



2005-2006

March Meeting Notice

Minnesota Geotechnical Society

SOIL NAIL AND ROOT TECHNOLOGY

Mike Fabius, PE, DST Consulting Engineers Inc., Thunder Bay, Canada

An alternative to retaining walls has been developed for unstable slopes using soil nails without the need for drilling, grouting or shotcrete. This innovative system integrates various lengths of steel bar and root reinforcement aligned across failure surfaces. The nails are installed to depths of up to 30 m (100 ft) using small slope mounted equipment. This system has been used successfully to stabilize several 12 to 30 m (40 to 100 ft.) high slopes in Canada. This paper reviews in detail the design and stabilization of 5 urban sites along a 30 m (100 ft) high riverbank in Ontario. The design consists of 38 mm (1.4 inch) steel bars up to 12 m (40 ft) long with heads, placed at a grid spacing of 1 to 2 m (3 to 6 ft). The biotechnical facing consists of grasses and deeper rooted plantings. The owner and regulatory agency found that the system integrated well with their hazard management approach of attending to areas only when the crest encroached within a predetermined distance of a street or house.

Date: Wednesday, March 8, 2006
Location: Big City Tavern & Banquet Center
2801 Snelling Ave
Roseville, MN

Time: 6:00 Social Hour
7:00 Dinner – Salad, Rolls, Coffee/Soda and a choice of:
1. Pan Seared Walleye
2. Pasta Pomodoro (Vegetarian)
3. Broasted Chicken
4. Hickory Smoked Ribs
Desert, Sponsored by Barr Engineering

8:00 Presentation – Mike Fabius, DST Consulting Engineers Inc.
(One professional development hour toward continuing education requirements for Professional Engineers is available).

Cost: \$25.00 members, \$30.00 non-members, and \$5.00 Full-time students, payable to MGS at the door.

Reservations: Requested by 12 Noon, Friday, March 3, 2006.
Please register via the website at <http://www.mngeotechnicalsociety.com/eventsmpls.asp> or call Greg Norris to indicate your dinner selection. Greg may be reached by phone: (763) 428-2242, fax: (763) 428-8348 or email: gnorris@veitcompanies.com

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