September 5, 2003

Refer to: HSA-10/B-107

Mr. Robert D. Slagter
President
ANRO Timber Products, Incorporated
7887 Ashwood Drive, SE
Ada, Michigan 49301

Dear Mr. Slagter:

In your May 23 letter to Mr. Richard Powers of my staff, you requested the Federal Highway Administration's (FHWA) acceptance of a recycled plastic block, called the Anro block, for use with strong steel-post w-beam guardrail on the National Highway System (NHS). Subsequently, you had the Anro block tested at the Midwest Roadside Safety Facility and sent us a copy of that agency's report, "Performance Analysis of the Anro Timber Products Recycled Plastic Spacer Block", dated August 25, 2003. Based on comparison bogey vehicle tests of a standard wood block and the Anro block, both mounted on W150 x 13.5 steel posts, the report concluded that there was no substantial difference in performance between the two offset blocks.

The Anro block is an injection-molded product composed of approximately 60 per cent recycled polyethylene (PE), 40 per cent polypropylene (PP), and a maximum of 2 per cent blowing agent. Each block is nominally 100-mm (4-inches) wide for 162 mm (6.38 inches), and then flares out to a post-side width of 150 mm (6 inches) over the last 41 mm (1.62 inches). A 108-mm x 10-mm (4.25-inch x 0.38-inch) routing on the backside fits over the steel post flange. The bolt hole dimensions are 0.875-inches in diameter at the rail side, tapering uniformly to a 0.742-inch diameter at the post side. These and other dimensions are shown on the enclosure.

After reviewing the test results, I consider the Anro block acceptable for use with strong post w-beam barrier on the NHS when it conforms to the dimensions, and is composed of the same materials, as noted above and as shown in the enclosure. Please note that the following provisions apply to this acceptance:

- Any material or dimensional changes that may adversely influence the crashworthiness of the device will require a new acceptance letter.
- This acceptance is based solely on the expected impact performance of the Anro block and is not intended to address the long-term performance or durability of the product. Furthermore, it shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any device that may be patented by others. The FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the parties involved.

- Should the FHWA discover that in-service performance reveals unacceptable safety

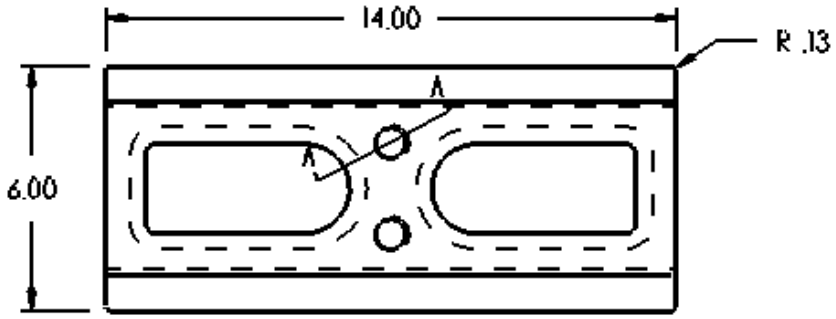
problems, or that the device being marketed is significantly different from the version described herein, it reserves the right to modify or revoke its acceptance.

- You will be expected to certify to potential users that the blocks you supply have essentially the same chemistry, mechanical properties, and geometry as noted above.
- To prevent misunderstanding by others, this letter of acceptance, designated as number B-107 shall not be reproduced except in full. This letter, and the documentation upon which this letter is based, is public information. All such letters and documentation may be reviewed at our office upon request.
- The Anro block may include patented components and, if so, is considered proprietary. When proprietary devices are specified by a highway agency 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, a copy of which is enclosed.

Sincerely yours,

(original signed by John R. Baxter)
John R. Baxter, P.E.
Director, Office of Safety Design
Office of Safety

2 Enclosures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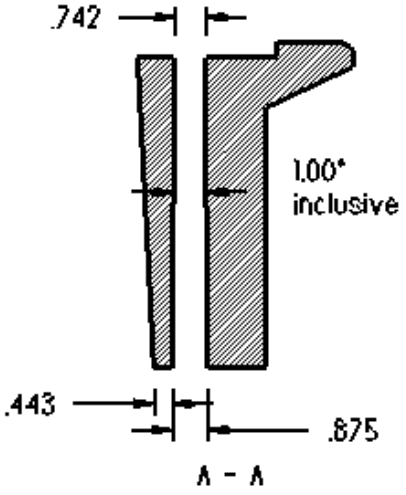
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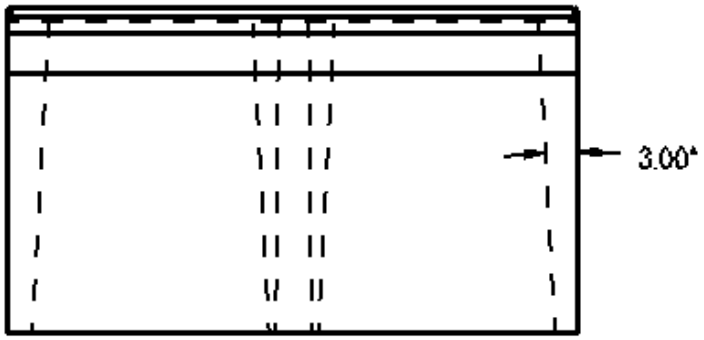
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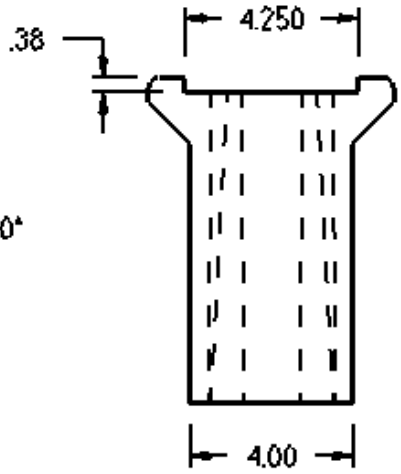
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