

**AFS30 COMMITTEE  
FOUNDATIONS OF BRIDGES AND OTHER STRUCTURES  
MINUTES FOR YEAR 2005 MEETING  
Wednesday, January 12, 2005  
8:00AM to 12:00PM  
Marriott Hotel, Washington Room B2**

**1. Attendance [Total 49 - 13 members, 36 non-members] (List Attached)**

**2. Agenda**

**3. General Items for the Record**

- The minutes from the year 2004 meeting were approved.
- Chairman Morvant recognized those members rotating off the committee. The chairman will develop a list of potential new members and submit them to the TRB for approval soon. New members will be invited in 2005 and will be seated at the 2006 meeting.
- Dave Suits, Chair for the AFS00 committees made TRB announcements (see attached notes)
- The Chair noted that comments on the committee sponsored LRFD Calibration Circular must be submitted to him by the end of January. Jerry DiMaggio noted the importance of the Circular as a benchmark for LRFD assessments.
- The Chair noted that TRB requested input from committees on "Critical Issues in Transportation". There was no discussion on the issue.
- Jerry DiMaggio commented on the AASHTO Bridge meeting in April which will focus on a five year Strategic Plan. He suggested that research priorities be coordinated with other committees. He also noted that papers and research topics frequently include a reference to LRFD but suggested the important of showing interaction between design elements in application of LRFD methods. Chair noted that three AFS30 members will be in attendance.

**4. Committee Program (Conducted as last item of meeting)**

(a) Invited Speakers and Topics

- Update on CHRP 12-66 "AASHTO LRFD Specifications for

Serviceability in the Design of Bridge Foundations”, NCHRP Report 507, presented by Dr Samuel G. Paikowsky.

- Update by Mike Adams of FHWA of test program to develop new guidelines for design and construction of geosynthetic reinforced walls and abutments.
- Bob Barrett presented many examples of RSS slopes to illustrate their successful use and questioned why the system is not used more. He also provided an update on Soil Nail Launcher Technology used for landslide repairs.
- Presentation of project photos and data from several projects showing results from lateral load tests of drilled shafts in State of Ohio by Rick Engel.
- Measurement and evaluation of settlement at bridge approaches by Dr. Zhongie Zhang.

## 5. Committee Business

### (a) Subcommittee Reports

Tom Cooling reported for the Geo-Seismic Subcommittee of AFF50, Seismic Design of Bridges Committee:

- The Subcommittee is being encouraged to get more members, especially from the ranks of state transportation departments.
- The Subcommittee is considering a study of the seismic response of Auger Cast Piles.
- A new AASHTO Code for Seismic Design of Structures is being prepared. Its earliest possible approval is June, 2006.

### (b) Activities /Accomplishments since Last Meeting

#### Reports on Year 2005 AFS30 Sponsored/Co-Sponsored Sessions

#### **Sunday January 9, 2005**

1:30pm –5:00pm	150	Proposed Changes to AASHTO Load and Resistance Factor Design Structural Foundation Specifications	<b>AFS30</b> <b>AFF10</b>	Marriott, Delaware B
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Est Attendees	55	Presider	Jawdat Siddiqi
Comments	Session had full limit of attendees .		

***Monday January 10, 2005***

8:00am – 9:45am	204	Design of Structures and Foundations for Vessel Collision Loading Conditions, Part 1: Analysis, Design and Strengthening Procedures	<b>AFS30</b> <b>AFF10</b>	Marriott, Cotillion South
Est Attendees	35	Presider	Gary Consolazio	
Comments	Four papers presented			

10:15am –12:00pm	254	Design of Structures and Foundations for Vessel Collision Loading Conditions, Part 2, Quantifying Collision Loads, and Soil-Structure Response	<b>AFS30</b> <b>AFF10</b>	Marriott Cotillion South
Est Attendees	40	Presider	Need Name (not Chris)	
Comments	Four papers presented			

***Tuesday January 11, 2005***

1:30pm – 3:15pm	477	Geotechnical Database Management Systems, Part 1	<b>AFS30</b>	Marriott Cotillion South
Est Attendees	50	Presider	Chris Dumas	
Comments	Four papers			

3:45pm – 5:30pm	531	Geotechnical Database Management Systems, Part 2	<b>AFS30</b>	Marriott Cotillion South
Est Attendees	40	Presider	Chris Dumas	
Comments	Four papers			

**Wednesday January 14, 2004**

8:00am – 9:45am	802	Verification of Foundation Design Methodolgy with Full-Scale Field Tests, Part 1	<b>AFS30</b>	Marriott Cotillion South
Est Attendees	40	Presider	Mark Morvant	
Comments	Three papers			

10:15am –12:00am	814	Advances in Real Time Geo-Instrumentation, Part 1 (Part 2, Session 824)	<b>AFS30</b> <b>AFS50</b>	Marriott Cotillion South
Est Attendees	30	Presider	Jim Sheahan	
Comments	Three papers			

(c) Future Sessions and Assignments

**Future Sessions**

Twin Sessions (Parts I and II) - “Design and Construction of Auger Cast-In-Place and Continuous Flight Auger Piles “, Sponsored by AFS30. Contact Person is Silas Nichols

“Practical Implementation of Limit States Design for Slopes and Retaining Structures”, Co-Sponsored with AFS50. Lead is AFS50.

“Rock Properties for Design”, Co-Sponsored with AFP30. Lead is AFP30.

“Performance of Integral Abutments”, Co-Sponsored with AFS20. Lead is AFP 20

“Changes in Site Response Due to Liquefaction – Design Approaches”, Co-Sponsored with AFF50. Lead is AFF50.

**Circulars**

*“Calibration to Determine Load and Resistance Factors for Geotechnical and Structural Design”, 106 pages, submission February 2005*

## **Workshops**

Sunday, 2006 – TRB Annual Meeting, “Insitu Testing for Foundation Design”, Co-Sponsored with AFP30. Lead is AFS30. Contact Person is Mark Morvant

## **Research Topics and Proposals**

The Chair noted there has been a lot of response on this with at least 25 topics for Research Problems. Topics are due to the TRB by March 1, 2005. Research Problem Statements should have support from one or more states to have a chance of acceptance. Three statements were accepted by the committee for submission.

- Innovative Technology and Procedures for Capacity Testing of Open End Cylinder Piles – This problem statement is currently posted as one of AFS30 problem statements. Possible sponsor: Florida and/or Louisiana DOT
- Jim Withium – Title “Calibration of AASHTO LRFD Specifications Considering Live Loads Transferred to Bridge Foundations”. Jim Withium will submit final version to the chair for committee review. Jim Brennan indicated KDOT would be a lead state sponsor for the proposal.
- Jim Brennan – Development of design and construction methods to improve the design criteria for lateral resistance of foundations constructed in embankments and bedrock. Chair noted that a similar statement is currently being voted on for NCHRP funding this year. Outcome of that statement will determine need for this statement.

Two statements were submitted without final vote for acceptance. The statements will be sent to committee member for further consideration before the submission deadline.

- Jim Withium – Title “AASHTO LRFD Specifications for Design of Micropile Foundations” Jim will solicit state sponsorship for this topic.
- Sam Paikowsky - AASHTO LRFD Specifications for ULS in the Design of Shallow Foundations for Bridges. Sam will solicit state sponsorship for this topic.

Synthesis topics are due to the TRB by January 31, 2005.

## 6. Other Business

(a) Motions, requests, recommendations, requests for action

Chris Dumas suggested that Synthesis Studies are under funded and an increase should be considered by the TRB.

(b) Conferences, Workshops and other activities of interest

- The 9<sup>th</sup> International Conference on Low-Volume Roads  
June 24-27, 2007  
The Austin Marriott at the Capitol  
Austin, Texas  
[www.TRB.org/Conferences/9LVR](http://www.TRB.org/Conferences/9LVR)
- The Third International Conference on Bridge maintenance, Safety and Management  
July 16-19, 2006  
Porto, Portugal  
[www.iabmas06.com](http://www.iabmas06.com)
- The 6<sup>th</sup> International Bridge Engineering Conference  
July 17-20, 2005  
The Westin Copley Place  
Boston, MA  
[www.trb.org/conferences/ibec](http://www.trb.org/conferences/ibec)

**Adjourned at 11:30pm**