

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://deldot.gov/Programs/BridgeDesignComp/index.shtml>

The Perspective article on page 5 highlights the success of the Delaware Bridge Design Competition, which is made possible by the support of Delaware Department of Transportation volunteers, partnering consultant volunteers, and educators. The goal of the competition is to teach science, technology, engineering, and math concepts to students. The website at this link provides details about the competition.

<https://www.aspirebridge.com/magazine/2018Summer/Perspective-OverviewOfDelayedEttringiteFormation.pdf>

The Concrete Bridge Technology article on page 36 discusses the deterioration mechanisms of alkali-silica reaction (ASR) and delayed ettringite formation (DEF). This is a link to an article in the Summer 2018 issue of *ASPIRE*® that provides more information about ASR and DEF.

<https://www.aspirebridge.com/magazine/2024Winter/Project-FirstUSBridgeWith100PercentUHPCSuperstructure.pdf>

One of the authors of the Concrete Bridge Technology article about ultra-high-performance concrete (UHPC) on page 32, Dr. Sherif El-Tawil, also coauthored “First U.S. Bridge with a 100% UHPC Superstructure: A Small Bridge with Big Implications,” a Project article in the Winter 2024 issue of *ASPIRE*. That article, which is available at this link, discusses a superstructure made of an open-recipe (nonproprietary) type of UHPC.

<https://www.aspirebridge.com/magazine/2022Summer/County-ClareCountyRoadCommision.pdf>

This is a link to a Concrete Bridge Technology article in the Summer 2022 issue of *ASPIRE* titled “Clare County Road Commission Seeks Higher Performance at Lower Cost with Open-Recipe UHPC Formula.” Some of the authors of the Concrete Bridge Technology article on UHPC on page 32 of this issue were also involved in the Clare County project.

https://www.fhwa.dot.gov/bridge/concrete/hif19067_Nov2021.pdf

This link provides access to a Federal Highway Administration report, *Lightweight Concrete Bridge Design Primer*, which is referenced in the NCBC Member Spotlight article on page 44.

<https://acmanet.org>

This is the link to the website of the American Composite Manufacturers Association (ACMA). ACMA is a new member of the National Concrete Bridge Council (NCBC) and a focus of the NCBC Member Spotlight article on page 42.

<https://www.stainlessrebarassociation.org>

This is a link to the website of the Stainless Steel Interest Group (SSIG) of the Concrete Reinforcing Steel Institute. SSIG is a new member of the NCBC and a subject of the NCBC Member Spotlight article on page 42.

<https://www.nps.gov/samo/learn/nature/pumapage.htm>

This is a link to a National Park Service (NPS) web page about the mountain lions that live in the urban landscape of Los Angeles, Calif. NPS research on these mountain lions has informed the design of the Wallis Annenberg Wildlife Crossing, which is the subject of a Project article on page 16.

<https://doi.org/10.1016/j.conbuildmat.2024.139001>

The Concrete Bridge Technology article on page 32 reports on recent research investigating the substitution of natural sand for quartz sand in ultra-high-performance concrete (UHPC) mixtures. This is a link to a journal article about the performance of UHPC prepared with manufactured sand.

<https://highways.dot.gov/federal-lands/wildlife-crossings>

This is a link to a web page for the Federal Highway Administration's Wildlife Crossings Program, which offers funding and resources for wildlife crossing projects. Two wildlife crossing projects in California are the subjects of Project articles on pages 16 and 22.

<https://www.aspirebridge.com/magazine/2026Winter/ProfessorsPerspective.pdf>

To supplement the Perspective on page 8, additional information about teaching bridge design-related skills to students can be found in the Winter 2026 issue of *ASPIRE* at this link. The author, Dr. George Okere of the University of Cincinnati, explains the value of teaching students in construction-related programs to read and interpret construction specifications and drawings so they are adequately prepared for industry careers.

<https://aspirebridge.com/magazine/2023Spring/ProfessorsPerspective-PrecastBridgeStudioAdvancesAcademia.pdf>

This link is to a Spring 2023 Professor's Perspective by Dr. Eric Matsumoto at California State University, Sacramento, about how precast concrete bridge studios prepare the next generation of bridge professionals. Like the Perspective on page 8, Matsumoto's article advocates for partnerships between industry and academia to educate students.

<https://www.aspirebridge.com/magazine/2019Summer/AProfessorsPerspective.pdf>

Dr. Richard Miller, the author of this issue's Perspective on page 8, also makes the case for improving the way that engineering is taught in the Summer 2019 issue of *ASPIRE*. In the 2019 article which is available at this link, Dr. Miller argues that engineering should be taught holistically, in the same manner that baseball is taught.