



ASSOCIATION OF ENGINEERING GEOLOGISTS

"Serving Professionals in Engineering, Environmental, and Ground-Water Geology"

THE ROCKY MOUNTAIN SECTION NEWSLETTER

MEETING DATE

**THURSDAY
MARCH 8, 2001**

TIME

5:45 p.m. Social Hour
6:30 p.m. Dinner
7:30 p.m. Presentations

LOCATION

GREEN CENTER
Lower Level
Colorado School of Mines
Golden, CO

COST

\$20 Members
\$20 Non-members
Free for Students

RESERVATIONS

c/o AEG Reservation Line
(303) 790-2161 x 243
**BY NOON, MONDAY
5 MARCH**
-OR- Jim Wright at
(303) 662-0100

Repair of a Failed Crib Wall on Berthoud Pass

Ben Arndt, P.E., Yeh & Associates

At the end of May 2000, the outer lane of U.S. 40 on the west side of Berthoud Pass settled approximately nine inches during a period of heavy precipitation. This prompted the Colorado



Department of Transportation (CDOT) to close one lane of the highway indefinitely. The settlement was directly caused by the overturning failure of a section of the existing foundation retaining wall. The wall is

comprised of approximately 8-foot by 1-foot concrete beams, which are placed in an interlocking pattern to form a crib wall. The base of the wall is located on slopes that are in excess of 40°. Several sections of the crib wall have experienced failure at various times in the past. The Colorado Department of Transportation decided to temporarily fix the wall.

Yeh & Associates were asked to provide a temporary mitigation design for the crib wall. Global and external stability analyses were performed on the existing wall to determine the likely strength parameters of the subsurface materials and failure conditions of the wall. Field analysis indicated that surface and

subsurface water conditions after heavy precipitation events effectively reduced the external stability of the wall, which caused overturning failure.



Based on this information, a temporary Mechanically Stabilized Earth (MSE) “deep patch” system was designed to mitigate the settled lane of U.S. 40 for approximately one year. This required closing all but one lane of U.S. 40 in order to excavate the settled section of highway and remove and replace and crib wall with a modular block MSE wall. The work was done between Sunday and Thursday to reduce adverse impacts to the heavy summer tourist traffic during the weekend.

Presently, the temporary repair appears to be performing well and further analysis is being conducted to determine the best solution for a long-term repair or replacement of the crib wall.

Silent Auction

The CSM Student Section will hold its silent auction at this month’s meeting. The CSM Student Section has again received generous donations from individuals, local companies, and agencies to help with their fund raising activities. If you or your company are interested in donating items for the auction, please contact Alyssa Kohlman at alyssakohlman@hotmail.com. Come to the meeting and see what goodies you may be able to take home with you!



Student Night Report

Last month’s student night was again a huge success. Nearly 100 people braved the near blizzard conditions and packed the warm confines of the Foothills Chapel in Golden to partake in the night’s festivities. Twelve sponsors displayed examples of their services and products at the meeting. CSM students made two excellent presentations. The only damper on the night’s festivities was that the students and professors from the South Dakota School of Mines and Technology were unable to make it to the meeting because of the weather. The food was great! The atmosphere was electric! The night was a huge success!

The Section would again like to thank the following sponsors for their financial contribution and their investment in time for making Student Night such a success:

Advanced Terra Testing
Church & Associates
Colorado Geological Survey
GEI Consultants, Inc.
Haley & Aldrich
HP Geotech
John C. Halepaska and Associates
MicroGeophysics Corporation

Rockware
Rocky Mountain Consultants
Secor
Yeh and Associates

CSM Career Panel and Workshop

The CSM Student Chapter recently held a Career Panel and Resume Workshop. It was a huge success! Including the panel, over 50 people attended, many of which then signed up to attend Student Night! Students from civil engineering, environmental engineering and sciences, geophysics, geological engineering, geology, and even mechanical engineering attended. Students had the opportunity to ask the panel questions about job hunting and received one-on-one help with their resumes just in time for Student Night! The CSM Student Chapter would like to thank Dave Noe, Sam Bartlett, Frank Harrison, Rick Andrew, and Jerry Higgins for participating in the Career Panel and Resume Workshop. Thanks to their involvement, the evening was a HUGE success

Upcoming Events

- April 8, 2001 A tentative date has been set for the Spring RMS Field Trip. Dr. Christoph Goss of Rocky Mountain Consultants is trying to work out the final details and access requirements for the field trip to the Laramie-Poudre Tunnel Rehabilitation project. Mark you calendars and stay tuned for more details!
- April 12, 2001 April RMS Meeting. Speaker: Rex Upp, Current AEG President. Topic: Grade a Road - Go to Jail; A Saga of the Criminal Justice System. This meeting will be our "Dinner with the President", possibly at a local restaurant. Stay tuned for more details!
- Week of March 5 Julie Keaton, AEG's education and annual meeting coordinator, will be in Denver to go over some preliminary plans for the 2003 Annual Meeting in Vail. Call Mike Hattel at (303) 665-6283 or mhattel@long.rmcco.com for more information.
- May 10, 2001 May RMS Meeting. Speaker: Bob Watters, Univeristy of Nevada Reno and 2000/2001 AEG Jahns Distinguished Lecturer. Topic: Realism in volcano hazard zonation: Does geo-engineering help provide a more accurate assessment? Again, stay tuned for more details an upcoming newsletter!

Other Upcoming Events

- Thursday, March 8, 2001 Joint Meeting of Extractive Metallurgy Chapter of Denver and Colorado Section SME. Speaker: Jan Krason, Geoexplorers International. Topic: Exploration for gas associated with methane hydrates. The meeting will be held at the Holiday Inn, 7390 W. Hampden Ave. (intersection of Hampden and Wadsworth) in Lakewood, Colorado. Cost is \$20 for dinner, with a social hour starting at 6 pm. Contact Tom Millensifer for reservations at 303-972-6601 by March 5.

Free Popular Geology Lectures

The Friends of Dinosaur Ridge have announced that the following "popular geology" lectures will be held at

the Lutheran Church of the Master at the intersection of Jewell, Alameda Blvd., and Bear Creek Parkway in Lakewood, Colorado. All are free and open to the public. Contact 303-697-DINO (303-697-3466) for further information

Tuesday, March 20, 2001, 7:00 pm "T-Rex Tracks"
T. Caneer, Friends of Dinosaur Ridge

Tuesday, April 17, 2001, 7:00 pm "The Colorado Geological Survey and Geologic Hazards in Colorado"
Vicki Cowart, State Geologist and Director, Colorado Geological Survey

Thursday, May 3, 2001, 7:00 pm "History of Coal Mining in Jefferson County, Colorado"
Chris Carroll, Colorado Geological Survey

Section News

John Himmelreich has volunteered to form a Legislative Affairs committee. This committee will closely follow the legislative issues that affect engineering geologists practicing in the Rocky Mountain area. John will be providing updates on a periodic basis. If you want more information, contact John at 719.632.2882 or thimmelreichs@hotmail.com

Tom Terry and Sam Bartlett attended the Legislative Reception on February 13, 2001. This is an annual event that provides an opportunity for geologic professionals to meet, greet, and discuss issues of the profession with representatives of the Colorado state legislature. Tom and Sam represented AEG-RMS at the reception. Please call Tom or Sam if you have any questions regarding the Reception. Once again, AER-RMS hosted a booth at the reception.

Please forward newsworthy items for the RMS newsletter to Doug Boyer at dboyer@do.usbr.gov

Newsletter Status

Many thanks to the individuals who forwarded their e-mail addresses for electronic receipt of the newsletter. However, with due to the rising costs of copying and postage, the Section Officers have decided to discontinue mailing paper copies of the newsletter to those who have established e-mail addresses. Not to fear - paper copies will continue for those without established e-mail addresses and for those individuals that specifically request to have a paper copy mailed to them. Those individuals who would like to continue to receive paper copies of the newsletter, please call the AEG-RMS reservation phone number and leave your name and message stating that you would like to continue to receive the paper copy of the newsletter. For those of you with established e-mail addresses and do not request a paper copy of the newsletter, this will be your final paper copy of the newsletter.

Section Website

The RMS website is up and running! And it looks simply outstanding! Peggy and her husband Jack have made great strides in getting this up and running. Members can look at meeting abstracts, download the newsletter, RSVP to meetings, and contact Section officers. Not all functions are currently available, but check back frequently as additional information is being added weekly to the website. The address is temporarily located at <http://home.earthlink.net/~jganse/aeg> until a permanent home is found. Enjoy!

RMS Officer Contact List

Chairperson Peggy Ganse, Haley & Aldrich, 303.534.5789, ext. 210, MAG@haleyaldrich.com
Chair-elect Tim Petz, Church & Associates, Inc., 303.463.9317, tpetz@geo-church.com
Secretary Jim Wright, GEI Consultants, Inc., 303.662.0100, jwright@geiconsultants.com
Treasurer Sam Bartlett, U.S. Bureau of Reclamation, 303.445.3142, srbartlett@do.usbr.gov
Membership Scott Walker, GEI Consultants, Inc., 303.662.0100, srwalker@geiconsultants.com
Newsletter Doug Boyer, U.S. Bureau of Reclamation, 303.445.3074, dboyer@do.usbr.gov

Missing E-mail Addresses

We have e-mail addresses for most of the Section, but need help locating addresses for the following members, if you have email information on these members, please forward to Scott Walker:

Dale Baures, Andrei Bedoya, Rex Bell, Robert Benmark, Warren Bennett, Kevin Bjella, Michael Bukovansky, Paul Burger, Craig Buth, Susan Buth, David Butler, John Cabrera, Charles Campbell, Chris Chapman, C. Compton, James Dahill, Jerry Dodd, John Doty, Gregory Doyle, Jean Ernstberger, Christopher Erskine, Ryan Fisher, Michael Gabora, Marion Glassgow, Thomas Griepentrog, Nicholas Hatfield, Daniel Heidenreich, Jeffrey Hynes, Brian Jacobs, Walter Junge, Thomas Karnuta, Michael Kopek, Nancy Lamm, Douglas Leafgren, Kathleen Littleton, Eric Lorenson, Juan Maez, Tim Manzagol, Diane Marron, Roy McKinney, Nancy McNab, Deborah Miles, William Moler, Charles O'Melveny, Marcus Pardi, James Pendleton, Bruce Peterman, Kent Peterson, Patrick Plumley, Kathleen Proffer, Gordon Revey, Charles Robinson, William Rogers, Damon Runyan, Eduardo San, J. Gary Shaughnessy, Greg Sherman, William Sherman, Harry Siebert, Thomas Staatz, R. Strain, Laura Swezey, Robert Thommen, Michael Unger, Mark Vessely, Curt Wells, Michael West, Robin White, Gary Whitt, Scott Winters

Job Announcement

Entry-Level Environmental Geology/Hydrogeology Position, Golden, CO

The ThermoRetec Golden office is seeking a full-time geologist or hydrogeologist, entry-level to 3 yrs. related experience, for environmental consulting work. BA/BS in geology or hydrogeology required. The position generally involves assisting project managers, scientists, and engineers in field data collection, management, and reporting both in the field and office. Typical duties include: field sampling (groundwater, soil, wastewater, etc.); monitor well soils logging and installation; field oversight of drilling, sampling, construction subcontractors; data compilation, reduction, and interpretation; and preparation of hydrogeological investigation and analysis plans and reports.

Requires willingness to work as part of a project team both in field and office and to learn and perform a variety of environmental sampling and remediation-related tasks. Up to 50% overnight travel out of state sometimes required. Strong writing, record-keeping, field work, and PC skills (word processing, spreadsheets, database, CAD) are desired.

Please forward resumes with cover letter via mail, fax, or e-mail, attn: Jean Lawlor, P.G. to:

ThermoRetec Corp
1726 Cole Blvd., Bldg. 22, Ste. 150
Golden, CO 80401
FAX: (303) 277-0110
Email: jlawlor@thermoretec.com