President’s Message

By Curt McCuistion, P.E.

Well, the end of the year for ASCE is approaching quickly. It is time to begin to pick the Officers for next year. I would encourage each of you to consider running for a leadership position in either your respective Branch or for the Utah Section. If you have a little extra time to devote, the rewards are well worth it. Please consider speaking to an officer about throwing your hat in the ring, the Society needs great leaders to keep things going and growing!

Another area of need is the Salt Lake Valley Science and Engineering Fair (SLVSEF). You can access their website at the following address: http://www.utahsciencecenter.org/sciencefair/

The fair is the culmination of the school competition for Elementary, Junior High, and High School science fairs. These kids have worked hard on their projects and won the best from their schools. Now they are competing on the regional level. They are in dire need of people who can judge these projects and that is where you can really help out. To be a judge, you must have a Bachelor’s degree. This severely limits the pool and the large number of professionals in our society could really help them out. They currently have over 450 projects submitted to be judged and each one must be judged by six different people. You can really help out the children and gain a lot of valuable insight and gratification at the same time. I am always amazed by some of the projects and go home feeling a little humbled. These kids are doing some really neat things. I can safely promise you that if you spend the time to be a judge, you will not be disappointed.

Curt McCuistion, P.E., LEED-AP
ASCE Utah Section President
**Announcements**

**Utah State University Civil Engineering Career Fair**

March 3, 2009  
Utah State University  
6:30 pm to 8:30 pm.

Free refreshments including dinner will be served. For more info, view the [Flyer...](#) at the end of this issue.

**SALT LAKE VALLEY 2009 SCIENCE AND ENGINEERING FAIR**

March 26th and 27th  
Rice Eccles Stadium, University of Utah

If you would like to volunteer as a judge, or would like more information, visit the [YMF Section...](#) in this issue.

**Wasatch Front Branch and the University of Utah Joint Seminars**

April 1, 2009  
First Session: 8:00 am to 12:00 Noon  
Second Session: 1:00 to 5:00 pm  
For more information, view the [Flyer...](#) at the end of this issue.

**DOPL Seat Available in June**

For more information, contact Mike McKamey at Micheal.Mckamey@glv.com.

---

**Northern Utah Branch**

The Utah Northern Branch will be meeting on March 12, 2009 at the Bluebird Restaurant (19 North Main, Logan) at 12:00 noon. Tracy Allen from J-U-B Engineers will be coming to talk about the vacuum sewer system that was recently constructed in Hooper Utah.

When it incorporated in 2000, Hooper City was the largest city in the State of Utah without a central wastewater collection system. This rural community on the border of the Great Salt Lake relied solely upon septic systems for wastewater collection and treatment in high groundwater conditions clearly not conducive to on-site systems. Incorporation lead to extreme residential growth pressure and a wastewater collection solution had to be found. A conventional gravity sewer collection system was deemed cost–prohibitive in the flat terrain. The solution was the design and construction of the first vacuum sewer collection system in the State of Utah.

This presentation will introduce vacuum sewer technology and explain why Hooper City decided to use the technology to solve its wastewater collection problems.

Danny Macfarlane  
Northern Utah Branch President

---

**Wasatch Front Branch**

Thanks to all who attended the February luncheon and to Blaine Leonard for his informative presentation. Also, thanks to those in attendance at the E-Week social and Order of the Engineer ceremony. We feel it was a successful event and hope to plan more of these in the coming year.

Our next meeting will be held on March 20, 2009 at noon when we will have a discussion about contracting and ethics. Please note we will be back at our normal location, Desert Star Theatres. Hope you can join us!

Check out the [flyer](#) at the end of this newsletter for information on the training to be held on April 1st. We are already half full so reserve your spot now!
You can register for either of two sessions, Effective Business Writing and Developing Leaders for Tough Economic Times. This provides an inexpensive way to get ahead on your PDH's. Please contact Jim Seale at James.Seale@glv.com or Erin Donovan at erin.p.donovan@gmail.com by March 6th to guarantee your place in this valuable training.

As always, feel free to contact your Board members with any comments or suggestions.

Erin Donovan, P.E.
Wasatch Front Branch President

Central Utah Branch

We would like to thank Dr. Grant Schultz for giving a presentation at our February luncheon. He talked about the results of a study conducted by his research team from Brigham Young University on several advance warning signals installed along Bangerter Highway. He described different obstacles that had to be addressed as they installed the signals and worked with UDOT to implement the project. Dr. Schultz also showed how the signals affected traffic safety at the monitored intersections in comparison to other intersections without advance warning signals.

Our March luncheon is tentatively scheduled for March 19th. Watch your e-mail for more information as it becomes available.

We would also like to remind everyone that Brigham Young University is hosting the Rocky Mountain Conference in April and the student chapter would like to get as many volunteers as possible to help with judging during the conference. Contact Mike Burns at apolloburns@gmail.com for additional information about how you can help with the conference.

Eric Dixon, P.E.
Central Utah Secretary-Treasurer

Geotechnical Group

The Geotechnical Group will be having our next luncheon on March 5, 2009 at 6:00 pm at Famous Dave’s in West Jordan (just east of the movie theaters). Our guest speaker will be Tom Hurley, District Manager for Nicholson Construction Company. Mr. Hurley will be discussing “Innovative Earth Retention, Underpinning and Water Control Techniques for a Mega-Development in Salt Lake City, Utah.” The dinner/social will run from 6:00 pm to 7:00 pm. The presentation will begin at 7:00 pm. The cost will be $20 for ASCE Members (no RSVP $25), $10 for students (no RSVP $15) and $25 for non-members (cash or check only).

A flyer with more detailed information is attached at the end of this newsletter.

Please RSVP to Ryan Cole at ryan@gerhartcole.com no later than Wednesday, February 25.

Ryan Cole, P.E.
Geotechnical Group Secretary-Treasurer

Southern Utah Branch

February was a busy month for the Southern Branch. We had a great turnout for our spring conference, and we were proud to present our branch awards during the banquet.

Blaine Leonard, President-Elect, was the keynote speaker at the opening luncheon. Blaine discussed the future of engineering and how we all can promote the value civil engineers bring to the world. We were honored to have Blaine speak and share the exciting outlook he sees for our industry. He is inspiring to our organization. We wish him continued success as he carries out his tenor.

I would also like to thank the members, attendees, exhibitors, and sponsors who made the conference a success. You are the reason we serve, and you are...
the reason we are able to promote students towards careers in civil engineering. And for those who work so hard to make our community a better place, we salute you! Your contributions are recognized and appreciated.

The award for Community Service was presented to Walt Jones, a retired geotechnical engineer, for his work with local communities on hillside development ordinances, geologic hazard zones, and landslide problems. Walt has a long history of serving on various boards and committees to safeguard the public regarding geotechnical engineering policies.

B Bowen Collins and Associates were given the Engineering Innovation Award for their Bloomington Hills Sewer Siphon project. This project converted a costly sanitary sewer lift station into a pressure siphon line to eliminate a continual maintenance problem for the city. The multi-barrel line crosses under the Virgin River. The Project Manager, Mike Chandler, was happy to accept the award.

The Outstanding Water Works Project was presented to Sunrise Engineering, specifically Joe Phillips, for his work on the Orderville Waterline Improvements. The project replaced miles of water line throughout the town as well as added storage tanks to regulate pressures and provide emergency water supplies.

Horrocks Engineers received the Outstanding Transportation Project award for their work on the Atkinville Interchange / Southern Parkway. This new interchange along I-15 will provide access to the Fort Pierce Industrial Park, the new St. George Airport, as well as being the first segment of a regional beltway to Hurricane.
The City of St. George’s Power Department won the Outstanding Civil Engineering Project for the forward thinking solar energy farm. The project was a collaborative effort between the City and the Dixie Rural Electric Company. It is a major step towards alternative, renewable energy for Washington County.

March will start with our student outreach program that ties into Science Fair Week at local schools. We are currently planning the spring activities and looking for new officer candidates. If you are interested in the great opportunities ASCE has to offer, please contact me at any time to discuss how you can benefit.

Sincerely,
Elisabeth Whitlock, PE
President, Southern Utah Branch

Younger Member Forum

The YMF recently returned from attending the Western Regional Younger Member Council meeting in San Francisco. We were able to send three representatives to the conference, including Kyle Twitchell, Brad Conder and Jenni Oman. We attended many great breakout sessions, including a presentation by the Society’s President-elect for 2009, Utah’s own Blaine Leonard. The conference ended with a technical tour at Alcatraz.

Again we would like to remind you about getting involved in the Salt Lake Valley Science and Engineering Fair that will be held on March 26 and 27, 2009. They are in need of volunteer judges. It does not take a lot of time and it is one way we can help motivate those students to consider engineering as a future career choice. If you have questions, please contact James Barron at james.barron@slcgov.com or Jessica Rice at jessicarice@utah.gov. If you would like more information please go the fair website at:

http://www.utahsciencecenter.org/sciencefair/the-event.

The PE Exam Review is about to begin. If you would still like to participate, please contact Kyle Twitchell at ktwitchell@reaveley.com or at 801-505-4007.

Brad Conder, P.E.
Younger Member Forum President

The evening’s highlight was the Engineer of the Year award. This prestigious honor was given to Glen Carnahan. Glen is a very conscientious engineer who not only provides the highest level of quality in his projects, but also takes it upon himself to mentor the Engineers-in-Training at his office. Glen manages all projects for the local School District and was also nominated for his work on an Ivins City Storm Drain project which involved designing a large diameter pipe at depths of over 30 feet to solve a long standing problem for the community.
ASCE Engineer and Educator of the Year

The ASCE Utah Section names an Engineer of the Year and an Engineering Educator of the Year each year. Those people are then nominated to the Utah Engineers Council (UEC) for consideration in the state-wide program.

This year, Blaine Leonard, the Research Program Manager at UDOT, was the ASCE Engineer of the Year, and Dr. Steven Burian, at the University of Utah, was the ASCE Engineering Educator of the Year.

Blaine has previous served as ASCE’s representative to the UEC and later became the Chair of the Utah Engineers Council in 1992. He was the founding editor of the UEC Journal (an annual magazine) in 1992, and served in that position for about 5 years. Blaine was the President of the Utah Section of ASCE in 1997 and is currently serving as the ASCE national President-elect.

Steven has been a member of the Department of Civil and Environmental Engineering at the University of Utah since August 2003, where he has taught courses on water resources and environmental engineering. His research and teaching interests focus on urban systems and their interaction with natural environment systems.

Have Something to Say?  
Email Me!  
Kelly Burns  
Civil Source Editor  
KBurns@utah.gov

University of Utah ACI Student Chapter

The Intermountain Chapter and University of Utah Student Chapter of the American Concrete Institute are introducing their 1st Annual Spring Symposium. This year's topics will address issues associated with creating a durable concrete and assessing the causes of deterioration and defects. Recent concern has developed about proper mixture design, finishing and assessing the causes of defects and deterioration. This symposium is dedicated to giving attendees the knowledge and skills needed in today's competitive market. A delicious lunch will be served to attendees in addition to 6 professional development hours.

Friday, March 20, 2009  
72 So. Central Campus Drive  
Salt Lake City, Utah 84112  
University of Utah  
Warnock Engineering Building, Room 104  
7:30 Registration, 8:00 Presentations Begins

Payments can be made with the registration form or online here. Early registration ends on March 2, 2009. Parking will be available in the lot east of the Warnock Engineering Building.

The speakers will be addressing issues related to durable concrete and the causes of commonly experienced defects.

Dr. Olek is a professor at the University of Purdue. Jan is the former Chair of the TRB committee of Durable concrete and an expert in concrete deterioration.

Orville "Bud" Werner is the President of Commercial Testing Laboratories, a division of CTL Thompson. He is a widely sought after consultant on concrete distress and a former director of the USBR's Construction Materials Lab.

Kristin Freeman is a geologist and petrographer for Ash Grove Cement Company. She works out of the Kansas City Lab and is an expert in causes of concrete deterioration and defects.

Dr. Paul Tikalsky is the Chair for the Civil and Environmental Engineering Department at the University of Utah. He is conducting research on the development and implementation of higher durability concrete.

Doug Bedingfield works for Jack B Parson Companies and has a many years of experience in the ready-mix industry.

Amanda Gilliland  
University of Utah Student
Dear Friend of Civil and Environmental Engineering,

We would like to invite you to the 2009 Civil and Environmental Engineering Career Night Open House. This annual event is sponsored by the Department of Civil and Environmental Engineering at Utah State University and is co-sponsored by the Northern Utah Branch of ASCE. It is intended to enhance the contact and communication between members of the professional community, students, and faculty.

This evening is aimed at Junior and Senior undergraduates and Master’s level graduate students. Although exploring employment opportunities are certainly a possibility, the primary purpose of this event is to learn about the variety of professional opportunities available to CEE graduates and assist in guiding future career decisions. The setting will be informal with a chance to discuss career paths and opportunities. A small table will be provided for each guest to display a company logo, literature, or other company information. However, space is limited so there may not be room for large company displays at this event.

We have had an excellent response in past years from both students and professionals and anticipate a successful event again this year.

2009 CEE Career Night Open House
Tuesday, March 3, 2008
6:30 p.m. to 8:30 p.m.
Skyroom, Room 401 in the Taggart Student Center
Refreshments will be served
(Terrace parking: $1.50/hour)

Please RSVP to Katlynne Pitcher in the CEE office (katlynne.pitcher@aggiemail.usu.edu) or telephone at 435-797-2932 by February 20th. You are also invited to participate in the University wide career fair to be held on March 4th. Please contact Maleah Christensen (maleah.christensen@usu.edu) at University Career Service.

Thank you very much for your interest and support of the Civil and Environmental Engineering program at Utah State University.

William Rahmeyer
Professor and Head

Ryan Dupont
Professor and SEES Advisor

Marvin W. Halling
Associate Professor and Career Night Coordinator
• Trip Hazard Removal for Municipalities
• Over 50 Satisfied Utah Cities
• Detailed Bidding and Tracking System
• Reduce Liability Exposure
• Patented Equipment and System
• Over 17 Years Experience

We CUT Trip Hazards - NO GRINDING

• GIS and GPS Compatible
• No Impact to Residents
• Up to 250 Trip Hazards Removed Daily
• Increase Safety
• ADA Compliant
• Free Demonstrations

Our service stretches budgets and provides a positive, visible, low-impact program to residents.

www.SafeSidewalks.com
(801) 224-0025
### Civil Source Calendar

#### March

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Utah State University Spring 2009 Civil Engineering Career Fair 6:30-8:30 PM</td>
<td></td>
<td>Geotechnical Group Luncheon 6:00 pm Famous Dave’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Northern Utah Branch Meeting Bluebird Restaurant 12:00 Noon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Central Utah Branch Meeting</td>
<td></td>
<td>Wasatch Front Branch Meeting Desert Star Theatres 12:00 Noon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>U of U Student Chapter and ACI Joint Symposium</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### April

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 WFB and U of U Seminars 8:00 am to 12:00 Noon and 1:00-5:00 pm</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29 AEG Intermountain Section Short Course “Geological Licensure in Utah”</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# ASCE Utah Section Contacts

<table>
<thead>
<tr>
<th>Utah Section</th>
<th>Wasatch Front Branch</th>
<th>Southern Utah Branch</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>President</strong></td>
<td>President</td>
<td>President</td>
</tr>
<tr>
<td>Nolte Associates</td>
<td>Nolte Associates, Inc.</td>
<td><a href="mailto:liz@red-plains.com">liz@red-plains.com</a></td>
</tr>
<tr>
<td><a href="mailto:Curt.Mccuistion@nolte.com">Curt.Mccuistion@nolte.com</a></td>
<td><a href="mailto:Erin.P.Donovan@gmail.com">Erin.P.Donovan@gmail.com</a></td>
<td>(801)-743-1328</td>
</tr>
<tr>
<td>(801)-743-1300</td>
<td></td>
<td>(435)-673-6850</td>
</tr>
<tr>
<td><strong>President-Elect</strong></td>
<td>President-Elect</td>
<td>President-Elect</td>
</tr>
<tr>
<td>Matt Sibul, P.E.</td>
<td>Corbett Hansen, P.E.</td>
<td>Chris Pettigrew, P.E.</td>
</tr>
<tr>
<td>Utah Transit Authority</td>
<td>Kleinfelder</td>
<td><a href="mailto:chris@racivil.com">chris@racivil.com</a></td>
</tr>
<tr>
<td><a href="mailto:MSibul@rideuta.com">MSibul@rideuta.com</a></td>
<td><a href="mailto:Chansen@Kleinfelder.com">Chansen@Kleinfelder.com</a></td>
<td>(801)-261-3336</td>
</tr>
<tr>
<td>(801)-236-4731</td>
<td></td>
<td>(801)-277-7700</td>
</tr>
<tr>
<td><strong>Secretary-Treasurer</strong></td>
<td>Secretary-Treasurer</td>
<td>Secretary-Treasurer</td>
</tr>
<tr>
<td>Mark Breitenbach, P.E.</td>
<td>Brian Warner, P.E.</td>
<td>Bob Lamoreaux, P.E.</td>
</tr>
<tr>
<td>Central Utah Water Conservancy District</td>
<td>McNeil Engineering</td>
<td><a href="mailto:bobl@agecinc.com">bobl@agecinc.com</a></td>
</tr>
<tr>
<td><a href="mailto:mark@cuwcd.com">mark@cuwcd.com</a></td>
<td><a href="mailto:Brian.w@mcneileng.com">Brian.w@mcneileng.com</a></td>
<td>(801)-255-7700</td>
</tr>
<tr>
<td>(801)-226-7105</td>
<td></td>
<td>(801)-686-3883</td>
</tr>
<tr>
<td><strong>Past President</strong></td>
<td>Past President</td>
<td>Past President</td>
</tr>
<tr>
<td>Brent Packer, P.E.</td>
<td>Micheal McKamey, P.E.</td>
<td>Brett Jensen, P.E.</td>
</tr>
<tr>
<td>Bowen, Collins &amp; Associates</td>
<td>Eimco Water Technologies</td>
<td><a href="mailto:Brett.Jensen@jacobs.com">Brett.Jensen@jacobs.com</a></td>
</tr>
<tr>
<td><a href="mailto:bpacker@bowencollins.com">bpacker@bowencollins.com</a></td>
<td><a href="mailto:Micheal.McKamey@glv.com">Micheal.McKamey@glv.com</a></td>
<td>(801)-526-2344</td>
</tr>
<tr>
<td>(801)-495-2224</td>
<td></td>
<td>(801)-756-0309</td>
</tr>
<tr>
<td><strong>Northern Utah Branch</strong></td>
<td><strong>Central Utah Branch</strong></td>
<td><strong>Younger Member Forum</strong></td>
</tr>
<tr>
<td><strong>President</strong></td>
<td><strong>President</strong></td>
<td><strong>President</strong></td>
</tr>
<tr>
<td>Danny MacFarlane</td>
<td>Scott Olson, P.E.</td>
<td>Brad Conder, P.E.</td>
</tr>
<tr>
<td>Civil Solutions Group</td>
<td>Horrocks Engineers</td>
<td><a href="mailto:bradc@horrocks.com">bradc@horrocks.com</a></td>
</tr>
<tr>
<td><a href="mailto:Danny@civilsolutionsgroup.net">Danny@civilsolutionsgroup.net</a></td>
<td><a href="mailto:scotto@horrocks.com">scotto@horrocks.com</a></td>
<td>(435)-713-9514</td>
</tr>
<tr>
<td>(435)-213-3762</td>
<td>(801)-763-5150</td>
<td></td>
</tr>
<tr>
<td><strong>President-Elect</strong></td>
<td><strong>President Elect</strong></td>
<td><strong>Vice-President</strong></td>
</tr>
<tr>
<td>Chris Slater, P.E.</td>
<td>Brian Andrew, P.E.</td>
<td>Kyle Twitchell</td>
</tr>
<tr>
<td>JUB Engineers</td>
<td>Hansen, Allen &amp; Luce</td>
<td><a href="mailto:Ktwitchell@reaveley.com">Ktwitchell@reaveley.com</a></td>
</tr>
<tr>
<td><a href="mailto:cslater@jub.com">cslater@jub.com</a></td>
<td><a href="mailto:bandrew@hansenallenlucet.com">bandrew@hansenallenlucet.com</a></td>
<td>(801)-404-5336</td>
</tr>
<tr>
<td>(435)-713-9514</td>
<td></td>
<td>(801)-486-3883</td>
</tr>
<tr>
<td><strong>Secretary-Treasurer</strong></td>
<td><strong>Secretary-Treasurer</strong></td>
<td><strong>Secretary</strong></td>
</tr>
<tr>
<td>Marvin Lewis, P.E.</td>
<td>Eric R. Dixon, P.E.</td>
<td>Oscar Moreno</td>
</tr>
<tr>
<td>Keller-Blesner Engineering, LLC</td>
<td>Franson Civil Engineers</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:mjlewis@kelblbi.com">mjlewis@kelblbi.com</a></td>
<td><a href="mailto:edixon@fransoncivil.com">edixon@fransoncivil.com</a></td>
<td>(835)-753-5651</td>
</tr>
<tr>
<td>(435)-753-5651</td>
<td>(801)-756-0309</td>
<td></td>
</tr>
<tr>
<td><strong>Past President</strong></td>
<td><strong>Past President</strong></td>
<td><strong>Treasurer</strong></td>
</tr>
<tr>
<td>Clay Bodily, P.E.</td>
<td>David Jensen, P.E.</td>
<td>Jenni Oman</td>
</tr>
<tr>
<td>Smithfield City</td>
<td>Brigham Young University</td>
<td><a href="mailto:jennioman@gmail.com">jennioman@gmail.com</a></td>
</tr>
<tr>
<td><a href="mailto:cbodily@smithfieldcity.org">cbodily@smithfieldcity.org</a></td>
<td><a href="mailto:david@byu.edu">david@byu.edu</a></td>
<td>(801)-422-2094</td>
</tr>
<tr>
<td>(435)-563-6226</td>
<td></td>
<td>(801)-440-4168</td>
</tr>
</tbody>
</table>
University Liaisons

University of Utah Liaison
Thomas Mathews, Jr
Michael Baker Jr. Inc.
tmathews@mbakercorp.com

Geotechnical Group

Chair
David Plehn, P.E.
Geopier Northwest
dplehn@geopier.com
(801)-942-8500

Secretary-Treasurer
Ryan Cole
IGES
801-270-9400

Past Chair
Joergen Pilz, P.E.
AMEC Earth & Environmental
(801)-266-0720

http://sections.asce.org/utah/index.htm
ASCE Geotechnical Group
The ASCE Geotechnical Group is Presenting:

Guest Speaker:
Tom Hurley
District Manager
Nicholson Construction Company.

"INNOVATIVE EARTH RETENTION, UNDERPINNING AND WATER CONTROL TECHNIQUES FOR A MEGA-DEVELOPMENT IN SALT LAKE CITY, UTAH"

The City Creek Center Block 76 Project includes the demolition and redevelopment of an entire city block for mixed use retail, office and residential properties directly adjacent to Historic Temple Square in Salt Lake City, Utah. Prior to construction, the Block 76 Project footprint was completely occupied by an existing shopping mall, subsurface parking structure and a twenty two story office building. Demolition of these structures, including the implosion of the office tower was required to make way for the new construction on the project. However an adjacent light rail system and four existing buildings between 9 and 23 stories remained at the corners of the project.

Excavation was carried out 65ft below street grade and by as much as 45ft directly below adjacent buildings supported by shallow mat and strip type footings. Movements of the earth retention system and adjacent buildings were monitored in real time using automated equipment which complemented a suite of traditional geotechnical instrumentation. Due to the high profile nature of this project and taking into consideration the requirement of deep excavations through granular soils and the adjacent high rise structures on shallow foundations, careful consideration was applied to evaluate the proposed support system. In the areas immediately adjacent to the existing buildings greater than 10 stories, anchored diaphragm walls were employed. This is believed to be the first anchored diaphragm wall for earth retention in Salt Lake City, Utah.

Areas of the site not supported by diaphragm walls employed a soil nail wall system. The location of soil nail walls was generally adjacent to streets where larger wall movements were acceptable to the project team. Soil nail walls were also employed directly below existing structures, but were enhanced by an underpinning system consisting of micropiles with an integral cap beam to limit anticipated movements to 1".

Jet grouting was employed as an alternate for water cutoff in lieu of dewatering to mitigate water inflow along the North and East sides of project. Prior to commencing production jet grouting, a field test program was instituted to optimize injection parameters and to confirm jet grout element geometric, mechanical properties. The test program involved the construction of test elements followed by a 3 day cure time. Jet grout test elements were exposed by excavation and geometric properties obtained by direct measurement. The jet grout wall consisted of overlapping secant columns and was constructed along two alignments, providing a connection between diaphragm walls adjacent to buildings along three corners of the project. In total, Nicholson's earth retention scope included 45,000 SqFt of Diaphragm Wall, 104,000 SqFt of Soil Nail Wall, Micropile underpinning of 3 buildings, and jet grouting for water control where soil nails walls were below the ground water table.

This paper will provide an overall description of the Block 76 project and discuss the approach for the selection of the earth retention systems actually employed on the site. In addition, the location and reasoning behind the use of underpinning and jet grouting will be discussed. A detailed account of the installation of the earth retention, underpinning and water cutoff systems will be provided with the soil conditions encountered at the site. A discussion will be provided comparing predicted versus actual earth retention wall movements. In closing a brief summary will be provided with regards to the 24" diameter, 450tn capacity auger cast piles (over one thousand of them!) currently underway for the new structure that is taking shape.

Thursday March, 5 2009 at 6:00 p.m. at Famous Dave’s, West Jordan:
7273 S. Plaza Center Dr. West Jordan (East of the Movie Theaters)
Dinner/Social 6:00 to 7:00 p.m. Presentation begins at 7:00 p.m.

Reservations: Please RSVP to Ryan Cole (ryan@gerhartcole.com) no later than Wednesday, February 25
Costs: ASCE Members $20 (no RSVP $25); Student Cost $10 (no RSVP $15); Non-Members $25 (Cash or Check Only)
The annual career fair at Utah State University is scheduled for the evening of March 3 from 6:30 – 8:30 PM in the Skyroom of the Taggart Student Center. USU has pioneered the concept of an engineering fair in the state of Utah and has done so annually since 1997.

The Career Fair is specifically designed for Civil and Environmental Engineering employers and Civil and Environmental Engineering students. The CEE fair is held the evening before the University wide career fair which then affords employers the opportunity to spend the night at the University Inn and participate in both fairs if they so desire.

At the USU CEE Career Fair:

- There is no charge to the potential employers.

- A table and chairs are made available to each employer with space to accommodate company displays, advertisements, and handouts

- The student audience is composed exclusively of Civil and Environmental Students,

- Refreshments including dinner are provided free of charge.

For more information please contact the Civil and Environmental Engineering Office at 435-797-2932. Email Katlynne Pitcher [katlynne.pitcher@aggiemail.usu.edu].
The Wasatch Front Branch of the American Society of Civil Engineers, in conjunction with University of Utah, Division of Continuing Education is providing two ½ day seminars. The course(s) will be offered as a full day package or half day single topic, either morning or afternoon session. The full day package will include two breaks and lunch. The half day sessions will include one break each. Each seminar provides 4 professional development hours. The course(s) will be limited to the first 25 paid attendees.

**Date of Training**
April 1, 2009

**Morning Session: 8:00 AM – 12:00 PM**
Effective Writing for Today’s Workplace (See Course Description on Back)

**Afternoon Session: 1:00 PM – 5:00 PM**
Developing Leaders for Tough Economic Times (See Course Description on Back)

**Location:** University of Utah, Division of Continuing Education  
5282 South 300 West, Murray

**Cost**

<table>
<thead>
<tr>
<th></th>
<th>ASCE member</th>
<th>Non-ASCE member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full day</td>
<td>$200.00</td>
<td>$225.00</td>
</tr>
<tr>
<td>½ day</td>
<td>$100.00</td>
<td>$125.00</td>
</tr>
</tbody>
</table>

**Registration and Payment Deadline**
Friday, March 6, 2009

**RSVP Information**
Jim Seale     Erin Donovan  
(801) 931-3316 (801) 824-6478  
James.Seale@glv.com erin.p.donovan@gmail.com
Effective Writing for Today’s Workplace (Morning Session)
This workshop provides strategies for increasing the quality and value of business writing. Learn to convey information for action and change using techniques that make a great deal more sense than the sentence diagrams you suffered through in school. Topics covered include ways of tailoring different forms of business writing to various audiences, business writing guidelines and provides a discussion on different types of business correspondence including letters and emails. The training will cover:

- Reasons for Poor Business Writing
- The Myth
- Getting Started and Focused
- Document Organization
- Business Correspondence (Business Letters and Emails)

The morning session will be instructed by Anne E. O’Brien. Ms. O’Brien’s professional experience centers on managing complex partner relationships for both branded and OEM product lines. Her proven track record in innovative business development, revenue generation programs and launch campaigns created the foundation for her consulting practice, The O’Brien Group, LLC. Anne helped numerous organizations create actionable plans for change and most recently held the position of acting VP of marketing and partnerships for Infopia, Inc., a Utah-based e-commerce software company. She currently holds the position of director of Professional Education at the University of Utah. Anne achieved her Bachelor of Science in Business Administration from Northeastern University, Boston and completed graduate work in business and marketing communications at Emerson College before moving to Utah. She recently completed her Masters in Public Administration at the University of Utah and continues to take numerous professional education courses whenever possible. Anne is an avid believer in continuing one’s education through personal and professional development.

Developing Leaders for Tough Economic Times (Afternoon Session)
In today’s business environment, competitive relevance requires that you foster leadership thinking and behaviors from all your people. Creating environments where those thoughts and behaviors interconnect to accomplish the organization’s mission and goals is key to survival and success. This course teaches the important elements of fostering and developing leadership abilities, individually or in teams. Participants will learn how they and their organizational processes and culture are both helping and hindering the leadership development they want; how to model effective leadership abilities, and how to empower new leaders and still sleep at night. Participants will examine different leadership styles and their relationship to group effectiveness, goal setting, change and innovation. The training will cover:

- The mission
- Creating a vision
- Creating categories
- Naming categories
- Relating categories
- Weighting and finding breakthroughs
- Creating the plan

The afternoon session will be instructed by Dr. Lynn Johnson. Dr. Johnson received his Ph.D. from the University of Utah in counseling psychology. He researched the effects of stress on language and worked in clinical psychology for several years. He organized The Brief Therapy Center in 1984, and made it an internationally known center for research and training in solution-focused treatment. He trained therapists in positive psychology and rapid treatment and coaching techniques from all over the world. He is an adjunct professor at the University of Utah, teaches in the management department, and has also taught at the MBA program at BYU. He has written four books and over thirty articles. He pioneered the use of measurement tools in executive coaching to assure positive outcomes.
The AEG Intermountain Section (AEG) and the Utah Division of Occupational and Professional Licensing (DOPL), Board of Professional Geologists, is proud to announce a one-day course on Utah’s Professional Geologist Licensing Act and what you need to know to safely and legally practice geology in Utah. The information covered in this course is valuable to anyone that practices geology in Utah and is concerned about legal, regulatory, ethical, and enforcement issues. Professional development credits will be available upon request.

Topics
• Geological licensure in Utah and elsewhere
• Ethical issues in the practice of geology
• Enforcement of Utah’s Act
• Panel discussions with regulatory agencies, and governmental
  and private-sector users of geological information that hire geologists
  - what they look for in geologic reports and services
  - what role licensure plays in the practice of environmental, engineering,
    water resources, and economic geology

Learn
What geologic disciplines require a license to practice? When and how do you use your stamp? What liability and responsibility do you and your company/agency incur when you stamp a report? What constitutes inadequate or unlawful practice and how are complaints investigated? What is ASBOG and how does it affect me, my employees, and/or my students? How do regulatory agencies and clients view the practice of geology and licensure? How do we improve the practice of geology in Utah?

Come with your questions and get answers!
Registration Form

Name:

Organization Name:

Email: Phone #:

Mailing address:

List any lunch food restrictions:

Please enclose a check payable to “AEG Intermountain Section.”

For planning purposes please respond by April 15, 2009.

Return to:
AEG Intermountain Section, c/o Bill Loughlin
Loughlin Water Associates, LLC
3100 W. Pinebrook Road, Ste. 1100
Park City, UT
84098
Course: Thanksgiving Point, Lehi Utah
Date: Wednesday, June 17, 2009
Cost: $100 per person or $300 per foursome
Price includes golf, cart rental, and buffet dinner
Time/Schedule: Registration @ 1:00 pm        Shotgun start @ 2:00 pm
Network on the 19th hole @ 6:00 pm
Buffet Dinner 7:00 pm
Dress Code: Must wear shirts with a collar. Shorts should be mid-length or longer, and no denim shorts or pants allowed. Thanksgiving Point Golf Club is an alternative spike facility - metal spikes prohibited.

The tournament will be a four man scramble. Individual golfers may create their own foursomes, or singles will be placed in foursomes by the tournament committee.

All Proceeds benefit the University of Utah AGC and ASCE student chapters

Registration:
Register online at https://umarket.utah.edu/civilmarket/. Select the Golf Tournament link. You can pay using Visa, MasterCard, or American Express or by check made to ASCE Student Chapter. Send printout with information by June 4, 2009 to:

AGC/ASCE Student Chapter, 122 South Central Campus Dr., Salt Lake City, UT 84112

You can also reach this site though our website at www.civil.utah.edu

If you have any questions about registration, hole sponsorship, or raffle donations contact:

Kari Wood @ 801-541-0932 or by email at kari.wood@utah.edu or
Tyson Green @ 801-842-2786 or by email at tysongreen@ymail.com
**University of Utah AGC/ASCE**  
**Golf Classic**

**Early Bird Offer:**  
Two Foursomes w/ hole sponsor: **$700**

**Sponsorship** is an opportunity to promote your company while supporting the U of U AGC and ASCE student chapters, scholarships, education outreach, and community service projects.

<table>
<thead>
<tr>
<th>#Available</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Hole Sponsor – Name published in sponsors list and advertisement at the hole</td>
<td>$250</td>
</tr>
<tr>
<td>2</td>
<td>Closest to the Hole – Name published in sponsors list, advertisement at the tee, name announced during banquet</td>
<td>$250</td>
</tr>
<tr>
<td>2</td>
<td>Longest drive hole sponsor – Name published in sponsors list, advertisement at the tee, name announced during banquet</td>
<td>$250</td>
</tr>
<tr>
<td>4</td>
<td>Drink cart sponsor – Name published in sponsors list, advertisement sign displayed on drink cart</td>
<td>$250</td>
</tr>
<tr>
<td>1</td>
<td>Winner Sponsor – Name announced during awards Ceremony</td>
<td>Call</td>
</tr>
<tr>
<td>Unlimited</td>
<td>Student Foursome Sponsor – Name on sponsors list</td>
<td>$150</td>
</tr>
<tr>
<td>2</td>
<td>Dinner Sponsor – Name published in sponsors list, advertisement sign displayed at the dinner</td>
<td>$250</td>
</tr>
<tr>
<td>Contact</td>
<td>Place sponsor (second, third, most honest…) – Name published in sponsor list, name announced during award ceremony</td>
<td>$250</td>
</tr>
</tbody>
</table>

To take advantage of sponsorship opportunities visit [https://umarket.utah.edu/civilmarket/](https://umarket.utah.edu/civilmarket/).

Tournament Sponsorship is on a first-come, first serve basis.