

North Dakota Department of Transportation
REQUEST FOR BID

Bid Number: 550-42-16-050	Bid Opening Date & Time: 06/20/2016 02:00 PM
Items: Attenuator, Truck-Mounted	Buyer: Alexis Wingo
Bid Mailing Address: 608 East Boulevard Avenue	Telephone Number: (701)328-2571
City, State, Zip: Bismarck, ND, 58505	Email: awingo@nd.gov
Contract Period: 06/20/2016 TO 06/30/2017	Date Prepared: 06/06/16

Please submit your bid response on the attached forms in conformance with the instructions and specifications in the NDAC 04-12-01 - 04-12-16.

One copy of your bid response must be returned to the North Dakota Department of Transportation (NDDOT) prior to the time and date specified for bid opening. Bid responses received after the time and day specified for bid opening will be rejected. Mark envelope as instructed in "Mailing Instructions".

In consideration of the acceptance by the state of the offer made pursuant to the bid response, the vendor agrees and promises to sell, furnish, and deliver to the state, at the time, places, and prices specified in the bid response, all goods, merchandise, supplies, commodities, equipment, or other items contained in the bid response. The vendor shall fully perform in accordance with the terms and conditions contained in the bid response including all specifications, rules, or regulations mentioned therein, and shall comply with all applicable provisions of the NDAC 04-12-01 - 04-12-16 promulgated by the State Purchasing Division; such manual being made a part of this invitation by reference. The Risk Management Appendix and Appendices A and E of the Title VI Assurances, attached, are hereby incorporated into and made a part of this Request for Bid.

Bids may be rejected if the following is not signed by OWNER, PARTNER, CORPORATE PRESIDENT, VICE PRESIDENT, other AUTHORIZED CORPORATE OFFICER or a duly authorized representative. If signed by other authorized Corp. Officer or representative, please attach a letter signed by the OWNER, PARTNER, CORP. PRES., or VICE PRES. indicating the individual has authority to enter into a contract on behalf of the company (or a Power of Attorney).

By issuance of a purchase order, a contract is made and entered into by and between the North Dakota Department of Transportation and:

Vendor Name <i>HIGHWAY SAFETY ZONE, LLC</i>			
Mailing Address <i>25385 HIGHWAY 169, ZIMMERMAN, MN 55398</i>			
Telephone Number <i>612-605-7551</i>	Fax Number <i>612-605-7551</i>	E-mail Address <i>dale@hwysafetyzone.com</i>	

DALE BRADDOCK JR. / V-PRES.
Name & Title (Type or Print)
Dale Braddock Jr.
Signature
6/16/2016
Date

To be signed by Owner; Partner; Corp. Pres., Vice Pres., or other authorized Corp. Officer or bid may be rejected. (if signed by other authorized Corp. Officer, please attach copy of Power of Attorney or other documentation showing authority to sign.)



MAILING INSTRUCTIONS

Mail only one completed and signed request for bid document per envelope, unless instructed otherwise. Request for bid documents not signed or received after the date and time specified in the request for bid will be rejected.

BID IS: ☒ SEALED ☐ NOT SEALED

Address the envelope containing your response in the following manner:

BID NUMBER – 550-42-16-050
BID OPENING DATE/TIME – June 20, 2016; 2:00PM CST
N. D. DEPT. OF TRANSPORTATION
PROCUREMENT SECTION
608 E BOULEVARD AVE
BISMARCK ND 58505-0700

BIDDERS INSTRUCTIONS

1. **Assistance to Bidders with a Disability.** Bidders with a disability and/or language assistance, contact Civil Rights Division, NDDOT, 701-328-2978 or civilrights@nd.gov or TTY 711, as soon as possible so that reasonable accommodations can be made. Additionally, the Request for Reasonable Accommodations form (SFN 60135) can be accessed at the following NDDOT website location: <http://www.dot.nd.gov/forms/sfn60135.pdf>.
2. **Award.** Award will be made to a responsive, responsible bidder with the lowest price considering conformity with specifications, terms of delivery, quality, and serviceability. NDDOT reserves the right to consider bids varying in minor respects from any specific requirements herein, but judged to meet the intent of this request.
3. **Awards, Splitting of.** The state reserves the right to make awards by item, groups of items, or on the total low bid for all the items specified as indicated in the detailed specifications. Bidders interested only in the total low bid for all items are to state 'all or nothing' on their bid response.
4. **Bid Bond.** Waived in this instance: however, bidder(s) failing to enter into a contract with this office, upon notification of award, may be subject to removal from the bidder's list.
5. **Bid Held Firm.** Bids are not awarded at the bid opening. Bid responses will be firm for 30 days, unless stated otherwise.
6. **Bid Opening.** All sealed bids received by the NDDOT Procurement Office will be opened and read at 608 East Boulevard Avenue, Bismarck, North Dakota, at the time specified in the solicitation. Interested parties are invited to attend the bid opening.
7. **Bid Summary.** Bid summaries are available when the bid has been awarded. When bids are issued using the State's electronic bidding system, the bid summary will be posted and available for download from: <http://www.nd.gov/spo/>

Bid summaries will be mailed to those bidders who supply a self-addressed, stamped envelope with their bid response. A copy of the bid summary may also be obtained by visiting the NDDOT Procurement Office during normal working hours.

8. **Bidder Checklist.** HAVE YOU REMEMBERED TO:

- Review all instructions, terms and conditions, and specifications to ensure your bid response complies?
- Prepare your price in the specified unit of measure, F.O.B. Destination, Freight Prepaid to the delivery location listed on the cover sheet?
- Indicate whether you can meet the delivery date indicated on the cover sheet?
- Sign your bid response on the cover sheet?
- Initial all changes and corrections?
- Submit any required samples or enclosures, if applicable?
- Mark the envelope as indicated above?
- Review and complete all requirements contained in this solicitation to ensure compliance.

9. **Clarifications, Bid Changes and Questions Deadline.** The Procurement Officer is the point of contact. Any irregularities, lack of clarity, requested bid changes and all questions regarding this bid and the procurement process must be addressed to the Procurement Officer referenced on the first page of this document no later than end of business June 13, 2016. (Contact information is indicated on cover page). If a bid amendment is required, it will generally be issued after this date.

The bidder is cautioned that the requirement of this solicitation can be altered only by written amendments and that verbal communications from whatever source are of no effect.

10. **Corrections.** The bidder's authorized representative must initial any corrections and alterations (i.e. erasures, whiteouts, correction tape, etc.) made to the bid response. Those bid responses with corrections and alterations that are not initialed are subject to confirmation by the Procurement Officer.

11. **Definitions.**

- Bidder - any person or firm submitting a competitive bid in response to a solicitation.
- Bid summary - a summary of all bid responses received by the NDDOT Procurement Office.
- Bid response - the executed document submitted by a bidder in response to a solicitation.
- Contract - a deliberate written agreement between two or more competent persons to perform specific act or acts.
- Contractor - any person or firm having a contract with a governmental body.
- Solicitation - the process of notifying prospective bidders that the State wishes to receive bids for furnishing goods or services.

12. **Electronic & Facsimile Bids.** Bid responses are not to be email attached or faxed to the NDDOT unless this transmittal method has been authorized by the Procurement Officer or bid document. (Contact the Procurement officer regarding additional requirements and exceptions.) Bid responses electronically submitted or faxed may be rejected as non-responsive. Bids may be faxed to a third party who will put it in a properly-addressed envelope and deliver it to the NDDOT Procurement Office before the date and time specified in the solicitation.

13. **Freight/F.O.B. Destination.** Freight and transportation charges are to be included in the price of the products, unless otherwise specified in the solicitation. (F.O.B. - Free On Board).

14. **Indemnification.** Bidders must review the attached Risk Management Appendix for indemnification and insurance requirements. The indemnification and insurance provisions are incorporated and made part of this solicitation and the resultant final contract. Objections to any of the provisions of the indemnification and insurance requirements must be made in writing to the attention of the Procurement Officer by the time and date set for receipt of questions. No alteration of these provisions will be permitted without prior written approval from the Purchasing Agency or Entity in consultation with the North Dakota Risk Management Division. Upon receipt of the Notice of Award, the successful bidder must obtain the required insurance coverage and provide the Procurement Officer with proof of coverage prior to contract approval. The coverage must be satisfactory to the Purchasing Agency or Entity, in consultation with the North Dakota Risk Management Division. A bidder's failure to provide evidence of insurance coverage is a material breach and grounds for withdrawal of the award or termination of the contract.

15. **Late Bids.** It is the bidder's responsibility to ensure that a bid response is physically deposited with the NDDOT Procurement Office prior to the date and time specified for the opening. Late bid responses will not be opened and will be rejected and returned regardless of the degree of lateness or the reasons.

16. **Minor Informalities.** The State reserves the right to waive minor informalities in bid responses in accordance with N.D.A.C. 4-12-10. Minor informalities are insignificant omissions or nonjudgmental mistakes that are matters of form rather than substance, evident from the bid document, with a negligible effect on price, quantity, quality, delivery, or contractual conditions that can be waived or corrected without prejudice to other bidders.

17. **Multiple Bid(s).** Bidders may submit more than one bid response(s) for the item(s) specified in the solicitation. Each bid submitted must comply in all aspects with the bid requirements and these instructions.

18. **Negotiation.** NDDOT reserves the right to negotiate with the successful bidder to ensure the best possible consideration is afforded to all concerned.

19. **New Equipment and Materials.** Unless otherwise indicated in the detailed specifications of this solicitation, all equipment and materials shall be new and under current production for use in the United States.

20. **Open Records.** After the bid opening, bid documents will be subject to the North Dakota open records law. Records are closed or confidential only if specifically stated in law. If a request for public information is received, the procurement officer will determine whether the information is an exception to the North Dakota open records law, and the information will be processed appropriately. Those interested in reviewing the bid file are to make arrangements with the NDDOT Procurement Office. The NDDOT Procurement Office hours are 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m. Monday through Friday.

21. **Packaging.** All shipments are to be packaged according to accepted commercial practices to avoid damage in shipment.

22. **Performance Bond.** Successful bidders will not be required to furnish a performance bond; however, failure to perform satisfactorily will result in the immediate termination of the contract(s) and bidders may be subject to removal from the bidder's list.

23. **Preparation of Bid.** Bids will be accepted on NDDOT forms only. If the document is located on the State Procurement Office website, then bidder is to download the document and type or write their responses as indicated by the bid document. Alteration of the bid document may be cause for bid rejection. Bidders are cautioned to examine specifications and all instructions. Failure to do so will be at the bidder's risk.

24. **Pricing.** Unit prices are to be stated in United States currency and based on the unit of measurement specified in the solicitation, F.O.B. Destination, to the NDDOT delivery locations specified herein.

In the event of mathematical differences between the unit price and extended total, the unit price will prevail.

25. **Protest of Award.** An interested party may protest the award within seven days after receiving notice in accordance with N.D.C.C. 54-44.4-12 and N.D.A.C. 4-12-14. Notice of award will be issued only to those bidders who submitted responses to this IFB. Seven calendar days after award or issuance of the Notice of Intent to Award; it will be assumed that all interested parties knew or should have known all the facts surrounding the award.

26. **Rejection.** Bid responses may be rejected if:

- The bid response is not legible.
- The bid response is not completed as requested.
- The bid response is faxed to the procurement office.
- The bid response is not responsive to the specifications or other requirements of the solicitation.
- The bid response is received after the time and date specified.
- The bidder has not met Vendor Registration requirements or is suspended or debarred.
- The bid document has been altered by the bidder.
- The bidder is determined to be not responsible (N.D.A.C. 4-12-11-04).

27. **Signature.** The bid must be signed manually in ink. The name and title of the person signing the bid response must be typed or printed above the signature. The bid must be signed by **Owner, Partner, Corp. Pres., Vice Pres., or other authorized Corp. Officer** or the bid may be rejected. If signed by other authorized Corp. Officer or representative, please attach a letter signed by the Owner, Partner, Corp. Pres., or Vice Pres. indicating the individual has authority to enter into a contract on behalf of the company (or a Power of Attorney).

28. **Specifications, Brand Name or Equivalent.** Unless otherwise indicated in the detailed specifications of this solicitation, the use of a specific brand name or make/model is for illustrative purposes only, and the State will consider equivalent products. If a commodity or service put forth by a bidder is rejected as not being equivalent, the Procurement Officer will notify the bidder of the rejection.

29. **Specifications, Compliance.** All bids submitted in response to this Invitation for Bid must comply with the specifications contained herein, and the successful bidder will be held responsible. Noncompliance with specifications is grounds for rejection of the bid response. Bidders who desire to submit commodities or services that deviate from these specifications or have any objections to the specifications stated herein must be clearly pointed out PRIOR TO THE DEADLINE FOR RECEIPT OF QUESTIONS; otherwise, it will be considered that the items offered are in strict compliance with these specifications, and the bidder will be held responsible.

30. **Supplemental Terms and Conditions.** Bids including supplemental terms and conditions will be accepted, but supplemental conditions that conflict with any conditions contained in this ITB or that diminish the State's rights will be considered null and void. The State is not responsible for identifying conflicting supplemental terms and conditions before issuing a contract award.

After award of contract:

- a) If a conflict arises between a supplemental term or condition included in the bid and a term or condition of the ITB, the term or condition of the ITB will prevail, and,
- b) If the State's rights would be diminished as a result of application of a supplemental term or condition included in the bid, the supplemental term or condition will be considered null and void.

Changes, modifications, additions, or alterations to the bid document could be cause for rejection of the submitted bid at the sole discretion of the NDDOT. Contact the Procurement Officer in writing prior to the deadline for clarifications.

31. **Taxes.** The State does not pay sales tax or federal excise tax. The state sales tax exemption number is E-2001. The federal tax-free transaction number is 45-70-0010K. The Purchasing Agency will furnish a tax exempt certificate upon request.

32. **Vendor Registration.** Bids will be accepted from bidders who are not currently Approved Bidders for the State of North Dakota; however, the successful bidder may be required to become approved prior to award, in accordance with N.D.C.C. 54-44.4-09. To become an Approved Bidder, you must: 1) register with the North Dakota Secretary of State (fees apply), and 2) submit a completed Bidder List Application to the ND State Procurement Office. Registration instructions and forms are available on-line at: www.nd.gov/spo/vendor. Contact the ND State Procurement Office at 701-328-2683 or infospo@nd.gov for assistance.

Placement on the bidders list does not guarantee a bidder will receive notice of every formal solicitation. Bidders must maintain current information by submitting a Notice of Change form to the State Procurement Office (Fax 701-328-1615). Visit the website for forms: www.nd.gov/spo/vendor.

33. Withdrawal or changes to a bid response prior to the bid opening date and time. A bidder may withdraw or make a change to his bid response prior to the bid opening date and time. The request to make a change or withdraw must be in writing by a representative of the firm. The request to withdraw or change must be signed by the bidder or his designated representatives.

34. Withdrawals after the bid opening date and time. After the bid opening, no changes may be made to the bid response. The bidder may make a written request to withdraw the bid response, subject to approval by the NDDOT Procurement Office. Vendors continually withdrawing bids after the bid opening may be removed from the Vendor Database.

GENERAL CONTRACT TERMS AND CONDITIONS

1. **Affirmative Action.** The contractor will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of individuals with disabilities, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin, or disability.

2. **Applicable Law and Venue.** Any dispute arising out of this agreement will be resolved under the laws of the State of North Dakota.

3. **Billing and Payment Procedures.** Purchase orders will be issued by NDDOT procurement office to the awarded contractor.

Invoices are to be submitted as indicated on the purchase orders unless otherwise instructed. Failure to submit correct invoices to the appropriate NDDOT office may delay contractor payment.

Payment will normally be made within thirty days after delivery and acceptance of commodities or services under this contract and receipt of a correct invoice. All invoice and payment inquiries must be directed to the purchasing agency.

4. **Binding Contract.** The acceptance of a bid response in writing by the purchasing agency constitutes a contract between the bidder and the State. Written acceptance from the purchasing agency will be in the form of a purchase order, notification of award, or contract. Any oral agreement or arrangement by a bidder with a State employee or purchasing agency will have no force or effect unless reduced to writing.

5. **Compliance with Laws.** The contractor must, in performance of work under this contract, fully comply with all applicable federal, state or local laws, rules, regulations and policies, including those relating to nondiscrimination, affirmative action, accessibility and civil rights including Title VI of the Civil Rights Act of 1964. The contractor agrees to file all required reports on time, to make required payroll deductions, and to pay all taxes and premiums owed on time, including sales and use taxes and unemployment compensation and workers' compensation premiums. The contractor shall have and keep current at all times during the term of this contract all licenses and permits required by law.

6. **Contract Amendments, Waivers.** After a binding contract has been entered into, no changes (i.e. additions, substitutions, subcontracting or a price adjustment) may be made, unless prior approval has been obtained from the purchasing agency and Procurement Officer.

The terms of this contract shall not be waived, altered, modified, supplemented, or amended, in any manner whatsoever, except by written instrument signed by the parties. No waiver consent, modification or change of terms of this agreement shall bind either party unless in writing and signed by both parties. Such waiver, consent, modification, or change, if made shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this agreement.

7. **Contract Termination.**

- a. **Termination without Cause.** This contract may be terminated by mutual consent of both parties, or by either party upon 30 days' written notice.
- b. **Termination for Lack of Funding or Authority.** The State may terminate this contract effective upon delivery of written notice to the contractor, or on any later date stated in the notice, under any of the following conditions:
 - i. If funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in the indicated quantities or term. The contract may be modified by agreement of the parties in writing to accommodate a reduction in funds.
 - ii. If federal or state regulations or guidelines are modified, changed or interpreted in such a way that the services are no longer allowable or appropriate for purchase under this contract or are no longer eligible for the funding proposed for payments authorized by this contract.
 - iii. If any license or certificate required by law or regulation to be held by the contractor to provide the services required by the contract is for any reason denied, revoked or not renewed.

Any such termination of this contract under (i), (ii), or (iii), above, shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination.

- c. **Termination for Cause.** The State by written notice to the contractor may terminate the whole or any part of this contract:
 - i. If the contractor fails to provide services required by this contract within the time specified herein or any extension thereof; or
 - ii. If the contractor fails to perform any of the other provisions of this contract, or so fails to pursue the work as to endanger performance of this contract in accordance with its terms and after receipt of written notice from the State, fails to correct such failures within ten days or such longer period as NDDOT may authorize.
 - iii. The rights and remedies of the State provided in the above clause related to defaults by the contractor are not exclusive and are in addition to any other rights and remedies provided by law or under this contract.
- d. **Termination, Deliveries.** If the contract is terminated for any reason, the contractor is responsible for delivery of all commodities and services ordered prior to the termination, unless those orders had been canceled by the Purchasing Agency or Entity.

8. **Inspection and Investigations.** The State reserves the right to conduct inspections and investigations related to the bidder and offered commodities or services, including but not limited to the firm, its facility, personnel, qualifications, and the commodities and/or services offered to make determinations regarding compliance with the bid requirements and responsibility of the bidder.

9. **Materials and Workmanship.** All material and workmanship shall be subject to inspection and testing at the discretion of the purchasing agency either at the point of manufacturer, place of storage, or upon receipt.

10. **Receiving.** Deliveries must arrive at the designated destination(s) during normal business hours unless other shipping/receiving instructions are issued by NDDOT personnel. The contractor shall contact the NDDOT to schedule delivery dates and times at least 24 hours in advance of delivery.

All NDDOT offices will be closed in recognition of State holidays. Any day declared a holiday by the President or Governor will also be recognized by office closure.

11. **Subcontracts, Assignment.** The contractor shall not subcontract, assign or transfer the contractor's interests or duties under this contract without express written consent of the purchasing agency. However, the contractor may enter into subcontracts provided that any such subcontractor acknowledges

the binding nature of this contract and incorporates this contract, including any attachments. The contractor is solely responsible for the performance of any subcontractor. The contractor shall not have the authority to contract for or incur obligations on behalf of the State.

12. **Successors in Interest.** The provisions of this agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and assigns.

13. **Service Representative.** The contractor must provide a dedicated customer service representative to provide support for this contract. The contractor shall notify the Procurement Officer in the event the representative is changed.

NAME: DALE BRADDOCK
(Name of person servicing this contract)

BUSINESS NAME: HIGHWAY SAFETY ZONE

MAILING ADDRESS: 25385 HIGHWAY 169

CITY & STATE: ZIMMERMAN MN ZIP CODE: 55398

PHONE NUMBER: 612-605-7551 TOLL FREE: _____

FAX NUMBER: 612-605-7551 E-MAIL: dale@hwy.safetyzone.com

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIFICATIONS FOR
TRUCK-MOUNTED TMA CRASH ATTENUATOR, TAILGATE MOUNT AND LED ARROW BOARD
(Energy Absorption SS180-9180 with tailgate mount or Equal)**

The intent of this specification is to describe truck tailgate mounted TMA that will be installed on a single or tandem axle plow truck. The TMA shall safely absorb collision energy when impacted by an oncoming vehicle. The TMA shall be equipped with a *Gordon-Stanley* style tailgate mount for quick one-man installation and removal from truck. The TMA shall be standard production of the latest model with standard accessories and in addition meet the following minimum specifications:

		Comply		SPECIFICATION DEVIATION
		Yes	No	
1. Crash Performance				
a.	Must meet at minimum NCHRP 350 test level 3 requirements; including NCHRP 350 Test 3-50, Test 3-51, Test 3-52 and Test 3-53, (no exceptions)	X		
b.	Must meet NCHRP 350 test level 2 requirements when TMA is folded in transport mode	X		
2. Frame/Chassis/Hitch				
a.	The complete TMA and arrow board assembly shall be designed to make attachment or detachment from the truck simple and fast, with the major components remaining together when detached from the support vehicle	X		
b.	Frame and chassis to be fabricated from corrosive resistant materials, such as aluminum or galvanized steel, or black painted steel	X		
c.	Meet Federal DOT requirements for conspicuity marking. Shall display a black on yellow inverted "V" chevron pattern with 100 mm (4 in.) wide color bands	X		
d.	Bi-folding, articulating frame assembly with two crash cartridges	X		
e.	Support structure, impact face and an underride designed for attaching the system to the truck	X		
f.	A hydraulic system is to be included in the system to fold the frame assembly and cartridges to travel position. When the system is in transport position, the frame assembly shall be capable of collapsing when impacted by an errant vehicle. No portion of the system shall protrude forward under the truck during an impact	X		

		Comply		SPECIFICATION DEVIATION
		Yes	No	
g.	The hydraulic system shall consist of a pump with a 12 volt DC motor, cylinders, hoses, switches, wiring, and necessary sub-components to tilt the frame assembly to a 90° position from horizontal. The hydraulic system shall hydraulically lock to secure the frame assembly in the 90° position. A manual mechanical lock mechanism shall also be provided to secure the frame assembly in this position. The TMA system shall be capable of tilting 5° from the horizontal when the bottom edge of the rear impact surface contacts rigid curb or pavement. The complete hydraulic system, including the pump and hoses, shall be factory assembled and mounted to the TMA	X		
h.	Four hand crank jacks with swivel casters shall be attached to the system to facilitate removing it from a truck for storage	X		
i.	Safety chains and shackles necessary to secure TMA to truck for transport and use	X		
j.	Gordon-Stanley style hanging attachment hitch to truck. Must be able to connect to NDDOT truck by hanging off of top of tailgate and resting against an installed underride frame on truck with chain binders for securement. <u>TMA tailgate hitch shall be capable of mounting to a varying truck tailgate height of 85" – 90" (measured from ground surface). The proposed TMA must be compatible with this hitch design and still meet all NCHRP 350 test level III requirements. Tailgate hitch shall come pre-assembled and mounted on TMA, ready for immediate install on truck with minimal adjustments necessary</u>	X		

3. Electrical

a.	The TMA shall come equipped with LED style brake lights, taillights, turn signals and an ICC bar light	X		
b.	Seven pole round light connector with spring cable guard and adequate length cable to attach to trailer connector at truck hitch plate	X		
c.	The wiring for the rear lights shall be routed and secured on the articulating frame. This system shall have additional lights so that the lighting system meets FMVSS No.108, whether the system is in its horizontal or vertical orientation	X		

		Comply Yes No	SPECIFICATION DEVIATION
4. Arrow board			
a.	Must provide 48"X96" LED 25 light arrow board with controller and sufficient length of cable to reach cab of tandem axle truck	<u>X</u> _____	
b.	Steel construction on arrow board frame, painted black	<u>X</u> _____	
c.	Must be able to manually tilt down the arrow board and lock into various positions	_____ <u>X</u> _____	RIGID MOUNT PROVIDED (SEE ATTACHED LITERATURE) WILL WORK WITH DISTRICTS TO POSSIBLY MODIFY FOR TILTING.
d.	The TMA must meet NCHRP 350 test level 3 with the arrow board installed	<u>X</u> _____	
5. Manuals/parts information			
a.	Two operators manuals, two parts books, and two repair manuals per unit	<u>X</u> _____	
6. Warranty			
	Manufacturer's one year full warranty (If the standard manufactures warranty is for a longer period it shall apply)	<u>X</u> _____	

The truck TMA unit shall be delivered complete with arrow board, tailgate hitch, hydraulic system and be ready for attachment to NDDOT truck. The TMA shall be delivered free of any defects due to shipping or workmanship. The successful bidder will be required to furnish a statement of origin. The successful bidder may also be required to furnish a certificate of product liability. Product literature should be submitted with the bid.

BID RESPONSE

Item No. 1

TRUCK TAILGATE MOUNTED TMA W/ LED LIGHT BAR

(The award will be based on low bid to furnish and deliver the trailer(s) to the following location(s)):

MAKE: TRINITY HIGHWAY / ENERGY ASSOCIATION MODEL: SAFE STOP 55180 (TAILGATE)

PARTS/SERVICE DEALER: HIGHWAY SAFETY ZONE TELEPHONE: 612-605-7551

1 each: \$ 24,910.00 / unit FOB: Fargo District 14 delivery days ARO
503 38th St S
Fargo, ND 58103-1198

Item No. 2 Vendor pricing including delivery freight for additional purchases until June 30th, 2017

Quantity: TBD \$ 26,988.00 / unit FOB: All NDDOT Districts 21 delivery days ARO

BIDDER: HIGHWAY SAFETY ZONE

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX A OF THE TITLE VI ASSURANCES**

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees as follows:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.
5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the Contractor under the contract until the Contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.



**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX E OF THE TITLE VI ASSURANCES**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).



Risk Management Appendix

Supply Contracts with Private Individuals, Companies, Corporations, Etc.:

Each party agrees to assume its own liability for any and all claims of any nature including all costs, expenses and attorney's fees which may in any manner result from or arise out of this agreement.

Contractor, or Contractor's delivery agent, shall secure and keep in force during the term of this agreement, from insurance companies, government self-insurance pools or government self-retention funds authorized to do business in North Dakota, the following insurance coverages:

- 1) **Commercial general liability and automobile liability** insurance.
- 2) **Workers compensation** insurance.

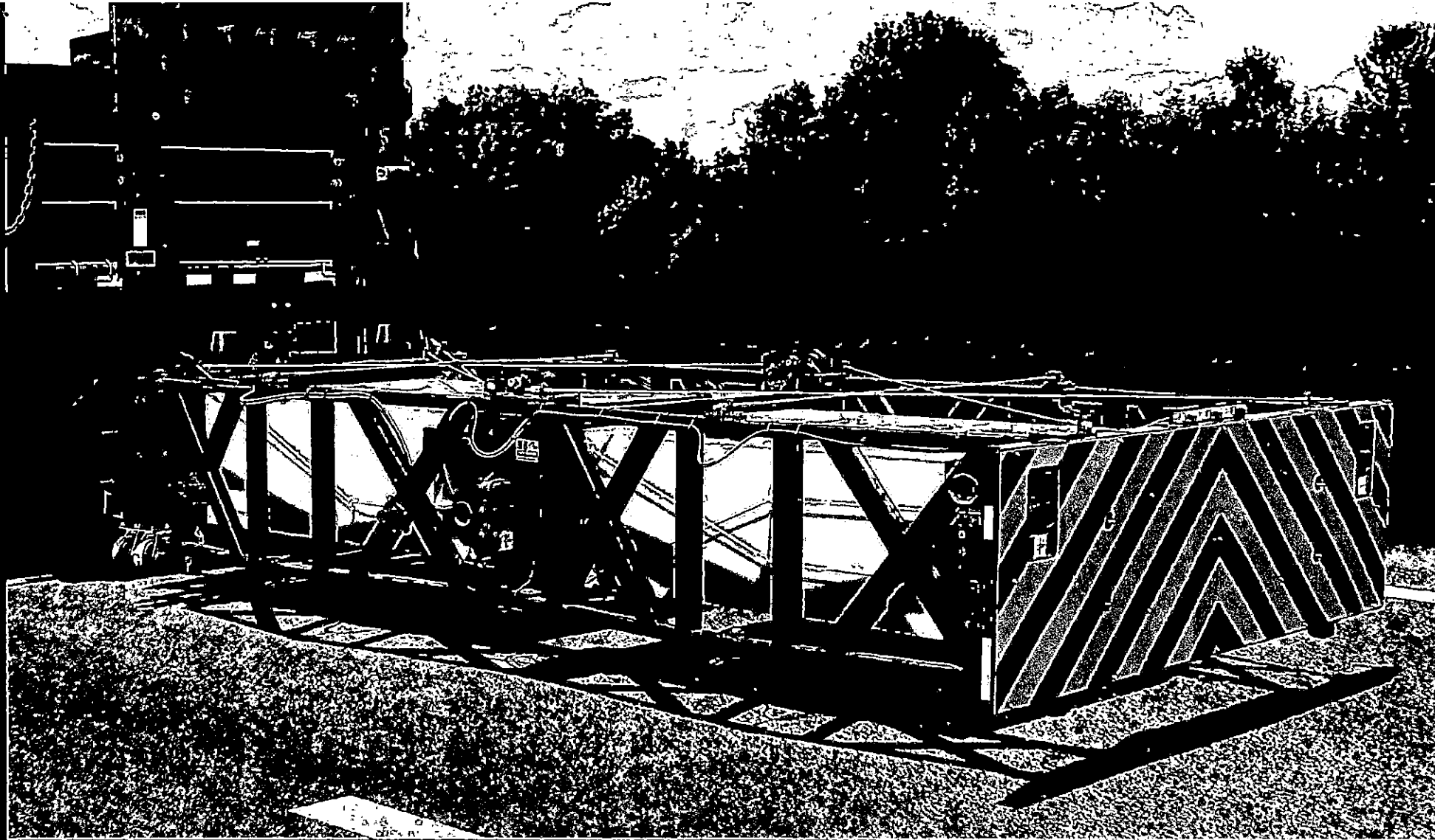
Contractor shall produce certificates of insurance or copies of insurance policies upon request by the State.

When a portion of a Contract is sublet, the Contractor shall obtain insurance protection (as outlined above) to provide liability coverage to protect the Contractor and the State as a result of work undertaken by the Subcontractor. In addition, the Contractor shall ensure that any and all parties performing work under the Contract are covered by public liability insurance as outlined above. All Subcontractors performing work under the Contract are required to maintain the same scope of insurance required of the Contractor. The Contractor shall be held responsible for ensuring compliance with those requirements by all Subcontractors.

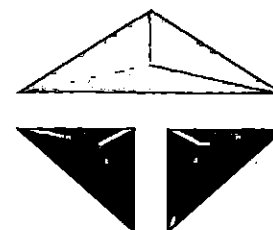
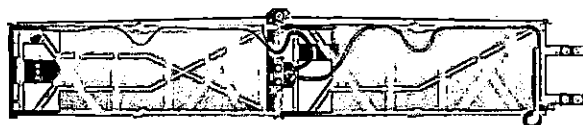
RM Consulted 2007
Revised 6-07



Truck Mounted Attenuators



SS180™

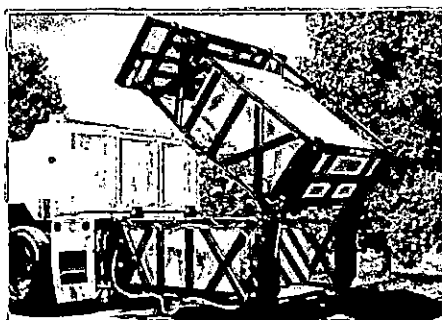


TRINITY
HIGHWAY

Ahead of the Curve™

SS180™

The SS180™ is a truck mounted attenuator for use on stationary or moving shadow or support vehicles. The SS180 has passed all mandatory and optional testing and is NCHRP Report 350 Test Level 3 compliant while impacted in deployment mode. The unit is comprised of two light-weight aluminum cartridges contained in a typically reusable steel support frame, and a 180° tilt feature which folds at the center to stack the two cartridge sections on top of each other. The SS180 helps to absorb rear-end impacts at speeds up to 62 mph (100 km/h).



TESTED PERFORMANCE

Features

- Short height while in storage mode ideal for garage storage and low overpasses.
- Replaceable energy absorbing cartridges.
- Potentially reusable steel support frame.
- Withstands typical low-speed nuisance hits up to 6 mph (10 km/h).
- Successfully passed vibration, corrosion and water resistance tests.

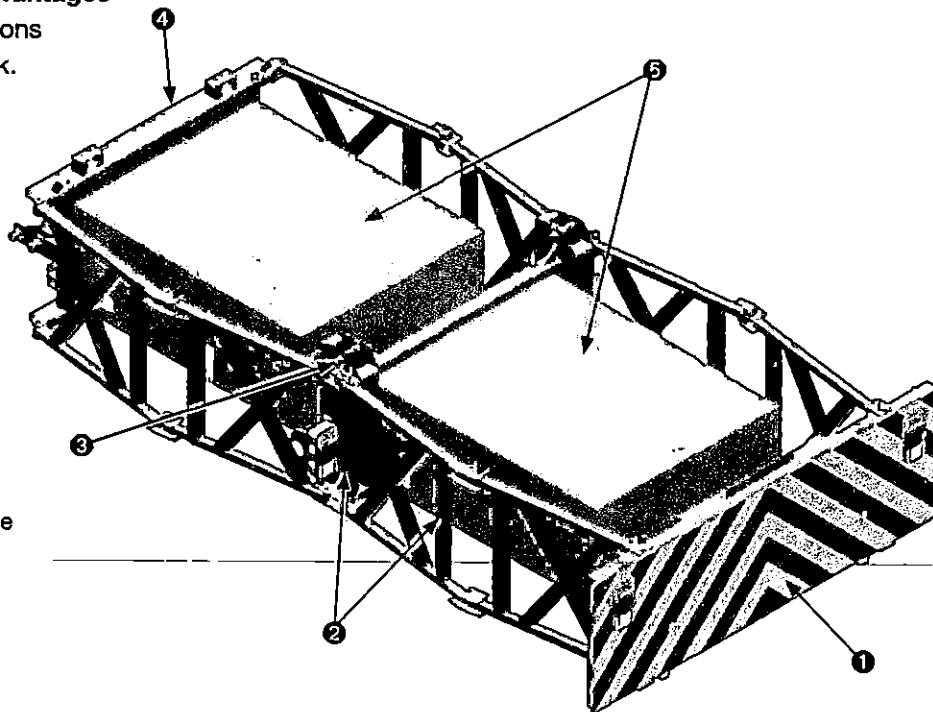
Assembly and Repair Advantages

- Simple attachment options mount to standard truck.
- Attaches to existing Safe-Stop TMA® mounts for standard and tailgate operations.
- Refurbishment can often be completed in the field.

Specifications

- 7'9" (2.36 m) Length From Back of Truck
- 7'9" (2.36 m) Width
- 6'10" (2.08 m) Height
- 2,080 lbs. (943 kg)
- 12" (30.5 cm) Road Clearance
- 16,090 lbs (7,300 kg) Minimum Support Vehicle Weight

- ① Impact Face
- ② SS180 Collapsible Frame
- ③ 180° Tilt Feature
- ④ Support Structure
- ⑤ SS180 Cartridges



An original  product.

Distributed by:



TRINITY
HIGHWAY

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5-14
www.trinityhighway.com
1.888.323.6374



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

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

March 11, 2005

In Reply Refer To: HSA-10/CC-78B

Mr. Barry D. Stephens, P.E.
Senior Vice President Engineering
Energy Absorption Systems, Inc.
3617 Cincinnati Avenue
Rocklin, California 95678

Dear Mr. Stephens:

Mr. Douglas Bernard recently delivered your February 24, 2005, letter to Mr. Richard Powers of my staff. In this letter, you requested formal Federal Highway Administration (FHWA) review and acknowledgement of a successful Test Level 2 (TL-2) crash into a Safe Stop[™] 180 TMA when in its folded (transport) position on a support vehicle. Your letter included a one-page test summary prepared by E-Tech Testing Services and a video of this crash event.

The tested Safe Stop 180 TMA was identical to the original design previously submitted to our office for acceptance as a test level 3 (TL-3) TMA (reference FHWA acceptance letters HSA-10/CC-78 & CC-78A). For the new test, the Safe Stop 180 was mounted to the back of an 8550-kg support vehicle and was impacted in its folded position, with the rear portion of the unit rotated onto the top of the front portion. In this configuration the top of the unit is 2.03 m (6'-8") off the ground and it projects out from the back of its support truck 2.4 m (7'-10").

The folded TMA was impacted head-on at 72.4 km/h by a 2026-kg pickup truck. The results of test 2-51 are summarized on the enclosed one-page test summary sheet. All reported occupant risk, vehicle trajectory and structural adequacy values were within acceptable limits. The roll-ahead distance for the support vehicle was reported to be 5.8 m.

Based upon this information, the FHWA acknowledges that the Safe Stop 180 TMA affords an acceptable level of protection in the folded position for a vehicle weighing approximately 2000 kg when impacted at speeds up to 70 km/h. In its deployed position, the Safe Stop 180 remains a TL-3 device.



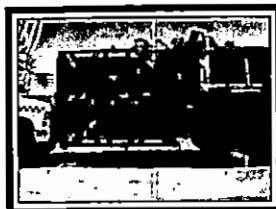
Please note that this acknowledgement is for the test described above only and is not meant to imply that the folded Safe Stop 180 meets all the requirements for a National Cooperative Highway Research Program Report 350 TL-2 attenuator.

Sincerely yours,

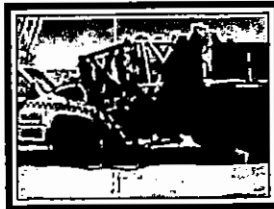
/Original Signed by/

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

Enclosure



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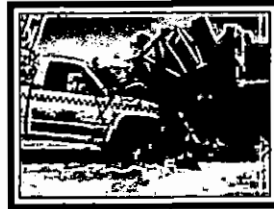
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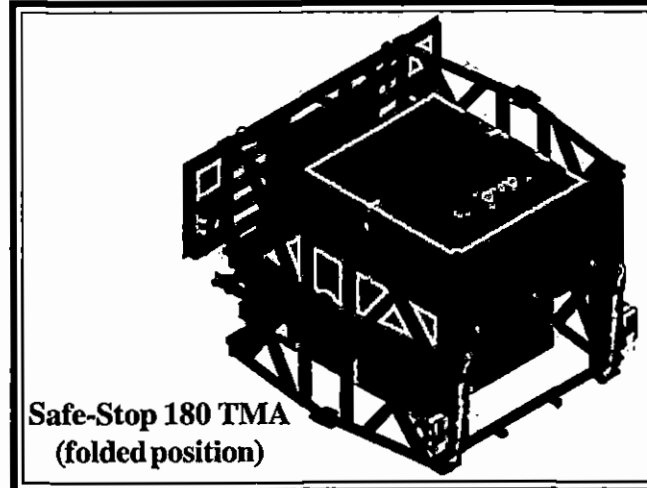
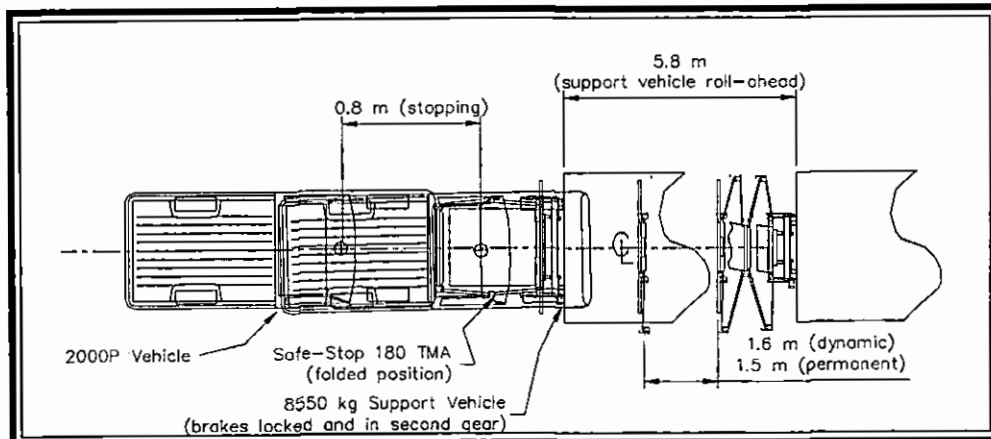
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t = 0.430 sec



E-TECH Testing Services, Inc.



Safe-Stop 180 TMA
(folded position)

General Information

Test Agency	E-TECH Testing Services, Inc.
Test Designation	NCHRP 350 Test 2-51
Test No.	01-4307-008
Date	9/15/04
Test Article	
Type	Energy Absorption Systems, Inc. Safe-Stop™ 180 TMA
Installation Length	2.39 m (overall system folded)
Material and key elements	(2) Aluminum Cartridges; 1524 x 1219 x 572 mm (L x W x H)
Foundation Type and Condition	Concrete, clean and dry
Test Vehicle	
Type	Production Model
Designation	2000P
Model	1993 GMC C2500
Mass (kg)	
Curb	2094
Test inertial	2026
Dummy	N/A
Gross	2026
Impact Conditions	
Speed (km/h)	72.4
Angle (deg)	0
Impact Severity (kJ)	409.6
Exit conditions	
Speed (km/h)	N/A
Angle (deg - veh. c.g.)	N/A

Occupant Risk Values

Impact Velocity (m/s)	
x-direction	10.2
y-direction	0.0
Ridedown Acceleration (g's)	
x-direction	-13.71
y-direction	3.5
Support Vehicle Acceleration (g's)	
x-direction	3.4
European Committee for Normalization (CEN) Values	
THIV (km/h)	36.6
PHD (g's)	13.7
ASI	1.0
Test Article Deflections (m)	
Dynamic	1.6
Permanent	1.5
Vehicle Damage (Primary Impact)	
Exterior	
VDS	FD-4
CDC	12FDEW4
Interior	
VCDI	AS0000000
Maximum Deformation (mm)	None
Post-Impact Vehicular Behavior (deg - rate gyro)	
Maximum Roll Angle	-1.7
Maximum Pitch Angle	-6.5
Maximum Yaw Angle	1.9

Summary of Results - Safe-Stop 180 TMA NCHRP 350 Test 2-51 in Folded Position

The results of this report relate only to the Safe-Stop 180 TMA configuration tested. This report may not be reproduced except in full, without the prior written approval of E-TECH Testing Services, Inc. Prepared by: John F. LaTurner, P.E. - Manager. Report 252 - Issued 2/24/05

April 2, 1999

Refer to: HMHS-
CC59

Mr. J. M. Essex
Vice President, Sales
ENERGY ABSORPTION Systems, Inc.
One East Wacker Drive
Chicago, Illinois 60601

Dear Mr. Essex:

In your March 16 letter, you requested the Federal Highway Administration's (FHWA) acceptance of a new truck mounted attenuator (TMA) called the Safe-Stop TMA for use on Federal-aid projects as an National Cooperative Highway Research Program (NCHRP) Report 350 Test Level 3 (TL-3) device. To support your request, you provided copies of a March 1999 report entitled "Safe-Stop TMA System Qualification to NCHRP 350 Test Level 3 Engineering Summary." Incorporated into this summary report was a detailed report prepared by E-TECH Testing Services, Inc., entitled "NCHRP Report 350 Crash Test Results for the Safe-Stop TMA." The latter report contained data on the NCHRP Report tests 3-50 and 3-51, which are the basic tests required for acceptance of a TMA.

On March 26, you sent Mr. Richard Powers of my staff, a second report, also dated March 1999, entitled "Safe-Stop TMA System NCHRP 350 Test Level 3 Optional Tests Engineering Summary" which included E-TECH's detailed report, "Summary of Results Safe-Stop TMA NCHRP 350 Tests 3-52 and 3-53 (optional tests)." Video tapes of the tests that you conducted were included with each of your submissions.

The Safe-Stop TMA consists of a bi-folding articulating frame assembly which contains a Safe-Stop Type I Cartridge immediately behind the impact face and a Safe-Stop Type II Cartridge near the support vehicle. The Safe-Stop is 3940-mm long, 2360-mm wide at the impact face, and weighs approximately 815 kilograms. A schematic drawing of the Safe-Stop is included with this letter as Enclosure 1.

We note that in addition to tests 3-50 and 3-51, you also ran optional tests 3-52 (2000-kg pickup truck offset at 0 degrees) and test 3-53 (2000-kg pickup truck offset at 10 degrees). Enclosure 2 contains summary information on each of the four tests that were conducted. We concur with your decision to use the cab-mounted accelerometer data for test 3-51 and agree that the reported 10-ms occupant ridedown acceleration of 20 G's is consistent with our previous interpretation of appropriate rounding convention for this criterion.

We note also that the reported occupant ridedown acceleration in test 3-52 was 23 G's but acknowledge that this is an optional test and that the data obtained therefrom is primarily for informational purposes. Furthermore, test 3-53 did satisfy all evaluation criteria and we note that the impact speed was 103.9 km/h (compared to 98.3 km/h in test 3-52). Being an angle hit, test 3-53 is probably much more representative of field impacts since most drivers will swerve at the last minute to avoid an impact. The Safe-Stop TMA is the only truck-mounted attenuator to date that has been subjected to all four tests recommended in the NCHRP Report 350.

Based on the information you provided and our analysis of the data, we agree that the Safe-Stop TMA, as designed and tested, meets the appropriate evaluation criteria suggested in the NCHRP Report 350 for a TL-3 truck-mounted attenuator. It may be used on the National Highway System (NHS) when such use is requested by a State transportation agency. Since it is a proprietary product, its use on the NHS is subject to the provisions of Title 23, Code of Federal Regulations, Section 635.411 when such use is specified by the contracting agency.

Sincerely yours,

(original signed by Dwight A. Horne)

Dwight A. Horne
Director, Office of Highway Safety Infrastructure

2 Enclosures



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.



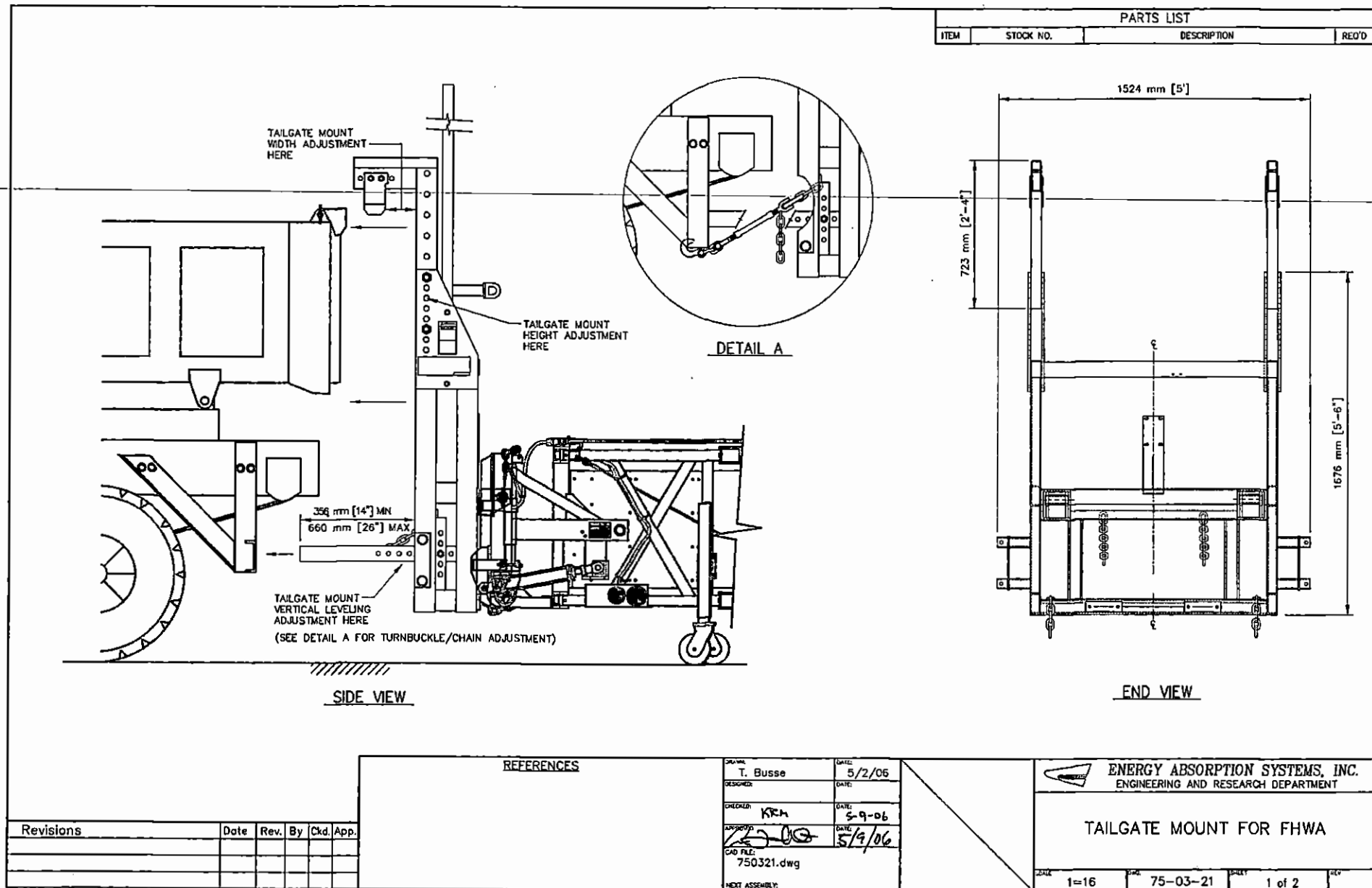
You did note that the pickup truck used in your test 3-51 was not instrumented since the purpose of the test was to determine the stability of the tailgate mount, not to re-visit the crashworthiness of the SafeStop itself. The truck was stopped in a stable manner and the tailgate mount remained fixed 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,

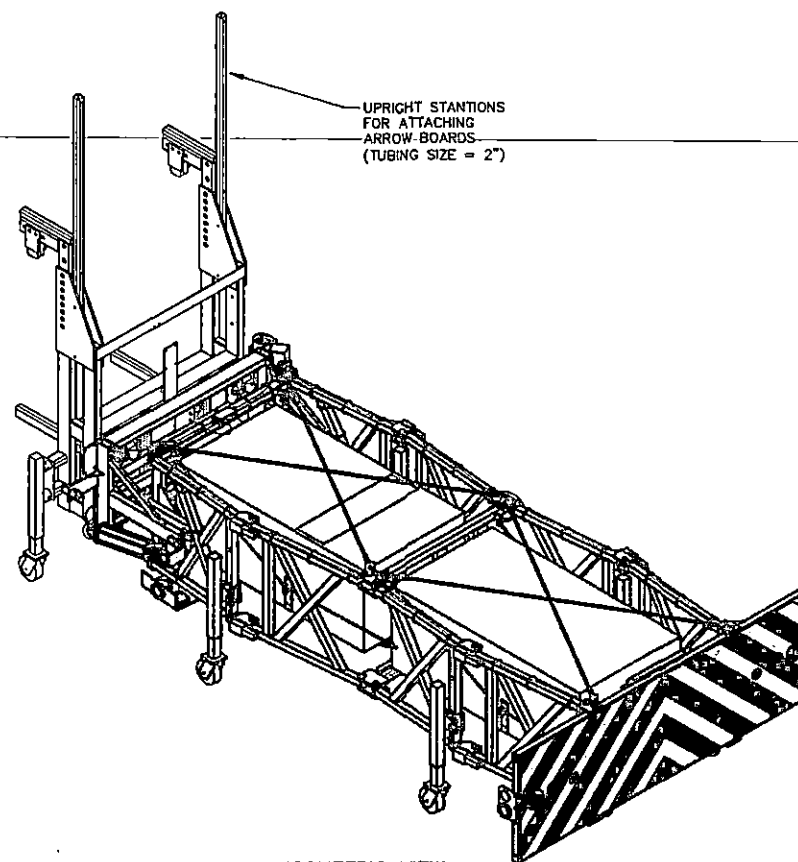
/original signed by/

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

Enclosure



PARTS LIST			
ITEM	STOCK NO.	DESCRIPTION	REQ'D




ISOMETRIC VIEW

REFERENCES

Revisions	Date	Rev.	By	Ckd.	App.

DESIGNED BY	T. Busse	DATE	5/2/06
CHECKED BY	KRM	DATE	5-9-06
DESIGNED BY	<i>[Signature]</i>	DATE	5/9/06
CAD FILE	750321 Sh02.dwg		
NEXT ASSEMBLY:			

 ENERGY ABSORPTION SYSTEMS, INC. ENGINEERING AND RESEARCH DEPARTMENT			
TAILGATE MOUNT FOR FHWA			
SCALE	1=16	DATE	75-03-21
SHEET	2 of 2	REV	