

INTRODUCTION:

Cracks that develop in P.C. concrete bridge barrier rails soon after construction are a concern. The Fibermesh Company of Chattanooga, Tennessee markets a fiber reinforcing material for P.C. concrete. The company claims the following benefits:

- Inhibits Cracking
- Increases Impact Capacity
- Reduces Permeability
- Adds Shatter Resistance
- Reduces Construction Time

To determine if the addition of "Fibermesh" synthetic fibers to concrete bridge barriers would be effective at controlling cracking, ten bridge projects were constructed with fibers in the rails. Each bridge was to have one rail with fibermesh and one without fibermesh.

PROJECT DESCRIPTION:

In 1985, one barrier for one bridge was constructed with 2" long fibermesh fiber added at the rate of 1-1/2 lbs. per cubic yard of concrete.

In 1986, one barrier for one bridge was constructed with 3/4" long fibermesh fiber added at the rate of 1-1/2 lbs. per cubic yard of concrete.