

ENTRANCES OR CONNECTIONS ADJACENT TO A BRIDGE

When entrances or connections cannot be relocated or eliminated and are located adjacent to a bridge on low-volume rural roads or in areas with dense entrance locations, it may be necessary to install radial guardrail around the entrances or connections. Plans fitting this criteria are to be submitted to the [Standards/Special Design Section](#) for review, approval and details.

GUARDRAIL OVER CULVERT IN FILLS

Standard GR-10, Type I, II or III, is the preferred method of installing guardrail over culverts where fills are less than 1090 mm above the culvert top slab.

Type I is adaptable to culverts with a perpendicular width of 3.2 m or less. A 7.6 m section is used with the rail doubled **nested*** and one post omitted. Type II is adaptable to culverts with a perpendicular width of 5.1 m. A length of 11.4 m is used with the rail doubled **nested** and two posts omitted. Type III is for use with a perpendicular width of 7 m. A length of 30.5 m is used with the rail doubled **nested** and three posts omitted.

In situations where the use of Standard GR-10 is not feasible, an allowable alternative may be the TEXAS T-6 (BGR-01) for speeds ≤ 70 km/h.

SHORT GAPS

Short gaps between barrier installations should be avoided. When the areas of concern are less than 60 m apart, the barrier protection shall be made continuous.

PONDS OR OTHER BODIES OF WATER

Barrier is to be constructed on all functional classifications at ponds or other bodies of water over 0.6 m in depth **when it is within the design clear zone.**

* Rev. 7/10