

Minutes of the AFS30 Committee Meeting
Foundations of Bridges and Other Structures
Tuesday, January 24, 2006
Marriott Hotel

Chair: Mark Morvant
Secretary: Hani Titi
Attachments:

Agenda
Present: list of members
Guests: list of guests

Call to order: 8:00 a.m.

1. Welcome and Approval of the 2005 meeting minutes

- Meeting attendees introduced themselves
- The chairman welcomed the new 19 members joined the committee this year
- Agenda, rosters, and other materials were distributed
- The minutes were unanimously approved (motion by Jim Withiam and Dan Brown)

2. General Items

- **Review of committee name and scope:** The name and scope of the committee were reviewed. The committee decided to keep the name and the scope unchanged.
- **Nominee for “Dialogue with Leaders in the Design and Construction of Transportation Facilities:”** The committee nominated the following individuals: Jerry DiMaggio, Dan Brown, and Benget Fellenius. Committee members voted using written ballots. The chairman will forward the committee selection to the TRB.
- **TSP Report Review:**
 - i. The committee discussed the report
 - ii. Draft report due on March 1, 2006
 - iii. Need to address the general goals/future goals
 1. Specific focus on short-term goals
 - iv. Mark Morvant, Hani Titi, James Brennan, Rudolf Frizzi and Sam Paikowsky will work on the report to finalize it before February 17th for full committee review and approval before the deadline.
- Transportation Information Needs Assessment survey will be sent to prioritize these needs. Chair requested member participation.

3. Technology Transfer and Summary of 2006 Sponsored Sessions/Workshops

- Fourteen papers were reviewed

- Seven papers were scheduled to be presented
- Four papers were recommended for publication.
- Session: Performance Evaluations of Soil Structures, Sangchul Bang presiding, approx. 45 people attended
- Poster Session: Analytical and Experimental Modeling of Foundation Elements, James Brennan presided, > 100 people passed through
- Workshop #155: “*Use of Cone Penetration Test for Foundation Analysis and Design.*” About 40 people attended the workshop , which was very well organized
- Subcommittee AFF50 (Seismic Design of Bridges Committee: Geoseismic Issues of Bridges Subcommittee) sponsored Session # 583: “*Effective Stress Seismic Site Response Analysis for Liquefiable Ground.*” The session was a joint effort with AFS30 Committee.

4. Presentations

- The following topics were presented at different times during the committee meeting:
 - i. Research funding support by Jim Withiam
 - ii. LRFD Calibration overview by Andrezej Nowak
 - iii. Performance Based Specifications for CFA Piles by Dan Brown & Silas Nichols
 - iv. Synthesis Report on Rock Socket Drilled Shafts by John Turner
 - v. Micropile Dynamic Testing by Frank Rausche

5. Research Topics and Proposals

- Ranking of New Research Needs Statements Topics for 2007: Committee members were surveyed to rank RNS topics. The results are as follows:
 - i. Performance base design of foundation elements and earth structures for extreme event loadings (Kenneth Fishman will prepare the statement which will be submitted by California DOT)
 - ii. Full scale lateral load tests on rock-socket drilled shafts to aid in developing p-y curves for lateral design (Dan Brown will prepare the statement which will be submitted by Oregon DOT)
 - iii. Development of Pile Set-up and relaxation for use in Deep Foundation Design (Hani Titi will prepare the statement which will be submitted by Louisiana DOTD)
- New Synthesis Topics discussed but not approved:
 - i. Different design methodologies for MSE Systems; AASHTO, NCMA, K_o -Stiffness, Mike Adams FHWA approach, the Japanese approach
 - ii. Application of numerical methods incorporating advanced constitutive models for geomaterials to better understand the performance of foundation systems, earth support systems and earth structures under a variety of loading conditions including extreme events

- Workshop recommended for 2007 Technical Session:
 - *Implementation of the LRFD Design for Bridge Substructures*
Organizer: Andy Nowak
- Sessions proposed for 2007 Annual Meeting
 - Suggestions for 2007 Technical Session: Committee members were surveyed to prioritize prior to meeting with discussion on results at the meeting:
 - Implementation of Geotechnical LRFD in the State Department of Transportation
 - Soil Set-Up and Relaxation Effects on Bearing Capacity of Driven Piles
 - Micro pile Design for Slope Stabilization and Earth Retention
 - Sessions approved for 2007
 - Paper Session: *Set-up and Relaxation Effects on Load Carrying Capacity of Driven Piles*, Organizer: Hani Titi
 - Conference Session: *Implementation Status of Geotechnical LRFD in the State DOT's*, Organizer: Robert Kimmerling

6. Other Business

- Geotechnical Baseline Reports: Dan Brown presented this topic to the committee. He will arrange for a presentation for the committee next meeting.
- George Goble gave comments on limitations of current LRFD implementation
- Conference Announcements: The following conference announcement were distributed:
 - i. Fifth National Seismic Conference on Bridges and Highways
“Innovations in Earthquake Engineering for Highway Structures”
September 18-20, 2006 / San Francisco, California
 - ii. First North American Landslide Conference “Landslides and Society: Integrated Science, Engineering, Management, and Mitigation” June 3-8, 2007 / Vail, Colorado

7. Adjourned

Adjourned at 12:00 Noon