SAN FRANCISCO SECTION NEWSLETTER

ASSOCIATION ENGINEERING GEOLOGISTS AEG

Meeting Details:

?? Tuesday, July 10th
?? Spenger's Grotto, Berkeley, see inside for directions
?? 6:00pm – Cocktail Hour
?? 7:00pm – Dinner
?? 8:00pm – Program Talk
?? $30 members, students ½ off who call Dr. Williams, 408-924-5050.
?? **Reservations due by Friday, July 6th. See back cover for RSVP form.**

Section Officers, 2000-2001

Chair
Jason Preece
Camp, Dresser & McKee, Inc.
925-933-2900
preeceje@cdm.com

Vice-Chair
Charles Kissick
Sigma Prime Geosciences
650-726-7198
sigmaprm@pacbell.net

Treasurer
Corinne Stewart
Pacific Geotechnical
408-629-7801
stewart_corinne@hotmail.com

Secretary
Anne Rosinski
CDMG
415-904-7730
arosinsk@consrv.ca.gov

Committee Chairs

Membership Chair
Chris Hundemer
Upp Geotechnology, Inc.
408-275-1336
rockman8@pacbell.net

Short Course Chair
Ernest Solomon
650-948-3528
esolo@earthlink.net

Field Trip Chair
Drew Kennedy
Gilpin Geosciences
north35west@earthlink.net

JULY 2001 PROGRAM:

THE CROTHERS ROAD LANDSLIDE, SAN JOSE, CALIFORNIA, by Sands Figuers, PhD, C.E.G., R.C.E., R.GPhys.

In early February 1998, weeks of heavy rainfall reactivated a large landslide on the southeast side of Alum Rock Park in San Jose. The landslide cut across land owned by the City of San Jose, Santa Clara County, Alum Rock Park, and several private owners. Immediate effects included: the closure of three roads (including the entrance into Alum Rock Park), the partial closing of another road, rerouting of underground utilities, and property damage.

A traditional landslide response followed. Roads were blocked off, pipelines were rerouted, FEMA was contacted, and lawsuits were filed. A preliminary geological evaluation suggested that the landslide was about 50 feet deep, 500 feet long, and 200 feet wide. This study included several borings (up to 100 feet deep). Some of the borings were converted to inclinometers, others to piezometers. Ground control points were installed both in and outside of the landslide to monitor surface movement. During the summer of 1998, a series of hydrodrains were installed in the upper part of the landslide. The park entrance road was reopened, but the other roads remained closed.

Continued landslide movement caused several inclinometers to shear off and be replaced Over the next year, the horizontal displacement of the park entrance road increased to 7-8 feet while vertical offsets of 3 to 5 feet required periodic road resurfacing. Landslide repair proposals were complicated by the environmentally sensitive location of the landslide and by multi-jurisdictional discussions. The lower 2/3's of the landslide was located within Alum Rock Park (covered with large oak trees), with the toe (more than 100 feet wide) extending to Penitencia Creek. This created significant permitting, logistical, and cost problems. The upper 1/3 of the landslide was located on land owned by Santa Clara County and by private owners. Each had different opinions as to responsibility, repair schemes, and payment. Repair delays prompted the formation of a local homeowners group that vocally lobbied both City and County politicians.

Repair proposals fell into two categories: repairing/stabilizing the entire landslide vs. stabilizing portions of the landslide (the roads), with a third option of abandoning the site. In 2000, Kleinfelder was retained to provide preliminary repair recommendations for the park entrance road. At the same time, we were retained to perform broad scale geologic mapping and analysis of the area. The Kleinfelder study was based on the information in the initial geologic study and included a detailed finite element analysis of the landslide. Kleinfelder proposed that the park entrance road could be stabilized with a series of large tied back piers. Our evaluation indicated that the slide was much larger and possibly much deeper than initially assumed. If true, this would cause a significant cost increase in the Kleinfelder proposal.

Our geological evaluation indicated that the current landslide is a deep bedrock slide that contains a series of nested blocks that move quasi-independently. The landslide is the most recent in a series of landslides that have been active in this particular location over the past several thousand years. Currently, landslide movement has significantly slowed and may have stopped. This is only temporary. The geologic history of the site indicates that the landslide will reactivate under the proper conditions.

Committee Chairs

CCGO Liaison
Betsy Mathieson
Exponent Failure Analysis
emathieson@exponent.com

Legislative Chair
Julian C. Isham
Julian.Isham@theitgroup.com

Publications Chair
Patrick Drumm
Geolith, Inc.
pldrumm@geolith.com

Awards Chair
Keil Albert
Geoconsultants, Inc.
kalbert@ix.netcom.com

Past Chair
Gary Pischke
Earth Systems Consultants

Newsletter Editor
Gretchen Mora
aegnews@visto.com

The AEG San Francisco Section Newsletter is a monthly publication of the San Francisco Section of the Association of Engineering Geologists.

Submittals:
Deadline is the 20th of each month for the following issue. Contact Gretchen Mora by email (aegnews@visto.com) for submittal. All submittals are subject to editing for space. Job ads are free if brief.

Address changes: Please submit to Section Secretary, Anne Rosinski at 415-904-7730.

Advertisements:
The newsletter's circulation is about 360 within northern California. Use these low rates to expand your market:

	Monthly
Business card	$ 15
1/4 page	$ 30
1/2 page	$ 60

Sponsorship:
Become a Section Corporate Sponsor! Donate to the Section and receive free advertisement each month, recognition for your donation at Section Meetings, and more! For more info on Section Sponsorship, Contact Jason Preece.

SPEAKER'S BIOGRAPHY

Dr. Figuers is a geological engineer with Norfleet Consultants in Livermore, CA. He is a registered geologist, civil engineer, hydrogeologist and geophysicist, with more than 20 years of worldwide experience.

CHAIR'S MESSAGE

Wow! Last month's meeting was outstanding. The meeting room was nice, attendance was up and everyone had a great time (probably because I stayed relatively quite). Dr. Lajoie, the meeting's speaker, pointed out types and areas of coastal hazards and the public's lack of concern for publicized reports warning against coastal development in high hazard areas. It's a good thing AEG strives to increase the public's awareness of the serious nature of geologic hazards and that predictive science is a credible means of assessing the level of risk associated with such hazards.

Based on the Mid-Year Board of Director's Meeting, AEG will be recommending actions from the following list of options to correct a significant negative cash flow problem that could seriously hamper the future operations and effectiveness of the Association.

?? Revise the 2000-2001 budget
?? Increase membership
?? Increase dues
?? Increase advertising and Corporate Sponsors
?? Reduce services
?? Close headquarters and contract out
?? Transfer the Journal to GSA
?? Merge AEG with another organization

Of these options, the Board decided to increase dues by $25 (we have not had a dues increase in nine years) and revise the 2001-2002 budget.

The Board also adopted a goal for AEG: "The Association of Engineering Geologists will be the leader in the applied geosciences." From this goal, the Board will be assessing the current mission statement and explore the need to revise it

The Executive Council recently enacted a new AEG policy on Annual Meetings to help guide the conduct of the meetings. Upcoming annual meetings will be held in St. Louis (2001), Reno (2002), Vail (2003), and Detroit (2004).

Finally, be advised that I did receive a phone call from Willie Young at the San Francisco Department of Building, Inspection, and Plan Review regarding an upcoming job opening for an Engineering Geologist. Once the notice has been made, we will post it in our newsletter provided we have sufficient lead-time.

JASON PREECE, San Francisco Section Chair

JULY SECTION MEETING DETAILS

The July Section Meeting will be held at Spenger's Fish Grotto, located at 1919 4th Street, Berkeley. Parking validation is available.

Directions from 80E/580W (Northbound): Take the University Avenue exit towards Berkeley. Keep right at the fork in the ramp. Go under the University Avenue over crossing. Turn right onto Hearst Avenue. Turn right onto 4th Street. A parking lot is across the street from the restaurant.

From 80W/580E (Southbound): Take the University Avenue exit. Turn eastward onto University Avenue. Turn left onto 6th Street. Turn left onto Hearst Avenue. Turn left onto 4th Street. A parking lot is across the street from the restaurant. **Please make your reservations by Friday, July 6th! See the back cover for the RSVP form.**

JUNE SECTION MEETING NOTES

Our June Section Speaker, **Dr. Kenneth R. Lajoie**, received his Bachelor and Ph.D. degrees in Geology from UC Berkeley in 1963 and 1968, respectively. He completed an NSF Post doctorate fellowship at Lamont/Doherty Geological Observatory of Columbia University from 1968-1970, and in 1970 he joined the US Geological Survey. Throughout his 30-year career, he studied coastal erosion in San Mateo County. The sea-cliff erosion cycle began only about five thousand years ago, and is still active today. Because retreat is not continuous, long periods of quiescence create a false sense of security that inspire continued development of coastal regions. Attempts to protect cliff-top structures from erosion include many and varied failed experiments in breakwater armoring the base of slopes. Continued sea-level rise, and El Niño events, in conjunction with inadequate methods of slope protection, suggest the most cost-effective sea cliff erosion mitigation technique is to simply restrict development on coastal bluffs.

ANNE ROSINSKI, Section Secretary

NEW SHORT COURSE ANNOUNCED

Hooold the presses!!!! **Sands Figuers** (this month's guest speaker) has agreed to do a short course on balanced cross sections. The matter of applicability to evaluation of landslide slip plane geometry will be addressed. Date and venue to be determined.

Please forward all suggestions for or offers to teach/lead interesting short courses to: esolo@earthlink.net.

ERNEST SOLOMON, Short Course Chair

NOMINATION OF NEW OFFICERS

Nominations are open for new officers in Section elections this fall. Open positions include Section Vice-Chair, Secretary, and the non-elected positions of Newsletter Editor and Webmaster for the Section website. If you would like to get involved in the Section, becoming an officer or Section staff member is a great way to start! To discuss the officer/staff opportunities available, please contact Past Chair Gary Pischke at 510-353-0320 or by email at:
pishbert@ix.netcom.com.

MEMBER NEWS

Peter Anderson from Pacific Geotechnical Engineering in Morgan Hill replies to a news item published in the April edition of the AEG SF Section Newsletter:

The reports of my death are greatly exaggerated. While it is true that a very low phi angle substrate caused the Factor of Safety of my ladder to fall <1.0, the resulting injury did not cost me my life or my job. I have been working for Pacific Geotechnical in Morgan Hill for the past 13 years, and continued employment is assured, pending maintenance of adequate health benefits and purchase of a better ladder. Reports of me working for Anderson Consulting are inappropriate, because having two dump Swedes (I can say that since I are one) in one office is two too many. Besides, working beside fellow AEG members **Reid Fisher**, **Corinne Stewart**, and **Stephanie Clark** has kept me in backhoe trenches and large-diameter boreholes, and out of trouble. Nevertheless, if I am wrong, and reports of my death are not exaggerations, I wish that those viewing my open casket would remark: "Oh look, he's breathing!"

Several members with 20+ years of membership in AEG have come out of the woodwork this month. Among those who deserve recognition are: **Betsy Mathieson** (24 years), **Chuck Taylor** (42 years!!), and **David Hoexter** (25 years). Wow!

If you have been a member of AEG for 20 years or more, please send a note to the Newsletter Editor (aegnews@visto.com).

CALDECOTT TUNNEL FIELD TRIP REPORT

The Caldecott Tunnel field trip was held on June 2, 2001 and was a success! Over 50 participants enjoyed a behind the scenes tour of the tunnel and the tunnel operations facilities above the west portal. **Ray Mailhot**, Caltrans Superintendent of Tunnels and Tubes, led the tour. Caltrans geologists **Grant Wilcox** (AEG SF section member) and **Chris Risden** provided a presentation of the tunnel geology and adverse conditions encountered during tunnel construction. Grant also outlined the preliminary plans for a fourth tunnel bore. We would like to thank the Caltrans field trip leaders for their time, and all of the field trip participants for joining us. We made $375 for the section. This will allow us to move ahead with plans for future field trips (see the field trips page on the web at www.aegsf.org/fieldtrips.html).

Photos from the Caldecott Tunnel field trip are posted on the field trips page and in this month's newsletter. We would like to post additional photos, so please send Gretchen Mora your photos from the trip at: aegnews@visto.com

If you would like to take your own groups on the tunnel tour, Ray Mailhot can be reached at (510) 286-0315 or by email at: Ray_Mailhot@dot.ca.gov

DREW KENNEDY, Field Trip Chair

Thanks to Keil Albert and Drew Kennedy for photos on the next page.

CALDECOTT FIELD TRIP PHOTOS!

Chris Risden, Caltrans geologist, summarizes the geology of the Berkeley Hills for the group.

The tour group enters the Welders' Shop. The hillside to the left was burned in the East Bay Hills fire. The Welder's Shop was destroyed and an old anvil that had been in place since the beginning of tunnel construction in the early 1900s was melted and ruined. All the equipment in the shop had to be replaced.

The group listens as Ray Mailhot, Superintendent of Tunnels and Tubes, describes how the Posey and Webster Street tubes were constructed. The tubes, shown on the large posters in the background, connect Oakland to Alameda.

Keil Albert, SF Section Awards Chair, gets drawn into the intake, as one of the giant fans is turned on. These fans circulate air through Bore 3. Bore 3 is the newest tunnel.

Thank You
Gregg Drilling & Testing, Inc!
An Outstanding Corporate Sponsor
of the San Francisco Section!

SPONSORS SOUGHT

The Sacramento and San Francisco Sections are looking for sponsors to help with the publication of *Engineering Geology Practice in Northern California*. Please contact Bob Anderson (banderson@quiknet.com) to help fund the cost of this joint volume.

If you would like to present your company services or products that may be of interest to the geotechnical community, become a Monthly Section Meeting Sponsor! Give a quick presentation of your company before the main speaker at the monthly meeting, get free advertising in the newsletter and website, and reap the benefits of exposure! Contact Jason Preece (925-933-2900) for more information and sign up today!

EMPLOYMENT

ENGINEERS/GEOLOGISTS

Streamborn is a Berkeley-based firm specializing in the investigation and remediation of contaminated soil and groundwater. We seek entry and midlevel engineers and geologists who are self-starters, work independently, and appreciate alternative work environments. Resumes to info@streamborn.com, PO Box 8330, Berkeley, 94707.

STAFF GEOLOGISTS

Staff geologists needed for environmental/geohazards team Lowney Associates in our Mountain View office. Responsibilities may include client coordination, field exploration, well installation, assessment of geological hazards, and preparation of proposals, letters and reports. M.S. degree in geology or engineering geology from an accredited university preferred. Strong written and verbal communication skills required. Lowney Associates, founded in 1969, is an innovative and team-oriented firm. We offer educational assistance and professional development opportunities. We also offer group insurance plans, a 401(K) program and a quarterly incentive bonus plan. Apply in confidence to hr@lowney.com 405 Clyde Avenue Mountain View CA 94043, (650)967-2365, and Fax: (650)967-2785

STUDENT ASSISTANTS

The Seismic Hazards Mapping Program (SHMP) is looking for energetic Student Assistants to help compile spatial data and assist with entry of the data into our GIS. Student assistants will: digitize geologic maps; enter data in databases; accompany geologists in the field; and assist in collection of geotechnical data. Desirable qualities include: (1) interest in geologic hazards; (2) familiarity with GIS and related databases; (3) ability to work and think independently; (4) energy and enthusiasm. Schedule and hours can be somewhat flexible.

Pay ranges from about $9.50 to $14.50 per hour, depending on experience and academic background.

Contact: Keith Knudsen (415) 905-5529;
kknudsen@consrv.ca.gov

ASSOCIATE ENGINEER GEOLOGIST/ENGINEERING GEOLOGIST

The Seismic Hazards Mapping Program is a world-renowned program in seismic zonation with a dynamic staff of about 20 geologists who utilize the latest technologies in digital mapping. An immediate vacancy exists in our San Francisco office. An Associate Engineering Geologist or Engineering Geologist is being sought with experience in engineering geology, landslide mapping, and Quaternary geology. Primary duties include participating in development of baseline information and maps showing areas that may be subject to earthquake-induced landsliding or liquefaction. Experience in seismic hazards evaluation is desired and experience in the geological consulting industry is an asset. Registration and engineering geologist certification is desirable. Experience, aptitude, or interest in GIS-based geologic/geotechnical analysis is desired, and an extensive training program is provided. For information, please contact Keith Knudsen at 415-904-5529. More can be learned about the Seismic Hazards Mapping Program by reviewing information presented at: http://www.consrv.ca.gov/dmg/shezp/index.htm.

STAFF AND PROJECT GEOLOGISTS

Parsons is seeking two geoscientists in its Oakland office:
1) A staff geologist to perform environmental remedial investigations. Requirements: 0 to 6 years, M.S. in geology/ hydrogeology. Preferred: California RG and environmental consulting experience. 2) a principal geologist/hydrogeologist/ project manager to direct multiple environmental characterization and remediation projects. Requirements: M.S., California RG, management of large projects, staff supervision experience. Send resume to Michael Kuttner, Parsons, 2101 Webster Street, Suite 700, Oakland, CA 94612. Please read complete descriptions of job opportunities in all regional offices at Parsons' corporate website: www.parsons.com.

STAFF GEOTECHNICAL ENGINEER

Pacific Geotechnical Engineering, located in Morgan Hill, is a relatively small consulting company that was started 13 years ago. Pacific Geotechnical provides high quality engineering geology and geotechnical engineering services to a variety of clients. We are looking for a staff geotechnical engineer. Applicant must have a bachelor's degree in civil engineering with a geotechnical emphasis or will receive degree soon. A minimum of 1 year experience is preferred.

Interested candidates please contact Dan Peluso or Peter Anderson.
phone: (408) 778-2818; fax: (408) 779-6879
Email: pacificgeo@aol.com

SENATE BILL 136

SB 136 (Figueroa) is the number on the proposed legislation that includes the language for the Board's Revised Act. The Revised Act was discussed at many Board and Technical Advisory Committee meetings over the last two years, and still may be commented on by any individual or group while it is being considered by both bodies of the Legislature. For the complete text of this bill, you may go to leginfo.ca.gov. on the Internet.

Thank You to AEG Corporate Sponsors from the San Francisco Section!

Applied Geomechanics – Santa Cruz
Exponent Failure Analysis – Menlo Park
Upp Geotechnology – San Jose

Gretchen Mora
37192 Oak Street
Fremont, CA 94536

AEG July Newsletter
July 10 – Monthly Section Meeting
Spenger's Restaurant, Berkeley

CHECK OUT THE AEG SF SECTION WEBSITE AT WWW.AEGSF.ORG!

RESERVATION FORM – July 10, 2001 AEG Dinner Meeting, 6pm
Spenger's Restaurant, 1919 4th Street, Berkeley
Please fax your reservation to arrive before *noon*, Friday, July 6th
Fax to Corinne Stewart, c/o Pacific Geotechnical Engineering (408-779-6879) - Check or Cash at the door – Do not mail or fax payment.
Dinner and Meeting Cost: $30 – members or spouses $15 – student members $32 – others
Make checks payable to: AEG SF SECTION

NAME ____________________ COMPANY ____________________

TELEPHONE NO. ____________________ NO. OF PEOPLE ____________________

PLEASE CHOOSE AN ENTRÉE: CHICKEN SALMON VEGETARIAN

PERMANENT RESERVATION FORM
AEG San Francisco Section Monthly Dinner Meetings are usually but not always on the 2nd Tuesday of each month.
I will attend and make payment for each meeting. If I am unable to attend I will fax or mail a cancellation notice to Corinne Stewart (fax: 408-779-6879) by noon, the Friday before the meeting.

NAME ____________________ TELEPHONE NO. ____________________

BILLING ADDRESS ____

SIGNATURE ____________________ DATE ____________________

Dinner Costs are normally but not always: $30 – members or spouses $15 – student members $32 - others

---