



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

**Administration**

400 Seventh St., S.W.  
Washington, D.C.  
20590

Refer to: HSA-1\SS-92

Ms. Elke Tremmel  
Tremmex  
40 Green Island Way  
Destin, FL 32541

Dear Ms. Tremmel:

This is in response to your letter of September 18, 2000, regarding National Cooperative Highway Research Program (NCHRP) Report 350 acceptance of your company's Tremex delineator posts. We received additional information via facsimile on October 10, 2000, and subsequently received a sample of the delineator. The Tremex delineator system consists of a blow-molded polyethylene post of a roughly round cross section as seen in the enclosed drawing for reference. The posts are deformed near the top to receive reflectors. The 1200 mm long posts are installed by inserting the bottom 150 mm into any of a number of foundation structures designed for their particular shape. The posts are not mechanically fixed into the foundations and therefore are free to move when struck by an errant vehicle.

In the past, roadside delineators, and work zone cones, vertical panels, and channelizing devices were not subjected to the rigors of crash testing, because it was thought that they would be far less hazardous than the typical breakaway signpost. Indeed, most early delineator posts were short, lightweight versions of crashworthy flanged-channel sign posts. In the last few years three plastic delineator post manufacturers have requested Federal Highway Administration (FHWA) acceptance of their posts. In all cases, video tapes of automobile testing were submitted. The testing was conducted to show the resilience of the post and was not intended to show full compliance with NCHRP 350. It was obvious to us that these posts posed little hazard to an errant vehicle.

The video of the informal low-speed testing that you submitted shows results similar to those observed when testing other such delineator posts. Because of the design of Tremex delineator posts, the posts are easily released from their bases and are knocked aside by the impacting vehicle. Change in vehicle velocity, as seen on your demonstration video, appears to be negligible. Because of the obviously benign nature of Tremex delineator posts, we feel that they would easily meet our requirements if crash tested according to NCHRP 350.

Therefore, your company's Tremex delineator posts are acceptable for use on the National Highway System (NHS), if requested by a State.

Please note the following standard provisions which apply to FHWA letters of acceptance:

- Our acceptance is limited to the crashworthiness characteristics of the devices and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may adversely influence the crashworthiness of the device will require a new acceptance letter.
- Should the FHWA discover that in-service performance reveals unacceptable safety problems, or that the device being marketed is significantly different from the version that was submitted for acceptance, 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, and that they will meet the crashworthiness requirements of FHWA and NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance, designated as number SS-92 shall not be reproduced except in full.
- The steel bases, if not manufactured in the United States, may be subject to "Buy America" requirements on Federal-aid highway contracts. These restrictions are detailed in 23 CFR 635.410, a copy of which is enclosed for your information.
- Tremex delineators are patented and are 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, a copy of which is enclosed.

Sincerely yours,



Frederick G. Wright, Jr.  
Program Manager, Safety

*for*

Enclosures

FIG. 1



FIG. 2

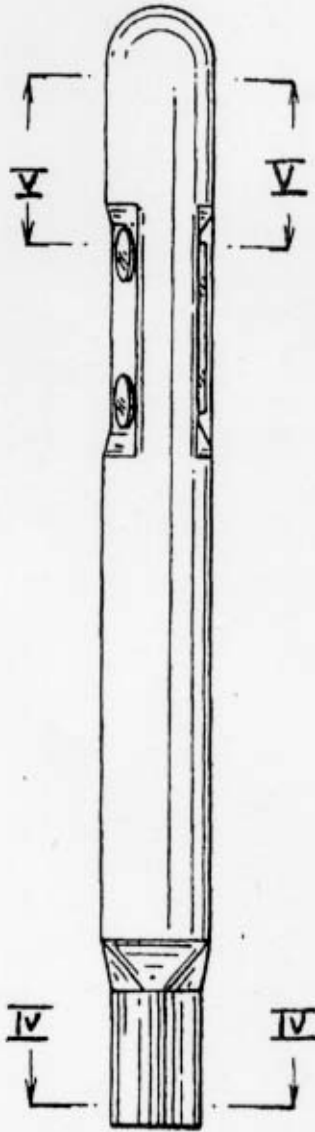


FIG. 3



FIG. 4



FIG. 5

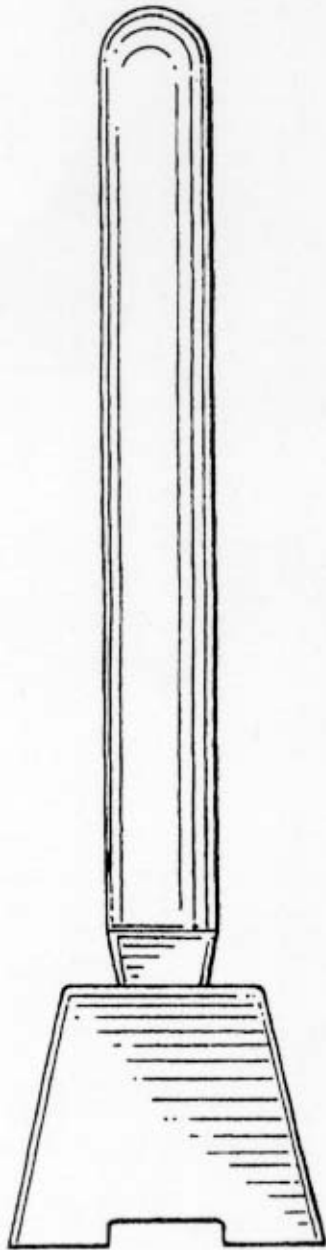


FIG. 9

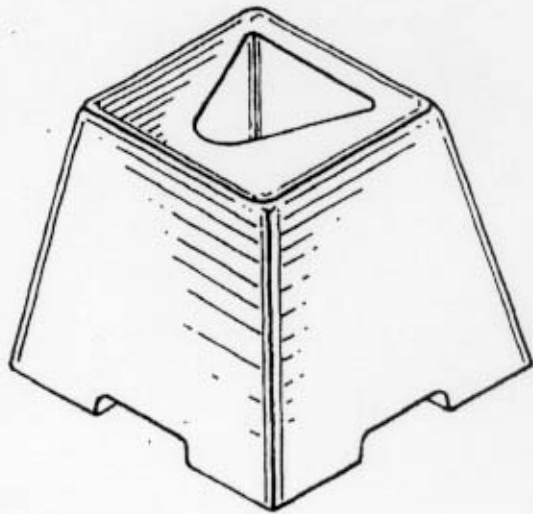


FIG. 6

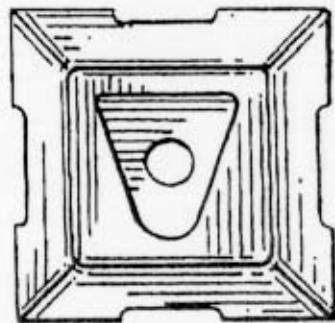


FIG. 7

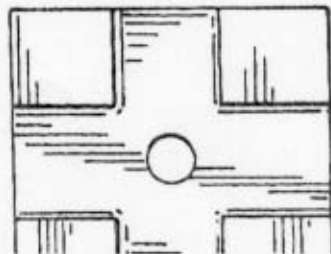


FIG. 8

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.