U.S. Department
of Transportation
Federal Highway Administration

June 9, 2006

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

In Reply Refer To:
HSA-10/CC-59B

Mr. Barry D. Stephens, P.E.
Senior Vice President of Engineering
Energy Absorption Systems, Incorporated
3617 Cincinnati Avenue
Rocklin, CA 95765

Dear Mr. Stephens:

In response to informal inquiries from my staff earlier this year, you sent Mr. Richard Powers information on a so-called "tailgate mount" design that was developed for use with Energy's SafeStop Truck-Mounted Attenuator (TMA). You stated that this mount was designed to be equal to or better than the attachment hardware that was tested and originally accepted by the Federal Highway Administration (FHWA). You further advised him that, although the National Cooperative Highway Research Program (NCHRP) Report 350 test 3-51 was conducted by E-TECH to verify acceptable performance of the TMA using the readily detachable tailgate mount and it was also subjected to extensive road tests to validate its resistance to fatigue failure, you chose at the time not to request formal FHWA acknowledgement or acceptance of this design.

It certainly remains the prerogative of a manufacturer or State Department of Transportation whether or not to submit new crash-tested devices or modified devices for formal FHWA review and acceptance. For minor modifications needed to adapt TMA connection hardware to various support vehicles, we would not expect any request for our concurrence. However, we advised you that, in the case of a significantly different mounting design (especially one that appears to be widely used), it would appear to be beneficial to you and to potential users to have it officially accepted and included on the FHWA's safety hardware Web site. Based on this advice, you did submit a request on May 11 that included videos of the above mentioned crash you conducted prior to market availability, a summary test report, and a drawing of the adjustable tailgate mount designed for use with the SafeStop TMA. The drawing is shown in the enclosure to this letter. You also shared photos from a crash where a SafeStop TMA, attached to a shadow truck using a tailgate mount, was impacted by an 18-wheel semi-truck. From the photos it was apparent that, in spite of the high impact severity of this real-world impact, the tailgate mount performed as intended by keeping the SafeStop TMA attached to the back of the support vehicle.

You did note that the pickup truck used in your test 3-51 was not instrumented since the purpose of the test was to determine the stability of the tailgate mount, not to re-visit the crashworthiness of the SafeStop itself. The truck was stopped in a stable manner and the tailgate mount remained fixed to the support dump truck, without suffering any damage. We agree with your conclusion that the SafeStop can be attached to your tailgate mount without compromising the crash performance of the TMA. Your letter also noted that potential users of the tailgate mount should evaluate the structural adequacy of the tailgates on their support vehicles before using this mount. Your company will be expected to supply the guidance needed to complete such an evaluation.

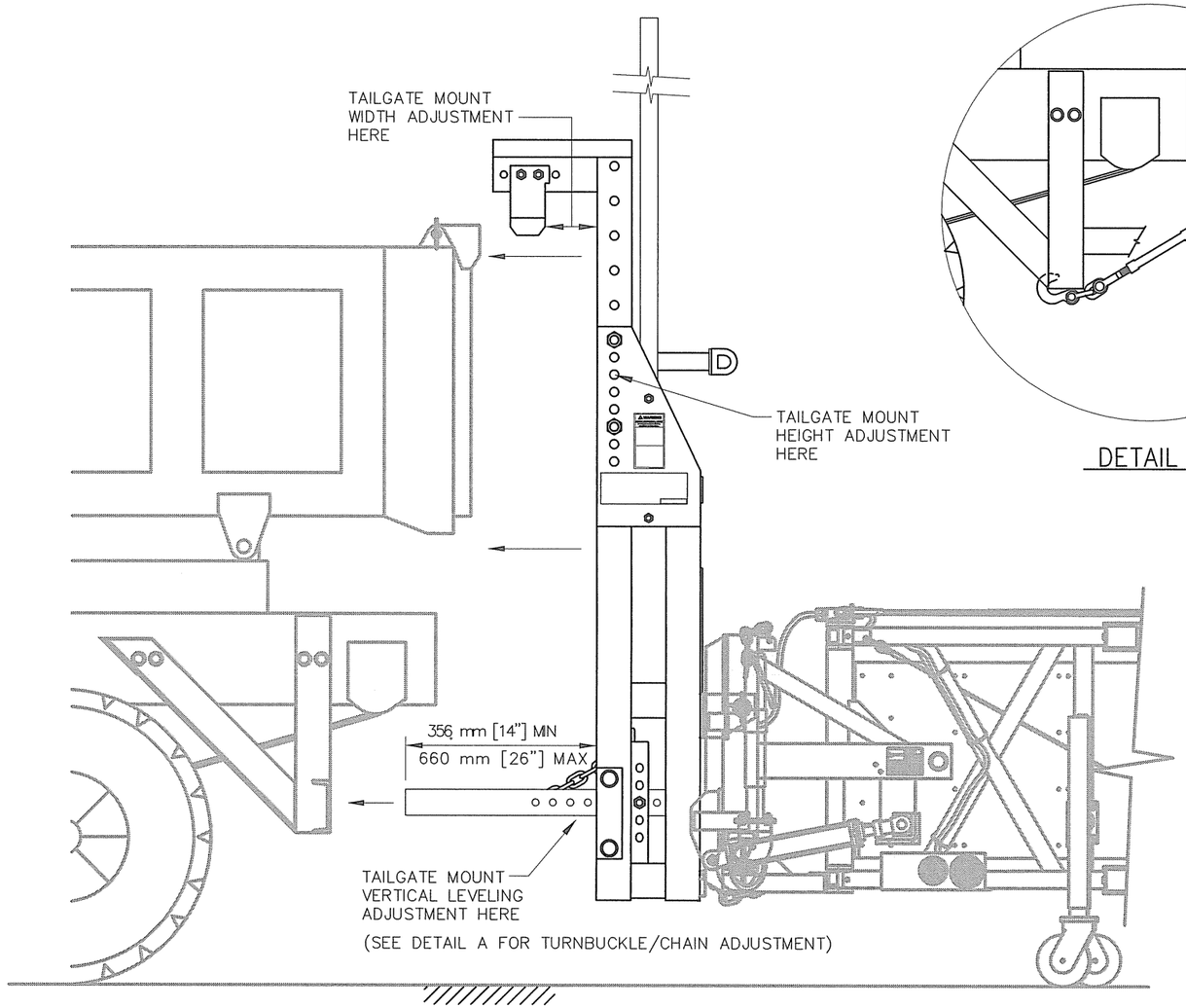
Sincerely yours,

/original signed by/

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

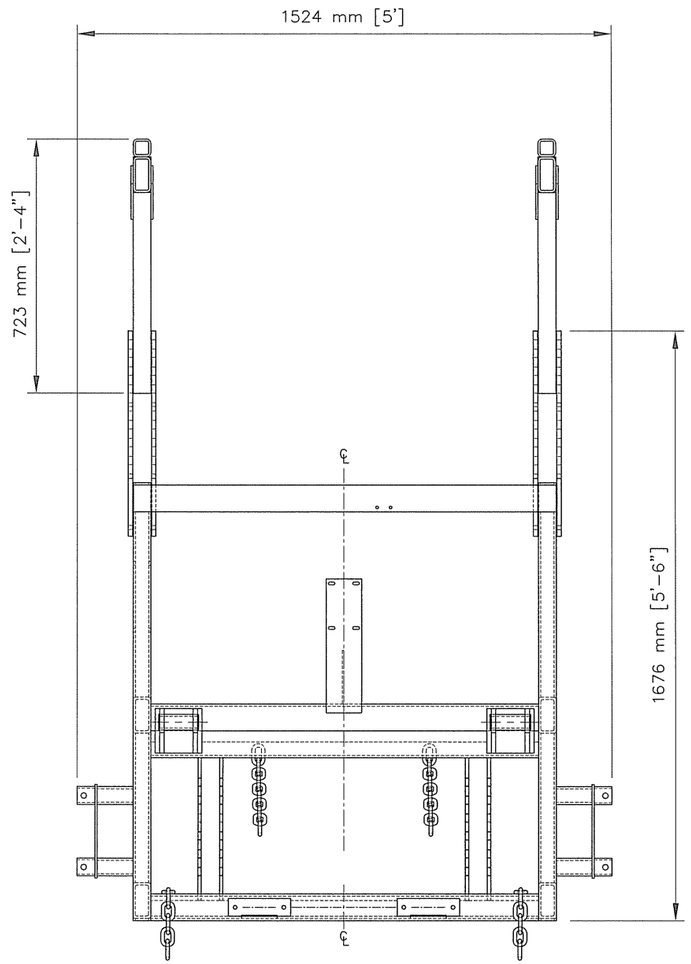
Enclosure

PARTS LIST			
ITEM	STOCK NO.	DESCRIPTION	REQ'D



SIDE VIEW

DETAIL A



END VIEW

Revisions	Date	Rev.	By	Ckd.	App.

REFERENCES

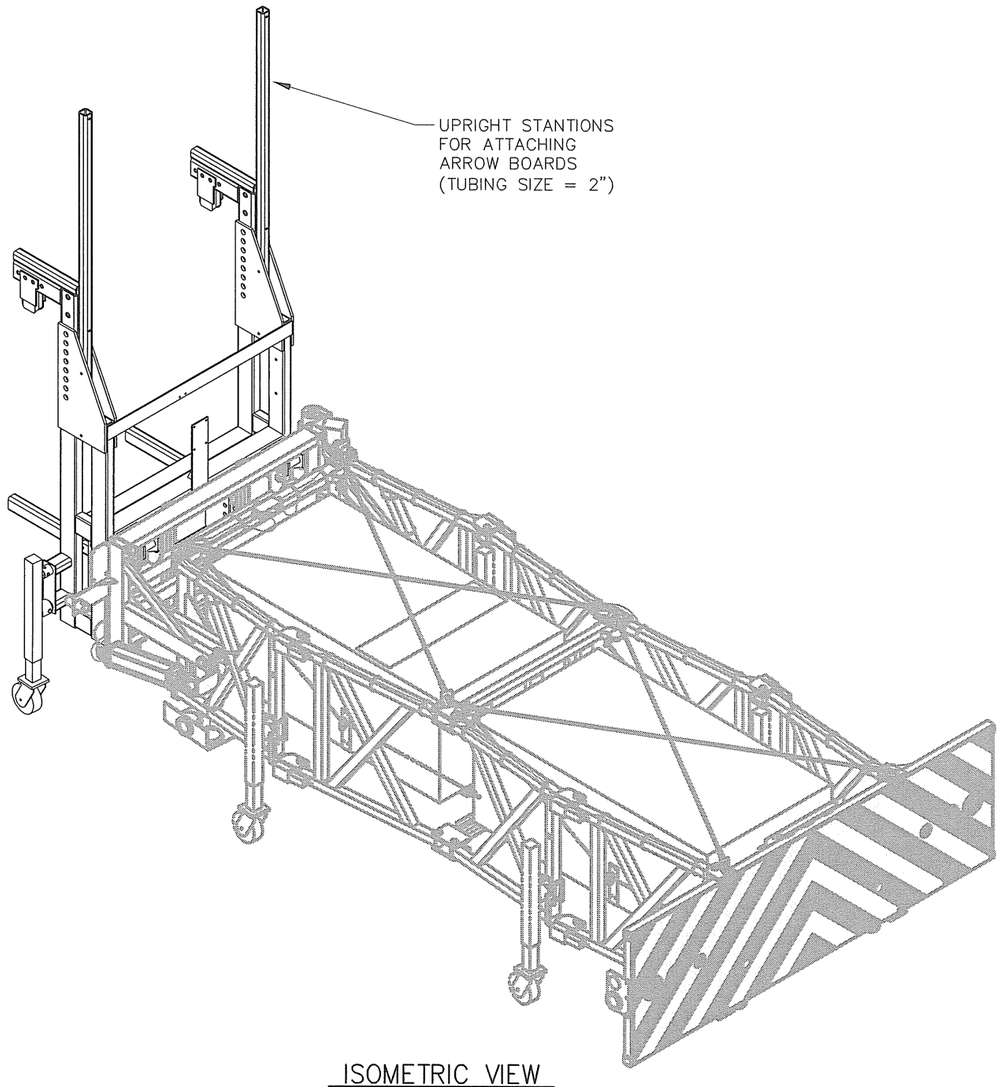
DRAWN: T. Busse	DATE: 5/2/06		
DESIGNED:	DATE:		
CHECKED: KRM	DATE: 5-9-06		
APPROVED	DATE: 5/9/06		
CAD FILE: 750321.dwg			
NEXT ASSEMBLY:			

ENERGY ABSORPTION SYSTEMS, INC.
ENGINEERING AND RESEARCH DEPARTMENT

TAILGATE MOUNT FOR FHWA

SCALE	DWG.	SHEET	REV
1=16	75-03-21	1 of 2	

PARTS LIST			
ITEM	STOCK NO.	DESCRIPTION	REQ'D



ISOMETRIC VIEW

REFERENCES

Revisions	Date	Rev.	By	Ckd.	App.

DRAWN: T. Busse — DATE: 5/2/06
DESIGNED: — DATE:
CHECKED: KTH — DATE: 5-9-06
APPROVED: — DATE: 5/9/06
CAD FILE: 750321 Sh02.dwg
NEXT ASSEMBLY:

ENERGY ABSORPTION SYSTEMS, INC.
ENGINEERING AND RESEARCH DEPARTMENT

TAILGATE MOUNT FOR FHWA

SCALE	DWG.	SHEET	REV
1=16	75-03-21	2 of 2	