



### **ASCE, PHILA. SECTION MEETING SCHEDULE 2013-14 WINDING DOWN**

The last two ASCE, Philadelphia Section meetings of this season are upon us and information on each is provided under separate headings for these announcements. It's hard to believe that the season is nearly coming to a close, which means, after April, the one remaining Section event is the Spring Social.

The Social will be held on **Thursday, May 8** at the **Hotel Monaco**, 5th and Chestnut Streets, Center City. We hope you can join us for our end-of-season festivities, socializing, networking and fun at an interesting and different venue. More information on the Social is included elsewhere in this edition.

### **ENGINEERS WEEK — A SUCCESS!**

We hope you participated in Engineers Week this year. In case you missed it, it was celebrated locally from Friday, February 14 through Saturday, February 22.

The Delaware Valley Engineers Week Committee (DVEWC) events were popular and successful. The Proclamation and Awards Luncheon, conducted at the DoubleTree Hotel on February 21 (rescheduled after being "snowed out" on its originally-scheduled date of February 14), drew almost 200 attendees. The Young Engineers Social, at the Manayunk Brewery in its eponymous neighborhood of Philadelphia, held on February 18, and the Celebration of Engineering Reception on February 20, at the Villanova University Conference Center in Radnor, were similarly well attended.

As we know, the completion of this year's events only kicks off the planning for next year's. DVEWC, a committee of the Engineers' Club of Philadelphia, is always in need of volunteers to assist in many of the activities surrounding Engineers Week. DVEWC has a need for your talents and skills in several diverse areas. If you are interested in volunteering or would like information on volunteer opportunities, please visit our website at [www.dvewc.org](http://www.dvewc.org).

## **MARCH DINNER MEETING**

American Society of Civil Engineers, Philadelphia Section

### **THURSDAY, MARCH 13, 2014**

**Loews Hotel Center City**, Congress Room BC, 12th & Market Streets, Center City Philadelphia  
Cocktails 5:30 PM, Dinner 6:30 PM, Meeting Presentation Follows (approximately 7:30 PM)

**SUBJECT: Raise the Bar – A New Future for Engineering Licensure**

**SPEAKERS: Anthony Puntin, P.E. and Megan Peal, P.E.**, Members of the ASCE National Raise the Bar Committee

**RESERVATION DEADLINE – MONDAY, MARCH 10.** The cost per attendee is \$40, with a half-price (\$20) cost for government agency employees and students, for reservations received by this deadline.

**RESERVATIONS RECEIVED AFTER MARCH 10** — Reservations received after the deadline and "walk-ups" without prior reservations paying at the door will be charged \$50 (government agency employees and students will be charged the regular \$20 rate), but will be subject to acceptance on a space-available basis. Please note that payment via PayPal will NOT be available after the reservation deadline.

**THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.** Walk-ins and anyone without a reservation will be handled on a space-available basis.

Reservations can be made via e-mail at [info@asce-philly.org](mailto:info@asce-philly.org) or electronically through our website ([www.asce-philly.org](http://www.asce-philly.org)) and pay via PayPal. As noted above, the PayPal option will NOT be available as a payment option after the reservation deadline.

Advance payment can be made by check as an option to electronic payment. Checks should be made payable to "Philadelphia Section ASCE" and sent to ASCE, Engineers' Club of Philadelphia, 215 S. 16th Street, Suite 16, Philadelphia, PA 19102. Checks will also be accepted at the reservation table at the dinner.

As always, guests will be welcome to attend the presentation without dinner at no charge. This may be subject to room capacity constraints in the event of a large turnout for dinner.

To protect the public's future health and safety, the minimum educational standards for Engineers must encompass new knowledge, new technologies, new regulations, and new social issues, while addressing the declining credit hours of a typical undergraduate Engineering degree. The National Council of Examiners for Engineering and Surveying (NCEES) recognizes the need for change and has approved a new model state licensure law that calls for additional education beyond the bachelor's degree as a requirement for preparing future licensed Professional Engineers. That is why many forward-thinking Engineering leaders are pursuing a historic initiative to "Raise the Bar." Mr. Puntin and Ms. Peal will discuss the various implications and proposals on this proposal.

*Continued on Page 2*

**Resolve to attend ALL Section Meetings!**

## **APRIL DINNER MEETING**

American Society of Civil Engineers, Philadelphia Section

### **THURSDAY, APRIL 10, 2014**

**The Mansion at Villanova Conference Center**, 601 County Line Road, Radnor, PA  
Cocktails 5:30 PM, Dinner 6:30 PM, Meeting 7:30 PM

Following the pattern established four years ago, this meeting will consist of a dinner with subsequent "breakout" sessions on several different topics. More information will be provided in the April edition of *THE NEWS*.



## PRESIDENT'S MESSAGE

Well, this year has gone tremendously quickly — it seems like we were just at the 100th Anniversary Gala and now we're only two months away from our **2014 Spring Social and Awards Dinner**, which will be held on **May 8 at the Monaco Hotel** — so mark your calendars! We have two more dinner meetings in March and April with very interesting topics, so I hope to see many of our members at these upcoming events.

We also just finished celebrating **Engineers Week** with a list of wonderful events planned by the **Delaware Valley Engineers Week Committee (DVEWC)**, so I'd like to extend a heartfelt thank you for everyone involved in organizing all these events in recognition and celebration of all the Engineers in the Delaware Valley! It's not every day we are able to celebrate our accomplishments and be recognized for all we accomplish as Engineers, so these events are a great reminder of why we all chose to be Engineers!

I'd also like to extend my congratulations on behalf of ASCE to the **Delaware Valley Engineer of the Year, Suzette Schultz** (the second woman to ever receive this award); the **Young Engineer of the Year, Philip Gonski**; and two of our very own — **Ruben David**, who won the award for **Outstanding Service to the Community**, and **Dr. Vukan Vuchic**, the latest inductee into the **Engineering Hall of Fame**. All the award winners demonstrate a strong commitment and achievement in the Engineering industry. In addition, further congratulations to all the student scholarship and award winners who represent the future of our industry, and after meeting several of them, I would say the future is very, very bright!

I know I've already mentioned the development of our **Centennial Book**, but as we are working toward completing this book, we wanted to remind everyone of a unique opportunity for members to be a part of the Centennial Book with a sponsorship program created primarily for small companies and individuals. With your sponsorship, your company or name will be listed individually in the book. In addition, we are looking for any old photos, or information from past events that you feel would be beneficial to include in the book. More information on this sponsorship program and providing items or photos to include in the book is included elsewhere in this edition of *THE NEWS*, so please consider being a part of sponsoring this Once-in-a Lifetime publication that will be around for years to come!

As always I encourage you to reach out to myself or any of the Officers or Board of Directors with any ideas or suggestions to improve what we are doing at a Section level. We are always looking for energetic, enthusiastic and passionate people to be leaders in ASCE and one of them can be you! Stay warm and think Spring!

Sincerely,  
Jennifer K. Walsh, P.E., PTP  
President, ASCE Philadelphia Section

## MARCH MEETING

*Continued from Page 1*

**Anthony Puntin** is a Senior Project Manager at the Louis Berger Group in its Manchester, NH office, where he has served as the Civil/Transportation Group Manager for Northern New England. He has over 20 years of experience in the area of highway design with a focus on project management and alternative delivery method. He is also currently the Executive Director of the Boston Society of Civil Engineers (BSCES). In this role he is responsible for the overall leadership and management of the organization. With over 4000 members and 10 Technical Groups, BSCES conducts over 50 events, seminars, and workshops each year. A 1992 graduate of the University of Massachusetts – Amherst, he has served on their Civil and Environmental Advisory Council since 2010. He is a Fellow in ASCE.

**Megan Peal** is a Design Engineer for Wallace Montgomery in its Hunt Valley, MD office. She has over eight years of experience in the design, inspection and repair of bridges and other highway related structures. She graduated from Tufts University in 2006 with a Bachelor of Science in Civil Engineering and Johns Hopkins University in 2011 with a Masters of Civil Engineering. She is currently serving as the International and Coordination Member on the ASCE Committee on Younger Members.

## MEMBERS IN THE NEWS

### PICKETT HONORED BY DELCO PSPE

As part of its Engineers Week celebration and awards, the Delaware County Chapter of the Pennsylvania Society of Professional Engineers (PSPE) honored **John Pickett** posthumously with its 2014 Lifetime Achievement Award. Mr. Pickett, the longtime Director of Delaware County's Planning and Community Development Department, passed away last May after battling lung cancer. Mr. Pickett received his Bachelor's degree in Civil Engineering from Swarthmore College and a Master of City Planning from the University of Pennsylvania. He was cited as the Chapter's Engineer of the Year in 2006 and by our Section as our Government Engineer of the Year in 2008.

**It is a fair, even-handed, noble adjustment of things, that while there is infection in disease and sorrow, there is nothing in the world so irresistibly contagious as laughter and good-humour.**

— Charles Dickens

## ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION — 2013-14 SEASON

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*\*Our Constitution recognizes only the immediate Past President as a part of our Board but, following tradition, we list the immediate three Past Presidents to acknowledge their service.*

### President — Jennifer K. Walsh, P.E.

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### COPY DEADLINE FOR

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MARCH 21, 2014

## YOUNGER MEMBER FORUM NEWS

Amanda Kessler, P.E., Forum Editor  
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### WINTER SOCIAL SPONSOR THANK YOU

YMF would like to thank all of our sponsors who generously donated gifts to the 2014 Winter Social Raffle. Proceeds from the Raffle, which totaled \$2,005, have been donated to three charitable causes — **Philabundance, the Future City Competition, and Bridges to Prosperity**, a Penn State non-profit organization (please see the separate article on this program). Thank you once again for all your support!

AD Marble; AECOM; American Geotechnical & Environmental Services; Ammann & Whitney; ASC Group; Bergmann Associates; Dawood Engineering; Drive Engineering; Figg; Fizzano Brothers Concrete Products; Gilmore & Associates; Hatch Mott MacDonald; Hill International; Hunt Engineering; Jacobs Engineering; James J. Anderson Construction; JBC Associates; JMT; Jones Turf Management; KMJ Consulting; LRSLA Studio; Malarkey Consulting; McCormick Taylor; McMahan Associates; Michael Baker Jr.; O'Donnell & Naccarato; Parsons Brinckerhoff; Pennoni Associates; Powell Trachtman; Remington & Vernick; RK&K; STV; The Burns Group; The Christakis Company; Thornton Tomasetti; Timothy Haahs; Toll Brothers; Traffic Planning and Design; Transystems; Urban Engineers; URS; Weston Solutions

### CANSTRUCTION

YMF is once again participating in the annual **CANstruction** event, being held at **The Shops at Liberty Place on Friday, May 9**. The event consists of several teams competing to design and construct a structure made entirely out of cans of food. The team is looking for Young Engineers who are able to help develop ideas for the CANstruction design, solicit donations, move cans, and assist on the build night. Participation in any one or more of those areas is welcome and encouraged. Please contact **Chris Renfro** at [cjrenfro84@gmail.com](mailto:cjrenfro84@gmail.com) if you are interested in joining the YMF CANstruction team.

### PEERS GROUP AWARD

YMF is thrilled and proud to announce that it is the winner of the **2014 Eastern Regional Younger Member Council (ERYMC) Peers Group Award**. This Award is based on the quality and variety of activities in which the chapter participated throughout the year. The selection of the winner for this Award is unique in that it is judged solely by the YMF's peers from younger member groups within the Eastern Region. It is an honor to have been selected for this award by our peers.



**SAVE THE DATE**

**ASCE's 2014 Spring Social**

Monaco Hotel Philadelphia  
 433 Chestnut Street

**Thursday May 8, 2014 - 6PM**

Additional Details to Come!

### SECTION CREATING CENTENNIAL BOOK

To memorialize our 100th Anniversary season and cite the many local landmarks, facilities and efforts that have been brought "to life" by members of our Section over that time, we are creating a keepsake commemorative **Centennial Book**, which we anticipate having ready for our upcoming Spring Social.

To help offset the cost of printing, we are making sponsorship opportunities available for individuals and small companies that were not able to participate in our 100th Anniversary Sponsorship Program. All firms that were part of this Program will be so noted in the Book. Two levels of sponsorship will be available for others to be a part of this effort – Engineer (\$100) and Patron (\$50). Sponsors participating at each of these levels will be listed in the Book.

Additionally, we are making a general call for information, particularly photos, that you may have and may believe would be worthwhile additions to the Book. We will have information available on our website shortly on both sponsorship and materials (not available at presstime), so please check there for this.

### CALL FOR NOMINATIONS FOR SECTION OFFICERS

If you have an interest in being a part of the Section's governance, your opportunity has arrived. In accordance with the Constitution and Bylaws of the Section, President **Jenn Walsh** will be appointing a Nominating Committee to recommend a slate of officers for all Section elective offices for the 2014-15 administrative year. The positions which will be open for nominees are President Elect, Vice President, Secretary, 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 **Thursday, March 13**. Any inquiries or nominations should be submitted to the Section's Secretary, **Cathy Farrell**, whose contact information is given on page 2.



*American Society of Civil Engineers*

*Eastern Regional Younger Member Council*  
*Regions 1, 2, 4, and 5*

*presents*

*Philadelphia Younger Member Forum*

*2014 ERYMC Peers Group Award*  
*at the*  
*ERYMC Annual Meeting*  
*in Indianapolis, Indiana, on February 8, 2014*

ERYMC is a subgroup of the Committee on Younger Members and is made up of Younger Member groups from Florida to Maine and as far west as Tennessee and Louisiana. Each year, our YMF sends a handful of its members to the annual ERYMC conference. This year, YMF members **Brett Coleman, Nha Truong, Kevin**

**Brown, Chris Gray, Kazi Hassan, and Jesse Gormley** represented the group at the conference held in Indianapolis, IN. The Peers Group award was announced and presented at the annual award banquet, which honors some of the most outstanding chapters in the Eastern Region.



## BRIDGES TO PROSPERITY

As reported briefly in the *February NEWS*, **Bridges to Prosperity** is a non-profit organization that seeks to fight poverty by building footbridges over impassable rivers in impoverished, rurally isolated areas across the globe. Here is more information on this program.

Last spring, Penn State Civil Engineering students founded a student chapter of **Bridges to Prosperity**. This helps affected communities by helping residents make the walk to school, a doctor, or work easier. In our country, we take this for granted. In areas in which the program is focused, this relatively simple walk can be extremely dangerous, if not impossible. To date, **Bridges to Prosperity** has partnered with these communities to construct over 130 bridges in 16 countries, providing an estimated 650,000 people with improved access to education, healthcare, and economic opportunities.

As an official Chapter of the organization, Penn State students will take the lead in managing their own pedestrian bridge construction project each year in a rurally isolated community of a developing nation. The Chapter, which is the first within ASCE Region 2 (of which our Section is a part), currently has a dedicated team of approximately 10 student officers and 40 members who will guide all phases of these projects, including site surveying, bridge design, bridge construction, community relations, and fundraising for the costs of each bridge. Throughout the process, students will receive technical mentoring and support from the **Bridges to Prosperity** international organization, the Penn State Department of Civil Engineering, and private companies.

The Penn State Chapter will be traveling in May to construct its first bridge in the community of Membrillo, located in the province of Coclé in Panama. Last August, three of the Chapter's officers visited Membrillo to perform a technical survey of the site and meet with members of the community. Currently, the community's residents rely upon a single pedestrian bridge to cross a ravine to reach the nearest school, healthcare facilities, and certain places of work. During the region's rainy season, the existing pedestrian bridge floods frequently, hindering the ability of 1,500 people to access basic necessities.

To help overcome the challenges that the ravine poses during the rainy season, the Chapter is working to design a sustainable, cable-stayed pedestrian bridge that will be constructed about 15 meters from the existing bridge in a location where it will not flood. The people of Membrillo have given the students a warm reception and are very excited about the prospect of building a new bridge. For them, it is not just a bridge; it is an opportunity for a better quality of life.

To learn more about the Penn State Chapter of **Bridges to Prosperity** and how you can become involved with the Chapter, please visit its website, [www.pennstateasce.com/bridges-to-prosperity.html](http://www.pennstateasce.com/bridges-to-prosperity.html). It has been working with other schools in order to start new **Bridges to Prosperity** Chapters and help reach its goal of

eliminating poverty due to rural isolation. It must raise \$10,000 in order to build the bridge in Membrillo; currently it is slightly over halfway to reaching this goal. Checks can be made payable to **Bridges to Prosperity** with Penn State Chapter in the memo and sent to Bridges to Prosperity, 113 Hammond Building, University Park, PA 16802. The Chapter would also like to thank **ASCE Region 2** for its support of this effort.

## DIRE STATES — THE MISSION

### A COUNTRY IN CRISIS

When we think of “infrastructure,” road building is often the first thing that comes to mind because we interact with roads daily. However, countless unseen systems support everyday life in America: waterworks, waste processing, ports, railways, utilities, dams, even parks and recreational areas. Without them we are incapable.

### FACT: THEY'RE CRUMBLING.

As Dan McNichol explains, “The American Interstate System was unrivaled. It was bigger than the Great Wall of China, the pyramids, any of the canals, the Suez and Panama. And we seem to just think it's like running water – it's just going to be there for us. Well, in this country, we seem to have forgotten about our greatness, about building great, civil structures.”

Want proof? Take a look at our 2013 Report Card for America's Infrastructure. Overall, our nation's infrastructure received a D+ and calls for an estimated \$3.6 trillion through 2020 to bring our systems up to modern standards. Not doing so will create a ripple effect that drops our GDP by \$3.1 trillion in less than a decade. Not to mention the safety and public welfare issues of a decaying infrastructure. While seen as mostly practical, our infrastructure has far-reaching impact on everything from the economy to national security.

Dire States energizes the conversation. It's building steam for a movement that brings about action. It's connecting thought leaders with those in positions to affect change and discuss real solutions—both public and private; things that have proven to work, as well as revolutionary ideas that will drive the next generation of innovation.

Smart infrastructure brings on higher levels of education. Sustainable projects protect people, food and jobs. Robust transportation systems make for a resilient economy despite natural and manmade adversities. Because of this and more, we the people need to build better, faster, and with intent.

Join the conversation at [Facebook.com/DireStatesTour](https://www.facebook.com/DireStatesTour).

### THE CAR FOR A CAUSE

“Mrs. Martin” – the 1949 Hudson that Dan McNichol will be driving throughout the tour – is as old, rusty and energy-defunct as our nation's infrastructure. Built the same year as most of our structurally deficient bridges, this lead-sled was

last on the road when Eisenhower was President. Much more than a resurrected Motor City classic, Dan's Hudson represents how aged America's infrastructure is.

The Hudson has been named “Mrs. Martin” in honor of its first and only other owner. An infamously tough woman known as the Iron Mountain Maiden of Stamford, New York, the original Mrs. Martin tended to do what she wanted. True to her spirit, she fell in love with the car and purchased the fully loaded, two-tone green 1949 Commodore Eight against the wishes of her husband.

Over the next decade, the car enjoyed many blissful drives through mountainous and muddy upstate roads with the family as well as special trips such as going into town for a movie or shopping – but only at the hands of the lady head of the house. One fateful day, Mrs. Martin parked her Hudson in the barn, hid the key in a backseat pouch and forbade Mr. Martin and all living Martins from driving the car. Alone and all but forgotten, the Hudson sat in the same spot for a half century with an odometer reading of 31,856.2.

### UNTIL A COLD JANUARY MORNING IN 2013.

Per Christiansen, Dan's long-time friend, found the Hudson on eBay. It was love at first sight. Whereas many buyers were turned off by the car's rusty exterior and moribund engine, Dan and Per saw its hidden potential and knew the barn-fresh four-door was yearning to be back on the open road. One month later, Dan and Per were able to purchase the Hudson from Mrs. Martin's teary-eyed granddaughter for nearly the same cost of the original purchase price.

After months of hard work, new engines and half-century old sludge, “Mrs. Martin” was ready for a cross-country trek to address the dire state of our nation's infrastructure. And who better? After all, the All-American success story of fixing what was forgotten and banding together to rebuild better than before is much like that of her own.

## REMINDER — SCIENCE FAIRS COMING UP

The Delaware Valley Science Fairs will be conducted on **Wednesday, April 2**, at the Greater Philadelphia Expo Center in Oaks. The 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.

If you are interested in being a Special Awards judge for the Section please contact **Chris Rood** at [chris.rood@aecom.com](mailto:chris.rood@aecom.com). We hope you can join us for a rewarding and interesting day.

## **ENVIRONMENTAL AND WATER RESOURCES TECH GROUP**

### **MARCH DINNER MEETING THURSDAY, MARCH 20**

**SUBJECT:** Prioritization of Water Main Replacement Methods

**SPEAKERS:** Jerry Snyder, PE, Snyder Environmental Engineering Associates and Rajan Ray, Innovyze, Inc.

**TIME:** 5:30 PM – Registration, 6:00 PM – Dinner and Presentation

**LOCATION:** Michael's Restaurant and Delicatessen; 130 Town Center Rd., King of Prussia, PA 19406; <http://www.michaelsdeli.com/directions.asp>

**COST:** \$30/member, \$20/full-time student

Buried assets such as water mains have a finite useful life and must eventually be replaced or rehabilitated. Water utility managers must develop water main replacement plans that are efficient and cost effective. The key question for water managers is which pipes should be replaced first. This technical seminar will present two methods for prioritizing water mains for replacement. The topic will be of interest to water system personnel involved in buried asset management programs.

Mr. Snyder, Principal of Snyder Environmental Engineering Associates, specializes in hydrologic and hydraulic modeling simulations and analysis and has authored nine Water Research Foundation (WRF) Reports.

Mr. Ray, Product Sector Lead/Client Service Manager for Innovyze, has extensive experience in advanced hydraulic modeling applications, GIS integration, and water system modeling, and supports some of the nation's largest utilities and consulting firms.

Attendees are eligible for one (1) Professional Development Hour (PDH) for attending this presentation.

RSVP's are due by **Tuesday, March 18**. Reservations should be posted to the website, [www.asce-philly.org](http://www.asce-philly.org). Payment by PayPal can be done from the reservation website. Payment by check or cash can be provided at the meeting. Checks should be made payable to "Philadelphia Section ASCE."

Reservation cancellations must be made 48 hours in advance or you will be charged for the meeting.

Contact **Eve D'Onofrio** at **610-630-1660** or **Scott Hughes** at **610-650-8101** if you have any questions on this.

**Think in the morning,  
act in the noon, eat in the  
evening, and sleep in the night.**

– William Blake

## **CONSTRUCTION, ENGINEERING MANAGEMENT AND TRANSPORTATION/ URBAN DEVELOPMENT TECHNICAL GROUPS**

### **MARCH DINNER MEETING THURSDAY, MARCH 6**

**SUBJECT:** SEPTA's Capital Investment "Catching Up" Plan

**SPEAKER:** Jeffrey D. Knuettel, P.E., Deputy General Manager of Operations/Infrastructure, SEPTA

**TIME:** 5:00 PM – Registration/Reception, 6:00 PM – Presentation

**LOCATION:** Sonesta Hotel, 18th & Market Streets, Center City

**COST:** \$65/member, \$25/government agency employee/full-time student

This meeting is being sponsored by the Construction Management Association of America (CMAA), Mid-Atlantic Chapter, and co-sponsored by the Women's Transportation Seminar (WTS), Philadelphia Chapter and three of our Section's Technical Groups (as noted above). Mr. Knuettel will provide a follow-up to his presentation to CMAA and our Section in November and outline SEPTA's short- and long-range plan for continued investment to rectify various infrastructure deficiencies including bridges, buildings, rapid transit facilities, railcars, trolleys and buses.

RSVP's are due by **Thursday, February 27**. Reservations will be handled by CMAA (not by our Section). More information can be found at <http://eepurl.com/NqAHn>.

## **E-WEEK BANNERS ON DISPLAY ONCE AGAIN**

Banners proclaiming the celebration of Engineers Week made their appearances on the street light poles on Broad Street near the DoubleTree Hotel (the site of the Awards and Proclamation Luncheon on February 21) in early February, the fourth year of the banner program.

You may recall that the Section helped develop the design of the original banners, which were first placed for 2006 Engineers Week. After these banners wore out (they usually last for five years), the Section, in conjunction with the Engineers' Club's Engineers Week banner program, sponsored a banner. Our Section is one of 12 societies which have participated in this effort since the start. Each banner features the name of one of these societies to recognize its participation.

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

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

## **CONSTRUCTION TECHNICAL GROUP**

### **LUNCHEON MEETING TUESDAY, MARCH 11**

**SUBJECT:** Philadelphia Family Court – New Building Project

**SPEAKERS:** Charles Rudalavage, AIA, LEED AP, Principal, EwingCole and Lydia Jeanne Evans, Architect, EwingCole

**TIME:** 12:00 NOON – 1:30 PM

**COST:** \$15 (\$20 after Friday, March 7); Students \$10

**LOCATION:** Urban Engineers, Inc., 530 Walnut Street, Philadelphia

The Philadelphia Family Court of the First Judicial District of Pennsylvania is currently located in two separate facilities. In order to unify the Domestic Relations and Juvenile Divisions of the Family Court in a building which will meet its current and projected space and functional needs, a new facility has been designed by EwingCole and is currently under construction. Designed to meet LEED Silver certification, the new public safety building will include 14 occupied floors above grade and one partial mechanical penthouse level, totaling 509,000 gsf.

The building will feature courtrooms, judges' chambers, and prisoner holding cells, as well as a loading/truck dock, a vehicular sally port for prisoners being brought to the building for court appearances, and building support areas. A three-level parking garage will be provided below-grade for public use, with secure spaces for judges and court officials.

Throughout all floors of the building, separate vertical and horizontal circulation paths will be provided for the public, judges and courts staff, and prisoners.

Mr. Rudalavage has over 16 years of experience in facility planning, design, documentation and administration. He has led project teams on several \$100 million+ projects for EwingCole. He has been at the firm since 1997 and is currently a Principal.

Ms. Evans has diverse experience in the detailing and implementation of major projects through all phases of design and construction, with a broad background in interior architecture. She joined EwingCole in 2007.

For reservations: Online: [register.engrclub.org](http://register.engrclub.org); E-mail: [reservations@engrclub.org](mailto:reservations@engrclub.org); Phone: 215-985-5703; Mail: Engineers' Club of Philadelphia, 215 S. 16th Street, Suite 16, Philadelphia, PA 19102 (checks payable to Engineers' Club of Philadelphia).

**A committee is a group of the  
unprepared, appointed by the  
unwilling to do the unnecessary.**

– Fred Allen



# N-ASCE\*

## PILOT UNHAPPY WITH TURNPIKE'S LANDING CHARGES

The Pennsylvania Turnpike has sent vintage plane flyer Brian Nicholson bills totaling nearly \$4,000 for landing on the Mon-Fayette Expressway south of Pittsburgh on August 5. Nicholson landed the 1946 Stinson airplane on the road after a chunk of its wooden propeller flew off and the plane was losing forward power.

Nicholson, a schoolteacher and weekend flyer, says the road was the only landing place close enough to get himself and a passenger down alive. He steered the crippled plane safely past power lines and overhead signs and landed between a car and a tractor-trailer. It was near Mile 30 near US 40 in Centerville. The plane was landed safely and no one was hurt.

The Turnpike Commission has sent Nicholson a bill for \$3,993.34, which covers towing and dozens of manhours spent closing the road and organizing a tow truck to carry the plane back to the airport where it was based. It contends this is standard practice for an incident that necessitates involvement of its personnel.

Nicholson says the tow was quite unnecessary because he had a mechanic come with a spare prop and could have flown off the highway. He claims he had an FAA and local police OK to take off. The Turnpike says it would have been even more expensive for it to go with a takeoff because of the need to further close the highway, and this would likely not be safe.

The report did not note if the plane had E-Z Pass... (which, as we know, entitles users to a toll discount).

Thanks to *Toll Road News* for this item.

## LAST CALL FOR BAR CARS

On the Metro North Railroad (the agency that operates commuter rail service basically north of New York City and in Connecticut), bar cars could be a thing of the past. When the agency rolls out new rail cars (M-8's), currently being introduced into service, there will be no accommodation in the cars for bar service. Until now, bar cars had a special following on the New Haven line, the last commuter rail operation in the country to offer cocktails en route in such a car. Connecticut's Department of Transportation commissioner said the bar cars will continue, but there is currently no money allocated and no design plan to include them on the M-8's. The M-8's will replace older equipment on the New Haven line by the end of this year.

*[As your Editor has observed, there are any number of places offering beer and drinks for takeout sales in both Penn Station and Grand Central Station, so whether folks will be "brown-bagging" it in the future remains to be seen.]*

Thanks to WCBS 880 for this information.

## MACHINE USES WHAT TO CREATE "BIOLOGICAL CONCRETE"?

A new portable machine uses a unique blend of materials to create an eco-friendly concrete-like material that can be used to make bricks to build houses. The machine, called "Dupe", uses a mixture of sand, bacteria and urine (yes, one of the ingredients – we are not making this up!) to create a material called biostone.

The machine is a proof-of-concept design only and is currently set up to create small products, but the method can be adapted to create just about anything.

Designer Peter Trimble, while studying at the Edinburgh College of Art, decided to look at the sustainability of material production and found that cement production was the most environmentally damaging. He then developed the biostone, which is environmentally-friendly, but can be easily made as bricks for building housing in developing countries or remote places.

The procedure for creating biostone involves filling a mold of the final required shape with sand before pumping a bacteria solution of *Bacillus pasterurii* (which has been grown in a nutrient broth) into the mold and leaving the mixture to establish itself overnight. A solution of calcium chloride, urea and nutrient broth is then pumped into the mold. The bacteria uses the urea as energy to absorb the calcium chloride and convert it into calcium carbonate, a cement-like mixture that binds the sand together within the mold.

"The process forms mineral composites at biological temperatures," said Trimble. "The biomaterial is structurally comparable to concrete, yet the production of the biomaterial produces no greenhouse gases." Concrete is responsible for 5 per cent of the world's man-made CO2 emissions.

The biomaterial produced by this process is a stepping stone in the right direction for the reduction of these carbon emissions, Trimble said. *Maybe just in time for St. Patrick's Day, considering there's a lot of beer drinking and appurtenant releasing of beer's by-product...? Considering there won't be any more bar cars to help production (see above). [Or maybe we should've held this one for the April edition and let you wonder whether it was an April Fool's thing? – Ed.]*

Thanks to the *Times of India* for this.

\*N-ASCE – Not always something concerning Engineering...

**Never hold discussions with the monkey when the organ grinder is in the room.**

– Winston Churchill

## JOHN A. LEPORE

John Lepore, Ph.D. passed away on February 14. Dr. Lepore was an Emeritus Professor at the University of Pennsylvania, where he served on the faculty of the Departments of Civil and Urban Engineering and, later, Systems Science and Engineering and Electrical Systems and Engineering, for many years. He taught courses in structural systems, structural analysis and mechanics of materials, among other topics. He is survived by his wife of 54 years, Patricia, four children, 12 grandchildren, 4 great grandchildren, one sister and one brother.

Dr. Lepore was cited as the Section's Educator of the Year in 1998. He was active in the Section and in Penn's ASCE Student Chapter.

Contributions in Dr. Lepore's memory may be made to the Alzheimer's Association, 399 Market Street, Suite 102, Philadelphia 19106.

## HISTORICAL PERSPECTIVE – "YEAR 101"

Once again, here is our regular feature to provide opening dates of significant local Civil Engineering projects and achievements for your reference and knowledge. And, as we've indicated in the past, they can still be used for winning a bar bet or a trivia contest (so we hear...).

**March 4, 1907** – the Market Street Subway-Elevated opens for service, extending from 69th Street in rural Upper Darby to 15th Street in Center City. The line was on the surface in Upper Darby, elevated from just west of the Philadelphia City Limits to just east of the Schuylkill River, and in subway from roughly 23rd Street to 15th Street. Subsequent expansions would extend the line to the South Street Ferry Pier and open the trolley subway west of City Hall.

**March 10, 1683** – the General Assembly in the newly-founded Pennsylvania colony authorized the construction of a bridge on Kings Highway across the Pennypack Creek in the Township of Holmesburg. Construction was completed in 1697. Later, Kings Highway was renamed Frankford Avenue, the Township was consolidated into the City of Philadelphia, and the bridge was widened in the 1890's. The bridge is still in use today, the oldest structure still in service in the United States (and a National Historic Civil Engineering Landmark).

**March 12, 1933** – the new 30th Street Station of the Pennsylvania Railroad was partially opened for service. It was part of a system of major improvements on the Railroad that ultimately moved all long-distance train service out of Broad Street Station (closed in 1952) and commuter rail service into Suburban Station (opened in 1930). 30th Street Station was fully available for service on December 15, 1933.

**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.

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**Baker**



### BEANNACHTAÍ NA FÉILE PÁDRAIG!\*

It doesn't seem like it should be that time already again, but the "wearin' of the green" date is almost here. And, just as expected, your Editor will put his mainly-Irish heritage to the test, cranking out another "Lightly Amusing Message from Eire" (also know as LAME) for your enjoyment (or maybe your reason to imbibe) for St. Pat's Day.

As we did at Christmas, we conducted a contest of sorts and solicited for your contributions for the LAME in the February edition of *THE NEWS*. And, as we found at Christmas, there are no aspiring writers, poets, "I bet I can make a rhyme – how hard can it be" dare takers, etc., so we had no choice but to hand the pen and a six-pack to your Editor. So here's what came out of that effort (other than six empty beer bottles):

May the road rise to meet you  
And not the other way around  
'Cause that would involve you fallin'  
On your face to the cold ground

May the wind be ever at your back  
And the sun shine warm on your face  
Let's hope it's rain fallin' on your fields  
We've had enough snow, for goodness grace

And until we meet again may the Good Lord  
Hold you in the hollow of his hand  
Happy St Patrick's day to you and good cheer  
Hope the day for you is grand

And, our "rerun" from years past, an Engineer's variation of an Irish prayer (unlike the slightly twisted version above):

May the road rise to meet you  
[in accordance with AASHTO vertical curve and geometric guidelines]

May the wind be ever at your back  
[using the 85th percentile velocity and direction data according to the local wind rose plot]

May the sun shine warm upon your face  
[at the optimal angle determined by latitude, allowing full utilization of alternate energy resources]

And the rain fall softly on your fields  
[to be retained and infiltrated to decrease the burden on the stormwater conveyance system]

And until we meet again,  
May God hold you in the hollow of his hand.  
[we ain't touching that one!]

*\*Beannachtaí na Féile Pádraig!  
(ban-ochth'-thee na fay'-le paw'-drig) –  
Happy St. Patrick's Day!  
(You should know this by now!)*



### SECTION MEMBERS HONORED DURING ENGINEERS WEEK

As reported last month, at the rescheduled Delaware Valley Engineer Week Awards Luncheon, two of our members were recognized for special honors, induction into the Delaware Valley Engineering Hall of Fame and citation for Outstanding Service to the Community Award. The Hall of Fame is comprised of individuals, teams, projects and companies whose Engineering achievements have had a lasting impact on the profession and/or the public. The Outstanding Service Award has two components, one for contributions in Engineering, the other for work in the community, and it is fairly self-explanatory.

**Dr. Vukan Vuchic** was inducted into the **Delaware Valley Engineering Hall of Fame** for his outstanding accomplishments and service, both close to home and worldwide. **Ruben David** was recognized for his extensive work in community and professional society activities.

We would like to congratulate each of these individuals on their well-deserved honors. More information on each awardee is available in the February issue of *THE NEWS* as well as at the Engineers Week Committee's website:

[www.dvewc.org/hof2014/](http://www.dvewc.org/hof2014/)  
[www.dvewc.org/osa2014/](http://www.dvewc.org/osa2014/)

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