

Project Brief

## Cataract Lake Bridge

### Structural Strengthening



Chicago, IL  
September 2008



The DOT decided to upgrade this old arch bridge that was located in a remote area of Indiana, about 20 miles east of Terre Haute. The bridge was badly deteriorated and required concrete repairs covering approximately 13,000 square feet of the structure. The structure had joints that leaked and allowed water to attack the structure. The spaces were confined and the concrete never dried, causing the steel to eventually corrode. This amounted to several joint locations where the structure needed structural strengthening.

Arch bridges are very pleasing to the eye. The structural strengthening had to be a solution that would not impact the aesthetic appearance of the bridge. Concrete repairs were performed on the concrete prior to the application of the Tyfo® SEH 51A System.

The fiber wrap solution allowed an aesthetically pleasing solution to strengthening the bridge. The project suffered numerous rain delays and at one point the bridge was submerged under water - this occurred half-way through the installation of the fiber wrap material. Access was difficult and all the work had to be performed in man lifts and on barges.

**Fyfe Co. LLC**

8380 Miralani Drive, Suite A, San Diego, CA 92126

Tel: 858.642.0694 Fax: 858.444.2982 Email: info@fyfeco.com [www.fyfeco.com](http://www.fyfeco.com)