

VIRGINIA DEPARTMENT OF TRANSPORTATION

# LOCATION AND DESIGN DIVISION

## INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM

GENERAL SUBJECT: INTERSTATE 4R PROJECTS	NUMBER: IIM-LD-177.1
SPECIFIC SUBJECT: SUBSTANDARD BRIDGE DESIGN EXCEPTIONS ACCIDENT ANALYSIS	DATE: DECEMBER 1, 2005
	SUPERSEDES: IIM-LD-177
DIVISION ADMINISTRATOR APPROVAL: Mohammad Mirshahi, P.E. State L&D Engineer Approved: December 1, 2005	

Changes are shaded.

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### CURRENT REVISION

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- Updated for current Division Administrator Approval.
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### POLICY

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- The following will be implemented on all Interstate 4R projects, excluding those minor in scope (e.g., recessed pavement markers, etc.), advertised after March 1, 1987 to comply with the FHWA's recommendation for improving the program in Virginia.
    1. A Design Exception is required for any project advertised after March 1, 1987 that does not include Work Category V (upgrading substandard bridge features) if substandard bridge rails (parapets) or widths exist within the project limits.

To determine which bridge rails and/or widths are substandard, contact the District Structure and Bridge Engineer. Form LD-252 has been revised to include the request.

Attached is a sample letter that can be used to process the Request for Design Exception.
    2. An accident analyses will be made a part of the project development process to assure that hazardous locations/conditions are not overlooked.

- a. For projects that have not been field reviewed, the Accident History is to be requested on Form LD-252 in the early stages of project development and the analyses and recommendations are to be provided to the FHWA Area Engineer and others at the Field Inspection for a determination of required action (i.e., corrective measures are incorporated into the project to alleviate the problem area or another project is required to correct the problem.)
  
- b. For projects that have been field reviewed and that will be authorized and advertised after March 1, 1987, the accident histories should be examined and discussed with the appropriate FHWA Area Engineer. The Traffic Engineering Division has this data on file and it may be obtained by a short memorandum or telephone call to the Safety Group.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION  
1401 EAST BROAD STREET  
RICHMOND, 23219

RAY D. PETHTEL  
COMMISSIONER

EARL C COCHRAN, JR.  
STATE LOCATION AND DESIGN ENGINEER

February 2, 1987

**SAMPLE**

Route 8: (Safety Project)  
Project: 0081-08-115, PE-101  
Federal: IR-81-2 (163) 174  
Rockbridge County  
Request for Design Exception  
Substandard Bridge Rails and  
Narrow Bridges

Mr. James M. Tumlin  
Division administrator  
Federal Highway Administration  
Richmond, Virginia 23240-0045

Dear Mr. Tumlin:

Our respective offices agreed to a priority schedule for safety upgrading of the Interstate System. Because of the costs involved it was prudent to perform this work in stages with the most cost effective improvements completed first.

Or priorities based on cost, traffic, accidents, types of hazards and collision frequencies determined from the AASHTO Barrier Guide are as follows:

- Category I – Upgrade guardrail, breakaway signs, etc.
- II – Extend pipe; flatten slopes, regrade ditches, etc.
- III – Upgrade 12'-6" guardrail spacing
- IV – Extend Substandard accel/decel lanes
- V – Upgrade bride parapet walls

This project provides for safety upgrading in Categories I, II, and III, in Rockbridge County. The attached list indicates there are 19 bridges with substandard bridge rails and/or narrow shoulders.

We request concurrence in a design exception for these bridges. When the higher priorities of safety improvements on the Interstate System are complete, we will proceed with projects correcting the Category V features.

Sincerely,

J. M. Wray, Jr.  
Chief Engineer

By: E. C. Cochran, Jr.  
State Location and Design Engineer

RLS/dd

Attachment: Substandard Bridge Tabulation

- cc:
- Mr. J. M. Wray, Jr.
  - Mr. J. S. Hodge
  - Mr. J. G. Ripley
  - Mr. F. G. Sutherland
  - Mr. A. L. Thomas, Jr.
  - Mr. P. F. Cecchini
  - Attn: Mr. L. L. Misenheimer

TRANSPORTATION FOR THE 21<sup>ST</sup> CENTURY

SHEET 2

TABULATION OF ROUTE 81 MAINLINE SUBSTANDARD BRIDGES

Rockbridge County

Crossing	Str. No.	Substandard Width	Substandard Type Rail
NBL/Cedar Creek	2000	X	X
SBL/Cedar Creek	2001	X	X
NBL/Route 11	2002	X	X
SBL/Route 11	2015		X