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Vol. 66-3

Our 80th Year

December, 1993

DECEMBER TOUR — LUNCHEON MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, DECEMBER 7, 1993

 $\it SUBJECT:$ TOUR OF THE RESTORED READING TERMINAL TRAIN SHED, PENNSYLVANIA CONVENTION CENTER. Luncheon in Chinatown.

HOST: HARRY PERKS, Pennsylvania Convention Center Authority

On December 7, 1993, the Phila. Section will conduct a daytime tour of the recently renovated Reading Terminal Train Shed. The Shed was constructed one hundred years ago and served as the Philadelphia terminal for the trains of the Reading Railroad from both close-in suburban areas and many towns throughout Eastern Pennsylvania. In 1984, with the opening of the Center City Commuter Rail Connection, all rail service was diverted from the Terminal. In an innovative reuse of the terminal, the new Pennsylvania Convention Center incorporated the Train Shed into the Center complex and rehabilitated it extensively. It is expected to open for public use in early 1994.

The tour will begin at 11:00 AM. Lunch will be offered at the Joy Tsin Lau Restaurant, 1026 Race Street, at approximately 1:00 PM. Lunch will be a "sit-down buffet feast" – come hungry!

COST WILL BE:

Tour only \$5.00 Tour and Lunch \$10.00.

Due to the already low price, there will be no student discount for this event.

The tour is limited to sixty (60) attendees. If interested, please send your reservation to the post office box. Reservations will be honored on a first come, first served basis.

Attendees will be notified of the meeting place. Hard hats will be required (if you do not have one, one will be loaned to you for the tour).

RESERVATIONS ARE REQUIRED. Please send your check for the number of attendees @ \$10.00 (tour and lunch), or \$5.00 (tour only), payable to Phila. Section, ASCE, P.O. Box 58186, Phila., PA 19102-8186; or call the Electronic Message Center, (215) 687-7741 (open 24 hours/day). Deadline for reservations is Friday, December 3, 1993.

EMPLOYMENT CONDITIONS SURVEY

The Philadelphia Section, ASCE is seeking a Chairman and assistants for its Committee on Employment Conditions (Salary and Benefits). Under the expert guidance and authorship of its late Chairman, Norman G. Weintraub (Section Past President 1987-1988), the Committee conducted bi-annual Salary and Benefits Surveys for

many years. The questions and summation of replies have always been published in THE NEWS.

Section members interested in pursuing this rewarding program are asked to contact Section President **Bob Wright** or Secretary **George Stanley** (see masthead, column 3, page 2 for addresses and phone numbers).

Greetings of the Season

The Editor and Staff of THE NEWS, on behalf of the Officers and Board of Directors of the Philadelphia Section, ASCE, extend to the Members and their families Heartiest Wishes for a Joyous Holiday Season, and a Healthy, Prosperous and Fulfilling New Year.

TECHNICAL GROUP ACTIVITIES

Geotechnical and Environmental / Water Resources Groups

(Combined Program for 1993-1994)

December Meeting

Date: Tuesday, December 14, 1993, 7:00 pm Location: Hill Seminar Room, LeBow Engineering Center, Drexel University, 31st & Market Sts., Philadelphia, PA

SPEAKER: Craig Calabria, Geosystems Consultants

SUBJECT: Consolidation of Organic Materials

Analysis of the deformation of organic soils, and by extension, other organic masses such as sludges, requires special analysis. This presentation covers the geomorphology of organic deposits and appropriate testing methods. The presentation will include presentation of data sets using traditional and newly modified methods and the engineering implications from several projects.

Upcoming Meetings

January 18, 1994

Arthur Raymond, AJR Stormwater Discharge Permitting for Industrial Facilities

February 15, 1994

Rick Karr,

Landfill Deformation/Decomposition

March, 1994

To Be Announced

April 19, 1994

Marlene Troy, GES
Insitu Biodegradation of Hydrocarbons

For further information, please contact: **Dr. J.P. Martin**, Chairman, Geotechnical Group, Dept. of Civil & Arch Eng., Drexel University, Phila., PA 19104, (215) 895-2363 or **Mr. Raymond Lees**, Chairman, Environmental/Water Resources Group, Groundwater Technology, Inc., 223 Wilmington-West Chester Pike, Chadds Ford, PA 19317, (215) 558-1730.

(Continued on Page 2)

THE PRESIDENT'S MESSAGE



Here it is, December already. Our Section program for the year is just about set and everything seems to be rolling along fine. It's hard to believe my term is half over. I'm just starting to enjoy all the perks of being President (whatever they happen to be)!

The trip to the National Convention in Dallas was very rewarding. I learned a few things about being President. I also intend to bring a few new thoughts to our Board for consideration to help the Section work a little better. Stay tuned for developments.

The Convention was well attended and it offered many interesting presentations and topics of discussion. The kickoff plenary ses-

sion was a "sneak preview" of one of our upcoming meetings — Gene Fasullo spoke on the response to the bombing of the World Trade Center (he'll do it again for us in April), and it was very interesting. The Council of Presidents was very informative and productive, and it planted a number of "seeds" which I intend to pursue with our Board. A number of locals were there, including Section past Presidents Chuck Pennoni (also a Past National President), Moustafa Gouda, John Durrant and Joe Syrnick. If you were looking for us the last week of October, we have excuses!

Please don't forget to send in your dues, if you haven't already done so. You should also keep in mind that your local Section dues is just as important. In an effort to keep costs down we have been forced to pare our mailing list. Thus if you don't pay Section dues, you won't be receiving THE NEWS on a regular basis. We, as a Section, have a relatively high percentage of members who pay Section dues, and we would like to believe this represents the commitment of our membership to the Section. Thanks to all of you who continue to support us through payment of your local dues.

This is the last message you'll get from me this year. On behalf of the Section, I hope 1993 was a good year and I wish you a good one for next year. Happy holidays to all. I hope we can continue our successes into 1994 and I trust we will work together to ensure this. As always, please feel free to pass along contributions, ideas, suggestions, and the like to help the Section serve you better.

Sincerely,
Bob Wright,
President, Phila. Section, ASCE

TECHNICAL GROUP ACTIVITIES

(Continued from Page 1)

Structural Group

Schedule of Upcoming Meetings

- Wind Damage and Building Code Load Requirements
- Preservation of Historic Structures
- Investigations of Timber Structures
 - Deep Foundation Remediation at the Conshohocken Marriott
- Chesapeake and Delaware Canal Cable Stayed Bridge – Tour, Joint Meeting with ACI

Dates and meeting locations will be announced in coming issues of THE NEWS. For further information, contact Richard Roberts, Chairman, Structural Group, at (215) 561-0460.

SCHNABEL SPONSORS SEMINAR

Schnabel Engineering Associates, West Chester, PA, in conjunction with ASFE: Professional Firms Practicing in the Geosciences, is sponsoring an all-day Seminar for Consulting Engineers of all disciplines on the subject: Loss Prevention and Liability, on Thursday, January 13, 1994, at the Sheraton Inn, Great Valley, Routes 202 and 30, Frazer, PA. The seminar hours are from 8:30 AM to 5:00 PM.

John P. Bachner, a nationally recognized professional liability loss prevention consultant and author, is principal speaker and Seminar

Leader. He will address the Consultants in the Delaware Valley area of the basics of loss prevention. Mr. Bachner has authored more than 25 books, manuals, and texts on professional liability loss prevention issues, in addition to magazine articles, case histories, monographs and other materials. He also is a frequent speaker on the subject.

Topics to be covered in the seminar include, among others: the cost and causes of disputes and lawsuits; the nature of our legal system; the negligence standard and duty of care; contract and warranty/guarantee issues; the fragility of professional liability insurance; and self-defense measures that participants can apply. Several workshops will also be featured.

The seminar is intended for consultants of virtually all disciplines, including project managers, project engineers, scientists, and others who have contact with clients, prepare or review contracts, develop proposals, or pursue similar endeavors.

The cost of the seminar is \$145 per person, or \$125 per person for three or more attendees of the same firm. Advance registration is required as space will be limited. For more information or reservations, contact Richard Wargo or Helen Foreman at (215) 696-6066.

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MEMBERS IN THE NEWS

WEGGEL HONORED

Dr. J. Richard Weggel, Professor of Civil Engineering at Drexel University and Past President of the Philadelphia Section, ASCE (1989-1990), is the winner of the National ASCE 1993 John G. Moffit-Frank E. Nichol Harbor and Coastal Engineering Award. The award, which is made to a member of the Society who has made significant contributions in the fields of harbor and coastal engineering, serves to recognize new ideas and concepts that can be efficiently implemental to expand the engineering or construction techniques available for coastal projects.

Dr. Weggel's contributions to the field include research on breaking waves and the development of formulas to predict wave overtopping and wave heights caused by the movement of ships. He was a major contributor to the Corps of Engineers' Shore Protection Manual.

Rich Weggel has received several awards for his coastal engineering work.

The award was presented during the recent ASCE National Convention in Dallas. The Phila. Section, ASCE extends its heartiest congratulations to Rich on his achievement of this high honor.

SPECIAL ANNOUNCEMENT FOR ASCE MEMBERS

One of the many benefits of your membership in the American Society of Civil Engineers is the GEICO Preferred Insurance program. GEICO Preferred is a specially designed program for qualified members of select organizations, including ASCE. The program offers quality service and low-cost auto and homeowners insurance underwritten by GEICO.

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NOVEMBER DINNER MEETING

November 10, 1993

Phila. Naval Base

BALTIMORE METRO TUNNELING

By Bill Richards, Associate Editor

The second dinner meeting of the year was held before an interested crowd at the Officer's Club at the Philadelphia Naval Base. The meeting was highlighted by the presence of two of the three candidates for National ASCE President-Elect, a particularly good student turnout, and an excellent technical presentation. Section President Bob Wright chaired the meeting, first reviewing some of the actions during the preceding Board of Directors meeting, then introducing the national candidates. Present were Satt Oishi from the New York Metro Section, and Charlie Partham from the Boston Section. We hope to have the third candidate, Neal Fitzsimmons from the Capital Section, at an upcoming meeting.

Drexel University Night

The meeting honored Drexel University ASCE Student Chapter and Civil and Architectural Engineering School. One of the Co-Presidents of the Drexel ASCE Student Chapter, Brian Teles, a well-spoken student engineer, explained that as a co-op school, Drexel has up to half its students on job assignments in any term, and copresidency assures that one will always be on campus. He then introduced the other officers present: Martin Kraus, Co-Presidnet; Dennise Kraus, Vice President; Kim Bradford, Secretary; and Brian Miller, Treasurer. Brian described the Drexel program this year, which has included a significant membership increase, a new improved office on campus, and the Sea Dragon II, Drexel's entry in the ASCE Concrete Canoe competition.

Speaker Introduction

Section Vice President Bill Thompson then introduced the evening's speaker, Ken Merrill of Parsons Brinkerhoff. Ken is the Construction Manager for the Joint Venture of DKP (DMJM, Kaiser and Parsons) on the northeast extension of the Baltimore Metro subway system. A native of Baltimore and a B.S. Civil Engineer from Maryland, he has worked on the construction of I-95 through

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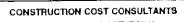
Ken's presentation provided a history of the Baltimore Metro Project, one that extends the subway to the John Hopkins Hospital. It involves two new stations, not far from the Inner Harbor area. The subway provides access to the Hospital, one of the major employers in Baltimore with limited traffic, parking and hotel facilities. A major tunneling effort through a downtown urban center, the Project overcame many obstacles as it is now nearing completion.

The first problem occurred as the chosen tunneling technique, open shield, proved inadequate once soft, wet ground was encountered, causing a large subsidence collapse at a major intersection. At about the same time, the tunnel began to fill with gasoline vapors, an occurrence expected because of anticipated areas of gasoline contamination. As the tunneling equipment was changed to that more appropriate for the soils, using breasting doors and tables, and also made explosion proof, groundwater was pumped and treated and additional tunnel ventilation was introduced. To minimize lost time during this shut-down, tunneling from the opposite end was also begun. As areas of even greater gasoline contamination were found, the project resorted to the use of compressed air within the tunnel to keep water and vapors out. In many sections of the City, this led to forcing gasoline vapors to the surface, where vapor extraction wells were used, or into buildings, where evacuation, ventilation and basement sealing were all required. Finally, an area of perchloroethylene contamination, from dry cleaning establishments, was found, where groundwater pumping and carbon absorption was required.

Despite these difficulties (an estimated 160,000 gallons of gasoline were extracted) the Project expects to be completed for a price of \$350 million, when the original budget was \$320 million. The key to budget control was the effort to keep activity ongoing, even while difficulties were being overcome.

Question and Answer Discussion

Ken finished his presentation with a lively question and answer session with the attendees, with much of the discussion centering on the techniques used for contractor conflict resolution. All those present learned form the discussion and went home having enjoyed the evening's events.



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IMPORTANT! 1993-1994 MEETING NOTICES

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

ALL DINNER MEETINGS (Except as noted for Luncheon Meetings)

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

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

Wednesday, January 26, 1994 - Holiday Inn, King of Prussia - Note Change in Date!

Joint Dinner Meeting with American Society of Highway Engineers (ASHE)

Subject and Speaker to be announced.

Wednesday, February 16, 1994 – Harbour League Club, Camden, NJ Joint Dinner Meeting with South Jersey Branch, New Jersey Section, ASCE NJ Transit South Jersey Rail Transportation Alternatives Study.

Friday, March 18, 1994 – All-Day Seminar, Drexel University Geosynthetic Research Institute Geotextile Seminar II – Transportation Applications Speaker: Dr. Robert M. Koerner, Director, GRI

Location: Stein Auditorium, Drexel University

March, 1994 – Location, date and time to be announced Financial Planning/Insurance Seminar

Saturday, March 26, 1994 – Family Night of Bowling Details to be announced.

Wednesday, April 13, 1994 (previous date in error) – Officers' Club, Philadelphia Naval Base
Joint Dinner Meeting with Society of American Military Engineers (SAME)
World Trade Center Emergency Preparedness – Response to Bombing
Speaker: Eugene Fasulla, Port Authority of New York and New Jersey

Sunday, May 15, 1994 - Officers' Club, Philadelphia Naval Base Annual Spring Dinner Dance

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APOLOGIES FOR AN OMISSION

It has been called to the Editor's attention that in the October, 1993 issue of THE NEWS, the name of a previous winner of the Daniel W. Mead Award for Younger Members from the Phila. Section, ASCE was omitted from the article on p. 3. He is James M. Anderson, who won the National Contest in 1956 while he was a student at Swarthmore College and active in the Philadelphia Section. We promise Mr. Anderson to include his name in future articles about the Mead Contest.



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