



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. 89-5

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.

REMAINING SECTION MEETINGS 2016-17

Our "look-ahead" schedule is provided for your planning purposes and to add to your calendar to hold the dates. Information on future meetings this season as of this printing is below.

MARCH 10

Delaware River Dredging Update Maggiano's Little Italy, Center City

APRIL 6

Multi-topic meeting/breakout sessions Location and topics to be determined

MAY

Spring Social Location and date to be determined

MARK YOUR CALENDARS ENGINEERS WEEK EVENTS SCHEDULED

The Engineers' Club of Philadelphia, through its Delaware Valley Engineers Week Committee, will be celebrating **Engineers Week 2017** from **February 17 through February 25** and will continue its schedule of three events which will highlight the various contributions of Engineers and Engineering students in the Delaware Valley. Please note this information in your calendar and plan to participate.

Luncheon: Friday, February 17 Loews Hotel, Center City

Young Engineers Social: Tuesday, February 21 2nd Story Brewing Company, Old City

Awards Reception: Thursday, February 23 Dave & Buster's, Penns Landing

Section Member John Nawn has been elected as the 2017 Delaware Valley Engineer of the Year. Congratulations to John on this honor!

More information will be provided on price and other details in the next edition of *THE NEWS*. Please visit **www.dvewc.org** for up-todate announcements.

Our 104th Year

January 2017

JANUARY JOINT DINNER MEETING

American Society of Civil Engineers, Philadelphia Section American Society of Highway Engineers, Delaware Valley Section

WEDNESDAY, JANUARY 18, 2017

Radisson Hotel/Valley Forge Casino, 1st Avenue and Gulph Road, Valley Forge Cocktails 6:00 PM, Dinner 7:00 PM, Meeting Presentation 8:00 PM

Cost \$40 through January 12 (\$25 for government employees and students), \$50 January 13 and after and at the door

SUBJECT: Pennsylvania Turnpike Commission Program Update SPEAKER: Brad Heigel, Chief Engineer, Pennsylvania Turnpike Commission PLEASE NOTE — RESERVATIONS MUST BE MADE THROUGH

DELAWARE VALLEY SECTION, ASHE. Reservations can be made as follows:
By mail – please send your check with the names of attendees to Delaware Valley Section ASHE, c/o Contractors Association, 1500 Walnut Street, Suite 1105, Philadelphia, PA 19102;
By fax – please fax the names of attendees to the Contractors Association, 215-546-2259, with payment to follow;

By e-mail – please e-mail the names of attendees to **Samantha Schultz (sschultz@caoepa. com)** or **Diana Perez (dperez@caoepa.com)** with payment to follow. Payment will be accepted at the door with no penalty for faxed and e-mailed reservations received before the RSVP deadline.

By PayPal - visit delvalley.ashe.pro for details.

We encourage you to reserve ahead to ensure a place at the meeting. Walk-ins will be accepted on a space-available basis. THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE. This has always been a popular meeting and a significant turnout is expected.

The Turnpike celebrated its 75th anniversary in 2015. America's first superhighway, as it has been called, opened its original 160-mile segment across the mountains from west of Harrisburg to east of Pittsburgh, utilizing the right-of-way of an abandoned railroad alignment, in 1940. The current nearly 500-mile network was completed in several efforts mainly in the 1940's and 1950's.

At present, the focus of the Pennsylvania Turnpike Commission (PTC) is the upgrading and modernization of the highway and its infrastructure, and a major program is underway to increase safety, widen medians, add lanes and bypass at least one tunnel. Technology is being implemented to move toward automated and cashless toll collection to aid in efficient vehicle movement, with the first cashless section (westbound at the Delaware River Bridge) implemented a year ago.

In our area, two main efforts are nearing completion. The new I-95 interchange will extend the I-95 designation along the Turnpike and the New Jersey Turnpike and close a long-time gap in this interstate. The widening of I-476 (the Northeast Extension) will provide a 6-lane section from Plymouth Meeting to Lansdale to handle increased commuter traffic. In other areas, the ongoing *Continued on Page 4*

FEBRUARY JOINT DINNER MEETING

American Society of Civil Engineers, Philadelphia Section Women's Transportation Seminar, Philadelphia Chapter

FEBRUARY, 2017

The details of our February meeting, which will be a joint effort with the Women's Transportation Seminar, Philadelphia Chapter, are being finalized as of this printing. More information will be provided in the February edition of *THE NEWS* and in upcoming e-mail blasts.



PRESIDENT'S MESSAGE

With the holidays upon us, hopefully everyone gets some time to spend with friends and family to relax and celebrate the holidays and accomplishments over the last year. The Section certainly had a very busy year with a number of well-attended dinner meetings, joint meetings, and ever-growing student outreach activities to name a few. We are excited to kick-off the new year with our joint meeting with ASHE in January.

Over the last few months, there were a few notable awards that I would like to further recognize and am proud of as a Widener alum. **Kevin Brown**, our YMF President (and Widener alum), was recognized by ASCE National as one of three Practitioner Advisors to receive the 2016 Outstanding Practitioner Advard for his work and dedication to the Temple and Widener University ASCE Student Chapters. Also, current Widener ASCE Student Chapter member, **Derek Harzinski**, was recognized by ASCE National as one of three student members to receive the 2016 Student Leadership Award for his leadership and dedication to the University's Student Chapter. Finally, to complete the Widener "trifecta", **Dr. Vicki Brown**, the Chairman of the Department of Civil Engineering (and former Section Board member), was named a Distinguished University Professor for her excellence in teaching, scholarship and service.

Finally, don't forget that National and Philadelphia Section ASCE membership renewals are due by the end of the year. Access to the 5 free PDH credits included as part of membership can help as the 2017 PA PE renewal approaches.

I hope everyone has a safe, healthy and happy holiday season!

Sincerely, Guy DiMartino, P.E. President, ASCE Philadelphia Section

A JOYOUS HOLIDAY SEASON TO ALL

While we recognize the collective celebrations observed this time of year as the "holidays" and the "holiday season", whether you celebrate Christmas, Hanukkah, Kwanzaa, or your own particular event (or all of them), the Officers and Board of Directors of the Philadelphia Section extend our best wishes to all Section Members, their families and friends for a safe, enjoyable and memorable season full of good cheer. Also, we offer our best wishes for a great new year and we sincerely hope that the new year brings good things your way.

We at The News would also like to send the same good wishes. We continue to try to give you the best we can in each edition, information you can use and otherwise... We hope you accept what we provide in the spirit that it is presented, sometimes a little tongue in cheek (we could all use a little more humor in our lives – some of us maybe more than a little...) and we certainly hope you enjoy it.

In the spirit of the season, 'tis better to give than receive, so we give our annual Lightly Amusing Yuletide Message (LAYM) for your enjoyment as well. (Remember, 'tis better to give than receive... We gave everyone a chance to submit something, we didn't get any submissions, so we're giving you this!)

Your Editor Could use a beer Contest went bust Again this year

Messages asked for But none in sight So pen in hand Editor will write...

In his shop At the North Pole Jolly fellow Ready to roll

Elves have loaded A bulging sleigh Reindeer power Leads the way

Reindeer lined up In two strong rows Led by Rudolph With his red nose

That jolly guy Will go worldwide With trusty elves A wild ride Trees decked out Glitter and light Festive ornaments A cheerful sight

A little weird A tree inside The kids don't care Their smiles wide

Near the mantle Empty stockings await Arrival of the jolly guy Hope he's not late

Gifts from that guy In the red suit Kids of all ages Getting their loot

Leave lots of room Under the tree Gifts for the good That's you and me

All have been good They've met that goal No need to fill Stockings with coal Flashing lights Red, green, gold A colorful sight Great to behold

Happy times Cheer abounds Good food and drink Gain a few pounds

Something about The tide of yule 'Tis the season Isn't it cool

Your Section bids All who engineer Happy Holidays Merry New Year

Your Section hopes Your season's keen Good tidings to you And a great '17 ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION - 2016-17 SEASON

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PAST PRESIDENTS*

AnnMarie Vigilante, Langan Engineering & Environmental Services Joseph Platt, Traffic Planning & Design, Inc.* Jennifer K. Walsh, McMahon Associates Inc.*

* 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.

President—Guy DiMartino, P.E.

Project Manager Traffic Planning & Design, Inc. 2500 E. High Street, Suite 650 Pottstown, PA 19464 (610) 326-3100 gdimartino@trafficpd.com

Secretary — Briana Earle, EIT Senior 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 Section Outreach Coordinator

Nha Truong

SEND COPY TO: Robert Wright, Pennoni Associates, One Drexel Plaza, 3001 Market Street, Suite 200, Philadelphia, PA 19104

> COPY DEADLINE FOR February 2017 ISSUE January 20, 2017

YOUNGER MEMBER FORUM NEWS

Nicole Eno, Forum Editor Kevin Brown, Forum President 2016-17 Urban Engineers, Inc. 530 Walnut Street Philadelphia, PA 19106 kbrown@urbanengineers.com

JOINT HAPPY HOUR WITH BOEING BRANCH November 14

YMF teamed up with the **Boeing Branch** of ASCE for a joint happy hour at Iron Hill Brewery in Media. About 20 attendees enjoyed happy hour specials and appetizers sponsored by the Boeing Branch. Drexel, Temple, and Widener were all represented by student attendees. Since most YMF events are in the city, it was good to get out to a new location and create some new connections. This was the first time that the YMF has collaborated with the Boeing Branch, and we certainly look forward to working together again in the future.

WIDENER UNIVERSITY PRESENTATION NOVEMBER 15

Widener University's ASCE Student Chapter Vice President, **Zachary Hill**, coordinated with the **ASCE Geo-Institute** to provide Widener students and YMF members with two speakers to present D.C. Water Clean Rivers – A Look Into Underground Construction. Project contractor Moretrench's **James Myers**, **PE** and **Adam Curry**, **PE** spoke to the group of about forty people about their ongoing tunneling work for the Project. Light refreshments were served at Widener's Uno Pizzeria after the presentation to promote networking among the students and professionals.

VILLANOVA UNIVERSITY PRESENTATION NOVEMBER 17

Justin DiBiase (Villanova Student Chapter practicioner advisor) and **Scott Cepietz** of Michael Baker International spoke to roughly 20 students of the Student Chapter about traffic engineering and provided information on ASCE and how it can benefit their careers.

VINE STREET EXPRESSWAY TOUR NOVEMBER 21

YMF held its second tour of the **Bridges over** the Vine Street Expressway (I-676), led by **Robert Buckley** of Buckley & Company, the prime contractor on the project. There were approximately 15 Engineers and Engineering students on the tour and they were able to see the progress of construction in its current stage. After the tour, the group was invited to the project trailers to listen to **Kazi Hassan**, **PE** give insight on some of the design aspects of the project as well as how the team worked together to solve challenges during construction.

K-12 OUTREACH November 29

YMF visited **Fox Chase Elementary**, reaching out to three 4th grade classes and a total of 90 students. Students worked in groups in a short roadway design activity, learning the ins-andouts of designing roadways as well as about sustainability and safety in roadway projects. Nikunj Karumsi led the outreach efforts and Charlie Mumford also facilitated. First-time YMF volunteer Samantha Burke commented, "the kids got excited about whose road would 'win' – after their roads were drawn and measured, the kids really grasped the concept and got excited. It was fun to watch." Thanks to all our volunteers!

Cive Club Fall Ceremony December 12

The YMF Philadelphia Civil Engineering Club at the **Chester A. Arthur School** celebrated the end of a successful fall semester with a mini-Engineering fair and ceremony! Club members presented poster boards featuring their favorite activity from the fall to parents and YMF volunteers, highlighting the activity's "Big Idea" and the students' hypotheses, procedures, results, and conclusions. Following the presentations, the club members competed against parents and volunteers in the "Marshmallow Challenge," and previewed the ASCE Dream Big Film. The event concluded with pizza and soda provided by the YMF, much to the club members' delight.

We would like to thank the ASCE YMF and ASCE College Chapter members who volunteered for club activities and helped to make the fall a success. We look forward to the spring semester at the Chester A. Arthur School, and are planning activities and field trips that focus on Geotechnical Engineering, Structural Engineering, and construction for the students. More information about the club is available on the **CivE Club Page** at **www.ymfphilly.org**. If have any questions, please contact **Tim Abel** (tabel@pennoni.com) or Kevin Walsh (kwalsh@pennoni.com), YMF CivE Club Co-Chairs.

ANNUAL WINTER SOCIAL JANUARY 30

YMF will be hosting its annual **Winter Social** at **McGillin's Olde Ale House** in Center City. This event brings together over 150 engineers in the local Philadelphia area. As in previous years, we will have a raffle in which all proceeds go to local nonprofit charities. At this time, we are looking for companies interested in sponsoring the Winter Social by providing raffle prizes such as gift cards. Please contact **Nha Truong (nha.truong@phila.gov)** if you would like to be a sponsor. Your name and logo will be featured on a sponsorship board at the event as well as on our website.

The cost will be \$25 for RSVP before the deadline of **January 23**. Be on the lookout for the RSVP link!



Students, teachers and mentors at the CivE Club Fall Ceremony

SECTION SCHOLARSHIP PROGRAM OPEN FOR APPLICATIONS

The Section's Scholarship Program is now open for applications for the 2016-17 season.

The Section offers three distinct undergraduate scholarships annually:

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

The application process for the Engineers Week Scholarship is now closed. This will be awarded during Delaware Valley Engineers Week in February.

Scholarship winners will be invited to attend our March Section meeting as our guests to be cited.

For the Student Scholarship, a minimum of one \$1,000 award will be made by the Section to a civil engineering student who is matriculated in a full-time Civil Engineering or Architectural Engineering program at one of the Philadelphia Sections five Student Chapters (Drexel University, Swarthmore College, Temple University, Villanova University, or Widener University). The applicant must be an active ASCE member.

For the Section Member Scholarship, a minimum of one \$1,000 award will be made by the Section to an undergraduate Civil Engineering student who is the child of an active Philadelphia Section member and matriculated in a full-time Civil Engineering or Architectural Engineering program at any accredited college or university. The applicant's cover letter should include his/her Section member parent's name and ASCE ID number.

The application requirements for each of these Scholarships include a cover letter containing the applicant's name, address/telephone/e-mail contacts, educational institution, GPA/class rank, resume, and additional information for consideration (such as need). A letter of recommendation from the applicant's faculty advisor should be submitted either with the application or separately. An essay (limited to 1000 words) should be included on this topic:

Education is one of the major requirements for becoming a Licensed Civil Engineer. Currently, ASCE is promoting a *"Raise the Bar Initiative"* to increase the degree level necessary for professional licensure from the Bachelor's to the Master's degree level. Discuss the ramifications that this change will have on industry, both positive and negative.

Complete applications must be submitted by January 31, 2017 to Andrew Bechtel (bechtela@ tcnj.edu).

We encourage all eligible students to apply. Good luck!



Participants in the YMF Widener University Presentation

Sofitel, Center City

December 7, 2016

Rebuilding for the Future – SEPTA Capital Program Update by Robert Wright, Editor

This year marks our Section's seventh time as a participant in the Engineers' Club of Philadelphia's "Multi-Society Meeting". We, along with the Club and 13 other engineeringrelated organizations, brought out nearly 160 attendees at Sofitel to enjoy some networking and a nice lunch and hear SEPTA General Manager (and Section Member) Jeff Knueppel present on SEPTA's significant and interesting capital program for its various infrastructure components. And, yes, it was lunch, differing from past years when this was a dinner event. From all accounts, the change to lunch appeared to be a success.

As has been part of this meeting, a Toys for Tots donation was conducted. While the Marines were not able to be present in person and pick up the toys as they have done in the past, many toys were donated for retrieval after the event and delivery to their intended recipients.

President of the Engineers' Club (and Section Member) **Mike Griffin** opened the meeting, settled the crowd, and thanked the 14 societies that co-sponsored the luncheon. Our own Past President (and Past President of the Engineers' Club) Ruben David offered the blessing of the meal, as he has often done at our Section meetings. Following lunch, President Griffin returned to the podium and introduced Mr. Knueppel for the featured presentation.

With a series of slides, Mr. Knueppel outlined the infrastructure challenges facing the Authority. The availability of both ARRA "stimulus" funds as well as money from Act 89 in the past few years has helped SEPTA address numerous needs and it has been cited for its efficient delivery of projects realized with these funds. However, more remains to be done. Several major station rebuilding projects are underway or in design, including the complicated 15th Street/ City Hall interchange between the Market

JANUARY DINNER MEETING

Continued from Page 1

Total Reconstruction Program is addressing widening and bridge replacement to help safe travel throughout the Turnpike system.

Mr. Heigel was named Chief Engineer of the Commission in 2012. Prior to that he served as Total Reconstruction Program Manager for eleven years. He is a graduate of the Pennsylvania State University and is on the Board of Directors of the Harrisburg Section of the American Society of Highway Engineers.

PROFESSIONAL CLOTHING DRIVE

The ASHE Delaware Valley Young Members Committee will be collecting professional clothing donations during the social hour prior to the January Dinner Meeting.

Clothing donations for women will benefit PA Workwear. Donations should be limited to women's business/business casual fall/winter attire, closed-toe professional shoes and handbags. Frankford, Broad Street and Subway-Surface Trolley Lines. An early phase of this will be the underpinning of City Hall, which will need a determination of the amount and level of protective insurance for the support of this massive unreinforced masonry structure to allow the station improvements to happen.

Replacements are needed for aging Regional Rail and trolley/light rail vehicles, and funding for these is not yet in hand. Mr. Knueppel explained that the new cars will require upgrades in various wayside infrastructure as well, such as station and loading platforms, to allow for efficient loading/unloading and operation. Power is another major area of need, with many of the current substations and facilities having been in continuous operation since the 1930's. New equipment earmarked for one location has often had to be redirected to another to address critical outages and problems.

Another less-obvious major item in the program is roof replacement, and Mr. Knueppel noted that several bus garages on the system must be addressed. Given the size of the buildings under consideration, the roofing is generally costly. Many roofs are in poor condition as they were deferred in the past when funding was not available.

Mr. Knueppel closed his presentation with an overview of two line extensions currently in study and environmental review, the Broad Street Line extension to the Navy Yard and the Norristown High Speed Line branch to King of Prussia. It is hoped to obtain funding to be able to build these routes and address areas in which passenger demand is in place and direct economic benefits will be realized.

President Griffin thanked Mr. Knueppel for his insightful presentation and closed the meeting, wishing all a happy holiday season.

Clothing donations for men will be directed to Community Action Development Commission's Fatherhood Empowerment Program. Donations should be limited to men's dress clothes, shoes, belts and ties.

Please bag women's and men's clothing donations separately and label each bag.

These donations will assist the needy and provide professional attire for them needed for job interviews, employment, career development and training.

Please keep the spirit of giving in mind this holiday season and perhaps start some early spring cleaning of your closets to see what you may be able to donate for these causes.



DREXEL HISTORY BOOK AVAILABLE

Looking for a gift for that Drexel grad this year? You're in luck! In conjunction with Drexel University's 125th anniversary, Building Drexel:

The University and Its City, 1891-2016 chronicles the founding of the university by Anthony J. Drexel through to the present day. The editors and contributors create a prismatic discussion of the university and its evolution. Richly illustrated chapters cover the architectural history of notable Drexel buildings; the role of Drexel in Philadelphia's modern history; its Greek life; sports — particularly Drexel's history in the Big 5; and each of the university's schools and colleges. There is a history of the medical college and law school, plus the creation of new schools such as those of biomedical engineering, science and health systems.

Building Drexel also documents the civil rights history of Drexel and its urban planning history in relation to the racially diverse Powelton Village and Mantua neighborhoods it borders. This commemorative volume shows the development of the university both in the city and in the world.

The editors are current Drexel faculty — **Richardson Dilworth**, Professor of Politics and Director of the Center for Public Policy, and **Scott Gabriel Knowles**, Associate Professor in the Department of History, and a number of other Drexel staff are among the contributors. The book (456 pages) is available for \$35 and can be purchased in eBook format. Please visit www. temple.edu/tempress/titles/2428_reg.html for more information and ordering.

DUES COMING DUE...

You have most likely received your dues statement/invoice for 2017 in some form by now (hard copy and/or electronic). As a reminder, this is payable by **January 1**.

Please don't forget to pay your ASCE National and Philadelphia Section dues. Your dues are vital to the support of our Section's activities. We appreciate your ongoing support.

Also, you may have noticed that you can earn up to 5 PDH's by choosing to attend up to 5 on-demand webinars offered by National as a free benefit of your membership. There is a list of over 60 such webinars from which you can choose. These PDH's are usable in the "tough-to-get" states, such as Florida and New York, for those webinars with technical topics, so they have an even-more enhanced value to many of us. You will receive login information for these webinars once you renew your membership.

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

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

Jay A. McKelvey III jaym@earthengineering.com

ENGINEERING MANAGEMENT

Chair currently vacant

ENVIRONMENTAL AND WATER RESOURCES

Eric Lindhult eric.lindhult@gmail.com

STRUCTURAL ENGINEERING INSTITUTE

(SEI) www.sei-philly.org Josh Amsler joshua.amsler@aecom.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 up-to-date information on Technical Group meetings and events. These will be included in our regular e-mail blasts as well.

CENTRAL PENNSYLVANIA GEOTECHNICAL CONFERENCE

The Central Pennsylvania Geotechnical Conference is the premier geotechnical event in the region. This will be the 29th in the series of very successful Conferences sponsored by the ASCE Central Pennsylvania Section. It will be held from Wednesday, January 25 through Friday, January 27 at the Hershey Lodge and Convention Center in Hershey. It typically attracts approximately 65 exhibitors and over 350 attendees from academia, constructors, consulting engineers and government agencies.

Individual registration is \$400, with full-time students available to attend for \$25. Individual and student registration includes registration packet with 1 copy of the proceedings.

Displayer/exhibitor registration is \$1000 and includes 2 attendees with registration packet and copy of proceedings. Extra attendees are \$150 each. Extra attendees do not receive a registration packet and copy of proceedings. Display area includes 8'x10' space suitable for large skyline type display frame or table top.

Registration and payment are due by **December** 23. Fees increase after that date.

Every registration includes opening reception on January 25, lunch and dinner on January 26 and coffee breaks throughout.

Please visit **www.central-pa-asce-geotech.org** for more information and registration.

PHILADELPHIA SECTION 2017 AWARDS OPEN FOR NOMINATIONS

It's that time again – our Section's Awards Program for 2017 has opened for nominations. Our Awards recognize Section members and others for their contributions to the Civil Engineering profession. All Awards will be presented at the Spring Social/Dinner Dance, which remains to be scheduled. More information on the Spring Social will be included in upcoming issues of *THE NEWS*.

We encourage you to submit nominations for those deserving individuals who should be recognized for their various contributions, achievements and career milestones appropriately.

GUIDELINES/RULES

- Nominations must be received by Friday, January 27. Nominations should be submitted on forms which are available from the Committee Chair.
- Individuals may be nominated for awards by a member in any grade of membership.
- Individuals may receive only one award in a single year, but may be nominated for more than one award in a single year.
- Award recipients are subject to the approval of the Section's Board of Directors.
- All awards are presented only in years in which, in the judgement of the Selection Committee or the Board, there is at least one suitable candidate.
- The Selection Committee, at its discretion, may nominate an alternate for each Award for Board consideration.
- The Selection Committee will recommend to the Board whether the recipient should also be nominated for applicable National or Regional awards by the Section.
- A nominee for an award MUST be a member in good standing of the Philadelphia Section in the year in which the nomination is made, with two exceptions. Nominees for the Government Service Award and Philadelphia History and Heritage Award need not be members of ASCE and/or the Philadelphia Section.

AWARDS

The Section has a total of 14 awards which cover various specialty areas. In addition, the Section President can nominate an individual for the Presidential Award at his/her discretion. The awards are as follows:

- Philadelphia Civil Engineer of the Year
- Philadelphia Young Civil Engineer of the Year
- Philadelphia Government Engineer of the Year
- Philadelphia Young Government Engineer of the Year
- · Government Service Award
- Educator of the Year
- Philadelphia History and Heritage Award
- Community Outreach and Service Award
- Individual Technical Awards:
- Civil Engineering Manager of the Year
- Construction Engineer of the Year

- Geotechnical Engineer of the Year
- Structural Engineer of the Year
- Transportation Engineer of the Year
- Water Resources Engineer of the Year

If you are interested in submitting a nomination for consideration, please contact **Bob Wright**, Committee Chair, at **215-254-7738**, or via e-mail at **newseditor@asce-philly.org**, to obtain a nomination form. You may also call Bob if you have any questions or need any additional information on the Section Awards Program.

ENVIRONMENTAL AND WATER RESOURCES TECHNICAL GROUP MEETING THURSDAY, JANUARY 26

SUBJECT: Transportation's Role with

Stormwater Management

SPEAKER: Domenic Rocco, PaDEP Southeast Regional Office

LOCATION: Michael's Restaurant & Deli, 130 Town Center Road, Valley Forge Center, King of Prussia

TIME: 5:30 PM networking, 6:00 PM dinner, presentation follows

COST: members \$30, students \$25

RSVP by Tuesday, January 24

This presentation and discussion will focus on the specific challenges with stormwater management for transportation projects, particularly as they relate to PaDEP Chapter 102 and Chapter 105 permitting. Mr. Rocco will cover items such as permitting procedures for PennDOT projects, common PCSM BMPs for linear projects, and common errors to avoid.

Reservations and payment can be made by PayPal at our Section's website (asce-philly.org). Payment for reservations by check can be made at the event (checks should be made payable to "Philadelphia Section ASCE"). Contact Eric Lindhult (215-852-0068 or eric.lindhult@gmail. com) if you have any questions or if you will be unable to attend after you have registered.

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

One of the most glorious messes in the world is the mess created in the living room on Christmas day.

Don't clean it up too quickly.

– Andy Rooney

COMPOST FOR USE IN GREEN INFRASTRUCTURE AND LAND MANAGEMENT

Once upon a time, compost was primarily used for plant establishment. Ron Alexander of R. Alexander Associates has provided the following article, the first of a four-part series, on other ways to use compost - for erosion control, storm water management, and green infrastructure.

The use of recycled organics is one of our nation's greatest assets, and we can utilize them to address several of societies vexing challenges. The commercialization of composting as an economic method to manage organic (carbon-based) "wastes", got its rebirth in the late 1970's and has grown from coast to coast, with over 4,500 larger-scale facilities in operation. Over 400 facilities exist in Pennsylvania, many of them smaller in size. These facilities manufacture a unique soil amending product – "compost" - which can be used in a multitude of applications and which can provide various benefits, as shown below.

COMPOST APPLICATIONS

- Soil Incorporation turf establishment, garden bed preparation, reclamation/remediation, nursery production, roadside vegetation
- Surface Applied garden bed mulch, erosion control media, turf topdressing
- Growing Media Component container/potting substrates, landscape (rooftop, raised planters), backfill mixes (tree and shrub plantings), golf course (tee, green, divot mixes), manufactured topsoil, storm water management (bioretention, rain garden, rooftop garden, bioswales)

COMPOST BENEFITS

- Improves soil structure and porosity creating a better plant root environment
- Increases moisture infiltration and permeability, and reduces bulk density of heavy soils – improving water infiltration rates and reducing erosion and runoff;
- Improves the moisture holding capacity of light soils reducing water loss and nutrient leaching, and improving moisture retention
- Improves the cation exchange capacity (CEC) of soils
- Supplies organic matter
- Aids the proliferation of soil microorganisms
- Supplies beneficial microorganisms to soils and growing media
- Encourages vigorous root growth
- Allows plants to more effectively utilize nutrients, while reducing nutrient loss by leaching
- · Enables soils to retain nutrients longer
- Contains humus assisting in soil aggregation and making nutrients more available for plant uptake
- Buffers soil pH
- · Supplies essential plant nutrients

(Above developed by R. Alexander Associates, Inc. for the US Composting Council)

Over the past 35 years, compost has become a staple of the landscaping industry, and an increasingly popular tool in land management. Compost is also popular in many other applications, including turf establishment and

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COMPOST

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maintenance, agricultural production, and more recently, erosion control. Compost has the ability to improve the physical, chemical and biological characteristics of soil, creating "Healthy Soils". These soils not only allow plants to better establish and grow, but they also resist soil compaction and erosion, and improve storm water infiltration. Better managing sediment and storm water movement is key to many construction projects.

The Food and Agriculture Organization of the United Nations defines "soil health" as the capacity of soil to function as a living system. Healthy soils maintain a diverse community of soil organisms that help to control plant disease, insect and weed pests, form beneficial symbiotic associations with plant roots, recycle essential plant nutrients, improve soil structure with positive effects for soil water and nutrient holding capacity, and ultimately improve crop production. A healthy soil also contributes to mitigating climate change by maintaining or increasing its carbon content.

But there's much more to the story, as compost can be used in more sustainable or "green" construction practices, and in soil and water management techniques that are often less expensive and more effective than current techniques.

BONUS PAGE 7!

We've added a bonus page to celebrate the holiday season and the end of 2016, as well as to add some last-minute holiday decoration tips, standards and QA/QC items especially meant for Engineers (courtesy of Winzler & Kelly). Enjoy...



Following this introductory article on compost, we will follow with articles more specific to using compost in common Civil Engineering practices (e.g., erosion control and storm water management), as well as in 'low impact development (LID) and green infrastructure type applications (e.g., component to green roof, bioretention, bioswale media, etc.).

Interestingly, aside from helping plants establish and grow, all of the applications mentioned above provide important environmental benefits related to water and soil protection and conservation, and storm water management. The importance of mentioning these technical benefits is that with a changing climate, the general public will end up incurring greater costs related to managing the effects of both more frequent and severe droughts, as well as greater and more intense rain storm events (e.g., flooding). Although we are not suggesting that the use of compost in the applications outlined above will mitigate the effects of these devastating events (and/or inadequate infrastructure), we can surely prove that we can lessen their effects. This can be done in both an economic and environmental fashion - while adding more carbon to the soil, slowing the effects of climate change - reducing the urban heat island effect, and providing it in an aesthetically pleasing way.

We hope that you will read the upcoming articles.

Mr. Alexander has over 30 years of experience working with compost and other organic recycled products on large-scale construction projects. He began his career in Philadelphia, and is the President of R. Alexander Associates, Inc., a consulting company specializing in product development for organic recycled products. He is the author of the Field Guide to Compost Use, AASHTO Erosion Control Specifications for Compost, and Landscape Architecture Specifications for Compost Utilization.

He provides technical assistance to Laurel Valley Soils, a large composter in Avondale (http://laurelvalleysoils.com/). He can be reached at alexassoc@earthlink.net or 919-367-8350 if you are interested in additional information on compost use or a related Lunch & Learn session.

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If you have an interest in joining our sponsorship program, please contact **Bob Wright** at <u>news</u> **editor@asce-philly.org** for more details.