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

August 9, 2006

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

In Reply Refer To: HSA-10

SOCKETS

Mr. Bill Neusch
Gibraltar
320 Southland Road
Burnet, Texas 786112

Dear Mr. Neusch:

In response to your e-mail request, please be advised it is the Federal Highway Administration's current position to consider driven posts and socketed posts set in concrete footings or driven steel sockets to be equivalent and, thus interchangeable when used in any configuration (i.e., post spacing) that was physically tested or at a spacing that lies between two spacings that were physically tested. In short, any post embedment type (i.e., driven posts, concrete-socketed posts, and driven steel tube socketed posts) for any post spacing that you have physically tested may be considered acceptable. The assumed design deflection for any alternative embedment design used would be the maximum deflection noted in any test with the same post spacing, even though a different embedment detail was used in the actual crash test. Based on tests run to date, there is some difference in deflection that can be attributed to embedment type, but it seems not to be significant, particularly since design deflections based on a single test are only a rough approximation of what will be seen in the field, given the potential disparity in actual crash conditions.

Since you have tested your Gibraltar cable system with posts set 15 inches into 42 deep concrete footings and also with posts driven directly into the ground to a 42-inch depth, I can agree that posts set 15 inches into a 3/16-inch thick 3"x 4" steel socket driven 42-inches deep would be expected to perform satisfactorily as well.

Sincerely yours,

/original signed by M.McDonough/

~for~

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

Celebrating 50 Years 1956 50 2006 Eisenhower Interstate System

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