



2012 - 2013

April Meeting Notice

Minnesota Geotechnical Society

Trout Brook Storm Sewer Realignment

Joel Swenson, PE
Barr Engineering

The Trout Brook Storm Sewer was constructed between the 1880's and 1950's and drains nearly 8,000 acres from portions of St. Paul, Roseville, Falcon Heights and Maplewood. Trout Brook crosses I-35E adjacent to the existing BNSF Railway mainline approximately 1 mile north of downtown St. Paul and then crosses beneath the BNSF mainline tracks in the vicinity of MnDOT's Cayuga Bridge and I-35E corridor reconstruction project. Approximately 800 feet of the Trout Brook Storm Sewer will be realigned to facilitate new bridge columns for the Cayuga project. Central to the Trout Brook realignment, BNSF agreed to a rare shutdown of two mainline tracks for 30-hours to allow a new box culvert storm sewer crossing. Construction dewatering was challenging due to high water-table, granular and organic soils and the presence of contaminated groundwater. Geotechnical analyses indicated that elastic and consolidation settlements near BNSF's maximum track movement criteria should be expected. An automated rail monitoring program was designed and implemented by Barr for two active BNSF mainlines and one service line to ensure the safety of BNSF trains during dewatering and construction operations. Site history, area geology, geotechnical analyses, monitoring plan and monitoring results will be presented.

Date: Wednesday, April 10, 2013

Location: Rose Vine Hall (downstairs at Grumpy's Bar & Grill)
2801 Snelling Ave. N., Roseville, MN

Time: 6:00 Social Hour – Viet & Company

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

1. 10-Ounce Top Sirloin - Char-grilled and topped with bleu cheese garlic butter. Served with white cheddar mashed potatoes and a sautéed vegetable medley – \$35.00*
2. Stuffed Pork Chops - Char-grilled pork chop stuffed with golden raisins, cornbread and apples. Served with potatoes and asparagus – \$35.00*.
3. Feta Cheese and Sun-Dried Tomato Stuffed Walleye - Served over white cheddar mashed potatoes with a drizzle of lemon thyme butter sauce – \$35.00*
4. Chicken Fettuccine Alfredo - Fettuccine noodles, snow pea pods, and mushrooms tossed in an Alfredo cream sauce and topped with a grilled chicken breast and parmesan cheese – \$30.00*
5. Cobb Salad - Iceberg topped with turkey, ham, bacon, hard cooked eggs, avocado, diced tomatoes, bleu cheese crumbles, and black olives with choice of dressing (Ranch, FF Ranch, Bleu Cheese, French, FF French, Italian FF Italian, Balsamic Vinaigrette) – \$25.00* *See Cost

8:00 Presentation – Joel Swenson, Barr Engineering
(One professional development hour toward continuing education requirements for Professional Engineers is available).

Cost: Paid 2012-2013 MGS Members receive a \$5 meeting discount on the meal costs listed above. The cost to Full-time students is \$5, payable to MGS at the door.

Reservations: Requested by Noon, Friday, April 5th, 2013
Please register via the website at <http://www.mngeotechnicalsociety.com/eventsmpls.asp>.
Please print, fill out and bring the New Membership Application to the next meeting. The form is at: <http://www.mngeotechnicalsociety.com/aboutmembership.asp>

President	Secretary	Treasurer	Program Chair	ASCE Chair	Past President	Duluth Representative
Chad Underwood 612-751-8648	Josh Van Abel 952-995-2310	Bill Cody 763-427-4330	Joel Swenson 952-832-2799	Joe Bentler 651-603-6616	Travis Rengstorf 952-884-0481	John Allen 512-705-5657

<http://www.mngeotechnicalsociety.com>