

SPECIAL NOTICE

As events continually develop in these unusual times, cancellation and rescheduling may be expected. Please check our website and e-mail blasts for up-to-date information. We apologize for any inconvenience.

THANKS TO OUR SPONSORS

We thank those firms who have made the financial commitment to Section Sponsorship for this season. The business cards of these 13 firms are included in the sponsor section of *THE NEWS*. Sponsor logos are also displayed in a special Sponsors section of our website. Through a click on the particular sponsor's logo, we provide direct links to its own website so prospective employees can review all available and up-to-date positions being offered by that firm. Sponsors can additionally provide a profile article in *THE NEWS*.

If you have an interest in joining our sponsorship program, please contact **Bob Wright** at newseditor@asce-philly.org for more details. While our season is nearly over, it's not too early to start thinking and planning ahead for next year.

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.

APRIL DINNER MEETING — POSTPONED

Our scheduled dinner meeting and breakout sessions for **Thursday, April 16** at the Inn at Villanova have been postponed as a result of venue unavailability related to recent closure orders from federal, state and local jurisdictions as well as direction and advice from ASCE National. We will look to reschedule this meeting as we can, and include the planned featured recognition of our incoming Life Members and our Past Presidents, when we are able to do so following this temporary situation.

Please note that, like all of you, our Section and Technical Groups are carefully monitoring the COVID-19 situation. We will continue to make judgement calls and recommendations based on federal and state direction and guidance regarding hosting planned and upcoming events. Our Section leadership holds the health and safety of all our members as our top priority. For events that we determine should not be held as planned, we will send out a cancellation notice with the intention of rescheduling them at a future date. We ask for your patience as we continue to navigate through this situation and urge our membership to follow guidance provided by our government and leadership to stay safe and healthy.

If you have any questions regarding an event and/or your attendance at one, please reach out to the event contact person listed on your registration and/or the event website.

We will keep you up to date through our regular e-mail blasts, website notices, and the May edition of *THE NEWS*.

We appreciate your patience and cooperation during this unprecedented and ever-changing situation.

SECTION MEETING SCHEDULE – ROUNDING THE LAST BEND...

Our last Section event of the season will be our annual **Spring Social**. This will be conducted on **Thursday, May 14** at **Tendenza in Northern Liberties**. We hope you can join us for our end-of-season festivities, socializing, networking and fun at an interesting venue.

More details will be provided in the May edition of *THE NEWS*.

“CLASS OF 2020” LIFE MEMBERS

Life Membership in ASCE is a major milestone in a member's tenure. To achieve Life Membership, one must have reached the age of 65, paid dues for a minimum of 30 years, and have 10 years' continuous membership immediately preceding the attainment of Life Membership. And, even better, Life Members are exempt from dues and need only pay a small service fee to receive *Civil Engineering* magazine.

Our Section welcomes 15 newly-minted Life Members as our “Class of 2020”:

Jack Bienenfeld • John Brun • Michael Byle • Bruce Grier • William Grosskopf • Eugene Gruber • D. Kirk Harman • Richard Horenberger • Michael Marquis • John McElroy • Martina Moore • Paul Pettit • Roman Pronczak • Chris Rood (Section Past President) • Richard Tannahill

We had intended to cite these esteemed individuals in person, as we usually do, at our April Section Meeting. With that being postponed, we will reschedule the presentation of the Life Member certificates to these individuals so we can honor them accordingly in person. More information on when that will be scheduled will be provided when it is available.

We congratulate our incoming Life Members on this honorable accomplishment and thank them for their long-time support as Section members.

**Minds are like
parachutes; they work
best when open.**

— Thomas Dewar



PRESIDENT'S MESSAGE

A few weeks ago, our Section's volunteers were in full force organizing the March dinner meeting, as well as wrapping up details for April and May events. A few weeks later, the world seems to be spinning a little slower as we try to grasp an understanding of what Coronavirus is. COVID-19 has managed to impact all our lives, in one way or another.

In line with ASCE National's recommendation, as well as orders from the Governor of Pennsylvania, the Section has decided to postpone the April Dinner meeting. Our current priority is to ensure the health and safety of our members. We are progressing our plan for the Annual Spring Social in mid-May, but it will be evaluated based on the current condition of COVID-19 spread in our region.

To ensure the well-being of the entire society, construction projects and non-essential projects are currently being put on hold. For many of us Civil Engineers, the design work did not slow down. As we practice social distancing, conduct virtual meetings, and abide by the stay-at-home orders, we have the ability to look ahead and continue our designs. The technological advancements made even in the last decade have increased our ability to work from home in ways many of us never imagined. This forced action of working remotely is giving us a chance to learn new things. It's giving us an opportunity to communicate differently, to think differently, and getting us out of our comfort zone just by the change of scenery. We are all working from a different space that can provoke new thoughts and ideas that can shape the future of our society.

Not all of us are as privileged, and there are many of us who are being directly impacted by COVID-19. At a time like this, we must support and care for each other. During this time of uncertainty, we have to find a way to stay positive and look ahead. Just remember, humans are resilient creatures. We are all going to recover from the impact of COVID-19 and when we do, the Civil Engineers will continue their work to design and construct the base of our society.

"Hardships often prepare ordinary people for extraordinary destiny."

~C. S. Lewis

Kazi M. Hassan, PE
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GRAMMAR FOR THE WRITING CHALLENGED

PRONOUNS IN AN ENGINEERING WORLD

This is what is anticipated to be an infrequent feature designed to help those of us who find writing and written communication somewhat of a challenge, what with all of those pesky grammar, spelling and sentence construction rules (not that we don't already have all of our Engineering principles and guidelines we have to remember...). Thanks to our Staff Writer, Assunta Daprano, with an "assist" from Danielle Schroeder, for this information.

You receive plan set comments from a client, and you notice in their email signature they have included the line "Pronouns: she/her." You think to yourself, "that's interesting, but is it necessary?" Well the short answer is, it's very necessary. Over the past few years, companies have made a bigger push to create an inclusive and diverse workplace. This includes more employees of different gender identities entering the workplace; and while most identify as female or male, others may identify as "genderqueer", "non-binary" and "genderfluid" and use they/them pronouns instead of the binary. Misgendering someone (or not acknowledging their identity) can have a negative impact on their mental health. However, acknowledging a person's preferred pronouns directly impacts their livelihood, brings awareness and builds an inclusive environment.

So, here are some tips for creating a more inclusive environment and understanding pronouns:

- Add your pronouns to your name tag, and if allowed by your company, your email signature.

- When introducing yourself to someone new, state your name and preferred pronouns. Feel free to also ask them what their preferred pronouns are as well.
- If sending an email to an unknown person, refrain from using Mr. or Ms. Consider using the gender neutral, Mx., or a simple Hello.
- Practice pronouns to normalize it in daily life.
- Beware of other gendered language, such as "guys, dudes, or ladies and gentlemen."
- Mistakes happen, it is okay to correct yourself and apologize.
- Lastly, if you do not know someone's preferred pronouns or do not want to misgender them by mistake, it is always appropriate to use neutral pronouns, such as they/them/theirs.

Building an inclusive environment, whether at work or in a professional society, takes time. Acknowledging a person's preferred pronouns is a good first step and together, I am confident we can build it.

My name is Assunta Daprano and my preferred pronouns are she/her.

Editor's note – as odd as it sounds, technically, the second-person singular pronouns remain thou (when used as the subject of a sentence), thee (when used as the object), and thine (the possessive adjective). While it sounds like something from long ago, popular usage has led to these being replaced by you, you and your (not you're) respectively.

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION—2019-20 SEASON

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**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.*

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COPY DEADLINE FOR

MAY 2020 ISSUE

APRIL 17, 2020

YOUNGER MEMBER FORUM NEWS

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NORTH PENN HIGH SCHOOL FEBRUARY 21

The YMF K-12 Outreach Program hosted its 6th event of the 2019-20 school year at North Penn High School in Lansdale. K-12 Outreach co-chair, **CJ Medora**, was joined by **Christian Antisell** (TPD), **Cory Bogas** (HNTB), **HuYoung Kim** (TimHaahs) and **Jeremy Pampuch** (RK&K). Approximately 100 students attended the presentation on Civil Engineering and many great questions about the volunteers' day-to-day lives were asked. Thank you to **North Penn** for hosting and to all our dedicated volunteers who took time out of their Friday morning to volunteer. We look forward to coming back during Engineers Week again next year!



ENGINEERING DAY AT THE FRANKLIN INSTITUTE FEBRUARY 22

The YMF K-12 Outreach Program hosted its 7th event of the 2019-20 school year at The Franklin Institute in Philadelphia. K-12 Outreach co-chairs, **Dani Schroeder** and **CJ Medora**, were joined by **Caroline Voigtsberger** (NV5), **Egla Qori** and **Assunta Daprano** (AECOM), **John Doyle** (TPD), **Mohammed Alsalihi** (Temple University), **Linda Douthwaite** (Pennoni), **Natasha S.** (Villanova University), and **Kerianne Chen** (Drexel University). Over 350 kids and their families stopped by the ASCE booth to learn about Civil Engineering, and tried the *Discover Engineering* activity "Shoo, Bird, Shoo." Attendees designed and built a mobile that warns birds away from a window or building. The event concluded with a demonstration at the **Ben Franklin National Memorial**, using liquid nitrogen and warm water to fire plastic balls into the air! Thank you to the **Engineers' Club of Philadelphia** and **The Franklin Institute** for coordinating this event, **Discover Engineering** for the **DiscoverE Engineers Week** Grant to fund this event, and a special thank you also to all our dedicated volunteers!

**Fortune knocks but
once, but misfortune has
much more patience.**

— Laurence Peter

SECTION VOLUNTEER SPOTLIGHT

Our Section Volunteer Spotlight effort focuses on our members who give their time and effort to provide meaningful programming and services to our Section or who promote our Section nationally through their volunteer efforts. At a time when all of us have considerable workloads keeping us busy, it is commendable that volunteers are still giving us their time, coming through and helping. This gives us an opportunity to also highlight those who do not have an "official" capacity as an officer or Director.

For March, we proudly note that **Ruben David, PE** has been nominated and selected for this honor. Ruben is well-known to many of you as our "unofficial chaplain" who often is called upon to offer the blessing for the meal at Section meetings, and he always does a good job at it. But he has done and continues to do much more for our Section that may not be all that obvious. He received his Bachelors Degree in Civil Engineering from the University of the East in his hometown of Manila, Philippine Islands in 1976 and came to Philadelphia, where he began what would become a 36-year career in the City's Department of Public Property. He started working on the staff of the then-under-construction Center City Commuter Rail Connection and later moved into the Department's Capital Projects group where he became a Project Director for buildings and facilities. One of his major projects is the restoration of City Hall, which was completed several years ago.



Ruben retired from City service in 2013 and has since been serving as a private consultant and more recently at Menna Engineering Associates, assisting Past President **Chris Menna**. He has continued his dedicated and active volunteer service in retirement, and serves in several civic, religious and community groups, and is an active supporter of the local Filipino-American community and causes. He has a deep background in professional societies, having served as Section President in 2002-03 and a number of other Section positions over the years, and as President of the Engineers' Club of Philadelphia (2006-08) and a Club Board member prior to that. He was cited as our Section's Government Engineer of the Year in 1993 and our Philadelphia Civil Engineer of the Year in 2014. Earlier that year he received the Delaware Valley Engineers Week Outstanding Service Award for his efforts in community affairs and outreach. He remains active in a number of organizations and is a current Honorary Board Member of our Section, where he helps with coordination of the PA Report Card and the Infrastructure Task Force of the State Legislature, the revitalization efforts of our Section's Mural, and as part of the judges team for the Delaware Valley Science Fairs.

Volunteers like Ruben are the foundation of our Section and contribute to the ongoing success

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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. While many of you know the former group well, you may not be all that aware of the latter. Our Committees address many of our regular and ongoing issues and keep our Section vibrant and in the forefront of service to our membership. A list of our Committees and chairs for this season is provided below. We would like to thank all of these folks for their contributions and diligence in helping our Section do what it does.

Additionally, if you have a particular interest in helping the Section as a Committee volunteer, please reach out to us at info@asce-philly.org or through our Section Secretary, **Mohamed Elghawy** (contact information is provided on page 2).

- Audit** – Briana Earle
- Awards** – Bob Wright
- Engineers Week Hall of Fame Recognition** – Ruben David
- Budget and Finance** – Joe Natale
- Civil Engineers in Government** – Jeanien Wilson
- College Scholarship** – Eammon Farley
- Communications** – Mohamed Elghawy
- E-mail Outreach** – Andrew Bechtel
- Webmaster** – Greg Dunn
- Social Media** – Joe Natale, Michael DeVuono
- Newsletter** – Bob Wright
- Sponsorship** – Bob Wright
- Continuing Education** – Briana Earle
- Humphrey Fund** – John Zarsky
- Membership** – Andrew Bechtel
- Mural** – Angelo Waters
- Nominating** (for Board Positions) – Kazi Hassan
- Program** – Jen Reigle
- Venue Coordination** – Troy Illig
- Project Build** – Tania O'Kane
- Report Card Promotion** – Cricket Schreppler
- Society Relations** – Cathy Farrell
- Region 2 Director** – Jack Raudenbush
- Region 2 Governors** – Carol Martsoff, Angela Marie Mayer, Carrie Nicholson, Patrick Sullivan
- Region 2 Younger Member Representative** – OPEN
- PA Council** – Cathy Farrell, Bob Wright
- Legislative Affairs** – Spencer Finch
- Subsidiary Groups** – Briana Earle
- Construction Management** – Dennis MacBride
- Delaware Valley GeoInstitute** – Russ Preuss
- Environmental and Water Resources** – Eric Lindhult
- Structural Engineering Institute** – Dan Kucz
- Transportation & Urban Development** – Bill Thomsen
- Younger Member Forum** – Jesse Gormley
- Spring Social Committee** – Troy Illig

OUR 2019-20 SECTION PRESIDENT – OR WE MANAGED TO RHYME HASSAN SOMEHOW...

You may have figured out that your Editor enjoys writing and you may be thinking he gets paid by the word (yes to the first, he wishes to the second). *THE NEWS* gives him the opportunity for the “enjoy” part but, as for the “paid” element, well, let’s just say the remuneration is spiritual (because we can’t see that either). As you may know, when April rolls around, and things are winding down Section-wise after a busy and productive year, tradition dictates that we present our annual assessment of our sitting President, whether we want this to happen or not. And often this somehow turns into a bit of a “roast”, not intentionally, but self-driven somehow. We don’t mess with this tradition, since it apparently started before your Editor was around, editing or otherwise, and all the previous occupants of the “top spot” have had to endure it (including your Editor), so here we go.

We somehow think this may have started in relation to April Fool’s Day, but we do not know for sure. We do know that doing it in April gives the President one last chance to rebut any or all of this in the May edition, so we’ll see where that goes. For those of you who were around when your Editor’s esteemed predecessor, one **Sidney Robin**, did this, you may recall that he took advantage of his extensive vocabulary to put together this piece, and we mere mortals often wondered if it was complimentary or taking jabs (in fact it was doing both). At the time, this was done in the combined April-May edition that closed out the season, thus it was additionally the “last word” on things. With the much less esteemed and certainly more mediocre guy now in charge, we have separated April and May to have two issues of *THE NEWS* and the President gets to fire back if he/she feels the need. Your Editor’s promise is this piece will be written so as not to make you run to the dictionary or google any unfamiliar words (but you know promises are made to be broken). You also know that your Editor (who will now change this to make it easier to read, using the third-person singular pronoun “he” (and take the opportunity to show off my grammar skills...)) is known for run-on sentences, so you might want to take a restroom break now before reading further.

If you’ve kept up to speed with President **Kazi Hassan’s** thoughtful and well-written messages this season, you already know he is honored to represent our Section and has been involved in it for a number of years. As many of our members have, he got his start and “earned his bones” through the Younger Member Forum and served it in various capacities over the past several years. In his year as YMF President in 2011-12, he helped get the CivE club at the Chester A. Arthur School going and it’s still doing well today. His accomplishments both within our Section and with his professional career as an engineer with Pennoni led to him being recognized as our Section’s Young Civil Engineer of the Year in 2014, on a regional level as one of the

Greater Valley Forge Transportation Management Association’s Top 40 Under 40, also in 2014, and as the Delaware Valley Young Engineer of the Year in 2017. Pretty impressive for a guy who was born halfway around the world in Bangladesh and came to our country in the early 1990’s.

SO, OK, WHERE’S THE ROAST...? WELL...

Not quite a year ago, on a warm spring day, our Section had our Spring Social at the Masonic Temple, and a nice-size crowd watched Kazi take the helm and be sworn in as our Section’s 106th President. He told us that evening that he had big plans. He wanted to win the Outstanding Section Award from National (we didn’t but came in second, but at least we didn’t lose to Dallas as we did the year before, not that losing to Pittsburgh is any consolation, but it’s not Dallas...). He was looking to have our dinner meeting program cover different areas that we hadn’t in a while – and after the October meeting which covered one of his projects, we did get into different areas. He was instrumental in helping to land the National Management and Leadership Conference in Philadelphia, which brought with it the Eastern Regional Younger Member Conference, by no means an easy feat. But, like his predecessor, Angelo Waters, we haven’t been able to find much “dirt” on him, which makes it difficult to write this. Even though we paid as close attention as we could (and you are aware that’s not our strong suit), we found little. Thus, we will be forced to reach a little and maybe redefine and stretch the meaning of “dirt”.

A number of years ago I recall first meeting Kazi at an ASCE meeting and seeing that he had a lot of energy, which is likely an understatement. One wonders what the source of this energy is, and one wonders more when e-mails get cranked out from him at all hours of the day and on weekends. A few years after we met, I spent some time working across the aisle from him at Pennoni when its offices were at the old Bulletin Building and he still had a lot of energy, and more than once we would chat about how he wanted to be the Section President some day. Having been one myself once, I was happy to hear that, certainly willing to help him toward that goal as I could, and glad to see his willingness to keep the Section as strong as it has been. And there were a few similarities we found between us, one of which was the desire to keep the Section strong, another was that we were each the first in our families to complete engineering degrees, and one more was we both went to institutions that at least have “Pennsylvania” in their names. My birthplace roughly 8 miles from Pennoni’s office was no match for his 8000-mile distance, but...

I do know he is a very proud Penn State graduate. He came out with his degree and went directly to Pennoni, where he has been since his graduation 14 years ago, and has risen in the ranks there to his current spot as Senior Engineer/Highway

Supervisor in the firm’s Transportation Division at its Center City headquarters. He is a proud member of the company, and we have been told that he is considered a “pioneer” in roundabout design there. To show how proud he is of Pennoni, we were told that at the previously-noted Management Conference, which our Section hosted in late January, he literally removed his ASCE cap and replaced it with his Pennoni hat during the event’s Friday evening social, to reflect who was sponsoring the event.

Desperate for something to write about, I thought looking back at those monthly President’s messages Kazi has penned would give some insight. That it did, but no dirt. As noted, I found his messages to be very good and informative, and it appeared that he actually enjoyed writing them (not all of our Presidents share this “joy”), but he did need a couple of reminders that we needed them, and we know we’re all busy, so this isn’t a bad thing. In his March message, he thanked the professionals in the Section who were helping him with various items and noted that they had “5-30+ years of experience” in this. I’ll take comfort in believing I’m in the higher range and will gladly stick with “30+” to describe this. And at least a handful of you noticed that we did indeed find a way to work Kazi’s name into our annual Christmas LAYM and actually rhyme it, and you thought that was clever on our part. (A rare pat on the back for us...)

When he isn’t busy with Pennoni’s projects and assignments, he enjoys flying his “beloved” drone, riding his bike, playing basketball, and following the Eagles, Phillies and Sixers, at the level of what some might call a “die hard” fan. (Kazi, we do have a hockey team in town...?) He and his wife, Ria, are kept busy by their toddler daughter at their home in West Philadelphia.

To wrap this up, and we know we haven’t imparted much “dirt” and maybe more praise than many of you would have liked to see, as Kazi prepares to hand the gavel to **Jen Reigle** (they are a short walk across the floor from each other at Pennoni, which means they probably e-mail each other a lot...). We noted last year that the “boy-girl” alternating pattern of Section Presidents that had been in place for ten years was broken when Kazi succeeded **Angelo Waters**. We’re not sure this will make up for it, but we’ll have two women Presidents in a row coming up, a first for us. We’re slowly changing the “score”, but it’s still a little lopsided at Guys 98, Girls 8. Two years from now, this pattern has a shot of starting again, but we shall see. In maybe 100 years or so, when I or one of our staff assistants are writing this for the President at that time, the score might be a little different?

We do hope we have been able to give you a little insight on our outgoing President, and we thank Kazi for his diligence and good service, and we’ll see what he might have to say in his next message. We know Jen will have the same level of great support from the Officers and Board and it will be easy for her to succeed with this backing, but we’ll still follow tradition next year and give her her due “report” as well.

MEMBERS IN THE NEWS

WATERS MOVES UP

Urban Engineers is pleased to announce that **Jennifer Waters, PE, LEED AP**, has been promoted to office manager of the firm's Philadelphia headquarters. She has been with the firm for nearly 20 years and serves as an associate vice president and the deputy practice leader for environmental services. "Jen is an outstanding professional who has quickly become a leader amongst her peers," said **Kenneth R. Fulmer, PE**, president and CEO of Urban. "We are excited to elevate her to office manager of our Philadelphia headquarters, and look forward to her continued success."

In her new role, Jen will be responsible for the viability and success of the firm's Philadelphia office. She will provide leadership to – and work directly with – general managers in all areas of project management, business development, training, mentoring, and other tasks necessary for the growth of the firm in the region. She is a registered Professional Engineer in six states and has years of diverse environmental and sustainability experience. She earned her bachelor's degree in Environmental Systems Engineering from Penn State and her master's in Engineering Management from Drexel University. She is married to Section Past President **Angelo Waters**.

We wish Jen good luck in her new assignment.

N-ASCE*

DURING A PANDEMIC, ISAAC NEWTON HAD TO WORK FROM HOME, TOO. HE USED THE TIME WISELY.

Isaac Newton was in his early 20s when the Great Plague of London hit. He wasn't a "Sir" yet, didn't have that big formal wig. He was just another college student at Trinity College, Cambridge. It would be another 200 years before scientists discovered the bacteria that causes plague, but even without knowing exactly why, folks back then still practiced some of the same things we do to avoid illness.

In 1665, it was a version of "social distancing" — a public health tool making a comeback recently as governments, schools and many businesses, including *The Washington Post*, send people home to try to slow the spread of the novel coronavirus. Cambridge sent students home to continue their studies. For Newton, that meant Woolsthorpe Manor, the family estate about 60 miles northwest of Cambridge.

Without his professors to guide him, Newton apparently thrived. The year-plus he spent away was later referred to as his annus mirabilis, the "year of wonders." First, he continued to work on mathematical problems he had begun at Cambridge; the papers he wrote on this became early calculus. Next, he acquired a few prisms and experimented with them in his bedroom, even going so far as to bore a hole in his shutters so only a small beam could come through. From this sprung his theories on optics.

IN MEMORIAM – RICHARD A. "DICK" MULFORD, PE



We are sad to report that Richard A. Mulford of Malvern, a literal "fixture" in the local engineering community, passed away peacefully on February 19, 2020 at the age of 89. He was born in Philadelphia, the eldest son of William A.

and Jeanne Roy Mulford.

Dick was not a Civil Engineer nor was he a member of our Section, but you may find his name familiar. He was a long-time member of several local technical societies including the Pennsylvania Society of Professional Engineers and the Engineers' Club of Philadelphia. At the latter, he took on the task of Executive Director following his retirement from the Philadelphia Electric Company in 1990. At the time, the Club had suffered both reputation and financial difficulties as older members started to become less involved, and in too many cases, pass on. The Executive Director position had been a paid staff member, but when he agreed to assume this spot, he stipulated that he would do so without remuneration as a full-time volunteer. He attacked the task vigorously and managed to turn the Club's finances around, making some difficult decisions in the process (one of which was to sell the Club's building to reduce assets and move to leased space).

With the assistance of two colleagues, who also decided to provide their services as volunteers, Dick managed to return the Club to financial stability and revitalized it mainly through

And right outside his window at Woolsthorpe, there was an apple tree. That apple tree. The story of how Newton sat under the tree, was bonked on the head by an apple and suddenly understood theories of gravity and motion, is largely apocryphal. But according to his assistant, John Conduitt, there's an element of truth. Here's how Conduitt later explained it: "...Whilst he was musing in a garden it came into his thought that the same power of gravity (which made an apple fall from the tree to the ground) was not limited to a certain distance from the earth but must extend much farther than was usually thought. 'Why not as high as the Moon?' said he to himself."

In London, a quarter of the population would die of plague from 1665 to 1666. It was one of the last major outbreaks in the 400 years that the Black Death ravaged Europe. Newton returned to Cambridge in 1667, theories in hand. Within six months, he was made a fellow; two years later, a professor.

So, if you're working or studying from home over the next few weeks, perhaps remember the example Newton set. Having time to muse and

recruitment of new membership. When he stepped down as Executive Director in 2007, he remained on staff to assist with the Club's services, still as a volunteer. He was instrumental in the Delaware Valley Engineers Week Council, which later became a committee of the Club, and remained active until health issues forced him to end his service to the Club in 2012.

Over the years Dick was strongly involved in efforts that provided scholarships to students in engineering programs in local schools, including the Philadelphia Engineering Foundation as well as statewide efforts. He, along with two colleagues, established a scholarship administered by PEF that continues to make awards to students during Engineers Week.

In 1952 Dick earned a Bachelor of Science degree with a certificate of distinction in Mechanical Engineering from the University of Pennsylvania and continued on to obtain his Master's Degree from Penn in 1957. He spent his entire career as an engineer with the Philadelphia Electric Company, retiring in 1990 after 38 years at the utility. He was the lead engineer and project manager in planning and building the Limerick Nuclear Power Plant. His efforts and volunteer service were cited by our Section with his receipt of our Presidential Award in 2002.

Dick's volunteer service extended outside of the engineering community as he assisted the sick and afflicted at Paoli Hospital for over 15 years. He committed over 13,000 hours to serving patients and blessing their lives with his warm smile and bright countenance. Doctors, nurses and hospital staff all knew him well.

Dick is survived by his two sisters, Jeanne Fox and Carole Haller, and seven nieces and nephews. He was predeceased by his sister, Florence Albrecht. Memorial donations may be made in his memory to the Church Farm School, CFS Development Office, 1001 E. Lincoln Highway, Exton, PA 19341.

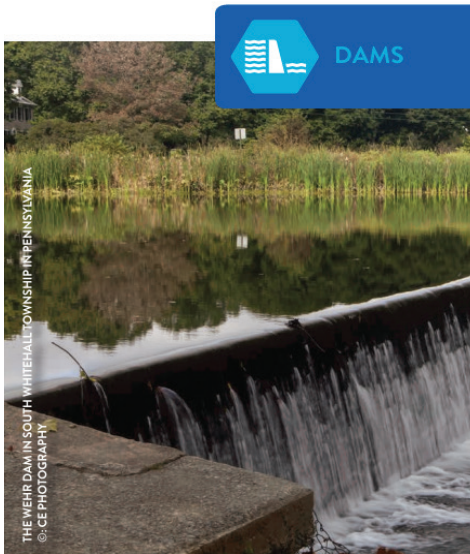
experiment in unstructured comfort proved life-changing for him — and no one remembers whether he made it out of his pajamas before noon.

Thanks to the *Washington Post* for this.

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

**An expert is someone
called in at the last
minute to share
the blame.**

– Sam Ewing



PA REPORT CARD CATEGORY OF THE MONTH: DAMS

There are 3,380 state-regulated dams in Pennsylvania that provide for the drinking water, irrigation, flood control, hydropower, recreation and industrial water needs of the state. While dams provide many needed services, if they are not properly invested in and maintained, they can pose a risk to life and property within the state. This is particularly true of high hazard potential dams; should these fail, there is probable loss of human life and substantial property damage. There are 803 high hazard potential dams in Pennsylvania, with 743 of these state-regulated. Roughly 44% of these state-regulated dams are considered deficient, a reduction from 67% in 2014. While this is encouraging, approximately 33% of the deficient dams are still considered unsafe, meaning they do not meet current Pennsylvania Department of Environmental Protection (PaDEP) standards.

COMPELLING STATISTIC: Estimates show that \$1.1 billion is needed to repair deficient and unsafe dams in Pennsylvania.

VOLUNTEER SPOTLIGHT

Continued from Page 3

of the organization. If you know of a Section member who has gone above and beyond as a volunteer, please feel free to nominate that person for consideration for our Section Volunteer Spotlight. Additional information and the nomination form are provided on our website.

**You have enemies?
Good. That means you've
stood up for something,
sometime in your life.**

— Winston Churchill

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MARCH SECTION DINNER MEETING

March 12, 2020

Maggiano's, Center City Philadelphia

Construction of the Comcast Technology Center

by Robert Wright, Editor

On an overcast but warm March day, with things just a little less normal than usual given the virus situation then emerging and the confusion around that, our Section “bucked the trend” that was occurring with similar events being cancelled and continued forth with our March meeting. The mood was a little less cheery and things were less noisy than past meetings there as the “crowd” numbered around 30 and the room was noticeably emptier than any time in the past that we have been there for a Section meeting. A larger crowd was certainly anticipated given the interesting and timely topic, and attendance was limited to ASCE members to keep the crowd manageable, but, as noted, those who came out enjoyed some camaraderie, the usual good spread of Italian goodies we’ve come to expect at Maggiano’s (at our third and last visit there this season), and an informative program.

And even with the crowd smaller than usual, the networking was somewhat loud and very active, and President **Kazi Hassan** and President-Elect **Jen Reigle** had to coerce folks to take their seats to get the evening started. As thing settled down, President Hassan made a few announcements and noted we would begin the program a little earlier than normal to allow it to finish early and have folks go on their ways. And he kept to this, coming back to the podium as dinner wound down to introduce the featured speaker, **Samuel Verzella**, Senior Project Manager for L. F. Driscoll and the lead for the construction management team for the Comcast Technology Center. Also assisting with the presentation was **Steven Kane**, Project Engineer with Thornton Tomasetti, the Design Engineer for the effort.

Mr. Verzella started by noting he was a proud graduate of Rutgers University and has been in the construction industry for 35 years, the last 7 of which have been in his current capacity directing large structure projects for Driscoll. He played a similar role on the construction of the Comcast Tower across the street from the Technology Center. He presented some project facts and figures in his powerpoint presentation, including that the Technology Center, at 1121 feet to the top of the lantern, as the light feature is called, is the tallest building in both Philadelphia and Pennsylvania, providing 60 floors of occupied space. Comcast employees and functions will occupy roughly 45 floors, with an entire floor devoted to the private residence of the company CEO. The building has space for new broadcast studios for news programming for the NBC 10 television station. The Ritz Carlton Hotel and its restaurant use the top-most floors, having moved from its previous location just over a block away on the Ben Franklin Parkway.

The Center was completed in 2018 following a four-year construction period, at a total cost of \$712 million. Occupancy began in mid-2017 with some offices being moved into as Comcast

staff relocated from leased space in various nearby buildings. Mr. Verzella added that several issues with steel girders had to be resolved before the building could be completely occupied in November 2018. There was some interesting construction at the underground level as well, and several photos of the concourse extension to allow a direct connection to the mezzanine levels of the Comcast Tower and Suburban Station were shown. A myriad of utility lines, some known and some that were surprises, were accommodated and relocated as needed to create the new connection.

With the building site being in the middle of busy Center City, it presented several logistical challenges, both in placement of the tower cranes needed to erect and move materials as well as material delivery and storage on site. A specific need to arrange for “just-in-time” delivery of many items was dictated by site space availability, to have these materials occupy scarce ground space in as minimum a time as possible. Mr. Verzella outlined the types of cranes used, with 3 primary cranes to handle steel and fascia panels, and two other specialty cranes for taller lifts once the building began to reach its ultimate height. He noted in detail the placement, erection, lifting/jacking and movement of the cranes and how these were designed keeping in mind the lessons learned from construction of the Comcast Tower, particularly attempting to minimize the need for attachment holes being cut into the concrete core of the building. The types of cranes specified were able to be supported without such holes, with considerable engineering and design going into the structures and stabilization of the cranes especially as they had to have sufficient swing distance to be able to operate within the site constraints. The two specialty cranes were smaller. One was of a unique design which enabled it to be jacked to higher stories and be supported by the building’s steel frame, and this was used for the upper floors and lantern. The second was utilized to dismantle the high-lift crane when its functions were completed. This technology was not available when the Comcast Tower was constructed.

An additional vertical transport feature was a six-car hoist at the west side of the building that allowed movement of workers, materials and waste in separate shifts constantly. This was placed at the ends of corridors on each floor with these ends sealed when the building panels were able to be placed over the openings. Mr. Verzella added that high upper-level winds needed to be taken into account with the design of the crane supports and the hoist. Experience from the Comcast Tower gave the construction team this insight, with winds often coming down the Schuylkill Valley and the Parkway at fairly high velocities even when the wind speed at ground level was calm.

Mr. Verzella added that other buildings were

considered as part of the complex, including in the open space on the northwest side of the site as well as the garden/open space at the west end of the Comcast Tower site, where a “bookend” building in the style of Suburban Station was considered. Thus far plans have not been developed for either site.

Several insightful questions were posed to Messrs. Verzella and Kane on the foundation pours and whether the small statue of William Penn that was placed in the structure prior to completion, to continue having Penn as the highest point in the city remains in place. President Hassan thanked both speakers and gave them Philadelphia Section solar chargers as a token of appreciation for their insightful presentation.

As an aside, it should be noted that the Suburban Station Building, which started the redevelopment of what is now Penn Center, will celebrate its 90th anniversary in September. The building, originally called One Penn Center (and that name was revived several years ago), sat atop the Pennsylvania Railroad’s Broad Street Suburban Station. The company’s regional commuter trains moved there from nearby Broad Street Station upon completion of the new facility in 1930. The Railroad’s corporate headquarters occupied the building for over 25 years as well.

2020 SECTION AWARD NOMINEES – CONGRATULATIONS!

Our Section Awards will be presented at our **Annual Spring Social and Dinner Dance on May 14**. More information and details on the Social will be included in the May edition of *THE NEWS*.

We received a number of strong nominations for Section Awards this year and the Awards Committee had the not-so-easy task to review the submissions and prepare a recommended slate of Award recipients. The recommended recipients have been approved by our Section Board of Directors. They are:

- **Darin Gatti**, Philadelphia Department of Streets – Philadelphia Civil Engineer of the Year
- **Dennis Wilson**, McCormick Taylor – Philadelphia Young Civil Engineer of the Year
- **Robert Lund**, SEPTA – Transportation Engineer of the Year
- **Sarah McInnes**, Pennsylvania Department of Transportation – Geotechnical Engineer of the Year
- **Gregory Dunn**, Michael Baker International – Structural Engineer of the Year
- **Louis Belmonte**, Pennsylvania Department of Transportation – Government Service Award
- **Lindsay Chateauvert**, Amtrak, and **Danielle Schroeder**, Pennoni – Community Outreach and Service Award

We hope you will join us at the Social to honor our Awardees for this year.

More information on our awardees will be included in our October edition of *THE NEWS*.