



Montana Department of Transportation  
PO Box 201001  
Helena, MT 59620-1001

**Memorandum**

To: Distribution

Paul Ferry, P.E.  
Highways Engineer

July 12, 2004

Subject: W-Beam Guardrail  
Reassessment of the BCT

This memo supplements the direction provided in the *Guidelines for Nomination and Development of Pavement Projects* concerning guardrail upgrades. The Guidelines indicate that upgrading guardrail blunt ends is required on all paving projects with the exception of Scheduled Maintenance.

The FHWA previously did not consider Breakaway Cable Terminals (BCT) as blunt ends. However, due to a recent NCHRP Report 350 head-on test of the BCT resulted in unacceptable passenger compartment intrusion indicating clearly that the BCT is too stiff to accommodate end-on hits, even at reduced speeds. This means that the BCT is essentially a blunt end.

Consequently, the replacement of BCTs is required on all paving projects, with the exception of scheduled maintenance.

This requirement applies to all projects submitted to the Contract Plans Bureau after October 1, 2004.

If you have questions concerning this, please contact me at 444-6244

Pf.

Distribution:	James Walther,	Preconstruction Engineer
	Lesly Tribelhorn,	Highways Design Engineer
	Damian Krings,	Road Design Engineer
	Tom Martin,	Consultant Design Engineer
	Duane Williams,	Traffic Engineer
	Suzy Althof,	Supervisor – Contract Plans Bureau
	Chris Clearman,	Contract Plans Bureau
	Jim Frank,	Glendive District Engineering Services Supervisor
	Gary Neville,	Billings District Engineering Services Supervisor
	Joe Olsen,	Butte Acting District Engineering Services Supervisor
	Duane Kailey,	Missoula District Engineering Services Supervisor
	Christie McOmber,	Great Falls Acting District Engineering Services