

OF GENERAL INTEREST

PROCEEDINGS OF THE SOCIETY

MINUTES OF MEETING

Boston Society of Civil Engineers

JANUARY 23, 1957.—A Joint Meeting of the Boston Society of Civil Engineers and the Structural Section, BSCE, was held this date at the United Community Services Building, 14 Somerset Street, Boston, Mass., and was called to order by President John G. W. Thomas, at 7:00 P.M.

President Thomas stated that the minutes of the previous meeting held on December 19, 1956 would be published in a forthcoming issue of the JOURNAL and that the reading of the minutes would be waived unless there was objection.

The Secretary announced the names of applicants for Membership in the BSCE, and that the following had been elected to membership on January 21, 1957.

Grade of Member—William E. Brooks, Robert A. Carleo, Alexander M. Gibson, Ross E. McKinney, Stiles F. Stevens.

Grade of Junior—Peter S. Parsonson, John D. Goodrich.

Grade of Student—Alfred W. Hoadley.

President Thomas requested the Secretary to present a recommendation of the Board of Government to the Society for action. The President stated that this matter was before the Society in accordance with the provisions of the By-Laws and notice of such action published in the ESNE JOURNAL dated January 14, 1957.

The Secretary presented the following recommendation of the Board of Government to the Society for initial action to be taken at this meeting.

MOTION "to recommend to the Society that the Board of Government be authorized to transfer an amount not to exceed \$1800 from the Principal of the Permanent Fund to the Current Fund for current expenditures".

On motion duly made and seconded it was *VOTED* "that the Board of Government be authorized to transfer an amount not to exceed \$1800 from the Principal of the Permanent Fund to the Current Fund for current expenditures".

President Thomas stated that final action on this matter would be taken at the February 20, 1957 meeting of the Society.

President Thomas announced that this was a Joint Meeting with the Structural Section and called upon Augustine L. Delaney, Chairman of that Section to conduct any necessary business at this time.

President Thomas then introduced the speakers of the evening,

Robert J. Basso, Corps of Engineers, U. S. Army; Frank L. Lincoln, Partner, Fay, Spofford & Thorndike; Joseph Peraino, Chief Engr., Merritt-Chapman & Scott.

Subject—"Renovations to South Boston Army Base".

A short discussion period followed the talk.

Fifty one members and guests attended the dinner and eighty six attended the meeting.

A rising votes of thanks was given the speakers.

The meeting adjourned at 9:00 P.M.

ROBERT W. MOIR, *Secretary*

FEBRUARY 20, 1957.—A regular meeting of the Boston Society of Civil Engineers was held this date at the United Community Services Building, 14 Somerset Street, Boston, Mass., and was called to order by President John G. W. Thomas, at 7:10 P.M.

President Thomas stated that the minutes of the previous meeting held on January 23, 1957 would be published in a forthcoming issue of the JOURNAL and that the reading of the minutes would be waived unless there was objection.

The Secretary announced the names of applicants for Membership in the BSCE, and that the following had been elected to membership on February 18, 1957.

Grade of Member—Harold Bateson, George Bradley, Daniel Collins, James A. Fife,* Louis Katona, Norman E. Jackson, Thomas A. LaCava, Francis J. Lariviere, Robert H. Lubker, John D. Marr, Jr., John C. Matte, Robert W. Muther, Jr., Gerald S. Parker, Chester C. Pease, Jr., Maynard D. Spekin, Joseph Sideransky, William C. Vose, Robert L. Yocum.

Junior Member—Arthur E. Sullivan.

Student Member—Govindaraju J. Mohanrao.

President Thomas requested the Secretary to present a recommendation of the Board of Government to the Society for action. The President stated that this matter was before the Society in accordance with the provisions of the By-Laws and notice of such action was published in the ESNE JOURNAL dated February 4, 1957.

*Transfer from Grade of Junior.

The Secretary presented the following recommendation of the Board of Government to the Society for final action to be taken at this meeting.

MOTION—"to recommend to the Society that the Board of Government be authorized to transfer an amount not to exceed \$1800 from the Principal of the Permanent Fund to the Current Fund for current expenditures".

On motion duly made and seconded it was VOTED "that the Board of Government be authorized to transfer an amount not to exceed \$1800 from the Principal of the Permanent Fund to the Current Fund for current expenditures".

President Thomas stated that this was the final action on this matter.

President Thomas then introduced the speaker of the evening, Mr. John Clarkeson, of Clarkeson Engineering Company who gave a most interesting paper on "Use of Photogrammetry in Highway Engineering".

A brief discussion period followed after which a collation was served.

Eighty nine members and guests were present at this meeting.

The meeting adjourned at 8:15 P.M.

ROBERT W. MOIR, *Secretary*

MARCH 20, 1957.—The one hundred ninth annual meeting of the Boston Society of Civil Engineers was held today at the Hotel Vendome, 160 Commonwealth Avenue, Boston, Mass., and was called to order at 4:15 P.M., by President John G. W. Thomas.

President Thomas announced that the reading of the minutes of the Society meetings had been omitted during the year. The minutes of the January and February 1957 meetings will be published in a forthcoming issue of the JOURNAL. The minutes of the April, May, October, November and December 1956 meetings to be declared approved as published.

It was VOTED "to approve the minutes as published".

President Thomas announced the death of the following member:—

Irving E. Moulthrop, who was elected a member December 18, 1895 and who died February 24, 1957.

The Secretary announced the following had been elected to membership:—

Grade of Member — Clifford E. Adams, Adin B. Bailey, Leonard J. Edel, Robert G. Esterberg,* Walter R. Ferris, Charles D. Hopkins, Jr., Robert F. Pelletiere, Arthur L. Quaglieri.*

Grade of Junior Member—Gino N. Cosimini,# John W. Cossart.

The Secretary also announced the names of applicants for membership in the Society.

The Annual Reports of the Board of Government, Treasurer, Secretary and Auditors were presented. Reports were also made by the following Committees: Hospitality, Library, John R. Freeman, Membership, Advertising, Publicity, and Joint Committee on Legislative Affairs.

It was *VOTED* "that these reports be accepted and placed on file".

The Annual Reports of the various Sections were read and it was *VOTED* "that the Annual Reports of the various Sections be accepted and placed on file".

President Thomas stated that all foregoing reports would be published in the April issue of the *JOURNAL*.

The Report of the Tellers of Election, George M. Reece and Charles M.

*Transfer from Grade of Junior.

#Transfer from Grade of Student.

Anderson, presented and in accordance therewith the President declared the following had been elected officers for the ensuing year.

President Arthur Casagrande
V.-President (for two years)

Frank L. Flood

Secretary (for one year)

Robert W. Moir

Treasurer (for one year)

Charles O. Baird, Jr.

Directors (for two years)

Arthur T. Ippen

Kenneth F. Knowlton

Nominating Committee (for two years)

John C. Rundlett

George W. Hankinson

Frank L. Heaney

The retiring President, John G. W. Thomas, then gave his address entitled "The Proprietors of the Locks and Canals on Merrimack River".

Thirty-eight members and guests attended the business meeting.

The meeting adjourned to assemble at 8:00 P.M., the Annual Dinner being held during the interim.

The President called the meeting to order at 8:05 P.M.

Following general remarks and the introduction of the newly elected President, Arthur Casagrande, and other guests at the head table the various prize awards were made.

The Secretary read the various prize awards and asked the recipient to come forward and President Thomas presented the following awards:—

<i>Award</i>	<i>Recipient</i>	<i>Paper</i>
Desmond FitzGerald Medal	T. William Lambe	"The Storage of Oil in an Earth Reservoir".
Clemens Herschel Award	Jacob Feld	"Structural Failures and How to Avoid Them".
Sanitary Section Award	John S. Bethel, Jr.	"Comprehensive Sanitary Survey of Woonsocket, Rhode Island".
Surveying & Mapping Section Award	Charles L. Miller	"Some New Conceptions and Old Misconceptions of Photogrammetry".

President Thomas then introduced the speaker of the evening, Mr. George F. Potier, who gave a most interesting illustrated talk on "Europe is a State of Mind".

At the conclusion of the address President Thomas on behalf of the Society thanked Mr. Potier for a most enjoyable talk and then turned the meeting over to President-elect Arthur Casagrande.

President-elect Arthur Casagrande presented retiring President John G. W. Thomas with a certificate for services rendered and then adjourned the meeting.

One hundred thirty-three members and guests attended the dinner meeting.

ROBERT W. MOIR, *Secretary*

STRUCTURAL SECTION

JANUARY 23, 1957.—A joint meeting of the Boston Society of Civil Engineers and the Structural Section of the BSCE was held in the Adams Room of the United Community Service Building on this date. Dinner was served at 6:00 P.M., after which the meeting was called to order. After transacting necessary business of the Society, President Thomas introduced the speakers: Mr. Robert J. Basso of the Corps of Engineers, Mr. Frank L. Lincoln of Fay, Spofford & Thorndike, Inc., and Mr. Joseph Peraino of Merritt-Chapman and Scott Corp., all of whom spoke on "Renovations to the South Boston Army Base".

Mr. Basso, the first speaker, gave a brief history of the construction of the Army Base, followed by a more detailed account of the deterioration that occurred and the corrective construction done in the period from the original construction to the present reconstruction. He also outlined the events leading to a decision to renovate the Base.

Mr. Lincoln, the second speaker, outlined the various possible methods of rebuilding that were investigated and

the reasons why each was discarded or retained for more complete study. The four most practical methods were covered in detail and the reasons for the selection of the actual method used were discussed.

Mr. Peraino, the final speaker, covered the construction method developed to carry out the work. The magnitude of the project was such that considerable study of the various construction problems was justified. The special construction methods used were outlined in some detail as was the scheduling and carrying out of the actual work.

The talks were illustrated by slides showing details of construction and the actual construction. At the conclusion of the talks, the speakers answered questions by the members of the audience.

Fifty-one members and guests were present at the dinner and eighty-six members and guests attended the meeting.

The meeting adjourned at 9:00 P.M.

RICHARD W. ALBRECHT, *Clerk*

FEBRUARY 13, 1957.—A meeting of the Structural Section was held in the Society Rooms on this date. The meeting was called to order at 7:00 P.M., by Chairman A. L. Delaney. After reading the minutes of the previous Structural Section meeting, a motion was passed under which the Chairman appointed a Nominating Committee to nominate a slate of officers for the Structural Section for the coming year. The committee appointed is as follows:—Charles H. Norris, Ruth D. Terazaghi, Casimir J. Kray.

At the conclusion of the business meeting, Chairman Delaney introduced the speaker, Mr. Nelson Aldrich, AIA of Cambell and Aldrich, who spoke on the subject "Interdependence of the Engineer and Architect with some Observations on the Aesthetics of Structures".

Mr. Aldrich stressed the need for

preliminary planning by the architect and the engineer in order to obtain an aesthetically pleasing structure that is functionally proper. During the course of the talk, the principles of several schools of architectural thought were discussed, slides being used to illustrate various points. The necessity for the architect and the engineers to act as a team, in order to obtain the most satisfactory structure, was stressed. At the conclusion of the formal presentation, the subject was discussed generally, with the members of the audience participating.

Forty members and guests attended this meeting.

The meeting adjourned at 8:15 P.M.

RICHARD W. ALBRECHT, *Clerk*.

MARCH 13, 1957.—A meeting of the Structural Section was held in the Boston City Club on this date. The meeting was called to order at 7:15 P.M. by Chairman A. L. Delaney. After the reading of the minutes of the previous meeting, the report of the nominating committee was presented by Mr. Casimir J. Kray. The following officers were nominated by the committee and were elected for the coming year:

Chairman	John M. Biggs
Vice Chairman	Richard W. Albrecht
Clerk	William A. Henderson
Executive Committee	

	Paul S. Crandall
	Myle J. Holley, Jr.
	John C. Rundlett

At the conclusion of the business meeting the speaker, Dr. Laurits Bjerrum, Director of the Norwegian Geotechnical Institute, Visiting Professor at the Massachusetts Institute of Technology, was introduced by Chairman Delaney.

Dr. Bjerrum presented an illustrated paper on "Norwegian Experience with Foundations on Steel Piles." The similarity of subsoil conditions in Oslo, Norway with those encountered in

Boston was discussed. The clays encountered are similar except that in Oslo the clay is much softer. The special pile point and driving method used in Norway to anchor steel piles on sloping rock surfaces was outlined. The speaker presented and discussed data concerning the curvature of long piles after driving, buckling loads, corrosion, displacement of clay and settlement.

At the conclusion of the talk various questions were discussed by the speaker and the members of the audience.

Seventy-two members and guests attended this meeting.

The meeting adjourned at 8:45 P.M.

RICHARD W. ALBRECHT, *Clerk*

SANITARY SECTION

MARCH 6, 1957.—The meeting was called to order at 7:15 P.M. by Vice Chairman John F. Flaherty, acting in the absence of Chairman Darrell A. Root. The meeting was preceded by an informal dinner at Patten's Restaurant. Fifty-two members and guests attended the meeting and twenty attended the dinner.

The Annual Report of the Executive Committee was read by the Clerk of the Section, and the report was accepted as read.

The report of the Nominating Committee was read by Mr. Fozi M. Cahaly. The following people were submitted for consideration as officers and Executive Committee members for the coming year.

Chairman	John F. Flaherty
Vice-Chairman	Clair N. Sawyer
Clerk	Joseph C. Knox
Members	Harold A. Thomas, Jr.
	George M. Reece
	James L. Dallas

The report of the Nominating Committee was accepted. The nominations were closed by vote and the Clerk cast one ballot for the nominees as presented.

Announcement was made of the vote of the Executive Committee to accept an invitation of the New England Sewage and Industrial Wastes Association to hold our Spring Outing by meeting with them at Newport, Rhode Island, on June 6, 1957.

The speaker of the evening was Dr. Conrad P. Straub of the U. S. Public Health Service who gave a very informative talk on the "Disposal of Atomic Power Plant Wastes". The speaker reviewed the details of the proposed "Yankee Power Plant" to be constructed in Western Massachusetts, giving reasons for the site selection and an insight to disposal problems which are apt to occur.

After a short discussion, the meeting was adjourned at 8:55 P.M.

CLAIR N. SAWYER, *Clerk*

HYDRAULICS SECTION

NOVEMBER 7, 1956.—The meeting was held at the Society Headquarters at Tremont Temple. The meeting was called to order at 7:25 P.M. by Mr. Clyde W. Hubbard, Vice Chairman.

The minutes of the meeting of May 2, 1956 were read and approved.

Professor A. T. Ippen of M.I.T. and a member of the Executive Committee of the Hydraulic Division of the American Society of Civil Engineers announced that a convention of the Hydraulic Division of the ASCE would be held in August 1957 at M.I.T. Professor Ippen invited the Hydraulic Section of the BSCE to act as a co-sponsor of this convention. It was moved, seconded and passed that the Hydraulic Section of the BSCE express its interest and support of the 1957 ASCE convention described by Professor Ippen and agree to act as co-sponsor.

The chairman introduced Professor Leslie Hooper of the Alden Hydraulic Laboratory and a member of the Freeman Committee of the Society. Professor Hooper explained the purpose of the Freeman Fellowships and then in-

troduced Mr. Lawrence Neale, the speaker of the evening who held the BSCE Freeman Fellowship for the year 1955. Mr. Neale spoke on the subject "European Hydraulic Laboratory and Hydraulic Practice in 1955."

As a Freeman Fellow during 1955, Mr. Neale traveled throughout Europe visiting hydraulic laboratories and hydraulic installations. He showed color slides of many of the places he had visited and gave his impressions of the work being done in a variety of areas of hydraulic interest. During the question period which followed, the audience expressed its interest in the details of many of the topics which Mr. Neale had mentioned. On completion of his presentation, the speaker was given a vote of thanks as an appreciation by all those present. The meeting was adjourned at 8:35 P.M. Total attendance was 31.

JAMES W. DAILY, *Clerk*

FEBRUARY 6, 1957.—The meeting which was held at the Society Headquarters at Tremont Temple was called to order at 7:05 P.M. by Mr. Joseph Lawlor, Chairman.

The minutes of the meeting of November 7, 1956 were read and approved.

Mr. Ralph S. Archibald, as Chairman, reported for the Nominating Committee consisting of Arthur T. Ippen, Lincoln W. Ryder and Archibald. The recommended slate of officers for 1957 includes: Chairman, Clyde W. Hubbard; Vice Chairman, James W. Daily; Clerk, Lee G. M. Wolman; Executive Committee, John B. McAleer, Robert S. Kleinschmidt, Lawrence C. Neale.

There being no further nominations, it was moved, seconded, and passed that nominations be closed and the Clerk being instructed to cast one ballot for the above slate of officers.

Mr. Lawlor introduced the speaker, Mr. William Rheingans, Manager of the Hydraulic Department of the Allis-Chalmers Mfg. Co., Milwaukee, Wisconsin. Mr. Rheingans spoke on the

two topics "Pump Storage Systems and Pump-Turbines" and "Cavitation." He described the purpose and history of pump storage systems and the use of pump-turbine units in such systems. He then showed a movie entitled "Captive Kilowatts" explaining how the pump storage system works and describing the installation of the generator and turbine units at the Hiwassee TVA Dam. The speaker concluded with a discussion of some new ideas on the velocity effect of cavitation pitting. A long question period followed the author's presentation.

Following the program, the meeting was turned over to the Chairman elect, Mr. Clyde Hubbard. Mr. Hubbard announced plans for holding the May meeting of the Section at the Alden Hydraulic Laboratory at Worcester Polytechnic Institute. On a straw vote, the audience expressed its preference for a Saturday meeting on that occasion.

There being no further business, the meeting was adjourned at 8:45 P.M. Total attendance was 88.

JAMES W. DAILY, *Clerk*

CONSTRUCTION SECTION

JANUARY 30, 1957.—The second meeting was called to order at 7:40 P.M., at the Society Rooms after an informal dinner at Pattens' Restaurant. Eighteen members and guests attended the dinner and thirty nine members and guests attended the meeting.

The slate of the nominating committee was unanimously elected as follows: Chairman, Robert J. Hansen; Vice Chairman, Steven R. Berke; Clerk, Albert A. Adelman; Executive Committee, William A. Fisher, William A. Hooper, Anthony J. S. Tomasello.

The speakers of the evening were Donald E. McElman and Peter S. Milinazzo of the Perkins Milton Company. A very interesting film was shown of construction on the St. Lawrence Seaway project. The economy of

the largest bull dozer ever built, the D-9, was presented.

ALBERT A. ADELMAN, *Acting Clerk*

MARCH 27, 1957.—The third program meeting of the Construction Section was held in the Society Rooms.

Chairman Robert J. Hansen introduced the guest speaker, Mr. James J. Kenney, Structural Engineer with the Portland Cement Association, whose subject was "Fabrication and Erection of Prestressed Concrete Bridges".

Two types of casting yards were described and 35 mm slides were shown of the casting years and erection procedures. It was an informative talk on a subject of great current interest.

Chairman Hansen announced a change of date for the next meeting from May 29 to May 22.

Prior to the meeting, 28 members and guests had dinner at Pattens' Restaurant.

Forty two members and guests attended the meeting.

ALBERT A. ADELMAN, *Clerk*

ADDITIONS

Members

- Adin N. Bailey, 3 Wildwood Terr.,
Winchester, Mass.
- Harold Bateson, 102 Underwood Ave.,
Lakewood, Rhode Island.
- George E. Bradley, 14 Perkins Manot
S.4, Jamaica Plain, Mass.
- Daniel Collins, 15 Margin St., Pea-
body, Mass.
- Leonard J. Edel, 8 Hillside Road, Wel-
lesley Hills Mass.
- Alexander M. Gibson 45 Apthorp St.
Wollaston Mass.
- Louis Katona, Box 432, Kenburma,
Mass.
- Norman E. Jackson, 16 Bonwood
Road, Needham, Mass.
- Thomas C. LaCava, Suncook, N. H.
- Francis J. Lariviere, 61 So. Spring St.,
Concord, N. H.
- Robert H. Lubker, 430 Lloyd Ave.,
Providence, R. I.

John D. Marr, Jr., 22 Washington St.,
Needham, Mass.

Ross E. McKinney, 7 Auburn Road,
Wellesley, Mass.

Robert W. Muther, Jr., 37 Grosvenor
Road, Needham, Mass.

Gerald S. Parker, 390 Highland Avenue,
Somerville, Mass.

Chester C. Pease, Jr., 5 Lothrop Road,
Reading, Mass.

Joseph M. Sideransky, 27 Stearns
Road, Brookline, Mass.

Maynard Spekin, 7 Strathcona Road,
Dorchester, Mass.

William C. Vose, Box 310, Amherst,
N. H.

Robert L. Yocum, 465 Sylvan Knolls,
Stamford, Conn.

Juniors

Peter S. Parsonson, 20 Torre Street,
Reading, Mass.

Arthur E. Sullivan, 45 Newbury Street,
Boston, Mass.

Student

Govindaraju Mohanarao, 1-083 Mass.
Inst. Technology, Cambridge, Mass.

DEATHS

Irving E. Moulthrop, February 24, 1957.