

the news



FIRST CLASS MAIL

Presorted
1st Class Mail
U.S. Postage Paid
Philadelphia, PA
Permit No. 1845

PHILADELPHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS

P. O. Box 58186, Philadelphia, PA 19102-8186

Electronic Message Hotline: (215) 934-3639 (24 hours a day)

Joseph R Synchronick
7022 MATTHIAS ST
PHILADELPHIA, PA

00124634
19128-0000

Vol. 67-3

Our 81st Year

October, 1994

OCTOBER DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

THURSDAY, OCTOBER 13, 1994

WILLIAMSON'S GSB Building • City Line Ave. • Philadelphia, PA (See Location Map Below)
Cocktails - 5:30 p.m. Dinner - 6:30 p.m. Meeting - 7:30 p.m.

SUBJECT: SPECTRUM 2 - A/K/A CORESTATES ARENA - PHILADELPHIA'S NEWEST SPORTS/CULTURAL COLISEUM

SPEAKER: ANTHONY G. ROHR, AIA, Project Designer, Ellerbe Becket, Inc., Architects and Engineers, Kansas City, Missouri

SPECIAL FEATURE: WIDENER UNIVERSITY NIGHT

The ASCE Student Chapter, Alumni and Faculty of the Civil Engineering Department of Widener University will be honored at this meeting. All Students, Faculty and Alumni are cordially invited.

Anthony G. Rohr received his Bachelor of Environmental Design (1984) and Bachelor of Architecture (1985) from the University of Kansas. In addition to Spectrum 2, he has been associated with the design of many major projects in many cities throughout the U.S. and the world.

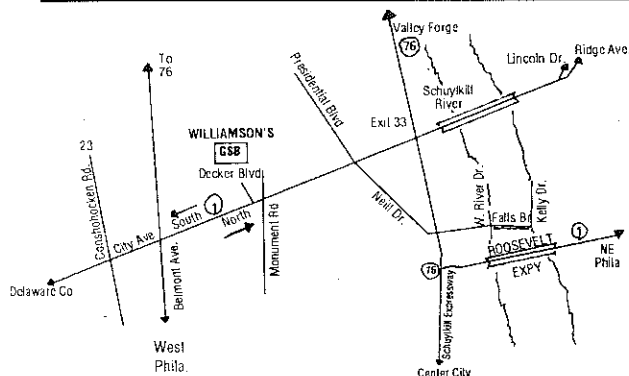
Mr. Rohr's presentation on the history of the Spectrum 2 Project and the design solution reached, will include the following principal functions:

- A brief history of the Project, its influences and goals.
- Analysis of the site utilization and the programmatic design decisions.
- The process of design and conceptualization.
- The development and discovery process of programming.
- Owner approval process and design modifications.

A review of the final design, exterior and interior materials, and the current status of the project.

RESERVATIONS ARE REQUIRED. Please send your check for the number of attendees @ \$25 per member or guest; \$13 ASCE Student members, payable to Phila. Section, ASCE, P.O. Box 58186, Phila., PA 19102-8186; or call the Electronic Message Center: (215) 934-3639 (open 24 hours/day). Deadline for reservations is **Monday, October 10, 1994.**

SEATING WILL BE LIMITED TO FIRST 100 RESERVATIONS ONLY!



**LOCATION MAP
for
Williamson's
GSB Building,
City Line Ave.,
Phila.**

TECHNICAL GROUP ACTIVITIES

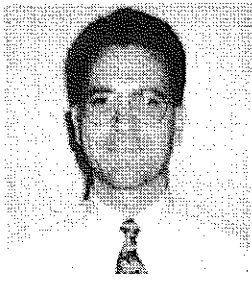
Section Forms Architectural Engineering Group

The Phila. Section ASCE Board of Directors approved the formation of an Architectural Engineering Technical Group in October of 1993. The new Group will provide a focus and forum for engineers involved in the multi-discipline design of buildings. The emphasis will be on the coordination of the various disciplines that are required to plan, program, design and construct buildings. The Phila. Section approved the formation of an Architectural Engineering Technical Group at its March 1994 meeting. Members interested in becoming affiliated with the Group should contact: **Tom Babacz**, Chairman, c/o STV Group, 11 Robinson Street, Pottstown, PA 19464, (610) 326-4600, Fax (610) 326-3833.

Engineering Management Group Seeks Members

When you graduated from college, did you know that your management skills would be just as important as solving engineering problems? The Engineering Management Technical Group is dedicated to informing Section members of the latest developments in managing the engineered project. We have sponsored programs on TQM, engineering ethics, engineers' compensation, etc., and coordinated tours of Philadelphia's major projects such as the Pennsylvania Convention Center, International Airport and SEPTA's Railworks. If you are interested in sharing your ideas for our 1994-95 program, please contact **Al Zion**, Chairman Engineering Management Group, at (215) 937-5582 or **Dennis MacBride** at (215) 580-7084. If you have any questions, call me at (215) 580-7084 (work) or (609) 768-7743 (home). Thank you. Sincerely, **Dennis MacBride**, Member, ASCE.

RESOLVE TO ATTEND ALL MONTHLY SECTION MEETINGS AND FUNCTIONS... AND INVITE YOUR CLIENTS, ASSOCIATES AND COLLEAGUES TO COME ALONG WITH YOU!



THE PRESIDENT'S MESSAGE

I am honored to be serving as the President of ASCE's Philadelphia Section of Civil Engineers during such an exciting time. Changes are occurring rapidly in the engineering profession and planning for these changes is an important aspect of leading our Society. We have an exciting program coming up this year and a great group of Officers and Board Members to assist in carrying out ASCE's functions. At the outset Railworks has been given OCEA's Award of Merit and the Section had an outstanding celebration event on September 19, 1994 in the Pennsylvania Convention Center Grand Hall. What a way to kick off our Section's functions for this year! Almost 300 people from the Section and project staff

were in attendance. Special thanks go to the OCEA Railworks Award Committee and Chairman Chris Rood. See Sid's write-up on this event.

The rest of the program proves to be equally exciting with meeting topics covering Structural, Transportation and Environmental Engineering issues. We look forward to all Section members participation in some aspect of the Section's activities this year, and we are interested in your comments about ways we can better serve the Society. If you have any ideas you would like to pass along to us please call me at (215) 923-5077 or drop a note to me or any of the Section's Officers or Board Members. Again, it is an honor to serve as the Section's President and I look forward to seeing all of you at some point in the year.

Sincerely,
William T. Thomsen, P.E.
President, Phila. Section, ASCE

POSITIONS AVAILABLE

Schnabel Engineering Associates, an established and growing geotechnical/environmental consulting firm, has immediate positions available for highly motivated individuals in the following areas:

Senior Geotechnical Engineer: Minimum six years' experience in management of design and construction phase geotechnical projects. Significant experience in subsurface investigations, all aspects of shallow and deep foundation systems, ground improvement and slope stability evaluations required. Report preparation, client liaison, management and marketing experience necessary. Professional license required. M.S. in Engineering also preferred.

Senior Environmental Engineer: Minimum eight years' experience in management of environmental audits, UST, landfill and hazardous remediation projects including regulatory interpretation. Report preparation, client liaison, management and marketing experience necessary. Professional license required. M.S. in Engineering or related science also preferred.

Excellent benefits and flexible work environment. Salary commensurate with experience. EOE.

Contact: **Richard Wargo (610) 696-6066**, Fax (610) 696-7771, 882 S. Matlack St., Suite 206, West Chester, PA 19382.

ADVERTISE IN THE NEWS...

... and help support the activities of your Section. Your business card could be here! For a low, one-time charge, you could be among the select advertisers who appear on these pages for an entire Section season (September through May/June).

If you are interested, please contact Bob Wright at (215) 686-5538 or send your inquiry to our post office box or call the Electronic Message Hotline for more information.

Hurry! Act now! Good spots are still available!

THE NEWS also provides one-issue or multi-issue classified advertisements for reasonable rates. Help support THE NEWS — the voice of your Section.

MISTAKE FOUND IN THE NEWS — Robin Declared Human

Editor's Note: The following gem was submitted by staff writer Joe Szymick. Once the foremost protagonist of the editor's accuracy, Joe sadly chooses to broadcast to the world the typesetting slip-up on page 1 of the April-May, 1994 issue of THE NEWS. tsk... tsk... tsk...

The 20 year effort of our proof-reading staff has finally paid off. The April-May issue of THE NEWS carries a March, 1994, Volume 66-5 designation. This is incorrect. The immediately preceding issue was March, 1994, Volume 66-5. This was

the first mistake of any kind since we began scrutinizing THE NEWS in October, 1973. If this sloppiness continues at this rate, we shall seek a change of leadership.

Incidentally, the October, 1973 issue, the issue which initiated our proof-reading effort, features a photo of a somewhat young Andrea Mitchell sporting a Prince Valiant haircut. This City Hall reporter certainly has made her mark in national journalistic circles.

**PLACE YOUR
BUSINESS CARD AD
IN THE NEWS.
FOR INFO,
CONTACT
BOB WRIGHT
at (215) 686-5538**

PHILA. SECTION, ASCE OFFICERS 1994-1995

PRESIDENT

William T. Thomsen

PRESIDENT-ELECT

William G. Richards

VICE PRESIDENT

George J. Stanley

SECRETARY

Michael J. Carragher

ASSISTANT SECRETARY

Sean Markey

TREASURER

Darin L. Gatti

MEMBERSHIP SECRETARY

Richard P. Markwith

ASSISTANT TREASURER

Jian Jin

DIRECTORS

Sandra J. May

Jonathan Cheng

Chris L. Rood

Drew S. Mihocko

Frederick C. Schmitt

Charles J. Sutphen

Samir Serhan, President, Reading Branch

PAST PRESIDENTS

Moustafa A. Gouda

Klaus K. Fuelleborn

Robert M. Wright

President - William T. Thomsen

Urban Engineers, Inc.

Penn Mutual Tower, Suite 1680

530 Walnut St., Phila., PA 19106

(215) 923-5077; fax (215) 923-5611

Secretary - Michael J. Carragher

LS Transit Systems

1601 Market Street

Philadelphia, PA 19103

(215) 568-4448; fax (215) 568-4591

PUBLICATIONS COMMITTEE

Chairman and Editor of THE NEWS

Sidney Robin

Associate Editor - Wm. G. Richards

Staff Writers

Frank Russo Joe Szymick Bob Wright

Publications Coordinator

Albert M. Tantala

SEND COPY TO:

Sidney Robin

64 Nancy Drive

Richboro, PA 18954

(215) 322-7464

**COPY DEADLINE FOR
NOVEMBER 1994 ISSUE
OCTOBER 13, 1994**

SEPTA AND PHILADELPHIA SECTION, ASCE CELEBRATE "RAILWORKS" AWARD

By *Sidney Robin*, Chairman of Publications, Philadelphia Section, American Society of Civil Engineers

An appreciative audience of over 250 individuals, representing the Southeastern Pennsylvania Transit Authority (SEPTA), the Philadelphia Section, ASCE, Civil Engineering Consultants, Contractors, Suppliers, and Contributors, an outstanding team involved in the accomplishment of the great "SEPTA Railworks Project" — which is an integral part of the Region's commitment to SEPTA and public transportation — enjoyed a gala reception, luncheon and program presentation in the magnificent new Grand Hall (former Reading Railroad Train Shed) of the recently completed Pennsylvania Convention Center in Center City Philadelphia, on Monday, September 19, 1994. Philadelphia Section President **William T. Thomsen, P.E.**, presided over the program.

pleted on time and significantly under budget..."

Other speakers were:

- **Robert M. Wright, P.E.**, Project Manager, Engineering Division, Philadelphia Department of Streets, and Past President (1993-1994) of the Philadelphia Section, ASCE. Bob reviewed the history of OCEA and previous submissions to the Competitions by the Philadelphia Section. Principal among these were the **Center City Commuter Tunnel** in 1985, which won the highest OCEA Award; the **Vine Street Expressway** in 1992, which did not win because of strong competition against many other critical works. Mr. Wright capulated the 100-year old history of the Train Shed, from its original construction and use as the Reading Railroad Terminal, its preservation as a Na-



General view of the SEPTA Railworks Award Reception in the Grand Hall (former Reading Railroad Train Shed) of the Pennsylvania Convention Center on September 19, 1994. (Note the rehabilitated arched roof of the famous structure. All structural elements are exposed in the finished building.)

The event celebrated the achievement of the Railworks Project of an *Award of Merit* in the 1994 National ASCE Outstanding Civil Engineering Achievement Award (OCEA) Competition, judged by a distinguished national panel. The Project was submitted by the Philadelphia Section as its nominee for the OCEA Award. As Mr. Thomsen pointed out in his welcoming remarks "... this Project has been a vital component of the SEPTA Commuter Railroad Infrastructure Rehabilitation, and it is the continuation of a rebuilding effort that began some twenty years ago, with the Center City Commuter Tunnel Project... The transformation took place during two summer shutdowns in 1992 and 1993, totaling a ten-month period. The Project stretched from Center City to Wayne Junction in North Philadelphia, over four miles, and was com-

ditional Historic Landmark, massive structural rehabilitation to preserve the integrity of the structure — to the present beautiful Grand Hall component of the Convention Center. He noted that the former Reading Mainline is still a critical transportation facility in this region today and it has been revitalized and adapted by Civil Engineers — through the Railworks Project — to continue to provide for the Region into the next century.

- **Louis J. Gambaccini**, General Manager, SEPTA. Mr. Gambaccini praised, and expressed deep gratitude for the professional honor bestowed on SEPTA by the Philadelphia Section and National ASCE; and "...on behalf of SEPTA, to the SEPTA engineering and construction team, and to the thousands of others who produced a Project which was — in the words of Gordon Linton, Ad-

ministrators of the Federal Transportation Administration "...a model for urban construction."

Mr. Gambaccini reviewed the evolution of the Railworks Project which began eight years ago in the meeting rooms and on the drawing boards; and he is proud of the ten other major awards it has won, in addition to ASCE's. He praised SEPTA's Operating Divisions — Railroad, Subway-elevated and Surface — for their unstinting support of the plans to make life as easy as possible for SEPTA's riders and in the neighborhoods. He also paid tribute to SEPTA's Civil Rights and Public Affairs Offices for their contributions in fair and equitable hiring practices; and in the creation and administration of almost endless public information programs.

- **Daniel J. Lynch, P.E.**, Director, Systems Engineering, SEPTA. Dan Lynch, who exercised remarkable oversight and was responsible for the entire six-year engineering, planning and construction activities, summarized the scope of the Railworks, which he characterized as "... a straightforward infrastructure renewal program of a four-mile stretch of four-track electrified railroad..." He recounted the tremendous major construction jobs accomplished: complete replacement of 21 bridges and rebuilding of four others; renewal of the entire overhead catenary power system, as was the entire existing cable plant for the signal and communication systems. Ten track-miles of bolted rail was replaced with welded rail, and the remaining track was upgraded; two major track interlockings containing more than 20 switches were fully undercut and replaced. A brand new Temple University Station was constructed, as well as a major upgrading of North Broad Street Station.

Many other smaller, but important improvements were completed, too numerous to list. All this was accomplished in ten months — during a six-month construction window in 1992 and a four-month window in 1993.

Mr. Lynch described some of the main problems encountered in the process, that belied the impression that all construction ran smoothly. However, each technical problem was faced by the indomitable courage to address it and the perseverance and dedicated commitment to solve it by all those involved. Most of these problem challenges were rooted in the search for solutions of inconveniences to civic functions of the neighborhoods and communities involved, such as church services schedule interruptions, or congregation isolation due to street detours, etc.

- **Sheldon A. Kinbar, P.E.**, Regional Administrator, Federal Transit Administration, and a Past Director of the Philadelphia Section, ASCE. Mr. Kinbar attended the function as a representative of the United States Department of Transportation. He reminded the audience that Gordon Linton, Federal Transit Administrator, is a Philadelphian and a former SEPTA Board member. He forwarded Mr. Linton's personal regards and congratulations to SEPTA, the Consultants, Contractors and all the other people and companies who contributed to the resounding success of the Project.

Mr. Kinbar delineated FTA's primary involvement: \$165 million in Federal Transit grants; and

(Continued on page 6)

APRIL JOINT DINNER MEETING

April 13, 1994

Harbor League Club

The World Trade Center Response to the Bombing

The Annual Joint Dinner Meeting of the Philadelphia Section, ASCE, and the Philadelphia Post, Society of Military Engineers (S.A.M.E.), was also attended by representatives of the Philadelphia Chapter, Pennsylvania Society of Professional Engineers (P.S.P.E.). More than 200 members and guests of the combined Societies enjoyed an enlightening and stimulating talk on the terrorist bombing of the gigantic complex, and the emergency response to the awful tragedy. Principal speaker of the evening was **Peter L. Rinaldi**, Engineering Program Manager, Interstate Transportation, the Port Authority of New York and New Jersey. Mr. Rinaldi admirably substituted for the originally scheduled speaker, **Eugene J. Fasullo**, Director of Engineering and Chief Engineer of the Port Authority, who was unable to appear and sent his regrets.

Widener University and Swarthmore College Night

In keeping with the policy of recognizing the ASCE Student Chapters and Civil Engineering Departments of area colleges and universities, the meeting honored Widener University and Swarthmore College. Philadelphia Section President **Robert M. Wright**, who co-hosted the meeting with S.A.M.E. President **Edward E. Gilvey**, acknowledged the Presidents of the ASCE Student Chapters of the two schools. Widener's President **Roger Johnson** was introduced on behalf of himself and his fellow officers: **Colleen Oliver**, Vice President; **Anthony Di Maggio**, Treasurer; and **Jerry Baker**, Secretary.

Swarthmore Student Chapter President, **J.P. Barton** rose on his own behalf and to represent his fellow officers: **Bosi Cohen**, Vice President and Treasurer; **Scott Hassel**, ASCE Student Member. **Dr. Faruq Siddiqui**, for many years Faculty Advisor of the Student Chapter, was present, as well as **Richard Mabry**, Contact Member.

S.A.M.E. President Gilvey conducted some post business and presented special awards to several members.

Mr. Rinaldi is Introduced

As previously noted, **Peter L. Rinaldi, P.E.**, Engineering Program Manager, Interstate Transportation, The Port Authority of New York and New Jersey, substituted for the originally programmed speaker, **Eugene J. Fasullo**, Director of Engineering and Chief Engineer of the Port Authority.

Mr. Rinaldi received his B.S. in Civil Engineering from Manhattan College, and M.S. in Civil Engineering from the Polytechnic Institute of Brooklyn. He is a licensed Professional Engineer in New York, and is a member of several professional organizations, including ASCE and NSPE. He joined the Port Authority in 1973 and has been involved in the engineering for the planning, design and construction of major Port Authority facilities. The Interstate Transportation Network, for which he has overall Engineering Program responsibility, consists of the Port Authority's bridges, tunnels and terminal; the main Authority Bus Terminal; and the Trans-Hudson (PATH) rail system.

Mr. Rinaldi was part of the engineering team that reconstructed the World Trade Center damage after the bombing. For his efforts he was given "*The World Trade Center Award for Excellent Service*" by the Port Authority. The Port Authority of New York and New Jersey, a state agency, was established in 1921, and oversees a vast range of maintaining and operating virtually all major facilities in both States. A large, comprehensive engineering department guides the Authority's 80,000 employees).

Mr. Rinaldi's Vivid Account

Accompanied by a superb set of slides, and without a single written note, Mr. Rinaldi presented a keen and dramatic portrayal of the tragic bombing incident on February 26, 1993, and the almost spontaneous response to the urgent call for emergency action by hundreds of individuals and organizations. He held the audience's rapt attention as he recounted the harrowing experiences endured by the occupants of the towers and the adjacent Vista Hotel. Not the least of these experiences was his own narrow escape from death when Mr. Rinaldi, Mr. Fasullo and several other engineering department associates were trapped in a stalled elevator. After jimmying open the elevator doors, the group found themselves facing a blank wall. Smoke was seeping into the elevator chamber and they feared they would suffocate. Then Mr. Rinaldi and Mr. Fasullo remembered that the firewalls were fire-retardant sheetrock, not masonry. Using their pocket utensils (keys, paper clips and nail cutters, etc.) they spent three hours chiseling through the gypsum board, opening a hole large enough for them to crawl through, emerging into a bathroom, then climbing down 58 flights of stairs to the Trade Center main concourse, stopping enroute to assist others to evacuate the building.

The Complex and the Bombing

The World Trade Complex encompasses 10 million square feet of office space (largest in the world); 50,000 people work there daily; and 80 to 100,000 people pass through daily.

Mr. Rinaldi described the day of the bombing, which occurred during lunch time, and its effect upon the entire complex, including rail connections and perimeter rail lines. His excellent slides illustrated damage to columns and other structural elements, spectacular photos of shear failures as far as 400 feet back from the bombing center point, the 220 automobiles destroyed in the explosion opening, which measured 150' x 150'.

The infinite ramifications of the cleanup were the first priority. Also, assessment of the rail system potential damage was crucial. Before removing debris, it was essential to provide for worker safety by stabilizing weakened structural members, particularly the columns, by temporary bracing of the structural supports of the Trade Center and the Vista Hotel. It is noteworthy that the strong structural framing of the Trade Center Towers withstood the force of the bombing without compromising the buildings' integrity, although the supporting columns of the

Vista Hotel were in danger of collapse.

Mr. Rinaldi emphasized that the first 12 hours after the bombing were crucial for crisis management. The statistics of debris removal and cleaning are staggering: 5,000 tons of debris and 20,000 gallons of soot-removal cleaning fluid.

In addition to the overwhelming problems of normal engineering experience in such a gigantic undertaking, the emergency construction teams were confronted with the challenges of coordination with the requirements and regulations of government investigative agencies, such as the FBI, EPA, etc.; the engineering investigations of subway line safety in the buildings' substructure; problems of cold weather; and a myriad of other logistical nightmares. Notwithstanding these almost insurmountable difficulties, the debris was cleaned out within four weeks — a phenomenal accomplishment.

The structural restoration continued for weeks after this phase, especially in the hotel area. After mechanical equipment repair, refrigerant and chiller machines and piping replacement, the buildings were reopened for full operation in 30 weeks. The restoration work entailed three shifts of 900 people cleaning, thousands of gallons of cleaning fluid and other materials, and major lighting and security measure replacement.

Post-Bombing Observations

It is interesting to note, pointed out Mr. Rinaldi, that occupancy percentages after the explosion and restoration are higher than before the tragedy. The entire reconstruction project, said Mr. Rinaldi, re-established the leadership of the engineering community. The buildings were in partial operation within 21 days of the bombing. Six people died, 100 were injured. The accomplishment of the restoration is a tribute to the round-the-clock cooperation and dedication of the workers.

Mr. Rinaldi's concluding poignant observation in his talk brings to sharp focus the significance of this horrible episode: "... the terrible destructiveness of the bomb tore out part of the building, but it failed to affect the hearts of every individual and group involved in the restoration..."

Question and Answer Discussion

Mr. Rinaldi's outstanding presentation inspired many penetrating comments and questions from the large audience. Among the most prominent questions was: "What provisions are now in effect to try to prevent similar incidents in the future?" Mr. Rinaldi responded that elaborate and highly sophisticated security measures are in force, regarding: improved restrictive public parking regulations; emergency intercommunications; fire alarms and equipment back-up; lighting, particularly in stairwells; emergency electric power provisions and many other vital operational functions. All appropriate agencies are investigating environmental issues like asbestos, emissions from burning, and potential dangers from gaseous emissions.

This discussion, of one of the most important engineering and civic crises of our time, will be long remembered by the attendees at this remarkable meeting.

SECTION 1994 AWARDS PRESENTED AT SPRING SOCIAL

By Bob Wright, Staff Writer

The Philadelphia Section, as has been its custom, presented its Section Awards for 1993-94 at its annual Spring Social and Dinner Dance, which was conducted on Sunday, May 15 at the Harbor League Club in Camden. Approximately 110 guests attended the Section's year-end affair to welcome in the new Section officers as well as to recognize six members who were nominated for Section awards. A short background on each of the awardees is given below:

Philadelphia Civil Engineer of the Year

Lawrence M. Moy was nominated for the Section's highest honor, the 1994 Philadelphia Civil Engineer of the Year. Larry is the Commissioner of the Philadelphia Department of Streets and has served the Department in various capacities throughout his 37-year career in government service. He directs the activities of this vital service department of the City, which includes everything from solid waste collection and disposal, to highway construction, design and maintenance, to street lighting and traffic engineering. He oversees an annual budget of \$295 million with nearly 2500 employees.

Larry has strived to introduce the concept of total quality management throughout the Department. His efforts have helped to improve performance, initiative and employee pride, and changed the focus of the Department from that of crisis management to one of long-range planning and problem solution. His attempts to provide customer service delivery systems with shrinking resources have been well received by both City government and the public.

Larry is a 1956 graduate of Villanova University. He served the Section in many capacities over the years, including Section President for the 1971-72 season and as a long-time member and past chairman of the Humphrey Fund committee. He received the Section's Government Engineer of the Year honors in 1987. He is additionally a past director of the Delaware Valley Chapter of the American Public Works Association.

Philadelphia Young Civil Engineer of the Year

The Section cited **Sandra J. May** as its Young Civil Engineer of the Year. Sandra is employed by PECO Energy as a Special Projects Engineer. In this capacity, she is directly responsible for such projects as gas pipeline replacement programs, natural gas vehicle demonstration, implementation of systems automation, and various capital improvement undertakings on the company's gas network.

Sandra received her Bachelor degree from Drexel University in 1985 and went on to obtain a Masters degree from Penn State University in 1990. She is an incoming Director on our Board and served our Reading Branch in various capacities, including Branch President in 1992-93. She was our Membership Secretary this past year.

Sandra has been very involved in numerous community activities and programs. This service as a citizen engineer was recognized by the Section,

which co-sponsored her successful candidacy in the 1994 Delaware Valley Young Engineer of the Year competition.

Geotechnical Engineer of the Year

Craig R. Calabria, President of GeoSystems Consultants of Fort Washington, was the winner of this award. Craig's specialty is the application of geosynthetics and related natural materials for waste containment projects. He formed this firm last year after more than 15 years in various capacities in consultation in the field of geotechnical engineering.

Craig received his Bachelor degree from Drexel University in 1974 and his Masters degree three years later. He is a member of several professional societies. He has also been an instructor in the civil engineering programs at both Drexel and Temple Universities and participates in Drexel's professional engineer exam review course.

Structural Engineer of the Year

Timothy H. Haahs received this honor. Tim recently started his own consulting firm after a ten-year period at Walker Parking Consultants. Among structure design projects he has managed are the Gateway Garage in Center City and the Camden Aquarium parking facility.

Tim is a 1979 graduate of the University of Pennsylvania, where he received his Bachelor degree in Civil and Urban Engineering. He returned to Penn to obtain his Masters degree in 1984.

Tim has served the Philadelphia Section in the past as a member of the Board of Directors and as past chairman of the Structural Technical Group. He is also a past director of the local chapter of the American Concrete Institute.

Transportation Engineer of the Year

This year's winner is **Dr. James Matthews**, a professor in the Civil Engineering Department at Temple University. He instructs courses in transportation facilities design, pavement management and materials, transportation systems management and airport facility design. In addition to his teaching and research duties, he has volunteered many hours to Red Cross disaster relief efforts, including the Midwest floods last year and the New Jersey coastal flooding in 1992.

James received his Bachelor degree in India, with subsequent Master and Doctorate level degrees from the University of California at Berkeley. He is active in several professional societies in addition to ASCE. He is also an active member of PRIME and several other community outreach efforts.

James was the 1993 Delaware Valley Young Engineer of the Year.

Engineering Manager of the Year

Daniel E. Lynch, the Director of Systems Engineering for the Southeastern Pennsylvania Transportation Authority, is this year's awardee. Dan is in direct charge of the technical management of SEPTA's capital improvement program for bridges, stations, track and other facilities. He was promoted to this position last year, after his successful shepherding of the Railworks program, where he was the Senior Project Manager.

Dan is a graduate of Drexel University where he

obtained his Bachelor degree in 1978 and his Masters degree eight years later. He is a member of the American Railway Engineering Association as well as ASCE.

Scholarship Winners

It was also announced at the Awards Ceremony that the following Civil Engineering students were the recipients of the Phila. Section's 1994 Scholarship Awards, each \$2,000: **David Hill**, Temple University; **Kenneth Cloud**, Drexel University.

Two scholarships, each worth \$2,000, are awarded to aspiring civil engineers who attend one of the six colleges within the Section's jurisdiction (Drexel, U of PA, Swarthmore, Temple, Villanova and Widener).

A candidate must be an active member of the ASCE Student Chapter at his/her particular college. He/she must be a matriculant in a full-time civil engineering program and must have completed at least two full years of the program to be considered. Candidates may submit applications during their second year.

Details are available from the Faculty Advisor of the ASCE Student Chapter at each involved college.

The Section extends its best wishes for future success to these students in their pursuits of professional careers in Civil Engineering.

The Section is grateful to the Awards and Spring Social Committees for the usual good job which they do every year — and they make it look so easy! We look forward to our 1995 Dinner-Dance. Watch THE NEWS for details.

STOVER NEW CHAIRMAN OF CONSTRUCTION GROUP

The Phila. Section, ASCE is pleased to welcome **Brian A. Stover, P.E.**, as Chairman of the Construction Group. He succeeds **Fred Plotnick**, who held the assignment faithfully for many years, and to whom the Section extends its gratitude for his dedicated service. Brian is Project Manager, Construction Management Division, Urban Engineers, Inc. His current assignment is the \$70 million Exton Bypass Construction. Formerly he was Project Manager on the Vine Street Expressway Construction. He was employed at SEPTA 1981-1986, and he is current President (1993-1994) of the Mid-Atlantic Chapter of the Construction Management Association of America.

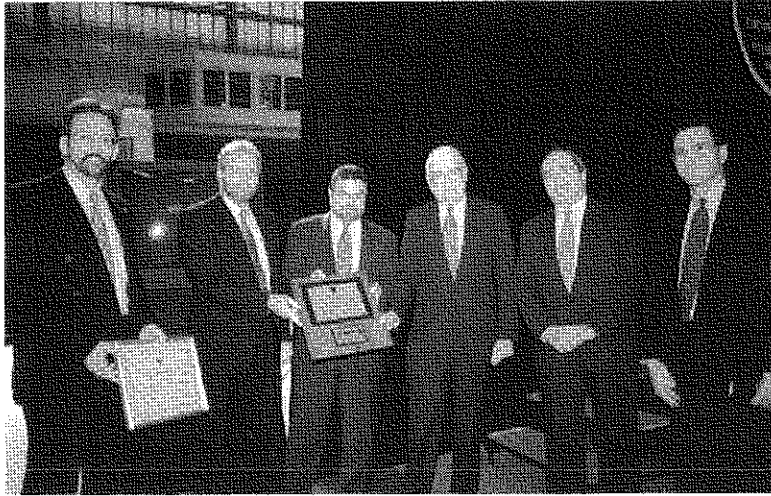
CADDEN ASSUMES PRESIDENCY OF YOUNGER MEMBER FORUM

As previously announced in THE NEWS (April-May, 1994) **Allen W. Cadden, P.E.**, has succeeded **Rich Markwith** as President of the Phila. Section's Younger Member Forum. Rich has been elected Membership Secretary of the Section for 1994-1995.

Allen is Senior Geotechnical Engineer at Schnabel Engineering Associates, Geotechnical and Geoenvironmental Consultants, West Chester, PA. The Phila. Section heartily welcomes Allen to the fold and wishes him well in stimulating renewed interest and viability in this important Technical Group.

Railworks Award

(Continued from Page 3)



Principals in the SEPTA Railworks Project display the Awards at the Reception Gala: (l-r) Chris L. Rood, Senior Project Manager, SEPTA and Chairman of the Phila. Section's OCEA Railworks Award Committee, holding the National ASCE OCEA Award of Merit; Daniel J. Lynch, Director, Systems Engineering, SEPTA; Fred S. Mlynarski, Asst. General Manager, Engineering and Construction Division, SEPTA; and Louis J. Gambaccini, General Manager, SEPTA, holding the Phila. Section, ASCE Award Plaque; Dr. Joel Abrams, Director, District 4, ASCE, who presented the Award to SEPTA; and Phila. Section, ASCE President William T. Thomsen, who presided at the event.

close communication with SEPTA in order to ensure that the Federal funds were well spent. In addition to paying tribute to the innumerable and diverse engineering and construction accomplishments of Railworks, Mr. Kinbar praised SEPTA for its outstanding efforts in involving local businesses; in providing benefits and inviting participation by local communities who were most impacted by the Railworks construction area; and to mitigate grievances by these groups as to noise, street closure inconveniences, and the like; in exceeding by far their goals for minority and female employment; and for hiring of community residents.

• **Dr. Joel Abrams**, Director, District 4, ASCE, presented the OCEA Award Merit Plaque to Mr. Gambaccini, on behalf of SEPTA. Denise L. Goren, Deputy Mayor, Transportation, substituting for Mayor Edward Rendell, offered the City of Philadelphia's congratulations and best wishes for all of the individuals, groups and companies involved in the great Project.

In his closing remarks, President Thomsen expressed his gratitude and appreciation to the Philadelphia Section, ASCE OCEA Award Ceremony Committee for their tireless efforts. He especially paid tribute to Philadelphia Section Director **Chris L. Rood**, Chairman of the Committee. Other Philadelphia Section Officers, members or affiliate associates on the Committee were: **Michael J. Carragher**, Secretary; **Darin L. Gatti**, Treasurer; **Charles Halboth**, of O'Brien-Kreitzberg & Associates and a Philadelphia Section member; **Sean Markey**, Assistant Secretary; **Darin Petroski**, of Fanalt Construction Co., Inc.; **Dr. Frederick C. Schmitt**, Chairman, Dept. of Civil Engineering, Temple University and a Section Director; **Scott Sibley**, of Gannett Fleming, Inc. Consultants, and a

Philadelphia Section member; and **Robert M. Wright**, Past President.

Award plaques were presented to all Project organizations, which participated and contributed funds for the Celebration:

Consultants — Gannett Fleming, Inc.; STV/Sanders & Thomas; O'Brien-Kreitzberg & Associates; Hill International, Inc.; Railway Systems Design, Inc.; LS Transit Systems; Don Todd Associates, Inc.; Urban Engineers, Inc.; Mitra & Associates; Management Concepts Systems & Services; JBC Associates, Inc.; VEP Associates, Inc.; Michael Baker Jr., Inc.; Transportation Systems Technology, Inc.; Vann Organization, Inc.; Contract Compliance, Inc.; Ang Associates, Inc.

Contractors — Vanalt Co., Inc.; Carr & Duff, Inc.; Tony DePaul & Son; IA Construction Corp.; Railroad Construction Co., Inc.; Neshaminy Constructors, Inc.; Jupiter Painting Co., Inc.; Rosbuth Mathis Painting Co.; Coastal Steel Construction Co.; Waste Management of PA, Inc.; Mar-Allen.

Suppliers — Synertech Moulded Products, Inc.; Carlisle SynTec Systems; Union Switch & Signal; Rail Products & Fabrications, Inc.; W.R. Grace & Co.

Sponsors & Contributors of additional funds: O'Brien-Kreitzberg & Associates; Roy F. Weston, Inc., STV/Sanders and Thomas; Synertech Moulded Products, Inc.

President Thomsen expressed particular and special acknowledgment of the efforts of Ceremony Committee member **Charles Halboth**, who, in Bill's words "...single-handedly prepared the OCEA Award submission document, with the help of — who else? — **Bob Wright**....!"

A delicious luncheon was enjoyed by all, capping off this fulfilling event.

FALL SEMINARS OFFERED BY DELAWARE VALLEY CHAPTER, AMERICAN CONCRETE INSTITUTE

October 13, 1994, "Achieving Quality in Concrete Design, Production and Construction."

This one day seminar will teach you how to put quality to work now. Things you can learn include:

- How quality saves you money.
- How to integrate quality into scheduling.
- The difference between quality control and quality assurance.
- Quality and the Act 318 Building Code.
- Quality in contracts.
- How to improve quality throughout your organization.
- How to measure your customers level of satisfaction.

If you are an owner, engineer, a specifier, ready mix manager or concrete foreman, you will have the opportunity to improve your skills by attending this seminar.

Instructors are recognized experts in the concrete industry with special expertise in the relationship of Quality and Concrete. They include **W. Larry Patrick** who have over forty years of experience in education, engineering and management and now has his own firm that specializes in Quality Assurance and continuous Quality improvement techniques and **Joe Gutierrez**, a Civil Engineer who has worked in program management, quality assurance and codes and standards development.

November 16, 1994, "Concrete Repair Basics."

If you are an engineer, repair contractor, material supplier or maintenance personnel, you leave this seminar with tips that you can use today. You will know:

- How to detect the full extent of damage.
- Available repair options to consider.
- When to use special materials like epoxy-coated rebar, silicafume or polymer concrete.
- Why cathodic protection is sometimes needed.
- Why hydroblasting may be better than jack hammers.

Teaching this seminar are **Harald G. Greve**, a principal with Applied Engineering & Technology which he formed after many years with **Feld, Kamietzky & Cohen** and **Ray Schultz**, a material consultant in **Waupun, Wisconsin** who has more than 40 years experience in solving concrete problems.

Both seminars will be held at the **Holiday Inn, King of Prussia**.

Each seminar will provide you with material to take home and use to implement what you learned. You will also receive 0.6 CEUs which are becoming more and more important for continued professional competency and a free six month membership in **ACI** for non-ACI members.

If you need more information or a registration form for either of these seminars, please call **Helmut Wilden** at (610) 966-3935 or fax (610) 966-4515.

1994 PHILA. SECTION, ASCE, SALARY & BENEFITS SURVEY

1994 '91 '89

The Philadelphia Section fondly remembers the late **Norman J.G. Weintraub**, Past Chairman, Salary & Benefits Committee. He dedicated his time and efforts in preparing this report for many years. We miss you, Norm!

This report is the 10th Biennial survey of the Philadelphia Section of the American Society of Civil Engineers; the first of which was published in 1972. Of the 985 surveys mailed, 115 or 11.7% were returned. This is a decrease from the 1991 survey where 200 were returned.

A special thanks is extended to **Dennis MacBride** who performed all of the computerized data analysis and graphics.

As far as trends, the following observations were noted after comparisons were made with prior survey data.

Our typical respondent is a 41-year-old Caucasian male who has worked for 18 years. He either has a Master's Degree or has taken courses towards one and is a Registered, Professional Engineer. He is salaried, working for a consulting firm located in Philadelphia doing primarily technical work as well as some supervising. This is his second job and he has worked for his current employer for 8 years. He spends 35 minutes a day driving to and from work, earns \$61,000 per year without bonuses or overtime pay. His benefits include 15 days of vacation, 9 holidays and 10 sick days. His company partially pays for his hospitalization, major medical, dental, life and disability. He does not have a paid optical, child care or legal plan. In comparison to 1991, our average member is now 5 years older, has had more jobs and more years with his current employer. Studies also showed an increase in mass transit ridership. (This information especially excited Mr. MacBride. O.K. Dennis, kudos for SEPTA!) The "Mass Transit" and "Drive & Mass Transit" categories totaled 21% in 1991 and increased to 28% in 1994 while "Drive" decreased from 73% to 68%. Respondents looking for a new job cited the "Other" category with "Management Problems" and "Security, Status and Gratification," each accounting for 13%.

Fifteen questionnaires were returned with comments, the majority pertaining to the opinion questions; all of which will be distributed to the Board for discussion.

On behalf of ASCE, I would like to thank all of you who responded as well as those of you who had good intentions (a few came in after the deadline).

Sandra J. May
Chairperson
Salary & Benefits Committee

Editor's Note: The Phila. Section is eternally grateful to Director Sandra May for taking over this gigantic task, the first since the 1991 survey completed by the late Section Past President and Chairman of the Salary and Benefits Committee Norm Weintraub and for the outstanding job she has accomplished. Her excellence in performance on behalf of the Section is manifest in the numerous other assignments she has so magnificently carried out.

Philadelphia Section ASCE 1994 Salary And Benefits Survey

| | 1994 | 1991 | 1989 |
|--|------|------|------|
| A. PERSONAL DATA | | | |
| 1. Age - Average | | | |
| Minimum | 44 | 40 | 41 |
| Maximum | 25 | 22 | 21 |
| Median | 63 | 70 | 99 |
| | 41 | 37 | 38 |
| 2. Years Of Full Time Employment | | | |
| Average | 21 | 15 | 16 |
| Minimum | 3 | 1 | 0 |
| Maximum | 50 | 45 | 55 |
| Median | 18 | 15 | 15 |
| 3. Race | | | |
| Caucasian | 94 | 95 | 94 |
| Black | 1 | 1 | 0 |
| Hispanic | 1 | 1 | 2 |
| Asiatic | 3 | 2 | 3 |
| Other | 2 | 1 | 1 |
| 4. Sex | | | |
| Male | 94 | 91 | 93 |
| Female | 6 | 9 | 7 |
| 5. Education | | | |
| No Degree | 0 | 1 | 2 |
| BS | 37 | 39 | 35 |
| BS Plus 15 Hours | 15 | 15 | 20 |
| Master's Degree | 43 | 40 | 39 |
| Doctorate Degree | 6 | 5 | 4 |
| 6. ASCE Membership Grade | | | |
| Student | 0 | 3 | 4 |
| Associate | 25 | 31 | 28 |
| Member | 67 | 60 | 62 |
| Fellow | 4 | 4 | 4 |
| Life | 4 | 2 | 2 |
| 7. Registration | | | |
| E.I.T. | 50 | 20 | 45 |
| P.E. | 85 | | 71 |
| L.S. | 6 | | 7 |
| 8. Other Membership | | | |
| Average | 2 | 2 | 1 |
| Maximum | 6 | 6 | 7 |
| B. EMPLOYMENT DATA | | | |
| 1. Income Source | | | |
| Self - Employed | 5 | 3 | 7 |
| Salaried | 88 | 96 | 90 |
| Commissioned | 0 | 0 | 0 |
| Retired | 4 | 1 | 1 |
| Unemployed | 3 | 0 | 0 |
| Student | 0 | 0 | 2 |
| 2. Type Employer Or Self-Employment | | | |
| Consultant | 53 | 58 | 53 |
| Contractor/Builder | 5 | 7 | 9 |
| Federal Govt. | 4 | 8 | 8 |
| State Govt. | 5 | 3 | 3 |

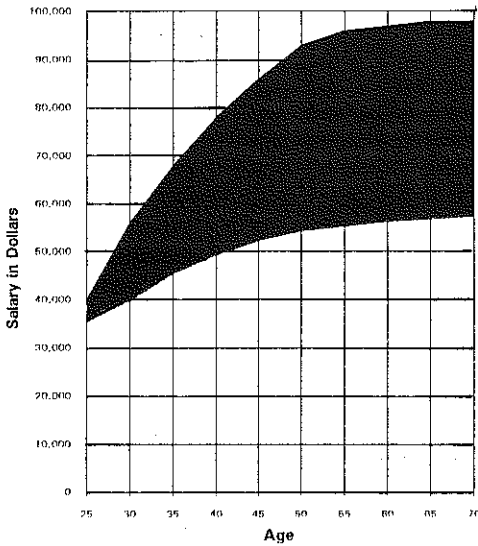
| | | | |
|--|-----|-----|----|
| Mun., Local or Reg. Gov. or Auth. | 19 | 9 | 10 |
| Utility (Private & Public) | 5 | 4 | 6 |
| Manufacturer | 3 | 3 | 5 |
| Education | 3 | 2 | 3 |
| Sales | 0 | 0 | 0 |
| Other | 6 | 6 | 3 |
| 3. Primary Responsibility | | | |
| Technical | 53 | 49 | 45 |
| Sales | 0 | 1 | 1 |
| Supervisory | 24 | 28 | 28 |
| Administrative | 15 | 17 | 17 |
| Other | 8 | 5 | 9 |
| 4. Do You Supervise Other People? | | | |
| Yes | 77 | 79 | |
| No | 23 | 21 | |
| 5. Number Of Different Employers | | | |
| | 3 | 3 | 3 |
| 6. Do You Have A Second Job? | | | |
| Yes | 9 | 10 | 5 |
| No | 91 | 90 | 95 |
| 7. Years With Current Employer | | | |
| Average | 11 | 9 | 10 |
| Minimum | 0 | 1 | 1 |
| Maximum | 37 | 34 | 45 |
| Median | 8 | 6 | 8 |
| 8. Primary County Of Employment | | | |
| PA-Bucks | 4 | 8 | |
| Chester | 13 | 14 | |
| Delaware | 6 | 7 | |
| Montgomery | 20 | 19 | |
| Philadelphia | 44 | 37 | |
| NJ-Burlington | 2 | 5 | |
| Camden County | 0 | 1 | |
| Gloucester | 0 | 0 | |
| Other | 11 | 9 | |
| 9. Method Of Commuting | | | |
| Drive | 68 | 73 | |
| Mass Transit | 15 | 14 | |
| Car Pool | 1 | 1 | |
| Walk | 1 | 4 | |
| Drive & Mass Transit | 13 | 7 | |
| Other (Bicycle) | 3 | 1 | |
| 10. Approximate Commuting Time One Way (Min.) | | | |
| Average | 35 | 24 | |
| Minimum | 0 | 1 | |
| Maximum | 120 | 120 | |
| Median | 35 | 20 | |

| 1994 '91 '89 | | | | 1994 '91 '89 | | | | 1994 '91 '89 | | | |
|---|--|--|--|--|--|--|--|---|--|--|--|
| C. SALARY AND BENEFITS | | | | H) Child Care | | | | 5. Critical Job Concerns | | | |
| 1. Salary | | | | 100% Company Paid 1 2 | | | | Pay And Benefits 30 29 27 | | | |
| Average 64,229 53,800 54,300 | | | | Partially Company Paid 4 5 | | | | Company Reputation 3 9 7 | | | |
| Maximum 150,000 100,000 175,000 | | | | None 95 93 | | | | Responsibility 19 15 25 | | | |
| Median 61,000 51,000 50,000 | | | | 8. Pension Plan | | | | Security 7 5 5 | | | |
| 2. Bonus/Commission | | | | Yes 80 80 77 | | | | Location 7 11 8 | | | |
| Percent Receiving 28 34 56 | | | | 100% Com. Paid 28 29 | | | | Type Of Work 31 27 23 | | | |
| Average 8,100 3,000 4,148 | | | | Emp. Contribution 72 71 | | | | Other 3 4 5 | | | |
| Maximum 40,000 42,000 9,999 | | | | No 20 20 23 | | | | 6. Ease Of Finding New Job | | | |
| 3. Overtime Remuneration | | | | 9. Profit Sharing | | | | Very Easy 9 10 28 | | | |
| None 52 47 55 | | | | Yes 41 45 30 | | | | Easy 38 45 47 | | | |
| Time (Compensatory) 19 15 14 | | | | No 36 54 40 | | | | Somewhat Difficult 39 35 21 | | | |
| Straight Pay 20 29 24 | | | | Not Applicable 23 1 30 | | | | Difficult 14 10 4 | | | |
| Time & A Half 8 6 7 | | | | 10. Formal Severance Pay | | | | 7. Salary, Compared To Other CE's? | | | |
| Double Time 0 1 0 | | | | Yes 39 34 27 | | | | Much Lower 4 3 3 | | | |
| 4. Vacation (Incl Admin. Leave, Personal Days, Etc.) | | | | No 61 66 73 | | | | Lower 16 24 19 | | | |
| Average Days Off 19 16 9 | | | | 11. Tuition Reimbursement | | | | Similar 50 48 46 | | | |
| Median Days Off 15 15 9 | | | | None 29 21 29 | | | | Higher 27 23 27 | | | |
| 5. Holidays | | | | Partial 71 79 61 | | | | Much Higher 3 2 5 | | | |
| 9 9 10 | | | | D. OPINIONS | | | | 8. Fringe Benefits, Compared To Other CE's? | | | |
| 6. Sick Leave (Company Paid) | | | | 1. Satisfied With Current Employment? | | | | Much Lower 6 7 5 | | | |
| Average 16 11 32 | | | | Unsatisfied 8 4 6 | | | | Lower 12 15 17 | | | |
| Median 10 10 3 | | | | Somewhat Unsatisfied 14 17 18 | | | | Similar 39 45 45 | | | |
| Minimum 0 0 0 | | | | Satisfied 29 20 20 | | | | Higher 38 28 25 | | | |
| Maximum Unlim. 70 100 | | | | Most Satisfied 29 45 34 | | | | Much Higher 5 5 8 | | | |
| 7. Company Paid Insurance | | | | Very Satisfied 20 14 22 | | | | 9. Professional Environment Important? | | | |
| A) Hospitalization | | | | 2. Performing True Engineering Work? | | | | Yes 83 89 92 | | | |
| 100% Company Paid 41 47 53 | | | | Yes 59 56 55 | | | | No 17 11 8 | | | |
| Partially Company Paid 56 51 43 | | | | No, Admin, Super, Business, Prom, Etc. 32 37 37 | | | | 10. Satisfied With Environment? | | | |
| None 3 2 4 | | | | No, Technician Draftsperson 1 2 1 | | | | Yes 71 75 70 | | | |
| B) Major Medical | | | | No, Other Functions 8 5 7 | | | | No 29 25 30 | | | |
| 100% Company Paid 37 44 52 | | | | 3. Work Properly Reviewed? | | | | 11. Agree Or Disagree With The Following? | | | |
| Partially Company Paid 56 53 43 | | | | Yes 34 39 32 | | | | A. Registration Required As Condition of Employment? | | | |
| None 7 3 5 | | | | Yes, But Could Be Better 34 41 39 | | | | Agree 42 37 38 | | | |
| C) Dental | | | | No 16 12 17 | | | | Disagree 58 63 62 | | | |
| 100% Company Paid 25 25 24 | | | | Not Applicable 17 8 12 | | | | B. Continuing Ed To Maintain Registration? | | | |
| Partially Company Paid 48 46 41 | | | | 4. Looking For New Job Within Next 2 Yrs? | | | | Agree 59 54 51 | | | |
| None 27 29 35 | | | | Yes 35 35 34 | | | | Disagree 41 46 49 | | | |
| D) Optical | | | | No 65 65 66 | | | | C. Consulting Work Competitively Bid? | | | |
| 100% Company Paid 15 13 15 | | | | Reasons For Looking For New Job | | | | Agree 61 60 66 | | | |
| Partially Company Paid 33 26 23 | | | | Salary 20 16 12 | | | | Disagree 39 40 34 | | | |
| None 51 61 72 | | | | Boss 13 5 4 | | | | D. Advertising, ...Is Acceptable? | | | |
| E) Disability | | | | Lack Of Responsibility 13 1 3 | | | | Agree 86 90 86 | | | |
| 100% Company Paid 36 51 37 | | | | Other 54 13 15 | | | | Disagree 14 10 14 | | | |
| Partially Company Paid 33 26 32 | | | | Management Problems 13 | | | | E. Shortage Of CE Graduates? | | | |
| None 31 21 31 | | | | Job Security, Status, Gratification 13 | | | | Agree 19 44 | | | |
| F) Life | | | | Economy, Budget 7 | | | | Disagree 81 56 | | | |
| 100% Company Paid 51 55 14 | | | | New Field 4 | | | | 12. Given 2nd Chance, Would You Still Be A CE? | | | |
| Partially Company Paid 33 32 43 | | | | Benefits 4 | | | | Yes 82 | | | |
| None 16 13 43 | | | | Location 4 | | | | No 18 | | | |
| G) Legal Fees | | | | Want To Work For Private Firm 4 | | | | | | | |
| 100% Company Paid 10 10 | | | | Family Business, Contract Employee Or Early Retirement 2 | | | | | | | |
| Partially Company Paid 5 6 | | | | | | | | | | | |
| None 84 84 | | | | | | | | | | | |

See "Salary Range" graph on page 9.

Philadelphia Section ASCE 1994 Salary and Benefits Survey

SALARY RANGE



1995 YOUNGER MEMBER GROUP AWARD

The purpose of the award is to promote excellence among the Younger Member Groups of the American Society of Civil Engineers. Younger Member Groups are defined as Associate Member Forums (AMF), Younger Member Forums (YMF), Younger Member Committees (YMC), etc. which operate at the Section and Branch level. It does not include Younger Member Councils. The award was officially instituted by action of the Society on July 9, 1985.

The award is known as the Younger Member Group Award. It is made annually to the most outstanding Younger Member Group of the American Society of Civil Engineers. Certificates of Commendation may also be awarded.

The Committee on Younger Members (CYM) shall recommend the winner of the award and those Groups receiving Certificates of Commendation.

The award shall consist of a framed certificate to be presented to the Younger Member Group at an Annual Convention meeting of the Society.

RULES

- The evaluation process involves scoring of nomination documents submitted by Younger Member Groups. The nomination documents should list professional, technical, social and special activities sponsored by the Younger Member Group for the preceding calendar year.
- Younger Member Groups may submit written nomination forms which are available from ASCE at the address below.
- Previous award recipients are eligible to reapply.
- By February 1, 1995 seven copies of the nomination should be submitted through the Section or Branch Secretary to: ASCE Awards Department, 1015 15th St. NW, Suite 600, Washington, DC 20005.

1995 DANIEL W. MEAD CONTEST FOR YOUNGER MEMBERS

The Daniel W. Mead Prize for Younger Members was established in 1939 to honor the memory and accomplishments of the 67th President of the American Society of Civil Engineers. The talents of many of the leaders of the profession were first recognized in previous contests for this significant professional honor. The current contest provides another opportunity for alert young civil engineers to further their professional development and gain national attention.

Papers must be written on:

“Do Civil Engineers Have An Ethical Responsibility To Their Client At The Expense Of The Environment?”

RULES

- Authors must be Associate Members, Members or Affiliates of the Society 32 years of age or less on February 1, 1995.
- Only one person can write each paper.
- Each Section or Branch can submit only one paper.
- Paper must contain no more than 2,000 words.
- One winner may be selected from each of the four Zones and International membership of the Society.
- The national winner, selected from the Zonal winners, will receive a wall plaque and a certificate.
- The national winner may be invited to present his/her paper at the ASCE National Convention, Sa Diego, California, in October, 1995.
- The paper by the national winner will be submitted for publication in **Civil Engineering**.

By February 1, 1995, seven copies of each paper must be submitted through the Section or Branch Secretary to: ASCE Awards Department, 1015 15th St. NW, Suite 600, Washington, DC 20005.

Philadelphia Section Younger Members are urged to get to work on the Mead Competition. We are proud of our past winners and want to continue to be in the forefront.

Past Mead Competition winners from the Philadelphia Section are:

- 1974 – John Spitko, National Award
- 1977 – Joseph R. Syrnick, Zone I Award
- 1978 – David S. Shaw, Zone I Award
- 1979 – Haym Bernaroya, Zone I Award

1995 EDMUND FRIEDMAN YOUNG ENGINEER AWARD

To recognize professional contributions of younger members of the Society, Edmund Friedman, Past President of ASCE contributed funds to establish the Edmund Friedman Young Engineer Award for Professional Achievement. The award was officially instituted by action of the Board of Direction in October 1972.

This recognition is awarded annually to members of the American Society of Civil Engineers who are 32 years of age or less on February 1 in the year of the award, and who are judged to have attained significant professional achievement, by the degree to which the candidates have shown:

- Service to the advancement of the profession;
- Evidence of technical competence, high character and integrity;
- Leadership in the development of younger member attitudes towards the profession;
- Contributions to public service outside of their professional career;
- Other evidence of merit, which has advanced the Society’s objectives.

RULES

- The award may be made each year to as many as five recipients. No recipient may receive the award more than once.
- An individual or group may submit written nomination forms which are available from ASCE at the address below.
- A nominee not selected one year may be renominated in a subsequent year, provided he/she is eligible under the above stipulations. Meritorious nominees, not selected in a given year, may be held over by CYM for consideration in the competition of the following year.
- Deceased persons are not eligible for nomination for the award, although an award can be made posthumously to a nominee whose petition had reached the award committee during his/her lifetime.
- The award shall consist of a framed certificate inscribed with the name of the recipient and his/her exceptional achievements, to be presented at the 1995 ASCE National Convention.

By February 1, 1995, seven copies of the nomination should be submitted to: ASCE Awards Department, 1015 15th St. NW, Suite 600, Washington, DC 20005.

PLEASE PAY YOUR SECTION DUES!!!

The Philadelphia Section, ASCE Board of Directors respectfully urges all Section members to bring their dues up to date. If your 1994-1995 dues (\$18.00) is in arrears, please remit your check immediately. Also, send in your check (\$18.00) for 1994-1995 dues when you receive the bill from National ASCE headquarters. Thus you will be assured of Active Membership and will enjoy all the services and functions of the Philadelphia Section, including the monthly newsletter, THE NEWS.

Members not receiving THE NEWS are deprived of all the technical and social activities announcements; reviews of previous Section meetings featuring addresses by distinguished speakers; updat-

ing of National and Local official reports; Members in the News, and the numerous miscellaneous subjects covered in the monthly issues.

So—if you are in arrears, please do yourself and your Section a service, by mailing your check including the Philadelphia Section dues of \$18 per year, with the dues bill(s) which you have received from National Headquarters in New York. Only thus will you enjoy all the benefits that accrue with receipt of the monthly issues of the Philadelphia Section newsletter, THE NEWS.

Mail your checks, payable to Philadelphia Section, ASCE, to P.O. Box 58186, Philadelphia, PA 19102-8186.

JOIN THE SECTION'S TECHNICAL GROUPS

Architectural Engineering

Thomas Babacz, Chairman
STV Group
11 Robinson St.
Pottstown, PA 19464
(610) 326-4600

Liaison

George J. Stanley
SEPTA Systems Eng'g.
714 Market Street, 3rd Floor
Philadelphia, PA 19106
(215) 580-7060

Younger Member Forum

Allen W. Cadden, President
Schnabel Engineering Assoc.
882 S. Matlack St.
West Chester, PA 19382
(215) 696-6066

Construction

Fredric L. Plotnick, Chairman
Empromac
P.O. Box 11264
Elkins Park, PA 19117-0264
(215) 843-7313

Structural

Richard Roberts, Chairman
Pennoni Associates, Inc.
1600 Callowhill St.
Phila., PA 19130
(215) 561-0460

Transportation

Gregory Yates, Chairman
Urban Engineers, Inc.
530 Walnut St., 16th Fl.
Philadelphia, PA 19106
(215) 983-5077

Engineering Management

Alvin Zion, Chairman
Hill International, Inc.
1 Levitt Parkway
Willingboro, NJ 08046
(215) 937-5582

Geotechnical

Dr. Joseph P. Martin, Chairman
Drexel University
Civil Engineering Dept.
32nd & Chestnut Sts.
Philadelphia, PA 19104
(215) 895-2363

Water Resources &

Environmental Engineering
Raymond A. Lees, Chairman
Groundwater Technology, Inc.
223 Wilmington-West Chester Pike
Chadds Ford, PA 19317
(215) 558-1730

CIVIL ENGINEERING CLASS PROJECTS COMMITTEE

for Grades 1 thru 12 & Community Colleges

Stephen G. Jochum, Chairman
Temple University
Department of Civil Engineering
12th and Norris Streets
Philadelphia, PA 19122
(215) 204-7802 or Section's Electronic
Message Service (215) 934-3639

IMPORTANT! 1994-1995 MEETING NOTICES

MARK YOUR CALENDAR for the dates of the remaining Philadelphia Section, ASCE monthly meetings and social functions, as follows: (Check each issue of coming editions of THE NEWS for details, possible date and topic changes.) THIS IS A TENTATIVE LIST.

ALL DINNER MEETINGS (Except as noted for Luncheon Meetings)

Cocktails – 5:30 p.m. Dinner – 6:30 p.m. Meeting – 7:30 p.m.

STUDENTS: All dinner and/or luncheon charges one-half price. If you prefer, you are welcome to attend all meetings after dinner or luncheon, at no charge.

Thursday, November 10, 1994 – Dinner Meeting, Williamson's City Line, "Chesapeake & Delaware Canal Bridge" (Arr. by Structural Group) *NOTE: A tour of the site will be available prior to the dinner meeting for a limited number of persons. Details will appear in the November, 1994 issue of "THE NEWS". Swarthmore College Night.*

Thursday, December 8, 1993 – LUNCHEON MEETING

"Tour of the new Criminal Justice Center, Center City" (Arr. by Construction Group)
University of Pennsylvania Day.

Thursday, January 12, 1995 – Dinner Meeting, Williamson's City Line

"Transportation Funding – Intermodal Surface Transportation Efficiency Act (ISTEA)" (Arr. by Transportation Group)

Thursday, February 9, 1995 – Harbour League Club, Camden, NJ

Joint Dinner Meeting with South Jersey Branch, New Jersey Section, ASCE
"New Jersey Infrastructure Program" (Arr. by South Jersey Branch & Construction Group).
Drexel University Night.

Thursday, March 9, 1995 – Dinner Meeting, Williamson's City Line

"Sun Oil Co. Middle Creek Project" (Arr. by Environmental Group)
Villanova University Night.

Thursday, April 13, 1995 – Dinner Meeting, Williamson's City Line

Joint Meeting with Society of American Military Engineers (S.A.M.E.)
"Philadelphia International Airport" (Arr. by Engineering Management Group)
Temple University Night.

Friday Evening, May 5, 1995 – Annual Spring Dinner Dance

Location and details to be announced.

The Most Important Thing You'll Ever Help Build

This year, help your Society and yourself by bringing in at least one new member. The reason why is simple: more members will mean more visibility, more opportunities for advancement and networking, and more high quality services and discounts. We'll even send you complimentary gifts when you sign up one or more new members. And we'll fly the top recruiter FREE to our 1995 Annual Convention in San Diego.

To help us build a better Society and a better future for civil engineers, call Membership Development at **800-548-ASCE**, ext. 7090 or 7227.

Solutions to Liquid Flow Problems

Analyses and Computer Simulations for Engineers:

Waterhammer • Surges • Transmission Pipelines
Distribution Networks • Cooling Water Systems
Storm Sewers • Rivers • Open Channels
Mixed Pressurized-Open Channel Flow

Dam Break Simulation • Specialized Modeling

JOEL L. CAVES, Ph.D., P.E.
Consulting Hydraulic Engineer

2 Tanager Drive, Reading, PA 19610, Tel./Fax 610-478-9992



TEMPLE UNIVERSITY
A Commonwealth University
College of Engineering

Dr. Frederick C. Schmitt, P.E.
Chair, Civil Engineering Department

12th & Norris Streets
Philadelphia, PA 19122
(215) 204-7831 Fax: (215) 204-6936

**Pennoni
Associates Inc.**
Consulting Engineers

1600 Callowhill St.
Philadelphia, PA
215-561-0460

William G. Richards, P.E.
Vice President

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Roy F. Weston, Inc.
1 Weston Way
West Chester, Pennsylvania 19380-1499
610-701-3094 • Fax 610-701-3158