

December 11, 2003

Refer to: HSA-10/B-34F

David E. Wasserstrom
President
Traffic Safety Devices, Inc.
Post Office Box 26716
Elkins Park, PA 19027

Dear Mr. Wasserstrom:

In your October 30 letter to Mr. Richard Powers of my staff, you requested Federal Highway Administration (FHWA) acceptance of a modification to the ROADGUARD Highway Assembly previously accepted by Mr. Dwight A. Horne in his August 5, 1998 letter to you (B-34C). This modification eliminated the single-piece 5/16-inch thick by 2-1/2-inch wide steel straps used to support both 2-inch diameter Schedule 40 steel pipes and attach them through the sides of the barrier. Instead, the upper and lower pipes are now attached independently through the plastic barrier using one-inch diameter bolts through angled steel brackets 3/8-inch thick by 2-inches wide welded to the pipes. The upper bolt is 12-inches long. The lower one is 21.5-inches long and has a 25-degree bend at its midpoint. The connection of the pipe rails at the joints is identical to the previously accepted design, as are the overall dimensions of the plastic barrier segments. Details of the modified design are shown as an enclosure to this letter.

Because the only significant difference from your current ROADGUARD design is the method of attaching the pipes to the barrier, the modified design can be considered equivalent and may be used on the National Highway System (NHS) as a National Cooperative Highway Research Program Report (NCHRP) 350 test level 3 traffic barrier. However, since this attachment detail has not been crash tested, I recommend that an informal in-service evaluation be conducted to verify satisfactory field performance. Chapter 7 of NCHRP Report 350 outlines the requirements for an appropriate in-service evaluation of roadside hardware.

Please note that the following standard provisions apply to this letter of acceptance:

- The FHWA acceptance is limited to the assumed crashworthiness characteristics of the device and does not cover other structural features, durability, or conformity with the Manual on Uniform Traffic Control Devices.
- Any future design changes to the ROADGUARD or any of its derivatives will require full scale crash testing before any new FHWA acceptance letter will be written.

- Should FHWA discover that an in-service performance evaluation reveals unacceptable safety problems, or that the device being marketed is significantly different from the version that was accepted for use on the NHS, it reserves the right to modify or revoke its acceptance.
- You will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You will be expected to certify to potential users that the hardware furnished has essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance.
- To prevent misunderstanding by others, this letter of acceptance shall not be reproduced except in full. This letter is considered public information. All such letters and any documentation upon which it was based may be reviewed at our office upon request.
- The ROADGUARD is considered proprietary. If proprietary devices are specified for use on Federal-aid projects, except exempt, non-NHS projects, they: (a) must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with 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.
- This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented device for which the applicant is not the patent owner. The FHWA acceptance is limited to the crashworthiness characteristics of the candidate device, and this office is neither prepared nor required to resolve issues concerning patent law. Please note that FHWA reserves the right to withdraw an acceptance letter if the applicant's submission is later shown to misrepresent the issue, either intentionally or unintentionally, or contains errors of fact or omission.

As noted in the title block on the enclosed drawing, you now wish to call the pipe assembly a "safety assembly" rather than a "highway assembly". Regardless of the nomenclature, the ROADGUARD units alone are not acceptable for use on the NHS as barriers, barricades, or delineators unless they have been successfully crash tested without the pipes.

Sincerely yours,

/Original signed by/

John R. Baxter, P.E.
Director, Office of Safety Design

Enclosure

