Morning Short Course
Design of Geosynthetic Reinforced Earth Walls and Slopes
Thursday, March 15, 2007, 8:00 A.M. - 12:00 NOON

Course Objective

Geosynthetic reinforced soil structures are cost effective and aesthetically pleasing. They also provide substantial time-saving compared to conventional geotechnical construction. This practical course is based on the FHWA/AASHTO approach to soil reinforcement. It will help attendees appreciate and implement design of mechanically stabilized earth walls (MSEW) and reinforced soil slopes (RSS). Topics include, through a combination of lectures and example problems: Geosynthetic reinforced walls and slopes systems, Reinforced soil principles, Properties of reinforcement and fascia, Design of MSE Wall with an emphasis on SRW, Design of reinforced slopes and embankments, Use of MSEW software combined with instructive examples, as well as the use of ReSSA software combined with instructive examples.

Course Instructor

Dov Leshchinsky, Ph.D.
Professor of Civil & Environmental Engineering
University of Delaware, Newark, Delaware

Afternoon Short Course
Analysis and Design of Deep Foundations Related to Highway Bridges
Thursday, March 15, 2007, 1:00 P.M. - 5:00 P.M.

Course Objective

The concept of load-transfer curves that yield unit load transfer p as a function of the lateral deflection of the pile y follows that for the approach employed for axial loading, except that the soil resistance is usually unimportant at the tip of the pile where deflection is usually very small. As for axial loading, experiments where such curves are found from full-scale experiments in the field are described and examples of experimental curves are offered, and soil mechanics is employed to the extent possible to confirm such curves. Recommended load-transfer curves are presented from specifications, and the differential equation for employing such curves in the solution of the load transfer along the sides and of a deep foundation is discussed. Example solutions are presented using Computer Program LPILE where the loading may be “static” or “cyclic.” The concept of the response of a pile group under combined loading is shown graphically. An example solution using Computer Program GROUP is presented and hand computations are performed to demonstrate that the solution shows the group to be in static equilibrium.

Course Instructors

William Isenhower, Ph.D.
Project Manager
Ensoft, Inc., Austin, Texas

Lymon Reese, Ph.D.
Professor Emeritus
University of Texas, Austin

Consultant, Lymon C. Reese & Associates

Course Registration

With conference registration, the fee is $200 for both courses and $100 for one. Without conference registration, the fee is $225 for both courses and $125 for one. The fee includes parking, tuition, handouts, lunch, and refreshments. Participants earn 4 professional development hours (PDH) for each course. Registration must be received by February 9, 2007 and each course is limited to 30 people. The University reserves the right to cancel either course, in which case a full refund will be made.

Course Location

The short courses will be held at the Continuing Education and Conference Center, 1890 Buford Avenue, on the St. Paul Campus of the University of Minnesota, in Room 32.