April 25, 1989

MEMORANDUM TO DESIGN GROUP LEADERS & CONSULTANTS

Subject: Prestressed Beam Design

Tension in the pre-compressed tensile zones of prestressed concrete girders shall be limited to no tension for projects in the coastal counties and to 3 f'c for projects in all other counties. Please note that this requirement is more stringent than the requirements of paragraph 9.15.2.2(a) of the AASHTO specifications.

It will continue to be the Department's standard practice to design Class "X" Concrete for a concrete compressive strength of 4000 psi at the time of strand release as stated in paragraph 704.13(b) of the SCDHPT Standard Specifications. When required by design the concrete strength at release may be specified as 4500 psi. When concrete strengths higher than 5000 psi are specified release strength should be a minimum of 0.8f'c but not greater than 0.9f'c.

B. A. Meetze, Jr. Bridge Design Engineer

cc:

Structural Engineer, FHWA

Mr. Rush

Mr. Martin

Mr. LaBoone

Mr. Kneece

Design Group Leaders

Consultants

RLK/ddg