



CC:

Don Morton

MAR 3 1989

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
P.O. BOX 25201
RALEIGH 27611-5201

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|---------------------|------------|
| ROADWAY DESIGN UNIT | |
| MAR 3 1989 | |
| Refer to: | <i>DES</i> |
| Remarks: | |
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DIVISION OF HIGHWAYS

JAMES G. MARTIN
GOVERNOR

March 1, 1989

JAMES E. HARRINGTON
SECRETARY

GEORGE E. WELLS, P.E.
STATE HIGHWAY ADMINISTRATOR

MEMORANDUM TO: Mr. K. L. Bellamy

FROM: J. T. Peacock, Jr., P. E. *J. T. Peacock, Jr.*

SUBJECT: Cored Slab Bridges

Often our Structure Design Unit will design a bridge using cored slabs. These prestressed concrete cored slabs are manufactured in standard 3'-0" units. Please refer to the attached drawings for details. In order to take advantage of the economics offered by this design, we obviously should use the standard slabs as manufactured and not specify deviations which would negate the intended purpose.

Of course, the 2 outside slabs have rebars to attach the handrails. These are also standard castings. Upon inspection of the handrail details, we then find that the resulting clear roadway width is always in increments of 3'. Our Bridge Policy calls for clear dimensions which are not always multiples of 3'. When this happens, we recommend the clear width be increased to the next higher multiple of 3'. Since our Bridge Policy is a minimum policy, then this recommendation, in our opinion, is justified. If you agree with this recommendation, we will proceed accordingly.

To implement this we will show on the structure recommendation report when the cored slab design is to be used. If the design is questionable or not known until a design actually begins, the Structure Design Unit will handle and advise you of the selected clear width.

The details of the coordination will need to be worked out but for now I'm asking your approval of the 3' increment widths. We have discussed this briefly with Mr. Max Tate of your staff.

Please advise if you wish to discuss.

JTP/HJC/ng

cc: Mr. D. R. Morton, P. E.
Mr. J. L. Smith, Jr., P. E.