

Design and Evaluation of High-Volume Fly Ash (HVFA) Concrete Mixes.
TRyy1110

Question 1:

Direct measurements of tensile and shear strength of concrete can be difficult and time consuming. Are indirect measurements such as a split cylinder test or a flexural test suitable for these properties?

Answer:

Yes. The following tests will be acceptable for indicating tensile and shear strength.

- Flexural Strength, AASHTO T 97 (28 & 56 day)
- Splitting Tensile Strength, AASHTO T 198

Question 2:

Due to the time constraints of a possible pilot project of a scheduled construction project, the evaluation of the concrete would not be long term (perhaps only for a time period of a few months after placing the concrete). Although the initial evaluation will provide significant information, does a pilot project without the long-term evaluation satisfy the needs of the RFP? (MoDOT could arrange for a longer-term evaluation after completion of the project)

Answer:

It was our intent that the first part of Task 3 in the RFP: “Casting and testing a scale model of a reinforced concrete member and pavement section for testing in the laboratory, ...” would be done to satisfy the needs of this project. - The outcome would be to use what was learned for future use in a pilot project that would be evaluated by MoDOT over a longer term. However, there may not be many paving projects let in the next 5 years; a pilot project might not be possible.