

All Regional Engineers

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Special Provision for Concrete Box Culverts with Skews ≤ 30
Degrees Regardless of Design Fill and Skews > 30 Degrees with
Design Fills > 5 Feet

January 10, 2014

This special provision was developed by the Bureau of Bridges and Structures as a result of the implementation of AASHTO Load and Resistance Factor Design (LRFD) for precast and cast-in-place concrete box culverts.

This special provision has been revised as a result of recent changes to the LRFD design code for the design and construction of buried structures, in particular the removal of the requirement for select granular material in order to take advantage of the 1.15 distribution factor.

This special provision should be inserted into contracts with precast or cast-in-place concrete box culverts with skews ≤ 30 degrees regardless of the design fill and also skews > 30 degrees with design fills > 5 feet.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the April 25, 2014 and subsequent lettings. The Project Development and Implementation Section will include a copy in the contract.

This special provision will be available on the transfer directory
January 10, 2014.

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**CONCRETE BOX CULVERTS WITH SKEWS \leq 30 DEGREES REGARDLESS OF DESIGN
FILL AND SKEWS $>$ 30 DEGREES WITH DESIGN FILLS $>$ 5 FEET (BDE)**

Effective: April 1, 2012

| Revised: April 1, 2014

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

“Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-in-place concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577.”

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