

# DELAWARE VALLEY GEO-INSTITUTE

DVGI January 2024

Volume 24 Issue 1

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### **January Dinner Meeting 2024**

SPEAKER: Dr. Kimberly Martin, PhD, PE of Keller – North America

**TOPIC:** Advancing Sustainability in the Geotechnical Industry

**DATE:** Tuesday January 16, 2023 – 5:30 PM to 8:30 PM EST

WHERE: Valley Forge Casino- Parkview Ballroom, 1160 1st

Ave, King of Prussia, PA 19406

COST: \$60 Standard, \$30 Government/Retired, \$10 Students

# **January DVGI Dinner Meeting 2024**

#### MEETING ABSTRACT:

Although the term "sustainability" is becoming more widespread, it can be challenging to know what tangible things we can do as geotechnical engineers and contractors to further sustainable development goals. This talk aims to advance our understanding by providing a brief background on sustainability, demonstrating how geotechnical engineers and contractors can significantly impact environmental sustainability, particularly through the use of the EFF-C/DFI Carbon Calculator, and offering ideas and insights to push our industry forward on social sustainability.

### ABOUT THE SPEAKER:

Dr. Kimberly Martin executes Keller's sustainability strategy across North America. Her responsibilities include driving innovation initiatives to advance Keller's carbon reduction targets, as well as developing and advising on Keller's internal and external social initiatives. Kimberly was previously a lead geotechnical engineer in the oil and gas industry, contributing her expertise to development projects worldwide. In addition to her professional role, Kimberly is actively engaged in industry groups. She previously served as the chair of the Arizona Geo-Institute chapter and is the secretary for the Geo-Institute's Sustainability in Geotechnical Engineering Committee. Her involvement extends to the DFI's sustainability committee, where she co-chairs the EFFC-DFI Sustainability Guides Task Group. Kimberly is also a member of the editorial panel for Engineering Sustainability, a journal published by the Institute of Civil Engineers. Her scholarly contributions include publishing more than ten peerreviewed journal and conference papers. Kimberly holds a Bachelor of Science in Civil Engineering from the University of Arizona, a Master of Science from The University of Texas at Austin, and a Doctorate from Arizona State University, where she

was an active member of the Center for Bio-mediated and Bioinspired Geotechnics.

Please register with QR code by January 2024:





### **December Lunch Webinar Meeting 2023**

Speaker: Dan Brown, Ph.D, PE, D.GE Dan Brown and Associates

Topic: Drilled Foundation Construction in the 21st Century, or the

Art & Science of Hole Digging

#### **MEETING ABSTRACT:**

Since the pioneering work of Dr. Lymon Reese in the early 1970s, the equipment and techniques used to construct drilled shafts and other types of drilled foundations have made substantial advancements and opened new opportunities for engineers to employ these types of foundations. Machines for construction of drilled foundations provide capabilities to extend these foundations to depths and diameters never before considered. It is critical to understand construction techniques and soil behavior during construction in order to facilitate continued advancements in construction and to design and employ drilled foundations effectively and reliably. This presentation describes modern techniques for construction of both drilled shafts and continuous flight auger piles, with an emphasis on a fundamental understanding of stability through the process of excavation and concrete placement. The discussion also describes factors affecting the influence of construction techniques on the axial resistance of the completed drilled foundation.

#### ABOUT THE SPEAKER:

Dan A. Brown, Ph.D., P.E., D.GE, is recognized as one of America's leading authorities on the construction and design of deep foundations. After completing his education and his early engineering career in Louisiana, Brown spent 22 years on the faculty at Auburn University, where he taught and conducted research on deep foundations. He remains active in deep foundation practice through his consulting firm, Dan Brown and Associates. His consulting work includes the foundation design of numerous large bridge projects as well as commercial structures. He remains active in teaching through short courses, including the National Highway Institute course on drilled shafts, and in organizing the ADSC Professor Training Workshops in Chattanooga, Tennessee.



### 2024 DVGI Scholarship Award

### 2024 DVGI Scholarship Applications

Students interested in applying for a 2024 DVGI scholarship can download the application file (http://www.dvgi.org/StudentScholarships.html). Over \$6,000 in scholarship funds are expected to be distributed with a minimum award of \$500 to the successful applicant(s).

All applications should be e-mailed to Dan Marano at: dmarano@pennoni.com and must be received by **January 26, 2024** for consideration.

### Eligibility Criteria:

The applicant must be a full-time student enrolled in a college program leading to a bachelor's or master's degree in a program related to civil/geotechnical engineering, environmental engineering, geology, or other related fields.

Preference will be given to students who reside in or are attending school in the Delaware Valley area.

Applicants must submit their most recent college transcripts, including grades for the most recent semester completed. Unofficial copies are acceptable.

Evaluation: Each applicant will be evaluated on a point system as follows:

25 points – Grades and Academic Performance

75 points – Career Questions (5 questions, 15 points each)

E-mail Dan Marano (dmarano@pennoni.com) with any questions related to the application or to request an electronic version of the application.

Please encourage any local student meeting the above criteria to submit an application.







2024

### DELAWARE VALLEY ENGINEERS WEEK FEBRUARY 15-24, 2024

#### PLEASE JOIN US FOR THIS YEAR'S CELEBRATION AND EVENTS

### 2024 DELAWARE VALLEY ENGINEER OF THE YEAR Robert M. Wright, PE

Bob Wright serves as a Project Manager at Bowman (formerly McMahon Associates), where he handles transportation and traffic engineering

duties and projects for various public and private clients as well as assistance with business development. He has been with the firm for the past six years, part of a career spanning 44 years of service in both government and private sector positions. The bulk of Bob's professional employment was with the City of Philadelphia Department of Streets, where he started as an entry-level engineer after his college graduation and rose through the ranks during his 27 years with the Department's Engineering/Survey and Design Division, culminating in his appointment as Chief Engineer and Surveyor, the Division's head, in 2005.

Bob obtained his Bachelor of Science degree in Civil and Urban Engineering from the University of Pennsylvania in 1979. He is a registered Professional Engineer in four states. He has held positions at the City of Philadelphia and three local consulting firms over the course of his career and has worked on various transportation and engineering projects mainly in the Philadelphia area in addition to several in New York City. During his time with the City he was involved in numerous major PennDOT projects including the completion of I-95 in the vicinity of Philadelphia International Airport, the I-95 Center City Ramp Access program, and construction of the I-676 Vine Street Expressway across Center City. He managed over 60 City-sponsored projects as well with a combined construction value of over \$130 million.

Professional society activity and service has always been important to Bob. He is a Fellow in the American Society of Civil Engineers (ASCE) and has held several positions, including Section President, in the Philadelphia Section. He is also a Senior Member, Past President and Section Executive of the Delaware Valley Section of the American Society of Highway Engineers (ASHE). He is a Past President and member of the Engineers' Club of Philadelphia and has been a Chair and member of the Club's Engineers Week Committee for many years. He additionally holds memberships in the Institute of Transportation Engineers (ITE), where he is a Fellow, the American Public Works Association (APWA), and the Women's Transportation Seminar (WTS). He has served in teaching positions with the Community College of Philadelphia through its educational outreach program with the City of Philadelphia, Urban Engineers' Training Institute and McMahon's "University' Program, as well as serving as guest lecturer and student project advisor at the University of Pennsylvania.

Bob's contributions to the local civil engineering community have been recognized with awards from ASCE and ASHE over the past several years. Most recently he was cited as the ASHE Delaware Valley Member of the Year (2023), the first time this award was offered. He is a Philadelphia native and a product of the Philadelphia Archdiocesan school system. He believes he has had the good fortune to be part of the local engineering community on both the public and private sides, thus allowing him to see things from two often-different perspectives, and has enjoyed and taken advantage of the opportunities he has had to "give back" to the profession and help recruit young people to consider engineering careers. He notes that his recognition as Engineer of the Year represents the combined contributions and hard work of the many who have helped him earn it.

Sam Winterburn was fortunate to have encouragement from an early age to study STEM subjects. Combining

# 2024 DELAWARE VALLEY YOUNG ENGINEER OF THE YEAR Samantha J. Winterburn

her love of science with her concerns for ensuring access to a technical education, she has used her role as a professional leader to build support from the student level to introductory career level. Enrolling at Rowan University, she obtained her Bachelor of Science in Chemical Engineering and focused on the key role of chemical engineering sustainability. As part of her engineering clinic, she was an active team member of the Think Like a Girl Engineering Kits start-up company that was devoted to empowering young girls to pursue STEM through activities, crafts, real world women engineer role models, and stories that make engineering attainable and fun.

Sam started her professional career in Philadelphia at INOLEX Inc. as a Process Development Engineer in 2016, where she began to develop opportunities working with R&D and production teams through helping to adopt the Principles of Green Chemistry and life cycle thinking. She advanced to a Technical Buyer position and later to Contract Manufacturing

Manager, and now leads the operational and procurement efforts in the firm's sustainability initiatives. Her management efforts include working within the international regulatory environment. She has been recognized for her performance as a two-time INOLEX Award winner, receiving the firm's Core Value Award, "True to Our Word" (2021) and the Innovation Award (2022).

Sam is passionate about developing our next generation of engineers. She has participated in an internship and co-op program at INOLEX in which engineering students complement their studies with a structured exposure to significant and meaningful in-plant experience. In addition to her work duties, she serves as the Chair and Board Member of Rowan University's Chemical Engineering Industrial Advisory Board (IAB), where she provides guidance to the undergraduate and graduate programs and curricula. She is an active member of multiple technical organizations such as the American Institute of Chemical Engineers (AIChE), the Society of Women Engineers, the Institute for Sustainability, and the Engineers' Club of Philadelphia. Locally, she has been deeply involved with AIChE's Delaware Valley Section, where she has held numerous executive positions, recently serving as the local section chair.

For her exemplary performance advancing the Chemical Engineering profession, the AIChE Delaware Valley Section recognized Sam as its 2023 Young Chemical Engineer of the Year. She supports programs to measure the health of local sections and enhance strategies to grow membership



For event registration, payment can be made electronically as part of the registration process or separately by check.

Please make checks payable to Engineers' Club of Philadelphia.

Checks can be brought to the events or mailed in advance. Mail should be directed to

Engineers' Club of Philadelphia 1735 Market Street Suite A #113 Philadelphia, PA 19103-7502

If you have any questions on this or require additional information, please contact us through the Contact Us tab at our website, www.engrclub.org.

Please visit <a href="https://www.engrclub.org">www.engrclub.org</a> and select the DVEW tab for more Information on award recipients and events.

Please keep in mind that certain levels of contributions to Engineers Week include admission for the Opening Ceremony. Sponsors will be sent a promo code to register their allowed complimentary tickets to the events.

More information is provided on the Engineers Week Sponsorship brochure, available at <a href="https://www.engrclub.org">www.engrclub.org</a>. Contributions to Engineers Week are accepted, encouraged and certainly appreciated, and may be tax-deductible (the Philadelphia Engineering Foundation is a 501(c)3 organization).

Please be sure to review the special Philadelphia Business Journal's Engineers Week Supplement, which will be available through the Engineers' Club website as well as at the tables at the Opening Ceremony.

#### **Engineers Week Opening Ceremony**

#### Thursday, February 15

Hilton Philadelphia City Avenue 4200 City Avenue 5:00 PM Networking, Awards and Affiliates Showcase 6:00 PM Dinner Program and Awards Following Dinner

2024 Engineers Week in the Delaware Valley kicks off with the Opening Ceremony, with networking, dinner and formalities at a new location this year, the Hilton Philadelphia City Avenue.

Formal festivities will begin with networking and cocktails (cash bar) at 5:00 PM. Recipients of various Engineers Week awards and scholarships, along with sponsoring affiliate societies, will be on hand with display boards during the networking session to showcase their honors and groups.

Our 2024 Delaware Valley Engineer of the Year, Bob Wright, will be formally introduced at the Opening Ceremony. Mr. Wright and our 2024 Delaware Valley Young Engineer of the Year, Sam Winterburn, will make brief remarks and kick off the celebration of Engineers Week in the Delaware Valley.

We will additionally cite other recipients of Engineers Week honors:

- Engineers Week Scholarships
- Outstanding High School Students
- Delaware Valley Science Fairs Award winners
- Outstanding High School Teachers Award recipients

The winning team from this year's local Future City Competition is anticipated to be on hand with its model of its city of the future.

Individual and project award recipients honored in the past year by the various engineering and technical societies and affiliates in the Delaware Valley will be included in the event PowerPoint and program.

Price - \$90 for reservations received on or before February 9 (\$70 for government agency employees and students). Prices will increase for reservations after February 9.

Reserved tables of 10 are available. When reserving a table, please include the name of each attendee. Please advise of any dietary restrictions or needs.

Reservations can be made at <a href="https://www.engrclub.org/registerDVEW">www.engrclub.org/registerDVEW</a>. Promo codes will be provided for those eligible for complimentary dinners,

#### Young Engineers Social

#### Tuesday, February 20

Yards Brewing Company 500 Spring Garden Street 6:00 PM to 9:00 PM

This event is geared specifically to young engineers (both in age and at heart) to socialize, catch up, network, and enjoy finger foods and drinks in an informal setting.

As part of the evening's festivities, Sam Winterburn, our 2024 Delaware Valley Young Engineer of the Year, will be recognized and make brief remarks.

The event will feature hors d'oeuvres and an open bar.

Price - \$45 for reservations received on or before February 9 (\$30 for government agency employees and students). Prices will increase for reservations after February 9. Reservations can be made at <a href="https://www.engrelub.org/YES2024">www.engrelub.org/YES2024</a>. Promo codes will be provided for those eligible for complimentary tickets,



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### **2024** DVGI Student Night Presentation Applications

Students interested in either delivering a presentation or presenting a poster at the March 2024 DVGI Student Night can download the application file at this link:

http://www.dvgi.org/StudentScholarships.html

All applications should be e-mailed to Dan Marano at: <a href="mailed-emailed-





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Kayla Nelson

(knelson@schnabel-eng.com)





### **GSI RECORDED WEBINARS**

- Topics, and Registration at <a href="https://www.geosynthetic-institute.org/webinar.htm">www.geosynthetic-institute.org/webinar.htm</a>
  - Each Webinar Carries 1.5 Professional Development Hours Upon Completion of a 10-Question Multiple Choice Test
    - Each presentation lasts approximately 90 minutes

# ALL WEBINARS WILL BE RECORDED AND CAN BE PURCHSED FOR VIEWING AT YOUR CONVENIECE

GSI/GMA Members \$200.00 USD per each Webinar

ASCE/G-I Members:
Read past and present issues of Geo-Strata magazine online at www.asce.org



Upcoming Dates for 2023-24 Dinner Meetings and events are as follows:

01/16/2024 - Kimberly Martin, Keller
02/20/2204 (TENTATIVE) - Joint Meeting with SEI
03/12/2024 - Thursday - Student Night - Villanova
0320/2024 - Lunch Webinar : John Nawn "Ethics and the Expert Witness"
One PDH will be awarded for most meetings that you attend.

If you are interested in presenting at one of our monthly meetings or have ideas about potential speakers, please get in touch with a DVGI board member.

### On Director's Cut

Geo-Institute Director Brad Keelor interviews G-I members about anything and everything. You might hear about their favorite geotechnical project, their favorite music, or their favorite pie. In Episode 18 of Season 3, Brad speaks with Theresa Andrejack Loux of Aero Aggregates!

See the video here: https://youtu.be/Gn-aDAHfCXq



### HAVE DVGI PUBLISH YOUR ARTICLE, ADVERTISEMENT, OR JOB POSTING

- Do you have an interesting article on a project or individual in your organization that you would like to have published in the DVGI newsletter?
- Would you like to get the word out about a job opening, new venture, etc. to our membership via the newsletter?

Please submit your articles or news items for consideration in the next edition of the newsletter or get in touch about our reasonably priced advertising by contacting Neil Scafonas (neil.scafonas@aecom.com).



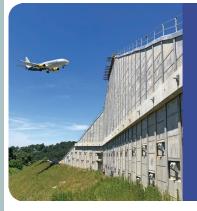
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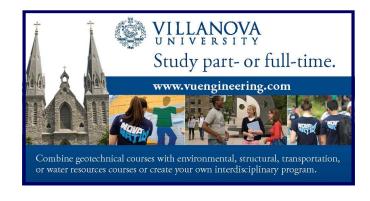




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