SS-83

U.S. Department
of Transportation
Federal Highway Administration

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

July 19, 1999

Refer to: HMHS

Mr. Rick Mauer
Marion Steel Company
P.O. Box 837
Greenland, New Hampshire 03840-0837

Dear Mr. Mauer:

This is in reply to your June 22 facsimile message to Mr. Nicholas Artimovich of my office requesting the Federal Highway Administration's (FHWA's) acceptance of your company's small sign supports for use on the National Highway System (NHS) when breakaway devices are required. Requirements for breakaway supports may be found in the American Association of State Highway and Transportation Officials' (AASHTO) Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. The FHWA also recognizes the crash testing guidelines contained in the National Cooperative Highway Research Program (NCHRP) Report 350, "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

The proposed sign support is a modification of a system previously found acceptable by the FHWA. The modification is intended for use in Canada, and consists of a 3.675 kg/m (2.47 pounds per foot) u-channel shape as shown in the enclosed drawing. This post would be spliced onto a Marion Steel Rib Back stub of 2.5, 3, or 4 pounds per foot using a bar spacer that measures 28.178-mm (1 7/64-inch) thick and 19.05-mm (3/4-inch) wide. The bar spacer would be threaded the same as your current spacer and require two longer 7.9-mm (5/16-inch) bolts. All of the u-channel posts will be of SP-80 grade steel as currently used by your company.

Small sign supports using Rib-Bak posts and a breakaway Lap Splice connection were found acceptable in our letters to you dated July 13, 1995 (SS-56) and March 14, 1996 (SS-56A.) We concur that similar installations using the modified sign post (2.47 pounds per foot) and breakaway Lap-Splice connection discussed above with Rib-Bak stubs of heavier cross section can be considered crashworthy and are acceptable for use on the National Highway System when requested by a state. For the benefit of your Canadian customers it is our opinion that this sign support system would meet the requirements of NCHRP Report 350.

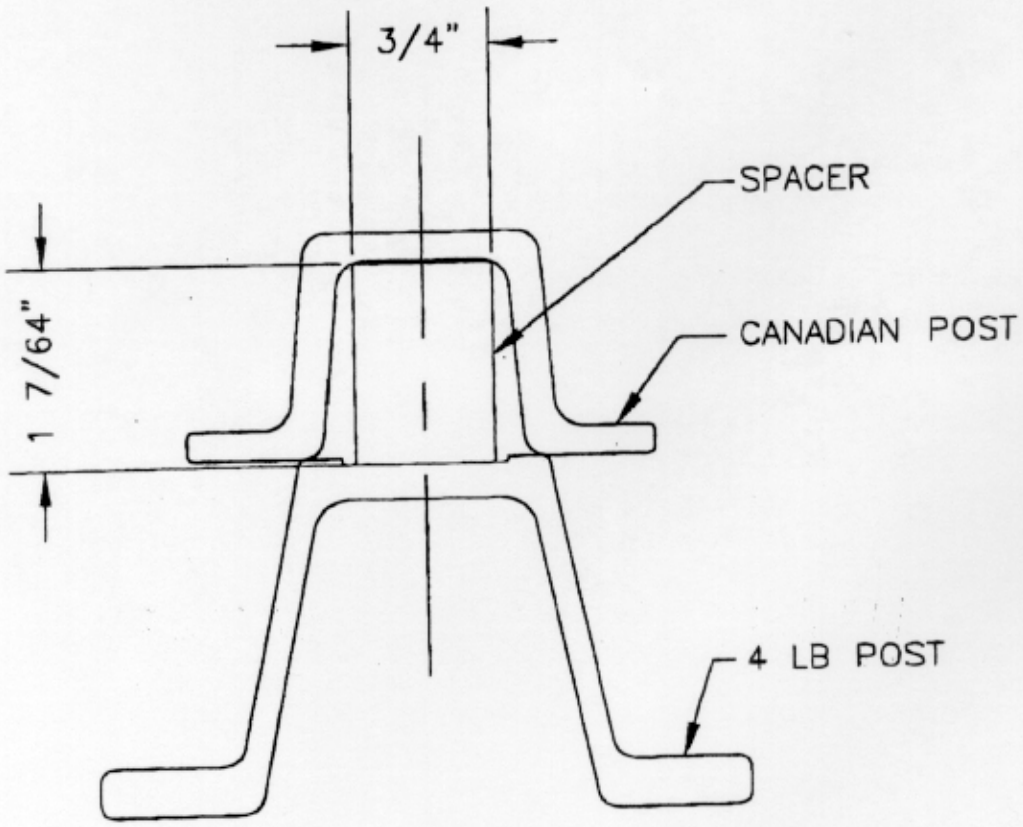
Our acceptance is limited to the breakaway characteristics of the supports and does not cover the structural features. Presumably, you will provide users with sufficient information on structural design and installation requirements to ensure proper performance of your supports. We anticipate that the transportation agencies will require certification from Marion Steel that the hardware furnished will have essentially the same chemistry, mechanical properties, and geometry as those covered by this acceptance and that they will meet FHWA change in velocity requirements. To prevent misunderstanding by others, this letter of acceptance, designated as number SS-83, shall not be reproduced except in full.

Sincerely yours,

Dwight A. Horne

Dwight A. Horne
Director, Office of Highway Safety Infrastructure

Enclosure


3/4"
SPACER
CANADIAN POST
1 7/64"
4 LB POST