North American Chinese Geotechnical Engineers Association

2 Ada, Suite 250, Irvine, California 92618; Tel: 949-727-4466; Fax: 949-727-9242;
Website: www.nac-gea.org EIN#: 27-0835587 (IRS 501c3 Organization)

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7th GEOTECHNICAL WORKSHOP

Friday January 28, 2011, 12:00pm-5:00pm
Leighton Conference Room, 17781 Cowan, Irvine, CA 92614, Ph: 949-250-1421

AGENDA:

12:00pm-1:00pm Lunch and Networking
1:00pm-1:25pm Opening Remark and Sponsors' Speeches

1) Keynote Presentation (1:25pm-2:10pm) – **Geotechnical Design Challenges & Utility Conflicts for I-405 Sepulveda Pass HOV Widening Design-Build Project, Los Angeles, California**
Invited Speakers: **Mr. Lawrence N. Perko, PE, GE,** Vice President, National Design-Build Lead; **Dr. Eric C. Pond, PE,** Principal Engineer, Kleinfelder, Inc., Irvine, CA

2) Keynote Presentation (2:15pm-3:00pm) – **Seismic Design of Driven Pile Foundations for Port of Long Beach Security Command and Control Center, Long Beach, California**
Invited Speaker: **Mr. Gary Gilbert, PE,** Associate, Diaz Yourman & Associates, Inc., Santa Ana, CA

3:00pm – 3:20pm **Coffee Break**

3) Keynote Presentation (3:20pm-4:05pm) – **Site-Specific Seismic Source Characterization and Seismic Hazard Evaluation for LADWP Van Norman Complex Program**
Invited Speakers: **Dr. Christine Goulet,** Researcher, URS Corp., Los Angeles, CA and PEER, Berkeley, CA; **Mr. Scott Lindvall, PG, CEG**, Vice President, Senior Principal Geologist, Fugro William Lettis & Associates, Inc., Valencia, CA

4) Keynote Presentation (4:10pm-4:55pm) – **Caltrans Guidelines for Estimation of Bridge Foundation Loads Due to Liquefaction Induced Lateral Spreading**
Invited Speakers: **Mr. Tom Shantz, PE, GE,** Senior Research Engineer, Division of Research and Innovation, California Department of Transportation (Caltrans), Sacramento, CA

4:55pm-5:00pm Closing Remarks

COST: Members: $50 - Consulting Firms, $30 - Government Employees and Students. Walk-in without RSVP: $60.
Non-members: $65 - Consulting Firms, $45 - Government Employees and Students.

You are a member if you had RSVP to any of our previous workshops. New members will fill in an application form and pay $25 annual membership fee.

RSVP: Dr. Jianping Hu, PE, GE (Jianping.hu@ladwp.com or 213-367-0942)

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Prestigious Speakers for the 7th NACGEA Geotechnical Workshop

Mr. Lawrence N. Perko, PE, GE
Dr. Eric C. Pond, PE
Kleinfelder West, Inc.

Mr. Lawrence Perko, Vice President & National Design-Build lead with Kleinfelder, has over 34 years of geographically and technically diverse experience on a broad range of geotechnical and civil engineering projects. He is experienced in delivering projects through both design-build and design-bid-build processes. He obtained both BS and MS from the University of Illinois, Urbana-Champaign Illinois.

Dr. Eric Pond is a Principal Engineer with Kleinfelder. Dr. Pond has more than 15 years of engineering experience, earned his PhD in Civil Engineering from Virginia Polytechnic Institute and State University with a concentration on geotechnical engineering, and is a Registered Professional Engineer in California, Arizona, Colorado, and New Mexico. He has been responsible for project development and management of large and complex geotechnical and materials engineering projects throughout the Southwest.

Mr. Gary Gilbert, PE with Diaz Yourman & Associates has over 14 years of experience. His geotechnical experience includes a wide variety of projects including port facilities, airports, commercial centers, and bridges. He holds a Bachelor and Masters from California State University at Long Beach and is a registered Civil Engineer in the state of California. He is currently serving as Treasurer of ASCE Los Angeles Section and also involved with the Engineers without Borders Orange County professional chapter Honduras project. Mr. Gilbert was recognized as Outstanding Young Engineer honorable mention by ASCE Region 9 in 2007 and earned the ASCE LA Section President's Award in 2010.

Mr. Gary Gilbert, PE
Diaz Yourman & Associates, Inc.

Dr. Christine Goulet, URS Corporation
Mr. Scott Lindvall, PG, CEG
Fugro William Lettis & Associates, Inc.

Dr. Goulet obtained her PhD from UCLA. She has worked on research and consulting projects in the fields of geotechnical earthquake engineering, seismic hazard analysis and soil-structure interaction. Dr. Goulet currently works as a researcher at the PEER, where she is coordinating the NGA-East effort to develop ground motion and hazard models for the central and eastern North American region. Dr. Goulet also consults with URS and teaches a graduate course in earthquake ground motions at UCLA

Mr. Lindvall, Senior Principal Geologist with Fugro William Lettis & Associates, Inc., has 25 years of experience performing seismic and geologic hazard analyses, paleoseismic investigations, and engineering geology evaluations. Mr. Lindvall received his BS and MS degrees in geology from Stanford University and San Diego State University, respectively. His work in seismic hazards ranges from characterizing the behavior of active faults to developing seismic source models for nuclear power plants and dams. He is currently working on the working on the Central and Eastern United States Seismic Source Characterization (CEUS SSC) Project funded by EPRI, DOE, and the NRC.

Mr. Tom Shantz is a senior research engineer for Caltrans, Division of Research and Innovation. Tom has been performing or managing geotechnical research for nearly 15 years. He directs Caltrans research activities in the areas of earthquake ground motion, site response analysis, liquefaction, and bridge foundations. He currently manages Caltrans' participation in the Pacific Earthquake Engineering Research (PEER) Center-Lifelines Program. Tom led a recent effort to update Caltrans' procedures for determining seismic loading for bridge design. He also spearheaded a recent effort to develop guidelines to estimate foundation loading resulting from lateral spreading. Tom received a bachelor's degree in physics and master's degree in civil engineering (geotechnical) from UC Berkeley and a bachelor's degree in civil engineering from San Francisco State.

Mr. Tom Shantz, PE, GE
Caltrans Headquarters

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Abstracts of the 7th NACGEA Geotechnical Workshop Presentation

Geotechnical Design Challenges & Utility Conflicts for I-405 Sepulveda Pass HOV Widening Design-Build Project, Los Angeles, California, by Mr. Lawrence N. Perko and Dr. Eric C. Pond: LACMTA in partnership with Caltrans adopted a design-build approach in widening the approximately ten-mile segment of Interstate-405 (I-405) through Sepulveda Pass approximately between Interstate-10 (I-10) to the south and US Route-101 (US-101) to the north in the City of Los Angeles, California. The Design-Build team is led by Kiewit as the prime contractor and HNTB as the prime design consultant. Kleinfelder is a subconsultant of HNTB, who specifically assists the design-build team in geotechnical engineering for the design and construction of all earth retaining structures, sound walls, sign structures, culverts, permanent cut and fill slopes, and pavement design for the project. Provisional Sum Items include geotechnical investigations and static and seismic analyses for Utility (MWD 96-inch waterline) Conflicts #1, 2, 3, 4, 5, 6 and 7. The presentation will cover the key challenges and solutions in design of high slopes, anchored walls and utility conflict analysis.

Seismic Design of Driven Pile Foundations for Port of Long Beach Security Command and Control Center, Long Beach, California, by Mr. Gary Gilbert: The Port of Long Beach (POLB) proposed to construct a facility to combine security operations in a single location. The project site was located adjacent to an existing perimeter stepped rock dike and contained two previously placed but now buried rock dikes. The perimeter and buried rock dikes were underlain and surrounded by soft and loose potentially liquefiable soils. The high seismic setting of the POLB, the stepped perimeter rock dike, and the potentially liquefiable soils would lead to several feet of lateral displacement because of the design earthquakes. To provide an earthquake resistance design for the facility, a unique driven pile foundation was selected and installed. The presentation will describe the site exploration, pile lateral load analysis procedures, and pile driving operations.

Site-Specific Seismic Source Characterization and Seismic Hazard Evaluation for LADWP Van Norman Complex Program, by Dr. Christine Goulet and Mr. Scott Lindvall: The Los Angeles Department of Water and Power (LADWP) is planning improvements to its San Fernando Valley Van Norman Complex (VNC). The VNC is comprised of a wide array of water treatment and containment facilities. Because the VNC is located in close proximity to many active faults and because LADWP would like to have stable design criteria for the next few years, LADWP and its consultants initiated a thorough site-specific seismic analysis. In this presentation we will cover the key findings from this effort, focusing on an update of the characterization of nearby faults and their impact on hazard analysis results.

Caltrans Guidelines for Estimation of Bridge Foundation Loads Due to Liquefaction Induced Lateral Spreading, by Mr. Tom Shantz: Caltrans, working closely with Pacific Earthquake Engineering Research Center (PEER) researchers, recently completed a design guideline for the estimation of loads on bridge foundations and abutments resulting from liquefaction induced spreading ground. The recommended procedures are based on an equivalent nonlinear static analysis methodology. While this approach does not attempt the analytical rigor of a nonlinear dynamic analysis, it was developed through careful evaluation of a modest body of research performed in the centrifuge, small scale shake table, large scale shake table, and full size field tests. This presentation will provide an overview of the recently adopted guideline.

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7th NACGEA Geotechnical Workshop Advertisement / Sponsorship

Company Presentation at Luncheon (Limited to 3 Companies)

Gold: $500 for 5 minutes presentation.
Silver: $300 for 3 minutes presentation
Bronze: $100 for 1 minutes speech

Company Marketing Souvenir to Speakers

Each Souvenir Limit to $25 Value

Please contact NACGEA Secretary-General:

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