

# Design Standards Letter

Letter Number: **D-1960-33**

Letter Date: **12/20/1960**

Effective Date: **12/20/1960**

Section/Plan No.: **None**

Subject: **Revised Culvert Designs H-15 (Two-Lane Loading) 53.15 Series**

Body

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**TO ALL DIVISION CHIEFS, DISTRICT AND URBAN ENGINEERS:**

**In order to utilize the concrete and steel in our culverts more efficiently, the Division of Bridges has designed another series of culverts for h-15 loading, using 20,000 lbs. reinforcing steel stress and 1,200 lbs. concrete stress. These culverts will be known and referred to as the 53.15 series. The skew sheet for these is numbered 53.24.**

**This series covers a much wider range of conditions than any previous series. The span lengths range from 5 feet to 14 feet, inclusive, and the standard fill heights range from 1' to 20'. For fill heights greater than 20', use Standard Drawing 53.20. This Standard also includes a 4' x 6' box for use as a cattle pass. We want to call your attention to the height of the parapet walls. This varies with the span length and fill height. In the wing walls J2 bars have been added to reduce the need for wing beams in many cases. Note also that the H bars in headwalls vary from those in the C-528 culverts, especially in the larger boxes and skews.**

**These culverts will replace the C-528 culverts immediately. The necessary changes in plans and estimates should be made in the District Office before submittal to this office.**

**Prints of the culvert drawings will be sent to you today. Quantity tables will be sent cut within a few days. If you have any questions regarding these instructions, please advise this office immediately.**

**We are sending, under separate cover, to each District, twenty (20) copies of the new Standard Drawing 53.15 and new Index to Standard Drawings.**

**C C. Tevis  
Engineer of Surveys and Plans**