

tions of embankment height and slope plot close to the line, the severity of an errant vehicle going over an embankment may be greater or less than the severity of striking the guardrail, so the shaded areas of the line should be regarded as a band. When the site specific embankment height and slope conditions plot above the equal severity band, the severity of colliding with the guardrail should be less than the severity of a run-off-road vehicle going over the embankment. Therefore, guardrail can be installed when the embankment height and slope plot above the band, and the criteria in Topic 7-03.3 are considered.

Although an embankment slope may not qualify for installation of guardrail based on application of Figure 7-1, the presence of fixed objects along the slope or bodies of water, school grounds,

or other fixed objects at the toe of slope or beyond the CRZ, can present a greater risk to vehicle occupants or people. For this reason local site conditions need to be considered in conjunction with Figure 7-1.

Guardrail placed to shield an embankment slope should shield both directions when the embankment is within the CRZ for each direction of travel. See Figure 7-2. For more information on clear recovery zones on conventional highways see Topic 7-02.

The District Traffic Safety Engineer must approve the decision to install or not to install guardrail and the type of end treatment at an embankment slope, and the approval must be documented in the project files.

Figure 7-1: Equal Severity Curve

