

PCI Offers eLearning Modules

Courses on Design and Fabrication of Precast, Prestressed Concrete Bridge Beams

The PCI eLearning Center is offering a new set of courses that will help an experienced bridge designer become more proficient with advanced design methods for precast, prestressed concrete flexural members. There is no cost to enroll in and complete any of these new bridge courses. The courses are based on the content of the 1600-page PCI Bridge Design Manual, now available for free after registering with a valid email. While the courses are designed for an engineer with 5 or more years' experience, a less experienced engineer will find the content very helpful for understanding concepts and methodologies.

Where applicable, the material is presented as part of a "real world" design of a complete superstructure example so that the student can see how actual calculations are completed according to the AASHTO LRFD specifications.

All Transportation courses on the PCI eLearning Center are completely FREE and include PDHs or other continuing education credits.



Start with PCI eLearning Series T100 Courses

Preliminary Precast, Prestressed Concrete Design (T110)

Materials and Manufacturing of Precast, Prestressed Concrete (T115)

Design Loads and Load Distribution (T120)

Additional courses are available at www.pci.org/eLearning

This web-based training course was developed by the Precast/Prestressed Concrete Institute (PCI) for the Federal Highway Administration (FHWA) through a contract with the American Association of State Highway and Transportation Officials (AASHTO).

CONCRETE CONNECTIONS

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.nts.gov/investigations/AccidentReports/Reports/HAR1902.pdf>

This is a link to the National Transportation Safety Board (NTSB) Highway Accident Report for the 2018 pedestrian bridge collapse in Miami, Fla., which is referenced in the Editorial on page 2 and the Perspective article on page 50.

<https://www.nts.gov/news/events/Pages/2019-HWY18MH009-BMG.aspx>

This is a link to information presented at the NTSB meeting on October 22, 2019, to determine the probable cause of the 2018 pedestrian bridge collapse in Miami, Fla., which is referenced in the Editorial on page 2 and the Perspective article on page 50.

<https://www.fhwa.dot.gov/bridge/pubs/hif18046.pdf>

This is a link to FHWA's *Manual for Refined Analysis in Bridge Design and Evaluation*, which is mentioned in a Perspective article on page 8.

<https://www.al.com/news/2020/01/alabama-your-700-million-i-5920-bridge-through-birmingham-is-ready.html>

This is a link to photos and a video of the Interstate 59/Interstate 20 bridges through Birmingham's central business

district. The bridges are featured in the Project article on page 10 and the Concrete Bridge Technology article on page 30.

https://www.pci.org/PCI_Docs/Design_Resources/About_Precast/PCI%20Zone6%20Curved%20Spliced%20Girders.pdf

This is a link to information on PCI curved and straight precast concrete U-girders. Curved U-girders are mentioned in the Project article on page 20 and the AASHTO LRFD article on page 48.

<https://www.youtube.com/watch?v=Hmk6W27r92w&feature=youtu.be>

This is a link to a video and renderings of the Mid-Coast Corridor Transit Project, a light-rail transit project in Southern California. A Project article on the Genesee Avenue Viaduct, which is part of this project, begins on page 20.

<https://www.fhwa.dot.gov/bridge/loadrating/pubs/hif18061.pdf>

This is a link to the Federal Highway Administration (FHWA) report *Concrete Bridge Shear Load Rating Synthesis Report*. Shear load rating of an existing bridge is the focus of a Concrete Bridge Technology article on page 24.