

From: [Artimovich, Nick \(FHWA\)](#)
To: [Hinton, Daniel \(FHWA\)](#)
Cc: [Fouch, Brian \(FHWA\)](#); [Winne, William \(FHWA\)](#)
Subject: RE: Guardrail endtreatment ET-Plus
Date: Thursday, October 11, 2012 3:30:18 PM
Attachments: [CC_0094_Acceptance_Letter_09-02-2005.pdf](#)

Dan,

Here is our response to your inquiry regarding the ET-Plus terminal.

On February 14, 2012, Barry Stephens and Brian Smith of Trinity Highway Products (Trinity) stated the company's ET end terminal with the 4-inch wide guide channels was crash tested at the Texas Transportation Institute (TTI) in May 2005. Roger Bligh of TTI confirmed this information on February 14, 2012. Trinity submitted documentation on various dates of changes made to its ET end terminals, which included changes from the ET-2000 to the ET-Plus. On February 14, 2012, the company reported the reduction in the width of the guide channels from 5 inches (in the year 2000) to 4 inches (in 2005) was a design detail omitted from the documentation submitted to the Agency on August 10, 2005. On March 15, 2012, Trinity submitted a letter to FHWA dated March 14, 2011 (sic), which stated its ET-Plus with the 4-inch guide channels was crash tested at TTI in May 2005. The Trinity ET-Plus end terminal with the 4-inch guide channels is eligible for reimbursement under the Federal-Aid Highway Program under FHWA letter CC-94 of September 2, 2005.

FHWA Letter CC-94 is attached.

Regards,

Nicholas Artimovich, II
Highway Engineer, Office of Safety Technologies
Federal Highway Administration HSST
1200 New Jersey Avenue SE, Room E71-322
Washington, DC 20590
email: nick.artimovich@dot.gov
phone: 202-366-1331
fax: 202-366-3222
web: <http://safety.fhwa.dot.gov>

From: Hinton, Daniel (FHWA)
Sent: Wednesday, July 18, 2012 2:03 PM
To: Artimovich, Nick (FHWA)
Subject: Guardrail endtreatment ET-Plus

Nick,

The SCDOT asked a question regarding the ET-Plus terminal for use on the NHS. Their question concerns the channel chute. In FHWA's January 18, 2000 letter the detail for the terminal show a 5" width for the channel chute (attached with the detail shown in red). However FHWA's

September 2, 2005 (attached) letter does not provide any details showing the width of the channel chute.

This end terminal is being installed on a oversight project on the NHS, however the system has a 4" width channel chute. SCDOT would like to verify that the change from 5" to 4" has been crash tested under MASH TL-3 conditions and is eligible for reimbursement under the Federal-aid highway program.

Thanks

Dan Hinton
Safety & Traffic Engineer
FHWA-SC
1835 Assembly Street, Suite 1270
Columbia, SC 29201

Phone: 803-253-3887
Fax: 803-253-3989
Email: daniel.hinton@dot.gov