

CONCRETE CONNECTIONS

Concrete Connections is an annotated list of websites where information is available about concrete bridges. Fast links to the websites are provided at www.aspirebridge.org.

IN THIS ISSUE

http://trb.org/news/blurb_detail.asp?id=1373

NCHRP Report 480, *A Guide to Best Practices for Achieving Context-Sensitive Solutions* focuses on how state departments of transportation and other transportation agencies can incorporate context-sensitive solutions into transportation project development. The guide is applicable to the variety of projects that transportation agencies routinely encounter.

www.tfhr.gov/structur/pubs/07024/Index.htm

This site provides a pdf version of the report titled "Flexural Capacity of Fire-Damaged Prestressed Concrete Box Beams."

www.dot.state.co.us/marooncreek/

This Colorado Department of Transportation website contains additional information about the history, design, and environment of the Maroon Creek Bridge replacement.

www.fhwa.dot.gov/environment/ecosystems/

This website explains FHWA's Exemplary Ecosystem Initiatives. The ecosystem approach looks at the present and *beyond*. It envisions future conditions under which ecological, economic, and social factors are integrated. The website contains details of the 43 initiatives that were designated from 2002 through 2006.

http://azdot.gov/Highways/Private_Funded_TI.asp

The Arizona Department of Transportation (ADOT) has established a handbook for the private development community as a uniform protocol for requesting new traffic interchanges (TI) or modifications to existing interchanges. Links are provided to the Requirements Handbook and other ADOT Sections included in the Privately Funded Traffic Interchange Process.

Bridge Technology

www.aspirebridge.org

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www.nationalconcretebridge.org

The National Concrete Bridge Council (NCBC) website provides information to promote quality in concrete bridge construction as well as links to the publications of its members.

www.hpcbridgeviews.org

This website contains 48 issues of **HPC Bridge Views**, a newsletter published jointly by the FHWA and the NCBC to provide relevant, reliable information on all aspects of high performance concrete in bridges.

Bridge Research

<http://ntlsearch.bts.gov/tris/index.do>

The National Research Information System provides a bibliographic database of over 640,000 records of published research for all modes of disciplines and transportation.

www.trb.org/CRP/NCHRP/NCHRPprojects.asp

This website provides a list of all National Cooperative Highway Research Projects (NCHRP) since 1989 and their current status. Research Field 12 – Bridges generally lists projects related to bridges although projects related to concrete materials performance may be listed in Research Field 18 – Concrete Materials. Some completed projects are described below:

http://trb.org/news/blurb_detail.asp?id=3257

NCHRP Report 517, *Extending Span Ranges of Precast Prestressed Concrete Girders*, contains the findings of research performed to develop recommended load and resistance factor design procedures for achieving longer spans using precast, prestressed concrete bridge girders. Spliced girders were identified as the design option with the greatest potential for extending span lengths.

<http://trb.org/TRBNet/ProjectDisplay.asp?ProjectID=349>

NCHRP Report 549, *Simplified Shear Design of Structural Concrete Members*, contains the findings of research performed to develop practical equations for design of shear reinforcement in reinforced and prestressed concrete bridge girders. Recommended specifications and commentary plus examples illustrating application of the specifications were also developed. The results of this research have been incorporated into the AASHTO LRFD Bridge Design Specifications.

http://trb.org/news/blurb_detail.asp?id=7443

NCHRP Report 579, *Application of LRFD Bridge Design Specifications to High-Strength Structural Concrete: Shear Provisions*, examines research performed to extend the applicability of shear design provisions for reinforced and prestressed concrete structures in the AASHTO LRFD Bridge Design Specifications to concrete compressive strengths greater than 10 ksi.

http://trb.org/news/blurb_detail.asp?id=8375

NCHRP Report 595, *Application of the LRFD Bridge Design Specifications to High-Strength Structural Concrete: Flexural and Compression Provisions*, explores recommended revisions to the AASHTO LRFD Bridge Design Specifications to extend the applicability of the flexural and compression provisions for reinforced and prestressed concrete to concrete compressive strengths greater than 10 ksi.