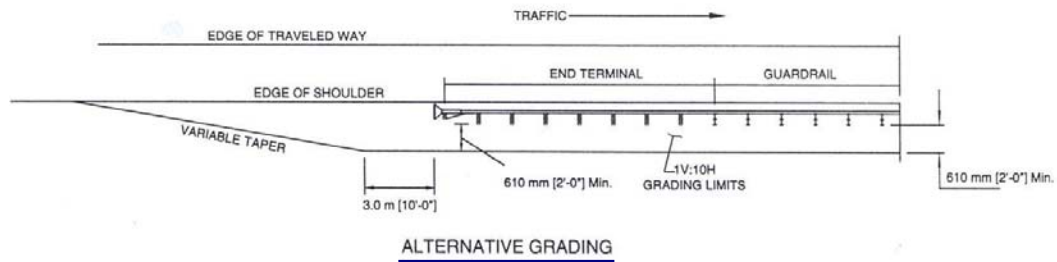
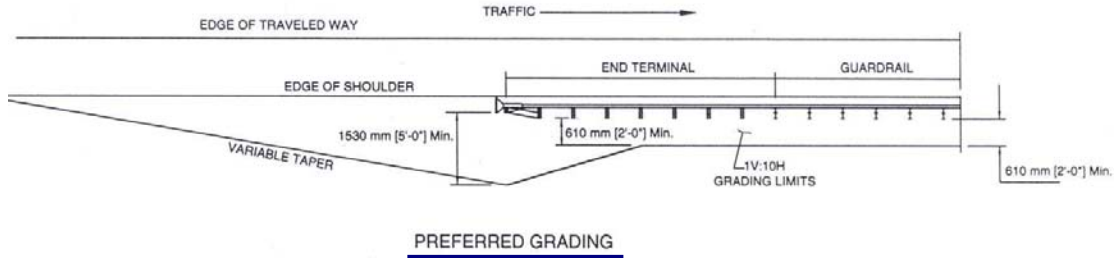
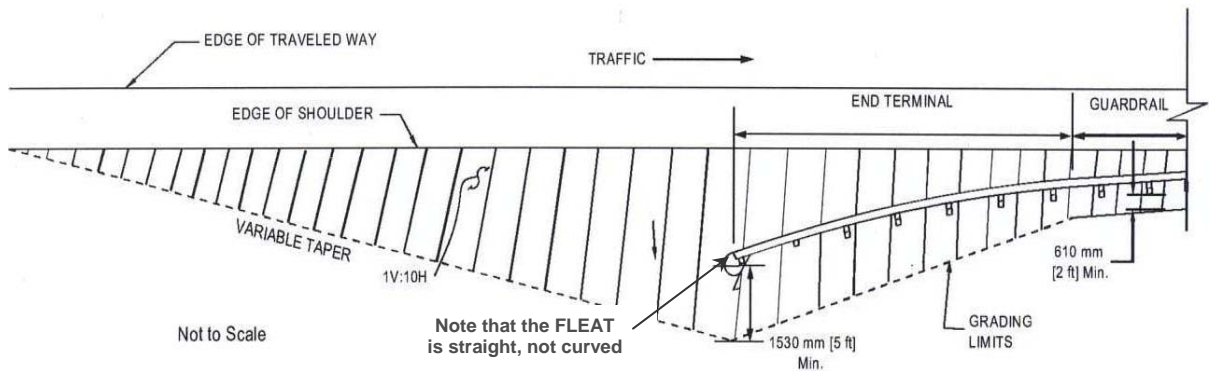


Guardrail End Terminal Grading Layouts



*The preferred grading layout should be used wherever practical. However, because of site limitations, when upgrading an existing terminal with a crashworthy terminal meeting NCHRP Report 350 criteria, the alternative grading layout may be used.

Grading for *Tangent Terminal* (from AASHTO Roadside Design Guide)



Grading for *Flared Terminal* (from AASHTO Roadside Design Guide)

Proper Grading is Needed For ALL Terminals

NCHRP Report 350 has a crash test requirement **Test 3-35**. For Test Level 3, the impact condition is 100 km/hr • 2000kg pickup truck • 20° at the redirective point. This test establishes the Beginning Length of Need (BLON) for terminals. Every terminal has a point where it is no longer redirective.

NCHRP 350 also has a crash test requirement **Test 3-33**. The impact condition is 100 km/hr • 2000kg pickup truck • 20° impact at centerline of the terminal nose. For this test, all terminals will allow the vehicle to gate through. The result is all terminals have similar redirective / non-gating lengths as part of the BLON calculation. Regardless of the type of system being used, a safe runout distance is needed beyond the end of the system, either for the situation where the vehicle passes through the system, or where the vehicle just misses the end of the system and continues behind it.