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PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

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National ASCE Central Number 1-800-548-ASCE • Toll Free

Vol. 74-4

Our 88th Year

December, 2001/January 2002

JANUARY JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers
Delaware Valley Section, American Society of Highway Engineers (ASHE)

WEDNESDAY, JANUARY 9, 2002

HOLIDAY INN, Goddard Blvd • King of Prussia, PA • See Location Map Below Cocktails – 6:00 p.m. • Dinnèr – 7:00 p.m. • Meeting – 8:00 p.m.

SUBJECT: Construction of the Eagles Football Stadium and Stadium Planning, Design and Construction

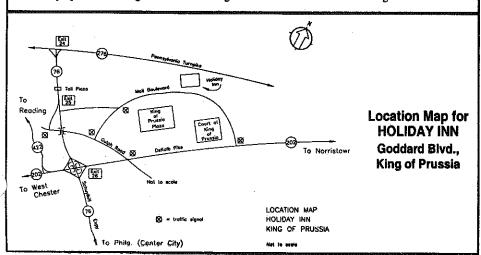
SPEAKER: Richard C. West, Vice President, Project Director, Turner Keating McKissak

SPECIAL FEATURE: DREXEL UNIVERSITY NIGHT. The ASCE Student Chapter, Alumni and Faculty of the Civil and Architectural Department of DrexelUniversity will be honored at this meeting. All Students, Faculty and Alumni are cordially invited.

RESERVATIONS MUST BE SUBMITTED BY THURSDAY, JANUARY 3, 2002. Please send your check for the number of attendees @ \$20.00 per member or guest, \$10.00 per ASCE Student Members, payable to the Phila. Section, ASCE, P.O. Box 58186, Phila., PA 19102-8186; or call the Electronic Message Center: 1-800-461-4190 (Open 24 hours/day) or e-mail the Section at info@asce-philly.org.

Richard West has been building stadiums around the country over the past years, with his latest success being the new Titans Stadium in Nashville, Tennessee. Turner Construction, in association with Keating and McKissak were awarded the construction of the new Eagles Stadium by the Eagles ownership.

As part of his presentation, Mr. West will review the planning process that must be a part of any successful stadium project. The \$400 million +/- construction of the Eagles Stadium is no exception, with a scheduled opening for the 2003 football season. With over 4000 construction workers involved in the development of the stadium, overcoming changes and opportunities is key to managing a construction project of this magnitude... and having it come in on time and under budget.





God Bless America!

TECHNICAL GROUP ACTIVITIES

Structures Group

January Luncheon Meeting

DATE: Wednesday, January 30, 2002

TIME: 12 Noon to 1:20 PM

COST: \$10.00; Students \$5.00 LOCATION: Conference Room at STV Inc., 1818

Market Street, Suite 1410, 14th Floor, 18th &

Market Streets, Philadelphia, PA 19103

SUBJECT: The Schuylkill Valley Metro Major Investment Study/Draft Environmental Impact Study

SPEAKERS: Chris Patton, Director of Capital and Long-Range Planning, SEPTA, and Rich Amodei, Manager of Planning, STV Incorporated, Philadelphia

Speakers will present various aspects of this important project, the economic and cultural impacts of the project on the City of Philadelphia and its suburbs, technical work that has been completed, issues that were overcome and the next steps.

A buffet lunch will be served starting at 12:00 noon with the presentation beginning at 12:20 pm.

Reservations are required and seating is limited to 40. Please contact Ali Khan, Chairman, Structures Group, at (609) 530-9618.

Please send your check for \$10 to the Phila. Section, ASCE, PO Box 58186, Philadelphia, PA 19102-8186; or call the Electronic Message Center: 1-800-461-4190 (open 24 hours/day).



THE PRESIDENT'S MESSAGE

Welcome to the Section's December/January issue of *THE NEWS*. Since my last message we sped by the Thanksgiving Holiday. We do indeed have much to be thankful for. I hope that your Thanksgiving was both blessed and bountiful.

It's hard to believe that we are all once again into the Holiday Season and quickly approaching another New Year. And for us football lovers we know that another season is quickly approaching its end. Oh my poor Penn State Nittany Lions! But, what a truly wonderful time of the year this is. It

is indeed a great opportunity time to be spending quality time with family and friends. In our fast-paced environment do take time to thoroughly enjoy it.

It just seems like yesterday that I was sworn in as your President and already more than seven months of my year's term has gone by. But, in that timeframe, if you hadn't noticed, your Board and Section has been quite busy. We have had several very successful functions including two well-attended Dinner Meetings. Our November Dinner Meeting was a sell out. Our friends from SEPTA, Dominic Sabatini and Jack Tepper gave the audience a very good overview of their Market Street Reconstruction Project. What an interesting and challenging project! Special thanks goes to both David Hanly and Sam Pickard for arranging such a wonderful meeting. There is a lot more to come. Our January Dinner Meeting should prove to be just as good. We join forces with our fellow professionals from the Delaware Valley Section of the American Society of Highway Engineers (ASHE). This Joint Meeting will give us all an opportunity to hear first hand about the Eagles new football stadium. I look forward to seeing many of you there, and hopefully some new faces.

As we prepare for the New Year let us continue to remember the families and friends of the victims of the horrific events of September 11th. Resolve to keep them, and our service men and women who have been called upon to fight the war on terrorism ever in our thoughts and prayers. Remember also to continue to display Our Country's colors – Red, White and Blue.

And, if you are still pondering with good New Year's resolutions, one to consider is "To attend at least two Section Meetings or Functions." Yes, double your pleasure. Do indeed resolve to become more active in our Section and to help strengthen both our Section and our Society. Our activities for the remaining 2001-2002 season have pretty much been finalized and are shown on the last page of this issue. I'm sure that we have something of interest for you. This is YOUR Section, so yow to participate.

Until next time – be safe, healthy and prosperous. Remember too that "The Joy of Life is in the Journey; Enjoy Each Day to its Fullest". And don't forget to check out our website at www.asce-philly.org. Have a Joyous Holiday Season.

GOD BLESS AMERICA!

Sincerely yours, Chris L. Rood, P.E. President, Philadelphia Section, ASCE

JANUARY TOUR/LUNCHEON MEETING

Philadelphia Section, American Society of Civil Engineers Thursday, January 17, 2002

KIMMEL CENTER LOBBY • Broad and Spruce Streets • Philadelphia, PA Meeting – 11:30 a.m. • Lunch – 12:00 Noon • Tour – 12:30 p.m.

SUBJECT: The Kimmel Regional Performing Arts Center

SPEAKER: George H. Shaeffer, P.E., Senior Project Manager, Perks-Reutter Associates

RESERVATIONS ARE REQUIRED AND MUST BE SUBMITTED BY MONDAY, JANUARY 7, 2002. Please send your check for the number of attendees @ \$10.00 per Member or Guest or \$5.00 per ASCE Student Member, payable to the Philadelphia Section, ASCE, P.O. Box 58186, Philadelphia, PA 19102-8186; or call the Section's Electronic Message Center @ 1-800-461-4190 (Open 24 hours/day) or e-mail the Section at info@asce-philly.org.

The Kimmel Regional Performing Arts Center Concert Hall and Recital Theater is now completed at Broad and Spruce Streets, Philadelphia. The new Rafael Vinoly Architects-designed structure is sure to become a Philadelphia landmark, both architecturally as well as for cultural excellence. Under the spectacular glass-vaulted ceiling towering more than 150 feet above street level, this world-class facility houses:

- The state-of-the-art 2500-seat Concert Hall, new home of the Philadelphia Orchestra, featuring full-height reverberation chambers to control and enhance acoustics in the Hall based on the type of performance.
- Recital Hall, multi-use, technologically advanced recital hall and theater, 650-seat new home to Amerian Theater Arts for Youth; Concerto Soloists Chamber Orchestra; Philadanco; and the Philadelphia Chamber Music Society.

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SECTION WEB SITE!

Our Section's web site has taken on a new look! Make sure you bookmark this site to chec' on our latest meetings and events, links and muc more! Comments and/or suggestions? Please contact us either via our Electronic Message Hotline at 1-800-461-4190 (24 hours a day) or e-mail at info@asce-philly.org.

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YOUNGER MEMBER FORUM NEWS

by Christopher Menna, Forum Editor and Past President

Younger Member Forum

Christopher Wright, President

DMJM+HARRIS The Atlantic Building 260 S. Broad St., Suite 1500 Philadelphia, PA 19102 (215) 735-0832, ext. 293

The Younger Member Forum (YMF) current membership includes college students, recent graduates, and young engineers including registered Professional Engineers who are 35 years of age and under.

Young engineers or college students who would like to become part of the YMF please contact Mike McAtee, Urban Engineers, Inc. at mjmcatee@urban-hq.com or at (215) 922-8080.

Past Accomplishments

On Saturday, November 10, 2001, the Younger Member Forum and the Friends of the Wissahickon (FOW) once again joined forces in an effort to beautify one of Philadelphia's greatest resources, Wissahickon Park in northwest Philadelphia. The project consisted of reconstructing a double-rail wooden fence located around the perimeter of the Picnic Pavilion in the Andorra Natural Area of the park. The fence had been previously damaged by weathering and vandalism. Approximately ten YMF members worked alongide volunteers of the FOW to complete the project in four hours. The next time you're in the Wissahickon Park, take a moment to notice the great job completed by the volunteers! Special thanks goes to Christopher Barber, City of Wilmington Water Department for organizing this very rewarding activity.

The Sixth Annual YMF Winter Social was celebrated on November 28, 2001 at McGillin's Olde Ale House in Center City. The event was a huge success and attracted over 70 members of the Philadelphia and South Jersey YMF groups, along with several prominent members of the Philadelphia Section. The festivities included a hot and cold buffet, open bar, lots of laughing, and socializing.

The highlight of the evening was a raffle and 50/50 that raised a total of \$400. The winner of the 50/50 was Ulysses Koutsogiannis of DMJM+HARRIS, who took home \$200 in cash. The remaining \$200 will be donated to the New York City Firefighters 9-11 Disaster Relief Fund. In addition to the 50/50, eleven company sponsored gifts ranging in value from \$25 to \$100 were raffled off. These prizes were generously donated by CADapult (\$100), DMJM+HARRIS (\$100), Urban Engineers (\$75), Parsons Brinckerhoff (\$50), Stone & Webster (\$50), URS Corp. (\$50), Michael Baker (\$50), and anzeisen & Quigley Sports Specialists (\$25).

e are very thankful to these sponsors whose contributions enabled us to raise so much money for such a worthy cause. Prize winners included Carolyn Barry, Melanie Kasper, Jeremy Colello, Jennifer Diec, Carol Martsolf, Kevin Haraschak, Kyle Oszeyczik, Christopher Wright, Mike McGettigan, Christopher Menna, and Jim Schwarzmeier.

Special thanks go to the entire Winter Social Committee for organizing such a successful event: Kristen Bowman of Flow Science, Alyson Lester of Urban Engineers, Jennifer Diec and John Quirus of Parsons Brinkerhoff, and Christopher Wright of DMJM+HARRIS.

Upcoming Events

The 2002 Northeast Regional Younger Member Council (NERYMC) will hold their annual conference January 18-20, 2002 in Hartford, Connecticut. The NERYMC Conference provides Younger Members from each Section and Branch within Zone I with an opportunity to share ideas and meet the ASCE National leaders. The Philadelphia Section YMF will be sending a group of eight delegates to the Conference this year and hopes to bring plenty of ideas and an informed perspective about ASCE.

The YMF is planning to attend a ski trip in February, 2002, coordinated by the South Jersey YMF. If you are interested in attending this event, please contact Brian Lipko, Stone & Webster Engineering, Inc. at (856) 482-3027, or brian.lipko@stoneweb.com.

Several YMF members are planning to visit local Colleges and Universities throughout the year to hold open discussions with Civil Engineering students. The YMF will respond to questions and concerns from the students at this informal gathering. The students will be informed of what to expect from the engineering world after graduation. If you would like to volunteer as a speaker, please contact James Markham, Pennoni Associates at (215) 222-3000 or Christopher Wright at (215) 735-0832.

Member Spotlight

The purpose of the member spotlight is to introduce a fellow YMF member to the Delaware Valley Engineering Community.

Thomas W. Brady, P.E. has been an active member of ASCE since attending college at Drexel University. Tom received a BSCE from Drexel University in 1993 and then began working for URS Corp. (formerly known as Greiner). A bulk of Tom's career has been serving as a Design Engineer on the S.R. 202 Sec 400 project in King of Prussia. Tom received an MSCE in 1999 from Villanova University. Currently, Tom works as a Project Civil—Highway Engineer at the URS Philadelphia office. His current projects include the Germantown Avenue Bridge Replacement in Chestnut Hill, the Betzwood Bridge Replacement in Valley Forge and S.R. 202 Sec 610 in Montgomery County.

Tom and his wife, Sharon, of four years welcomed their first child, Catherine Rose, on August 31, 2001. They reside in Exton, PA. Tom's hobbies include playing football for the New England Patriots (no, not really but he enjoys watching football), playing basketball, golfing and being a proud father.

Tom is currently serving on the YMF Board as the Vice President of Technical Groups, and

was the winning designer of the YMF logo. Tom is also an active member of the American Society of Highway Engineers (ASHE).

VILLANOVA WATER SHORT COURSE ANNOUNCED

Villanova University Department of Civil and Environmental Engineering and the Center for Environmental Engineering Research announce that the short course "Analysis of Water Surface Profiles Using HEC-RAS" will be held January 9-11, 2002. This course has been designed to familiarize the Civil and Environmental Engineer with both the theoretical and practical aspects of using HEC-RAS, the steady flow, water surface profile computer model developed by the Hydrologic Engineering Center of the U.S. Army Corps of Engineers. HEC-RAS is the first of the Next Generation (NexGen) engineering software packages to be released by the Corps. HEC-RAS replaces HEC-2 as the industry standard. Each instructor has more than a decade of extensive consulting, research, and academic experience with hydraulic models. Villanova participated as a Beta test site for the original HEC-RAS software. Professors Traver, Chadderton, and Falcone are the chief instructors.

The fee for the conference which includes class materials, program software and user manuals, coffee breaks, and a reception is \$800. Each course participant will receive the latest HEC-RAS software, a copy of the program documentation, and course lecture notes. The program software is not copy protected. 2.0 CEU's will be awarded to each student. A \$50 discount is offerered to members of ASCE, SAME. Group discounts are available.

The Course starts with a review of basic open channel hydraulics. After each new aspect of HEC-RAS is introduced, students will be given a design problem to analyze on the computer under supervision of the course instructors. Students will use the most current micro-computer version of the package on pentium microcomputers in Villanova's Computer Aided classroom. This facility allows the instructors to include actual HEC-RAS results in a real-time environment. HEC-RAS is windows-based and much more user friendly than the earlier HEC-2. Specialized topics to be discussed include Cross Section Selection, Mixed Flow Regime Modeling, Bridge and Culvert Hydraulics, Floodway Determination, Error Analysis and Model Sensitivity. Theory and practical usage will be integrated to maximize understanding of HEC-RAS applications to real world design problems.

For further information, or to reserve a seat, contact either Professors Traver or Falcone at Villanova University.

Professor Traver; (610) 519-7899; Robert. Traver@Villanova.edu.

Professor Falcone; (610) 519-7920; Frank Falcone@Villanova.edu.

Department of Civil and Environmental Engineering; 800 Lancaster Ave.: Villanova, PA 190785; fax (610) 519-6754

OCTOBER DINNER MEETING

October 24, 2001

Williamson's City Line, Philadelphia, PA

"Professionalism and the Civil Engineer"
By Bob Wright, Staff Writer and Sid Robin, Editor

The Phila. Section, ASCE, inaugurated its 2001-2002 Season of monthly meetings with a highly successful discussion on the vital subject of "Enhancing the Standards of Professionalism for the Civil Engineers." Featured speaker was Thomas L. Jackson, P.E., National ASCE President-Elect, Vice President of the Consulting Firm DMJM+HARRIS. A gratifying turnout of Phila. Section members and guests, and Civil Engineering Students, Alumni and Faculty of the University of Pennsylvania Systems Civil Engineering Department attended and participated in the discussion.

Continuing its long-held policy of recognizing the Civil Engineering Departments of area colleges and universities, the University of Pennsylvania ACE Student Chapter, Alumni and Faculty of the Civil Engineering Systems Department was featured and honored at this meeting. Phila. Section President Chris L. Rood, P.E. presided expertly at the first regular monthly meeting of the new season.

University of Pennsylvania Night

The UofPA ASCE Student Chapter Faculty Advisor, **Dr. Wen K. Shieh**, thanked the Phila. Section for its courtesies in recognizing his group. Dr. Shieh is proud of his 70 students in the Department, in which the curriculum is focusing principally on Transportation and Infrastructure Management Specialties of Civil Engineering.

Student Chapter Activities

Penn's ASCE Student Chapter President, Ken Merriam, spoke on the Group's principal objectives: social events in the unified environment of Civil Engineers; regular meetings, featuring well-known speakers on specialized Branches of Civil Engineering; and various development projects. The Chapter is also very active in promoting membership into ASCE for both undergraduates and degree-candidate students.

Younger Member Forum

An additional Special Feature of the meeting was a tribute to the Phila. Section's dynamic Younger Member Forum, which has contributed invaluable accomplishments to the Section's agenda for the past many years, thanks to an enterprising, industrious progression of Officers, Special Committee Personnel, and Active Members.

Current YMF President Christopher Wright reviewed the busy activities of the YMF (which are articulated in a detailed separate article in this issue of THE NEWS.) Chris acknowledged and introduced all of the YMF Officers and members present — to the plaudits of the enthusiastic audience.

Mr. Jackson Introduced

Phila. Section YMF President Wright presented a short introduction of the evening's featured speaker, Thomas L. Jackson, P.E., ASCE

National President-Elect and Vice President of DMJM+HARRIS, Consulting Engineers.

The Section's Younger Member Forum President, Christopher Wright, presented a short introduction of the evening's featured speaker, Thomas L. Jackson, P.E., ASCE National President-Elect and Vice President of DMJM + HARRIS.

Defining "Engineer" Concepts

Mr. Jackson outlined his talk on the topic of enhancing the standards of professionalism for the Civil Engineer, a subject that he noted was a personal concern as well as a career one. He explained that the public's concept of "engineer" was a confused one at best and this did not help the cause of enhancement of the reputation and standing of engineers of any discipline in general. Therefore, those in the profession will need to help themselves and begin to set realistic, attainable standards for practice and education. ASCE has set out to do just this.

Requirements for Professional Status

Mr. Jackson presented several examples of how engineers are not considered "professionals" despite current educational standards, accreditation requirements, and state registration. In his own family, his wife is an attorney, his daughter a CPA, and his son-in-law a pediatrician. While these three people are considered to be "professionals" by the general public, the engineer is, outside of his own circle, not viewed as a professional despite state recognition as such. While he countered that the attorney and pediatrician had to undergo the requisite internship periods (and, in the case of the pediatrician, this was a 7-year residency), engineers have an experience requirement before they can apply for the PE exam. However, there is no formalized "internship" period for engineers. In a world that continues to advance technologically as fast as ours does today, this may be something that engineering educators ought to reconsider.

Continuous Professional Development Advocated

Mr. Jackson remarked that, at present, half (26 of 52) jurisdictions in the United States that issue PE licenses have a continuing professional development (CPD) program. CPD is justified by the many changes in technology which require engineers to be "current" in the latest techniques, applications, materials and practices. Typically, 15 hours of CPD per year are the minimum requirement for license renewal, and, for the most part, State boards do not force license holders to provide documentation with renewal. PE's are left to their ethics to assure the boards that they have met the CPD requirements.

Ethics Are Vital

Ethics are a "must" in Mr. Jackson's opinion. PE licensure requires that holders comply with ethics, and many PE's are suspended based on

ethics violations. Any professional must have and uphold the principles of ethics. As an example, attorneys must generally attend multi-day session on ethics on an annual basis.

Academic Requirements for PE License

Mr. Jackson covered a currently controversial topic within ASCE – the issue of the Masters level degree as the first professional degree. ASCE has published a policy on this subject after considerable committee discussion and review. The intent is to have a single standard for the civil engineering profession. At present, some disciplines within civil engineering, such as Geotechnical and Environmental, effectively require a Masters degree. ASCE has slightly modified its original thoughts on this with the Masters or Equivalent (MOE) policy which has greater latitude in the coverage of other training.

Mr. Jackson felt that the Masters may not necessarily be required for entry-level positions and that it could be obtained while candidates were working, during their "internship" prior to the taking of the PE exam. He reminded the attendees that architecture programs are five years, and the technical training for architects is much less than that for engineers.

Discussion Period

Given the topic, there was no surprise that several in-depth questions were asked by the attendees. Interesting, penetrating comments and observations were forthrightly addressed by our distinguished speaker. Of particular interest — and concern — to many questioners was National ASCE position on academic and/or "other" requirements for Professional Engineer Registration.

President Wright presented a Gift of Appreciation to Mr. Jackson on behalf of the Section's Younger Member Forum, for his excellent presentation.

Phila. Section President Chris Rood also presented our distinguished speaker the Section's Gift of Appreciation for his outstanding talk. Chris also acknowledged with thanks the work done by the YMF and their assistants in arranging this enlightening meeting.

When you sit with a pretty girl for two hours, you think it's only a minute. When you sit on a hot stove for a minute, you think it's two hours. That's relativity.

-Albert Einstein



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PHILA. SECTION AWARDS PROGRAM NOMINATIONS NOW OPEN!

The Section's Award program is now open for nominations. These Awards recognize Section members and others for their contributions to the Civil Engineering profession. All Awards will be presented at the Spring Social/Dinner Dance, which will be on Friday, May 3, 2002 at the Sugarloaf Center in Chestnut Hill. (More information on the Spring Social will be included in upcoming issues of THE NEWS.)

GUIDELINES/RULES

- Nominations must be postmarked by Friday, February 8, 2002 or faxed to the Awards Committee Chair by the close of business that day. Nominations should be submitted on nomination forms which are available from the Committee Chair.
- Individuals may be nominated for awards by a member in any grade of membership.
- Individuals may receive only one award in a single year, but may be nominated for more than one award in a single year.
- Award recipients are subject to the approval of the Section's Board of Directors.
- All awards are presented only in years in which, in the judgement of the Selection Committee or the Board, there is at least one suitable candidate.
- The Selection Committee, at its discretion, may nominate an alternate for each Award for Board consideration.
- The Selection Committee will recommend to the Board whether the recipient should also be nominated for applicable National or Regional awards by the Section.
- A nominee for any award MUST be a member in good standing of the Philadelphia Section in the year in which the nomination is made, with two exceptions (Government Service Award and Philadelphia History and Heritage Award). For these awards, membership in the Philadelphia Section is NOT required.

AWARDS

The Section has a total of 13 awards which cover various specialty areas. In addition, the Section President can nominate an individual for the Presidential Award at his/her discretion. The awards are as follows:

- · Philadelphia Civil Engineer of the Year
- Philadelphia Young Civil Engineer of the Year
- Philadelphia Government Engineer of the Year
- Philadelphia Young Government Engineer of the Year
- Government Service Award
- · Educator of the Year
- · Philadelphia History and Heritage Award

Individual Technical Awards:

- Civil Engineering Manager of the Year
- Construction Engineer of the Year
- Geotechnical Engineer of the Year
- Structural Engineer of the Year
- · Transportation Engineer of the Year
- · Water Resources Engineer of the Year

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NOVEMBER DINNER MEETING

November 15, 2001

Williamson's City Line, Philadelphia, PA

"SEPTA's Market Street Reconstruction" By Bob Wright, Staff Writer and Sid Robin, Editor

A very gratifying turnout of the Phila. Section, ASCE members and guests, representatives of Villanova University Department of Civil and Environmental Engineering, and a contingent of Villanova's ASCE Student Chapter, enjoyed a comprehensive presentation on the Southeastern PA Transportation Authority (SEPTA) current \$420 million project, involving reconstructing the Market Street Elevated portion of the Blue Line (also known as the Market-Frankford Subway and Elevated). Two distinguished SEPTA officials on the project were the featured speakers: Dominic F. Sabatini, P.E., Director of SEPTA's Blue Line Structures Engineering and Construction Division; and John F. Tepper, P.E., Deputy Director, SEPTA's Blue Line Structures Engineering and Construction Division.

As he immediately proved at the Section's inaugural 2001-2002 regular monthly meeting on October 24, 2001 President Chris L. Rood, P.E., demonstrated his outstanding administrative talents in presiding at the Main Meeting and the Board of Directors Meeting preceding the Main Meeting, with proficiency and interesting commentary.

Villanova University Night

At the meeting, the Phila. Section honored the ASCE Student Chapter, Alumni and Faculty of the Civil and Environmental Engineering Department of Villanova University. ASCE Student Chapter Faculty Advisor, Professor Frank E. Falcone, long-time dedicated member of the Phila. Section, thanked his hosts for their courtesies and recognition of Villanova's Civil and Environmental Engineering Department. Professor Falcone proudly announced that the Student Chapter has grown to 85 members. The Chapter's ambitious agenda includes monthly meetings, featuring invited speakers from consulting firms, contractors and industry. Professor Falcone typically endeavors to establish greater and more frequent interaction with the Phila. Section. He also noted participation in the Zone I Leadership Conference, and the Annual Concrete Canoe Race and Model Steel Bridge Construction Competitions.

Student Chapter President Speaks

Villanova ASCE Student Chapter President Peter Theisz also expressed, on behalf of the Chapter and the Civil and Environmental Department, his appreciation of the honor of recognition and courtesies of the Phila. Section. He introduced his fellow Student Chapter Officers: Vice President, Leah Shimko; Treasurer, Elizabeth Marcantonio; Secretary, Stephanie Pilipovich; Engineering Student Council Representative, Francis Homer; Social Chair, Allison Valentine. Peter summarized the activities of the Chapter, which featured noted speakers from engineering consulting firms and construction industry related companies, at their meetings; field trips to major

projects; participation in civil engineering field exercises, and construction projects; a cooperative program of class hours credit combined with field work; preparation for post-graduate degrees; and promotion of professional issues of interest to engineering students anticipating graduation and pursuing post-graduate degrees.

Rood Introduces Speakers

Phila. Section President Rood introduced the speakers for the evening, Dominic F. Sabatini, P.E., Director of SEPTA's Blue Line Structures Engineering and John F. Tepper, P.E., Deputy Director. Mr. Tepper opened the session with a brief background on SEPTA's ongoing efforts to revitalize the Blue Line (also known as the Market-Frankford Line). This line is SEPTA's "workhorse", carrying 150,000 riders each weekday. Its vulnerable point is that, in case of breakdown or emergency, there is no viable surface transit line alternative, unlike the Broad Street Line which has a bus route serving its corridor for nearly its entire length.

Work-To-Date Reviewed

Mr. Tepper outlined the work to date on the Blue Line, including the major restoration of the Frankford Elevated structure, replacement of the stations on the Frankford side, the reconstruction of Frankford Terminal, and the installation of automatic train control (ATC) equipment on the entire line. The Market Street side remains to be addressed.

History of The "El"

The Market Street Elevated structure was built by the Philadelphia Rapid Transit Company (PRT) and opened in 1907. It originally extended from Cobbs Creek to just east of the Schuylkill River as an elevated line. The original Market Street subway started at roughly 23rd Street. In 1955, the section between 45th Street and 23rd Street was placed in a subway, resulting in the current-day El line that is just under 2 miles in length. The El has had serious structural deterioration, mainly due to drainage problems, and plans were developed in the mid-1990's to redeck the line, with the two-column bent support system to be rehabilitated and retained.

Double- or Single-Column Bents?

The segment of Market Street below the El is constrained by the bents, which create an unusual inner/ outer roadway situation, which is confusing for drivers. The City's Department of Streets approached SEPTA to ask if a single-column bent system could be installed, which would change the street operation to a more normal one. SEPTA reevaluated the supports and found that most were in questionable condition, thus the decision was made to place new columns. Many column bases are in need of repair, and several columns have

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November Dinner Meeting

(Continued from Page 5)

been struck by motor vehicles, although no catastrophic failure has resulted to date.

SEPTA's Services During Construction

Mr. Tepper explained SEPTA's approach to the work, which was nearing \$300 million in costs. The most difficult aspect of it will be the requirement that the Blue Line be substantially kept in service during construction. This will necessitate weekend service outages, during which time contractors will remove the existing El structure and place new beams and track deck. Massive 450-ton cranes will need to be positioned onto Market Street to lift old members out and new ones into place.

Design Progress and Contract-Letting Progress

Most of the design work for the project is complete or nearing completion. A \$45 million initial effort to place column bases has recently been let and approved by the SEPTA Board. This will also entail some underground utility relocation and will install a SEPTA subsurface duct bank for power and communication cables. (During construction, these will be temporarily supported by a wood pole line.) Another \$73 million contract is being advanced to replace the Cobbs Creek viaduct west of 63rd Street. Supports will need to be carefully placed in this section to avoid interference with traffic on busy Market Street.

Mr. Tepper noted that two major contracts remain to be let — the main line viaduct from 45th Street to 63rd Street and the station package for stops at 46th, 52nd, 56th, 60th and 63rd Streets. The viaduct package will contain elements for street-level improvements such as new curb and sidewalk, streetscape elements, new traffic signals, and similar efforts. The four combined contracts have a total construction value of \$270 million.

Details of Stations

Stations will all feature off-structure "head houses" which will contain entrance stairways, elevators, and cashier booths. All stations will be fully ADA accessible. The finish of the head houses will be brick to match surrounding buildings.

Construction Scheduling and Community Considerations

The project will begin in Spring 2002 and be completed in 2007 according to current schedules. Mr. Tepper reviewed significant efforts being made to inform the West Philadelphia community of the project's progress and when critical elements will affect El travel, street traffic, businesses in the corridor, and related activities.

Overall Resume by Mr. Sabatini

Mr. Sabatini took over the presentation with a general run-through of current construction and community outreach efforts. He noted the difficulties in the preparation of competitive construction contracts and having ability to prequalify contractors who could handle the many tight constraints in the work schedule and corridor. He explained a three-dimensional constructibility model which was assembled to see how the project could

be accomplished despite the many requirements and limitations.

Discussion and Question Period

Complex, in-depth comments and questions, from members of the audience, on this gigantic project, were addressed forthrightly by our wellinformed and articulate expert speakers, who hold high official and responsible positions in the project's planning, design and construction, restoration of service on the "El", alleviation of inevitable hardships and sacrifices which will be required of business, residents and commuters in the construction area. How best to address these immense problems so that minimum economic harm and social obstacles which will confront the people and institutions within the project's confines, will be challenges only great minds and talents of SEPTA officials, contractors and community activists can attack boldly and with unwavering vigor. Phila. Section President Rood presented to each of our distinguished speakers the Section's Gift of Appreciation.

January Tour Luncheon Meeting (Continued from Page 2)

 The \$255 million 450,000 square feet edifice will also be home to Merck Education Center; Rooftop Terrace; Commonwealth Plaza, our allweather Town Square; a Cafe and Restaurant; a Gift Shop and other amenities.

Construction Statistics

- More than 3,900 public parking spaces
- 29,054 total cubic yards of concrete (equivalent to 92 miles of 5-foot wide sidewalk)
- 317,000 masonry blocks
- 135,000 total cubic yards of dirt removed from the site at Broad and Spruce Streets
- 3,700 total tons of structural steel
- 2,281 tonnage of rebar (reinforcing steel bars)
- 61,048 linear feet of structural steel tubing supporting the glass roof
- 1,400 tons of steel in the arches supporting the glass end walls
- 156,677 square feet (3.6 acres) of glass glazing
- 66 tons of weights holding glass end walls
- 9,300 gallons (860,000 square feet) of paint
- 594 doors
- 2.5 miles (13,184 linear feet) of handrails
- 14 elevators

George H. Shaeffer, P.E., Senior Project Manager, Perks-Reutter Associates from 1995 to the present, served as Project Manager on the RPAC and the Academy of Music renovation (1987-1995) projects. At the Academy project, Mr. Shaeffer served as Director of Construction on the design and construction of the \$30 million renovation of the historically certified Academy of Music. The project was implemented over a six-year period on a phased basis in order to keep the facility open during the performance season.

Mr. Shaeffer, with 30 years' experience, is a 1963 graduate of Drexel University with a B.S. Degree in Civil Engineering. He is a Registered Professional Engineer in Pennsylvania and New

Jersey

From 1984-1987, Mr. Shaeffer was Executive Vice President, Gaudet Associates, serving Project Manager to PIDS on the \$523 milli Convention Center construction projects, in addition to other major building renovation projects in Center City Philadelphia. He also was Construction Manager on the Schuylkill Expressway Reconstruction, providing management assistance to PennDOT. Previous positions held by Mr. Shaeffer include: President, Dowling Construction Co. (1982-1984); Deputy Commissioner, City of Philadelphia Department of Public Property (1981-1982); Director of Construction, City of Philadelphia Redevelopment Authority (1966-1978); Director of Construction, Market Street East (1974-1978); Project Administrator and Project Engineer for Eastwick Urban Renewal Area (1966-1972).

Mr. Shaeffer's Awards include: HUD National Design Award for Project Administration of the Gallery at Market Street East; the National ASCE Award for Outstanding Civil Engineering Achievement as Project Coordinator for the Center City Commuter Rail Connection in Philadelphia.

PAST PRESIDENT MAY A "WOMAN OF DISTINCTION"

Section Past President Sandra May recently added another award to her long list of citation and honors, as she was recognized as a "Worm of Distinction" in the Philadelphia region. This honor was bestowed upon a total of 25 local business and professional women at a banquet conducted on November 29, 2001.

This program, sponsored by the Philadelphia Business Journal and the National Association of Women Business Owners, annually recognizes the most dynamic women who have made exceptional contributions in their fields and to the community. The 25 awardees were selected from hundreds of nominated candidates who are all remarkable in many ways.

As many of you already know, Sandra, who served as Phila. Section, ASCE President in 1998-99, continues to provide an active role in both Section activities as well as National committees. She is currently spearheading the Section's "Building Big" outreach efforts with local schools and co-chairs the 150th Anniversary Event committee.

Congratulations to Sandra May for yet another recognition of her contributions!

Awards Nominations

(Continued from Page 5)

If you are interested in submitting a nomination for consideration, please contact Bol-Wright, Committee Chair, at 215-686-5538 (email robert.wright@phila.gov) to obtain a nomination form. You may also call Bob if you have any questions or need any additional information on the Section Awards Program.

WEBSITE SPONSORSHIP PROGRAM

Directors Carol Martsolf and Walter DeLury

The Officers and Directors of the ASCE Philadelphia Section are pleased to addise you of the "Sponsors" section of our recently upgraded web page www.asce-philly.org.

The Sponsorship Directory will provide three categories of "Sponsors" for the following annual fees:

Golden Gate Bridge Club \$700.00 Silver City Bridge Club \$500.00 Bronze Cast Bridge Club: \$300.00

*E-mail and web page site address cannot be linked to the www.asce-philly.org site due to ASCE 501(c)(3) tax status.

The Sponsors section will also have the following General Provisions associated with it:

- Sponsor information on the ASCE web page is for a one-year period from October 1 to September 30 with web page updates occurring in October, November, January, February, March, April and August.
- The ASCE web page will run Sponsorship member employment opportunity ads on the ASCE web page as follows:

Golden Gate Bridge Club: one employment ad three times during the year

Silver City Bridge Club: one employment adtwo times during the year

Bronze Cast Bridge Club: one employment ad one time during the year

The employment opportunity ads, once ced, will run until the next web page update.

Sponsorship will be for a one-year period as previously stated. There will be no refunds of Sponsorship payments and the names of Sponsorship members will be implemented within a month of receipt by ASCE. No company logos will be allowed. All electronic format information for Sponsorship ads must be received by ASCE prior to the 15th day of the month for the next update period.

- The ASCE will provide the following electronic format for the ad and it will be up to the sponsor to provide the ASCE with electronic information:
- Provide Company Name and one line biography (20 words or less)
- Job Position and Location
- Requirements of position (30 words or less)
- · How to respond to job listing offer*
- *E-mail and web site addresses cannot be linked to www.asce-philly.org site due to ASCE 501(c)(3) tax status.

RESOLVE TO ATTEND
AT LEAST ONE
SECTION MEETING
OR FUNCTION
THIS YEAR
AND INVITE YOUR
ASSOCIATES!!

REPORT ON ASCE HEADQUARTERS ORIENTATION IN RESTON VIRGINIA

Monday, November 5, 2001

By Ruben D. David, P.E.
Phila. Section, ASCE, President-Elect

Summary

- 1. Number of Attendees: 7
- Sections: Boston (2), Pittsburgh (2), Virginia (1), and Philadephia (1)
- Jim Davis, ASCE's Executive Director and Chief Executive Officer gave welcome remarks.
- Larry Roth, Assistant Executive Director and Chief Operating Officer gave an ASCE operations overview.
 - Annual Budget \$50 million
 - Staff 250
 - Organization Chart
- Jm O'Brien, Director of Education and Diversity presented the student activities
 - ExCEED Teaching Workshops
 - ABET CE Accreditation in the People's Republic of China
 - 1st ASCE Student Convention, UW-Madison, June 2002
- John Durrant, Executive Director of Institutes made a presentation on six different institutes.
 - · Geo Institute (GI)
 - Structural Engineering Institute (SEI)
 - * Architectural Engineering Institute (AEI)
 - Environmental & Water Resources Institute (EWRI)
 - · Rivers, Coasts, Oceans, Ports
 - Construction Institute (CI)
 - 2003 Conference in Philadelphia
- Susan Blodgett, Director of Membership and Curtis Nunley, Manager of Membership Retention presented on membership recruitment and retention.
- Mike Kufferman, Managing Director of Electronic Work Group Collaboration and ASCE Web Site
 - ASCE e-commerce (on-line subscriptions, bookstore orders, membership renewals, etc.)
 - CE World (1st Virtual World Conference on CE) Online in mid-2002. It is free.
- Paul Skoglund, Director of 150th Anniversity gave rpesentation on the upcoming activities to commerate the anniversary
 - West Point Bridge Design Contest
 - Student Conference
 - · Rose Bowl Float
 - Annual Conference & Expo, Washington, DC
- Brian Pallasch, Director on Government Relations gave an overview on government relations and Washington office.
 - Leadership Training
 - Legislative activity and testimony, i.e.,
 Report Card for America's Infrastructures

- 11. John Casazza, Senior Director on Continuing Education
- 12. Patty Montgomery, Senior Manager on Board Operations gave an overview of the policies and procedures affecting Sections and Branches.
- Jon Esslinger, Manager Director on Technical and Professional Activities
- 14. Geographic Services Resources group presented services being offered to Sections and Branches.

Section's Approved Budget: \$500 Expenses Incurred: Hotel accommodations and travel: \$141.35 plus mileage cost.

ASCE 'REPORT CARD' GRADES U.S. INFRASTRUCTURE BETTER THAN IN 1998, BUT STILL A D+ AVERAGE

The nation's infrastructure has improved since 1998, but several areas remain in need of major attention, according to a report released by the American Society of Civil Engineers.

Released in early March, ASCE's 2001 report card provides assessments of areas such as public schools, aviation, wastewater, and drinking water. The average grade was a D+, a slight improvement over the D average that infrastructure received on ASCE's previous report card, released in 1998.

Of all public works, school were graded worst, receiving a D-. Due to aging or severe overcrowding, 75% of the nation's school buildings are inadequate for meeting school children's needs, the report card says.

Solid waste received the best rating, with a C+. Bridges received a C, while roadways, waterways, energy, and hazardous waste each got a D+. Aviation, wastewater, drinking water and dams received only D ratings. The report card points out that some sewer systems in the country are over 100 years old.

Carleton Finkbeiner (D), mayor of Toledo, Ohio, and chairman of the Rebuild America Coalition, says that the low scores are surprising and adds, "While progress is being made, it is clear that a grade of D+ is not acceptable."

ASCE has suggested several steps that public works can take to improve their grades.

For roads, ASCE says, full funding of the Transportation Equity Act for the 21st Century should be implemented, and the Highway Trust Fund should be removed from the federal budget. ASCE also seeks more than \$10 billion per year in federal funds for wastewater management. Federal aid for Clean Water state funds is \$1.35 billion this year.

In its own report, also released in early March, the National League of Cities declared infrstructure as one of six "critical threats" to urban areas. ASCE estimates that it will take more than \$1.3 trillion over five years to make all the necessary improvements.

JOIN THE SECTION'S TECHNICAL GROUPS

Construction

Brian Stover, P.E., Chairman Urban Engineers, Inc. 530 Walnut St., 14th Floor Philadelphia, PA 19106 (215) 922-8080

Structural

Dr. Mohiuddin (Ali) Khan, P.E., Chairman Manager, Bridge Division STV Incorporated 820 Bear Tavern, Suite 105 Trenton, NJ 08628 (609) 530-9618

Transportation

Chris L. Rood, P.E., Chairman DMJM+HARRIS 126 Franklin St.

> Riverside, NJ 08075 (856) 461-9565

Engineering Management

Dennis M. MacBride, P.E., Co-Chairman **HNTB** Corporation 8 Penn Center, 7th Floor 1628 John F. Kennedy Blvd. Philadelphia, PA 19103 (215) 568-6500

William J. Mulloy, P.E., Co-Chairman U.S. Army Corps of Engineers Wanamaker Building 100 Penn Square East Philadelphia, PA 19107-3390 (215) 656-6583

Delaware Valley Geo Institute (DVGI)

Craig R. Calabria, Ph.D., P.E., Chairman GeoSystems Consultants Inc. 514 Pennsylvania Avenue Fort Washington, PA 19034 (215) 654-9600

Allen W. Cadden, P.E., Liaison Schnabel Engineering Associates, Inc. 510 East Gay Street West Chester, PA 19380 (610) 696-6066

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Holiday Greetings

The Editor and Staff of THE NEWS, Phila. Section, ASCE, on behalf of the Officers, Board of Directors, Technical Groups, Younger Member Forum and Committee Personnel, extend to the Phila. Section Membership, their families, loved ones, friends and Associates, warmest wishes for a Happy Holiday Season and a fruitful, healthy and successful New Year.

IMPORTANT! 2001-2002 MEETING NOTICES

MARK YOUR CALENDAR NOW! The dates of the Philadelphia Section, ASCE monthly meetings and social functions, are as follows: (Check each upcoming edition of THE NEWS for additional details, possible date and topic changes.) THIS IS A TENTATIVE LIST.

ALL DINNER MEETINGS (except as noted):

Cocktails - 5:30 pm; Dinner - 6:30 pm; Meeting - 7:30 pm

Students: All dinner and/or luncheon are at discounted price. If you prefer, you are welcome to attend all meetings after dinner or luncheon, at no charge.

Thursday, January 17, 2002

Luncheon at the site of the "Kimmel Regional Arts Center

Tour" . Speaker George Shaeffer

Thursday, February 21, 2002

Joint Dinner Meeting with South Jersey Branch, NJ Section, ASCE • Location to be announced • "Southern New Jersey Light Rail Camden to Trenton Project" • Speaker Charles "Ty"

Dickerson • Temple University Night

Thursday, March 21, 2002

Joint Dinner Meeting with Delaware Valley Chapter, American Concrete Institute (ACI) • Williamson's in the GSB Building on City Line Avenue• "Doubling the Parking Capacity at Phila. International Airport" • Speaker Nick Cinalli • Swarthmore University Night • Life Members Night

Thursday, April 18, 2002

Joint Dinner Meeting with Phila. Chapter, Penna. Society of Professional Engineers (PSPE) • Williamson's City Line, Philadelphia, PA • "CHOP Expansion" • Speaker: Anthony Kelly • Widener University Night • Past Presidents Night

Friday, May 3, 2002

Annual Spring Social Dinner Dance and Awards Presentations • Sugarloaf Conference Center, Chestnut Hill, PA • Details to be announced.

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