

DESIGN PARAMETERS FOR ROADSIDE BARRIER LAYOUT

DESIGN SPEED (km/h)	DESIGN TRAFFIC VOLUME (ADT)				SHY* LINE (m)	FLARE RATE		
	OVER 6000	2000-6000	800-2000	UNDER 800		BEYOND SHY LINE		INSIDE SHY LINE
	RUNOUT LENGTH Lr (m)	RUNOUT LENGTH Lr (m)	RUNOUT LENGTH Lr (m)	RUNOUT LENGTH Lr (m)		GR-2, 3 & 8 MB-3	MB-7D, 7E, 7F, 12A, 12B & 12C	ALL
110	145	135	120	110	2.8	15:1	20:1	30:1
100	130	120	105	100	2.4	14:1	18:1	26:1
90	110	105	95	85	2.2	12:1	16:1	24:1
80	100	90	80	75	2.0	11:1	14:1	21:1
70	80	75	65	60	1.7	10:1	12:1	18:1
60	70	60	55	50	1.4	8:1	10:1	16:1
50	50	50	45	40	1.1	7:1	8:1	13:1

- Shy line is measured from the adjacent edge of pavement and is a distance beyond which a roadside object will not be perceived as a threat by a driver. In other words, a driver will not react to an object beyond the shy line offset. If possible, the roadside barrier should be placed beyond the shy line offset.

Source: The 2006^{*} Roadside Design Guide Tables 5.5, 5.7 & 5.8.

TABLE A-3-3M

SLOPES FOR APPROACH BARRIERS

As a general rule, a roadside barrier should not be placed on an embankment if the slope of the embankment is steeper than 10:1; however, in special cases, such as "barn roof" ("recoverable area") slopes, it is acceptable to place semi-rigid barrier on slopes as steep as 6:1. When semi-rigid barrier is used on 6:1 slopes, a 3.0 m rounding should be included between the shoulder and slope. Where it is not feasible for the entire graded median in the area of the hazard to be on a 10:1 slope, an acceptable alternative is to provide the 10:1 slope between the edge of pavement and the approach barrier (See Fig. A-3-2M). A clear run-out path should also be provided behind the terminal.

When recoverable areas are less than 4.3 m in width and guardrail is required, the guardrail is to be placed on a fill with guardrail (W/GR) shoulder and the recoverable area is not to be provided. Although not encouraged, guardrail is permitted on 6:1 slopes if located beyond 3.6 m of the shoulder hinge point.

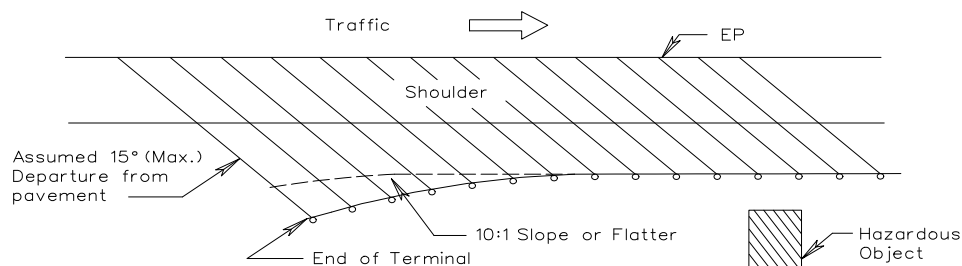


FIGURE A-3-2M - SUGGESTED SLOPES FOR APPROACH BARRIERS

* Rev. 1/10