In Reply Refer To:  
WZ-316

Glenda Bleau  
MDI Traffic Control Products  
38271 W Twelve Mile Road  
Farmington Hills, Michigan 48331

Dear Ms. Bleau:

This letter is in response to your request for the Federal Highway Administration (FHWA) to review a roadside safety system for eligibility for reimbursement under the Federal-aid highway program.

Name of system: MDI 4812KC-60 Sign Stand  
Type of system: X-Footprint portable sign stand  
Test Level: NCHRP Report 350 Test Level 3  
Testing conducted by: N/A  
Date of request: April 13, 2012

**Decision**

The following device is eligible, with details provided in the form which is attached as an integral part of this letter:

- MDI 4812KC-60 X-footprint portable Sign Stand

Based on a review of a comparison of the subject portable sign stand to prior crash test results detailed in FHWA Letters WZ-69 and WZ-164 submitted by the manufacturer certifying the device described herein meets the crash test and evaluation criteria of the National Cooperative Highway Research Program (NCHRP) Report 350, the device is eligible for reimbursement under the Federal-aid highway program. Eligibility for reimbursement under the Federal-aid highway program does not establish approval or endorsement by the FHWA for any particular purpose or use.

The FHWA, the Department of Transportation, and the United States Government do not endorse products or services and the issuance of a reimbursement eligibility letter is not an endorsement of any product or service.
Requirements
To be found eligible for Federal-aid funding, roadside safety devices should meet the crash test and evaluation criteria contained in the National Cooperative Highway Research Program (NCHRP) Report 350 or the American Association of State Highway and Transportation Officials’ Manual for Assessing Safety Hardware (MASH).

Description
The device and supporting documentation are described in the attached form. The 4812KC-60 has a smaller base and the diameter of the upright is smaller than the 4815RBK-60 sign stand detailed in FHWA letter WZ-164, dated November 7, 2003. The 4812KC-60 has a smaller base, diameter of the upright is smaller than the 4860K sign stand detailed in FHWA letter WZ-69 dated May 9, 2001. The 4812KC-60 only holds roll-up signs.

Summary and Standard Provisions
Therefore, the system described and detailed in the attached form is eligible for reimbursement and may be installed under the range of conditions tested.

Please note the following standard provisions that apply to FHWA eligibility letters:

- This finding of eligibility does not cover other structural features of the systems, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may influence system conformance with NCHRP Report 350 criteria will require a new reimbursement eligibility letter.
- Should the FHWA discover that the qualification testing was flawed, that in-service performance reveals safety problems, or that the system is significantly different from the version that was crash tested, we reserve the right to modify or revoke this letter.
- You are expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You are expected to certify to potential users that the hardware furnished has the same chemistry, mechanical properties, and geometry as that submitted for review, and that it will meet the crash test and evaluation criteria of the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of eligibility is designated as number WZ-316 and shall not be reproduced except in full. This letter and the test documentation upon which it is based are public information. All such letters and documentation may be reviewed at our office upon request.
- This letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented system for which the applicant is not the patent holder. The FHWA does not become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.
The MDI sign stands are patented products and considered proprietary. If proprietary systems are specified by a highway agency for use on Federal-aid projects: (a) they must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with the existing highway facilities or that no equally suitable alternative exists; or (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411.

Sincerely yours,

Michael S. Griffith
Director, Office of Safety Technologies
Office of Safety

Enclosures
Glenda Bleau  
MDI Traffic Control Products  
38271 W Twelve Mile Road  
Farmington Hills, Michigan 48331

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Sincerely yours,

[Signature]

Michael S. Griffith
Director, Office of Safety Technologies
Office of Safety

Enclosures
VINYL FLAGS
3/4 OAL. HARDWOOD DOWELS: 30" LONG
LIGHT FLASHER
DETZ 670 6 VOLT BARRICADE LIGHT WITH BATTERIES BLINKING OR STEADY BURN 3" POLYCARBONATE LENS WEIGHT: JS 649

48x48x0.080 ALUMINUM SIGN
BREAKAWAY SECTION
HHCS 3/8-16x2-1/2 BOLTS
(2) COIL SPRINGS

123" 51"

ROAD WORK AHEAD

4860 WEIGHT:
ALUMINUM SIGN ------ 18.5 LB
LIGHT FLASHER ------ 3.5 LB
SIGN STAND WITH RIGID SIGN BRACKETS ----- 47.7 LB
TOTAL -------------- 69.7 LB

FLAG LOCK STEEL BRACKET
LEGS CONNECTED WITH BOLTS 3/8-18x1-3/4
1.25 x 1.25" ALUMINUM TOP UPRIGHT
1.50 x 1.50" ALUMINUM BOTTOM UPRIGHT
MOLDED RUBBER LEG CAPS. RIVETED WITH (2) 3/16x1/2 ALUM. POP RIVETS
HRS STEEL BASE 3/16" AUTOPHORETIC COATED

MDI
DATE: 12/15/00
NAME: MODEL 4860
| **FEDERAL HIGHWAY ADMINISTRATION**  
| **OFFICE OF SAFETY DESIGN**  
| **Category 2 Work Zone Device Acceptance Letter** | **Letter Number**  
| **Date** |

**Contact Info**  
**Petitioner / Developer Name and Address:**  
MDI Traffic Control Products  
38271 W Twelve Mile Road  
Farmington Hills, MI 48331

I hereby certify that the device(s) covered by this Acceptance Letter meet(s) the crashworthiness test and evaluation requirements of the FHWA and NCHRP Report 350.

**Signature**  
[Signature]

**Telephone #**  
(248) 488-5704

**Email Address**  
qbleau@mdiwoldwide.com

**Laboratory / Engineer Name and Address**  
Christopher Larson  
37271 W Twelve Mile Road  
Farmington Hills, MI 48331

I hereby certify that the testing that supports this Acceptance Letter was conducted in accordance with NCHRP Report 350 guidelines, that the device(s) tested is/are accurately described on this form, and that the test results indicate that the device meets all applicable NCHRP Report 350 evaluation criteria.

I have evaluated the requested modifications to these devices previously found acceptable by the FHWA in Acceptance Letter WZ-316, and hereby certify that, in my opinion, the modifications do not adversely affect the crash performance of the devices. I also certify that these devices are accurately described on this form.

**Signature**  
[Signature]

**Telephone #**  
(248) 488-5701

**Email Address**  
clarsen@mdiwoldwide.com

**Keywords:**

- Type of Device (See page 3)  
- X-Footprint Sign Stand  
- Composition of Sign or Rail substrate (See Page 3)  
- Roll-up / Fabric (with fiberglass spreaders - aluminum or steel spreaders are not allowed)  
- Thickness of substrate (inches):  
- Height of sign from the ground (inches), if applicable: (See Page 3)  
- Tall: 60 to 71 inches above the pavement  
- Flags and or lights present during test? Indicate number of each:  
  - # of flags:  
  - # of lights:  
  - Weight of lights: ea.

**Device Name**  
**Detailed Desc. Of Device, Materials, sizes, Fasteners, Substrates Foundation, Aux. Features Ballast, etc.**  
(May be attached on separate page(s))  
See attached
**Mandatory Attachments**

- **Attachment #1**: Test data summary page(s)
  - Attach. #1a  Test #
  - Attach. #1b  Test #
  - Attach. #1c  Test #
  - Attach. #1d  Test #

**Alternative**

- **Attachment #1**: Description and discussion of modification(s) to crash tested and/or accepted device.

**Attachment #2**: PDF drawing(s) of device(s)

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4812KC-60
Schematic Drawing
Roll-up Sign

5/16" X 1.25" VERTICAL PULTRUSION

48"-SQ ROLL-UP SIGN w/SEWN POCKETS

3/16" X 1.25" HORIZONTAL PULTRUSION

BREAKAWAY SECTION

STEEL BASE

1.00"-SQ ALUMINUM
2ND UPRIGHT

HITCH PIN & SS CHAIN
FOR SIGN ATTACHMENT

1.25"-SQ ALUMINUM
1ST UPRIGHT

SPRING & PLUG ASM

1.25"-SQ ALUMINUM
1ST LEG

LEG CAP

1.00"-SQ ALUMINUM
2ND LEG

4812KC-60 Weight

Sign Stand 26 lbs.

Roll-up Sign w/aluminum tube 11 lbs.

Total 37 lbs.