Construction-Zone Design Speed (mph)	Calculated *K* Value ($K = V^2/46.5$)	*K* Value Rounded For Design
20	8.6	9
25	13.4	14
30	19.4	20
35	26.3	27
40	34.4	35
45	43.5	44
50	53.8	54
55	65.1	66

$$L = \frac{AV^2}{46.5} = KA$$

Where:

- L = *Length of vertical curve, ft*
- A = *Algebraic difference between grades, %*
- K = *Horizontal distance required to effect a 1% change in gradient*
- V = *Design speed, mph*

_K_ VALUE FOR SAG VERTICAL CURVE
(Comfort Criteria in a Construction Zone)

Figure 82-3B