**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**

**www.rebar-u.org**
This is a link to the Concrete Reinforcing Steel Institute (CRSI) website with self-paced, informational or continuing education courses on various aspects of steel reinforced concrete. CRSI is featured in the Focus article on page 6.

https://www.ccscheme.org.uk/ccs-ltd/what-is-the-ccs2
This is a link to the website for Considerate Contractors Scheme, a nonprofit organization in the United Kingdom that strives to improve the image of the construction industry by having companies practice good-neighbor policies. Good relationships between companies and communities are emphasized in the Perspective article on page 10.

https://www.pendot.gov/PennDOTWay/Pages/Article.aspx?post=76
This is a link to a Pennsylvania Department of Transportation website and information on the Interstate 78 Underclearance project. The six concrete bridges of the project are featured in a Project article on page 12.

https://vimeo.com/243907218
This is a link to a time-lapse video of the replacement of one of the bridges that was part of the Interstate 78 Underclearance project, which is featured in a Project article on page 12.

https://www.youtube.com/watch?v=UeUQwYysWA
This is a link to a video of construction activities or the Stone Arch Bridge over Stony Brook in Princeton, N.J. The rehabilitation of the historic bridge and construction of a new bridge over an adjacent flood channel are featured in a Project article on page 16.

This is a link to a newspaper article and photos of the Veterans Memorial Bridge in Daytona Beach, Fla. Bridge integration modeling was used for the workflow and to create three-dimensional documents for the design and construction of the structure. This new workflow technique is the topic of a Concrete Bridge Technology article on page 20.

http://www.pcine.org/index.cfm/resources/bridge/Bridge_Deck_Panels
This is a link to the website of the PCI Northeast chapter, which has extensive information on precast concrete bridge deck panels. The handling and transportation of precast concrete deck panels is the subject of a Concrete Bridge Technology article on page 24.

http://elearning pci.org
This is a link to the PCI eLearning website, which contains continuing education courses on various precast/prestressed concrete topics, including *Course T220: Production and Construction Details of Full-Depth Precast Concrete Deck Panels*. The handling and transportation of precast concrete deck panels is the subject of a Concrete Bridge Technology article on page 24.

https://igamemom.com/build-pencil-da-vinci-bridge-stem-challenge
This is a website that has instructions on how to build a Da Vinci bridge using pencils and rubber bands, a good activity for children. Providing educational activities to children in the STEAM (science, technology, engineering, art/architecture, and mathematics) areas is mentioned in the Professor's Perspective article on page 28.

https://www.pci.org/PCI/Education/Student_Competitions.aspx
This is a direct link to the website containing rules of the 2019 PCI Engineering Student Design (Big Beam) Competition. Also on the website are the winning videos and reports from previous competitions. The competition is mentioned in the Professor's Perspective article on page 28.

This is a direct link to *Determination of Transport Properties of Lightweight Aggregate Concrete for Service Life Modeling*. This report is the subject of the Safety and Serviceability article on increasing durability and service life of bridges on page 32.

**OTHER INFORMATION**

https://store.transportation.org/item/PublicationDetail?ID=4134
This is a link to a website where the recently published American Association of State Highway and Transportation Officials’ (AASHTO’s) *LRFD Guide Specifications for Accelerated Bridge Construction*, 1st edition, can be purchased. These specifications cover both design and construction and address items not covered in the AASHTO LRFD Bridge Design Specifications and AASHTO LRFD Bridge Construction Specifications.

This is a link to download *End-Region Behavior and Shear Strength of Pretensioned Concrete Girders Employing 0.7-in. Diameter Strands* by the Center for Transportation Research at the University of Texas at Austin. This recent report documents a research project on end-region serviceability and shear strength of Texas pretensioned concrete bulb-tee girders with 0.7-in.-diameter strands.

https://abc-utc.fiu.edu/events/webinar-archives
This is a link to the website for the Accelerated Bridge Construction University Transportation Center at Florida International University. The website has webinars such as *ABC Methods for Delaware’s All-Precast Bridge 1-438*. The bridge was constructed with just a 31-day closure.