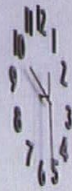


BROOKLYN Pennsylvania Architect

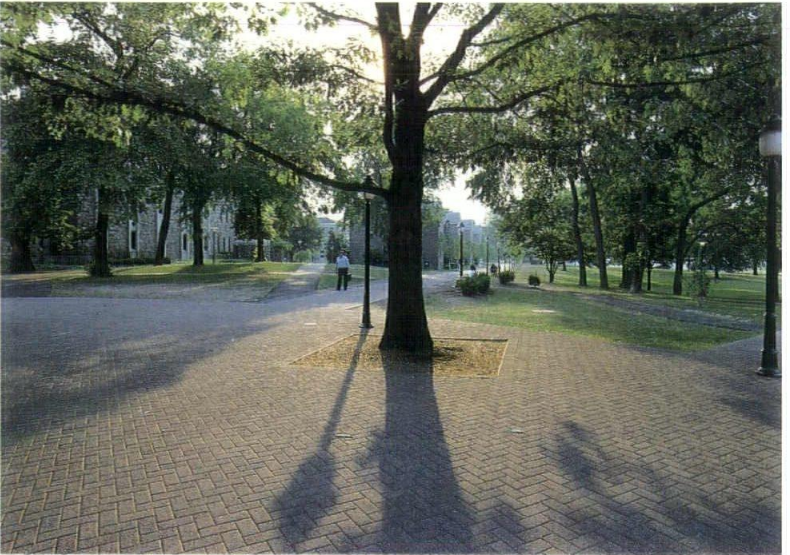
JOURNAL OF THE PENNSYLVANIA SOCIETY OF ARCHITECTS

BROOKLYN ELEMENTARY SCHOOL





Spring Grove Area High School, Spring Grove, PA

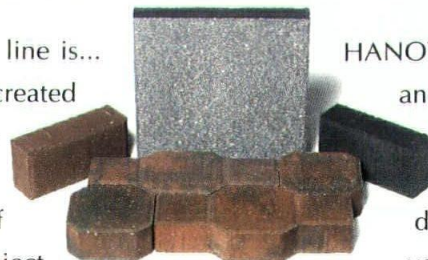


Ursinus College, Collegeville, PA



Monroe Community College, Rochester, NY

The bottom line is...
not all concrete pavers are created
equal. Cement and stone is only the
beginning. Pavers can and should
become an integral part of
your project.



HANOVER® is known for our ability
and willingness to adapt to the
requirements of your individual
design. Our representatives will
discuss your needs and explain
your options.

HANOVER ARCHITECTURAL PRODUCTS, INC.

240 Bender Road, Hanover, PA 17331 (717) 637-0500



Contents

Pennsylvania Architect/Fall 1991

PSA Board of Directors:

William J. Bates, AIA-President;
Dennis R. Connell, AIA-Vice President;
James L. Crum, AIA-Secretary;
John C. Haas, AIA-Treasurer
Kenneth Rodemer, AIA; Harry Rutledge, AIA;
Lawrence A. Greene, Jr., AIA;
Martin U. Dougherty, AIA; Robert J.
Crownier, AIA; Robert Nalls, AIA; Martin
Harms, AIA; R. Mitchell Shiles, AIA;
Robert J. Shusterman, AIA; George R.
Ehringer, AIA; Kent Edwards, AIA;
Marsha Berger, AIA; Herbert W. Levy, AIA-
AIA Director, PA Region; Mark Bandzak, AIAS

Editorial Committee:

John A. Fatula, AIA-Chairperson
George Donovan, AIA
Nelson McCloskey, AIA
Dennis R. Connell, AIA
G. Randolph Hudson, AIA
Ross Rectenwald, AIA
James Garrison, AIA
Douglas L. Shuck, AIA
David Wilson, AIA

Board Liaison:

Robert J. Crownier, AIA

Editor-in-Chief

John A. Fatula, AIA

Managing Editor

Lela Shultz

For information regarding project
submission and/or subscription to the
Pennsylvania architect, contact:

The Pennsylvania Society of Architects
P.O. Box 5570
Harrisburg, PA 17110-0570
717/236-4055

For advertising space rates
and information, contact:

National Sales

TSG Publishing

940 Western Avenue
Pittsburgh, PA 15233 412/323-1808

Pennsylvania

Winterhalter Sales

54 Rolling Road
Mars, PA 16046 412/776-1432

3 Editor's Letter

4 PSA News

6 Kahn Revisited: The Modelmaking Genius of Brenner, Christensen, Kass

Primary and Secondary Schools

8 Bogle Hall, Blair Academy

12 Springside School

16 Oak Ridge Elementary School

20 Red Lion Elementary School

22 Brooke Elementary School

About the Cover

The matter of scale provided the major organizational framework for the design of the Brooke Elementary School.

The complete story of this project can be found on page 22.

Photography by: Peter K. Cowen

The Pennsylvania Architect
TSG Publishing
940 Western Avenue
Pittsburgh, PA 15233
412/323-1808

GE presents no-hassle remodeling.



No hammers. No saws. No headaches.

No kidding. With GE White on white appliances, you can create a contemporary, built-in look in your kitchen. Without the headaches built into remodeling.

For starters, install the GE 30" slide-in electric range in place of your old one. It's beautifully complemented by the Spacemaker® microwave/convection oven, SpaceCenter 27 refrigerator

and electronic Potscrubber® dishwasher.

What's more, you won't have to tear up your cabinets to install them.

Just your remodeling plans.

So, call the GE Answer Center® service at 800.626.2000 for our informative brochure.

We'll send it out to you right away.

No problem.



We bring good things to life.

The Editor's Letter

"A great building must...begin with the unmeasurable and go through the measurable in the process of design, but must in the end be unmeasurable."

The idea crossed my mind to allow this quotation by Lou Kahn to stand by itself as a statement which perfectly synthesizes what we're all about. Why should I try to comment on it or explain it? As another Louis once said, "If you have to ask, (What is jazz?) I can't tell you." Substitute the word "symphony" or "painting" or "poem" for "building" and the idea is wonderfully valid and gives the essence of the creative process.

As I visited the basement studio where the five new exhibition models were in their own act of being born, I could sense this beautiful man's presence in this assortment of tools and parts which surrounded his ideas taking form in wood, plastic and metal. Beth Sulit's article on page 6 will give us a glimpse of those processes, both measurable and unmeasurable. The architectural community owes a substantial debt of gratitude to Linda Brenner, Bill Christensen and Laura Kass for their labors. It is clear that the effort has passed well beyond the assignment to build a few models and entered into a labor of love. Thank you from all of those who knew, studied or worked with Lou.

But now I must deal with an economic reality and remind you, as if you needed to be reminded, that despite Mr. Bush's strange ideas about the end of the recession, we architects are still looking for the light at the end of our tunnel. This is reflected in magazine advertising which is down in architectural publications nationwide. While the number of ads in The Pennsylvania Architect is still on the rise, it is at a very slow rate. I am reminding you to support those companies which support our magazine and encourage those who are not yet in these pages to get there.

John A. Fatula, A.I.A.
Editor

The Pennsylvania Architect

Editorial Schedule 1991/92

Ad Closing Date

Winter 1992 January 2, 1992

The 1991 Pennsylvania Society
of Architects Design Awards

Spring 1992 April 3, 1992

Retail facilities including shopping
centers, malls, individual retail
businesses, department stores. New
construction or renovation.

For advertising space rates and other
information contact:

National Sales	Pennsylvania
Karl Rabeneck	Winterhalter Sales
412/323-1808	412/776-1432



Left to right: Donald Gibson, Dino Calvitti, Justin Shaulis, Lt. Governor Mark Singel, Donald M. Rorke, William J. Bates, AIA, Andrew Kudless, Felipe Velasquez and Jonathan Glance.

1991 PSA High School Architectural Design Competition

The Pennsylvania Society of Architects and The Knoll Group recently announced the winners of the third annual PSA High School Architectural Design Competition. The competition was held on May 4th in five locations throughout Pennsylvania and 133 students participated.

First place went to Justin Shaulis, a sophomore at Conemaugh Township Area High School in Somerset County. Justin received \$1,200 in U.S. savings bonds.

Second and third place went to Jonathan B. Glance, a sophomore at Sewickley Academy in Pittsburgh and Felipe Velasquez, a senior at Thomas A. Edison High School in Philadelphia. Glance received \$700 in bonds and Velasquez received \$500 in bonds.

Three students received Honorable Mention: Donald Gibson, a senior at State College Area High School in Centre County; Dino Calvitti, a senior at McKeesport Senior High School in Allegheny County and Andrew Kudless, a sophomore at Moravian Academy in Lehigh County.

The program for the competition was the design of a children's library located on a site adjacent to the Capitol Building in Harrisburg. This represented a deviation from the two previous years in which the students were asked to design homes.

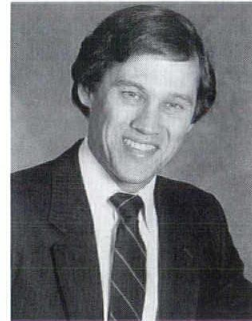
The competition was judged in Philadelphia by James Rowe, AIA, Michael Kihn, AIA, Herbert W. Levy, AIA, Leonardo Diaz and Jane Elliott.

On August 20th the winners and their parents came to Harrisburg and received recognition from Lt. Governor Mark Singel.

PSA Special Awards

Each year the Board of Directors of the Pennsylvania Society of Architects presents special awards to celebrate outstanding contributions to the profession. In 1991 the Board chose to present two awards at its Annual Meeting held on September 24th at Toftrees in State College.

Medal of Distinction



The PSA Medal of Distinction is the highest award bestowed by PSA upon a PSA member. The recipient must have made

contributions to architecture that transcend local boundaries and have been of benefit to not only the profession, but also the citizens of Pennsylvania.

In 1991 the Board selected Robert Dale Lynch, AIA as the recipient of this award. Mr. Lynch was nominated by the Pittsburgh Chapter/AIA for his dedication to accessibility issues. Lynch's effort resulted in the enactment of the state's Universal Accessibility Law. In 1989 he was appointed to the eleven member advisory board to draft the regulations to implement that law.

At the national level he has worked closely with AIA National to refine and enact the federal Americans with Disabilities Act. In 1989 he was the United Cerebral Palsy Association's national representative to the



**HIGH CONCRETE STRUCTURES, INC.
HIGH CONCRETE STRUCTURES, INC. OF NJ**

Affiliates of High Industries, Inc.
125 Denver Road
Denver, PA 17517

PHONE: 215/267-3821
800/272-1515 (Within PA)
800/535-1515 (Outside PA)
FAX: 215/267-2012

**ALL TYPES OF ARCHITECTURAL, STRUCTURAL &
HOLLOWCORE PRODUCTS
COMPLETE BUILDING SYSTEMS FOR ALL
INSTITUTIONAL PURPOSES**

- Parking Garage Systems
- Multi-Housing (Stackwall) System (Dormitory Use)
- Education Facilities (Labs, Offices & Classrooms)
- Industrial Building Systems (Maintenance Facilities)

PCI CERTIFIED

OVER 75 YEARS OF EXPERIENCE

"Quality is a **HIGH** Priority"



American National Standards Institute's A117 Committee for Buildings and Facilities Providing Accessibility and Usability for Physically Handicapped People.

Contribution to the Profession by Furthering Artistic Appreciation

This award was created to recognize individuals or companies from either the public or private sector for contributions that have furthered the appreciation of architecture through helping to create an aesthetic and intellectual climate for the arts.

The Board elected to give this award to The Helen Clay Frick Foundation. The Foundation was selected for its contribution to the celebration and appreciation of architecture in Pittsburgh over the past six years through architectural exhibits at the Frick Museum and the restoration of Clayton, the Frick home in Pittsburgh.

The Foundation was nominated by Donald Carter, AIA of UDA Architects in Pittsburgh.

Architects Poised to Implement New ADA Regulations

Architects are gearing up to help their commercial clients comply with new regulations and guidelines published last week to accompany the Americans with Disabilities Act (ADA). The new regulations will profoundly affect the construction and alteration of more than five million public and commercial

continues on page 26

The architect's right hand.



One hand should help the other. Architects need reliable engineers.

Engineers who know the construction process inside and out. Specialists who both the architect and owner can trust. But most of all, engineers who aren't afraid to discuss costs and materials up front when it counts.

Straight talk is rare in our business—but it's our way of working with clients. We always give you the most efficient design, without any last-minute budget surprises.

Why not let us give you a helping hand on your next project?



O'DONNELL & NACCARATO
STRUCTURAL ENGINEERS
INGENUITY IN ENGINEERING.

BOURSE BUILDING • INDEPENDENCE MALL EAST • PHILA., PA 19106 215-925-3788

DOYLESTOWN, PA • PHILADELPHIA, PA • WEST PALM BEACH, FL

Kahn Revisited: The Modelmaking Genius of Brenner, Christensen, Kass

By: Beth Kephart Sulit

On a quiet residential street in urban Philadelphia, there is a nineteenth-century townhouse that seems to swallow the visitor in—down the narrow throat of an interior stairwell into the depths of an unpretentious model shop. Everywhere is the color of earth: a battered wood floor, plaster-splattered walls, faded architectural drawings, the suggestion of sculpture. Machines—a 10-inch table saw, an assortment of modelmaking saws, a band saw, a drill press, grinders, hand drills, routers—huddle against the walls. The air cools.

But the eye of the visitor sees one thing only: the 1/8th"-scale basswood model of the National Assembly Building in Dhaka, Bangladesh—a jewel-like reproduction of one of Louis Kahn's great architectural achievements. Measuring six feet across, standing 24 inches high, and cut away to expose the interior, it is delicate; it is imposing.

The work of figurative sculptor Linda Brenner, woodworker/watercolorist Bill Christensen and painter/modelmaker Laura Martin Kass, the Dhaka model is but one of five scale models destined to appear in *Louis I. Kahn: In the Realm of Architecture*, a major retrospective which will debut at the Philadelphia Museum of Art between October 20, 1991 and January 5, 1992 before moving on to museums in Paris, New York, Japan, Los Angeles, Fort Worth, and Columbus. All five exhibit models—National Assembly Building of Dhaka, Trenton Bath House, Salk Conference Center, Monument to Six Million, and City Tower—were entrusted to the

modelmaking team of Brenner, Christensen, Kass last November by The Museum of Contemporary Art, Los Angeles.

Interestingly, the execution of the five archival Kahn models has witnessed a convocation of some of Kahn's most notable collaborators—Marshall Meyers, who is overseeing the entire commission; Henry Wilcots, who worked closely on Dhaka throughout its two-decade design and construction cycle; and Anne Tyng, FAIA, who shared responsibility for the design of the City Tower, among other projects—collaborators who have journeyed back in time to recall Kahn's intent, clarify ambiguous details, and define the approximate size, scale, and materials of every model. It has also called on the accumulated knowledge of Kahn Archivist Julia Moore Converse and University of Pennsylvania scholars David DeLong and David Brownlee, who have provided essential data and counsel throughout the 11-month venture.

The construction documents of Bangladesh's own National Assembly Building, coupled with the pristine memory of Henry Wilcots, have guided the artists through the making of the Dhaka model. To replicate the built structure's form (an intricate assemblage of interior/exterior, poured-in-place concrete walls), the team clad both sides of plastic with scored basswood. Horizontal bands of gessoed wood strips periodically interrupt the facing, just as Kahn commemorated the concrete pour lines with bands of white marble. The slight protruding lip of the drip molding is represented in the model as well.

The model's cut-away plunges the viewer into the building's interior.

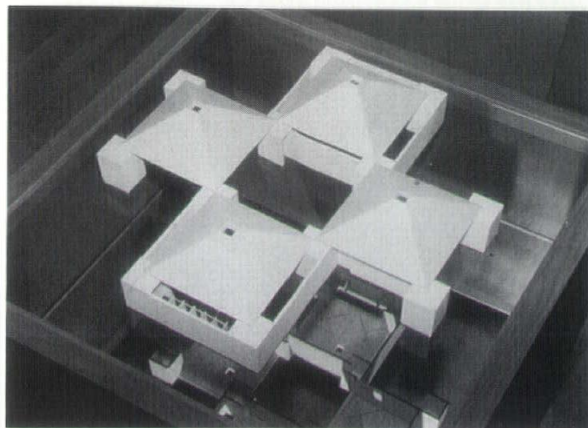
Seven hundred metal chairs, cast from a 1/8th"-scale model of an original, rise out of the floor. Stairwells appear and disappear behind the walls.

Perhaps the most important feature of the Dhaka model is its accommodation of light. Reflected off the surface of a monitor above the vaulted ceiling, light moves through the model—its walls, stairwells, and openings—in close approximation of the Dhaka experience. The physical channelling of the light, revealed to the modelmakers throughout the section-by-section assembly process, has been documented by Christensen in a comprehensive sequence of photographs.

The Dhaka model appears to be all art, and then again, it is mathematics—the product of an unusual synthesis of talents and personalities. Between them, Brenner, Christensen, and Kass have years of modelmaking experience. As artists in the Rhode Island School of Design program during different periods, Kass and Brenner received their first requests for modelmaking from friends in the RISD architectural program. The calls have never stopped coming: Kass's delicate paper/board models are known throughout the city; Brenner's commissions include the prestigious National Gallery of Art in Washington, DC model. Christensen comes to modelmaking by way of fine woodworking and plaster moldmaking—talents which have proved invaluable throughout the Kahn model commission.

As a team, the artists have what modelmaking takes: an innate understanding of architectural design, detailing and construction; a technical knowledge of casting,

The Trenton Bath House displayed on glass over a mirror.



molding, laminating, carving, and assembly processes; and a willingness to labor until they conform to their own impeccable standards of quality.

Just understanding how the exhibit models have come into being requires a multidisciplinary mind. Brenner eases the visitor into the process with a brief history of the 1/4th"-scale Trenton Bath House, a grouping of four pyramidal hipped roofed pavilions about a courtyard.

"Kahn designed the Trenton Bath House back in the early 1950s as a changing room for a community pool," begins Brenner. "It was built, and it still stands today. Unfortunately, much of the building's documentation was lost—only one plan and no elevations survive—and so we returned to the actual building to understand its geometries and structure. We climbed roof tops, collected measurements and took photographs until we had assembled the data we needed."

With the data in hand, the team began to define the parameters of the model—testing foundations and joint systems, adhesives, materials, surface treatments and the like to achieve both the correct geometries and the desired finish, not to mention a formulation that would pack up and travel well. Because the completed model will sit on glass above a mirror, a precise treatment of the model's roof structure was imperative. Approximately 130 hours went into the making of the Trenton Bath House, a full one-third of which were consumed in the planning and testing phase.

"For the Kahn exhibit, it was very important that we select building systems and materials that would enable us to accurately represent wall

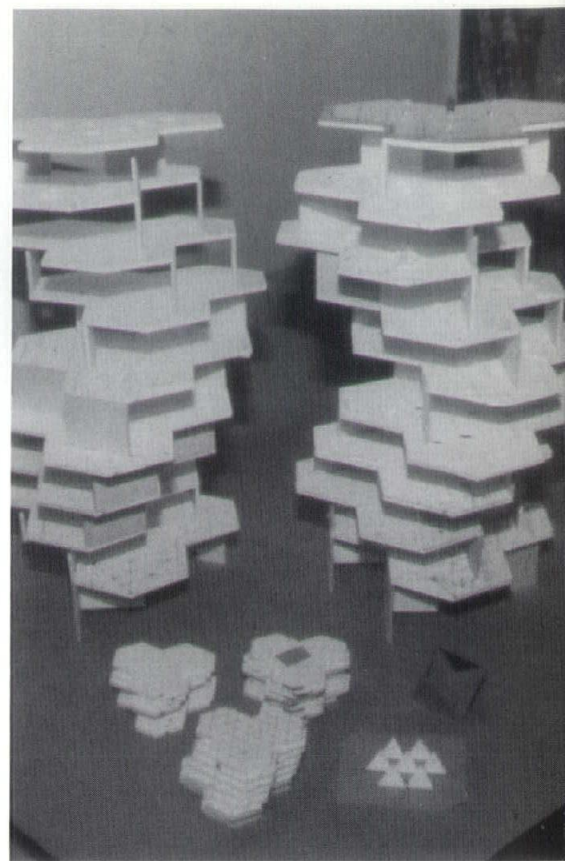
Various sketch models were built to discover the principle of the Philadelphia City Tower's shifts.

thicknesses, floor-to-floor spacings, surface treatments, and even joints, where possible," says Christensen. "Our philosophy has been to strive for the ideal, and to not stop asking questions until we get the answer we need."

Building an archival scale model based on a built work of architecture is difficult at best. The challenge becomes even more extraordinary when the model is to be fashioned after an unbuilt project, and when much of the project's mystery resides with Kahn himself.

Such was the case with the Philadelphia City Tower, a project commissioned to Kahn and Tyng in the mid-1950s by the Atlas Cement Company. The commission called for the creation of an imaginary concrete tower; its final design was to be rendered in a model, which Atlas planned to use in an advertising campaign.

Kahn's response to the project was extraordinarily complex—a jutting, shifting tower held together by tetrahedral concrete floors and diagonal struts. Fortunately, or so it seemed at the time, Kahn's own City



Laura Kass adding finishing touches to the National Assembly Building of Dhaka model.

Tower model still existed—stowed away in the shop of a well-known modelmaker of the Kahn era. Brenner, Christensen, Kass's assignment was to clean, repair, and display the original model—a difficult task, given the corroded and fractured condition of the piece (its base had been cut down), but still achievable.

continues on page 28

Bogle Hall, Blair Academy

Location: Blairstown, New Jersey

Architect: Bohlin Cywinski Jackson

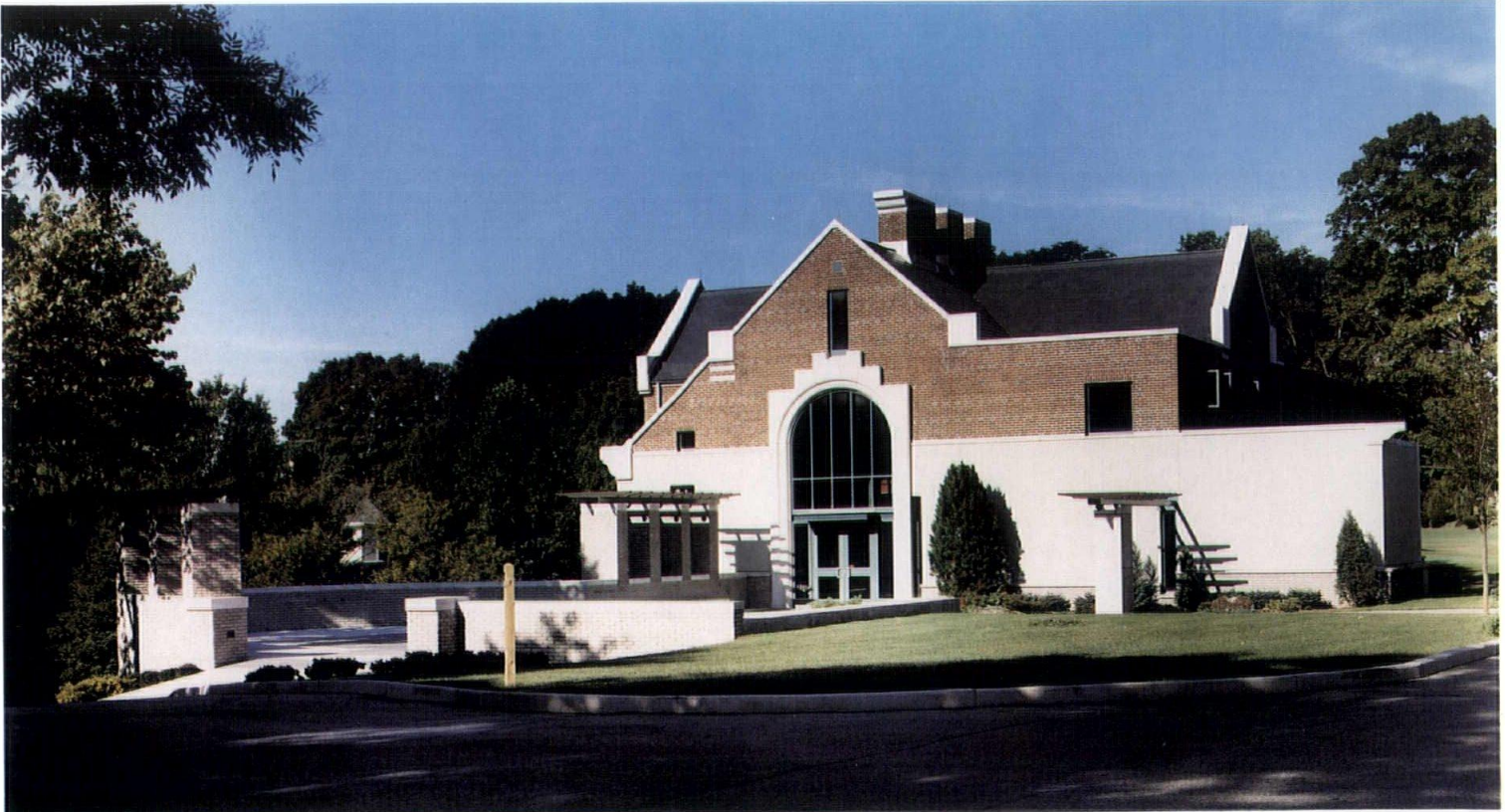
Contractor: Keithley Construction Corporation

The Blair Academy is an independent secondary school, founded in the late 1840s, serving both day and boarding students in grades 9 through 12.

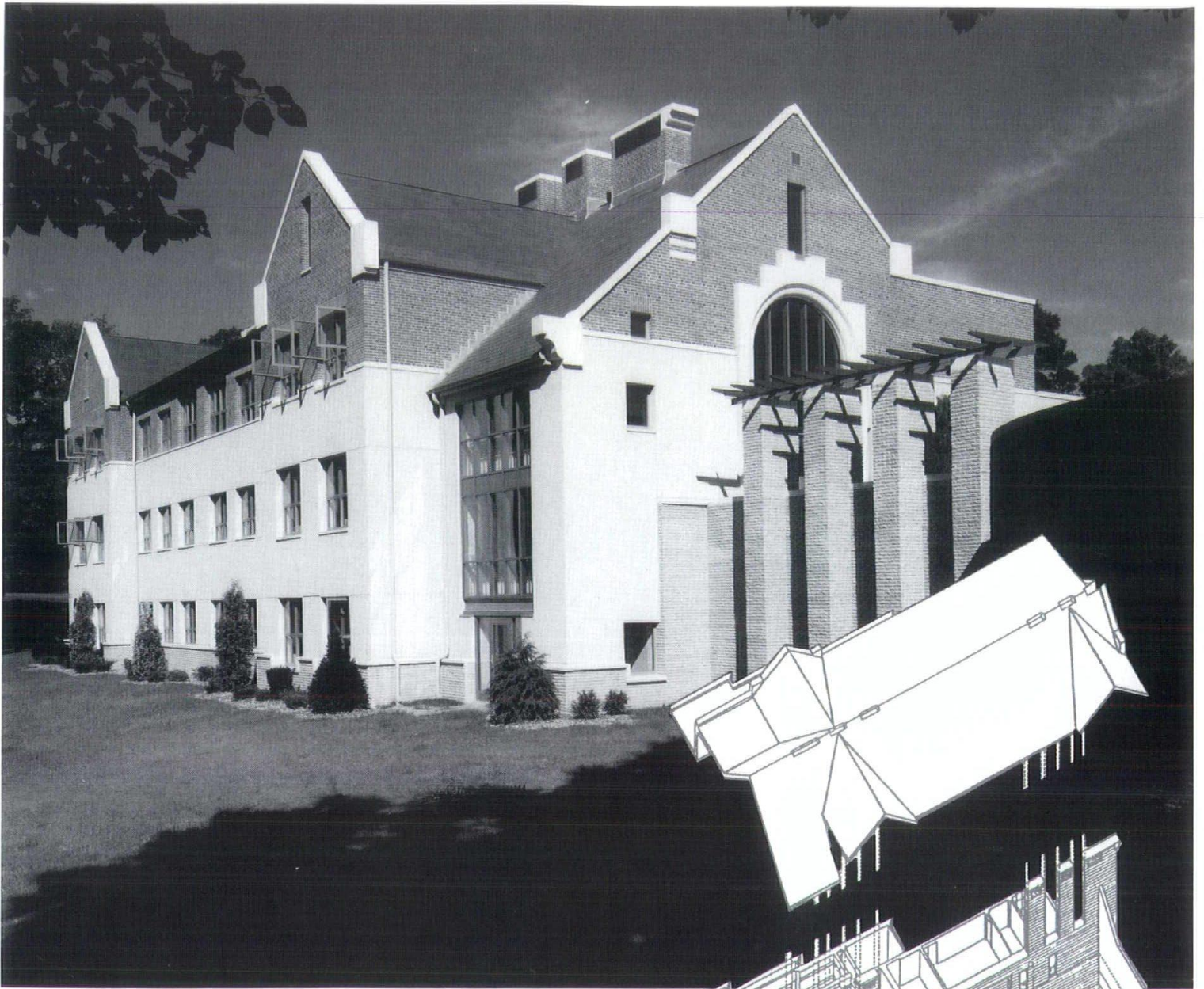
Blair's campus is an exceptional grouping of mid-nineteenth and early twentieth century buildings set in a landscape of expansive lawns and mature trees. With significant elements from the 1840s onward, the Academy's landholding is now a nationally registered Historic District. The buildings borrow from French, Romanesque and English Gothic traditions but form an extraordinarily cohesive ensemble. Their sense of unity arises from the distinctive combination of stone, stucco and brick and their gracious relationship to an established landscape.

The new Science and Math building, Bogle Hall, is the first major academic facility built since 1925. While providing laboratory and computer facilities consistent with the school's advanced academic requirements, it was specifically designed to extend the core campus' architectural and landscape traditions. The major science disciplines, Biology, Chemistry and Physics, are stacked as instructional suites on each of the three floors' south side. Each suite is arranged to maximize teachers' flexibility in interweaving students' lecture and lab experience. Laboratories have ample visual and physical access to classrooms and supply areas, promoting the use of demonstrations during lectures while facilitating

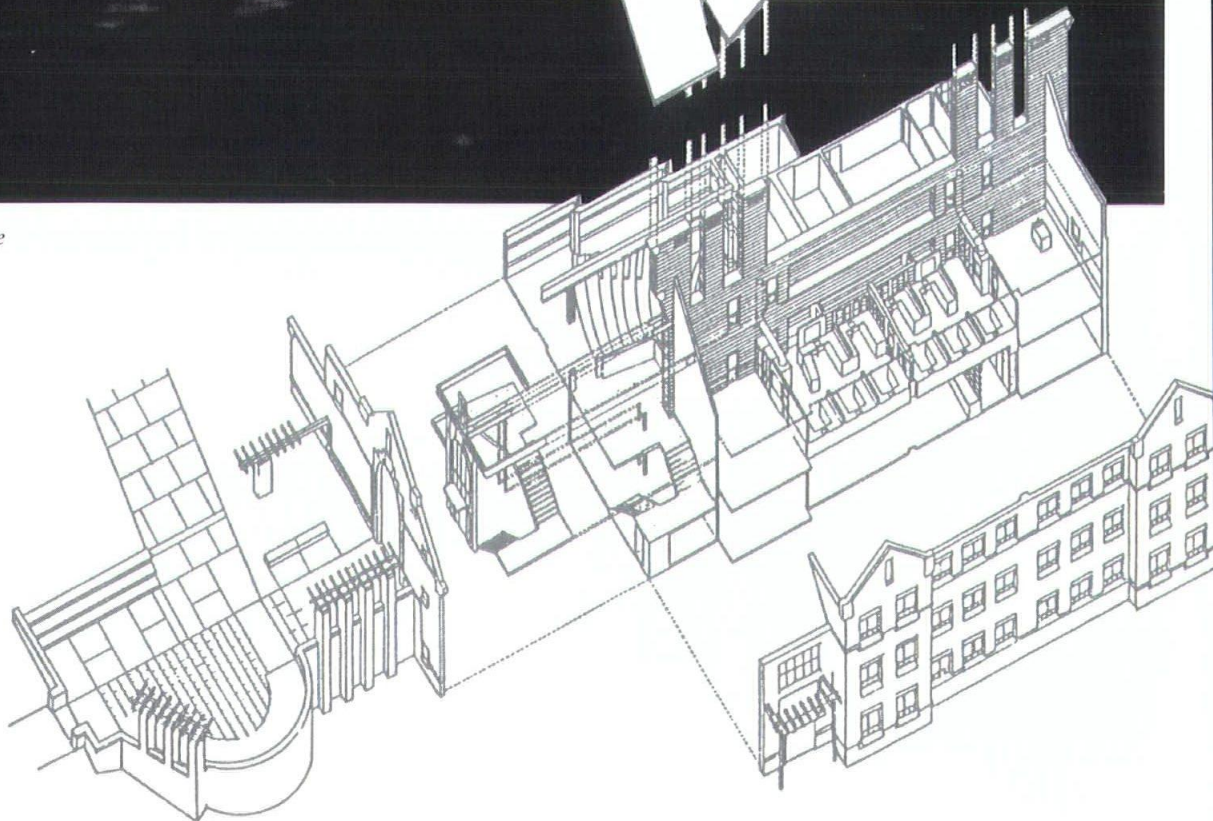
continues







Photography by : Christopher Barone



supervision of experiments. A computer cluster serves Math, Physics and Computer instruction.

The laboratories' mechanical infrastructure is clustered in the brick chases which form the building's "backbone," visible in the corridors and extending as chimneys through the roof. While providing for the laboratory supply and ventilation, the chases restate the campus' traditional roofscape with its numerous stove and fireplace chimneys. The brick core demarks the "Science" side of the circulation corridors, with Math and other spaces organized along each hall's variegated north wall. The corridors' social potential is enhanced by their relationship to the landscape as they link the multi-story lobby to glazed seating areas overlooking the Academy's golf course.

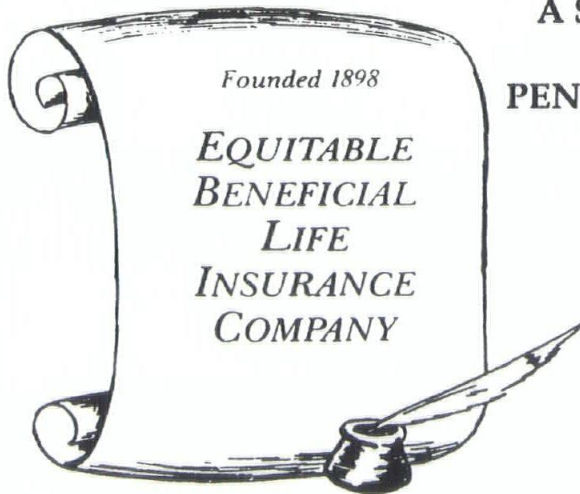
The 110-seat Timkin Auditorium, designed for science and computer

demonstrations, has become the locus of a broad range of cultural events, from recitals to lecture series. Its attractiveness for special functions is enhanced by both the lobby and a major entry court. Overlooking the bucolic landscape, it has become the focus for informal campus life during the school day and the setting of preference for a broad variety of formal social and institutional events.

The Blair Academy's strong architectural and landscape traditions are clearly visible in Bogle Hall's siting and design, signalling a commitment to Mathematics, Science and the computer's role in the core curriculum. Special amenities, such as the auditorium and indoor and outdoor social space make the building a lively contribution to the overall life of the school. □

EQUITABLE BENEFICIAL LIFE INSURANCE COMPANY ANNOUNCES

A SPECIALLY DESIGNED PROGRAM FOR THE PENNSYLVANIA SOCIETY OF ARCHITECTS



- 10 Plans to choose from
- Choice of deductibles 100-1000
- Choice of co-insurance 2000-5000
- **Optional coverages available**
 - Dental
 - Prescription card
 - Short term disability
 - Long term disability
 - Life insurance

Included In all plans, Eye Care Plan America

Call Tracy or Bob

To receive additional information simply **call (800) 822-3455** or **Fax** us a listing of employees and receive an immediate reply with an explanation of benefits **FAX(717) 939-1840**.

Springside School

Location: Philadelphia, Pennsylvania

Architect: Tony Atkin & Associates

Contractor: John S. McQuade Company

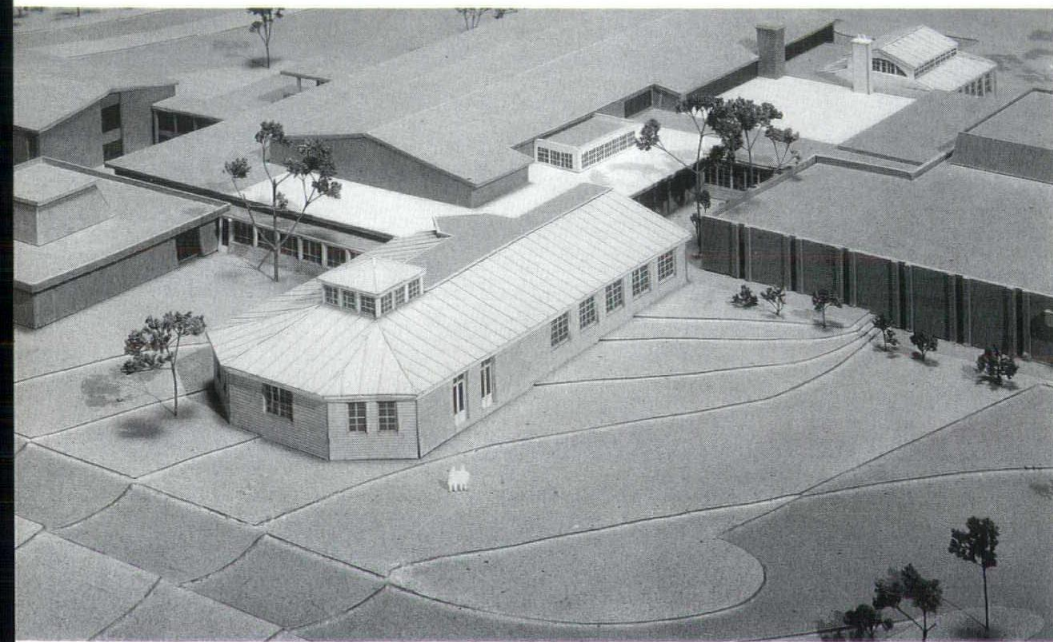
Springside School is an all girls school located in the Chestnut Hill section of Philadelphia. The school has had a number of additions through the years that have doubled the size of its original 1959 building.

Tony Atkin & Associates was retained to develop an overall master plan to clarify future growth and to upgrade and enlarge the art and music facilities as well as design a cafeteria/student center.

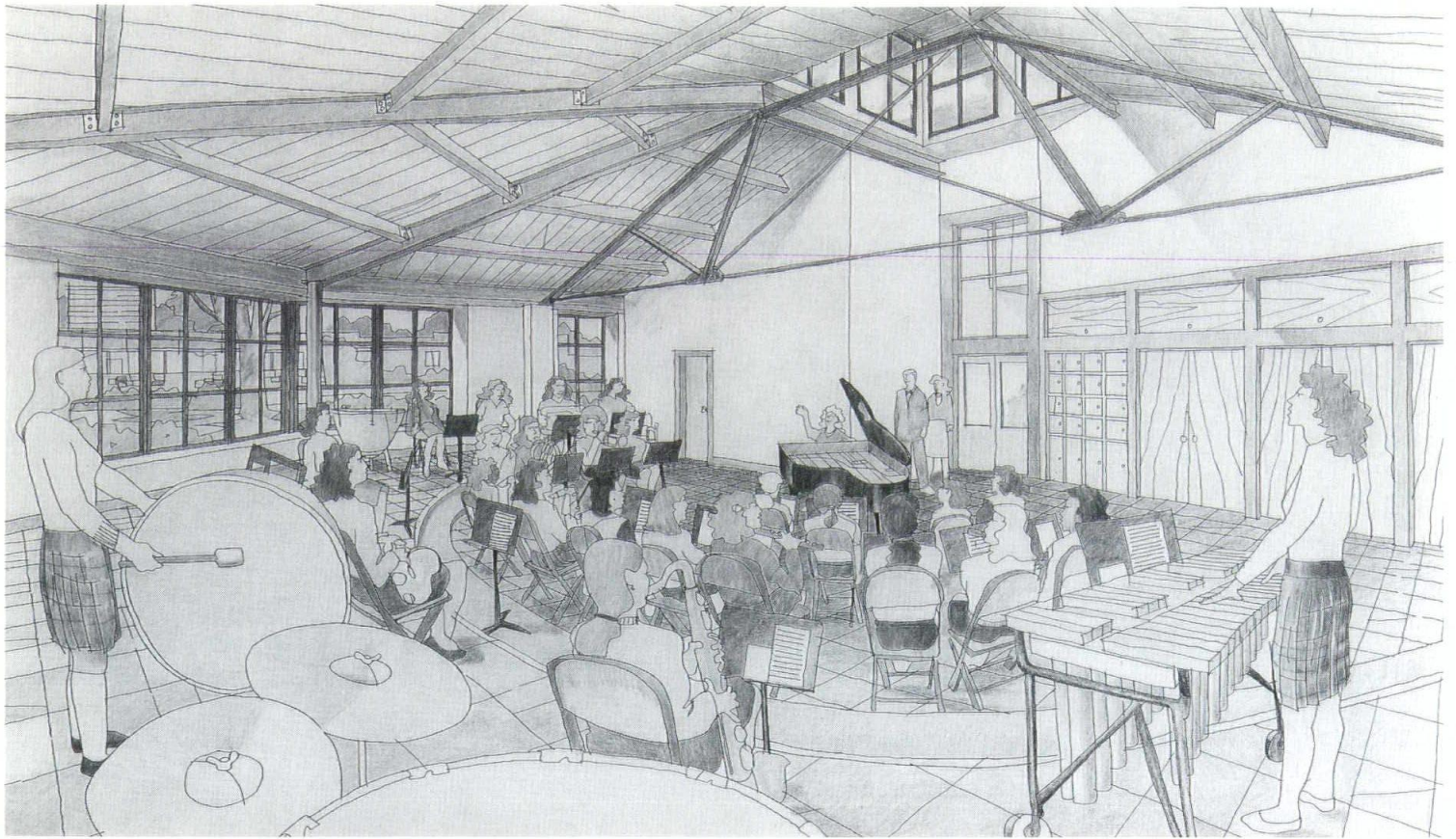
Initial master planning analysis showed a number of functional and circulation problems that had developed over years of ad hoc additions. Work consisted of developing a new cross axis in the school that called for relocating a poorly situated cafeteria and creating a new circulation loop that ties together many disparate parts of the overall plan.

The new art facilities developed around an exterior art court. All art rooms will open onto the court, which can serve not only as a place to display art, but also as an exterior workplace. The music facilities have been designed as the end of the new cross axis with a new recital hall at

continues







the terminus. Both the music and art rooms have separate exits and entrances to allow the facility to have summer sessions while the rest of the school is closed.

At the opposite end of the new cross axis will be the new cafeteria/student center. The center will overlook the southern playing field and offer much needed space for various student activities. Beneath the student center, with direct access to an outdoor playground, will be the new Hillside Day-Care Facility. This will be jointly operated by Springside School and Chestnut Hill Academy. □

Photography by: Tom Bernard

PENNSYLVANIA SOCIETY OF ARCHITECTS INSURANCE PROGRAMS

Professional Liability Insurance

- Competitive
- High Limits: From \$100,000 to \$15,000,000
- Low Deductibles: As low as \$2,500
- Stability: Coverage available from A+XV rated companies

Workers' Compensation Insurance

- Solid Protection: A+XIV rated insurance company
- 15% deviation from manual rates
- Dividend: has averaged 31.7% for past 7 years

Call or Write our Program Administrator for Details:

Sedgwick James of Pennsylvania Inc.



P.O. Box 1675
Harrisburg, PA 17105
Attention: Brian Rabena
(717) 763-7261
(800) 382-1422

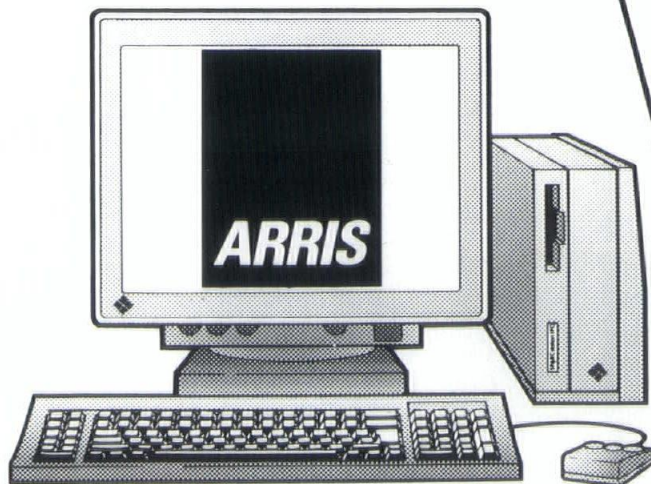


Sedgwick James

How To Stay On Top Of Your Building Without Going Through The Roof.

Talk to us about ARRIS F/X
on the SPARCstation IPC.

**\$14,445
Complete**



The Sun SPARCstation IPC

ARRIS F/X and Sun's SPARCstation IPC give you the right combination for superior facilities management. Arris F/X ties directly into your company's databases, giving you everything you need for planning, designing and managing your facility. And it's all accessible through one simple, easy-to-use interface.

Here's what you get with the economical, complete SPARCstation IPC/ARRIS F/X system:

- 207 MB Hard Disk
- 3.5" Floppy Disk Drive
- 8 MB RAM
- 16" Color Monitor
- Mouse
- Sun Operating System
- Networking
- ARRIS BD&D
- ARRIS F/X Management
- ARRIS F/X Planning

So if you need an easy way to stay on top of things, ask us for a demonstration of ARRIS F/X on the SPARCstation IPC.

GP
COMPUTER
RESEARCH inc

200 Corporate Center Drive
Coraopolis, PA 15108-3100
(412) 262-4430



Value
Added
Reseller

Oak Ridge Elementary School

Location: Harleysville, Pennsylvania

Architect: Breslin Ridyard Fadero

Contractor: Franklin E. Skepton

The Oak Ridge Elementary School is a predominantly one story structure designed to address the needs of kindergarten to fifth grade students. Within the school, functional requirements are broken down into two basic components: the classroom clusters, consisting of three identical groupings of eight classrooms arranged about large group instructional areas; and the shared use spaces, which include the library, multi-purpose room, cafeteria, administration and health.

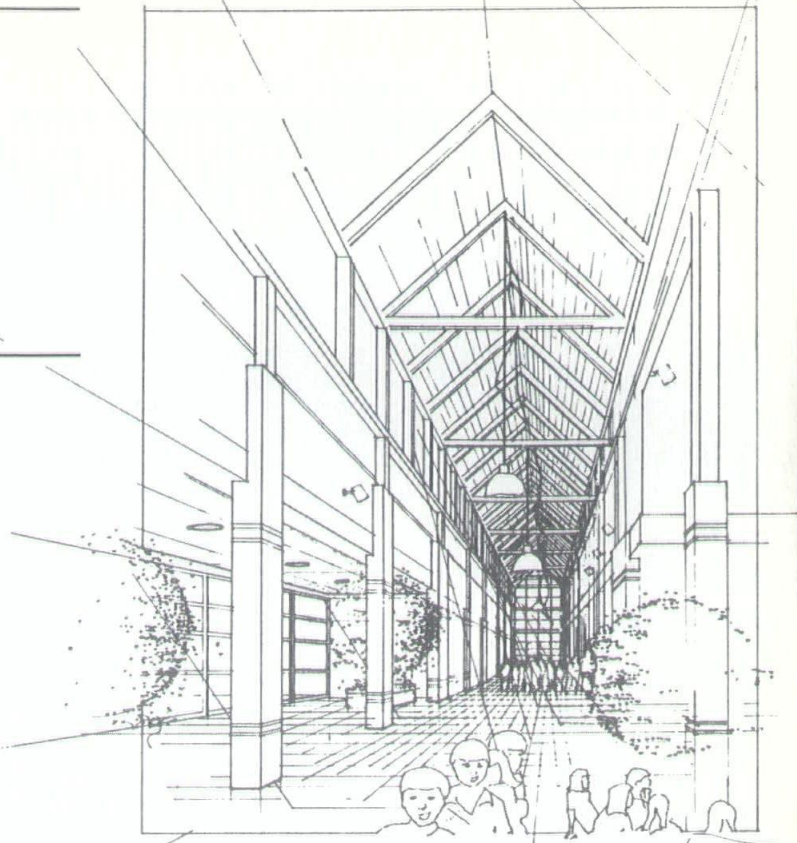
The main organizing element of the school is the circulation spine which mediates between the shared use spaces and the classroom clusters. This two-story element orders the classrooms cluster along its western edge, which allows direct student access to the playground. Conversely, shared use spaces border the eastern edge which fronts the parking lot and houses the main entrance. The circulation spine begins at the southern end of the site as a ceremonial front to Moyers Road. This ceremonial front is actually the



kindergarten entrance, allowing facilities for kindergarten students to be segregated from all other functions. From this point, the circulation spine proceeds past the three classroom clusters that, by placement, create two courtyards to the west, which are balanced by the library and main entrance to the east. The spine continues north beyond the building as a pathway which accesses the athletic facilities and culminates in an outdoor classroom pavilion which borders the local park system.

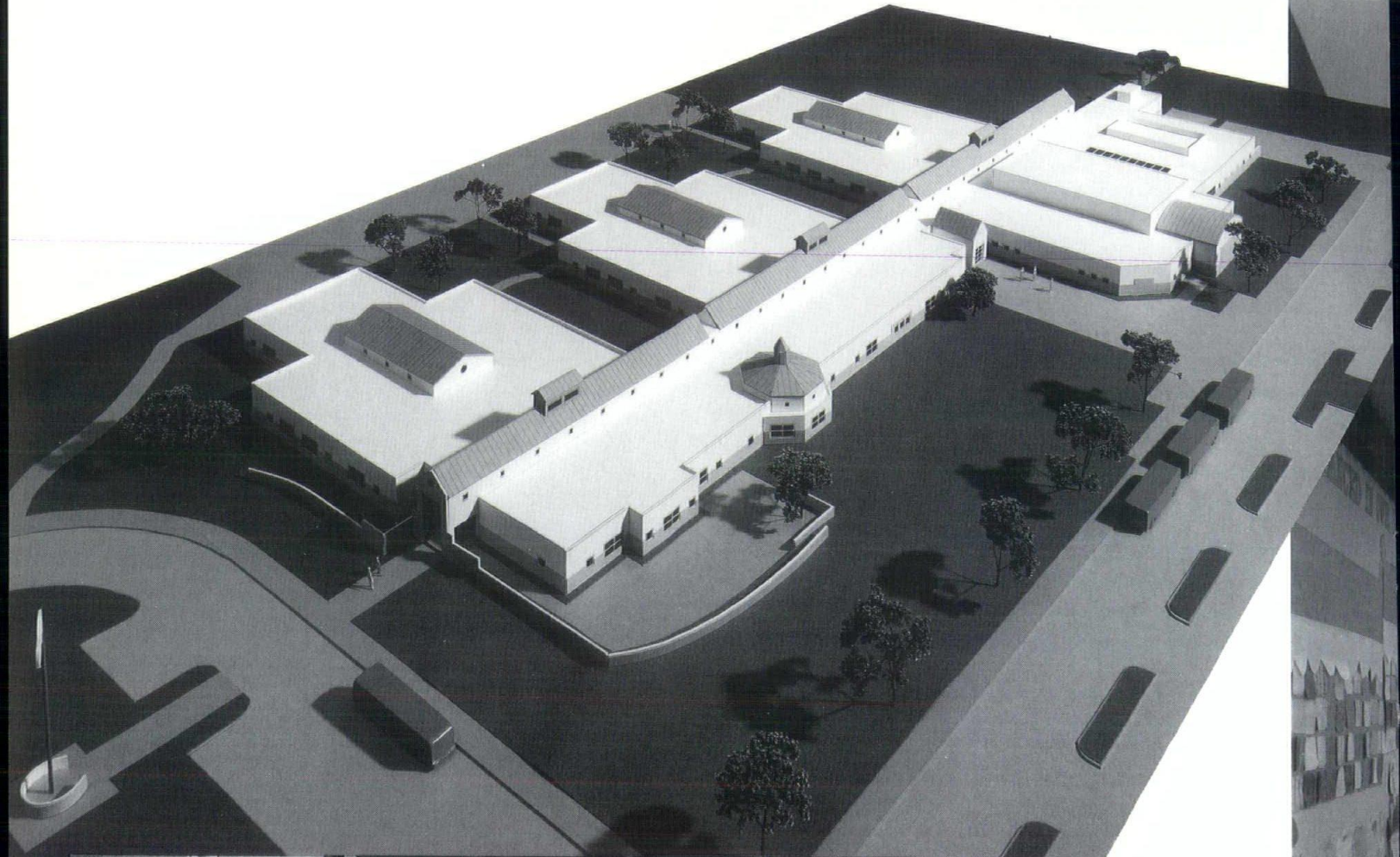
The external form of the building is derived by the articulation of the school's interior functions. The classroom clusters are articulated with gabled roofs over the large group instructional areas which run perpendicular to the dominant, two-story gabled roof form of the circulation spine. Similarly, this gabled roof acts as an organizing element for the functions of the shared-use facilities, specifically, the

continues



View Of Main Corridor/Lobby





octagonal library and the bowed roof topping the multi-purpose room stage.

The interior of the school is enhanced by the use of patterned ceramic tile walls and patterned floors which provide an appropriate scale and character for a public elementary school.

The Oak Ridge Elementary School has received the William W. Caudill Award from *American School and University Architectural Portfolio* magazine. This award honors the best K-12 school in the United States for 1991. □



*Photography by: Otto Baitz,
Steve Wolfe*



Red Lion Elementary School

Location: Windsor, Pennsylvania

Architect: Hayes Large Architects

Contractor: Cumberland Contracting Group Inc.

Situated on a seven-acre site in a rural area between two small towns, this new school has public functions deployed along a curved entry corridor, each end leading to a classroom wing. The wings are joined at their intersection by the library. The outdoor courtyard provides light and views from the library and circulation corridors and is used for outdoor programs.

The building design achieves a non-institutional image by creating a "village" of forms relating to specific function. Building materials are cream- and russet-colored brick and masonry units with sloped, shingled roofs at special areas. Inside, the multi-purpose room has a wood-

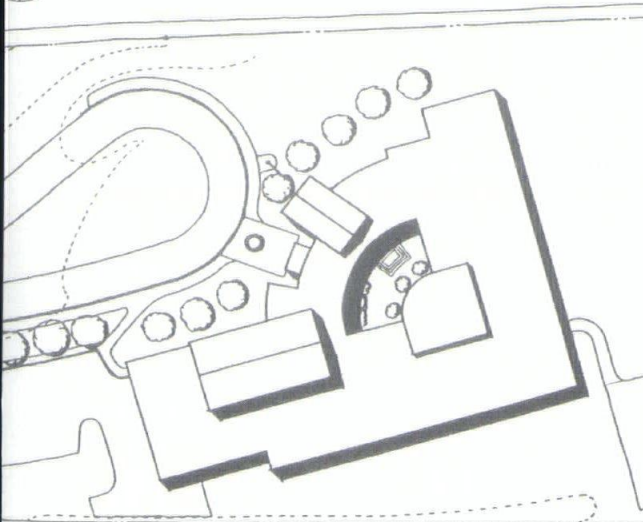
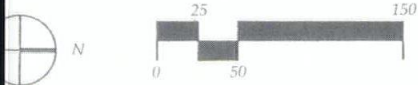
plank and beam ceiling, creating an economical, but visually appealing space.

The school has 12 typical classrooms and two special-education classrooms divided into primary and intermediate areas. Additional spaces include art/music, kindergarten, multi-purpose room with stage, kitchen, administration and health. The library, multi-purpose room, kitchen and mechanical systems are oversized to anticipate the future addition of 12 classrooms. □



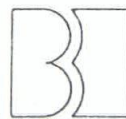


Photography by: Christopher Barone



Pave it with Imagination!

Concrete Interlocking Paving Stones
 Parking Lots • Streets • Pedestrian Malls • Loading Docks
 Sidewalks • Courtyards • Walkways • And more
COMMERCIAL • INDUSTRIAL • RESIDENTIAL



BALCON, INC.

P.O. Box 3388, 2630 Conway Rd., Crofton, MD 21114
 (301) 721-1900 • Fax (301) 793-0657



**THE ORIGINAL.
 THE BEST.™**

Brooke Elementary School

Location: Montgomery County, Pennsylvania

Architect: The Architectural Studio

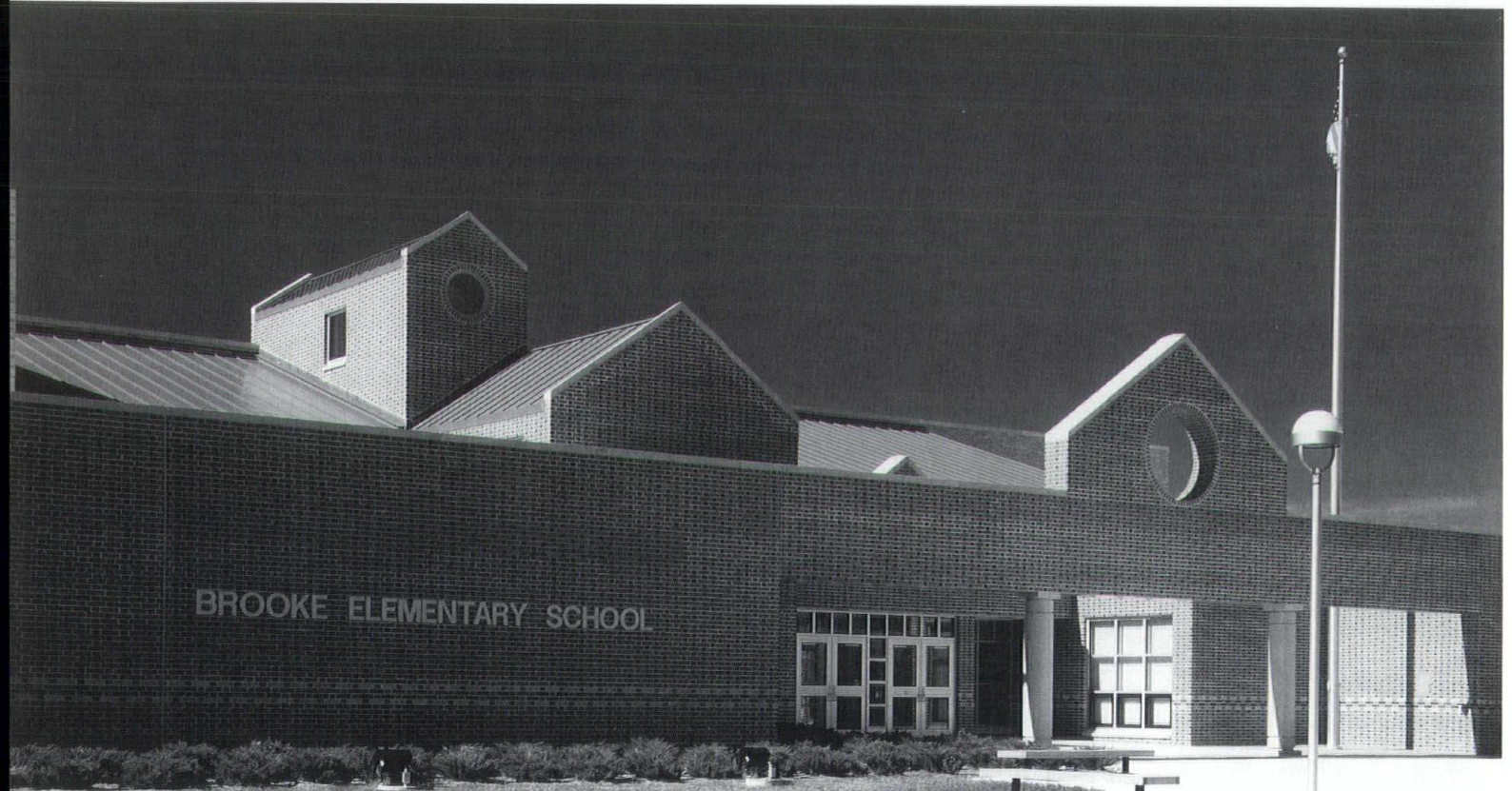
Contractor: Bilt-Rite Contractors, Inc

The central problems defined by the design of the Brooke Elementary School were hardly unique: how can a 42-inch child feel comfortable in and around a 70,000-square-foot building; how can a public school structure properly express the broad range of educational and social values the school district and the community hope to promote; what is the appropriate architectural form for a relatively flat suburban site in an age of economic and environmental difficulties and rapid technological advances?

The first problem, the matter of scale, provided the major organizational framework for the design. Mass, form and surface vocabularies were developed to break the structure into components to

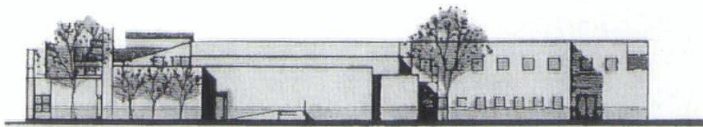
which the children would relate. The major functional elements (classrooms, multi-purpose, administration) are broken into simple rectilinear blocks, which are further reduced in scale by smaller projecting elements such as courtyards, kindergarten play areas, and entrances. The positive and negative form of these projections—squares, circles, triangles—are, of course, the basic, recognizable elements of children's early geometry and, not coincidentally, the images children draw of houses and other buildings. The colors and patterns of the surfaces, interior and exterior, not only reinforce this, they also encourage children to touch the lines and zig-zags as they walk, to walk on

continues

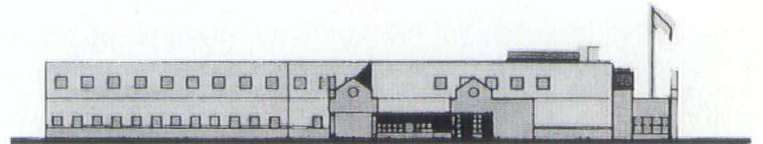




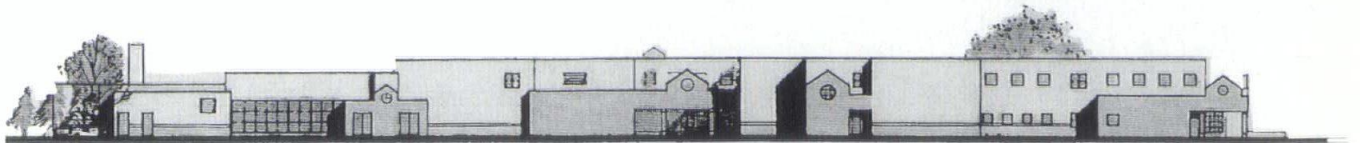
North Elevation



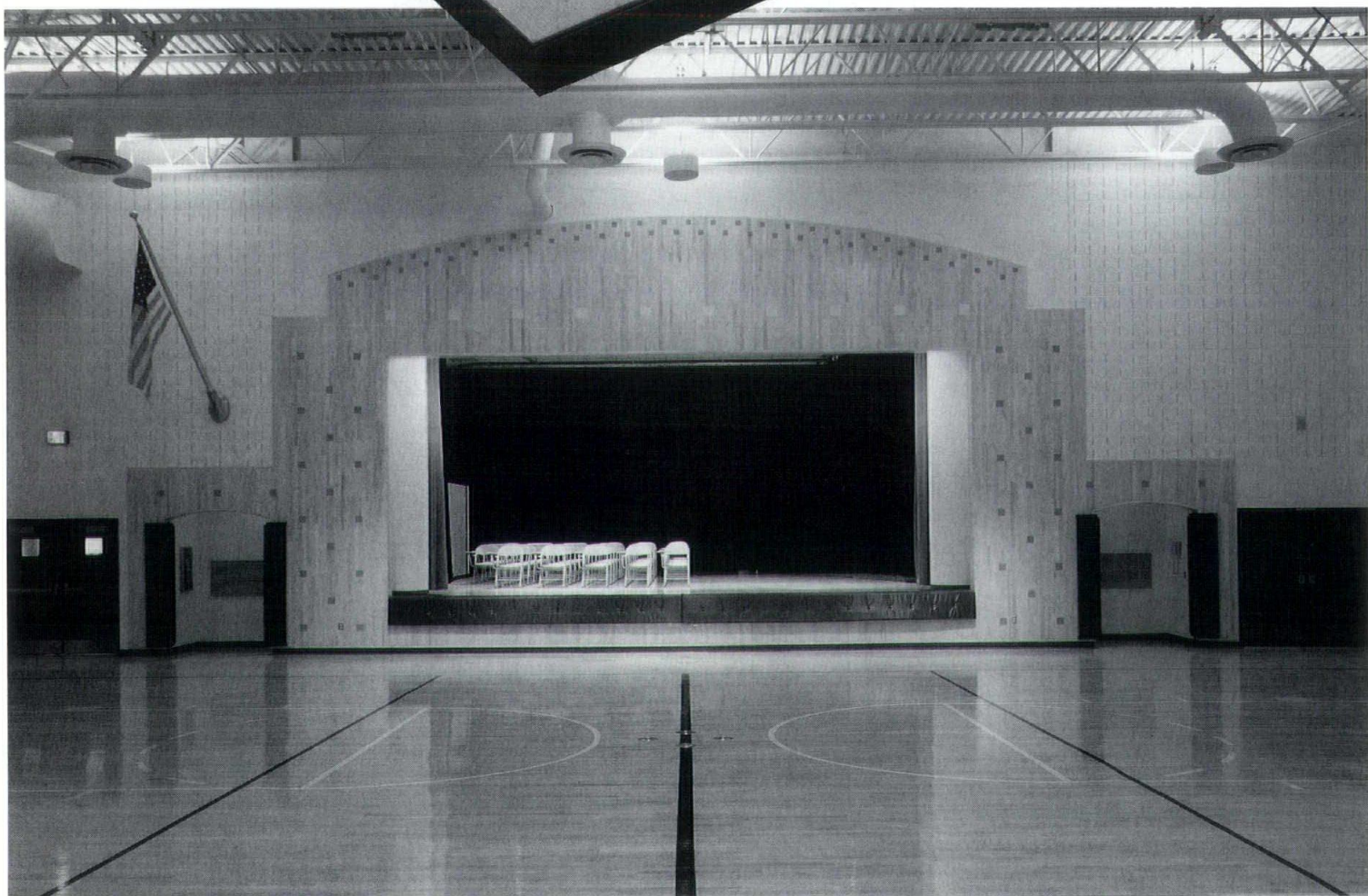
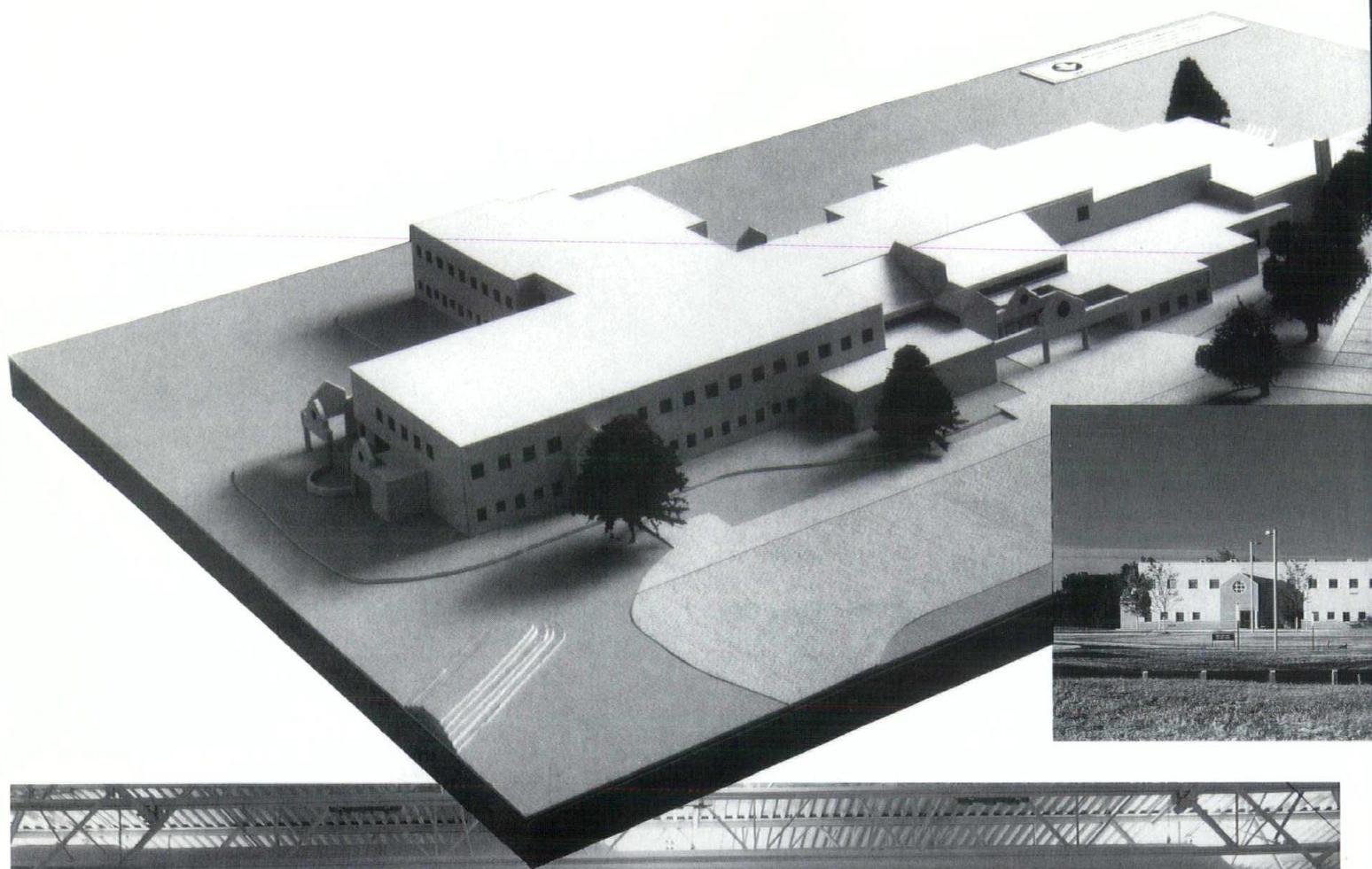
West Elevation

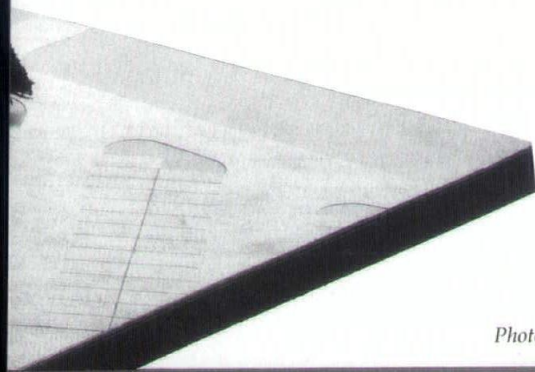


East Elevation



South Elevation





Photography By: Peter K Cowen



the low walls, and to run around the columns. Adults and children alike feel more secure in buildings they can touch.

On the other hand, the building is not overly playful. Within its seemingly informal massing (rotated on the site for maximum solar gain), it was very important to the district and to the community that the building recognize the significance of order and discipline in the learning process. A balance between the spontaneity and creativity of childhood and the discipline of learning provide the symbolic basis for the interplay of mass and form.

The building is designed to permit expansion. Its predominant materials—brick and standard ceramic tile—are modest in cost and are produced without environmentally threatening consequences. Encouraging growth, after all, and reinforcing the values of the community are the primary purposes of education, and we believe that educational buildings must serve the same functions. □

Quality Crafted

SIGNS

Briggs Insurance
Fancy Flowers Ltd
Grant Advertising
Schwab Interiors
World Travel Inc.

South Shore Place

LAKE SHORE PARK

Lake Shore Industries designs and custom manufactures high quality signs and markers for a wide variety of uses. We'll develop a striking and appropriate design for you or quote on your specifications.

- * Exterior Architectural Signs
- * Interior Architectural Signs
- * Custom Cast Aluminum
- * Memorial Walls
- * Low-Voltage Letter-Lites®
- * Cut Vinyl Graphics

Call or write for more information.



Lake Shore Industries

1817 Poplar Street Box 59 Erie, PA 16512-0059
814-456-4277 In PA 800-458-0463 Outside PA

buildings nationwide, including restaurants, theaters, hotels, retail stores, convention centers and recreation facilities. The documents also will have an impact on state and local government buildings and facilities.

Included in the regulations are requirements for accessible new construction and alterations; removal of barriers in existing facilities; the provision of auxiliary aids for individuals with vision, speech, or

hearing impairments; and requirements for non-discriminatory policies and procedures. □

New Product Update

Harmar Brick Introduces New Color Series in Face Brick

An exciting new series of face brick colors has just been introduced by

Harmar Brick Inc., one of Pennsylvania's leading brick manufacturers.

The new colors, called the "800 Series," include tangerine, buff, gray, and tangerine flashed.

Harmar Brick, located in Pittsburgh in Cheswick, PA, primarily supplies face brick and pavers to the northeast and midwest U.S. and parts of Canada. The new "800 Series" is directed toward increasing demand in those markets for colored brick.

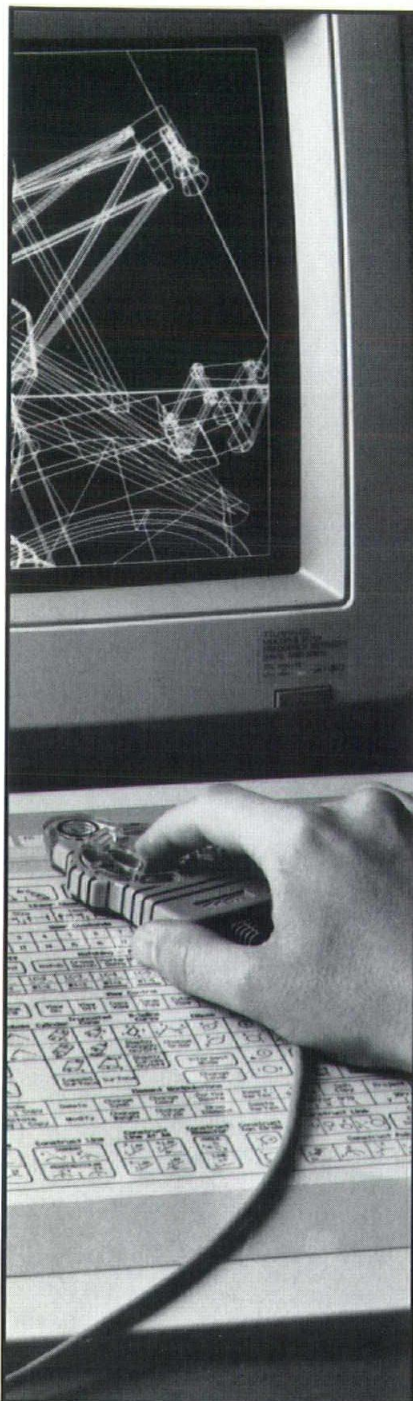
"These colors haven't been readily available for many years," said Charles D. McNamara, General Sales Manager of Harmar Brick. "They offer a choice other than traditional red, and are strong alternatives among a good mix of commercial and residential applications."

The flashed color can give a building a deeper color range by occasionally displaying a darker brick. The tangerine color is also flashed to offer a similar aesthetic appeal. The gray and buff colors provide architects and building owners with pleasing colors while eliminating the need for paint and increased maintenance. In addition, the increase in demand for colored brick in custom homes makes the 800 Series a strong choice among builders and developers.

The 23-year-old brick manufacturer is currently planning production of matching brick pavers for the new 800 Series.

"We've always been known for making a very high-quality, reasonably-priced paver," said McNamara. "Very soon the 800 Series will be expanded with matching pavers and matching die-skin face brick, making the series an even more attractive choice for a wider range of applications."

Harmar Brick is a subsidiary of Steetley Brick Inc., along with Cushwa Brick in Maryland and KF Brick in Connecticut. Steetley Brick Inc. is part of Steetley plc, a major construction materials company located in Rugby, England. □



▼
**WHO CAN MAKE
THE MOST OF
YOUR CADD
SYSTEM?**

**WE'LL DRAW YOU
A PICTURE.**

▼

TSA/ADVET provides better tools for CADD users.

We've been around long enough to develop a solid reputation for innovative, cost-effective hardware and software solutions to a variety of engineering and design questions.

But, did you know that TSA/ADVET has also assisted many of Pennsylvania's leading architectural and engineering firms in realizing the full potential of their CADD systems with our on-call service/support team?

Our specialists are available to give you a detailed plan to complete your project, help you get the most out of your system, or design a complete new system from the ground up. One workstation or an office full.

TSA/ADVET. We give you more than a line, we give you the whole picture.

TSA/ADVET

4722 Campbell's Run Road • P.O. Box 44145
Pittsburgh, PA 15205-0345
(412) 787-0980 • FAX (412) 787-9835

MicroStation™

VERSATEC
Authorized Reseller

NEW PRODUCTS

Harmar Brick "800" Series

New Colors in Face Brick

#801 TANGERINE MATT



#870 GRAY MATT



#850 LIGHT BUFF MATT



#801FL TANGERINE FLASHED MATT



All 800 Series products are also available in smooth texture.

Exciting new colors in face brick are now available with Harmar Brick's new "800 Series". The first group of refreshing new colors in the series include tangerine, gray, buff and tangerine flashed.

Excellent for both commercial and residential applications, the new colors provide architects and building owners with

aesthetically pleasing alternatives to traditional red brick. The 800 Series gives your designs more potential and greater flexibility, while eliminating the need for maintenance.

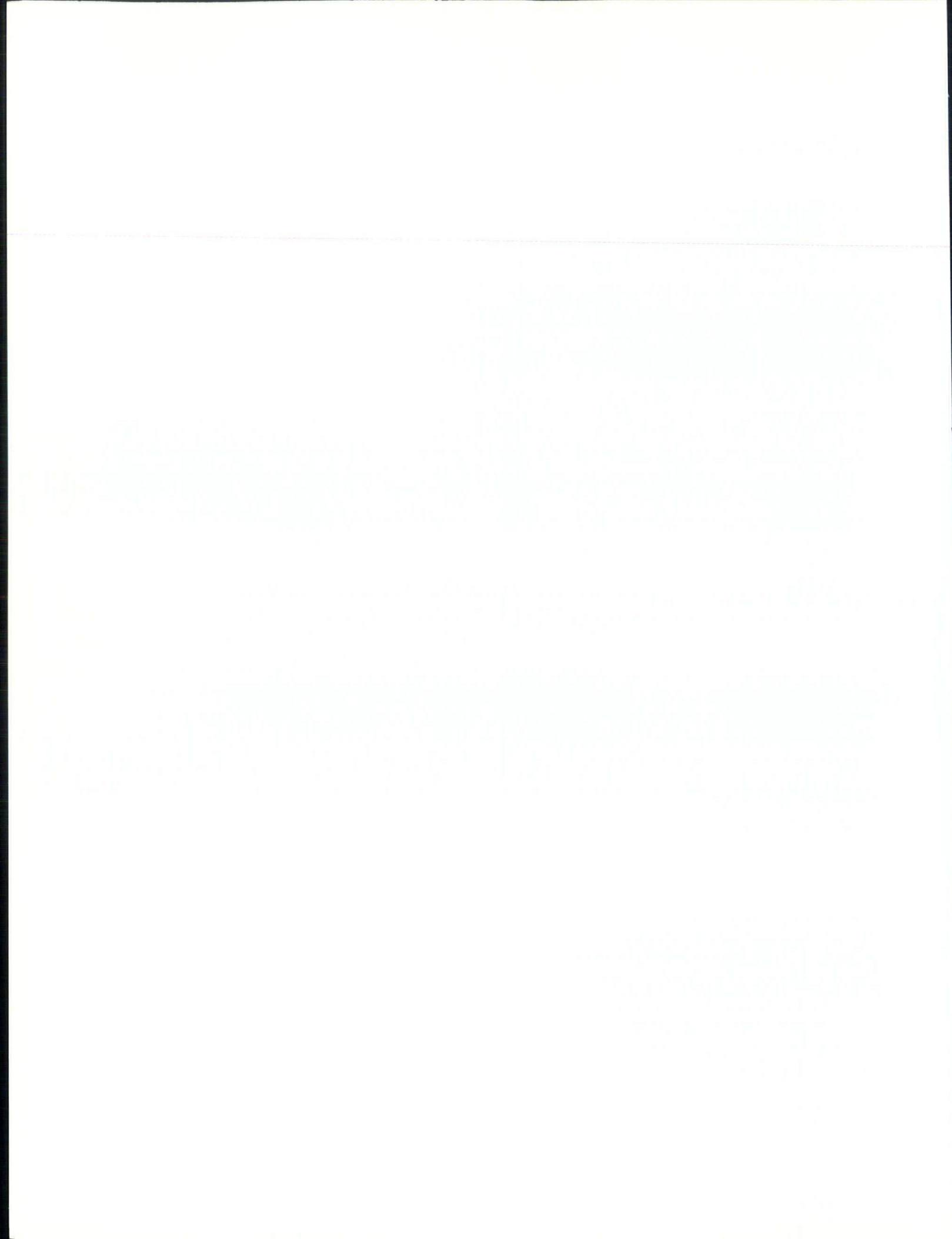
All Harmar quality brick products exceed ASTM standards.

**HARMAR
BRICK, Inc.**

*For more information or samples,
call or write Harmar Brick at:*

Rich Hill Road ■ Cheswick, PA 15024 ■ (412) 828-6300

 **STETLEY** A Stetley Company



Hold on to your financial security - now and in the future.
Take advantage of a valuable AIA membership benefit.
THE AIA MAJOR MEDICAL PLAN FOR FIRMS
As the only plan for firms sponsored nationally by the
American Institute of Architects, it is designed specifically
for architectural firms - including sole practitioners.



Designs for your Future

- Comprehensive coverage including a number of options so you can fit your program to your situation.
- Employee Benefits including life insurance to help you attract and keep talented people.
- Prompt claims processing by a professional staff.
- Affordable rates, in fact, comparisons show that the AIA Plan premiums are competitive with other plans available to members and lower than most.

A toll free number to call when you have questions so it's easy to administer.

For more information about the AIA Major Medical Plan, mail the coupon to
AIA Benefit Insurance Trust,
1735 New York Avenue, N.W.,
Washington, D.C. 20006

Or call the plan administrator toll free
1-800-343-2972



Have a custom quote prepared for you. This plan can save money for architects in Pennsylvania!

Please, send information about the
AIA Major Medical Plan for Firms.
I understand there is no obligation.

Name: _____

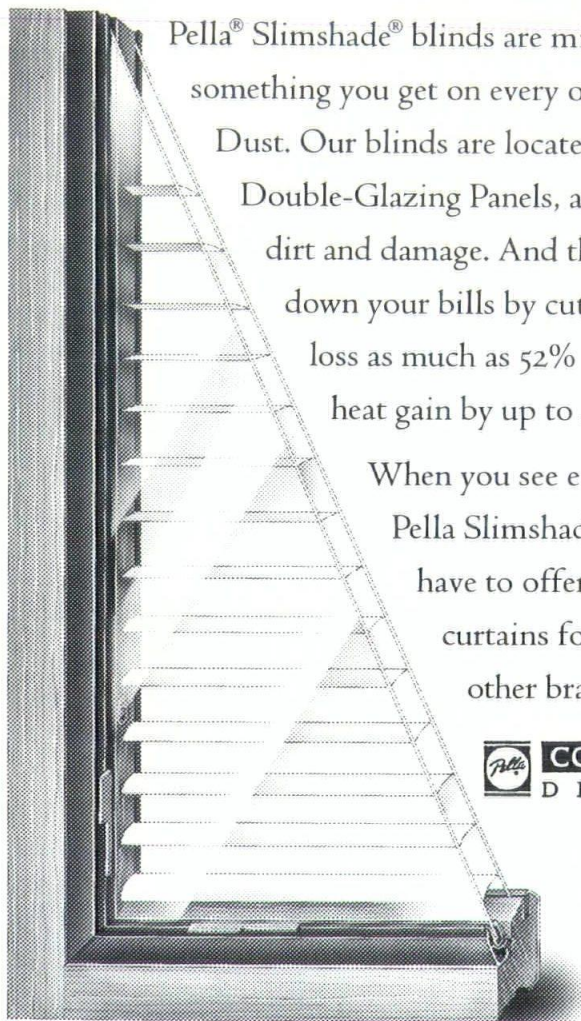
Address: _____

City: _____

State: _____ ZIP: _____

Mail to: AIA Benefit Insurance Trust
1735 New York Avenue, N.W.
Washington, D.C. 20006

BUY THE WINDOWS THAT ARE SHADES ABOVE THE REST.



Pella® Slimshade® blinds are missing something you get on every other blind. Dust. Our blinds are located between Double-Glazing Panels, away from dirt and damage. And they can slim down your bills by cutting heat loss as much as 52% and summer heat gain by up to 42%.

When you see everything Pella Slimshade blinds have to offer, it will be curtains for any other brand.



BUILT TO IMPOSSIBLY HIGH STANDARDS. OUR OWN.™

Call your Pella Commercial Representative soon.

Pella Window & Door Co.
Trade Name of Gunton Corporation
Commercial Department

2550 General Armistead Blvd.
Valley Forge Business Center
Norristown, PA 19403-5217
(215) 631-9500 or (800) 527-3552

79 North Industrial Park
Bldg. 304
Sewickley, PA 15143
(412) 741-8855 or (800) 222-8771

© 1990 Roloscreen Company

Kahn Revisited continued

In June, the Brenner, Christensen, Kass studio was jolted by the news that Kahn's original City Tower model had inexplicably been sold, and was no longer available for the retrospective. With just a few months remaining to the show's opening, a total recreation of City Tower was now required.

While scaled floor plans of the Kahn-Tyng project were preserved in the archives, the essence of the model—its interconnections—was recorded in nothing more than some cryptic notes scrawled in the margins of the drawings. With Tyng in their shop, Christensen, Brenner, and Kass diligently worked the geometries through—experimenting with different alignments of the floor plates in search of a pattern which corresponded to the original.

"From an intellectual point of view, this was our greatest challenge," says Christensen. Several apparent solutions had to be discarded when it was realized that, for instance, the elevator shaft was being bumped out of a straight vertical.

Ultimately, it was the cryptic handwriting—and some creative transpositions—that led the way.

"One day, Linda, whose mind was filled with all these geometries, re-discovered the handwritten notes and transposed them in some unusual way," recalls Kass. "Then, she and Bill sat with the xeroxes of the original model, tracing the struts in colored pencil from three different points until they were sure that the floors connected in a way that was analogous to the floor connections of Kahn's project." Constructed of computer-milled plexiglas and cast-metal columns, the 1/16th"-scale City Tower model stands four-feet tall.

Not surprisingly, its making extracted a toll. "In one way or another, every model plunged us deep into Kahn's soul—forced us to retrace his thinking and his ideas," says Brenner.

One could almost, smiles Kass, hear Kahn's own whispers.

And it is, in fact, difficult to imagine just how assimilated into Kahn's spirit these modelmakers have been. They have paced the floors and roofs of an actual Kahn construct. They have spent hours with Kahn collaborators. They have studied archival records until their vision blurred. And they have made discoveries that they believe will interest scholars for years to come. □

"Louis Kahn, In the Realm of Architecture" has been made possible by the Ford Motor Company. Significant additional support has been provided by Leslie H. Wexner and the Pew Charitable Trusts.