



PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS 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. 91-2

Our 106th Year

October 2018

ASCE VISION

Civil Engineers are global leaders building a better quality of life.

ASCE MISSION

Provide essential value to our members and partners, advance Civil Engineering, and serve the public good.

SECTION MEETING SCHEDULE 2018-19

The Section Meeting program for the upcoming season is starting to take shape. Our meeting program committee is busy lining up speakers and topics for what we hope will be an interesting and informative series of meetings. The dates and other information known at this time have been provided below for your planning purposes. We would suggest that you use this to mark your calendar at this time and hold these dates.

As always, you are welcome to attend the meeting presentation without dinner at no cost if you prefer to do so.

Information on future meetings this season as of this printing are:

2018

December – Engineers' Club of Philadelphia Multi-Society Meeting; in planning stages

2019

January 16 (Wednesday) – Joint meeting with American Society of Highway Engineers, Delaware Valley Section; Radisson Hotel/Valley Forge Casino, Valley Forge Cocktails 6 PM, dinner 7 PM, meeting 8 PM; Topic – Frankford Avenue Bridge Rehabilitation

February – In planning stages

March 14 – Maggiano's Little Italy, Center City; Topic to be determined

April 11 – Multi-topic meeting/breakout sessions, in planning stages

May - Spring Social, in planning stages

OCTOBER DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

THURSDAY, OCTOBER 11, 2018

Maggiano's Little Italy, 1201 Filbert Street (corner of 12th Street), Center City Cocktails 5:30 PM, Dinner 6:30 PM, Meeting Presentation Follows (approximately 7:30 PM)

SUBJECT: Lessons Learned on the Vine Street Expressway Project

SPEAKER: James Pezzotti, PE, Associate Vice President/Senior Bridge Engineer, Pennoni Associates

RESERVATION DEADLINE – THURSDAY, OCTOBER 4. 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 can be made through our website (**www.asce-philly.org**) and paid via PayPal or check. This option will NOT be available after the reservation deadline. Checks will be accepted at the reservation table at the door. Reservations received after the deadline and "walk-ups" without prior reservations will be charged \$50 (government agency employees and students will be charged the regular \$20 rate), and will be subject to acceptance on a space-available/standby basis.

Our "express" check-in process will be in place for those who reserve and pay via PayPal. Please print your paper ticket when you reserve and bring the ticket with you. This will allow you to enter the meeting room and bypass the registration table.

All registrations are final. Due to our commitment with our event venues, cancellations or no-shows will be invoiced for the full cost of the event. Registrants are able to transfer their registrations to others without penalty.

As always, guests will be welcome to attend the presentation without dinner at no charge. This will be subject to room capacity constraints.

ACCESS AND PARKING: Maggiano's is a short walk from SEPTA's Jefferson Regional Rail station and a half-block from bus routes, the Subway-Surface Trolleys and the Market-Frankford Line on Market Street. There is a parking garage directly above the restaurant for which validation can be offered for a reduced price.

What does it take to successfully complete a major project in the middle of a very busy area over a year ahead of schedule? To find out, join us for a "Lessons Learned" presentation on the Pennsylvania Department of Transportation's \$65 million Vine Street/I-676 Overhead Bridge Replacement Project in Center City Philadelphia, which is currently wrapping up. This effort includes the replacement of seven structurally-deficient bridges over I-676 and improvements to adjacent surface streets. Mr. Pezzotti, the Project Manager, will relate his detailed experience with the design and construction of this major effort, including accelerated design schedules, accommodation of large public events, both planned and relatively "spur of the moment", and the challenges of maintenance and protection of traffic both on I-676 and the surface streets through the heart of Philadelphia.

Mr. Pezzotti is an Associate Vice President and Senior Bridge Engineer with Pennoni Associates at its headquarters in Center City. Prior to joining Pennoni, he served as a Bridge Engineer with PennDOT District 6 in King of Prussia. He received his Bachelors and Masters degrees in Civil Engineering from Villanova University.

NOVEMBER DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

THURSDAY, NOVEMBER 8, 2018

Maggiano's Little Italy, 1201 Filbert Street (corner of 12th Street), Center City Cocktails 5:30 PM, Dinner 6:30 PM, Meeting Presentation Follows (approximately 7:30 PM) More information will be provided in the November edition of *THE NEWS*.



PRESIDENT'S MESSAGE

Welcome to another year of ASCE and I hope everyone had a wonderful and relaxing summer with their friends and family. The ASCE section season has not even officially kicked off yet and our technical groups, volunteers and members have been busy and engaged. Just in the last month we have had several outstanding technical events:

1. Frankford Avenue Bridge Tour (Presented by Michael Cuddy, PE of TranSystems)

2. Wells Fargo Remodeling (Construction Technical Group)

Advancements in Resilient Stormwater (Environmental and Water Resources Technical Group)
Addressing Issues with Large Diameter Foundation Elements (Geotechnical Institute)

As I am writing this there are two events on the way. Our Structural Engineering Institute has a September 27th presentation on Nonlinear Time History Analysis in RFEM with Machine Induced Vibrations. And, of course, our October 11th kickoff Section dinner meeting, where the topic of the night will be Lessons Learned on the Vine Expressway Project. Thank you to all that make these events interesting and accessible to our members and friends of ASCE.

Switching gears a bit, I would like highlight a program that ASCE National promotes and our Philadelphia Section has the privilege to be a major contributor. The program is ASCE's Historic Civil Engineering Landmark Program. The program:

- Increases public appreciation of Civil Engineering contributions to the progress and development of society;
- Provides Civil Engineers with an historical awareness of their own profession for both practical insights and pride;
- · Encourages the preservation of significant historic Civil Engineering works; and
- Fosters the inclusion of Civil Engineering landmark information in encyclopedias, guidebooks and maps.
- Just within our city limits we have the privilege to have four Civil Engineering Landmarks:
- The City Plan of Philadelphia
- Frankford Avenue Bridge
- Philadelphia City Hall
- Philadelphia Municipal Water Supply

Over the summer volunteers from our Section (Mohamed Elghawy, Jennifer Reigle, Bob Wright, and Jeanien Wilson) visited these landmarks and provided ASCE with a condition assessment of each. Their input enabled ASCE to update the web-based landmark database and provide invaluable intel on the condition and accessibility of the landmark plaques. I urge everyone to visit these landmarks or at the very least check out their descriptions on the web (https://www.asce. org/landmarks).

I wish everyone well and I look forward to seeing many of you on October 11th at Maggiano's!

Best, Angelo J. Waters, PE, LEED[®] AP President, ASCE Philadelphia Section ajwaters@urbanengineers.com | 215-284-3161

THANKS TO OUR SPONSORS - NOW IN OUR 28th (!) SEASON

At this early point in our season, we are proud to note that 13 firms have agreed to participate in our Section Sponsor program. We extend our special and collective THANKS to each sponsor for their financial commitment and support.

And, as noted in the title, we have been conducting our sponsorship program for 28 years! When we first rolled out our sponsorship program at the start of the 1991-92 season, there were nine firms that participated in it (2 of these remain as sponsors today!). Thanks to all of you have participated in this over the years.

Sponsor logos are displayed in a special Sponsors section of our website. Additionally, we provide direct links to sponsors' own websites so prospective employees can review all available and up-to-date positions. We also offer sponsors the opportunity to have a "spotlight" article in an edition of *THE NEWS*.

We contacted last year's sponsors in mid-August to determine their interest for this season, so if you were "in" last year but haven't yet renewed, we look forward to having you back.

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

The nine "original" sponsors were the following:

- BCM Engineers Inc.
- Lippincott Engineering Associates
- National Timber Piling Council
- Pennoni Associates, Inc.
- Pickering Corts & Summerson, Inc.
- The RBA Group
- Reutter Engineering
- Temple University
- J. Richard Weggel, Ph.D, PE

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION-2018-19 SEASON

The slate of Section officers and Board members for this season was formally installed at our Spring Social on May 3. Our new officers are:

PRESIDENT Angelo Waters, Urban Engineers, Inc.

PRESIDENT ELECT Kazi M. Hassan, Pennoni Associates, Inc.

> VICE PRESIDENT Troy Illig, WSP

SECRETARY

Briana Earle, Langan Engineering & Environmental Services

ASSISTANT SECRETARY Caroline "Cricket" Slattery, Advantage Engineers

TREASURER

Jennifer Reigle, Pennoni Associates, Inc. ASSISTANT TREASURER

Joseph Natale, WSP

MEMBERSHIP SECRETARY

Mohamed Elghawy, Traffic Planning & Design, Inc.

DIRECTORS

Andrew Bechtel, College of New Jersey, 2017-19 Kevin Brown, Vaughan Buckley Construction, 2017-19 Spencer Finch, Langan Engineering & Environmental Sciences, 2018-20 Joseph Natale, WSP, 2018-20 Nha Truong, Ernst & Young, 2018-20 Jeanien Wilson, Phila. Dept. of Streets, 2017-19

PAST PRESIDENTS*

Cathy Farrell, HNTB Guy DiMartino, Traffic Planning & Design, Inc. AnnMarie L. Vigilante, Langan Engineering & Environmental Sciences

* In accordance with our Constitution and Bylaws, only the immediate Past President will serve on the Board, and only for a one-year term. We show the most recent three Past Presidents as has become our tradition.

We wish these brave and generous folks our collective good luck for the coming season.

President—Angelo J. Waters, PE

Vice President Urban Engineers Inc. 530 Walnut Street Philadelphia, PA 19106 215-922-8081 x1273 ajwaters@urbanengineers.com

Secretary—Briana Earle, PE Staff Engineer Langan Engineering and Environmental Services PO Box 1569 Doylestown, PA 18901-0219 (215) 451-6500 bearle@langan.com

PUBLICATIONS COMMITTEE Editor of *THE NEWS* Robert Wright Editorial Assistants Lindsay Chateauvert, Assunta Daprano Section Outreach Coordinator Briana Earle SEND COPY TO: ASCE, c/o Urban Engineers, Inc. 530 Walnut Street, Philadelphia, PA 19106

> COPY DEADLINE FOR NOVEMBER 2018 ISSUE OCTOBER 12, 2018

Sean McCreesh, Forum Editor Eammon Farley, Forum President 2018-19 Michael Baker International eammon.farley@mbakerintl.com

LANGLEY AVENUE CONSTRUCTION TOUR **JUNE 26**



YMF held a construction tour of Langley Avenue, a new roadway being built at the Philadelphia Navy Yard. The tour started with a presentation at Bar Amis by Pennoni and Philadelphia Industrial Development Corporation (PIDC) on the history, design, and construction of the roadway and the Navy Yard. The group then took a walking tour of the newly realigned Langley Avenue to see the utility, vehicular, bicycle, and pedestrian improvements.

After the tour, the group returned to Bar Amis for a networking and discussion session. We are excited to see the completed project this Fall!

PHILLIES GAME AND TAILGATE

JIJI Y 20

YMF hosted our annual Phillies Game and Tailgate event, with the Phils trouncing the San Diego Padres by an 11-5 score. The event was well attended, with over 100 there ranging from college students to Section members. The weather was perfect and the tailgate was very well received. Thanks to everyone who came out and made for a great end of year event!



PRACTITIONER and FACULTY ADVISOR TRANING WORKSHOP

AUGUST 3-4

YMF Board Members Scott Cepietz and Jacob Nichols attended the 2018 Practitioner and Faculty Advisor Training Workshop at ASCE Headquarters in Reston, VA. Scott and Jacob had the opportunity to network and learn from other Student Chapter Advisors from around the country and the world. Scott had the opportunity to present to the group of 20 advisors about the concepts he learned at the 2017 workshop and how he incorporated those into the school year. Scott and Jacob are the Practitioner Advisors for Villanova University and Temple University respectively. The Practitioner Advisor is one of the main connections between college student chapters and the professional world.

THE NEWS

ASCE YOUNG MEMBER LEADERSHIP **SYMPOSIUM**

AUGUST 10-12



Several members of YMF took part in the 2018 edition of the ASCE Younger Member Leadership Symposium (YMLS) at ASCE Headquarters in Reston, VA. Two of our Board members, Jesse Gormley and Joe Natale, were directly involved in the planning and organizing of the weekend. The 2018 YMLS saw record attendance, including over 80 younger member participants from 25 states and 9 ASCE regions. The Symposium included excellent sessions on a wide range of topics including personality/communication types, mentorship, learning from mistakes, and project cost and schedule planning. Away from the Symposium, our members enjoyed checking out the night life that Reston had to offer and getting to know their colleagues from the many different YMFs and YMGs around the country.

END OF SUMMER HAPPY HOUR



SEPTEMBER 13

YMF gathered at Morgan's Pier to celebrate the final days of summer with the annual group photo. The group photo was taken around 6 PM and then everyone proceeded to enjoy appetizers and drinks amongst the company of their fellow members and colleagues. While the weather forecast showed storms, it turned out to be a beautiful, clear night with almost 50 people attending the event and making a complete success.

SAVE THE DATE! **ASCE MULTI-REGION LEADERSHIP CONFERENCE (MRLC)**

January 30 – February 1, 2020

YMF will be hosting ASCE's Multi-Region Leadership Conference (MRLC)/ Eastern Regional Younger Member Conference (ERYMC) in January of 2020! Together with the help of our Section, the conference will take place from January 30 through February 1 at the Philadelphia 201 Hotel (Sheraton) in Center City!

Conference sponsorship opportunities will be coming soon to our existing Section sponsors!

MEMBERS IN THE NEWS LAWRENCE JOINS MCCORMICK TAYLOR

McCormick Taylor is pleased to announce that Katrina Lawrence has joined its Planning and Communications practice in Philadelphia. In her role as Transportation Specialist III, Katrina will assist with project management in Philadelphia, Harrisburg, and New Jersey. She will also help with the statewide public participation plan and P3 work out of the firm's Harrisburg office.

With eight years of professional experience, Katrina spent the last four years at the Delaware Valley Regional Planning Commission, most recently serving as Senior Project Implementation Engineer, and facilitated working relationships between PennDOT and local municipalities as a PennDOT Consultant Project Manager for locally sponsored projects. She successfully managed multiple agencies, commissions, and private firms to deliver projects within federal guidelines.

Katrina has experience in the development and execution of Transportation Alternative Programs, Transportation Alternatives Set-Asides, Safe Routes to School programs, and Congestion Mitigation and Air Quality programs for Pennsylvania and New Jersey, all of which involved outreach to local municipalities and presentations to potential grant applicants.

We wish Katrina good luck in this endeavor.

BRADY JOINS WRA

Whitman, Requardt, and Associates, LLP (WRA) announced that Past President Thomas W. Brady has joined the firm as Associate in its Philadelphia Office. Tom is responsible for client project coordination and business development on the eastern side of Pennsylvania. He has over 25 years of experience in various aspects of highway design for major public-sector infrastructure improvement projects including the US202/US422/I-76 Interchange Improvements in King of Prussia, the Germantown Avenue Bridge over Wissahickon Creek in Philadelphia, and the Trenton-Morrisville Toll Bridge. He received his bachelor's degree from Drexel University and his master's degree from Villanova University and holds Professional Engineering licensure in three states. Congratulations to Tom on his new position!

THE MULFORD CLASSIC -**GOLF OUTING**

If you're looking for a fun and interesting day on the golf course, please mark the date of Monday, October 8 in your calendar and plan to join us fun-seekers at the 19th Annual Engineers' Club/Philadelphia Engineering Foundation (PEF) Golf Tournament, also the 3rd Annual Mulford Classic. It will be conducted at the Bala Country Club in Wynnefield. Various sponsorships, foursomes, and individual play are available.

Golfers of all skill levels are welcome. Volunteers are also needed for various duties. This is all for a good cause - PEF funds and administers college student scholarships and prizes in conjunction with the Engineers' Club that are awarded during Engineers Week.

Please visit the Engineers' Club website (www.engrclub.org) for more information and registration.

THE 2018 SPRING SOCIAL

After a winter that wouldn't go away, and about 3 days of spring following when it finally ended, summer arrived just in time for our annual Spring Social on May 3. While it was, by the calendar, still mid-spring, the day's temperatures made things feel more like July than early May. This was our second time conducting the Social at the Top of the Tower/Sky Philadelphia in Center City. A large turnout of nearly 130 Section members and guests turned out to close out our 105th season and put another successful year in our annals. It was a great evening to be 50 stories up, as the location offered interesting views of the Center City skyline and beyond, and the skies were clear.

Attendees were busy with happy hour and using their complimentary drink tickets, when they were directed from the lounge area to the dining room. President **Cathy Farrell** pounded the gavel to start her last meeting as President to get the busy evening underway. Once the crowd was settled, Region Governor and Past President **Carol Martsolf** offered an invocation/ blessing, and guests began enjoying their dinners.

Following dinner, the usual order of business was begun. Two of our Section prize winners at the Delaware Valley Science Fairs were in attendance, with their award-winning projects on display during the cocktail hour. Section Awards were presented to several nominees (more detail is given below). The slate of incoming Officers and Board Members for the 2018-19 season was introduced, with Region Governor Carol Martsolf called on once again to administer the Oath of Office. The "finale" of the evening was the passage of the gavel, as President Farrell handed over the "reins" of the Section (and the gavel she has used quite frequently) to incoming President **Angelo Waters**, who wrapped up the event with his short remarks.

As has become a tradition of sorts, we invited our Section's Science Fairs awardees to attend the Social and show off their winning projects. Past President **Bob Wright**, standing in for Past President **Chris Rood**, chair of the Section's Science Fairs judging contingent, recognized them. These hopefully aspiring Engineers were Grades 6-8 First Place winner **Dean Siedlecki**, an 8th grade student at Pittsgrove Township Middle School in Pittsgrove, NJ, offering "*Which Wood is the Strongest*?", and Grades 6-8 Second Place recipient **Marissa Lux**, from the 8th grade at Patton Middle School in Kennett Square, whose project was "*The Great Quake*." Both Dean and Marissa displayed their projects during the networking hour and ably responded to questions from attendees.

We additionally recognized eight members who were nominated for Section Awards for 2018, using the audiovisual show that has been produced for this purpose (and well-received, as usual) for many years to cover their accomplishments. Information on each of the awardees follows.

PHILADELPHIA CIVIL ENGINEER OF THE YEAR

William Thomsen

Bill was nominated for this award, our Section's highest honor. He has been with Urban Engineers since 1980 and has risen through the ranks to his current title, Senior Vice President and Chief Operating Officer of the firm, and also the President and Chief Executive Officer of Urban's counterpart firm in New York. He directs Urban's National Services practice, which covers the planning, design, construction, and program management for numerous public transportation projects. He has played a key role in the development of the firm's program management oversight efforts, which have included many major and key expansion projects for transit agencies and authorities across the United States. Among his current assignments are the multi-billion-dollar mega projects for the East Side Access Improvements and expansion of the Long Island Railroad services to Grand Central Station and the Second Avenue Subway extension, both in New York City.

Bill is a graduate of Clarkson University, where he earned his Bachelors degree in Civil Engineering in 1978, with a subsequent Masters in Engineering Management from Drexel University in 1985. He has been an active member of our Section for many years and has served in numerous capacities as a Section officer and Board member, culminating in his term as Section President in 1994-95. He continues to lead our Transportation and Urban Development Technical Group.

PHILADELPHIA YOUNG CIVIL ENGINEER OF THE YEAR

Jesse Gormley

Jesse serves as a Staff Engineer with Pennoni Associates at the firm's headquarters in Center City. He has been with Pennoni for the past eight years and is with the firm's Transportation Division, where he specializes in bridge and structural design, inspection and load rating analysis for bridges, and design of retaining walls and related earth-retention structures. Among his recent projects are the Crum Creek Viaduct replacement on SEPTA's Media Elwyn Regional Rail line, the replacement of overhead structures on the Vine Street Expressway in Center City, and the award-winning Lock Street bridge spanning the Manayunk Canal in northwest Philadelphia.

Jesse has been extremely involved with our Section's Younger Member Forum and is the Forum's current Secretary. He has also been active in younger member concerns at the ASCE National level and was recently appointed as the Chair of the National Committee of Younger Members. He was instrumental in the formation of the Civil Engineering Club at the Chester A. Arthur public school in South Philadelphia, which allows students in 6th to 8th grades a hands-on exposure to Civil Engineering.

Jesse received his Bachelors degree in Architectural Engineering from Drexel University along with a Masters degree in Civil Engineering in 2010.

YOUNG GOVERNMENT ENGINEER OF THE YEAR

Katrina Lawrence

Katrina is on the staff of the Delaware Valley Regional Planning Commission, where she is a Senior Projects Implementation Coordinator. She has been with DVRPC for the past four years. (She has since moved to a different firm – please see the separate article on this.) In this position she manages federally-funded projects for the non-traditional types of transportation projects that address multi-modal concerns and issues. These include efforts that provide safe routes to school, pedestrian connections to transit, and multi-use trails throughout the Philadelphia Region. She additionally coordinates these projects among the various stakeholders, including the local sponsor, affected municipalities and townships, and PennDOT, to obtain the necessary reviews and approvals.

Katrina is a graduate of the Georgia Institute of Technology, where she received her Bachelors degree in Civil Engineering in 2010. She is an active member of our Section's Younger Member Forum and co-chaired outreach efforts to local grade and high schools over the past two years. To cite her success in reaching over thirteen hundred students as part of this program, she was awarded our Community Outreach and Service Award last year.

GEOTECHNICAL ENGINEER OF THE YEAR

Melissa Logan Gillespie

Melissa serves as the Geotechnical Engineering Eastern Practice Leader for TRC Engineers at its office in Mount Laurel, New Jersey, a position she has held for the past two years. She has been with TRC for the past 17 years and manages budgets, schedule, invoicing, and Engineering efforts associated with the successful operation of the firm's East Coast Geotechnical Engineering practice. Her work encompasses all phases of projects, including site stabilization, foundations, geotechnical instrumentation monitoring systems, and design evaluations related to soil and rock slope stability, earth retaining structures and reinforced soil slopes. She has been a key team member and contributor on numerous local projects.

Melissa received her Bachelors degree in Civil Engineering from Drexel University in 1996 and her Masters degree from the University of Texas at Austin in 1998. She has served as a board member of our Section's Delaware Valley GeoInstitute for several years and has been very dedicated in her assistance with DVGI's successful programs. She is a registered Professional Engineer in nine states.

ENGINEERING MANAGER OF THE YEAR

Carmen Zappile

Carmen is with the Philadelphia Industrial Development Corporation, where he is the Vice President of Planning and Project Development as well as the Manager of the Philadelphia Navy Yard. He has been with PIDC for the past nine years. His duties include supervision and direction of Architecture and Engineering consultants for PIDC's efforts for technical *Continued on Page 5*

Continued from Page 4

investigation, project development and implementation, and project and construction management, both at the Navy Yard as well as at other sites. He also assists with coordination of the Navy Yard's various developments and large-scale construction projects, infrastructure requirements, permitting, and regulatory issues. Prior to joining PIDC, he was with the United States Army Corps of Engineers, where he directed staff on various civil works projects and provided technical and planning guidance.

Carmen is a graduate of Widener University, where he received his Bachelors degree in Civil Engineering in 1990. He returned to school to earn a Masters degree in City Planning from the University of Pennsylvania in 2003.

ENVIRONMENTAL AND WATER RESOURCES ENGINEER OF THE YEAR

Dr. Franco Montalto

Franco is an Associate Professor in the Department of Civil, Architectural and Environmental Engineering at Drexel University. He is also the Founder and President of eDesign Dynamics in New York City. His field of interest is Sustainable Water Resource Engineering, which includes the ecological, social and economic implications of water infrastructure strategies and designs implemented in urban and urbanizing regions. He has worked in numerous areas, both through his university research and his firm, in the contemporary backdrop of climate change and urban growth and regeneration. He has developed a laboratory and coursework in this area at Drexel and has received over five million dollars in research grants and contracts as a project leader and principal investigator from various funding agencies and water utilities.

Franco received his Bachelors degree in Civil Engineering from the Cooper Union in 1995 and subsequent Masters and Doctorate degrees from Cornell University.

COMMUNITY OUTREACH AND SERVICE AWARD

Timothy Abel & John Doyle

This year, there were two nominees for our Community Outreach and Service Award.

Timothy Abel serves as an Associate Highway Engineer with Pennoni Associates at its headquarters in Center City. In this capacity he provides Design and Engineering services for highway and transportation facility improvement projects.

Tim received his Bachelors degree in Civil Engineering from the University of Delaware in 2015 and is currently working toward his **John Doyle** is with Traffic Planning and Design, where he is a Highway and Trail Designer in the firm's Center City office. He assists with the Design and Engineering of various projects.

J.R. earned his Bachelors degree in Civil and Environmental Engineering from the University of Pittsburgh in 2016. He is active in our Younger Member Forum.

Tim and J.R. have directed the efforts of our Younger Member Forum's Civ E Club at Chester A. Arthur School in South Philadelphia this past year, which allows hands-on involvement in various Engineering-related activities for students in 6th through 8th grades. This is one of only a handful of such outreach programs in the country and it has been very successful.

OTHER AWARDS

Awards presented by National to Section members in separate ceremonies and venues were noted and recognized.

- The 2018 Wilbur S. Smith Award, received by Dr. Geoffrey Rowe
- The Eastern Regional Younger Members Council (ERYMC) Outstanding Young Civil Engineer in the Public Section award, received by **Nha Truong**

Our Younger Member Forum received several awards and citations:

- Student Transition Activity (STAY) Grant
- ERYMC Peers Group
- ERYMC Outstanding Younger Member Group Project, for the Dream Big Inspired Engineers Week YMF K-12 Outreach at North Penn

THANKS TO...

Special thanks are extended to those who helped make the Spring Social a success once again this year. This includes the Spring Social Program Committee (chair **Troy Illig, Briana Earle, Kazi Hassan, AnnMarie Vigilante, Jenn Walsh, Jeanien Wilson** and **Bob Wright**), the Awards audio narrators, who once again stayed inside on a nice spring evening to donate their voices to the effort (**Mohamed Elghawy, Cathy Farrell, Carol Martsolf, Jen Reigle** and **Bob Wright**), and the Awards Committee (chair **Bob Wright, Carol Martsolf, Allan Moore** and **Joe Natale**).

Planning for the 2019 Spring Social will begin later this season, so no date has been set as of this writing. Details will be provided as they develop and will be noted in upcoming editions of *THE NEWS*.



Rehabilitating a 321-year-old bridge – the oldest structure still in use in America – is no easy task. Yet the rehabilitation of the bridge carrying Frankford Avenue over Pennypack Creek in the Holmesburg section of Philadelphia will forever be a part of its storied history.

Built in 1697 and reconstructed in 1893, this three-span stone masonry arch bridge is listed on the National Register of Historic Places and is a National Historic Civil Engineering Landmark. It was an important link on The King's Highway, which eventually connected Philadelphia to New York. Some historians believe George Washington and John Adams crossed the bridge.

The impetus behind this bridge rehabilitation stemmed from an inspection of the structure following a 2015 crash when a section of parapet wall was damaged. Crews removed and rebuilt the bridge's north spandrel wall, excavated and replaced arch backfill, repointed stone masonry, and performed other related items of work.

Work was completed in mid-September and the detailed process of design and construction will be the subject of our January joint dinner meeting with the American Society of Highway Engineers, Delaware Valley Section. A group 20 of Engineers was able to participate in a tour of the project on August 29, led by **Mike Cuddy** of TranSystems. Thanks to Section Membership Secretary **Mo Elghawy** for his coordination of this.

THE NEWS

Providing transportation engineering and related services

across the eastern United States

SECTION COMMITTEES

Our Section runs very well and it is mainly a result of the dedication and service of our many volunteers, both our Officers and Board Members as well as our various Committees. A list of our current Committees and chairs is provided below to advise what groups we offer. If you have an interest in helping and/or would like to join a Committee, please reach out to us at a new e-mail address we have set up for this, **volunteer@asce-philly.org**, or through our Section Secretary, **Briana Earle** (contact information is provided on page 2).

ASCE Philadelphia Report Card Promotion – Cricket Slattery

Audit – Kazi Hassan

Awards – Bob Wright (includes Engineers Week Hall of Fame Recognition)

- Budget and Finance Jennifer Reigle
- **Civil Engineers in Government** Jeanien Wilson

College Scholarship – Andrew Bechtel **Communications** – Briana Earle (includes E-mail Outreach, Newsletter, Sponsorship, Website)

Continuing Education – Angelo Waters **Humphrey Fund** – John Zarsky

Membership – Mohamed Elghawy

Mural - Angelo Waters

Nominating (for Board Positions) – Cathy Farrell

Program – Angelo Waters (includes Meeting Check-in/Name Tags and Venue Coordination)

Society Relations – Cathy Farrell (includes Legislative Affairs, PA Council and Region 2) Subsidiary Groups – Kazi Hassan (includes Technical Groups/Institutes and Younger Member Forum)

Spring Social Committee – Troy Illig

TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. 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 dmacbride@septa.org

DELAWARE VALLEY GEO-INSTITUTE (DVGI) www.dvgi.org Archie Filshill

archie@aeroaggregates.com ENVIRONMENTAL AND WATER RESOURCES

Eric Lindhult eric.lindhult@gmail.com

STRUCTURAL ENGINEERING INSTITUTE (SEI) www.sei-philly.org

Joe Fazio jfazio@hntb.com

TRANSPORTATION AND URBAN DEVELOPMENT

William T. Thomsen wtthomsen@urbanEngineers.com Please check the noted websites as well as the main Section site (www.asce-philly.org) for upto-date information on Technical Group meetings and events. These will be included in our regular e-mail blasts as well.



www.villanova.edu/VUSP



Construction Management
Operations & Maintenance

For career opportunities and/or information, please visit wsp-pb.com/usa

Design

N-ASCE* OLD TAPPAN ZEE BRIDGE GETS NEW LIFE

The new Tappan Zee Bridge (officially known as the Governor Mario M. Cuomo Bridge) recently opened for full use, which will allow the old bridge (less well officially known as the Governor Malcolm Wilson Bridge) to go to the fishes. Really. Chunks of concrete and steel that held the three-mile span aloft over the Hudson River for decades is in the process of being scattered among a half-dozen artificial reefs off Long Island, with about 30 bargeloads total to be deposited through early fall.

By recycling the Tappan Zee, New York State has not only found an affordable and practical way to dispose of some of its massive parts, but is also significantly expanding a state-managed artificial reef program that aims to provide new habitats to increase the diversity of marine life, promote recreational fishing and diving and bolster economic development.

The state program maintains 12 artificial reefs, two in Long Island Sound, two in the Great South Bay, and eight in the Atlantic Ocean. The old bridge parts will be sunk, along with 30 decommissioned barges, tugboats and tenders from the Erie Canal and upstate waterways as well as steel pipes and scrap materials from state transportation projects. Concrete and steel from the Tappan Zee's supporting structure will be deposited among six of these reefs. The bridge's steel trusses may also be used to build up the reefs. All the materials will be thoroughly cleaned before being submerged. The cost of transporting the materials to the artificial reefs is about \$5 million and is covered in the construction contract for the new bridge.

The expansion of the reefs will not only benefit those who fish and dive, but also the local businesses that they support, from bait and tackle stores and fuel stations to hotels and restaurants. The reef work goes hand in hand with efforts to improve the water quality around Long Island, which has long been polluted by runoff from home septic systems and sewage treatment plants, and bring back oysters, clams, mussels and scallops.

Additionally, some bridge parts are destined for recycling centers and scrap yards, and others are being repurposed. The New York State Thruway Authority, which operated the Tappan Zee, sold 133 concrete-and-rebar panels from the deck of the bridge, at \$1 apiece, to counties and the state Department of Transportation to use for infrastructure projects.

Thanks to the New York Times for this info.

WHEN IN VIENNA...

Europeans are proud of their ability to cope with summer heat without the icy air-conditioners that are so common in the United States. But sometimes, even for an Austrian, it's just too much.

When temperatures on many of Vienna's U6 subway line cars reached 95°F in July, the city decided that it was time to take some action. (In

Europe, even the transport of livestock is restricted to lower temperatures, generally no higher than 90° .) But if commuters were hoping to be treated on an equal level with European livestock, they were soon disappointed.

Defying the temptation of air-conditioning, the publicly owned transport company decided to hand out deodorant instead. Over 14,000 sticks were distributed to riders. Reactions were mixed. While the smell-concealing gifts were warmly welcomed by Vienna commuters, some wondered about the underlying message of the initiative.

The larger issue is the use of air conditioning. While this has been on a steady rise across the globe in recent decades, growth rates in Europe have lagged far behind those of China and the United States. As summers are now getting hotter in Europe, however, cities are finding themselves increasingly forced to upgrade their cooling systems on public transport and in offices.

European city officials frequently emphasize that they want to avoid shifting entirely to a US-style approach to air conditioning. The main concern is that the sort of cheap AC that's commonly used in the United States is about 25 percent less efficient than the usual European systems. But the broader question here is also whether AC is really needed, especially as countries seek to reduce their carbon footprints. Cultural factors also seem to affect the attractiveness of ACs in some countries as well.

Still, capitals such as Vienna and Berlin have a long way to go to match the AC-density of North American cities. So far, only 3 percent of households in Germany have it. In the US, that number is 87 percent.

Thanks to the *Washington Post* for this info. **N-ASCE – Not always something concerning Engineering...*

SPONSORS IN THE NEWS TPD NAMED A FASTEST-GROWING COMPANY IN AMERICA

Inc. magazine has named Traffic Planning and Design, Inc. (TPD) on its Inc. 5,000 list of the fastest-growing private companies in America. TPD's commitment to growth has earned it a spot for the first time since 2009 when it came in at 4,312. This year it came in at 4,998 in its fourth time on the list.

With 150 members, 10 office locations, and an ever-expanding repertoire of services, TPD has made some notable strides over the past few years. As TPD continues to leverage its resources and recruit top talent, the firm's trajectory seems to be limitless.

Kevin Johnson, TPD's President, attributes the firm's success in recent years to "TPD's dedication to investing in human capital and exploring new service-driven and geographic opportunities, while operating as lean and strategically as possible." Already this year, it has also landed on the Zweig Group's Best Civil Engineering Firms to Work list (a national ranking) as well as Engineering News Record's list of Top Design Firms in the Mid-Atlantic Region.

The full Inc. 5000 ranking list can be found here: https://www.inc.com/inc5000/list/2018.

'18 PA REPORT CARD BEING FINALIZED – COMING SOON!

The four Pennsylvania Sections (Central Pennsylvania, Lehigh Valley, Philadelphia and Pittsburgh) have been working diligently so far this year (and since last November) to assess the conditions of the state's infrastructure and provide an updated 2018 PA Report Card.

The Sections reviewed data on 18 separate categories, including reports, studies, surveys and various other materials from professional societies, non-profit associations, as well as government agencies at the local, state and federal levels. Based on this review, a detailed assessment of the condition of our infrastructure was developed, taking into account its performance, funding, capacity and future needs.

This effort represents the fourth such undertaking performed by the Pennsylvania Sections, following those developed and released in 2006, 2010 and 2014.

The Report Card is "almost there" and will be presented to the public on November 14. Please hold the date for a local "unveiling" ceremony that is now in the planning stages. More information will be provided in e-mail blasts and the November edition of *THE NEWS*.

Thanks to Past Section President **Cathy Farrell** and **John Caperilla** of the Lehigh Valley Section, who have co-chaired the effort this time around.

The only way to prove that you're a good sport is to lose.

– Ernie Banks

AN ENGINEERING TRUTH?

Some of you who deal with the public on various items may have often wondered this, but at least one Engineer involved in transportation design has related what many of us have often thought. In an industry publication, this Engineer shared a comment he received from a concerned citizen who was attending a public meeting on a request for installation of a traffic signal. The citizen explained, "Your job is to anticipate our stupidity and take actions before we hurt ourselves." Obviously, we must be smarter than we think...

YOUR CARD CAN BE HERE! CONTACT US AT newseditor@asce-philly.org FOR DETAILS