CHAPTER 4—VESSEL COLLISION CONSIDERATIONS

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4.1—SCOPE

The following shall replace the 2nd sentence in *A4.1*.

The provisions of *AASHTO LRFD Bridge Design Specifications* and the provisions in *LADOTD BDEM, Part II, Volume 1* shall apply, except as modified or supplemented herein.

Construction specifications shall be the latest edition of *Louisiana Standard Specifications for Roads and Bridges (Standard Specifications)*. *Standard Specifications* are subject to amendment whenever necessary by supplemental specifications and special provisions to specific contracts. In the absence of specific information in the *Standard Specifications,* follow the latest edition of *AASHTO LRFD Bridge Construction Specifications.*

4.3—PERFORMANCE CRITERIA

The following shall replace the 1st paragraph of *A4.3*.

For the purpose of selecting maximum annual frequency of collapse, as specified in *AASHTO LRFD Bridge Design Specifications, A3.14.5*, refer to *LADOTD BDEM, Part II, Volume 1, D3.14.5*.

4.4—DESIGN VESSELS, LOADS, AND LIMIT STATES

The following shall replace the 1st paragraph of *A4.4*.

In addition to the Design Vessels required by *AASHTO LRFD Bridge Design Specifications,* as amended or supplemented by *LADOTD BDEM, Part II, Volume 1, D3.14.1,* collision with a smaller vessel, or vessels, designated as Operating Vessels, defined in *A4.2*, may also be considered to:

- Minimize damage from routine marine traffic.
- Ensure that the bridge remains operational.
- Proportion the fender system so that it is not severely damaged after minor collisions.

4.6—COLLISION RISK ANALYSIS

The following shall replace *A4.6.*

The vessel collision risk model described in the current *AASHTO LRFD Bridge Design Specifications*, as amended or supplemented by *LADOTD BDEM, Part II, Volume 1, D3.14.2*, shall apply, except that unique characteristics of movable bridges and the special navigation conditions shall be considered, especially when estimating probability of vessel aberrancy and the geometric probability.

4.7—VESSEL IMPACT LOADS

The following shall replace *A4.7.*

For a given vessel type, size, and speed, vessel collision loads shall be determined as specified in the current *AASHTO LRFD Bridge Design Specifications* as amended or supplemented by *LADOTD BDEM, Part II, Volume 1.*

REFERENCES

AASHTO LRFD Bridge Construction Specifications, Latest Edition, American Association of State Highway and Transportation Officials, Washington D.C.

AASHTO LRFD Bridge Design Specifications, Latest Edition, American Association of State Highway and Transportation Officials, Washington D.C.

AASHTO LRFD Movable Highway Bridge Design Specification, Latest Edition, American Association of State Highway and Transportation Officials, Washington D.C.

AASHTO Standard Specifications for Movable Highway Bridges, 5th Edition, MHB 5, American Association of State Highway and Transportation Officials, Washington D.C., 1988.

Louisiana Standard Specifications for Roads and Bridges, Latest Edition, State of Louisiana Department of Transportation and Development, Baton Rouge, LA