

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

P. O. Box 58186, Philadelphia, PA 19102-8186 Electronic Message Hotline: 1-800-461-4190 (24 hours a day) 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

Our 95th Year

October 2007

ASCE, PHILA. SECTION MEETING SCHEDULE 2007-08

Vol. 80-2

The ASCE, Phila. Section Meeting program for the 2007-08 season remains "in progress." While TENTATIVE dates have been set, and we offer those for your use in marking your calendar, we are still painstakingly working to line up topics and speakers that will offer interesting and insightful events. Watch this space in future issues of THE NEWS and the Section website for updated information on our meeting program.

All dinner meetings feature a cocktail hour starting at 5:30 PM, dinner at 6:30, and the meeting presentation following at approximately 7:30, unless otherwise noted. As always, you are welcome to attend the meeting presentation without dinner at no cost if you prefer to do so.

Wednesday, December 13, 2007 – Joint meeting with Project Management Institute and Society of American Military Engineers, Philadelphia Post – Location and topic to be determined

Wednesday, January 16, 2008 – Joint meeting with American Society of Highway Engineers, Delaware Valley Section – Radisson Hotel, Valley Forge (cocktails 6:00, dinner 7:00, meeting 8:00) – Topic to be determined

Thursday, February 14, 2008 – Joint meeting with ASCE South Jersey Branch – Location and topic to be determined

Thursday, March 13, 2008 – Joint meeting with Mid-Atlantic Section, Institute of Transportation Engineers and Women's Transportation Seminar – Union League – Topic to be determined

Thursday, April 10, 2008 – Joint meeting with Engineers' Club of Philadelphia – Union League – Topic to be determined

I'm not saying my golf game went bad, but if I grew tomatoes, they'd come up sliced.

— Lee Trevino

OCTOBER DINNER MEETING

American Society of Civil Engineers, Philadelphia Section, and Younger Member Forum, Philadelphia Section

THURSDAY, OCTOBER 11, 2007

Union League • 140 South Broad Street (at Sansom Street), Center City Philadelphia Cocktails 5:30 PM • Dinner 6:30 PM • Meeting 7:30 PM

SUBJECT: Key Initiatives at PATCO

SPEAKER: John Matheussen, Chief Executive Officer, Delaware River Port Authority; President, Port Authority Transit Corp. (PATCO)

SPECIAL FEATURE: **Drexel University Night.** The ASCE Student Chapter, Faculty and Alumni of the Department of Civil and Architectural Engineering of Drexel University will be honored at this meeting. All Faculty, Alumni and Students of are cordially invited to attend and participate.

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, OCTOBER 5, 2007. Please send your check for the number of attendees at \$40 per member or guest, \$20 per ASCE Student Member. Checks should be made payable to "Philadelphia Section ASCE" and sent to ASCE, PO Box 58186, Philadelphia, PA 19102-8186. Reservations can also be made on the Electronic Message Center, (800) 461-4190, or via e-mail at info@asce-philly.org. Walk-ins will be subject to acceptance on a space-available basis. THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.

The world-famous **Port Authority Transit Company's (PATCO)** "High Speed Line," a 14.5-mile rapid transit line connecting Center City with South Jersey, opened for service within New Jersey on January 2, 1969, with regular service to Philadelphia beginning on the following February 15. The Speed Line, as it is often called, was the first transit route to offer automated train operation and fare collection as well as video-surveillance security. Nearly 40 years after its opening, it remains a significant transit service in the Philadelphia region.

Today, the focus of efforts for the future of the Speed Line and PATCO service is multifold. After 38 years of use, the line's infrastructure is in need of rehabilitation, and various projects are underway to renew systems and replace worn-out facilities. The 120-car fleet, over 60 percent of it dating to the Line's opening and the remainder only 11 years younger, will receive a complete makeover to continue the high level of service reliability for which PATCO is known. A new fare instrument, the Freedom Card, will be introduced to address problems with an efficient but outmoded fare collection system. Studies are also underway to add service to areas in South Jersey as well as a possible light rail component along the Delaware River waterfront in Center City and South Philadelphia. Additionally, several New Jersey PATCO stations are being targeted as possible centers for transit-oriented development (TOD) projects.

NOVEMBER DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

THURSDAY, NOVEMBER 8, 2007

Union League • 140 South Broad Street (at Sansom Street), Center City Philadelphia Cocktails 5:30 PM • Dinner 6:30 PM • Meeting 7:30 PM

THE TOPIC AND SPEAKER will be announced in the November edition of THE NEWS.

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, NOVEMBER 2, 2007. Please send your check for the number of attendees at \$40 per member or guest, \$20 per ASCE Student Member. Checks should be made payable to "Philadelphia Section ASCE" and sent to ASCE, PO Box 58186, Philadelphia, PA 19102-8186. Reservations can also be made on the Electronic Message Center, (800) 461-4190, or via e-mail at info@asce-philly.org. Walk-ins will be subject to acceptance on a space-available basis. THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.



PRESIDENT'S MESSAGE

Boy, am I glad you are reading THE NEWS online! WHAT? You are not reading THE NEWS online? Well — please give it a try by going to our website at **www.asce-philly.org** and enjoy the current issue by clicking on the Newsletter link on the right hand side.

After having enjoyed the online experience, click on the **Go Digital** link and join the 21st century and start receiving THE NEWS via email.

Why? You might ask. Several of the normal reasons involve — saving the oil used to deliver THE NEWS and the trees used to create THE NEWS come to mind, but there is a more self serving reason — the ASCE, Philadelphia Section spends \$16,000.00 of your money printing and delivering THE NEWS to you every year!

We are lucky in that your Board of Directors is dedicated to stretching every penny we've got in order to best serve the members with programs, awards, tours, social functions and educational opportunities throughout the year (more on all of those in later editions of THE NEWS). Here is your chance to help!

You already know that reading THE NEWS is the best way to stay informed about the ASCE, Philadelphia Section and its events. Please take the opportunity to save some oil, trees and money by reading THE NEWS online!

Digitally yours, James Markham, P.E. President, Philadelphia Section of ASCE

DON'T GET MAD AT YOUR EDITOR...

I can hear the catcalls now! They'll be burning copies of THE NEWS in the village square and calling for the Editor's resignation (hey, wait, is that a bad thing...). But, before you express your outrage at this, keep in mind the fact that it's an actual excerpt from a published article. Those of you who attended the March ASCE, Phila. Section Meeting will recall that PennDOT Deputy Secretary **Rina Cutler**, one of the speakers at the meeting, read these aloud. Thus, we reprint it here to illustrate how much the world has changed in 60-plus years.

So, travel back with us to 1943, when *Transportation Magazine* listed "Eleven Tips on Getting More Efficiency Out of Women Employees" in its July edition. And those tips would be:

- Pick young married women. They usually have more of a sense of responsibility than their unmarried sisters and are less likely to be flirtatious.
- When you have to use older women, try to get ones who have worked outside the home at some time in their lives. It's always well to impress upon older women the importance of friendliness and courtesy.
- General experience indicates that "husky" girls those who are just on the heavy side
 — are more even-tempered and efficient than their underweight sisters.
- 4. Retain a physician to give each woman you hire a special physical examination one covering female conditions. This step reveals whether the employee-to-be has any female weaknesses which would make her mentally or physically unfit for the job.
- 5. Stress at the outset the importance of time. Until this point is gotten across, service is likely to be slowed up.

- 6. Give the female employee a definite daylong schedule of duties. Numerous properties say that women make excellent workers when they have their jobs cut out for them, but they lack the initiative in finding work themselves.
- 7. Whenever possible, let the inside employee change from one job to another at some time during the day. Women are inclined to be nervous and they're happier with change.
- 8. Give every girl an adequate number of rest periods during the day. You have to make some allowances for feminine psychology. A girl has more confidence and consequently is more efficient if she can keep her hair tidied, apply fresh lipstick and wash her hands several times a day.
- Be tactful in issuing instructions or in making criticisms. Women are often sensitive; they can't shrug off harsh words the way that men do. Never ridicule a woman — it breaks her spirit and cuts her efficiency.
- 10. Be reasonably considerate about using strong language around women. Even though a girl's husband or father may swear vociferously, she'll grow to dislike a place of business where she hears too much of this.
- 11. Get enough size variety in operator uniforms that each girl can have a proper fit. This point can't be stressed too strongly as a means of keeping women happy, according to western properties.

Opposing viewpoints should be forwarded to your Editor for consideration. Please keep in mind that these views do NOT reflect those of the ASCE, Phila. Section, your Editor, or any other man on the planet (at least not one who would admit it)!

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THE 2007 SPRING SOCIAL — "REVOLUTIONARY?!"

Over 80 ASCE, Phila. Section members, spouses and guests turned out for the Annual Spring Social and Dinner Dance, and enjoyed a great spring evening for the event, on May 10, 2007. A new night (Thursday) and a new venue (the National Constitution Center in Independence National Historic Park) were tried for the Social for the first time, and by all accounts, the trial was a success.

The evening featured the traditional induction of new Officers and Board Members as a main order of business. Past Section President and Editor of THE NEWS, **Bob Wright**, handled the duty of presentation of the oath of office to the new Officers as well as those completing the second years of their terms. (And he is still wondering how he got selected for this duty, but...)

Outgoing Section President Carol Martsolf briefly highlighted the many undertakings and accomplishments of her successful term, thanking the Section Board and Officers for their support and assistance, before handing the gavel to the incoming President, James Markham.

The Section's top awardees in the Delaware Valley Science Fair were invited to attend the Social and display their winning projects, but, since the Social was on a school night, they could not be there. This year's first-place winners were **Taylor Zaengle**, a 7th grader at Baldi Middle School in Philadelphia, with the project of *Sand Size – Does It Affect Concrete?* and **Matthew Cooper**, a junior (11th grade) at the Lehigh Valley Christian High School in Allentown, whose effort was *Concrete – Which Beam Can Handle the Stress?* (Apparently, concrete was very popular this year!)

The Section Awards for 2007 were also a highlight of the evening. This year, five recipients were cited, mainly through the audiovisual show that has become a Section standard. Information on each of the awardees follows.

Philadelphia Civil Engineer of the Year

The recipient of this award, the Section's highest honor, was Joseph Viscuso. Joe is a Partner in the firm of Stantec at its office in Kennett Square. Stantec purchased the firm of Vollmer Associates this past April. Joe was with Vollmer for the past ten years after the company he founded in 1979, Brandywine Valley Engineers, was purchased by Vollmer. He directs the activities of Stantec's five Philadelphia-area offices in the areas of roadway design, utility design, survey and mapping, traffic signalization, planning and environmental studies, municipal engineering, cost estimating and contract administration. He has served as Municipal Engineer or special consultant for a number of localities and currently serves Aston Township in this capacity, as well as Authority Engineer for the Southwest Delaware County Municipal Authority.

Joe has additionally been a part of numerous professional and industry groups over the years and has worked diligently to defend the Engineering profession as well as raise the visibility of what Engineers do to others. He has been appointed to several federal, state and local boards and commissions to bring his expertise and ideas to the forefront.

Joe earned his Bachelors degree in Civil Engineering at Widener University in 1973 followed by a Masters degree from Villanova University in 1977. He is a member of several technical and professional societies in addition to ASCE. Earlier this year, he was installed as the 2007 Delaware Valley Engineer of the Year.

Joe and his wife, Deb, who have five children, live in West Chester. He describes himself as an avid golfer and a loyal fan of local sports teams.

Young Civil Engineer of the Year

The Section recognized Jeremy Colello as our Young Civil Engineer of the Year. Jeremy is a Project Engineer and Highway Group Manager at the Center City headquarters of Pennoni Associates. He specializes in project management, roadway drainage design, erosion and sedimentation control, stormwater management, river hydraulics, bridge scour, and permitting issues. He has been with Pennoni for the past four years following five years of experience at another firm.

Jeremy earned his Bachelor of Science degree in Civil Engineering from Lehigh University in 1997 and a Masters of Science degree in Hydrosystems Engineering from the Pennsylvania State University in 1998. He has professional registration in two states and is a member of the American Society of Highway Engineers in addition to ASCE. In our Section, he is a member of the Board of Directors and serves as the Chair of the Environmental and Water Resources Technical Group. He is also a Past President of the Section's Younger Member Forum. Earlier this year, he was recognized as a co-recipient of the **Delaware Valley Young Engineer of the Year** honors.

Jeremy and his wife, Karen, live in Havertown.

Geotechnical Engineer of the Year

This year's nominee was **Dr. Joseph Wartman,** an Associate Professor in the Department of Civil, Architectural and Environmental Engineering at Drexel University. Joe joined the Drexel faculty in 2001, where he teaches and conducts research in the areas of earthquake engineering, sustainable geotechnics and geosynthetics. He has been in lead positions in the investigations of earthquakes in Peru and Mexico. Recently he has been in the forefront of the forensic efforts to investigate the damage to the New Orleans levee network caused by Hurricane Katrina.

Joe received his Bachelors degree in Civil Engineering from Villanova University in 1990. After four years in Consulting Engineering, he began full-time graduate coursework and completed both his Masters and Doctorate degrees at the University of California at Berkeley, where he finished his studies in 2000.

Joe, his wife, Carol, and their three daughters live in Chestnut Hill. He is an avid bicyclist.

Structural Engineer of the Year

John Lang was our nominee for the Structural Engineer of the Year award. John is a Vice President and Structural Group Manager at the Fort Washington office of URS Corporation. He has been with URS and its predecessor firm, Greiner, since 1985. He oversees the office's structures group and manages all transportation structure design. He has 40 years of professional experience in the design, supervision and management of transportation projects. Among the more locallysignificant projects that John has directed are the redesigned Girard Avenue interchange on I-95, the Germantown Avenue bridge in Philadelphia, the extension of SEPTA's R3 Regional Rail line from Elwyn to Wawa, and the reconstruction of viaduct segments of I-95 in both Philadelphia and Chester after major fires.

John earned his Bachelors degree in Civil Engineering from Geneva College in 1967, followed by a Masters degree from the University of Pittsburgh in 1971. He is a member of the International Bridge, Tunnel and Turnpike Association in addition to ASCE.

John and his wife, Emily, have three children and two grandchildren. They live in Audubon, NJ. When he isn't working, he enjoys golf and his fish pond.

Government Service Award

United States Representative Allyson Y. Schwartz was nominated for the Section's Government Service Award. Representative Schwartz is currently serving in her first term representing the 13th District of Pennsylvania. The district borders the Delaware River in Northeast Philadelphia and stretches from the suburbs of Abington Township in eastern Montgomery County to the farmlands in the extreme western part of Montgomery County. Over the past three decades, she has held various government positions at the local and state levels prior to her election to Congress. During her tenure in public service, she has built a national reputation as an innovative leader who knows how to forge bipartisan coalitions to accomplish goals, and has amassed a long list of impressive accomplishments. She has also worked diligently to obtain transportation project funding for the Philadelphia region through federal legislation and has a strong environmental record.

Rep. Schwartz earned a Bachelors degree in Sociology from Simmons College and a Masters of Social Work from Bryn Mawr College. She and her husband, David, who are the proud parents of two sons, live in Rydal.

Rep. Schwartz was unable to attend the Social as she had to attend to Congressional business in Washington. **Julie Slavet**, her aide, accepted the award on her behalf.

The ASCE, Phila. Section Scholarship program provides scholarships to incoming

SECTION WELCOMES NEW LIFE MEMBERS

At our April ASCE, Phila. Section Meeting, a total of fifteen incoming Life Members were honored. Not all were able to attend the meeting in person to receive their Life Membership certificates.

To become a Life Member, one needs to meet all of the following requirements: (1) ASCE membership at any grade for 20 years, (2) age 65, and (3) the sum of one's age and the number of years of ASCE membership must be 95. A major benefit of Life Membership is that dues are no longer required, although continued support of Sections through payment of Section dues is encouraged. ASCE National will automatically notify members when their qualifications for Life Membership are met.

The newly-minted Life Members are Mary Beck, David Bogan, Sailendara Chatterjee, Curtis Clifford, Everard Joering, Robert Ludgate, Koran Mani, Bruce McClish, Joseph Mullaney, Peter Naccarato, H. Richard Orth, Frederick Schmitt, A. B. Seymour, Ram Singh and Richard Siwinski.

We offer our congratulations to all of these Members upon their achievement of Life Membership status.

REVOLUTIONARY SPRING SOCIAL

Continued from Page 3

juniors and seniors in the Student Chapters of the Section's five colleges. This year's recipient was **Michael Franceschina** of Widener University. Unfortunately, Michael was unable to attend the Social to accept his award, but he will be invited to a Section meeting in the upcoming season to be cited accordingly.

Special thanks are extended to those who helped make the Spring Social a success once again this year. This includes the Program Committee (Tom Brady, Ruben David, Kristen Kavanagh, Carol Martsolf, Chris Menna and Bob Wright), the Awards audio narrators, who once again gave up a nice spring evening to donate their voices to the effort (Tom Brady, Carol Martsolf and Bob Wright), and the Awards Committee (Sandra May, Carol Martsolf, Allan Moore, Brian Stover, Bill Thomsen and Bob Wright).

As of presstime, final details of the 2008 Social are still being ironed out, and these will be included in future issues of THE NEWS as they become available.

COMING NEXT ISSUE...

- More information on the November meeting
- · Updated meeting schedule

Look for this in the November edition of THE NEWS, coming in mid-October.

SPONSOR PROFILE - PENNONI ASSOCIATES INC.

Pennoni Associates has proudly been a supporter of the ASCE, Philadelphia Section for 40 years. Through Engineering design work on projects including the Comcast Center and the Cira Centre, historical restorations like Franklin Square Park, nationally respected bridge inspections, infrastructure improvements including miles of new sewers designed throughout the city, award winning green roof designs, and through work for Philadelphia landmarks like the Museum of Art and the National Constitution Center, Pennoni continues to play a key role in shaping the very fabric of Philadelphia.

Pennoni Associates' founder and former ASCE Foundation President C.R. "Chuck" Pennoni, P.E. has consistently encouraged involvement in ASCE. "Participation in ASCE offers Engineers the opportunity to stay current with new technologies and to broaden their network of contacts in the Civil Engineering and related communities, as well as develop their communication skills," he says.

Anthony S. Bartolomeo, P.E., President and CEO of Pennoni, has spoken similarly about the company's commitment to ASCE, noting, "We plan to continue to actively participate in the Engineering community and the community at large as our firm grows within the greater Philadelphia region."

Pennoni Associates Inc. was founded in Philadelphia in 1966 and has developed into a multi-disciplinary firm serving clients throughout the Northeast. While the firm has grown to include 21 regional offices with over 850 employees, the Philadelphia region is home to its corporate headquarters and will always be a primary focus of the firm's business.

SAVE THE DATE! 137" ASCE ANNUAL CIVIL ENGINEERING CONFERENCE

The 137th ASCE Annual Civil Engineering Conference is scheduled **November 1-3, 2007** in Orlando, Florida. This year's theme is *Infrastructure For All Generations: Plan, Design, Build, Manage*. Get ready for innovative technical sessions, symposiums and roundtables in the backdrop of sunny Florida! Major topics covered will include transportation and rail, the Everglades and shuttle redesign.

The Conference will be conducted at the Buena Vista Palace Hotel. Registration is open!

For more information, visit the website, http://content.asce.org/conferences/an07/reg. html.

Give me the fresh air, a beautiful partner, and a nice round of golf and you can keep the fresh air and the round of golf. — Jack Benny

TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Vice President **Kristen Bowman Kavanagh** will coordinate activities of the Groups. 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 Group Chair.

CONSTRUCTION

Dennis MacBride SEPTA 1234 Market Street, 12th Floor Philadelphia, PA 19107 (215) 580-3404

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Michael S. Carnivale, III Pennoni Associates Inc. 515 Grove Street, Suite 2C Haddon Heights, NJ 08035-1756 (856) 547-0505 ext. 3416

ENGINEERING MANAGEMENT

William J. Mulloy US Army Corps of Engineers Philadelphia District Wanamaker Building, 7th Floor 100 Penn Square East Philadelphia, PA 19107 (215) 656-6583

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William T. Thomsen Urban Engineers, Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 (215) 922-8080

WIDENER OFFERS COURSEWORK IN LAND DEVELOPMENT

Widener University's Department of Civil Engineering has developed a new graduate certificate program in Land Development. The certificate is made up of 4 courses (12 credits) and will be offered in the Fall. It can be completed in as little as eight months.

Credits earned for the certificate can also be applied toward a Masters degree in Civil Engineering or Engineering Management.

If you are interested in learning more about this new Certificate in Land Development, which is unique in this region, please visit the website at www.widener.edu/SOE/landdevelopment.



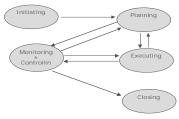
Professor Malarkey's Project Management Practical Methods, Pitfalls and Musings

by Ann M. Tomalavage, P.E., PMP

PROJECT MANAGEMENT STRUCTURE

Introduction

The Project Management Institute (PMI) has an excellent structure for project management: the 5 process groups and the 9 knowledge areas of project management. I like to think of the "5 & 9" as my thought process for all my projects.



If I follow this thought process, my projects are more successful—and less stressful.

5 Project Management Process Groups

- 1. **Initiating** gets the project off to a good start:
 - a. The organization makes a decision to go forward with the project. This decision could be based on the organization's strategic plan, changes to regulations, changes in the marketplace, new opportunities or initiatives, an RFP, etc.
 - b. The project manager (PM) is identified. Sometimes, this happens formally when the organization issues a project charter, which states that the named PM has the backing and authority to muster organizational resources (people, budget, tools) to meet the project objectives. Sometimes, whoever walks by...
 - c. The PM (and at least a few key project team members) interview the project's client to gather high-level information about the project: why, goals, in-scope, out-of-scope, target date, target budget, risks, etc. NOTE: Often an individual or group within the organization raises a good idea for a project. In these cases, the individual/group would present this information to a client, to "sell" the client on the idea and ask for support and authority to proceed with the project.
- 2. Planning creates the project roadmap. The PM and the project team take the high-level information and flesh out a plan to accomplish the project objectives. When the team creates the project plan together, their chances of a successful project are much higher than if:
 - they had not planned at all, and
 - the PM had created the plan by him/herself. The team creates the plan by means of the following steps:

- **a.** The team prepares a scope statement by discussing what they heard the client say during the information interview. They agree on what they heard and put it into writing. They then review this document with the client and get his/her concurrence that the team has understood the project.
- **b.** The team creates a work breakdown structure (WBS) by taking the scope of the project and breaking it into smaller, more manageable pieces. The WBS is the biggest favor a team can do for itself, because it lays the foundation for the rest of the planning. It allows the team to:
 - Identify the skills needed for each piece of scope and find a responsible resource with those skills.
 - ii. Estimate the duration for each piece of scope, as well as the sequence (Project Network Diagram (PND)) for completing each piece of scope. Together, these constitute the schedule.
 - iii. Estimate the cost for each piece of scope. When overlain on the schedule, a weekly/monthly/quarterly spend plan can be developed.
 - iv. Develop acceptance criteria, which indicate to the team how they will know whether each piece of scope is "complete" or "successful" or "done".
- **c.** Identify and mitigate the risks associated with the project.
- **d.** Identify the pieces of scope for which the team will have to procure goods or services from outside the organization.
- e. Determine the stakeholders for the project, identify what they need to know about the project, how the team will communicate, and what decisions the team needs from them.
- **f.** Develop a plan to identify potential changes and quantify the potential impact of those changes (to schedule, budget, resources, other projects).

In summary, Planning addresses all nine knowledge areas (see below).

- 3. **Executing** means doing the project according to the plan. It is not necessary to complete planning fully before executing, but the more complete the plan, the lower the risk of rework on the project.
- 4. Monitoring and Controlling is done while executing the project. It simply means comparing the current progress and expenditures to what was planned as of this date. If the project is on plan, great. If not, the team can either do its best to get back on plan, or the plan may need to be changed. Planning is really the team's best guess as to how they believe the project will progress. Before beginning to execute the project, the team should have processes in place to recognize and approve any changes to the plan. Without a project plan, the team cannot monitor or control the project, because there is nothing to compare with; there is no roadmap.
- 5. **Closing** means ending the project, or phase of the project. The team makes sure all the

deliverables are completed per the acceptance criteria. The team develops "lessons learned" by asking the customer, stakeholders, and team what they did very well and what they could improve for the next project. The invoices also get paid and the files are archived. The team should also remember to celebrate!

9 Knowledge Areas of Project Management

1. Project Scope Management deals with the "WHAT" of the project. The team must know the WHAT before they can determine the WHO, the HOW, the HOW LONG, the HOW WELL, etc. The scope helps the team define what they ARE doing and, just as important, what they are NOT doing on this project. Something that is out of scope may eventually be done, but is just not part of THIS project. After the scope statement, the team creates the WBS and uses that as the basis for all other planning. During Executing, the team monitors and controls the project based on the WBS, which makes it much easier to manage the project.

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KARNIG YERVANT TERZIAN (1928-2007)

Karnig Yervant Terzian, one of the founders of Urban Engineers, Inc., passed away on May 10, 2007.

"Terz," as he was known to friends and coworkers, was born in Khartoum, Sudan and was raised in Beirut, Lebanon. After earning his Bachelors degree in Civil Engineering from the American University of Beirut in 1949, he emigrated to the United States and received his Masters degree in Civil Engineering from the University of Pennsylvania in 1954.

Terz started his Engineering career shortly after graduating college in 1949 and worked at several firms. After his employer, L. T. Beck and Associates, closed in 1960, he and two colleagues decided to form their own company to pick up the work that the Beck firm had not completed. This firm, Urban Engineers, has been growing ever since.

Terz took charge of Urban's structural design, transit design, construction management, and mass transit planning components. Among his many notable projects were the expansion of Philadelphia International Airport, the Center City Commuter Rail Connection, and I-476 (the Blue Route). He retired in 1993 after over four decades of engineering service.

Terz was very proud of his Armenian heritage and an active member of the local Armenian community as well as St. Gregory the Illuminator Armenian Apostolic Church in Philadelphia. In professional societies, he was an active member of the Prestressed Concrete Institute and the National Society of Bridge and Structural Engineers, in addition to the ASCE, Philadelphia Section.

Terz is survived by his wife of 48 years, Helen.

PROJECT STRUCTURE

Continued from Page 5

- 2. **Project Time Management** has two aspects: the HOW and the HOW LONG. The team takes the pieces of scope from the WBS and lays them out in the order they think they will do them, noting the relationship of one task to another (dependencies, by means of the Project Network Diagram or PND). The team also estimates how long each piece of scope will take (duration). When the team adds up the durations based on the dependencies, they create the schedule and can determine the project end date.
- 3. **Project Cost Management** deals with the HOW MUCH. The team estimates how much each piece of the WBS will cost and uses this as the basis for determining total project cost, and also for monitoring the project. The team can also create a cash flow plan or spend plan for the project, based on overlaying the schedule on the cost estimates.
- 4. Project Human Resources Management deals with the WHO. For each piece of the WBS, the team decides what skills are needed and identifies who has them, who is available, and who will be responsible for each WBS element.
- 5. **Project Quality Management** deals with the HOW WELL. For each WBS element, the team determines what will make it acceptable to the team member who will receive that work product. The team must ask the customer of the project what will make the final deliverable (or product) acceptable, so that the team does not have to rework.
- 6. Project Communications Management includes identifying the stakeholders of the project (those who can impact the project positively or negatively, or who might be impacted by the project positively or negatively). It is important for the team to understand what each stakeholder needs to know about project progress, and to figure out how to communicate with—and manage—the stakeholders. It also deals with understanding what decisions will have to be made, who is authorized to make them, and how quickly a decision is needed.
- 7. Project Risk Management includes identifying what might go wrong on the project, quantifying and prioritizing the risks, developing countermeasures for each high-priority risk, and putting the countermeasures into effect when necessary. It also involves being vigilant for new risks which could develop during Executing.
- 8. Project Procurement Management deals with contracting for goods or services coming from outside the organization. The team looks at the WBS elements to determine which parts can be done in-house and which parts need outside help or materials. Sometimes, the organization has the expertise to do the work but the current workload suggests that getting outside help is best. Project Procurement Management is the only optional knowledge

- area, because it may not be necessary to go outside the organization for this project.
- Project Integration Management deals with having a plan, executing to the plan, and managing changes to the plan—scope, schedule, budget, etc.

Ann M. Tomalavage, P.E., PMP, helps organizations worldwide to be more profitable by improving their project management skills. Ann can be reached at 610.326.0205 or ann@malarkey.us. Her website is www.malarkey.us

VILLANOVA UNIVERSITY 2007 PENNSYLVANIA STORMWATER MANAGEMENT SYMPOSIUM

The 2007 Symposium is being conducted on **October 17** and **18, 2007.** The purpose of the symposium is the advancement of knowledge and understanding of comprehensive stormwater management for those dealing in all aspects of planning, design, implementation and regulatory compliance.

On October 16, there will be a special presymposium workshop for Municipal Representatives with the topic "Transforming Stormwater Management – Converting Runoff Problems to Community Resources."

Speakers at the symposium will include **John Hines** and **Barry Newman** of PaDEP. In
response to your input, there will be two
concurrent sessions instead of three, covering:
Stormwater BMPS, Stormwater Modeling,
Benefits of Green Strategies, Stream Restoration,
BMP Performance, Stormwater Planning, VUSP/
TVSSI Research Presentations, Stormwater
Management Projects, Stormwater Management
in Karst Terrain, and Stormwater Retrofits

Participants will have the choice (limited by bus size) of several tours. This is an optional event, with a \$20 charge (includes Lunch!). Tour options include three different BMP Tours and a Stream Restoration Project.

CEU's will be given for attendance at the symposium. The symposium proceedings will be published. For more information and to register: http://www.villanova.edu/VUSP

THANKS TO OUR SPONSORS

The ASCE, Phila. Section Sponsorship continues to be a success. Last season, we had 39 local firms participate in the program. Thus far, 21 firms have opted to become sponsors for the coming season. As always, the Section extends its collective "thank you" to our sponsors for their commitment and continued support of the Section.

There are several benefits available to you as a Section Sponsor. For a low annual fee, you too can be a part of this program and have your business card appear in each edition of THE NEWS, among other perks. You may have seen the cards of those who have decided to become Section Sponsors for the current season throughout this edition. If your firm is not in this esteemed group, and you would like to become a sponsor, this is the time to consider it.

For information on the program, please contact our Editor, **Bob Wright** at (215) 922-8081, x1647 or newseditor@asce-philly.org.

SPONSOR PROFILE — F.X. BROWNE, INC.

F. X. Browne, Inc. is an award winning, multi-disciplined, environmental consulting firm serving municipalities, associations, and businesses in the Mid-Atlantic states. The firm has been providing the highest level of planning, water resources and environmental consulting to a variety of clients for 30 years.

Headquartered in Lansdale, F. X. Browne, Inc. has offices in the Pocono area (Marshalls Creek, Pennsylvania) and Saranac Lake, New York, as well as a water quality laboratory certified by the Departments of Environmental Protection of both Pennsylvania (PADEP) and New Jersey (NJDEP). A staff of Civil and Environmental Engineers, Environmental Scientists, Biologists, Landscape Architects, and Planners provides a creative, team oriented workplace, and a diverse project list. The firm prides itself in providing innovative solutions that meet the client's needs while protecting the environment, meeting regulatory requirements, enhancing landscape and site aesthetics, and being cost-effective.

Projects include lake and stream studies, lake and stream restoration, watershed management, stormwater management, BMP design, bioengineering, water quality modeling, wetland studies, low impact site development, wastewater treatment and much more.

An expert in stormwater management, with 35 years of experience, President of the firm, **Dr. Frank Browne**, assisted with the draft of PADEP's new Stormwater Management manual and also assisted DEP in training Engineers in Pennsylvania in meeting the mandates of the new manual. F. X. Browne, Inc. was also selected by PADEP to assist in the expedited review process of National Pollutant Discharge Elimination Systems (NPDES) stormwater permit applications. As a leader in the industry, F. X. Browne, Inc. has earned numerous awards, most recently:

- 2006 Stormwater Best Management Practices Award Recognition by PADEP and the City of Philadelphia
- 2006 Stormwater Management Award by PADEP and the City of Philadelphia
- 2005 Philadelphia Area Stormwater BMP Award
- 2004 Northeastern Pennsylvania Environmental Partnership Award
- 2004 Association of New Jersey Environmental Commissions Award
- 2004 New Jersey Environmental Excellence Award for Innovative Technology
- 2000 North American Lake Management Society's Outstanding Corporation Award
- 1998 Governor's Award for Environmental Excellence

For additional information on F. X. Browne, Inc. contact the firm at (215) 362-3878 or see its website at www.fxbrowne.com.

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YOUNGER MEMBER FORUM NEWS

Joe Platt, Forum President 2007-08

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Reminder: Photos of YMF happenings can be seen on the YMF's web site under "past event photos" (www.ymfphilly.org).

Social Events

On **April 21, 2007** the YMF and friends visited one of our region's most popular breweries: Yards Brewery. The brewery owes such a large extent of its sales to kegs purchases by the region's best beer purveyors that production of its bottled varieties can be done by hand (some consider this the mark of a true beer crafter). The event was attended by almost 20 people, who we're sure were there purely for their Engineering edification. Thanks go out to the Social Co-chair, **Cathy Golata**, for organizing this event.

On June 28, 2007 almost 20 YMF members went to see the Phillies and the Cincinnati Reds play at Citizens Bank Park. The game had several lead changes and was in danger of being rain-delayed, but the Phils came through in dramatic fashion by winning in the bottom of the tenth, and setting off fireworks for those loyal, yet drenched, fans who stayed for the extra inning. Thanks again to Cathy Golata for organizing the trip and getting us \$2 drink and dog specials!

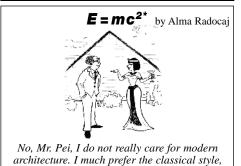
ANACE* — THERE'S ANOTHER "MAIN LINE"?

Walter Justin Sherman was a Construction Engineer for the Pennsylvania Railroad in our area as it was expanding westward from Philadelphia. In the 1880's he moved on to work for the Santa Fe Railroad building its new main line from Fort Worth, Texas to Oklahoma City, Oklahoma. At the time, Oklahoma was officially designated "Indian Territory" by the federal government (it would not become a state until 1907), and it was sparsely settled.

In addition to building the rail line, Sherman was given wide latitude for the designation of names on stations along the line. Like many of us, apparently he fell back on what he knew to do this. If you look at your handy-dandy road atlas, you can find the towns of Overbrook, Ardmore, Wynnewood, Paoli and Wayne, in that order, from south to north, along Interstate 35 in this part of Oklahoma. Berwyn existed between Ardmore and Wynnewood until it was renamed Gene Autry.

Thanks to *Cinders*, the newsletter of the Philadelphia Chapter of the National Railway Historical Society, for this tidbit.

(*Absolutely Nothing About or Concerning Engineering)



much like the way you work.

*Engineers are mutually cerebral and comical.

THE NEWS TURNS 80!

If you look carefully at our masthead, you'll notice two things. One is very obvious —the ASCE, Phila. Section is entering its **95th year.** Not bad! The other is in much smaller print — THE NEWS is now on **Volume 80** — an octogenarian!

Like most 80-somethings, we can't recall much of where it all started and where we came from. It all happened a long time ago. We can't even find records on who was the first Editor. We know the late **Sid Robin** took over the reins in 1941, when THE NEWS was a mere "youngster" of 13, and he remained as Editor until the current occupant of that position assumed it four years ago, so we know of two people who held this esteemed position.

Someone else served as Editor in 1962-63, when Sid stepped down temporarily to devote his time to the Section Presidency, but we have little information on that or who preceded Sid. If anyone can enlighten us on any of this, we'd be glad to get the information and pass it along to our inquiring members.

In any event, we know when it all started. The ASCE, Phila. Section Board, realizing that it had to communicate with its membership, in a time before e-mails, when even telephones were not universal (and cell phones were non-existent), passed a resolution at its meeting of March 5, 1928 to authorize "the printing of a tabloid newsletter to give information of interest to members." The first edition of THE NEWS, clearly a collector's item if you have one, was printed and mailed in November 1928. And we've been going strong since then!



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