

# new family on the block 

There's going to be a


## CONNECTICUT ARCHITECT

Connecticut Architect is published bimonthly by Communiconn Publications, Inc. for The Connecticut Society of Architects, a chapter of The American Institute of Architects, and is the official publication of the Society.

## Officers

President
Robert L. Wilson, AIA
Vice President
Richard E. Schoenhardt, AIA
Secretary
Michael P. Buckley, AIA
Treasurer
Phyllis V. Olson, AIA
Executive Director
Peter H. Borgemeister

## Editorial Board

Co-Chairmen
Walter F. Greene, Jr., AIA
Robert H. Mutrux, AIA

Donald J. Baerman, AIA
David Basch, AIA
Michael P. Buckley, AIA
Raymond J. Wisniewski, AIA
David E. Woodard, AIA

## Connecticut Architect

Editor-Publisher
H. Evan Snyder

Associate Editor
Natalie Korsheniuk
Design Director
Karin T. Deeks
Marketing Director Sherman Kanter
Advertising Director
Donald F. Bradley
Circulation Director Lucy W. Waesche

Printed by Allied Printing Services, Inc.,
Manchester, Connecticut.
© Copyright 1975, Communiconn Publications, Inc.

All rights reserved. No part of this publication may be reproduced without permission in writing from the publisher, except brief quotations in a review.

Volume 11, Number 2
March-April 1975

## 2 From the CSA

5 News

## 10 The Hartford Civic Center

A New Urban Energizer
by H. Evan Snyder, Michael P. Buckley, AIA, and Susan L. Leroux
17 New Haven Savings Bank
A New Landmark on Church Street
by H. Evan Snyder
20 The 1975 Burlington Awards
by Natalie Korsheniuk
24 CSA Professional Education
by Donald J. Baerman, AIA
26 Letters

30 Books

Cover: For more than a year, the Hartford Civic Center was an enormous, twoblock hole in the ground, surrounded by a wooden fence decorated by children from the inner-city schools. Then, slowly but surely, there began to emerge a
"megastructure" destined to change the ambiance of an entire area. The story of the Hartford Civic Center's technical achievements, the process by which its many elements were brought together, and its influence and impact on the future of the capital's downtown begins on page 10. The editors wish to express appreciation to Atna Life and Casualty Company; to Mr. Don Mayes, General Manager of the Civic Center Shops; Mr. Harry Danos, AIA, associated architect on the project; and to Monica Wolff and Bill Bradford, who are responsible for the splendid color photography. Cover photograph by Bill Bradford.

Circulation of Connecticut Architect includes all resident Connecticut architects; libraries; landscape architects; and selected consulting engineers, contractors, builders, and church, hospital, school, federal, state, and local officials; and others concerned with architecture in Connecticut. Appearance of products, services, names, and pictures in advertising or editorial content does not constitute endorsement by The Connecticut Society of Architects.

Controlled circulation postage paid at Hartford, Connecticut.
For all subscription information write Circulation Dept., Connecticut Architect, Bushnell Plaza, One Gold Street, Hartford, Connecticut 06103 (203-249-7634). When filing a change of address, give former as well as new address, zip codes, and include recent address label if possible.
\$1.50 per copy
Subscription: \$7.50 per year

## From the President

In the January/February issue of Connecticut Architect, I discussed several possibilities which I perceived might help us to weather this economic downturn. Good business management is of concern to most of us, and certainly the mounting costs of doing business is one of the factors which affects us acutely during a period of shrinking market potential.
A prime cost item for Architects, which is going to be even more of a burden, is Errors and Omissions Insurance. Insurance rates have been steadily going up, and more recently the Continental Casualty Company, which underwrites the official AIA program for Errors and Omissions Insurance, has requested an increase in rates which might average anywhere from 70 to $100 \%$ in 1975 . Obviously, this type of cost will be prohibitive to many offices. Unfortunately, the trend in the courts has been an increased finding of Architects' liability in awards of legal suits of all kinds. The request by CNA for higher rates was obviously met with some apprehension by the AIA, and it had an independent actuary do a study which confirmed the necessity for the rate increase which was requested by the CNA.
There are two ideas being put forth which might lessen the burden on our practitioners. One is to create no-fault liability insurance for Architects and Engineers. The other is to have clients pay for liability insurance on a project by project basis, very similar to the way in which they pay for bonding insurance premiums for Contractors. Of the two approaches, I feel the one that has some merit is the latter proposal, that is, getting a client to pay for the insurance premiums on a project by project basis. I believe that clients would pay such a premium, if it outlined a full explanation of the benefits which would be derived. The client would be protected for claims which might arise either by himself or a third party because of the Architect's negligence.
The alternative, obviously, is for an Architect to be without coverage. This would increase the possible liability to an Owner, if he had a claim which was unrecoverable against the Architect, and would give immediate relief to the Architects of Connecticut who are negotiating contracts with clients. In addition, it is something that we can do immediately by ourselves rather than waiting for legislation to be promulgated.

Another vital tool in our management planning arsenal is the new cost-based method of compensation. Guidelines for this method were recently published by the AIA. It is my suggestion that every practicing Architect get a copy of this document for his use. The basis for this system is a complete understanding by the Architect and the client of the services required to be provided and their costs. This system lists approximately 120 separate services which may be provided by an Architect to a client. Having identified the services which the Architect is to provide, and those services which the Owner either does not wish, wishes to perform himself, or wishes to contract with others, costs can beestablished for each phase of the work based on its complexity and the estimated time that it would take to perform.
Any office which has kept time card records, and most offices do, will have the beginnings of a data bank for use with this system. This system will provide a far more accurate method of compensating Architects for their services, as well as a basic tool for profit planning.
One final item which I would like to discuss here in terms of management planning is the problem of cash flow. I think of all the problems which Architects face from a business standpoint, restricted cash flow is probably the most severe. There was a time when Architects sold services to clients without being in a position of acting as a financing agency for those clients. Retainers were given by clients to Architects, and payments were made on a periodic basis, usually monthly. Theoretically, that system still exists; but in practice, more often than not, it doesn't.
I should like to call for the re-establishment of that kind of sound fiscal management. Architects' professional services are just that, and no more. For an Architect to finance a client, borrowing money at extremely high rates to do so, and then not be compensated for it or even paid timely, is simply poor business. The practitioner and profession itself can only suffer.
My suggestion to Architects negotiating contracts with clients is that they point out some very simple business basics. If an Architect is to spend money on a client's behalf, he must be reimbursed on a timely manner so that he can continue to give that client the highest level of professional service. If an Architect is to act as a client's banker, then some method
of compensation should be arranged. Even if such an arrangement could be struck, I am not so sure that it would be in the best interests of either the Architect or the client.
One practical aspect of this type of contractural arrangement (retainer plus monthly payments) is that if an Architect has been working for a client for several months and has been paid regularly, the client who has already expended his own money is far more prone to push a project if it gets in trouble or stops for whatever reason.
The Architectural profession's business acumen has not engendered very wide respect from the business community heretofore. I firmly believe that a sound business approach by Connecticut Architects to running their own offices will not only help our viability but will also be understood and respected by the business community-at-large. A client cannot help but feel secure in purchasing the services of a business-like and wellrun Architect's office; and a clients' respect, understanding and confidence will move us one step closer toward charting the path of our own destiny.

Robert L. Wilson, AIA

## From the Executive Director

Robert Wilson, AIA, president of CSA, Commissioner of Government Relations, Richard Foster and CSA Executive Director Peter Borgemeister met with State Commissioner of Public Works Robert Weinerman on March 21. The purpose of our meeting was to impress upon him the deteriorating economic conditions in the architectural profession and in construction.
Mr. Weinerman was told the results of the CSA's Employment and Expectations Survey, which indicated that employment in architectural firms five or more years old is down $25 \%$. It was pointed out that perhaps more critical were the expectations of the reporting firms. These firms indicated, by a more than six to one ratio, that their billings in 1975 would be less than in 1974. These expectations have been borne out by lay-offs and by converting to four-day week since the first of the year.
The following eight-point program was suggested to Mr. Weinerman:

1. Immediate release of impounde state construction funds.
2. Appropriation this year of planning and design funds for the most critically needed projects which might be funded for con struction in the years 1976 and 1977.
3. Special emphasis on the reviva the State's housing industry.
4. The initiation of a broad state lic works program, including projects commemorating the bicentennial.
5. The development of a favorable climate for business and industry to move into and remain in the State.
6. The encouragement of energy conservation in building design.
7. The encouragement of renovation of existing buildings.
8. The up-dating of the state's physical plant to comply with the latest regulations in the fields of fire safety, barrier-free design, structural stability, etc.

Mr. Weinerman, a former general conractor, appeared to understand the onditions described. He spoke of the evere budgetary limitations the state aces at this time. Though he did not nake any commitments, everyone presint felt that the discussions were helpful nd hoped that this meeting would be he first of many. In addition, Governor frasso has promised to meet with a small roup from the CSA shortly after Easter.
bill to open up the State's selection rocess of design professionals, which vas sponsored by the Interprofessional ask Force for Designer Selection was eard by the General Assembly's State nd Urban Development Committee on harch 20. The CSA is represented on the ask Force. Edward Jeter, AIA, developed his bill from legislation passed in other tates and model legislation written by he AIA.
ttorney Bourke Spellacy, representing he Interprofessional Task Force, told he committee that passage of this bill rould allow design professionals to be elected for their competence. Furtherpore, the bill contained a negotiating rocess similar to that used by the Genral Services Administration, which psures a fair and equitable fee for both he designer and the state.

Commissioner Weinerman, expressing his opposition to the bill, pointed out that, in his opinion, control of the process of producing buildings would be lost if the contracting state agency did not select the designer. Unfortunately, the draft of the Task Force's bill had been somewhat revised shortly before the hearing. It was felt that Commissioner Weinerman was not speaking to the latest draft, which contained an important change - the placing of the negotiating responsibilities with the state contracting agency rather than with the Selection Board. Mr. Weinerman will be advised of this important change.
The CSA is also interested in a bill, backed by the Building Code Officials Association, which would create a Building Standards Regulations Commission and would place in that body the responsibility for promulgation and implementation of the codes and regulations effecting building design. Norman Ruderman, AIA, researched the bill and wrote the first draft.

This bill calls for the Commission to be the single point from which information on the codes and their modifications is disseminated. Furthermore, it would establish the supremacy of the state codes over local ordinances. Russell Stecker, FAIA, and the Legislative Commissioner's office have put the draft into legislative form. The bill will be heard by the federal Administration and Policy Committee in April.
Nancy Jackson, AIA, the chapter's Program Chairman, announces that the next meeting will be in the Wesleyan University Arts Center on June 4. The two chapter meetings held thus far this year have featured two nationally prominent speakers-Giorgio Cavagliari, FAIA, who has rehabilitated several famous


## ARCHTECTIGAL

 a annevesengineerang Lano of velopment one piece poivure thane
roam topos

SOMERSET SCALE MDDELS 4a francis avenue
HARTFORD • CONNECTICUT OG10E TELEPHONE (2031 S23.9557
buildings in New York City, and Thomas King, a consultant on site planning for housing.
The chapter has an urgent need for new members to replace those who have resigned because of present depressed conditions. To encourage members to ask their non-member colleagues to join, Andrew Smith, AIA, Membership Chairman, is planning a series of small luncheon meetings throughout the state. The first one was held in Hartford on March 26 and was attended by twelve chapter members. Chapter activities, particularly those which are of direct and visible benefit to the practitioner and his employees, were discussed in detail. Suggestions regarding chapter activities and policy were a valuable byproduct of these discussions intended to acquaint interested members with chapter activities.
It is important for each member of the chapter to make an effort to convince a colleague to join. The CSA needs size and money to represent the architectural profession effectively in front of governmental bodies and to carry out the educational, public relations and professional practice programs it should.

Peter H. Borgemeister


## Acoustical Ceilings for New Haven Savings Bank by

## THERMML ACOUSTICS,INC.

81 FARWELL ST. - WEST HAVEN, CT. (203) 933-1637


FABRICATORS \& ERECTORS
OF
MISCELLANEOUS \& STRUCTURAL STEEL

BOX 535 * GLASTONBURY, CONN. 06033
(203) 633-3631

2009 N. 14th STREET = ARLINGTON, VIRGINIA 22210 (703) 527-1065

> TM. Frank Higgins שூ Co., Inc.

Resilient Flooring \& Carpet Specialists

## News

## Podge/Sweet Predicts Housing Recovery

Construction is expected to lead the pation's economy out of its recession with recovery in housing and public works his year, followed by a turnaround in onresidential building late in 1975 or arly in 1976, according to the latest uplate of the 1975 Dodge/Sweet's Contruction Outlook.
he report indicates a heavier cutback n commercial and industrial building, due o the deepening recession. A recovery ff the depressed housing market, as a esult of improved savings flow, is still nticipated. Public works construction, particularly highways and sewer projects, vill be accelerated by the release of impounded Federal funds as a means of roviding employment, according to he firm.
Jeorge A. Christie, vice president and hief economist of the firm's F. W. Dodge Division, points out that " with the recent mprovement in mortgage market conbitions, homebuilding is ready to go." He xpects the second quarter will "almost ertainly" bring an upturn in housing tarts, followed by continued improvenent through the remainder of the year. ccording to Christie, a total of 1.4 million omes and apartments will be built this ear with a value in excess of $\$ 36$ billion -11 per cent more than the 1974 dollar mount. Construction of hotels, motels, nd dormitories will bring the 1975 resilential building total to $\$ 38$ billion.
ccording to the Dodge economist, the alue of nonresidential building will lecline 10 per cent in 1975 to $\$ 31$ billion, s the business sector cuts back on conracting for factories, offices, stores and varehouses. "This is the same thing the pusiness sector did in the 1970 recession," aid Christie. "The decline in business onstruction isn't likely to be reversed intil late in 1975 or early in 1976, someime after a more general recovery in the conomy has been established." In the hterim, he believes the main support of onresidential building will come from chools, health facilities and other instiutional buildings.
le also cautioned that the goal of energy onservation, as announced in President ord's January budget and economic hessages, "is in competition with the oal of economic recovery. The conflict sunavoidable as long as the basis for energy conservation is punitive taxation and the basis for economic stimulation stax reduction."

McGraw-Hill Information Systems Company, an authority on the construction market, produces Dodge Reports on construction activity and Sweet's Catalog Files of building product information.

## ASHRAE Examines Energy Usage

"The United States could save $71 / 2$ to 10 per cent of its total energy usage over the short term through the application of existing technology," David Rickelton, president of the American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) declared.
"In our industry, by improving efficiencies of existing structures and systems with an all-out concentrated effort, we could realistically save the equivalent of 3 to 4 million barrels of oil per day," he told ASHRAE members at their semi-annual meeting in Atlantic City. That far exceeds the President's goal of a 1 million-barrel per day reduction in 1975, and complete independence from foreign oil by 1985.
He suggests that the nation must not only increase the available amount of energy to the consumer to meet his space heating and cooling requirements, but also simultaneously improve operating efficiencies of these systems and their containerization. Because of present inefficiencies, millions of buildings across the nation
lose 25 to 50 per cent of their heating and cooling energy.

## Amarlite Sweepstakes

Amarlite, the Architectural Products Division of Anaconda Aluminum Company, is offering an expense-paid trip for two to Egypt. This unusual sweepstakes contest is open to architects, specification writers, and design engineers.
As a tribute to the "Seven Wonders of the World", of which only Egypt's pyramids still exist, Amarlite has commissioned illustrations of all seven wonders which will be sent to entrants at no charge. Various architects, archeologists and engineers have been able to determine what the six extinct monuments looked like from the writings of historians and tourists.
Entries must be postmarked before December 31,1975 , with the drawing to be held in January, 1976. Winners will be notified by mail. For more information and entry blanks, contact Amarlite/Anaconda, P.O. Box 1719, Atlanta, Georgia 30301.

## 'Street Furniture' Sought

The Center for Design Planning invites producers of "street furniture" to submit their designs for publication in the fed-


A rendering of the Mausoleum at Halicarnassus will be one of the Seven Wonders of the World illustrations sent to all entrants to Amarlite's sweepstakes.
erally-funded STREETSCAPE Equipment Sourcebook.
The National Endowment for the Arts, Architecture and Environmental Arts Division, has awarded the Center a grant to produce a reference manual for city officials, developers, architects, landscape architects, and engineers who are searching for products of superior utility and design.
"Street furniture" applies to all products which are intended for use in streets, parks, plazas, malls, or other public spaces. The items of special interest include equipment related to lighting, traffic control, information signage, public safety and security, amenities, and circulation systems.
A jury of professionals, nationally recognized for their work toward the improvement of the urban environment, will select the products to be included in the Sourcebook.
The deadline for entries is July 15, 1975, and there will be no entry fee. For further information and applications, contact the Center for Design Planning, 3417 1/2 M Street, N. W., Washington, D. C. 20007.

## Woman Architect Wanted

The Woman's Hall of Fame, the only national hall of fame to honor American women of achievement, is searching for a woman architect to design a permanent structure in Seneca Falls, New York, the birthplace of the Women's Rights Movement.
The "Hall of Honors" will house statues, paintings, historical memorabilia, a library, and plaques honoring the architect, in addition to the first 20 women inducted in 1973, namely: Jane Addams, Marian Anderson, Susan B. Anthony, Clara Barton, Mary McLeod Bethune, Elizabeth Blackwell, Pearl S. Buck, Rachel


Charles E. Gunnels
Louise Carson, Mary Cassatt, Emily Dickinson, Amelia Earhart, Alice Hamilton, Helen Hayes, Helen Keller, Eleanor Roosevelt, Florence Sabin, Margaret Chase Smith, Elizabeth Cady Stanton, Helen Brook Taussig, and Harriet Tubman.
For further information, contact M \& M Associates, 419 E. 78th Street, Suite 1B, New York, NY 10021 or call (212) 879-9785.

## Westfarms Honored

The Associated Landscape Contractors of America (ALCA) has awarded T. P. Ozyck, nursery manager for Glen Terrace Nurseries, Inc. of Hamden, for the landscaping of Westfarms Mall, the regional shopping plaza located just west of Hartford. Presentation of the Environmental Award took place during the 13th Annual Meeting of ALCA in St. Petersburg, Florida.


Allen P. Tracy, P.E.
Officers Named at Russell Gibson von Dohlen Inc.
Charles E. Gunnels and Allen P. Tracy have been named vice-presidents of Russell Gibson von Dohlen Inc., a West Hartford based architectural and planning firm.
Gunnels, a West Hartford resident, is a 1952 architectural graduate of Georgia Institute of Technology. He is registered in Connecticut, Massachusetts, and Illinois, and has been with the firm since 1971.

Tracy, a resident of Ellington, is a 1959 graduate of the University of Maine and a registered professional engineer in Connecticut, Maine, Massachusetts, New Hampshire, and Vermont. He joined the firm in 1969.
Russell Gibson von Dohlen Inc., with offices in West Hartford and in Pittsfield,


## Job: FIRST FEDERAL SAVINGS

Corner Boston Post Road and Racebrook Road, Orange, Conn.
Contractor: HARRY SKOLNICK \& SON, INC.
Architect: ANDREW EUSTON
Windows: PELLA WOOD DOUBLE HUNG
Supplied by: LAURENCE R. SMITH, INC.
68 Holmes Road, Newington, Conn. 06111
Phone: (203) 666-1527


The State Public Works Department plans to move the 17 th century Timothy Steele House from Lafayette Street to another state-owned property.

Massachusetts, is among the largest architectural firms in the area. Since its establishment in 1954, the firm has had design responsbility for over 200 buildngs throughout New England.

## Important Notice from Plastics Industry

The flammability characteristics of celluar plastics used in building construction, and low density cellular plastics used in furniture are tested under numerous test methods and standards. Included among hese are ASTMD-568, 635, 757, 1433, 1692, E-84, 162 and 286; UL 94 and 723; and NFPA 255. The Federal Trade Commission considers that these standards are not accurate indicators of the performance of the tested materials under actual fire conditions, and that they are only valid as a measurement of the performance of such materials under specific, controlled test conditions.
The terminology associated with the above tests or standards, such as "nonburning", "self-extinguishing", "noncombustible" or "25 (or any other) flame ppread" is not intended to reflect hazards bresented by such products under actual fire conditions. Moreover, some hazards associated with numerical flame spread atings for such products derived from est methods and standards may be signifcantly greater than those which would be expected of other products with the ame numerical rating.
The Commission considers that under actual fire conditions, such products, if allowed to remain exposed or unproected, will under some circumstances oroduce rapid flame spread, quick flashover, toxic or flammable gases, dense smoke and intense and immediate heat and may present a serious fire hazard. The manufacturer of the particular product or The Society of the Plastics Industry, nc., 250 Park Avenue, New York, N. Y. 10017, should be consulted for instruc-
tions for use to minimize the risks that may be involved in the use of these products.

## State Seeks Mover for Oldest House

The State Public Works Department is seeking bids on a project to dismantle and restore on an historically more appropriate site what is considered to be the oldest house in Hartford.
Commissioner Robert A. Weinerman has announced the deadline for submitting sealed bids on the moving of the Timothy Steele House as Wednesday, April 16, by 1:00 p.m. Interested parties are also requested to indicate whether they would require payment by the State or be willing to pay the State for the privilege of participating in the project.
Students of colonial architecture who have examined the structure on 91-93-95 Lafayette Street have concluded that the massive, handmade beams, the bricks in its huge chimney, the stone work in the old foundation and other details date the construction of the original portion of the house to the 17 th century.
Prospective bidders may inspect the site by appointment with William Borthwick, Chief of the Public Works Department Architectural Unit.

## Housing Forecast

Richard W. O'Neill, nationally known housing consultant and president of Housing Advisory Council, Ltd. in Lakeville, told members of Western Wood Moulding and Millwork Producers that he projects "... 1.4 million new starts in 1975, 70 per cent of them single family., In a presentation at WWMMP's SemiAnnual meeting in San Diego, California, O'Neill struck out at government inefficiencies and their negative effect on housing and the economy. Citing budget deficits and historical precedent, he cautioned not to expect much help for housing from the federal government.
"On the brighter side," said O'Neill, "because of the steady upward trend in land and real estate values, a home continues to be a family's only real hedge against inflation. Couple that with the fact that, after all factors are applied, the U.S. can, in nonrecessionary times, absorb at least 1.8 million new dwelling units per year, and the long-term outlook is bright indeed."

## GSA Awards Program

The U.S. General Services Administration's second Biennial Design Awards program has been announced by GSA Administrator Arthur F. Sampson. Established in 1972, the program honors design excellence in federal construction projects.
"To reflect GSA's concern with improving the man-made environment," explains Sampson, the scope of the program has been widened, and entries are encouraged from architects, engineers, interior designers, energy consultants, artists, urban planners, private industry employees and government personnel.
For a personal announcement, write to $J$. Walter Roth, AIA, Chief of the Professional Support Branch, Public Buildings Service, GSA, 18th and F Streets, N.W., Washington, D.C. 20405, Attention: Design Awards Program, or call (202) 343-4615.

## Moore to Design NASA Project

Pending contract negotiations, Charles W. Moore Associates of Essex, has been selected by the National Aeronautics and Space Administration (NASA) to design "Project Tech," an energy conservation demonstration house at the Langley Research Center in Langley, Virginia.
In association with Forrest Coile and Associates of Norfolk, Virginia, the Connecticut firm will concentrate on demonstrating the application of ad-

## Ariangle Pacific <br> Building Products Corp

Mountain Road. Suffield. Conn. 06078
(203) $668-7376$ (413) 732.8900


TRUSS DIVISION

## SEDGWICK MACHINE WORKS, INC.

## Dumbwaiters Residence Elevators

- Manufacturing • Sales
- Installation
- Service

EIPMVGV(914)454-5400
vanced technology to minimize the requirement for energy and utility services and defining interactions of integrated energy and water management systems with building configuration and construction materials.
NASA guidelines for the project include: water/sewage partial reclamation; heating/cooling using solar energy, wood and waste material; total energy management of all heat sources; the best modern practices in construction, electrical, plumbing and materials using modular flexibility; use of the latest current technology including some custom-made components; and the use of systems by which any extra cost would be recovered within the lifetime of the system.

## Minges Named For SolarEnergy Project

The Minges Associates, Inc., consulting engineers of Farmington, has been selected as part of a three-firm consortium to design a solar-heated housing project for the elderly in Hamden.
Funded by the Connecticut Department of Community Affairs, the $\$ 1$ million project is the nation's first multi-family dwelling utilizing solar energy. Twenty of the project's 40 units will draw on the sun's energy for both space heating and domestic hot water. Ground breaking will be in July, and occupancy is scheduled for the summer of 1976.
Minges will handle the design of all solar, mechanical, electrical, and plumbing systems, in addition to the structural and site engineering. Landscape architecture is also a Minges responsibility.
In addition to The Minges Associates, Inc., the consortium consists of McHugh and Associates, architects, Farmington, and Kaman Aerospace Corporation, Bloomfield.

## Kaestle-Boos Reorganized

Hirsch-Kaestle-Boos Architects, Inc. announces that as of February 1, 1975, Irwin J. Hirsch will no longer be affiliated with the corporation.
The architectural firm will continue serving its clients at 30 Bank Street, New Britain, as Kaestle-Boos Associates, Inc.

Irwin J. Hirsch will practice architecture as Irwin Joseph Hirsch \& Associates Architects at 920 Farmington Avenue, West Hartford, Ct.

## Two Architects Join Shemitz Firm

Two architects, Ronald R. Eichorn of Madison and Arnold D. Gans of New Haven, have joined the professional staff of Sylvan R. Shemitz \& Associates, Inc., West Haven lighting designers and consultants.
Eichorn, formerly with Charles W. Moore Associates of Essex, and Zane Yost \& Associates of Bridgeport, received his Bachelor of Architecture summa cum laude from the University of New Mexico. He was Assistant Professor of Architecture at New Mexico and also served on the faculty of the University of California, Berkeley.
Gans was previously on the staff of Warren Platner Associates Architects in New Haven. He received his Bachelor of Architecture degree from the Rhode Island School of Design, where he has subsequently served as a visiting critic. He has been active in civic and housing affairs in the Greater New Haven area, serving as general chairman of the Festival of Arts; vice president and director of William N . Feaster Memorial Housing Corporation; member of the Community Development Action Plan in North Branford; and member of the South Central Region

Housing Assistance Groups, State of Connecticut.

## Hartford Library Offers Architecture on Microfilm

The Nook Farm Research Library of 77 Forest Street, Hartford, has acquired the complete microfilm collection, American Architectural Books, whose comprehensive studies range from the first architectural work recorded by the American colonies to titles in active use throughout the 19th century.
The 35 mm microfilm set is based on Henry Russell Hitchcock's 1962 bibliography of American architectural books and on Helen Park's "A List of Architectural Books Available in America Before the Revolution." The collection, with 989 titles covering 1066 volumes, is the only one of its range and size in the state.
The Nook Farm Research Library, maintained and staffed by the Stowe-Day Foundation, combines the collections of the Stowe-Day Memorial Library and Historical Foundation and the Mark Twain Memorial. Housed in the Katharine S. Day House, the Library is open to researchers and students daily, Monday through Friday, from 9:00 to 5:00. It is named after the famous 19th-century Hartford neighborhood in which such prominent figures as Harriet Beecher Stowe, Mark Twain, and William Gillette lived.

# ARTISTS' MATERIALS ARCHITECTURAL \& DRAFTING SUPPLIES 



# the EASTERN WOODWORKco. 

## Greater New Haven's preferred way to save

 New Haven Savings BankNew Haven. Connecticut
Estabished 1838
Established 1838
Member
ien
S.M.A.R.T. - the easy way to Save Money Automatically by Regular Transfer of funds from your no-interest checking account to an estate-building $51 / 4 \%$ savings account.

| See how your money grows! |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| years on deposit | \$10 deposited monthly | $\begin{gathered} \hline \$ 25 \\ \text { monthly } \end{gathered}$ | $\begin{gathered} \$ 50 \\ \text { monthly } \end{gathered}$ | $\begin{gathered} \$ 100 \\ \text { monthly } \end{gathered}$ | $\begin{gathered} \$ 200 \\ \text { monthly } \end{gathered}$ |
| 1 | \$123.53 | \$308.81 | \$617.63 | \$1235.25 | \$2470.50 |
| 3 | \$391.21 | \$978.02 | \$1956.03 | \$3912.06 | \$7824.12 |
| 5 | \$688.96 | \$1722.40 | \$3444.79 | \$6889.59 | \$13,779.18 |
| 10 | \$1588.02 | \$3970.05 | \$7940.10 | \$15,880.19 | \$31,760.38 |
| 15 | \$2761.25 | \$6903.13 | \$13,806.26 | \$27,612.53 | \$55,225.05 |
| 20 | \$4292.27 | \$10,730.67 | \$21,461.35 | \$42,922.70 | \$85,845.40 |

Note: SMART is also a convenient and painless way to pay your mortgage bill or other loan at New Haven Savings Bank.

# The Hartford Civic Center A New Urban Energizer 

If it can be said that any single structure can radically alter the ambiance of an entire central-city area, then that structure must surely be the new Hartford Civic Center. The completion of the $\$ 70$ million complex, which includes a 12,000 -seat coliseum, retail and commercial areas, exhibition and assembly space, and a 22-story hotel, has indeed ushered in a new era in the life of Connecticut's capital city. Streets which were once dark and nearly deserted after the close of the business day are now ablaze with lights and filled with pedestrains - shoppers, hockey enthusiasts, basketball fans, tennis buffs, late-evening diners, and families viewing the wonders of a boat show, a home show, or an antique auto exhibition.
Since the opening of the coliseum and hotel portions of the Civic Center on January 9 , more than 600,000 spectators (more than four times the population of Hartford) have purchased tickets for events in the arena, and countless thousands more have visited the opening Festival of Progress and other exhibitions. The Hartford Civic Center, in other words, is fulfilling its prime purpose as a catalytic agent for attracting people downtown into the core business area. It has created more excitement in three months than the city has seen in years.

## A Fifteen-Year Development History

From the present vantage point of the Civic Center's success, both as a financial venture and as a technical triumph, the history of its development - with many discouraging moments and doubtful turning points - becomes particularly interesting. The seed for the idea of a downtown civic center structure was planted as long ago as 1945, when the Post War Planning Committee and the City Plan Commission authorized consideration of a war memorial stadium. The real turning point came in 1961, however, when Hartford voters approved a $\$ 3.2$ million bond issue to cover the city's share of the $\$ 10.6$ million needed to develop what was then the Trumbull Street Renewal Project.
But it was not until January of 1965 that


This article on the Hartford Civic Center is the result of the collaboration of three writers:
H. Evan Snyder is editor-publisher of Connecticut Architect; Susan L. Leroux is a member of the public relations staff of Etna Life \& Casualty Company; Michael $P$. Buckley, a member of the magazine's editorial board, is an architect working with the real estate team in developing and leasing the commercial and retail portions of the Center.

by H. Evan Snyder<br>Susan L. Leroux<br>Michael P. Buckley, AIA

Photography by Monica A. Wolff and Bill Bradford


The impressive facade of the Hartford Civic Center extends from Asylum and rumbull Streets three blocks to the new Sheraton-Hartford Hotel.

Deputy Mayor George B. Kinsella proposed the seven and one-half acre Trumbull Street area as the future site, and another year until a feasibility study, sponsored by the Hartford Chamber of Commerce and financed by Ætna Life \& Casualty Company, recommended a $\$ 24$ million Civic Center.
To city planners, it seemed only natural that, after completion of Constitution Plaza financed by the Travelers Insurance Co., redevelopment should move west to the other side of Main Street to create a more fully integrated urban core. Although the Trumbull Street area was an eyesore, it required unusual cooperation between the city, the chamber, and the potential developer to convince taxpayers that, in a time of ever-increasing mil rates, the expensive Civic Center idea was a good one.
Through a total commitment by the Greater Hartford Chamber of Commerce and its president, Arthur Lumsden, and the tireless efforts of the Hartford City Council , the voters of Hartford became aware of the tremendous potential of the Civic Center. The Center would bring much-needed parking to the downtown area, and provide a more versatile facility for all kinds of events and a new drawing card for existing restaurants and stores. In addition, the Civic Center complex would allow Hartford to compete more successfully with other cities for convention business and, more important, provide a unique vehicle for private corporations and the municipal authority to come together in an experiment for solving urban problems. Perhaps the most compelling argument for so huge an undertaking, however, was the Civic Center's potential for paying for itself: $\$ 50$ million in development of the Trumbull Street area would mean an estimated $\$ 2.4$ million in additional property taxes.

## The Design Team

The design team for the Civic Center was formed in early 1969, and represents a collaboration between one of America's largest and most illustrious architectural firms, Vincent G. Kling and Partners of Philadelphia and the firm of Danos and


Over 10,000 spectators a day watched the Æetna World Cup tennis matches between the United States and Australia on March 6, 7, 8, and 9. The event attracted the largest paid attendance in the history of professional tennis.

Associates of Hartford. Another important part of the team was Civic Center director, William Lillyman, who was hired by the City before the project was underway to coordinate input from the many different owners and other sources.
"Our purpose in the design process", commented architect Harry Danos, "was not to create a monumental structure, but rather something which would serve as a focus of activity for downtown and remain in scale with the city itself." After site visits to a number of similar facilities around the country, the architects developed a scheme for separate entities a circular coliseum and an adjacent highrise office/commercial area, connected by outdoor malls. Cost factors, climatic conditions, and the scale of the surrounding business district, however, dictated the final evolution of the design into a more horizontal complex, with the
terior streets" or courts which retain natural lighting through a number of skylights, but which can be completely climate controlled.

## Hartford's Superblock

The Civic Center, as constructed, is best described as a "megastructure" or "minicity" which covers more than two city blocks and includes the following components:

- a 12,000-seat coliseum for shows, concerts and sporting events;
- an 88,000 square foot exhibition/ assembly area for displays and conventions, with adjacent food-service facilities;
- the Civic Center Shops, a 220,000 square foot shopping mall, featur ing some 50 specialty stores and gourmet restaurants flanking the multi-level pedestrian streets;
- 120,000 square feet of commercial and corporate offices;
- a 500-car underground parking garage and service level; and
- the 22-story Sheraton-Hartford Hotel, connected by enclosed bridges to the main portion of the complex and adjacent parking.
The Civic Center complex, representing some $\$ 70$ million in investment by the City of Hartford, Ætna Life and Casualty Co., and ITT-Sheraton, encompasses a number of technical and administrative "firsts". Among these are the incorporation of the much heralded "Fast Track" system of construction so prevalent in today's architectural vocabulary, in combination with the Construction Manager system of building.
Real estate development, by its very nature, involves a certain amount of risk, but in the case of the Civic Center, the

(Above left) The Asylum Street entrance to the Civic Center. (Below left) The Coliseum floor during the recent New England Boat Show.
(Above) A completely enclosed mall connects the Coliseum portion of the Civic Center with Sheraton-Hartford Hotel.
jamble was unusually speculative. With William Crow Company of New York acting as Construction Manager and with he aid of the architects the entire buildng process was programmed by computer. The result of the computer analysis vas the decision to begin excavation on he project in late 1971 before architecyral and engineering working drawings vere complete. "We really stuck our hecks out," reflected Councilman Nichplas Carbone, but the gamble paid off n the saving of more than a full year in onstruction time and thousands of dolars in cost. When excavation began, here were a few tense moments, howpver, since bids had already been put put on sheeting and shoring contracts, pn the roof and steel, with no definite ssurances that the budget would evenually be fully funded.

The Civic Center's main claim to techni-
cal fame is the construction concept of the gigantic space frame for the coliseum roof. The triangulated lattice-type space frame, designed by the engineering firm of Fraioli-Blum-Yesselman in consultation with the architects, was chosen as means of creating a fragile-appearing and gos-samer-like structural system which would appear to "float" over the arena. The space frame, composed of 4,455 relatively small, high-strength steel members, was programmed by computer, thus saving thousands of manhours in design time.

The method of fabrication and erection selected by Bethlehem Steel Corporation for the space frame was to assemble the entire element at ground level and raise it in a single operation, using temporary lifting towers, into its final position. Measuring 360 feet in length, 300 feet in width, and 22 feet in depth, and weighing 1,400 tons, the space frame was raised to
a height of more than 100 feet by four diesel-driven, compressed-air hydraulic winches at the rate of $281 / 2$ feet per hour. It remained suspended from the lifting towers for approximately two months, while the permanent concrete pylons were poured in place, and then lowered into its final position, 85 feet above the coliseum floor.

According to Lewis M. Eisenstadt, AIA , a partner of Kling \& Associates, "To the best of our knowledge, this is the largest roof of its kind that was ever raised in one piece; the largest clear span, in any event." By anticipating not only the possibility but also the economy and desirability of this method of erection, the design team was able to program the space frame contract at the earliest possible time and allow the seating construction within the coliseum to follow after the roof was in place. All duct work,

pipes and conduits were installed and the structure painted before being hoisted. By spanning an area 270 feet by 210 feet in the rectangular directions ( 340 feet measured diagonally), the design also insures an unobstructed view of the arena from every seat in the coliseum. Although the Civic Center and the commercial/office portion, known as the Civic Center Shops, were designed long before energy conservation became a major national concern, the facilities are a model for efficient energy use. A total energy study made for the City of Hartford and $\npreceq$ tna by the engineering division of the Kling Partnership showed that chilled water for cooling and steam for heating piped from the Hartford Steam Company would be far more efficient and less costly than an on-site heat-ing-cooling plant. Furthermore, the very size of the two-block complex, Danos points out, means that less heat and cooling is required than for the many separate buildings found in an average downtown city block, each with its own exposed corners, angles and broad glass areas. By comparison, the Center has a lower ratio of glass and exposed wall area to volume, as well as fewer corners and angles.
The specially designed lighting equipment for the coliseum portion of the

electric energy, while providing lighting precisely adjusted to the requirements of each of the varied uses for which the facility is intended. All of the 464 lighting units are contained in 87 fiberglass globes, or "pods". Over the arena floor are three clusters of pods, each containing three 1,000 watt, high-intensity halide vapor lighting units and three 2,000 watt quartz lighting units. The metal halide vapor lights produce as much as 130,000 lumens for as long as 10,000 hours, as compared with only 21,000 lumens for only 2,000 hours for a 1,000 watt incandescent bulb. In addition to the halide vapor fixtures which are used for lighting sports and televised events, the highly efficient quartz lighting units are used for circuses, ice shows, and other events which require variable colored light. Sealed beam units are used for lighting the seating areas, all controlled for maximum efficiency by intensity switches.
Even the ultra-modern four-sided electronic scoreboard is a study in conservative use of energy. Because of special mounting and manufacturing methods which allows a small lamp to make a large and clear spot of light, the entire system operates on 80 per cent of line voltage. Lustig \& Associates, Inc., of St. Louis, designed the lighting and sound systems, in conjunction with the architects.
(Top left) The Civic Center's Giant Space Frame.
(Top right) The skylight in the main lobby provides natural lighting and interesting shadow effects.
(Bottom left) The three-level foyer of the complex will be surrounded by retail and office space.
(Bottom right) Fiberglass "pods", eight feet in diameter, provide lighting for the Coliseum.

## "The New Side of Main Street"

In terms of its impact on the city of Hartford, the Civic Center must be considered an urban device of considerable significance. Situated in the exact center of the central business district - halfway between Constitution Plaza to the east and Union Station to the west the Center is causing a major shift in downtown's center of gravity to what used to be disparaged as "the other side of Main Street." The shift will be further enhanced by the network of east-west pedestrian malls proposed for the area.
Many of Hartford's major businesses, with high concentrations of professional men and women, as well as the offices of state and municipal government, are located within a ten-minute walk of the Center. The complex is also easily accessible from the major Interstate Highways 84 and 91. With 8,500 parking spaces within two blocks of the Center, the complex has already proven to be an extraordinary regional attraction.
The Sheraton-Hartford Hotel, as the northern border of the Civic Center, has given the city a new, competitive edge for attracting convention business. Within its 22 stories are 407 private rooms, two restaurants, meeting rooms and a banquet hall for up to 900 guests. The hotel is intimately connected to the mall of the Civic Center Shops, providing indoor passage to the Center's exhibition and assembly halls.
Slated for opening this fall, the 220,000 square foot Civic Center Shops will feature a carefully-chosen mix of retail shops, boutiques and restaurants clustered along an angular, two-level pedestrian mall. Dramatic courtyards, fully landscaped, punctuate the shopping street at intervals.
The mall is anchored on the north by the Sheraton-Hartford Hotel, and on its west by Luettgens Limited, a 66,000 square foot men's and women's specialty store. Luettgens Limited is Connecticut's first entirely new department store in 85 years.


## ABOUT THE ARCHITECTS

The Hartford Civic Center was designed by Vincent G. Kling \& Partners, architects, planners, engineers, of Philadelphia, in association with Danos \& Associates, architects, of Hartford, Connecticut. Both firms also shared in the administration of the construction of the complex.
The Kling Partnership has completed more than $\$ 2.8$ billion in architectural planning and engineering projects in the United States and abroad, and has been the winner of numerous awards for excellence and creativity, including National Honor Awards from the American Institute of Architects and other professional organizations. Lewis Eisenstadt, AIA, was the partner-in-charge for the Kling organization on the Civic Center projects. Harry McHorney, AIA, was staff architect-in-charge of the Center.
Danos \& Associates is a locally based architecture and planning firm which supplied program, design, and workingdrawing input on the Civic Center, as wel


Vincent Kling, FAIA
as knowledge of local subcontractors, local color and procedures. Harry J. Danos, AIA, principal of the firm, has been recognized for his work on projects for the University of Connecticut, Central Connecticut State College, and numerous projects

The new Sheraton-Hartford Hotel, with 407 private rooms, two restaurants, meeting rooms, and banquet facilities is proving a great new force in attracting visitors and convention business to Hartford.


Harry Danos, AIA
for educational, municipal and commercial organizations. Joseph Casparino and Robert Chester were the associates-incharge of contract administration, and Robert Anderson, AIA, was in charge of coordination and documentation.


Fifty other specialty shops complete the mall, including an unusually diverse selection of restaurants:

- The Signature Restaurant, an elegant luxury dinner house, specializing in native American cuisine
- The Promenade Cafes, a cluster of individual Greek, Mexican, German, Italian and Oriental kitchens, enclosing a heavily landscaped common seating area
- The Rising Sun, a Japanese restaurant with shoji-screened dining alcoves


## Project Management Team

\&tna Life \& Casualty, developer of the Civic Center Shops and corporate offices, has retained a professional team of architects, real estate experts, and design and construction management consultants to complete the \$26 million project. Halcyon Ltd., an international consulting firm has overall responsibility for project management. Leasing agent for the mall is California-based Coldwell Banker, specialists in regional shopping centers. Norwood Oliver Associates, a New York-based interiors
firm, has been retained by both Etna and Luettgens Limited for design consultation. By identifying tenants, establishing design and graphic control and insuring the quality of construction, this project team is developing an exciting, integrated urban retail center.
The new Hartford Civic Center is a unique generator of activity in the downtown core. The insurance capital of the world has never lacked for bustle by day, but with the addition of the coliseum, the nightlife of Hartford is showing signs of dynamic growth. By the arena's capacity to create its own crowds, Civic Center visitors are spilling out to patronize downtown stores and restaurants. As the Civic Center Shops are finished, shoppers will find goods and services not found anywhere else in this area.
It is clear to see that Hartford is sitting on the brink of a new era of urban excitement. The Civic Center is the energizer - a superblock as invigorating to the city as it is to the people who live, work and visit there. Now, more than ever, there's good reason to "Keep Your Eye on Downtown Hartford!"

## THE HARTFORD CIVIC CENTER OWNERS:

City of Hartford
Coliseum, Public Assembly Rooms, Garages
Atna Life \& Casualty Commercial portion of complexretail mall and offices
Sheraton Hartford Hotel
Partnership composed of Atna Life
\& Casualty and ITT-Sheraton
ARCHITECTS:
Vincent G. Kling \& Partners, Philadelphia, Pa.
Danos \& Associates, Associated Architects, Hartford, Ct.
ENGINEERS:
Structural:
Fraioli-Blum-Yesselman, Norfolk, Va. \& Hartford, Ct.
Mechanical \& Electrical Kling/Lindquist, Inc., Philadelphia, Pa.
Special Electric \& Lighting consultants: Lustig \& Associates, St. Louis, Mo.

## CONSTRUCTION MANAGER:

William L. Crow Construction Co., Div. of J. A. Jones Construction Co., New York, N. Y.

## PRIME CONTRACTORS:

Gilbane Building Company,
Providence, R.I.
Coliseum
Associated Construction Co., West Hartford, Ct.
Parking garages
William Crow Construction Co., Commercial portion
Bethlehem Steel,
Bethlehem, Pa. Space frame

LEASING AGENTS:
Coldwell Banker, Hartford, Ct.

# New Haven Savings Bank A New Landmark on Church Street 

## by H. Evan Snyder

The fact that new buildings for the banking industry in Connecticut are having a tremendous impact on our architectural landscape is nowhere more apparent than on Church Street, bordering the southeastern side of the New Haven Green. Here one can see new - or relatively new - headquarters for the First New Haven National Bank, Connecticut Savings Bank, and the recently completed New Haven Savings Bank.

The 18 -story tower at One Ninety-Five Church Street, designed by William F. Pedersen and Associates, is unquestionably the most impressive commercial structure in the redevelopment of downtown New Haven. For many years, New Haven Savings was headquartered at 170 Orange Street, but when the old building became a part of the city's redevelopment area in the late 1960's, the decision was taken to build a new headquarters building at the corner of Church and Elm.

The New Haven Savings Bank building consists of a five-story base portion covering the entire corner site, with 18,350 square feet per floor, and a 13-story office tower, with 11,500 square feet per floor. The structure also contains an additional 53,000 square feet of indoor parking space. An original concept calling for a two-story building on the site was abandoned in favor of the present plan, which houses the main banking functions at the street level, and on the 10,000 square foot mezzanine, with general and executive offices occupying the second and most of the fourth floors.

The architects have added greatly to the visual excitement of the building by avoiding the usual rectangular plan so prevalent in contemporary office structures. The tower portion, oriented on its longest dimension to Elm Street, forms an interesting six-sided geometric plan providing a variety of sharply contrasting exterior angles, with the result that the observer gets different impressions of the building from different vantage points. The plan also allows for the utmost flexibility in the interior office spaces. The plan shown here envisions a possible arrangement of one of the tower floors for three tenants, each with individual access directly from the elevator lobby and a variety of interesting individual office layouts related to the angular pattern of the design.


(Left) Architect's proposed office plan for a typical tower floor.
(Below) Main Banking Floor
(Right)Library and Board of Directors Meeting Room
Photographs by Sean Kernan, courtesy of Office Interiors, Inc.



The New Haven Savings Bank is a totally electric building in which every floor enjoys individual control of temperature through the Westinghouse ConstantAire ${ }^{\text {™ }}$ System, which interrelates lighting, heating and air conditioning to achieve year-round comfort, while meeting ecological requirements by conserving energy to an unusual degree. Another energy conserving feature of the building are the solar glass windows which reduce sun glare and which open easily on a cen-ter-pivot for natural ventilation when required.
Among the most striking features of the bank's new headquarters are the warm and gracious interiors, designed by Office Interiors, Inc. of Hamden. The main banking floor is an open and inviting area, with warm tones of rust and red in the furnishings and wall coverings, accented by deep wood tones in the supporting columns and the warm tones in the travertine floors. The business areas are positioned on either side of the main lobby to add to the feeling of spaciousness.
In economic times such as these, the New Haven Savings Bank headquarters is a welcome statement of confidence in the future vitality and viability of downtown New Haven. It will serve as an anchor for the future redevelopment of Church Street, which includes a new City Library complex, the rebuilding of City Hall, and the refurbishing of Government Center.

Owner-Developer:
THE NEW HAVEN SAVINGS BANK
One Ninety-Five Church Street
New Haven, Connecticut 06502
Architect:
Wm. F. Pedersen \& Associates, Inc.
Consulting Engineers:
Joseph R. Loring \& Associates, Inc.
Macchi \& Hoffman
General Contractor:
The Dwight Building Company Renting Agency:

Wm. M. Hotchkiss Co.

## The 1975

by Natalie Korsheniuk

A New York architect transformed one end of a Connecticut barn into a colorful summer home and won a 1975 Burlington House Award for his imaginative approach.
Francis Booth, of the New York architectural and engineering firm Tippetts-Abbett-McCarthy-Stratton, utilized the original structural elements of a 19th century barn in creating a setting for his family's changing tastes in furnishings and decoration.
The barn itself defines three sides of a courtyard, situated high in an enclosed valley of the Connecticut countryside. The fourth side is bordered by an 18th century farmhouse and its yard. It was the architect's intent to maintain the visual continuity of the courtyard facade of the barn, while, on the other hand, making a clear distinction between the old and new sections of the building; and he succeeded by matching the exterior colors and materials, yet expanding on the simplicity of the design with contemporary interior details.
Working in harmony with the existing framework, Booth allowed the old beams to govern his placement of the windows. The large glass openings face north and east, away from the courtyard and out onto a pond which was added by his family. They also rebuilt stone walls and planted trees to enhance the grounds and their view from the house.
The first level of the renovated barn playfully explores the endless possibilities of an open living area. The stark whiteness of the walls and ceiling emphasize the antiquity of the beams and posts. Partial walls of knotty pine serve as neutral backdrops for such colorful decorator touches as a blue, red, orange and yellow Mexican blanket and the green freshness of hanging plants. The only structural addition to the interior is an unobtrusive, spiraling black stairway which leads to


Vibrant colors brighten the natural wood and white walls of the interior.


The dining and kitchen area open out into the living space, and the sliding glass doors lead to a vegetable and herb garden.

The effect of the minimal use of walls and bartitions is a feeling of total freedom which is mirrored by the family's mixed collection of furniture and artifacts from differing periods and cultures. The Booths have assembled African and Oceanic masks, placed colonial and contemporary furnishings side-by-side, and added such oright splashes of color as the purple, white and red of the sofa cover, and white, red and maroon rugs. The grandfather clock in the living area was made by a Booth ancestor during the Civil War era. The dining and kitchen areas open out into the living room section, and a small vegetable and herb garden has been blanted nearby in the east yard. Large windows and easy-to-sweep concrete foors make this compact and functional area an efficient and pleasant space in which to work or eat. The dining table, sideboard, divider front and kitchen cabinets were all made by Mrs. Booth's father from an old chesnut log found buried in the original, muddy floor of he barn.
since the summer house is heated only by he fireplace and small auxiliary heaters, the Booths frequently spend winter weekends across the courtyard in the yellow farmhouse which belongs to Mrs. Booth's parents. Architect Booth intentionally avoided installing an extensive heating system to allow the whole barn structure o expand and contract as a single unit. An addition is currently planned for a children's play and sleeping room in the section which presently serves as the garage.
According to the architect, "The obvious intent, aside from providing pleasant summer shelter, was to retain the integrity
of the whole property, that is, improving it in a discreet, non-designed way, for present use and historic continuity." Booth met his goals so aesthetically that House Beautiful submitted their feature on his architectural success for judging by the Burlington Awards committee. On January 5, 1975, Booth was notified by the Board of Governors, under the chairmanship of Mrs. Lyndon B. Johnson, that his design had won a well-deserved national plaudit known as the 1975 Burlington House Award.


New York architect Francis Booth designed a home into a 19th century Connecticut barn as a summer retreat for his family.

Ceco long flange forms and steel domes were used in Civic Center Parking Garage construction.



Style and beauty plus ruggedness enable Ceco steel doors to meet every functional need. Ceco doors and frames are tough, stable, allow for solid attachment of hardware - won't warp, swell, shrink or rot. You gain the advantages of durability and trouble-free performance. Ceco's basic Hartford inventory offers a choice of 10,000 types and sizes which easily convert basic doors and frames to meet most requirements.


Ceco doors, frames \& hardware furnished for new Sheraton Hartford Hotel.

Ceco's research and development of forming systems affords architects, engineers and contractors the benefits of new and better ways of executing poured-in-place concrete construction. As always, Ceco's experience gives you simplicity, reliability and economy. With monolithic reinforced concrete systems, all materials and forming equipment are available locally everywhere. You can design with true versatility in rib slab, waffle slab or flat slab construction. And with Ceco's forming services, you get a dependable floor system fast. You can have large modules and attractive finishes for exposed ceilings by specifying Ceco's fiberglass forms. Ceco crews of formwork specialists erect and remove forms of steel, fiberglass or wood, on schedule, on a firm lump-sum contract.


CECO
The Ceco Corporation 621 Farmington Avenue Hartford, CT 06105 Phone: 236-0647

this vital question: What will the occu-
pants burn for heat or power, and will
they burn it efficiently?
Fuel oil is, by far, New England's most depend-
able fuel. Our business is supplying it and aiding
in its efficient use. Call us before you design and see
if we can be of assistance.


Upon appointing the writer as Commissioner of Education, President Robert L. Wilson wrote a letter directing the writer and the members of the commission to give priority to those educational programs which had the greatest probability of being of immediate benefit to our members in this difficult economic period. In particular, President Wilson suggested the following programs: a repeat of "Management Supercourse", a session on joint ventures, one or several educational sessions on small office financial management, and "how to do it" programs on environmental impact statements and O.S.H.A. The committe has responded as follows:

Son-of-Supercourse, now being planned, will be offered in the fall. It will be somewhat more concise than its father, and consequently it should be less expensive.

The commission members will discuss at their next meeting whether to offer an A.I.A. seminar on joint ventures.
The education commission is giving top priority to the planning of one or more all-day training sessions on the financial management of the small office and the various types of organizational structure applicable to the small office. This program will be designed for architects and those members of their staff who are involved with the day-to-day management of their offices, such as secretaries and bookkeepers.

## Environmental Impact Analysis.

Members will shortly be receiving information on a two-session course offered by Robert DeSanto, Ph.D., in the immediate future.
The writer has asked Victor Osborne, Safety Director of Yale University, to offer one or more training sessions dealing with the understanding and application of OSHA standards.
The education commission has attempted to extend President Wilson's ideas with the following additional "immediate help" programs:

The commission members will discuss at their next meeting the possibility of presenting the A.I.A. workshop entitled "How to Make it through Hard Times."

## CONGRATULATIONS <br> TO SHERATON OF HARTFORD

## for architects, contractors and industrialists... a complete painting and architectural coating service

## PAINTING.

gold leafing
decorating
sandblasting
waterblasting
vinyl wall coverings
flexible wood wall coverings
paper hanging
waterproofing
protective coatings
ARCHITECTURAL COATINGS...
seamless floors
cold glaze wall coatings
epoxies
textures
aggregate finishes
stone finishes
OTHERS .
tanks
stipple work
refinishing factory, office furniture decorative finishes

## daniel goodison, inc.

painting and architectural coatings 97 nutmeg lane / glastonbury / connecticut 06033 / 633-6751



## §cored Ground

## Economical and Colorful...

A wide variety of designs and wall patterns can be created easily and economically with these smooth, scored and colorful units. Timeless wall fashions, prestigeous and distinctive surfaces are yours, including the inherent qualities of concrete block construction: complete fire-safety, self-contained
insulating properties, noise reducing features and of significant importance, walls are practically maintenance free. Autoclaved (preshrunk) units are manufactured in conventional modular sizes and in several colors . . . special colors made to order. Send for FREE detailed literature.

## plasticrete corporation



# Letters 

Readers Respond to<br>'Outrage: The Urban Blight'

I enjoyed your article "Outrage: The Urban Blight" in the current issue of Connecticut Architect because I share your point of view completely. The article is well done.
One minor correction: on page 8, center column, third full paragraph, you state (in part): ". ... that might alter the Department of Environmental Protection's goals for Historical Districts....". Sadly, such is the public's awareness of the Connecticut Historical Commission, that few know that the State program for Historic Districts is administered by this Commission. True, there is a close correlation between the goals of these two state agencies and DEP is careful to refer to the Commission in its publications. But, so far as I know, DEP has no goals for Historic Districts. We do.

Because these goals are so closely associated with architecture, I think it important that articulate and influential architects, such as yourself, should know what we are doing (some 40 state-sponsored districts and some 16 National Register districts also administered by this Commission).
While I applaud your approach, I am bold enough to say that we also need your help.

Harlan H. Griswold
Chairman, Conn. Historical Commission

I have read the article "Outrage: The Urban Blight" by Raymond Wisniewski, AIA in the January-February 1975 issue of Connecticut Architect. My reaction was outrage, not so much from the fact that it was written by a member of the profession which gave the tax-paying citizens of the State of Connecticut the $250 \%$ cost overrun medical-dental center in Farmington, as by the bias and lack of factual information it contained.
May I remind your readers and Author Wisniewski that long before there were any notable buildings there was a primitive transportation system, and long before there were any "architects" there were primitive "engineers" who built and expanded that primitive transportation system. I would also like to remind them that for many years the only long-
range planning concerning transportation for prospective land use and future population growths was performed by the Planning Division of the former Connecticut Highway Department. Present land use planning relies heavily on the data bank of existing and future land use information compiled by this agency and its successor, the Bureau of Planning and Research in the Department of Transportation. Also, long before land use controls in the form of local planning and zoning commissions became effective, these same highway engineers were trying to effectuate efficient and perpetual land use control by means of the limited access expressway. Developers, and through them architects, created problems at interchanges on some of our earlier efforts, which required even more stringent control in these interchange areas. For years a slow educational process has been going on, and today developers, and their architects, have begun to recognize the blighted areas they have created. Hopefully, this educational processwill continue.

Connecticut Boulevard in East Hartford was cited as a "blatant example of pe-ripheral-arterial sprawl". This may have been true prior to the construction of the limited access expressway 1-84, but, as a result of this facility, is no longer. Certainly the new buildings in this area and

Publications, brochures, catalogues are our forte
. . . in fact any printing requirement you may have will be of interest.

have a Nice day



ALLIED PRINTING SERVICES, INC. 579 MIDDLE TURNPIKE, WEST MANCHESTER, CONNECTICUT 06040 TELEPHONE 643-1101

## nema 2 inc

specializing in lighting equipment
WESTINGHOUSE
222 Park Road KLIEGL-STAGE CO. LAM
GOTHAM
ART METAL
ANDY RESNISKY PAUL RIEDEL

West Hartford, Conn.
(203) 236-5941
nearby Founders Plaza could hardly be classified as "honky-tonk".

Mr. Wisniewskicites as excellent examples several shopping centers, such as Meriden Square, Enfield Square and West Farms Mall. One thing all of these have in common is an expressway arterial and improved highways that accommodate fairly well the enormous traffic loads that are necessary to make these viable commercial entities. Earlier in the article the question was raised as to whether Town Planning and Zoning Commissions, the Department of Environmental Protection, Historical Commissions and the like were aware of the goals of the Transportation Department and how they might affect the goals of the listed agencies.
The answer to this is a resounding "Yes", and the excellent developments mentioned are a result of this coordination. After all, the planning, design, acquisition of rights-of-way and construction of a major highway facility is a long process, ten or more years, and the coordination of such a facility with the agencies mentioned is a continuing process through all of the stages, including the physical construction.
Further on in the article, Mr. Wisniewski makes some unflattering remarks about 1-291 and the four-level structure which was constructed to provide for the interchange between I-291 and I-84. I won't

## Fifty years of recognized knowhow and service to meet your specifications.



0
expert technical assistance on paints and exotic coatings

0professional designers available to help you color-coordinate each project at no extra cost
paints and coatings/wall coverings/corks/fabric-backed natural woods/custom designed wallpapers/spray equipment sales and service

## National Paint Company

654 Tolland Street
East Hartford, Conn. 06108 (203) 289-3331

## If our salesmen could carry samples, You'd always specify BILCO.

When all you have to go by are the pictures on the catalog pages, one brand of horizontal doors looks pretty much like another. But if our sales representatives could carry samples you would immediately recognize the advantages of Bilco Doors.

You would see for yourself how easily they open and close, their superiority in design and workmanship. You would readily see that Bilco Doors are built to deliver long, trouble-free service, assuring your clients of sound value and complete satisfaction.


ROOF SCUTTLES
Standard sizes for personnel access; special sizes in single and double leaf types for equipment access.


FLOOR and PIT DOORS
Four standard types in a variety of sizes for every interior and exterior requirement. Special sizes on order.


## FIRE VENTS

The finest in fire protection equipment. Eight standard sizes with UL and FM labels. Special sizes to order.
quarrel with him on the structure itself, other than to say it was designed by an Architect-Engineer firm, and that it is functional and was constructed with in budgeted funds.
I will take exception to his remarks concerning the highway itself. This highway was planned as part of the expressway system for the Greater Hartford area. Those parts of the system that have been constructed were designed giving full and complete consideration to the dispersion of nonthrough traffic which 1-291 would afford. Without this facility the constructed expressway system will function about as well as a beautiful architectural masterpiece founded on quicksand.
While there may be some environmental damage associated with this project, there are also environmental benefits that will outweigh these disadvantages. Removing traffic from residential streets where it doesn't belong is not the least of these. A larger, more viable park in Newington with improved vehicular and pedestrian access to it must also be considered advantageous. West Farms Mall is oriented toward access from I-291 and without
it this development may never reach its full potential.
It is not my purpose to answer recrimination with recrimination. Rather, it is to suggest to Architect Wisniewski that the day of the "Master Builder" is past - assuming that it ever existed at all except in the minds of some pompous, egotistical architect or engineer. Our civilization has grown more complicated, and the needs of today require a close and complete cooperation of planners, architects, engineers and financiers to produce those things which will add to, rather than subtract from, our standard of living.
I suggest that the village concept, i.e., small, largely self-sustaining entities connected by a fine transportation network, will go a long way toward this end. Let's provide at West Farms Mall, for example, professional offices for doctors, dentists and lawyers; housing for low, middle and high income families and other facilities for leisure time activities such as a library and recreational facilities. Let's do all of this using the Mall as our centroid, and connect all of the entities with pleasant walkways. Complete I-291 so that this
complex is connected to similar complexes throughout the State and the country, to hospitals and larger scale leisure time and cultural facilities and long-range transportation facilities such as Bradley Field.
I can agree with Architect Wisniewski that we can't each "simply build one building, to suit one program and one budget, on one site, we have to do more than just understand the needs of one client". But, I submit that neither the architect nor the engineer alone can create the future that I believe each in our own way sees.
We can, we must work together. We can, we must avoid recriminations each to the other. We can, we will create a future environment better than exists today; for, after all, isn't today's environment better than yesterday's?
I'm discouraged by Architect Wisniewski's lack of information as shown by his article. I'm encouraged by the fact that he, like I, recognizes that we may be part of the problem, and I'm grateful for this chance to reply.

George S. Koch, P.E.

## Professional Services

## HUBBARD, LAWLESS \& OSBORNE ASSOCIATES, INC.

110 Whitney Avenue
New Haven, Connecticut 06510
Mechanical \& Electrical Engineers

## BURTON \& VAN HOUTEN ENGINEERS, INC.

Structural, Mechanical, Electrical, and Civil Engineering
10 North Main Street West Hartford, Conn. 06107

## BOUNDS \& GRIFFES ENGINEERS

STRUCTURAL-CIVIL CODE REVIEW - STUDIES-REPORTS

967 FARMINGTON AVENUE WEST HARTFORD, CONN. 06107 523-4228

## STORCH

## ENGINEERS

Subsurface Investigations Laboratory Testing Soil Analysis \& Reports ONE SIXTY ONE MAIN STREET WETHERSFIELD, CONN. 06109 203-529-7727

Specialists in Environmental Impact Statements

- SOCIO-ECONOMIC ANALYSES
- NOISE INVESTIGATIONS
- ECOLOGICAL ASSESSMENTS
- hydrological studies


## FRAIOLI-BLUM - YESSELMAN OF NEW ENGLAND

A Professional Corporation

## STRUCTURAL ENGINEERING CONSULTANTS

999 Asylum Ave., Hartford Ct. 06105 Philip Wesler, P.E. Richard R. Gossoo, P.E.

JOHN L. ALTIERI, P.E. CONSULTING ENGINEERS

MECHANICAL \& ELECTRICAL ENGINEERING

3 MORGAN AVENUE
NORWALK. CONN. O6951
$203.866 .5538 \quad 212.489 .6275$

## HALLISEY ENGINEERING ASSOCIATES,INC

structural engineers
17 WOODLAND STREET
HARTFORD, CONNECTICUT 06105
TEL: (203) 278-8267

## THE TIIIGES RSSDCIRTES, ぃIc.

Environmental Engineering Building Engineering Land Planning Laboratory Analyses

The Exchange, Farmington, Connecticut 06032 203-677-1385

JOSEPH M. HALLISEY, P.E.

## - st.JUDE CHILDREN'S RESEARCH HOSPITAL please help us

Send contributions to: MEMPHIS, TENN. 38101


ART NEEDS FOR 1. FINE ARTS... Custom frames etc
2.. COMMERCIAL... Advertising \& Illustrating.
3.. TECHNICAL... Architects-Engineers. etc REPROGRAPHIC... Photostats. Blueprints. Cameras ...Drafting

## Koenig's Folir Arts

SERVING THE ARTS SINCE 1933
is on the corner at 59 Farmington Ave. Hartford


Phone 728-3406


Hartford Civic Center and Sheraton Hotel electrical installation
. . . anotherjob successfully completed on time and to customer's satisfaction by

## 

SINCE 1896 ELECTRIC EOMPANY

## Got a tough nut to crack?

The biggest aggravations in remodeling or moving can be new furniture and furnishings. Save yourself time, money, mistakes and a ton of paperwork. Use our professional purchasing service and let us go nuts instead of you!


55 High St., Hartford, Conn. 06103 (203) 247-3248

THE ASSOCIATED SHEET METAL, ROOFING AND INSULATING CONTRACTORS
NORTHERN DISTRICT OF CONNECTICUT

19 LAUREL AVENUE - WINDSOR. CONNECTICUT - TELEPHONE 688-9651

American Sheet Metal Works 280 Brookside Ave., Waterbury
C. G. Bostwick Co

41 Francis Ave., Hartford
Bristol Sheet Metal Works
7 Carlton St., Wallingford
Capitol Ventilating Co
195 Maxim Road, Hartford
G. R. Cummings Co

198-210 State St., Meriden
Dansky's Roofing \& Sheet Metal Works 22 Raymond Road, West Hartford
Joseph H. Day Company
16 Honey St. Milford
H. R. Hillery Co.

Box 186, Groton
Industrial Sheet Metal Works
140 Boston Post Road, Orange
Limbach Company
9 Goodman Place, Bloomfield
Liner-Atwill Co
729 N. Mountain Rd., Newington
Morin Erection Co.
683 Middle Turnpike, Bristol
Northeastern Ventilating Co
271 John Downey Dr., New Britain
Ernest Peterson, Inc.
1830 Broad St., Hartford

Portland Roofing Co. Lake St., Portland
R \& S Contractors Inc. R. \& S. Contractors, Mate. Shaw Metal Fabricators Box 131, Branford
Shelton Roofing Co. 101 Water St., Derby
Southern N.E. Roofing Co. Box 1772, Hartford
Systems Testing \& Balancing Co 32 Harmony Rd., Granby


FRANCIS M. JACKSON ASSOCIATES, INC.

185 SILAS DEANE HIGHWAY
WETHERSFIELD, CONN. 06109 - (203) 563-9381

Builder's Guide to Contracting, by John R. Zehner, McGraw-Hill, New York, 320 p.p., \$15.00.

Major areas of building construction management, estimating and procurement, from the receipt and analysis of bids to the selection of subcontractors and suppliers, are summarized and explained by John R. Zehner of the Turner Construction Company.
Well illustrated with realistic examples from actual projects, this practical volume offers pointers on improving bidding and estimating procedures, recognizing potential dangers and avoiding them, increasing profitability, and operating a successful construction company.
Purchasing agent and former assistant secretary of Turner Construction Company, John Zehner has had extensive construction experience. His purchasing responsibilities have included such major projects as the New York Daily News building, Madison Square Garden Center, and McGraw-Hill World Headquarters.

Designer's Guide to OSHA, by Peter S. Hopf, AIA; McGraw-Hill, New York, 304 p.p., \$17.50.

The author has assembled materials from the thousands of OSHA documents, translated their words into illustrations, and listed sources for further information on specific problems.
Subtitled A Practical Design Guide to the Occupational Safety and Health Act for Architects, Engineers, and Builders, th is comprehensive working tool deals mainly with those portions of OSHA that are pertinent to the design profession. More than 500 easy-to-follow drawings, diagrams, charts, graphs, and other explanatory and reference aids have been included to enhance the reader's understanding of the OSHA regulations.
All the material is presented in the same sequence as the OSHA regulations, with easy-to-read titles. References to the full OSHA text appear next to each drawing or diagram for additional assistance. A practicing architect for many years, Peter Hopf is president of OSHA Research and Development Corporation, a consulting firm specializing in matters relating to OSHA. Formerly a partner in the New York architectural and engineering firm of Brodsky, Hopf, and Adler, he has designed virtually every type of building, including airport facilities, restaurants, maintenance structures, schools, and office and industrial buildings.
P.O. Box 5 Schoolhouse Road Old Saybrook Connecticut 06475

## GENERAL CDNTRACTDR BபILDER

(203) 388-5666

## Office Interiors, Inc.

Office Interiors specializes in combining function and total design to create an environment that is right for you and right for your company. Whether you need one chair or an entire office, our design specialists are always available to help you make a good total impression.
60 Connolly Parkway, Hamden, Conn. 06514 (203) 248-0161

How to Make Children's Furniture and Play Equipment, by Mario Dal Fabbro, McGraw-Hill, New York, \$7.95.
More than 70 projects which can be easily produced with hand or power tools by the beginning or advanced hobbyist are thoroughly described and illustrated in this second edition.
The first section of the book deals with practical information, starting with the selection of wood and other materials, and proceeding to choices of hardware, common wood joints employed, pointers on child safety, and the like.
Section two is devoted to descriptions of the actual projects, including lists of materials with dimensions, and numbered instructions for assembling.
Mario Dal Fabbro is a professional designer, consultant, and author. A contributor to the New York Times, House and Garden, and the Encyclopedia Britannica, he has designed furniture for both American and Italian manufacturers and is listed in Who's Who in American Art, as well as Who's Who in the East.

Preliminary Cost Guide, ed. by David K. Hyun, AIA; Architectural Data Corporation, Pasadena, 700 p.p., \$49.95.
Designed to permit developers, architects, engineers and other members of the design development team to forecast total project costs rapidly and accurately, this self-teaching manual covers pre-


## Interior Specialties

- Acoustical - Stone aggregate
- Metal stud - Computer floors
- Gypsum - Radiant ceilings
- Movable office partitions

DAVIS ACOUSTICAL CO., INC.
41 Walnut St. Hartford, CT
Tel. 278-8420
liminary estimating procedures for all phases of project development. According to editor Hyun, professionals with no experience in financial planning can use the guide. The system is taught by a step-by-step method and utilizes comprehensive budgetary cost forms developed especially for this manual. The case studies also correspond to Construction Specifications Institute Divisions of materials, processes and costs.

Techniques of Successful Practice for Architects, ed. by William B. Foxhall, McGraw-Hill, New York, 226 p.p., \$14.95.

Edited by the senior editor of Architectural Record, this book offers practical advice on such topics as the marketing of architectural services, effective handling of project administration, and dealing with government agencies. Architects, engineers, and professional consultants associated with building design and the construction industry will also find useful information on value engineering, lifecycle costing, construction management, and many other related subjects.

The section on Management of the Professional Firm covers every aspect of this topic, including financial management, personnel practices in the firm, computers as automated practice aids, and the use of slide presentations. Another chapter features the legal side of practice legal pitfalls, simple guides for avoiding liability, laws on the copyrighting of plans, interstate practice laws, etc.

For practices of all kinds - associated, joint venture, corporate, interstate, and international - this book provides guidance on managing professional firms successfully.

Author of Professional Construction Management and Project Administration, William Foxhall has served as associate editor of Air Conditioning, Heating, and Ventilating magazine.

Time, Cost, and Architecture, by George T. Heery, AIA; McGraw-Hill, New York 192 p.p., \$16.50.
The former chairman of the American Institute of Architects' industrial architecture committee, George Heery presents a definitive system for time and cost control that may be applied with in any given program of requirements, quality level, or design goal. The author-architect reveals the unique, combined design and construction management service which was developed by his architectural and engineering firm, Heery and Heery, of Athens, Georgia. This technique was recently used in connection with the design and construction of the Greater Cincinnati Airport, with substantial time and cost savings.

## For Congratulations, Celebrations, Graduations, Confirmations, Commemorations, Congregations.

The Sheraton has beautiful rooms available for banquets. For information callour banquet department.

# Sheraton-Hartford Hotel 

TRUMBULL STREET AT CIVIC CENTER PLAZA, HARTFORD, CONNECTICUT 203/728-5151


terior space utilization.

## THE CONSULTANTS' CONSULTANT

* ENVIRONMENTAl CONSUlting * ENVIRONMENTAL PLANNING * APPLIED ENVIRONMENTAL RESEARCH

TRC frequently serves as the specialized environmental consultant to architects, engineers and construction management organizations. We offer unusually versatile field sampling facilities, mathematical modeling and environmental applications of chemistry, biology and meteorology. Our specialized knowledge of indoor air pollution can be particularly helpful in planning in-

## WRITE OR PHONE FOR OUR BROCHURE

$$
\square \sqrt[\square]{\square}
$$

THE RESEARCH CORPORATION of New England 125 Silas Deane Highway

Wethersfield, Ct. 06109
Tel: (203) 563-1431

you already know about
tennife H F $0^{\circ}$ the pavement saver

## Now find out about

atexite
ACRYLIC COLOR
SEALER/SURFACER SYSTEM for all-weather tennis courts, play areas, patios, traffic islands, masonry Resilient • Non-Fading • Weather-Proof Won't Peel, Crack, or Chalk
FREE Brochure, Spec. Sheets, Swatch Card teNnis court construction, SURFACING, ACCESSORIES 131 Willow St., Cheshire, Ct. 06410 (203) 272-3221


## THINK SMALL. . . TO SOLVE YOUR NEXT BIG PROBLEM

## Serving the New England Architect

 with quality models.. . our 10th year
architectural
MODEL ASSOCIATES
55 SALEM STREET
WOBURN, MA. 01801 engineering uwson of f w onon c .


Since 1917

COMMERCIAL

INDUSTRIAL

INSTITUTIONAL

CONVENTIONAL
SYSTEMS

# DEVELOPER•BUILDER CONSTRUCTION MANAGER 

FULLY BONDED

Code 203
288-7753

## Building Today For Energy Tomorrow

Many people know us as New England's largest mechanical contractor. In fact, we are one of the largest in the nation.
One area of our business gives us special pride-energy related projects. This work has been a major factor in tripling our business volume in the last five years. And it has let us contribute to the solution of tomorrow's energy problems.
Some of our recent and ongoing projects in this area are:

## Nuclear

Waste system modifications for Connecticut Yankee Nuclear Power Plant, Haddam, Conn.
Heavy Fuel Oil
Construction of the first electrically traced (heated) pipeline of its kind in the United States for NEPCO.

Construction of tanker unloading, piping and transport facilities for United Illuminating Company, New Haven, Conn.

Construction of piping and mechanical facilities, ARCO tank farm (Atlantic Richfield Co.), New Haven, Conn.

## Liquid Propane

Turnkey contractor and design/build assignment for
construction of a 400,000-barrel storage facility for a U.S. subsidiary of Gazocean, a French corporation.

## Natural Gas

Construction of piping and mechanical work for new liquefied natural gas plant for Connecticut Natural Gas Company.

## Jet Fuel

Construction of two separate jet fueling facilities at Logan International Airport, Boston, Mass. For Delta Airlines and for the base operator.

## Defense

Shore power facilities for nuclear submarines, Electric Boat Division of General Dynamics, Groton, Conn.

## Recycling of Materials

Electrical systems for several New Haven Trap Rock-Tomasso facilities, converting accumulated rock dust to valuable construction aggregate.
At C. N. Flagg, we're working on the future. It's something we've been doing for more than 60 years.

## C.N.Flagg \& Co., Inc.

C. N. Flagg \& Co., Inc.

Cybernetics Inc.
C. N. Flagg Construction Division Northeastern Ventilating Co. Northeast Electrical Testing and Maintenance Co.

- Heating - Plumbing - Ventilating Excavating - Air Conditioning - Fire Protection Electrical Construction and Testing - Power and Process Piping
- High Pressure Gas Mains


