



Office of Engineering
Project Development Division
Bridge Design Section
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John Bel Edwards, Governor
Shawn D. Wilson., Ph.D., Secretary

MEMORANDUM

TO: ALL CONSULTANTS
ALL BRIDGE DESIGNERS

FROM: PAUL FOSSIER, P.E.
BRIDGE DESIGN ENGINEER ADMINISTRATOR

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 62 (BDTM.62)
BRIDGE DESIGN AND EVALUATION MANUAL (BDEM) REVISION NO. 5

DATE: June 1, 2016

The following pages in BDEM have been revised and added. The BDEM posted on Bridge Design Section Website has been updated to include these pages. The revised pages (with changes in red) are also attached for reference.

Page No.	Revision Description
Index-iii	Revised the page to add Part IV Chapter 3 – Intermediate Diaphragm Study
Revision History-i	Revised the page to document revision No. 5
II.V1-Ch5-9	Revised policy for intermediate diaphragm
IV.Ch3-i to IV.Ch3-114	New pages for Part IV Chapter 3 – Intermediate Diaphragm Study

The policy for intermediate diaphragm for precast prestressed concrete girder spans in BDEM Part II Vol. 1 Section 5.13.2.2 (Page II.V1-Ch5-9 dated 11/17/2014) has been revised as result of a comprehensive intermediate diaphragm study. The new policy is in line with national best practices and will reduce construction cost. The final report of the intermediate diaphragm study is included in BDEM Part IV Chapter 3.

Refer to BDTM.50 for implementation policy on revisions to BDEM.

This technical memorandum is posted on the LA DOTD Website under [Inside La DOTD > Divisions - Engineering > Bridge Design > Technical Memoranda – BDTMs.](#)

Please contact Ms. Zhengzheng “Jenny” Fu (225-379-1321, zhengzheng.fu@la.gov) if you have questions or comments.

PF/zzf

Attachment

Cc: Janice Williams (Chief Engineer)
Chad Winchester (Chief, Project Development Division)
Edward Wedge (Deputy Engineer Administrator)
Kirk Gallien (Assistant Secretary of Operations)
David Miller (Chief Maintenance Administrator)
Michael Vosburg (Chief Construction Division Engineer)

Jeff Burst (Project Management Director)

Jeff Lambert (Pavement and Geotechnical Engineer Administrator)

Simone Ardoin (Road Design Engineer Administrator)

Art Aguirre (FHWA)

District Administrators, ADA Engineering, ADA Operations, and District Area Engineers

Inactive

PART IV BACKGROUND INFORMATION

CHAPTER 1 LADV-11 DEVELOPMENT

CHAPTER 2 TEMPERATURE RANGE STUDY

CHAPTER 3 INTERMEDIATE DIAPHRAGM STUDY

Inactive

5.12.4—Protective Coatings

The following shall replace *A5.12.4*.

Refer to *D5.4.3.1* for the policy on protective coatings.

5.13—SPECIFIC MEMBERS

5.13.2—Diaphragms, Deep Beams, Brackets, Corbels and Beam Ledges

5.13.2.2—Diaphragms

C5.13.2.2

The following shall supplement *A5.13.2.2*.

The following shall supplement *AC5.13.2.2*.

Intermediate diaphragms (ID) for precast prestressed concrete girder spans shall be provided as specified in the Policy for Intermediate Diaphragms table. End diaphragms (ED) shall be provided for all precast prestressed concrete girder spans. Both ED and ID shall have a minimum width of 8 inches and shall extend full depth from the bottom of deck to top of girder's bottom flange.

The study report for intermediate diaphragms is included in *BDEM Part IV*.

Policy for Intermediate Diaphragms

Situations	Requirement for Intermediate Diaphragms (ID)
All spans unless otherwise specified as follows:	ID is not required.
<u>Case 1</u> : Spans over roadways, railroads, navigational channels, and water body with anticipated marine traffic under normal loading condition except for Cases 2 and 3	One ID shall be provided at center of span.
<u>Case 2</u> : Spans on curve with curved girders only	Requirement of ID shall be determined for the design condition. Minimum one ID shall be provided.
<u>Case 3</u> : Spans subject to wave force, extreme high wind conditions, other anticipated lateral forces, or other unusual loading conditions	Requirement of ID shall be determined for the design condition. Minimum one ID shall be provided.