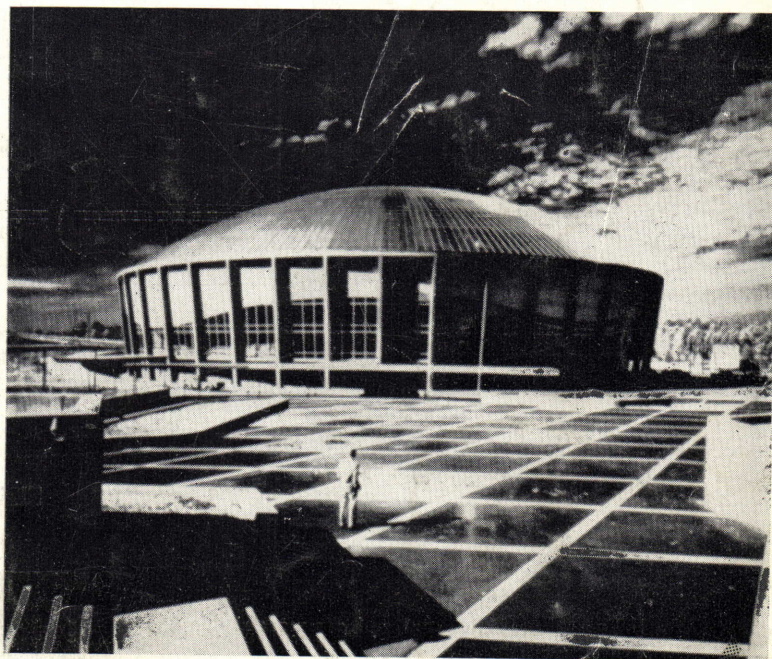
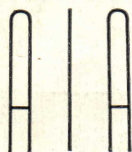


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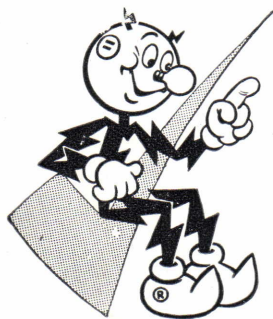
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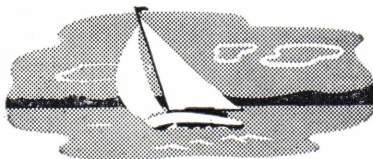
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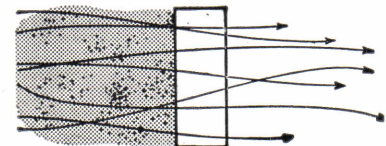
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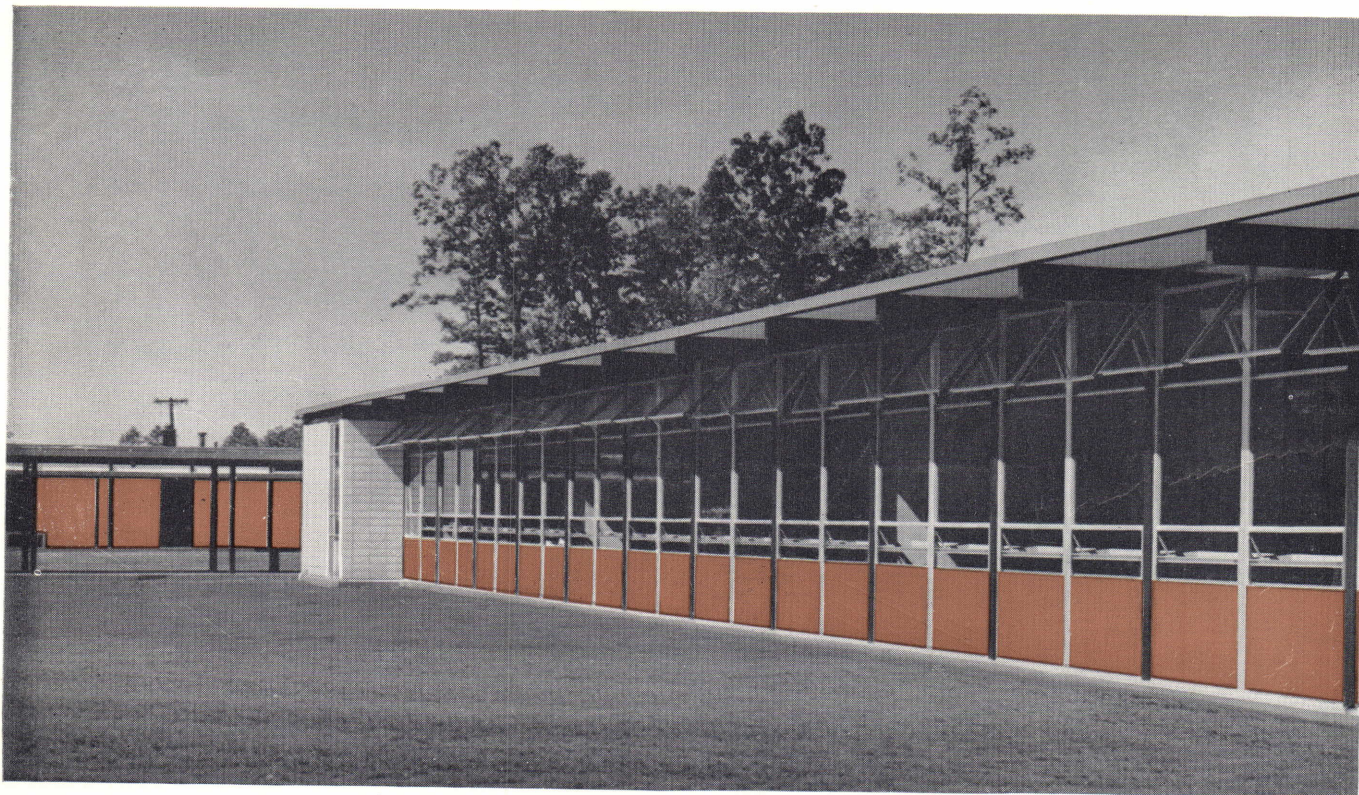
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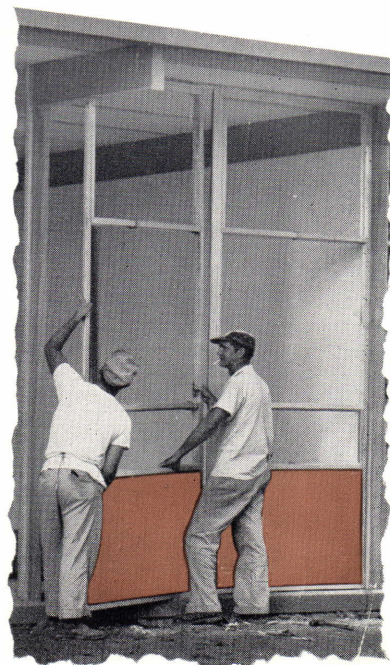
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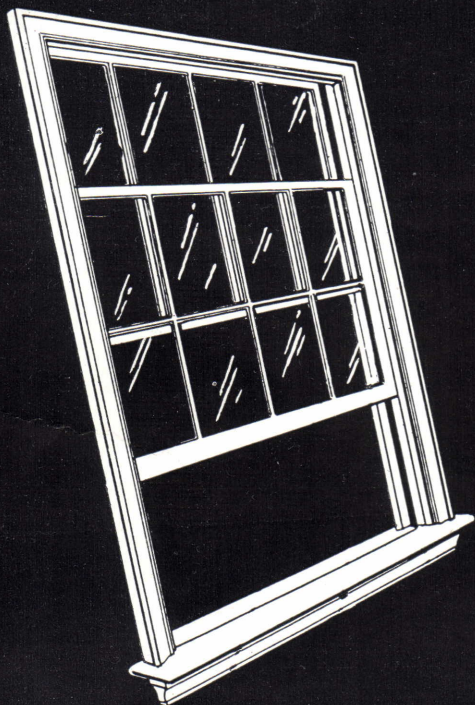
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JULY 3: Winston-Salem Council of Architects. El-Cam-Rey Restaurant, Winston-Salem.

JULY 5: Raleigh Council of Architects. S & W Cafeteria, Raleigh.

JULY 6: Guilford Council of Architects. Bliss Restaurant, Greensboro.

JULY 11: Charlotte Council of Architects. Thackers Restaurant, Charlotte.

JULY 14—AUG. 25: Seventh Annual Design Workshop, Instituto Tecnológico de Monterrey, Mexico.

JULY 17: Winston-Salem Council of Architects. El-Cam-Rey Restaurant, Winston-Salem.

JULY 19: Raleigh Council of Architects. S & W Cafeteria, Raleigh.

DEC. 9-11: Carolinas Branch, Associated General Contractors of America. Annual Convention. Boca Raton Hotel, Boca Raton, Fla.

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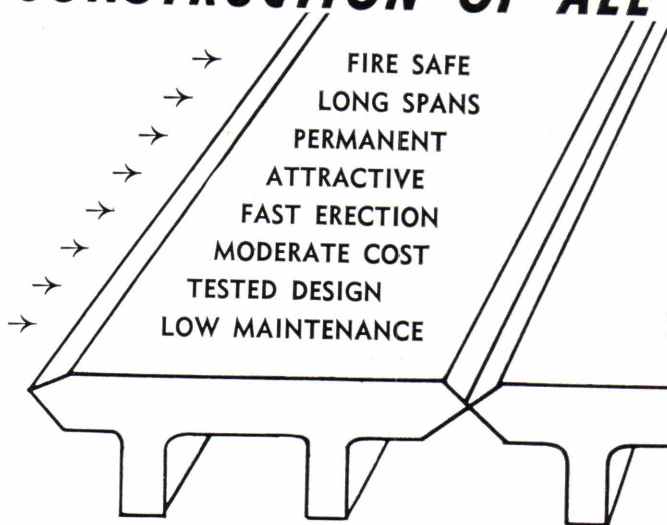
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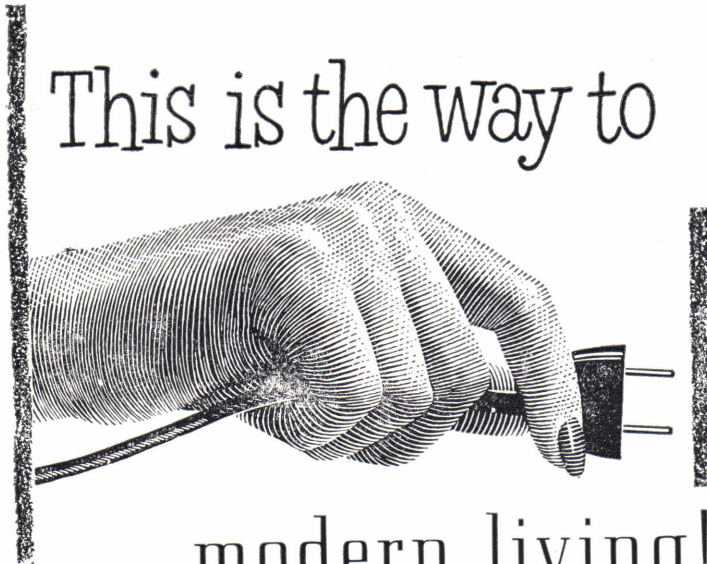
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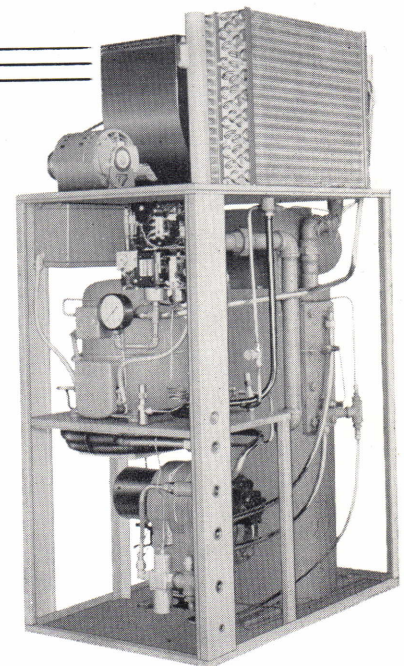
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Southern Architect

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May 1956

Number 1

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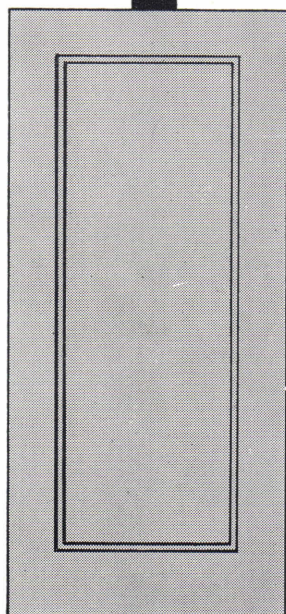
Charlotte Coliseum as seen from the Auditorium
A. G. Odell, Jr., AIA, Charlotte

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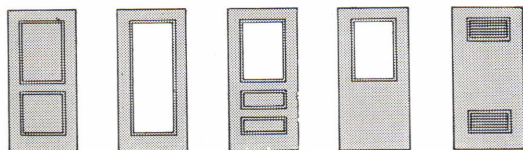
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❖ PRESIDENT'S MESSAGE ❖

A report on the 88th Annual Convention of the American Institute of Architects held May 15-18 in Los Angeles will require several issues. In addition to items of general interest there was much of specific interest to various committees, which will be forwarded to chairmen for their use.



WILLIAMS

A coast to coast flight in one day presents an impressive view of the changing landscape. The greatness and diversity of our country and the shrinking of time and distance are emphasized in a striking way.

Los Angeles is one of the world's largest cities and covers a tremendous area. The traffic problems created by an average of one automobile for every two persons—and apparently all in constant use—is fantastic. The freeway system relieves the congestion considerably, but the speed at which traffic moves—four lanes in each direction and at one intersection there are four levels of these multi-lanes arteries—produces a real pileup if an accident occurs. Helicopters take over upon occasion to direct jamming traffic. We rented a car for several days to advantage and found no difficulty and little difference in the driving when maintaining the speed of the lane.

Our hosts were generous and hospitable. The attitude of all seemed relaxed and considerate. There were eighteen hundred people registered. Four hundred and eighty-two official delegates from 104 Chapters represented over 11,000 Institute members—a majority of all the Architects in the country and a much greater majority of the total number of offices in practice.

The theme of this Convention was a statement of professional purpose—"Architecture for the Good Life." The mere satisfaction of the physical needs for shelter must be transcended to produce in addition the atmosphere for spiritual enrichment. To more completely fulfill our obligation to the public we share in the work which culminates at these conventions. Here in the words of our dedicated past president, George Bain Cummings—"We meet and greet, we learn and impart, we discuss and decide"—all in the warm hospitality of beautiful Southern California.

Like a seven ring circus there was more to see and do than anyone or even two could undertake. I will report on as much as possible in the following areas—business sessions and actions of the Institute; instructional seminars on practice and on chapter affairs; educational tours of architectural interest; individual conversations on specific problems; entertainment and sight-seeing; decisions and plans for the future; highlights of talks by distinguished speakers.

Let me suggest that all who possibly can plan to attend the Convention in Washington, D. C. in 1957—the 100th year of the American Institute of Architects. Leon Chatelain, Jr., of Washington is our new President, and a once-in-a-lifetime event is being planned. You will not regret participating.



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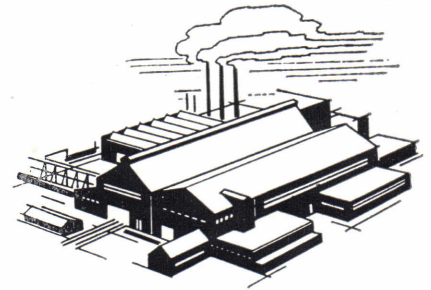
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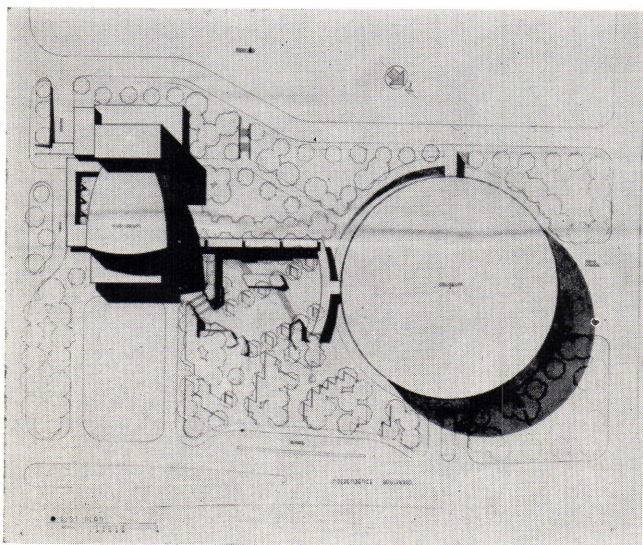
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AUDITORIUM AND COLISEUM

CHARLOTTE, N. C.

A. G. Odell, Jr., AIA, & Associates

CHARLOTTE, N. C.

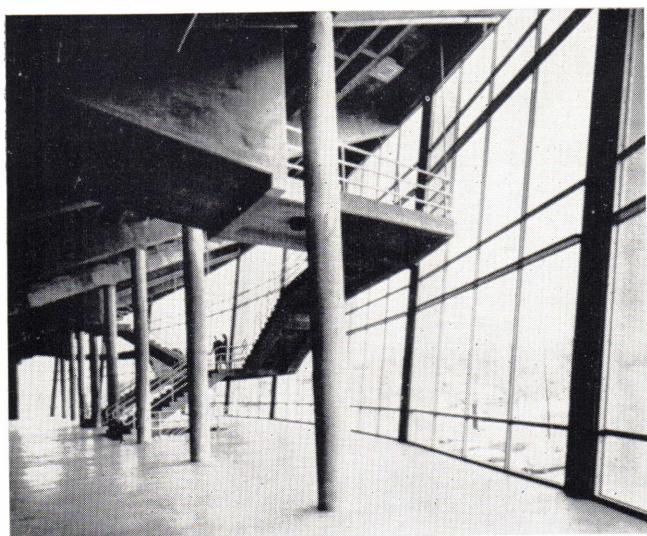
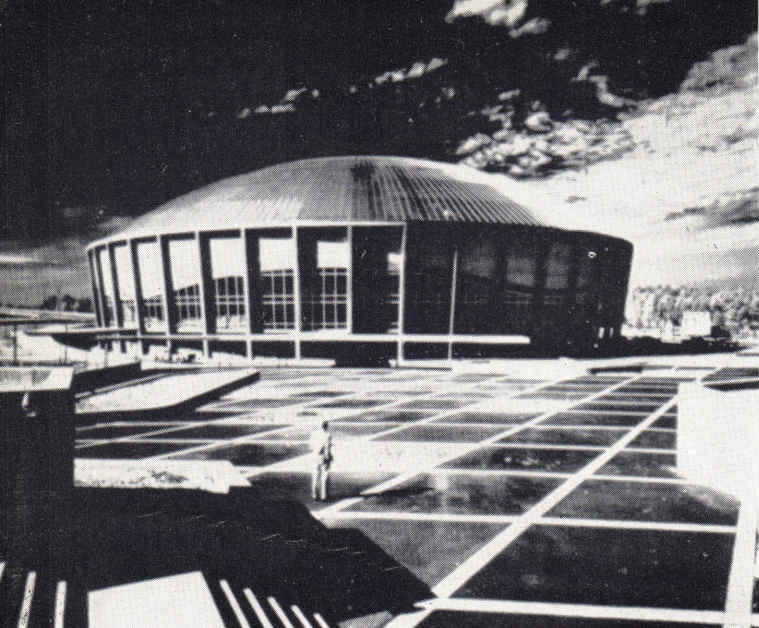


Charlotte's auditorium and coliseum is the product of long and extensive preliminary study and planning before the architects, A. G. Odell, Jr., AIA, and Associates, of Charlotte, chose its final design.

The steel dome of the coliseum, spanning 334 feet, is the largest in the world and has attracted visitors from throughout the entire United States.

Planned as a civic center and built with public funds in the form of municipal bond issues, economy in construction and maintenance, flexibility and ease of circulation were the factors sought in establishing the basic design of the two structures. The result paid off in two simple structures whose beauty and practicality have placed them among the most highly publicized buildings in the world.

In the beginning, a 23-acre site three and one-half miles from the center of Charlotte's business district, on the principal east to west boulevard



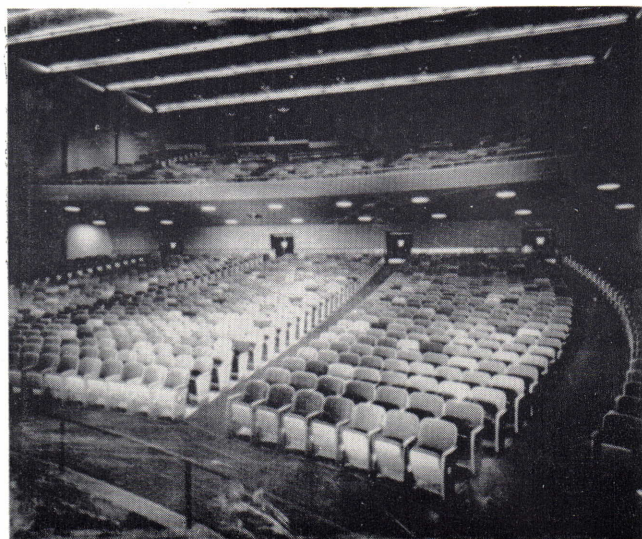
of the city, was proposed for development. Two buildings were proposed; one in the nature of an auditorium seating 2,500 people for the presentation of concerts, theatrical performances and similar entertainment, and the other as a coliseum to accommodate a minimum of 10,000 permanent seats for such attractions as athletic events, circuses, ice shows, horse shows, and like activities.

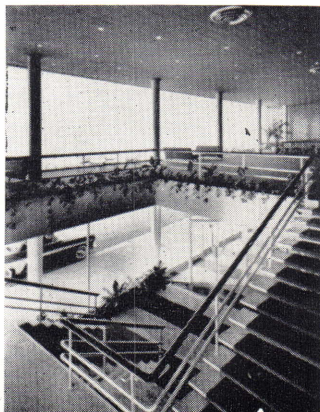
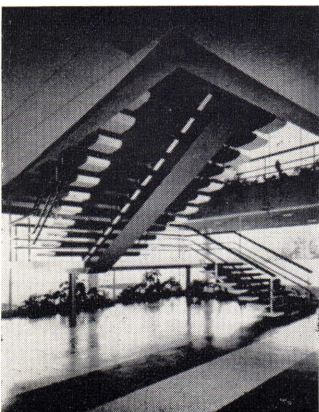
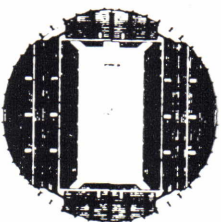
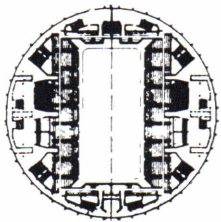
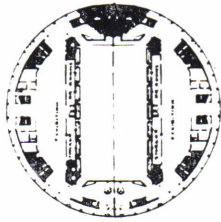
Public funds were provided through bond issues and the primary concern was to provide the facilities in the most economical possible cost consistent with reasonable ease of future maintenance. It was also desired to provide space for a possible third building to house exhibitions, provide meeting rooms, and like activities, but this was not included in the present program.

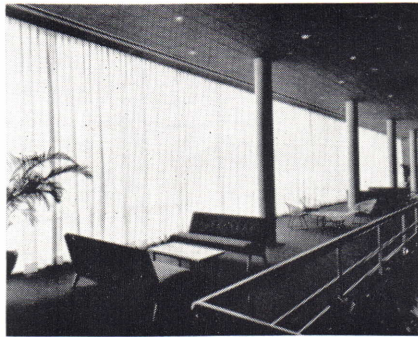
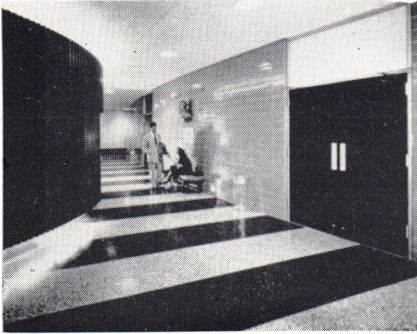
The basic problem of designing the coliseum in proximity to the relatively small auditorium, separating as much as possible their resultant pedestrian traffic and sound transmittal, coupled with the desire to provide a future site for an exhibition building of one or two stories in height, which could be utilized in conjunction with either the auditorium or the coliseum or both, resulted in placing the two buildings approximately 200 feet apart. The property on which the coliseum is located is approximately 15 feet lower than that of the auditorium, which assisted in mitigating the relative preponderance of the coliseum. The coliseum was placed close to the boulevard and the auditorium was set back a greater distance to provide a landscaped foreground as a complement to its more formal activities. Parking on a higher natural ground level was relegated to the rear of the two buildings. Streets were provided to surround the entire property and also radiate to the rear to existing streets, with the parking lots normally being vacated in 15 minutes.

The basic design for the auditorium was determined by the seating requirements and optimum acoustical benefits, with these factors dictating the shaping of the seating area.

Two large chorus dressing rooms and five small dressing rooms, together with work spaces and supplemental minor areas were provided on the





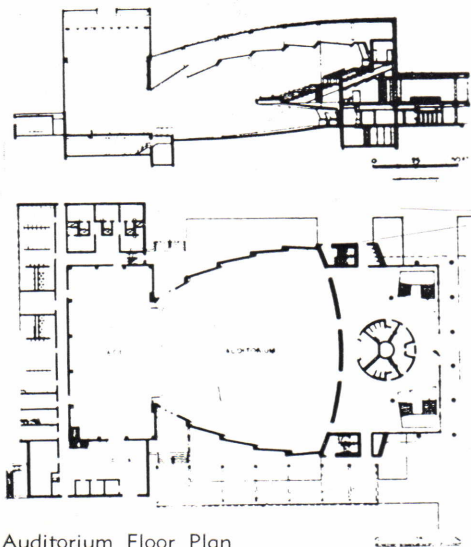


Auditorium Interiors

stage level. Additional storage space and dressing room facilities for musicians and stage hands are provided under the stage level.

A central heating plant for both auditorium and coliseum is located in the basement area of the auditorium as is the air conditioning equipment for the auditorium only.

Above the brilliantly lighted lobby, a large semi-darkened lounge is located on the second floor with concession facilities. Public toilet facilities are on both floors. In addition to the long covered walkway and drive at one side, the front drive is par-



Auditorium Floor Plan

tially covered by the overhang of the second floor lounge to provide weather protection at the entrance.

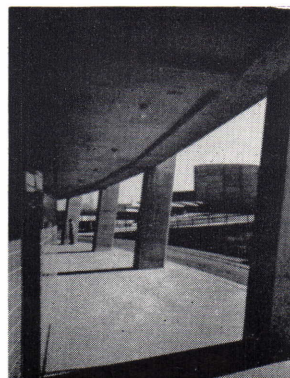
The design of the coliseum was primarily influenced by the need for economy of construction and maintenance, flexibility of use, and ease of circulation. The circular shape of the building gives maximum square footage for the perimeter, a most economical roof structure, and places a maximum number of seats on either side of the arena floor. The size of the arena floor was determined by the necessity of accommodating horse shows, circuses and ice hockey, which require the maximum in floor space.

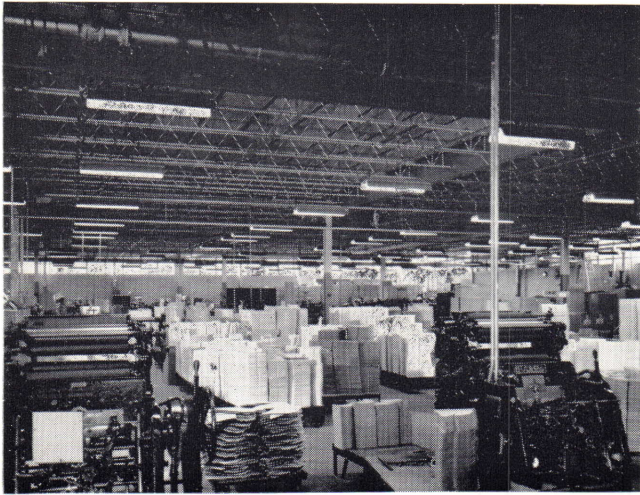
Aside from the upper vomitories which are reached by stairs, both the first and second levels of the coliseum can be reached without the use of exterior stairs. The second level can be reached directly from a bridge coming from the parking lot, which is some 15 feet above the arena, or first level. From this second level, seats can be reached directly through the lower vomitories. At this level continuous open concourses encircle the buildings with exterior glass walls. Interior open stairs connect the two levels. Concessions, toilets and miscellaneous related facilities are on this level as well as on the lower level.

Main ticket offices are provided on the first level, along with offices, conference rooms, and open areas which are equipped with utility outlets, as is the arena floor, to accommodate temporary exhibition booths until such time as an exhibition building is provided between the auditorium and

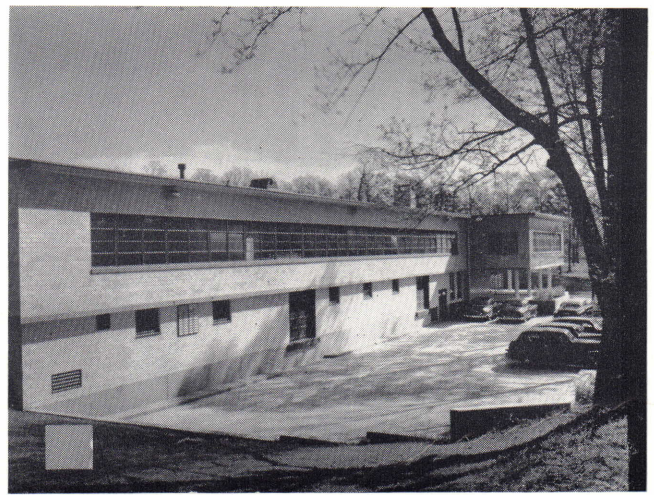
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Coliseum

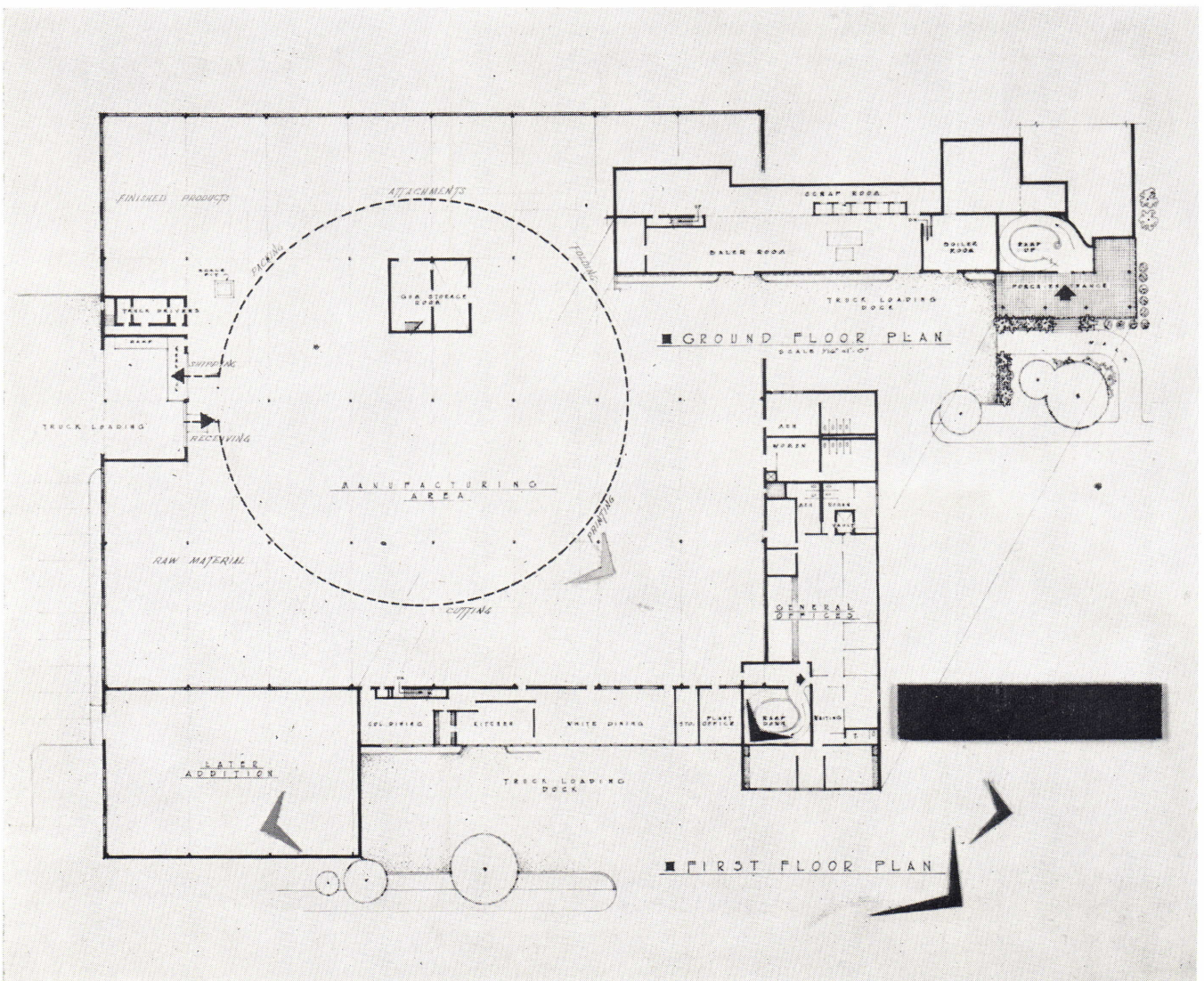


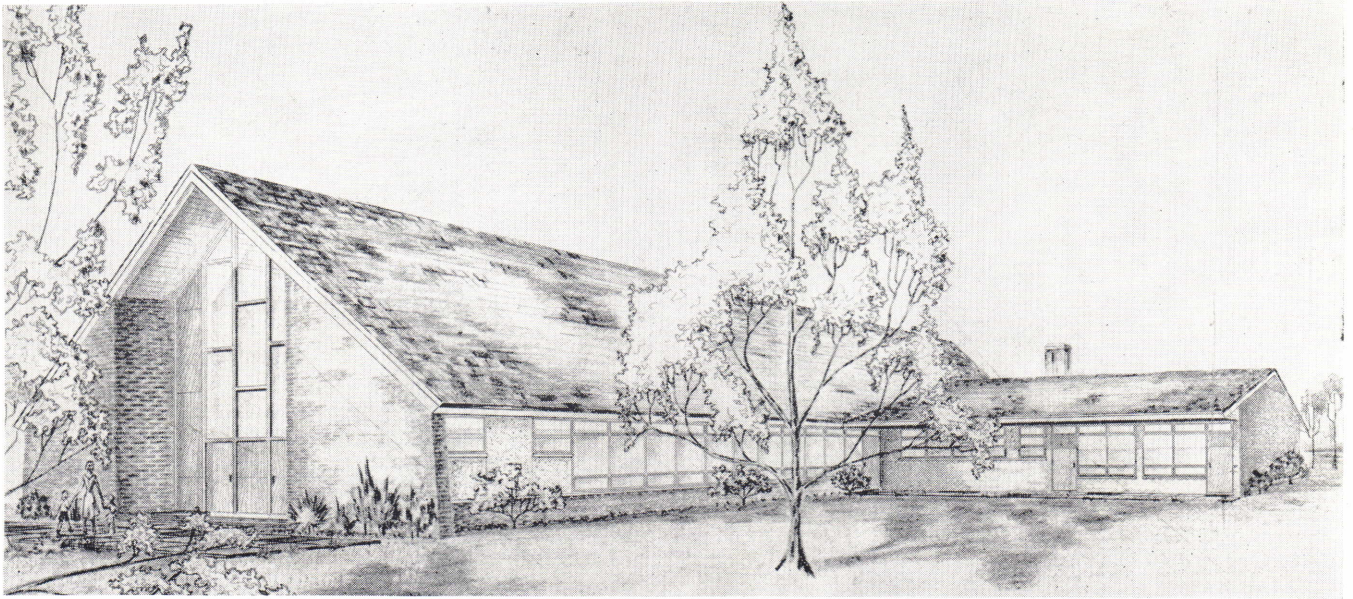


Interior



Exterior



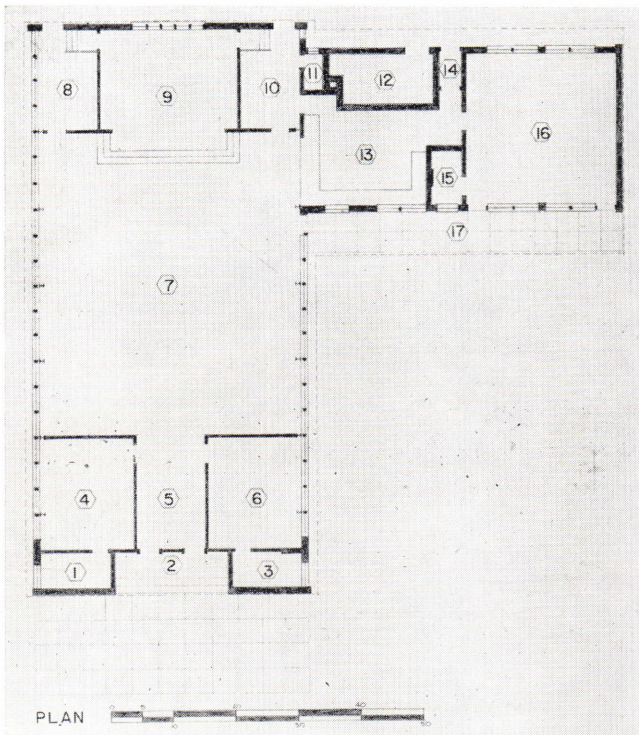


FELLOWSHIP HALL

FAYETTEVILLE, N. C.

Basil G. F. Laslett, AIA

FAYETTEVILLE, N. C.



The Fellowship Hall of the First Christian Church of Fayetteville is the first unit of a complete church building program, which will include an educational building, church and chapel in addition.

Basil G. F. Laslett, AIA, of Fayetteville is the architect for the project and it was necessary for the architect to develop the complete preliminary design for the approval of the church before proceeding with the first unit.

The exterior walls of the Fellowship Hall are face brick and Mo-Sai stone panels. Windows are the aluminum awning type. The floor is concrete slab on grade, with asphalt tile finish flooring and wood platform.

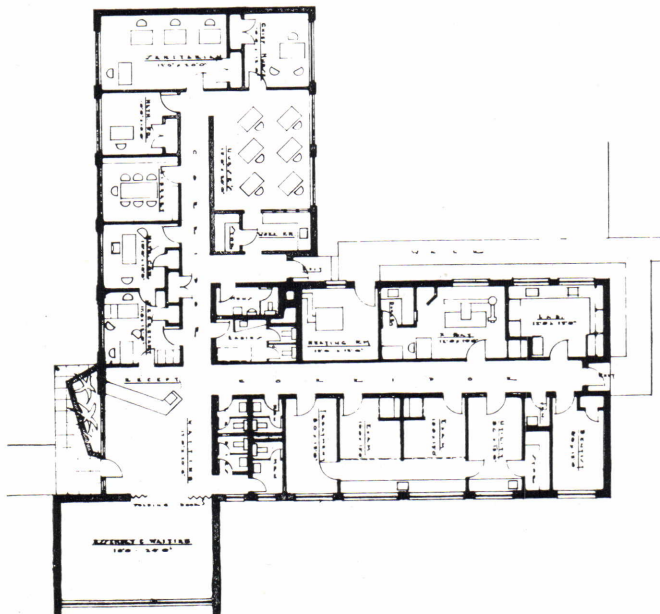


HEALTH CENTER

SHELBY, N. C.

Breeze, Holland & Riviere, AIA

SHELBY, N. C.



Cleveland County's Health Center provides facilities for the county's health department, with ample administrative office space, examination rooms, and treatment rooms. The building, constructed by Cleveland County with state and local funds, was designed by Breeze, Holland & Riviere, AIA, of Shelby.

The brick structure has administration offices of exposed block, while the examination and treatment rooms are plastered. Acoustical plastered ceilings were used throughout the building, with concrete deck and concrete floors with asphalt tile. The general contractor was A. A. Ramsey & Son, Inc., of Shelby.



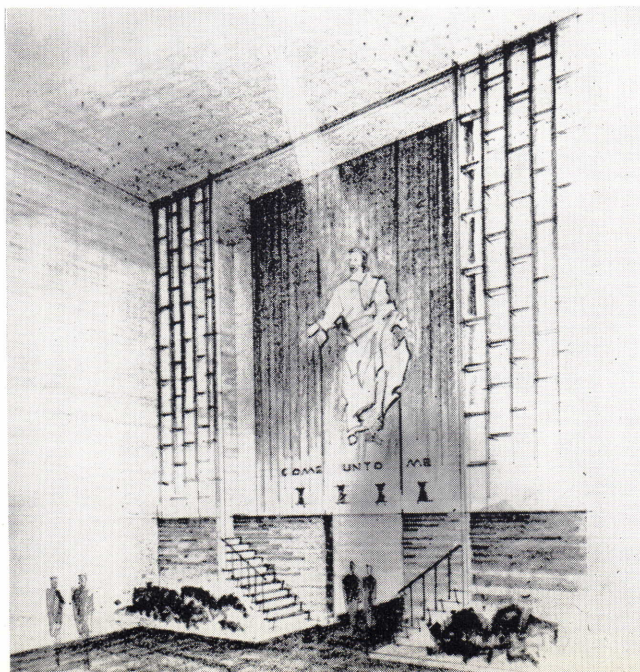
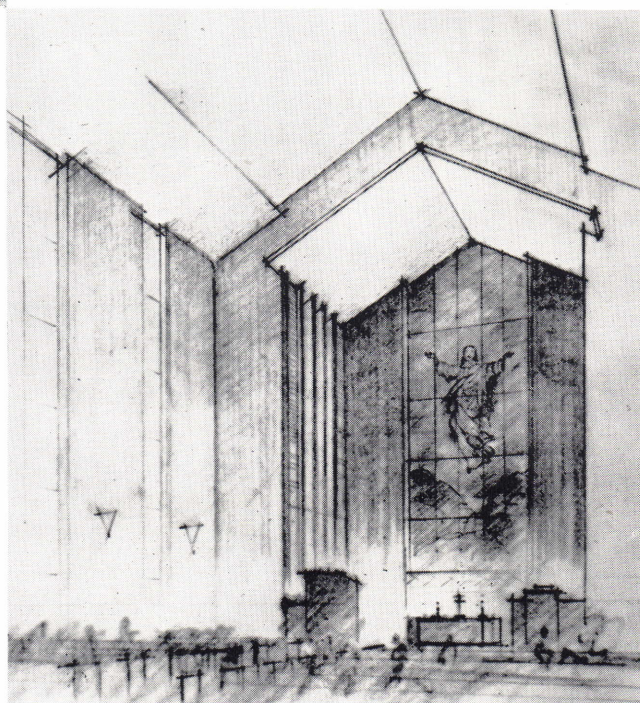
WESTMINSTER PRESBYTERIAN CHURCH

CHARLOTTE, N. C.

James A. Stenhouse, AIA

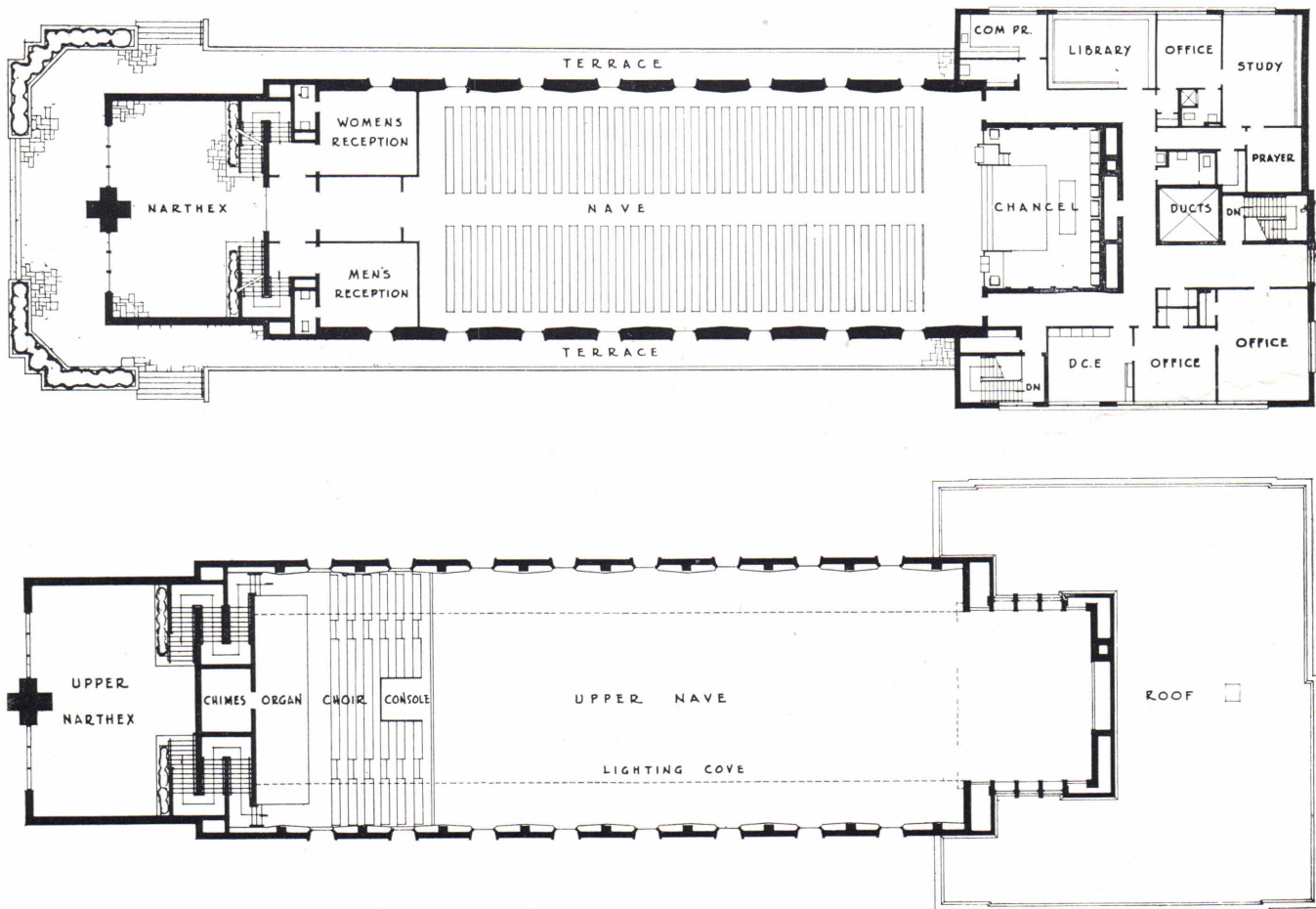
CHARLOTTE, N. C.

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The new Westminster Presbyterian Church in the Eastover section of Charlotte will be one of the few churches in the Charlotte area that is not traditional in style. The architects recommended a contemporary design and the question of contemporary over traditional style was favored by the congregation by a vote of approximately four to one. However, the design chosen is still conservative in its general proportions.

The site is a triangular plot in the thirty-five degree fork of a busy intersection. The grade drops twenty-five feet from the intersection so that there is a full floor under the auditorium with grade-level entrances to the side streets. This lower floor is twelve feet wider than the auditorium or nave,



and this additional width makes possible a six-foot wide terrace on each side onto which the side doors of the nave open. This treatment also reduces the apparent height of the side walls. A future Fellowship Hall and Educational Building will be built facing the side streets.

Orientation of the site also played a big part in the design. The congregation faces eighteen degrees east of south which is the mean location of the sun during the hour of church service, but its direct rays are excluded by the blank south wall. The side windows of blue-tinted, heat absorbing plate glass, four feet wide and forty feet high, are set in a two-foot reveal to keep out the sun as it swings from southeast to south. The walls are furred to two-foot thickness to conceal the air conditioning ducts and the legs of the rigid steel frame.

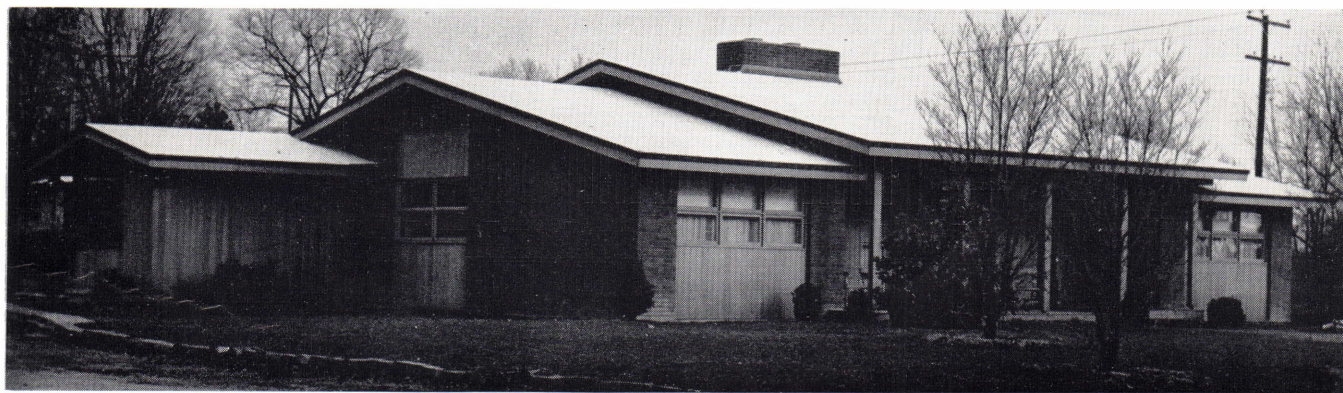
The front elevation facing the intersection is largely plate glass. There is a twelve-foot wide, forty-foot high glass panel with three glass doors on each side of the center tower. This being a northern exposure the glass area is not a large load factor in the air conditioning. The wall opposite is of redwood on which is mounted a large spot-lighted figure of Christ facing the entrance. Under this figure is the entrance to the auditorium and the stairs to the balcony. The side walls of this very spacious narthex are blank without

any openings. The floor is slate, the same as the exterior terrace.

The walls of the chancel are natural finish mahogany matching the chancel furniture and all of the woodwork and pews of the nave. In the center of the rear wall of the chancel, which is the focal point of the nave, is a large twelve-foot wide and thirty-five-foot high tinted glass panel featuring an ascension figure of Christ. The quantity of lighting desired behind this panel can be controlled by a rheostat. The side walls of the chancel have narrow windows of glass in several tints between vertical fins. These windows are hidden from view but their light brightens the chancel area and the sunlight reflected from the hidden side of the fins changes gradually from one side of the chancel to the other as the sun moves during the hour of service. Behind these fins are multi-colored lights on rheostats which can be controlled from the pulpit to change the color of the chancel slowly from gold to purple or vice versa.

The nave is lighted by indirect fluorescent lighting in a cove down each side of the forty-foot high ceiling.

The organ and choir are located in the balcony, the entire works of the organ being left exposed at the back of the balcony to assure the very best tones possible.



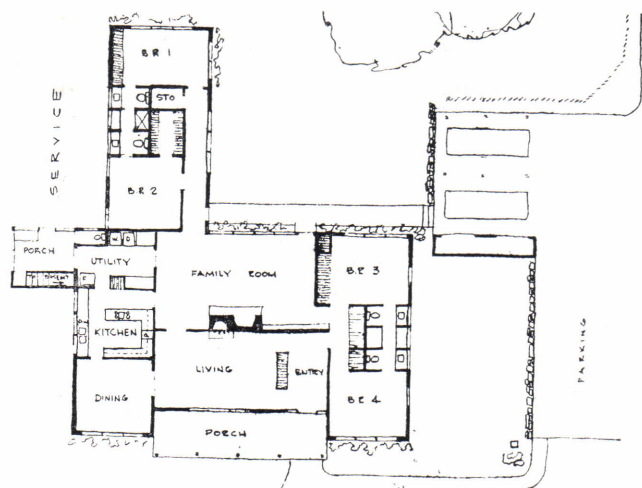
RESIDENCE

MONROE, N. C.

Beemer Harrell, AIA

HICKORY, N. C.

Floor Plan



The heart of this residence is the family room, which overlooks a landscaped yard enclosed by a louvered fence.

The home was designed by Beemer Harrell, AIA, of Hickory, for Olin B. Sikes of Monroe.

The family room is a high ceilinged, roomy area in which warm natural materials were used. The ceiling and beams are of fir, with brick chimney and cork floor. Radiating from this are the entry, living room, dining room, kitchen, and sleeping quarters. The entry, living room, and dining room are essentially one space with subtle, yet clear, divisions. The four bedrooms are grouped in twos so that a three compartmented bath falls between each two. For all practical purposes, each bedroom has its own bath.

Brick and cypress siding were used for the exterior, with a white marble chip roof. No paint was used at all on the exterior, with the cypress being treated to achieve a silvery grey color. The house is basically contemporary, with concessions to the fine collection of antiques owned by the Sikes.

TRUE ECONOMY IN SCHOOL CONSTRUCTION

By WILFRED F. CLAPP
Assistant Superintendent, Michigan Department of
Public Instruction

The public has always demanded economy in the expenditure of public funds, and it certainly has the right to do so. But just what true economy is has not always been well understood, especially with regard to school building construction.

Real economy in a school building may be defined as the most value for every dollar spent. It is made up of many elements, the most important of which is the extent to which the building will meet the needs of the school program throughout its useful life. Also the truly economical building will be a safe, healthful and emotionally satisfying environment for those who use it through the years.

There are several opportunities for achieving true economy in school building, planning and construction. The first is by the development of and adherence to a sound, long term plan. This will avoid opportunistic and haphazard construction to meet a crisis in a hurry, with a sad realization later that the money has not been wisely spent.

Every building built anywhere at any time, whether one room or one hundred should be part of a total master plan. Every dollar spent should be toward the accomplishment of that plan. Space does not permit a complete discussion of how such a plan is formulated, but some elements will be briefly mentioned to show their relationship to true economy.

First, and basic, is a determination of the nature and extent of the school program for which the housing will be provided. If building funds are scarce and are committed to a particular project without a review of the entire program, the risk is great that money will be wasted by spending it for the wrong thing, or that so much money will be spent for one purpose that other needed facilities cannot be provided, or that the money will be spread over so many projects that none can be of satisfactory quality.

One decision which must be made about the program is the age range to be served. Should the district operate a nursery school program? Should it offer a community college program? In fact, is the district really able to support a high school? There are thousands of districts in the country which operate high schools so small that they cannot provide a good program at reasonable cost.

When the educational program is extended beyond the resources of the community, the taxpayer is not likely to get his money's worth because neither the building facilities nor the funds for operation will permit a suitable quality of education for the dollars spent. It will not be easy for the board of education, in the face of tradition, local pride and commercial pressures to take a hard, realistic look at the facts and to make the

necessary decision.

But if each community operating a marginal high school bases its building plans on the idea of outdoing its neighbor and "saving" its high school, an inadequate educational program at both elementary and secondary levels may be perpetuated. Certainly this is far from sound economy.

A second element of a well-conceived long term plan is the determination of size and location of buildings. This will be based on carefully study of present and future enrollments for the district as a whole and by neighborhoods. While enrollment predictions are not infallible, they are more likely to be right than if there is no study. When building funds are spent without such study, several risks are incurred which might be avoided:

1. A building may grow haphazardly by small additions until it becomes an unworkable maze of different floor levels, stairways and corridors or until the building is so large that the quality of education suffers.
2. Opportunities for advance purchase of sites may be overlooked and eventual site acquisition may be much more costly than would otherwise be the case.
3. Buildings may be erected in the wrong places and then not be fully utilized.

A third element in the development of a long term plan is a careful study of existing buildings. Such a study might indicate ways of increasing the utilization of a given building by slight remodeling, by changing its use or by shifting attendance area boundaries. Sound decisions can be made as to which buildings should be remodeled, which ones renovated, which ones added to, and which abandoned.

Another major opportunity for achieving true economy is by careful preparation of educational specifications for a given building. Educational specifications tell the architect in detail about the building needed including the number to be housed, the size of groups, the ways teachers teach, the kind of space needed for good teaching and learning, the supplies, tools and equipment needed to carry on the activities in the building.

The preparation of the educational specifications should be the joint effort of the school staff and interested citizens. At first it might seem that such a process would result in everyone dreaming up what he would like and then adding everyone's desires together. This is, of course, impractical and would, no doubt, result in extravagance.

But with the proper leadership the participants can think basically about the program to be operated and what is really needed to house it properly. From this can emerge, assuming good architectural services, a building which will serve well the pro-

A third major way of achieving true economy is by obtaining good architectural services. The fact that funds are limited and needs are great should be all the more reason for obtaining the most competent and creative architectural service rather than falling prey to the practitioner who sells himself on the basis that he can build a building cheaper or that he will work for a smaller fee than some other architects.

The truly creative and capable architect will produce the most economical building in terms of first cost, maintenance and operation costs during the life of the building, and educational efficiency. When he is forced to compromise to reduce costs, he will select wisely the methods of cutting costs with the full knowledge and understanding of his client.

There are many ways that a good architect can economize of which a few general ones can be mentioned here:

1. Shape and perimeter of building.
Without sacrificing unduly such objectives as good natural lighting and ventilating, good grouping, noise control, general attractiveness, and educational utility, he will attempt to enclose the square footage of the building in the smallest perimeter and will avoid a variety of complicated shapes.
2. Economical use of floor space.



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He can achieve economies by arrangement of space within the building and on the site. He can perhaps reduce corridor areas in various ways or design them to serve more than one function.

3. Ornamentation and non-functional elements.
He will avoid useless ornamentation and non-functional elements such as battlements, towers, cupolas and columns. There are simpler and more economical ways of achieving beauty. He will constantly search for things which may be omitted without sacrificing performance or other objectives.
4. Choice of materials.
He will choose materials wisely, keeping in mind not only original cost but also the cost of maintenance and operation.
5. Method of construction.
He will be alert to the most recent developments in the construction field and will use those which will save money for his client without sacrificing other objectives.
6. Completeness of documents.
He will prepare complete working drawings and specifications, and will thereby attract the bids of the best contractors. The conscientious contractor welcomes complete and detailed directions because more accurate bidding is possible and misunderstandings and delays during construction are avoided.
7. Bidding procedures.
The time to take bids is when contractors want work. The architect will know when this is and will advise his client accordingly. Sometimes a delay of a month or less in taking bids may save thousands of dollars, because of more active competition for the award.

A fourth major way of obtaining true economy is through wise handling of the bond issue. The more attractive the investment, the lower the interest rate will be.

Again, placing school bonds on the market at the right time is important. Expert technical assistance throughout the bonding process will usually save the school district far more than the fees paid for such services. A saving of one quarter of one per cent in interest rate on a long term bond issue will represent thousands of dollars in saving to the taxpayer.

No discussion of economy in building construction would be complete without mentioning two fallacies which should be avoided, namely, temporary buildings and stock plans.

Those advocating temporary buildings state that such buildings can meet a critical need more quickly and cheaply and that they will tide the district over for a few years until "things are better." Experience has shown that the time never seems quite opportune to abandon the temporary.

There are always more pressing needs. It can always be used for "one more year."

Does the school district get full value for dollars spent on temporaries? If the temporary is used only a few years as intended, its cost per year will be quite high in comparison with a good building unless it can be sold or converted to other use to advantage. If it is used for a long period of years, the cost per year must also include added costs for operation and maintenance. Furthermore, most of these buildings are deficient in health and safety factors, in educational usefulness and in attractiveness. Usually "temporary" really means "sub-standard permanent."

Every now and then is heard the suggestion that stock plans, standard plans or patented designs be used. It is argued that these will save the architect's fee and permit savings through the use of mass production techniques. The uninformed layman, accustomed to the standardization in other fields, thinks that there must be some standard answer to what a good school building is and that, once determined, it can be repeated everywhere.

But each school building must fit the neighborhood or community it is to serve. It must be designed to fit the local educational program and the site on which it is located. Are all neighborhoods the same? Are all educational programs the same and are all sites the same?

Lessons should be learned from the planning and construction of each school building and each building should be an improvement over the one built before it. The use of stock plans will tend to mechanize education, freeze the school program and stop progress.

There is a lag between scientific progress and its applications to the building industry. This lag should be reduced. Research in materials and methods of construction is needed as is wider dissemination of research findings.

Although standard plans are not an answer to achieving true economy there are possibilities in the development of standardized, interchangeable, building units which can be mass prefabricated and assembled on the job. They should be such that they can be put together in a great variety of arrangements so that a non-standardized building of standardized parts will result.

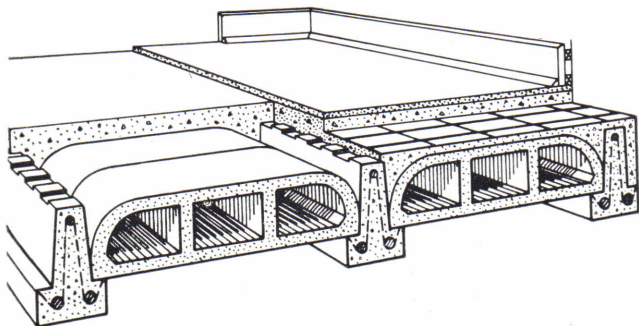
In summary, true economy will be achieved where each step in the planning, financing and construction process is done well and completely. There is no magic answer. The cheap building will usually be the most expensive in terms of total cost throughout its life and, more important, in terms of the effect it has on the education and the lives of the boys and girls who will pass through it. —Reprinted from The School Executive by permission.

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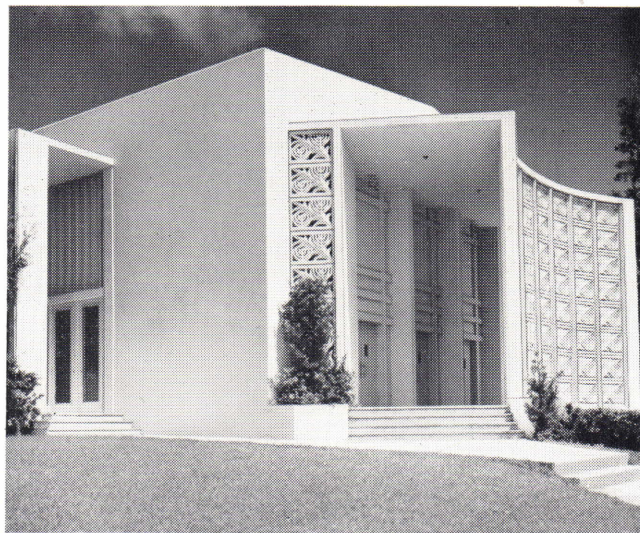
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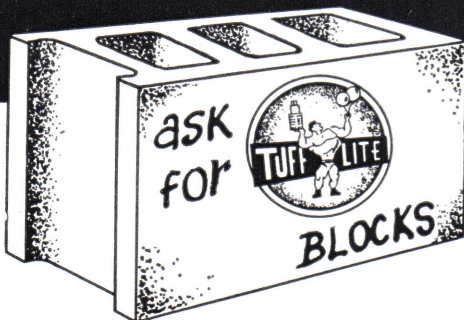
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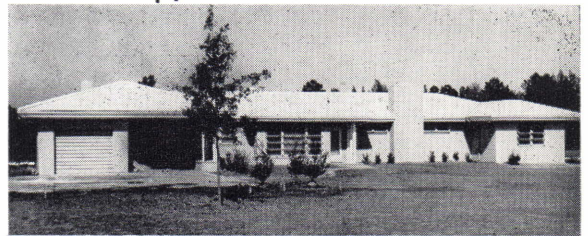
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BOOK REVIEWS

By Edward Loewenstein, AIA

DOCTORS OFFICES AND CLINICS

By: Paul Hayden Kirk and Eugene D. Sternberg
Reinhold Publishing Corporation,
430 Park Ave., New York 22, N. Y.
Price \$12.00

Since World War II most doctors and dentists have built new offices, wanted to build new offices, or occupied unsuitable residential or commercial structures and hoped for the better. There has been no source material for these specialized structures other than a disorganized expose in the various architectural magazines and construction publications. Many doctors have depended on the "free planning" of medical equipment suppliers, general contractors, or investment bankers.

This book gives a thorough analysis of some of the better designed clinics and offices in the country, with a special emphasis on the west coast and the middle west. Doctors and architects will gain a great deal from it and it will answer many of the questions on types of materials, heating and air conditioning, cost, parking and general details. Drawings and photographs are more than adequate and provide a business-like and down-to-earth insight into the various buildings involved.

Doctors and dentists have been at the very top of the professional field, from a financial standpoint, for many years, although in the eyes of the average investment banker, they are considered very poor financial risks and business men. Many doctors feel that a license to practice architecture and engage in general contracting is included in their medical licenses. Examples of this are seen in the various buildings which have been completely designed and constructed by the medical pro-

fession. This book illustrates what can be done when everyone sticks to his own knitting and works in harmony and with mutual respect. The text begins by dealing in generalities of health, city planning, and architecture. It then analyzes architecture in its relation to the practice of medicine and goes into the vital and essential details required of all doctors and dentists buildings and clinics. These include not only the planning of the building and the site, but a discussion on the advantages and disadvantages of renting, building, selecting an architect, whether to practice as an individual or in a group, the actual recommended square feet involved, and the space requirements, the financial considerations, and maintaining and operational cost, depreciation, and a host of other necessary and very important subjects. There is no question that this book is an absolute must for architects contemplating the construction of med-

(Continued on page 29)

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Below are excerpts from a letter written by a Texas client to his architect. We think it tells a lot about why such an overwhelming percentage of commercial buildings of all sizes, varieties and uses are being constructed from first preliminary schematic drawings to final inspection with full architectural services:

"Prior to the actual planning of our new building we had been thinking for ten to fifteen years in terms of constructing a building which would be designed for more efficient operation. During that period we considered designing and constructing the building without the assistance of an architect or general contractor, thinking that we might be able to save a good deal of money.

"When we finally realized that the time was at hand for us to make a decision regarding the construction of a building for ourselves, we felt that the project would be too large for us to undertake without the assistance of people with the proper "know how." Still there was the question of whether or not an architect should be employed. As one problem came right on top of another, we finally decided it would be necessary to employ the services of an architect. We naturally sought out the man we felt was best qualified to do a good job for us.

"As you know, we went through about two years of planning in which our firm helped us immeasurably in getting our own ideas down on a practical, workable basis. You brought out a number of thoughts which were extremely important and of which we had very little knowledge.

"After this period of planning, we were satisfied that the plan itself was the best for our individual business that could be developed and as you know, there were very few changes made during the time of construction.

"You will remember that I asked you how much of my time would be required during the period of construction and you replied that after the contract was let that I could forget about it until the building was finished. I did just exactly that, and did so with confidence, feeling that the plan would be carried out and that my participation during the period of construction would slow the thing down and accomplish nothing.

"Your supervision of the work as it progressed was worth your entire fee in our opinion. We believe that this phase of your work alone was one of the most important factors in the construction of a sound building.

"After this experience, I realize that our thinking that we might do the job without the services of an architect was nothing but wishful thinking. And I am convinced that if we had proceeded along those lines this building would not be the sound investment which we believe it to be."—
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BOOK REVIEWS

(Continued from page 27)

ical buildings for doctors and dentists, and for the doctors and dentists themselves. Some have said that the various types of buildings displayed have no application in this area, that they are too expensive, too elaborate, and too wasteful in many respects. It is admitted that blatant copying of buildings in this book would be unwise for North Carolina, but on the other hand, if the principals involved in the design and construction of medical buildings would read this book, a sounder and more practical long term investment is virtually guaranteed.

NATIVE STONE

By: Edwin Gilbert
Doubleday & Company
Price \$4.95

"Forever Amber," and many other things have been rewritten in this book. It takes place in an authentic architectural setting, and covers everything known to modern American man—lightly. The action begins in Yale University Architectural School, and its background remains the north-eastern seaboard. However, its polar star and point of return is bed—not one but many.

This book is highly recommended for the novel reading public if they are interested superficially in any of the following: romance, hate, tolerance, bigotry, race relations, and lack of them, lust and love human relations, economic truisms, and architecture. Mr. Gilbert knows the problems, situations, and hopes of the architectural profession more personally than Miss Winsor could know Restoration England, and uses them almost as robustly.

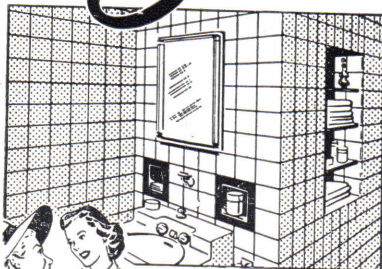
The plot involves three stereotyped gentlemen who are involved in architecture, and should be read and not repeated. However, briefly, we have: Raferty Blum, a fine talented fellow who combines integrity and Jewish and Irish blood; Vincent Cole, love, human relations, economic truisms, and tracks, and an incipient villain if I ever saw one; Abbott Austin, an inhibited soul from too far on the right side of the tracks. Take this and add the requisite number of women, and architecture considered as an art, a study, and a cut-throat trade and you have it.

I recommend this book to my competitors as its 469 pages should take them hors de combat for many hours. Personally, it has solved a minor mystery that has nagged me for twenty years. During my undergraduate years at M. I. T. School of Architecture, one of my closest friends suddenly, and for no logical reason, transferred to Yale. Now I know why.

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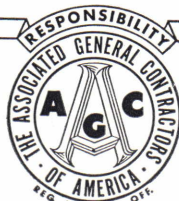
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AUDITORIUM-COLISEUM

(Continued from page 14)

the coliseum. Every effort was made to provide as much flexibility of use for the various areas in the coliseum as possible.

The seating banks around the arena were planned with straight sections in order to facilitate the use of economical precast seat beams rather than the comparatively expensive curved cast in place sections. Complete circumferential circulation is provided on both the first and second levels of the building, both within the seat banks as well as through the surrounding concourses on the two levels underneath the seat banks. In addition, exterior circumferential circulation is provided at ground level around the exterior perimeter of the building, and this walkway is protected from the weather by setting the first floor exterior wall back from the exterior columns. Time tests prove that the building is normally evacuated within four minutes.

Continuous louvers at the top of the exterior walls provide openings for ventilation and for the many air handling units spaced radially around the edge of the dome. Air conditioning can be easily installed in the coliseum if desired at some future date.

No steel members of the coliseum dome is deeper than 18 inches. The dome is of all welded construction in order to lighten its dead load, which is only 22 pounds per square foot, including the perimeter tension ring. Dome is covered with three-inch precast wood fiber planks, which also has necessary insulating and acoustical properties, on bulb tees, topped with approximately one-inch parge of concrete which in turn receives sheet aluminum roof covering. Specifications pointed out to bidders that all roof steel, contiguous utility piping and conduit, duct work were to be painted from the top prior to the installation of pre-painted roof planking, thereby eliminating scaffolding. This resulted in a considerable saving in cost.

Exterior masonry panels of both auditorium and coliseum are of precast concrete slabs approximately seven feet by 22 feet. Blue ceramic tile covers the exterior walls of the coliseum up to the continuous overhang, and the same tile is used at either end of the auditorium lounge.

The Charlotte Auditorium and Coliseum are among the most economical of their type ever constructed. The coliseum will seat 13,500 persons and the auditorium will accommodate 2,500. The total cost was \$4,698,000 or approximately \$293 per seat. These figures represent the total cost of all expenses incurred in the construction and complete equipment of the two buildings, including bond expense, purchase of land, realtor's fees, interest and bank commissions, architect's fees, landscaping, exterior parking and street paving, ice rink, furniture, draperies, carpets, and office, concession, athletic, and maintenance equipment.

The utilitarian character of the coliseum is not to be compared with the quality of the auditorium, with its stage and dressing room facilities, lobby, lounges, and air conditioning for concert, opera and theatrical activities.

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ARCHITECTS AND BUILDERS IN THE NEWS

WINS AWARD

James J. Cardo of the Independent Electric Supply Company of Charlotte was presented an award for the "most interesting lighting installation" at the recent Southern Regional Conference of the Illuminating Society at Birmingham, Ala.

MBA NAMES OFFICERS

Lex Marsh was recently elected President of the Mortgage Bankers Association of Charlotte for the coming year. Other officers named include Charles B. Rich, Vice-President, and James H. Spearman, Jr., Secretary-Treasurer. N. G. Speir, Ike C. Lowe,

W. R. Cuthbertson, President Marsh, and Vice-President Rich form the Board of Directors.

JOINS FIRM

Larry Kilduff of Newark, N. J., has assumed duties as Manager of Trade Sales in the South Atlantic States for the Carolina Wallpaper and Paint Company of Charlotte. Mr. Kilduff was former Manager of Creative Interiors, Inc., a division of the Stamford Wallpaper Company.

GUEST SPEAKER

A. J. Fox, Vice-President of F. N. Thompson, Inc., and a former President of the Carolinas Branch of the Associated General Contractors of America, was a guest speaker at the meeting of the North Carolina Inspectors' Association, which was held in Raleigh June 26-27.

ATTENDS CONFERENCE

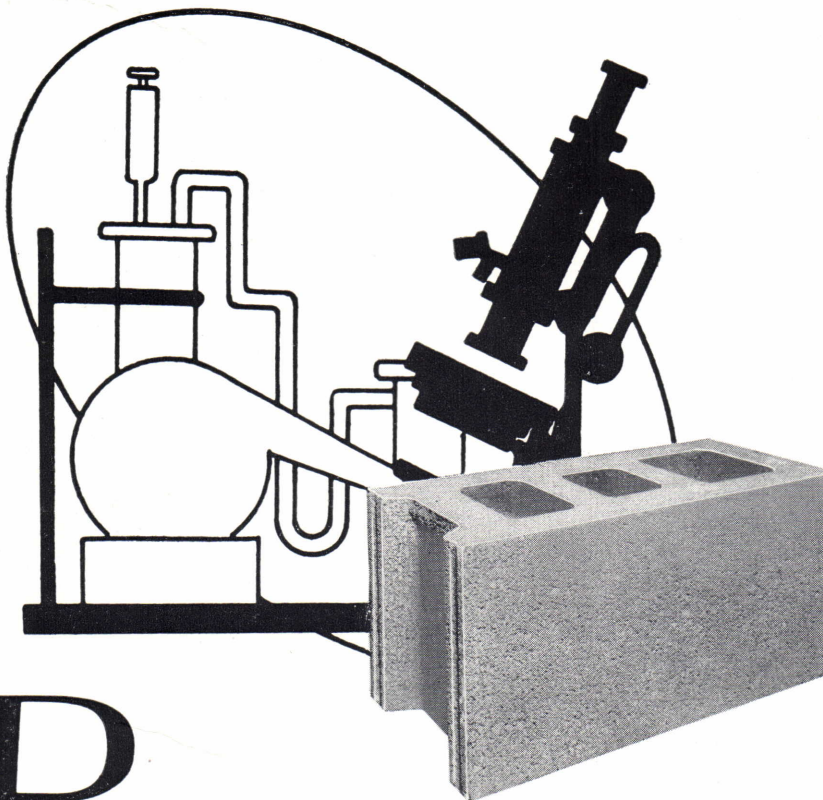
R. V. Roberts of the Charlotte district office of the Carrier Corporation recently attended a training conference at the company's home office in Syracuse, N. Y., to study new techniques and equipment.

ATTENDS MEETING

Daniel A. Vogel, President of the Carolina Wallpaper and Paint Company of Charlotte, has returned from Miami Beach, Fla., where he attended a convention of wholesale wallpaper distributors.

JOINS AGC STAFF

Charles H. Lesesne, Jr., Professor of Engineering at the University of South Carolina, has accepted a position as Executive Assistant with the Carolinas Branch of the Associated General Contractors of America. Mr. Lesesne will make his headquarters in Columbia, S. C., where he will have charge of South Carolina activities of AGC under the direction of Managing Director Robert Patten.



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KNIGHTS MOVE TO CALIFORNIA

John C. Knight, AIA, and family have found it necessary to move from Raleigh to Southern California for reasons of health. Mr. Knight has been associated with William Henley Deitrick, FAIA, of Raleigh as a partner in the firm of Deitrick - Knight, AIA, and Associates for the past three years and altogether



KNIGHT

was with this office for seven years.

Mr. Knight was active in the North Carolina Chapter of the American Institute of Architects as Chairman of the Public Relations Committee for several terms and had also served as President of the Raleigh Council of Architects. He was closely identified with the civic life of Raleigh, having held important assignments in the Kiwanis Club, Raleigh Little Theater, and United Fund.

In California, Mr. Knight will be with the firm of Welton Beckett, FAIA, and Associates of Los Angeles, Calif.

NAMED VICE-PRESIDENT

Foy J. Shaw of Durham has been named Regional Vice-President of the Painting and Decorating Contractors of America for Region 5, which includes North Carolina, South Carolina, and Georgia. The national group is composed of 8,500 members and is one of the nation's oldest business associations.

SCHOLARSHIP AWARD

Jesse Evans Powell, Jr., of Charleston, S. C., a student at North Carolina State College, was chosen to receive the annual AGC scholarship award as the outstanding construction engineering student at North Carolina State College in 1956. The presentation was made by A. J. Fox, Past President of the Carolinas Branch of the Associated General Contractors of America at a luncheon meeting of the North Carolina Section of the American Society of Engineers.

WILL-BURT STOKERS AT SMITH REYNOLDS AIRPORT WINSTON-SALEM, NORTH CAROLINA

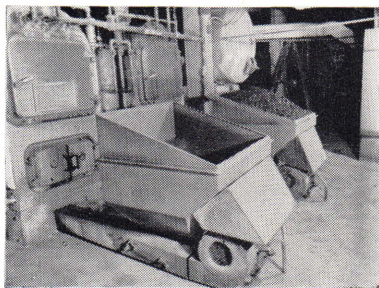


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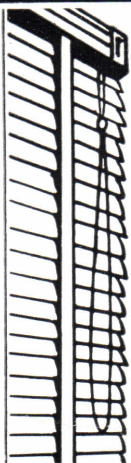
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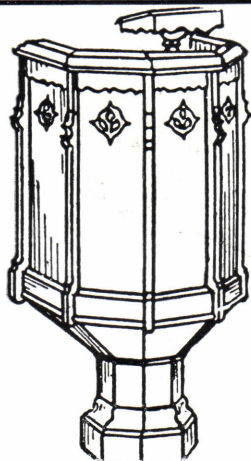
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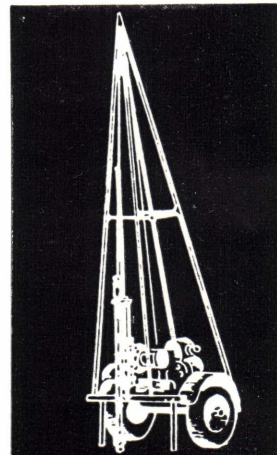
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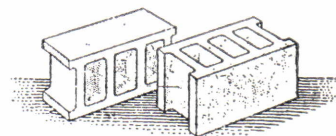
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Easy-to-apply insulating plastic is the subject of a new four-page booklet by the Zonolite Company.

The booklet outlines uses for the lightweight, fireproof insulating plastic, including insulation of steam and hot water pipes, flue openings, hot water tanks, furnaces and boilers, and hot air ducts.

Advantages of the material as described in the two-color booklet, are its economy, easy of application by hand or trowel, permanence, attractive finish, and that it is harmless to the skin and non-cracking when dry.

Copies of the booklet are available on request. Zonolite Company, 135 S. LaSalle St., Chicago, Ill.

A much-needed new standard for water-cooling towers for use with air-conditioning and refrigeration equipment has just been released by the Air-Conditioning and Refrigeration Institute. It is known as **ARI** standard 910-55.

The purpose of the standard is to establish minimum requirements for the design and construction of prefabricated natural-draft and factory-assembled, mechanical-draft, water-cooling towers for use with air-conditioning and refrigeration equipment.

This standard covers prefabricated natural-draft water-cooling towers and mechanical-draft water-cooling towers which are factory assembled into sections by the manufacturer.

The new standard defines the following types of water-cooling towers: natural-draft, mechanical-draft, induced-draft, forced-draft, spray-draft, spray-filled, deck-filled, spray-deck, and packed. It also explains circulating water, cooling range, approach, drift, blow-down, make-up and total heat dissipation.

Components to be included as standard equipment are outlined as well as rating and performance and necessary published data.

Conformance with this recommended standard is completely voluntary, said spokesmen for the Air-Conditioning and Refrigeration Institute, but equipment represented as being in accordance with the standard shall conform with all the provisions thereof.

Architects, consulting engineers and others will find that this new standard provides a great deal of helpful information on water-cooling towers for use in connection with the purchase and specifications for this type of equipment.

Copies of the new standard are free upon request. Air-Conditioning and Refrigeration Institute, 1346 Connecticut Avenue, N. W., Washington, D. C.

HYDRO-PAC, a completely engineered, "packaged", low-cost gas hot-water heating system is now available.

Consisting of a compact cast iron boiler, baseboard radiation and circulator, expansion tank and operating controls, the system can cover capacities of 200 to 1000 square feet of installed radiation at a price competitive with hot air installations.

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and operation, the baseboard can be arranged in series loop loop using a single circuit in installations of less than 35,000 BTU's and multiple circuits for larger heating loads. The heating element serves as a main in the series loop system reducing the pipe and fittings required. Hydrotherm, Inc., Northvale, N. J.

Metal curtain wall panels and 10-and 12-inch joists are the outstanding new products listed in the 1956 architectural

products catalogue just published by the Stran-Steel Corporation.

The steel curtain-wall panels are offered in several styles and weights, either insulated or non-insulated. They are easily applied by means of metal clips fastened by a hand-operated clinching tool. This method eliminates in most cases the problems that accompany attachments which require welding.

An additional feature is the eye-appeal of the new curtain wall, provided

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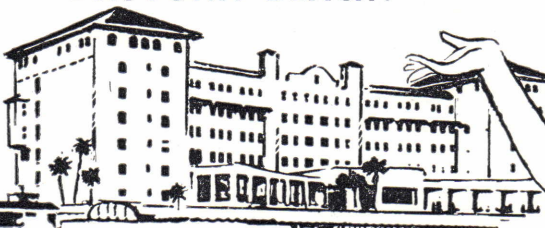
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A full-color brochure, picturing and describing the varied uses of **ALSYNITE** translucent fibreglas panels for home building and remodeling is now available. Illustrated in natural color are the complete lines of Riviera and Step-lap for residential and patio use, Mist panels for shower and tub, and Alsynite Flat for decorative applications. Twenty-three new decorator shades are included. Several unique installations are also pictured, and advantages of Filtron 25 for cool comfort and Chemiglazed surface for lasting beauty are explained. Alsynite Company of America, 4654 DeSoto Street, San Diego 9, Calif.

A design manual for the use of porcelain enamel in architecture has been issued by the Porcelain Enamel Institute and is available to architects on request. The manual has been prepared to acquaint architects with the properties and advantages of porcelain enamel. It provides technical information and drawings useful in designing new and

remodeled structures. Porcelain Enamel Institute, 1145 Nineteenth Street, N. W., Washington, D. C.

Magnetic power latches are now featured on all Warren folding doors. Although the power latch is small in size, it has a very strong holding capacity.

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Copies are available from Stran-Steel Corporation, Ecorse, Detroit, 29, Mich.

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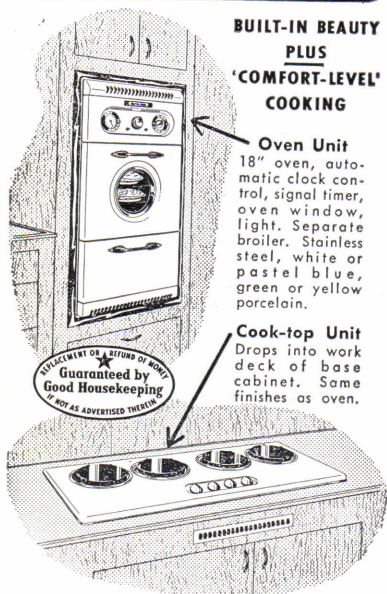
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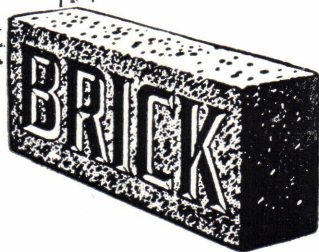
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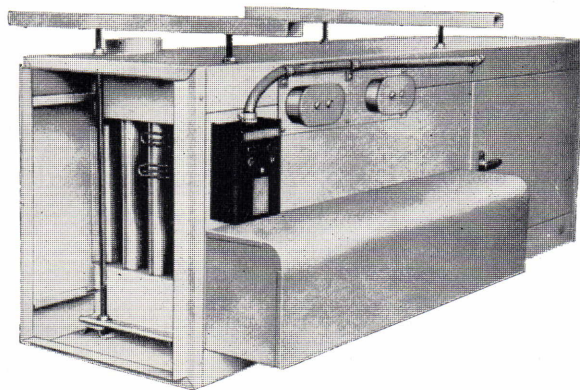
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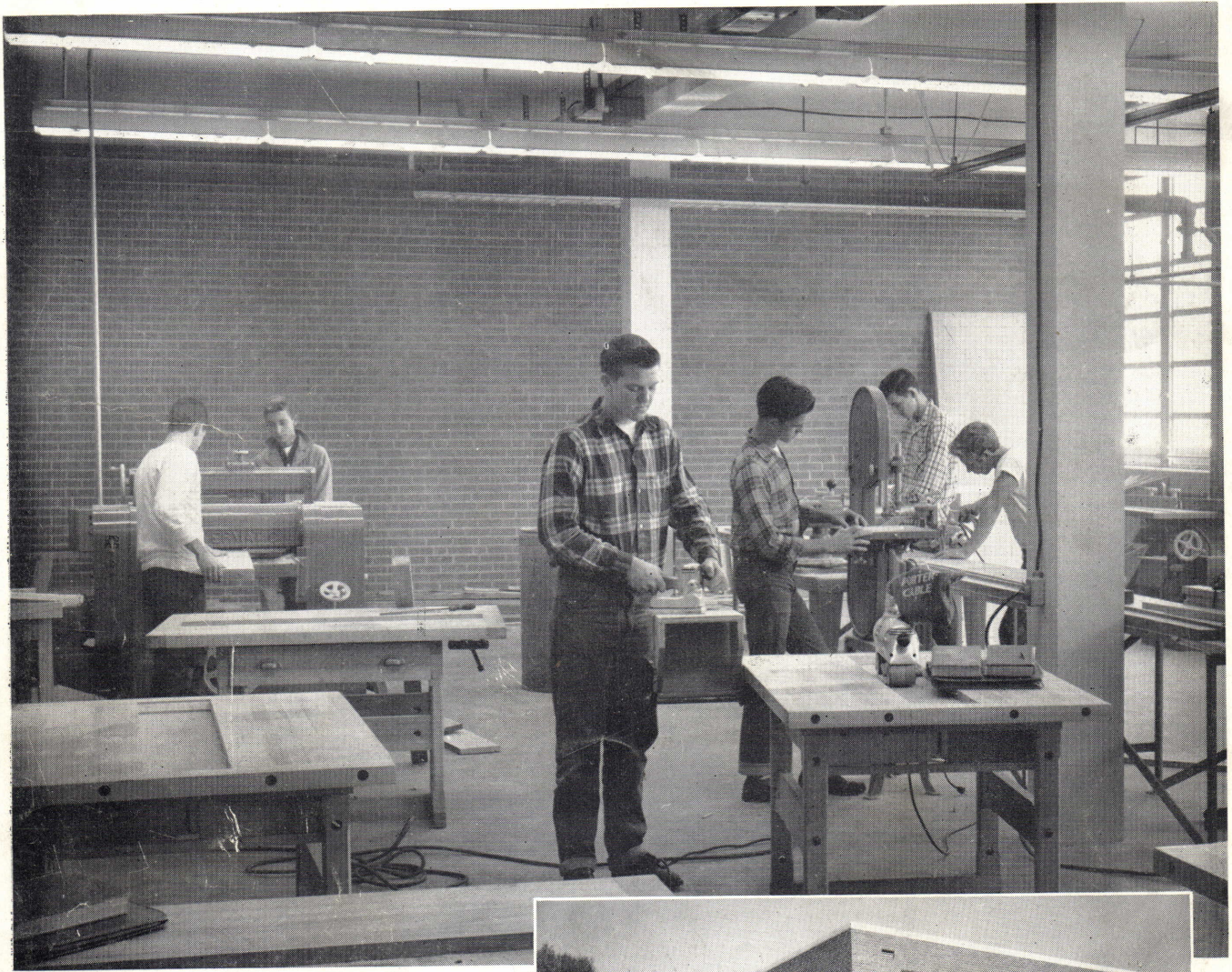
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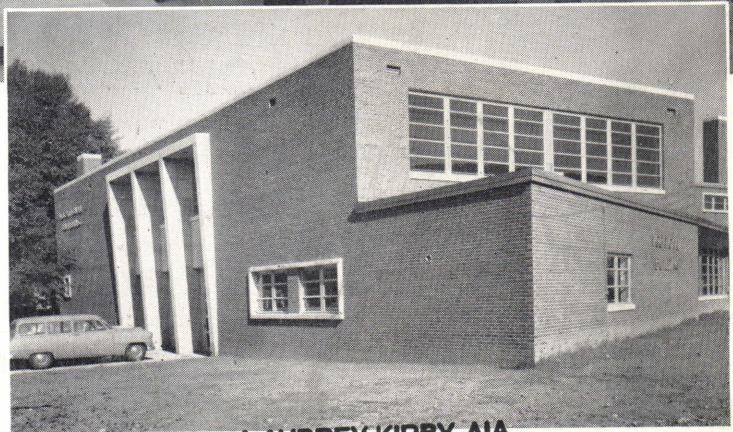
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