

the news



**DATED MATERIAL
DO NOT DELAY**

Non-Profit Org.
U.S. POSTAGE
PAID
Philadelphia, Penna.
Permit No. 1845

PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS
1317 Spruce Street, Philadelphia, PA 19107

VOL. 58 - 4

OUR 73rd YEAR

January, 1986

JANUARY DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, JANUARY 14, 1986

Engineer's Club, 1317 Spruce Street, Philadelphia

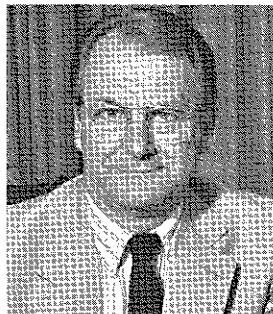
Cocktails — 5:30 P.M. Dinner — 6:30 P.M. Meeting — 7:30 P.M.

SUBJECT:

AN UPDATE ON THE CITY'S COMPREHENSIVE SOLID WASTE MANAGEMENT STUDY.

SPEAKER:

HON. HARRY M. PERKS, Commissioner of Streets, City of Philadelphia.



Mr. Perks will update ASCE members on what his Department is doing to solve the crisis that presently exists in solid waste disposal. Commissioner Perks was appointed Streets Commissioner by Mayor W. Wilson Goode in February, 1985. Except for a three year appointment to the School District on leave of absence from Day & Zimmermann (D & Z), Mr. Perks spent virtually his entire career with the D & Z firm, a large engineering and construction company in Philadelphia. He was made D & Z President in 1976, and retired in January, 1984. Commissioner Perks' presentation will provide members with the latest information on a comprehensive study that is now being advanced for the City by a team of consultants, working to solve the solid waste crisis for the City.

Commissioner Perks is responsible for the collection processing and disposal of solid wastes generated in the City, including its 1.7 million residents; as well as for the City's 2,500 miles of streets, 429 bridges and the 3,600 employees of the Department. The Streets Department has an operating budget of \$91.5 million and a 6-year Capital Program of \$370 million (plus a proposed \$150 million Resource Recovery Cogeneration plant).

SPECIAL FEATURE:

DREXEL UNIVERSITY NIGHT (Day and Evening Colleges)

The ASCE student chapter, Faculty and Alumni of the Civil Engineering Department of Drexel University will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

FEBRUARY DINNER MEETING
TUESDAY, FEBRUARY 11, 1986

SUBJECT AND SPEAKER:

TO BE ANNOUNCED

SPECIAL FEATURE:

TEMPLE UNIVERSITY AND UNIVERSITY OF PENNSYLVANIA NIGHT

Please call Mr. deKovacs at the Engineers' Club immediately (215 735-5234), for reservations. Dinner Meal Charge.

ASCE Member—\$10.00 Non-Member—\$11.00 Students—\$4.00
STUDENTS — Note that your Dinner Charge is LESS than one-half price. Plan to attend for Dinner or Meeting after Dinner.

TECHNICAL GROUP ACTIVITIES

Construction Group

January Meeting

Date: *Thursday, January 23, 1986*

Engineers Club
Meeting at 7:00 p.m.

Subject: *Degradation of Information Flow in Construction Projects.* Problems and micro-computer-based communication solutions.

Speaker: *Richard D. Henkus* — Entre Computer Center of Phila.

Program Host: *Fredric L. Plotnick, Esq., P.E.*, Chairman, Construction Group

Multiple-site construction activity involves coordinating the flow of information between several remote locations and a central management/information center. Expertise and data required for a project at any particular remote site may be fully available only at the central location. Recent developments in microcomputer communication technology provide opportunities for reducing information flow degradation in construction projects. These developments offer the construction industry an enhanced ability to reduce real, tangible costs, and simultaneously to increase productivity at remote construction sites.

☆

Notes on October Meeting

On Tuesday, October 29, 1985, the ASCE was delighted to present a program on rescuing distressed contractors. The speakers, Jack Tanner, Esq. and Glenn Newman, CPA have extensive experience in dealing with troubled contractors. Messrs. Tanner and Newman are with the insurance consulting group of Laventhol & Horwath, an international accounting and consulting firm.

Mr. Tanner focused on the variety of relationships the surety can have with its troubled principal. Addressed were the options available to the surety such as financing the principal, taking over the job, re-letting the contract and setting up a joint venture. Mr. Tanner emphasized the importance of the contractors keeping the

(Continued on page 2)

IMPORTANT!! 1985 - 1986 Meeting Notices

THE NEWS is now being mailed at Non-Profit Organization Bulk Rate. While this promises postage savings to the Section, *it also runs the risk of much longer delivery time from your local post office to your mail box.* Therefore, *please refer to your 1985-1986 Section Meeting Program Schedule* and mark your calendar for all meetings and social functions. Listed below is a summary of remaining meeting dates.

All Dinner Meetings —

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

Tuesday, March 11, 1986 — Section Dinner Meeting, Engineers; Club

Topic: *The Rebirth of Commercialized City Centers — The Festival Malls*

Speaker: *Robert M. Cameron*, Group Vice President, The Rouse Development Company, Columbia, Md.

Widener Univ. and Spring Garden Night

Tuesday, April 8, 1986 —

*Joint Dinner Meeting with Philadelphia Post,
Society of Military Engineers*

Officers Club, U.S. Naval Base Philadelphia

Topic: *Meeting the Engineering Challenges of a Modern Navy*

Speaker: *Commodore Richard F. Butts*, USN, Commander U.S. Naval Base Philadelphia

Saturday Evening, May 3, 1986

Annual Spring Social

The Bourse Building, 5th and Market Sts., Phila., PA 19106

TECHNICAL GROUP ACTIVITIES

(Continued from page 1)

surety informed at all times of the status of its bonded jobs. These actions aid the surety in establishing and developing confidence in the principal. It's the confidence factor that ultimately dictates which option the surety pursues in its dealing with the distressed contractors.

Mr. Newman discussed the various alternatives facing the contractor in a cash poor environment. The restrictions and guarantees often required by a lender were compared to other methods of raising capital such as equity financing and shareholder loans.

The thought process behind a Chapter Eleven bankruptcy filing vs. a Chapter Seven filing was addressed by both gentlemen with the conclusion resting upon the principal's realistic and honest approach with his attorneys and accountants. It is the principal's attitude which will ultimately have a direct correlation as to whether he is one of the few distressed contractors who can survive a bankruptcy filing.

In any instance, be it prosperity or insolvency, the distressed contractor should be in contact with his attorney, surety and accountant to increase his chances of survival in the event of financial difficulties.

Joint January Meeting — Geotechnical Group and Water & Environmental Engineering Group

Date: *Tuesday, January 21, 1986*

Engineers' Club, Cocktails and Dinner — 5:30 p.m. Meeting — 7:00 p.m.

Subject: *"Remedial Measures at Sanitary Landfill Sites"*

Speaker: *Robert D. Mutch, Jr., P.H.G., P.E.*, Group Vice President, AWARE, Inc., West Milford, New Jersey

Program Hosts: *Moustafa A. Gouda, P.E.* chairman, Geotechnical Group

John E. Tunnel, P.E., chairman, W&EE Group (Please call for dinner reservations, Mr. Gouda (609) 461-1239, Mr. Tunnel (215) 597-4714)

The capacity of sanitary landfills to significantly impact the environment, particularly groundwater resources, is well documented. Efforts at upgrading and remediating sanitary landfill sites have been undertaken for approximately two decades. These efforts have intensified in the last five to seven years with the advent of the federal RCRA and Superfund (CERCLA) programs. Many of the country's Superfund sites are sanitary landfills.

This presentation will describe the advancements made in the remediation of sanitary landfill sites over this time period. Technologies employed in landfill remediation include subsurface cutoff walls employing slurry-trench techniques, compacted clay, and geomembranes. Other technologies brought to bear in the remediation of sanitary landfill sites (caps), and groundwater recovery and treatment systems. Several case studies of sanitary landfill remedial action efforts will be described.

Robert D. Mutch, Jr., P.H.G., P.E., has spent his entire professional career in the fields of hydrogeology and land disposal engineering. His work has included the investigation and remedial design of hundreds of municipal and hazardous waste disposal sites, including 15 Superfund sites. He has provided consultation to the United Nations Environmental Programme (UNEP) in regard to international landfill problems. He serves as an Adjunct Instructor of groundwater hydrology at the New Jersey Institute of

(Continued on page 3)

IMPORTANT PARKING PRIVILEGE NOTICE

Philadelphia Section, ASCE members are entitled to special parking rates after 5:00 P.M. for meetings at the Engineers' Club, through an arrangement between the Club and the East side of Broad Street, North of Pine Street. Have your parking ticket validated at the front desk of the Engineers' Club and your parking fee will be the special reduced price of \$2.50.

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS OFFICERS 1985-1986

PRESIDENT

Ira N. Pierce

VICE PRESIDENTS

Albert M. Tantala Norman G. Weintraub

SECRETARY

Edward J. Lutz

TREASURER

Charles J. Denny

MEMBERSHIP SECRETARY

Robert Wright

DIRECTORS

Charlene O'Donnor J. Richard Weggel
Robert J. Stone Thomas J. Lauer
Susan Lior Richard Weiss

M. A. Iqbal
(Reading Branch)

PAST PRESIDENTS

Bernard M. McNamee William M. Malarkey
John E. Durrant

President — Ira N. Pierce

Kassner-Pierce Consulting Engineers
The Bourse Building
Independence Mall East
Philadelphia, PA 19106
(215) 238-0222

Secretary — Edward J. Lutz

Rollins Environmental
P.O. Box 418
Chadds Ford, PA 19317
(215) 459-1114

PUBLICATIONS COMMITTEE

Sidney Robin
Chairman and Editor of THE NEWS

Joseph R. Szymik
Assistant Chairman and Associate Editor

Staff Writers

Greg Neiderer

Michael Peleszak

Publications Coordinator
Albert M. Tantala

SEND COPY TO:

Sidney Robin
64 Nancy Drive
Richboro, Pennsylvania 18954
Phone: (215) 322-7464

**COPY DEADLINE FOR
FEBRUARY, 1986 ISSUE
JANUARY 14, 1986**

TECHNICAL GROUP ACTIVITIES

Joint January Meeting —

(Continued from page 2)

Technology, from which he holds B.S. and M.S. degrees in Civil Engineering. He is a licensed professional engineer in the states of New Jersey, New York, Massachusetts and South Carolina. Mr. Mutch has numerous publications in the areas of secure landfill design, landfill remedial measures, and groundwater hydrology of landfill sites.

☆

Transportation and Urban Development Group

January Meeting

Date: Thursday, January 23, 1986, Engineers Club

Cocktails: 5:30 p.m.; Dinner: 6:00 p.m.; Meeting: 7:00 p.m.

Subject: *The Harrisburg Transportation Center*

Speaker: *William Faust, Assistant Director For Special Projects, Harrisburg Redevelopment Authority.*

Program Host: *Daniel S. Winokur, Chairman, T&UD Group*

Mr. Faust will present an overview of the project from its conceptual stages and its role in the redevelopment of the Downtown Area. A discussion about the architectural restoration of the old train station and the structural engineering work on the train shed will also be included. For reservations, please call: *Florence Malcom* at D.S. Winokur Assoc., Inc. (215) 627-2440.

GEOTECHNICAL GROUP Program — 1985-1986

For our 1985-1986 program, we have selected the topic of "Geotechnical Consideration In Construction Over Lands Occupied By Sanitary Landfills" as the subject of our lecture series.

Several sanitary landfills exist on valuable real estate property. In recent years, some developers have proposed to develop industrial and commercial buildings over properties occupied by sanitary landfills. Several problems associated with such development is geotechnical in nature and can be mitigated using special geotechnical techniques. Our lecture series will deal with the problems and how they can be solved. We trust that you will find this subject quite interesting and that you will attend all our monthly meetings.

Tentatively, we propose the following remaining programs:

January 21, 1986

(Joint dinner meeting with the Water & Environmental Grp.)

"Waste Site Remediation & Corrective Action" — *Robert Mutch, P.E., V.P. of Aware (Environmental Consultants).*

SPEEDIER EXCAVATION METHODS BRIGHTEN OUTLOOK FOR TUNNELS

(Abstracted from *The Wall Street Journal*)

With little room to expand clogged roads, many city planners are turning to tunnels. Engineers in Boston, for example, plan to build one to replace a freeway that cuts off the downtown area from the waterfront.

But tunnels usually are much more costly than roads, and problems such as cave-ins can quickly put construction budgets in the hole. The answer to such drawbacks: dig faster. "The emphasis in tunneling is speed of construction to keep down interest costs," says Frank Davidson, an expert on large-scale construction at Massachusetts Institute of Technology.

In recent years, engineers have been trying new ways to speed up tunnel excavation, including the use of rock-cutting water jets and earth-melting machines. But since the 1950s, gains in tunneling speed have been largely attributable to refinements in the making of mechanical "moles" machines with huge, circular metal plates mounted with numerous small cutters that grid into rock as the plate is spun against it. Moles have gradually replaced explosives for boring through rock.

With the latest machine designs and steel alloys, boring machines can exert 25 tons of force through each cutter, enough to crush even the hardest rock, says Richard Robbins, president of Robbins Co., a Kent, Wash., maker of

boring machines. "Fifteen years ago, the only way to go through hard rock was to blast it out at maybe 30 or 40 feet a day," he says. "Now we can bore through it at more than 100 feet a day." Soft rock is easy for such machines, which slice through it at more than 400 feet a day.

Explosives still are needed at times, such as in tunnels with sharp curves that boring machines can't negotiate. Tunnel walls weakened by explosions require more support than walls in bored tunnels, so engineers increasingly rely on surgically precise blasts that use many small charges rather than a few large ones. And research on rock structure has shown that crumbling walls once elaborately braced as a matter of course often can be supported more easily with "shotcrete," or concrete sprayed on like paint.

Tunneling under rivers and harbors is often trickier than boring through rock. Preventing tunnel flooding is a major concern, and bracing walls can be a speedlimiting factor. An alternative is the sunken-tube tunnel, which involves sinking prefabricated tunnel segments and linking them underwater. But in some situations, such as in fast-moving rivers, the approach isn't practical.

(To be continued in a future issue.)

ROTTEN STONE

Editor's Note: Ever alert to items of interest, our widely-read Section First Vice President *Al Tantal* submitted the following interesting article, reprinted from the November 21, 1985 issue of *MACHINE DESIGN* magazine.

Many stone buildings and monuments are being "eaten away" in Western nations through reactions that are somehow related to air pollution. Researchers give three possible causes: the natural acidity of rain, acid rain generated by reaction with industrial pollutants, and sulphur dioxide in the atmosphere. How much each contributes to stone erosion is not clear. But according to an item in *Science* magazine, the destructive reaction seems to be caused by the formation of calcium sulphate in the pores of the stone. Somehow the wind-and-rain carried pollutants find their way into the stone's pores and a reaction starts. As the crystals of calcium carbonate form and expand, they destroy the stone.

One interesting sidelight on the problem is that much of the statue damage seems to have been done after the introduction of "non-polluting" gas and oil heating fuels. When coal and wood were used by most homes, the nearby stone work became dirty but was not damaged internally. It was only after oil and gas came into use that the pollutants were able to actually destroy the stone.

Experts still disagree on what is to blame and how to stop the problems.

February 18, 1986

"Synthetic Liners in Sanitary Landfills" — *Dr. Robert Koerner, Ph.D., P.E., Drexel University.*

March 18, 1986

"Methane Gas Protection Systems" — *Richard E. Mabry, P.E., Consulting Engineer.*

April 15, 1986

"Consolidation Settlement of Sanitary Landfills"

May 20, 1986

"Stabilization of Fill & Soil Masses Using Lime and Flyash".

As in the past, lectures will be held at the Engineers' Club in Philadelphia. (See THE NEWS future issues for more details of meetings.)

6:30-7:00 p.m. Cheese and Wine will be served (except January)

7:00-8:30 p.m. Lecture

We look forward to seeing you. Please feel free to pass this memo to others who may be interested.

For more information, please contact:
Mustafa A. Gouda, Chairman,
Geotechnical Group
Lippincott Engineering Associates, Inc.
501 Burlington Ave.
Delanco, NJ 08075
(609) 461-1239



PHILADELPHIA SECTION ASCE ANNUAL CIVIL ENGINEERING AWARDS

1986

The Philadelphia Section takes pleasure in announcing the Second 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 3rd SOCIAL at The Bourse Building

RULES

Nominations must be received prior to 3 p.m., February 15, 1986.

(If time extension or information are necessary, contact
John Durrant or **Dave Perri** at (215) 225-3977).

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.

AWARDS

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 Young Engineer Award for Professional Achievement

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, 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 of the Philadelphia Section or employed within or residing 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 area 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

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 or 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:

Registration Information

ASCE Yes No

Phila. Section Yes No

Age (if applicable).....

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.)

Return Form to: John E. Durrant or David Perri, Phila. Water Dept., 7th & Lehigh Ave., Phila., PA 19133 (215) 225-3977

DON'T MISS THIS EVENT!

THE DELAWARE VALLEY
ENGINEERING AND
TECHNOLOGY CONFERENCE

COMPUTERS • HI TECH • ROBOTICS

February 27 - March 1, 1986
Valley Forge Convention Center
King of Prussia, Pennsylvania

Sponsored by:



The Engineers' Club Of Philadelphia
1317 Spruce Street, Phila., PA 19107
215-735-5234

Free tickets available
(Call The Engineers' Club)

or
Present This Ad
For Free Admission

**THE CAEA CENTER
AT TEMPLE UNIVERSITY**

The Computer-Aided Engineering and Architecture (CAEA) continuing education program at Temple University is now adding artificial intelligence and introductory finite element analysis to its Computer-Aided Design and Drafting (CADD) program started only a year ago.

Four to six times a year, the CAEA CENTER at Temple still offers free one-evening programs to facilitate a meaningful exchange of information between current and potential computer users, interested in specific applications or topics. These programs consist of short presentations followed by combined or separate discussions of direct interest to participating engineers, architects and related professionals who may attend as individuals or as representatives from interested organizations.

The CAEA CENTER at Temple offers free parking for pre-registered participants, reasonable course fees (\$175 to \$235 for a typical six-week course) and excellent computer facilities. This is largely due to the significant support the CAEA CENTER receives from Pennsylvania's Ben Franklin Partnership Program, from the private sector and from Temple University.

Most CAEA courses meet once a week for six weeks from 6:00 p.m. to 9:30 p.m. at the College of Engineering and Architecture, 12th and Norris Streets, Philadelphia, PA 19122. The next free one-evening program is entitled "Computers for Designers" and starts at 6:30 p.m. on *Tuesday, January 21, 1986*. Preregistration is requested. Particulars and registration forms may be obtained by calling 215/787-7802.

**MANUAL 55 A MUST
AND A BARGAIN!**

A "must" for every engineer's personal library, ASCE's popular and informative Manual 55, "Guide To Employment Conditions For Civil Engineers" is now available for a limited time at the special price of \$3.00 per copy.

The four section manual, first published in 1976 and revised in 1980, is published in a ready reference format. It provides the information you need to help you assess your career and your job conditions. Compiled from historical data and existing policies from a wide range of civil engineering organizations, it covers recommended guidelines for professional employment (endorsed by 27 professional societies), recommended salary guidelines, recommended fringe benefit policies, and supplementary information related to engineering support personnel. The manual also contains important guidance regarding the fair and ethical relationship between employer and employee.

The guidelines cover conventional, practical principles of professional employment presented in a format that can be adapted to any employment situation whether the employer be large or small, public or private. It is intended for use as a reference by both employees and employers seeking a mutually rewarding, professional atmosphere of employment.

Manual 55 reflects the significant steps ASCE has taken over more than 15 years to help educate civil engineers in the non-technical aspects of their practice.

A handy reference for employee and employer alike, it is now less than half price at \$3.00 per copy through December 31, 1985. Order from ASCE Headquarters or through the page 11 order form in the August "ASCE News".

ASCE JOB EXCHANGE

Members in search of employment, and members who have jobs available at their offices are invited to communicate by mail to Editor, Sid Robin, 64 Nancy Drive, Richboro, PA 18954. B.S.C.E. Graduate. The Catholic University of America, Wash., D.C., seeks professional career in construction.

Varied experience in real estate investments, repair, maintenance and replacements; negotiating estimates, awarding construction contracts, and on-the-job supervision; training new unskilled workers, etc. References available on request.

For full resume and detailed work experience and background — if you have employment available — kindly contact:

Gary E. Pergolini
2121 Belvedere Ave.
Havertown, PA 19083
(215) 449-6679

**PLOTNICK CONDUCTS
CONTRACTS COURSE**

A ten-session course on: "Legal Aspects of Construction, Architecture and Engineering Contracts" will be conducted by *Fredric L. Plotnick, Esq., P.E.*, Chairman of the Philadelphia Section, ASCE Construction Technical Group, at Drexel University on *ten Tuesday evenings, 6:30 to 9:00 P.M., February 18-April 22, 1986*.

The course will concentrate on two areas of the law:

- The reading, interpretation, and writing of specifications, general conditions, and contract provisions.
- The conduct of the architect, engineer, contractor, or owner, which may lead to civil liability.

It will teach the engineer how an attorney, arbitrator or judge will interpret contract documents which the engineer may prepare or review. Once familiar with rules of interpretation, all parties participating in a project will learn the legal requirements of a properly written specification or contract, and the legal consequences of various optional clauses. Methods of reducing the risks of civil liability — by contractual arrangement, by management methods, and by recognition of "red flags" — will be discussed in depth.

Some highlights of the course outline include: Types and Conditions of Contracts; Judicial Enforcement of Contracts; Rules of Construction and Contract Language, including Discharge or Breach of Contractual Obligations, and Remedies Therefor; Intentional Torts; Negligence; Strict Liability; Products Liability; Prevention and Care.

Fred Plotnick is the Chief Executive Officer of Engineering and Property Management Consultants, Inc., a firm which specializes in construction management, project controls and claims resolution. Mr. Plotnick is a Registered P.E. in Pennsylvania, New Jersey and Florida; and a member of the Bars of these same States. He is a member and panelist of the American Arbitration Association.

The course will be conducted in one of Drexel University's comfortable executive seminar rooms. Fee for the course is \$375.00, which includes all course notes and materials. For full particulars and registration information, please contact the *Office of Continuing Professional Education, Drexel University, 32nd & Chestnut Sts., Phila., PA 19104*. Phone: (215) 895-2154, 56.



Schumann's Press Inc. is a full-service commercial print shop serving the Delaware Valley for 25 years.

Schumann's Press was founded in 1960 by Ron Schumann. In 1970, the business expanded and moved to a 3000 sq. ft. facility on Street Road. In 1980, expansion necessitated another move to their present 5000 sq. ft. facility in the Jaymor Industrial Park in Southampton.

Ron Schumann and the employees of Schumann's Press look forward to being of service to the Philadelphia Section, ASCE.

DECEMBER MEETING

December 10, 1985 Engineers' Club

The Managing Director's Perspectives on City Government Functions

The Philadelphia Section, ASCE was privileged to have as its Principal Speaker at the December meeting the City of Philadelphia's dynamic Managing Director, the *Hon. James S. White*. Appointed by Mayor W. Wilson Goode, Mr. White, formerly Commissioner of the Department of Licenses and Inspections, was sworn in to his new post on July 1, 1985.

A Kaleidoscopic Report

Mr. White modestly offered to share his views and perspectives "... as *our* employee . . ." and to explore current newsworthy topics and events in the City, including an update of the Osage Avenue housing rebuilding project.

As Managing Director, Mr. White has targeted four prime objectives:

1. To improve the internal structures and methods of management of the City's ten principal Operating Departments (Police, Fire, Streets, Public Property, etc.)

2. To raise the morale of the City's work force. He regrets that the majority of media publicity and considerable public opinion accentuates the negative aspects of City employees; whereas the overwhelming majority of municipal workers are dedicated professionals or technicians in their specialties, who serve honestly and with full devotion to their duties.

3. To buoy and elevate the quality of work delivery; thus saving tax dollars.

4. To cultivate and enhance public awareness of the high qualities of City employees' professionalism and intensity of their jobs in all Departments. Mr. White hopes to initiate a Recognition and Awards Program in connection with this objective.

The most recent manifestation of this last objective was the exemplary conduct of the police and auxiliary forces during the December 9, 1985 hostage situation at Archbishop Ryan High School in Northeast Philadelphia, pointed out Director White.

Our speaker reviewed the City's current and long-range budget planning processes; and he described the coordination procedures of task-force committees and sub-groups among the Operating Departments, such as L & I, Streets (particularly the Sanitation Division), Water, Health, Public Property, etc.

Crisis Management and Governmental Function Continuity

Even as critical and pervasive as were the issues of the May 13, 1985 MOVE confrontaton at Osage Avenue, the incident has had relatively little impact on governmental operations, declared Mr. White. All else cannot be cast aside, he said, when such crises arise. Government cannot "... come to a screeching halt . . ." The crisis must be confronted and addressed with positive resolution and determina-

tion, even at the risk of controversy and severe criticisms of the citizens, the press and outsiders.

The Osage Avenue Incident and Restoration

Mr. White related dramatically the brave efforts of the many individuals in the Police and Fire Departments and ancillary agencies who were intimately involved in attempting to minimize the damage and personal injury to residents, not only at the MOVE house, but also in the areas adjacent to and on the periphery of the main conflagration on Osage Avenue.

The rebuilding is progressing on schedule and in conformity with the Mayor's announced plan, reported Mr. White. Inevitably, some delays have arisen due to design changes and finishing appurtenances, caused in most part by efforts of the designers and builders to satisfy particular rebuilding needs and requests of the displaced homeowners. It had been anticipated from the very beginning of the restoration program that there would be continuing problems in this regard. Mr. White and the other City officials involved have acted forthrightly in addressing these difficulties.

To Avoid a Repetition

What does Mr. White contemplate doing to prevent this kind of catastrophe from happening again? He plans to direct disaster planning and recovery by reinforcing and improving the efficacy of the City's Emergency Operations Center — which handles weather emergencies, chemical waste hazard accidents, evacuation, riots, and the like. Director White focuses on the importance of interaction between him and the Operating Departments, and, in turn, between him and the Mayor's office in crisis management. Regular meetings, study group work sessions, and contingency plans for future potential crises, are imperative — even in the face of radical organizations such as MOVE — in order to learn more about the workings and principles of such groups. Thus, the authorities would be able to cope with possible future trouble or confrontation.

Major Projects in Process

Mr. White recited an impressive list of major construction and improvement projects presently under way or in advanced stages of planning and design. These include:

- A 650-bed correctional institution complex at 8100 State Road, in the Holmesburg Section of Northeast Philadelphia.

- Sky-boxes at Veterans' Stadium — part of the agreement between the City and the Philadelphia Eagles to keep the team in the City. Twenty-eight of the boxes were completed in September, 1985 as Phase 1 of the project. Twenty-six more are scheduled for completion in time for the 1986 football season.

- The \$318 million capital budget for F/Y 1986 (including Federal and State grants) is contemplated to be used for the improvement of public City functions such as Philadelphia International Airport, the Civic Center, City Hall, etc. Most of the industrial-commercial develop-

ment financing will be directed through the Philadelphia Industrial Development Corporation (PIDC).

- Retention and additions of retail businesses in Center City and bordering districts is essential to commercial growth; and optimum initiatives of City agencies are being directed toward accomplishment of this goal.

- Increasing emphasis on expansion and improvement of City facilities. Inevitably, these needs and priorities conflict with petitions for new buildings such as recreation centers, and police and fire stations. In-depth evaluations must be derived to determine which developments should take precedence within budgetary constraints.

- Critically needed maintenance and, where necessary, rebuilding of the city's basic infrastructure. These include: transit facilities; rebuilding and repair of bridges and roads; inspection, cleaning, repair and replacement of water and sewer pipes.

Director White intends that the priority conflicts and importance evaluations of the various agencies will be resolved through consultation among the Planning Commission, Finance Director, the Managing Director — representing the 10 principal Operating Departments — and the Mayor.

The Criminal Justice Center

One of the most controversial projects in process is the proposed Center City Criminal Justice Center on the site of the old Essex Hotel — now demolished — across from City Hall Annex. Mr. White gave an update on the status of the comprehensive legal facility, which faces formidable objections from various civic organizations and public groups, as well as hurdles in processing through use, zoning and building permit boards and other L & I Divisions. The building is planned to be a complex combining various bureaus and agencies of law enforcement, including: the Criminal Division of Common Pleas Court — Quarter Sessions; Police Department functions (booking, processing, etc.); a 440-bed prison facility; and administrative offices of the District Attorney Department. Architectural and construction plans are currently in process, to resolve the logistics problems and the various objections of the civic groups.

Question and Answer Period

Mr. White responded unwaiveringly to many pointed comments and questions from the floor, particularly regarding the Osage Avenue MOVE incident and rebuilding project. Answering a question regarding the alleged questionable qualifications of the General Contractor, Director White said that, although the commissioning of a minority builder for the job was a prime consideration in view of the circumstances, the selection of the Contractor was conducted in a legitimate, prudent process. The winning builder's bid was bona fide, he was low bidder, and he is a qualified professional in his field.

(Continued on page 8)

ASCE DUES BILL AND TECHNICAL GROUP DETAILS

Section members will notice in the 1986 dues bill from National ASCE Headquarters, that the PHILADELPHIA (SECTION) DUES is itemized as \$12.00. This amount includes assessment for membership in one Phila. Section Technical Group of your choice. *If you choose to be a member of more than one Group, please add \$1.00 for each Group.*

Also, because National's bill did not list the Technical Groups to which your \$1.00 payments were to be applied, *you are requested to get in touch with the Chairmen of the Technical Groups of your preference*, so that their membership lists can be classified.

The appropriate individuals to contact are the following:

Liaison

Norman G. Weintraub
Phila. Water Dept.
29th & Cambria Streets
Philadelphia, PA 19121
(215) 686-1635 (215) 228-7078

Associate Member Forum

Anthony Micciolo, Chairman
1141 Dyre Street
Philadelphia, PA 19124
(215) 744-8767

Construction

Fredric L. Plotnick, Chairman
806 Hillton Lane
Elkins Park, PA 19117
(215) 487-1443

Engineering Management

Susan Lior, Chairlady
Peer Systems, Inc.
112 South 12th Street
Philadelphia, PA 19107
(215) 925-3196

Gotechnical

Moustafa A. Gouda, Chairman
Lippincott Engineering Associates
501 Burlington Avenue
Delanco, New Jersey 08075
(609) 461-1239

Structural

Stephen H. Golden, Chairman
Pennonni Associates, Inc.
1911 Arch Street
Philadelphia, PA 19103
(215) 561-0460

Transportation and Urban Development

Dan Winokur, Chairman
Winokur Associates
399 Market Street
Philadelphia, PA 19106
(215) 627-2440

Water and Environmental Engineering

John E. Tunnell, Chairman
Chief, Coastal and Special Studies
Section; U.S. Army Corps of Engineers,
Phila. District
U.S. Custom House
2nd and Chestnut Streets
Philadelphia, PA 19106
(215) 597-4714

DECEMBER MEETING

(Continued from page 7)

As he stated earlier in his address, Mr. White emphasized that it is almost impossible to satisfy completely all of the requests and criticisms of the residents whose homes and possessions were destroyed. He was assisted in explaining the quality of construction, owner-induced divergences of design; and on-site field changes, time schedules and the like — by representatives of the Consulting firm commissioned by the City to oversee the entire project, who were in the audience at the meeting. Mr. White assured his listeners that the project is encompassed by professional technical supervision of City officials, as well as architectural and structural consultants and a Project Manager. He does not deny, however, that the difficulties with some homeowners will probably persist.

Mr. White was questioned on many other issues of timely and particular interest to his professional audience. The constraints of time unfortunately limited his opportunity to continue the discussion.

President Ira N. Pierce extended the commendation of the Section to our distinguished speaker for his outstanding presentation.

☆

ACI ANNOUNCES STUDENT COMPETITION

The Delaware Valley Chapter of the American Concrete Institute will sponsor a Student Competition to design, construct and test a concrete beam. The testing is slated for *March 15, 1986* at Temple University. Cash prizes will be awarded and participants will be recognized at the ACI's annual Student Night to be held the week of *March 24, 1986*.

For information, contact *Mike Boyle*, c/o Valley Forge Laboratories, Inc., Six Berkley Road, Devon, PA 19333, phone: (215) 688-8517; or *Tom Normik*, c/o Geddes, Brecher, Qualls, Cunningham, 2401 Locust St., Phila., PA 19103, phone: (215) 561-2401.

It's not too early to start work on this interesting project. Get your applications in as soon as possible, students!

NEWS OF MEMBERS

DIED: DR. LEROY A. BROTHERS, Retired Dean, College of Engineering, Drexel University — suddenly, November 20, 1985, at his apartment residence in Carol Woods, Chapel Hill, NC.

A full profile of Professor Brothers will appear in the February, 1986 issue of THE NEWS.

Salvatorelli Retires

Joseph J. Salvatorelli, AAEE, PE, LS, long-time Active Member of the Philadelphia Section, ASCE, announces his retirement from the firm of Taylor Wiseman and Taylor, Consulting Engineers, Mount Laurel, NJ, where he has served for more than 15 years as Vice President and partner. Prior to joining TWT he was with the Philadelphia firm of Albright and Friel, Consulting Engineers in the same capacities for 25 years, specializing in all disciplines relating to environmental engineering.

Mr. Salvatorelli will continue to engage in Consulting Engineering at his private office at 8014 Lagoon Drive, Margate, NJ 08402 — Phone: 609-822-7320. He will offer his services to engineering firms, and private and municipal clients in review of projects, Forensic Engineering, Facilities Operation, Engineering In Management, Construction, Environmental and other Special Engineering Functions.

☆

J.S. Muller Engineering, Construction Cost Consultants — Managers, announces the opening of new offices at 350 South Main Street, Suite 109, Doylestown, PA 18901 — Phone 215-348-4426. The firm specializes in Feasibility Studies, Quantity Surveys, Conceptual Engineering, Claims Cost Verification, Damage Cost Evaluation, Estimating New Construction.

IMPORTANT NOTE RE RECEIVING THE NEWS

Any Philadelphia Section members (yourself or others you know) who have not been receiving THE NEWS because you or they have moved, are urged to get in touch with National ASCE Headquarters in New York — Phone: **800-548-ASCE** and let them know your new address. You may also contact Philadelphia Section Secretary **Edward J. Lutz** (See page 2. for address and phone).

**Please mail in your
ASCE dues promptly**