

TO:

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ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

SUBJECT: OPTIONAL REINFORCEMENT DETAILS IN DECK
SLABS FOR PRESTRESSED CONCRETE BRIDGES

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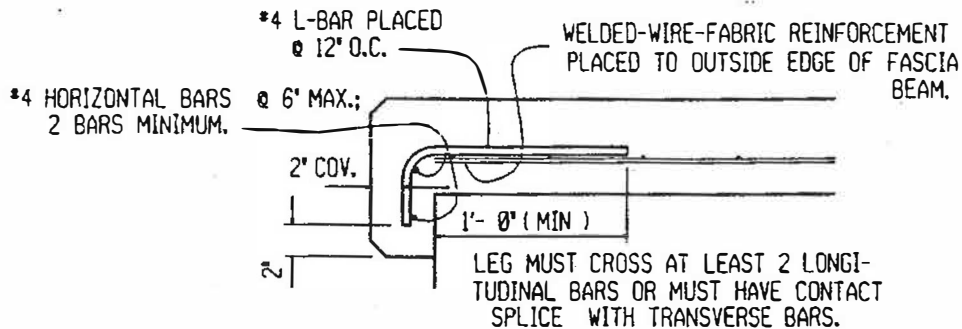
APPROVED:

Supersedes:

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At the April 13, 1989 Joint AGC/DOT Specifications Meeting, it was brought to our attention by members of the contracting community that some contractors are experiencing difficulty in complying with the requirement to bend welded-wire-fabric deck reinforcement along the fascia edges of prestressed concrete bridges. Not only is this time consuming for the contractor and therefore costly to the State, but it also damages the coating on those installations using epoxy-coated fabric.

The Structures Division has reviewed the problem and decided that the current detail shown on BDDs 83-70, 71 & 73, which requires this bending, is preferred. However, it is acceptable to this Division to allow the contractor to use, at no additional cost to the State, the optional reinforcing detail shown below:



When the Division updates its BDD and GLD sheets, the optional detail will be included on the appropriate sheet(s). The designer shall place the detail shown above on the contract plans, along with a note that indicates that the option is to be at no extra cost to the State.

The contractors also stated that they are having problems obtaining epoxy-coated welded-wire-fabric in a timely fashion from suppliers. In order to alleviate this problem when it occurs, it is acceptable to this Division to allow the contractor to substitute, at no additional cost to the State, a mat of epoxy-coated deformed reinforcing bars. The mat shall consist of #4, grade 60, reinforcing bars at 12 inch centers in both directions. Placement shall be identical to that required for the fabric reinforcement as shown in the contract plans and the applicable BDD and GLD sheets. The reinforcing mat shall be adequately secured by chairs and ties to the steel projecting from the prestressed concrete units at appropriate spacings. The concrete cover on the top surface may be reduced to 3 inches to

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maintain the normal 6" minimum deck thickness. This substitution will mandate the use of the optional fascia reinforcement detail described above. It should also be noted that when this detail is used on an installation having either epoxy-coated fabric or the epoxy-coated mat substitute, then the L-bar and horizontal fascia reinforcement shall also be epoxy-coated.

The substitution is only permitted on contracts requiring epoxy-coated fabric deck reinforcement. The designer shall place a note on the contract plans that indicates the allowed substitution at no extra cost to the State, and indicates the allowable size, type, grade, spacing, cover, and placement of the bar reinforcement substitute, as stated above. A notification of the substitution shall be submitted by the contractor to the D.C.E.S for tracking purposes.

The Structures Division does not normally specify the use of epoxy-coated welded-wire-fabric for prestressed concrete bridge decks unless there is a specific reason on a particular project. Because of this policy, there is no mention of its use on any current or proposed BDD or GLD. When the revised Standard Details Manual is issued, it will include a clause allowing the above noted substitution.