

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
GUARDRAIL OVER BOX OR SLAB CULVERTS

GCB:CT

1 of 1

APPR:WKP:REL:04-07-26
FHWA:APPR:04-16-26

a. Description. Ensure the requirements of this special provision are satisfied when using the alternate construction method (adhesive-anchored threaded rods) from Standard Plan R-73-Series. Complete this work in accordance with the adhesive manufacturer's specifications and this special provision.

b. Materials. Furnish threaded rods, nuts, and washers in accordance with Standard Plan R-73-Series and subsection 908.11.B of the Standard Specifications for Construction.

Furnish an adhesive anchoring system from the Qualified Products List (712.03J) for securing threaded rods to the concrete structure.

c. Construction. Install adhesive-anchored threaded rods in accordance with the Alternate Construction Method shown on Standard Plan R-73-Series, the adhesive manufacturer's recommendations, and subsection 712.03.J of the Standard Specifications for Construction, with the following exceptions:

1. Ensure the minimum embedment depth meets the adhesive manufacturer's recommendations and the requirements of Standard Plan R-73 Series.
2. Proof tests must demonstrate that anchors can develop a minimum of 7,800 pounds with less than 1/16 inch of slippage; and
3. Field tests must demonstrate that anchors can develop a minimum of 5,500 pounds with less than 1/16 inch of slippage.

Unless otherwise specified by the Engineer, ensure anchors are placed at least 12 inches from joints in the underlying concrete surface.

Repair all exposed steel surfaces, including exposed surfaces on threaded rods, in accordance with subsection 716.03.E of the Standard Specifications for Construction.

Level posts as necessary using galvanized washers, as detailed on the plans. Ensure posts are plumb after installation is complete.

d. Measurement and Payment. The completed work, as described, will be included as part of the **Guardrail Post, Culv** pay item defined in section 807 of the Standard Specifications for Construction. Additional payment will not be provided for completing the work items described in this special provision.