# American Society of Civil Engineers Pittsburgh Section: Geo-Institute

### Deep Foundations: Selection, Design, and Construction

Last name First name Initial
Company / School
Mailing Address
City State Zip Code
Email Address
Phone Number (No shows will be billed at a non-member rate)  Pgh. GI Member \$195.00
Full-Time Student \$90.00
Non-Member (Pgh. GI) \$215.00
<b>Total Amount Enclosed:</b> \$00 (Registration will not be processed without payment) Please detach this form and return by April 18, 2015 with a check made payable to:
ASCE Geotechnical Engineering Group:

Or register On-line at: http://www.asce-pgh.org/

Attn: Steven Lowden, P.E. GAI Consultants, Inc. 4200 Triangle Lane Export, PA 15632-1358

### Deep Foundations: Selection, Design, and Construction

8:00 to 8:30 8:30 to 8:45	Registration Welcome and Introductions - Review of course objectives
8:45 - 9:45	and agenda  Design and Construction of  Deep Foundation Overview
9:45 – 10:15	Subsurface Investigations; Selection of Soil and Rock Parameters
10:15 - 10:30	BREAK
10:30 - 11:45	Installation Equipment
11:45 – 12:30	LUNCH
12:30 - 1:45	Geotechnical and Structural Axial Design
1:45 – 2:00	BREAK
2:00 - 3:00	Geotechnical and Structural Lateral Design
3:45 – 5:00	Construction Monitoring and Inspection

The seminar fee includes the cost of a continental breakfast, lunch, coffee and seminar notes. To register for the short course complete the attached form and mail it along with a check to the address enclosed on the back of this brochure. Cancellations received after April 18, 2015 and no shows will be billed. If you have any questions, please contact Steven Lowden (724) 387-2170 x2755 or via email at s.lowden@gaiconsultants.com



## American Society of Civil Engineers

Pittsburgh Section: Geo-Institute Presents a One Day Short Course:

### Deep Foundations: Selection, Design, Construction

By: Jerry A. DiMaggio, P.E., D.GE, F.ASCE.

#### Saturday, April 25, 2015

Sheraton Pittsburgh Hotel 300 W. Station Square Dr. Pittsburgh, Pennsylvania

#### 8:00 AM to 5:00 PM

8 PDH's eligible for attendees (NY not eligible)



INSTITUTE

Pittsburgh Chapter

### DEEP FOUNDATIONS: SELECTION, DESIGN AND CONSTRUCTION

#### **Subject of Course/Course Description**

Deep foundations is one of the most complex and interesting topics in civil engineering. The uncertainty and risk associated with the selection, design and construction of driven and drilled foundations equally influences owners. designers, material suppliers and contractors. Communication and interaction between specialty technical disciplines (structural, geotechnical hydraulics and construction) are of primary importance. Advancements in the deep foundation specialty area are under constant development in order to keep pace with changes in: the complexity and increasing demanding performance requirements of projects, changes to project delivery methods (D-B, CM/GC and PPP), and site conditions, challenges, and complexity. As advancements and changes occur engineers and contractors must be flexible, proactive and constantly reflecting on their project roles and responsibilities to be successful. This interactive course provides participants' guidance to achieve this goal of success based on current state of "best practices" and the instructor's 41 years of national and international experience in this specialty area.

Participants will be provided printed and an electronic copy (PDF) of the instructor's PowerPoint slides.

#### Instructor

Mr. DiMaggio is a principal at Applied Research Associates, Inc. ARA and specializes in civil engineering and construction related to strategic planning, innovation deployment, and business plan development. He is recognized for his accomplishments related to design, construction, monitoring, forensics, disputes resolution and innovation mainstreaming/deployment. He has presented hundreds of seminars and workshops on structural foundations, retaining structures and engineered earthworks for structures, buildings, earthworks and energy facilities. Mr. DiMaggio was Implementation Coordinator for the Strategic Highway Research Program (SHRP2) at the National Academies and was responsible for deployment and implementation for the research outcomes from internationally recognized program. He served on numerous national and international projects related to limit states design, risk management, innovative contracting and accelerated construction. He is a retired Principal Bridge Engineer and National **Program Manager of Geotechnical** /Foundation Engineering with the U.S. DOT. He holds B.S./M.S. degrees in Civil Engineering from Clarkson University, and is a Master Trainer. He has consulted on @ 1000 civil construction and business related projects throughout the Americas, the Middle East and Australia.

#### Course Outcomes:

Upon completion of the course the participants will be able to:

- Select technically feasible and cost effective deep foundation solutions based on project conditions and performance requirements.t
- Understand the overall deep foundation design and construction project development and delivery process.
- Discuss differences in roles and responsibilities related to deep foundations for D-B-B, D-B and CM/GC projects.
- Know where to locate detailed design/ construction guidance on deep foundations in FHWA, AASHTO and professional references.
- Evaluate the results and the relationship between design results, construction observations and construction monitoring tools (observations, wave equation, dynamic measurements and static and rapid load testing).
- Understand loads, load combinations and limit state requirements for deep foundation projects.
- Discuss the critical elements of specifications, and construction plans/notes for deep foundations.