

 Office of Structures Guidelines and Procedures Memorandum	DESIGN
	Number: D-11-49(4)
	Date: 03-16-2018
Deck Reinforcement for Bridges with Multiple Girder/Beam Spacing	Approval: 

Care shall be taken to address the location of truss bar bend points and the number and location of the longitudinal bars in the deck slab for bridges with varying girder/beam spacing. This situation typically occurs on a deck replacement project that includes a widening. The tendency in this situation has been to specify the standard deck slab for the largest girder/beam spacing.

Using this method creates a problem in the smaller spaced spans because the top bend point of the truss bar specified for the wider spacing causes the “belly” dimension of the truss bar to be too small to cover the necessary positive moment area. In addition, this results in the improper spacing and location of the longitudinal bars.

To ensure the proper placement of the deck reinforcement, include both a plan and section view of the deck slab on the bridge typical section plan sheet. The detail shall be developed in accordance with the standard detail that applies to a particular spacing. The detail needs to show the layout of the truss bar across each girder/beam spacing, the distribution and location of the longitudinal steel for each girder/beam spacing, and the layout of the reinforcement at any staged construction joint if applicable.