



**Notes:**

1. For vertical curves where the two tangent grades are in the same direction (both upgrades or both downgrades), 50% of the curve length will be part of the length of grade.
2. For vertical curves where the two tangent grades are in opposite directions (one grade up and one grade down), 25% of the curve length will be part of the length of the grade.

**MEASUREMENT FOR LENGTH OF GRADE**

Figure 44-1C