

DETERMINING TOTAL GUARDRAIL LENGTH

3-2F

The total length guardrail needed at an installation is obtained by adding the length of need to the guardrail length which is needed throughout the limits of the hazard, and then deducting the applicable anchors' unit length. Anchor unit deductions, to be used in calculations, are listed below: The total length of guardrail should be rounded so it is divisible by 12.5 ft.

ANCHOR DEDUCTIONS

<u>ANCHOR</u>	<u>DEDUCTIONS</u>
GRAU-350	50.0'
M-350	37.5'
CAT-1	6.25'
AT-1	6.25'
*Type III	18.75'
*B – 77	22.875'
*B – 83	25.0'

*Measured from the end of the bridge or approach slab rail.

GUARDRAIL INSTALLATION AT INTERSECTIONS

3-3

When installing guardrail around intersections, care must be taken to ensure adequate sight distance is maintained at the intersection. Also, the guardrail should not impede the turning path of a vehicle. When guardrail is warranted around an intersection, provide as much offset as possible from the edge of the travel lane to the face of the guardrail. This will ensure adequate sight distance and place the guardrail farther from a vehicle's turning path.

In installations along curb and gutter facilities, the guardrail should preferably be placed 12 feet from the face of the curb instead of at the face of the curb. If 12 feet is not available, place the guardrail, as far away from the face of the curb as the berm width will allow. When guardrail is placed at the face of the curb, sight distance and the vehicle's turning ability is impeded.

See Roadway Standard Drawings, Std. No. 862.01, Sheet 7, for a pictorial view showing placement of guardrail at intersections.