



Eckert Seamans Cherin & Mellott, LLC
SunTrust Center
919 East Main Street, Suite 1300
Richmond, VA 23219

TEL 804 788 7740
FAX 804 698 2950
www.eckertseamans.com

Matthew B. Kirsner
804.788.7744 (Direct)
mkirsner@eckertseamans.com

September 18, 2015

BY EMAIL AND U.S. MAIL

Richard Tyler McGrath, Esq.
Senior Assistant Attorney General
Chief, Construction Litigation Section
Office of the Attorney General
Commonwealth of Virginia
900 E. Main Street, 2nd Floor
Richmond, VA 23219

Re: VDOT Testing of the ET PLUS Tangent W-Beam Guardrail Terminal (GR-9)

Dear Richard:

I am writing to follow up on Trinity's inspection of the test articles and vehicle for Test #1 at the KARCO test facility in Adelanto, California on September 17, 2015. Thank you for taking the time to meet with us and listen to Trinity's various concerns about the installation. Below is a summary of the issues raised by Trinity, and VDOT's response.

1. Trinity noted that the first section of guardrail was not inserted all the way into the extruder head. VDOT responded that adjustments would be made prior to testing. Trinity observed the adjustments, and the guardrail was still not inserted all the way into the extruder head.
2. Trinity noted that the extruder head was mis-aligned on the guardrail section, with the top of the guide channel resting on the top of the guardrail. VDOT responded that adjustments would be made prior to testing. Trinity observed the adjustment, and the extruder head was still mis-aligned.
3. Trinity noted that the 3rd Steel Yielding Terminal Post was not adequately inserted into the soil. VDOT responded that the soil grade was adjusted prior to the testing. It appeared that the only adjustment made was that additional native soil was added around the base of the post.

4. Trinity noted that the guardrail post heights were uneven, and the guardrail length was wavy and bowing. VDOT responded that no adjustments would be made prior to testing.
5. Trinity noted that KARCO installed the guardrail posts in native soil rather than compacted NCHRP Report 350-standard soil. VDOT responded that no adjustments would be made prior to testing.
6. Trinity noted that the end terminal system bearing plate was leaning out and forward from the post. VDOT responded that the bearing plate would be tightened and the cable would be taut prior to testing. Trinity notes that the bearing plate was still leaning out and forward from the post after the adjustment.
7. Trinity noted that the end terminal system was not installed with Trinity-manufactured splice bolts. VDOT responded that no adjustments would be made prior to testing, but VDOT would consider making changes for future tests.
8. Trinity noted that the end terminal system was not installed with Trinity-manufactured blockouts. VDOT responded that no adjustments would be made prior to testing, but VDOT would consider making changes for future tests.
9. Trinity noted that the bolt at post number 8 was not flush. VDOT responded that the bolt would be re-seated prior to testing.
10. Trinity noted that the pickup truck seemed to be riding higher than normal due to the removal of standard components. VDOT responded that no adjustments would be made prior to testing.

As noted in my letter of yesterday, VDOT is literally “driving” (pounding) the posts into native soil, rather than augering a hole and back-filling the posts with compacted NCHRP Report 350-standard soil. VDOT did not make any adjustments to this post installation process prior to testing.

Because Trinity’s concerns were not fully addressed by VDOT, and the test did not conform to NCHRP Report 350 requirements, Trinity did not attend the testing. However, Trinity has returned to KARCO this morning to inspect the second test article.

On a final note, and as we discussed by telephone last night, VDOT should also speak with KARCO regarding the run-out area necessary for the 15 degree tests we understand may be set to begin next week, and whether there is adequate space at the KARCO facility for the test vehicle to travel after impact in that test scenario. A secondary impact with extraneous, non-test



Richard Tyler McGrath, Esq.
Senior Assistant Attorney General
Office of the Attorney General
September 18, 2015
Page 3

installation components that are close to the downstream end of the installation could make it difficult to separate damage caused by the impact with the end terminal system from damage caused by any secondary impact.

Thank you.

Sincerely,

/s/ Matthew B. Kirsner

Matthew B. Kirsner

cc: Sarah R. Teachout, Esq.
Mr. Gregg Mitchell
Counsel of Record in Case No. CL13-698,
Circuit Court of the City of Richmond, VA