

Product ID: 8166-1-5 Initiation Date: February 2009 Revision Date: August 4, 2023

# **Product Evaluation**

## **RE: Review of X-Tension Guardrail End Treatment**

#### **PRODUCT**

X-Tension Guardrail End Treatment is manufactured by Lindsay located in Vacaville, California and distributed by Roadway Traffic Products, located in Edmonton, Alberta and Roadside Supply Ltd located in Ardrossan, Alberta.

## **VENDOR CLAIMS AND INFORMATION**

### **CLAIMS:**

X-Tension Guardrail End Treatment has been tested to the guidelines as specified in NCHRP 350 for a non-gating, re-directive guardrail end treatment. When properly installed and maintained this system is capable of containing and re-directing impacting vehicles in a predictable and safe manner under the NCHRP 350 impact conditions. Product Web link <a href="https://www.lindsay.com/">https://www.lindsay.com/</a>

#### **DESCRIPTION:**

The X-Tension Guardrail End Treatment has been designed and tested to meet the evaluation criteria of NCHRP 350 Test Level 3. The unique X-Tension technology is a tension-based solution rather than compression based. It offers exceptional vehicle control and energy absorbing capabilities in head on impacts where the energy is absorbed with resistance at the impact head rather than being transferred down the rail as occurs with other systems.

### **POTENTIAL USAGE:**

X-Tension Guardrail End Treatment placement and use should be done in accordance with the guidelines and recommendations set forth in the "AASHTO Roadside Design Guide". The X-Tension Guardrail End Treatment is a highly engineered safety device made up of a relatively small number of parts.

### STANDARDS:

The X-Tension Guardrail End Treatment System meets or exceeds NCHRP Report 350 Level 3.

### ALBERTA TRANSPORTATION COMMENTS

#### **EXPERIENCE:**

Alberta Transportation has no experience with this system.

## **APPLICATION STANDARDS:**

Alberta Transportation does not have a standard for crash attenuators

# **RECOMMENDATIONS:**

X-Tension Guardrail End Treatment System be listed as a Reviewed Product under Alberta Transportation Products List, Highway Safety Devices – Impact Attenuators – Proprietary, based on the information provided.

## TRIAL PROJECTS

Westbound Stony Trail at the Beddington Turnoff Exit 50 (installed 2009) Hwy 3 Crowsnest Pass

### Rishi Adhikari

cc New Products Evaluation Group – Roger Skirrow Hal Cook

Classification: Public