new jersey Architecture

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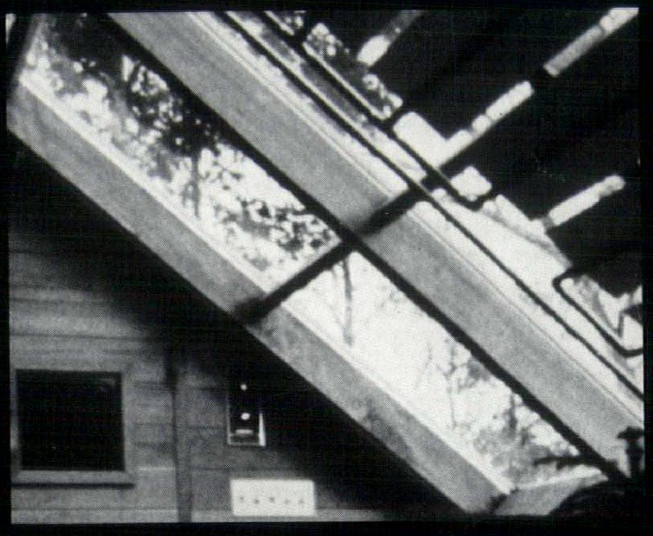

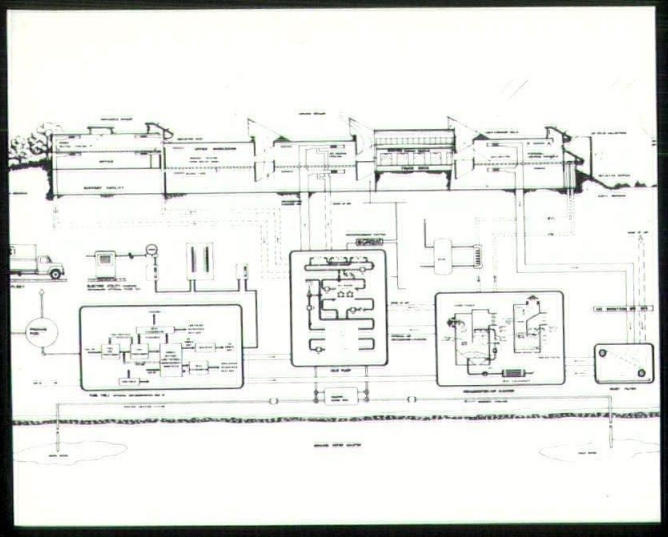

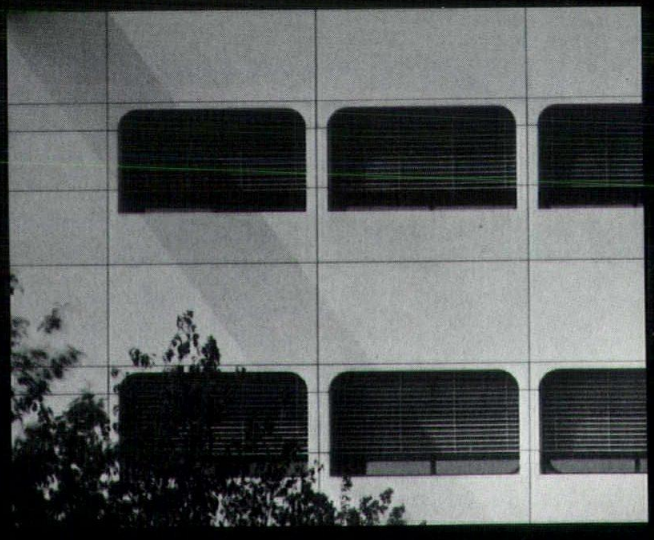

Energy and Architecture

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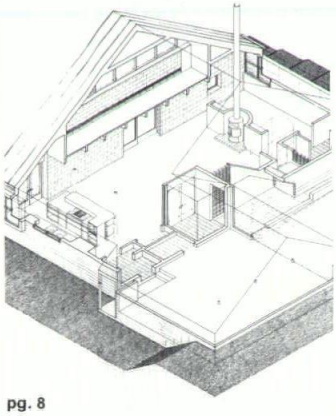

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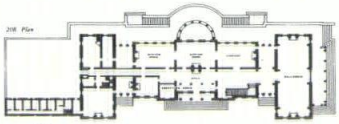

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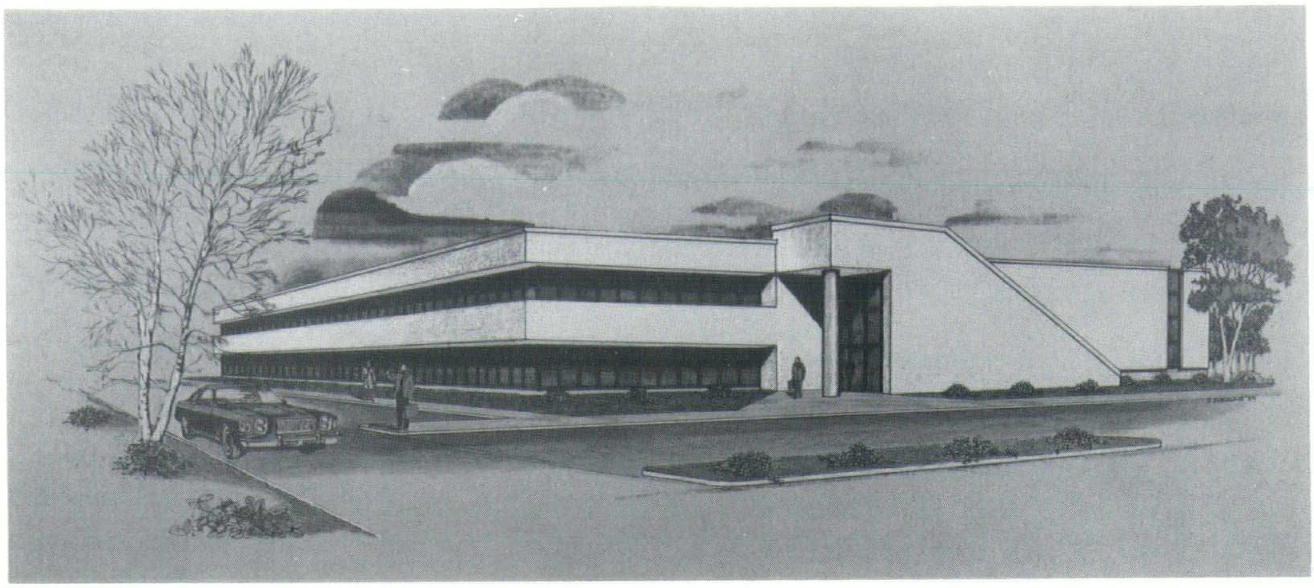
Cover: Good Shepherd Lutheran Church
Architects: Eckman, Sincox, Bator

Mills-Wright House
Architects: Kelbaugh & Lee

Mail Processing Facility
Architects: Spector/Hillier

Rockaway Townsquare
Architect: Barrett Allen Ginsberg, AIA

Correction: Woodland Plaza office building, published in ANJ issue #1, was a joint venture, James G. & Edward J. Centanni, AIA/CBS Design Group.



Job of the Month:

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checklist

Robert Geddes, FAIA, has been selected to receive the ninth annual Award for Excellence in Architectural Education from The American Institute of Architects and the Association of Collegiate Schools of Architecture. The coveted award honors a living educator who has taught at least 10 years and who has made outstanding contributions to architectural education. Mr. Geddes, former Dean of the Princeton School of Architecture and now Kenan Professor of Architecture there, also maintains a private practice in Princeton.

Two new members were appointed by Governor Kean to the N.J. State Board of Architects. They are *James S. Gaspari, AIA,* of North Brunswick and *Harry Spies, AIA,* of Cranford. Mr. Gaspari has a private practice in North Brunswick. Mr. Spies is a partner in the firm of Van der Clute & Spies in Cranford.

The Hillier Group sponsored its sixth annual Architectural Career Day which included a general lecture on architecture and the profession, a tour of their offices and one-on-one counseling with architects and representatives of several schools of architecture. The program gave local high school students an opportunity to visit an architectural and interior design office and talk with individuals established in those professions. Parents were also invited to participate.

Elizabeth Reilly Moynahan, AIA, has been appointed liaison to the AIA's Women's Task Group for 1984.

Two Architectural firms are celebrating their tenth year of practice this year: Rothe-Johnson Associates of Iselin and Short & Ford of Princeton.

Due to the success of their computer aided drafting and design (CADD) technology system, The Ryan Group of Red Bank has established a separate TRG Software Development Corporation.

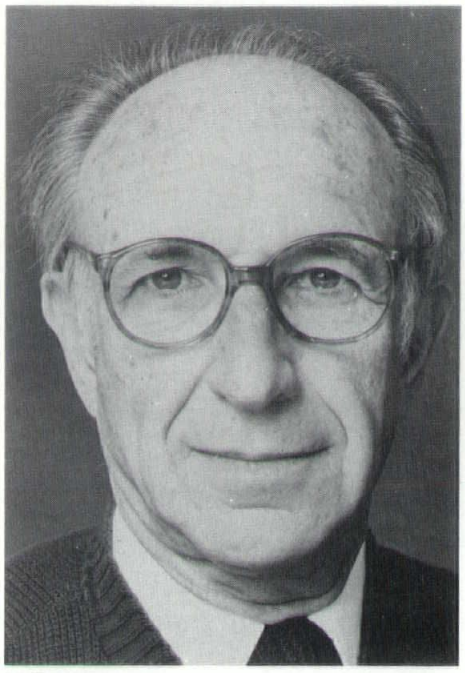
The office of *Barrett Allen Ginsberg, AIA,* of Bedminster, announced the promotion of two staff members. *Beth Trautwein, AIA,* was promoted to Director of Interiors. *Robert J. Scialla, AIA,* was promoted to Coordinator of Project Development.

Blender/Feitlowitz of Livingston donated their 1983 Sweet's Catalog to the Livingston Library. The donation of outdated reference books is a public service which libraries are delighted to receive.

Robert Blakeman, AIA, and *Eric Rosenblum, AIA,* have been named Associates of The Hillier Group in Princeton.

Susan Linger is the current President of the Society of Architectural Administrators. She is employed by Tomaino & Tomaino, Architects.

Kelbaugh & Lee were selected as a finalist in the National Design Competition for a new cultural arts center in Newport News, Va.

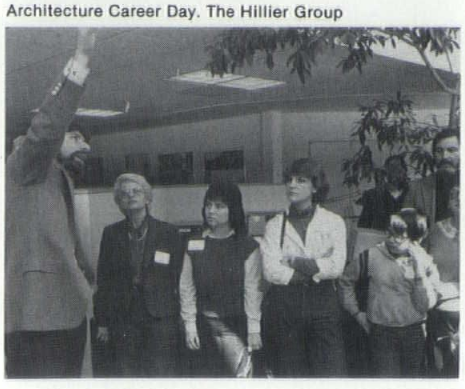


Geddes

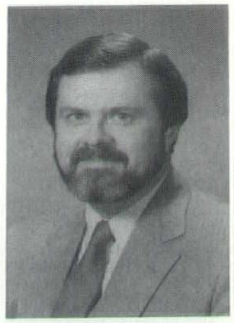
Gaspari, Mrs. Gaspari, Atty. Gen. Kimmelman.

Spies, Atty. Gen. Kimmelman

Architecture Career Day. The Hillier Group



Moynahan

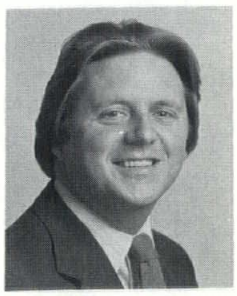


Ryan

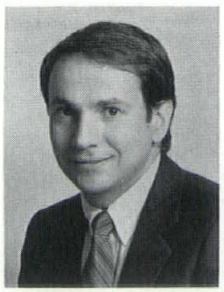
Trautwein

Scialla

Feitlowitz, Shaw, Blender.



Blakeman



Rosenblum

Linger

Competition Entry Newport News Cultural Arts Pavilion. Kelbaugh & Lee.

introduction

energy and architecture

This issue is devoted to the subject of Energy and Architecture. While visionaries such as Buckminster Fuller warned a half century ago about the danger of depleting finite resources, it was not until the sudden scarcity and consequent dramatic rise in the cost of petroleum products which occurred a little over ten years ago that any visible effect on Architecture has been evident.

Here in New Jersey a good deal of work that is sensitive to the need for the conservation of resources has and is being built. Several members of the New Jersey Society of Architects are among the nation's leading authorities in the field of energy efficient design.

The following pages include an essay on the implications of energy conservation for architecture in the larger sense and a selection of projects that indicate the variety of responses being produced by New Jersey architects.

environmentalism & historicism

Doug Kelbaugh, AIA Discusses Alternate Sources of Architectural Form

Over the last decade, as Modernism has lost its moral and formal potency, new paradigms have arisen to fill the vacuum. Among these new paradigms are historicism and environmentalism. The former has in large part given birth to Post Modernism and the latter to solar architecture. The first issue to be addressed is which of these two ascendant positions offers the better path for architects. The second concerns natural energy systems, and the third explores the possible overlap between the two positions. An underlying question is whether energy conservation is a theoretical issue as well as a moral and technical one.

Nature is a More Sophisticated Design Model than History

Nature is a good model for design because it contains within it the key to vitality and sustainability. Le Corbusier wrote about the underlying unity in the organization of nature and referred to the laws of physics as vibrating with the criterion of harmony. Designers can learn from the incredible sophistication of biological and ecological systems. They have an ecological role to fulfill, namely to protect and preserve ecosystems, natural cycles, loops and chains and the symbiosis between organisms and their environment. Their role is also to reverse entropy, which is done by creating order and meaning. The most meaningful and highly evolved order is to be found in nature, especially at the biological scale. The complex, dynamic balance of biological life is a good model for the built environment. Buildings can, like plants and animals, be viewed as vitalistic rather than as inert and denatured. They can be treated as organisms which are conceived, grow, flex, adapt, interact, age, decay, and are born again.

Nature is a loose term that has inspired designers and artists in different ways. The word "natural" has been used to describe and defend varying positions and cosmologies over the years. Nature *per se* does not demand any one interpretation. In fact, all phenomena can be called natural in the final analysis. Depending on the scale, nature can wear many hats: picturesque at the landscape scale, organic at the vegetative scale, abstract at the microscopic scale, and even mechanistic at the atomic scale.

It is not the appearance of nature at the biological scale that serves as a good model but the way it functions and sustains itself. In fact buildings tempered by natural energy systems need not and usually do not look organic or naturalistic. A natural energy system is not applied naturalistic ornament or hardware. It is a direct, harmonic coupling of a building to the natural environment.

History is also a deep reservoir and a rich archive of order and meaning. But human culture is very young and shaky compared to nature. Architects who dip into the history of architecture for meaningful forms are on less firm ground because their model is more superficial than nature. The gene pool is smaller, natural selection far briefer. Compared to the goings on in a salt marsh, the byzantine designs of Venice are simple. The most refined gothic cathedral, as sublime as it is, pales before the overwhelming complexity and four-dimensional order of a rain forest. A modern metropolis might match the complexity of an ecosystem but not its order or sustainability. The history of architecture is indeed impressive and wonderful but it is nowhere near as amazing or as evolved as Nature. For the long haul, architects will be better served by studying the perfection of nature than copying the styles of history.

Natural Energy Systems

Natural energy systems directly tap renewable sources to naturally heat, naturally cool, naturally ventilate and naturally daylight buildings. They respond to the specifics of climate and site, responding to its natural *genius loci.* Living and working spaces are oriented to the sun: south facing glass is maximized if heating is an issue; east and west glass is screened, minimized or eliminated. They often contain more mass to store excess solar gain. Buildings are layered thermally from south to north so that occupants will have a range of internal environments for different weather and different seasons. They are sometimes constructed with buffer zones to capture or reject solar energy and to resist heat flow through the building envelope. Interior space is sometimes seasonally adjustable, becoming cellular to conserve heat in winter and open to promote ventilation in summer. Buildings are more modest in size, higher in density and, where possible, attached to neighbors to reduce the area of envelope exposed to the elements. The exterior walls of a building look different from one side to the next, in response to the path of the sun and physical context of the site. They revive regional building practices, materials and vocabulary. They try not to use building materials which embody excessive energy. They are better crafted because well-made buildings maintain their thermal regimes more effectively than those that are poorly built. (Energy costs have risen faster than labor costs, aiding this trend to better craftsmanship.) They utilize more durable materials and are designed to last repudiating both planned obsolescence and the sheetrocking of America.

Limits: Common Ground for Solar and Post Modern Architecture?

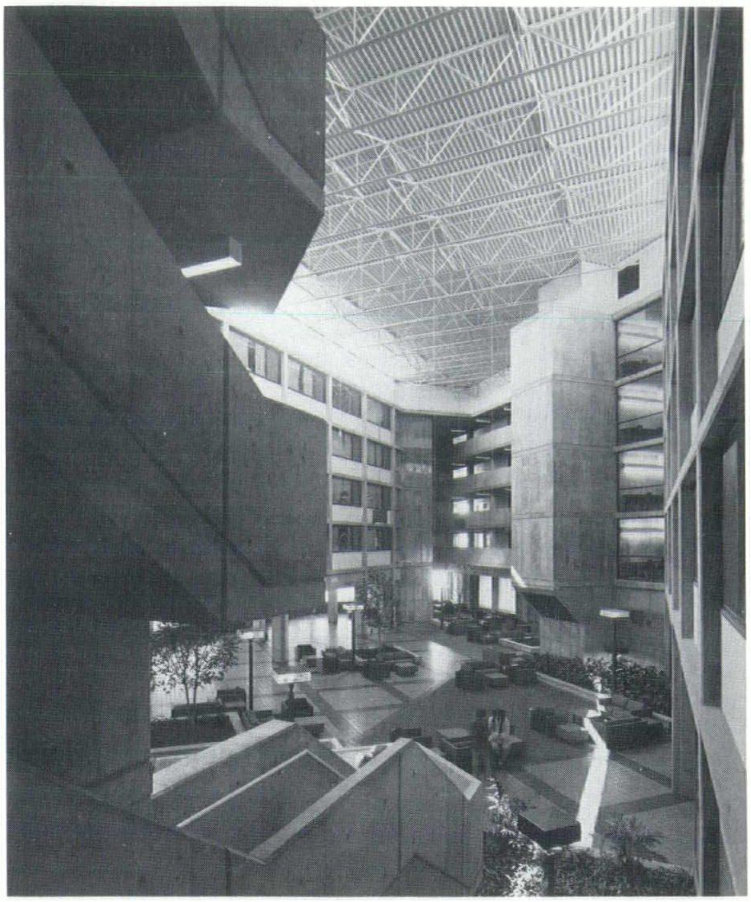
The appreciation of resources as limited may mean that architectural space will be perceived once again as finite. The Modern Movement, especially the International Style, saw space as equal, neutral and continuous. Modernists like Mies placed objects in a universal cartesian grid ignoring context, circumstance and place. They saw architecture as flowing through the interior and between the interior and exterior in buildings that were literally and phenomenally transparent. Now there is renewed interest in discrete, static space. Rooms, as particular spaces, are replacing free-flowing space. The pre-Modern notion of a Room (with a capital R) was a statically enclosed, positive, contained, often symmetrical and sculpted space. This view was replaced over the last half century by open-ended view of space and resources. It is ironic in this budding age of space travel that our conception of architectural space should shrink from infinite field to finite place.

Not only is the room as a discrete architectural element again powerful but so are other aspects of finite geometry: the axis, which establishes geometric beginning, end and sides; symmetry, which creates a center line; frontality, which distinguishes front from back; heavy construction, which relies more on compression than tension to overcome gravity. These formal devices all result in an architecture that looks and feels more finite, massive and static. This architectural syntax of limits and stasis is one position on which both environmental and post-modern architects seem to be converging. There are other more obvious convergences, such as the common interest in preservation of the existing building stock and contextualism, but they are beyond our scope.

Architects are personalizing, particularizing and humanizing their buildings to give them more vitality. There seems to be a corresponding shift in popular journalism from such things as field theory in physics to ecology in the life sciences. The reversion of interest from atonal to tonal music is perhaps another parallel change, as is the trend from liberal to sacral religion, although these cross-media comparisons tend to be risky. There does seem to be a slow, general shift in consciousness from a mechanical to a more vitalistic interpretation of nature. Energy conservation is a metaphor for this attitude towards nature and therefore is as much an issue of architectural theory as of technics and morality. It remains as compelling as it was ten years ago.

Doug Kelbaugh, AIA, practices with Kelbaugh & Lee in Princeton and teaches studio at N.J.I.T. and the University of Pennsylvania. His passive solar home was the first to use a Trombe wall in the U.S.A. and has been featured in over 100 books and magazines. His firms has won over a dozen design awards in the last 8 years, many of them for energy efficiency.

Blanton Residence Hall
Montclair State College
Montclair, NJ

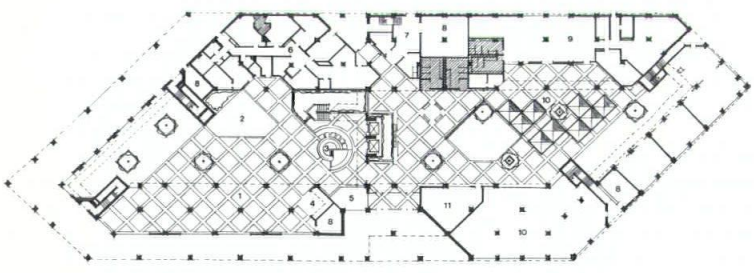


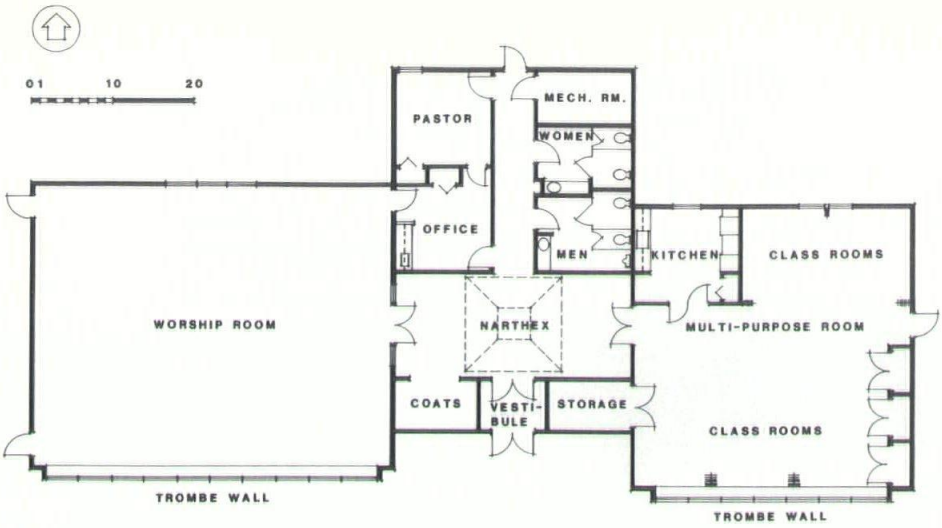
Architects:
Nadaskay/Kopelson
Morristown, NJ

The program for a new dormitory required that double rooms be provided for 644 students. The students were to be housed in arrangements that created neighborhoods within the building, encouraging student interaction. Energy efficiency and ease of maintenance were of paramount concern. A central dining facility for the campus and a 24-hour health center were also required. The building is arranged with rooms ringed around a five-story covered atrium which is a direct response to the program's energy criteria. By covering the atrium with a well-insulated roof, the ratio of exposed surface to building area and volume was significantly reduced, reducing both heat loss and gain. By positioning clerestory windows on the north and south exposures, solar heat gain was obtained in winter, and natural light became available year round. Air conditioning costs are reduced by spreading the peak load over a longer period of time. Loads are distributed by allowing early heat to build up on the low mass panel system on the east and south side and retarding the transfer of heat energy through 8 inch thick solid mass walls on the west and northwest sides. Inverted blinds in south-facing windows between double glazing reflect solar energy to concrete ceilings for storage.

A shaft at the back of the stair tower contains two large fans that draw warm air from the ceiling of the atrium down to the first floor where it is distributed through grilles.

Photographer: Otto Baitz





Good Shepherd Lutheran Church

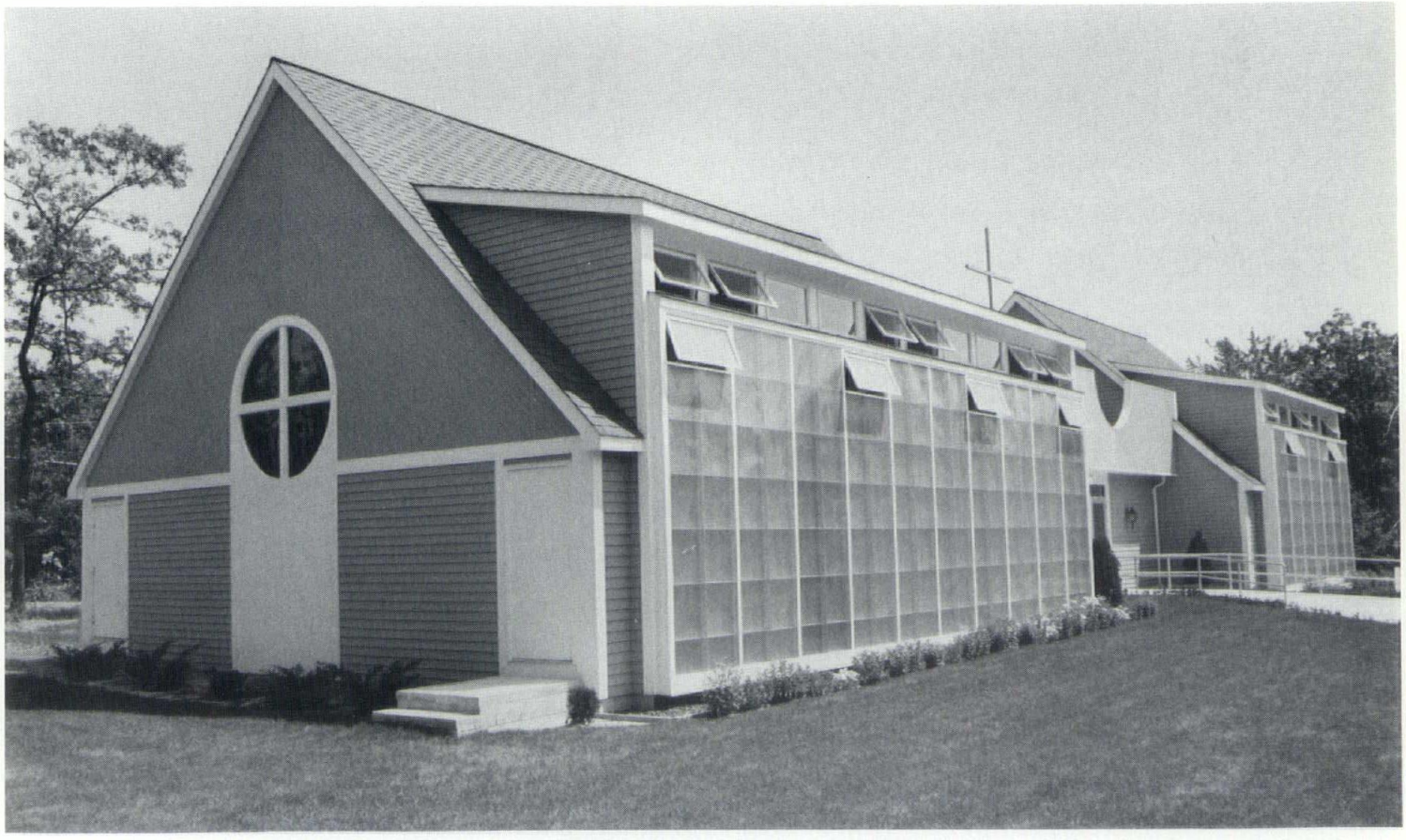
Tuckerton, NJ

Architects:
Eckman, Sincox and Bator
Westfield, NJ

Undisturbed trees and shrubs along the north property line maintain the natural setting, act as a sound buffer and protect the building from harsh winter winds.

The south facade includes double glazed, vented, 16 inch thick concrete filled trombe walls. Above the 890 sq. ft. wall, 170 sq. ft. of clerestory provide direct gain and daylighting to the workshop and multi-purpose areas. It is estimated that daylight will provide 40 footcandles in the major rooms. Artificial lighting units are wired to be lit progressively to save electricity.

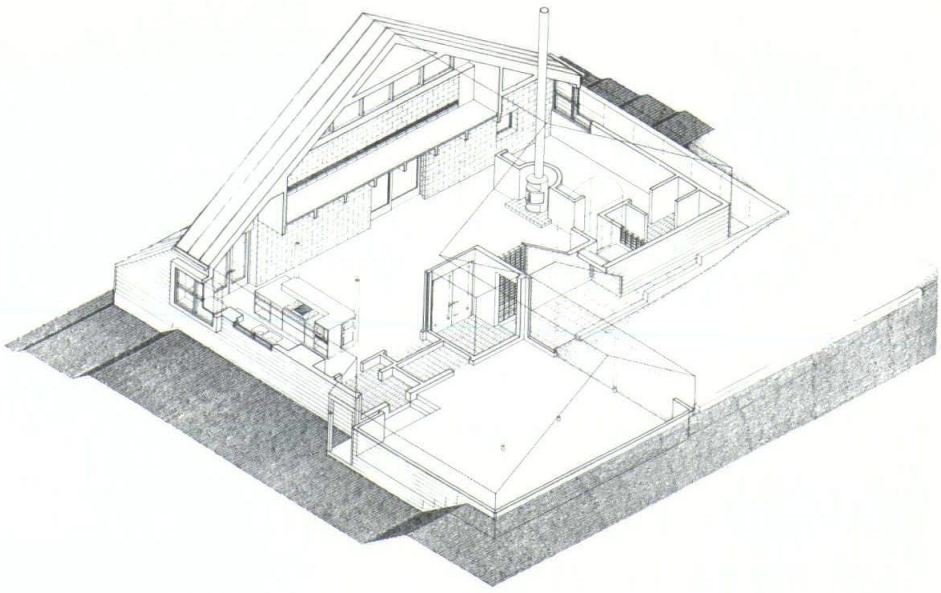
In the summer the open clerestory windows vent the trombe wall and building spaces by drawing cool air through the north windows. That air because it comes from the pine stand to the north is typically 10 degrees F. cooler than the air to the south.



Mills-Wright House

Chatham, NJ

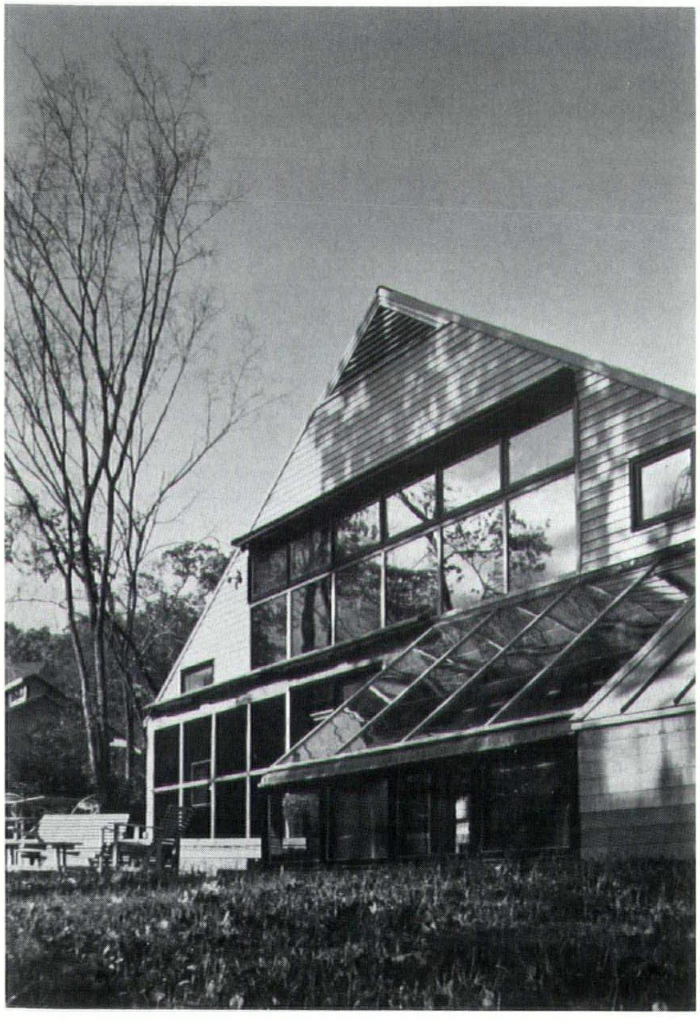
Architects:
Kelbaugh & Lee
Princeton, NJ

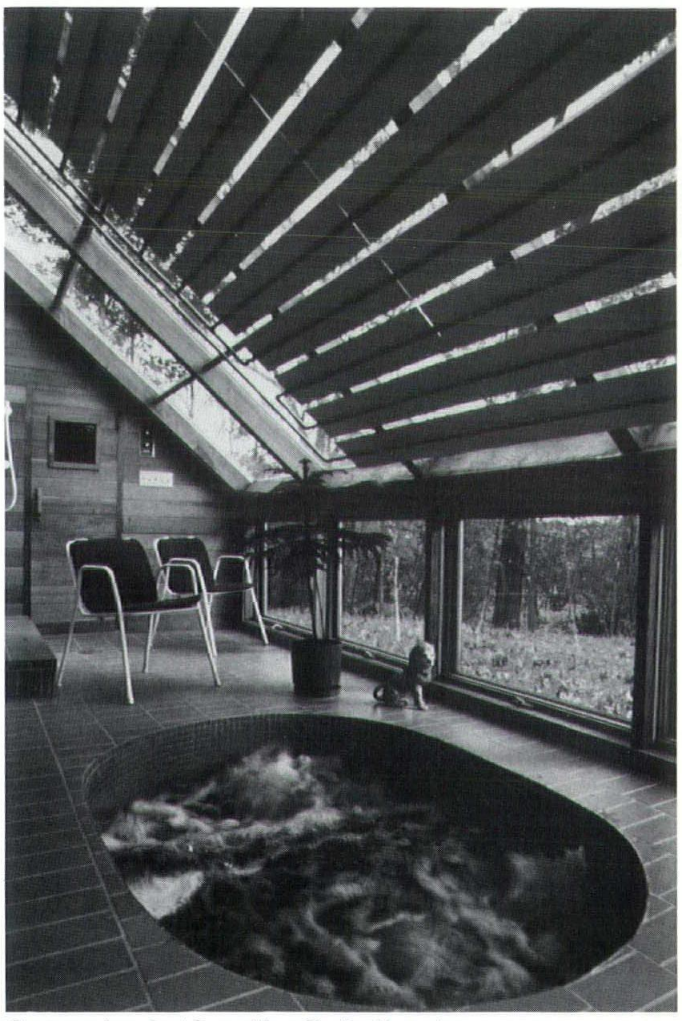


The first floor of this 2000 sq. ft. house is a large living/dining room with kitchen at one end and guest room at the other. There is a greenhouse attached to the south side with sauna and hot tub. A six foot buffer zone along the north side contains guest bathroom, staircase, entrance vestibule, mechanical room, coat closet and mud room. The garage acts to further buffer the building from north winds and the street.

The 100 ft. x 150 ft. site slopes steeply to the southeast and the house is built on a slab that is 8 ft. below the street level. The house is cut sharply into the hill but a moat-like walkway allows level passage around the house. The second floor which faces due south is glazed for both solar access and view across a river valley.

The house is heated primarily by passive solar systems, including stagnant trombe walls, direct gain and sunspace, which also preheats domestic hot water. Large awnings and an attic fan cool the house in summer. Auxiliary heat is provided by a pulse-type boiler and radiant floor slab.

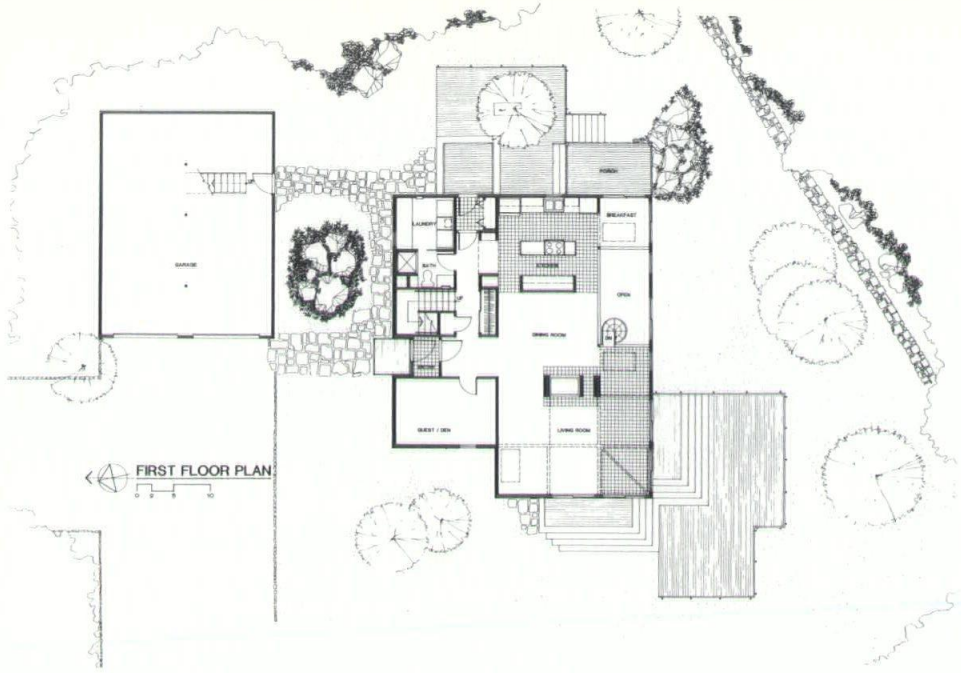




Photographer: Carl Doney/New Shelter Magazine.

Private Residence

Randolph, NJ

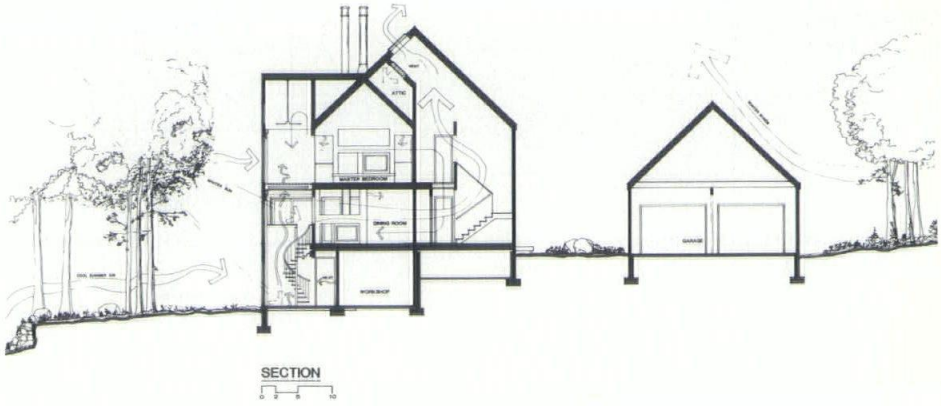


Architects:
Ar-Ke-Tekts
Raymond L. Caselli, AIA
Morristown, NJ

The plan of this 2500 sq. ft. passive solar residence positions main floor living and entertaining spaces on the south side for light and view. These spaces are connected through balcony relationships to bedrooms above and the solarium below for maximum air movement. All service spaces are organized as buffers along the north side, and are separated from living areas by circulation and storage.

On the second floor, the cathedral ceilinged master bedroom dominates the center of the house and is adjacent to an interior "balcony/deck" on the south side. The floor of this deck contains phase change thermal storage material, allowing air passage by means of a wood slat ceiling below and spaced deck boards above. Fans are used in two-story spaces for increased air movement.

All south wall glazing is composed of standard sliding and fixed glass door units with roll down insulating curtains for R-11 night time insulation. The curtains are automated by exterior sun sensors. The 2-1/2 story stair shaft provides direct sunlight and contains a whole house ventilating fan. Two fireplace furnaces provide ducted heat to supplement the passive systems and function as design focal points to the major spaces.



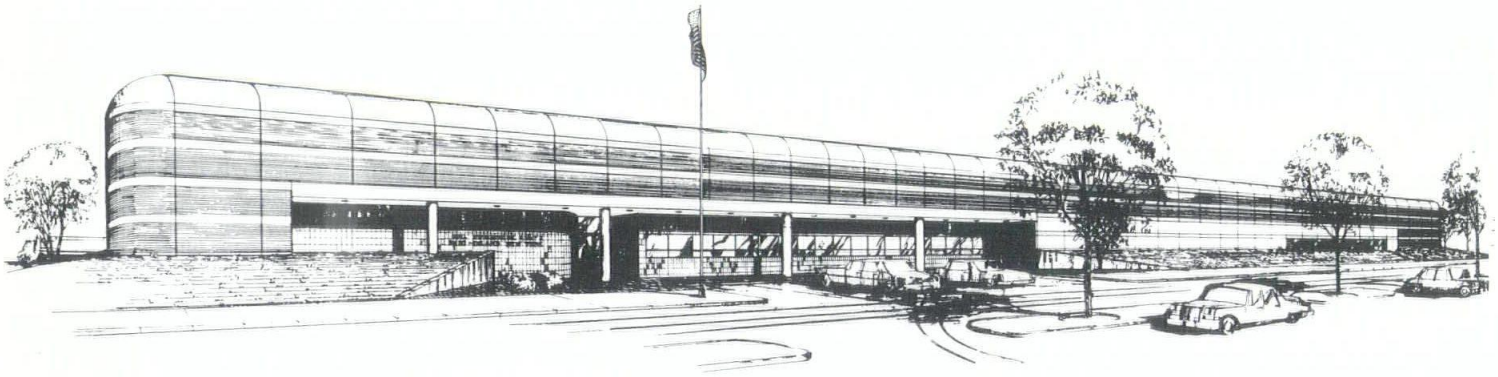
Mail Processing Facility

Melville, NY

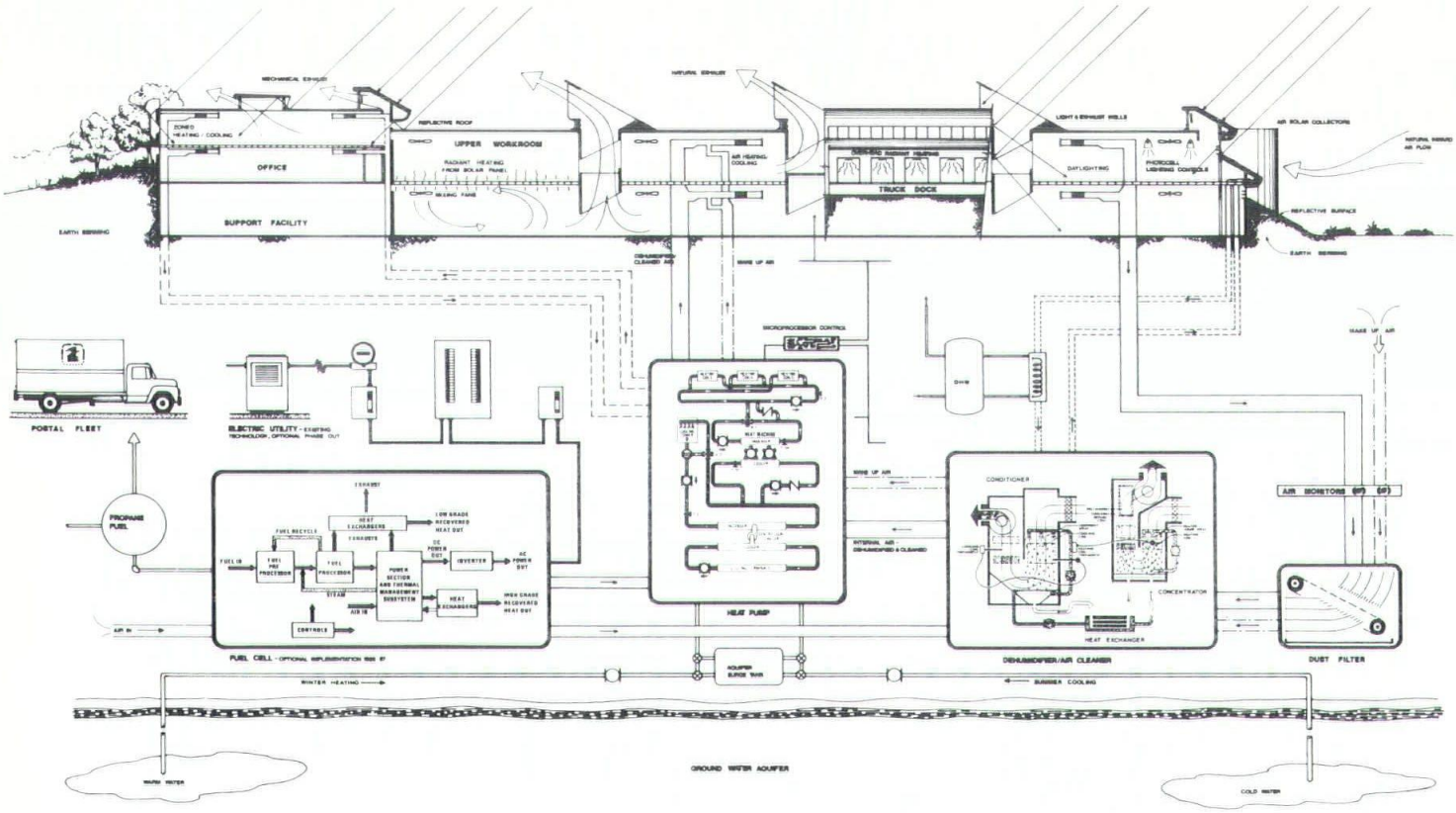
Architects:
Spector/Hillier
Long Island and Princeton

Operational energy consumption in mail processing facilities has become a major concern for the postal service. In this building natural lighting will be used as much as possible. Artifical lighting will be controlled on an individual luminaire basis to meet task needs. Lighting for the main workroom will be via high pressure sodium lights individually dimmed to suit specific needs and the availability of daylight.

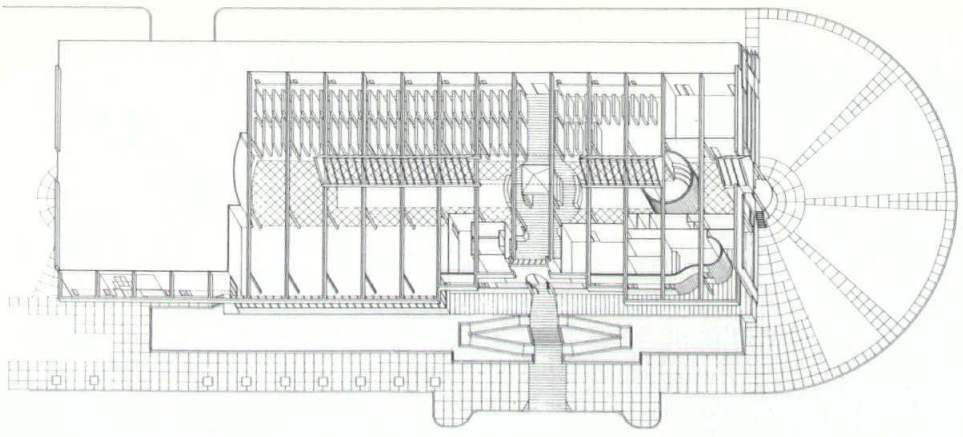
The basic space conditioning system will employ a liquid desiccant process for simultaneous thermal conditioning, humidity control and air cleansing. Ground water source heat pumps will service the air handling units. The closed loop ground water retrieving process will be alternated seasonally to create hot and cold aquifer storage, further increasing the efficiency of the operation.



PERSPECTIVE VIEW OF MAIN ENTRANCE



MECHANICAL SCHEMATIC DESIGN

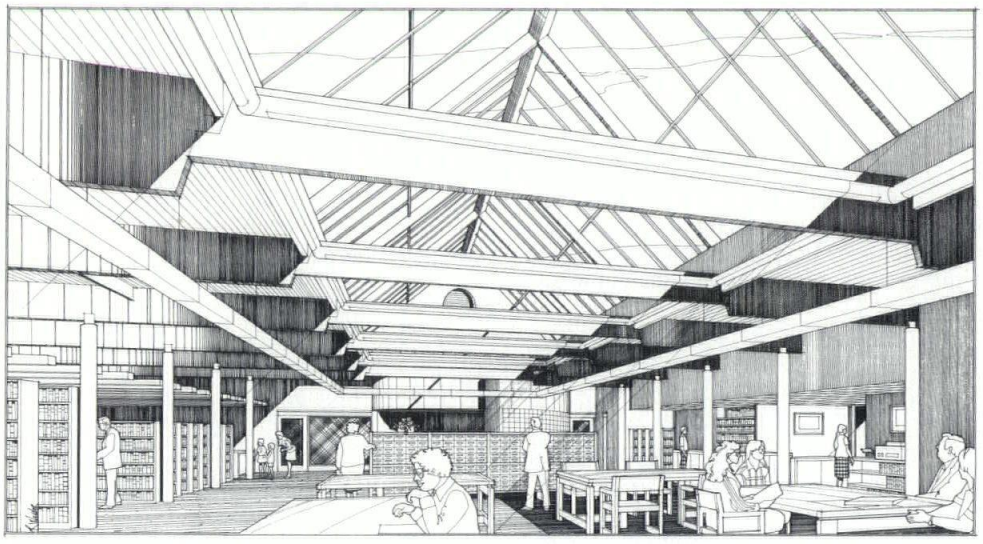


Axonometric

Lawrence Branch Library Headquarters

Mercer County, NJ

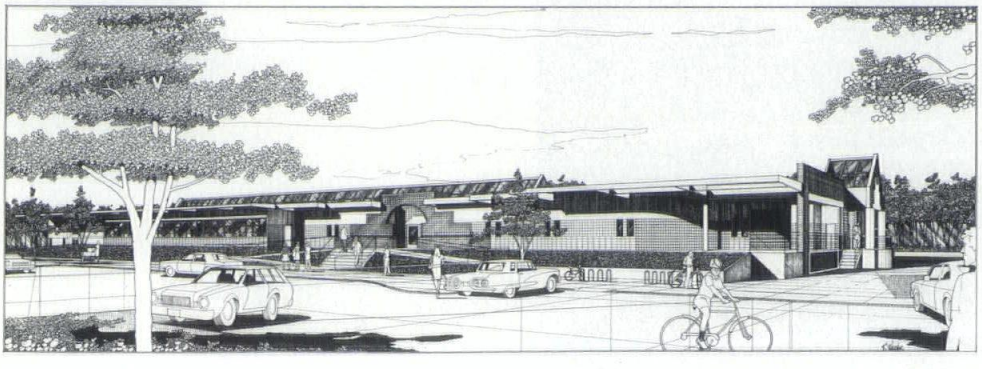
Harrison Fraker, Architects
Princeton, NJ



This building is an adaptive reuse of a 39,000 sq. ft. former trucking terminal. The building's exterior was reconstructed using ground face concrete block with glazed block accent bands of rose and green. The south entry ramp rises through a landscaped earth berm to an arched entry leading into the main library. Secondary entrances at the east and south lead respectively to the two community meeting rooms and the administrative portion of the building.

The interior is spatially layered with each zone articulated by energy conserving architectural features. The southermost zone (circulation area, reference stacks and staff work area) is marked by a passive solar greenhouse reading room adjacent to the reference stacks. In the central reading room a 16 ft. by 160 ft. gabled skylight with adjustable louvers admits natural daylight while shading glare from direct sunlight. The skylight enables considerable savings in electricity when coupled with the photovoltaic controls of the artificial lighting. The northern zone's (adult and children's stacks) small operable windows protect from winter cold but permit natural ventilation when required.

Annual energy consumption is expected to be $1.45 per square foot as compared to approximately $2 per sq. ft. for a similar conventionally designed building.



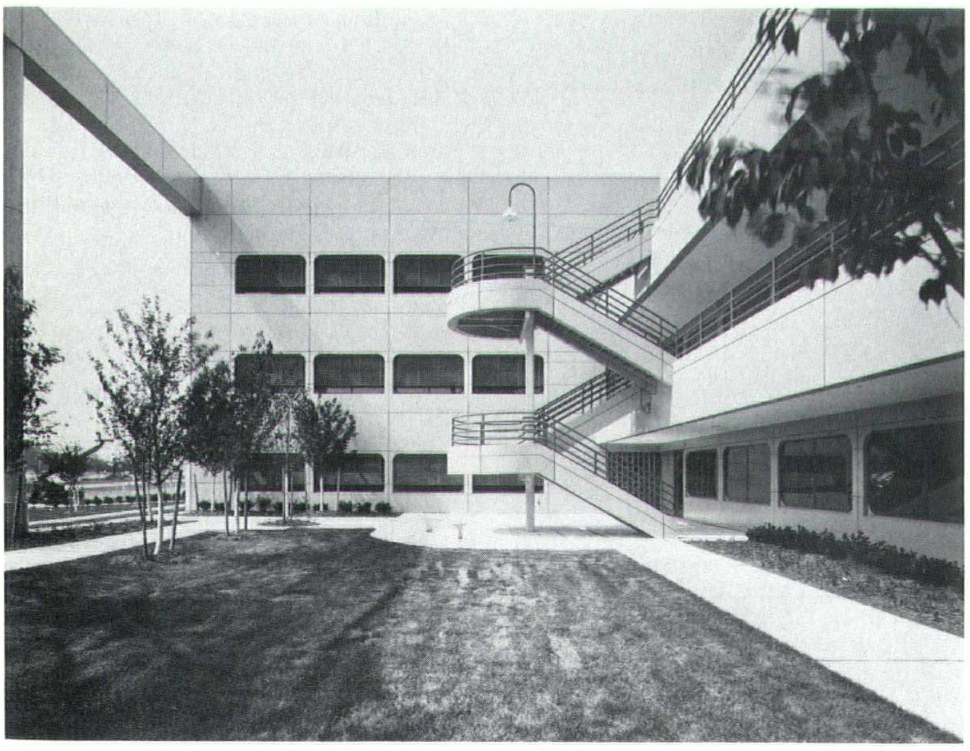
Rockaway Townsquare

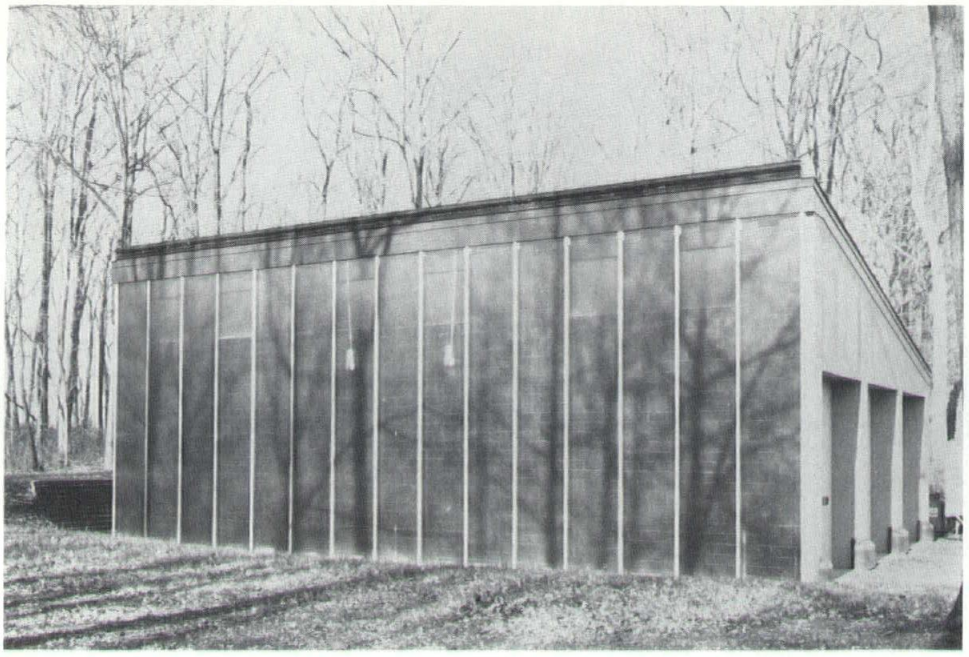
Rockaway, NJ

Architect:
Barrett Allen Ginsberg, AIA
Bedminster, NJ

Window recesses and balconies provide summer shading of the tinted insulated glass areas on the southeast and west elevations of this 90,000 sq. ft. corporate office building. In addition each window unit is equipped with exterior solar blinds which are automatically controlled by temperature sensors located throughout the building's facades. Each sensor adjusts a group of blinds as the position of the sun changes.

A capital cost analysis projects that energy savings will pay for the cost of the blinds in less than eight years.



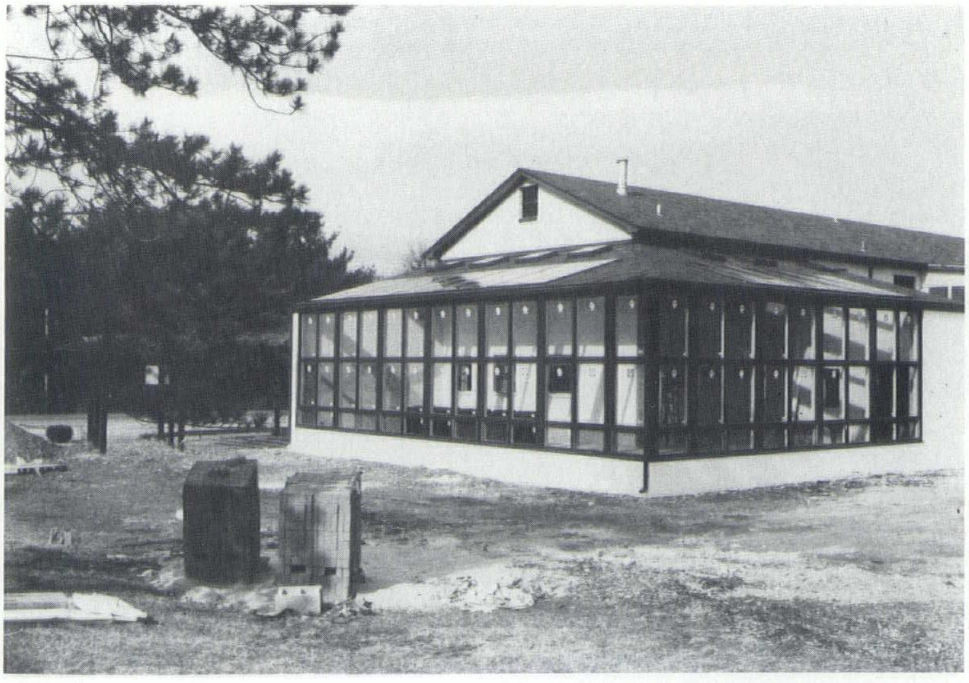


Emergency Vehicle Garage
Princeton University
Princeton, NJ

Architects:
Holt & Morgan Associates
Princeton, NJ

All heating requirements for this building are provided by a total passive solar system without back-up using a trombe wall with glazed perforations for direct gain on the south facade.

The water in a tanker truck provides additional thermal mass. Manually operated vents on the partially buried north and east walls and at the top of the trombe wall provide natural summer ventilation.



Edmond A. Laport Greenhouse
Hunterdon County Arboretum
Lebanon, NJ

Architect:
Terence Golda, AIA
Ringoes, NJ

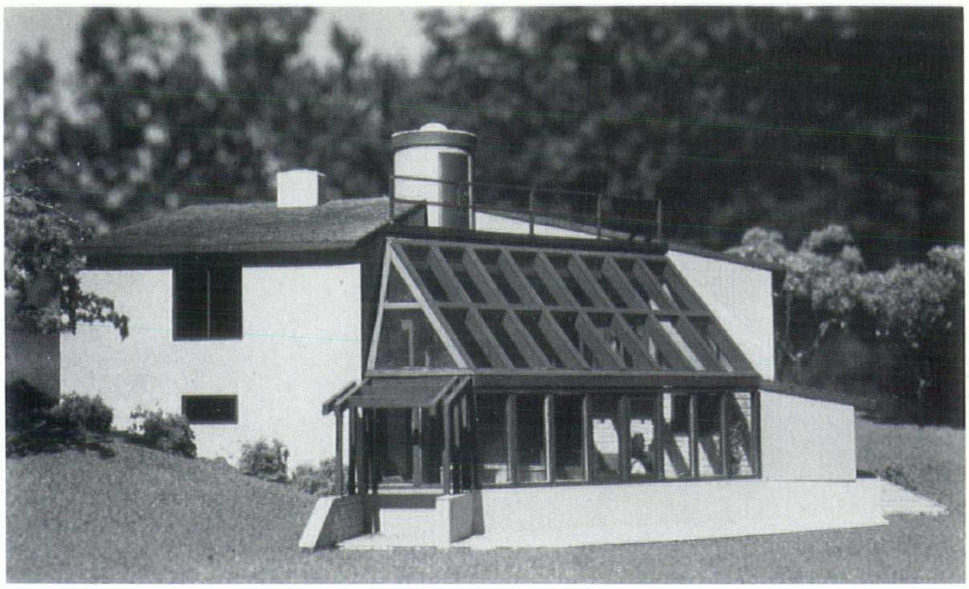
This project utilizes fifty-four water filled barrels stacked along the inner walls to capture and store heat from the sun. In winter the low angle of the sun strikes the exposed barrels. The stored hot water moderates the greenhouse air at night and on cloudy days. Natural convection circulates the warm air. An insulated foundation floor and ceiling, solid north and west walls and an air lock entry minimize heat loss.

In summer the solid portion of the roof shades the barrels from the sun's rays. Upper and lower window vents carry cool air in and hot air out.

Waterless composting toilets reduce the building's waste water to the drainage from three sinks. This is filtered to remove grease, lint and particles. The result, called "greywater" is used to irrigate the permanent soil bed.

Passive Solar Home

Mansfield Township, NJ



Architect:
Alan Spector, AIA
Hamburg, NJ

Situated on a gently sloping hill this 2800 square foot passive solar home is organized around a large central sunspace.

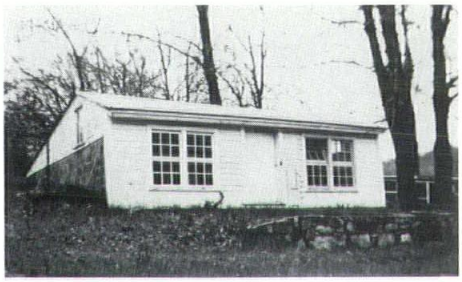
Serving as the focus of the home, the sunspace which contains a hot tub is used during daytime as a family room and dinette. It is surrounded by the living, dining and kitchen spaces on the lower level with three bedrooms overlooking the sunspace from an upper level balcony. A central spiral staircase connects the levels, and rises to a small roof deck above.

Glazed with 470 square feet of insulating glass, the sunspace acts as a solar collector. Warm air is distributed to the interior spaces by convection. Some heat is stored in the floor slab, while most is drawn off by fans and ducts to two remote rock bed storage areas (filled with 42 tons of round river-bed rock) located beneath the living and kitchen spaces. After charging the rockbeds, the cooler air is returned to the sunspace.

Solar heating is calculated to provide 59 percent of the home's total heating requirements. The large amount of concrete floor and wall surfaces helps to stablize the interior temperature. Though the rock-beds do not get very warm, they do aid in stabilizing the temperature during evening hours.

Ecological Research Studio

Califon, NJ



Architect:
R. Heinrich, AIA
Highland Park, NJ

Converted from a chicken coop this small house makes use of an existing partially earth buried structure. The original roof was raised and glass added for the observation of nature and to capture the warmth of the sun. Translucent tubes of water and a concrete floor store heat on the south side. Glazing and mylar film with vents at the top and bottom allow maximum heat gain, retention and temperature without loss of view. The Owner reports 65°F. temperatures throughout the winter without use of the wood burning stove.

what is architecture?

This article is the result of a series of roundtable discussions among the following members of Sander Associates, P.A., Architects and Planners in Princeton, New Jersey: Hugh J. Connolly (editor); J. Ward Kuser; Diana C. Nelson; Allen W. Prusis; and Daniel R. Millen, Jr., AIA, Principal.

"What is architecture?" is a question which, when asked of architects, is likely to produce a myriad of responses. Asking the same question of the average architecturally untrained public would also produce an assortment of answers. However, the laymen's answer might have one thing in common; their answer would probably all be very different from those of the architect's. This may not be surprising, but were the laymen asked "What does an architect do?" and "What could an architect do for you?" the answers might be disturbing. In fact, what might be revealed is a schism between the laymen's perceptions and the true nature of the architectural profession.

Surely many architects have encountered situations similar to one we at Sander Associates have often faced; meeting with a client for the first time, we go over the "process of architecture", from programming and site analysis through construction. If this is the clients first experience, he may react with "So that's what an architect does. That's fascinating. I didn't know that." Many times the client's or layman's preconception of architecture is limited to or centered on the small percentage of the design process that we call conceptual design; the artful sketch expressing the grand idea. Often they are delighted to discover that a major part of the process is devoted to detailing what they need or want in their environment. This is the reaction of people to whom the "mystery" of architecture has been revealed because the resources were available to hire an archirect. But what of the people who never have and never will hire an architect, even though they are those whose lives could benefit the most from architects' skills? Not only do they perceive architecture as strictly design, but they also perceive it as a luxury service meant only for the affluent. For them the image of the architectural profession, if they have any, is Frank Lloyd Wright, the flamboyant, eccentric master architect, designing homes for the wealthy and offices for multi-national corporations. In short, they perceive architecture as having nothing to do with their lives. There is nothing, they think, that an architect could do for them. Although these people are born, work, play, and die in the built environment, rarely do they understand the full effect that this environment has on their lives. The effect exists though. All one has to do to find evidence of it is to read a book such as Oscar Newman's *Defensible Space,* which advocates community safety through better design, or talk to former residents of the Pruitt-Igoe, a modern St. Louis housing project which was declared unlivable and eventually demolished.

The effect of architecture on the layman's life can also be positive though, and one of the best examples of this is here in New Jersey; The Architect's Housing in Trenton, which recently passed its third anniversary. Residents interviewed there for the occasion spoke of the importance of a feeling of community, a feeling that is reinforced by the building's design. Short corridors with numerous, evenly disbursed communal areas allow elderly residents to be frequently in touch with each other, promoting safety and psychological health. This is but one example of the positive effect that the programming and design skills of an architectural professional, correctly applied, can have in a multi-family residential situation.

The state laws of New Jersey entrust architects with protecting the public health, safety, and welfare as it relates to the built environment. Besides designing to meet building codes and ensure against structural failure and fire hazards, a major aspect of this trust can be interpreted to be the designing of suitable housing and community facilities for those who cannot afford to provide these for themselves. This issue has been and will surely remain for a long time, one of the basic concerns of architecture and architects. Whether as a prototypical design or for a specific client and program, the problem of providing safe, attractive, functional, responsive housing on what always seems to be a limited budget has been returned to again and again by architects driven by a thirst for challenge and a sense of civic duty. When designed and built well, public housing can embody all of the ideals and properties that responsible architecture should have: a sense of place and community; personal and community security; responsive and accurate programming; contextural continuity; energy efficiency; building safety; and a meeting of a limited budget through methods such as adaptive re-use or community labor.

Many of these properties can be achieved only through involving the users of a building in the design process. This idea has been successfully done many times, especially by Charles Moore with his TV design sessions in Dayton, Ohio and elsewhere, and is a process that educates both the public and the architect. This approach can ensure that a project will not only be more functional, but that it will be used more, and be taken care of better by its users. The feeling that users would have about a project with whose design they were involved could be compared to the attitude of an owner as opposed to a renter of a house.

There has usually been a missing link in attempts by architects to solve the problem of housing the nation's growing population however; that is, finance and popular backing. Many innovative housing solutions remain unbuilt because they were considered too risky by bankers, or difficult to sell by marketing analysts, or were unable to secure government financing. The ideas and the architects are there, but the general populace may never know of them.

The Architect's Housing project solved this problem in a unique combination of innovative financing and community support but this method may not prove to be generally applicable. A possible solution to this aspect of the gap between housing ideas and reality may be the informing of the public as to the benefits of and availability of a design process involving interaction between concerned architects and the public. A populace so informed could begin to feel that betterment of their environment is possible and, taking these desires to governmental and financial bodies, could find the necessary support to bring their dreams to fruition. All of this though would be based on their knowledge that the architectural profession can help them improve their lives.

This problem, of the disparity between the public's perception of what architect's do and the reality of what they can do, is one that affects both the public and the architect. The public is missing out on an opportunity to improve their lives while we as architects are missing the chance to tap the full potential of our talents for the betterment of society. For this "information gap" can affect not only housing but it also affects community health, recreation, education, and social facilities. It is up to the architectural community and our organizations, such as the New Jersey Society of Architects, to address this problem so that the successful process and ideas embodied by the Architects Housing project do not remain forever unique.

The Tarquini Organization

Camden, New Jersey

The Tarquini Organization, a professional association of architects and planners, is the continuation of a practice started in 1947. Located in a Camden carpet warehouse-turned-architect's office, the firm has been responsible for many significant buildings that dot the New Jersey landscape.

Designs by The Tarquini Organization have included nearly every major project type: residential, municipal, corporate, hospitals, schools and colleges, jails and recreation facilities. Other areas covered are preservation, restoration, planning and feasibility studies, and interior design and space planning.

Among current projects on the boards or under construction are a new student center and library for Gloucester County College; a 376-unit multi-family housing development in Voorhees; Kensington Recreation Center, Philadelphia; newly renovated, planned and furnished office space for the Philadelphia Navy Base's security police; a 20,000 SF fast-track renovation for a print shop and storage space for Provident Mutual Life Insurance Co.; and a 106-unit motel in Bordentown.

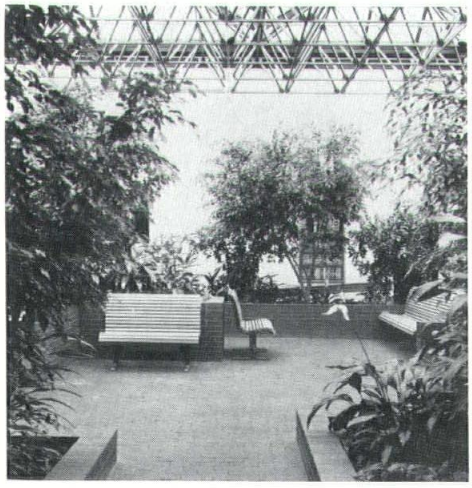
Recently completed are the seven-story Camden County Hall of Justice; a psychiatric unit for Kennedy Memorial Hospital's-University Medical Center, Cherry Hill Division; a Ronald McDonald House affiliated with Cooper Hospital in Camden; and a Family Practice Center for Underwood Memorial Hospital in Woodbury.

Several designs have won awards in the last five years for excellence in planning and integration within the community from the Camden County Planning Board. These include Terrestria, a planned unit development; Northgate II, a high- and lowrise public housing development; and the main office of Tri-County Savings & Loan, an adaptive reuse of a gas station. La Bonne Vie, a condominium directed at the singles market, received a citation of merit from Professional Builder magazine in their "Smarter House for the Money" category.

The Tarquini Organization's present staff is at twenty-two, and is comprised of

Principals: L. to R., Daniel R. Sciullo, Sr. V.P., Joseph T. Tarquini, Sr., President, Robert J. Giacomelli, V.P., Harold Lichtman, V.P.

Atrium, PSE&G Southern Inquiry & Accounting Center, Bordentown, NJ.



PSE&G Southern Inquiry & Accounting Center, Bordentown, NJ.

La Bonne Vie, Gloucester Twp., NJ.

Fidelity Bank & Trust Co., Voorhees, NJ.

Pennsauken Police and Municipal Court, Pennsauken, NJ.

registered architects, licensed planners, interior designers, construction inspectors, draftspersons and administrative and clerical personnel. The firm is particularly proud of its new interior design department. With it, a full spectrum of in-house design services are offered.

The Tarquini Organization is structured under the project manager system, with ultimate design and quality control under the firm's president and design director, Joseph T. Tarquini, Jr., AIA, PP. Joe has recently assumed this responsibility in order to promote a more uniform and consistent level of design quality. It is his belief that "this policy will minimize design changes after substantial work has been completed while assuring our clients that our design effort is consistent with the standard of quality I consider to be appropriate for our firm."

Working with Joe to further the firm in its goals for quality design, efficient production, effective marketing and satisfied clients are Daniel D. Sciullo, AIA, Robert J. Giacomelli, AIA, PP and Harold Lichtman, AIA, PP. Dan, presently second Vice President for the West Jersey Society of Architects, is Senior Vice President. Bob and Hal are both Vice Presidents, with Bob also serving as Director of Marketing. All are principals and project managers with the firm.

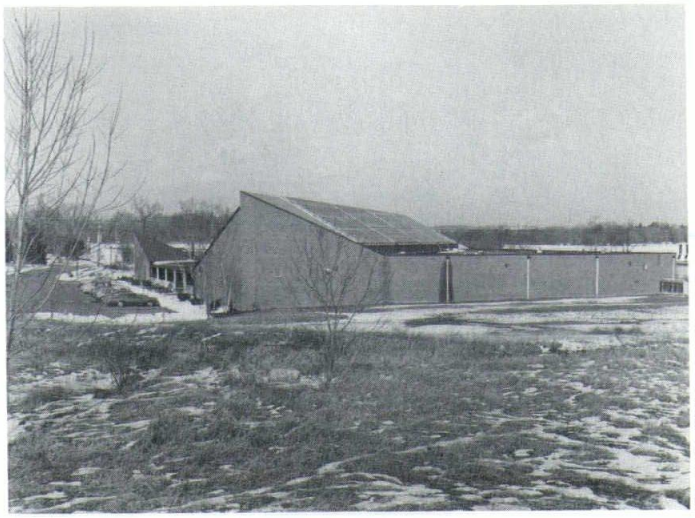
Rohrer Towers II, Haddon Twp., NJ.

conversation with a client

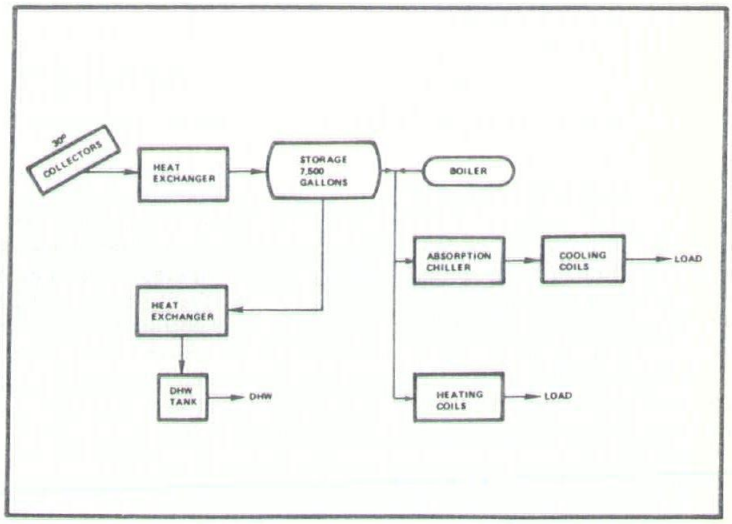
The following "conversation" is the ninth in a continuing series. In each of these interviews, ANJ attempts to illuminate what, for us, is the other side of the architectural story — our clients' reaction to the structure and their insight into the interaction between the design professional and person or organization for whom the building is intended.

The interview took place among ARCHITECTURE NEW JERSEY representative Philip Kennedy-Grant, AIA, Leo August and Michael August of the Washington Press in Florham Park.

We gratefully acknowledge the time and effort of the Augusts and hope that our readers will find the interview informative and entertaining.



ANJ: *Will you please introduce yourselves to our readers?*
LA: *I am Leo August of the Washington Press. I'm one of the principals who was involved in producing the building we have here. Also with us is Michael August, who did a lot of the engineering work that brought about the completion of the building.*
ANJ: *How long has the Washington Press been in existence?*
LA: *About 45 years. We started in Newark in 1933. From Newark we moved to Maplewood, where we were for 20 years and from Maplewood, we moved here. We were running out of space and we wanted to do something about it. Of course, the idea was: Look let's not just put a four-walled building with a roof on top. Let's make it look a little different, more up-to-date — Solar. We weren't interested in getting our money out of the solar collectors. We just wanted to show our trade that we were right up there in the forefront. We got a lot of publicity out of it. And we still do.*
ANJ: *How did you become aware of Halsey & Ryder?*
MA: *We saw a newspaper article about the Somerset County Environmental Center. We actually went there one afternoon to see a demonstration concerning solar technology. The architecture of the building was very appealing. The collectors fit in as part of the structure. They didn't look like they'd been pasted on to the top. I was very impressed with the way it looked. And when we spoke to Mr. Halsey, we told him we weren't interested in building a box. In fact, he was probably gratified that we didn't want to build just a box.*
LA: *The architects very much had their own way. Almost everything they said, we went along with.*
ANJ: *It corresponds to your product. Your stamp albums are a little bit better than others. You wanted a building that represented that type of idea.*
LA: *We just didn't want something that was static, another building. We've very happy with it. We still have customers that come by wanting to see it.*
ANJ: *In the design of the building you mentioned Bill Halsey had a relatively free hand. When he came to you with an idea, was he open to your suggestions?*
LA: *We told him what he wanted. He showed us where we could improve. We followed, I think, all of his suggestions.*
MA: *I think he was quite receptive to what we needed to do with the building. You just don't build a building and hope the customer fits into it.*
ANJ: *I understand that you received a federal grant to help defray the cost of the solar collectors. How did that come about?*
MA: *We were introduced to General Electric, who suggested we apply to the Federal Government for a grant. I think this was the third round of solar buildings that were funded by the Department of Energy. Earlier versions of solar collectors had been used in*



the first two rounds. GE's latest version was to be used in our building. What they have now is an evacuated tube collector. The amount of energy it can absorb is greater per square foot.

ANJ: *Did Halsey & Ryder assist in the preparation of your grant applicaton?*

MA: *Oh, yes. It was really a team effort.*

ANJ: *What were the design goals for the solar system?*

MA: *Well, we wanted to supply about 60% of our heating and cooling energy needs. We didn't know it when we first started, but as it developed, we discovered that we wanted to be able to use it in conjunction with the air-conditioning because that was actually a tremendous energy user. Nowadays, you can't really operate a building like this without efficient air-conditioning. Although the air is dry enough in the winter, you still have to have it in the summer. The humidity in this part of the country is quite substantial and can be a problem in printing and working with stamps.*

ANJ: *Is it possible to heat and cool at the same time?*

MA: *The system was designed so we could do both. In the winter of course, we don't have the temperatures that would be necessary to run the solar air-conditioning. We would be firing the chillers from the boiler, but we can both heat and cool at the same time if we need to.*

LA: *We're also equipped to use oil or gas.*

MA: *The boiler right now is fired by gas, but if for some reason we had a gas shortage and industrial customers were asked to cut back, we could flip the switch, turn on the oil pump, and pump oil out of the tank.*

ANJ: *So you have a great deal of flexibility?*

MA: *Right, when we began planning the building, we experienced the second oil crisis. I don't think it was so much of an embargo on oil as just a great price leap. There was a lot of interest in solar power at the time. It was a new technology and that was part of the reason we were interested.*

ANJ: *Was the dual fuel boiler one of your ideas?*

LA: *Halsey & Ryder's offices thought of it. We were unable to connect up to gas at the time.*

ANJ: *What about the performance of the system now?*

MA: *Unfortunately, we don't have any monitoring devices. There's no way to really tell actually how much it's supplying. But just by the percentage of daylight hours that it spends supplying energy now, we're probably close to 50%-60%, maybe even higher. During the summer, we find we spend a good part of the day using solar air-conditioning which is really energy intensive. That probably is where the bulk of our energy is being produced. I suspect that half of the energy used by the building is in the 3 or 4 months of air conditioning during the summer.*

ANJ: *Do you have any idea of what the pay back period is or was that never estimated?*

MA: *It was estimated that under worst conditions, it was supposed to be a pay-back of about 13 years. It's not the kind of the investment to make if you wanted to turn a fast buck.*

LA: *This was something we planned to be in for a long time, so it really didn't make any difference whether it was 13 years or 15 years. We're not sorry we did it. We could have done better over the last few years if we had invested that money. But we don't look at it that way. We look at it as part of our product.*

ANJ: *Were there any difficulties in the construction of the solar system that were unanticipated?*

MA: *No, the solar system went together pretty much as designed. The design was revised at various points along the way, so there were some changes. But the heating contractors had a very good grasp of how it was intended to go together and how it was supposed to work. During construction they made significant contributions to various aspects regarding the controls and design of the system and we were able to incorporate their suggestions.*

ANJ: *Is there anything you would have done differently, thinking about it now?*

MA: *No, I like the final results. I think the building is precisely what we were looking for. I don't think I would change anything. We haven't actually had a meeting and sat down and discussed what we don't like about the building, but I can't really think offhand of something that really galls me. I think we did very well. The building was well planned.*

ANJ: *Was the final project close to the original budget?*

MA: *I think it turned out to be quite close.*

ANJ: *You seem to be very pleased with your building. Are there particular comments you would like to add regarding the building process?*

MA: *The more money you're putting into a building, the more you want to be sure that it's well spent. I think you can be sure of that by hiring a competent architect before you start. I think it's important to do as we did and talk to several architects. If they're not interested in your project, they can't conceal that. Halsey & Ryder were quite interested right from the beginning in doing a project of this type. They were familiar with the printing business and the needs of a plant of our size. They're a small firm but they had done beautiful work. They did the same for us.*

Glass — It has come so far. How far will it go?

by Kellen M. Chapin, AIA, CCS

Long before the advent of recorded history man sought shelter from the elements. Natural caves were quite effective as shelters with security being the dominant characteristic of the space. Physiological and psychological comfort were secondary. Rudimentary architecture came into being with "production" of shelter rather than the finding of it. Since window glass was not an indigenous material, windows (if we accept the broadest possible definition for the term) consisted of openings in the shelter made by design or chance.

Glass as a material has been around for 5,000 years, but usage started with items such as jewelry, decorations, vases, and bottles. The Renaissance brought the first common usage of glass in windows. The production of flat sheets of glass is traced only about 450 years back to Venice, Italy. Within that time span, glass was made one piece at a time by craftsmen right up to the end of the 19th century. Industrialized production glass has only existed on any significant commercial scale for seven decades, and the most commonly used flat sheet glass type used today, float glass, was only introduced twenty-five years ago. This accelerating development curve is continuing today at such a rate that the modern architect is hard pressed to stay abreast of the latest developments in glass and glazing.

Glass has become an integral element in buildings as one of the prime determinants of exterior appearance and interior spatial quality. But the real beauty of modern glass is that the architect can avail himself (or herself) of all its aesthetic benefits and simultaneously improve the *performance* of the building. Two different means toward that dual improvement have developed: the imaginative application of glass forms that have existed for a relatively long time and also in new, calculated uses of recently developed glass products. In either case, architects have discovered that how they use glass affects how they can or must treat other components of the built environment as a whole functioning unit. If we return to that basic premise that buildings are, at their elemental base, a form of shelter, then we realize that the only attributes we have really modified are its aesthetic form and the methods used to control or improve the interior environmental conditions. Depending on location, climate, orientation and use, we heat, cool, humidify or dehumidify, ventilate and circulate the air in an effort to achieve or maximize the level of comfort in our interior spaces. With our advancing knowledge on the subject of controlling solar energy, passively as well as actively, the window and type of glazing in it have a new dimension. Instead of being a duty dictated by code or architectural style, the fenestration in a structure represents an opportunity to capture economies in the operating costs of the facility. Where windows used to automatically be an energy liability that needed to be minimized, intelligently applied glazing can produce positive energy contributions.

Glass has a characteristic that cannot be ignored. It is brittle and fails instantly when stressed beyond its elastic limit. The tensile strength for standard annealed glass is only 6,000 p.s.i. If localized pressure deflects the sheet enough to exceed the tensile limit in one spot, it will generally cause progressive failure across the whole surface. Chips and other surface or edge imperfections will significantly affect ability of the glass to withstand stress. In the search for large clear openings, several improvements were developed beyond simply increasing thickness. Where the increased cost is justified, heat strengthened glass can be selected. This is approximately twice as strong as standard glass of the same thickness. Tempered glass is twice as strong again (four times as strong as annealed glass). A by-product of the strengthening process is that the manner in which the glass fails is also changed. Instead of linear cracks, the surface, once tension is broken in one place, will progressively crack into small nugget sized chunks over the whole sheet sparing no area. Thus, as a negative point, this means the pane of glass must be cut to its exact intended size before treating. Once treated, cutting by any means brings about total sheet failure. On the positive side, this characteristic means that glass which is broken during normal use, will fail "safely" leaving no long shards to cause injury. For uses in sloped glazing over potential building occupants, falling glass in any form could be hazardous. Laminated glass has clear plastic film permanently bonded between two or more layers of glass so that in event of failure in any layers, the glazing sheet will remain in its frame until replaced. Wire glass accomplishes the same end result using a mesh of fine steel wires between the layers. Codes must be consulted carefully to determine the types of safety glazing permitted for each use.

The integrity of a glass sheet is not only tested by externally applied forces such as projectiles, windloads or snow load (on sloped glass). Structural movement or movement in the supporting framing can exceed the tolerable stress limits. Thermal stress is induced whenever one portion of the glass surface is heated or cooled at a different rate from other parts.

So now, for a given use, you check the code, you check the span/load tables for the size opening desired and pick your glass type and thickness, right? Wrong. Buildings in our part of the country must resist winter cold and summer heat. The designer has to evaluate anticipated environmental extremes, interior conditioning systems and occupancy requirements, intended glass area needs, building and window orientations, and other similar factors. The advent of energy codes in this last decade has further complicated the design process.

Fortunately, to counter the myriad restrictions that would otherwise suffocate the designers spark, today's architect has a veritable arsenal of products having good to even outstanding thermal performance characteristics.

Double (or even triple) insulating glass assemblies introduce a dead air space between the panes. The individual panes in an assembly can be altered to improve overall performance. Use of tinted glass, reflective coatings or heat absorbing glass can drastically affect heat loads. Coatings are currently available which are selective regarding the types of energy which can pass through. So in the instance where passive solar heating is desired, south facing glass can let in short wave radiation and not be transparent to long wave radiant emissions from interior surfaces struck by the sun's light. By use of shading devices such as overhangs or louvers, seasonal sun angle changes can be used beneficially.

Most commercial or institutional buildings usually have their most significant design challenges in the area of cooling load reduction, the avoidance of unwanted solar heat gain. Selection of glass types here requires an understanding of U-values, shading coefficients, and the effects of reflective coatings on heat gain. In double glazed assemblies, the relative positioning of the coating (that is, which surface the coating is applied to) will make considerable difference.

We can see that developments in glass quality and capabilities have advanced at an accelerating pace. As energy conservation continues to increase in importance, research in energy related characteristics will also continue to produce new choices. The problem of some significance to architects in the balance of this century will be to acquire or sharpen their analytical skills enough to cope with the increasing volume of performance data generated for their decision making needs. It is truly an exciting time for those of us who, for our glazing considerations at least, appear to be able to have our cake and eat it, too.

Kellen M. Chapin, AIA, is a Certified Construction Specifier, member of Newark/Suburban Chapter and employed by Nadaskay/Kopelson, Morristown.

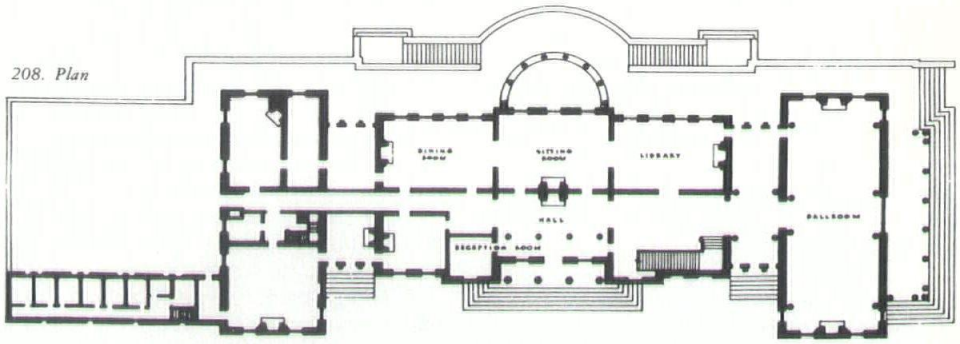
McKim, Mead, & White, by Richard Guy Wilson; 240 pages, 292 illustrations, 4 in color. Rizzoli International Publications; $35.00.

This book is divided into two sections: the first is an essay which outlines the lives and personalities of the three partners, describes their firm and its development (up to 1909), and discusses the meaning of their architecture; the second section is a catalogue of thirty-one of McKim, Mead, and White's buildings which are discussed in somewhat greater detail.

The firm of McKim, Mead & White was one of the premier architectural firms in the United States at the turn of the century. Approximately nine hundred buildings were credited to it; to gain an accurate understanding of the firm's work is a difficult task. Fortunately for us, Mr. Wilson has made that task much easier. In his analysis, Mr. Wilson has divided the work of McKim, Mead & White into three stages of development. The first, the Early Period, reveals an architecture of no particular style. The buildings of this period are updated colonial, shingle style, eclectic. The second stage of McKim, Mead, & White's development Wilson defines as the Consolidation Period. In this period the firm begins to design buildings in more directly recognizable historical forms. "The freedom of form and lightness," which was characteristic of the Early Period, "was replaced by more regular geometrical forms and solidarity." Finally, in their work of the High Classical Period, the historical quotations become even more direct. The quality of the architecture, however, is made fresh by the fact that invariably there are subtle changes made in the adaptation of the historical model.

Mr. Wilson's essay is brief, but amply supplemented by illustrations. Many of the photographs were taken when the buildings were new, and they show them off well. The book is handsomely laid out, but seems to over-emphasize the photography. In describing the thirty-one buildings, for example, the photographs are large and clear, but the text is the briefest summary. One would rather see more analysis of the architecture and less emphasis on large photographs. As an introduction to the work of McKim, Mead, & White, this book is excellent, and in an age of increasing prices for books on architecture, it also represents a good value. Its eleven inch square format is easy to read without being cumbersome. Perhaps its greatest benefit, however, is that it shows such a wide range of McKim, Mead, & White's excellent architecture, reminding us how strong and powerful that architecture was, and whetting our appetite for more.

Philip S. Kennedy-Grant, AIA



Plan of "Florham", the Twombley House, 1890-1900, by McKim, Mead and White, Florham Park, New Jersey. House, outbuildings, and grounds are now owned and used by Fairleigh Dickinson University. According to Richard Guy Wilson, the Twombley "estate is one of the most elaborate ever constructed in the United States."

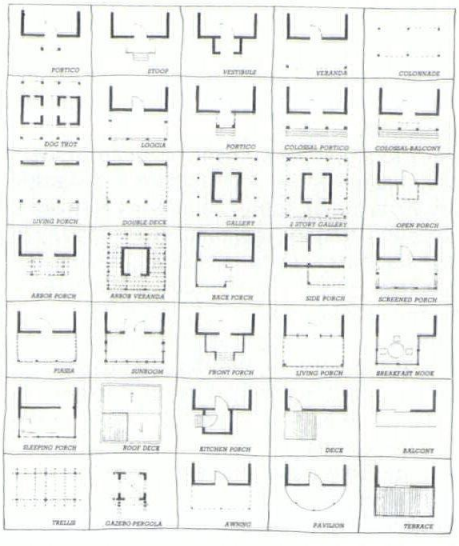
HOME SWEET HOME: American Domestic Vernacular Architecture, edited by Charles Moore, Kathryn Smith, and Peter Becker; 150 pages, 100 illustrations; Rizzoli International Publications, Paperback; $17.50.

Vernacular architecture can be described as that class of buildings which has developed without direction or attention by architects. As vernacular speech is the language of the street, vernacular architecture is typified by the ordinary, everyday house. As a subject of academic interest, it has been largely ignored; Vincent Scully, Robert Venturi, and Charles Moore being significant exceptions. Nevertheless, even in this age of architectural pluralism, the vernacular building remains much ignored, and even much maligned.

This book seeks to generate further awareness of, and respectability for, vernacular architecture. As stated in the forward, its purpose is to "attempt to define what constitutes vernacular architecture." Toward that end, a wide range of topics are addressed, from regional color (a fascinating idea, though incompletely developed) to early architectural construction toys. We are shown pictures of Airstream trailers, the Hearst castle, a Corvette's grille, a still from a Donald Duck cartoon, and totem poles from the Northwest Coast. There are some downright tacky houses and some simply elegant ones. The collection is a visual grabbag and the multitude of topics tends to obscure the stated goal. One forgets that it is vernacular architecture we are attempting to define because the connections are not always clear. Can it be that everything is included?

This publication is a catalogue of a series of exhibitions sponsored by the Los Angeles Craft & Folk Art Museum. The essays are brief to the point of being inconsequential, and seem more the documentation of an idea's existence than an elaboration of that idea. As a prod to one's thinking about vernacular architecture and its limitations, the book is very useful. As a catalogue of exhibitions, one is left wondering whether the exhibitions themselves were stronger and more coherent.

by Philip S. Kennedy-Grant, AIA



"A Graphic History of the American Porch, 1700-present," from Home Sweet Home: American Domestic Vernacular Architecture.

Typical California two-story stucco duplexes. From Home Sweet Home.

Child's drawing of a house from Home Sweet Home.

mt. laurel II a design perspective

by Richard Bottelli, AIA

If nothing else, the State Supreme Court's so-called Mount Laurel II decision has dramatically raised the "consciousness level" and forced a long needed dialogue on the impact that changing demographics and living patterns are having on America's housing needs.

However, an unfortunate by-product of this decision to declare exclusionary zoning unconstitutional is the unwarranted fear it has created that small, high density housing will have an adverse impact on property values, municipal services, local tax rates and a community's aesthetic appeal.

While the membership of the New Jersey Society of Architects is not presumptuous enough to interfere with home rule or local zoning ordinances, we do proclaim expertise in building design and environmental development. It is our collective belief that the new forms rising out of demographic change are not something to be feared.

On the contrary, small, higher density housing, if designed and planned well, will enhance, not detract from communities. Today, smaller and smarter housing can provide efficient design inside and out, making the best use of footage both aesthetically and economically. Small homes are cost efficient, energy efficient, designed for easy maintenance, and affordable.

Likewise, higher density housing can be a solution to municipal and socio-economic needs by making the best use of land in a community, resulting in aesthetic benefits by clustering units together and providing for beautifully landscaped greenbelt areas.

It's a sorry fact that most affordable, single family housing today is already in the ground. Inflation, interest rates and building costs have made building-new cost prohibitive. A study undertaken by the United States League of Savings Institutions reports that by 1984, even if median home prices remain constant at their 1982 levels and mortgage rates drop to 11 percent, the gap between what a first-time home buyer can afford and the median cost of a new home will still be $14,000. In 1977, that same affordability gap was only $2,400.

In New Jersey alone, about 40 percent of all wage earners, even those in white collar professions, do not earn enough to compete for a new home.

It should be apparent then that unless we quickly find ways to accomodate a vast portion of our population, we face a housing crisis of incredible dimensions. A crisis that cuts across our entire social, economic and cultural spectrum.

Good, affordable, higher density housing can and is being built, but it takes cooperation between architects, builders and public officials. For developers, the job is twofold: first, they must insure that their smaller homes are smarter homes, desirable community additions whose density is softened by good planning and design; second, they must work closely with political leaders, officials and neighboring residents to increase understanding and acceptance of new concepts.

Community involvement means working with existing residents in open forum, informing them as to what is being planned, identifying objections early-on and diffusing rumors that would distort the reality of smaller, higher density housing. For instance, it is not a drain on communities. New home buyers and builders, in fact, generally pay more than their fair share in community improvements such as roads, parks, schools, water and sewer facilities.

A report undertaken by the Real Estate Research Corporation of Chicago indicates that well-planned, higher density developments actually result in lower economic costs, lower environmental costs, less use of natural resources and a reduction in some personal costs. Higher density communities generally cost less to construct and maintain, and a lower proportion of the cost is likely to be borne by the government.

Indirectly, it also produces jobs, an attractive business community and an opportunity to increase tax revenues.

Studies on specific communities in Connecticut and Colorado have discredited the myth that government assisted housing and — by inference — all affordable housing development must necessarily lower the property value of surrounding homes. Furthermore, examples of numerous projects built without government subsidy show that values of higher density housing can actually increase faster than average home appreciation rates.

Environmentally, architects are responding to the design challenge of smaller, higher density housing by creating units that are affordable for greater numbers of people but still maintain the aesthetic qualities so vital to discriminating neighborhoods. Through adaptive reuse, we are often able to preserve beautiful existing mansions that might otherwise have to be destroyed.

For example, the adaptive reuse of four-story brownstones in Hoboken and Jersey City from single family to multi-family units has been largely responsible for effective and aesthetic revitalization in those communities. Few would contend that those attractive structures should have remained one-family dwellings as they were at the turn of the century, yet that, in essence, is the argument made by those municipalities that arbitrarily insist on single family, multi-acreage zoning.

Aside from economic and aesthetic considerations, the fact remains that those elements which determine individual living styles have changed drastically over the past few decades and our more traditional housing forms will no longer suffice. Though our total population is decreasing, the need for individual housing units is growing, due to an increase in the divorce rate, the number of people remaining single, widows or widowers living longer lives and children not remaining with parents as long as they once did.

Then again, more and more of our housing needs, even for the affluent, are recreation oriented. People are willing to live in one or two rooms as long as the amenities — swimming, tennis, golf, socializing, maintenance — are first rate.

By and large, people seeking affordable homes in established communities are not different from existing residents. Higher density housing appeals to a discriminating group of home buyers consisting of young professionals, empty-nest couples whose children have grown and left home, and retired, long-term residents — a stable segment of responsible citizens vital to any community. To these buyers, a higher density environment is often a desirable lifestyle. Such density design provides these citizens with proximity to neighbors, security and recreational amenities.

Restrictive zoning, when arbitrarily conceived and randomly enacted, also tends to discriminate against those who have lived in a large home over a number of years, but are now in a circumstance where a large residence is no longer required: a spouse died, their children have left, or they have recently divorced. Current practices are preventing these people from remaining in the community where they have spent their lives because affordable, desirable housing is prohibited.

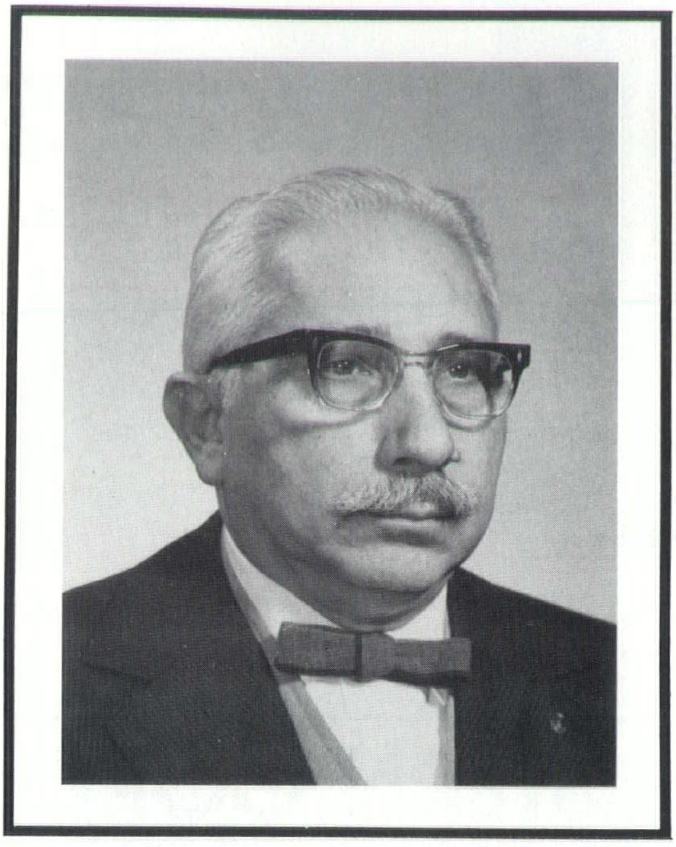
Additionally, if affordable starter housing is not available, there will be a shortage of move-up buyers for larger homes. The pipeline will collapse, adversely affecting the prices of existing larger homes, instead of enhancing them. Ironically, an artificially restricted customer base will in itself decrease property values.

As stated earlier, The New Jersey Society of Architects does not presume to pass judgement on an individual community's zoning patterns. In some cases, restrictive zoning clauses may be appropriate and even advisable. The Society only urges that community officials base zoning decisions on a realistic and factual appraisal of cause and effect.

The New Jersey Society of Architects will willingly lend its expertise and assistance to any level of local, county or state government wishing to implement a program that will provide for affordable, aesthetically appealing and economically feasible housing.

Editor's Note: Mr. Bottelli is principal of Bottelli Associates in Florham Park, and a Past President of NJSA.

ADOLPH R. SCRIMENTI, FAIA
1913-1984



Adolph R. Scrimenti, FAIA, passed away in Florida on March 26, 1984, after an illness of several months.

Adolph was a past president of the New Jersey Society of Architects, and a former Director of the New Jersey Region of The American Institute of Architects. He was a key figure throughout the construction industry for more than two decades. A record of his service to the profession at all levels would fill volumes. His influence was incalculable.

He was the architect's Architect; a Renaissance Man who used his intelligence and imagination with a great skill. Always a stalwart of personal and professional integrity, he set high standards for those who worked with him and for him. His name was synonymous with honor, respect and dignity. He was intolerant of hyprocrisy, disloyalty, and incompetence, often speaking out with a sharp tongue advocating a position that, although not easy or popular, was the honorable and just course.

Adolph was a meditative and thoughtful person who always considered the ideas of others before taking a stand. During debate he would listen to the views of others before stating his. He had the ability to succinctly sum up the issues and express a logical course of action. Rarely would he speak first, but he always had the last word.

Adolph was a creative and wise person who throughout his entire adult life held a passionate romance with his profession. Architecture was his entire world. It was his avocation as well as his vocation. He dedicated his life to the betterment of his profession; he will be greatly missed, but well remembered.

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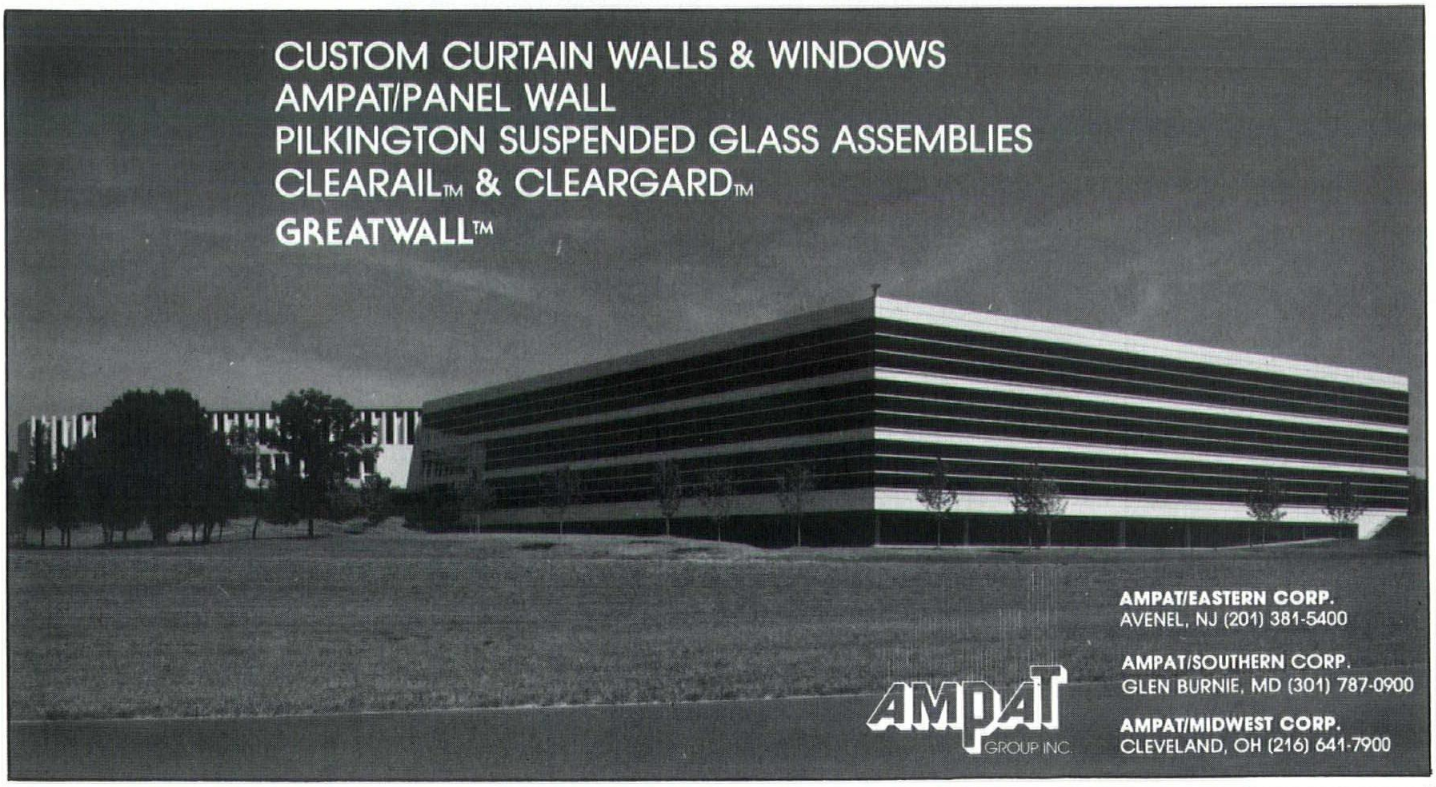

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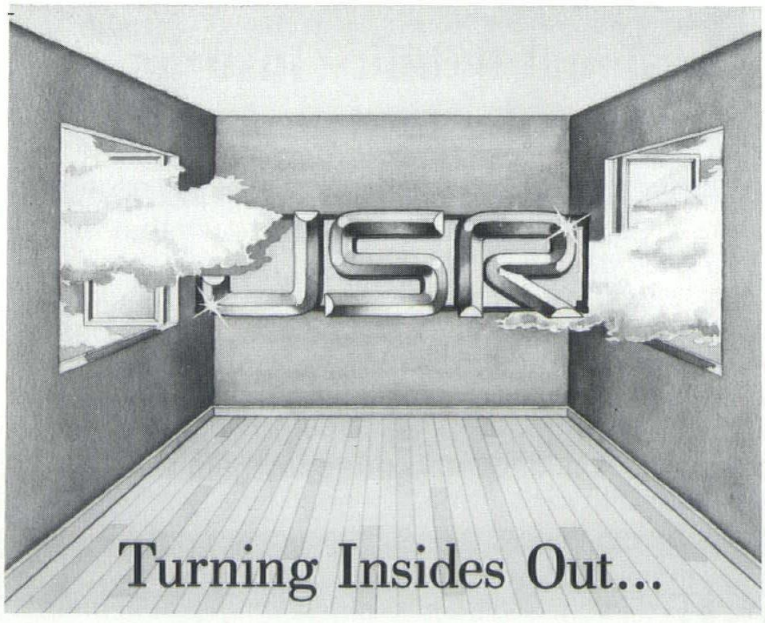

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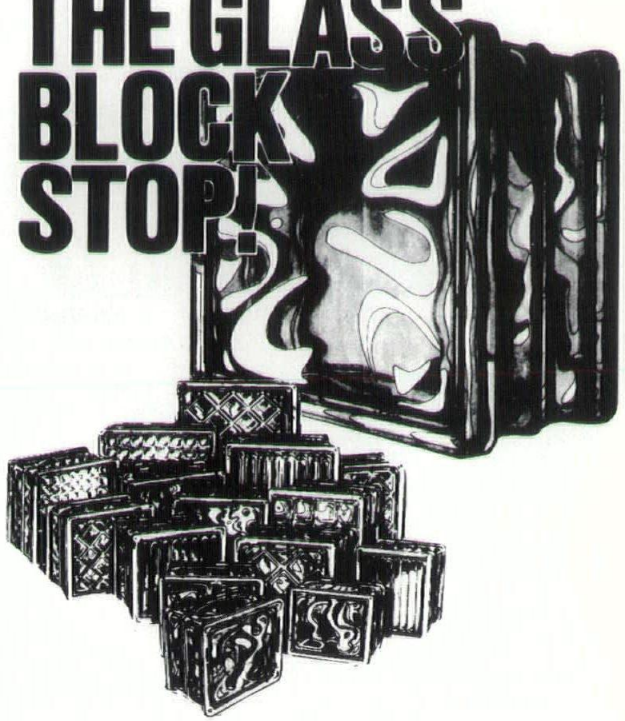

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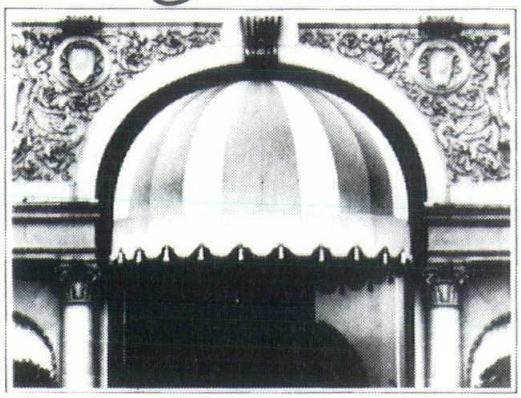

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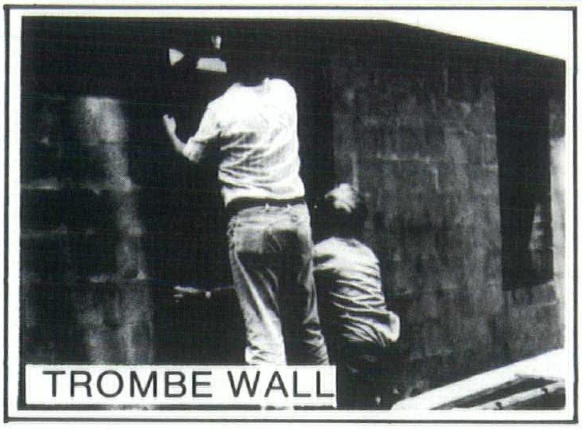

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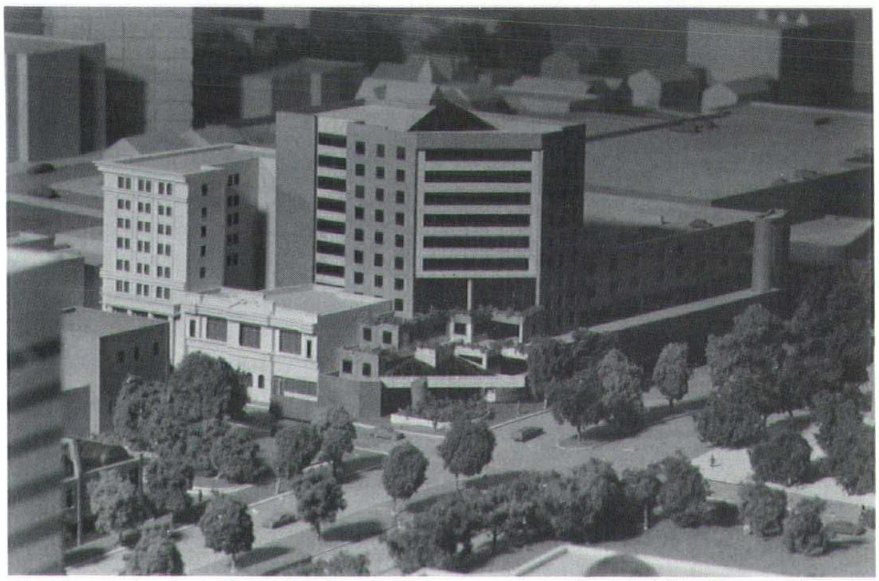

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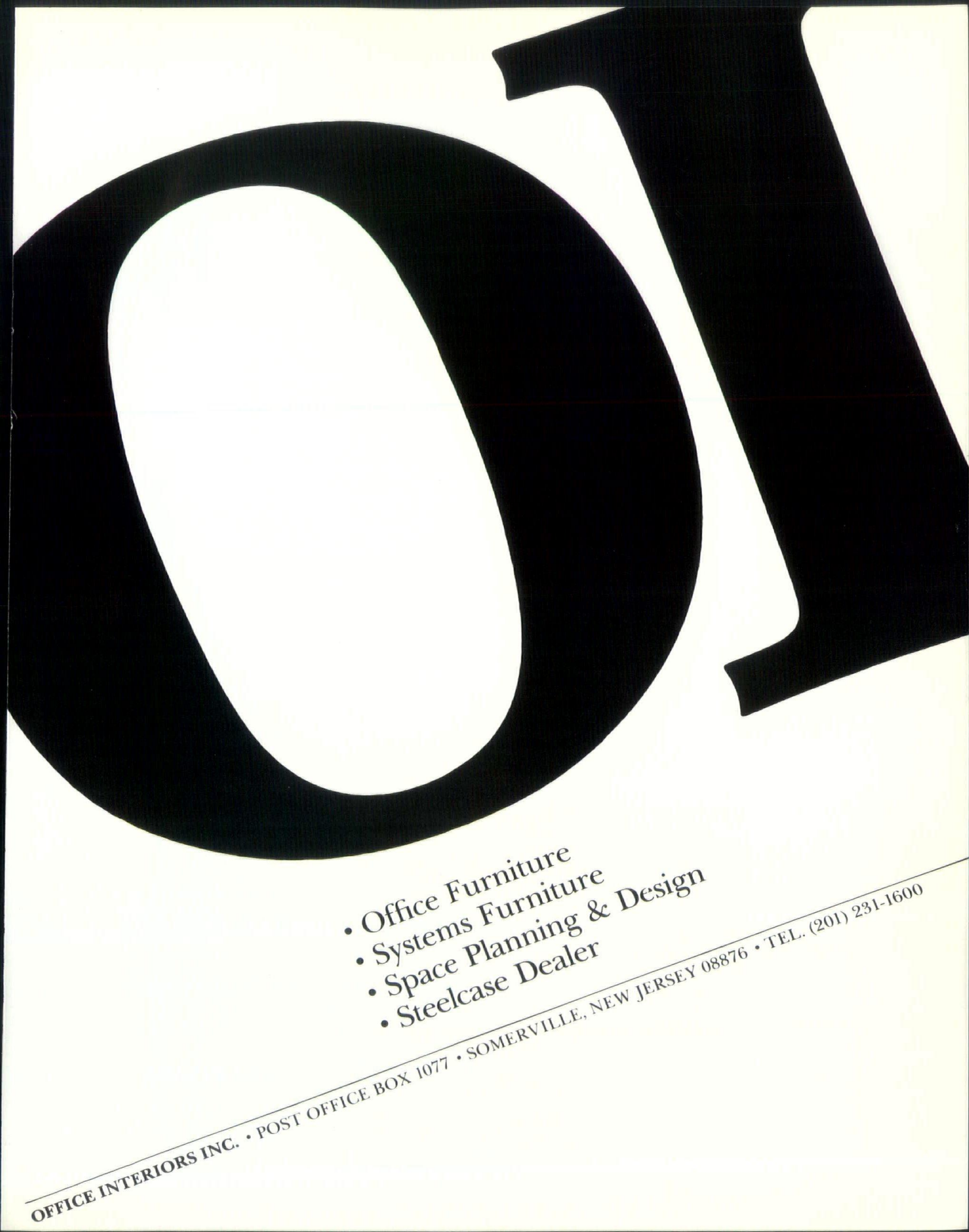
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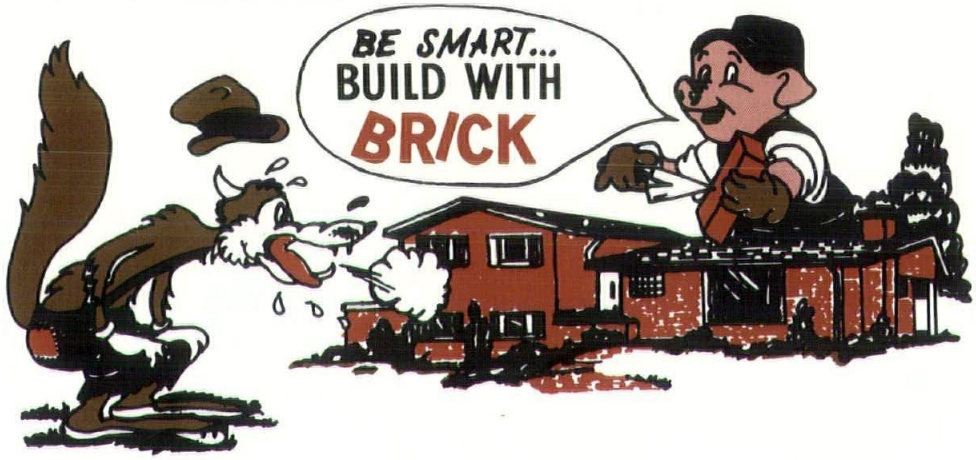

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