



2004-2005

December Meeting Notice

Minnesota Geotechnical Society

Summary of the Continuous Compaction Control

John Siekmeier, PE

Senior Engineer, MnDOT

Compaction equipment is available that can measure the stiffness of grading materials during compaction at the construction site. Some of these compactors also adjust their compactive energy on the fly during compaction. This optimizes resources by allowing the specified stiffness to be achieved without over compaction. This equipment is more common in Europe and several countries have specifications, which describe a stiffness-based method of quality control. The FHWA and several DOTs are currently working to organize demonstrations of this equipment in the United States.

A demonstration of continuous compaction control (CCC), also referred to as intelligent compaction, occurred on a road embankment at the MnROAD facility during the week of September 27-29. Bomag equipment was used for compaction, field testing was completed during the demonstration, and a report is being produced. Traditional in situ testing devices included the nuclear density gauge and sand cone. In addition, alternative measures of compaction included the following devices: dynamic cone penetrometer (DCP), light weight deflectometer (LWD), and GeoGauge. All those interested in continuous compaction control and intelligent compaction were welcome and almost 200 contractors and public/private sector engineers and technicians participated.

The presentation to the Minnesota Geotechnical Society will include a summary of the analyses and conclusions from the demonstration, future studies proposed by the University of Minnesota, and discussion about the next steps toward implementation in Minnesota.

Date: Wednesday, December 8, 2004

Location: KFAN, The Restaurant
2801 Snelling Ave
Roseville, MN

Time: 6:00 Social Hour Sponsored by Styrotech, Inc.

7:00 Dinner – Salad, Rolls, Coffee/Soda and a choice of:

1. Center-Cut Pork Chops with Skin-On Mashed Potatoes & Seasonal Vegetables
2. Fresh Atlantic Salmon with Skin-On Mashed Potatoes & Seasonal Vegetables
3. Fettuccini Alfredo (Please note with or without chicken)

8:00 Presentation – John Siekmeier, MnDOT

(One professional development hour toward continuing education requirements for Professional Engineers is available).

Cost: \$20.00 members, \$20.00 non-members, and \$5.00 Full-time students, payable to MGS at the door.

Reservations: Requested by 12 PM, Friday, December 3, 2004.

Please call Ann Schmidt to indicate your dinner selection. Ann may be reached by phone: (651) 603-6611, fax: (651) 659-1347 or email: akautz@amengtest.com

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