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SHERRI H. LEBAS, P.E.
SECRETARY

MEMORANDUM

TO: ALL CONSULTANTS
ALL BRIDGE DESIGNERS

FROM: HOSSEIN GHARA, P.E. 
BRIDGE DESIGN ADMINISTRATOR

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 29 (BDTM.29)
AS-DESIGNED BRIDGE RATING

DATE: APRIL 5, 2011

Effective immediately for all projects prior to 60% final plan stage, as-designed bridge ratings shall be performed by the design engineer and included in the plans in accordance with LADOTD's "The Policies and Guidelines for Bridge Rating and Evaluation" and this memorandum.

As-designed bridge ratings shall include the inventory and the operating ratings for the HL-93, and the inventory rating for the LADV-11, as defined in BDTM.28. If the inventory rating for the HL-93 is less than 1.0 (as may be the case for rehabilitated bridges), additional ratings for the LA TYPE 3, LA TYPE 3-S2, AASHTO TYPE 3-3, LA TYPE 6, LA TYPE 8 and Lane-Type Legal Load Models shall be also provided.

The LADV-11 live load model shall be evaluated at the inventory level for all limit states indicated in the "Design" column in "Table 2 LRFR Limit States" of LADOTD's "The Policies and Guidelines for Bridge Rating and Evaluation." For the evaluation of the Service III limit state for the LADV-11 only, a Load Factor of 0.9 shall be used.

The following As-Designed Bridge Rating Factor Tables, which show the most critical as-designed ratings for each structure, shall be included on the general notes sheet as appropriate.

For Bridges with HL-93 Inventory Rating ≥ 1.0 :

As-Designed Bridge Rating Factor Table			
Structure No.		Recall No.	
Vehicle	Superstructure	Substructure	Notes
HL-93 (INV)			
HL-93 (OPR)			
LADV-11 (INV)			

For Bridges with HL-93 Inventory Rating < 1.0:

As-Designed Bridge Rating Factor Table				
Structure No.		Recall No.		
Vehicle	GVW(KIPS)	Superstructure	Substructure	Notes
HL-93 (INV)	-			
HL-93 (OPR)	-			
LADV-11 (INV)	-			
LA TYPE 3	41			
LA TYPE 3-S2	73			
TYPE 3-3	80			
LA TYPE 6	80			
LA TYPE 8	88			
Lane-Type Legal Load Model-1*	-			
Lane-Type Legal Load Model-2**	-			
*Per MBE Appendix A-6A.4 Figure A-6A.4-4				
** Per MBE Appendix A-6A.4 Figure A-6A.4-5				

The as-designed bridge rating report shall be prepared in accordance with LADOTD's "The Policies and Guidelines for Bridge Rating and Evaluation". The report shall be sent by the DOTD Bridge Task Manager to the DOTD Bridge Rating Engineer in two submittals. The initial submittal shall be made within thirty days after 100% Final Plans are completed. The second submittal shall be made after the completion of the shop drawing review period and shall be updated to include any changes that were the result of plan revisions, change orders, and / or shop drawing reviews. If no modifications were necessary, a letter stating that no changes were made should be submitted to the Bridge Rating Engineer in lieu of a second submittal of the report. If a consultant is performing the as-designed bridge ratings, the reports shall be submitted to the DOTD Bridge Task Manager who will in turn submit them to the DOTD Bridge Rating Engineer. The final as-built bridge rating, which will incorporate any changes made after the shop drawing review period, will be performed by a bridge rating engineer and is not the responsibility of the designer.

This technical memorandum will be posted on the Bridge Design Website: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/Technical-Memoranda.aspx

Please contact Ms. Dana Feng (225-379-1060, dana.feng@la.gov) if you have questions or comments.

HG/zzf/pv

Cc: Richard Savoie (Chief Engineer)
 Janice Williams (Chief, Project Development Division)
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