

IBC 2010 Technical Program by Session

Keynote/Plenary

Monday, June 7, 2010

Chair: Jeffrey J. Campbell, P.E., International Bridge Conference® 2010 General Chair

Cable Stayed Bridges: The way forward

*Peter R. Taylor, Ph.D., P.Eng., P.E., Buckland and Taylor, Ltd., North Vancouver, BC,
Canada.....1*

Infrastructure Challenge

Jim J. Moynihan, Balfour Beatty Infrastructure, Inc., Atlanta, GA.....15

Overview of the Maryland State Highway Administration

*Neil J. Pedersen, Administrator, Maryland State Highway Administration, Baltimore,
MD.....62*

Featured Agency

Monday, June 7, 2010

Chair: *Robert Healy, Deputy Director, Office of Structures, MSHA*

StateStat: The State of the State of Maryland Bridges

Robert Healy, Deputy Director, Office of Structures, Maryland State Highway Administration, Baltimore, MD.....1

Woodrow Wilson Bridge Project: "Water in the Ducts"

James Ruddell, PE, CCM, PB Americas, Inc., Portland, OR.....1

Concrete Arch Bridge over Rock Creek

Paul J. Alterini, P.E., Parsons Transportation Group, Baltimore, MD.....1

I-95 Express Toll Lanes

Dave LaBella, P.E., Maryland Transportation Authority, Baltimore, MD.....1

Research Efforts to Test and Detect Chlorides in Concrete and their Effects on Durability and Strength

Jeff Robert, Maryland State Highway Administration, Baltimore, MD.....2

Smart Aggregate - A Chloride Detection System

Rengaswamy (Srini) Srinivasan, The Johns Hopkins University, Applied Physics Laboratory, Laurel, MD2

Accelerated Bridge Construction: The Replacement of MD 362 over Monie Creek

William N. Pines, P.E., Maryland State Highway Administration, Baltimore, MD.....2

Preserving the Bay Bridge

Geoffrey V. Kolberg, P.E., Former Maryland Transportation Authority Chief Engineer, STV, Inc., Baltimore, MD2

The American Legion Bridge, MD No. 1510000, I-495 over Potomac River

Cecil W. Kincaid, P.E., Maryland State Highway Administration, Baltimore, MD.....2

Curtis Creek Bascule Span Rehabilitation

Dan Williams, P.E., Maryland Transportation Authority, Baltimore, MD; Scott Reynolds, P.E., Hardesty & Hanover, LLP, Annapolis, MD.....2

Four Span Bridge on MD 32 over Liberty Reservoir

Mark Glass and Rod Thornton, Maryland State Highway Administration, Baltimore, MD

Span Replacement of MD 90 over Assawoman Bay

William N. Pines, P.E., Maryland State Highway Administration Structures, Baltimore, MD.....

Design, Part 1

Tuesday, June 8, 2010

Chair: *Kenneth J. Wright, P.E., HDR Engineering, Inc., Pittsburgh, PA*

The 4th Street Bridge - Crossing the Pueblo Rail Yard with Colorado's Longest Highway Span

John Dvorak, P.E., FIGG, Pueblo, CO ; Karen Rowe, P.E., Colorado Department of Transportation, Region 2, Pueblo, CO; Steve Fultz, P.E., FIGG, Denver, CO475

Fantasy Harbour Bridge

Zhugang "Amos" Liu, P.E. and Gregory Sigmon, P.E., STV/Ralph Whitehead Associates, Inc., Charlotte, NC; Barry Bowers, P.E., South Carolina Department of Transportation, Columbia, SC.....479

Design and Construction Check of the Astana Arch Bridge

(Not Available at Time of Publication)

Alexandre Chaperon, Advitam, Vélizy Cedex, FRANCE486

The George Street Bridge Over Route 18 and Boyd Park

Thomas Zink, P.E., Gannett Fleming, Inc., Mount Laurel, NJ; Michael DiGiacomo, P.E., Gannett Fleming, Inc., Orlando, FL.....487

Analysis and Design of the New St. Croix River Extradosed Bridge

Preston D. Vineyard and Darren Vian, Ph.D., P.E., Parsons Brinckerhoff, New York, NY.....495

Replacement of the Hillery Street Bridge over the Passaic River, Passaic County, NJ

Bruce Karalius, P.E., Greenman-Pederson, Inc., Lebanon, NJ; Aurelia Mayer, Passaic County Engineer, Paterson, NJ504

Seismic Performance of Precast Bridge Columns with Energy Dissipating Joints

Sarira Motaref, PhD student of Earthquake and Structural Engineering Research Assistant, University of Nevada, Reno, NV.....510

Long Span Bridges

Tuesday, June 8, 2010

Chair: *Herbert M. Mandel, P.E., GAI Consultants, Inc., Homestead, PA*

Design, Construction and Organization of a Major Sea Crossing in Korea
*Andrew Yeoward and Don Fraser, Halcrow Group Ltd, Swindon, Wilts, UK; Koo Im Sig, Daewoo E & C Ltd, Busan, Korea.....*520

US62/641 Tennessee River Bridge - Innovative Long-Span Design
*C. Tony Hunley, P.E., S.E. and Don Mills, P.E., S.E., ENTRAN, PLC, Lexington, KY.....*528

Design of Indian River Inlet Bridge
*Benjamin Soule, International Bridge Technologies, San Diego, CA ; Eric Nelson, AECOM Transportation, Nashville, TN.....*536

Comparison of Characteristics of Some Unique Cable-Stayed Bridges under Construction in Korea
*Young-Jae Seo, Kyoung-Jae Lee, Jae-Hong Kim, Daelim Industrial Company, Seoul, South Korea*543

The Amelia Earhart Tied Network Arch Bridge
*Natalie McCombs, P.E., S.E. and Frank Blakemore, P.E., HNTB, Kansas City, MO; Mark Hurt, P.E., S.E., Kansas Department of Transportation, Topeka, KS.....*551

The Geometry Control of Sepoong Bridge : A Curved Cable-Stayed Bridge
(Not Available at Time of Publication)
*Jung-Min Nam, Joong-San Ahn, Jung-Nam Lee, and Jae-Hong Kim, Daelim Industrial Company, Ltd., Seoul, South Korea.....*557

Main Bridge Design and Construction Innovations of the Autoroute A-25 Project
*Thomas Spoth, P.E., Joseph Viola, P.E., Augusto Molina, P.E., and Seth Condell, P.E., Parsons, New York, NY.....*565