

the news



Address Service Requested
FIRST CLASS MAIL

FIRST CLASS
POSTAGE PAID
PERMIT NO. 130
CONCORDVILLE
PA 19331

PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS

P. O. Box 58186, Philadelphia, PA 19102-8186

Electronic Message Hotline: 1-800-461-4190 (24 hours a day)

Web site: <http://www.asce-philly.org>

National ASCE Central Number 1-800-548-ASCE • Toll Free

The Sidney Robin Memorial Newsletter of the Philadelphia Section ASCE

Vol. 76-6

Our 90th Year

April/May 2004

APRIL JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers,
Women's Transportation Seminar, Philadelphia, PA and
Institute of Transportation Engineers, Mid-Atlantic Section

WEDNESDAY, APRIL 14, 2004

THE UNION LEAGUE • 140 South Broad Street, Center City Philadelphia
Cocktails – 5:30 p.m. • Dinner – 6:30 p.m. • Meeting – 7:30 p.m.

SUBJECT: Transportation Legislation and Funding: An Update for 2004

**SPEAKER: The Honorable Richard A. Geist, House of Representatives, Majority Chairman,
House Transportation Committee**

SPECIAL FEATURE: PAST PRESIDENTS NIGHT. Past Section Presidents will be honored as guests of the Section.

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, APRIL 9, 2004. Please send your check for the number of attendees @ \$30.00 per member or guest, \$15.00 per ASCE Student Members, payable to the Phila. Section, ASCE, P.O. Box 58186, Phila., PA 19102-8186; or call the Electronic Message Center: 1-800-461-4190 (Open 24 hours/day) or e-mail the Section at info@asce-philly.org.



Rep. Richard A. Geist
R-79th Blair County

As the 2003-2004 legislative session of the Pennsylvania General Assembly begins, **Rick Geist** marks his 25th year as a member of the House of Representatives. Geist is now in his fifth term serving as Majority Chairman of the House Transportation Committee, which makes him the longest-serving Majority Transportation Chairman in House history. He has been a member of the House Transportation Committee since entering the House in 1979.

Under Geist's Chairmanship, the 2001-2002 legislative session was the most productive session for transportation legislation since the state Vehicle Code was re-codified in 1976.

As an avid cyclist and the driving force behind the annual Tour de 'Toona international cycling event, Geist received the 2001 Dr. Paul Dudley White Award from the League of American Bicyclists. He also received the 1995 State Legislator of the Year award, and the 1996 Best Friend in Public Office award by *Bicycling Magazine*, in recognition of his long-standing promotion and advocacy of cycling.

TECHNICAL GROUP ACTIVITIES

**Engineering Management Group
Joint Meeting with the Structural Group**

SUBJECT: Management Challenges Surrounding the American Parkway Bridge Project

SPEAKER: George Horas, P.E., Structural Department Manager, HNTB Corporation

DATE: Wednesday, April 14, 2004
12:00 Noon to 1:30 PM

LOCATION: Municipal Services Building, 16th Floor, Conference Room E, 15th & JFK Blvd., Philadelphia, PA

PRICE: \$10; Students \$5 (Includes buffet lunch)

The American Parkway project consists of an almost one-mile long extension of a four lane, limited access urban arterial through the northeastern part of the City of Allentown, PA. Included are fully functional interchanges on either side of the Lehigh River and a desired distinctive river crossing. The interchanges are required to accommodate all movements while being significantly constrained by the presence of environmental obstacles. The project is being designed by a diverse team, assembled to provide expertise in a number of areas. The estimated construction cost of the project is in excess of \$70 million. When completed, it will have a dramatic impact on the regional mobility of the Lehigh Valley.

Reservations are required and seating is limited to 50 persons. Please contact **Dennis Mac Bride** at (215) 580-3404 or **Bill Mulloy** at (215) 656-6583.

Delaware Valley Geolnstitute (DVGI) – Dinner Meeting

**DATE: April 20, 2004 – 5:30PM cocktails,
6:30PM dinner; \$30**

**LOCATION: Wyndham Valley Forge Hotel,
Route 202 and Chesterbrook Blvd., Valley Forge**

**SUBJECT: Revolutions in Drilling: New Ways
to Build a Caisson**

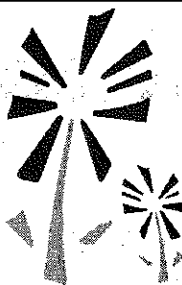
SPEAKER: Mike Pilkington, PKF Mark III, Inc.
Drilled shaft foundations have been around for a long time. We are all familiar with the large auger

(Continued on Page 7)

ENJOY YOUR SUMMER...

The officers and Board of Directors of the ASCE, Philadelphia Section, along with the staff of THE NEWS, extend our wishes to you for a fruitful and enjoyable spring and summer.

As we go off to our well-deserved several months' off and summer hibernation, the staff of THE NEWS will obviously spend our copious free time in the pursuit of methods which will ensure even better quality in the future (e.g., we will learn that January only occurs once a year). So, until September or October, whichever comes first, enjoy!





THE PRESIDENT'S MESSAGE

Dear ASCE Friends,
 It is hard to believe I have already come to the end of my presidency. When I first took office last May, I remember everyone telling me this year would fly by... and so it has. As I reflect on the past year, what strikes me most is that it has been a year of change. These changes have occurred for me on both personal and professional levels. They have also occurred within our Section. We have lost two of our longstanding friends and board members in Sid Robin and

Walt DeLury. We also had to remove our mural from I-76 due to damage and weathering it had sustained. Despite these losses, we also had many positive changes and achievements.

Under the supervision of Carol Martsof, we updated and expanded our local website: www.asce-philly.org to make it more user-friendly and informative. We partnered with the Philadelphia International Airport to show a photo exhibit highlighting Civil Engineering Landmarks in and around the Philadelphia area as part of the Airport's Exhibitions Program. Drexel University hosted the 16th Annual Philadelphia area as part of the Airport's Exhibitions Program. Drexel University hosted the 16th Annual National Concrete Canoe Competition last summer and will also host an Order of the Engineer award ceremony with ASCE National President, Patricia Galloway, on June 11, 2004. We continued to nominate projects for ASCE National Historic Landmarks (Philadelphia City Hall and the Walnut Lane Bridge nominations are pending). We sponsored a scholarship in conjunction with the Delaware Valley Engineers Week Council. And our own Bob Wright has done an outstanding job as the interim editor of 'THE NEWS' which was dedicated to the various outreach activities which our Section, ASCE. All of these were in addition to the various outreach activities which our Section conducts or participates in each year — such as Engineers Week, Future Cities Competition, Delaware Valley Science Fair, Elementary School Build-a-Thons and other Public Service projects.

These various events as well as our regular dinner and technical group meetings do not just happen on their own. They are organized and supported by our dedicated board members and committees who take the time out of their busy schedules to make a difference by promoting our profession and increasing public awareness of Civil Engineering. For all of that, I have to offer my heartfelt thanks and gratitude to the Section Board, our Technical Group Chairpersons, our Younger Member Forum and all of the other members who make the choice to contribute. It is the combined effort of all these individuals that truly makes our Section great! In addition, I have to acknowledge all of our sponsors who support our activities and also, the area universities who work with us to bring the benefits of ASCE to the next generation of Engineers. In particular, I offer a personal note of thanks to Bob Wright for his insight and his help in keeping me in line and somewhat on schedule. I truly appreciate it.

In closing, I ask you all to remember — This is our Section! It thrives on our energy and participation. Get involved in the activities that promote our profession. Join a committee. Attend a meeting (and bring a colleague). Mentor a student. Support Engineering in your community by joining a neighborhood committee or participating in career day activities at your local school. These are small things we can all do to advance our profession. Help shape the future of Civil Engineering in our community and our country.

It has been my privilege to serve as the President of the Philadelphia Section, ASCE. I look forward to another new year filled with great expectations under the leadership of Brian Stover. I hope you all will join me in supporting Brian and the incoming officers of the Philadelphia Section, ASCE.

Sincerely,
 Allan F. Moore, Jr., P.E.
 President, Philadelphia Section, ASCE

SECTION WEB SITE!

Our Section's web site has taken on a new look! Check us out at www.asce-philly.org. Make sure you bookmark this site to check on our latest meetings and events, links and much more! Comments and/or suggestions? Please contact us either via our Electronic Message Hotline at 1-800-461-4190 (24 hours a day) or e-mail at info@asce-philly.org.

**PHILA. SECTION, ASCE
 OFFICERS 2003-2004**

PRESIDENT
 Allan F. Moore, Jr.

PRESIDENT-ELECT
 Brian A. Stover

VICE PRESIDENT
 Christopher J. Menna

SECRETARY
 John W. Stone

TREASURER
 David C. Hanly

MEMBERSHIP SECRETARY
 Thomas W. Brady

ASSISTANT SECRETARY
 Alyson R. Lester

ASSISTANT TREASURER
 Mark N. Washington

DIRECTORS

Frank Falcone Patricia M. Gallagher
 Carol C. Martsof Michael D. Petner
 Karen Anne Ribley Christopher W. Wright
 Gerald Donnelly (Reading Branch)

PAST PRESIDENTS

Thomas J. Branigan
 Chris L. Rood
 Ruben D. David

President - Allan F. Moore, Jr.
 City of Philadelphia
 Division of Aviation
 Philadelphia International Airport
 Terminal E
 Philadelphia, PA 19153
 (215) 937-6942
 Email: allan.moore@phl.org

Secretary - John W. Stone
 Deloitte and Touche,
 Construction Consulting Services
 1700 Market Street, 22nd Floor
 Philadelphia, PA 19103-3984
 (215) 299-4530; Fax (215) 405-3157
 Email: jostone@deloitte.com

PUBLICATIONS COMMITTEE
Interim Editor of THE NEWS
 Robert Wright
Staff Writers
 James Markham Joe Syrnick

SEND COPY TO:
 ASCE News
 P.O. Box 58186, Philadelphia, PA 19102-8186

**2004 SECTION AWARDS TO BE
 PRESENTED AT SPRING SOCIAL**

Section Awards for the year 2004 will be presented to this year's recipients at the Annual Spring Social and Dinner Dance (particulars on the Social are given elsewhere in THE NEWS). The Section Award recipients are:

- John McElroy, Langan Engineering - Philadelphia Civil Engineer of the Year
- Michael McAtee, Urban Engineers - Philadelphia Young Engineer of the Year
- George Koerner, Geosynthetic Research Institute - Geotechnical Engineer of the Year
- Gerald Donnelly, STV Engineers - Engineering Manager of the Year
- Walter Sawruk, ABSG Consulting - Structural Engineer of the Year

- Faruq Siddiqui, Swarthmore College - Educator of the Year

We hope you will join us at the Social to honor our Awardees for this year.

In the fall, THE NEWS will feature more information on the awardees as well as a synopsis of the Social's events.

Baker
 Engineering & Energy

Eric D. Frary, P.E.
 Regional Manager

ChallengeUs.

Michael Baker Jr., Inc.
 A Unit of Michael Baker Corporation
 1818 Market Street, Suite 3005
 Philadelphia, Pennsylvania 19103
 215-568-0539
 Cell 215-327-0564
 Fax 215-568-1349
efrary@mbakercorp.com

**COPY DEADLINE FOR
 SUMMER 2004 ISSUE
 JULY 18, 2004**

**THE MOORE PRESIDENCY —
DECISIVE, RESPONSIVE, ENER-
GETIC — EVERYTHING WE
HOPED FOR, AND “MOORE”**

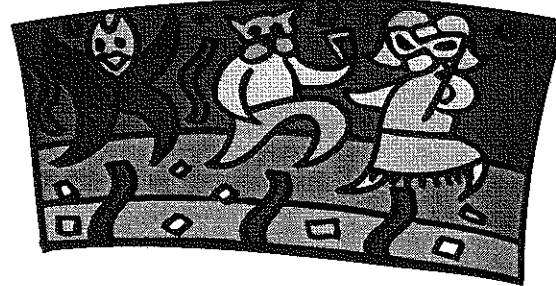
Editor's Note — One of the first things I thought about when I took this job late last summer was that I'd have to write the usual send-off for the outgoing President when the time came. I didn't think it would be all that hard. Following the methods used by our dear departed Editor, I would carefully follow the actions of the President throughout the year, highlight his accomplishments, and pull out the ol' thesaurus so I could use a bunch of big words that few engineers would understand. I did everything but the last part — at least I'll try to use words that I can spell without the aid of reference books or computer checkers. So here goes...

“President Moore”...has a nice ring to it, doesn't it? We all want more, and we got it — for the past year, **Allan Moore** has served the ASCE, Philadelphia Section well as our President. Not surprisingly, he's done a commendable job. Also not surprisingly, just like many of his predecessors, as soon as he's gotten into the swing of things, and he's reaching his maximum potential, his term runs out!

Allan started the Section year just as most Section Presidents have — the gavel was handed to him at the Spring Social, he got a handshake from the outgoing President and applause and well wishes from his “loyal subjects”, and he was in charge. After two years of waiting in the proverbial wings, as Vice President and President Elect, he was going to get his chance to sit in the pilot's seat. [Editor's Note — this is only one of a number of puns which will be put to use in this article, so fasten your seat belts and prepare for takeoff!]

When he was sworn in last May, Allan was assuming the role left by the previous Section President, **Ruben David**. As many of you know,

(Continued on Page 5)



**Mardi Gras in May
THE BASH IN THE BAYOU**

Phila. Section ASCE Annual Spring Social Dinner Dance

FRIDAY, MAY 7, 2004

Sugarloaf Conference Center

9230 Germantown Avenue, Chestnut Hill, Philadelphia, PA

6:00 pm Cocktails & Hors d'Oeuvres (Cash Bar)

7:00 pm Dinner • \$40.00 per person

**Music for your listening &
dancing pleasure til Midnight**

For reservations and information, visit <http://www.asce-philly.org>

For Reservations, Please Complete This Form and Return

Name/Company Reservation is to be held under:

Address _____

Phone: _____

Please reserve _____ seats @ \$40.00 per person

Total Amount: \$ _____

Tables(s) of ten can be reserved for your party or company.

Make checks payable to “Phila. Section ASCE Spring Social 2004”

Mail check & reservation to: Phila. Section, ASCE

P.O. Box 58186 • Philadelphia, PA 19102-8186



engineers architects planners construction managers

Transportation
Buildings & Facilities
Environmental Studies & Design
Industrial & Defense Systems
Construction Services

STV Incorporated
Philadelphia: 215/832-3500
Douglassville: 610/385-8200

www.stvinc.com
info@stvinc.com

VOLLMER ASSOCIATES LLP

Engineers
Architects
Landscape Architects
Surveyors
Planners

Civil Engineering
Structural Engineering
Landscape Architecture
Transportation Engineering
Architecture and Planning
Survey and Photogrammetry
Environmental Engineering
Municipal Engineering
Construction Services

www.vollmer.com

Aston, PA: 610.494.3636 • Philadelphia, PA: 215.954.6327 • Kennett, PA: 610.444.6522

ANG ASSOCIATES, INC.
Consulting Engineers/Construction Managers

Design and Construction Services for:
Public and Private Facilities; Transportation;
Institutional; Educational; Industrial;
Commercial and Residential Projects

Penn Treaty Park Place Bldg. Tel: (215) 427-8700
1341 N. Delaware Ave., Suite 500 Fax: (215) 427-8710

a mentor/protégé partner of CSA Group
www.csagroup.com

GEO INSTITUTE

DELAWARE VALLEY GEO-INSTITUTE

Allen W. Cadden, PE
Chair
scadden@schabel-eng.com

Philip E. Gouffreaux, PE
Treasurer
pgouffreaux@dtbcconsultants.com

Michael Carnivale, PE
Vice Chair
michael.s.carnivale@usace.army.mil

Yongli Min, PE
Secretary
yongli_min@urscorp.com

At-Large Board Members
Joseph Wattman, PhD, PE
joseph.wattman@drzel.edu

Aza G. Moustafian, PE
amoustafian@gnl.com

William K. Petersen, PE
bill_petersen@urscorp.com

Ted Thomson, PhD, PE
tthomson@daffnet.com

ASCE Philadelphia Section Members
Are you interested in receiving the DVGI monthly newsletter? Add your name to our email list by sending your email address to Mr. Yongli Min, PE @ yongli_min@urscorp.com and you will begin receiving our newsletter!

HNTB ARCHITECTS ENGINEERS PLANNERS

Bridge Design
Transportation Planning
Highway Design
Aviation Planning & Engineering
Rail/Public Transportation
Construction Services
Urban Planning & Design
Architecture

8 Penn Center, 7th Floor
1628 John F. Kennedy Blvd.
Philadelphia, PA 19103
ph 215-568-6500
www.hntb.com

Peirce Engineering, Inc.
Civil - Construction Engineering

John J. Peirce, P.E. & Jennifer L. Peirce, P.E.

3736 Stoughton Road, Collegeville, PA 19426
Phone: (610) 489-1163 Fax: (610) 454-7741
Email: PeirceEngr@aol.com

YOUNGER MEMBER FORUM NEWS

by Asha Maliakal
Forum Editor

Michael McAtee, PE
2003-2004 President

Urban Engineers, Inc.
530 Walnut Street, 14th Floor
Philadelphia, PA 19106
(215) 922-8081
mjmcatee@urbanengineers.com

The Younger Member Forum (YMF) membership includes college students, recent graduates and young engineers, including Registered Professional Engineers, who are 35 years of age or younger. The objectives of the group are: 1) to provide networking opportunities, 2) to interact with schools and the general public to promote civil engineering and 3) to enhance career development.

Young engineers or college students who would like to become part of the YMF and be added to the announcement list should contact **James Markham** of Pennoni Associates, at secretary@ymfphilly.com or at (215) 222-3000. *There are no fees to join!*

Recent Accomplishments

April 24, 2004 will mean football for the 40 YMF members who attended the Philadelphia Soul game versus the New York Dragons down at the Wachovia Center. Philadelphia's newest sports team is causing quite a stir and attendees will be treated to great seats and an exciting game. A prize will be awarded to anyone seeing **Bon Jovi** in the stands (an autograph will be needed for verification!). Thanks to **Kevin Aach** for organizing the event.

On **April 22, 2004**, the YMF and the Structural Group will hold a joint meeting in the Municipal Services Building. The guest speaker, **Allen Roth, P.E.**, Vice President of Joseph B. Callaghan, Inc., will cover a Forensic Engineering Case Study — World Trade Center Area. As the structural consultants for 90 West Street, an office building in close proximity to the World Trade Center Towers, Roth discussed how his firm investigated the structural integrity of the building following the events of September 11, 2001. The building, designed in 1907, suffered tremendous localized fire and impact damage, yet remained structurally sound. Thanks to **Jeremy Colello** of the YMF and **Ali Khan** of the Structural Group for organizing this meeting.

On **April 3, 2004**, some of the more athletic YMF members joined **Chris Menna** as he led a group on a bicycle excursion through Wissahickon Park. The group traveled from the Tree House along Lincoln Drive and the Forbidden Drive to Historic Rittenhousettown and back; a 15 mile round trip. At the end of the trip, the group enjoyed a picnic at the Treehouse hosted by ECP. The Friends of the Wissahickon were also invited to the picnic, giving the YMF participants a chance to learn more about the park, one of Philadelphia's greatest treasures. Thanks to **Chris** for organizing this event!

Seven YMF board members and two ASCE officers spent the weekend of **March 6 and 7,**

2004 at ASCE's Northeast Regional Young Member Council Meeting (NERCYM) in New York City. Participants attended speaker sessions and activities focused on strengthening and expanding the program and activities of ASCE's younger member groups. The participants look forward to putting all they learned to work to improve our YMF section. Thanks to all who attended.

Upcoming Events

Phillies Outing: The YMF will visit the brand new **Citizens Bank Park** to watch the Phillies take on the LA Dodgers on **May 20, 2004!** Don't miss out on this opportunity to catch MLB action from these great seats! Tickets are only \$16 each! Seating is limited, so RSVP early to secure your seat before they're all gone! For further information, or to RSVP, please contact **Sean Skierski** at (215) 864.0640 or sskierski@Langan.com.

Waterworks Tour: Watch your inbox for emails on an upcoming tour of the Philadelphia Waterworks. This newly rehabilitated historic landmark has only recently opened to the public. Be one of the first to get a behind the scenes look at this notable attraction.

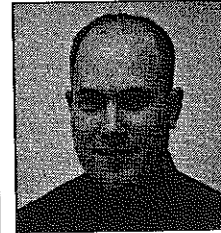
Announcements

College Outreach... The YMF is looking for volunteers to participate in discussion sessions with Civil Engineering students at local colleges. No preparation is required! Using personal experience, volunteers will help inform students of what to expect after graduation and will respond to questions and concerns from students. If you would like to volunteer as a speaker, please contact **Joe Platt** at JPlatt@trafficpd.com or (610) 326-3100.

YMF tee-shirts are now on sale! Last year we sold out of our ever popular YMF tee-shirts and had to order a batch of new ones to satisfy our fashion-hungry younger members. This year's designer YMF tee-shirt "line" includes the classic grey tee (\$9), a retro grey/navy ringer tee (\$10) and a sporty grey/navy baseball tee (\$12) — all with the coveted YMF logo. Shirts are available in sizes Medium through 2XXL. Get one while supplies last! To place your order, contact **Alyson Lester** at arlester@urbanengineers.com; (215) 922-8081 x1445. Thanks to our sponsors: **DMJM+Harris, McCormick, Taylor & Associates, McMahon Associates, Michael Baker, Jr., Parsons Brinckerhoff, Pennoni & Associates, St. Lawrence Cement, Traffic Planning and Design, Urban Engineers, URS Corporation, and Vollmer Associates.** Tee-shirt sales will fund YMF Awards for members who publish articles in engineering publications.

Attention PE Candidates! Are you preparing for the PE exam? Visit the new YMF Website to

take a look at the YMF's "PE Exam Study Guide": <http://www.asce-philly.org/ymf/articles.htm>. While you are there, check out the rest of the YMF website as it goes through construction.



Member Spotlight
Jeffrey Birks, EIT is a Civil Engineer with DMJM+HARRIS in Philadelphia. Jeffrey has been with DMJM+HARRIS since starting his career in July 2001. Several of his recent projects, including the

realignment of S.R. 0061 in Shamokin Pennsylvania, a clearance improvement project along the Trenton Line Subdivision for CSX Transportation, and a preventive maintenance projects for I-95 and I-476, have concentrated his work in highway and railroad infrastructure design.

Jeffrey is a 2001 graduate of Drexel University, where he earned a Bachelors of Science in Civil Engineering. Since graduation Jeffrey has continued at Drexel in pursuit of a Masters degree in geotechnical engineering. If all goes as planned, he anticipates completing his degree in the spring of 2005.

Jeffrey has been involved with ASCE ever since participating in the concrete canoe competition with the Drexel University team. Upon completion of his undergraduate degree, Jeffrey became more involved in the South Jersey YMF where he held his first position as treasurer. Currently, he serves as the vice president of the South Jersey YMF and will be taking over the responsibility of president in the upcoming year. As YMF president, Jeffrey hopes to increase younger member attendance at activities, as well as provide opportunities for younger members to give back to the local community through events such as Habitat for Humanity. In addition to being involved with the YMF, Jeffrey also attends South Jersey ASCE branch events, as well as American Society of Highway Engineers (ASHE) meetings.

Outside of work, Jeffrey enjoys fishing and spending time outdoors. Indoors, he participates in a local dart league. Jeffrey recently got engaged and is looking forward to his wedding this coming October. Congratulations Jeffrey!



DREXEL UNIVERSITY	
Civil, Architectural & Environmental Engineering	
Part-Time and Full-Time Graduate Study	
Structural Engineering	Geosynthetics
Geotechnical Engineering	Infrastructure Systems
Architectural Engineering	Hydraulics, Hydrology & Water Resources
Environmental Engineering	
Dr. Charles Haas Head, Civil, Architectural & Environmental Engineering haascn@drexel.edu	Dr. Michael Piasecki Graduate Advisor (215) 895-1721 michael.piasecki@drexel.edu

New York Pennsylvania	New Jersey Florida	Michigan Ohio
1617 JFK Blvd, Suite 1700 Philadelphia, PA 19103		
215.972.7640 (phone)		
215.972.6989 (fax)		
www.bergmannpc.com		

2004 Philadelphia Section ASCE – Salary and Benefits Survey

The Philadelphia Section, ASCE, is conducting its bi-annual Salary and Benefits Survey and is asking for your help so that we can better serve you. The Survey helps you gauge your career achievements among your peers and identifies trends that directly affect you and your future. It requires only about 10 minutes of your time to complete the enclosed questionnaire. Help yourself achieve your career goals and enhance the profession's image. Please complete this questionnaire, fold so that the return address is on the outside, tape and return by May 31, 2004. If you prefer, you can respond via e-mail. When the Section e-mails this survey to you, return your completed survey to dmmacbride@aol.com. The results will be published in the first issue of THE NEWS in the Fall. *Thank you!*

A. PERSONAL DATA

1. Age _____
2. Years of full-time employment _____
3. Race
 - a Caucasian
 - b African American
 - c Hispanic
 - d Asiatic
 - e Other _____
4. Sex
 - Male Female
5. Marital Status
 - a Single
 - b Married
 - c Divorced
 - d Widowed
 - e # of children, if any _____
6. Education (Check highest level)
 - a No Degree
 - b Bachelor's Degree
 - c B.S. Degree+15 hours
 - d Master's Degree
 - e Doctorate Degree
7. ASCE Membership Grade/# of Yrs.
 - a Student
 - b Associate
 - c Member
 - d Fellow
 - e Life
8. Registration, if any
yes (# of states) # of Years
 - a EIT
 - b PE
 - c LS
9. Other Membership
Indicate the number of Professional/Technical Organizations other than ASCE of which you are a dues-paying member (i.e.: NSPE, ACI, etc.) _____

B. EMPLOYMENT DATA

1. Income source
 - a Self-employed
 - b Salaried
 - c Commissioned
 - d Retired
 - e Unemployed
 - f Student

2. Type employer (Check one)
 - a Consultant
 - b Contractor/Builder
 - c Federal Gov.
 - d State Gov.
 - e Municipal, Local or Regional Gov. or Auth.
 - f Utility (Private & Public)
 - g Education
 - h Sales
 - i Other (explain) _____
3. Number of Employees in organization _____
4. Primary Responsibility (Check one)
 - a Technical
 - b Sales
 - c anagement
 - d Administrative
 - e Other (explain) _____
5. Do you supervise other people?
 - Yes No
6. Number of different employers since graduation (including current) _____
7. Do you have a second job?
 - a Yes b No
8. Years with current employer _____
9. Primary County of Employment/ Residence (Check one)

	Work Pennsylvania	Home
<input type="checkbox"/> a Bucks		<input type="checkbox"/>
<input type="checkbox"/> b Chester		<input type="checkbox"/>
<input type="checkbox"/> c Delaware		<input type="checkbox"/>
<input type="checkbox"/> d Montgomery		<input type="checkbox"/>
<input type="checkbox"/> e Philadelphia		<input type="checkbox"/>
	Work New Jersey	Home
<input type="checkbox"/> f Burlington		<input type="checkbox"/>
<input type="checkbox"/> g Camden		<input type="checkbox"/>
<input type="checkbox"/> h Gloucester		<input type="checkbox"/>
<input type="checkbox"/> i Other (Identify _____/_____) _____		
10. Method of Commuting (Check one)
 - a Drive
 - b Mass Transit
 - c Car Pool
 - d Walk
 - e Drive and Mass Transit
 - f Other (Identify _____)
11. Approximate commuting time, minutes (one way _____)

C. SALARY AND BENEFITS

1. Salary (include normal overtime) \$_____ per yr.
2. If bonus or commissions are paid in addition to above salary, indicate expected amount per year _____
3. Overtime Renumeration
 - a None
 - b Time (Compensatory)
 - c Paid @ regular pay rate
 - d Paid at time&a half rate
 - e Double Time
4. Average number of hours worked per week _____
5. Vacation (incl. Admin. Leave, Personal Days, etc.) _____ days
6. Holidays _____ days
7. Sick Leave (number of days per year at full salary) _____ days
8. Insurance (Company Paid)

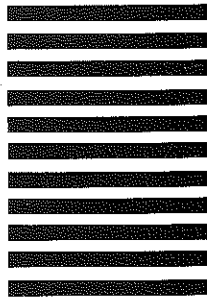
For "a" thru "h" fill in:

 1. 100% company paid
 2. Partially company paid
 3. Available, employee pays all
 4. Not available
 - a Hospitalization _____
 - b Major Medical _____
 - c Dental _____
 - d Optical _____
 - e Disability _____
 - f Life _____
 - g Legal Fees _____
 - h Child Care _____
9. Pension Plan Yes No
10. Profit Sharing
 - Yes No Not applicable
11. 401(k) or equivalent
 - Yes No
12. Formal severance pay policy
 - Yes No
13. Contributing Education tuition reimbursement
 - Yes No
 If yes, maximum % _____

(OVER)



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
FIRST-CLASS MAIL Permit No. 97 ATCO NJ

POSTAGE WILL BE PAID BY ADDRESSEE

DENNIS M. MACBRIDE
168 BEACH DRIVE
ATCO, NJ 08004-9907



D. OPINIONS

- | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|-------|--------|---|--------------------------|--------------------------|---|--------------------------|--------------------------|--|--------------------------|--------------------------|--|--------------------------|--------------------------|---|--------------------------|--------------------------|
| <p>1. Are you satisfied with your current employment situation?</p> <p><input type="checkbox"/> a Unsatisfied</p> <p><input type="checkbox"/> b Somewhat unsatisfied</p> <p><input type="checkbox"/> c Satisfied</p> <p><input type="checkbox"/> d Most satisfied</p> <p><input type="checkbox"/> e Very satisfied</p> <p>2. Do you believe that, in your current employment situation, you are performing true engineering work.</p> <p><input type="checkbox"/> a Yes</p> <p><input type="checkbox"/> b No, primarily administration, supervisory, business, promotion, etc.</p> <p><input type="checkbox"/> c No, primarily technician/draftsperson</p> <p><input type="checkbox"/> d No, other functions</p> <p>3. Do you believe that your work is properly reviewed?</p> <p><input type="checkbox"/> a Yes</p> <p><input type="checkbox"/> b Yes, but could be better</p> <p><input type="checkbox"/> c No</p> <p><input type="checkbox"/> d Not applicable</p> <p>4. Do you think you will be looking for a new job within the next 2 years?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, why?</p> <p><input type="checkbox"/> a Salary</p> <p><input type="checkbox"/> b Boss</p> <p><input type="checkbox"/> c Lack of responsibility</p> <p><input type="checkbox"/> d Other (Explain)</p> <p>_____</p> | <p>5. If you were looking for a new job, what would be your most critical concern? Rank 1, 2, 3, etc.</p> <p><input type="checkbox"/> a Pay and benefits</p> <p><input type="checkbox"/> b Company reputation</p> <p><input type="checkbox"/> c Responsibility</p> <p><input type="checkbox"/> d Security</p> <p><input type="checkbox"/> e Location</p> <p><input type="checkbox"/> f Amount of travel</p> <p><input type="checkbox"/> g Type of work</p> <p><input type="checkbox"/> h Other (explain) _____</p> <p>6. How easy do you believe it would be for you to find a new job?</p> <p><input type="checkbox"/> a Very easy</p> <p><input type="checkbox"/> b Easy</p> <p><input type="checkbox"/> c Somewhat difficult</p> <p><input type="checkbox"/> d Difficult</p> <p>7. Do you believe your salary, considering your experience and ability, compared to other Civil Engineers, is:</p> <p><input type="checkbox"/> much lower</p> <p><input type="checkbox"/> lower</p> <p><input type="checkbox"/> similar</p> <p><input type="checkbox"/> higher</p> <p><input type="checkbox"/> much higher</p> <p>8. Do you believe your fringe benefits, compared to other Civil Engineers, are:</p> <p><input type="checkbox"/> much lower</p> <p><input type="checkbox"/> lower</p> <p><input type="checkbox"/> similar</p> <p><input type="checkbox"/> higher</p> <p><input type="checkbox"/> much higher</p> | <p>9. Is your professional physical environment (office appearance, privacy, secretarial support, etc.) important to you?</p> <p><input type="checkbox"/> a Yes <input type="checkbox"/> b No</p> <p>10. Are you satisfied with your professional physical environment?</p> <p><input type="checkbox"/> a Yes <input type="checkbox"/> b No</p> <p>11. Do you agree or disagree with the following statements?</p> <table border="0"> <tr> <td></td> <td style="text-align: center;">Agree</td> <td style="text-align: center;">Disag.</td> </tr> <tr> <td>a. Registration should be required for all Engineers as a condition of continued employment</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>b. Continuing Education should be required to maintain registration</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>c. Consulting work should not be competitively bid</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>d. Advertising, by engineers, that is not self-laudatory is acceptable</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>e. There is currently a shortage in the number of Civil Engineering Graduates</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> <p>12. If you had a second chance would you still become a Civil Engineer?</p> <p><input type="checkbox"/> a Yes <input type="checkbox"/> b No</p> <p>Why? _____</p> | | Agree | Disag. | a. Registration should be required for all Engineers as a condition of continued employment | <input type="checkbox"/> | <input type="checkbox"/> | b. Continuing Education should be required to maintain registration | <input type="checkbox"/> | <input type="checkbox"/> | c. Consulting work should not be competitively bid | <input type="checkbox"/> | <input type="checkbox"/> | d. Advertising, by engineers, that is not self-laudatory is acceptable | <input type="checkbox"/> | <input type="checkbox"/> | e. There is currently a shortage in the number of Civil Engineering Graduates | <input type="checkbox"/> | <input type="checkbox"/> |
| | Agree | Disag. | | | | | | | | | | | | | | | | | | |
| a. Registration should be required for all Engineers as a condition of continued employment | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| b. Continuing Education should be required to maintain registration | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| c. Consulting work should not be competitively bid | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| d. Advertising, by engineers, that is not self-laudatory is acceptable | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| e. There is currently a shortage in the number of Civil Engineering Graduates | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |

Additional comments and suggestions for future questions: _____

The Moore Presidency

(Continued from Page 3)

Ruben has a lot of big ideas, a whole host of friends in various places, and the energy of a 5-year-old. Even though Allan is closer to that age than Ruben is, Allan had his work cut out for him. Fortunately, Allan was certainly well-equipped to handle the task of Section President.

Not far into his year, Allan had to deal with an urgent and unfortunate situation with the unexpected loss of the Editor of THE NEWS, Sid Robin, in August. In his handling of this reality that had to be addressed, Allan ably and confidently navigated the Section Board through this crisis. Just over a month later, we learned of the sudden demise of Section Vice President Walt DeLury. Once again, Allan was tested, and, once again, he responded. If the Board learned nothing else in the first four months of his presidency, it found that Allan could deal with pressure! Where many would not be able to deal with the mounting problems, he came to the forefront and took charge. And this is no surprise, since we know Allan is a can-do kind of guy.

Allan was able to lead a body that, while it is always helpful, can be cantankerous in several issues. He's always open to suggestions, no matter how wacky they may be (our Board can be very creative sometimes!). He can keep things on the proverbial radar screen and safely guide issues through their final approaches to successful landings. (OK, enough airport puns!!)

Allan's friendly manner and fair treatment of everyone ensured that issues were addressed and all opinions were heard. You find that he's very easy to approach and, at the same time, he is a sparkplug who quietly and purposely gets things done.

None of this comes as any surprise to your Interim Editor. I first met Allan when he was a young and impressionable Drexel student who had just accepted a co-op position in our Highway Design Unit in 1985. Allan struck me as a very busy guy. He explained that this was perhaps his third or fourth job, not one after another, but simultaneously. He valet-parked cars, delivered piz-

zas, worked at a catering hall, and then he usually started his day with us. And you'd think he'd be tuckered out by the time we saw him, but he was full of energy, just like a puppy - rarin' to go.

You had to like him. He was affable, pleasant, hard working, and never too busy to chat. He's a South Philly kid - need anything more be said? (I'm tempted to use that South Philly term I am sometimes accused of overusing - fuggedaboutit - but I won't apply it this time.) You could overlook the fact that he chose to leave the neighborhood to attend Central High (and this author overlooked his choice of colleges!). But what a guy!

In 1986, he returned for a second co-op assignment with us, and we thought we had a "keeper", since he liked what we did. During his third co-op, at Philadelphia International Airport, however, Allan found what he enjoyed even more than highway design - airport stuff.

After his graduation from Drexel in 1988, Allan sort of disappeared. When we saw him next, he had gone to work for a local consultant. Soon after, he showed up at the Airport. This author got the chance to work with him again, and, not surprisingly, it was a good experience. And then he was getting involved in the Section. (Ah, the brainwashing, subtle hints and subliminal messages were finally kicking in!)

As a result, we got to see him more. As busy as he was, moving critical Airport projects to reality (except the infamous "Can Not Go" effort (and I don't think CNG stands for that, but Allan made it work!)), he found time to show up at the occasional (!) golf outing and join us as we raided and pillaged whatever local establishment happened to be hosting the affair (and we do mean raided and pillaged - if you've seen us golf, you know this is true! Ask Allan about his monster chip onto the patio deck at Woodcrest a couple of years ago!).

Allan started to rise through the Section ranks, after becoming active in the Younger Member Forum, and we know most of the rest of the story. And, a little suddenly, during his term as President, we learned that Allan had left the Airport. He took off for a stint with a local consultant. And almost just as suddenly he landed back at the Air-

port. But he didn't miss a beat.

On the personal side, the Moore family includes Allan's wife, Kim, another civil engineer (and a Drexel grad, whom Allan met at the Airport) and their 2-year-old son Nicholas. Will little Nicholas have a chance to be anything but a civil engineer when he grows up? (We have a feeling that he has already been exposed to the field, but time will tell...) While Allan says he's not influencing anything here, he secretly hopes that if Nicholas does choose engineering as a career, he does NOT go into electrical or mechanical!

Allan still finds time to follow auto racing, one of his hobbies. So if there is ever a NASCAR event on one of the Airport runways, you may know who had something to do with this!

With all of his other copious (?) free time already being spent on Section business, it isn't unusual to get e-mails from him time-stamped 2 AM. We can't tell whether he sets his clock to fool us or if he really is burning the midnight oil. Knowing Allan's ability to burn the candle at both ends and in the middle, we suspect the latter.

One thing that Allan and this author had much "back and forth" on over the past year was the dreaded President's Messages. Allan produced good ones each month, but I had to prod him a bit for these sometimes. Admittedly, with his family and occupational obligations, one would wonder when he would find time to do these at all. As he told me once, during the lulls in some snow removal operations at the Airport, which he directed, he would assemble some thoughts and then put them in writing in the wee hours at his computer. A bit of déjà vu occurred to this author - during my own Section Presidency 10 years ago, I had to write these and get them to Sid. Sid's usual reply was that mine were lengthy and had too many quotation marks. So I have a couple at the ready in case Allan couldn't find time to do. With a little prodding (or sometimes a little more than a little), he always came through.

We'll certainly miss Allan's cheerfulness, patience and easy-going manner at the far end of the table at Board meetings and at the podium at Section meetings. He has certainly steered the ship that we call the Philadelphia Section in the right direction in a year which had more than its share of ups, downs and headaches. (See - no more airport puns!)

And now, we move on to welcome Brian Stover as the Section's 92nd President. Brian is a classmate and good friend of this author, so I already have a good deal of dirt for when I have to do this again in a year! (Of course, since Brian is one of the few, the proud University of Pennsylvania graduates in this organization, we'll give him lots of slack.) We all wish Brian well as he accepts the gavel and takes on the duties at the helm of the ASCE, Philadelphia Section.

DUFFIELD ASSOCIATES
 Consultants in the Geosciences

Geotechnical Engineering • Environmental Services
 Water Resources • Construction Review and Testing

1528 Walnut Street • Suite 725
 Philadelphia, PA 19102
 Phone: 215.545.7295 Fax: 215.875.7255

Ann M. Tomalavage, P.E., PMP
 President

Malarkey Consulting, Inc.

Project Management Consulting
 Environmental Consulting

(610) 326-0205
 (610) 326-0530

1429 Shaner Drive Pottstown, PA 19465
 fax: (610) 326-0530
 tomalava@netcarrier.com

Over 50 years of Graduate Engineering Education

VILLANOVA UNIVERSITY
 College of ENGINEERING

- Evening Graduate Programs
- Environmental & Water Resources*
- Geotechnical & Structures
- Transportation
- Multidisciplinary

*New! Degree is available through Real Time-Distance Education!
 Department of Civil & Environmental Engineering
 (610)-519-4960 Fax: (610)-519-6754
 www.engineering.villanova.edu/ce

kmj
 consulting, inc.

Karen Jehanian, PE
 President

P: 610-896-1996
 F: 610-896-8002
 E: kjehanian@kmjinc.com

3550 Lancaster Avenue
 Haverford, PA 19041-0157
 www.kmjinc.com

**DON'T MISS
 MARDI GRAS IN MAY**
 - see Page 3 for details!

MARCH JOINT DINNER MEETING

March 18, 2004

The Union League, Philadelphia, PA

"Green Concrete"

By Jim Markham, Staff Writer and Jamie Phillips

For the first "home game" of our 2004 "season" (the first two meetings of the year were "away" joint meetings in Valley Forge and New Jersey), the Philadelphia Section, ASCE joined with the Delaware Valley Chapter of the American Concrete Institute (ACI) for a dinner meeting on March 18, 2004 at the Union League. It was a particularly celebratory meeting as we were able to recognize the most experienced members of our community as well as some of the newest.

After brief welcoming remarks from Section President **Allan Moore**, and the President of the Delaware Valley Chapter of ACI, **Vic Scotese**, Section Membership Secretary **Tom Brady** recognized the 12 Section members who were eligible for Life Membership Status this year. The achievement of Life Membership requires a career of service to ASCE and the Civil Engineering Profession. To qualify for Life Membership, a member must:

- Have reached the age of 65
- Have paid dues for a minimum of 20 years
- Have paid dues in any membership grade for a number of years that when added to their age equals or exceeds 95

Incoming Life Members in 2004 are: **Mohammad B. A. Khan; John Smyth, Sr.; Philip V. D. McLaughlin, Jr.; G. Lee Christensen; A. Carl Helwig; John E. Edinger; Alvin R. Zion; Thomas R. Babacz; Robert C. Peters; John E. Rigby; Robert H. Bryans; and Thomas R. Smith.** ASCE appreciates the lifelong support of these members.

In addition to this recognition of these distinguished gentlemen, some of the newest members of our profession were also honored. The winners of ACI's Student Beam Competition were recognized for the successful efforts.

A team of students from **Widener University** designed the strongest beam using Fiber Rein-

forced Polymer (FRP) reinforcing bars. The **Swarthmore College** student team was the most accurate at predicting the load that would break its beam, forecasting 3817 psi while the beam actually failed at 3815 psi. That's within 1%!

Congratulations to Widener and Swarthmore for the winning efforts!

It was a doubly-exciting night for Swarthmore, as they were not only winners in the Student Beam Competition, but they were the featured guests of ASCE. **Dr. Faruq Siddiqui**, the faculty advisor for the ASCE Chapter at Swarthmore introduced **Mike Norieka**, the President of the Swarthmore Student Chapter of ASCE. Mr. Norieka elaborated on the Swarthmore team's winning strategies and on some of their ASCE related activities on campus.

After the awards **Vic Scotese** introduced the featured speaker, **Jamie Phillips**. Miss Phillips has a Bachelor of Science in Civil Engineering from the University of Michigan. She has EIT certification and will be eligible for PE licensure later this year. She recently took a position with Master Builders after working on the technical side of cement and concrete for over four years with St Lawrence Cement.

Green Concrete

Building in an environmentally conscientious manner is now on the forefront of the minds of most engineers, architects, and especially owners. Selection of materials that have little or less of an impact on the environment is part of this effort. Concrete, the most widely utilized building material and second most consumed product in the world (after only water), is actually inherently environmentally friendly. Structures made with concrete are safer, more energy efficient, last longer, and are more reflective. There are ways however to make concrete more environmentally friendly and at the same time make it a stronger,

more durable product.

Of all of the constituents of concrete the one that has the greatest environmental impact is the cementitious component. The production of cement not only requires the use of a great amount of raw materials but it also results in the production of CO₂ (carbon dioxide), a greenhouse gas. Replacing a portion of the Portland cement with supplemental materials such as slag cement and/or fly ash results not only in lower CO₂ emissions, limiting the use of the earth's raw materials, and use of a product that might otherwise be land-filled, but also in better, more durable concrete. Concrete using slag cement also produces a whiter finish, thus reducing the "heat island effect" associated with concrete surfaces.

Miss Phillips also noted that in today's environmentally aware times, the use of slag cement in concrete can also earn the owner LEED points. The Leadership in Energy and Environmental Design (LEED) green building rating system recognizes buildings with lessened environmental impact using a point system. LEED is both a design guideline for sustainable construction and operation, and a standard for certification, and it is becoming an increasing factor in new construction of all types.

Conclusion

After a brief question and answer session, President Scotese and President Moore thanked Miss Phillips and gave her tokens of our collective appreciation.

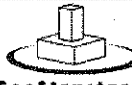
Many things are lost for the want of asking.

— English proverb

Burns GROUP

Engineering and Construction
Solutions
That Build Your
Future

Philadelphia, PA Pittsburgh, PA Edison, NJ Wilmington, DE
www.burns-group.com


GeoStructures

Phone: 610.688.7066
Fax: 610.688.7065
www.geostructures.net

GEOTECHNICAL ENGINEERING CONSULTANTS

- Subsurface Investigations
- Slope & Retaining Wall Design
- Geosynthetics Design
- Phase 1 & 2 Site Assessments
- Construction Monitoring
- Foundation Evaluations/Design
- Soil Stabilization
- Geologic Exploration/Mapping
- Sinkhole Assessment/Remedy
- Geotechnical Lab Testing

988 Old Eagle School Road, Suite 502, Wayne, PA 19087

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

"PROVIDING ENGINEERING SERVICES SINCE 1966"

<p>Philadelphia Office Corporate Headquarters One Drexel Plaza, 3001 Market Street Philadelphia, PA 19104 ph: 215.222.3000 fax: 215.222.6830</p> <p>David S. Lowdermilk, PE Vice President</p>	<p>Transportation Civil/Municipal Water & Wastewater Environmental Inspection & Testing</p>	<p>Land Surveying Building Systems Geotechnical Site Design Landscape Architecture</p>
---	---	--

Visit Pennoni on the Web at www.pennoni.com

DMJM HARRIS

The People Who Get It Done

HIGHWAYS • BRIDGES • MASS TRANSIT
RAILROADS • AVIATION • PORTS & HARBORS
PLANNING • TRAFFIC & ITS
www.dmjmharris.com

<p>The Atlantic Building 260 South Broad Street Suite 1500 Philadelphia, PA 19102 (215) 736-0832</p>	<p>Pennsylvania Business Campus 201 Gibraltar Road, Suite 120 Horsham, PA 19044 (215) 674-1913 AN AECOM COMPANY</p>
--	---

A.I. Con\$ulting, LLC

Collections, Contract Dispute Resolution
and Cash Flow Solutions

Andy Harmelin

Phone: 610-667-3422
FAX: 610-667-3425
E-mail: andyharmelin@aol.com


NTH Consultants, Ltd.

Infrastructure Engineering
and Environmental Services

Geotechnical Engineering
Construction Observation & Testing
Environmental Compliance
Rehabilitation Engineering
(roofs, pavement, building envelope)

Pennsylvania Offices: Exton and Philadelphia
610.524.2300 www.nthconsultants.com

OUR 100th YEAR

EPHENRY

FOUNDED 1903

Kevin Earley
RETAINING WALL SALES

16 ANDERSON RD. PARKER FORD, PA 19457
610-495-8533 u 800-44henry ext. 321 u FAX 610-495-1966
www.ephenry.com email: kearley@ephenry.com

SECTION HISTORY

Here are some notable events in the history of the Section that have occurred in the months of April and May.

APRIL 1924 – Section members went on a field trip to examine and review foundation problems of the under-construction Delaware River Bridge. The bridge was renamed to honor Benjamin Franklin in the 1950's and it remains known as the Ben Franklin Bridge. (The bridge opened to traffic on July 1, 1926.)

APRIL 1959 – The Section held its first joint meeting with the Society of American Military Engineers, Philadelphia Post. This joint effort has continued to the present day. This season, the joint meeting was conducted in December.

APRIL 2004 – An inexperienced and naïve Interim Editor completed his rigorous first year of learning and training at the helm of THE NEWS. Amazingly, THE NEWS has managed not to collapse and continues in its 76th year of service to the Section's membership. (Which means the Interim Editor will be around for the 77th year...?)

MAY 1986 – The Section moved its Spring Social to a grand new venue, the Center Court of the Bourse Building. Despite several problems, the event is declared a success.

ALSO MAY 1986 – Section Past President **John Durrant**, with the assistance of Membership Secretary **Dave Perri**, produced a cutting-edge audio-visual presentation to highlight Section Award recipients, including a pre-recorded narration. In 1987 they managed to convince the Section's Board to do this again, and they talked Section Secretary **Bob Wright** into helping. To this day, the popularly-acclaimed Awards presentation continues this format to salute the Section's honorees.

From what we get, we can make a living. What we give, however, makes a life.

— Arthur Ashe



GeoSystems Consultants

Engineering, Earth Sciences and Geotechnical Laboratory Testing

514 Pennsylvania Avenue
Fort Washington, PA 19034

Telephone: 215-654-9600
Fax: 215-643-9440
www.geosystems.com



International

Michael V. Griffin, PE
Senior Vice President

Hill International, Inc.

One Penn Square West
30 South 15th Street
Suite 1300
Philadelphia PA-19102
Tel 215-557-3250
Fax 215-557-0214
mikegriffin@hillintl.com
www.hillintl.com

TECHNICAL GROUP ACTIVITIES

Delaware Valley Geoinstitute (DVGI) – Dinner Meeting

(Continued from Page 1)

drill rigs, augers and core barrels used for rock sockets. This is a slow and tedious construction process, and access is often an issue, particularly in marine environments. Advances from around the world are gaining acceptance in the United States. These advances allow us to drill these high capacity foundations into some very difficult geologic conditions with comparative ease. As such, new and improved equipment and tooling are available to the geotechnical and structural engineering community. Mr. Pilkington will draw on his more than 25 years of experience in foundation construction around the world to provide the DVGI an insight into the available technology, and methods of completing drilled shaft construction in difficult ground conditions.

Born in the United Kingdom, **Mike Pilkington** spent his childhood and early career in South Africa, where he received his diploma in Civil engineering from the Natal College for Advanced Technical Education. He has been involved in foundation construction for more than 25 years in South Africa, Mauritius, Hong Kong, Australia, Canada, and the United States. He is currently employed by PKF-Mark III, Inc of Newtown, PA, developing a foundation group and engaged in projects in Upper Darby and New Jersey.

Engineering Management Group and Construction Group

Luncheon Meeting

DATE: Wednesday, May 12, 2004, 12 noon to 1:30 PM

LOCATION: Municipal Services Building, 16th Floor, Conference Room E, 15th & JFK Boulevard, Philadelphia, PA

SUBJECT: Engineers and Lawyers

SPEAKER: Mark W.S. Young, JD, MBA, BSCE, EIT, The Young Law Firm, P.C.

PRICE: \$10; Students \$5 (Includes buffet lunch)

Mark Young, Attorney and Counselor at Law and Principal of The Young Law Firm, P.C, has both engineering and law experience. He has served as a survey crew member, field engineer, project engineer, and legal counsel at various firms throughout the US. His Bar admissions include the Supreme Courts of Pennsylvania and New Jersey; US District Court, District of New Jersey; US Patent & Trademark Office; and others. His publications include:

- "Getting Sued: Steps To Take When You've Been Sued For Professional Malpractice," Design/Build Business, January 2004
- "What Do You Do After You have been Sued For Professional Malpractice," THE NEWS – Philadelphia Section: American Society of Civil Engineers, March 2004
- "Preparing for Depositions," THE NEWS – Philadelphia Section: American Society of Civil Engineers, December 2003/January 2004.

Acknowledged in a popular engineering textbook: Hwang, Ned H. and Robert J. Houghtalen, Fundamentals of Hydraulic Engineering Systems, 3rd Ed. Prentice Hall: 1996.

Mr. Young received his BS in Civil Engineering from the Rose-Hulman Institute of Technology, his MBA from the University of Utah School of Business and his JD from the University of Utah College of Law.

His presentation will cover legal liability for engineers and the legal system.

For reservations, please contact **Dennis MacBride** at (215) 580-3404 or **Bill Mulloy** at (215) 656-6583.

McM MAHON ASSOCIATES, INC.

RESPONSIVE TRANSPORTATION SOLUTIONS

BEST PLACES to work in PA

Corporate Headquarters:
Fort Washington, PA
215.283.9444
Exton, PA
610.594.9995
Middletown, PA
717.985.1700

- Traffic Studies
- Transportation Planning
- Land Survey
- ITS/Traffic Signal Design
- Highway & Structural Design
- Pavement Design
- Structure Design
- Highway Occupancy Permitting
- Construction Surveillance & Inspection

www.mcmtrans.com

Your Local Edwards and Kelcey Offices are:

One Penn Square West
30 South 15th Street, Suite 1100
Philadelphia, Pennsylvania 19102
Voice 215 569 0100
Fax 215 568 7670

1247 Ward Avenue, Suite 100
West Chester, Pennsylvania 19380
Voice 610 701 7000
Fax 610 696 3550

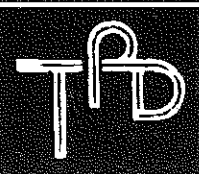
www.ekcorp.com

Transportation Communications Facilities / Development

Edwards AND Kelcey

Engineers Architects Planners Constructors

TRAFFIC PLANNING AND DESIGN, INC.



www.trafficpd.com

- Bridge Design
- Highway Design
- Closed Loop Traffic Signal Design
- Transportation Planning
- Environmental Services

Pottstown Lehigh Valley Harrisburg Maryland

building a world of difference™

- Water Supply, Treatment and Distribution
- Wastewater Collection, Treatment and Reuse
- Power Generation and Distribution
- Federal Facilities Engineering
- Environmental Investigations and Remediation
- Program Management and Enterprise Consulting



BLACK & VEATCH

601 Walnut Street Suite 550W Philadelphia PA 19106 215-928-0700
www.bvc.com Offices Worldwide

TAYLOR WISEMAN & TAYLOR

POSITIONS AVAILABLE IN ALL OFFICES

MARK S. MAYHEW, PE
Regional Manager
Chalfont, PA
267-956-1020

ROBERT MC ANALLY, PE
Regional Manager
West Chester, PA
610-918-9200

www.taylorwiseman.com

ENGINEERING • SURVEYING • PLANNING
LANDSCAPE ARCHITECTURE
SUBSURFACE UTILITY ENGINEERING

In Loving Memory... Sid Robin

SECTION MEMBERS' TRIBUTES TO SID

To honor the memory of Sid Robin, the Editor of THE NEWS for an unbelievable 61 years, we thought it only fitting that THE NEWS should be used as the vehicle for this duty. We also know that, after Sid's 61-year stint as Editor, and his long career as an engineer and developer, there had to be many stories out there that many of us probably have not heard. Thus, we thought that the proper honor to Sid, in the pages of his beloved THE NEWS, would be the publication of some of our favorite anecdotes and remembrances of Sid. Here is the second volume of "Sid Stories" for your enjoyment.

SID STORIES

SID THE FUGITIVE (?)

I remember my first meeting with Sid. It was in Chattanooga, Tennessee, where we both worked for the Tennessee Valley Authority during World War II. Sid had gotten himself into some sort of a jam with the police and he needed a lawyer to represent him in a Justice Court. I had recently completed night law school and had passed the Tennessee bar exams, thus I was a qualified attorney. Someone suggested to Sid that I might be available to help him, and Sid contacted me for my first case. I don't remember all the details of Sid's difficulties, but I do recall that we won and Sid went free. I think that Sid bought me an extra beer as my fee, but it did start a long friendship between us. Several years later, when I became the Section President, Sid wrote some nice things about me in THE NEWS, and we often talked about the "incident in Chattanooga".

— Alfred Quinn, Past President

SID, THE MODERN MAN (?)

One member of the Section Board had to volunteer to ensure that e-mails and faxes got to Sid, since he didn't own (and didn't want!) a computer or a fax machine. He was proud that virtually all of the work he did on The News was done on his old typewriter.

— Bob Wright

Somewhere along the line, someone thought it would be useful to get Sid a fax machine. I think someone may have even hooked it up at one time, but it was rarely if ever used. Sid's direction to anyone who wanted to fax something to him was either (1) mail it or (2) fax it to the printer.

— Bob Wright

I called Sid once and got an answering machine. At first, I thought I misdialed, but as I heard the message, it was Sid. I was shocked that he had "given in" to a modern convenience. Of course, I took the opportunity to chide him about this when we spoke afterward. "Can you imagine?"

— Bob Wright

SID, THE EPITOME OF CLASS

The Section dedicated its Mural at a ceremony in October 1999 held at the Water Works in Fairmount Park. Because of construction, attendees had to park on adjacent roads and walk to the site, about 1/2 mile walk. I was there, and once I got to the ceremony site, I realized I had

left my camera in the car. I rushed back to get it. On the way back I ran into Sid and his companion, Carolyn, walking to the site. He asked about the restrooms at the site. As luck would have it, we were right in front of the "porta-potties" that served this purpose. I pointed them out to Sid. He said something along the lines of "those things stink", then proceeded around the side of the four or so porta-potties to do his business with his back to us. My only lament was that I did not have the camera to record this obvious "Kodak moment" for the annals of THE NEWS.

— Bob Wright

You could always count on Sid to dance at the Spring Social, usually putting those half his age to shame (this writer included). He would chide many others that it was both the Spring Social and Dinner Dance, so they should be dancing (and we all know how engineers like to dance!). He also would find someone with the "hat du jour" (whatever the theme was, someone would have a sombrero, tam o' shanter, or whatever, and Sid would borrow it and pose for a photo that might appear in THE NEWS, depending on whether Sid liked the photo).

— Bob Wright

SID THE DICTATOR

Sid would often call to express his frustration with missing something that needed to go into THE NEWS, being asked to do the impossible, etc., especially at the last minute. He would usually start one of these phone calls not with "hello", "good morning", "how are you", etc, but with words along the lines of "I quit. I've had it. I'm not going to do this any more. I can't deal with this stuff. I'm done." Once he got this off his chest, then it was time to get down to business.

— Joe Syrnick, Past President,
Past District Director

Sid ran THE NEWS with an iron fist. He printed what he thought should be printed and that was that. When I became Section President, he asked for a photo to run with the President's Message. I politely declined. He printed the first edition of my term with the message and a block which said "photo to appear next month". I sent him the second message and asked him to take out the block. He responded that he had a photo someone had given him and he would use that photo unless I gave him another. He wouldn't tell me where he got the photo or how bad it was, but I blinked and sent him a photo. When it came to THE NEWS, Sid ruled, and there was no doubt about it.

— Bob Wright

Sid always wanted maps for the meetings once they moved from the Engineers Club. I usually supplied them, and usually they were hand-drawn. I later found out that he himself often used them to find his way to the meetings. (I learned this at one of the South Jersey joint meetings, when he asked why I described directions from all points except from South Jersey, since that was the way he was coming!)

— Bob Wright

SID THE MAN WHO DOESN'T ASK FOR DIRECTIONS (JUST LIKE ALL OTHER MEN?)

Other than the above story, Sid and Frank Depman usually drove together to Section meetings. Once, they arrived very late for a Board meeting at Williamson's. No one asked why but it was obvious that some of us were getting worried when Sid hadn't shown. After the meeting, I asked if everything was OK. He replied that he and Frank had gotten into an involved discussion during the drive and, for some reason, drove to the Holiday Inn in King of Prussia, the location of the Section's joint meeting with ASHE. When they got there, they realized that the meeting was at Williamson's, so they got back into the car and drove there. I asked Sid why he didn't look at one of those 30 or 40 copies of THE NEWS in his briefcase. I won't repeat the reply.

— Bob Wright

DVGI THANKS SPONSORS

The Delaware Valley Geo-Institute (DVGI) Board of Directors would like to recognize and thank the many sponsors that have contributed their time and resources over this past year. The DVGI meetings of 2003-2004 have attracted large numbers of attendees, and have featured a wide range of presentations of interest to local geo-professionals. We know that the future success of our organization is not possible without the generous contributions of our sponsors. The following companies supported DVGI this year:

ACF Environmental; C.A.T. Construction; Compaction Grouting Services; ConeTec; Duffield Associates; Gannett Fleming; Geostructures; Geosystems Consultants; GRL Engineers; Hayward Baker; Moretrench Geotech; Nicholson Construction Company; NTH Consultants; Peirce Engineering; PKF Mark III; Quantum Geophysics; RocTest; Schnabel Engineering; Schnabel Foundation Company; Site-Blauvelt Engineers; URS Corporation.



NOMINATIONS FOR OFFICE – PHILA. SECTION 2004-05

In accordance with the Constitution and By-laws of the Section, the Nominating Committee, appointed by President Moore and chaired by Past President Ruben David, has submitted the following slate of nominees for elective office for the 2004-05 administrative year:

President – **Brian Stover** (moves from current President Elect position automatically)

President Elect – **Christopher Menna** (one year as President Elect followed by one year as President)

Vice President – **Carol Martsolf**

Secretary – **Kristen Bowman**

Membership Secretary – **Thomas Brady**

Directors:

2-year terms – **Anthony Kelly, Michael Petner, Mark Tiger**

1-year term (finishing term of Carol Martsolf) – **James Markham**

Non-voting assistant positions:

Assistant Secretary – **Jennifer Walsh**

Assistant Treasurer – **Mark Washington**

Officers in which incumbents have one remaining year to serve are:

Treasurer – **David Hanly**

Directors – **Frank Falcone, Christopher Wright**

Past Presidents to serve on the Board of Directors are:

Chris Rood – one year

Ruben David – two years

Allan Moore – three years

The above slate was proposed at the March 18, 2004 Board Meeting and was announced at the Section Meeting following the Board Meeting. If no additional nominations are received by the Section Secretary by Friday, April 16, 2004, the above slate shall be declared as elected at that time. The Officers will be officially installed at the Section's annual **Spring Social and Dinner Dance on Friday, May 7, 2004** at Sugarloaf Conference Center.

The Section's appreciation is extended to the Nominating Committee, which consisted of **Ruben David (Chair), Allan Moore, Tom Branigan, Chris Rood and Bob Wright.**

The LawAce Says...

gaged in rendering legal or other professional services. If legal advice or other expert assistance is required, the services of a competent professional person should be sought.

EDITOR'S NOTE – Our LawAce, Mark Young, will be the featured speaker at a meeting sponsored jointly by the Engineering Management and Construction Technical Groups on May 12. Please consult the Technical Groups meeting announcements in this issue for more details.

If you can find a path with no obstacles, it probably doesn't lead anywhere.

— **Frank A. Clark**

The LawAce Says...



UNDERSTANDING "MALPRACTICE"

Prepared by
Mark W.S. Young, Esq.
myoung@LawAce.net

Design professionals dread the word "malpractice." But what exactly is it? It is worth understanding the concept and meaning of malpractice so that you can avoid committing it in your activities. Malpractice basically is a professional acting negligently in his or her trade. This article will focus on clarifying the meaning of negligence.

To treat all parties in a lawsuit equal, the courts create "tests" to determine who should win a lawsuit. If the plaintiff (person filing the lawsuit) satisfies all of the elements of the test, then the plaintiff wins. If the plaintiff fails to satisfy all of the elements, then defendant wins.

For a plaintiff to prevail in a negligence lawsuit, the plaintiff must prove these five things: 1) the design professional had a duty recognized by law, 2) the design professional breached that duty, 3) the design professional's breach of the duty was the proximate cause of harm, 4) the design professional's breach of the duty was the actual cause of harm, and 5) that there are damages.

First, the design professional must have a duty recognized by law. This element is typically satisfied with the engagement contract that the design professional uses to retain the design professional's services. The contract creates a legal duty for the design professional.

Second, the design professional must breach the professional duty. This professional duty is known as the "standard of care" used by reasonable, prudent design professionals in the area. Determining the standard of care can be based on guidelines by professional associations as well as building standards or simply what another design professional would do in similar circumstances. The parties often fight over determining what is the appropriate standard of care, which is what is accepted in the industry. The design professional's actions will be compared to a reasonable, prudent design professional in similar circumstances. In a lawsuit, both sides will often hire expert witnesses to testify that the conduct violated or did not violate the standard of care.

The standard of care can be a problem for design professionals using innovative designs. To gain a competitive advantage in the marketplace, some design professionals try to incorporate cutting-edge design features and materials in a building's design. However, this cutting edge design can create legal problems because the standard of care is set by what other design professionals are currently doing.

Third, the design professional's breach of the duty must be the proximate cause of harm. The proximate cause is also known as the "legal cause". The defendant must be the legal cause of

the harm. A simple test to determine the legal harm is the "but for" test. For example, the roof would not have blown off in the storm, but for the architect's failure to include hurricane straps. The proximate cause links the injury to the breach of the duty, to attach legal liability. The "but for" test does not apply in all circumstances, but provides basic guidance to proving breach of a duty is the proximate cause of the injury.

Fourth, the design professional's breach of the professional duty must be the actual cause of the injury. This is known as the "actual cause" element, which means that the defendant's actions or inactions must have actually caused the injury. To better understand actual cause, here is an example. An architect designs a house, but forgets to include hurricane straps. A low flying airplane crashes into the building causing the building to collapse. When the building collapses, the roof falls off. In these facts, the lack of hurricane straps no longer was the actual cause of the harm. Thus, the architect is no longer the actual cause of the injury and should defeat the malpractice claim.

Fifth, the plaintiff must show that he suffered actual harm. Of course plaintiff probably would not sue if there were no harm.

The plaintiff must establish all of the above elements to win a negligence lawsuit. However, construction professionals should understand the legislature may define the standard of care with building codes, ordinances and/or statutes. Violation of a building code, ordinance and/or statute can prove negligence. This is known as negligence per se. To determine whether a violating a code creates negligence per se, there is a three part test: (1) the code must be determined to be applicable, (2) the code was designed to protect the class of persons injured (the plaintiff), (3) against the risk of the type of harm that has in fact occurred as a result occurred as a result of violating the code.

Negligence Per Se makes the plaintiff's case much easier and almost an automatic loss for the defendant. To prevent this "automatic loss" in a lawsuit, the design professional must ensure that the design complies with all applicable laws.

Summary

The design professional can minimize malpractice legal liability by ensuring the design complies with the applicable standard of care in the industry. Lastly, the design professional should make sure that the design does not violate any building code, ordinance or applicable law.

For a free copy of *Surviving Construction Lawsuits*, go to www.LawAce.net or contact Mark W.S. Young (myoung@LawAce.net).

Prepared by Mark W.S. Young, JD, MBA, BSCE, EIT. Mr. Young is an attorney licensed in the US Patent and Trademark Office, Pennsylvania, New Jersey, and Texas. Mark Young has worked on a variety of construction law cases ranging from defective house construction to million dollar environmental contamination cases. From the engineering side, Mark Young has experience designing land development, municipal, DOT, and airport projects. Website: www.LawAce.net

Note: The article is designed to provide information regarding the subject matter covered. It is provided with the understanding that the publisher is not en-

JOIN THE SECTION'S TECHNICAL GROUPS

Construction

Brian Stover, P.E., Chairman
 Urban Engineers, Inc.
 530 Walnut St., 14th Floor
 Philadelphia, PA 19106
 (215) 922-8080

Structural

Dr. Mohiuddin (Ali) Khan, P.E., Chairman
 Manager, Bridge Division
 STV Incorporated
 820 Bear Tavern, Suite 105
 Trenton, NJ 08628
 (609) 530-9618

Transportation

Chris L. Rood, P.E., Chairman
 DMJM+HARRIS
 126 Franklin St.
 Riverside, NJ 08075
 (856) 461-9565

Engineering Management

Dennis M. MacBride, P.E., Co-Chairman
 SEPTA
 1234 Market Street, 12th Floor
 Philadelphia, PA 19107
 (215) 580-3404

William J. Mulloy, P.E., Co-Chairman

U.S. Army Corps of Engineers
 Wanamaker Building
 106 Penn Square East
 Philadelphia, PA 19107-3390
 (215) 656-6583

Delaware Valley Geo Institute (DVGI)

Allen Cadden, P.E., Chairman
 Schnabel Engineering Associates, Inc.
 510 East Gay Street
 West Chester, PA 19380
 (610) 696-6066

ORDER OF THE ENGINEER CEREMONY PLANNED AT DREXEL

The Drexel University Department of Civil, Architectural and Environmental Engineering and the Philadelphia Section, ASCE are proud to announce that **Ms. Patricia Galloway**, ASCE National President, will preside over the initiation ceremony of the Order of the Engineer on **Friday, June 11, 2004**. Ms. Galloway is the first woman to be elected President of the nation's oldest professional engineering society and an advocate of the Order of the Engineer.

The Order of the Engineer is a solemn obligation to uphold the standards and the dignity of the Engineering profession. It is an obligation to turn to practical use the principles of science and the means of technology... to serve humanity by making the best use of earth's precious wealth. The purpose is to stimulate formal public recognition by Engineers in the United States of two basic principles. These principles are that (1) the primary purpose of engineering is service to the public, and (2) all members of the engineering profession share a common bond. Those that have taken the pledge are identified by a stainless steel ring worn on the fifth finger of their working hand.

The Order of the Engineer members must be licensed engineers and/or graduates (this includes seniors about to graduate) from an ABET Engineering Accreditation Commission approved degree program.

For more information about the Order of the Engineer, please visit <http://www.order-of-the-engineer.org>

Location:

Drexel University Stein Auditorium
 Nesbitt Hall
 33rd and Market Street
 Philadelphia, PA 19104
 Refreshments - 4:30 P.M.
 Ceremony - 5:30 P.M.

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, MAY 14, 2004.

Please send the order form and a check for \$10.00, payable to the Drexel University ASCE Student Chapter, Department of Civil, Architectural, and Environmental Engineering Department, 3141 Chestnut Street, Philadelphia, PA 19104, Re: Order of the Engineer.

Please direct any questions to **Michael Carnivale, III, P.E.**, Practitioner Advisor of the Drexel ASCE Student Chapter, at michael.s.carnivale@usace.army.mil or by phone at (215) 656-6667.

YOU KNOW YOU ARE LIVING IN 2004 WHEN:

1. You accidentally enter your password on the microwave.
2. You haven't played solitaire with real cards in years.
3. You have a list of 15 phone numbers to reach your family of 3.
4. You e-mail your friend who works at the desk next to you.
5. Your reason for not staying in touch with friends is that they do not have e-mail addresses.

URBAN ENGINEERS, INC.
 CIVIL ENGINEERING MULTIDISCIPLINARY FIRM
 530 Walnut Street, 14th Floor | Philadelphia, PA 19106
 p 215-922-8080 | f 215-922-8082 | 800-232-4596
 Founded: 1960 ■ ISO 9001 CERTIFIED ■ Employee-Owned
 Voted one of "Best Places to Work" in PA
www.urbanengineers.com

Nave Newell
 Where Ideas Get Down To Earth.
 SPECIALIZING IN LAND DEVELOPMENT & FACILITIES ENGINEERING SERVICES
 Land Planning and Landscape Architecture
 Surveying and Construction Stake Out
 Civil & Structural Engineering
 Gregory C. Newell, P.E. 357 S. Gulph Road
 Principal Suite 300
 King of Prussia, PA
 610/265-8323
www.navenewell.net

Gannett Fleming

 Civil/Site Design
 Traffic
 ITS
 Transportation Planning
 Transportation Design
 GANNETT FLEMING, INC.
 Engineers and Planners
 Phone: 215 557 0106
 Fax: 215 557 0337
 Suite 1530
 1515 Market Street
 Philadelphia, PA 19102

DMJM Aviation
 Building Airports Better
 • Planning
 • Engineering
 • Environmental
 • Program Management & Construction Management
 • Specialty Services
 1700 Market Street
 Suite 1700
 Philadelphia, PA 19103
 Tel: (215) 399-4300
 Fax: (215) 399-4350
www.dmjnaviation.com
 AN AECOM COMPANY

WJE ENGINEERS ARCHITECTS MATERIALS SCIENTISTS www.wje.com
Wiss, Janney, Elstner Associates, Inc.
 - Structural Evaluation - Building Envelope Assessment
 - Repair Design - Construction Materials Evaluation
 - Historic Preservation - Litigation Support
 - Failure Investigation - Structural Testing & Instrumentation
 14 Washington Road, Suite 501, Princeton Junction, NJ 08550-1013
 Phone: 609.799.7799 Fax: 609.799.7088

TEMPLE UNIVERSITY
 A Commonwealth University
 College of Engineering
 Civil & Environmental Engineering Dept.
Dr. Frederick C. Schmitt, P.E.
 1947 N. 12th Street
 Philadelphia, PA 19122
 (215) 204-7724 Fax: (215) 204-6936

Tim Haahs ENGINEERS ARCHITECTS
 Parking Planning & Design
 Structural Engineering
 Architectural Design
 Project Management
 3-D Visualization
 Restoration Engineering
 550 Township Line Rd.
 Suite 100
 Blue Bell, PA 1942
 484.342.0200
 484.342.0222 Fax
www.timhaahs.com

TANTALA ASSOCIATES CONSULTING ENGINEERS www.tantala.com
 4903 FRANKFORD AVENUE
 PHILADELPHIA, PA 19124-2693
 T: 215.289.4600
 F: 215.288.1885
 E: mail@tantala.com
 civil engineering
 structural
 geotechnical
 site development
 risk management