

the news



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. 56 - 7

OUR 71st YEAR

April - May, 1984

APRIL JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers
Philadelphia Post, Society of American Military Engineers

TUESDAY, APRIL 10, 1984

Engineers' Club, 1317 Spruce Street, Philadelphia

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

SUBJECT:

CONRAIL Coal Handling Operations from the Mines to the Ships

SPEAKERS:

Jeff May, Area Engineer and

Tom Schoonmaker, Director of Coal and Ore Sales, Consolidated Rail Corporation (CONRAIL).

The Port of Philadelphia, known for its bulk cargo traffic, has shown renewed growth in recent months. The presentation will discuss CONRAIL's coal business, a key aspect of this growth. *Jeff May* will talk on the \$41,000,000 rehabilitation of Pier 124, a project which included a new ship loader, rehabilitated pier structure, new dock conveyors and several improvements to the rail yard. *Tom Schoonmaker* will introduce us to the importance of coal to CONRAIL, the various market segments, differing sulfur contents from mines, and CONRAIL's transportation infrastructure. These two well qualified speakers will provide an excellent presentation for our combined meeting with the Society of American Military Engineers.

LIFE MEMBERSHIPS AWARDED

As reviewed in Staff Writer Greg Neiderer's writeup of the Section's March 13, 1984 meeting (see elsewhere in this issue), a Special Event of that meeting was the awarding of Certificates of Life Membership in ASCE to Philadelphia Section members. Presentations were made to eleven members, nine of whom were present at the meeting and received their Certificates in person. The nine present were:

John J. Brennan, Joseph H. D'Amelio, Paul M. Edwards, Kazimierz J. Jaworski, Janos Liptak, Frank G. Rennis,

Bruno J. Talvacchia, Charles E. Winsch, I. Tan Yu.

Harold Lorsch was unable to attend, and Secretary Al Tantala has mailed his Certificate to him.

William E. Yoder is a member of the Reading Branch. His Certificate was presented to him in a ceremony at the Reading Branch's March meeting by President Carl A. Vath.

The Philadelphia Section presentations of Life Membership Certificates were made by Past President and Chairman of Publications, *Std Robin*.

TECHNICAL GROUP ACTIVITIES

Engineering Management

April Meeting

Date: *Wednesday, April 18, 1984*

Engineers' Club—7:00 P.M.

Cocktails—5:30 P.M.

Dinner—6:00 P.M.

To call for reservations contact *Chuck Juliana* at (215) 854-0887.

Subject: *Accelerating Your Cycle Of Self Development*

Speaker: *Joseph McCoy*, Leadership Institute.

Program Host: *Susan K. Lior*, Chairperson, Engineering Management Group.

The close of the first full year for the Engineering Management Technical Group is quickly approaching. This year has been the group's first effort in presenting a broad range of meetings to the ASCE's membership. Some of the topics presented have ranged from international marketing to the use of CPM's as a management tool. All these programs have, for the most part, been a great success. In an attempt to keep the membership abreast of the events sponsored by the Engineering Management Group, this is to announce that its next meeting will be held *April 18, 1984*.

This meeting is entitled "Accelerating Your Cycle of Self Development." The speaker will be Mr. Joseph McCoy of the Leadership Institute. The focus of this meeting is to enhance a skill which traditionally has not been the strength of many engineers, but is vital in today's ever changing industry. It is the human resource of communication.

Whether you are a project manager for a major construction firm, a design engineer for the Army Corps of Engineers, or a consultant working out of

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

ASCE Member—\$9.00 Non-Member—\$10.00 Students—\$4.00

STUDENTS — Note that your Dinner Charge is LESS than one-half price. Plan to attend for Dinner or Meeting after Dinner.

(continued on page 3)

!!HERE IT COMES!!

The Fabulous Annual Spring Social

SATURDAY, MAY 5, 1984

ENGINEERS' CLUB

1317 Spruce Street, Philadelphia

For your listening and dancing pleasure — the music of
THE KORDS

COCKTAILS: 6:00 to 7:00 P.M. (Cash Bar)

Hors D'oeuvres

DINNER: FILET MIGNON 7:00 P.M.

COME JOIN YOUR FRIENDS FOR FUN

Call or Send for your Tickets Today . . . Guests Welcome

— \$19.00 per person —

Please make checks payable to Women's Auxiliary, ASCE and send for tickets to:

MRS. WALLACE A. (Joan) RUTECKI

7112 Pennsylvania Avenue, Bywood, Upper Darby, PA 19082

(215) 352-3746

THE PRESIDENT'S MESSAGE

I'd like to take this opportunity at the end of my term to thank the Section Officers and Members for the support and help that I have received this past year. I was told before assuming the post that it could almost be considered a full-time job, and that assessment was not too far off the mark. Without the help and advice that has been given to me, many of the past year's accomplishments would not have come about. Probably the most encouraging development of the year was the institution of the Infrastructure Committee, followed by rejuvenation of some of the Technical Groups. I think these two areas are in capable hands and should continue their growth in the future.

Once again, my thanks to all of you who have helped during the past year (particularly my wife, Maureen, who has had to put up with me, as well as with two small boys) and best wishes to John Durrant on his new administration.

Sincerely,

BILL

William M. Malarkey,
President, Philadelphia
Section, ASCE

ENJOY YOUR SUMMER!!

On behalf of the Officers and Board of Directors of the Philadelphia Section, ASCE, the staff of THE NEWS extends to all the Members and their families best wishes for healthy and pleasant Spring, Summer and Fall seasons.

We look forward to seeing you all at the first meeting of the Section's 1984-1985 season at the Engineers' Club on **Tuesday, October 9, 1984**. Watch for the October, 1984 issue of THE NEWS.

EDITORIAL

A PRESIDENT'S TERM

When *William M. Malarkey* assumed the office of President of the Philadelphia Section, ASCE in May 1983, the new word in everyone's vocabulary was "infrastructure". To address this problem that plagues the entire country, he proposed a three fold plan of educating

people. The plan stressed three major factors in design; first, even though nothing outlives the test of time we should design things to last as long as possible; second, attempts at rehabilitation and repair; lastly, if necessary, replacement. After a good deal of discussion and suggestions on implementing the plan, a Committee was created to deal specifically with the problem.

As a result, the Main Section meetings reflected the theme of educating people about the infrastructure. The 1983-84 season also saw an increase in Main Section Attendance and fulfillment of another of President Malarkey's goals, rejuvenation in some of the Technical Groups.

The Philadelphia Section is proud and appreciative of all the accomplishments of Bill Malarkey during his Presidency. We look forward to his continuing presence, so that we will benefit from his abilities for many years to come. Thank you Mr. President, for a job well done!

We now welcome incoming President *John Durrant*. He will have competent, willing assistance from other officers, Section affiliates, and the encouragement of the entire Section membership to help him in his difficult tasks. Welcome aboard, John!

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS OFFICERS 1983 - 1984

PRESIDENT

William M. Malarkey

VICE PRESIDENTS

John E. Durrant

Ira N. Pierce

SECRETARY

Albert M. Tantala

ASSISTANT SECRETARY

Edward Lutz

TREASURER

Charles J. Denny

MEMBERSHIP SECRETARY

Thomas J. Lauer

DIRECTORS

Klaus K. Fuelleborn

David A. Novick

Dennis J. Mohan

Norman G. Weintraub

Charlene O'Connor

Richard E. Woodring

Joel L. Caves
(Reading Branch)

PAST PRESIDENTS

Joseph R. Synchronick

Frederic Roll

Bernard M. McNamee

Secretary — Albert M. Tantala

Tantala Associates

4902 Frankford Avenue

Philadelphia, PA 19124

(215) 289-4600

PUBLICATIONS COMMITTEE

Sidney Robin

Chairman and Editor of THE NEWS

Joseph R. Synchronick

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
OCTOBER, 1984 ISSUE
AUGUST, 10, 1984**

TECHNICAL GROUP ACTIVITIES

(continued from page 1)

your converted garage, communication is the vital link between you, your fellow professionals, and your clients. All too often the strength of this link is weakened. This may be due to its lack of practice or due to the fact that you never received the correct training in the first place. What ever the case, to be successful in today's industry it is essential to develop your communication skills to a level which will maximize its effectiveness. In other words, forming a well stated message that will get your intending meaning across to the audience, so more will understand it. Mr. McCoy will present techniques on how this is done. His mini workshop is designed to develop both written and oral communications skills for supervisory and management personnel and has been tested at several local colleges and businesses.

So come on out to this meeting and learn how it is done. Learn how to communicate or sharpen this skill to a fine edge

May Meeting

Because this is the last issue of THE NEWS for this year, the Engineering Management Technical Group would like to take this opportunity to announce that it will be sponsoring its last meeting of this year on *May 16, 1984*. The title of this meeting is on "Writing Proposals for Engineering Services". For more information come to the April, 1984 meeting or contact:

Susan Lior, Chairperson
Engineering Management Technical Group
c/o T. J. Trauner Associates Inc.
1339 Chestnut Street,
Philadelphia, PA 19107
(215) 854-0887

*

Geotechnical**April Meeting**

Date: *Tuesday, April 17, 1984*
Engineers' Club—7:00 P.M.

Subject: *Vertical Drains*

Speaker: *Mr. M. James Warren*,
President, Drainage & Ground Improvement, Inc., Pittsburgh, Pa.,
(Formerly—Chief Operating Officer,
Vibroflotation Foundation Co.)

Program Host: *Moustafa A. Gouda, P.E.*
Chairman, Geotechnical Group
Refreshments will be served

Developments, design and use of prefabricated drains will be discussed at this meeting.

Mr. Warren received his BSCE from

Bucknell University in 1965 and his MSCE from the University of Missouri in 1967. He is a member of the American Society of Civil Engineers.

Presently, Mr. Warren is the President of Drainage & Ground Improvement, Inc., of Pittsburgh, Pennsylvania. For the past 17 years, as the Executive Vice President & Chief Operating Officer for Vibroflotation Foundation Company, Mr. Warren has been involved with the design and development of vertical drains. He initiated the "Dutch Jet Bailer" method of non-displacement vertical sand drains in the United States and played a prominent role in the introduction of prefabricated drains to the United States.

For full information and reservations, please call: *Moustafa A. Gouda*, (609) 461-1239

*

May Meeting

This is the final meeting of the Geotechnical Group for the 1983-1984 season. Please join us for dinner.

Date: *Tuesday, May 22, 1984*
Engineers' Club
Dinner—6:00 P.M.
Meeting—7:15 P.M.

Subject: *Use of Geotextiles in Soil Stabilization*

Speaker: *Dr. Robert Koerner*
Professor of Civil Engineering
Drexel University

In recent years, the geotechnical construction industry has seen the birth and growth of synthetic fabric use. The lecture will address geotextile fabrics, in general, with emphasis placed upon the use of fabrics in soil stabilization and ground improvement.

Dr. Koerner received his BSCE and MSCE from Drexel in 1956 and 1963, and his PhD from Duke University in 1968. Dr. Koerner is the author of over 100 technical papers and his book, "Construction & Geotechnical Engineering Using Synthetic Fabrics", is one of few references on the subject.

Reservations: *Moustafa A. Gouda*
(609) 461-1239

*

Structural**April Meeting**

Date: *Thursday, April 19, 1984*
Phila. Marriott Hotel, City Line Ave.
and Monument Road, Philadelphia
Subject: *The ACI/PCA (Concrete) Building Code Conference and Handbook Seminar.*

See detailed article elsewhere in this issue of THE NEWS.

Transportation and Urban Development April Meeting

Date: *Thursday, April 12, 1984*
Engineers' Club—7:30 P.M.
Cocktails—6:00 P.M.
Dinner—6:30 P.M.

Subject: *High Speed Rail Passenger Service Between Pittsburgh and Philadelphia*

Speakers: *Rep. Richard Geist*, Chairman of the Pennsylvania High Speed Intercity Rail Passenger Commission.
Eric Bugaile, Assistant Director of the Pennsylvania High Speed Intercity Rail Passenger Commission.
Kenneth Uhlman, Project chairman and Consultant from Parsons, Brinkerhoff, Quade and Douglas, Inc.

Program Host: *Janusz Supernak*, Chairman, T & UD Group.

For reservations please call Barbara Kelley at Dr. Supernak's office, Department of Civil Engineering, Drexel University (215) 895-2341.

*

May Meeting

A field trip is planned. Announcement will be sent by mail. Please inquire about details by calling Dr. Supernak at (215) 895-2340.

*

Water & Environmental Engineering**April Luncheon Meeting**

Please note change of program: Previously we had announced a visit to the Southwest Water Pollution Control Plant for April 18, 1984. However, we are told that the maintenance work presently going on at the plant is not expected to be completed by April 18th and hence the plant would not be available for our visit. We regret any inconvenience this may cause our members. An excellent alternative program is offered as given below:

Date: *Wednesday, April 18, 1984*
Engineers' Club
Luncheon: 12:30 P.M.

Cost: About \$7.00 per person, payable at door

Lecture: 1:15 P.M.

Subject: *Hydraulic and Environmental Aspects of Seabrook Circulating Water System Design*

Speaker: *Allen J. Hulshizer*,
Consulting Engineer, United Engineers & Constructors, Inc., Philadelphia, Pa.

Program Host: *H. Y. Rajagopal ("Raj")*,
Chairman, W&EE Group

Reservations: Call Raj, (215) 566-7820

The circulating (cooling) water system of the Seabrook Station consists of

(continued on page 4)

TECHNICAL GROUP ACTIVITIES

(continued from page 3)

an impressive system of offshore and onshore hydraulic structures. Ocean water is drawn at a rate of 824,000 gpm through three 30 ft. diameter intake structures. The flow then passes down through vertical shafts into a 19 ft. diameter intake tunnel that is nearly 3 miles long and 260 ft. below sea level. At the plant end, water rises into a transition structure and into the pump house from where it is circulated through the plant's condenser cooling system. The heated water is then conveyed via similar shafts and tunnel and discharged into the Atlantic Ocean through a carefully designed diffuser nozzle system. The design and construction of the entire system offered many technical challenges which have been successfully met. For this work, United Engineers & Constructors, Inc., was given the Engineering Achievement of 1981 awarded by the Delaware Valley Engineering Association in connection with the National Engineers Week.

Mr. Allen Hulshizer worked on the Seabrook project from 1973 to 1982 as Supervising Structural Engineer and has a thorough knowledge of the design and construction of the system. He received his B.S. and M.S. Degrees in Engineering from Drexel University in 1961 and 1963 respectively. He started working for UE&C in 1961 and was for 6 years in the Industrial Division before being transferred to the Power Division. From 1982 on, he has been working as a Consulting Engineer on a number of projects including the development of a standardized nuclear power plant design for the Italian Government.

Mr. Hulshizer is an excellent photographer and has documented various stages of construction of the Seabrook circulating water system. He plans to show a number of these slides to illustrate his talk. He has published a number of papers on design and construction topics. He is a registered P.E. in eight states and is a fellow of the ASCE.

This program should be of a great deal of interest to the Construction, Structural and Engineering Management Groups also. Members of these groups are most cordially welcome to the meeting.

SEE
YOU
AT
THE
MEETING and SOCIAL

Water & Environmental Engineering Group

Report of Activities for 1983-1984

With the April 18th meeting, we will be completing our schedule of meetings for 1983-84. As Chairman, I would like to present a report of our activities.

The Officers of the Group were:

Chairman—*H. Y. Rajagopal*

Consulting Engineer, Power Division
United Engineers & Constructors, Inc.
Philadelphia, Pa.

Co-Vice Chairmen—*David B. Campbell*
Senior Project Engineer, O'Brien and
Gere Engineers, Inc.
Blue Bell, Pa.

J. Richard Weggel

Associate Professor, Department of
Civil Engineering, Drexel University
Philadelphia, Pa.

Secretary-Treasurer—*John E. Tunnell*

Chief, Coastal and Special Studies
Section, U. S. Army Corps of Engi-
neers, Philadelphia District
Philadelphia, Pa.

First of all, the Group, formed out of the erstwhile Hydraulic and Sanitary Engineering Group, adopted a new name (Water & Environmental Engineering Group) to reflect the broader horizons of its thinking and activity. Its wider scope offered an opportunity to many engineers who had water-related interests but did not have a specific Technical Group of their own, to participate more fully in the technical group meetings of the Section. It also provides an opportunity to offer a wider variety in lecture topics at our meetings. In all, six meetings were scheduled for the period October 1983 to April 1984, in addition to the Section meeting of January, 1984. We started off with an interesting field visit to Nockamixon Dam in Upper Bucks County. Mr. George Elias of O'Brien and Gere Engineers, who was in charge of the design of the dam, conducted us to various parts of the facility and talked about their hydraulic design. The November and December meetings were luncheon meetings at the Engineers' Club. The November meeting was addressed by Dr. J. Richard Weggel of Drexel University, Co-Vice Chairman of the Group. He spoke on sedimentation in coastal navigation channels (sand bypassing), drawing upon the great amount of work he had done while at Coastal Engineering Research Center (CERC). At the December meeting, Mr. Donald E. McCandless, Jr., Agricultural Engineer, Soil Conservation Service, Chester, Pa., spoke on erosion

and sediment control in urbanizing areas (in special reference to the Delaware Valley). His talk elicited a great deal of interest as evidenced by nearly an hour long discussion that followed. The Section meeting of January 1984, focused on the Superfund and was addressed by Mr. Anthony S. Bartolomeo of EPA, Region III, a report of which has previously appeared in the Section NEWS. The February meeting was a symposium on small scale hydropower in Pennsylvania. This meeting was jointly sponsored by the Group and the Water and Environmental Engineering Graduate Program of the Department of Civil Engineering, Villanova University, and was held at the Connelly Center on the beautiful Villanova campus. The symposium featured a panel of five experts drawn from various fields related to hydropower. The lead panelist was Mr. Frank B. Pilling of the Bureau of Conservation, Economics & Energy Planning, Commonwealth of Pennsylvania Public Utility Commission. He spoke on state and federal policy issues and gave an overview of small scale hydropower in Pennsylvania and also acted as the moderator for the panel presentation. Mr. Peter McGrath, President, American Hydropower Company, Philadelphia, spoke on the financing and marketing aspects and Mr. Angelo Capuzzi of the U. S. Army Corps of Engineers, Philadelphia District, spoke on the methodology of determining the optimum installed capacity of a run-of-the-river project. Mr. Kenneth Broome, of Williams and Broome, Inc., Exton, Pa., presented a consulting engineer's view on the design of small hydropower projects in Pennsylvania and Mr. William Nowe of Allis Chalmers Corporation, Hydro-Turbine Division, York, Pa., spoke on the development of low-head turbines, their present design and future trends. Dr. Lewis J. Mathers, Professor, Civil Engineering Department, Villanova University, was one of the program hosts. The symposium was attended by more than 60 people. The presentation made by the speakers are being compiled for distribution. This should be ready in 3-4 weeks. Those who wish to get a copy, please contact me. Our March meeting focused attention on dam safety issues in Pennsylvania. The topic was ably and authoritatively presented by Mr. Joseph Ellam, Chief, Division of Dam Safety, Commonwealth of Pennsylvania, Department of Environmental Resources. Mr. Ellam's presentation was followed by a lively question and answer period. The last meeting was to be a field visit to

(continued on page 5)

Water and Environmental (continued from page 4)

the Southwest Water Pollution Control Plant but we had to postpone the visit to a future date as the plant is undergoing some maintenance work that is not expected to be completed by April 18th. We have instead, a lecture-slide exposition by *Mr. Allen Hulshizer* of United Engineers & Constructors, Inc., on the hydraulic and environmental aspects of Seabrook circulating water system design. A notice of this meeting appears elsewhere in THE NEWS.

On behalf of the Water & Environmental Engineering Group, I thank all the speakers who have given us so generously of their time and talents and made each of our meetings a success. Mr. Ellam and Mr. Hulshizer agreed to fill in the spots at short notice and I owe them a special word of thanks. Dr. Lew Mathers of Villanova University gave a big hand in arranging the hydropower meeting. I owe a debt of gratitude to him and to *Dr. Edward M. Wallo*, Chairman, CE Department, Villanova University, for co-sponsoring that meeting. Arranging a Group meeting on a campus, in collaboration with a school, was something new we tried this year and it was a welcome departure from the usual scene. It proved quite successful and well attended, although logistic problems detracted a few members.

It has been quite an active year for the Group. Our membership is increasing; attendance at luncheon meetings has been at an average of 20. Members have shown excellent response which is both gratifying and encouraging. Many members have come forward with lecture topics and volunteered to speak at the meetings and offered other help. To all these members I offer my sincere thanks.

To my colleagues, I owe a great debt of gratitude. To be sure, none of these activities would have been possible but for their help and cooperation. Dave Campbell arranged for the site visit and did a tremendous job in arranging and hosting the hydropower seminar. Rich Weggel not only gave an excellent talk himself but hosted the dam safety meeting. John Tunnell volunteered to help us out as Secretary-Treasurer, and gave much needed support. He and Rich Weggel are updating the mailing list. They should be contacted for inclusions or address changes, if any. It has been a real pleasure working with these colleagues and I thank them all.

I also thank the members of the Board of Directors, particularly *Bill Malarkey*,

MARCH MEETING

by *Greg Neiderer*, Staff Writer

The Schuylkill Expressway Rehabilitation

The well-attended Phila. Section March 13, 1984 meeting formally opened when Section President *William Malarkey* introduced Past President *Sidney Robin*, Editor of THE NEWS and ASCE Life Member.

Life Memberships Presented

Mr. Robin explained the prerequisites of ASCE Life Membership and then proudly announced the eleven new Life Members of the Philadelphia Section. Sid then presented each individual with a Life Membership certificate after briefly sketching that member's professional accomplishments. (See separate article in this issue)

Schuylkill Expressway Rehabilitation

After the Life Membership presentation was completed, Program Host *Janusz Supernak*, Chairman of the Transportation and Urban Development Group, introduced the two PennDOT engineers responsible for the ambitious Schuylkill Expressway rehabilitation — *Robert Rowland* and *Jeffrey Greene*. Mr. Rowland who is the District Engineer of PennDOT for the Metropolitan Philadelphia area, led the slide show presentation of the planned renovation. Pennsylvania Secretary of Transportation *Thomas Larson* has characterized the Schuylkill as an Expressway that is "Too important to fix and too important not to fix." Mr. Rowland highlighted the truth of Secretary Larson's statement with the facts that approximately 750,000 people in 500,000 cars drive the Expressway each workday. During rush hour alone over 33,000 trips occur, and on an average day roughly 39,000 trucks also travel the highway. This tremendous volume of

President, *Ira Pierce*, Vice-President, and *Sid Robin*, Chairman of the Publications Committee for all the help and cooperation they have given me. Thanks are also due to *Mr. deKovacs* of the Engineers' Club for his efficient help and courtesy in setting up the meetings, and to *Debbie DeSanto* and *Carol Smith* of United Engineers & Constructors, Inc., for their most valuable secretarial help.

With continued cooperation from our members, we can certainly look forward to another year of professionally useful activity.

Wish you all a nice spring and a fun-filled summer.

H. Y. Rajagopal

traffic, deicing salts, and old age, (the Expressway is 25 to 35 years old) have contributed to the worn wheel ruts, potholes and heavily cracked pavement found over much of the highway.

The Planning Stage

In 1982 the Department of Transportation organized an Expressway renovation taskforce with *Jeffrey Greene* as Project Coordinator. PennDOT, along with its consultant, *Orth Rodgers*, first handed out a destination questionnaire during two subsequent morning rush hours. And they received an astonishing 38% of those questionnaires back from over 500 different zip code locations. From these questionnaires they determined that 60% of the drivers said they would use side streets during the highway renovation, while 10% said they would use mass transit, and 1½% even said they would stay home. More importantly, the questionnaires revealed the preferred alternate routes so the roads could be upgraded to meet the anticipated increased use.

PennDOT also used the questionnaires to influence the selection of the three main goals considered when scheduling work on the Schuylkill. These goals are: to keep a minimum of one lane open in each direction; to keep the truck traffic on the Expressway; and to open all lanes during the winter months.

The Construction Phase

To meet these goals while effectively rehabilitating the Expressway, it was decided to carry out the work in the construction seasons of 1985, 1986 and 1987. During the rehabilitation 38 bridges will be completely redecked, 11 other bridges will be overlaid, two interchanges (City Avenue and Routes 202-363) will be significantly upgraded, and one interchange (Vine Street) will be completely redone, in addition to the widening of shoulders and turnpike-type pavement rework over the entire Expressway. The total cost of this renovation is expected to total \$140 million, with over \$12 million of that money earmarked for improvements of side streets to ease the construction delays.

Question and Answers

During the question and answer session after the presentation Messrs. Rowland and Greene responded to the many of the audiences comments and questions about the renovation with skill and forthrightness.

When asked why the Schuylkill was allowed to deteriorate to its present poor condition, Mr. Rowland replied that

(continued on page 6)

TECHNICAL GROUP DETAILS

Section members interested in participating in the activities of the various Technical Groups should direct their inquiries to the following key individuals:

Liaison

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

Construction

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

Engineering Management

Susan Lior, Chairlady
T. J. Trauner Associates
The Widener Building
Chestnut at Juniper
Philadelphia, PA 19107
(215) 854-0887

Geotechnical

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

Structural

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

Transportation and Urban Development

Janusz Supernak, Chairman
Department of Civil Engineering
Drexel University
Philadelphia, PA 19104
(215) 895-2340

Water and Environmental Eng. Group

H. Y. Rajagopal, ("Raj"), Chairman
United Engineers & Constructors, Inc.
30 South 17th Street
Philadelphia, PA
(215) 422-3032

ACI/PCA (CONCRETE) BUILDING CODE CONFERENCE

On April 19, 1984, The American Concrete Institute (ACI) and the Portland Cement Association (PCA) will bring their ACI 318-83 Building Code and PCA Design Handbook Seminar to the Philadelphia area. The all-day seminar will be held at the Philadelphia Marriott Hotel, City Line Avenue and Monument Road, Philadelphia. The new Concrete Code, ACI 318-83 has already been published and is currently in force; it must be used for all concrete designs. The Philadelphia Section, ASCE is a co-spon-

MARCH MEETING

(continued from page 5)

lack of funds crippled earlier attempts at rehabilitation. But the present sound funding basis of the state and the recent Legislative change which allows Federal funding to contribute 90% of interstate rehabilitation costs have removed that restraint.

Mr. Greene answered the question of "will work continue around the clock?" He said the contractor has that decision, not PennDOT. But for the first time in Pennsylvania the state highway contract will include both a penalty and a bonus clause, so he would not be surprised if long hours are common.

"Why are additional lanes not being added to the Schuylkill during this renovation?" was the next question. Mr. Rowland explained that because of the narrow right-of-way, additional land would have to be added to the existing right-of-way. To acquire this new land both environmental impact statements and negotiations with landowners would be required. These procedures are costly and extremely time-consuming. Therefore PennDOT felt that it was best to fix what presently exists rather than wait for years to complete the legal and regulatory delays the new lanes would require.

After the question and answer session, the meeting was adjourned by Section President Malarkey, with expressions of gratitude and congratulations to our speakers for their outstanding presentations.

sor of the April 19. Seminar although it is not listed as such in the enclosed brochure. ASCE Members are entitled to attend the Seminar at the Member rate of \$150 instead of \$165, the non-member rate. When mailing in the registration form, cross out *ACI Member No.* and write in *ASCE Section Member* along with your ASCE Membership Number. To eliminate any possible question, please enclose a photocopy of your 1984 ASCE Invoice or your Membership Card. Mailing your registration form to arrive at ACI Headquarters prior to April 12, 1984, will entitle you to an additional \$10 discount.

Included in the seminar fee are the seminar notes, the ACI 318-83 Code and Commentary, the PCA *Notes on ACI 318-83* and a new PCA Publication, *Simplified Design of Concrete Buildings of Moderate Size and Height*. The value of the four publications is over \$64. Lunch is also included. Please refer to the enclosed ACI announcement for additional details.

1984 CONCRETE CANOE RACE

The 1984 Annual Philadelphia Section sponsored Concrete Canoe Race will be held on *Saturday, April 28, 1984* at 9:00 A.M. on the Schuylkill River shell course (between the Strawberry Mansion Bridge and Columbia Railroad Bridge). For full information please contact *Bob Rotermund* or *Wayne Kudenchak* at (215) 365-5166.

Three Day Short Course

Designing with
Geotextiles, Geogrids and
Geomembranes

September 10, 11 and 12, 1984

by *Robert M. Koerner*

Prof. of Civil Engineering,

Drexel University

and *J. Richard Bell*

Prof. of Geotechnical Engineering

Oregon State University

will be offered at

DREXEL UNIVERSITY

For additional information contact:

Bob or Paula Koerner

(215) 543-3213

WOMEN'S AUXILIARY

April Meeting

The April Luncheon-Meeting will be held at the Engineers' Club on *Wednesday, April 18, 1984, 12:00 noon*. *Paul Roller*, proprietor of Roller's Restaurant in Chestnut Hill, Philadelphia—and son of Charles and Claire Roller—will speak on the tempting subject of: "*The Culinary Art of Hors D'oeuvres*." (Charlie Roller is a Past Director of the Section and has been a dedicated Active Member for many years. Claire Roller is a Charter Member of the Women's Auxiliary and is currently Corresponding Secretary.)

May Meeting at Whitemarsh

The final Auxiliary function of the 1983-1984 season is the popular Luncheon-Meeting at the *Whitemarsh Country Club, Lafayette Hill, Pa.*, on *Wednesday, May 16, 1984, 12:00 noon*. New officers for 1984-1985 will be installed. The principal guest speaker is *Mary (Mrs. Robert) Wooler*.

The intriguing title of Mrs. Wooler's presentation is: "The Egg and I". This promises to be a very interesting program.

Wives of Section members are cordially invited to join the Women's Auxiliary, to attend all its meetings and functions and to bring guests. For full information about membership application please call Membership Committee Chairperson *Marie (Mrs. Kenneth J.) Zitomer*, (215) 548-5324.