabout intersection.
  8. Mn/DOT will comply with the terms specified in Section 1A.10, 3<sup>rd</sup> Guidance, Item H (Page 1A-9).
  9. Mn/DOT will provide a report semiannually, and a final report at the end of the two year experimentation period to Dave Kopacz, FHWA Division Office in St. Paul, Minnesota, who will forward this report on to the FHWA's Office of Transportation Operations. This report will include a summary of any phone calls and comments received by Mn/DOT, as well as any maintenance activities required on these signs.

If you have any questions about this experiment, please contact Terry Ward, Mn/DOT Rochester District Traffic Engineer, at 507-280-5035.

Sincerely,



Gary Thompson  
State Traffic Engineer

Enclosures

cc: Michael Spielmann  
Micheal Weiss  
Terry Ward  
Dave Kopacz, FHWA

APPROVED	SIZE	36 X 36	48 X 48
		DIMENSION	
	RADIUS	2.25	3
	MARGIN	.63	.75
DATE OF REV.	BORDER	.88	1.25
	a	11.5	16
	b	8.1	11.2
	c	1	1
	d	18	24.5
	e	1.7	2.4
ROUNDABOUT	f	.63	.88
	g	7	9.4
	h	4	5.4
	i	.6	.6
	j	11	15
	k	5	7
	l		
	m		
	n		
	o		
	p		
	q		
	r		
s			
t			
u			
SIGN NUMBER	v		
	w		
	x		
	y		
	z		

