



### ASCE, PHILA. SECTION MEETING SCHEDULE 2009-10

The ASCE, Phila. Section Meeting program for the upcoming season is nearly set, and currently-planned dates have been provided below for your calendar.

In coming issues of *THE NEWS*, we will provide updates as information becomes available. We also suggest you visit the Section website for the latest changes in our meeting program.

Remaining dinner meetings will be on **March 11** and **April 8**. Please hold **May 14**, the date of the Spring Social, as well.

### YOUNGER MEMBER FORUM NEWS

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*Cathy G. Farrell*, Forum President 2009-10

Michael Baker Jr., Inc.

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### Traffic Management Center Tour

On December 17, the YMF took an after-hours tour of PennDOT District 6's Regional Traffic Management Center. Thank you to **Manny Anastasiadis** for showing us the "central nervous system" of the District's ITS program. The tour highlights included learning how PennDOT uses the traffic cameras, monitors speeds and overall keeps area roadways moving. Thank you to **Jeremy Chrzan** for setting up the tour!

### 14th Annual Winter Social

**Monday, January 25, 2010**

**McGillin's Old Ale House**

**1310 Drury Street Philadelphia, PA**

Please join us for the most popular YMF event of the year! This year the YMF returns to McGillin's Old Ale House from 5:30pm to 8:30pm. The cost is \$20/person with RSVP and \$25/person at the door. Your ticket includes buffet style food and beverages including beer, house wine, well drinks and soda. Additionally there is a prize raffle. Last year over \$2000 of donated prizes were raffled off! If you would like to become a Winter Social Sponsor, please email **Jeremy Chrzan** at [secretary@ymfphilly.com](mailto:secretary@ymfphilly.com). To RSVP for the event, please visit <http://www.ymfphilly.org/rsvp.htm> by **Thursday, January 21**. (You must be 21 or over to attend this event.)

## JANUARY JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers  
 Reading Branch, American Society of Civil Engineers  
 Delaware Valley Section, American Society of Highway Engineers  
 Engineers' Club of Philadelphia

### WEDNESDAY, JANUARY 20, 2010

**Radisson Hotel, Valley Forge** • 1st Avenue and Gulph Road, Valley Forge, PA

Cocktails 6:00 PM • Dinner 7:00 PM • Meeting 8:00 PM

(NOTE SLIGHTLY DIFFERENT TIMES THAN OTHER SECTION MEETINGS!)

**COST:** \$30 before January 15 (\$20 for government employees),

\$40 January 15 and after and at the door

**SUBJECT:** Tasty Baking Facility at the Philadelphia Navy Yard

**SPEAKERS:** **Bill Fisher**, Liberty Property Trust; **Steven Kopp**, Environetics Design; and

**Ric Zappan**, Penntex Construction Company

**RESERVATIONS MUST BE MADE THROUGH DELAWARE VALLEY SECTION, ASHE.** The Philadelphia Section will **NOT** be accepting any reservations for this meeting. Payment for reservations must be received at ASHE by the **January 15** deadline. Those who reserve past this date and walk-ins will be charged the higher rate.

Walk-ins will be subject to acceptance on a space-available basis. THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.

Checks for reservations should be sent to **Delaware Valley Section ASHE**, 1500 Walnut Street, Suite 1105, Philadelphia 19102. Checks should be made to "Delaware Valley Section ASHE."

For directions to the Radisson Hotel, Please visit <http://www.radisson.com/kingofprussiapa>.

In October 2009, the first Tastykakes rolled off the "pie line" at the new 343,000 square foot "green" baking facility at the Philadelphia Navy Yard. The state-of-the art facility includes 7 baking lines, a distribution center, and space to accommodate tours and events. The building was constructed on a former brownfield site in the shadow of the I-95 Girard Point Bridge and is part of the redevelopment efforts within the Navy Yard. It is anticipated that the building will be the largest LEED-certified baking facility in the United States.

Mr. Fisher will describe the efforts of the developer of the site, Liberty Property Trust. Mr. Kopp, design manager, will speak to architectural/design issues faced by the lead architectural firm, Environetics Design. Construction challenges will be explained by Mr. Zappan, the construction manager for the prime contractor, Penntex.

## FEBRUARY JOINT DINNER MEETING

American Society of Civil Engineers, Philadelphia Section  
 American Society of Civil Engineers, New Jersey Section, South Jersey Branch

### THURSDAY, FEBRUARY 11, 2010

**Crowne Plaza Hotel Philadelphia-Cherry Hill**

2349 W. Marlton Pike (at Cuthbert Blvd.), Cherry Hill, NJ

Cocktails 5:30 PM • Dinner 6:30 PM • Meeting Presentation Follows

**SUBJECT:** New Jersey Turnpike Widening Program

**SPEAKER:** **John M. Keller, PE**, New Jersey Turnpike Authority

Additional information will be provided in the February edition of *THE NEWS*.



## PRESIDENT'S MESSAGE

Happy new year to everyone! In addition to creating fun opportunities for networking/socializing and improving member communications, another one of the ASCE, Philadelphia Section Board's main goals for the year has been to increase the breadth and frequency of technical meetings.

Part of the impetus for this goal is to provide continuing education opportunities for members to satisfy the State of Pennsylvania's impending requirements for continuing professional development hours (PDHs) for Civil Engineers. Although the PDH requirements are still somewhat up-in-the-air, our technical groups and institutes have been busy planning meetings and laying the groundwork for the Section to provide more diverse and frequent technical offerings. Here's an update on our progress:

- **Monitoring PDH legislation** — A PDH committee is monitoring the status of the PA legislation and exploring how the Section can assist members in understanding and meeting the requirements.
- **Increasing technical offerings** — Our technical groups and institutes have been increasingly active in organizing low cost technical meetings at local venues. Details on upcoming meetings and reservation information are available in the newsletter and on our website at [www.asce-philly.org](http://www.asce-philly.org).
- **Creating local institutes** — Currently we have one institute (Delaware Valley Geo-Institute) and five technical groups (Construction, Environmental & Water Resources, Engineering Management, Structures, and Transportation & Urban Development). Two of our larger technical groups — Environmental & Water Resources and Structures — are beginning the process of converting into local chapters of ASCE's national institutes. The purpose of this is to broaden their membership bases and to better serve the technical specialty areas of our membership.
- **Increasing volunteer participation** — Participation on our technical group committees has increased from 6 to 20 thanks to many new volunteers! The result is that more technical meetings and tours are being offered than in prior years, and we are able to create more local institutes.

As you can see, our member volunteers have accomplished much this year and have greatly increased the strength and vibrancy of the Section's technical groups. Please support their efforts by attending an upcoming technical meeting or contact me at [kbkavanagh@flowscience.com](mailto:kbkavanagh@flowscience.com) to add yourself to our list of invaluable volunteers!

Best wishes for a happy and prosperous 2010!

Kristen Bowman Kavanagh, P.E.  
President, ASCE, Philadelphia Section

## ENGINEERS WEEK — JUST OVER A MONTH AWAY

As a reminder, **Engineers Week** in the Delaware Valley will be celebrated **February 12-20**. The Delaware Valley Engineers Week Committee has planned the following events to celebrate Engineers Week. Please note this information in your calendar and plan to participate accordingly.

### Awards and Proclamation Luncheon

**Friday, February 12, 12 Noon**

**Loews Hotel (12th & Market Streets, Center City)**

The Luncheon will include a poster session with presentation of student paper winners (starting at 10 AM). Scholarships and Awards will be featured and Engineers Week proclamations will be displayed. The Engineer of the Year and Young Engineer of the Year will make brief remarks

### Young Engineer Social Event

**Monday, February 15, 5:30 PM**

**Yards Brewing Company (901 N. Delaware Avenue)**

This will be a happy-hour type event. The Young Engineer of the Year will make brief remarks.

### Celebration of Engineering Gala

**Saturday, February 20, 6 PM**

**Chemical Heritage Foundation**

*(315 Chestnut Street, Center City)*

The culminating event of **Engineers Week** will be a social/networking gala event to celebrate engineering, featuring cocktails, appetizer stations, and dessert stations. Award recipients will be honored with posters/exhibits/running PowerPoint in the networking area. Future City Competition Regional winners will display their first place model. The Engineer of the Year and Young Engineer of the year will provide brief remarks, followed by a brief recognition of the Hall of Fame, Outstanding Service, and Engineering Achievement award recipients

Event prices and reservation arrangements will be available shortly. Please visit [www.dvewc.org](http://www.dvewc.org) for the latest information.

**As always, volunteers are needed!** If you are interested in volunteering for one of the many activities of Engineers Week, please contact **Mike McAtee, P.E.**, Committee Senior Vice Chair, at **215-922-8081, ext. 2622**, or at [mjmcaatee@urbanengineers.com](mailto:mjmcaatee@urbanengineers.com).

## ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION — 2009-10 SEASON

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#### SEND COPY TO:

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**COPY DEADLINE FOR  
FEBRUARY '10 ISSUE  
JANUARY 22, 2010**

**Resolve to attend ALL Section Meetings This Year!**

## TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Director **Keith Yamatani** will be coordinating activities of the Groups. If you have any topics that you think would be of interest to the Groups, please feel free to pass this information along to the appropriate Group Chair.

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**If you don't go after what you want,  
you'll never have it.**

**If you don't ask,  
the answer is always no.**

**If you don't step forward, you're  
always in the same place.**

— Nora Roberts

## PHILA SECTION 2010 AWARDS — NOMINATIONS NOW OPEN!

It's Awards Season again! The ASCE, Phila. Section's Awards Program for 2010 is now open for nominations. These Awards recognize Section members and others for their contributions to the Civil Engineering profession. All Awards will be presented at the **Spring Social/Dinner Dance**, scheduled for **May 14, 2010**. (More information on the Spring Social will be included in upcoming issues of *THE NEWS*.)

### GUIDELINES/RULES

- Nominations must be received by the close of business (5:00 PM) on **Friday, January 29**. Nominations should be submitted on nomination forms which are available from the Committee Chair.
- Individuals may be nominated for awards by a member in any grade of membership.
- Individuals may receive only one award in a single year, but may be nominated for more than one award in a single year.
- Award recipients are subject to the approval of the Section's Board of Directors.
- All awards are presented only in years in which, in the judgement of the Selection Committee or the Board, there is at least one suitable candidate.
- The Selection Committee, at its discretion, may nominate an alternate for each Award for Board consideration.
- The Selection Committee will recommend to the Board whether the recipient should also be nominated for applicable National or Regional awards by the Section.
- A nominee for any award **MUST** be a member in good standing of the Philadelphia Section in the year in which the nomination is made, with two exceptions (Government Service Award and Philadelphia History and Heritage Award). For these awards, membership in the Philadelphia Section is **NOT** required.

### AWARDS

The Section has a total of 13 awards which cover various specialty areas. In addition, the Section President can nominate an individual for the Presidential Award at his/her discretion. The awards are as follows:

- Philadelphia Civil Engineer of the Year
- Philadelphia Young Civil Engineer of the Year
- Philadelphia Government Engineer of the Year
- Philadelphia Young Government Engineer of the Year
- Government Service Award
- Educator of the Year
- Philadelphia History and Heritage Award

Individual Technical Awards:

- Civil Engineering Manager of the Year
- Construction Engineer of the Year
- Geotechnical Engineer of the Year
- Structural Engineer of the Year
- Transportation Engineer of the Year
- Water Resources Engineer of the Year

If you are interested in submitting a nomination for consideration, please contact **Bob Wright**, Committee Chair, at **215-922-8081, x1647** (or via e-mail at [newseditor@asce-philly.org](mailto:newseditor@asce-philly.org)).

## WE WELCOME IN THE 21ST CENTURY — AND THE NEWS GOES DIGITAL!

Yes, we at *THE NEWS* aren't always in the vanguard, and most times we're so far behind the crowd we can't even see the front, but we try. After some effort, we have managed to save at least a few trees and go almost paperless with the move of *THE NEWS* to a primarily digital distribution. We hope this goes smoothly, but please contact us if there are any glitches or hiccups that we can address as we transition into the world of virtual reality.

If you're reading this, either the new e-mail system worked wonderfully or you're one of the handful of "hangers-on" who are still getting the hard copy mailed to you. To those of you who are disappointed that you'll have to find some other printed material to line your birdcage or wrap your fish, well...

As promised, if you decide that reading the computer screen is less enjoyable than the comfort of the hard copy, we're pleased to send you the paper version via "snail mail" as long as you let us know you want this and where you'd like it sent. (Maybe you like reading this in your comfy chair by the fireplace and are fearful that the laptop will get overheated from being too close to the flames? And nobody wants the computer around their warm bubble bath.) Please notify us at [info@asce-philly.org](mailto:info@asce-philly.org) or via mail to our address at the Engineers' Club so we can add your address to our list of those who like things the old fashioned way. And we promise we won't make any snide remarks, use the word "geezer," or anything like that.

And, as reported last month, one significant benefit of this change is that we have added a January edition of *THE NEWS* for the first time in our memory. The switch to digital makes it more economical to produce an additional issue of *THE NEWS*, thus we will be producing separate editions for December and January. We know how much you enjoy what we have to offer, so you're now going to get 17% more of this for your reading enjoyment (if our math is correct).

Copies of the December edition, our last mass-distribution hard copy (and therefore a collector's item), can be purchased from your Editor for your keepsake purposes. Prices are negotiable and reasonable (and can be had with or without his autograph — obviously, the autographed copy will be slightly higher). Grab this offer now before it moves to eBay where you'll be forced to compete against no-doubt higher bids! (Protective plastic dust covers sold separately.)

*Happy reading!*

[philly.org](mailto:info@asce-philly.org)) to obtain a nomination form. You may also call Bob if you have any questions or need any additional information on the Section Awards Program.

## FREE MONEY STILL AVAILABLE — ACT NOW!

The ASCE, Phila. Section's Scholarship Program has been slightly revised, as previously reported, and applications are still being accepted.

The Section offers three distinct undergraduate scholarships annually:

- ASCE Delaware Valley Engineers Week Scholarship
- ASCE Student Scholarship
- ASCE Section Member Scholarship

Scholarship winners will be recognized as the Section's guests at our April 2010 dinner meeting. In the past, winners were invited to attend the Spring Social, but this is not always convenient to academic schedules.

### ENGINEERS WEEK SCHOLARSHIP

The deadline for submissions for this \$2,000 undergraduate scholarship has passed. This program will be available once again in fall 2010.

### STUDENT SCHOLARSHIP

At least one \$1,000 scholarship will be awarded by the Section to an undergraduate Civil Engineering student who meets the following requirements:

- The applicant must be matriculating in a full-time Civil Engineering or Architectural Engineering program at one of the five colleges which have Student Chapters in the Philadelphia Section: Drexel University, Swarthmore College, Temple University, Villanova University, or Widener University.
- The applicant must be an active participant in the ASCE Student Chapter.
- The applicant must be in their sophomore or junior year (and Pre-Juniors at Drexel).

### SECTION MEMBER SCHOLARSHIP

At least one \$1,000 scholarship will be awarded by the Section to an undergraduate civil engineering student who is the child of an active Philadelphia Section member and meets the following requirements:

- The applicant must be matriculating in a full-time Civil Engineering or Architectural Engineering program at an accredited college or university.
- The applicant must be an active participant in the ASCE Student Chapter at his/her school.
- The applicant must be in their sophomore or junior year (and Pre-Juniors at Drexel).

### Application Requirements:

- The applicant's name, GPA and/or class rank, and an address/telephone number where they can be reached must be included with the scholarship application. Additional information for consideration (such as need) is allowed. A letter and/or resume is an acceptable means to provide this information.
- A recommendation letter from the applicant's faculty advisor is not required but is strongly suggested.
- The applicant will be required to submit an essay, limited to 1,000 words, on ONE of the following topics:

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## DECEMBER DINNER MEETING

December 9, 2009

The Down Town Club, Center City Philadelphia

### Pennsylvania Convention Center Expansion Update

by Robert Wright, Editor

For the second time in a row this ASCE, Philadelphia Section meeting season, the day of the meeting started stormy (fortunately for December, rain rather than snow). For the third time this season, we found ourselves at the Down Town Club. For the first time this season, the room was overflowing with a deluge of over 140 attendees squeezing their ways into the main hall to hear about the expansion of the Pennsylvania Convention Center, so much so that getting a drink at the cocktail hour preceding the meeting was a notable feat in itself.

As was done last year, the combined efforts of seven different societies, including the host, the Society of American Military Engineers, Philadelphia Post, accompanied by the Construction Management Association of America, Mid-Atlantic Chapter, the Engineers' Club of Philadelphia, the Project Management Institute, Delaware Valley Chapter, the Pennsylvania Society of Professional Engineers, Philadelphia Chapter, the Association for the Advancement of Cost Engineering, Delaware Valley Chapter, and our Section virtually ensured the wall-busting crowd. (We dare you to diagram the last sentence!)

SAME host (and Section Member) **Thom May** got things started once the crowd settled down, with an invocation by Past Section President **Ruben David** and a presentation of **Toys for Tots** collected at the meeting to the Marine Corps. Mr. May acknowledged the Presidents and/or key representatives of all societies present, fortunately not allowing any of them to speak, and dinner was served.

### EXPANSION WHO, WHAT, WHY'S

At the conclusion of dinner, Mr. May welcomed Section President **Kristen Bowman Kavanagh** to the podium and she introduced **Joseph Resta**, Project Executive of the Convention Center Authority, to start his presentation. He began with some basic information on the expansion, which will provide one million new square feet of Center to increase the Center's size to an overall 2.3 million square feet of floor space. This is necessary to meet the current demands of the convention and exposition market and to remain competitive with centers in other cities. The expansion has created 1800 construction jobs and will result in 18,700 new permanent jobs when it is completed.

Mr. Resta noted that the Pennsylvania Academy of Fine Arts (PAFA), across Broad Street from the expanded Center, would like to close the section of Cherry Street through its campus, which would mirror what the Center has done east of Broad. This would allow PAFA to link two of its buildings on either side of Cherry Street and create a new full block of Broad Street with the Center on the east side and PAFA on the west.

The Expansion program is valued at \$786 million, and the enlarged Center will increase meeting and exhibit space by nearly 60 percent, allowing two conventions to hold their events simultaneously. Mr. Resta explained that \$223 million of this has been for site acquisition, demolition and preparation. The two major construction contracts are Contract #1 for the building superstructure (awarded to the Keating Joint Venture in June 2008, \$155 million) and Contract #2, general construction (awarded to the Keating Joint Venture in October 2008, \$295 million). Both are underway. An impressive 28% of the work involves minority and economically disadvantaged (M/DBE) firms.

### THE PROJECT TEAM

Mr. Resta brought the leaders of the key project teams to address each of their specialty areas. First up was Richard Holland of Vitetta, who directs the architecture components. He noted that the effort was, architecturally speaking, unique for its scale. He showed several photos and renderings to illustrate how the materials and finishes will match the existing Center so it will appear to be a single unit. There will be a new "iconic" entrance on Broad Street with a canopy.

Mr. Holland noted that there will be additional capacity for meeting rooms, the main reason for the expansion, as well as a 6000-seat ballroom, which will be the significant feature of the addition. The room can be divided into four separate ballrooms each with a 1500-seat capacity.

**Todd Gerhart**, the structural group leader, also of Vitetta, walked through the structure aspects. There are six independent structures within the single building which is being provided as the expansion. Drilled pier construction was found to be most economical for the caissons, and there are nearly 300 of them on the site.

The west edge of the existing Center had to be modified to connect to the expansion. Additionally, the expansion required removal of part of the existing loading dock to maintain the 13th Street right-of-way as required by the City. Numerous utility floor boxes have been installed for service on the main floor, and their framing-in required significant coordination with the structure design. Continuous trusses will support the ballroom floor.

**Mark Celoni** of Pennoni leads the site/civil group, and he cited Section Member **Harry Laspee**, who was present in the audience, as the "key guy" in this endeavor. Five separate City streets were removed from public use and this required relocation of over 2000 feet of underground utility infrastructure. One example he cited is a line that is not moving, a Verizon

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## TECHNICAL GROUP ACTIVITIES

### ENVIRONMENTAL AND WATER RESOURCES GROUP

**Thursday, January 14**

**TOPIC:** Fresh Water and Geosynthetics — A Logical Combination

**SPEAKER:** Dr. Robert Koerner and Dr. George Koerner, Geosynthetic Institute

**TIME:** 4:00 PM to 5:30 PM

**LOCATION:** Geosynthetic Institute; 475 Kedron Avenue (Route 420), Folsom (for directions, see [www.geosynthetic-institute.org](http://www.geosynthetic-institute.org))

**COST:** \$5 per person — Students free

**RESERVATIONS:** e-mail: [reservations@engclub.org](mailto:reservations@engclub.org) or call the Engineers' Club, 215-985-5701, x3# by January 12

This presentation will cover the use of geomembranes in dam waterproofing (earth, concrete, and RCC dams), canal liners, reservoir/basin liners and covers, and tunnel liners. It also presents the latest research in lifetime prediction of exposed geomembranes. There will also be a laboratory tour of testing of geomembranes and geomembrane seams.

### FREE MONEY

*Continued from page 4*

- 1) How can Civil Engineers capitalize on our new-found "fame" resulting from recent stimulus spending on infrastructure? What opportunities do you see to use this new focus on infrastructure to enhance the stature of Civil Engineers as well as educate the public on who Civil Engineers are and what we do?
- 2) If you could make a suggestion(s) for introducing Civil Engineering to children, what would it be?

#### Submittal Deadline:

- Applications (excluding recommendations) must be submitted by **January 31**. Blank applications are available on our website ([www.asce-philly.org](http://www.asce-philly.org)).
- All recommendations must be submitted by **February 15**.
- Scholarship winners will be notified by **March 31**.
- Applications and recommendations should be submitted by mail or email to:  
Mr. Jeff Bade, Scholarship Committee Chair  
American Society of Civil Engineers  
215 South 16th St., Suite 16  
Philadelphia, PA 19102  
[jbade@hardesty-hanover.com](mailto:jbade@hardesty-hanover.com)  
(609) 538-8233

We encourage all eligible students to apply.

## DECEMBER DINNER MEETING

*Continued from page 4*

duct bank in the former Cherry Street, which runs beneath the existing Center. It was determined that it would be easier to allow it to remain in place beneath the expansion as well. This is an important line for Verizon and has a value of \$100 million for every hour that its service is interrupted.

Four on-site stormwater tanks have been provided to meet the City requirements for stormwater management/BMP's during construction. Mr. Celoni noted that a complex array of utility lines on the surrounding streets had to be maintained and supported during construction.

**Mark Dickinson** of Hill International directs site preparation. The nature of the expansion required that all property acquisition and demolition happen within a very short time frame. Environmental issues cropped up as there were 21 separate underground storage tanks on site that had to be remediated and removed. Traffic and pedestrian safety around the site was paramount, and this was often difficult given the site's location in busy Center City.

As touched on in Mr. Celoni's segment, the underground utility lines became the biggest challenge, and Mr. Dickinson explained how a utility task force was created to coordinate this. Dust and vibration control were prime concerns as well. The mentioned Verizon duct bank had a particular sensitivity to vibrations and the nearby Broad Street Subway was continuously monitored to make sure no structural damage was occurring in the tunnel. The adjacent Arch Street Methodist Church had known foundation issues before construction began and it had to be monitored and observed as well.

On the demolition site, the National Building was successfully imploded, but the various construction techniques used in the Odd Fellows Building dictated that it had to be taken down piecemeal. This would require an unprecedented closure of Broad Street. Mr. Dickinson covered how this was negotiated with the highest levels of City government, including Mayor Nutter, and the street was closed and detoured for a 6-day period following Memorial Day.

Mr. Dickinson was pleased to report that the various measures of success in his segment (no unplanned interruptions, no property damage, no violations) were achieved. Over 90% of the demolition material was able to be recycled.

From the construction management standpoint, **Steve Burke** of Joseph Jingoli and Son outlined the need for a master plan of attack and overall project schedule so costs can be monitored, construction activity can be overseen and coordinated, and value engineering opportunities can be identified. Since the Convention Center Authority did not have standards, special provisions and contract "boilerplate", this had to be developed for the bid packages.

Project controls, such as the Primavera CM system, have the capability for electronic submissions and document tracking/storage so

document control is easier. Mr. Burke added that the Authority has an unusual power for approval of change orders, which helps expedite extra work and change resolution. The project has an amazingly low number of change orders (\$200,000 worth in Contract #1). Contract #1 is 92% complete and Contract #2 39% complete as of this date.

Last up was **Tom Broadhurst**, the project manager for the Keating Joint Venture (Daniel J Keating Co. and Keating Building Co.). He explained that construction issues related to the existing Center were reviewed as many of these were expected in the expansion. He showed a number of photos which demonstrated the monthly progress of work. A slight change in the design at the southeast corner of the site required a change in the construction approach but resulted in no net impact on the schedule or operations, as these were tweaked to some degree to keep work moving. As of this meeting, Mr. Broadhurst was proud to note that the work is three weeks ahead of schedule.

Mr. May thanked Mr. Resta and his presentation team for an informative event.

## TECHNICAL GROUP ACTIVITIES

### CONSTRUCTION TECHNICAL GROUP — Luncheon Meeting

**Wednesday, February 17, 2010**

**TOPIC:** Delay Claims from the Owner and Contractor's Perspectives

**SPEAKERS:** Mr. Michael Radbill, PE, Vice President, Urban Engineers, Inc. and Mr. Dennis MacBride, PE, Manager, Project Scheduling and Claims, SEPTA

**TIME:** 12:00 noon to 1:30 PM

**LOCATION:** Conference Room X, 16th floor, Municipal Services Building, 15th Street and JFK Boulevard, Philadelphia, PA

**COST:** \$12

When a project is delayed due to an owner's actions, a contractor may incur extra costs and seek compensation for those losses. When a project is delayed by a contractor's actions, the owner may seek compensation in the form of liquidated or actual damages. In both cases, it is important that both parties understand the basics of delay claims. Messrs. Radbill and MacBride will discuss contract language related to delays, the types of delays and damages, and the requirements for a successful claim. The presentation will also include an interactive case study.

A buffet lunch will be served starting at 12:00 noon.

For reservations, please contact **Dennis MacBride** at (215) 580-3404 or [dmacbride@septa.org](mailto:dmacbride@septa.org) no later than **Friday, February 12**.

# ANACE\*

## Why You Drive on a Parkway and Park on a Driveway?

This question is raised quite a bit and no one seems to know the answer. No one, that is, except our intrepid Membership Secretary, **Chris Wright**, who volunteered this information to straighten us all out on this. (Looks like no more bar bets on this one!) Thanks, Chris!

This idea dates back before the time of the interstate system to the time of the Great Depression. In 1931, there was a WPA (Works Project Administration) project called Skyline Drive in the National Park Service's Shenandoah National Park in Virginia. This was a 105 mile road through the Park which provided a panoramic view of the park. Completed in 1939, it was thought that all long stretches of roads would run through parks to the point where long roads were deemed "parkways".

About this same time, a number of expressway-type roads that were intended for cars only were completed in the New York metropolitan area and in adjacent sections of New Jersey and Connecticut. For much the same rationale, they got the title "parkway" as well, and many of them exist today.

From what is generally understood, "way" means "road", so a driveway is a road that you drive on, typically either to the street or your garage. A parkway is a road through or to a park. Usually parkways are landscaped, or beautified, with medians or trees along the edges.

Park comes from an old word (parc, it is believed) meaning something enclosed. Generally, fancy landscaped areas in the old days were enclosed to keep the riff-raff out, and started being called parks....the name stuck. The military enclosed the places where they stored their vehicles (wagons and such, up to modern stuff) and called them "parks" as well. When they stored their vehicles, they began to refer to this as "parking" them. The term started being used around just after the War of 1812 and gained popularity into World War 2, and apparently it stuck. It just lost the meaning of "enclosed". When so many military veterans continued using the phrase when they became civilians, it became standard.

Driveways were initially much longer, leading from the road back to the main house on the property. So, initially, people really did drive on them. Many of the first driveways provided with houses when automobiles were becoming popular were the so-called "Model T" driveways, which were two paved, narrow paths that were the gauge of the wheels of a Model T. The word "parkway" was used to describe a well-developed thoroughfare, complete with trees, grassy divided medians and other landscaping, thus the "park" in the name.

## Wit and Wisdom in the Tubes

Officials of the London Underground have given tube train operators on the Piccadilly Line a book of profound and enlightened quotations to broadcast over the trains' intercom systems. This is intended to break the monotony of the daily commute and is interspersed with the recorded announcements on upcoming stations, service, etc.

Some of the quotes are witty, while others wax philosophically. Officials hired a comedian to help the operators with their deliveries.

The quotes have been well received but there are no immediate plans to expand this to other Underground Lines at this time.

*\*ANACE — Absolutely Nothing About or Concerning Engineering*

## MEMBERS IN THE NEWS

### RAHBARI BECOMES DIPLOMATE OF GEOTECHNICAL ENGINEERING

Section Board Member **Soheila Rahbari** received recognition as a **Diplomate of Geotechnical Engineering** from the Academy of Geo-Professionals (AGP). The induction ceremony was held on November 3 at the 24th Central Pennsylvania Geotechnical Conference in Hershey.

**Arlan Rippe**, AGP President, noted that "Specialty certification provides an advanced certificate of achievement, which greatly enhances the Engineer's career development. It also gives the public further confidence in the competence of our geo-professionals."

Soheila is a Senior Project Manager at CMX Engineering. Congratulations to her on this honor!

### SYRNICK RECOGNIZED AS WTS MEMBER OF THE YEAR

**Megan Syrnick** was cited as the **Member of the Year for 2009** by the Women's Transportation Seminar (WTS), Philadelphia Chapter. Megan received this honor at the Chapter's annual Awards Dinner on December 8.

Megan is a Civil Engineer with Hill International at its office in Bensalem and was recognized for her "extraordinary commitment to the Chapter and its successful growth. She takes great initiative to improve the Chapter's activities in multiple areas — and always goes 'above and beyond' in everything she does for the Chapter" (to quote the information provided in the Dinner program). She serves as the Chapter's Recording Secretary and has been involved with its committees on Public Relations, Programs, and Facilities.

Megan is an active member of several technical societies, including ASCE, and serves as a Board member at the Engineers' Club of Philadelphia.

We congratulate Megan on her recognition by WTS!

## A JOYOUS HOLIDAY SEASON TO ALL

Knowing that what you really want for Christmas, Hanukkah, Kwanzaa, or your celebration of choice is more of the Editor's bad grammar and run-on sentences, he's once again tried to top himself in this area. Merry whatever, happy 2010 and enjoy this l-o-n-g sentence just waiting for your red pens and rulers to attack and dissect!

As your holiday season is winding down

We hope it was a great one

The excitement was nice but now back to work

With memories of good times and fun

A new year has arrived and few of us know

A new decade doesn't start until next year

Most folks think the 2010's began January 1

I'll bet none of them would be an engineer

Some things we wanted, we didn't get in '09

Did Santa forget to leave them under the tree?

Like public understanding of what engineers do

And PA's continuing education requirements for the PE

We got the white Christmas, but only because

Of the two feet of snow the week before

It wasn't even winter and we shoveled so much

By Christmas Day we were still a bit sore

We look forward to a productive year

Now that presents have been opened and gift cards spent

We'll use this as our subliminal suggestion for

Getting you to an upcoming Section event!

Your Editor obviously has too much time on his hands

He says he's an engineer, not a poet

He can misuse grammar and iambic pentameter

And most of his colleagues wouldn't know it

He should spend more time in his profession's pursuits

Like design plans, shop drawings and GANTT charts

And leave the writing and creativity to those

"experts"

With their degrees in the liberal arts

We wish you all the best in 2010  
And belated good tidings for the holiday season  
Check out the Section's schedule of events and make

A New Year's resolution to attend (a good reason!)

'Tis better to give than receive, we're usually told

Yet we enjoy getting gifts, and in large amounts

Your Editor's cheap, so consider this your present

Remember, it's the thought that counts!



## SPONSOR PROFILE

### Villanova University Stormwater Partnership (VUSP)

The potential for urban storm water to deliver pollutants and increase flows to receiving waters over short intervals is a well-recognized environmental issue. These challenges, coupled with U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System Phase II regulations, have brought a new direction to storm water management.

Volume and quality have joined peak flow as design parameters, radically changing the design approach of storm water professionals. The design, performance and maintenance of best management practices (BMPs) are still emerging, as recognized by the 2002 EPA guidance manual on storm water monitoring.

To demonstrate and learn more about this emerging technology, Villanova created the Villanova University Stormwater Research and Demonstration Park. Current BMP study sites include a pervious concrete/porous asphalt comparison, a bioinfiltration traffic island, an infiltration trench and a storm water wetland.

The research focus is to determine BMPs' effectiveness in reducing storm water runoff volumes, peak flows and nonpoint source pollution to the surface water system and to determine the volume and quality of the infiltrated runoff. The storm water monitoring strategy focuses on assessing volumes, rates and pollutant loads for wet-weather flows both entering and exiting the BMPs.

The research requires water quality and water quantity analysis. Water quantity is addressed through site instrumentation. A watershed laboratory has been constructed to support water quality studies. Measurements of storm water flows into and out of a BMP provide data on its volumetric capacity and ability to retain, infiltrate or dampen flows. Water quality sampling, storm water, infiltration and overflow are analyzed for a host of parameters, including pH, temperature, conductivity, total suspended solids, dissolved solids, chlorides, nutrients and metals.

This work can be daunting. Rainfall is extremely variable, and the pollutant loadings change during a storm event; this requires multiple samples per site. The random nature of rain makes it difficult to forecast storm events, and the workload can be extreme. Based on these factors, it was decided to create a dedicated storm water lab; here, following a storm event, a student workforce could process the samples within the required holding times.

Read more on VUSP in the article "Design Direction" in the September/October edition of *Storm Water Solutions* ([www.estormwater.com/lm.cfm/st090905](http://www.estormwater.com/lm.cfm/st090905)).



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