

INDUSTRY NEWS

DOT Approves Use of Prestressed Rail Ties for Northeast Corridor

In a significant decision, Transportation Secretary **Brock Adams** announced that the U.S. Department of Transportation (DOT) has approved the use of precast prestressed concrete rail ties on two separate, 200-mile sections between New York City and Boston and New York City and Washington.

The favorable decision to use plant-produced prestressed concrete ties was based on a thorough engineering and economic investigation conducted by the DOT including valuable data supplied by PCI Member Producers and PCI Headquarters.

Secretary Adams' statement emphasized the fact that "Concrete ties will enable us to provide a faster, safer and more comfortable ride."

The go-ahead decision by DOT plus several recent successful installations of concrete ties in rail tracks are a significant precedent to the use of precast prestressed concrete on current and future railroad projects.

PCI Technical Committee News

Several PCI technical committees are moving forward to meet their 1977 goals:

■ The PCI Committee on Bridges, **H. Kent Preston**, chairman, is reviewing for approval a proposed new Design and Construction Specification on precast, prestressed bridge deck panels that are used as stay-in-place forms acting compositely with cast-in-place deck concrete. Eventually, the committee plans to submit the report as an addition to the AASHTO Standard Specifications for Highway Bridges.

■ The PCI Committee on Design Handbook, **D. P. Jenny**, chairman, held its 10th meeting since September 1975 when it began work on the proposed Second Edition. Remaining tasks were targeted in order to complete all development work before the end of the year, and to publish the new edition early in 1978.

■ The PCI Committee on Standardization, **George Ziverts**, chairman, has closed off its 1976 National Precast Concrete Products Survey after three mailings to all industry producing plants. The committee will begin summarizing the wealth of data provided in the survey questionnaire, which will lead to a published report. At the same time, the committee will recommend to the PCI Design Handbook Committee the industry products to show in the Second Edition, based on trends that the Survey may reveal.

■ The PCI Seismic Committee, **Joseph Manning**, chairman, recently entered into contract with a joint venture of three California consulting firms to study use of precast and prestressed concrete in buildings designed to meet seismic criteria. Their objective in the first phase of the study will be a state-of-the-art report that will recommend optimum building configurations and evaluate performance of framing systems and connections. The consulting team consists of Eric Elsesser, Forell/Elsesser Engineers, Inc., Walter Saunders, Martin & Saunders, Inc., and Donald Strand, Brandow and Johnston Associates.

■ The PCI Fire Committee, **James Gaston**, chairman, cooperates with the Concrete and Masonry Industry Firesafety Committee by providing reviews of its Fire Protection Planning Reports as they are developed. The new third report in the series is entitled "Significance of Fire Ratings for Building

Construction," and the Fire Committee will distribute copies to all PCI members as it has with the previous two reports. In addition, the PCI Fire Committee is planning a one-day seminar for late 1977 for PCI Producer Member personnel that will explain the contents and application of the committee report MNL 124-77, "Design for Fire Resistance of Precast Prestressed Concrete," published earlier this year. Watch for upcoming announcements.

■ In the period following its summer meeting, the Technical Activities Committee (TAC), **John M. Hanson**, chairman, has been reviewing, for purpose of publication approval, the very extensive "PCI Manual for Structural Design of Architectural Precast Concrete," and has been engaged in a special study for comment on the "Code of Standard Practice for Precast Concrete" that was sent to all PCI members for review and comment.

Coleman and Curtis Form Management Services Co.

PCI Members **Paul H. Coleman** and **Robert B. Curtis** have formed the Management Services Company to provide complete management assistance in all areas of activities to the concrete products industry.

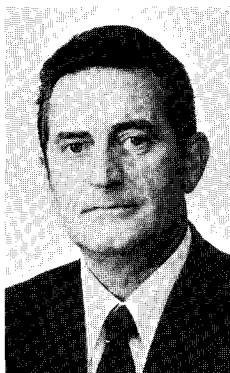
Mr. Coleman was vice president of manufacturing and engineering for San-Vel Concrete Corp. for the past 3 years. For 10 years prior to that he was the principal in Paul Coleman & Associates, a consulting service to the prestressed/precast concrete industry.

He is a past chairman of PCI's Management Training Committee, and has spoken at numerous PCI conventions on cost reduction and operational controls. Mr. Coleman, who graduated from the University of Rhode Island with a degree in industrial engineering, is a past instructor in the Engineering School at Northeastern University.

Mr. Curtis held the position of vice



Paul H. Coleman



Robert B. Curtis

president-general manager for Westinghouse-Blakeslee for almost 20 years, and more recently had the same position with Grand Prestress. He also worked as a field construction engineer and a design engineer prior to his association with the prestress industry.

A registered professional engineer, he is a graduate civil engineer from Lehigh University. He has been a member of the Board of Directors of PCI, and served as secretary-treasurer and vice president-president elect. Mr. Curtis also has been a member of numerous PCI committees, and a past chairman of the Structural Division Committee and the Plant Certification Committee.

In addition, he contributed in writing the *PCI Manual for Quality Control* and "Recommended Practice for Design,

Manufacturing and Installation of Prestressed Concrete Piling."

The new company is located at Hollis, New Hampshire, P.O. Box 605; and at Setauket, Long Island, New York, at 7 East Gate Lane.

Neu Named Associate at Carl Walker Firm

Dennis E. Neu has been named associate in the Minneapolis office of Carl Walker & Associates, Inc. He has been with the firm for the past 7 years.

Mr. Neu, a registered professional engineer, has a BS in civil engineering from the University of Minnesota. At Carl Walker & Associates his work has been concentrated in project management and development of parking structures in the upper Midwest. His recent projects include design and supervision for parking facilities for the University of Iowa at Iowa City and St. Mary's Hospital in Rochester, Minnesota.

Nawy to Chair RILEM Symposium Session

PCI Member **Edward G. Nawy** will chair Session II, Field Testing of Structures, of the RILEM 30th Anniversary Symposium on "In Situ Behavior of Concrete Structures" to be held in Budapest, Hungary, September 10-19, 1977.

Dr. Nawy will also present a paper summarizing his research findings on the deflection and cracking behavior of reinforced and prestressed concrete slabs, and non-destructive field testing and performance evaluation of such structures.

Promotions at Stresscon

Stresscon Corporation (a PCI Producer Member) of Colorado Springs, Colorado, has promoted three of its men to key production positions.

Willard Hipsher has been promoted to the position of production manager, and is now directly responsible for all production operations in Stresscon's

three plants. **Harold Green** has assumed the position of plant superintendent, and **John Duncan** moves to the position of production foreman. All three employees have been with Stresscon for over 7 years and their promotions reflect the company's policy to develop and promote experienced and qualified personnel from within the firm to positions of responsibility.

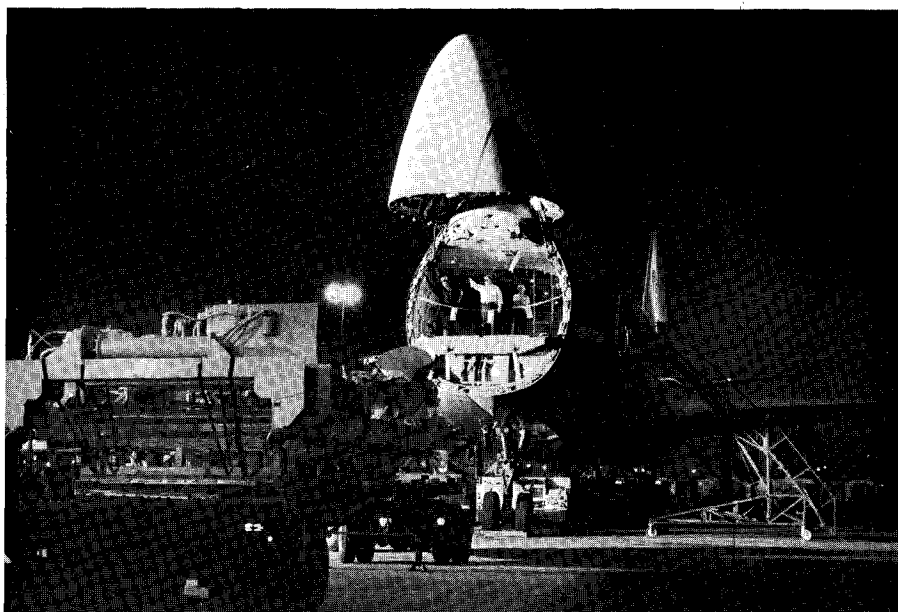
Stresscon Corporation, founded in December 1967, is today a major producer of precast structural concrete in Colorado, having a capacity of over 12,000 sq ft of products per day. The firm is currently operating near full capacity having recently received two major contracts each having a contract value in excess of \$1.0 million worth of precast structural concrete products.

Price Brothers Acquires Blakeslee-Midwest

Effective July 1, 1977, Blakeslee-Midwest Prestressed Concrete Company, a wholly owned subsidiary of Westinghouse, became Price Brothers-Midwest, Inc., a wholly owned subsidiary of Price Brothers Company (a long-time PCI Producer Member) of Dayton, Ohio.

The announcement of the acquisition was made by Gayle B. Price, Jr., president of Price Brothers Company. Mr. Price went on to say that "The acquisition will fill out the products and services offered by our 18 facilities throughout the eastern half of the United States to a truly "full service" status. Price Brothers can now service the needs of a broad range of projects in the building, highway, pressure pipe and sewer pipe industries. Our products will now include long span single and double tees, wall panels and bridge members, as well as DYNA-FRAME and Flexicore systems, pressure pipe, and sewer and culvert pipe.

"The marketing thrust of our Price Brothers-Midwest operation will be to-



Two highly sophisticated precast component plants were recently flown overseas to Abu Dhabi in the United Arab Emirates aboard this nose-loading Boeing 747 jet freighter. The customer was Sheikh Zayed Bin Sultan, ruler of Abu Dhabi, and the supplier, Martin Industries (a PCI Associate Member) of Fort Worth, Texas. The reason for the airlift: a low-cost housing project that must be completed on a very short construction schedule. According to Martin Industries, the two plants will be able to produce precast components for up to 18 houses per day.

ward promotion of total concrete systems and packages to increase the scope of our services and decrease the risk to our customers," Mr. Price said.

Originally a construction firm, Price Brothers Company was first incorporated in 1899 and began manufacturing concrete products in 1919, making it one of the oldest firms in the precast/prestressed concrete industry today.

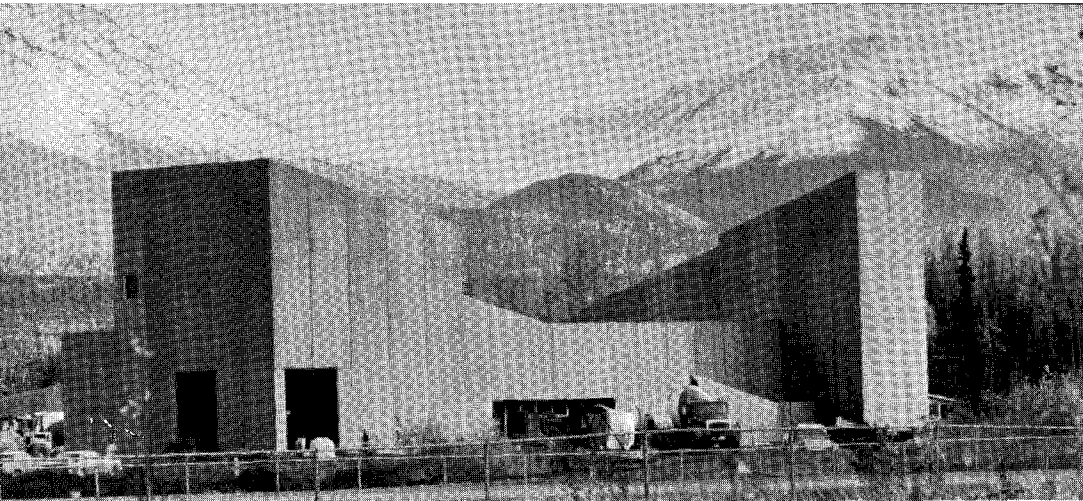
ASTM Symposium on Deep Foundations

A call for papers is issued for an ASTM Symposium on the Behavior of Deep Foundations to be held during the week of June 25-30, 1978, during the 81st ASTM Annual Meeting in Boston, Mass. The symposium is sponsored by Committee D-18 on Soil and Rock for Engineering Purposes of the American Society for Testing and Materials (ASTM).

Papers are solicited on these topics: (1) design and evaluation of load tests on piles and caissons, (2) soil capacity for supporting deep foundation members, (3) stresses in pile members (long-term performance and for short-term performance during driving), and (4) design practice — present and proposed (considerations for standards and codes). Preference will be given to those papers containing specific conclusions and recommendations.

There will be a state-of-the-art speaker for each symposium session who will summarize each paper, therefore, authors will not be called on to present their papers.

Authors are invited to submit the title and an abstract, along with an ASTM paper offer form, by November 1, 1977 to Raymond Lundgren, #3 Embarcadero Center, San Francisco, Calif. 94111 (Tel: 415-956-7070).



The commercial structures award went to the Alagco Batch Plant, Anchorage.

WPCI Award Winners Announced

Four structures designed by Washington state architects and engineers and featuring precast and/or prestressed concrete have been named for top

awards in commercial, institutional and transportation categories by the Washington Precast Concrete Industry (WPCI).

A winner in the institutional category was the Air Traffic Control Tower, Anchorage.

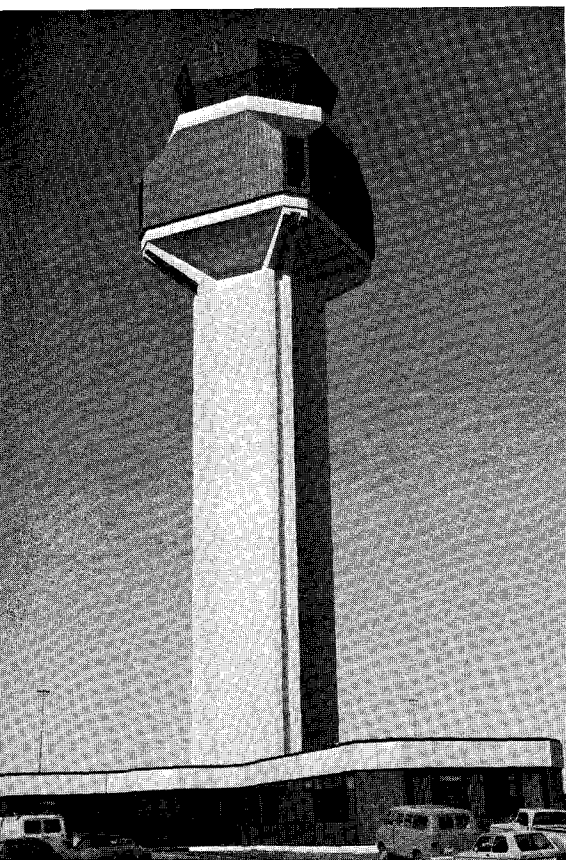
The winner in the commercial structures category was the Alagco Batch Plant in Anchorage, Alaska. Owner of the facility is the Alaska Aggregate Corp., Anchorage.

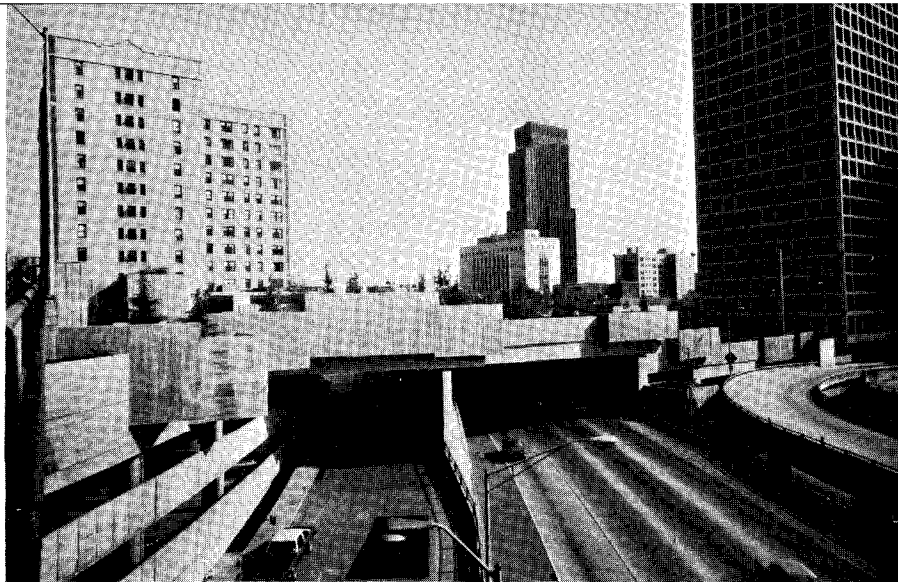
The Air Traffic Control Tower in Anchorage, Alaska, owned by the Federal Aviation Agency, was one of two winners in the institutional category. The other winner in the institutional category was the State of Washington Building No. 2, located in Olympia, Washington. The owner is the State of Washington.

Taking top honors in the transportation structures class was the Seattle Pedestrian Plaza and Park, located in Seattle and owned by the State of Washington.

The 1977 entries were judged by **Richal Smith, P.E.**, Richal Smith & Associates, Inc.; **Gerald C. Pomeroy**, AIA, Waldron, Pomeroy, Polk & Smith, Architects; and **Andrew Wick**, Wick Construction Company.

The awards luncheon was held on June 28 in Seattle. WPCI President **Edwin Rudloff** of Centrecon, Inc., Everett, Washington, presented the awards.



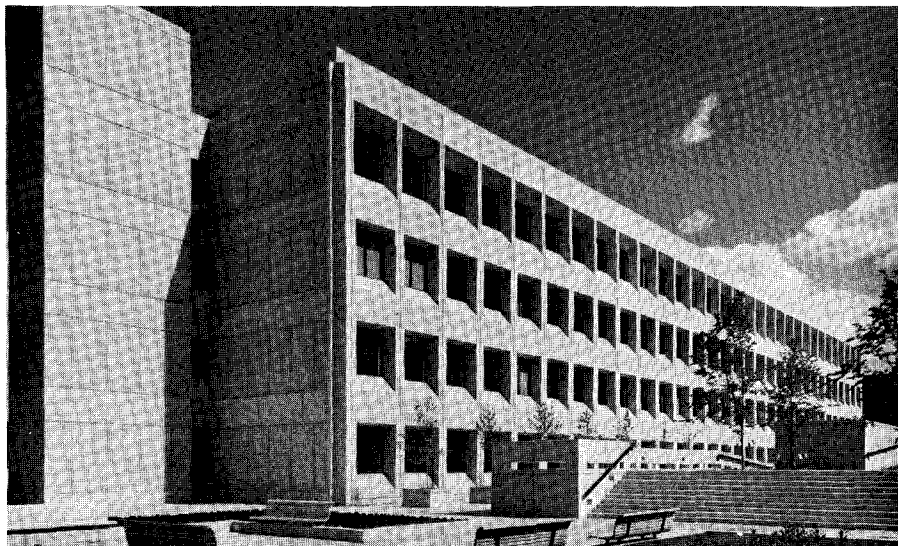


Award winner in the transportation structures class was the Seattle Pedestrian Plaza and Park.



Among those who attended the awards luncheon were (l-r): **Edwin Rudloff**, WPCI president; **George Oistad** and **Phil Jacobson**, The Richardson Associates; **Gill Rose**, Washington State Department of Highways; **Bharat Soli** and **Ross Atkinson**, Andersen-Bjornstad-Kane-Jacobs, Inc. (ABKJ); **Dr. Arthur R. Anderson**, ABAM Engineers, Inc. (awards luncheon speaker); and **Arthur Andersen**, ABKJ.

The State of Washington Building No. 2 also was an institutional class winner.



Course on Partially Prestressed Concrete

In conjunction with its annual convention and exposition at the Hyatt in San Francisco, California, October 17-22, 1977, the American Society of Civil Engineers will be offering a series of accredited continuing education courses.

A one-day course on Partially Prestressed Concrete—Principles and Practice will be given on October 20. The course will be conducted by PCI Members **T. Y. Lin, Felix Kulka and Y. C. Yang.**

The contents of the course will include:

1. Historical development of both fully and partially prestressed concrete.
2. Design of structural members using a combination of prestressing steel and mild steel reinforcement based on serviceability and strength and complying with codes and specifications.
3. Combinations of precast concrete and in-place concrete.
4. Incorporation of non-prestressed reinforcement in prestressed concrete and of prestressed reinforcement in reinforced concrete.
5. Applications of partially prestressed concrete. Design and construction examples in buildings, bridges, pressure vessels, and other fields.

For further information contact Gail Bays, Manager, Continuing Education Services, ASCE, 345 East 47th Street, New York, N.Y. 10017.

ASTM Symposium on Full-Scale Load Tests

A call for papers is issued for an ASTM Symposium on Full-Scale Tests of Structures to be held March 13-14, 1978, in Washington, D.C., during ASTM March Committee Week. The symposium is sponsored by Committee E-6 on Performance of Building Con-

structions of the American Society for Testing and Materials (ASTM) in cooperation with the Joint Committee for Developing a Guide to Professional Practice on Load Tests of the American Society of Civil Engineers (ASCE) and the Research Council on the Performance of Structures (RCPS).

The object of the symposium is to bring together engineers concerned with full-scale load testing and present a series of papers on all aspects of load testing of structures including loading techniques, instrumentation, application of results from the owner's, engineer's and building official's viewpoint, correlation of results with design calculations, limitations and criteria.

Prospective authors should submit a title, a 200 to 300-word abstract of their papers, along with an ASTM paper offer form by October 15, 1977, to W. R. Schriever, Division of Building Research, National Research Council, Montreal Road, Ottawa, Ontario K1A 0R6, Canada (Tel: 613-993-2433).

Authors who wish to submit a paper may obtain an ASTM paper offer form from W. R. Schriever or from Jane B. Wheeler, ASTM, 1916 Race Street, Philadelphia, Pa. 19103 (Tel: 215-299-5413).

Ottawa Conference on Sulfur in Construction

An international conference on sulfur in construction will be held September 13-16, 1978, in Ottawa, Ontario, Canada. Cosponsors are the Canada Centre for Mineral and Energy Technology; Energy, Mines and Resources, Canada; and the Sulfur Development Institute of Canada.

Included in the list of subjects for original papers that have been requested by the sponsors are:

■ Sulfur concrete and sulfur-infiltrated/impregnated concretes: their properties, technology and application.

■ Durability and stabilization of
(continued on page 110)

Here-in one place-is a step-by-step design procedure for a high-rise precast prestressed concrete building from concept to construction.

Design Considerations for a Precast Prestressed Apartment Building

Fifteen nationally prominent consulting engineers apply their expertise to the various aspects in the design and erection of a typical high-rise precast prestressed concrete building. *Result:* a clear picture of the design procedure following the usual order of solution by a designer in a typical engineering office.

Although a computer was used to facilitate the calculations, in general, the solutions are presented "long hand" to emphasize the logical steps.

Each of the eight chapters were presented to a group of engineers with varying backgrounds in a seminar. This living test of the clarity and practicality of the explanations assures the usefulness of the book as an easily understandable guide.

The eight chapters are:

Design Problem—Eugene P. Holland, Laurence E. Svab.

States the problem to be solved and discusses the basic design decisions and assumptions required.

Analysis of Lateral Load Resisting Elements—John V. Christiansen. Presents a detailed analysis of the lateral load resisting elements following the requirements of the Uniform Building Code.

Design of Load-Bearing Wall Panels—Charles H. Rath.

Treats the design considerations and designs procedures used as well as the detailed numerical calculations of a typical wall panel.

Design of Secondary Floor Members—Michael H. Barrett, Neil F. Dunbar, David D. Gillaspie.

Covers the design considerations and solutions for the design of the floor system.

Design of Frame—Richard M. Gensert, Miklos Peller, Kirit Parikh, Richard Y. Fujita.

Gives the step-by-step design calculations for the girders and columns including a commentary on the computations.

Design of Prestressed Concrete Pile Foundations—George C. Fotinos.

Discusses the various design considerations that enter into pile selection and presents the detailed design calculations for a typical prestressed pile foundation.

Design for Erection Considerations—Alfred A. Yee, Fred R. Masuda.

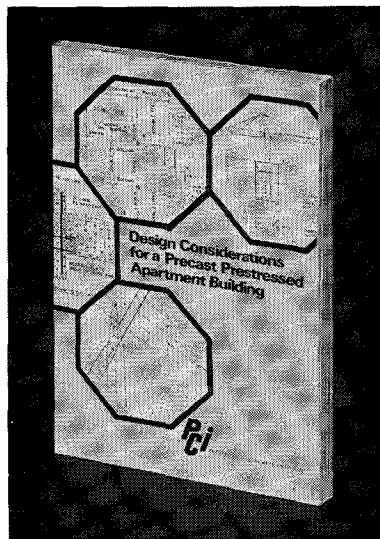
Covers the design decisions regarding equipment and erection procedures and supplements them with detailed numerical calculations.

Design Against Progressive Collapse—Alexander Popoff, Jr.

Proposes a design philosophy and design criteria to guard against progressive collapse from which connection details and reinforcement requirements are derived.

Extremely valuable for both constant use and for easy reference (the book is fully indexed), this authoritative volume should be readily available to every engineer and architect.

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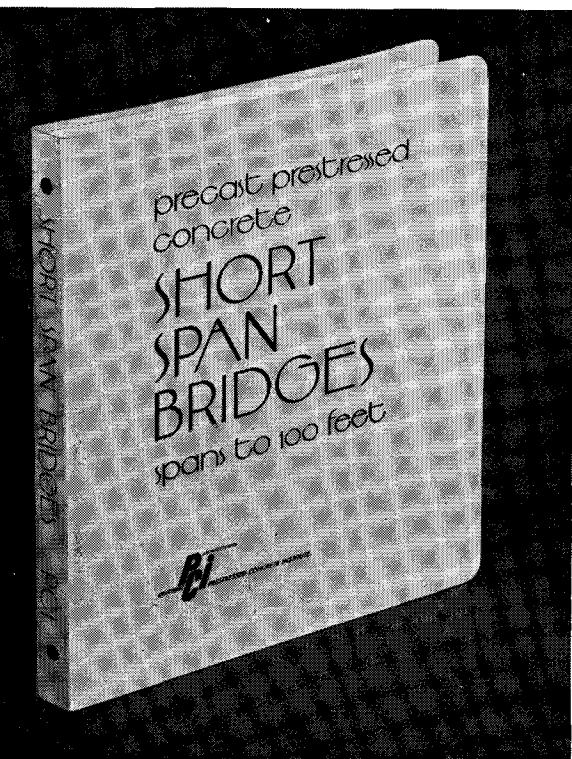
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Short Span Bridges

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This manual is complete, shows numerous actual applications, and provides a variety of design aids in the form of charts, graphs and detail drawings. All are arranged for easy selection of sections applicable to immediate and future bridge problems.

Contents are based on the AASHTO Specifications for Highway Bridges.

No bridge design group should be without the valuable guidance set forth in "Precast Prestressed Concrete SHORT SPAN BRIDGES."

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Numerous construction examples, generously illustrated with photos of actual bridges, show how precast prestressed concrete integral deck components can appreciably reduce: initial cost; maintenance; construction time; and traffic interruption.

Actual applications show how the low depth-to-span ratio and clean, attractive lines of prestressed concrete bridges help meet the most demanding environmental requirements.

Part II

Charts and graphs tabulate and illustrate technical data, properties, depth-to-span dimensions and other information on the wide variety of sections available for short span bridges.

Structural capabilities for all sections are based on AASHTO HS20-44 loading.

Also shown are: shear connections; bearing details; bridge layouts; suggested specifications; and cost reduction methods.

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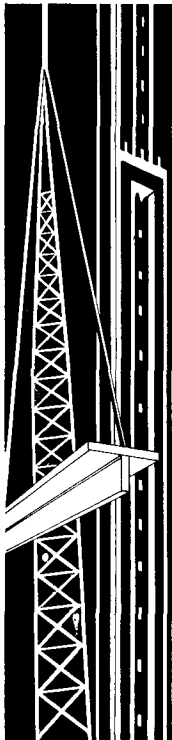
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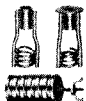
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(continued from p. 106)

sulfur-aggregate systems.

Abstracts of intended presentations should be sent before November 1, 1977, to Dr. J. A. Soles, Chairman, SIC Programme, CANMET, 405 Rochester Street, Ottawa, Ontario, K1A 0G1, Canada.

Griffin Appointed Plant Manager at Tanner Co.

T. E. "Toby" Blizzard, president of the Prestressed and Architectural Concrete Division of The Tanner Companies (a PCI Producer Member) has appointed **George Griffin** as plant manager for the companies' Las Vegas operations.

Mr. Griffin comes to The Tanner Companies with 13 years experience in the precast and prestressed concrete field. For the past four years he had been manager of precast and prestressed concrete products for Lone Star Industries, Inc., of Norfolk, Virginia.

A graduate of Case Institute of Technology with a BS in civil engineering in 1957, he received his Masters in civil engineering in 1960.

Building Industry to Display Its Technology

The Second Annual Building and Construction Exposition and Conference will be held November 1-3, 1977, at McCormick Place, Chicago, Illinois. The international trade exposition and conference is being sponsored by the Producers' Council, Inc.

According to the Producers' Council, the BCEC will include one of construction industry's largest assembly of building products ever shown.

Wind Research Conference

The Third U.S. National Conference on Wind Engineering Research will be held February 26-March 1, 1978, at the University of Florida, Gainesville, Florida. The conference is sponsored by the Wind Engineering Research Council and the National Science Foundation.