

General Sessions

8:00-9:00am - General Session: Building a Better Life - Concrete Steps for Success, *Presented by Joel Oppenheimer*, *P.E., STV Incorporated*: This inspirational session will address taking positive "concrete" steps to "Build a Better Life." We explore the value of having a proactive, positive and responsible attitude. We address the importance of learning, understanding and abiding by the "Universal Laws of Success and Achievement." We discuss the importance of and how to write your personal and professional goals regularly. We talk about effective time management and managing your priorities to get the most accomplished. We explore communication skills for leadership and success. We conclude by putting it all together into Building a Better Life!

9:00-10:30am - Legislative Panel: A Legislative Agenda for the Engineering Profession in Maryland's Evolving Political Environment Moderated by Chris Costello, PSCG and Members of this Legislative Panel are Sen. Pres. Mike Miller, Sen. Bob Cassilly, Del. Marvin Holmes Jr. & Del. Neil Parrott

10:50-11:50am - General Session: Maglev in Baltimore, *Presented by Cosema E. (Connie) Crawford P.E., Louis Berger:* This presentation will provide an overview of the Baltimore-Washington Maglev project, which proposes to provide 15-minute service between Washington, DC and Baltimore, MD using superconducting magnetic levitation trains traveling at 311mph. The EIS is underway.

11:50am-1:20pm - General Session: Luncheon and Keynote Speaker *Presentation by Aaron Tomarchio, Tradepoint Atlantic:* Engineering a 3,100-Acre Industrial Site: 15 Million Square Feet of Vertical Development, Significant Deep Water Ports, 100 Miles of Rail, \$48 Million Environmental Cleanup and much more about the Tradepoint Atlantic project.

Track One - Professional Practice

1:30-2:30pm - Lessons Learned from Construction Lawsuits to Reduce your Risk of Liability, *Presented by Terrence M. McShane*, *Esquire:* Topics covered in this presentation: important contract clauses to reduce your risk of liability; importance of project construction phase documentation; site safety issues; standard of care and dispute resolution issues.

2:40-3:40pm - Construction Phase Services for Engineering Firms: Pitfalls, Perils & Payment, Presented by Justin Klein & Barbara Sable: Learning objectives: Learn about of the drivers that promote unreasonable expectations, and what engineers can do to manage client expectations for the benefit of both the project and the community at large. Gain an understanding of how to manage construction phase services in an ethical manner while protecting public health, safety, and welfare. Explore how contracts and other communications can more clearly address client expectations to protect the parties as well as the public. Review ways in which engineers can better manage payment provisions to reduce their exposure to inadequate compensation

4:00-5:00pm - Dispute Resolution, *Presented by Ken Sorteberg, Esquire, Huddles Jones Sorteberg & Dachille, PC:* The reality today is that construction- and design-related litigation in the court system can become very, very expensive. Judges rarely have expertise in design and construction disputes. Neither do juries. In addition, court filings and court proceedings are open to the general public, and more importantly, to the media. For these and other reasons, alternative dispute resolution (ADR) methods (in particular, mediation) have become the new normal in the design and construction world. Ken Sorteberg brings his experience as a construction attorney, arbitrator and mediator to the table in discussing the dispute resolution options available, including mediation, arbitration and litigation; the pros and cons of litigation vs. arbitration; setting up your contract to limit or avoid certain risks; incorporating ADR provisions into your contract; potential limitations on discovery in arbitration; impact and influence of insurers on dispute resolution; sources of claims; defending claims; and much more.

Track Two - Transportation/Civil

1:30-2:30pm - BGE Infrastructure Installation Factors to Consider During the Planning Phase of a Development, *Presented by Steve Troch, P.E., Bob Swiderski, Vince Popp and Jeremy Carden, P.E., BG&E*: BGE is currently working with the Maryland Building Industry Association (MBIA) & Anne Arundel County to develop solutions to the challenges BGE is encountering when installing gas and electric infrastructure in high density developments. BGE would like to take this opportunity with the Maryland Society of

Professional Engineers (MDSPE) to make you aware of these challenges and provide a forum for discussion of issues encountered by engineers, builders and developers.

- 2:40-3:40pm What Every PE Needs to Know About the Mysteries of Boundary Surveying and Maryland Title Law and Accuracy vs Precision Explained, Presented by David Thaler, P.E., D.S. Thaler & Assoc.: Is the deed to your house conclusive evidence that you own it? If so, why do you get title insurance? Why don't you get title insurance on your car? Acclaimed engineer and surveyor David Thaler will discuss these and other mysteries for determining who actuarily owns what.
- **4:00-5:00pm Purple Line Project**, *Presented by James W Mitchell, CCM, AECOM & Kevin Oberheim, PE, CCM, RK&K/Maryland Transit Partners*: The Successes and Challenges of Delivering a P3 The Purple Line Maryland's New Light Rail System focusing on: Discuss the challenges of delivering a mega-project in a high density urban and suburban environment. Discover how Program Managers (Engineers, Architects, Construction Managers) can impact and benefit an owner throughout the project delivery cycle; Recognize the unique challenges of constructing in a sensitive urban/suburban environment. Interfacing and connecting a new light rail system to two existing systems and working within an active railroad corridor where safety is paramount and discussing the importance of risk mitigation and assignment in managing and protecting the owner's interests while ensuring the project is completed within the stipulated timeframe.

Track Three - Mechanical/Electrical

- 1:30-2:30pm Impacts of Connected and Automated Vehicles, *Presented by Dalia Leven, AICP, Consulting Manager, AECOM:*Transportation is on the verge of a number of profound revolutions, many of which are being led by advances in communications and automation technology. The convergence of many technology and behavioral trends are changing the available travel options, and how people make their daily travel decisions. These changes will have wide-ranging impacts on the transportation system, but the scale of those impacts depend on how these technologies are deployed, how much they cost to own and operate, and how quickly people accept these new options. Considering the range of potential futures is an important element in planning for cities and regions over the next twenty years. This presentation will review the potential impacts and the factors affecting them including: induced travel demand, changes in vehicle miles traveled (VMT), safety, traffic operations and capacity, roadway design needs, parking requirements, real estate development patterns, transit ridership, environmental impacts, and financial and fiscal impacts for government agencies.

 Methods for considering these impacts will also be discussed, including forecasting alternative future scenarios.
- **2:40-3:40pm Community Solar**, *Presented by James A Mirabile*, *P.E.*, *Baltimore Gas and Electric Co.*: Jim is the principal engineer in BGE's interconnection business office. He reviews and approves all large generator interconnection requests for BGE. Jim holds a BSEE from Drexel and an MAS degree from Johns Hopkins. The presentation will review the various programs available like net metering, aggregate net metering, and community solar. Utility requirements for interconnection projects will be discussed.
- **4:00-5:00pm Data Center Fire Protection: Are Code Minimums Enough**, *Presented by Brian Schlosser*, *P.E., EBL Engineers LLC:* This presentation will review the applicable codes and standards associated with protecting data centers and similar critical facilities from the effects of smoke and fire with a focus on building construction, fire detection and alarms systems, fire sprinkler systems, and supplemental fire suppression systems. Industry standards and best practices, above and beyond the minimum code requirements, as well as processes for developing a performance-based approach, will also be discussed. Participants should leave with a general understanding of the fire risks associated with data centers and the various means and methods to reduce such risks.

Track Four - Special Topics

- 1:30-2:30pm Surveying the Underground: An Introduction to the Practice of Subsurface Utility Eng, Presented by Michael Maguire, Accurate Infrastructure Data, Inc.: A presentation on the art and science of subsurface utility investigation, surveying and mapping including what engineers need to know about locating underground utilities. Topics covered include the Maryland One Call (Miss Utility) law, an introduction to ASCE 38-02 the Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, and an overview of techniques and practices for locating and mapping underground utilities.
- **2:40-3:40pm Understanding Concrete Pavements Today**, *Presented by Robert Hackman*, *P.E.:* This is an educational presentation to provide a broad overview of the use of different types of concrete pavements. A brief introduction into the history of concrete pavements is provided, followed by an overview of some of the important benefits and design concepts necessary for successful pavements. The main types of concrete pavements are discussed with practical examples for some pavement types. Advances in construction processes and equipment are also provided during the descriptions of the different pavement types. Finally, some resources are provided for further development of the understanding of the use of concrete pavements for the right application at the right location at the right time, as promoted by FHWA.
- **4:00-5:00pm Time Management (Managing Multiple Priorities) for Success**, *Presented by Joel K. Oppenheimer*, *P.E., STV Incorporated:* Do you feel like you never have enough time to get everything done? At the end of a busy day, do you wonder if you accomplished anything important? Do you feel like you are spinning your wheels? Do you wonder what the top of your desk looks like (is it wood or metal)? This overview of time management looks at life management, setting priorities based on your goals and then offers tips to avoid wasting time. Come listen to how you can improve your life at work and at home by managing your time better. Learning Objectives: Understanding the importance of prioritizing your time and Pareto's "80/20" Principle. Understanding the Time Management Matrix. Learning some best practices to manage your time effectively. Putting time management together for success