

عنوان مقاله:

PERFORMANCE OF RETROFIT HIGHWAY BARRIERS WITH MECHANICAL ANCHOR

محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

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خلاصه مقاله:

The Texas Department of Transportation uses vehicular barriers at the edges of highway bridge decks. A recent TxDOT research study, conducted at the University of Texas at Austin, was intended to develop designs for retrofit barriers, connected to bridge decks using post-installed mechanical anchors, which could be used to replace highway barriers damaged by vehicular collisions. In the research study described here, two retrofit barrier designs were developed: one an intermittent barrier with through anchors, and the other a continuous barrier with undercut anchors. The undercut-anchor design involved groups of inclined anchors, whose capacity was governed by concrete breakout, and for which current design provisions were not directly applicable. The barriers were tested under quasi-static and impact loading. The current US anchor design provisions of ACI 318-05 Appendix D can safely be used to predict the capacity of such barriers.

کلمات کلیدی:

anchors, barriers, finite elements, post-installed, retrofit

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