

Concrete Connections is an annotated list of websites where information is available about concrete bridges. Links and other information are provided at www.aspirebridge.org.

IN THIS ISSUE

<https://www.tucsonaz.gov/tdot/22nd-street-kino-parkway-tucson-boulevard>

This is a link to a comprehensive website for the Kino Parkway and 22nd Street Overpass project, with the history of the design process, environmental reports, and summaries of meetings of the Citizens' Advisory Committee and Technical Advisory Committee. The interchange was featured in a Project article on page 22.

<http://bridgestunnels.com/bridges/ohio-river/ironton-russell-bridge>

This is a link to photos of construction activities and history of the Oakley C. Collins Memorial Bridge, which is featured in Project and Construction Bridge Technology articles on pages 26 and 38, respectively.

<https://www.union-township.oh.us/phocadownload/Resources/map-eastgate%20area%20improvement%206-2014.pdf>

This is a link to a plan view showing the complexity of the Eastgate Boulevard Interchange featured in a Project article on page 30.

http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/NCHRP12-71_FR.pdf

This is a link to NCHRP 12-71 *Design Specifications and Commentary for Horizontally Curved Concrete Box Girder Highway Bridges*, which formed the basis for the curved, precast concrete spliced U-girders featured in the article on page 44.

https://www.pci.org/PCI_Docs/Publications/PCI%20Journal/2008/November_and_December_2008/Curved%20precast%20pretensioned%20concrete%20I-girder%20bridges.pdf

This is a link accessing the *PCI Journal* article "Curved, Precast, Pretensioned Concrete I-girder Bridges," which also includes box and U-shapes. Curved, precast concrete spliced U-girders are discussed in an article on page 44.

<http://www.cproadmap.org/publications/MAPbriefApril2017.pdf>

This is a link to a Moving Advancements into Practice (MAP) brief announcing performance-based concrete mixtures, the subject of the Federal Highway Administration (FHWA) article on page 48.

https://bookstore.transportation.org/item_details.aspx?ID=3767

This is a link to purchase American Association of State Highway and Transportation Officials (AASHTO) PP 84-17 *Provisional Standard Practice for Developing Performance Engineered Concrete Pavement Mixtures*, the recently published specification featured in the FHWA article about performance specifications on page 48.

OTHER INFORMATION

http://www.virginiadot.org/vtrc/main/online_reports/pdf/17-r20.pdf

This is a link to a recently released Virginia Department of Transportation research report, *Development of Improved Connection Details for Adjacent Prestressed Member Bridges*. The report contains analytical and experimental results on longitudinal joints of precast concrete box beams and voided slabs. Alternate connections were shown to perform better than current designs.

<http://apps.trb.org/cmsfeed/trbnetprojectdisplay.asp?projectid=3171>

This is a link to a report, that as a part of National Cooperative Highway Research Program (NCHRP) 12-91, proposes revisions to the current debonding provisions for pretensioning strand in the *AASHTO LRFD Bridge Design Specifications* and the *AASHTO LRFD Bridge Construction Specifications* as a result of a research study.

<http://www.trb.org/Main/Blurbs/176394.aspx>

This is a link to NCHRP Research Report 850: *Applying Risk Analysis, Value Engineering, and Other Innovative Solutions for Project Delivery*. The report investigates the state of the art in managing project development and delivery through application of value engineering for transportation projects. Tools and techniques are presented.

http://www.fdot.gov/research/Completed_Proj/Summary_SMO/FDOT-BDV31-977-35-rpt.pdf

This is a link to *Impedance-Based Detection of Corrosion in Post-Tensioned Cables: Phase 2 from Concept to Application*, a report released by the Florida Department of Transportation that quantifies corrosion rates and oxide film thicknesses for ASTM A416 steel in simulated pore solutions and grout. Also, indirect impedance is studied as a nondestructive method of detecting corrosion in post-tensioned tendons.

https://bookstore.transportation.org/item_details.aspx?ID=3734

This is a link to purchase the recently published AASHTO *Guide Design Specifications for Bridge Temporary Works, 2nd Edition*. The design specifications reflect the current state of the practice for the design and construction of falsework, formwork, and temporary retaining structures and include significant changes to the design loads for falsework.

https://bookstore.transportation.org/item_details.aspx?ID=3733

This is a link to purchase the AASHTO *Construction Handbook for Bridge Temporary Works, 2nd Edition*, developed for use by contractors and construction engineers. This handbook supplements the *Guide Design Specifications for Bridge Temporary Works*.