

5440000 CRASH CUSIONS
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Christian Cummings
ccummings@acmebarricades.com

Comments: (12-7-15) (Internal Review)

Has the Department considered that some of the manufacturers of the devices might not be willing to provide the required certifications that the personnel installing or repairing have been trained or set up to provide the required training. Presumably, this would subject the manufacturer to additional liability. There is a limited number of manufacturers of these devices and it seems that if even one were to decline, the negative effects could be severe. Separately, would a manufacturer be allowed to train an employee with a contractor or subcontractor to become a trainer for other employees with the Contractor or subcontractor? It does not appear under the proposed language that this would be acceptable. How often is the training required?

Response:

Karen Byram
State Product Evaluation Administrator
850-414-4353

Comments: (12-15-15) (Internal Review)

Section 544-2: I thought that M-Team had decided to require all new applications to have the MASH-09 testing regardless of when they were tested. This is not required until 2019, but the M-Team was looking for areas to expedite the implementation. If so, now is the time to remove the reference to NCHRP 350.

Response:

Renato Marrero
305-470-5359
renato.marrero@dot.state.fl.us

Comments: (12-18-15)

It seems there are a few Districts that see cartridge theft several times a year. D6 was spared this year, but not in previous years. Although my comment may be beyond this review, we learned a year ago that most systems come with an INEXPENSIVE anti-theft device. This device is a simple thin rod (similar to the \$4 rods in Home Depot) that prohibits thieves from simply pulling out the cartridges. The extra cost, IF ANY, will be negligible. I recommend the anti-theft device be a standard. By the way, we asked the Vendors to give us a price for each so we can install them on the existing systems. They quoted us about \$500 each and we install them. They also say that if we install our own (at \$5 each), the entire warranty is instantly voided.

Response:

Eric Runyon
erunyon@bobsbarricades.com

Comments: 12-18-15)

This specification is not necessary as the manufacturer has a repair and installation manual available to all. There are no specific approved training classes at this time. In addition there are many contracts already in place that do not require this specification therefore the projects were bid without cost and reimbursement for this specification to the sub or prime. This relates to crash attenuators in our case.

Response:

Neil Monkman
239-462-7371
neil.monkman@wrightg.com

Comments: (1-5-16)

It is not very often that I respond completely to the negative, but this proposed revision is beyond reasonable in my opinion. Understanding that it is a critical component where does it end? Will contractors soon be required to have a rep onsite for every facet of construction? In summary, if you have a contractor installing something and they don't know how, they should not be installing it.

Response:

George Tedder III

Comments: (1-5-16)

My comment is that although training is important for guiderail installers, Section 105 does not need to be altered. The adequacy of training for the installer supervisor should be something that is in the guiderail Standard Specification section 536-2.7 Certification; verified based on certification from the Contractor, Manufacturer, along with a copy of the installation instructions attached. Designating a Roadway Hardware Installation Supervisor for guiderail is not necessarily something that belongs in Section 105. The Department already has the QC Manager that is supposed to verify proper torque or tension of fasteners, compaction of soil around posts, placement of terminations, etc. and certify the Project for the Department. Also, not a trivial matter, is the use of the word Guardrail. For liability reasons, the Federal Highway Administration, AASHTO, and many member state DOTs have quit using the word guardrail and substituted the word guiderail. The word guiderail more closely resembles the purpose and use of the safety devices and does not imply active protection.

Response:

District 5 Construction Operations

Comments: (1-5-16)

Remove the comma in Section 544-3 after "...meeting the requirements of Section 705" in the second paragraph.

Response:

Chad O. Rucks, P.E. Project Oversight III FDOT,
D4 - Treasure Coast Operations
Desk: (772) 429-4938
chad.rucks@dot.state.fl.us

Comments: (1-5-16)

Section 544-4: During a recent field review with Stefanie Maxwell, she mentioned that the individuals placing crash cushions were going to need to be certified. Should 544-4 read...Provide a "Certified" Roadside Hardware Installation Supervisor

Response:

Lance Grace
8139756264
lance.grace@dot.state.fl.us

Comments: (1-5-16)

Requiring a certification for training is too much of an administrative burden on the contractor and department. This concept could be used on numerous manufactured products. A reference to the contractor being properly trained for installation would be more ideal.

Response:

Maria Connolly
954-934-1209
maria.connolly@dot.state.fl.us

Comments: (1-7-16)

What problem does this solve? What is driving this change? Is there a problem with crash cushion installations and repairs? This could be a slippery slope and create a precedent of requiring "... must be performed under the supervision of a xxxxx Supervisor ..." for other items that are typically included in construction projects- anything from cable barrier installation/repairs to structural repairs to bolt torqueing, etc.

Response:

The proposed change will have a significant impact on maintenance operations. Currently there are 18 products listed under crash cushions on the APL. In addition, there are several different crash cushions on the State Highway System that are not on the current APL list. It will be a significant challenge to have contractors trained in each of the different products. Is it really necessary to require a “Roadway Hardware Installation Supervisor” or a manufacturer’s representative be present for repairs?

Response:

The current Attenuator Inspection and Maintenance procedure (850-055-003-f) states: When an attenuator is significantly damaged (50% or more) or deteriorated, it shall be replaced to the latest applicable standard using an attenuator listed on the QPL. For each attenuator that is replaced, the designated District or Area Maintenance Engineer shall evaluate the attenuator history to ensure it is replaced with the most cost effective attenuator, taking into account the long term maintenance of the unit. For example, if an attenuator is routinely being hit it shall be replaced with a low maintenance/resettable type attenuator even if the initial installation cost may be higher, as the long term cost will be less due to the reduced repair costs on future impacts. All Department approved attenuator designs are listed on the QPL. Attenuators are to be installed according to the manufacturer’s specification. Proposed change to the specification requires the name and APL number of the specific device(s) that the “Roadway Hardware Installation Supervisor” has been trained to install or repair. How will repairs to existing systems that are not on the APL be handled?

Response:

From a maintenance perspective it is unreasonable to expect us to have a manufacturer’s representative on site for all maintenance repairs so we will have to use the “Roadway Hardware Installation Supervisor” instead which will present some challenges listed below:

- There is performance criteria in our Asset Maintenance (AM) Contracts that require the contractor to complete permanent repairs on crash cushions resulting from an incident within 5 calendar days of the incident. Requiring a “Roadway Hardware Installation Supervisor” who has received device-specific training may have a negative impact on the time to perform repairs. What happens if the AM contractors do the repairs to meet the contract time requirements but they don’t have the required training?

Response:

- Requiring a “Roadside Hardware Installation Supervisor” may cause the repairs to be delayed especially in an emergency situation. This would impact toll facilities most as it may cause the facility to have to shut down their designated cash/trucks booth on multiple occasions - once for the initial response to safe up the unit if no “Roadside Hardware Installation Supervisor” is available and a second time for repairs with the “Roadside Hardware Installation Supervisor”.

Response:

- Will this specification apply to any FDOT personnel performing crash cushion repairs? Will this specification apply to our consultant maintenance support personnel who perform

miscellaneous items such as tightening of bolts? Will contract managers have to meet the same training requirements as they certify that work has been completed to FDOT standards?

Response:

- What type of training will be required? What format will it be – on-site training, computer based training, etc.? Should FDOT determine what constitutes appropriate training? Are the device manufacturers aware of the proposed change to this specification? Has the training been developed by each of the device manufacturers? Who bears the cost of the training? What happens if a vendor goes out of business?

Response:

- If this is deemed necessary, has a phased-in implementation date been considered otherwise we will be in non-compliance Day 1? Recommend we exempt out maintenance repairs from the specification.

Response:

Chad Wiliams
850-330-1604
chad.williams@dot.state.fl.us

Comments: (1-13-16)

Should 544-4 also include relocate (in addition to installation and repair)? There could possibly be some disassembly/reassembly required to relocate the cushion depending on size.

Response:
