

Alaska DOT&PF Guardrail End Terminal Replacement Requirements (Rev 7-9-02)										
Existing Guardrail End Terminal (GET)	Type of Project or Maintenance	Non-NHS				National Highway System (NHS)				
		GET Condition				Non-Hi Spd/Hi Vol				
		OK	Def- icient	Damage Major	Damage Minor	OK	Def- icient	Damage Major	Damage Minor	GET Condition
Any or None	New Construction Projects	I350	I350	I350	I350	I350	I350	I350	I350	I350
Breakaway	4R Projects	>40 MPH: R350	>40 MPH: R350	>40 MPH: R350	>40 MPH: R350	R350	R350	R350	R350	R350
Cable Terminal (BCT)	3R Projects (Including Gravel to Pavement)	RNR	RNR	RNR	RNR	R350	R350	R350	R350	R350
	Surface Repair Maintenance Projects	RNR	RNR	RNR	RNR	RNR	R350	R350	RNR	R350
	State-funded maintenance (non-project)	RNR	RNR	>40 MPH: R350	RNR	RNR	RNR	R350	RNR	R350
Turned Down or Blunt Ends	All projects (4R, 3R, Maintenance) State-funded maintenance (non-project)	R350 RNR	R350 RNR	R350 R350	RNR RNR	R350 R350	R350 R350	R350 R350	R350 R350	R350 R350

Note. Terminal replacement requirements may be waived for a current project if a separate guardrail project that will correct terminal deficiencies within the limits of the current project is included in the STIP and is scheduled to receive construction funding no later than one year after construction begins on the current project.

Definitions.

I350: Install new NCHRP-350 compliant terminals conforming to current installation standards.

R350: Replace Non-NCHRP-350 compliant guardrail end terminals within project limits with Alaska-approved, 350-compliant terminals, with the following exceptions:

- 1) Upstream terminals outside of the clear zone for both directions of traffic.
- 2) Downstream terminals outside of the clear zone for the opposing direction of traffic.

When replacing a terminal, make sure embankment widening at the terminal conforms to standard drawing G-20. If not, grade and/or widen as necessary to achieve conformance. Consider relocating terminals if widening can be more easily constructed elsewhere (length of need must be verified where a relocated terminal would result in a reduced length of guardrail). If building embankment widening in accordance with G-20 is not feasible at a location due to slope steepness, height and constraints on extension of the road footprint, the reasons for not doing it should be documented (in the design study report for design projects).

>40 MPH R350: Replace in accordance with R350 above if the speed limit is greater than 40 MPH. If the speed limit is 40 MPH or less, comply with RNR below.

RNR: Replacement Not Required: It is not mandatory to replace terminals with ones that are 350 compliant. However, if terminals are not replaced, damaged parts still need to be repaired. If terminals are replaced, replacements must be 350-compliant.

Hi Spd / Hi Vol: High-Speed, High Volume - 50 MPH or more and 6000 ADT or more.

Surface Repair Maintenance Projects: Surface repair Projects funded under the federal Preventive Maintenance Program, not including crack sealing or projects that are eligible under the 3R program (3R-eligible projects must conform to the 3R requirements in the matrix). PM projects include asphalt surface treatments, rut filling, profiling, and similar work and may be done either by DOT&PF Maintenance or Contractors.

Deficient: Deficient terminals include those that have, after project completion, improper flares, improper approach cross slope, rail height too high or low (lower than 24" or higher than 30" on strong-post W-beam), breakaway hardware stub height over 4", etc.

Minor Damage: Post and rail damage, no foundation damage, less than half of the terminal posts need replacement.

Major Damage: Damage to concrete foundations or half or more of the terminal posts need replacement