

Seismic and Lateral Loads Committee

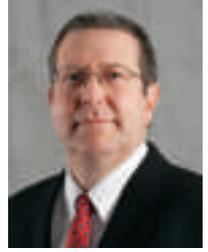
The Seismic and Lateral Loads Committee is a group of active members involved in the understanding and evaluation of seismic and lateral loads on deep foundations. The committee's activities are aimed at studying and disseminating information that advances the engineering practices involving such loading.

The committee is teaming with the DFI Drilled Shaft Committee and the ADSC Drilled Shaft Committee to investigate the use of software in reinforcing design. A task force will study available lateral load test data and corresponding designs, primarily focusing on hard rock socketed piers/piles, sands and clays. The ultimate goal of the task force is to gain a better understanding of the forces involved and how the software analyzes the problem. The task force will then work with software vendors to improve p-y models, if necessary. Ideally, the results will be presented in a short course at future DFI events or joint DFI-ADSC seminars. ADSC and DFI members will participate in the joint task force by contributing lateral load test and design data.

Representatives from the committee are participating as liaisons to the Codes and Standards Committee on the proposals for changes to the IBC Chapter 18. These representatives participate in routine meetings and provide feedback to the committee members on technical issues and proposed changes. Changes to the code language will be developed over the next 6 months, at which time, the group will write justifications for the code changes for presentation to the International Code Council in 2015.

Professor Anne Lemnitzer of University of California, Irvine, is leading the committee's DFI Committee Project Fund project to conduct an extensive literature review and develop an online

database of large scale pile load tests. The committee is teaming with the DFI Drilled Shaft Committee on this effort. Lemnitzer will present a project update at the Seismic and Lateral Loads Committee meeting at the DFI Annual Conference in Phoenix on September 25, 2013.



Zia Zafir (Kleinfelder), Bob Kruger (CB&I, Inc.) and I are spearheading a committee effort to study the practical aspects of pile head fixity. This study will seek to answer the questions of what is pinned, what is fixed, how to incorporate a partially fixed head, etc., and provide a white paper that provides practical guidance for foundation designers.

The committee is developing a seminar based on presenting the new *DFI Seismic and Lateral Loads Guideline* document. This document (available at www.dfi.org), was written to assist geotechnical engineers, pile designers and contractors in analysis, design and testing of piles and drilled shafts for lateral loads. The committee is also considering delivering its software seminar at a location in the Midwest U.S. in 2014.

All DFI members interested in participating on this committee are encouraged to contact staff@dfi.org.

DFI Soil Mixing Committee Seminar – October 2013

The DFI Soil Mixing Committee is preparing a seminar for October 24-25, 2013 in San Francisco. Topics will include information on design and construction of deep mixed foundations for foundation support and earth retention. Information on design guidance, treated soil properties, quality control and assurance practices, and construction methods will be highlighted with case histories from practitioners who work around the world.