



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

July 28, 2016

1200 New Jersey Ave., SE  
Washington, D.C. 20590

In Reply Refer To:  
HSST-1/ B-131A

Mr. Adrian Bullock  
Highway Care  
Callow Hill Business Park  
Ledbury, Herefordshire HR8 2PZ  
United Kingdom

Dear Mr. Bullock:

This letter is in response to your December 29, 2015 request for the Federal Highway Administration (FHWA) to review a roadside safety device, hardware, or system for eligibility for reimbursement under the Federal-aid highway program. This FHWA letter of eligibility is assigned FHWA control number B-131A and is valid until a subsequent letter is issued by FHWA that expressly references this device.

#### **Decision**

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

- BarrierGuard 800

#### **Scope of this Letter**

To be found eligible for Federal-aid funding, modified roadside safety devices should meet the crash test and evaluation criteria contained in the National Cooperative Highway Research Program (NCHRP) Report 350. However, the FHWA, the Department of Transportation, and the United States Government do not regulate the manufacture of roadside safety devices. Eligibility for reimbursement under the Federal-aid highway program does not establish approval, certification or endorsement of the device for any particular purpose or use.

This letter is not a determination by the FHWA, the Department of Transportation, or the United States Government that a vehicle crash involving the device will result in any particular outcome, nor is it a guarantee of the in-service performance of this device. Proper manufacturing, installation, and maintenance are required in order for this device to function as tested.

This finding of eligibility is limited to the crashworthiness of the system and does not cover other structural features, nor conformity with the Manual on Uniform Traffic Control Devices.

### **Eligibility for Reimbursement**

FHWA previously issued an eligibility letter for the roadside safety system described in your pending request. Your pending request now identifies a modification to that roadside safety system.

The original roadside safety device information is provided here:

Name of system: BarrierGuard 800  
Type of system: Longitudinal Barrier

Date of original request: November 9, 2004  
Date of original FHWA eligibility letter: November 30, 2004  
FHWA Control number: B-131

Date of original request: December 18, 2006  
Date of original FHWA eligibility letter: May 8, 2007  
FHWA Control number: B-158

Date of original request: December 18, 2006  
Date of original FHWA eligibility letter: May 8, 2007  
FHWA Control number: B-159

Date of original request: December 18, 2006  
Date of original FHWA eligibility letter: May 8, 2007  
FHWA Control number: B-160

The pending modification(s) consists of the following changes:

1. Change company name and address

FHWA concurs with the recommendation of the accredited crash testing laboratory as stated within the attached form.

### **Full Description of the Eligible Device**

The device and supporting documentation, including reports of the crash tests or other testing done, videos of any crash testing, and/or drawings of the device, are described in the attached form.

### **Notice**

If a manufacturer makes any modification to any of their roadside safety hardware that has an existing eligibility letter from FHWA, the manufacturer must notify FHWA of such modification with a request for continued eligibility for reimbursement. The notice of all modifications to a device must be accompanied by:

- Significant modifications – For these modifications, crash test results must be submitted with accompanying documentation and videos.
- Non-signification modifications – For these modifications, a statement from the crash test laboratory on the potential effect of the modification on the ability of the device to meet the relevant crash test criteria.

FHWA's determination of continued eligibility for the modified hardware will be based on whether the modified hardware will continue to meet the relevant crash test criteria.

You are expected to supply potential users with sufficient information on design, installation and maintenance 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 test and evaluation criteria of the NCHRP Report 350.

Issuance of this letter does not convey property rights of any sort or any exclusive privilege. This letter is based on the premise that information and reports submitted by you are accurate and correct. We reserve the right to modify or revoke this letter if: (1) there are any inaccuracies in the information submitted in support of your request for this letter, (2) the qualification testing was flawed, (3) in-service performance or other information reveals safety problems, (4) the system is significantly different from the version that was crash tested, or (5) any other information indicates that the letter was issued in error or otherwise does not reflect full and complete information about the crashworthiness of the system.

### **Standard Provisions**

- To prevent misunderstanding by others, this letter of eligibility designated as FHWA control number B-131A 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 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.
- If the subject device is a patented product it may be considered to be 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

Archived -  
For  
Research  
and  
Historical  
Purposes  
Only

## Request for Federal Aid Reimbursement Eligibility of Highway Safety Hardware

<b>Submitter</b>	Date of Request:	29th December 2015	<input type="radio"/> New <input checked="" type="radio"/> Resubmission
	Name:	Adrian Bullock	
	Company:	Highway Care	
	Address:	Callow Hill Business Park, Ledbury, Herefordshire HR8 2PZ	
	Country:	UK	
	To:	Michael S. Griffith, Director FHWA, Office of Safety Technologies	

I request the following devices be considered eligible for reimbursement under the Federal-aid highway program.

**Device & Testing Criterion - Enter from right to left starting with Test Level**

System Type	Submission Type	Device Name / Variant	Testing Criterion	Test Level
'B': Rigid/Semi-Rigid Barriers (Roadside, Median, Bridge Railings)	<input type="radio"/> Physical Crash Testing <input checked="" type="radio"/> Engineering Analysis	BarrierGuard800	NCHRP Report 350	TL4

By submitting this request for review and evaluation by the Federal Highway Administration, I certify that the product(s) was (were) tested in conformity with the NCHRP Report 350 (Report 350) and that the evaluation results meet the appropriate evaluation criteria in the Report 350.

**Individual or Organization responsible for the product:**

Contact Name:	Adrian Bullock	Same as Submitter <input checked="" type="checkbox"/>
Company Name:	Highway Care	Same as Submitter <input checked="" type="checkbox"/>
Address:	Callow Hill Business Park, Ledbury, Herefordshire HR8 2PZ	Same as Submitter <input checked="" type="checkbox"/>
Country:	UK	Same as Submitter <input checked="" type="checkbox"/>

Enter below all disclosures of financial interests as required by the FHWA 'Federal-Aid Reimbursement Eligibility Process for Safety Hardware Devices' document.

No test laboratory was involved in this name change modification, and additionally no test laboratory has any financial interests in BarrierGuard 800 or has any ownership of the product IP.

# Historical Purposes Only

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## PRODUCT DESCRIPTION

New Hardware or Significant Modification    
  Modification to Existing Hardware    
  Non-Significant

BarrierGuard 800 has existing Federal Highway Eligibility associated with it, these are B-131, B-158, B-159 & B-160. This barrier system is made up of thin wall steel hollow step profile sections 800mm high and 540mm wide (at the base) being joined together to create a longitudinal barrier wall, further details and drawings of the BarrierGuard 800 system are contained within these letters.

These letters are addressed to our old distributors, Barrier Systems Inc, with this form we request that the FHWA change the company name and address on the letters to us; the proprietors, Highway Care Ltd as Barrier Systems Inc are no longer our distributors in the USA for this product, our postal address for these letters is the same as listed in the 'submitter' section of this form. We include with this form a letter agreeing to this change from Lindsey Transportation Solutions who own Barrier Systems Inc

Brief explanations of the BarrierGuard system covered by each letter are as follows:

- B-131, for the crash tested BarrierGuard 800 as a NCHRP 350 TL-4/TL-3 system
- B-158, for the crash tested BarrierGuard 800 MDS system, as above but with the addition of a rolled steel section fastened to the top of the barrier and the system anchored more frequently along its length to create a Minimum Deflection System (MDS).
- B-159, for the crash tested BarrierGuard Gate.
- B-160, For the special BarrierGuard section used to facilitate expansion and contraction of the barrier wall at required locations.

Since there is no physical change in the design, FHWA agreed (22nd June 2016) that a lab certification was not needed for the change in company name and address.

### CRASH TESTING

By signature below, the Engineer affiliated with the testing laboratory, agrees in support of this submission that the Modification to Existing Hardware is deemed Non-significant for the device listed above to meet the NCHRP Report 350 criteria.

Engineer Name:		
Engineer Signature:		
Address:		Same as Submitter <input type="checkbox"/>
Country:		Same as Submitter <input type="checkbox"/>

A brief description of each crash test and its result:

Required Test Number	Narrative Description	Evaluation Results
4-10 (820C)		Modification has no effect on crashworthiness
S4-10 (700C)		
4-11 (2000P)		
4-12 (8000S)		
4-20 (820C)		
S4-20 (700C)		
4-21 (2000P)		

# Only

Required Test Number	Narrative Description	Evaluation Results
4-22 (80005)		

Testing Laboratory's signature concurs that these modifications are considered Non-Significant.		
Laboratory Name:		
Laboratory Signature:		
Address:		Same as Submitter <input type="checkbox"/>
Country:		Same as Submitter <input type="checkbox"/>
Accreditation Certificate Number and Dates of current Accreditation period :		

Submitter Signature\*: 

**Submit Form**

### ATTACHMENTS

Attach to this form:

- 1) Additional disclosures of related financial interest as indicated above.
- 2) A copy of the full test report, video, and a Test Data Summary Sheet for each test conducted in support of this request.
- 3) A drawing or drawings of the device(s) that conform to the Task Force-13 Drawing Specifications [Hardware Guide Drawing Standards]. For proprietary products, a single isometric line drawing is usually acceptable to illustrate the product, with detailed specifications, intended use, and contact information provided on the reverse. Additional drawings (not in TF-13 format) showing details that are relevant to understanding the dimensions and performance of the device should also be submitted to facilitate our review.

**FHWA Official Business Only:**

Eligibility Letter		Key Words
Number	Date	

# Only

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Date: June 2<sup>nd</sup> 2016

Dear Sirs

Barrier Systems Inc. which is now part of Lindsay Transportation Solutions LLC used to represent and distribute Highway Cares BarrierGuard 800 product range. Our agreement to distribute BarrierGuard 800 in the USA ended some time ago by mutual agreement.

Highway Care carried out product crash testing for the BarrierGuard 800 range of products, we as Barrier Systems then carried out the submittal to FHWA for eligibility letters for the BarrierGuard 800 product range.

I am aware that Highway Care has made a request to FHWA to have the letters re-issued in their name with their address. As we no longer represent this product range I do not have any reason for these letters not to be issued in Highway Cares name.

Please feel free to contact me at the numbers below if you have additional questions.

Sincerely:

Lindsay Transportation Solutions



Chris Sanders  
Senior Vice President