



PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS 215 S. 16th Street, Suite 16, Philadelphia, PA 19102 Telephone/Reservations: (215) 985-5703 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. 83-6

## Our 98th Year

February, 2011

#### ASCE, PHILA. SECTION MEETING SCHEDULE 2010—11

The ASCE, Philadelphia Section Meeting program for the upcoming season is wrapping up. After March, there will be one regular meeting remaining, on **April 13**, which will be a multi-topic event similar to that conducted last April, at the same venue as last year's (**Villanova Conference Center**).

Also, please mark your calendar for our annual **Spring Social**, which is scheduled for **Friday, May 13**. More information on this will be provided in the March edition of *THE NEWS*.

#### THANKS TO OUR SPONSORS!

Our Section Sponsorship Program is an ongoing success, with 19 firms currently participating in this program. We appreciate the financial commitment and support these firms have demonstrated for the benefit of the ASCE, Phila. Section, and we extend a heartfelt, special and collective THANKS to each sponsor accordingly.

If you have an interest in joining our sponsorship program, please contact **Bob Wright** at **newseditor@asce-philly.org** for more details.

# ANACE\*

#### SWEAR ON THE MUTCD

This article originally appeared in the January 2010 edition of *TM* & *E* Magazine. We thank the author, **Dan Baxter**, ITS Practice Leader, Stantec (St. Cloud, FL), for his permission to reprint it here.

You all know the acronym. The MUTCD is the Manual on Uniform Traffic Control Devices, right? Not to me. My definition? My Unpleasant Traffic Court Day.

My name was called. I crossed the courtroom and faced the assistant city attorney. "Oh, you got a ticket at the airport," he said. "Let's discuss this before it goes to the judge." He spent a few minutes explaining the signs at the airport, assuming I was confused as to my absolute guilt.

I listened quietly, and then told him, "The speed limit sign on which my ticket was based was not

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FEBRUARY JOINT DINNER MEETING

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

## WEDNESDAY, FEBRUARY 23, 2011

NOTE – CHANGE IN DATE FROM THAT PREVIOUSLY ADVERTISED

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: Rehabbing an Icon – The Walt Whitman Bridge

*SPEAKER:* Michael Venuto, P.E., Director of Engineering/Chief Engineer, Delaware River Port Authority

**RESERVATIONS MUST BE SUBMITTED BY WEDNESDAY, FEBRUARY 16.** Please make your reservations through **South Jersey ASCE's system** (**rsvp@sjasce.org**).

The cost of dinner will be \$35 per member or guest, \$20 per ASCE Student Member. Payment will be accepted at the door. 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.

The heavily-travelled Walt Whitman Bridge is over 50 years old and is scheduled to undergo major reconstruction/rehabilitation over the next four years. The deck of the suspension bridge will be replaced in seven stages while the structure remains open to traffic. Additionally, anticipated work on the bridge will consist of dehumidification of the cable splay areas within the anchorages, dehumidification of the main suspension cables, removal of the original lead-based paint and installation of a 3-coat paint system and hardening (armor protection) of the suspension cables and suspender ropes.

**Michael Venuto, P.E.** has been with the Delaware River Port Authority Engineering Department for ten years. He has served as the Director of Engineering/Chief Engineer for the past year. His previous positions in the Engineering Department were the Manager of Planning and Design, Manager of Port Projects and Senior Engineer. During his time in the Engineering Department, he led multiple bridge, roadway, marine, transit and building capital improvement projects for the Authority. He holds a Masters of Business Administration from Lehigh University, *Continued on Page 4* 

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

## **MARCH JOINT DINNER MEETING**

American Society of Civil Engineers, Philadelphia Section

## THURSDAY, MARCH 10, 2011

Down Town Club, Public Ledger Building, 6th and Chestnut Streets, Center City Philadelphia (enter from 6th Street)

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

TOPIC: The New Barnes Museum on the Parkway SPEAKER: William McDowell, Project Executive

*SPECIAL FEATURE:* **Temple University Night** Additional information will be provided in the March edition of *THE NEWS*.



#### **PRESIDENT'S MESSAGE**

As Valentine's Day approaches, I hope all of you will thank your spouses and significant others in a special way for listening to our very detailed stories, laughing at our jokes (even though they are only funny to us Engineers), and loving us even when we are faced with deadlines and need to work overtime. Please take some time to let them know how special they are to you!

Since I started studying Civil Engineering at Drexel University, I have been enthusiastic about this profession that it is all around us and our goal to build a better quality of life. This enthusiasm also led to confusion as some people thought I knew about and could inform them on every Civil Engineering project going on in the Delaware Valley and beyond our region. Technology has improved greatly since 1993 and with a little help from Google, I can now get them those answers.

**Engineers Week (February 18-26)** is the one time each year that we all can be very enthusiastic about our profession and make a concerted effort to draw attention to the good work we do all the time and the importance of Civil Engineers. On behalf of the ASCE Philadelphia Section Board, please join us in celebrating Engineering and join us in the upcoming Engineers Week activities.

Sincerely,

Thomas W. Brady, P.E. President, ASCE, Philadelphia Section



#### **E-WEEK BANNERS — NEW ONES!**

Banners proclaiming the celebration of **Engineers Week** will be making their appearances on the street light poles on **Broad Street** near the **DoubleTree Hotel** (the site of the Awards and Proclamation Luncheon on February 18) in early February.

You may recall that the ASCE, Phila. Section helped developed the design of the original banners, which were first placed for 2006 Engineers Week. The banners have a useful life of about five years and took a particular "beating" last winter. Last year, the Section, in conjunction with the Engineers' Club, took a different approach and offered sponsorship of banners to all local technical societies. A new design was completed (as pictured) and this will be used, with 12 societies participating in the sponsorship effort. Each banner will show the name of one of these societies to recognize its participation.

It is anticipated that the new banners will also have a functional life of five years, so we'll be seeing these placed in advance of Engineers Week for the foreseeable future.

Thanks to Past Section President and Engineers' Club Board Member **Chris Menna** for his leadership of this successful undertaking.

#### **YOUNGER MEMBER FORUM NEWS**

Scott Ceipitz, Forum Editor Michael Wagner, Forum President 2010–11 Urban Engineers Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 (215) 922-8080 mgwagner@urbanengineers.com

#### **FUTURE CITY COMPETITION**

The Future City Philadelphia Regional Competition was held on **January 22** at the **Sheet Metal Union Workers Hall** in Philadelphia. A total of 40 area middle schools competed for a spot to go onto the national competition in Washington, DC. YMF members were on hand to judge ASCE's special award, the "ASCE YMF Award for Ingenious Civil Engineering", which went to Kutztown Area Middle School. For more results check out the Future City website, **www.futurecityphilly.org**. Thanks to all the ASCE members who volunteered this year!

#### YMF WINTER SOCIAL

The 15th Annual **YMF Winter Social** was another great success, as the YMF returned to **McGillin's Olde Ale House** in Center City on January 24. There were over 150 young Engineers in attendance which made for a great opportunity for networking with fellow colleagues from the area. YMF Board Members raffled off prizes which were generously donated by sponsoring companies. More information will be provided on the Social in the next issue of *THE NEWS*.

#### **UPCOMING EVENTS**

To keep up-to-date on all our upcoming events, sign up for our mailing list by emailing secretary@ymfphilly.org to receive regular updates or visit our events page at www. ymfphilly.org/events.htm.

#### ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION – 2010-11 SEASON

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> COPY DEADLINE FOR MARCH '11 ISSUE FEBRUARY 23, 2011

#### JANUARY JOINT DINNER MEETING

January 19, 2011

Radisson Valley Forge Hotel, King of Prussia, PA

South Street Bridge Replacement Project

by Robert Wright, Editor

Meeting #4 for the season and the first one in 2011 took us to King of Prussia for our annual joint event with the Delaware Valley Section, American Society of Highway Engineers (ASHE). For the first time this season, there was no rain to complicate things, although it appeared we were between snow events, with one the previous Monday and another threatening the next day.

A packed house of nearly 270 attendees welcomed the speakers from the City's Department of Streets, who would update them on the recently-completed South Street Bridge. ASHE Section President Rob Prophet opened the festivities and brought the evening to order, followed by the blessing of the meal, led by ASHE Director/Past Section President Curt Shugars, and the Pledge of Allegiance. Section President Tom Brady and Membership Secretary Cathy Farrell made a few announcements on Section events.

The Widener University Student Chapter was featured at this meeting, despite the lack of notice in the meeting announcement in The News (your Editor apologizes greatly, having done this for the second year in a row (at least he's consistent?)!). Chapter Advisor and Civil Engineering Department head Dr. Vicki Brown and three of her students, Chapter President Ryan McCarthy, Chapter Vice President Charles "Chas" Evans, and Shawn Paul brought those in the room up to speed on what the Widener Student Chapter is doing.

Following dinner, ASHE Director/ASCE Section Past President **Bob Wright** was welcomed by President Prophet to start the "main event" and introduce the speakers for the evening – Dave Perri, Chief Engineer and Surveyor; Jack Lutz, Chief Bridge Engineer; and Bill Gural, Project Engineer, all from the City's Department of Streets – and note that the bridge was opened and well received by almost everyone (with the notable exception of the Inquirer's architecture critic).

#### **HISTORY**

Mr. Perri was first up, noting that, after nearly two years of construction, the new South Street Bridge was opened to traffic in a public ceremony in November. It replaced a structure that was built as a bascule ("draw") bridge. He gave a brief background and history of the river crossings at this location. The first one, built in the 1870's, collapsed in the 1880's and was replaced. This bridge was found to be inadequate over time and was itself replaced in 1923 by the structure that lasted for the next 84 years. It had draw spans and carried trolley tracks to facilitate transit movement. The draw spans were locked in the late 1950's as they were no longer needed for river traffic. Trolleys stopped running on the bridge about the same time, replaced by a bus route.

Mr. Perri noted that the bridge is a critical link across the Schuylkill in an area that is distant

from the next nearest river crossings. It carries traffic over three busy rail lines (including Amtrak's Northeast Corridor and SEPTA's Regional Rail network), beneath another railroad and over the Schuylkill River, I-76 and the Schuylkill River Trail in its reach from 27th Street in Southwest Center City, the western "frontier" of William Penn's original Philadelphia, to Convention Avenue in University City. It has an average daily traffic (ADT) volume of over 27,000 and is a popular pedestrian and bicycle connection between the college campuses at its west limit and residential areas on its east end.

The bridge fell into disrepair in the mid-1990's, with concrete failures related to de-icing chemicals and steel corrosion that led to failures in the sidewalks and holes in the deck. It became very difficult to maintain. Falling chunks of concrete led to the closure of I-76 beneath the bridge, disrupting travel nearly throughout the entire region. The result was the imposition of successive load limits which, by the mid-2000's, were down to 3 tons, requiring detours for trucks and SEPTA buses. Mr. Perri added that this led to the decision to plan for a replacement structure.

#### THE REPLACEMENT

Mr. Perri briefly described the process for the planning, design and coordination of the new bridge. Since the new bridge would be occupying the same alignment as the existing one, it would need to be completely closed during the effort, with traffic accommodated on detour routes. The lengthy distance to the next nearest bridges previously described meant that the detours would be sizable and would impact traffic movements on already-at-capacity streets and bridges. In addition the I-76 interchange would need to have its own long detours through busy traffic corridors, and most users were unfamiliar with the detour routes. An alternate route strategy was developed and over \$4 million was expended on improvements to the detour routes, including a major upgrading of traffic signals at 31 intersections and improved directional signing. This was completed and in place before work could start on the bridge replacement.

The Department of Streets engaged Gannett Fleming to perform the design of the new bridge, with H2L2 on the design team for architectural tasks. The complex plans were completed over the course of six years and the project went to bids in fall 2008. Driscoll Construction was the low bidder with a price of approximately \$67 million. The contract was awarded and work began in December.

Demolition proved to be tricky, as was anticipated to a great extent during the design phase. Most of the concrete was found to be very strong, and therefore not easily removed, leading the design team to suspect that the concrete failures were only in very select areas and not a universal problem on the entire bridge. Mr. Perri showed slides that illustrated other constraints, such as at the CSX "high line" overpass where the railroad structure's piers are closely spaced and dictate the width of the highway bridge passing between them, the stairway from the bridge sidewalk to SEPTA's University City Station that must be met, and the connection to the secondfloor level of the University of Pennsylvania's Hollenback Hall adjacent to I-76.

#### CONSTRUCTION

Mr. Gural took the podium to walk through the construction challenges faced by the project. Because of the physical constraints of the site and general lack of easy access at ground level west of the Schuylkill River, considerable amounts of demolition debris and new steel were transported to and from the site on the river by barge. There were tight time requirements for work over I-76, which generally required midnight restrictions and used the so-called "up and over" detour on the existing ramps for some operations, in addition to intermittent 15-minute traffic stoppages overnight. Amtrak and SEPTA would provide very limited electric catenary outages, generally also overnight, for work over their tracks. In general, site constraints forced a phased demolition approach with adjacent construction sections being worked on and completed sequentially.

The "hub" or infield area between the eastbound and westbound lanes of I-76 posed its own particular difficulties given the tight work area and the situation in the middle of the Expressway. Mr. Gural showed slides of the new structure constructed to support the intersection of the I-76 ramps and the new bridge, which had its own share of tricky structural and erection problems that needed to be addressed.

The work proceeded fairly smoothly from west to east but difficulty was encountered on the east side with curved girders. Mr. Gural described how the original idea to heat treat the girders to reach the desired curvature was not accepted. The design team and the contractor worked together to develop an acceptable solution and the fascia girders were modified accordingly.

The existing river piers were planned to be reused with some modifications above the water line. Mr. Gural noted that sonar soundings at the river bottom showed significant scour that was remediated by the careful placement of R-7 rock in the scour areas. Weather also became a major issue, as 2010 had both the snowiest winter and hottest summer on record and this played havoc with construction to a great extent. A pre-Christmas snowstorm in December 2009 caused problems with anchor shafts when moisture and ice formed in them which led to some cracking and concrete spalling. This was investigated and restored.

#### THE FINISHED PRODUCT

Mr. Perri returned to the podium to highlight the new bridge. It was designed to be extremely ped-

### 2010 WAS THE YEAR OF THE REPORT CARD

#### IN 2011, ASCE MEMBERS NEED TO BUILD ON ITS FOUNDATION.

By Kate Luce Angell, Publicity and Public Relations, Region 2

On May 24 of last year, the four Pennsylvania sections of ASCE — Pittsburgh, Central Pennsylvania, Lehigh Valley and Philadelphia — released the 2010 Report Card for Pennsylvania's Infrastructure, a series of reports that assessed 12 infrastructure categories and assigned the state's infrastructure a cumulative grade of D+.

It was the most ambitious public affairs project the Pennsylvania sections have ever undertaken, and the Report Card's impact was further maximized through four press events across the state that coincided with the 2010 Legislative Day in Harrisburg.

The PA Report Card received attention on a national level and was well-covered throughout the state. With its release, the ASCE Pennsylvania sections added a strong voice to the conversation about our crumbling infrastructure, pointing out both its deplorable conditions and its vital importance for the physical and economic health of our state and its citizens.

That conversation is far from over, and while the efforts supported by the Report Card are moving forward in some areas, in many others they have never been farther behind.

One of the biggest issues raised by the Report Card is the state's ongoing transportation funding gap, and a recent poll by ASCE Region 2's Legislative Affairs Committee indicates that the decline in transportation funding is now directly impacting Engineers and their firms' hiring practices.

#### FEBRUARY DINNER MEETING

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a Bachelor of Science in Civil Engineering from Rutgers University, and a Bachelor of Science in Surveying Engineering Technology from the New Jersey Institute of Technology. He is a New Jersey licensed Professional Engineer (PE) and professional land surveyor (PLS).

#### DIRECTIONS TO CROWNE PLAZA HOTEL

For more information on the Hotel location and directions, visit www.ichotelsgroup.com/h/d/ cp/1/en/hotel/cpcrw/transportation?start=1

**From Center City Philadelphia** – Take the Ben Franklin Bridge to New Jersey and follow US 30 after reaching the Toll Plaza. Follow US 30 and stay left for the NJ 38/70 junction, which follows an overpass over the Airport Circle. At the end of the overpass, stay to the right and follow the signs for NJ 70. Follow NJ 70 to the Cuthbert Blvd. interchange. The Hotel will be on your right just past the interchange.

**From the North** – Take I-95 to the Betsy Ross Bridge. Follow the Bridge into New Jersey. Exit for US 130 South and follow US 130 to the Airport Circle (junction with US 30, NJ 38/70). Make a left turn onto NJ 38/70 and proceed east. Stay to the right and follow the signs for NJ 70. Follow NJ 70 to the Cuthbert Blvd. interchange. Last year, more than 30 Pennsylvania Engineers from all areas of the profession volunteered their time to research and write the reports that make up the Report Card, and its reception showed that the media, our legislators and the public consider ASCE an important source of information about our infrastructure crisis.

But we need to keep that momentum going in 2011 if we hope to have any impact on that crisis, and Section members have many ways they can help.

First, if you haven't heard much about the PA Report Card project, take a look at the web site at **www.pareportcard.org**. Ideally, every Section member should be able to act as an advocate for our infrastructure and explain—to family and neighbors, as well as their local representatives why it's critical to fund it now and find sustainable ways to continue that funding.

Second, find a way to be heard in public affairs. That could be as simple as sending a form letter to a state representative, or taking copies of the Report Card to infrastructure-related events and being prepared to talk about it. The **2011 Legislative Day** in **Harrisburg** is scheduled for **May 10**, and calls will be going out for your help. And we always need informed Engineers who will volunteer to help us put together letters to the editor and op-eds.

The 2010 Report Card was something for this Section to be proud of, but we need members' efforts to ensure its impact lasts well into the future. The stakes have never been higher.

The Hotel will be on your right just past the interchange.

From the South (Walt Whitman Bridge) – Take the Bridge to New Jersey, staying in the right lane. Exit for US 130/NJ 168 at the end of the bridge. Follow this roadway to the US 130 North exit. Take US 130 North to the Airport Circle (junction with US 30, NJ 38/70) and follow the ramp to NJ 38/70. Stay to the right and follow the signs for NJ 70. Follow NJ 70 to the Cuthbert Blvd. interchange. The Hotel will be on your right just past the interchange.



#### WHERE'S TOM?

ASCE, Phila. Section President **Tom Brady** has raised a challenge to our members. Each month, we

will show a photo of Tom at a different location. You will be asked to keep track of the locations where Tom appears in the photos. The first photo was provided in the Summer edition. In April, you can send a list of your guesses to Tom and the participants will be entered into a drawing for a prize to be awarded at the Spring Social.

Good luck!

## ENVIRONMENTAL AND WATER RESOURCES TECHNICAL GROUP

#### March Dinner Meeting WEDNESDAY, MARCH 16, 2011

SUBJECT: Water-Quality and Permitting Issues

SPEAKER: Thomas Fikslin, Ph.D.; Manager of the Modeling, Monitoring and Assessment Branch of the Delaware River Basin Commission (DRBC)

*TIME:* 6:00 PM (5:30 PM Registration/Networking) *LOCATION & COSTS:* To be announced (update will be available in the March edition of *THE NEWS*)

Dr. Fikslin will discuss a wide variety of water quality and permitting issues concerning industrial and municipal discharges. Topics that will be discussed include Water Quality Criteria for conventional (including nutrients) and toxic pollutants, Total Maximum Daily Loads (TDMLs), DRBC's anti-degradation program (Special Protection Waters) in non-tidal waters and Total Dissolved Solids (TDS) issues. He will review the science and modeling behind the development of permit limitations. The mission of the DRBC and its relationship to state agencies will also be reviewed.

Attendees are eligible for one (1) Professional Development Hour (PDH) for attending this presentation. Please contact **Eric Lindhult** at **267.464.3613** if you have any questions on this.

#### SCIENCE FAIRS COMING UP — WANT TO BE A JUDGE?

The **Delaware Valley Science Fairs** will be conducted on **Wednesday, April 6**. The location remains the same as last year, the **Greater Philadelphia Expo Center** in **Oaks**. The ASCE, Phila. Section will once again participate in the Fairs and offer four Special Awards for projects that have a Civil Engineering theme, with two awards for Grades 6 through 8 and two for Grades 9 through 12.

As usual, judges are needed for this effort. The judging will require you to spend most, if not all, of your day (approximately 8 AM to 3 PM) at the Fairs, examining and short listing possible projects in the morning and then interviewing the students who assembled them and finalizing the selections in the afternoon. It is always a very interesting and enlightening experience.

If you are interested in being a Special Awards judge for the Section please contact **Chris Rood** at **chris.rood@aecom.com**. You will also need to register for this and this can be done through the Fairs' website **www.dvsf.org**.

For more information on the Fairs please visit the above website.

We hope you can join us for a rewarding and interesting day.

Good advice is something a man gives when he is too old to set a bad example.

#### THE NEWS

#### ANACE\*

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in conformance with the Manual on Uniform Traffic Control Devices."

He quickly interrupted. "Let me stop you right there — the MUTCD does not apply in this city." He then pulled out a court record that showed a decision that "strict adherence to the MUTCD is not required."

I told him a jury might see it differently, that if I had to follow the traffic rules, the people who install signs have to follow the rules, too. He informed me that he could easily suppress evidence from the MUTCD because it does not apply to his city, and the jury would never hear that argument.

I replied, "If the MUTCD doesn't apply, why doesn't the city just put up a \$12 plywood board and spray paint 35 on it, instead of spending \$1,800 to install a valid sign?"

He stopped for a moment, and I sensed I had made a point.

To his credit he then listened as I handed him references from the MUTCD and showed him the picture I had. I showed him what I believed was the nonconformity. I also explained that a series of supplemented signs with no regular R2-1's applied in between, is probably OK, but is a questionable practice possibly confusing to some motorists. He didn't agree directly, but ceased to argue the point.

He told me his brother is an Engineer and he understands how deeply we care about our stupid rules. He then made an offer that I couldn't refuse. Let's just say I pled guilty to a lesser charge of being an annoying Engineer obsessed with ridiculous details that no one else in society cares about.

It has been said that there are no winners in court. This was true for me and my downloaded PDF of the MUTCD. I lost. I lost because I was late for a flight and was driving too fast and got caught. The city also lost because cherry-picking tourists at the airport to bleed one last painful credit card transaction from them before they leave and often causing them to miss their flights is a little low. If you were a tourist and this happened to you, would you return to vacation in the City of No MUTCD?

My fellow Transportation Engineers lost because no matter how hard we work on the MUTCD, I learned, our legal system can loophole it. It is true that localities can amend the MUTCD, but that was not the case here — I checked the amendments and supplemental beacons were not addressed.

The matter-of-fact statement from a very wellrespected city attorney that "the MUTCD does not apply in our city" was a little shocking to hear. This was said by a city attorney who is famous in the City of No MUTCD for a new public-safety law he championed a few years ago. He has practiced law for 25 years, and I didn't challenge the validity of his statute, just his interpretation of the statute.

#### LOOKING AHEAD IN 2011

Kathy Caldwell, ASCE President, looks at what's ahead for Civil Engineers

In late 2010, *Money* magazine named Civil Engineering one of the **top 10 'Best Jobs in America'** and *U.S. News & World Report* named Civil Engineering one of the 50 best careers. Additionally, the Bureau of Labor Statistics predicts stronger employment for Civil Engineers than the national average. Of course, employment is nowhere near the levels we have seen in the past. To stay current and relevant in this competitive economy, individuals and companies have been re-learning some skills and developing new ones through continuing education and other training programs and opportunities.

However, mounting concern over the national debt creates a challenging environment for the significant investments infrastructure improvement requires. President Barack Obama has acknowledged the role infrastructure investment can play in stimulating and improving the nation's economy, and has declared his commitment to improving the condition of our roads, pipes, dams and other critical support systems. There are also indicators of increased public support for infrastructure investment. When the public can see the benefits they will reap from improved infrastructure and the consequences of doing nothing - it becomes an issue they can be passionate about, particularly when money is tight in their own homes. If we can sustain that level of support and commitment, 2011 has the potential to be the "Year of Infrastructure."

The biggest challenges facing the Civil Engineering profession in 2011 shouldn't be all that surprising. Despite its crumbling condition, investment in the nation's infrastructure remains woefully inadequate. Our roads, bridges, water systems and railways are the foundation on which our society is built and can thrive, but their condition is all too often "out of sight, out of mind." This presents a challenge to Civil Engineers, and signals an even greater challenge to the nation. How can we expect to maintain our quality of life or see our economy rebound without adequately functioning infrastructure systems? Civil Engineers have the solutions for building a sustainable future; now we need the resources and political leadership to move forward.

Civil Engineers must also become creative and find new ways to put projects together, find efficiencies via system-wide optimization and work with regulators to streamline permitting requirements. Owners must also work to

I've practiced Engineering for 25 years, all the time believing that the big colorful book we call the MUTCD was sacrosanct. I realize now that we Transportation Engineers are the last line of defense in traffic safety, not the courts. We can't assume that the legal system will uphold the MUTCD and force us to follow our own rules. We just have to get it right on our own.

\*ANACE – Almost Nothing About or Concerning Engineering

encourage the use of new technology and innovation.

The Civil Engineering profession is committed to sustainable practices and ASCE is committed to leading the way forward. The society has dedicated significant resources, both capital and human, to advancing our sustainability-related goals and objectives. We're working on a number of exciting new sustainability initiatives, all of which stress the importance of a triple bottom line approach to sustainability: economic growth, environmental stewardship and social progress.

In partnership with APWA and ACEC, we are developing a cross-sector infrastructure sustainability rating system that will be formally launched in the spring of 2011. In addition to the rating system, ASCE is also developing certification programs and continuing education opportunities, as well as collecting and sharing case studies demonstrating sustainable practice in action.

#### **JANUARY MEETING**

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estrian-friendly to address the significant pedestrian use of the bridge, with wider sidewalks than the old bridge and a midblock signalprotected crosswalk at the connection stairway and future ramp to Schuylkill River Park on the east side of the river. Clearly-marked greenpainted bike lanes are provided. Traffic lanes are better defined than on the old bridge. Pedestrianscale lights have been provided and placed adjacent to the curb to help define the separation of the roadway and the walkways. A style of guide rail borrowed from a Massachusetts design has been utilized and "Quilite" electrification barriers have been placed instead of the usual metal structures used for this purpose. Each of these features will provide the necessary level of protection and add aesthetic value to the bridge.

Some artwork and aesthetic amenities, the major areas of contention among the various public advocates and civic groups commenting on the bridge (a group formed as the South Street Bridge Coalition) are still being completed. These include light towers to replicate former bridge operation houses and decorative lighting below the handrails which will create a water-shimmer effect. Mr. Perri reported that the bridge was able to be opened for functional use ahead of schedule on November 6 with a ceremony that included the usual group of dignitaries in addition to other "less usual" attendees including puppets, bridge players and a brass band.

Mr. Lutz wrapped up the presentation addressing some questions posed by the audience.

Presidents Prophet and Brady thanked the presenters for an interesting program and handed tokens of appreciation from each Section to each speaker.

A man grows most tired when standing still.

#### ENGINEERS WEEK — DON'T MISS OUT!

Engineers Week is right around the corner, and the Delaware Valley Engineers Week Committee will be offering celebratory events for **Engineers Week 2011** as it has done for many years. This year, the events are slightly different as compared to those in previous years. Please note this information in your calendar and plan to participate.

#### AWARDS AND PROCLAMATION LUNCHEON FRIDAY, FEBRUARY 18, 2011

Doubletree Hotel, Center City Philadelphia 11:00 AM to 2:00 PM

The Awards and Proclamation Luncheon will include:

- A poster session with presentation of student paper winners from 11:00 am to 12 noon prior to the Luncheon
- The Awards and Scholarships presented at the Banquet in previous years will now be featured at the Luncheon
- · Engineers Week proclamations will be displayed
- Project and individual awards of all participating Engineering societies in the Delaware Valley will be recognized
- The 2011 Engineer of the Year, **Douglas Kriebel**, **P.E.**, and Young Engineer of the Year, **Angela Fante**, **P.E.**, **LEED AP**, will make brief remarks

#### YOUNG ENGINEER SOCIAL EVENT TUESDAY, FEBRUARY 22, 2011

Field House Sports Bar, 1150 Filbert St., Center City 6:00 PM to 9:00 PM

This will be a happy-hour/networking event geared to younger Engineers but open to all. Enjoy a buffet dinner and beverages of your choice (two drink tickets are included in the price of admission), along with darts and Wii games. The 2011 Young Engineer of the Year, **Angela Fante, P.E., LEED AP**, will make brief remarks.

#### CELEBRATION OF ENGINEERING RECEPTION THURSDAY, FEBRUARY 24, 2011

Pyramid Club, 1735 Market St., 52nd Floor, Center City 6:00 PM to 9:00 PM

The culminating event of Engineers Week will be a social/networking gala event to celebrate Engineering, with cocktails, appetizer stations, and dessert stations. Other features of the event include:

- 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 2011 Engineer of the Year, **Douglas Kriebel**, **P.E.**, and Young Engineer of the Year, **Angela Fante**, **P.E.**, **LEED AP**, will provide brief remarks, followed by a brief recognition of the Hall of Fame inductees

Information on event prices, parking and other details, along with reservation options, are available at **www.dvewc.org**. The deadline for reservations for all events is **February 11**. Late reservations will be accepted on a space-available basis after that date at a slightly higher price.

As always, volunteers are welcome to participate in the many activities involved with Engineers Week. If you are interested, please contact us through our website, **www.dvewc.org**.

### CONTINUING EDUCATION — EARN 24 PDHs!!

#### 3-DAY HEC-RAS CONTINUING EDUCATION COURSE (MARCH 7–9)

Professional Development Hours (PDH's) are now required in order to maintain currency with your Professional Engineer license. Earn 24 PDH's (New Jersey and Pennsylvania state requirements for PE license renewal) during this 3-day course devoted to the use of the HEC-RAS program for basic open channel flow analysis. Course topics include: water surface profiles, bridge and culvert hydraulics, multiple opening analysis, bridge scour computations.

#### **COURSE SPECIFICS:**

WHEN: March 7 through March 9 (Monday through Wednesday)

## WHERE: The College of New Jersey, Ewing, NJ COST: \$1000 per participant

*DISCOUNTS:* Members of the New Jersey Association for Floodplain Managers (NJAFM) and The American Society of Civil Engineers (ASCE) receive a \$50 discount.

Also, register before February 18, or register 3 or more people from the same organization, to receive an additional \$100 discount per participant

#### **REGISTRATION:**

If you have questions about course specifics or would like to register for the course please contact **Dr. Michael Horst** at **814-571-5607** or **horst@tcnj.edu**.

#### ADDITIONAL INFORMATION:

Please visit the following website for specific details about the course including: a complete course agenda, information about the instructor, course materials, and directions to The College of New Jersey. www.tcnj.edu/~horst/coned.htm

#### CALL FOR NOMINATIONS FOR SECTION OFFFICERS

Throughout the year, you have been asked to volunteer your time and ideas to strengthen the ASCE, Phila. Section. Well, now is your chance to really make your mark!

In accordance with the Constitution and Bylaws of the Section, President **Tom Brady** will be appointing a Nominating Committee to recommend a slate of officers for all ASCE, Phila. Section elective offices for the 2011-12 administrative year. The positions which will be open for nominees are President Elect, Vice President, Treasurer, Membership Secretary, and at least three Director positions.

Please feel free to nominate yourself or a colleague if you are interested in serving the Section in one of these capacities. We are looking for hard-working, dedicated volunteers who have fresh ideas.

The deadline for nominations is **Friday**, **February 18**. Any inquiries or nominations should be submitted to the Section's Secretary, **AnnMarie Vigilante**, whose contact information is given on page 2.

#### REGION 2 COLUMN — FEBRUARY 2011

Some words from your Local Governor, Christopher J. Menna

One of the tasks of the Region Governors is to promote the various programs within ASCE. One of great importance is membership promotion, specifically encouraging various groups within the Region to honor fellow, accomplished ASCE members by recommending them for Fellow or Distinguished (formerly Honorary) Member status where appropriate. For details on requirements, please refer to the ASCE Register or National's website. Governors can assist by facilitating paperwork, references, deadlines, and/or National Staff contacts. Often times, there are members who have met the requirements, but do not realize it. Many of these members have been around for a very long time. Wouldn't it be nice to recognize them? Then, perhaps they could be re-energized to get back involved in some way. Membership Secretaries are kindly reminded that reviewing the membership list for possible promotions should be one of your regular tasks.

Fellow Members account for approximately 3-4% of ASCE National's population. In Philadelphia, this trend is patterned with about 67 out of 2200 members being recognized as Fellow. Yours truly was just recently added to that list. I'd like to say that my attainment of this grade would not have been possible without the strong support and encouragement of the Section, Section YMF, CYM, National, past employers, and current employer. I started within ASCE at a young age and have been fortunate enough to contribute in a lot of ways over the years. Usually, Fellow status is granted to well seasoned Engineers in their 40's or 50's. I am a rarity in that I did it just under the age of 40. That says a lot about the fine programs that we have here.

Distinguished (Honorary members) number far fewer. In Philadelphia, there is less than a handful. Life membership status is automatically determined by ASCE National by a predetermined formula. Again, please see the abovementioned references for more information.

As we enter 2011, let's strive to recognize all of the great achievements of our members.

#### STRUCTURAL ENGINEERING INSTITUTE Dinner and Technical Meeting TUESDAY, FEBRUARY 22

SUBJECT: Real Issues Facing Engineers – Assessing and Addressing Bridge Security SPEAKERS: Meghann M. Valeo and Harry A. Capers, Jr., P.E., Arora and Associates TIME: 5:30 PM Registration/Social (cash bar), 6:15 PM Dinner; 7:00 PM-8:30 PM Program

LOCATION: Radisson Valley Forge Hotel/ Scanticon Hotel and Conference Center, 1160 1st Avenue, King of Prussia

*COST:* \$50 ASCE members; \$55 non-members; \$15 students

Please visit **www.sei-dv.org** for more information. Attendees are eligible to earn 2 Profession-*Continued on Page 7* 

#### **TECHNICAL GROUPS/CHAIRS**

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Director **Keith Yamatani** will be coordinating the 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.

#### CONSTRUCTION

Dennis MacBride SEPTA 1234 Market Street, 12th Floor Philadelphia, PA 19107-3780 215-580-3404 dmacbride@septa.org

#### **DELAWARE VALLEY GEO-INSTITUTE (DVGI)**

Ara G. Mouradian Gannett Fleming, Inc. 1010 Adams Avenue Audubon, PA 19403 610-650-8101 amouradian@gfnet.com

#### ENGINEERING MANAGEMENT

The Chair position is currently open (see below).

#### **ENVIRONMENTAL AND WATER RESOURCES**

Eve D'Onofrio E S Design LLC 128 Regency Dr Norristown, PA 19403-1755 610-630-1660 edonofrio@esdesignllc.com

#### **STRUCTURAL ENGINEERING INSTITUTE (SEI)**

Dr. Mohiuddin Ali Khan JMT Inc. 1200 Lenox Drive, Suite 101 Trenton, NJ, 08648 609-512-3415 mohidin@temple.edu

## TRANSPORTATION AND URBAN DEVELOPMENT

William T. Thomsen Urban Engineers, Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 215-922-8080 wtthomsen@urbanengineers.com

We are still looking for a chair for the Engineering Management Group. Please contact President Tom Brady (contact information is given on page 2) for more information on this or if you are interested in this esteemed position.

#### STRUCTURAL ENGINEERING

Continued from Page 6

al Development Hours (PDH).

To register, please contact Ali Khan at mohidin@temple.edu or (609) 332-1136 by 12/20. Mail your check payable to SEI-Phila Chapter to SEI-Phila Chapter, Treasurer Vijay Gupta, PhD, PE, c/o A.D. Marble & Co. 375 E. Elm St, Suite 200, Conshohoken, PA 19428.

#### **MEMBERS IN THE NEWS**

#### LAWRENCE "CHUCKED"? (NOT EXACTLY...)

Chuck Lawrence retired from his position of Chief Engineer of the Philadelphia Regional Port Authority (PRPA) on January 4. *Good luck in retirement, Chuck!* 

#### **LEHANE MOVES UP**

John Lehane has been promoted to Vice President at Toll Brothers, where he most recently served as National Director of Stormwater Compliance. He directs Toll's corporate-wide program to meet the requirements of the Clean Water Act, NPDES regulations, and erosion prevention and sediment control. He is a Certified Professional in Storm Water Quality (CPSWQ) and an Instructor for Certified Erosion Sediment and Storm Water Inspector (CESSWI). *Congratulations, John*!

#### PSPE CHAPTER ENGINEERS WEEK EVENTS

#### **PSPE DELCO ENGINEERS WEEK DINNER**

The Pennsylvania Society of Professional Engineers (PSPE), Delaware County Chapter, has scheduled its **2011 Engineers Week Dinner** for **Thursday, February 17, 2011** at the **Media Towne House**, 117 Veterans Square, Media. In addition to the recognition of Engineers Week, the Chapter will be honoring its Delaware County Engineer of the Year, Young Engineer of the Year and Lifetime Achievement Award.

Section Member John Nawn will be cited as the 2011 Delaware County Engineer of the Year at this event. John is a vice president at KSE Engineers local office in Center City Philadelphia. He has a Bachelor's degree in Civil Engineering from Drexel University and is licensed to practice Engineering in seven states. He was one of the first Engineers to become certified internationally as a Professional Traffic Operations Engineer (PTOE).

The evening begins with a social hour at 6 PM, followed by dinner at 7 PM (choice of sirloin steak or baked salmon), and the meeting program at 8 PM. The cost of the event is \$30 per person. Reservations are due by **Friday, February 11** (no reservations will be accepted after that date and no purchases at the door will be permitted). Reservations can be made through **Gwen Himes** (**ghimes@trafficpd.com, 610-326-3100**).

#### **PSPE PHILA. ENGINEERS WEEK BANQUET**

The Pennsylvania Society of Professional Engineers (PSPE), Philadelphia Chapter, will conduct its **2011 National Engineers Week Banquet** on **Saturday, February 26, 2011** at the **Springfield Country Club** (400 West Sproul Road, Springfield). This event will recognize, promote and celebrate the role that Engineers fill in the Greater Philadelphia Region.

The price per person is \$65.00. Reservations can be made on the Chapter's website, **www. pspe-philly.org**, using PayPal. Sponsorships and table-top exhibits are also available.







PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS 215 S. 16th Street, Suite 16, Philadelphia, PA 19102 Telephone/Reservations: (215) 985-5703 Web site: http://www.asce-philly.org National ASCE Central Number Toll Free 1-800-548-ASCE