

August 14, 2001

Refer to: HAS-10/B89

Mr. Bijan Kasraie
Consolidated Tire Corporation
1430 W. Peachtree St., NE Suite 705
Atlanta, GA 30309

Dear Mr. Kasraie:

Late last year, Dr. Dean Alberson sent me information on some pendulum testing he had done on offset blocks produced by your company. These blocks are made from multiple plies of recycled tire tread laminated together through a patented process and intended for use with strong post, w-beam guardrail. Pendulum testing consisted of swinging an 820-kg pendulum through a vertical drop of 4 m into a fixed steel guardrail post with a short section of W-beam and your blocks attached. The posts failed at ground line and the blocks remained intact. However, because the blocks did not have a routing on the back face as did similar products, Dr. Alberson was advised that crash testing would be needed to verify the expected field performance of your block. Alternatively, he was told that if routing was added to the existing product, full-scale testing would not be mandatory.

Mr. Richard Powers of my staff recently received Dr. Alberson's July 19 letter that included a revised drawing with a route incorporated into the design and with dimensions that conform more closely to previously tested and/or accepted blocks. Please note, however, that - without full scale testing - the minimum depth of the block must be 150 mm rather than the 132 mm shown in the enclosed drawing (Enclosure 1). A block 200-mm deep would also be acceptable and is likely to perform better in service.

Based on the results of the pendulum tests run, your product may be considered acceptable for use on the National Highway System (NHS) when it conforms to the dimensions shown on Enclosure 1 (as modified above) and is composed of the same materials as the tested blocks. As with all other recycled blocks accepted for use on the NHS, FHWA acceptance is based solely on the reported impact performance in the pendulum test and is not intended to address the long-term performance or durability of the product. Since your block is the first laminated design we have seen, the effects of weathering in particular should be carefully monitored on initial field installations.

Since your block is a proprietary product, its use on Federal-aid projects, except exempt, non-NHS projects, is subject to the conditions listed in Title 23, Code of

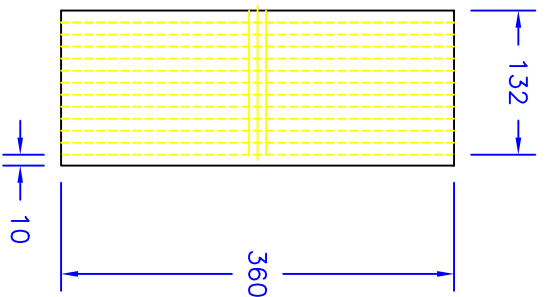
Federal Regulations, Section 635.411, a copy of which is enclosed for your ready reference. If you have any questions, please call Mr. Powers at (202) 366-1320.

Sincerely yours,

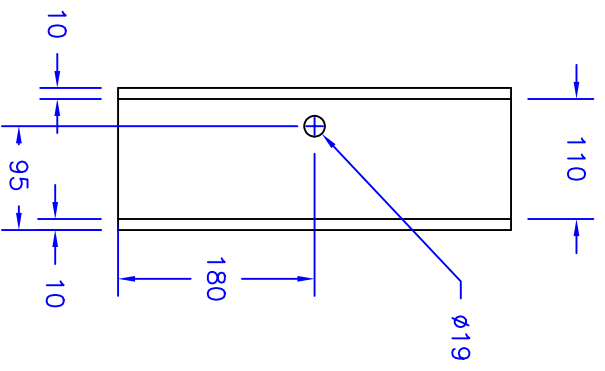
(original signed by Frederick G. Wright, Jr.)

**Frederick G. Wright, Jr.
Program Manager, Safety**

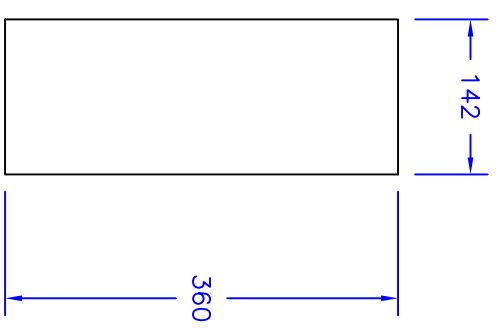
2 Enclosures



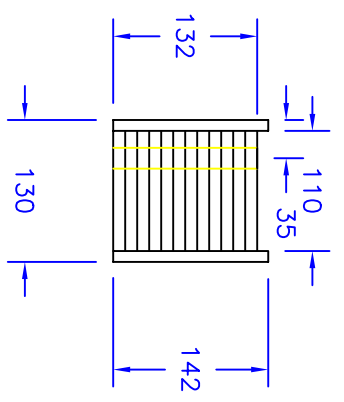
RIGHT SIDE



FRONT



OUTSIDE PIECE



Mr. Bijan Kasraie	
Consolidated Tire Corporation	
1430 W. Peachtree St., NE Suite 705	
Atlanta, GA 30309	
TITLE:	PENDULUM TEST TIRE BLOCKOUT
SHEET:	1 OF 1
DRAWING NO:	

Sec. 635.411 Material or product selection.

(a) Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

(1) Such patented or proprietary item is purchased or obtained through competitive bidding with equally suitable unpatented items; or

(2) The State highway agency certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists; or

(3) Such patented or proprietary item is used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes.

(b) When there is available for purchase more than one nonpatented, nonproprietary material, semifinished or finished article or product that will fulfill the requirements for an item of work of a project and these available materials or products are judged to be of satisfactory quality and equally acceptable on the basis of engineering analysis and the anticipated prices for the related item(s) of work are estimated to be approximately the same, the PS&E for the project shall either contain or include by reference the specifications for each such material or product that is considered acceptable for incorporation in the work. If the State highway agency wishes to substitute some other acceptable material or product for the material or product designated by the successful bidder or bid as the lowest alternate, and such substitution results in an increase in costs, there will not be Federal-aid participation in any increase in costs.

(c) A State highway agency may require a specific material or product when there are other acceptable materials and products, when such specific choice is approved by the Division Administrator as being in the public interest. When the Division Administrator's approval is not obtained, the item will be nonparticipating unless bidding procedures are used that establish the unit price of each acceptable alternative. In this case Federal-aid participation will be based on the lowest price so established.

(d) Appendix A sets forth the FHWA requirements regarding (1) the specification of alternative types of culvert pipes, and (2) the number and types of such alternatives which must be set forth in the specifications for various types of drainage installations.

(e) Reference in specifications and on plans to single trade name materials will not be approved on Federal-aid contracts.

ENCLOSURE 2