

the news



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PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS

1317 Spruce Street, Philadelphia, PA 19107

Vol. 62-5

76 Years of Excellence

FEBRUARY, 1990

FEBRUARY LUNCHEON MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, FEBRUARY 13, 1990

LOCATION: DREXEL UNIVERSITY, Grand Hall, Creese Student Center,
32nd & Chestnut Sts., Phila, PA. Parking behind building and at metered lot
on 33rd St. between Market & Chestnut Sts.

Luncheon - 12:00 NOON Meeting - 1:00 P.M.

SUBJECT: PROFESSIONAL LIABILITY INSURANCE -

Prospective: Exposures, Responsibilities and Liabilities of Design Professionals in the Current Environment.

SPEAKER: KENNETH R. WORTLEY, Head, Professional Liability Department, Paul M. Hertel & Company, Insurance

SPECIAL FEATURE: VILLANOVA UNIVERSITY DAY

The founder of Paul Hertel and Co. insurance agency saw a need to emphasize on loss control by assisting commercial and industrial companies to mitigate their exposure to loss through property conservation and the purchase of insurance.

Critical to the success in arranging the most effective insurance program is access to the insurance marketplace. Paul Hertel and Company has represented most of the major insurance carriers for many years, has several specialized programs and access to the underwriters at Lloyd's of London.

The company encourages continuing education and attainment of professional recognition, enabling it to design and implement the most effective risk management programs from both a coverage and cost standpoint for the benefit of its clients.

The Professional Liability Department of Paul Hertel & Company was established in order to service effectively the needs of the design professional community by assisting the firms in the management of their practice. It was felt that much more could be accomplished in the handling of loss exposures as early as possible, recognizing that the most important factor in claims management is communication and documentation. Insurance company statistics conclude that most claims against design professionals are from other members of the project team - primarily the client. This is where it was felt that the greatest amount of effort should be directed.

Serving as brokers and consultants for the design professional community entails more than just placing an insurance policy. In reality, liability costs when they occur are already a given fact and subject only to cost management. If however, controls are implemented early enough, the probability of a problem developing may be eliminated or effectively reduced.

Kenneth R. Wortley is a licensed agent and broker with over thirteen years experience in the insurance industry. Since joining the firm in 1981, bringing with him a background of risk management consulting and knowledge of the construction industry, he has been instrumental in the success of the Professional Liability Department. Mr. Wortley was able to expand the number of design professional
(Continued on Page 2)

NOTICE!! DINNER AT PHILA. SECTION MEETINGS WILL BE SERVED ONLY TO THOSE WHO CALL IN THEIR RESERVATIONS. FOR ALL MEETINGS - AS THEY ARE ANNOUNCED IN THE NEWS - PLEASE CALL PRESIDENT WEGGEL'S SECRETARY, KWEEING, AT (215) 895-2364 IMMEDIATELY.

Luncheon charge at the **February 13, 1990** meeting at Drexel University: Members & Guests - \$10. STUDENTS: If you prefer, you are invited & welcome to attend the Meeting after Lunch, at no charge.

ENGINEERS' CLUB RELOCATES

The Engineers' Club of Philadelphia will be vacating the 1317 Spruce Street location and moving its office and dinner locations to THE DOWNTOWN CLUB IN THE PUBLIC LEDGER BUILDING, 6th & Chestnut Streets, Philadelphia; unless specified otherwise in "THE NEWS" meetings announcements. All affiliate society dinners, lunches, etc. will be held at The Downtown Club.

The New location for all meetings including those for the Philadelphia Section, ASCE, which were scheduled to be held at the Engineers' Club is now:

The Downtown Club
Public Ledger Building
6th and Chestnut Streets, 11th Floor
Philadelphia, PA

Discount Parking is available at:

Philadelphia Life Parking Lot
7th and Ranstead Sts.

(between Market and Chestnut)

Bring parking ticket into The Downtown Club for validation.

TECHNICAL GROUP ACTIVITIES

**Geotechnical and
Water/Environmental Group**
(Combined Program for 1989-1990)

February Meeting

Date: **Tuesday, February 20, 1990-7:00 PM**
Drexel University, Hill Seminar Room, LeBow
Engineering Center, 31st & Market Sts., Phila.

Subject: **Remediation of Contaminated Soil
and Groundwater at a Superfund Site**

Speaker: **John Gee, P.E., EEC, Inc.**

Only about three dozen of the 1,225 Superfund sites currently on the USEPA National Priorities List (NPL) have resulted in remediation. This accounts for about three percent of the sites which have been considered for remediation during the 10-year duration of the Superfund Pro-

(Continued on Page 2)

MARCH DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, MARCH 13, 1990

LOCATION: TO BE ANNOUNCED

Social Hour - 5:30 P.M. Dinner - 6:30 P.M. Meeting - 7:30 P.M.

SUBJECT: THE JOINT BRITISH-FRENCH ENGLISH CHANNEL TUNNEL

SPEAKER: WHINN FRANKS, Manager of Operations, DeLeuw, Cather & Company, Consulting Engineers, Baltimore, MD

SPECIAL FEATURE: WIDENER UNIVERSITY NIGHT

FOR RESERVATIONS FOR THE **MARCH 13, 1990 MEETING**, PLEASE CALL PRESIDENT WEGGEL'S SECRETARY, KWEEING, AT **(215) 895-2364**. STUDENTS: If you prefer, you are welcome to attend the Meeting after Dinner, at no charge.

FEBRUARY LUNCHEON MEETING

(Continued from Page 1)

clients from a handful to approximately 200 without loss of service. The Department now boasts a staff of 7 people.

Much of Mr. Wortley's time involves the reviewing of contracts for the purpose of reducing or eliminating potential liability issues. Additionally he conducts in-house seminars for the professional and technical staff of clients. The topics vary from general loss prevention to specific issues for the client.

Mr. Wortley is a graduate of Valley Forge Military Academy and has attended Marquette University. Mr. Wortley has also continued to attend classes in the insurance and design professional/construction industry. Additionally he has guest lectured to architectural and engineering students at Wharton/University of Pennsylvania, Temple University and Spring Garden College, and chapters of the AIA, CEC, ASLA and ASPE. He is an affiliate member of the Philadelphia Chapter AIA, the Delaware Valley Chapter of ASPE, PSMA Metro-Philadelphia and the Professional Liability Agents Network.

Technical Group Activities

(Continued from Page 1)

gram. The topic of the February 1990 meeting will focus on the innovative technology of soil flushing, which is being used in conjunction with conventional groundwater treatment technologies, to remediate soil and groundwater contamination at a Superfund site.

The case study which will be presented at the February 1990 meeting involves the development of a Remedial Action Plan (RAP) for a confidential Superfund site located in the Atlantic Coastal Plain of the eastern United States. The site contains over one billion gallons of groundwater and over 100,000 cubic yards of soil contaminated with 16 volatile and semivolatile compounds listed on the USEPA Target Compound List (TCL). The proposed RAP for this site calls for the extraction, treatment and reinjection of groundwater throughout the soils to flush out the source of contamination on site.

For further information, please contact:

Geotechnical

Dr. J.P. Martin

Dept. of Civil & Architectural Engineering
Drexel University
Philadelphia, PA 19104
(215) 895-2363

Water Resources/Environmental

Mr. Raymond E. Lees

Westinghouse Environmental
and Geotechnical Services, Inc.
323 Norristown Road, Suite 200
Ambler, PA 19002
(215) 542-9100

Structural Group

February Meeting

Date: **Wednesday, February 28, 1990**

The Downtown Club, 6th & Chestnut Sts.
11th Floor, Phila., PA
Cocktails 5:30 pm Dinner - 6:30 pm
Meeting - 7:30 pm

Subject: **The Bell Atlantic Tower**

Speaker: **Dr. P.V. Banavalkar**, C.B.M. Engineers, Houston, TX

Dr. Banavalkar will present a program on the structural systems for one of the newest additions to the city's skyline. He will overview the design and optimization studies that led to their solution for the skeleton of this 53-story structure.

For reservations and information, please contact **David A. VanOcker**, P.E., Chairman, Structural Technical Group, c/o Christakis & Kachele, Inc., (215) 352-7676.

**COPY DEADLINE
FOR
MARCH 1990
ISSUE
FEBRUARY 13, 1990**

SENIOR PROJECT ENGINEER

WALKER Parking Consultants/Engineers, a multi-disciplined ENR 219 E/A firm specializing in the design of multi-level parking facilities, has immediate opening for a Senior Project Engineer with advancement to a Project Manager.

The desirable candidate will be a Registered Structural Engineer with previous experience on precast and post-tensioned concrete projects and possess superior communication skills.

We offer excellent salaries and benefits programs. Qualified candidates should submit resumes to WALKER Parking Consultants/Engineers, Attn. **Timothy H. Haahs**, 2 Penn Center Plaza, Suite 1015, Philadelphia, PA 19102

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PHILADELPHIA SECTION ASCE ANNUAL CIVIL ENGINEERING AWARDS

1990

The Philadelphia Section takes pleasure in announcing the Annual Civil Engineering Awards. These awards are to recognize local members, for their contributions to the Civil Engineering field. If you wish to nominate someone, please read the rules and criteria and then fill out the nomination form.

ALL AWARDS WILL BE PRESENTED AT THE MAY 5TH, 1990 ANNUAL DINNER DANCE at Colleen's Restaurant, Park Towne Place

R U L E S

Nominations must be received prior to 3 p.m., **March 2, 1990.**

(If time extension or information are necessary, contact
Bob Wright (215) 686-5538.)

Individuals may be nominated for awards by a member in any grade of membership.

Individuals may be awarded only one award in a single year.

Individuals may be nominated for more than one award.

Award recipients must be approved by the Board of Directors.

All awards are presented only in years, where in the judgment of the Selection Committee, or the Board, there is at least one suitable candidate.

The Selection Committee will be required to nominate an alternate for Board consideration for each award.

Each Selection Committee will also recommend to the Board of Directors whether the recipient should be nominated for applicable national or regional awards by the Section.

A W A R D S

Philadelphia Civil Engineer of the Year

The section's highest award is presented to an individual who is judged to have contributed substantially to the civil engineering profession.

CRITERIA:

- Membership Grade — Member, Fellow, Life or Honorary
- Member in good standing of the Philadelphia Section

RECIPIENT ALSO CONSIDERED FOR:

1. Delaware Valley Engineer of the Year
2. Edmund Friedman Professional Recognition Award

Philadelphia Young Civil Engineer of the Year

This award is presented to a young civil engineer who is judged to have contributed to the civil engineering profession.

CRITERIA:

- Membership Grade — Associate or Student
- Member in good standing of the Philadelphia Section or member of a student chapter assigned to the Philadelphia Section
- Must be 31 years of age or younger on Feb. 1 of the award year

RECIPIENT ALSO CONSIDERED FOR:

- Edmund Friedman Professional Recognition Award

Philadelphia Government Engineer of the Year

This award is presented to an individual who is employed by the Federal Government, a State Government, a Municipal Government or a public authority that has contributed substantially to the civil engineering profession.

CRITERIA:

- Membership Grade — Member, Life, Honorary or eligible for membership
- Assigned to the Philadelphia Section or employed or residing within the Philadelphia Section boundaries.

RECIPIENT ALSO CONSIDERED FOR:

1. Zone I Government Engineer of the Year
2. Civil Government Award

Philadelphia Young Government Engineer of the Year

This award is presented to a younger member who is employed by the Federal, a State or a Municipal Government or a public authority that has contributed to the civil engineering profession.

CRITERIA:

- Membership Grade — Associate member or eligible for membership.
- Member in good standing of the Philadelphia Section or employed within the Philadelphia Section boundaries.

RECIPIENT ALSO CONSIDERED FOR:

- Zone I Young Government Engineer of the Year

Government Service Award

Presented to an elected or appointed governmental official who has contributed substantially to the status of the civil engineering profession by their public service.

CRITERIA:

- Holds office in a jurisdiction which represents a geographical including an area which corresponds to the boundaries of the Philadelphia Section. This would include the President, a U.S. Senator from Pennsylvania, Congressman, Mayor, Commissioner, etc.

RECIPIENT ALSO CONSIDERED FOR:

- Civil Government Award

Individual Technical Awards

The following awards have the same criteria. Each award is presented to an individual who is judged to have contributed substantially to civil engineering and in the area of the particular award.

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

(over)

CRITERIA:

- Membership in any grade
- Member of the Philadelphia Section

RECIPIENT ALSO CONSIDERED FOR:

- Technical Groups will be responsible for nominating winners for appropriate national award.

Educator of the Year

This award is presented to an outstanding educator in the field of civil engineering, who has contributed substantially to the field.

CRITERIA:

- Membership Grade — Higher than student
- Member of the Philadelphia Section
- Must be a staff member of a college or university with an ASCE student club chapter

Philadelphia History and Heritage Award

Presented to an individual whose efforts have made contributions to better the knowledge of, or appreciation for, the history and heritage of civil engineering.

CRITERIA:

- Must reside within the geographical boundaries of the Philadelphia Section or be a member of the Philadelphia Section.

RECIPIENT ALSO CONSIDERED FOR:

- Civil Engineering History and Heritage Award

cut along line

— NOMINATION FORM —

IF YOU DESIRE TO MAKE NOMINATIONS FOR MORE THAN ONE PERSON, PLEASE PHOTOCOPY THIS FORM.

Name of Candidate _____
 Address _____ Phone _____
 Job Title _____
 Work Location _____

Membership
 ASCE Yes No
 Phila. Section Yes No
 Age (if applicable) _____

Registration Information

Award(s) Nominated to— Check One (or more if applicable)

- 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
- Geotechnical Engineer of the Year
- Structural Engineer of the Year
- Construction Engineer of the Year
- Transportation Engineer of the Year
- Water Resources Engineer of the Year

Academic Degrees —

Other Professional Societies —

Civic or Charitable Activities —

Continuing Education —

Other Awards or Honors _____

Nominated by: Name _____
 Member I.D. (see Newsletter label) _____
 Address _____
 Telephone Number _____

Achievements — (In 200 words or less, that supports the candidate's nomination, please use separate sheet.)

JANUARY JOINT MEETING

January 17, 1990

Holiday Inn, King of Prussia

THE VINE STREET EXPRESSWAY

By William G. Richards, Staff Writer

A capacity crowd attended and enjoyed the January Joint Meeting of the Philadelphia Section, ASCE; the Delaware Valley Section, American Society of Highway Engineers (ASHE); and the Reading Branch of the Philadelphia Section, ASCE, which was held at the Holiday Inn, King of Prussia. Philadelphia Section Director and Chairman of the Transportation and Urban Development Technical Group, **William T. Thomsen, P.E.**, Project manager, Urban Engineers, Inc., and Moderator of the panel discussion **James W. McPhillips, P.E.**, Vice President, Urban Engineers, Inc. and former Chief Engineer and Regulator, Bureau of Surveys and Design, Philadelphia Department of Streets, arranged an outstanding program, highlighted by a spirited and insightful panel discussion of the principal aspects of The Vine Street Expressway. This gigantic project – in Mr. McPhillips' words "...Philadelphia's last expressway..." awash in controversy for more than 25 years, is presently becoming a reality across one of the busiest traffic arteries in Center City Philadelphia.

Panel speakers and their topics were: **Vito Genua, P.E.**, PennDOT, "*The Design Challenge*;" **Joseph McAtee, P.E.**, Vice President, Urban Engineers, Inc., "*The Construction Challenge*;" and **Stephen B. Lester, P.E.**, District Engineer, PennDOT, "*The Department's Challenge*." Mr. Lester is President-Elect of National ASHE. Jointly presiding the meeting were Philadelphia Section, ASCE President **J. Richard Weggel** and ASHE President **Jack Seber**.

Drexel University Night

The meeting honored the ASCE Student Chapter, alumni and faculty of the Civil Engineering and Architectural Department of Drexel University, which were well-represented. Dr. Weggel introduced Drexel ASCE Student Chapter Advisor, **Dr. Joseph P. Martin**, who then presented the Chapter President, **Harold L. Rohde**. Mr. Rohde thanked the Philadelphia Section and its co-hosts for their courtesies and acknowledged his fellow Student Chapter officers: Vice President, **Banu Obut**; Treasurer, **George Cressman**; Recording Secretary, **Kim Gaudioso**; and Membership Secretary, **Dave Caballero**. He reviewed the busy schedule of activities accomplished by the Student Chapter. Mr. Rohde pointed out that Drexel maintains a catalogue of resumes of the graduating class members, which is available to companies, consulting firms, etc., who may be interested in recruiting graduates.

Vine Street Expressway History and Panel Discussion

Moderator **James W. McPhillips**, a graduate of Drexel University, reviewed the history of the Vine Street Expressway Project. Mr. McPhillips has been connected with the Vine Street Expressway Project in several capacities for more than 27

years, and he is well qualified to provide this background. He took us back through the history of the Project, starting from the 10-lane arterial in the 1950s, through the concept of its serving as one of three links across the City, through debates over environmental and community impacts, to the crucial "go or no-go" decision in the early 1980s and finally to the downscaled expressway decided on in 1982. He then turned over the podium to **Vito Genua**.

The Design Challenge

Mr. Genua functioned as the Chief Liaison Engineer for PA DOT in the design development of the Vine Street Project. A graduate of Villanova, he has over 17 years experience with the Department. Vito began with the environmental issues that were experienced in developing the Project and that led to a "scaled-down" version rather than the full scale expressway originally envisioned. The original plan had major intersections with I-95 and in the 15th-16th Street area and presented major impacts on the local communities. It met with opposition that delayed the project. This led to more limited interchanges being designed, a depressed highway between 10th St. and the Schuylkill Expressway, no direct connections to the Benjamin Franklin Bridge and significant additional effort to mitigate impacts on the affected communities. The eventual Project will cost over \$225 million for one and a half miles which will be paid for by 90% Federal and 10% State funding.

Numerous mitigation steps had to be designed into the Project. Significant requirements for landscaping and inclusion of foliage on top of retaining walls at the depressed sections have been included. Air conditioning and ventilation at Roman Catholic High School and Holy Redeemer School were included because of the need to keep windows closed during construction. Noise mitigation was a major concern, which in the Chinatown section also included walls with Chinese symbols and designs to blend in with the local community.

A Pedestrian Plaza was included at 10th Street and sculpture has been added at 17th Street. Design was mandated to take into account the depth of the depressed highway at the Broad Street crossing where the expressway base will actually be the roof of the Broad Street Subway.

Traffic control requires the maintenance of 8 lanes of traffic at all times during construction. Design had to allow for maintaining cross-street traffic and pedestrian flow with no major detours. As a result, retaining walls for the depressed section had to be designed to be built one side at a time, prior to excavating the center. Clearly this was a major design challenge, and the Department, as well as the design firms of Michael Baker, Jr. for four contract sections, and Modjeski

and Masters for one section, are to be congratulated.

The Construction Challenge

Joe McAtee, Vice President, Urban Engineers and Project Director for Construction Management Consultant Services for the Expressway Project, then presented the construction challenges of the Project. It is a very tightly sequenced Project, with many complications that had been described in part under the design challenge. In addition, the location in the middle of the City brings in the complications of congestion, traffic, numerous underground utilities and the need to remove or relocate existing structures.

The major factor in the construction effort is the spirit of teamwork that has developed, and had to develop, among the construction contractors, PA DOT, the design consultants, and the construction management team, to make this project work. Construction is now wrapping up in some sections, and completion is expected in 1991. Joe now feels that the final schedule is within the expected base schedule plus 90 days, a major accomplishment over a total four year period.

Community relations have been a big factor during construction. The Project has been working closely with groups from Franklin Bridge North, Philadelphia Chinatown Development, Olde City Civic Assn., Logan Square Neighborhood, Frankintown and others. Problems encountered have included: SEPTA Subway access; complex construction staging; encountering hazardous materials, including asbestos wrapped steam lines; subsurface conditions; the need for special fabrications; and the renovation of existing structures. 1990 will include a lot of earth moving as work on the depressed section commences. A potential ancient cemetery may be encountered in the 10th Street area. So the challenge continues!

Mr. McAtee ended by praising the "stick-to-it-iveness" of the construction team and their spirit of teamwork.

The Department's Challenge

With over 25 years experience with PA DOT, **Steve Lester** was ably qualified to provide his insight to the Department's challenges for the Vine Street Project, in particular, and the issue of major limited access highways in the Philadelphia area in general. Steve indicated that the development of the Vine Street Expressway and any future projects benefited in many ways from the lessons learned on the Schuylkill and Delaware Expressways. These include the use of embankments rather than bridge viaducts, and the need for mitigating community concerns. He discussed the history of transportation planning around Philadelphia, including now defunct plans such as the Tacony/Pulaski Expressway and the extension of the Broad Street Subway up the Roosevelt Boulevard.

Steve believes the Vine Street Expressway went ahead when other planned projects failed because of a consensus for its need was developed, particularly among the business community. The Vine Street Project was recognized as

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January Meeting

(Continued from Page 5)

needed to reduce congestion, improve traffic flow, unite the port area with center city, improve air quality and with mitigation to improve local communities. He and Jim McPhillips agreed that major public works projects in the future require building a consensus for the benefit of the project.

Audience Discussion

A spirited question and answer period between panel speakers and members of the large audience, following the formal presentations, capped this splendid meeting. Kudos are extended to Bill Thomsen and Jim McPhillips for their successful efforts.

VILLANOVA HYDROLOGY ANALYSIS COURSE

Villanova University is offering, with the Phila. Section, ASCE co-sponsor, a continuing educational course on Computational Analysis of Surface Water Hydrology Using HEC-1. The course will be held from 7 to 9 March 1990, with a cost of \$500 (\$450 for ASCE members). The instructional staff includes Dr. Lewis J. Mathers, Dr. Ronald A. Chadderton, and Dr. Robert G. Traver from Villanova and Dr. Arthur C. Miller from Penn State. The course will be conducted on campus in the College of Engineering Computer Assisted Classroom to allow individual computer usage.

The course is designed to first, review/teach the basic hydrologic theory, and then apply this theory using the microcomputer package of HEC-1 as developed by the Corp of Engineers. Each participant will receive a copy of the program, documentation and special lecture notes and will participate in several workshops to enhance the instruction.

For further information, con Dr. Robert G. Traver at 215-645-4960 for technical information or Dr. Bob Stokes at 215-645-4303 for reservations. Attendance limited to 40 participants.

POSITIONS AVAILABLE CIVIL ENGINEER

\$30,000-\$35,000

Fee paid

CIVIL CONSTRUCTION

Our client is involved with the construction of pipelines, pumping stations and terminals for the transportation of liquid products. The position involves field survey, construction supervision and facility start up. They require a BSCE plus 0-3 years experience.

STORM WATER DESIGN

\$28,000-\$43,000

Fee paid

Our client seeks an individual experienced in storm water controls both residential and commercial. The successful candidate will be involved with grading, calculations, basin design, etc. They require a degreed civil engineer with 2-8 years experience or a non degreed designer with 8 or more years experience. To be considered for these excellent opportunities contact Jim McCarthy at 215-825-3850 or FAX 828-1095.

1990 DELAWARE VALLEY ENGINEERS WEEK

FEBRUARY 15 - 24, 1990

Engineers: Turning Ideas Into Reality

PROCLAMATION LUNCHEON

Union League • 140 S. Broad St.
THURSDAY, February 15 - 11:30 AM
GERALD E. SPEITEL, P.E.

Chairman of Engineers Week Presiding
Presentation of Engineers Week Proclamations
Announcement of Engineering Achievement Awards & Address

E. ROSS FORMAN, P.E.
1990 Delaware Valley Engineer of the Year
LUNCHEON COST \$20
For reservations, call Linda Miles,
McCormick, Taylor & Assoc., (215) 592-4200

PENJERDEL COUNCIL

Breakfast
TUESDAY, February 20 - 8:00 AM
For additional information
call Gretchen Toner, (215) 875-6749

ENGINEERS CLUB LUNCHEON

1317 Spruce Street
THURSDAY, February 22
Reception 11:30 AM - Lunch 12 Noon
Remarks
E. ROSS FORMAN, P.E.
1990 Engineer of the Year
LUNCHEON COST \$18
For reservations, call 735-5234

SCIENCE & MATH TEACHERS WORKSHOP

Temple University
Engineers & Architecture Building
THURSDAY, February 22
Registration, Lobby EA Building 4:00 PM
Reception & Dinner, Diamond Club 6:30 PM

ENGINEERS WEEK BANQUET

Temple University
Broad & Mitten St.
SATURDAY, February 24
Reception 6 PM Dinner 7 PM
Welcoming Remarks
GERALD E. SPEITEL, P.E.
Chairman of Engineers Week - Presiding
Presentation of
Engineering Achievement Awards
JOHN J. GILLESPIE, P.E.

Presentation of
1990 Young Engineer of the Year Award
WILLIAM H. SCHILLING

Presentation of
Outstanding Science Teacher Awards
C. CHARLES MIESSE

Presentation of
Undergraduate Student Papers Awards
LT. COL. VICTOR A. MARCUS, USA (RET)

Presentation of
Math Counts & High School Student Awards
JOSEPH W. KRULIKOWSKI, P.E.

Presentation of the
1990 Engineer of the Year Citation
FREDRIC L. PLOTNICK, ESQ., P.E.
President of the Philadelphia Chapter,
Pennsylvania Society of Professional Engineers
Address
E. ROSS FORMAN, P.E.

1990 Delaware Valley Engineer of the Year
\$35 TICKET INCLUDES
COCKTAILS, DINNER and GRATUITIES
For Reservations Call Linda Miles,
McCormick, Taylor & Assoc. (215) 592-4200

ENGINEERING & TECHNICAL SOCIETIES COUNCIL SCIENCE-ENGINEERING-TECHNOLOGY CONFERENCE

Drexel University, Creese Student Activities Center
SATURDAY, March 3
For reservations, call ETSCO-SET Council Office,
Engineers' Club, 1317 Spruce St., Phila., PA 19107 -
(215) 735-5234.

ENGINEERING CAREER DAY CONFERENCE

for Middle School and High School Students
Registration \$1 Lobby Level 8:00 AM
Opening Session with Keynote Address on
EARTH DAY 1990
featuring speaker MAURICE SAMPSON
Urban Recycling Institute

THE DELAWARE VALLEY CONSTRUCTION & ENGINEERING EXPO

The Valley Forge Convention & Exhibit Center
(Next to the Sheraton) King of Prussia, PA
March 8-10, 1990

DO YOU KNOW THE RULES? Seminar Slated on New ACI 318 Building Code

For design and construction of reinforced concrete buildings, the rules are the ACI 318 Building Code. And the rules just changed. For those working with the code, whether it is once a year or several times a day, this seminar is a not-to-be-missed opportunity. The ACI/PCA 318 Building Code Seminars are a joint effort of the American Concrete Institute and Portland Cement Association and will be cosponsored by local ACI chapters and other local groups.

In an intensive 7-hour session, some of the most respected concrete designers in the world will guide civil and structural engineers, architects, building contractors, specifiers, inspectors, estimators and concrete materials suppliers through all the changes.

This program is being presented in Phila-

delphia, PA, March 8, 1990, in cooperation with the Delaware Valley of ACI.

The registration fee for this seminar is \$245 for nonmembers of ACI, and includes a complimentary six-month ACI membership. For members and employees of PCA member firms (including PCA employees), the registration fee is \$225. This includes a copy of the ACI 318-89 Building Code in its new format that combines the code and commentary into a parallel arrangement. Participants will also receive a copy of PCA's Notes on ACI 318-89.

To register, or for more information, contact the Seminar Registrar, American Concrete Institute, P.O. Box 19150, Detroit, MI 48219-0150, or call (313) 532-2600, or FAX (313) 538-0655, or Helmuth Wilden at (215) 966-3935.

Have You Mailed
Your 1990 Dues to
National ASCE?
(If not, please do so NOW)

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Lafayette Hill, PA 19444