



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

October 27, 2006

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

In Reply Refer To:
HSA-10

Mr. Bill Neusch
President
Gibraltar
320 Southland Road
Burnet, TX 78611

Dear Mr. Neusch:

In your October 13, 2006, letter to Mr. Richard Powers of my staff, you requested formal acknowledgement that the design deflection distances shown in the Federal Highway Administration's April 3, 2006, acceptance letter B-137B for your 3-cable test level 4 (TL-4) barrier design can also be considered acceptable for your 3-cable TL-3 design. For the TL-4 design, these deflections with a 12-foot post spacing were approximately 7 feet, those with a 20-foot spacing were approximately 8 feet, and those with a 30-foot spacing were approximately 9 feet. Since both your TL-3 and TL-4 designs use three cables, albeit with a higher top cable height with the TL-4 design, it is reasonable to assume that design deflections for both systems will be similar under the same impact conditions. Therefore, the deflections noted above can also be applied to your TL-3 design.

As stated in my original acceptance letter B-137, dated June 13, 2005, and repeated here for emphasis, dynamic deflection distances based on standardized tests are not precise and represent only an approximation of what is likely to be seen in the field. Actual deflections depend on actual crash conditions such as vehicle type, impact speed, and roadway departure angle. To increase the factor of safety afforded the motoring public, the available deflection distance for any flexible or semi-flexible barrier system should exceed its design deflection distance whenever practicable.

Sincerely yours,

/original signed by/

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

