Abstract:
Despite the growing sophistication of construction contracts, “unforeseen” or “differing” site conditions disputes continue to occur.

These disputes, which often result in substantial damages awards, arise when large volumes of unanticipated rock, soil, groundwater, or other adverse subsurface conditions are encountered during the “dirt” moving stages of construction, and the parties are in disagreement over who is responsible for the additional costs associated with the unforeseen conditions.

Although contractors typically initiate litigation over “unforeseen” or “differing” site conditions ("DSC") against owners (and not geotechnical professionals) pursuant to principles of contract law (i.e., DSC lawsuits are typically based on express representations of expected subsurface geologic conditions provided to the contractor by the owner that differ materially from the conditions actually encountered), owners unable to successfully defend DSC lawsuits often seek indemnity from engineering geologists and geotechnical engineers under principles of tort and contract law. More specifically, owners seeking indemnity from engineering geologists and geotechnical engineers frequently contend that the geotechnical professional, in his/her investigation of subsurface geologic conditions and preparation of the project geotechnical report, fell below established professional standards of care (i.e., was negligent) and is therefore partially or wholly responsible for the owner’s losses.

Given that the risk of encountering unforeseen or differing geologic conditions...
diminishes greatly as the quantity and quality of subsurface geotechnical investigation increases, it is vital that engineering geologists and geotechnical engineers understand the importance of providing a complete and thorough subsurface investigation that is designed for the subject project site, reflects expected geological and environmental soil and subsoil conditions, and accounts for potential regional geologic variability.

The purpose of this presentation is to provide engineering geologists and geotechnical engineers with such an understanding by: (a) summarizing the basic areas of contention in DSC litigation (i.e., from a contractor’s, owner’s and geotechnical professional’s point of view); (b) carefully analyzing the legal rules governing DSC disputes and indemnity claims brought by owners against geotechnical professionals; (c) examining the various methods of contractually allocating risk and how each method affects the importance of the project geotechnical investigation and the manner in which the geotechnical professional/contractor conducts its site investigation; and (d) summarizing three heavily litigated, multi-million dollar DSC lawsuits, including: (i) a dispute arising from the failure of extensive silty-sand deposits during the excavation and construction of a large-diameter tunnel; (ii) a dispute arising from the collapse of a large excavated trench and the improper characterization of joint geometry; and (iii) a dispute initiated by a drilling contractor after having encountered substantially harder rock than represented by the owner.

Biographical Information: Dr. Benumof is currently an independent consulting geologist working out of San Diego as well as an associate with a law firm based in Irvine. He received his B.S. in Geological Sciences from the University of California, Santa Barbara, his Ph.D. in Engineering Geology from the University of California, Santa Cruz and his J.D. from the School of Law at the University of San Diego.

Dr. Benumof has received many honors and awards in both his geologic pursuits and his practice of law. Dr. Benumof has published legal papers and geologic reports in addition to numerous maps. Most of his work has focused on coastal geologic hazards in southern California, however Dr. Benumof has also been involved with the mapping of lava flows in Hawaii for geohazard analysis.

Chair Column (by Matthew Hawley)

Hello southern Cal Section AEG! Thank you to all who provided verbal support for my up-coming tenure as your section Chair, with special thanks to Tania Gonzalez who I bugged continuously during the past several months and who continued to provide me with great solutions and answers even to my most puzzling and seemingly inane queries.

With respect to the over-all position of our section, I will try hard to keep our section organized, financially solvent, up-beat and high on the idea of great expectations. Our section has great potential and I hope to achieve several goals I’ve set for us, or at least myself. These goals include:

- Keeping our ears and noses close to the grindstone of change swirling around the California legislature at this time. This will be achieved through strong representation by our Legislative Committee.
- Attempting a field trip with an emphasis on simple and easy, especially with respect to the field trip guide.
• Having one short course seminar.
• Reinforcing our ties to the local universities by establishing “Student Night” as a yearly event.
• Providing our members with quality speakers and a yearly schedule of presentations by the end of January 2005.
• And finally, establishing stronger ties between the old and new ‘Guard’; those who have represented AEG through countless seasons with those that will. Those of us who are relatively new need to tap into this resource before it breaches $50/barrel!

In order to bring you up to speed with the current organization of our section, the following is provided. My partners in crime, your officers for the 2004-2005 season are:

Officers
Chair: Matthew Hawley, mhawley@lgcgeo.com
Vice Chair: Charles Nestle, cnestle@ladpw.org
Treasurer: Brian Villalobos, bvillalobos@petra-inc.com
Secretary: Rosalind Munro, rmunro@lgcgeo.com
News Letter Editor: Jonathan Relyea, jon@radiusmaps.net

Out–Going Chair: Tania Gonzalez, tgonzalez@earthconsultants.com
‘Section Ambassador’: Buzz Spellman, buzzspellman@aol.com
Web Master: Kerry Cato, kerry@catogeoscience.com

In addition to this fine crew, our section committees are staffed as follows:

Committees
Legislative Committee:
 Chair, Joe Cota, joe@radiusmaps.net
 Member, Buzz Spellman, buzzspellman@aol.com
 Member, Hugh Robertson, hr@robertsongeotechnical.com

Field Trip Committee:
 Chair, OPEN

Publications Committee:
 Chair, OPEN

Short Course Committee:
 Chair, OPEN

Education Committee:
 Chair, OPEN
As you can see, most of our committees are desperately looking for people to guide them for our section, and without them achieving the Goals for the year will be impossible. I’m already on the look-out for “volunteers” to help. So be aware! You may be the next chair of a committee at the end of this month’s meeting.

I’ll provide a synopsis of the results of the Board of Director’s meeting held in Dearborn for this year’s AEG National in next month’s column. Hope many of you had a chance to attend and can share your stories of the interesting topics you attended for November’s meeting.

Cheers – Matthew Hawley

2004 MEMBERSHIP RENEWAL

For those of you who have not yet renewed, are unsure about your membership status, or did not receive your membership dues statement please contact AEG Headquarters at www.aegweb.org, or Matt Hawley.

YEAR 2004-2005 CONTRIBUTORS NEEDED

Contributions from corporations and individual members for the remainder of this year and the year upcoming will be greatly appreciated. Contributors will be listed in our newsletter throughout the year and can post their logo or business card in the newsletter if so desired. please mail contributions made out to AEG to our section chair, Matthew Hawley.

NEWSLETTER ADVERTISING

<table>
<thead>
<tr>
<th>Type</th>
<th>Monthly Cost</th>
<th>Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Card</td>
<td>$10/month</td>
<td>$100/year</td>
</tr>
<tr>
<td>1/2page</td>
<td>$20/month</td>
<td>$200/year</td>
</tr>
<tr>
<td>1/4 page</td>
<td>$35/month</td>
<td>$350/year</td>
</tr>
<tr>
<td>Full page</td>
<td>$50/month</td>
<td>$500/year</td>
</tr>
</tbody>
</table>
EMPLOYMENT OPPORTUNITIES

(10-04)

Lawson & Associates Geotechnical Consulting, Inc.

2045 Royal Avenue, Ste. 125
Simi Valley, CA 93065
Tele: (805) 579-3434 Fax: (805) 579-3435
Email: kesmond@lgcgeo.com

1020 Calle Cordillera, Ste. 101
San Clemente, CA 92673
Tele: (949) 369-6141 Fax: (949) 369-6142
Email: info@lgcgeo.com

Website: www.lgcgeo.com

LGC is looking for dynamic individuals to join our team and work on some of Orange County’s most interesting and technically challenging projects. If you are an experienced geotechnical professional, or just starting your career, please do no hesitate to contact us. All inquiries will be considered in the utmost confidence. We look forward to hearing from you.

RGS Engineering Geology (10-04)

Staff Geologist

RGS Geosciences has and excellent opportunity for highly motivated individual seeking a mid-level engineering geologic position for residential, commercial, and municipal projects. The ideal candidate will be placed on a fast track and exposed to multiple project phases ranging from investigation to remediation, with an overall career path towards project management to meet client needs and complement other staff skills. The desired candidate will have the ability to perform independent hands-on fieldwork, and oversee contractors and other field personnel. The position requires an individual who thrives in a team-oriented environment. Flexibility to work on a multitude of diverse projects, a positive attitude, willingness to learn, and commitment to workplace health and safety are imperative.

Job Description:

- Site investigation, field geologic mapping, coordination and oversight of subsurface exploratory borings and trenches.
- Perform soil/rock sampling and assist in the development of laboratory testing programs
- Complete test trench and boring logs, prepare geologic cross sections, maps, and other illustrations
- Groundwater sampling and analysis
- Assist in engineering evaluations for slope stability, liquefaction analysis, fault and seismic exposure analysis, settlement, foundation design, and other geotechnical factors related to earthwork.
- Preparation of geologic and geotechnical reports relating to development of residential, commercial, and municipal projects.

Experience/Requirements:

- Bachelor’s Degree in Geology or related science
- Graduate level education preferred but not required
October 2004

- 2-4 years experience with field investigations (geologic mapping, exploratory borings/trenches) --- Experience in southern California preferred
- Candidate should be knowledgeable in earthwork and grading operations for hillside and large scale projects.
- Strong technical writing skills and exemplary time management skills
- Experience with engineering analysis and evaluations including slope stability, liquefaction, stereonet projections, foundation design, environmental engineering and earthwork/grading.
- Excellent written and verbal communication skills
- Proficient computer skills including word processing and excel. Other geologic software experience, including slope stability, liquefaction, fault/seismic design parameters, seismicity, and autocad preferred.
- OSHA 40-hour HAZWOPER/CPN Nuclear Gage training a plus.
- Valid California drivers' license, current DMV printout, and vehicle for use to travel to various sites.
- Able to lift up to 50 lbs. on a routine basis
- All candidates are required to provide a post-offer/pre-employment drug test and physical

Please respond ASAP if you would like consideration. This is an immediate opening in the Inland Empire region of southern California. For immediate consideration please fax resume and salary history to Rosa Garcia at (909) 945-2407 or mail to RGS Geosciences, 8800 Onyx Avenue, Suite D, Rancho Cucamonga, CA 91730.

An Affirmative Action Participant EOE
Benefits and salary based on experience

City of Los Angeles (8-04)
The City of Los Angeles Department of Building and Safety is currently searching for a licensed Geotechnical Engineer for the position of Geotechnical Engineer I in the Grading Division. The work environment is very fast-paced with constant challenges. The salary is competitive with excellent benefits. Anyone interested in this position should contact Andy Szpikowski (213/482-0493) or Dana Prevost (213/482-0488)

Allan E. Seward (7-04)
Allan E. Seward Engineering Geology, Inc. (AESEGI) is an established company for over 26 years with an office in the City of Santa Clarita. AESEGI now employs a current staff of approximately 22, which includes Registered Geotechnical and Civil Engineers, Certified Engineering Geologists, Staff Engineers and Geologists, Laboratory and Field Technicians as well as our office support staff.

We are currently seeking a staff/project-level geotechnical engineer and a soil technician to join our professional team to perform geotechnical investigations in Northern Los Angeles County and adjoining cities. We are interested in dynamic and motivated individuals with the leadership skills to grow within an expanding operation. We offer an excellent compensation package.

Please send resume to:
Dharmesh Amin, Allan E. Seward engineering Geology, Inc., 27825 Smyth Drive, Valencia, CA 91355.
(Fax) 661-294 0833, Email: Damin@SewardGeo.com.

Ninyo & Moore (7-04)
Ninyo & Moore Geotechnical and Environmental Sciences Consultants has an immediate opening for Staff and Sr. Staff Geologists and Geotechnical Engineers in their San Diego and Irvine, CA offices. Please send your resume to Carol Price at Ninyo & Moore, 475 Goddard, Suite 200, Irvine, CA 92618, or fax your resume to (949) 753-7071.

Immediate openings exist for Geotechnical Engineers and Geologists and a Senior Technical Marketing Associate in their San Diego office. Submit resumes to our Corporate office: Ninyo & Moore, 5710 Ruffin
American Geotechnical (7-04)
American Geotechnical a twenty year old geotechnical consulting firm is seeking mid to sr level CEG's to join our growing team. We have great salary and benefits package based on experience. Master preferred. Excellent written and verbal skills required. 5 years of Construction and Forensic experience a minimum.  Please e-mail Langenwl@amgt.com plain text only or contact me at 714/685-3907x234 to find out more about this great opportunity.

Jennifer langenwalter, Client Services Director
American Geotechnical
714/685-3900

Geomatrix/Accolo
Accolo, a community helping each other find jobs and people for jobs, has been asked to help fill this job. To apply or refer someone you know, please go to:
http://www.accolo.com/webapp/orion/public/ReferApplyJob.jsp?ID1=`enexy

We are seeking a Project Geologist/Hydrogeologist, for work on groundwater supplies; characterizing soil and groundwater conditions for site cleanup and redevelopment at a former industrial facility; or contributing to two wastewater expansion projects at a potato-processing facility in Argentina.

Geomatrix is a mid-sized, employee-owned firm with about 300 people in offices throughout the U.S. and Canada. As a project team geologist/hydrogeologist based in Costa Mesa, California, your first assignments will prove your adaptability as you supervise drilling, sample soil and groundwater, test aquifers, and analyze and interpret data. In the field, you will exercise judgment as a project manager, scoping out project parameters, selecting sub-contractors, assigning staff and overseeing the entire field program. In house, you will analyze data and report your findings to clients and regulatory agencies. Working with an upwardly mobile organization that fosters continuing education for its people, you will not just sharpen your existing skills but broaden them significantly.

Jerry Bires, Accolo Consultant, 415-785-7833, x209
jbiress@accolo.com

Provost and Pritchard Engineering Group, Inc. (7-04)
The ideal candidate would have a BS in geologic science, MS, preferably in hydrogeology. 3-5 years experience, knowledge of range of modeling tools in Quantitative Risk Assessment. Understanding of regulatory environment, chemistry background and registered Geologist/Hydrogeologist.

Broad based duties may include preparation of cost estimates, workplans and permits; scheduling and oversight of utility locating, geophysics, excavation, drillers, and construction subcontractors; geologic and hydrogeologic interpretation from soil borings, excavations, trenches and monitor wells; installation of groundwater and vadose zone wells; sampling of groundwater, soils, and soil gases; remediation feasibility testing, design, construction, and implementation; data analysis and report preparation; and project and budget management.

Compensation: salary commensurate with qualifications. Great benefit package including 401(k), ESOP, medical, vision, dental, and more. Refer to the Provost & Pritchard website for additional information about Provost & Pritchard.
Interested candidates should submit resumes to jbazarian@ppeng.com.
AEG Southern California Section
J. Relyea
18302 Sierra Highway, #102
Santa Clarita, CA 91306