



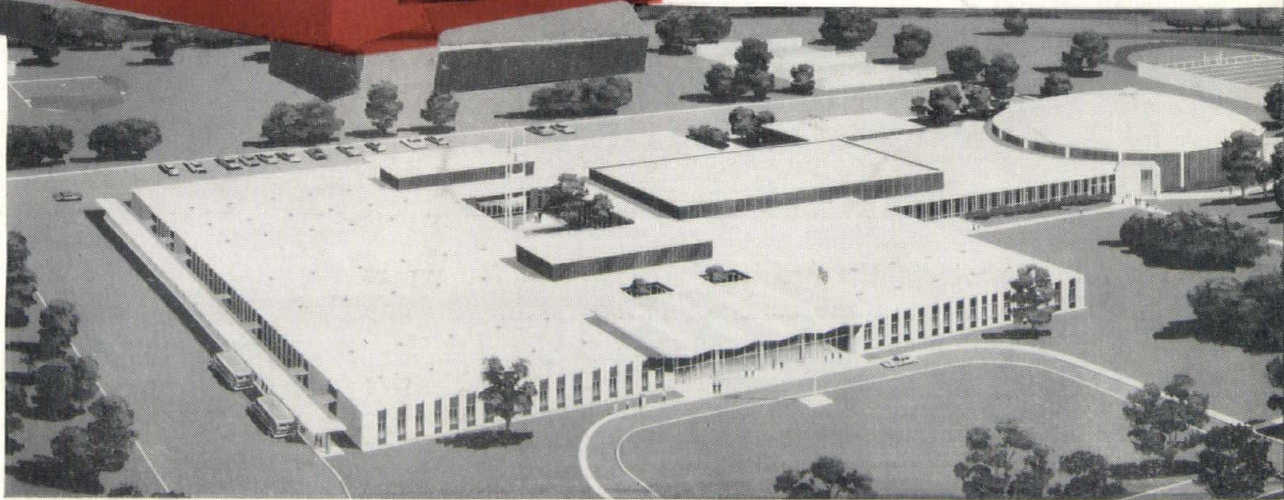
January 1962

FEB 1 1962

MR. GEB

2c

AMERICAN INSTITUTE
OF
ARCHITECTS
FEB 5 1962
LIBRARY



Indiana Architect



Quality...

. . . that protects the architect's reputation for expert knowledge . . . and the contractor's reputation for fine workmanship.

Spectra-Glaze Quality includes:

- Fire rated
- Load bearing
- Chemical resistant
- Will not craze
- Imperviousness far exceeding the requirements of ASTM C-126-58T (ask for report of independent testing laboratory)
- Modular dimensions
- Color fast, for interior use
- Resistant to weathering
- Satin finish eliminates glare and reflection
- Strict adherence to dimensional tolerances
- Each piece inspected and checked against rigid requirements.

Get the complete Spectra-Glaze quality story. Write or phone for your free copy of illustrated, 16-page folder.

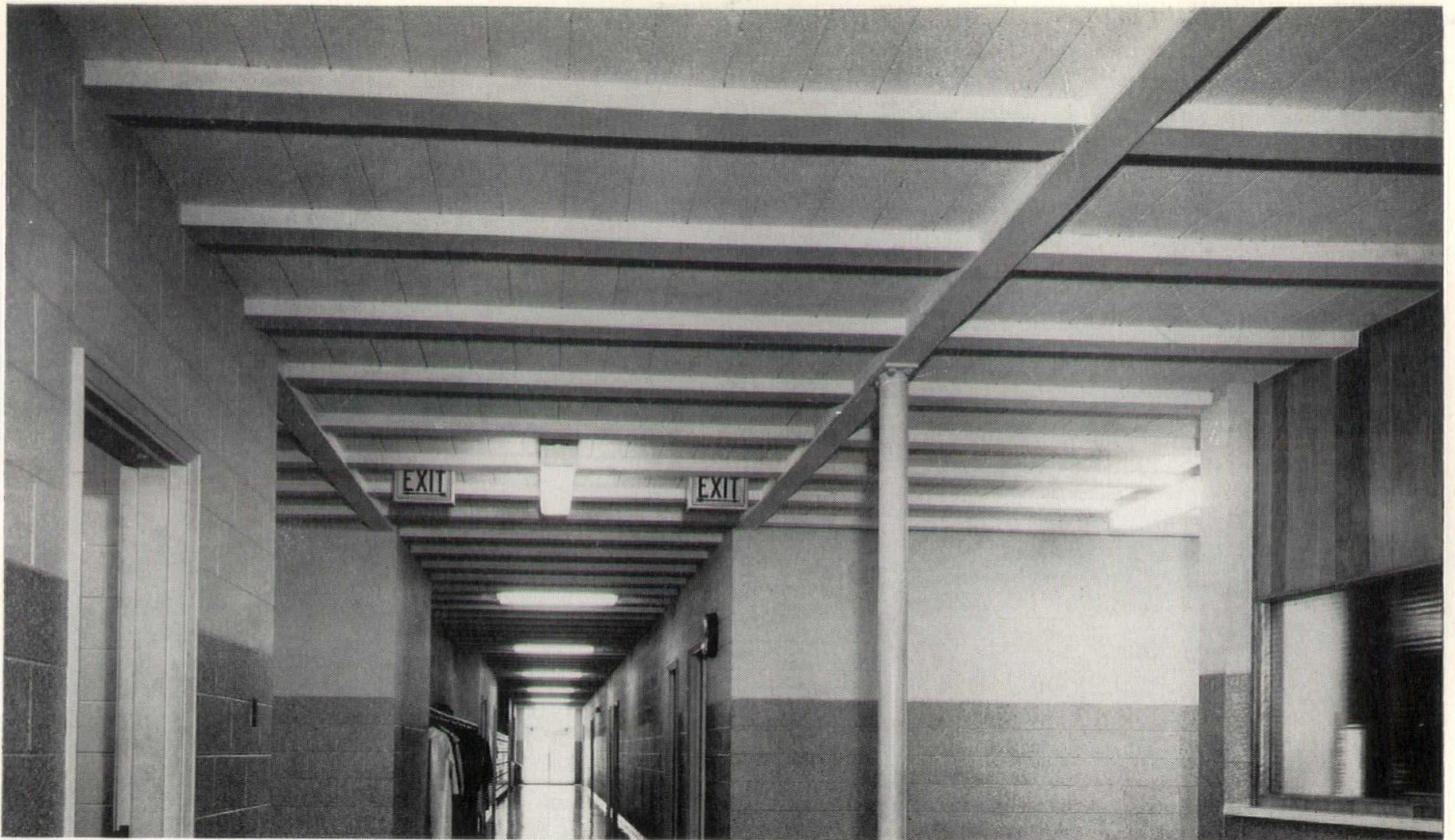

Spectra-Glaze
glazed structural
masonry units

See the 16-page Spectra-Glaze® unit
in Sweet's Catalog (4b/BU).

Distributed by —

The C. T. CORBIN CO., Inc.

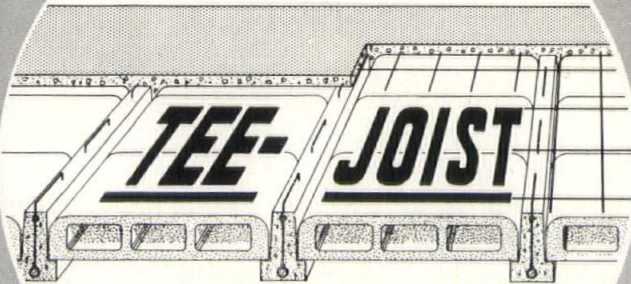
7998 Meadowbrook Drive • Indianapolis • Phone: CL 1-3941



In constructing a new school building at the Indiana Academy, Cicero, Ind., the TEE-JOIST Floor and Roof System, with attractive acoustical recessed ceiling, was used throughout.

CONCRETE

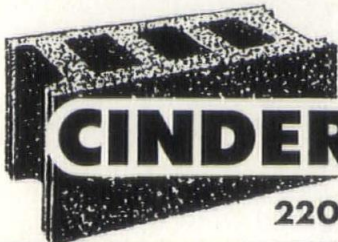
*No Forming Required . . . Rigid . . . Firesafe
Attractive . . . Acoustical . . . Maintenance-Free*



**FLOOR AND ROOF
SYSTEM**

ARCHITECTS and building engineers with discriminating taste and a knowledge of construction values have found the TEE-JOIST SYSTEM to be the very finest. In addition the system offers a major contribution to efficiency and all-around economy in construction, as well as combines the advantages of precast and cast-in-place methods.

Ceilings may be flush or handsomely recessed with precision-ground, light-weight filler block between load-bearing, factory cast concrete TEE-JOIST . . . all covered with a steel reinforced concrete slab to form a floor or roof. It's light and strong . . . cuts deadweight load without cutting strength. Saves materials, manpower and money, too. Compare and see for yourself the many advantages of this superior system. Call today for the facts.



CINDER BLOCK & MATERIAL CO.

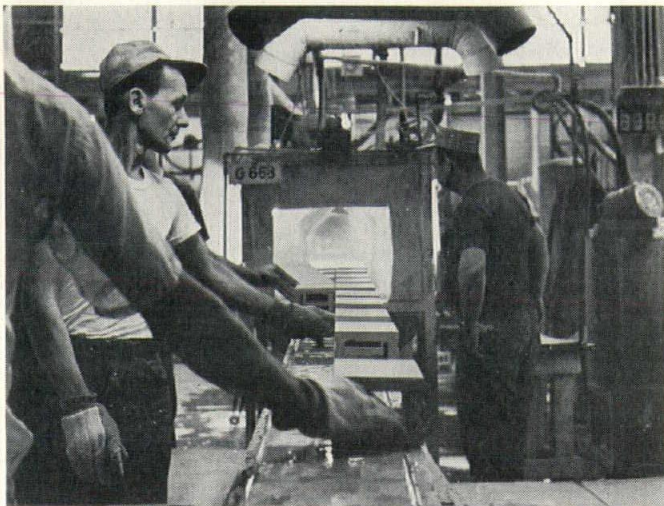
2200 N. Montcalm St.

Phone ME 2-1432

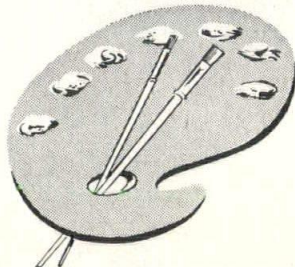
Indianapolis



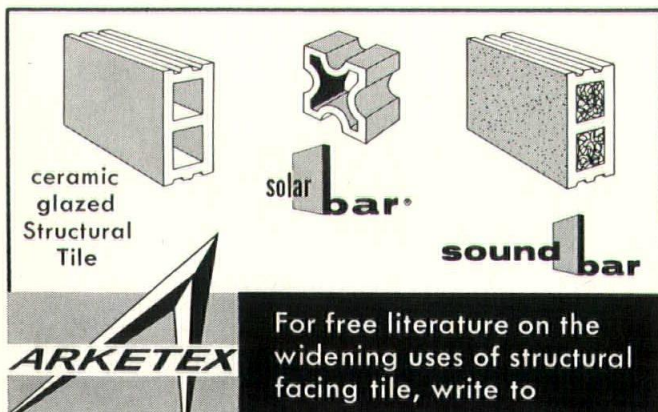
...the continuous quality control system in the manufacture of Arketex Ceramic Glazed Structural Tile



BIRTH OF A SALESMAN
for you ...
in color!



Arketex Structural Facing Tile walls are jobs you like to show. They attract prospects and help you sell new business. The richer, more professional tone of an Arketex wall is the result of greater color consistency. Before the color glaze is applied, each Arketex tile is individually hand-inspected, sanded and brushed, to prevent surface blemishes. The color glaze is then applied evenly by precisely timed machine spraying. This extra Arketex care results in reliable color uniformity from tile to tile, batch to batch.



For free literature on the widening uses of structural facing tile, write to

ARKETEX CERAMIC CORPORATION
Brazil, Indiana

**This is the sign
of the man you
can trust**

**CERTIFIED
APPLICATOR**

VERMICULITE  INSTITUTE

**ZONOLITE
ROOF DECKS**

...to give you the light-weight concrete roof deck you specify (*no fudging on materials, no switching either*). For the name of the certified ZONOLITE concrete roof deck applicator nearest you, write:

ZONOLITE

COMPANY

135 SOUTH LASALLE ST.
CHICAGO 3, ILLINOIS

*new ideas
in
Indiana
Limestone*

Accentuate the Entrance!

Indiana Limestone provides the architect with an excellent permanent material for sensitive, delicate treatments. Genuine limestone affords a choice of textures and finishes ranging from very smooth surfaces to rustic, informal applications. Indiana Limestone blends handsomely with other building materials. A wide choice of fabrication techniques is available to the interpretive architect. Architects are invited to write the Institute for the newly published Handbook on Limestone, a comprehensive text on limestone applications.



Music Library, Washington University, St. Louis, Missouri
Architects: Smith and Entzeroth
Clayton, Missouri

INDIANA LIMESTONE INSTITUTE

BOX 757

• BLOOMINGTON INDIANA



ALL-GAS HOMES..

TOPS

in Comfort
and Convenience

LOWEST

in Operating
Cost




GAS HEATS MORE HOMES THAN ANY OTHER FUEL!

Practically All new homes in our
territory are *GAS* heated.

**Natural Gas Is Best —
for the Big household jobs.**

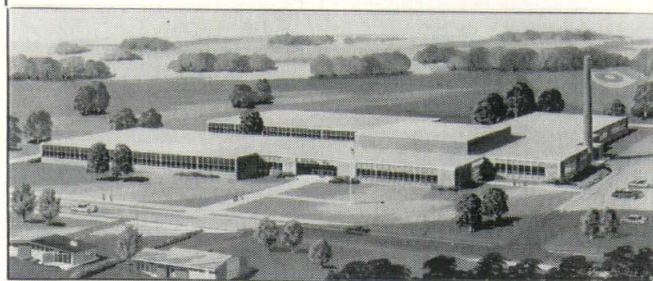
Specify Gas for . . .

HEATING
COOLING
COOKING
REFRIGERATION
CLOTHES DRYING
WATER HEATING
TRASH, GARBAGE DISPOSING
OUTDOOR GAS LIGHTING

INDIANA **GAS**  **& WATER
COMPANY, INC.**

LIVE MODERN, FOR LESS, WITH GAS

Steel Aluminum Enamel Building Products



Public School No. 98 — Indianapolis;

Architects — Daggett, Naegele & Daggett, Inc.;

General Contractor — A. B. Cochran & Son, Inc.

The following products furnished by Architectural
Building Products Company, Insulated Curtain Wall
Panels; Valley Metal Products Company.

Engineered to Meet Exacting Specifications

**Serving Schools . . . Public Buildings
Churches . . . Commercial Buildings**

ALUMINUM and STEEL

CURTAIN WALL and WINDOW WALL

ALUMINUM and PORCELAIN FACIAS

SKY DOMES, PLASTIC MATERIALS

PORCELAIN ENAMELED PANELS

ALUMINUM and STEEL CANOPIES

TOILET PARTITIONS

FORMED ALUMINUM and STAINLESS STEEL

*Unit Erection and Installation Provided
By Factory Trained Erectors*

Architectural Lou Carner,
Pres.
Building Products Co.

1433 N. Meridian St., Indianapolis, Indiana
ME 4-8351

Indiana Architect

Official Journal, Indiana Society of Architects,
A Chapter of The American Institute of Architects

Vol. V

JANUARY, 1962

No. 9

Edited and published monthly in Indianapolis by Don E. Gibson & Associates, 3637 N. Meridian St., P. O. Box 55594, Indianapolis 5, Indiana. Editorial and advertising policy governed by the Public Relations Committee, Indiana Society of Architects.

Current average monthly circulation, 3,400, including all resident Indiana architects, school officials, churches and hospitals, libraries, selected public officials, and members of the Indiana construction industry. Further information available on request.

Member, Publishers Architectural Components

16 Affiliated Official Publications of Components of The American Institute of Architects, in 26 key states. Advertising and Listing in Standard Rate and Data Serv-



ice, Headquarters, 120 Madison Ave., Detroit 26, Michigan, Woodward 1-6700. Eastern Office, 18 E. 56th Street, New York 22, N.Y., Plaza 5-3180.

Editor and Publisher

Don E. Gibson

Director of Advertising

William E. Stineburg

Cover Design

William E. Stineburg

Officers and Directors, Indiana Society of Architects

Wayne M. Weber, AIA, Terre Haute, president; Walter Scholer, Jr., AIA, Lafayette, vice-president; Fran E. Schroeder, AIA, Indianapolis, secretary; John P. Guyer, AIA, New Castle, treasurer. District Directors: Edwin C. Berendes, AIA, Evansville; Alfred J. Porteous, AIA, Indianapolis; Walter Scholer, Jr., AIA, Lafayette;

James L. Walker, AIA, New Albany; Carl L. Bradley, AIA, New Castle and Fort Wayne; Wayne M. Weber, AIA, Terre Haute. Directors-at-Large: Donald E. Clark, AIA, Indianapolis; Harry E. Hunter, AIA, Indianapolis; Edward D. Pierre, FAIA, Indianapolis.

light-forms
by Prescolite

Glowing geometric shapes combine the beauty of soft satin handblown glass with all-aluminum construction to provide an unusual combination of decorative effects limited only by the imagination of the designer. Designed for wall use only light-forms may be used on either interiors or exteriors. Available with or without black trim plates.

Write for complete catalog.

PRESCOLITE
MANUFACTURING CORP.
2229 Fourth Street
Berkeley 10, California

FACTORIES:

Berkeley, Cal. • Warrington, Pa. • El Dorado, Ark.

Speedway High School

Architectural Metals
Coil Wall

Northwest High School

Curtain Wall
Coil Wall

Lawrence Central High School

Architectural Metals
Coil Wall

All by . . .

Emrok Metal Products Corp.

620 SOUTH BELMONT

INDIANAPOLIS 7, INDIANA



CLASSROOM AUDITORIUM
OFFICE LOUNGE
GYMNASIUM PLAYGROUND
EQUIPMENT

ALLIED, INC.

339 NORTH CAPITOL AVE.

ME 4-1451

INDIANAPOLIS 4

For School and Commercial Application . . .

Specify GAS Heating and Cooling

Gas, the natural flexible fuel is available in Marion County for large volume comfort heating and cooling. Your client will appreciate the lower first cost and lower operating and maintenance costs of gas and gas equipment.

Our Commercial Division will be happy to consult with you regarding the application of gas equipment to your plan. Call WA 4-3341.



General Office: 2020 N. MERIDIAN

How Do You Plan What To Tell The Architect?

Progress in school building design will be spotty until educational administrators firmly believe that the physical plant controls to a large degree the success of the teaching-learning activities it contains. Indeed, they must recognize that the plant is an integral part of the total educational program. The business of writing a set of educational specifications for a new building, therefore, begins with an analysis of the educational program itself.

Any educational program analysis should start with a comprehensive look at overall community-school relationships—how each can serve the other. This approach to educational program planning includes the community as a whole, since there are many potentials for assisting in the teaching-learning processes outside the formal school plant. It abandons the narrow concept of a school site of from 10 to 1,000 acres; instead it includes stores, factories, offices, courts, government buildings, museums and TV and radio stations as necessary parts of an educational program. The “formal school” aspects of such a community-based program would still take place in a school building but both space and scheduling design could depart radically from tradition.

The first step in analyzing educational building needs is to set down in writing the objectives and policies which are to determine the educational program of a school district and against which its success is to be evaluated. Such a statement is necessary because it puts responsible school officials on record as to the goals they seek through the school program.

WHAT ARE ED-SPECKS?

Educational specifications are the written statements that explain the method for implementing these stated educational policies—the most important contribution, therefore, that teachers and curriculum specialists can make to school building design. A well conceived set of educational specifications, meticulously and creatively translated into plant facilities, is the only guarantee that a school building design will be functional rather than imposed. They are the “preliminaries” that are necessary before anyone is ready to talk about a specific planning project.

In my experience, the term “educational specifications”

has become a semantic casualty. What does it mean? Interpretations of the term generally fall into one of three classifications:

First—To some people educational specifications—or ed-specks—mean a listing of finely-spun educational philosophy and theory to be given to an architect for interpretation into space and facility needs.

Second—There is the group that belongs to Bill Caudill's famous AIAA (American Institute of **Amateur** Architects) who believe they must draw out in minute detail the exact plan of space and placement of equipment for the architect, who obviously would be lost without such assistance.

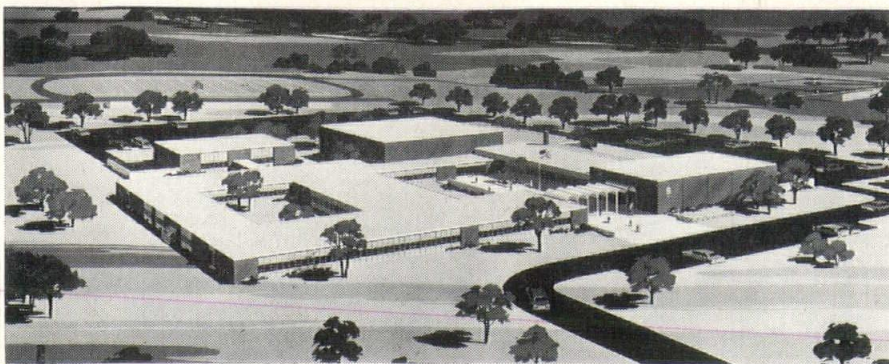
Third—The rare soul who really understands the true meaning of the term sits down and writes out in detail for his area of the curriculum how many students do what—for how long—requiring what kind of space and equipment. He describes a “class hour” or a “school day” from the time the students come chattering into the room until they leave. He relates the kinds of student activities, the type of equipment used, the size of the group, whether the activity is noisy or quiet, the space necessary, the supplies utilized and the storage needed.

Educational specifications should describe the **methodology** of teaching. They must explain the plant implications of sub-grouping a class of 30 students for instructional purposes. Unfortunately, methodology is usually still taken for granted. But if we can't tell the architect the methods of teaching used now and envisioned for the future, we cannot expect the right kind of building from him.

Educational specifications do not need to begin with theory. Rather, they are prepared: (1) to clarify the thinking of teachers and curriculum people, concerning what they teach, and how; (2) to give the architect an understandable bill of specifics against which to design facilities; and (3) to evaluate the results of a building program and to assess the penalty of compromise. But they carry no obligation to make an educator out of an architect and, conversely, they fail if they attempt to make an architect out of an educator.

In simplest terms, they should interpret the wonders of art into the things students and teachers **do** to learn to enjoy the wonders of art.

(To Page 11)



NORTHFIELD HIGH SCHOOL

Also SOUTHWOOD JUNIOR
HIGH SCHOOL

Architect — JAMES ASSOCIATES

General Contractor WOLF CONSTRUCTION CO.

HENRY C. WOLF

613 WEST MARKET ST.

LOGANSPORT, INDIANA

SOUND MASTER 240



Best for Schools! Specify the Soundmaster 240 . . . Modernfold's new folding partition that shuts out sounds other makes let through. For details, specifications and quotations, call

Wilson-Partenheimer, Inc. or Old Fort Supply Company, Inc.

1107 E. 54th St.

Indianapolis

CL 1-4541

2013 S. Anthony

Fort Wayne

AN 6425

Distributors for Modernfold partitions • Modern-Cote vinyl wall covering • Dwyer Kitchenettes

Who should prepare educational specifications? Just like most other activities, some should and some shouldn't:

1. Number one on my list of who shouldn't prepare ed-specks is the **unqualified staff**. A staff that doesn't have the foundatoin for projecting educational methodology trends has no business preparing educational specifications for the design of a building that will have long-range educational implications.

2. Next on my list is the **unqualified administrator**. He is the one who has adopted what I like to call the Bunker Hill attitude, or the don't fire until you can see the whites of their eyes philosophy. He has waited to be absolutely sure those kids swarming the sidewalks and streets are really going to show up in school. He always has what he thinks is a good reason for delaying action until he gets three years behind in a building program—but then watch out, stand back—for here he comes, there he goes. No time now for such luxuries as carefully prepared educational specifications.

3. Next on our who-shouldn't list we find any combination of the qualified staff-unqualified administration, or qualified administration-unqualified staff. For example, "textbook teachers" working in a district where the administrators and supervisors want to do somethnig beyond textbook education—or vice versa; educational specifications prepared by a teaching staff under those conditions would lead only to a negative result.

4. Who then should prepare this important document—and when? If educational specifications are to be vital and useful, they must be prepared by a **qualified staff** and a **qualified administration** assisted by **qualified out-of-district consultants**. The development of a specific set of ed-specks for a building project should only be a point-in-time culmination of a continuous staff process of curriculum evaluation with space implications. No curriculum study is complete or valid until it has been translated into space and equipment requirements necessary to curriculum objectives. Educational specifications for school buildings, facilities and equipment should not be a special chore associated with a spe-

cific building project. They should be a continuing part of the written policy which says that school buildings and equipment are part of the total educative process and that educational programs and educational facilities cannot be either planned or evaluated as separate factors.

Under the do-it-yourself approach recommended here, there is no valid place for a contract survey, but there is lots of place for competent consultant services. These consultant services are needed in direct ratio to the competence of the local district personnel in handling their own problems, but should always be used for the review of what is going on outside the local area. It is axiomatic that persons closest to problems are most sensitive to the nuances of these problems. Final decisions should be made by those persons responsible for carrying them out, but by the same token, local persons have the responsibility for "unlocalizing" their thinking before making vital decisions.

IT TAKES LEADERSHIP

Organizing whoever is to prepare educational specifications into a smoothly operating, productive group is one of the key steps in any analysis of educational building needs. All the competence in or out of the district won't produce an understandable statement of ed-specks unless it is properly organized and used. The chief administrator has traditionally assumed this role of leadership. Without intending to belittle chief administrators at all, this practice no doubt has led to some of our present school building problems. The head man in a school district of any appreciable size simply cannot add such a responsibility to his already considerable duties and do justice to either.

Many school districts would save much time and many dollars if they established a top administrative position with adequate staff to handle the educational-needs analysis of the district. Such a step would put school plant planning and design in proper relationship to its function in the total educational picture.

However this leadership is provided, the person providing it must have the necessary time to devote his full energies to this assignment

(to Page 37)

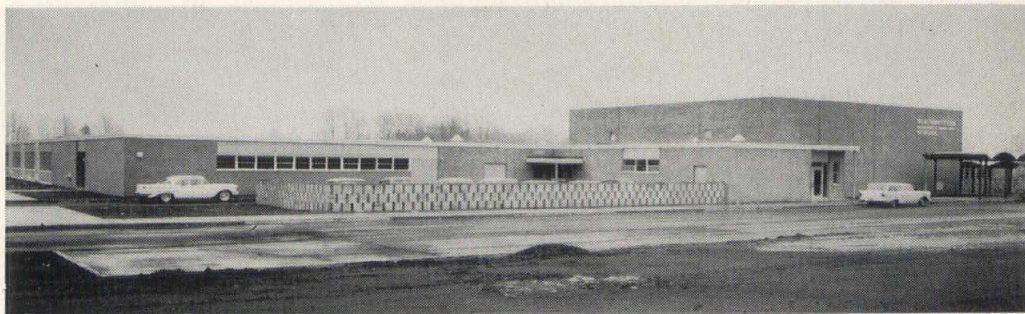
Again, Architects Specify *Flameless* ELECTRIC HEATING

Here is another example. Architects are specifying safer, cleaner, more dependable electric heating in modern schools, churches, hospitals and

commercial buildings. Flameless electric heating is practical for home use, too. See us today for complete details!

Southwestern Elementary & Junior High School, Hanover, Indiana. Architects: James Associates, Indianapolis.

Completed in January, 1961, this modern school facility serves approximately 900 pupils and features clean, flameless electric heating.



--PUBLIC SERVICE COMPANY OF INDIANA, INC.--

... Lower Maintenance

... Greater Durability

... Positive Decorative

SPECIFY
PLEXTONE® PAINT

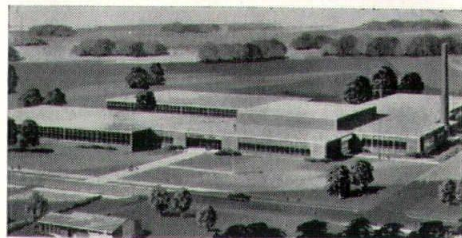
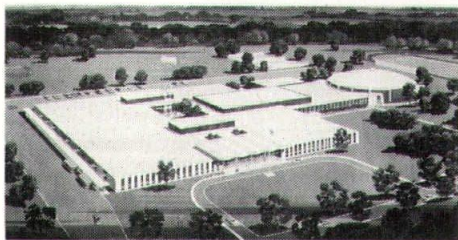
Color-Flecked Enamel

Distributed By

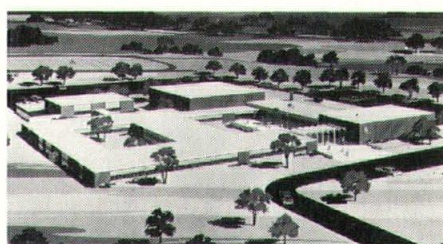
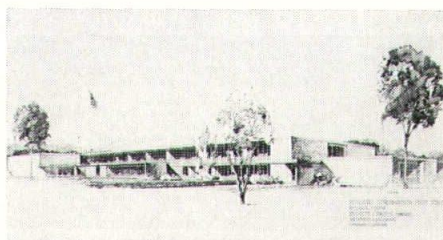
PERFECTION PAINT & COLOR

**715 E. MARYLAND — INDIANAPOLIS, IND.
ME 2-4312**

**1 School out of 2 Chooses
McKINLEY Fascia**



WRITE today
for detail sheets
and catalog.



good reasons:

- finest quality heavy metal—no wood
- straight-line always—no waves
- "floating" design allows expansion-contraction
- positive alignment
- any color—any finish



o. o. McKINLEY co., inc. 4530 N. Keystone Ave.

Indianapolis 5, Indiana

OTHER MCKINLEY PRODUCTS: SUN SHADES • MARQUEES • CORNICES • WALL FACING • DOOR HOODS

Of News in Architecture

The Women's Architectural League has given advance notice of their evening-at-the-theater benefit for the newly-established ISA architectural scholarship fund. Architects' night at the Civic Theatre will be April 11th, for "The Marriage-Go-Round"; tickets will be \$2.25 each, with proceeds going to the scholarship fund. More details are promised next month.

* * *

Lennox, Matthews, Simmons and Ford have been honored for their design of the Lawrence Senior High School, which appears on page 20 and as the "today" example featured on the cover.

Plans for the school and a scale model have been selected by a committee of architects and educators for showing at the American Association of School Administrators Convention and Exposition at Atlantic City, New Jersey. Selection was based upon "outstanding" design.

* * *

The ISA Board took to the air for the Evansville Board meeting in December, with all attenders but host Director Ed Berendes flying to scenic southern Indiana. Past President Charles Betts flew directly to Evansville via commercial lines from a business jaunt to Illinois; ISA President Wayne Weber and Indianapolis Director Al Porteous joined Vice-President Walter Scholer Jr., in his

round-about flight from Lafayette; and Treasurer John Guyer, Secretary Fran Schroeder, and Executive Secretary Don Gibson chartered a flight from Indianapolis.

Incidentally, the Indianapolis group almost cancelled their chartered flight when they reached the airport and were nearly overcome by an extremely strong aroma of model airplane cement. However, the flight went off as scheduled after assurances were given that the model airplane cement had not been used on their rented plane.

* * *

The new Speech Privacy Analyzer, under the sponsorship of Owens-Corning Fiberglas, a complete and reliable guide for solving today's increasingly complex acoustical problems, will be premiered at the January 25th meeting of the Indianapolis District of the American Institute of Architects. Developed by Bolt, Berenak & Nefman, Inc., specialists in architectural acoustics, the Analyzer provides an easy-to-use method for determining the degree of speech privacy required for any given room situation, and the building components which will provide the necessary sound isolation.

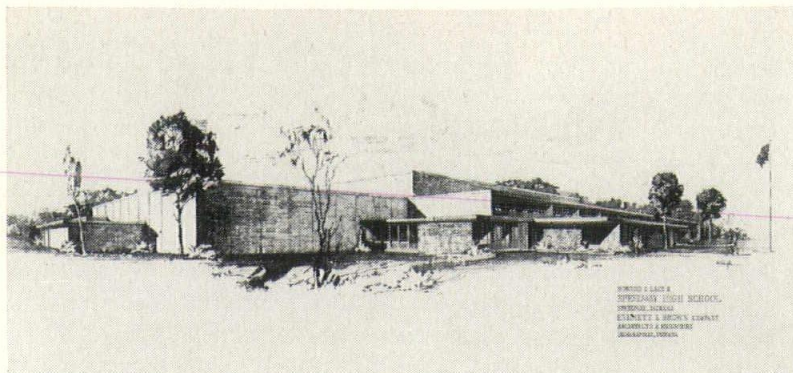
A valuable aspect of the research required to develop the analyzer is that, for the first time, a large number of people were consulted to discover what they consider a suitably private environment

(to Page 15)



An average of more than 115 architects and Construction Specification Institute members—a capacity crowd—attended each of the four sessions of the CSI Masonry Short Course held at the Purdue University Extension in Indian-

apolis recently. The Short Course was presented by the CSI in cooperation with the Unit Masonry Association, Structural Clay Products Institute and the Portland Cement Association.



**Howard J. Lacy, II
SPEEDWAY HIGH
SCHOOL**

EVERETT I. BROWN CO.
Architect & Engineers
Indianapolis, Indiana

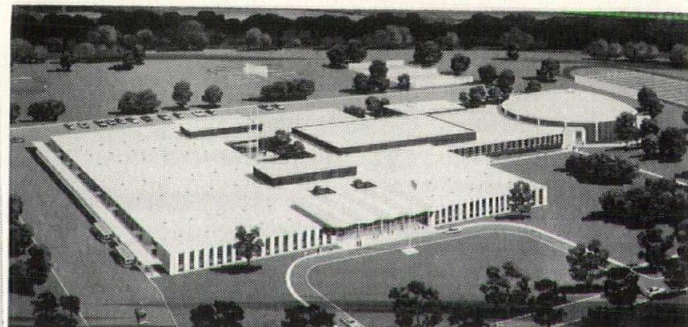
General Contractor—

W. A. SHEETS & SONS, INC.

FORT WAYNE, INDIANA



HOWARD LACY II HIGH SCHOOL



LAWRENCE HIGH SCHOOL

Electrical Contractor

PEARSON ELECTRIC SERVICE

Electrical Contracting and Engineering

4730 EAST 10TH ST.

INDIANAPOLIS 1, IND.

Using New Type Lighting Fixtures, Incandescent Flood Lights Howard Lacy School — Quartzline Floodlights Lawrence School — Walkways and Parking Areas Both Schools — Playing Fields, Lawrence School

Supplied By

**GENERAL  ELECTRIC
SUPPLY COMPANY**

A DIVISION OF GENERAL ELECTRIC COMPANY

(from Page 13)

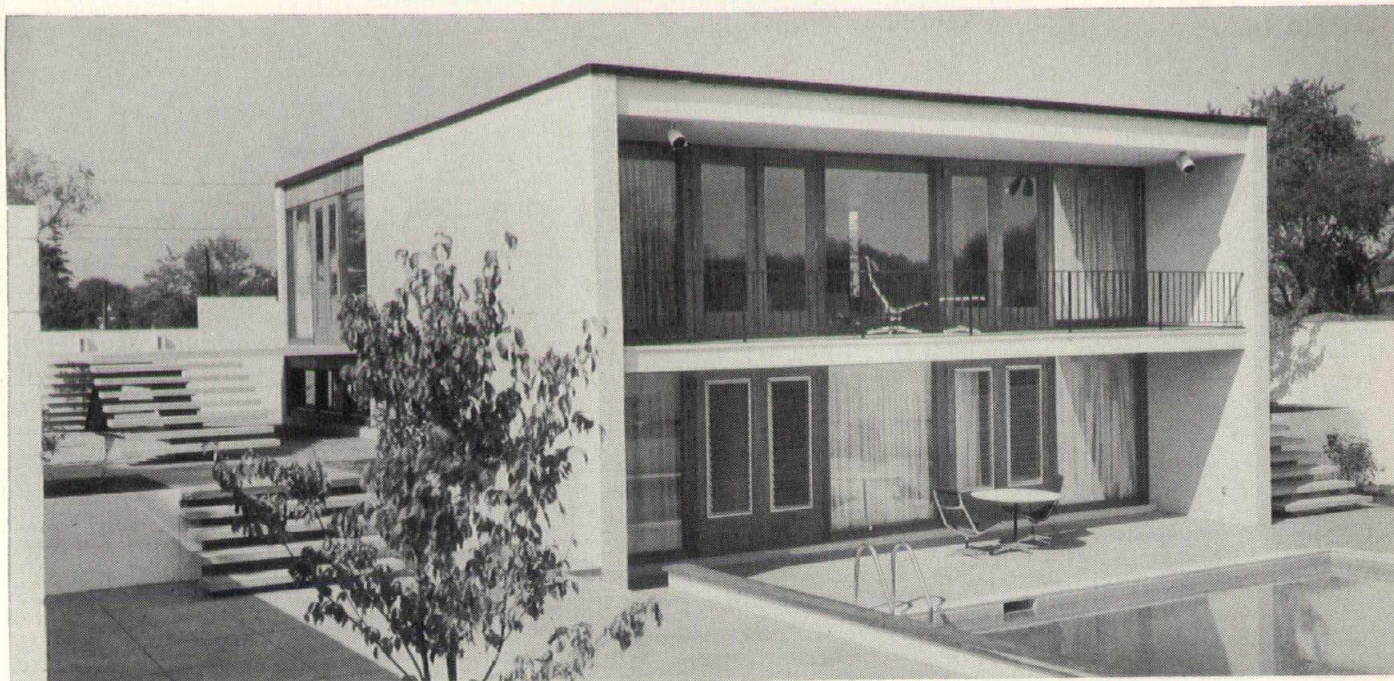
A carefully controlled experimental situation determined that people are remarkably consistent in their response, permitting the establishment of a definite criterion objective analysis of several hundred office spaces. This field experience and the original experimental, simulated environment environment correlated very closely.

The research also indicated that the sound isolation performance of the wall was not in itself an indicant of whether or not offices would have sufficient privacy. A number of factors—the isolation of the wall, the size of the wall, the sound absorption in the rooms, the nature of the occupants business and, perhaps most important of all, the level of

More News...

air conditioning noise, traffic noise or activity noise present in the rooms—were all major contributors to the end result—adequate speech privacy.

The resultant Speech Privacy Analyzer will be demonstrated at the January 25th meeting, to be held at the Marott Hotel starting at 5:30 P.M., EST. All architects throughout the state are invited to attend.



Architectural award winners have been announced for the first annual Concrete Industries' HORIZON HOMES Program—a national design awards program involving all branches of the concrete industry for promoting the design, construction and ownership of new homes.

The first place national prize, a trip for two to anyplace in the world, went to Architects Jean Henry Kuhn and Peter Woodhall Drake who designed a HORIZON HOME in South Plainfield, N.J. Seven regional runner-up prizes in the design category also were presented.

Some 80 HORIZON HOMES participated in the program and were seen by more than two million open-house visitors during National Home Week festivities this past September.

The first continuing home promotion effort of its kind, the HORIZON HOMES Program is sponsored by the National Concrete Masonry Association, National Ready Mixed Concrete Association and the Portland Cement Association. Cooperating organizations include the American Institute of Architects and the National Association of Home Builders.

(Still More News on Page 32)

REPRODUCTIONS

- Blue Prints
- White Prints
- Autopositives
- Film Reproductions
- Photo Copies

Exclusive
Eugene Dietzgen Dealer
Local Pick-Up &
Delivery Service

SUPPLIES

- Slide Rules
- Surveying Inst.
- TwoWay Radios
- Drafting Furniture
- Graph Papers

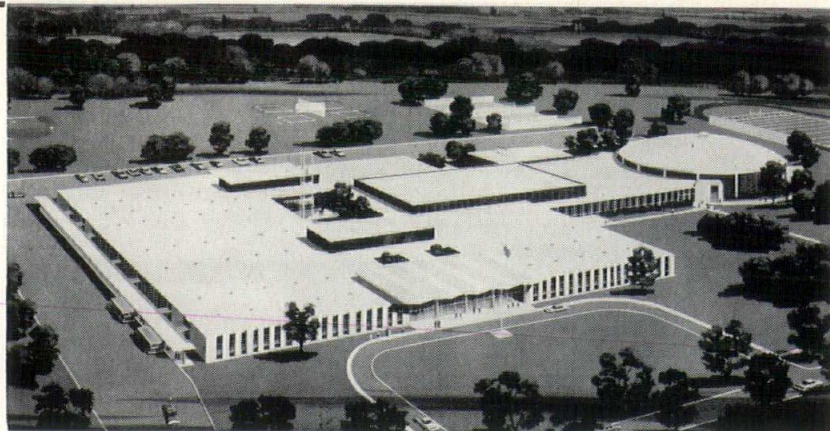
ME 5-2355

THE H. LIEBER CO., INC.
INDIANAPOLIS

ME 5-4373

**LAWRENCE HIGH
Indianapolis**

Lennox, Matthews,
Simmons & Ford
ARCHITECT



Painting Contractor

THE KITE COMPANY

509 ILLINOIS BUILDING
INDIANAPOLIS, IND.

PHONE ME 6-7413



LAMINATED FABRICATORS CO.

6144 College Avenue

Indianapolis, Indiana

CLifford 1-1455

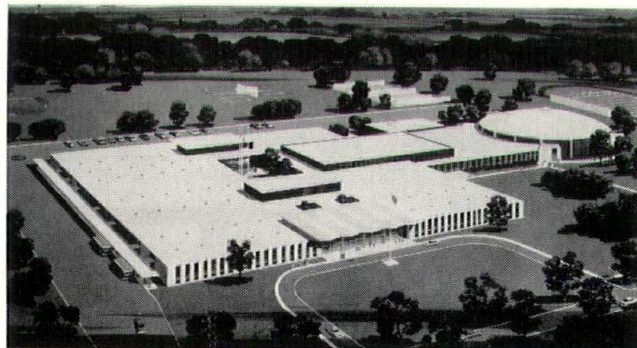
Fabricators & Erectors of the Laminated
Radial Rib Dome — Lawrence Central High School
Lawrence, Indiana

Specializing in:

LAMINATED WOOD
PRODUCTS
WOOD DECKING

Representing:

American Fabricators
Company.
Bellingham, Wash.



Specializing in:

POREX WOOD FIBRE
DECKING

Representing:

CONCRETE PRODUCTS,
INC.
Brunswick, Georgia

Operation Storehouse

Citizens Gas has completed and put into use a 58-mile transmission line to an underground natural gas storage field. This will assure a supply of economical natural gas for Marion County homes, business and industry. It is possible, of course, to construct gas transmission facilities that could supply fuel for maximum needs—but it would be expensive and extremely inefficient. Pipelines designed to meet the "call" for gas on the coldest winter evenings would operate at fractional capacity most of the year.

Since anything less than 100% use of equipment increases operating expenses, idle machinery and pipelines would substantially raise the costs of marketing gas.

For many years, engineers and geologists wrestled with the problem of finding an economical method of stock-piling natural gas close to consumers.

Then came an idea which is one of man's most unique reversals of nature.

Throughout the United States there are many depleted oil and gas fields which were abandoned when they stopped producing. Why not use these as underground storage reservoirs for gas, one engineer reasoned?

Experimentation began on the project and from the beginning it proved successful.

The operation of an underground storage pool is comparatively simple. Gas supplies are pumped back into depleted fields through wells which are drilled deep into sub-surface porous rock. Then, when temperatures drop, the process is reversed. Gas is withdrawn to supplement pipeline deliveries.

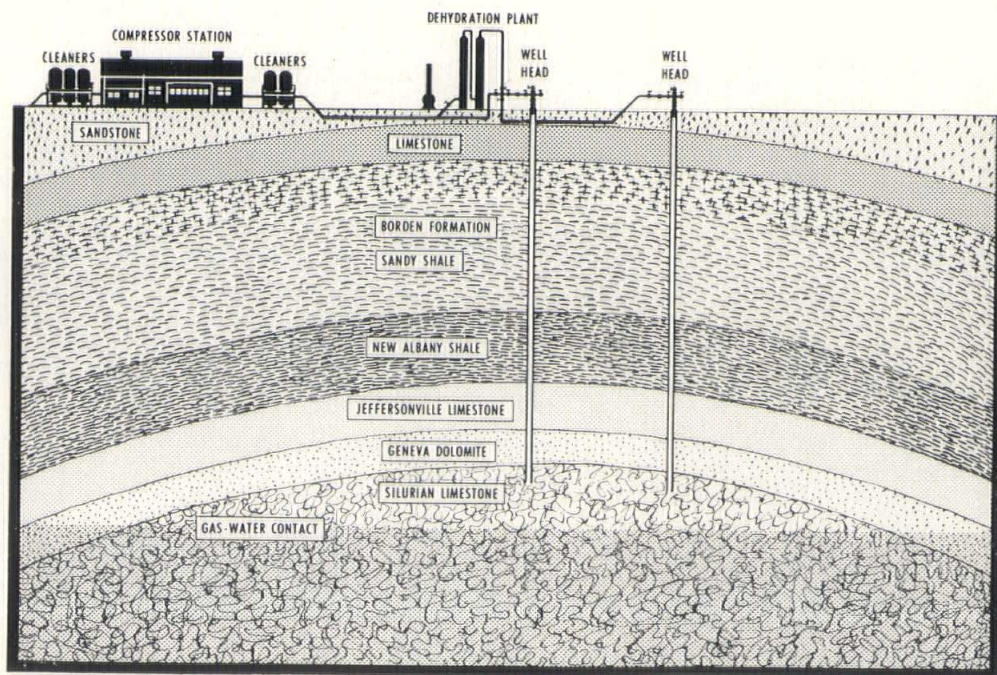
Thus much of the fuel used in homes on cold days have started its journey from producing wells in the Southwest several months earlier.

In fact, on the coldest day of 1959, nearly one-quarter of the natural gas used in homes came from underground storage pools.

The industry investment in underground storage is huge—presently totalling \$650 million dollars.

There are now 209 separate gas "warehouses" in 20 states with a total capacity of 2.5 trillion cubic feet of natural gas—equal to about one-fifth of total gas production last year.

The American Gas Association estimates that in the three year period ending in 1963, \$450 million will go into underground gas storage systems. Thus by 1963, total underground storage investment will exceed one billion dollars.



Drawing shows geological strata in Greene County through which gas will be forced at high pressure for storage as much as 2,000 feet underground. New Albany shale is primary caprock and gas is trapped and held in Geneva and Silurian Limestone at bottom.

**Contractor for
the Following New
Schools**

Southwestern Elementary
HANOVER, IND.

**Perry Township School
Lawrence High School**
INDIANAPOLIS

Northfield High
INDIANAPOLIS

**Southwood High
Northwest High**
INDIANAPOLIS

American Art Mosaic & Tile Co., Inc.

CONTRACTORS
Terrazzo, Marble, Mosaic and Tile
A. C. FRANCESCON, Pres.

1024 E. MARKET ST. PH.: ME 1-8033
INDIANAPOLIS, INDIANA

**Masonry Contractor
For The New**

HOWARD LACY II

HIGH SCHOOL

SPEEDWAY, INDIANA

COLLINS & WITTEW
MASONRY CONTRACTORS INC.

139 NORFOLK ST.
FORT WAYNE, IND

PHONE T-7058

**Plumbing and Heating
Contractor**

for the New
NORTHWEST HIGH
SCHOOL

INDIANAPOLIS, INDIANA

COOK BROS. INC.

510 S. ALABAMA
INDIANAPOLIS, IND.

ME 4-7471



General Contractor

**CRESTVIEW
ELEMENTARY
SCHOOL**
INDIANAPOLIS, INDIANA

M. W. NULL CO., INC.

*Commercial & Industrial
Construction*

1150 E. 28TH ST.
INDIANAPOLIS, INDIANA
Telephone WA 3-5331

A Practical Approach to School Stage Design

Because the use of stage facilities in a modern school are so varied and involve activities among several departments within the school along with increasing demand from non-school organizations, it is not possible to prescribe iron-clad foolproof criteria. Nevertheless, a sensible approach with an eye toward budget evolves good basic rules-of-the-thumb which will serve as an intelligent guide. Quite naturally, an exceptionally small stage would somewhat deviate from these rules in much the same manner that an exceptionally large stage would incur other problems.

These formulas are based upon a need derived from the seating capacity intended in the Auditorium. If the audience is to be seated in a gymnasium, cafeteria, ballroom or similar area, the audience size factor must be based upon the anticipated number of persons to actually be seated for a performance—not considering the total seating capacity of the area.

PROSCENIUM WIDTH:

Twelve feet plus an additional four feet per 100 seats on the main floor. For larger auditoriums, add one foot per 100 seats in excess of 800.

PROSCENIUM HEIGHT:

Four feet plus thirty percent of the proscenium width if audience is seated entirely on the main floor. Naturally, this must be increased if there is a balcony involved.

STAGE WIDTH:

Twice the width of the proscenium opening. Within reason, this need not be equi-spaced. Closed areas for dressing rooms or storage cannot be counted as part of this stage space. In an elementary school not beyond sixth grade, the stage width may be revised to $1\frac{1}{2}$ times the proscenium width.

STAGE DEPTH:

Three-fourths the width of the proscenium opening. Stage depth is measured from the stage side of the proscenium columns—not from the front edge of the stage. This is minimum.

STAGE HEIGHT:

For Dead Hung System whereby the equipment is hung from the ceiling beams by means of chains, the height should be one-third greater than the proscenium height. This is measured from lower edges of exposed ceiling beams.

For Counterweight System, the height should be twice the height of the proscenium plus ten feet. If the Counterweight Carriages travel into a pit below stage floor, the height can be reduced seven feet.

FORESTAGE:

Four feet from stage side of proscenium column line to front edge of stage at center—whether curved or straight. If footlights are used, this depth is to be increased accordingly.

STAGE FLOOR:

When the auditorium floor is sloping, the stage floor should be 32" to 36" above the auditorium floor at the first row of seats. When the auditorium floor is flat, this may be increased to 42".

ORCHESTRA PIT:

Not required for schools not teaching beyond sixth grade. For high schools the depth should be 54" below stage floor. A greater depth is permissible for collegiate or for professional musicians, but depth should not exceed 66". The Pit should be twelve feet from front to rear and may be curved or straight. If the audience floor is flat, a Pit should be provided, but it may be trapped.

ACCESS STAIRS:

From audience floor to stage level provide recessed type on each side of proscenium opening—preferably beyond opening. Hand rails are not necessary, but steps should be lighted with recessed louvred fixtures circuited with exit lights. Portable steps should not be considered.

PROSCENIUM WALL:

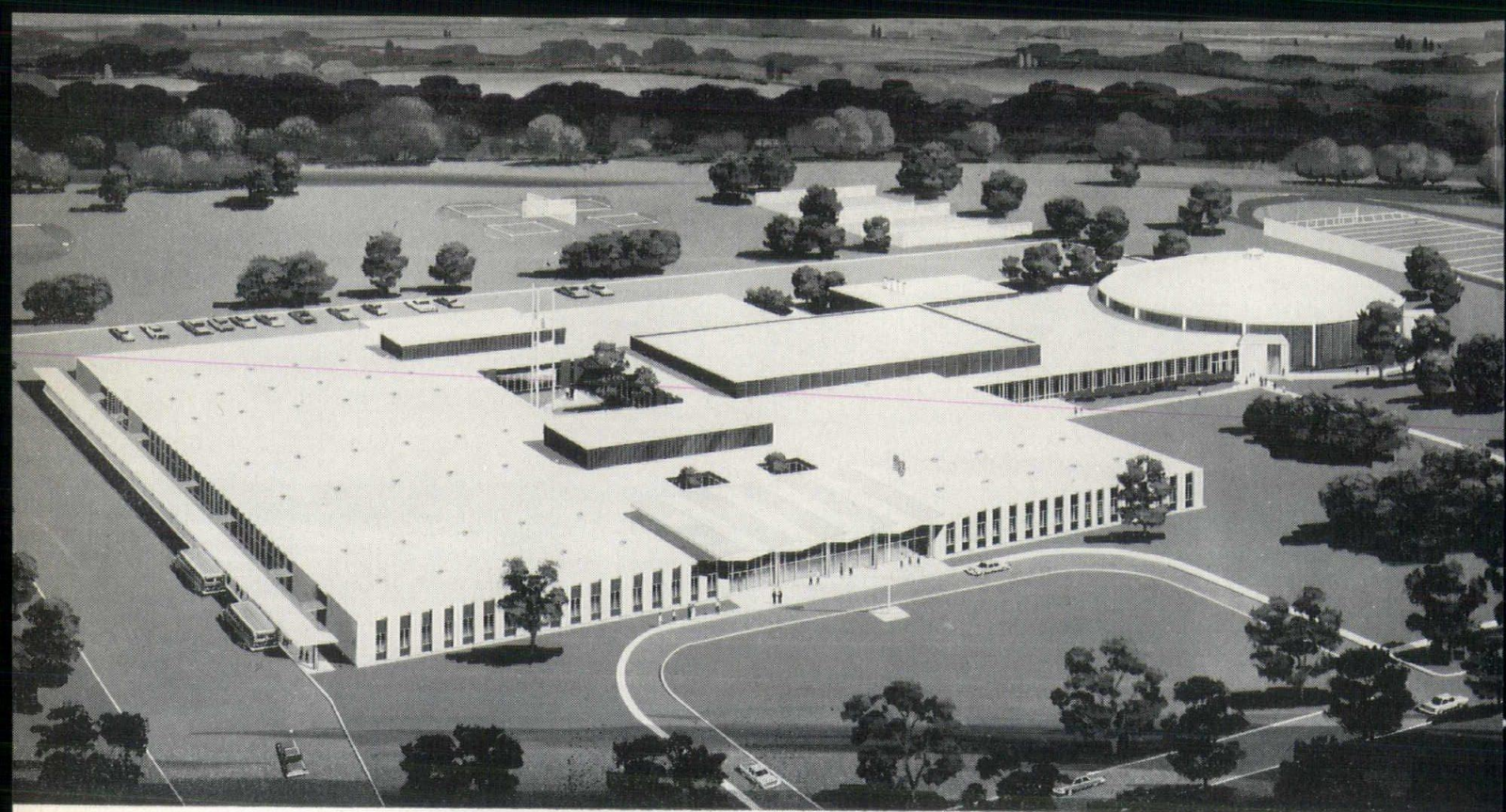
The stage side of the proscenium columns and their lintel must be kept in the same plane. In relation to the proscenium wall itself, this plane may protrude into the stage area, but it must not recess toward the audience.

The proscenium columns and wall areas adjacent to the opening must be kept free and clear of all devices (except Smoke Pockets when required) for a minimum width of 10% of the proscenium arch width. All devices such as electrical or sound equipment outlets, fire hose or extinguishers, thermostats and similar items are to be located beyond these areas. Additionally, the floor space for the first three feet behind these areas on each side are to be kept clear of stairways, railings, equipment and other items.

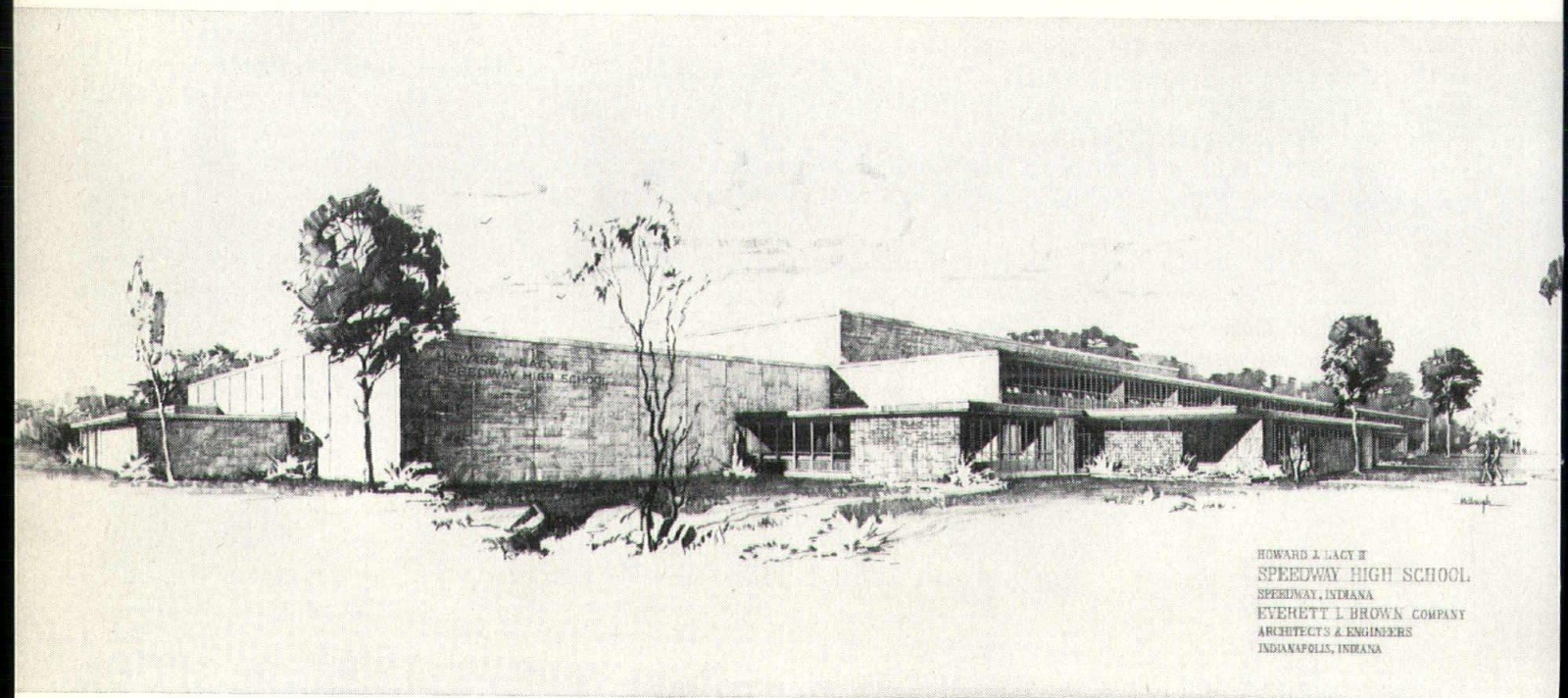
SIDE WALLS:

The use of doors or stairways at the corners should be avoided. If a Counterweight System is planned, its side wall must be straight without jog and without doors. Radiation is permissible in this wall if such radiation is recessed. An exposed down-spout for roof drain is permissible in rear corner, but this should be avoided if practicable. This wall must not have exposed

(to Page 35)

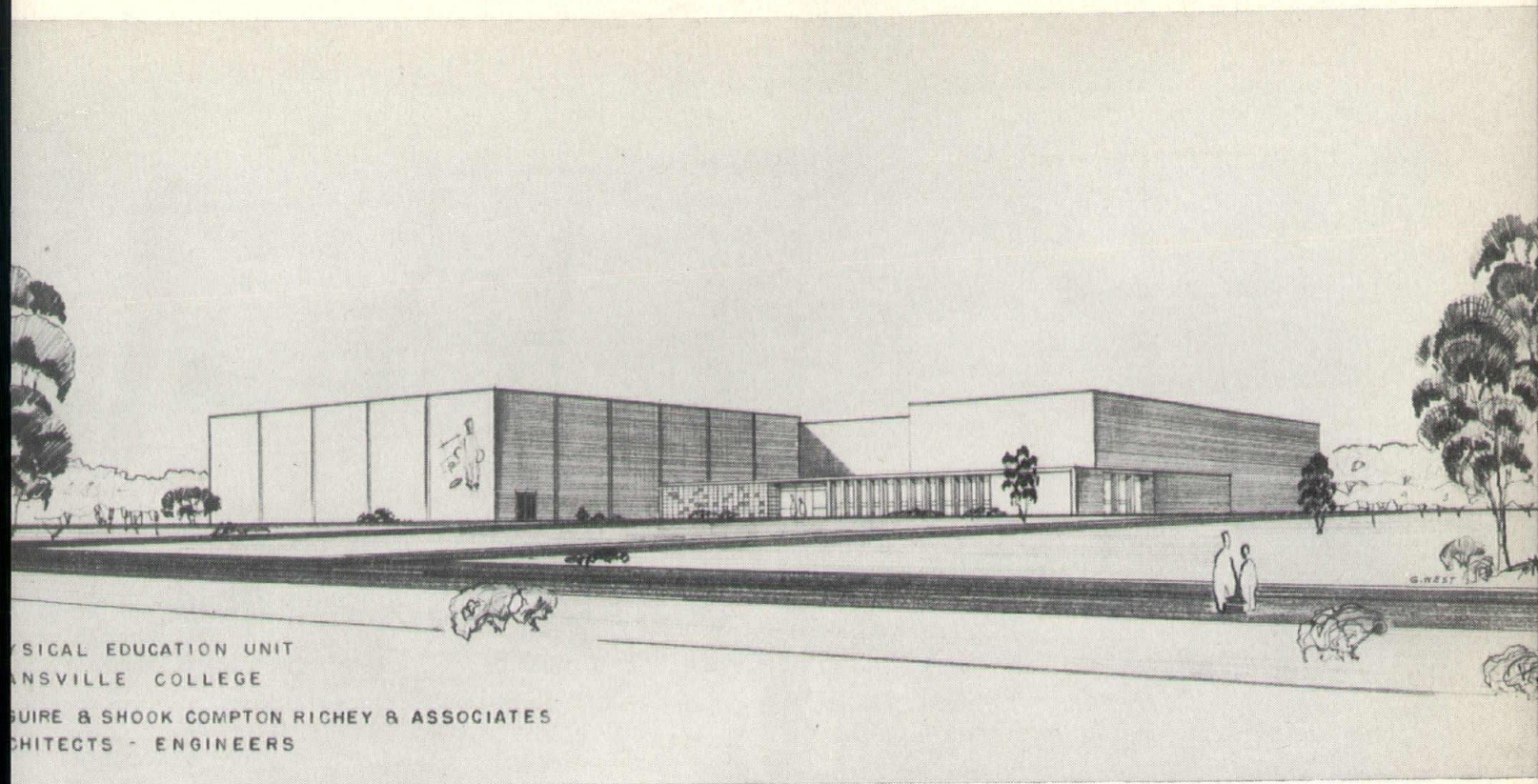


LAWRENCE HIGH SCHOOL — INDIANAPOLIS
Architect: Lennox, Matthews, Simmons & Ford

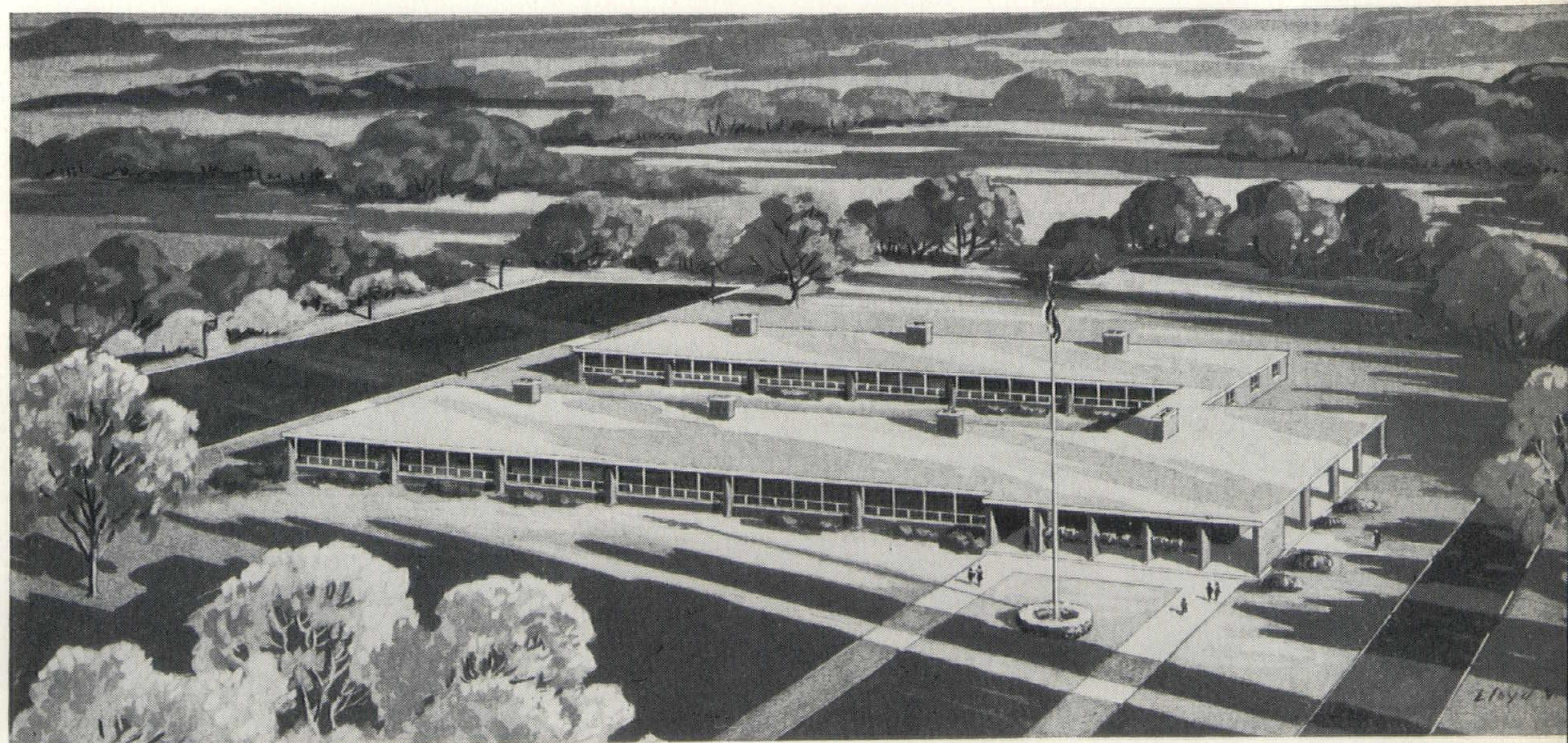


HOWARD J. LACY II
 SPEEDWAY HIGH SCHOOL
 SPEEDWAY, INDIANA
 EVERETT L. BROWN COMPANY
 ARCHITECTS & ENGINEERS
 INDIANAPOLIS, INDIANA

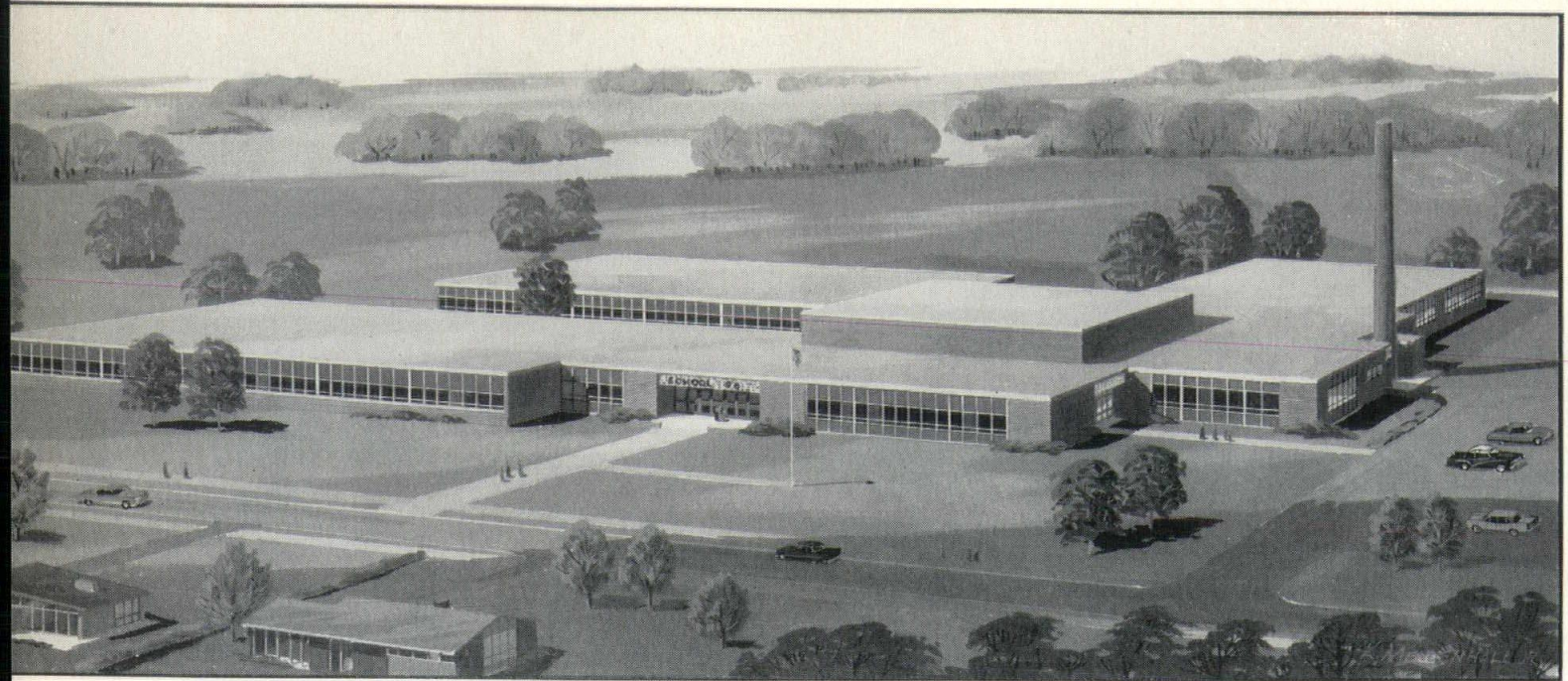
SPEEDWAY HIGH SCHOOL — INDIANAPOLIS
Architect: Everett L. Brown Company



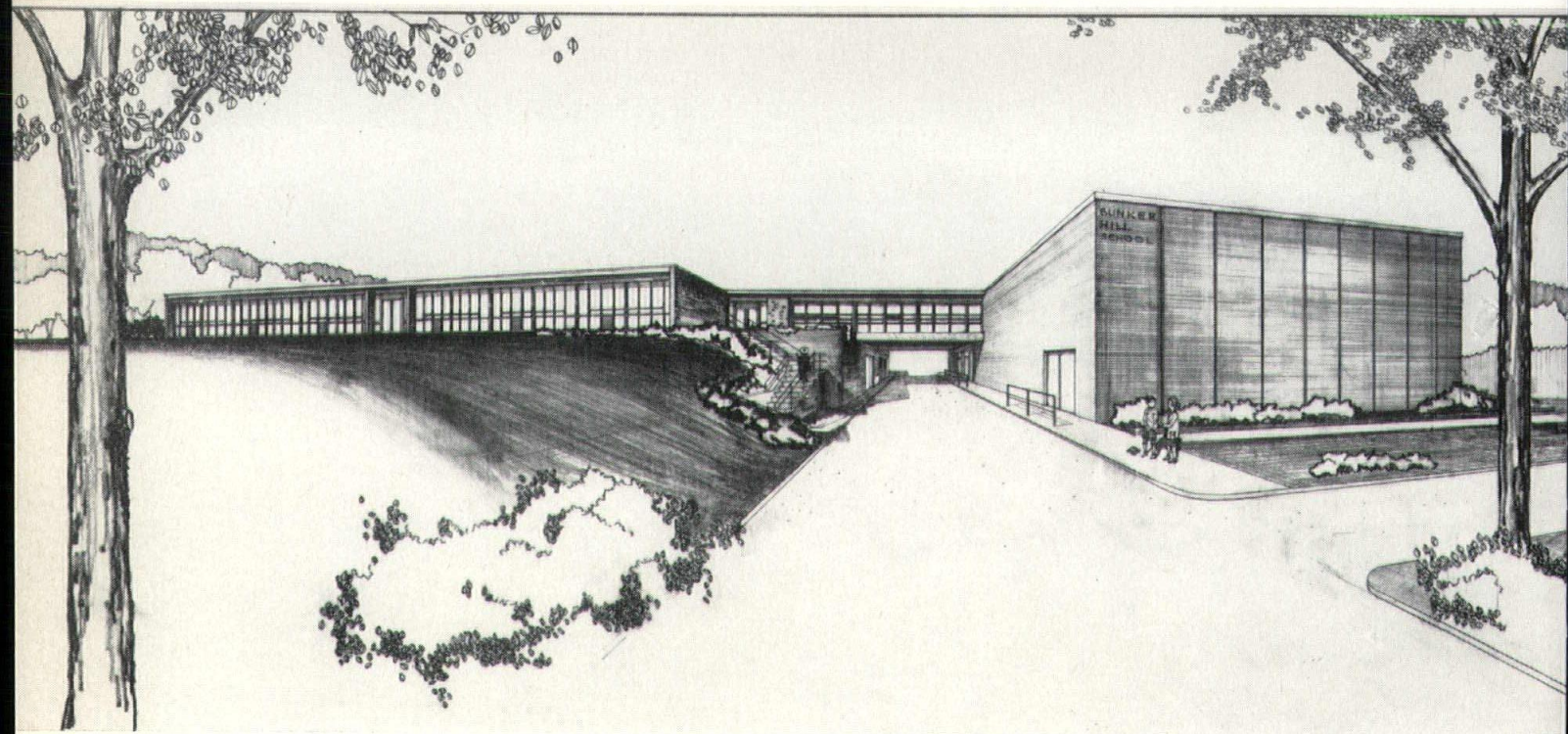
*PHYSICAL EDUCATION UNIT — EVANSVILLE, IND.
Architect: McGuire & Shook, Compton, Richey & Associates*



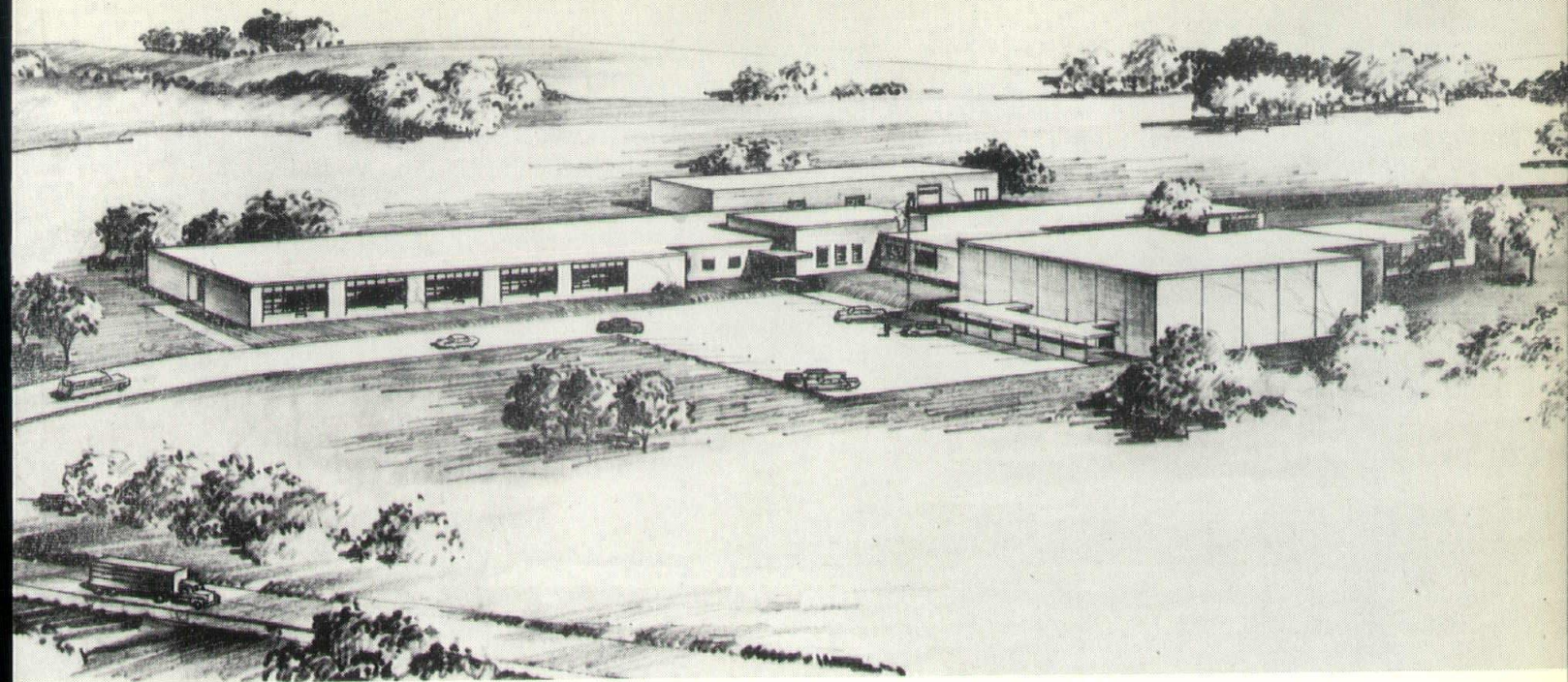
*TECUMSEH ELEMENTARY SCHOOL
Architect: Walter Scholer and Associates*



PUBLIC SCHOOL 98 — INDIANAPOLIS
Architect: Daggett, Naegele & Daggett



BUNKER HILL ELEMENTARY SCHOOL
Architect: McGuire & Shook, Compton, Richey & Associates



JUNIOR SENIOR HIGH SCHOOL
Green County, Indiana
Architect: James Associates

*CRAWFORD
 ELEMENTARY
 SCHOOL*

*Terre Haute
 Indiana*

*Architect
 Juliet Peddle*





Indiana school saves \$76,500 with Armstrong Acoustical Fire Guard Lay-In ceilings

Even though rated fire protection wasn't required for this new Indianapolis school, the architects wanted the extra safety of a fire-retardant ceiling — so they built it in with Armstrong Acoustical Fire Guard ceilings. As a result, Fire Guard helped qualify the school for the lowest possible fire insurance rates. Because it's an exceptionally efficient, yet dense, acoustical material, Fire Guard quiets noise and greatly reduces the transmission of sound from area to area through the ceiling. The architects estimate that, to provide similar advantages of fire safety and sound control, a combination of conventional fire-resistive ceilings and acoustical tile would have cost \$76,500 more than Fire Guard.



Lawrence High School, Indianapolis, Ind. Architects: Lennox, Matthews, Simmons and Ford, Indianapolis. General Contractor: F. A. Wilhelm Construction Co., Indianapolis. Acoustical Contractor: Commercial Floor Covering & Acoustics Co., Inc., Indianapolis.

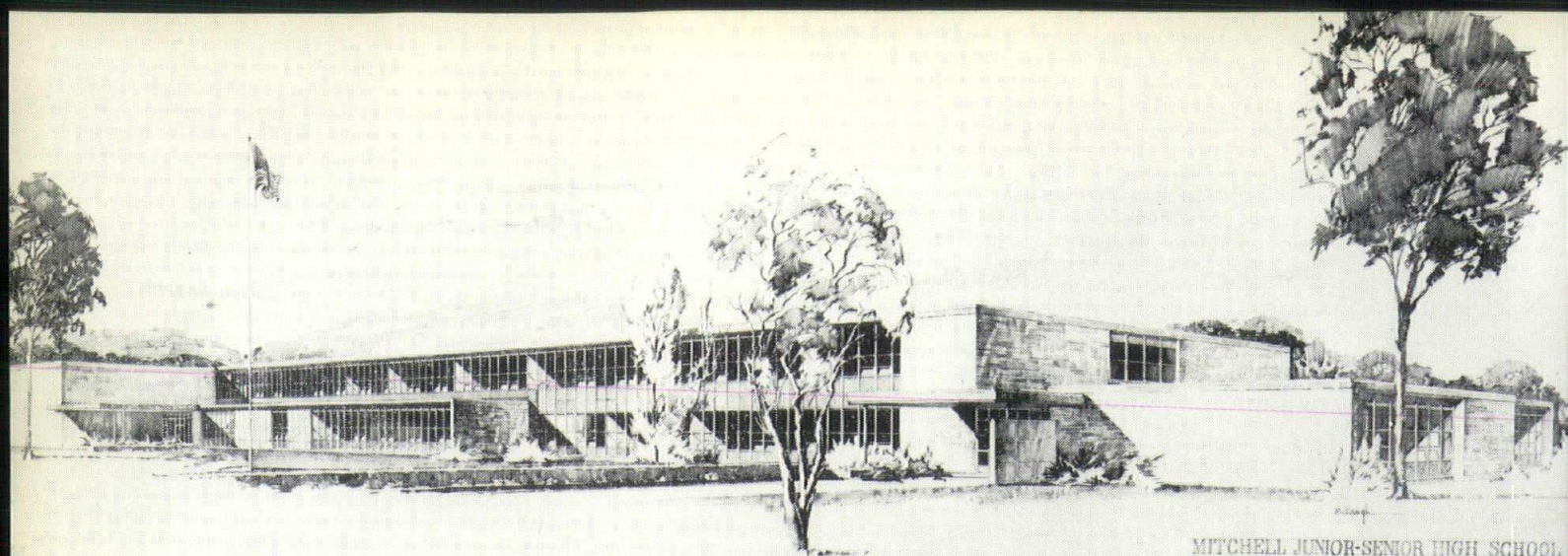


Whether you're in the hallway shown on the opposite page, the library above, or any other area of Lawrence High School, the Fire Guard ceiling, with its handsome fissured design, is a noteworthy decorative asset. And the 24 x 48" lay-in units provide above-ceiling accessibility, no matter what interior arrangements are created with the school's nearly two miles of movable partitions.

Armstrong ACOUSTICAL CEILINGS

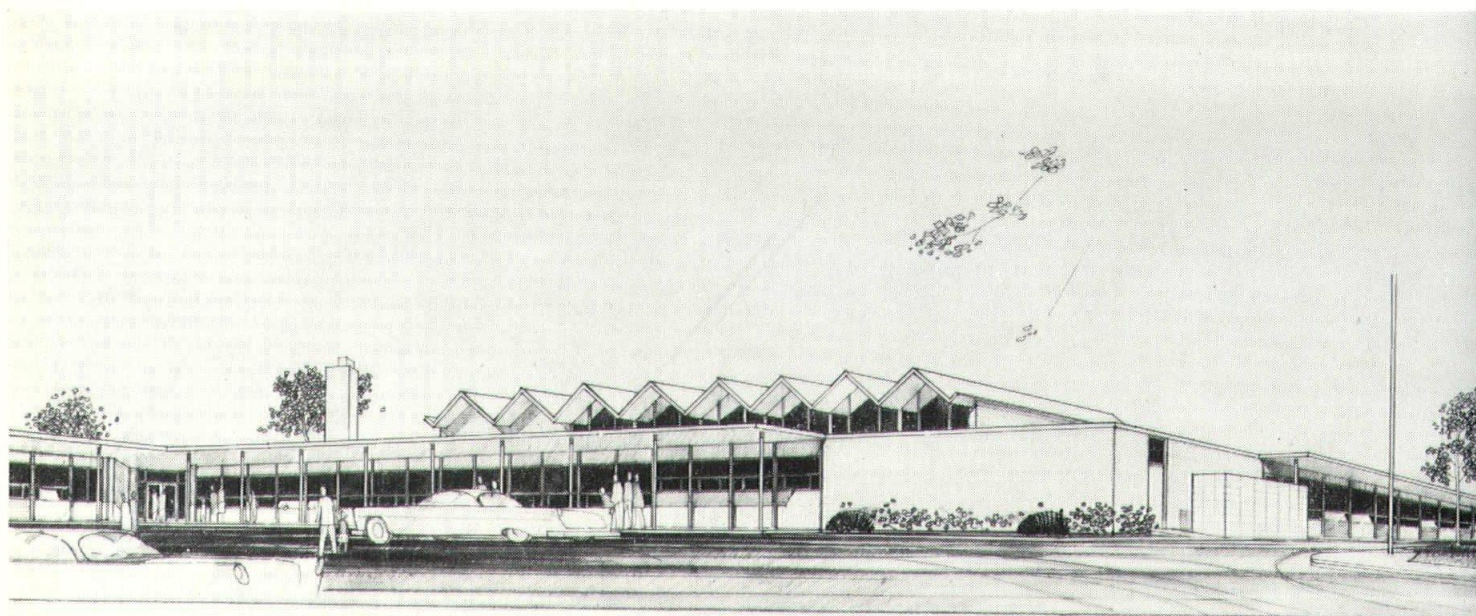
First in fire-retardant acoustical ceilings

Technical data: UL rated: Armstrong Acoustical Fire Guard offers one- to four-hour rated fire protection for structural components. Saves money, construction time: up to 45¢ per sq. ft. by eliminating intermediate fire protection . . . up to two months' time through dry installation; often earns lower insurance rates. Ventilating Fire Guard: Provides uniform air diffusion across the entire ceiling surface, sound control, and rated fire protection. Available in tile and lay-in units. Suspension system: For tile: TDR or Zee; for lay-in units (24 x 24 x 5/8" and 24 x 48 x 5/8"): exposed grid system. Choice of designs: Fissured, Classic, Full Random. For full data, call your Acoustical Contractor, your Armstrong District Office, or write Armstrong Cork Co., 4202 Page St., Lancaster, Pa.



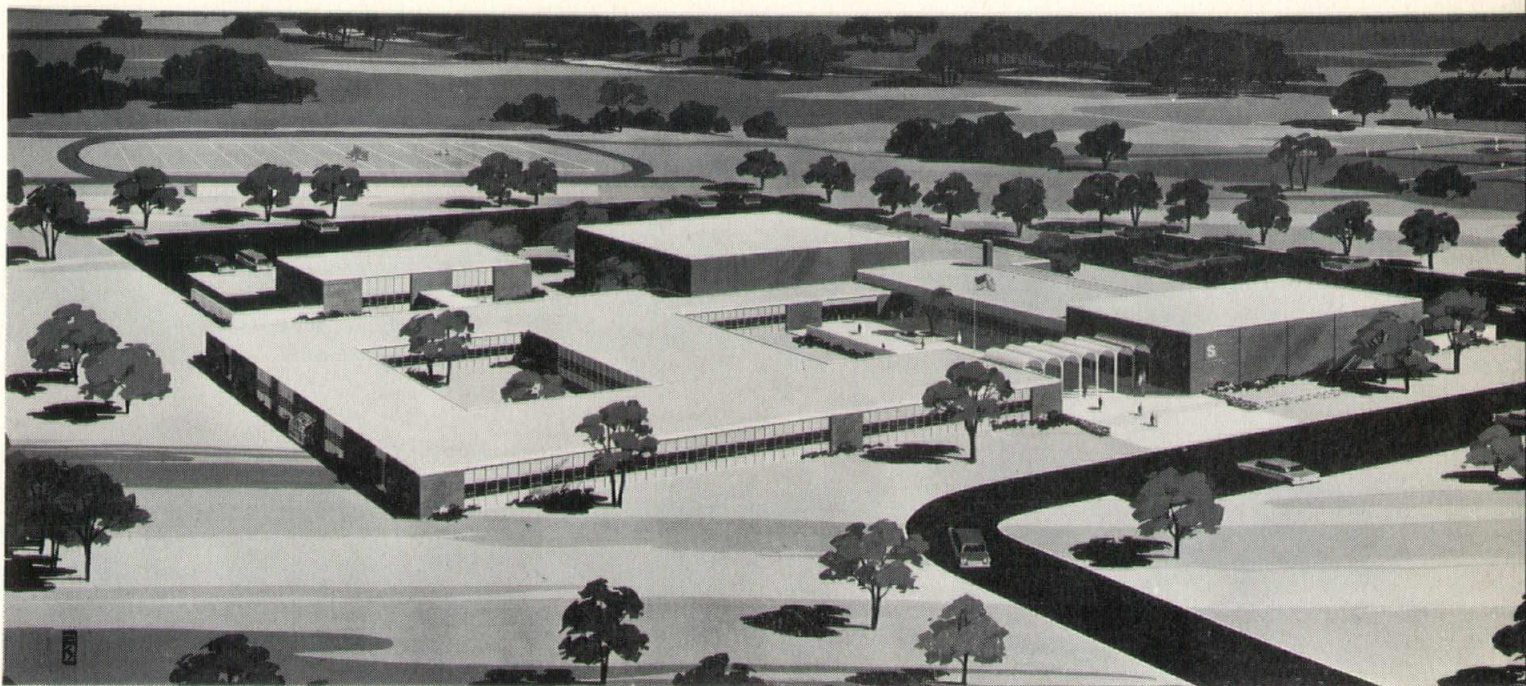
MITCHELL JUNIOR-SENIOR HIGH SCHOOL
MITCHELL, INDIANA
EVERETT I. BROWN COMPANY
ARCHITECTS & ENGINEERS
INDIANAPOLIS, INDIANA

MITCHELL JUNIOR-SENIOR HIGH SCHOOL
Mitchell, Indiana
Architect: Everett I. Brown Company

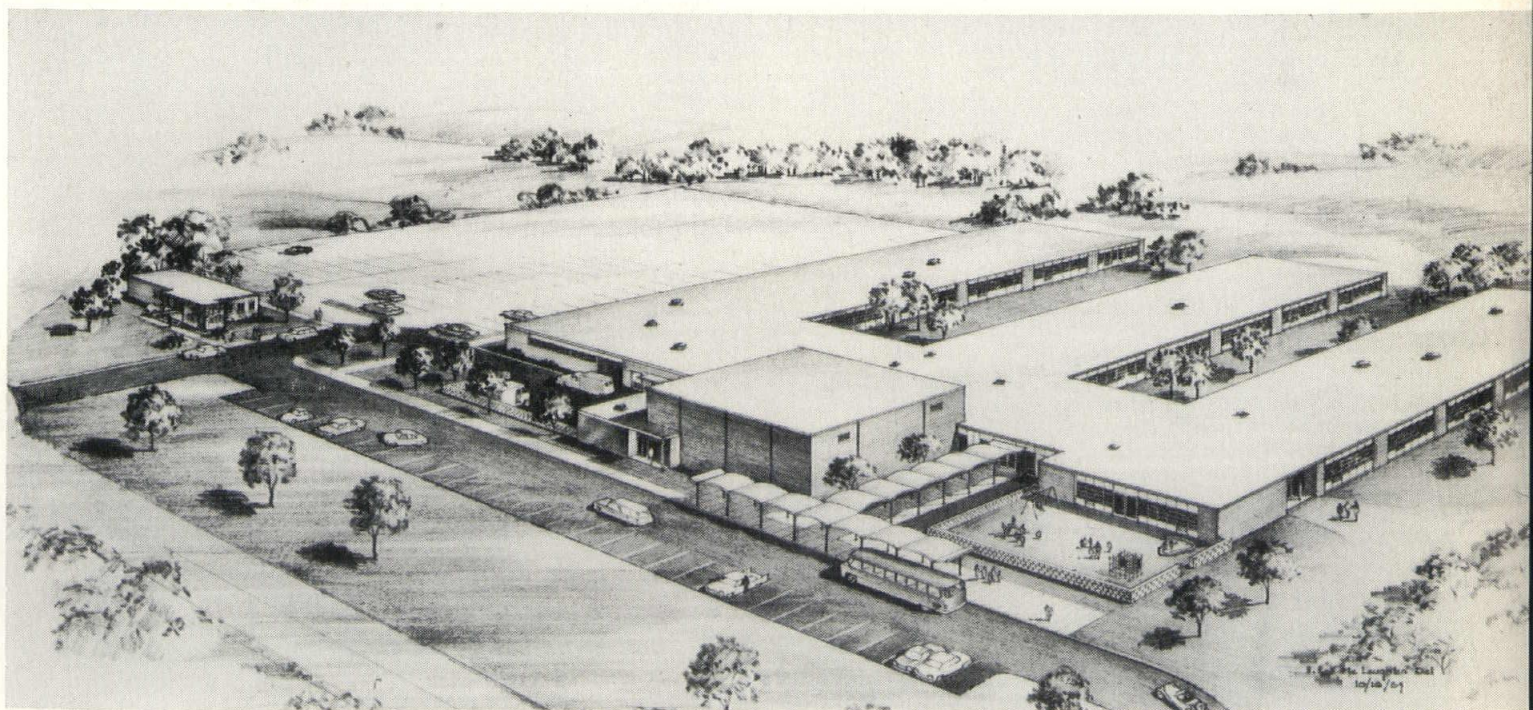


CRESTVIEW ELEMENTARY SCHOOL

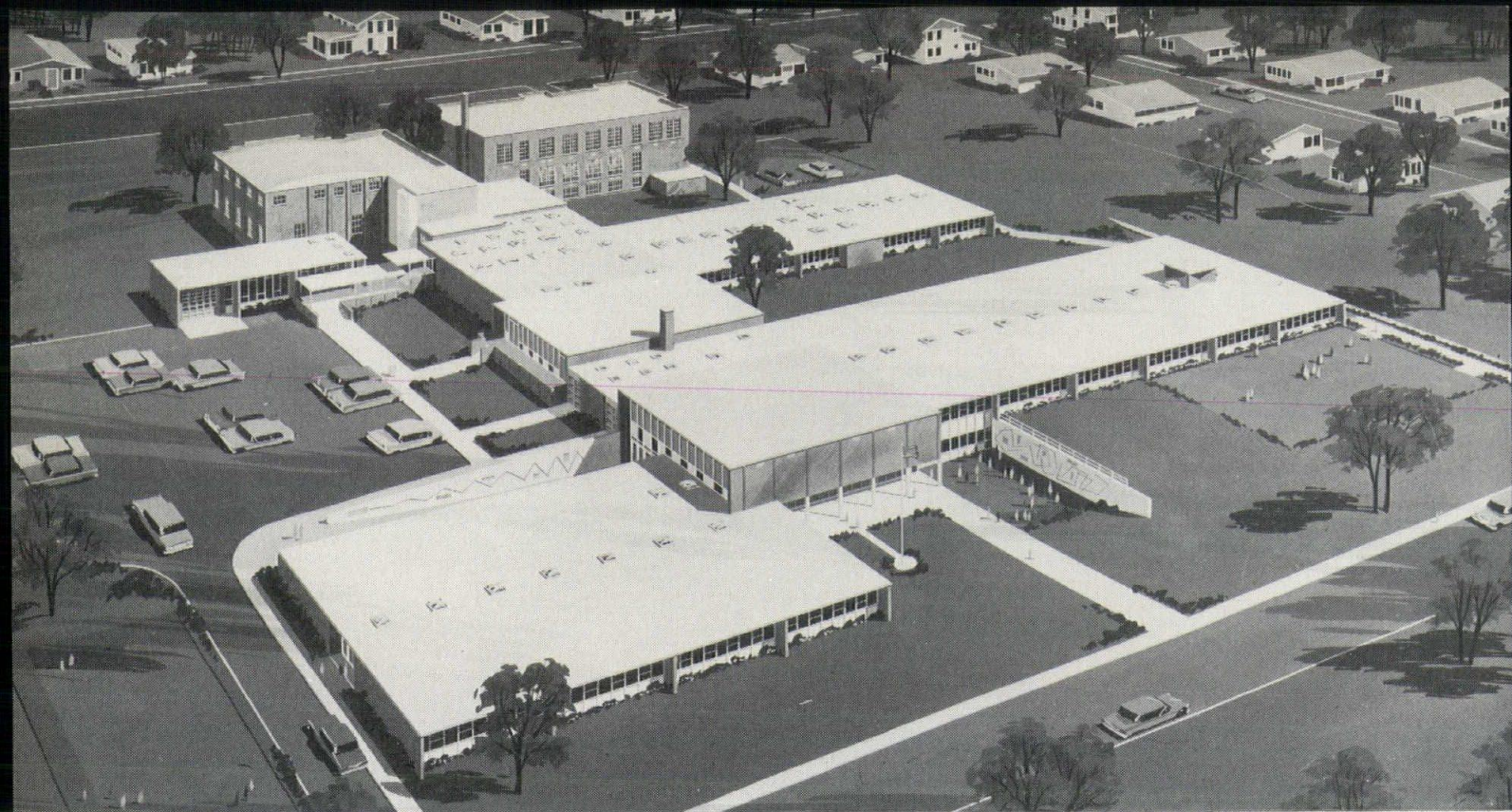
CRESTVIEW ELEMENTARY SCHOOL
Indianapolis
Architect: Wright, Porteous & Lowe, Inc.



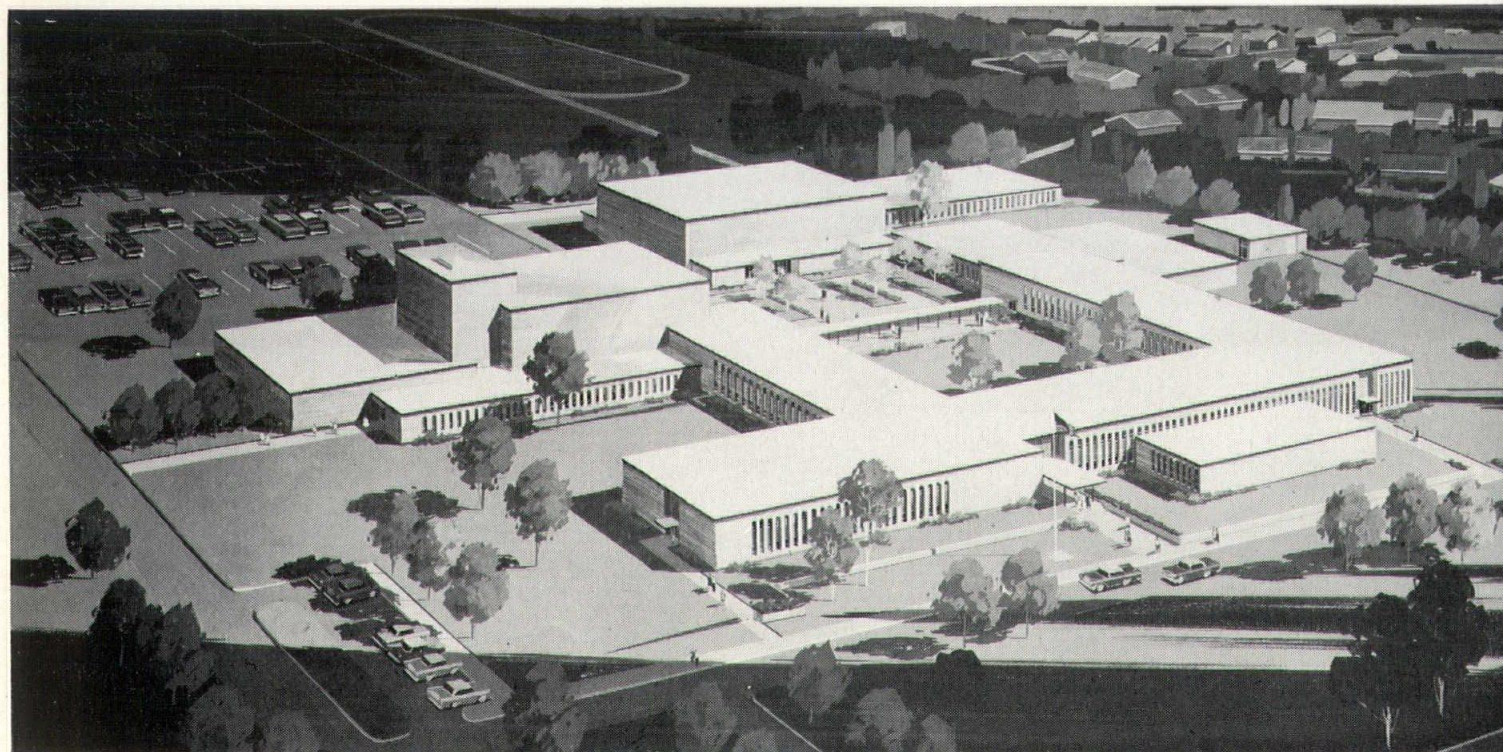
*JUNIOR-SENIOR HIGH SCHOOL
Wabash, Ind.
Architect: James Associates*



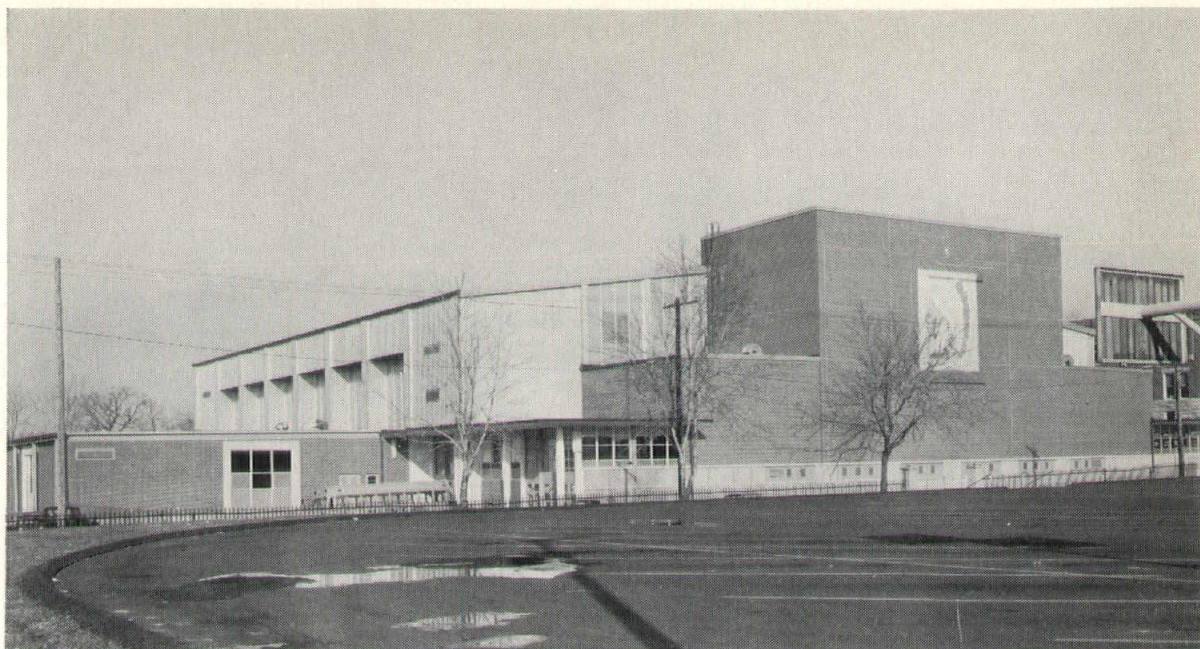
*SOUTHWESTERN ELEMENTARY
Hanover, Ind.
Architect: James Associates*



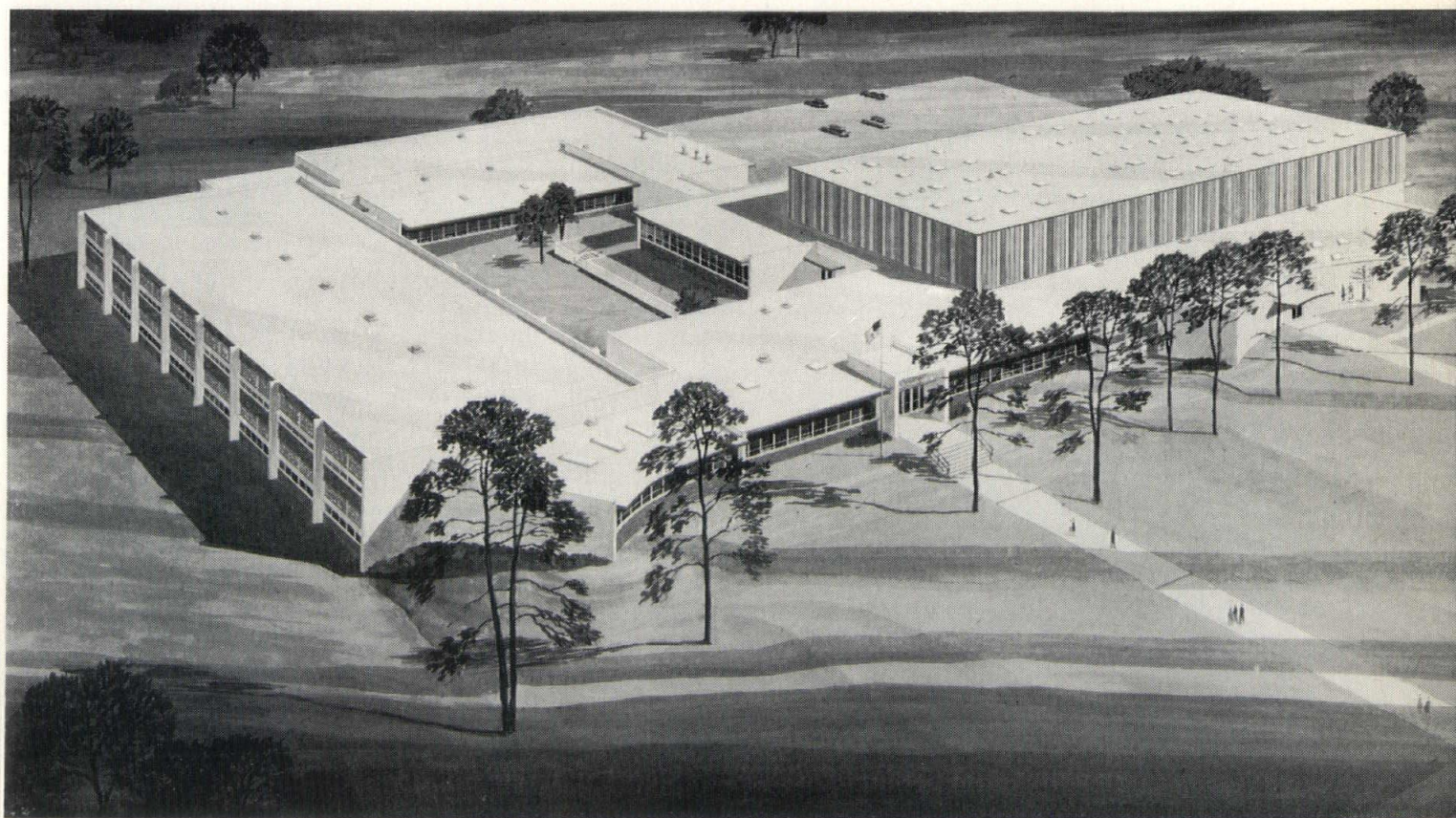
BLOOMFIELD, SCHOOL
Architect: Miller and Miller



NORTHWEST HIGH SCHOOL — INDIANAPOLIS
Architect: James Associates



*ANDERSON HIGH SCHOOL GYM — ANDERSON, IND.
Architect: Arthur B. Henning*



*VILLAGE WOODS JUNIOR HIGH SCHOOL — FORT WAYNE, IND.
Architect: Bradley and Bradley*

CHROMALOX

INTEGRATED ELECTRIC HEATING SYSTEMS

FOR
FREEDOM IN DESIGN



Exact Locations of
Electrically Heated Schools
Available on Request

SEE ONE SOON

CATALOG **CHROMALOX** COMPLETE
180M

NOW AVAILABLE FROM

COUCHMAN-CONANT INC.

INDIANAPOLIS

MEIrose 5-5313

Electric Heat for Schools

Architects and School Board Members are aware of the increasing number of schools now designed with complete electric heating systems.

Over 250 school buildings in the United States, now electrically heated, demonstrate the modern safety, unmatched in other standardized heating systems.

Indiana Architects working with our School Boards lead all other states. At the close of 1961, more than 50 Indiana schools are electrically heated. The valuable data derived from these in construction and operation demonstrated the initial cost savings and advantages for elimination of the administrative supervision.

The integrated electric heating system affords a new freedom in design by elimination of the usual large mechanical equipment room with its boiler, stack, and nearby fuel storage.

Large amounts of heat may be transported over relatively small wires to be released by precise programming within all spaces of a school building. Complete safety results with 100% efficiency.

Electric heat gives further freedom in design since there are no critical considerations required as in wet heat systems. This is important in today's design of the spreading, loosely-coupled structures where simple electrical feeders and circuits can efficiently follow any feasible route and be concealed in slabs, exposed, or be buried underground.

Expansion for future growth need not have prime consideration or built-in space provision. Simple, inexpensive additions to existing service and panels can be made, or new service and circuits can be added when additions are required. Again, freedom of design lies in the use of properly sized individual quick-recovery storage type electric water heaters for each lavatory location. Separate heaters of the same type can be specified for cafeteria kitchens with small sized boosters for developing required water temperatures for sanitation and dish washing.

The design of today's electric heated schools include adequate insulation preparing the space for the sure-to-come day of air conditioning, to permit the 11-month classroom use.

The low energy cost of electric heat assures a low energy cost within the same rate for air conditioning to be required in summer months.

TECTUM ROOF DECK
LAMINATED WOOD
BEAMS IN ALL ROOMS

**CRESTVIEW
ELEMENTARY
SCHOOL**

Supplied By

STRUCTURAL TIMBERS INC.

5340 E. 75TH ST.

INDIANAPOLIS

TI 9-3431

Finest Quality
Glass and Glazing
For the New
Public School
98



furnished by

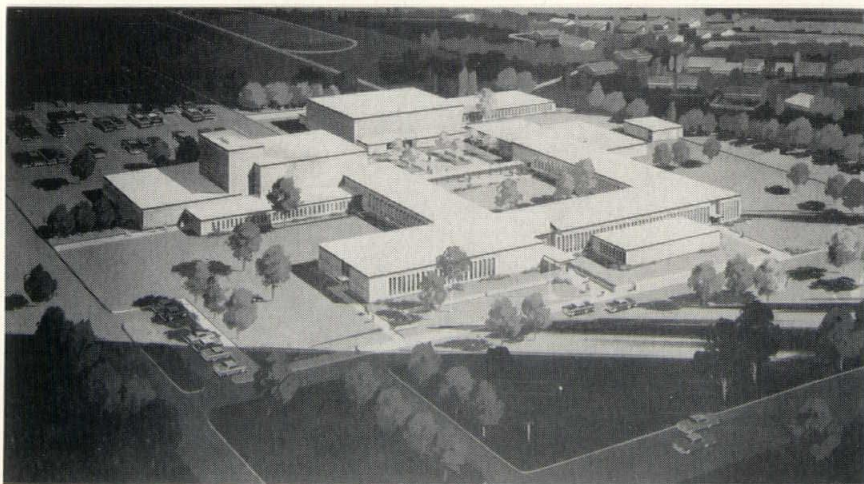
COOK'S

GLASS & MIRROR

5703 W. MORRIS ST.

INDIANAPOLIS 7, INDIANA

CHapel 1-9344



Northwest High School

Architect—

JAMES ASSOCIATES

. . . **there is no substitute for
experience,** and *ROBBINS ELECTRIC* has
gained its experience in over half a century of electrical
contracting . . . with an ever increasing volume reflecting
customer confidence and satisfaction.

ROBBINS ELECTRIC COMPANY, INC.

INDUSTRIAL and COMMERCIAL ELECTRICAL CONTRACTORS SINCE 1909

Late News Flashes

★ **Portable Chalkboards**
Wood and Aluminum
Framed

★ **Directory Boards**

★ **Aluminum Trim**
Snap-on, Screw-on,
Ready Framed
Types

★ **Aluminum Cases**
Bulletin, Display,
Trophy

★ **Chalkboards**
"Korok" Steel
Natural Slate
Composition

★ **Tackboards**
Cork
Fabric Covered
(Tactex)
Pegboards

★ **Sliding Chalkboards**

If It's KOROK It's Forever

KOROK[®] inc.
SUBSIDIARY THE ENAMEL PRODUCTS COMPANY

**4091 MILLERSVILLE ROAD
INDIANAPOLIS 5, IND.**

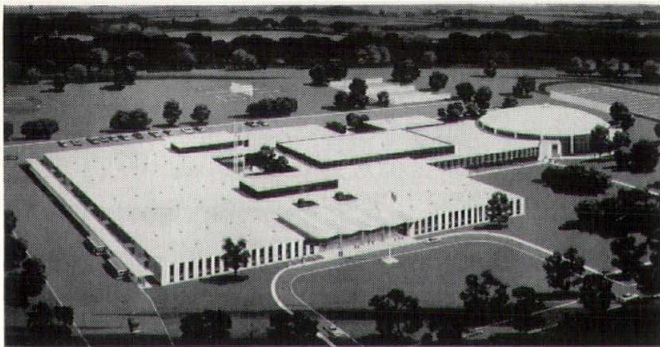
"Contemporary religion and the buildings which house it have been struggling for definitive expression in the changing community of our time. The great need for religious buildings is an architecture that speaks affirmatively for religious purposes and witness."

With this challenge, the 1962 Conference on Church Architecture extended its invitation to architects to participate in the architectural exhibit on religious buildings at the Sheraton-Cleveland Hotel, Cleveland, Ohio, on March 20, 21 and 22, 1962. This annual conference is sponsored jointly by the Church Architectural Guild of America and the Department of Church Building and Architecture of the National Council of the Churches of Christ in the United States of America.

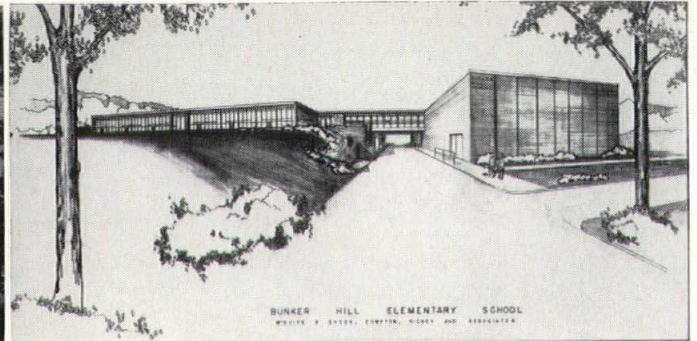
According to the invitation, there will be only one classification of work and only one criterion of quality; namely, that the buildings be an inspired expression looking toward a realistic contemporary religious affirmation.

Church buildings of any denomination of faith completed since 1957 in the United States, or its Territories and Possessions are eligible, along with projects currently under construction.

Entry blanks must be in the hands of the exhibit committee no later than February 26th.



LAWRENCE HIGH SCHOOL
ARCHITECT
Lennox, Matthews, Simmons & Ford



BUNKER HILL SCHOOL
ARCHITECT
McGuire & Shook, Compton
Richey and Associates

ENGINEER CURTAINWALL, INC. — Curtainwalls, Windows
FOUR SEASONS WINDOW CORP. — Sliding Windows

Custom Doors & Frames
Complete—Erected

GEORGE C. SMITH, INC.

1150 East 28th St. — Phone WA. 3-2331
Indianapolis, Indiana

CHANGES AT THE STATE OFFICE BUILDING: The Architectural Registration Board announces a new telephone number, MEIrose 3-4839, but remains in its same office on the tenth floor of the State Office Building.

The Administrative Building Council, on the other hand, has moved from its fifth floor office to Room 1012 on the tenth floor, but has retained its former number, MEIrose 3-5433.

* * *

Mr. Norman H. Hill, AIA, (of the former architectural-engineering firm, Hill & Wupper, Inc.) has announced his office is now located at a new address, 6214 West Southport Road (RR 3, Box 847 M), Indianapolis. His new phone number there is ULysses 6-5356.

* * *

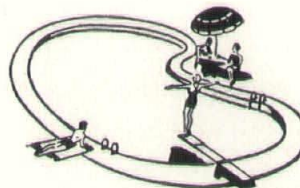
Mr. Clyde C. Shropshire, AIA, as joined the firm of Robert N. Kennedy and Associates as a partner, and the firm name also has been changed to Kennedy & Shropshire and Associates. The architectural firm is located at 4167 North College Avenue, Indianapolis.

* * *

Mr. J. Parke Randall, ISA Associate Member and formerly an architect with Martin & Jelliffe, Architects, has announced the opening of his private architectural office at 5350 Cheviot Place at Chatham, Indianapolis. Mr. Randall, whose new phone number is LIberty 7-0125, is a graduate of Washington University School of Architecture. He was a registered architect in Missouri before moving to Indianapolis ten years ago, and since then has been associated with several Indianapolis architectural firms.

Residential and Commercial

SWIMMING POOLS



Compare Quality and Price!

We will show you all sizes and shapes to fit your requirements.

*Oldest and Largest Pool Builders
in Indiana*

Quality Pools by

JAMES Construction Co.

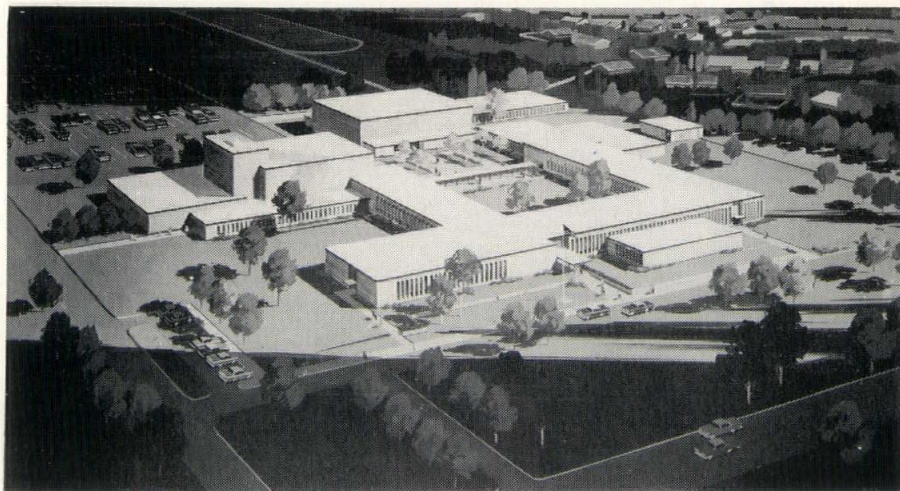
Charter Member of the National Swimming Pool
Institute

LIberty 5-0990

2321 N. Emerson LI 5-0990

NORTHWEST HIGH SCHOOL

Architect
JAMES ASSOCIATES



General Contractor

Carl M. Geupel Construction Co.

1919 N. MERIDIAN ST. INDIANAPOLIS, INDIANA



**Miscellaneous
Metal and
Specialists**

for

PUBLIC SCHOOL 98
INDIANAPOLIS

...

**GENERAL STEEL
FABRICATING
CO. INC.**

4000 E. 16th St.
Phone FL 6-7246
Indianapolis
Indiana

**MILLWORK
for
PUBLIC SCHOOL 98
and
BUNKER HILL
SCHOOL**

**Wm Hermann
& Son**

1360 S. Talbot
ME 7-6122
Indianapolis

LANDSCAPING

For . . .

**NORTHFIELD HIGH
and
SOUTHWOOD HIGH
WABASH, IND.**

H. D. BURGE JR.

5735 SHERMAN AVE.
INDIANAPOLIS, IND.
PHONE CL 1-7542

*Painting
Contractors*

For the

**HOWARD
LACY, II
HIGH SCHOOL**

SPEEDWAY, INDIANA

ralph lula

COMPANY INC.

RR 1, Carmel, Ind.
Phone VI 6-2186

*"The Indiana Limestone
for the new ultra-modern
Speedway High School
furnished by*

...

**JONES & REATH
CUT STONE CO.**

*Quality, Fine Workmanship
Service*

BOX 161 BEDFORD, IND.
PHONE BR 5-6510

"SEND DATA FOR
FREE ESTIMATES"

***Fabricated
Structural
Steel***

For The

**HOWARD LACY II
HIGH SCHOOL**

**Geo L. Mesker
Steel Corp.**

EVANSVILLE, IND.
Phone HA 2-1134

Stage Planning . . .

(from Page 19) electrical nor water piping nor structural bracing from this wall to support other equipment. If the proscenium wall is closer to the auditorium than the proscenium columns, such space differential may be used for other equipment.

REAR WALL:

The portion directly behind and equal in size to the proscenium opening should be kept clear of all devices and openings. Additionally, the construction should be uniform throughout this area.

DOORS:

A large door should be well located to facilitate bringing furniture, scenery and similar equipment onto the stage from outside the building. A double door is adequate for stages with less than 30-ft. proscenium width. For larger stages, this door should be 8-ft. wide x 10-ft. high and an additional pedestrian door should be provided.

Toward the academic wing of the building, a double door should be provided—without center post. If the adjacent corridor is not at stage level, a ramp should be provided. Such ramp is not required in a school not teaching beyond sixth grade. If ramp or stairway is on the stage side, it must not be counted as part of the stage width.

STORAGE:

Every available foot of space near the stage should be

incorporated to provide storage of countless items of all sizes. Storage rooms for furniture should not have ceiling height in excess of seven feet—to preclude hazardous stacking. A separate room solely for piano storage should be provided adjacent to the stage.

SCENERY SHOP:

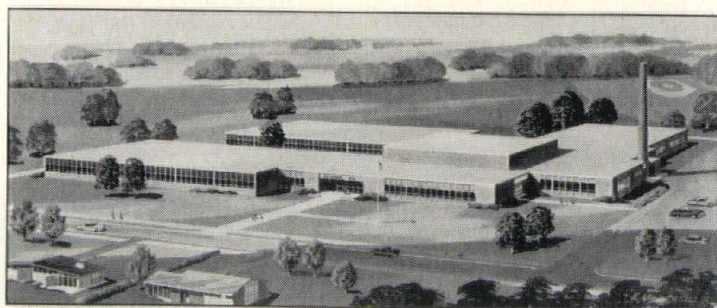
This facility is best located adjacent to the stage. If located elsewhere, provide access to stage and access to outside of the building. Its sink should be equipped with large trap which may be easily cleaned to remove sediment from paint brushes.

GYMNASIUM-AUDITORIUM:

This facility is best when the stage is located along one side of the athletic floor—not at one end. Such arrangement is better for the audience psychologically, better for the stage presentation accoustically and minimizes the hazards of straying basketballs. The use of permanent roll-away bleachers at the rear wall should be avoided. Nevertheless, if such bleachers are planned, the occupied space must not be counted as part of the stage depth.

STAGE FLOOR:

The forestage and front third of acting area may be hardwood laid perpendicular to the proscenium wall. The balance of the stage including the wing areas should be long edge grain or quarter sawed softwood such as fir or pine and is to be laid parallel to the proscenium wall. For a Counter-weight System in which the Lockrail is to be on the stage floor, the floor under the Lockrail and approximately three feet in front of it should be concrete.



**PUBLIC SCHOOL 98
INDIANAPOLIS, INDIANA**

Architect: DAGGETT, NAEGELE & DAGGETT

GENERAL CONTRACTORS

A. B. COCHRAN & SON, INC.

FOUNDED 1910

**2425 E. 46 STREET, P.O. BOX 55344
INDIANAPOLIS 5, INDIANA**



PARKING AREAS
AND DRIVEWAYS

FOR
NORTHFIELD HIGH
and
SOUTHWOOD HIGH

By

**ENGINEERING
ASPHALT CORP.**

Logansport
Indiana

ELECTRICAL
CONTRACTOR

**Bunker Hill
School**

BERTRAM
ELECTRIC COMPANY

*Complete Industrial
Commercial Electric
Contracting*

1610 S. Meridian ME 6-4533
Indianapolis

***Layout and
Installation Service***

- ★ LOCKERS
- ★ HOSPITAL CASEWORK
- ★ LABORATORY CASEWORK
- ★ KITCHEN CABINETS
- ★ METAL SHELVING

Specialize In:

- ★ Home Economic Casework
- ★ Arts & Crafts Casework
- ★ Science Room Casework

Robert J. Hiatt Co.

P. O. Box 55441
Uptown Station
Indianapolis, Indiana
Phone CL 5-5068

*Plumbing
Contractor*

**Bunker Hill
School**

W. L. EVANS CO.

847 EARHART
INDIANAPOLIS

**PHONE
FL 6-2485**

**Glass and
Glazing for**

FULTON JUNIOR
HIGH SCHOOL
INDIANAPOLIS

**CAPITOL
GLASS
Co.**

432 S. MISSOURI
INDIANAPOLIS
ME 2-1461

GENERAL
CONTRACTOR

FOR THE
CRAWFORD
ELEMENTARY
SCHOOL

Terre Haute, Ind.

**NEWLIN-
JOHNSON
DEVELOPMENT
CO.**

TERRE HAUTE, INDIANA

How to Plan . . .

(from Page 11) understand current and projected trends in teaching methodology, and must be able to work well with professionals outside the field of education. Particularly he must be able to coordinate educational and architectural planning.

A partial list of those who should play a role in analysis and educational specification would include board members, superintendent, business manager and staff, curriculum director and staff, principals, teachers, pupils, operational personnel, consultants and citizen advisers. Anyone who is asked to be a part of a planning team should have his specific role in the overall effort made abundantly clear. First, a balanced, competent team should be brought together, and then each member should be told about his area of responsibility. The leader of the group should see to it that each competence stays in its own field.

WHEN TO BRING IN STAFF

The real problem in staff participation in planning includes not only the role each should play, but also—and just as important—the **timing** of those roles. When shall participants be introduced to the problem? When shall their contribution be sought? At what stage of the production shall they be asked to reappear upon the scene?

Our experience indicates several points about participants and timing:

1. They must see themselves as part of a group developing plans and interpreting policy before their contributions can be valid.

2. They must be asked to make their first contribution in the **idea** stage of production. If such people as business managers, curriculum directors, teachers, custodians and pupils are going to be asked only to comment on developed plans, you might as well forget them—save their time and yours.

3. They must become involved in the planning process at the time their specific competence is most pertinent to the planning.

4. They should be re-contracted at various stages of planning development for a critique of the work to date.

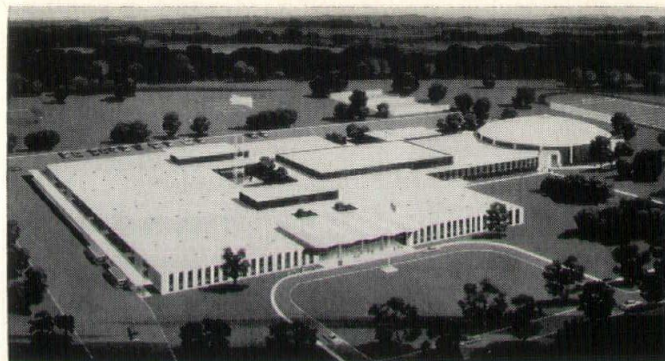
5. They should be given a tour of the facilities which resulted from their work and an explanation of how the finished product complies with or deviates from the original specifications.

USING PARTICIPANTS

While we cannot discuss here the roles and timing of all the possible participants in the development of educational specifications, I will mention two: the teacher and the architect.

The teacher. A study made in California of teacher participation in school planning revealed that valuable teacher resources were often not used to potential advantage in school planning. It indicated that when departmental planning committees consisted of volunteers from the entire staff, planning was cumbersome and inefficient. Teacher participation was most successful when limited to describing teaching techniques and scope and content of courses and to analyze preliminary

(to Next Page)



LAWRENCE CENTRAL HIGH SCHOOL

Congratulations!

To Architects **LENNOX, MATTHEWS,
SIMMONS & FORD, INC.,** for
their Design award.

*Another INSULROCK ROOF DECK
to be installed by*



ANNING-JOHNSON *Company*
INCORPORATED

1720 ALVORD STREET

WALnut 3-2461

INDIANAPOLIS 2, INDIANA

Branch Office: 320 N.W. 7th St. Evansville HA 3-3683

Structural
Steel
and
Erection Joists

for
LAWRENCE HIGH
School

TUCKER
STEEL CORPORATION OF IND.

3925 N. COLLEGE

INDIANAPOLIS

WA 3-2319



**VILLAGE WOODS JUNIOR
HIGH SCHOOL**

Architect

BRADLEY AND BRADLEY

General Contractor

Hagerman Construction Corp.

405 Strauss Building

P.O. Box 690

Fort Wayne 2, Indiana

*Exterior Granite
Interior Marble
Ceramic Tile*

for the

**Howard Lacy, II
High School**

Speedway, Indiana

**Wege Marble and Tile
Co., Inc.**

333 N. PENN., ROOM 919

Architect & Builders Bldg.

Indianapolis, Indiana

Phone ME 5-7531

How to Plan . . .

(from Page 37)

drawings presented by the architect. But when teachers are asked to participate in the preparation of ed-specks, they seem to be miscast.

The architect. By architect in this instance, I mean the job captain from an architectural office who has been assigned to a specific building project. He should not be confused with the "principal architect" who is the job getter in most firms and generally the one who makes all contacts with the client. The architect, as we speak of him here, is the project architect or job captain who is responsible for the production of the plans for the new school building. He should sit in on all major planning sessions on ed-specks. This can hamper good results if the architect is prone to sell his own "canned" solution. But this hazard can be met by a skillful leader who would make sure that the project architect gets first-hand the background discussions behind the written words. While he should be present primarily to listen, there are times when a few of his prudent words of caution can keep planning discussions in line with district policies. His very presence tends to discourage the ambitious members of the AIAA who can express themselves only by making crude lines on graph paper.

There are many fine procedures available to school district personnel for use in program analysis. One called "Procedures for Appraising California Secondary Schools," published by the California Association of Secondary School Administrators, carries this preliminary statement on written objectives:

A good secondary school . . .

. . . makes energetic efforts to know the details of the wide variation in interests, needs and abilities which exists among its pupils.

. . . is constantly redefining and reappraising its goals in terms of the changing needs of society.

. . . evaluates the outcomes of its program in terms of the development of individual pupils and the successes of its graduates.

. . . is continually striving to improve its methods for encouraging the development of individual pupils.

. . . is concerned with providing a staff, materials of instruction and physical facilities which will insure the maximum progress of each pupil toward the goals of the school.

An appraisal of your educational program against these objectives would make a fine beginning point for any school district seriously interested in self-analysis of its educational building needs.

The preceding article was adapted from a talk Mr. Gibson made to a school planning workshop sponsored by the Association of San Diego County Administrators and the Department of Education, San Diego County. The article is here reprinted from the January, 1960, issue of *OVERVIEW Magazine*, published by the Bittenheim Publishing Corporation, New York.

Good Lumber Imported & Domestic Hardwoods
 Fine Custom Millwork Pre-assembled Components
BURNET-BINFORD LUMBER CO.

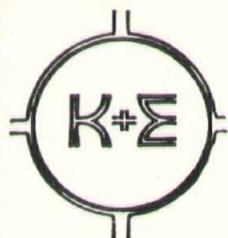
1401 West 30th St.

Indianapolis 23, Ind.

8502 Westfield Blvd.

Nora, Ind,

Wa. 6-3315



• **Blue Prints** • **White Prints** • **Photo Copies**

Pick-Up and Delivery Service

Exclusive

K&E DEALER

Slide Rules • Measuring Tapes
 Surveying Instruments, for Sale or Rent
 Level Rods and Poles • Complete Stocks
 LeRoy Lettering Instruments & Supplies

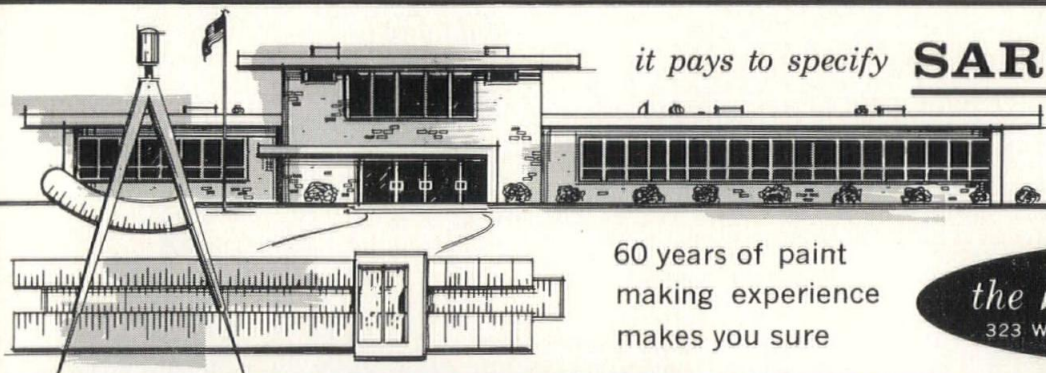
FOR BETTER SERVICE . . .

2—CONVENIENT LOCATIONS—2

MARBAUGH Engineering Supply Co.

- 140 E. Wabash St., Indianapolis
- 5226 N. Keystone Ave., Indianapolis

MEIrose 7-3468
 CLifford 1-7070

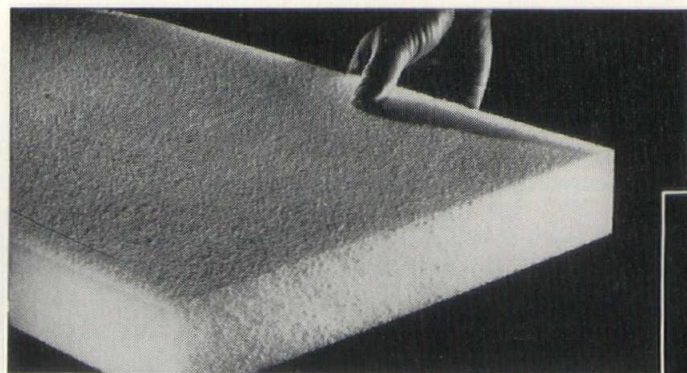


it pays to specify **SARGENT® PAINTS**

See for yourself . . . how Sargent paint products more than fill the bill for consistent quality . . . for commercial or private application.

60 years of paint
 making experience
 makes you sure

the Sargent-Gerke Co.
 323 W. 15th ST., INDIANAPOLIS, INDIANA



ARCHITECTS— Specifications, data and application instructions available in portfolio form. Information on the new Scorbord perimeter insulation also included. Write today, no obligation.

STYROFOAM DISTRIBUTOR

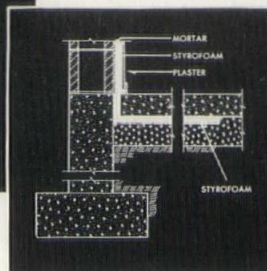
SEWARD SALES CORPORATION

ELKHART, INDIANA
 740 SOUTH MAIN STREET

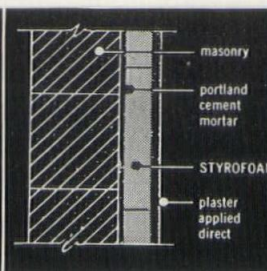
INDIANAPOLIS, IND.
 1101 EAST 46th STREET

CINCINNATI 8, OHIO
 3660 MICHIGAN STREET

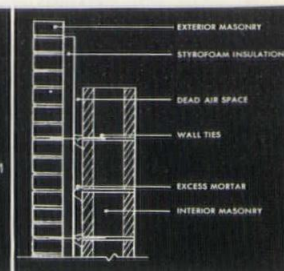
Styrofoam® insulation
 superior for commercial and
 residential construction



PERIMETER INSULATION
 For vertical, horizontal, crawl space or perimeter heating insulation, Styrofoam retains its low K factor indefinitely. It is impervious to moisture.



PLASTER BASE INSULATION
 Styrofoam insulation— plaster base construction eliminates framing and lathing, reduces handling and installation costs. Plaster keys directly to Styrofoam.



CAVITY WALL INSULATION
 Styrofoam used in cavity wall construction provides comfort and heating economy in schools, churches and commercial buildings. Easy to install and serves as its own vapor barrier.

**F. E. GATES
MARBLE & TILE CO.**

&

Desco Vitro Glaze of Indiana

Contractors In

Marble, Ceramic Tile,

Slate and Desco Vitro

Glaze Wall and Floor

Finishes

KENNETH D. EARL, General Manager

CLifford 5-2434

5345 Wintthrop Ave.

Indianapolis 20, Indiana

Rauland SOUND SYSTEMS & EQUIPMENT

"BETTER ENGINEERING FOR CORRECT AUDIBLE SOUND"

FOR
HOSPITALS — SCHOOLS
INSTITUTIONS — FACTORIES
STORES — PUBLIC BUILDINGS

PROGRAM DISTRIBUTION
BACKGROUND MUSIC
PAGING — INTERCOM

**FOR CONSULTATION
ON ANY SOUND PROBLEM**

CL 5-2466

A-1

COMMUNICATION & SOUND SERVICE

"Sound Consultant RICHARD RAUB B.S.E.E. ('44) Purdue"
5908 N. COLLEGE AVE. INDIANAPOLIS, IND.



INCLUDED IN THE COMPANY . . .

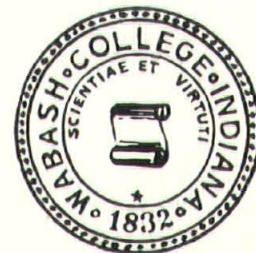
"we're mighty proud to keep"

Purdue—Wabash—Ball State Teachers . . . are just three of the colleges and universities, elementary and secondary schools for which Poston-Herron Face Brick are being used.

At P-H, "more than 50 years of craftsmanship in clay" is reflected in exclusive Postonians and distinctive Orientals, not to mention the many, many architectural reds and blends of quality face brick.

Architects find P-H Face Brick today's most imaginative material for interpreting their design ingenuity. Contractors and masons prefer P-H Brick because they are accurately-dimensioned for easy laying. Owners like P-H Face Brick because of their distinguished appearance and maintenance-free wearability.

*Your nearest P-H Dealer has
samples of the complete line.*



POSTON-HERRON BRICK CO., INC.

ATTICA, INDIANA

"Home of Exclusive Postonians / Orientals"

**QUALITY
FLUORESCENT LIGHTING
FIXTURES**

FOR

SCHOOLS

OFFICES

STORES

FACTORIES

**LOUISVILLE
LAMP CO., INC.**

LOUISVILLE 3, KENTUCKY

FOR QUICK SERVICE

CALL JU 7-6094

INDIANA REPRESENTATIVE

THE H. H. HOMAN CO.

JOHN G. LEWE

H. H. (SANDY) HOMAN

MARIEMONT CENTER BLDG.

ROOM 102

CINCINNATI, 27, OHIO

Jury Announced For Reynolds Student Award

The appointment of a jury for the 1962 second annual Reynolds Aluminum Prize for Architectural Students has been announced by the American Institute of Architects, which administers the competition.

The jury members are:

Olindo Grossi, FAIA, dean of the School of Architecture, Pratt Institute, New York City. A graduate of Columbia University's School of Architecture, Dean Grossi has been in private practice in New York since 1945.

Linn Smith, AIA, Birmingham, Mich., director of the American Institute of Architects' Great Lakes Region. A graduate of the University of Michigan's College of Architecture and Design, Mr. Smith is well known as a designer of school structures.

Harold Spitznagel, FAIA, a prominent architect of Sioux Falls, South Dakota. A graduate of the University of Pennsylvania's School of Fine Arts, Mr. Spitznagel is a past regional director of the AIA.

To date 37 collegiate schools of architecture have notified the AIA of plans to participate in the 1962 Student Prize.

The Reynolds competition offers a national prize of \$5,000 for "the best original design for a building component in aluminum." This top prize is divided equally between the winning school and the student or student group submitting the design. The design winner in each participating college is awarded \$200, and the collegiate winners are entered in the national competition.

The national prize will be presented during the AIA student convention in Dallas, May 7-11.

The 1961 prize was won by John Dewey, a student at the University of Cincinnati.

The national competition is open to all students in participating schools who have completed at least two years of an architectural design curriculum. Eligible schools are those in the United States which are members or associate members of the American Association of Collegiate Schools of Architecture, or which have a Student Chapter of the American Institute of Architects.

Dodge Outlook

Construction will enjoy its best year in history and set a new record for the 17th consecutive year according to F. W. Dodge Corporation's Construction Outlook for 1962.

Dodge's annual outlook statement, just published in Architectural Record, predicts that total construction contracts in 1962 will amount to nearly \$40 billion, a gain of 7 percent over the estimated \$37.3 billion for this year.

The Dodge outlook points out that residential building will register its best year of the recent past and that dollar volume of residential contracts will total \$17.5 billion, up 10 percent over 1961. Residential floor area is expected to increase 8 percent over 1961.

According to the Dodge report, non-residential building contracts will register a 4 percent increase in 1962 totaling \$12.7 billion. Floor area represented by these contracts is expected to rise 3 percent primarily because of a 10 percent jump in manufacturing buildings. Floor area of commercial buildings is expected to equal the 1961 total, while the physical volume of educational and science buildings is forecast to increase 2 percent. With the exception of hospitals, which are predicted to slip just below the 1961 level, all other building types in the non-residential category will register small gains in 1962.

41

STEEL STUD HOLLOW PARTITIONS • MEMBRANE FIREPROOFING • CURTAIN WALLS
SUSPENDED CEILINGS • FURRED PLASTER WALLS • 2" SOLID PARTITIONS • STUCCO
PANELING FOR EXTERIOR WALLS AND MARQUEES • ALL OF . . .

GENUINE

LATH and plaster



RESULT IN —

DESIGN VERSATILITY • FIRE SAFETY
ECONOMY • DURABILITY

INVESTIGATE — SPECIFY — DEMAND LATH and PLASTER

Lathing & Plastering Bureau of Indianapolis, Inc.

SECRETARY-TREASURER: WILLIAM F. BOYCE, P.O. BOX 572, INDIANAPOLIS 6, INDIANA

THE TREND IS TO ELECTRIC HEATING

FOR

- **Schools**
- **Motels**
- **Factories**
- **Offices**
- **Stores**
- **Apartments**

Because of its flexibility that permits a wide range of installations, *Electric Heating* offers a new, but proved advance in structure design.

Costs on equipment, installation and operation are available on actual installations in the Indianapolis area.

FOR FULL INFORMATION CALL
ARCHITECT and ENGINEERING
REPRESENTATIVE

MEIrose 1-1411—Extension 264

INDIANAPOLIS
Power & Light
COMPANY

MAJOR EQUIPMENT CO., INC.
CHICAGO 39, ILL.

STAGE LIGHTING EQUIPMENT and CONTROL SYSTEMS

For almost 50 years Major has supplied dependable stage lighting equipment to the electrical construction industry. For your requirements contact the Major representative in your area.

DIMMER SWITCHBOARDS
FOOTLIGHTS • BORDERLIGHTS • SPOTLIGHTS
FLOODLIGHTS • PLUGGING DEVICES
FLOOR & WALL POCKETS



Authorized representative . . .

Robert H. Merrill

STAGE EQUIPMENT
ESTABLISHED 1946

6520 WESTFIELD BOULEVARD

INDIANAPOLIS 20, INDIANA

PITTSBURGH TESTING LABORATORY

Established 1881



*Inspecting
Engineers
and Chemists*

3821 E. NEW YORK
INDIANAPOLIS
INDIANA

**Face Brick
Selected For
The New
LAWRENCE
HIGH SCHOOL**

**H. W.
LINABURRY
BRICK & TILE
CO.**

1604 DELOSS
INDIANAPOLIS
ME 6-3466

Culture of the City

PART II

It may be hard to discover and express the connotations of this new urban form which is so different from the ones of the past. Perhaps we could apply to it a designation used in contemporary painting: A-formal. However, we should not be afraid or impatient. A painting by Jackson Pollock has a logical and severe composition, even if it has nothing to do with the laws of academic composition. Schoenberg's music is firmly organized, even if, when compared to the musical tradition, it sounds chaotic and arbitrary. The same is probably true of the modern city: It has a structure, a new and powerful form which we have up to now sacrificed to a nineteenth century ideal which is dying, once and for all, with Brasilia. It is the challenge of contemporary city designers to uncover this kind of a-formal structure and let it free to grow.

So my first question is: How can we identify this new sizeless urban form, so essentially different from the traditional, static city that we all know by now as obsolete and bleak?

This question brings us into the core of the second problem: The relationship between city planning and city-making. The architects are, in this phase, the real protagonists of the city. But this does not make the situation much easier. In fact, modern architecture, in spite of its great achievements, seems to have fallen into a state of confusion and eclecticism. Without some agreement on architectural language, is it possible to re-design a coherent urban scene?

When we look at the history of Western civilization, we see that architecture either preceded or was simultaneous with town design. That is to say, all space-conceptions in towns reflected and translated in bigger scale space-conceptions which had been embodied in some building. I do not assume this to be a divine law, but it is a datum worth considering. Medieval town-space is identical with medieval architectural space; the pattern of Ferrara is the same as the pattern of its buildings; this is true for Fontana's scheme for Rome and for Haussmann's Paris. A perfect convergence of planning and architectural thinking is to be found in Wright, or LeCorbusier, or Gropius, or Mies; that is, in the urban theories formulated between the two world wars. Does this convergence of research and criteria still exist today? And, if it does, which are the buildings that express a

space-conception capable of being magnified in city scale? Is it the Seagram Building or the Guggenheim Museum? Idlewild or Ronchamp?

So far as we can see, the International Style ideal of isolated, pure, transparent prisms in space has been, if not denied, at least complemented by a tendency towards expressionistic plasticity and by a sort of Neo-Baroque inclination for visual continuity through undulating serpentine. I do not think such plurality of expression is necessarily negative. In the process of disclosing a new city form, richness of architectural language may be interpreted as a happy event. I have a liking for the architects who, when planning or re-designing a city, leave some problems unanswered, trust the natural growth, refuse to be dictators up to the window-curtains and the flower-pots. This liberal attitude seems congenial with a democratic approach, but to what extent can it work? One can visualize a sizeless and formless city of the future, just as beautiful as a Pollock or a Schoenberg composition, made true and vital by a various, audacious, personal architecture that, again taking from painting, we could denominate "action-architecture." But, in order to achieve such a challenging purpose, architects must be able to seize the present great opportunity to remould our cities, they should think in bigger terms, they should re-organize the profession so that it becomes the driving and promoting power of the entire building industry.

And here I am afraid that too many of our colleagues, at the very moment when we can win and become leaders of the building industry, retreat, give up, are tired, for I don't know what neurotic reasons. They seem to be content to continue to be minority report. They stop at Mondrian and Arp, or are bemused with stylistic details, vernacular evasions neo-Art Nouveau, neo-historicism, filligree and other architectural delights. You know that I have hailed architecture's emancipation from the doctrinaire of the thirties. But such freedom was won to meet new and bigger tasks, to extend architectural research in city scale, and not to indulge introversion and individual idiosyncrasies. Urban design is not an architectural cosmetic. Within the different sectors of the new a-formal city we should have a coherent sound and eloquent architecture to produce a vital third dimension. Let's remember that the degree of resistance

**General
Contractor
for
LAWRENCE
HIGH SCHOOL

F. A. WILHELM
CONSTRUCTION CO., INC.

Prospect & Southeastern
Indianapolis
FL 9-5411**

**Terrazzo Corridors
and Steps for
the New Speedway
High School By . . .**

**MIDWESTERN
TERRAZZO COMPANY**

Established 1938

**SHERMAN DRIVE AT 26TH ST.
INDIANAPOLIS
INDIANA**

of the third dimension is the barometer of the validity of an urban pattern. Sixtus' scheme for Rome is three-dimensionally so strong that not even Mussolini could destroy it, although he tried. But the small street of the Borghi leading to St. Peter's were not so strong, and the crime was committed.

My second question, therefore, is: What kind of interaction is there of different architectural tendencies in today's city-making?

The third and last question, urban renewal, is perhaps only a consequence of the first two. But it has difficulties of its own. I hesitate to offer any conclusions based on a quick look at present-day American cities. But since my arrival in California, I have toured the major large-scale renewal projects in Los Angeles, San Francisco, Chicago, Detroit, Pittsburgh and Washington. Perhaps a subjective impression from a friendly outsider may be of some use. I was certainly impressed by the brave effort made to deal with housing, urban expressways, industrial and commercial developments. However, it was not always clear to me whether these projects, taken together in their aggregate, will make the future city, will establish the framework of a new urban society.

If cities are to survive as cultural instruments, they must be more than a collection of public works projects. Houses or expressways may be produced on assembly line methods perhaps, cities are not. And where is the coordination between residential communities and motorways, business districts and recreational centers—in other words, where does urban design come into the picture? The architectural profession is evidently conscious of the new role it is called upon to fulfill in the national task of redesigning urban America. Indeed, the very significance of the architectural profession is at stake. In the process of city-making, there is no second, or third, or fourth place that architects can occupy: Either they come in first, or they are going to be the last. Either they promote, or they become the passive reflection of a disintegrated city life. Organic relationship between public works projects, organic relationship between these projects and the building industry at large; this is what urban design amounts to, this is where urban design becomes public policy. Either architects can show a way toward an integrated urban policy, or architecture is lost.

Never before was architectural design so dependent on urban design. The scope of urban renewal cannot be limited to housing, office triangles, shopping centers. When it is, architecture itself is not going to be very good. For instance, in many American cities, urban renewal, so far as I could see, means demolishing, with bulldozer technique, an urban section in order to rebuild it according to contemporary criteria. Often, at the end of a carpet of old houses, we see a series of new tall buildings, in the shape of towers or elongated prisms. Such contrast of dimension, structure and character is sometimes successful, as it attains a surrealist beauty. But can isolated towers or slabs constitute the entire semantics of urban renewal and offer a consistent method for re-designing urban America? Don't they sometimes lacerate the structure and the texture of the city, depriving it, together with the slums, of some of its historical and social

assets? A city atmosphere means interchange, movement, continuity, and the architecture for it cannot always be so violently discontinuous.

This is true especially of city sections reserved for pedestrians. There, we should have a type of architecture consonant not only in scale but also in quality to the pedestrian's tempo. In fact, too many pedestrian's centers in Europe look artificial and unconvincing because they do not have an architectural form of their own.

But urban renewal becomes a much more difficult operation when it is applied to monumental towns. In Italy, we are almost paralyzed by this problem. Opinions strongly diverge. I happen to be Secretary General of the Italian Institute of Planners, Vice President of the Italian Institute of Architecture, and University Professor of Architectural History. It is more than enough to give me a case of split personality about urban renewal. Historians would not change a stone of the past, some architects would like to clear everything up, planners change their opinion all too often. In the meantime, Palermo has become socially degraded to the point that only the "Report" by Daniel Dolci, perhaps the best living Italian who recently visited this country, succeeded in depicting. Venice is going to pieces, and its new town plan just approved does not offer any long-range solution. Milan, yes, is totally renewed, with the result that it is perhaps the ugliest city in Europe, a city where the Duomo and St. Ambrogio are the only buildings which look out of place and tune. In the next five years the historical center of Rome is going to be renewed, and the question is, once again: How to do it?

I think that this problem too concerns all of us. In spite of the differences between American and European towns, a philosophy flexible enough to be applied to American cities quite probably might work also for Europe.

These, Mr. Chairman and friends, are my main questions regarding the city's size, its new third dimension, and urban renewal. They are questions of an economic, social and esthetic nature at the same time, because the notion of anti-social beauty is just a contradiction in terms. I could stop with these questions, but I ask of you two more minutes to stress a point about which I feel very strongly, and which concerns international cooperation on planning policy, city design and urban renewal.

To be frank, can we expect a definite answer to these questions, from this panel or this convention? It is doubtful: We are no longer looking for formulas, for theories valid everywhere and nowhere. We believe in experiences and mutual collaboration, and this is an urgent problem about which perhaps we can do something right here and now.

As you know, there are many international bodies and organizations that are supposed to take care of exchange of information. But, for some reason or another, they do not seem to work. First of all, many of them collect facts and figures from official sources, general facts and apologetic figures; they never touch the real core of the matter, the specific city problems. Secondly, these official organizations either do not follow any clear philosophy concerning our urban future, or they follow two or three different philosophies at the same time. On one side, they have an abstract,

**Electrical
Contractors**

for

**VILLAGE WOODS
JUNIOR HIGH**

...

**McKAY ELECTRIC
COMPANY**

**ELECTRIC WIRING
AND FIXTURES**

**7671 BLUFFTON ROAD
P.O. BOX 2808**

Phone: SHerwood 4141

**FORT WAYNE
INDIANA**

**Plumbing,
Heating, Ventilating
Air Conditioning**

for

**VILLAGE WOODS
JUNIOR HIGH**

**HAUGK
PLUMBING & HEATING
CO., INC.**

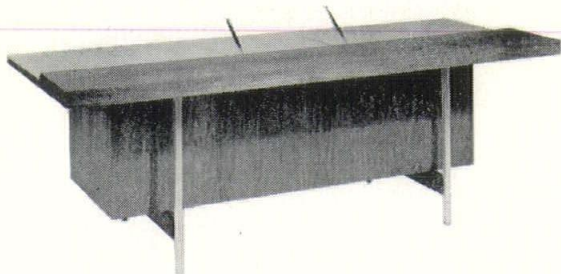
Contractors & Engineers

209 N. 13th Phone 3-3316

DECATUR, INDIANA

Conceived in the architectural
thinking of today,

TEMPLATE by Leopold



awaits you and/or your client
in our showroom . . .

Purford's

OFFICE INTERIORS

603 E. Washington St. MEIrose 5-7301

illuministic approach: They imply that there are certain universal values in urban civilization, which should work from Brazil to China because they are good for everybody. When you come down to find out what these universal values are, you discover that they are vague common denominators of no interest to anyone. Sometimes, they take the opposite approach: They try to adhere to what they call the specific cultural pattern of every nation, they find that everything that exists has some reason for existing, even the slums if they are picturesque enough. This is a paternalistic attitude, almost a colonial approach, and it works just as badly as illuministic abstractions. Finally, the major fault with all these international organizations is that they are paralyzed by the principle of non-intervention.

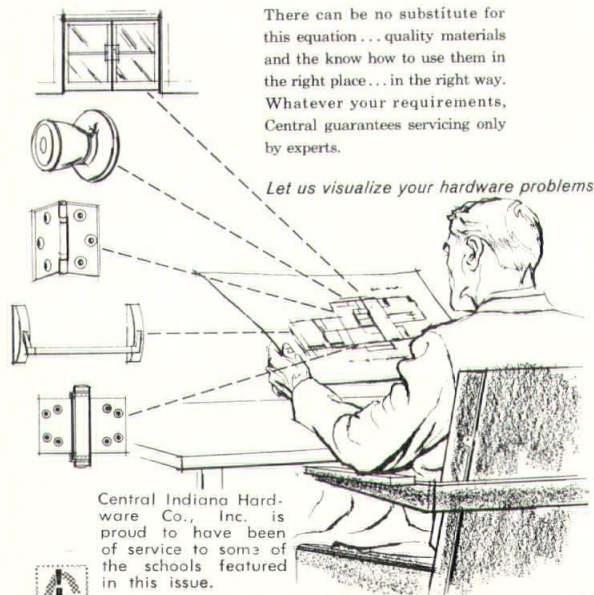
I submit to you that a totally different type of international cooperation on city-design should be organized. Something coming directly from the profession, anti-bureaucratic, quick to intervene in every part of the world, around a drawing board, with pencils in hand. Towns are to be re-designed, and in this task every country needs the support of others, and can contribute. A timely, friendly and competent intervention from outside can remove many difficulties that arise within a single nation.

However, whether you will consider this suggestion or not, I want you to know that whatever you do in re-designing urban America has a great impact on Europe. When the plan for Fort Worth was published, there was in Italy, a sincere enthusiasm: We felt that something had been done for Texas which was instrumental and meaningful also for us. The same can be said of the Golden Gateway Redevelopment in San Francisco, of your experiences in Detroit, in Pittsburgh, and in many other cities, of the admirable campaign on urban renewal that some of your architectural magazines are conducting. The same is true especially of Philadelphia, a city which, for the work being done in the University, in the planning commission and in the redevelopment authority, might be considered one of the world's major centers for city design today.

Fifteen years ago, I had the honor to speak at the Convention of The American Institute of Planners which was held in Celveland. This was in 1946. The title of my address was: "Town Planning as an Instrument of an American Foreign Policy." I meant what it implied. Unfortunately, during the last fifteen years, this instrument was little used, and American foreign policy was not always brilliant and successful. Something, however, is changing now, here as in the whole world. Expectation is in the air, and I feel once again that the architects' contribution can be determining. Town-making will perhaps be the final battleground between the East and the West. In an affluent society, the quantitative competition is going to become less and less important. The final battle will be fought on quality, and here city designers and architects will bear the greatest responsibility.

This is all, at least for the time being. My talk was meant to be only a prelude before the real thing. I am one of the many European disciples of Lewis Mumford. I am here to pose questions to the master and learn from all of you. Thank you.

HARDWARE+VISUALIZATION=SERVICE



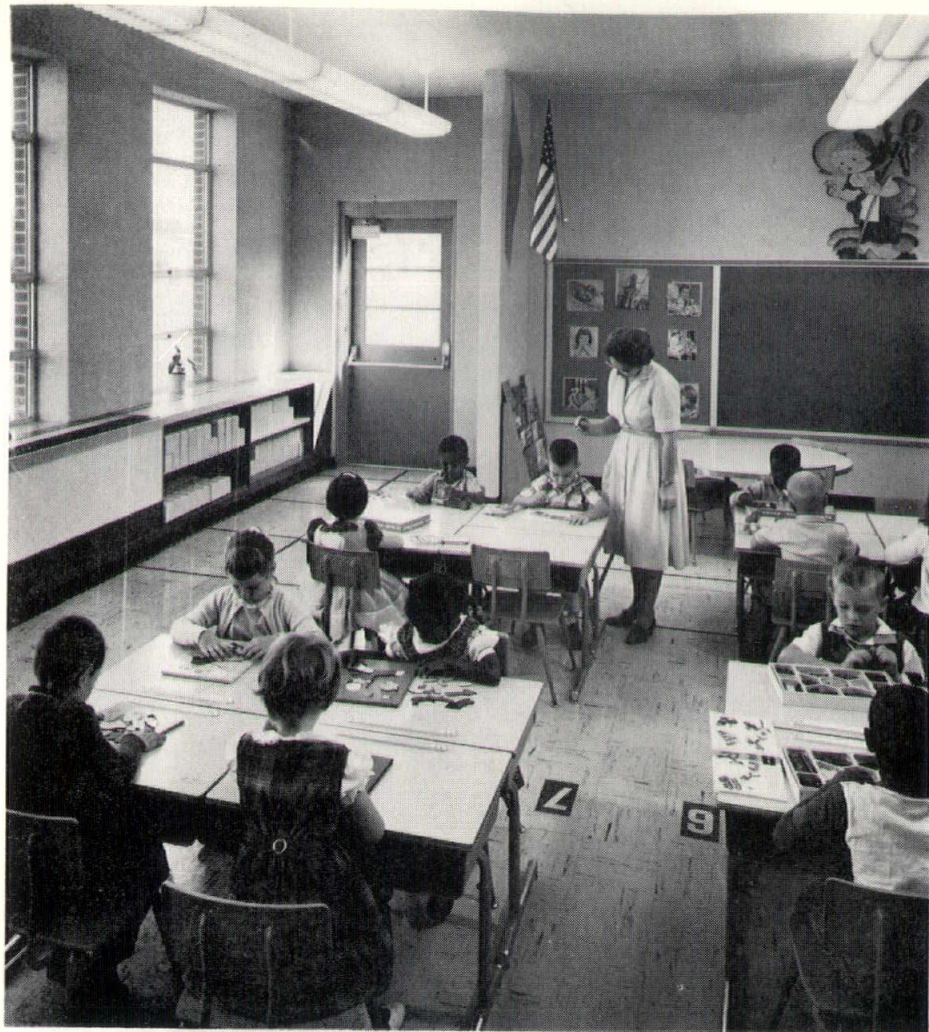
There can be no substitute for this equation... quality materials and the know how to use them in the right place... in the right way. Whatever your requirements, Central guarantees servicing only by experts.

Let us visualize your hardware problems

Central Indiana Hardware Co., Inc. is proud to have been of service to some of the schools featured in this issue.



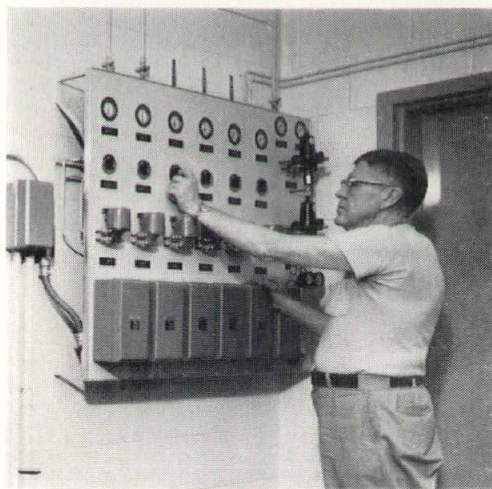
CENTRAL INDIANA HARDWARE CO., INC.
1134 EAST 54TH STREET • INDIANAPOLIS 20, INDIANA



Typical electrically heated classroom at the Slocum School, Marion



Compact electric water heaters



Automatic controls for heat

Marion All-Electric School Costs Less to Build, Less to Maintain!

Electricity in Marion's Frances Slocum Elementary School provides pupils and teachers with the best possible environment. With clean, safe electric heating, automatic ventilation, high-level fluorescent lighting, and electric water heating, this building will stay modern for years. It is estimated that some \$16,000 was saved over the original estimates for the school . . . because of its All-Electric design.

Everywhere you look in an All-Electric school, whether it's the lighting, heating, cooking, or water heating systems, electricity is saving money . . .

for the taxpayers. How? An All-Electric school uses only one source of energy—flameless electricity!

There are no ducts to install with electric heating. And there are no vents, flues, boiler rooms, or piping—the list is a long one. Use the space for an additional classroom. Since flameless electric heating requires practically no attention, there can be fewer maintenance people on the payroll.

Remember, only the cost of electricity has remained constant through the past 15 years. Other fuels have steadily risen in cost. This means an important savings for years to come when your school is All-Electric.



Special electric heating cable is provided in the floor of the kindergarten and in the room for physically handicapped children. With this type of electric heat, floors radiate a comfortable warmth. Teacher Mrs. Ruth Bramblett and her class demonstrate the floor's safety.

Write or Call



**INDIANA & MICHIGAN
ELECTRIC COMPANY**
System Commercial Department, 2101 Spy Run Avenue, Fort Wayne, Indiana
An Investor-Owned Public Utility

For Information!

THE INDIANA ARCHITECT
P. O. Box 55594
Indianapolis 5, Indiana

Bulk Rate
U. S. POSTAGE

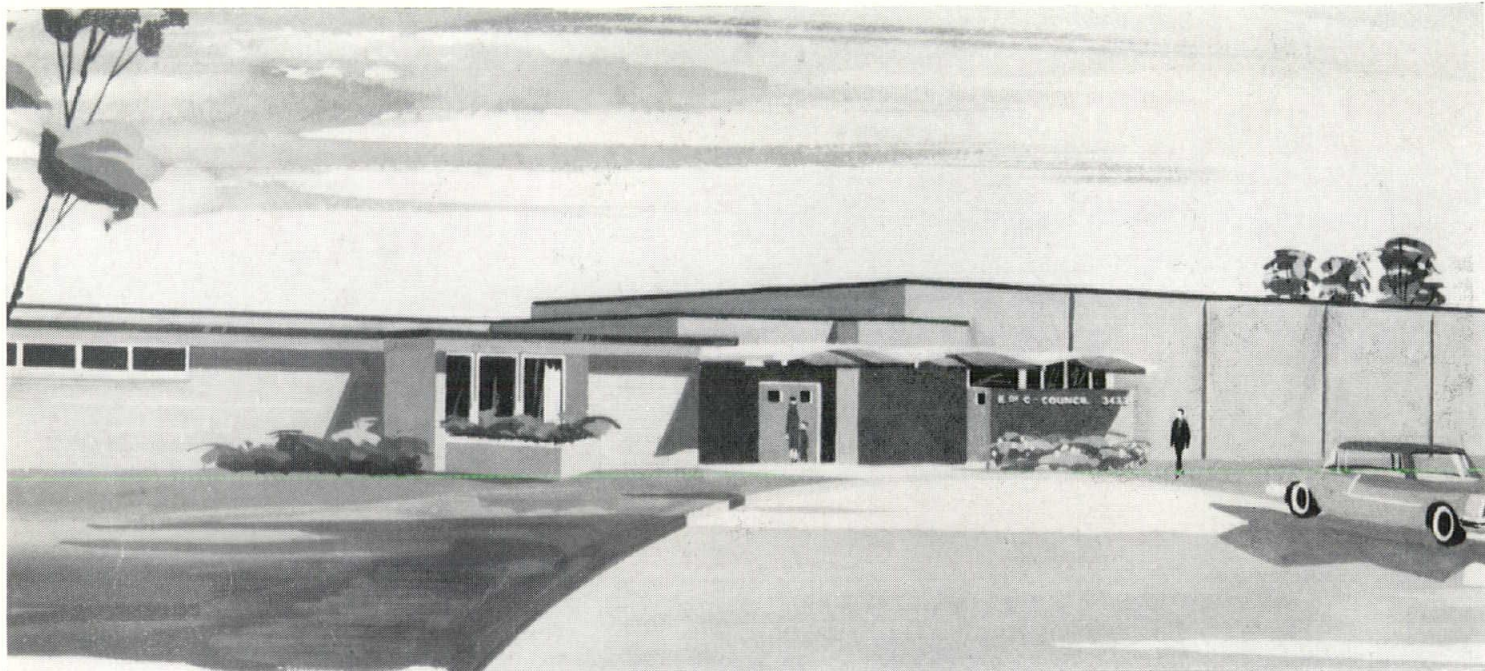
PAID

Indianapolis, Ind.
Permit No. 1497

Edmund R. Purves, FAIA
American Institute of Architects
1735 New York Ave., N.W.
Washington 6, D. C.

Return Requested

For Outstanding Masonry Design



Rendering by Drafting Unlimited Indianapolis

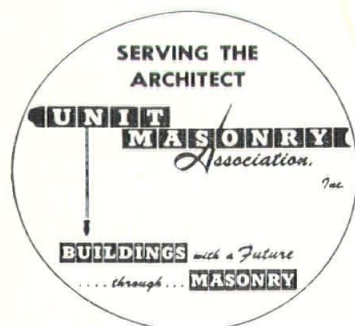
ST. PIUS X COUNCIL, KNIGHTS OF COLUMBUS, Indianapolis, Indiana

Buff Brick laid in traditional running bond blends harmoniously with the burgundy brick at the entrance-way to create a warm, colorful exterior.

Unit Masonry Association Salutes...

FRAN E. SCHROEDER, AIA & Associates

THE ST. PIUS X COUNCIL, KNIGHTS OF COLUMBUS, now under construction, combines imaginative design and the use of unit masonry to create a limitless flexible building which will serve the needs of the owners and community for many years to come . . . yet with virtually no expensive maintenance costs.



UNIT MASONRY ASSOCIATION, Inc.

5420 North College

Clifford 5-3114

Indianapolis, Indiana

Buildings with a Future... Through Masonry