

STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION
Project Development Branch
Standards & Specifications Unit
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August 1, 2007

Mr. David A Nicol, P. E.
Division Administrator
FHWA Colorado Division
Attention: Marcee Allen
12300 West Dakota Avenue, Suite 180
Lakewood, Colorado 80228

Dear Mr. Nicol:

CDOT is requesting FHWA concurrence for a continuation of the provisional Statewide Finding in the Public Interest (FIPI) for the QuadGuard System for an additional calendar year from July 1, 2007 until June 30, 2008. This Finding in the Public Interest is in conformance with the rules and procedures as outlined in 23 CFR 635.411. CDOT has developed a satisfactory repair experience with the QuadGuard System and requires more time to investigate additional end treatment systems provided by other suppliers for acceptability as permanent installations based on repair experience developed from Colorado highway test installations.

CDOT had test projects for the Barrier Systems Universal TAU Crash Cushion System. Three TAU Crash Cushions were installed on CDOT facilities: two at the Port of Entry on I-25 near Fort Collins, and one at Exit 213 on SB I-25, just south of the I-25/I-70 interchange. The installation at Exit 213 was completed on November 22, 2004, and impacted on March 17, 2005. Repairs were completed by CDOT Region 6, Maintenance Section 8 personnel on April 14 and April 22, 2005 at total repair cost of \$12,164.42. CDOT maintenance staff spent 162 man-hours repairing the TAU Crash Cushion. In comparison, a severely hit QuadGuard repair cost approximately \$4000 less to repair than the TAU Crash Cushion. CDOT maintenance staff found repair of the TAU to be difficult, and would not recommend this device unless some changes were made to the design, such as; springs on the slider bolts, removal or a major change to the hinges on the bulkheads at the rear of the attenuator, better cartridge support brackets and stronger side panels.

CDOT has installed another product, the SCI100GM impact attenuators at three locations, westbound I-70 exit to I-225, eastbound I-70 exit to C-470, and westbound I-70 exit to York Street. CDOT will be reviewing the performance of these installations.

Extension of Provisional FIPI for QuadGuard System

August 1, 2007

Page 2 of 2

CDOT has identified additional potential locations in Region 1. This SCI system was reported by the Arizona DOT, to have the lowest repair cost of the systems which they installed.

The CDOT Crash Cushion and End Treatment Device Application Chart was updated on February 18, 2005, and is attached for your reference. It is available electronically in .pdf format on the CDOT website in the Safety Selection Guide at the following link:

<http://www.dot.state.co.us/DesignSupport/SafetySelection%20Guide/Index.htm>

Please don't hesitate to contact Darrell Dinges at (303)757-9083 or Larry Brinck at (303)757-9474 should you have any concerns, or additional technical information on this item is needed.



Tim Aschenbrener, P. E.
CDOT Project Development Branch Manager

FHWA CONCURRENCE

DATE 8/24/07

BY Marcee Allen

for DAVID A. NICOL, P.E.
Division Administrator
Colorado Division

cc: Marcee Allen - FHWA
Maintenance Superintendents via Staff Maintenance
Larry Brinck – Standards & Specifications

attachments:

CDOT Crash Cushion and End Treatment Device Application Chart
Copy of Extended FIPI for the QuadGuard System – June 16, 2006