

INDIANA DEPARTMENT OF TRANSPORTATION



INTER-DEPARTMENT COMMUNICATION
Standards Section-Room N642



Writer's Direct Line
233-2273

September 22, 2000

DESIGN MEMORANDUM No. 00-12 POLICY CHANGE

TO: All Design, Operations, District Personnel and Consultants

FROM: /s/ Anthony L. Uremovich
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SUBJECT: Guardrail Over Large Drainage Structures

SUPERSEDES: Design Manual Section 49-5.03 including Figures 49-5L and 49-5M

EFFECTIVE: January 17, 2001 Letting

Large drainage structures are defined as those with a clear span of 1675 mm or greater, including 3-sided structures. The policy relating to W-beam guardrail over such structures on all projects including **3R** has been changed as listed below:

1. The selection of the W-beam guardrail at a large drainage structure will be based on the structure width and the depth of cover over the structure.
2. A **30.48 m** section of nested W-beam guardrail with **1830 mm** length posts will be used over low-fill structures in accordance with **NCHRP 350** crash test criteria.
3. Standard W-beam guardrail with **1830 mm** length posts will be used at the structures for a depth of cover \geq **1250 mm**, but less than **1550 mm**.
4. Standard W-beam guardrail with **2130 mm** length posts will be used for a depth of cover \geq **1550 mm**.

Attached is Design Memorandum No 00-12 Technical Advisory to provide additional information regarding the design and contract document preparation procedures related to guardrail over large drainage structures. This interim procedure will remain in effect until superseded by an official Design Manual revision or another Design Memorandum/Policy Change document. Designers are instructed to follow the interim procedure to shield errant motorists from adverse conditions at the ends of large drainage structures by using W-beam guardrail.

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