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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. 74 (BDTM.74)
APPROACH SLAB SPECIAL DETAILS – REVISIONS AND NEW SHEETS

DATE: July 3, 2017

Effective immediately, use of the following revised and new approach slab special details, with a signature date of June 19, 2017 shall be implemented. Use of the approach slab special details with a signature date of July 28, 2015 shall be discontinued. All new details have been published in ProjectWise for use.

Revised Approach Slab Special Details

Common Details for 20' and 40' long approach slabs

Special Details for 40' long and 40' wide approach slabs with skews of 0°, 15°, 30° and 45°

New Approach Slab Special Details

Special Details for 40' long and 30', 32', 36', and 44' wide approach slabs with skews of 0°, 15°, 30° and 45°

Summary of Revisions

To begin, the new plans were made compatible with the 2016 Louisiana Standard Specifications for Roads and Bridges. In addition, several other design and detail changes were made to improve the approach slab details from the initial published set.

First, the approach slab width for slab span and quad beam bridges has traditionally been the clear roadway width plus 6 inches on each side, which carried the curb. To be consistent with approach slabs for girder-span bridges, the approach slab width is now simply the clear roadway width, with the curb carried on the outside edge of the approach slab. Secondly, the 6 inch sacrificial section at the bridge end of the approach slab has been removed for slab span and quad beam bridges, as it is highly unlikely that it would be needed for those types of bridges. Finally, approach slabs adjacent to asphalt roadways have historically carried a 2 inch layer of asphalt across the full length (minus 1 foot) of the approach slab. This additional weight has now been removed from the approach slab, and the detail at the roadway end of the slab has been revised. The new asphalt roadway/approach slab joint detail was developed in coordination with the Road Design, Pavement and Geotechnical Services, and Construction sections, and is similar to a detail used in overlay/pavement preservation projects. The new detail will implemented and monitored for performance to assess if any future revision is necessary.

Detail Revisions to Each Revised Sheet:

Special Detail #	Description of Revisions
BD.2.10.1.0.01	Revised concrete class, removed references to 2" asphalt layer, added 30' clear roadway width to index of sheets, revised standards index numbers as necessary, removed 10'-long off-system approach slabs from index
BD.2.10.1.0.02	Revised width of slab (reduced by 6" on either side), revised curb detail, removed 2" asphalt layer, removed 6" sacrificial section, revised detail callouts, revised location of sleeper slab for asphalt roadways
BD.2.10.1.0.03	Removed 2" asphalt layer, changed Detail "D" to haunch detail, revised rebar callout numbers, added note re: payment of 1/2" joint material, removed sacrificial section and associated 406/407 bars
BD.2.10.1.0.04	Removed 2" asphalt layer, revised detail callouts, revised location of sleeper slab for asphalt roadways
BD.2.10.1.0.05	Removed 2" asphalt layer, changed Detail "K" to haunch detail, revised rebar callout numbers, added notes re: sacrificial section and 407 bars
BD.2.10.1.0.06	Revised detail for sleeper slab/approach slab adjacent to asphalt roadway, revised curb detail for slab span/quad beam bridges, removed haunch detail (moved to sheets 3 and 5), revised table and note re: geosynthetic reinforcement in embankment under 2'-6" in height
BD.2.10.1.0.07	Added detail for underdrain with no sleeper slab, added detail for cross-drain pipe at the limit of the right-of-way, revised elevation detail for sleeper slab location at asphalt roadway, removed 6" sacrificial section
BD.2.10.1.0.08	Added detail for cross-drain pipe at the limit of the right-of-way, revised elevation detail for sleeper slab location at asphalt roadway
BD.2.10.1.0.09	Added curb details, revised shape of curb at catch basin
BD.2.10.1.0.10	Revised dimensions and note on plan view, added curb details, added detail for crack control joint, revised payment note
BD.2.10.2.5.01	Reduced width of slab by 1'-0" and revised the curb detail, renumbered #10 and #8 bars due to change in slab geometry associated with the reduced slab width, removed sacrificial section and 406/407 bars, removed 2" asphalt layer
BD.2.10.2.5.02	Revised quantities and rebar numbering, added schematic plan views of 15, 30, and 45 degree skewed slabs, removed asphalt and sawcut and seal from quantities tables
BD.2.10.2.5.03	Renumbered #10 and #8 bars to coincide with changes made to BD.2.10.2.5.01
BD.2.10.2.5.04	Revised quantities and rebar numbering, added schematic plan views of 15, 30, and 45 degree skewed slabs, removed asphalt and sawcut and seal from quantities tables

Please reference BDTM.57 for more information on the design and usage of the approach slab special details sets.

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 /abl

Attachments

Cc: Janice Williams (Chief Engineer)
Edward Wedge (Deputy Engineer Administrator)
Chad Winchester (Chief, Project Development Division)
Kirk Gallien (Assistant Secretary of Operations)
David Miller (Chief Maintenance Administrator)
Michael Vosburg (Chief Construction Division Engineer)
Brian Kendrick (Project Management Director)
Jeff Lambert (Pavement and Geotechnical Engineer Administrator)
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District Administrators, ADA Engineering, ADA Operations, and District Bridge Engineers and Area Engineers