

#### INTERNATIONAL WORKSHOP ON MICROPILES

Washington, DC - September 22-25, 2010

# DFI / ADSC Micropile Committee Activity Update

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Friday, September 24, 2010



#### Which is It?

DFI / ADSC Joint Micropile Committee
or
ADSC / DFI Joint Micropile Committee

It depends on whether you are the DFI Co-chair or the ADSC Co-chair... Today, it is the DFI / ADSC Joint Micropile Committee.



#### Committee

- Current Co-Chairs
  - DFI: Jon Bennett, PE, D.GE
    - » GeoStructures, Inc. (jbennett@geostructures.com)
  - ADSC: Bob Carnevale, PE
    - » DBM Contractors (rcarnevale@dbmcm.com)
- Approximately 24 committee members
- Distribution list of approximately 100 associate members
- Good cross section of Contractors, Engineers and Suppliers mostly throughout North America



#### Mission

Through cooperation with, and the direction of the International Society for Micropiles (ISM), and the use of education, training, seminars, research, specifications and other means; this committee will work with Owners, both private and public, Contractors, Engineers and Suppliers to increase the use, understanding, quality and economy of Micropile systems as defined by the Joint Committee.



#### **Ongoing Objectives**

- Have four (4) committee meetings per year to conduct the business of the Committee
- Sponsor and execute one (1) to two (2) industry educational seminars each year
- Canvas the committee membership to investigate future research activities and needs that may be suitable to participate in or recommend to the ADSC IASC (Industry Advancement Steering Committee) for sponsorship



### Meetings

- Four (4) Committee meetings per year held at:
  - DFI Annual Conference
  - ADSC Annual Meeting
  - ADSC Spring Board of Directors Meeting
  - ADSC Summer Meeting



### Meetings

- Recent Meeting Locations:
  - March 2009: Orlando, FL (45 Attendees)
  - July 2009: Seattle, WA (41 Attendees)
  - October 2009: Kansas City, MO (35)
  - January 2010: Tucson, AZ (55)
  - April 2010: Dallas, TX (22)
  - July 2010: Colorado Springs, CO (48)
  - Next Meeting: October 2010 @ DFI Ann. Conf.



#### Seminars

- The Committee has developed and presented Micropile Seminars on a Fundamental (101) and Adavnced (201) Basis throughout the United States and Canada
  - 2009 Orlando, FL (first 201 level seminar)
  - 2009 Greensboro, NC (combined with AMPIS)
  - 2010 Toronto, Ontario, Canada
  - Next Seminar: May 2010, Little Rock, AR



### Specifications

- The Committee has historically been proactive in developing and providing input on micropile standards for various organizations
  - DFI / ADSC Guide to Drafting a Specification for Micropiles (2003)
  - AASHTO LRFD Design Specification for Micropiles (2005-2007)
  - AASHTO LRFD Construction Specification for Micropiles (2005-Current)
  - International Building Code (IBC) Micropile Provisions (2006)



## Sampling of Past / Current Projects

- Ongoing ISM Collaboration
- Grout Strain Compatibility Study
- Grout Testing Study (Cubes / Cylinders)
- Standardized Casing Joints
- NHI Micropile Design and Construction Course
- Micropile Webinar / Brown Bag Material
- Building Code Load Testing Criteria Evaluation



#### **Current Hot Projects**

- DFI / ADSC Guide to Drafting a Specification for Micropiles Update
- Drafting a position paper to address the issue of mill secondary material for micropile casing
- LRFD / Limit State Design for Micropiles
- Wrapping up AASHTO LRFD Construction Specification



## DFI / ADSC Micropile Specification

- Review and update the 2003 Guide to Drafting a Specification for Micropiles
- Review is in process
- Make the document and actual specification as opposed to a guide
- Integrate hollow bar micropiles into the base specification
- Develop a commentary to accompany the specification text



## Mill Secondary Task Force

- Develop a position paper to defend the use of mill secondary material for micropile casing
- A number of owner provisions for buying domestic materials is challenging the use of mill second material for certain projects
- A requirement to use prime casing for micropiles will result in a dramatic and unnecessary increase in material costs



## LRFD Micropile Design

- LRFD / Limit States Design has become a primary design methodology in the structural engineering community and is emerging in geotechnical engineering
- A lot of interest in LRFD was expressed at the Toronto Seminar
- Objective is to develop an LRFD Design segment for our Micropile Seminar Series



#### **AASHTO LRFD Construction Spec**

- This particular specification has been in development over the last couple of years
- Continuing work with the T-15 Committee of AASHTO to finalize the Specification
- Objective is to have the Specification incorporated into the next interim revision of the AASHTO LRFD Specification Document



#### **New Opportunities**

We welcome the opportunity to explore new topics of interest to the Micropile Community.

Let us know if there are topics that are of interest to YOU!



#### **Next Meeting**

Location: Hollywood, CA

Event: Deep Foundations Institute (DFI) 35<sup>th</sup>

Annual Conference on Deep Foundations

Venue: Renaissance Hollywood Hotel and Spa

Micropile Committee Meeting Wednesday, October 13, 2010 8-10AM



# THANK YOU!

for Your Time and Attention
You will be rewarded accordingly...

Should you have further question, contact jbennett@geostructures.com.







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