

COMMITTEE ON BRIDGES

The PCI Committee on Bridges met in Chicago on April 6, 1984. The following is a summary of discussion items of interest.

ALLOWABLE STRESSES IN PRECAST DECK PANELS

It is the position of the BRIDGE COMMITTEE that the allowable flexural stresses under construction or final loads shall follow Sec. 1.6 of AASHTO's specs for bridges. Such flexural stresses can be calculated using either the approximate or the more accurate methods mentioned in Art. 1.3.2(C) or the 1981 Interim Specs.

GEOMETRY OF BENT STIRRUPS IN I-GIRDERS

As shown in Figures 2.a and 2.b of the FHWA Report RD-82/005, titled "Optimized Sections for Major P/S Bridge Girders," the shape of such stirrups varies from state-to-state. It is essential that the top and bottom of stirrup legs be anchored horizontally. However, the Committee believes that "confining" the bottom bulb with additional ties or by extending the regular L-shaped ties up and around the bulb is not structurally required or justified.

LOW-RELAXATION STRAND PROVISIONS

The Committee recommendations for new provisions for allowable initial stresses and prestress losses applicable for low-relaxation strands in pretensioned and post-tensioned members were submitted for consideration of both AASHTO and AREA Committee 8. The AASHTO Subcommittee on Bridges & Structures considered these provisions at their 1984 Regional meetings. AREA Committee 8 will be balloting on this item this fall.

TACK WELDING OF STIRRUPS

Tack welding can seriously weaken reinforcement and is not recommended. Where it is necessary to tack weld stirrups to longitudinal reinforcement, it should be restricted to the girder flange areas and the material and welding procedures should be carefully controlled.