

**9-19 PRESTRESSED CONCRETE GIRDERS****9-19.1 Aggregates and Proportioning**

The concrete for prestressed girders shall have the minimum compressive strengths as specified in the Plans. Aggregates used in the mix shall conform to the following: Coarse aggregate shall be in accordance with Section 9-03.1(4); and fine aggregate shall be in accordance with Section 9-03.1(2), Class I or Class II. The manufacturer may revise the grading of the coarse aggregate provided that the concrete mix design is qualified with the modified gradation.

The Contractor shall submit for approval a proposed mix design for each design strength. Included shall be evidence satisfactory to the Engineer that the proposed mix design will meet design requirements. Approval of the mix design will not preclude any requirements for the concrete placed in the girders.

The concrete mix shall be prepared and placed in accordance with the appropriate sections of Section 6-02.

Water used in mixing the concrete shall conform to the requirements of Section 9-25.1.

Cement shall conform to the requirements of Section 9-01.

Chemical admixtures shall conform to the provisions of Section 9-23.7.

The total chloride ion (C1-) content of the mixed concrete, expressed as a percent by mass of cement, shall not exceed 0.06 percent.

**9-19.2 Reinforcement**

Reinforcement shall meet the requirements of Section 9-07 and shall be placed in accordance with the requirements of Section 6-02.3(24).