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Jeff Landry, Governor Glenn Ledet, Jr., Secretary

MEMORANDUM

TO: ALL BRIDGE DESIGNERS - IN-HOUSE AND CONSULTANTS

FROM: MARK BUCCI, P.E.

BRIDGE DESIGN ENGINEER ADMINISTRATOR

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 95 REVISION 1 (BDTM 95.1)

CONCRETE ROADSIDE AND MEDIAN BARRIERS

DATE: September 02, 2025

Effective immediately, implement the following policy in accordance with the Bridge Design and Evaluation Manual (BDEM), Revision 9, Preface, Implementation Policy of BDEM and Revisions.

This BDTM revises the language of the DOTD Bridge Design and Evaluation Manual, Part II, Volume 4 as follows:

Add the following to Section 2.2.2, which addresses Concrete Roadside Barriers:

Where roadside barriers are required and where the highest roadway cross section finish grade elevation is greater than or equal to the 100-year base flood elevation, install MASH barriers having minimum drain slot dimensions of 24-inch length and 6-inch height longitudinally spaced at 10 feet maximum. Do not install concrete roadside barriers where the highest roadway cross section finish grade elevation is less than the 100-year base flood elevation.

Replace Section 2.3.3, which addresses Concrete Median Barriers, with the following:

2.3.3 - Concrete Median Barrier

A concrete median barrier system consists of either a single-sided or double-sided barrier typically supported by a reinforced cast-in-place concrete foundation.

Use concrete barriers having a 42-inch minimum height. As a minimum, use a Test Level 4 (TL-4) concrete barrier tested in accordance with MASH. A 54-inch barrier height may be used when justified in the Design Report. Single slope barrier faces are preferred.

Design and construct foundations to be independent of the roadway/shoulder section. Use crash tested foundations where possible. Use AASHTO LRFD Bridge Design Specifications (BDS) "Design Forces for Traffic Railings" to design non-tested foundations.

If barrier height exceeds test height, design barrier system in accordance with AASHTO LRFD BDS.

For concrete median barrier systems in superelevated roadway sections, accommodate differing roadway elevations and apply transverse traffic rail design forces to each barrier face. Site-specific concrete barrier designs and details are required at these locations.

On roadway segments that lie within a FEMA-designated Special Flood Hazard Area (SFHA) where the highest roadway cross section finish grade elevation is lower than the 100-year base flood elevation, use MASH TL-4 barriers as depicted in Texas A&M Transportation Institute Test Report 0-6976-R1. For roadway section elevations greater than or equal to the 100-year base flood elevation, install MASH TL-4 barriers having minimum drain slot dimensions of 24-inch length and 6-inch height longitudinally spaced at 10 feet maximum.

This BDTM is posted on the LA DOTD Bridge and Structural Design website.

Please contact Kelly Kemp at kelly.kemp@la.gov if you have questions or comments.

MB/CG/kmk

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