

Minimum reinforcement bar size shall be No. 4. Reinforcement spacing in both transverse and longitudinal directions in the deck shall not exceed seven inches on centers to minimize cracking width.

LADOTD Deck design tables presented in Part III, Ch 2 may be used to determine the deck reinforcement requirements in the interior regions of the deck, provided that the stated limitations are met.

Deck overhang and the adjacent region to the overhang shall be designed for vehicle collision provisions in accordance with *A13* in addition to wheel load. Refer to *D9.5.5* for deck overhang reinforcement requirement when approved crash tested railings are used.

For bridges composed of simple span precast girders made continuous, additional longitudinal continuity reinforcement shall be provided at the top of deck over continuity diaphragm locations in accordance with *D5.14.1.4*. Refer to *A6.10.1.7* for additional deck reinforcement requirements in negative flexure moment region of continuous steel girder bridges.

A deck placement sequence shall be provided on the bridge plans for all continuous multiple span bridges with a cast in place concrete deck. Refer to *Bridge Design Special Details - Miscellaneous Span Details* and *D6.7.2* for requirements on deck placement sequences for continuous multi-span prestressed girder and steel girder bridges.

#### **9.7.3.2—Distribution Reinforcement**

The following shall supplement *A9.7.3.2*.

Steel reinforcement shall also be placed in the secondary direction in the top of slabs as a percentage of the primary reinforcement for negative moment using the same equations as for the bottom distribution reinforcement.

#### **C9.7.3.2**

The following shall supplement *AC9.7.3.2*.

It has been observed that many new bridges with increased girder spacing exhibited deck cracking due to the decrease of deck mass and hence high vibration. In addition the thermal effects, which are generally ignored in the design, could be significant and lead to excessive cracking. Increasing the top longitudinal reinforcement will help limit the potential for cracking and reduce crack width which in turn should improve long-term durability.