# 3 RID GES 2010

Design

Construction

& Retrofitting

November 16 – 17, 2010 Hyatt at Fisherman's Warf, SanFrancisco, CA

# Improve Long Term Bridge Performance, Learn Innovative and Sustainable Design Techniques & Deliver Accelerated Projects



Letter from the Chairman

5

Conference Agenda

14

Who's Who in the Cast

12

Sponsors & Media Partners

19





With more bridges being declared structurally deficient or obsolete, there is a need for immediate and novel engineering solutions in order to be well prepared for potential disasters and minimize future maintenance costs.

At Bridges 2010 Conference you will learn how to deliver your project on time and on budget. Take advantage of this unique opportunity to hear from senior project managers from state transport authorities, construction companies and leading engineering firms. Join us as we highlight topics such as future proofing your bridge infrastructure, critical new design methodologies, strategies for attaining desired results through innovative engineering processes and preventative maintenance to increase the overall life of these structures.

With tenders being released on a continuous basis and contractors vying for position, it is critical to be up to date with the latest innovations and practices being implemented to remain competitive. IQPC's Bridges 2010 Conference will give you the best opportunity to meet the individuals responsible for holding the budgets not just for retrofits but major new bridge projects. Coupled with the chance to meet industry leaders in the bridge construction field, you could be networking your way to that next successful bid.





# Tuesday, November 16, 2010

8:00 a.m.	Registration and Coffee			
8:15 a.m.	Opening Remarks from the Chair			
	-Joung Lee Associate Director for Finance and Business Development AASHTO			
8:30 a.m.	Utilizing a Prefabrication Method in Bridge Construction and Retrofitting and Identifying How Further Use of Prefabrication Can Assist Project Timelines and Budgets			
	Detailing the project management techniques used throughout prefabrication construction			
	Understanding how prefabrication construction can improve your future projects			
	<ul> <li>Developing a prefabrication strategy for major bridge projects</li> </ul>			
	Outlining what Impact does prefabrication could have on the design process			
	- Bill Forrester Director, Structures Federal Highway Administration			
9:15 a.m.	Providing A Status Update On The Construction Of The New San Francisco- Oakland Bay Self Anchored Suspension Bridge			
	This project exemplifies the high-level coordination required between contractors, agencies, and the public to make sure all elements of this highly complex, multi-segmented, mega project come together as planned.			
	<ul> <li>Highlighting initial construction activities included logistics planning and long-range procurement</li> </ul>			
	<ul> <li>Proving an overview of the complex design of the bridge and overcoming unique construction challenges and approaches</li> </ul>			
	<ul> <li>Outlining the benefits of the bridge components being fabricated in the United States, Europe, Asia and People's Republic of China</li> </ul>			
	Emphasizing the importance that the bridge is able to withstand seismic activity			
	Ensuring the aesthetics of the bridge remain in keeping with stakeholder expectations			
	- Michael Flowers Project Director American Bridge/Fluor Jv			

# Tuesday, November 16, 2010 (continued)

10:45 a.m.	Outlining Caltrans Accelerated Bridge Construction Program for Future Bridge Projects				
	<ul> <li>Construction and testing of an accelerated bridge construction project</li> <li>Outlining related traffic impacts and improved work zone safety</li> </ul>				
	Safety enhancements for the motoring public and highway workers				
	<ul> <li>Lessening environmental impacts which are directly attributable to limiting in-situ work requirements</li> </ul>				
	<ul> <li>Development of practice and policy for future bridge projects</li> </ul>				
	- Tony Marquez Deputy Division Chief, Program, Project and Resource Managemen Caltrans				
11:30 a.m.	Showcasing Best Practices of NYC Bridge Retrofits				
	Achieving better check and balances during design and construction of bridges				
	Working effectively to deliver projects on time and on budget				
	Highlighting how to obtain a satisfactory life in your structure				
	Increasing the sustainability and safety of major bridge systems				
	- Tony Taddeo Vice President Koch Skanska				
12:15 p.m.	Lunch And Networking				
1:30 p.m.	Delivering Environmental Approvals For The Alaskan Way Viaduct And Seawa Replacement Program				
	Program History – from the damaging earthquake to construction				
	<ul> <li>Identifying and delivering all federal, state and local approvals for your program – risk management strategies</li> </ul>				
	<ul> <li>Creating defensible documents – identifying elements required from transportation modelling to assessing potential cumulative impacts of your program</li> </ul>				
	<ul> <li>Legal challenges – strategies, responses, and managing risks</li> </ul>				
	- Kimberly Farley Director of Environmental Services Washington State Dot				

2:15 p.m.	Outlining Various Case Study Projects Where Design And Build Contracts Were Utilized Successfully				
	Specifying key points with-in the tender that are crucial to a winning bid				
	<ul> <li>Highlighting the procurement process and bringing designers and contractors to- gether early in the detail design portion of a project</li> </ul>				
	<ul> <li>Executing the design effectively, according to codes and consistent with industry standard specifications</li> </ul>				
	<ul> <li>Utilizing new procedures within the procurement process to reduce risk to the owner and design-build team</li> </ul>				
	<ul> <li>Amber Blanchard Design-Build Program Manager, Office of Construction and Innovative Contracting Minnesota DOT</li> </ul>				
3:00 p.m.	Networking & Refreshment Break				
3:45 p.m.	Delivering The Burlington Bridge Project And Adding A Vital Link To The Nations Transportation Infrastructure				
	<ul> <li>Showcasing the history of the bridge and how it will impact the redevelopment project</li> </ul>				
	<ul> <li>Outlining the upgrades to the bridge including the design process and re-design after the project initially began</li> </ul>				
	<ul> <li>Utilizing construction approaches to improve the bridge's overall rail capacity for freight and passenger movement and rebuilding the bridge to 21st century engineering standards</li> </ul>				
	<ul> <li>Highlighting the costs involved, timelines and the benefits of the project to the community</li> </ul>				
	- Steve Millsap Assistant Vice President, Structures Burlington Northern Santa Fe Railway - Bernard Hopfinger AVP and Division CM HNTB Corporation				
4.30	End Of Day One				

# Wednesday, November 17, 2010

8:15 a.m.	Opening Remarks From The Chair			
	- Joung Lee Associate Director for Finance and Business Development AASHTO			
8:30 a.m.	Utilizing C.C. Myers, Inc Organizational Dynamics to Achieve Successful Projection Outcomes			
	Analyzing facts and data from the Bay Bridge and MacArthur Maze projects			
	<ul> <li>Highlighting the corporate culture that exists with-in the company and using it to overcome challenging projects</li> </ul>			
	Utilizing the ownership culture to inspire results and deliver on expectations			
	How innovative project management can address cost and procurement issues			
	- Linda Clifford Chief Financial Officer C.C. Myers, Inc			
9:15 a.m.	Realizing The Importance Of Long-Term Planning And Investment In Bridge Projects In Creating Greater Access And Traffic Management			
	Leading the way in traffic planning through a long-term vision for transport infrastructure provision			
	<ul> <li>Building relationships between asset owners and contractors by developing a project delivery system which provides significant benefits to both parties</li> </ul>			
	<ul> <li>Reviewing the tendering process in providing asset owners value for money to optimize project delivery</li> </ul>			
	<ul> <li>Projecting future transport requirements in alleviating congestion and the role innovation in bridge construction can play in traffic management</li> </ul>			
	- Andrew Fremier Deputy Executive Director, Operations Bay Area Toll Authority & Metropolitan Transportation Commission			
10:00 a.m.	Coffee And Networking			
10:45 a.m.	Outlining Parson Brinkerhoff's Unique Thermoplastic Bridge Design			
	Discussing the material composition and material projects used in the design			
	Utilizing the design in the Fort Bragg Tank Bridge and Fort Eustis Rail Road Bridge			
	<ul> <li>Emphasizing other structural applications including retaining walls, sounds walls, rail road ties, jetties and piers.</li> </ul>			
	Highlighting other design considerations discussed for the project			
	- Vijay Chandra Senior Vice President Parsons Brinckerhoff			

11:30 a.m.	Delivering The San Francisco Oakland Bay Bridge East Span Eyebar Repair Project				
	<ul> <li>Highlighting the challenges of demolishing the cantilever and truss structures following the safe rerouting of traffic to the new East Span</li> <li>Overcoming the hurdles of working in close proximity of moving traffic and establishing processes to minimize risk</li> </ul>				
	Analysing concrete and steel deterioration mechanisms				
	Using special investigations and full scale trials to determine bridge conditioning				
	<ul> <li>Comparing strategies for the long term maintenance of bridges</li> </ul>				
	- Barton Newton State Bridge Maintenance Engineer Caltrans				
12:15 p.m.	Networking & Refreshment Break				
1:15 p.m.	Examining The Blueprint For Surface Transportation Investment And Reform				
	<ul> <li>Providing an update on state transportation spending levels</li> </ul>				
	Reporting and showing lessons learned form Recovery Act implementation				
	<ul> <li>Discussing the state of current surface transportation and bridge funding, including Federal Highway Trust Fund conditions</li> </ul>				
	Providing AASHTO's funding and financing framework for the next six years				
	<ul> <li>Giving the latest update on current program extensions and SAFETEALU reauthorization</li> </ul>				
	- Joung Lee Associate Director for Finance and Business Development AASHTO				
2:00 p.m.	Innovative Design Techniques And Building Sustainable Bridges				
	Developing bridge concepts considering project requirements, site condition, available materials, constructability and maintenance				
	<ul> <li>Paying close attention to aerodynamic stability and human induced vibration if unique structural system is used</li> </ul>				
	<ul> <li>Creating better structural design with the help of 3-D modeling</li> </ul>				
	Developing lighting scheme to enhance nighttime appearance				
	Designing construction sequences with consideration of contractors' capabilities				
	- Ignacio Barandiaran Project Director ARUP				
2:45 p.m.	Networking & Refreshment Break				

# Wednesday, November 17, 2010 (continued)

3:15 p.m.	Implementing Best Practice Maintenance Regimes For Bridges				
	<ul> <li>Ensuring your operational costs remain balanced and minimizing costs of up keeping the infrastructure.</li> <li>Ensuring the value of your asset remains economically sustainable</li> </ul>				
	<ul> <li>Outlining maintenance procedures that are necessary to mitigate a major accident or hazard</li> </ul>				
	<ul> <li>Implementing modern maintenance and engineering practices to improve the bridge infrastructure</li> </ul>				
	<ul> <li>Taking a long term approach to asset maintenance and identifying appropriate ser- vice levels to improve your decision making</li> </ul>				
	- Jon Tapping San Francisco Oakland Bay Bridge Risk Management Coordinator Caltrans				
4:00 p.m.	Learning From Shake Table Tests Of Three, 110'-Long, 4- Span Bridge Models With Conventional And Innovative Materials				
	Three bridge models each supported on three, two-column bents were tested under simulated earthquakes to failure				
	<ul> <li>Bridge-abutment interaction was included in the tests using hydraulic actuators at the ends of the bridge</li> </ul>				
	The earthquake motions simulated the 1994 Northridge earthquake				
	<ul> <li>Conventional reinforced concrete piers were used in one bridge model, but the other two incorporated innovative materials such as shape memory alloys, fiber concrete, built-in elastomeric pads, glass and carbon fiber composites, and precast columns</li> </ul>				
	- Dr. Mehdi Saiidi Professor, Department of Civil and Environmental Engineering University of Nevada, Reno				
4:45 p.m.	End Of Conference				



# Who's Who in the Cast Our Outstanding Speaker Line Up



Ignacio Barandiaran, *Project Director, ARUP*Innovative Design Techniques And Building Sustainable Bridges
Wednesday, November 17 at 2:00

Note: Photo is a placesaver, actual photo not available



**Amber Blanchard,** Design-Build Program Manager, Office of Construction and Innovative Contracting, **Minnesota DOT** 

Outlining Various Case Study Projects where Design and Build Contracts Were Utilized Successfully

Tuesday, November 16 at 2:15

Note: Photo is a placesaver, actual photo not available



Vijay Chandra, Senior Vice President, Parson's Brinckerhoff
Outlining Parson Brinkerhoff's Unique Thermoplastic Bridge Design
Wednesday, November 17 at 10:45



Linda Clifford, Chief Financial Officer, C.C. Myers, Inc

Utilizing C.C. Myers, Inc Organizational Dynamics to Achieve Successful Project Outcomes

Wednesday, November 17 at 8:30

Note: Photo is a placesaver, actual photo not available



Kimberly Farley, Director of Environmental Services, Washington State DOT

Delivering Environmental Approvals For The Alaskan Way Viaduct And Seawall Replacement Program

Tuesday, November 16 at 1:30

Note: Photo is a placesaver, actual photo not available



Michael Flowers, Project Director, American Bridge/Fluor JV

Providing a Status Update on The Construction of the New San Francisco-Oakland Bay Self Anchored Suspension Bridge

Wednesday, November 16 at 9:15

# Who's Who in the Cast Our Outstanding Speaker Line-up (continued)



Bill Forrester, Director, Structures, Federal Highway

Utilizing a Prefabrication Method in Bridge Construction and Retrofitting and Identifying how Further Use of Prefabrication Can Assist Project Timelines and Budgets

Tuesday, November 16 at 8:15

Note: Photo is a placesaver, actual photo not available



Andrew Fremier, Deputy Executive Director, Operations, Bay Area Toll Authority & Metropolitan Transportation Commission

Realizing the Importance of Long-Term Planning and Investmenti n Bridge Projects in Creating Greater Access and Traffic Management

Wednesday, November 17 at 9:15

Note: Photo is a placesaver, actual photo not available



Joung Lee, Associate Director for Finance & Business Development, AASHTO

Opening Remarks From The Chair

Tuesday and Wednesday, November 16 and 17 at 8:15

Examining the Blueprint for Surface Transportation Investment and Reform

Wednesday, November 17 at 1:15



**Tony Marquez,** Deputy Division Chief, Program, Project and Resource Management, Caltrans

# Outlining Caltrans Accelerated Bridge Construction Program for Future Bridge Projects

Wednesday, November 16 at 10:45

Note: Photo is a placesaver, actual photo not available



Steve Millsap, Assistant Vice President, Structures, Burlington Northern Santa Fe Railway

Delivering The Burlington Bridge Project And Adding A Vital Link To The Nations Transportation Infrastructure

Tuesday November 16 at 3:45

Note: Photo is a placesaver, actual photo not available



Barton Newtown, State Bridge Maintenance Engineer, Caltrans

Delivering the San Francisco Oakland Bay Bridge East Span Eyebar Repair Project

Wednesday, November 17 at 11:30

# Who's Who in the Cast Our Outstanding Speaker Line-up (continued)



**Dr. Mehdi Saiidi,** Professor, Department of Civil and Environmental Engineering, University of Nevada, Reno

Learning from Shake Table Tests of Three, 110'-Long, 4- Span Bridge Models with Conventional and Innovative Materials

Wednesday, November 17 at 4:00

Note: Photo is a placesaver, actual photo not available



Tony Taddeo, Vice President, Koch Skanska

Showcasing Best Practices of NYC Bridge Retrofits

Wednesday, November 16 at 11:30

Note: Photo is a placesaver, actual photo not available



Jon Tapping, San Francisco Oakland Bay Bridge Risk Management Coordinator, Caltrans

Implementing Best Practice Maintenance Regimes for Bridges

Wednesday, November 17 at 3:15

# Who's Who in the Cast Our Sponsors

# Deloitte.

### Deloitte

**Deloitte,** is one of Canada's leading professional services firms, provides audit, tax, consulting, and financial advisory services through more than 7,600 people in 56 offices. The firm is dedicated to helping its clients and its people excel. Deloitte is the Canadian member firm of Deloitte Touche Tohmatsu.

Our professionals have been developing effective business solutions and innovative performance improvement strategies for Canadian and international organizations for more than 150 years. We combine national coverage with international capabilities; a multifunctional team approach with in-depth industry expertise; and personal commitment to service with technical excellence. Most of all, we bring into play a superior caliber of people – highly talented and highly motivated – who are able to deliver business results that give our clients the competitive edge.

As Canada's largest professional services firm, Deloitte brings our vast array of resources to this project. The success, however, of any assignment such as this starts with the presence of an experienced, knowledgeable and well-rounded Project Team that is expert in all facets of the engagement.

www.deloitte.ca



### Poseidon

Poseidon Barge Corporation fabricates sells and rents the Poseidon Portable Sectional Barges to the Heavy Highway, Bridge & Marine Construction Industries. Sectional Barges are used to float cranes, excavators, piling equipment, air compressors and many other types of construction equipment. The Poseidon Sectional Barge is truckable allowing access to rivers and lakes not accessible by the larger standard deck barges. We have distribution in Indiana, Arkansas, Massachusetts, California, Hawaii & Florida. Call Poseidon Barge for a quote for your project. Our qualified sales and engineering staff will be happy to assist you with your project design, stability analysis and availability questions.

www.poseidonbarge.com

# Who's Who in the Cast Media Partners



### Construction IQ

# Delivering quality content and events to enhance your knowledge and strengthen your networks

Welcome to the essential information exchange for regional construction specialists... In a market that places increasing demands on you and your team, time is as valuable a commodity as any other.

We provide quality content hand picked and reviewed by a team of construction specialists. You'll also be able to walk away with action-points that can be directly applied to your job and quickly impact the bottom line, ensuring you an increase to the value of your projects immediately.

www.iqpc.com/Construction.aspx 1-646-454-4559



### **AASHTO**

Established in the 2005 SAFETEA-LU transportation authorization act, the mission of the AASHTO Center for Excellence in Project Finance is to provide support to State Departments of Transportation in the development of finance plans and project oversight tools and to develop and offer training and state-of-the-art finance methods to advance transportation projects and leverage funding.

### The Center provides four primary services:

- Professional Education
- Research Services
- Technical Assistance
- Information Dissemination

www.transportation-finance.org



### American Infrastructure magazine

# American Infrastructure magazine: Informing Municipal Management Professionals

American Infrastructure magazine is a national public works and municipal trade magazine with a focus on infrastructure case study projects. Readers include elected and appointed city, county, and state officials; their staff; and the companies they work with.

www.americaninfrastructuremag.com



# The Big Project

The Big Project delves into the trends affecting construction, engineering, architecture and light and heavy equipment in the Middle East and international markets.

The monthly publication is a platform for bringing together key decision makers at senior management level to identify, discuss, debate and resolve matters at the forefront of the industry.

www.thebigprojectme.com



# **Building & Construction West**

Building & Construction West is the only regional magazine to cover the growing markets in the western United States. Each issue brings readers must-read information about new projects, executive promotions and trends unique to this part of the United States. Whether it's a new high-rise going up in Las Vegas, a retirement community outside of Phoenix or a corporate headquarters in California's Inland Empire, Building & Construction West keeps its readers up to date on the latest developments and construction techniques.

Civil construction is a major component of this region. With the federal government taking action against crumbling transportation infrastructure throughout the United States – especially in the West – Building & Construction West keeps readers abreast of the newest projects to break ground, as well as the processes to make these projects a success. The western United States also is a barometer for change in the construction industry as a whole, especially "green" building in the Pacific Northwest. Building & Construction West delivers the latest information about LEED construction practices and sustainable design, as well.

www.buildingandconstruction-west.com



# **CE News**

**CE News** provides reliable, timely industry news and trends to civil engineers, firm owners and managers, and vendors of services and products vital to the civil engineering industry. Visit Cenews.com and subscribe to *CE News* magazine and *Civil Connection* eNewsletter to stay up to date on the latest updates, projects, resources, and more!

www.cenews.com



### **Construction Today**

This publication covers timely issues such as the profound effect construction spending has on the U.S. economy, managing volatile material costs, LEED design and construction, emerging technologies such as BIM, and work force retention. It offers its readers – upper-level executives and project managers – information about best practices in project delivery methods, new technologies, market trends and training techniques, including special sections dedicated to five of the most important sectors in the industry: commercial, residential, industrial, institutional and civil. Editors of Construction Today explore regulatory and economic issues, new construction technologies, financing trends and equipment maintenance.

Construction Today provides a unique opportunity to reach decision makers across the market because readers are involved in all aspects of the construction industry: residential, industrial and commercial buildings; roads, bridges and other heavy construction projects; and specialty trades such as carpentry, plumbing and electrical work.

www.construction-today.com

# Who's Who in the Cast Media Partners (continued)



# Energy + Infrastructure

Effective utility management and underground solutions are the main driving forces behind Energy + Infrastructure's mission. E+I covers the issues, trends and challenges that face North American utility, tunneling and waste management companies – as well as municipal, state and federal public works agencies that employ these companies. These markets form the backbone for energy, underground and transportation infrastructure, and they help keep Canada and the United States in motion and energized.

Energy + Infrastructure reaches key decision makers and investors at the senior boardroom and field levels. These include CEOs, chairmen, presidents, directors, owners, general managers, partners, vice presidents, superintendents, managers and procurement executives. We also reach out to the investor community, including directors, CFOs, financial institutions, investor relations firms, individual and institutional investors, and analysts.

www.energyandinfrastructure.com



# **Government Engineering Journal**

Government Engineering Journal is received bimonthly by over 40,000 city, county, state, and consulting engineers responsible for the operation, management, maintenance, and rehabilitation of the built infrastructure for potable water, wastewater, stormwater, roads & bridges, transportation, brownfields, information systems, GIS/GPS, surveying, pipelines, construction equipment, solid waste, fleet services, and safety.

www.govengr.com



### Infrastructure USA

**RebuildingAmericasInfrastructure.com** is the premier website for bridge and road engineers and professionals. The websitesite provides daily content tailored to your professional needs. Sign up for **RAI** eNews, our bi-weekly eNewsletter, to get content delivered right to your inbox! (link to www.rebuildingamericasinfrastructure.com)

www.rebuildingamericasinfrastructure.com

# General Information

Venue: Hyatt at Fisherman's Wharf, San Francisco, CA 555 North Point Street San Francisco, CA 94133

Tel: 1 415 563 1234

Website: www.fishermanswharf.hyatt.com

Conference Organizer: Judith Blake 1 (917) 683-3258, jblake@ipcu.com