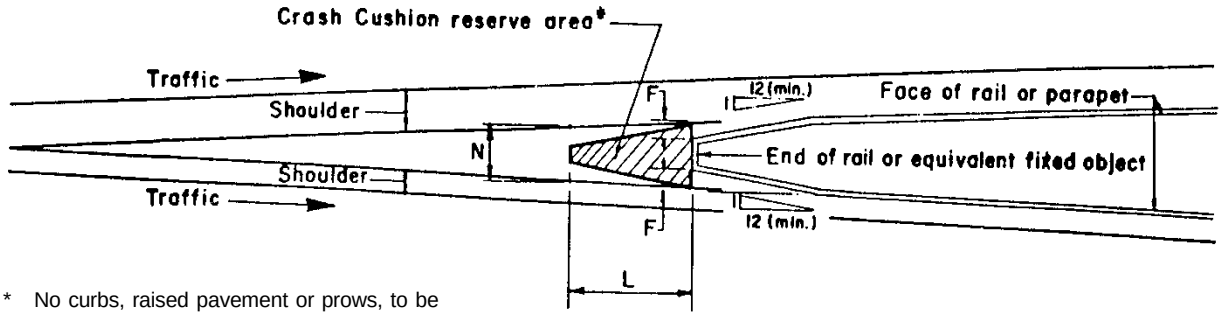
These dimensions are recommended so there will be additional space available should experience dictate the need for a device capable of slowing larger vehicles than originally considered or for producing lower deceleration forces. In the meantime, the unoccupied space provides valuable motorist recovery area. Site conditions may dictate the type of attenuator needed. For example, fixed objects such as barrier ends which are less than 3 feet wide should be shielded by a narrow impact attenuator. Similarly, wide hazards, e.g., those greater than 3 feet, can be effectively shielded best by a wide impact attenuator or approved sand barrier arrays.

Design Speed on Main line [mph]	Dimensions for Crash Cushion, Reserve Area [feet]								
	Minimum						Preferred		
	Restricted Conditions			Unrestricted Conditions					
	N	L	F	N	L	F	N	L	F
30	6	8	2	8	11	3	12	17	4
50	6	17	2	8	25	3	12	33	4
70	6	28	2	8	45	3	12	55	4
80	6	35	2	8	55	3	12	70	4

Source: The 2011 AASHTO *Roadside Design Guide*.



* No curbs, raised pavement or prows, to be built or remain in the area surrounding or occupied by the crash cushion.

FIGURE I-2-1

Source: The 2011 AASHTO *Roadside Design Guide*.