



The Deep Foundations Institute is a not-for-profit association of contractors, engineers, manufacturers, suppliers, owners and academia.

DFI's membership promotes understanding and advancement of the deep foundations & excavations construction industry through conferences, publications, and community.

The technical committees, Augered Cast-In-Place Pile, Drilled Shaft, Driven Pile, Helical Foundations & Tiebacks, Marine Foundation, Micropiles, Seismic and Lateral Loads, Slurry Wall, Soil Mixing, Testing and Evaluation, and Tiebacks & Soil Nailing provide industry leadership for these foundation systems, through the publication of Guides, Specifications and References and by providing educational programs.

The membership is international.

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For Immediate Release

DFI 2006 Young Professor Paper Competition Award

August 30, 2006, Hawthorne, NJ: The Deep Foundations Institute is pleased to announce Thomas J. Weaver, Ph.D., P.E. as the winner of the 4th Annual DFI Young Professor Paper Competition. Dr. Weaver was chosen for his paper entitled, "Increasing Lateral Pile Stiffness through Limited Soil Improvement", which was based on a series of analyses performed to assess the depth and lateral extent of soil improvement required to significantly increase lateral foundation stiffness. Dr. Weaver will accept his award and present his paper at the 31st Annual Conference on Deep Foundations, Washington, DC, USA, October 4-6, 2006.



Contact DFI HQ
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Dr. Weaver, who received his Doctor of Philosophy in Structural Engineering from the University of California, San Diego in December of 2001, is currently an Assistant Professor in the Civil Engineering Department at the University of Idaho, Moscow. He obtained a B.S. and an M.S. in Civil Engineering from the Brigham Young University in 1996 and 1997 respectively. Before beginning his professorship at the UI, Dr. Weaver was employed by Kleinfelder.

As part of his award, Dr. Weaver will receive a complimentary full registration to the 31st Annual Conference on Deep Foundations, travel stipend, 2 nights lodging at the Omni Shoreham Hotel, a library of up to 20 DFI publications, and membership in DFI through December 31, 2008.

The abstract of his paper follows:

Piles extending through soft soil near the ground surface will have a relatively low lateral stiffness. As a result, lateral serviceability limits may control the number of piles required for foundation support. Improving near surface soil properties may significantly increase lateral pile stiffness and thus reduce the number of piles required for the foundation. A series of analyses have been performed to assess the depth and lateral extent of soil improvement required to significantly increase lateral foundation stiffness. Analyses consisted of Winkler type beam on a spring foundation and three-dimensional, linear elastic finite element analyses. Results from the analyses show that lateral pile foundation stiffness can be doubled when soil properties are improved to a depth and lateral extent of 5 pile diameters. In order to achieve this increase in foundation stiffness, the modified/improved soil modulus of elasticity needed to be approximately 5 times greater than adjacent unimproved soil. This magnitude of soil improvement over such a limited lateral extent suggests that limited soil improvement can result in more economical foundation designs at soft soil sites.

DFI congratulates Dr. Weaver as well as competition runner-up, Dr. Ashutosh S. Dhar, Assistant Professor of the Department of Civil Engineering at Bangladesh University of Engineering and Technology for his paper, "Design and Performance Evaluation of Bored Piles in Sand". Join DFI at the 31st Annual Conference on Deep Foundations in Washington, DC, October 4-6, 2006 when Dr. Weaver accepts his award and presents his paper. Both award winning papers will be published as part of the 2006 Conference Proceedings.

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