Call for Papers: Special Collection on Acceleration Bridge Construction

A significant portion of the existing roadway system in the United States was built over 50 years ago and is widely showing signs of increasing deterioration. The average age of nations’ bridges is 43 and about 25% of 607,000 bridge in U.S. inventory are structurally deficient or functionally obsolete and need repair or replacement. Construction activities related to bridge replacement and rehabilitation are important contributors to traffic jams and reduced mobility and, most importantly, to safety hazards. The safety hazards attributed to construction work zones are alarming. Accelerated Bridge Construction (ABC) is a delivery solution method of building and repairing bridges with the capability to reduce the interruption to traffic and increase safety. Bridge owners are asking several important questions, before using ABC. Among them are development of connections suitable for ABC applications, durability of ABC bridge systems and components and cost comparison of ABC to conventional methods of construction. Research studies are being carried out to develop new bridge systems suitable for ABC, new connection details best suited for ABC, decision making tools, among other topics.

The main focus of this special issue will be on recent advances in the design, fabrication, construction, inspection and maintenance of ABC projects. This issue is expected to become an international forum for researchers and engineers in the field and will summarize newly developed scientific results. Potential topics include, but are not limited to (other topics will be considered upon review by the editor):

- ABC Bridge systems
- Different moving methods for ABC bridges
- Connections suitable for ABC projects
- Fabrication and construction of ABC projects
- Service life of ABC projects
- Maintenance of ABC projects
- Seismic aspects of ABC projects
- Application of ABC to elevated structures for High Speed Rail
- Foundation systems for ABC projects
- Re-use of existing foundations in ABC projects
- Non-destructive testing of critical details within ABC projects

ASCE Journal of Bridge Engineering no longer publishes special issue / special sections in print (paper version of the journal). All accepted papers submitted through this solicitation will be published in regular issues of the journal as they are accepted and will be added to special collection online (which is similar to in-print version of a special issue). Please note that papers solicited through this call will undergo standard journal peer review process and will be indexed for citations like other regular journal papers. All interested authors can submit papers to the journal online at www.editorialmanager.com/jrnbeeng. Please note that this is an invitation to submit papers for peer review. Acceptance of submitted papers depends on the peer review process of the journal.

The deadline for paper submissions under this solicitation is February 28, 2018. Guest Editor for this solicitation is Dr. Atorod Azizinamini of Florida International University (aazizina@fiu.edu). For any questions regarding this solicitation, please contact the Chief Editor, Dr. Anil K. Agrawal, at jbe.agrawal@gmail.com.