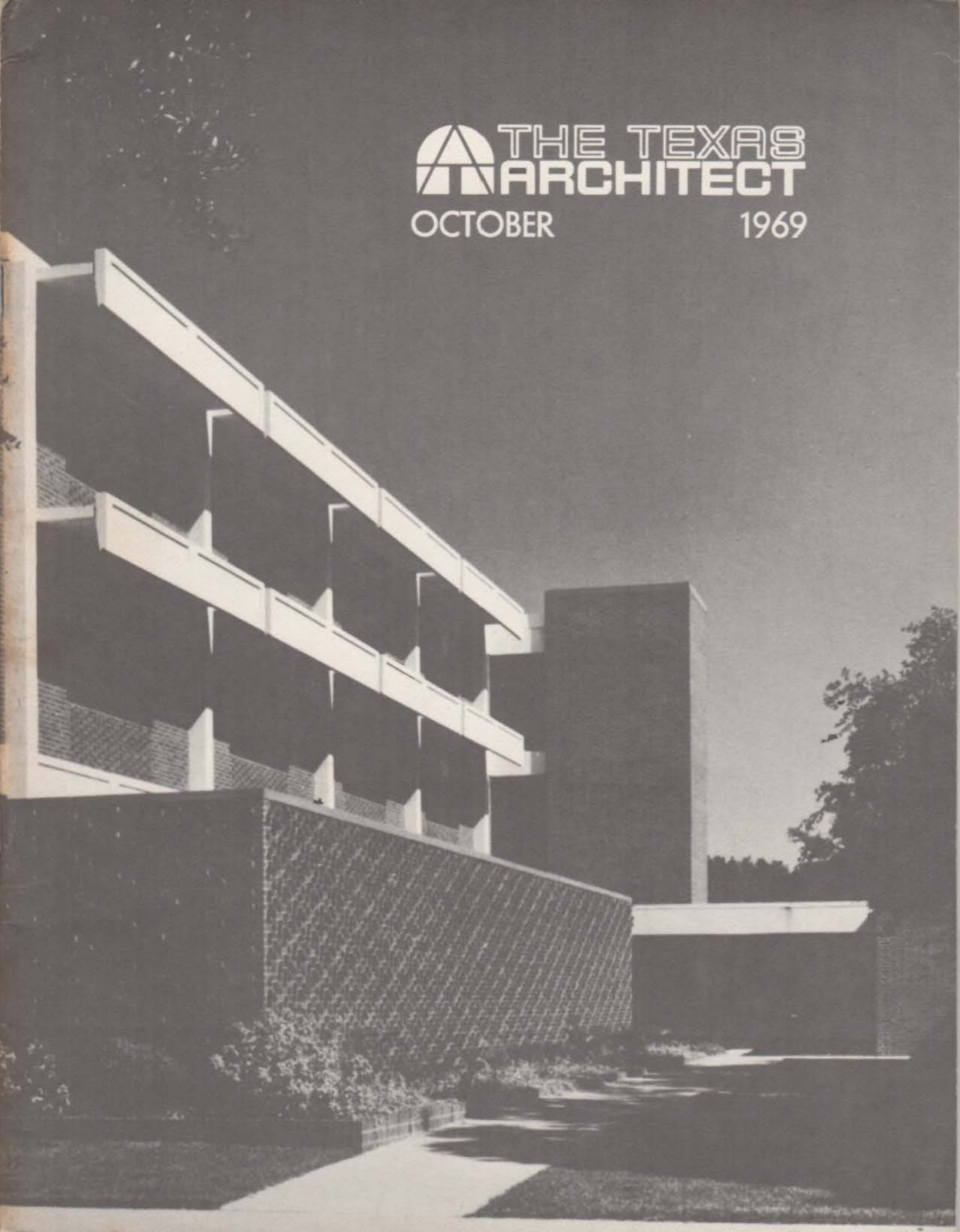

THE TEXAS ARCHITECT

OCTOBER 1969

STUDENTSTUDENTSTUDENTSTUDENTSTUDENTS

Architectural students have asked American architects to donate 10 per cent of their annual business income to solving the nation's critical urban problems. Architects could reach the 10 per cent goal through direct financial contributions, donated time, money secured from foundations or the government. If 15,000 architects donated only four hours of work a week or two weeks a year, the value would be more than $15 million.

Various student comments included: Architects are urged to join engineers, planners, landscape architects and other professions and raise a multi-million-dollar war chest to influence U.S. government policy, aid the poor, produce better design in the cities. The profession is at a crisis stage. $10 million will start the change. And then we would stop designing little buildings on little bits of land. Look around us. Not just in the ghettos. But in all our cities, black, white and mixed. The structure we have built isn't working.

Students representing some 25 architectural schools also told the AIA leadership the profession should not spend as much money on social functions, perhaps should not invest in a new national headquarter and should take a more active role in politics. The studenta noted that poverty is the real problem in our cities and there is no architectural solution for that. Architects must use money, politics and sociology before design can help.

Students have asked for a greater alliance of efforts, both monetary and personal, between student architects and practictioners and a re-definition of the role of the architect. Students from Canada noted that there is no official student architectural organization in their country, and that the students are concerned primarily with re-defining architectural education. They said that since they do not have the race and ghetto problems which are prevalent in the U.S., they are working toward a coalition between the practitioners, educators, and students, whereby the latter will have a voice in determining curriculum.

Representing the U.S. students, Taylor Culver, East Orange, N.J., President of the 17,000-member Association of Student Chapters, AIA, and James Kollaer, Vice President, Lubbock, Texas, explained the commitment they want the architects to make.

"The allocation will be used to help communities determine the way in which they want to live. This is what we want you to be about. Architects can build their buildings, but it's the people who are going to live in them that must say what they should be. We ask you to stand for something.

The project should be an on-going program, not a one-year commitment, that would be structured with equal student-AIA member participation. We don't think architecture is necessarily the problem. We are re-defining the role of the architect and want you to be a part of it. The final product of the work would not be aesthetics, hut that through the program a community would he able to develop a political and economic strength it did not have before, and it would be given technical assistance it could not otherwise afford. A "community" is a house, an area, a city, or the world and the "community" would be represented by an organization and given funds to sustain itself. We want you to understand that students are human beings. We dislike what we've been given as society, and we want to work to change it. Specifically, we want to do it with you—blacks, whites, young, and old."

Architects after receiving the report, praised the students for examining the problems and after giving them credit for being thoughtful and concerned, asked them for a statement of specific problems and alternative solutions. Students are much more mature now than they were a few years ago. They have stimulated and provided a goal, and it's the responsibility of the Institute to make a significant input into this. We have been given a challenge, not an unreasonable demand. □

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TEXAS ARCHITECTURAL FOUNDATION

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THE TEXAS ARCHITECT

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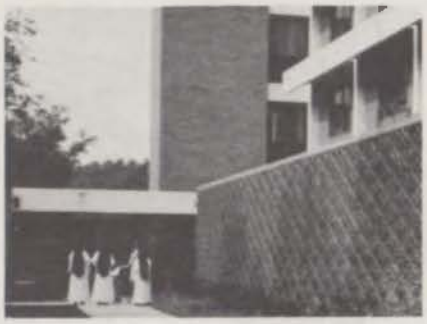
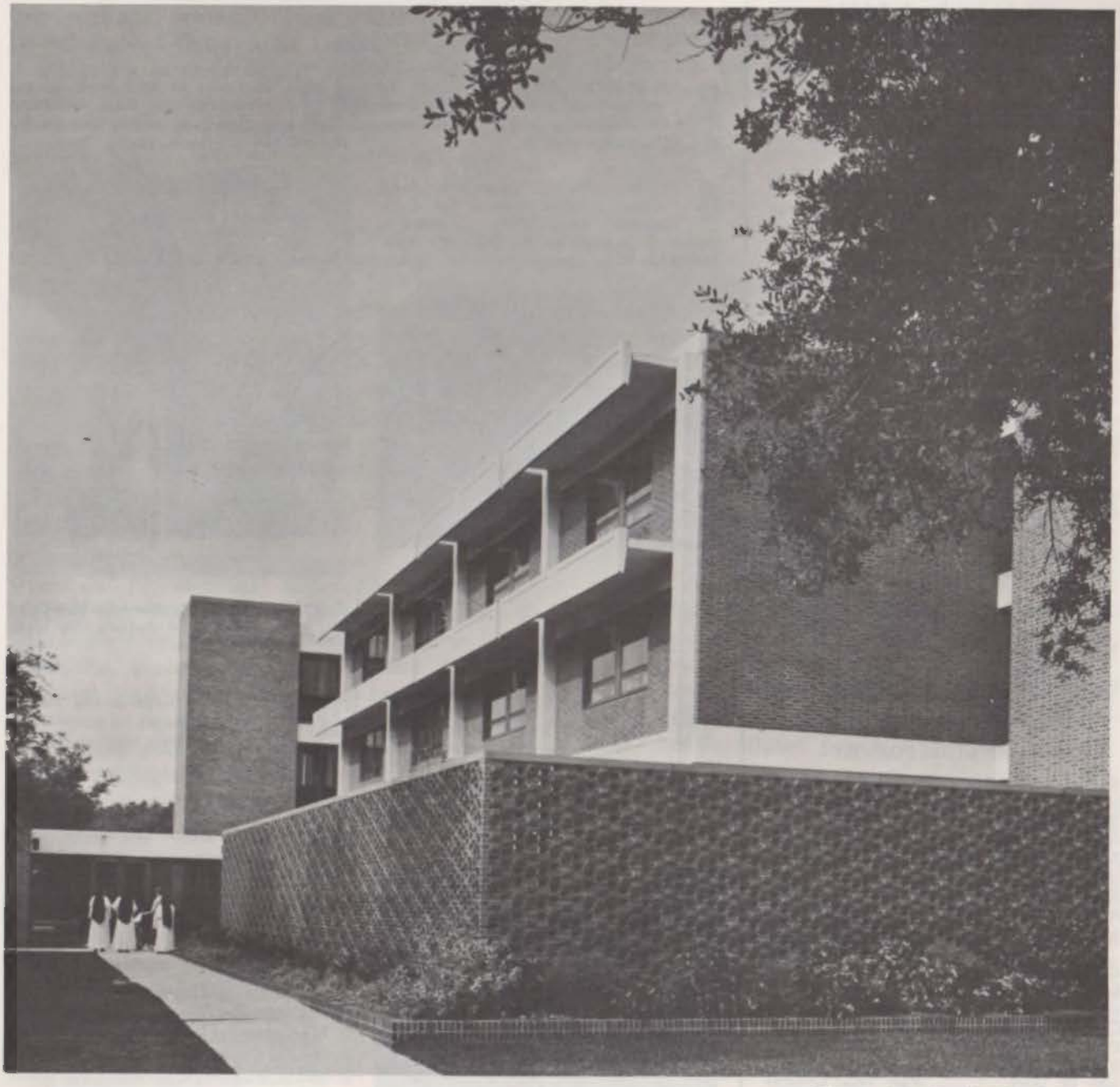


ST. DOMINIC'S VILLA
DOMINICAN CARE CENTER
SACRED HEART COLLEGE, HOUSTON

TEXAS ARCHITECTURE 1968



Photograph by Bert Brandt & Associates

GOLEMAN & ROLFE, A.I.A., ARCHITECTS

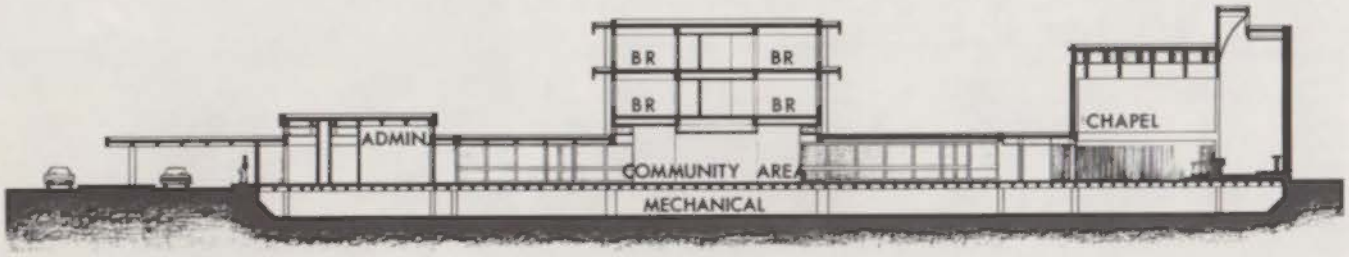
Walter P. Moore & Associates, Structural Engineer

Mulhauser, Homes & Riggs, Kitchen Consultant

Bernard Johnson Engineers, Inc., Mechanical & Electrical Engineer

Evans-Monical, Inc., Interiors Consultant

Fretz Construction Co., General Contractor



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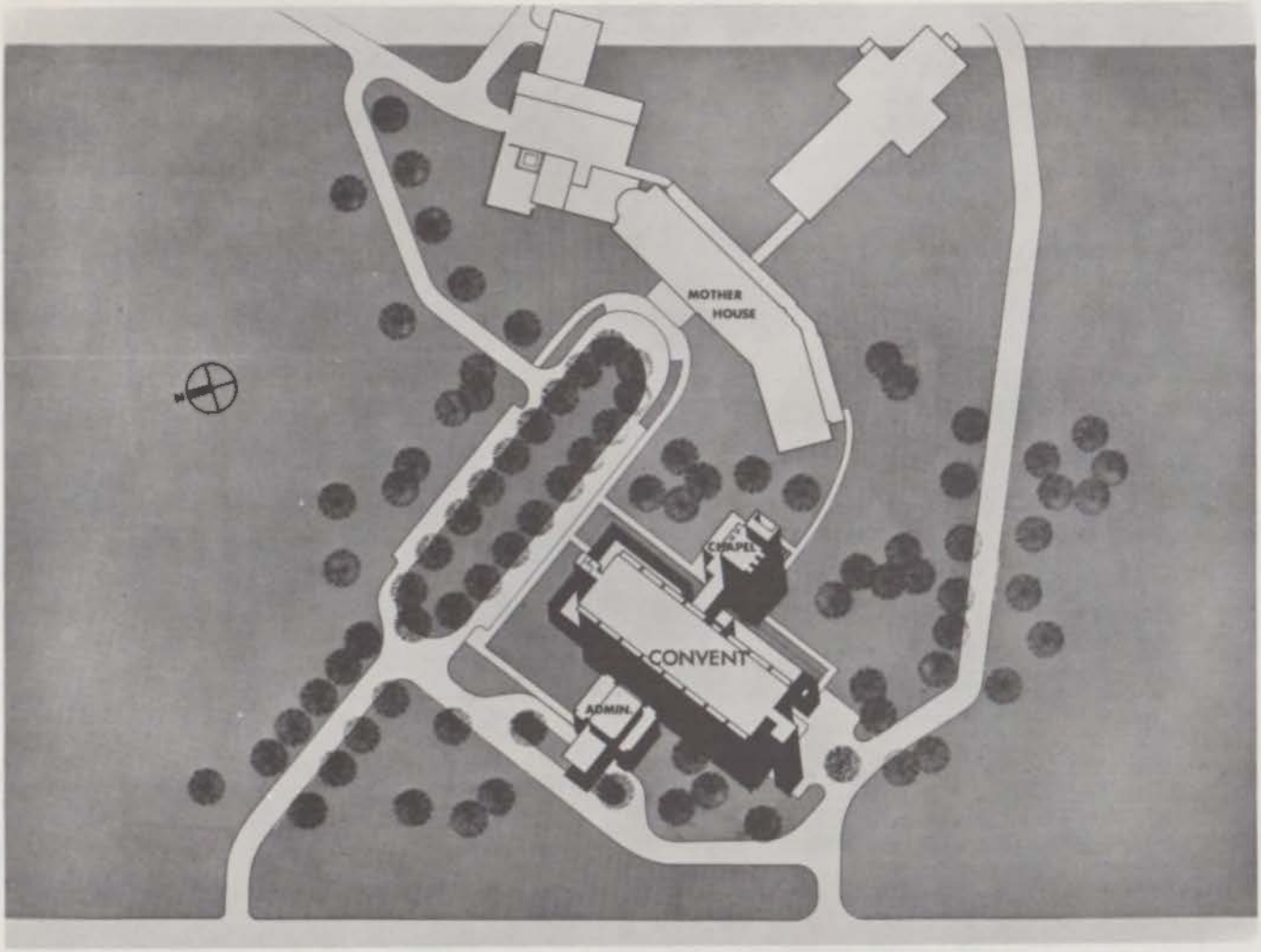
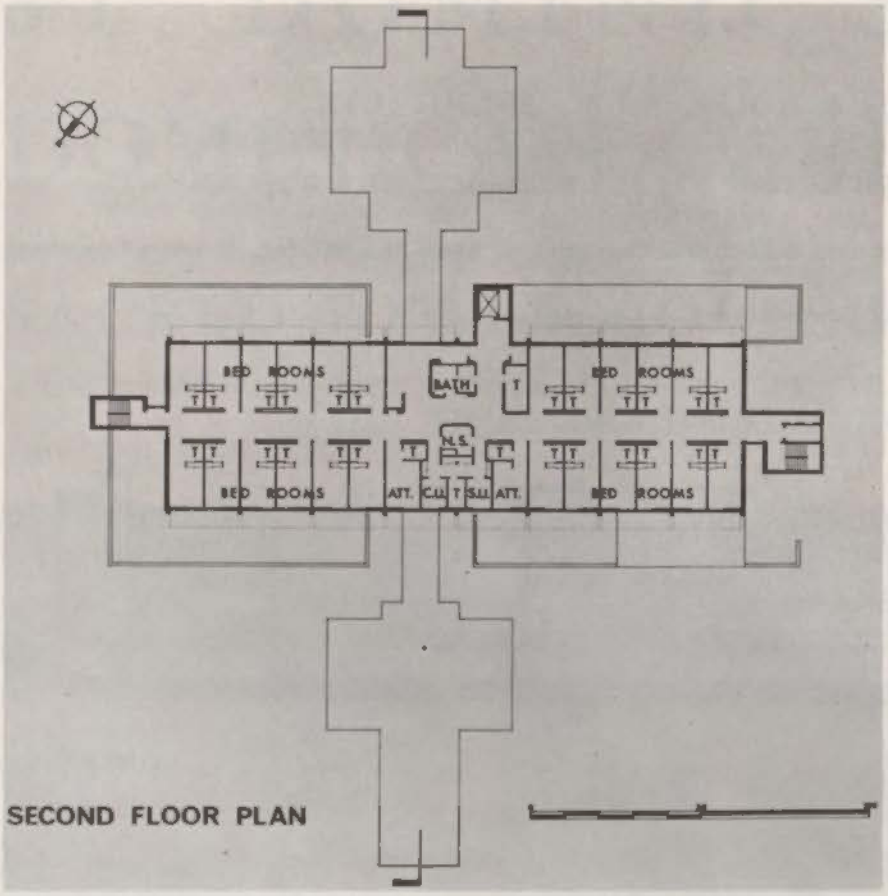
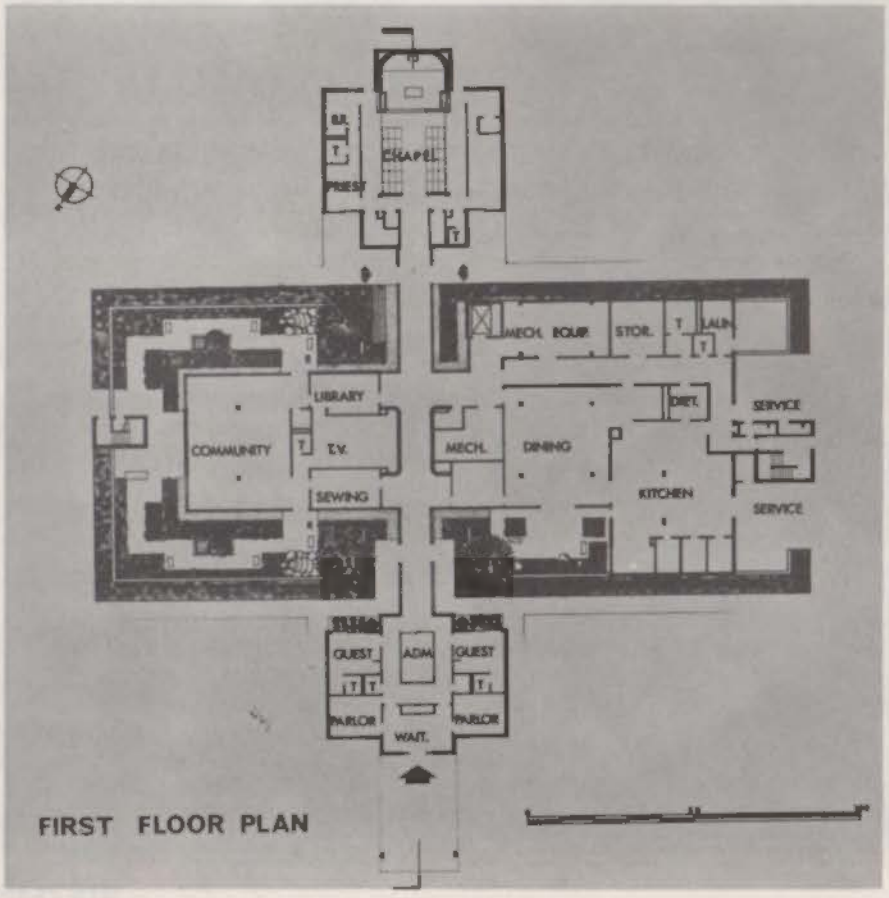


SITE PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

This care center for aged sisters serves primarily as a nursing home. However, it was the request of the religious order that it be more than just a warehouse for storing those who are no longer useful. This building is designed as a total, self-sufficient environment for the older sisters, but it still allows them to participate in the teaching-learning process of the religious community.

The dormitory and nursing floors are elevated for privacy and view. The ground floor contains three separate elements:

(1) The chapel which is placed as a link between this building and the Mother House; (2) the administration which controls visitors and the general operation and (3) the community areas including gardens, dining, sewing and meeting areas where the residents of this building can pass on their experience to the younger sisters and thereby continue to make a contribution to the Order.

Care was taken to preserve an intimate human scale throughout the building and to give the sisters a cheerful environment in which to spend their later years. Quiet gardens surround the community areas, serving as outdoor extensions of these rooms while maintaining a degree of privacy.

The chapel is designed for maximum use of natural illumination. Light reflectors give a soft glow to the sanctuary and flood the altar with reflected sunlight which provides a suitable focal point for worship.

EXTERIOR VIEW OF CHAPEL

Photograph by Bert Brandt & Associates

INTERIOR VIEW OF CHAPEL

Photo by Harper Leiper Studios

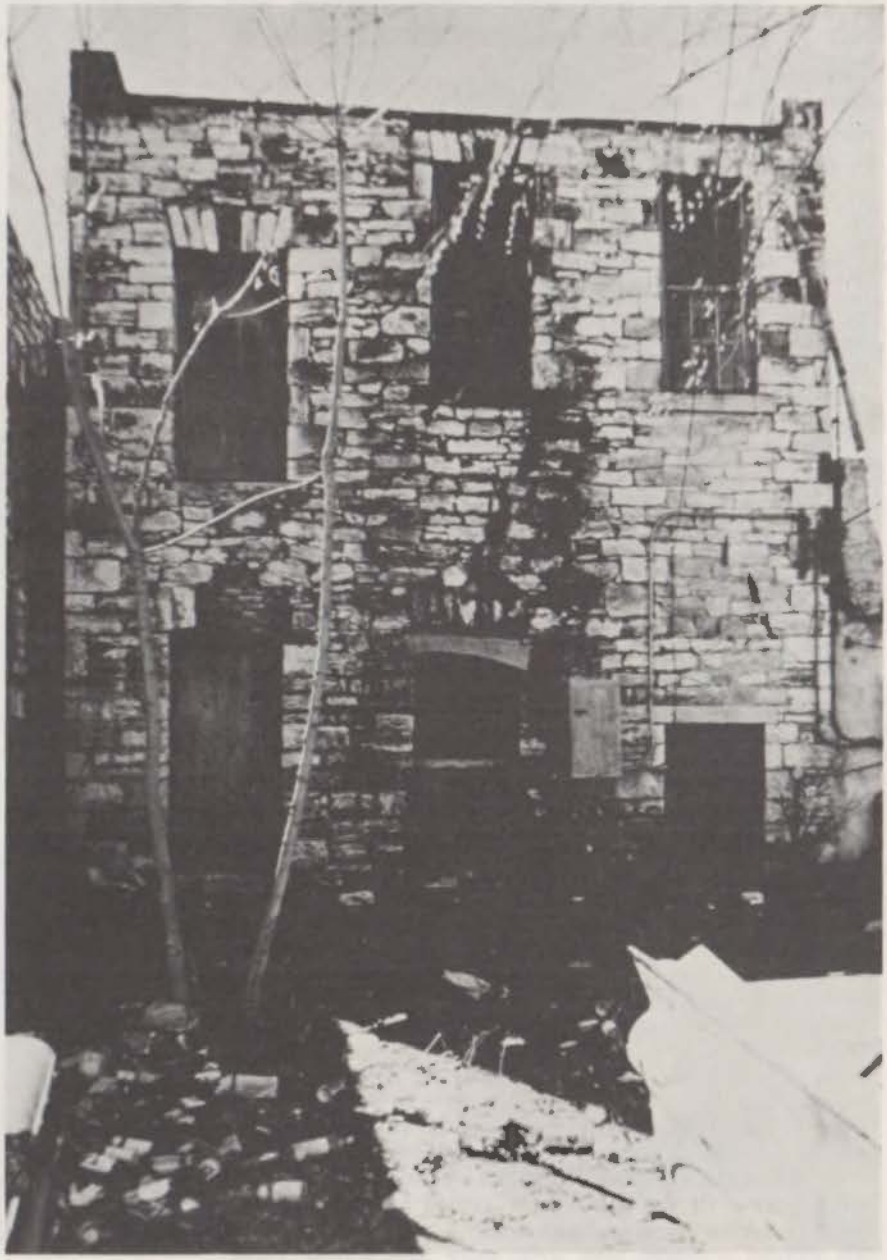
Urban Town House

Residence of David Graeber, Austin Architect, 410 East Sixth Street

Original Building as purchased in January 1968. Note painted signs, advertising posters, and pass-thru used to serve sidewalk customers.

Throughout Austin the address 410 E. Sixth Street recalls a new elegant town house or to others it is affectionately known as Graeber's Pad. The old building opened in 1882 as the Old Shamrock Saloon. Since that time it has housed a bawdy house, grocery store, beer parlor, pool hall and numerous other enterprises. The Texas Architect magazine regrets that the presentation is not in color, since color explodes throughout the exciting sequence of spaces. Dave Graeber has proved a trend-setter since four other Austinites have recently purchased old buildings on East Sixth Street and are now in the planning stage for town houses and small artist studio shops.

The 400 block of East Sixth Street showing the wide variety of business establishments. Note building in center of block as seen in January of 1968.



Rear of Building January 1968. Note trash pile, abandoned autos, and rock work that has gathered moss on mortar joints.

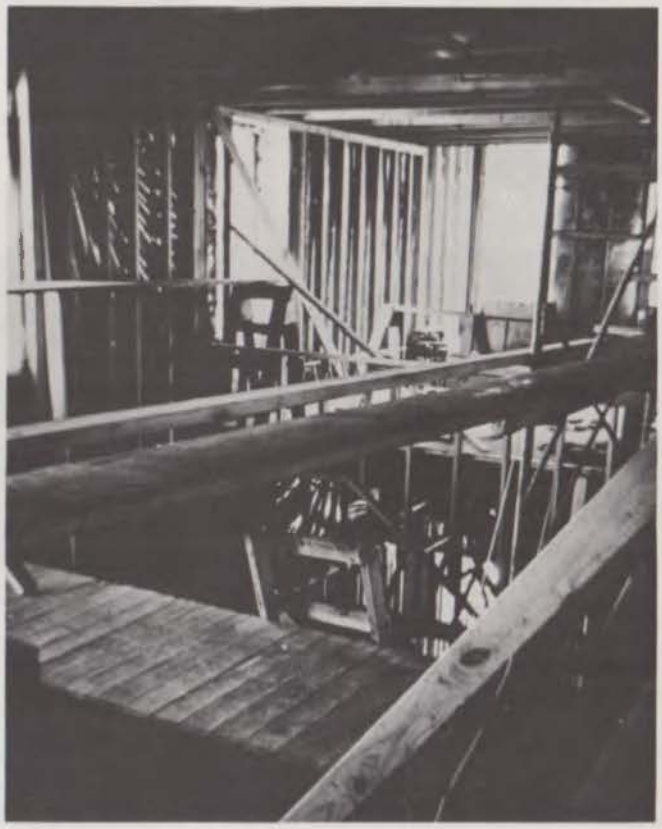
Scaffolding allows sandblasting of brick to remove the dozens of coats of paint that have been applied over the past hundred years.

Wood frame work starts to mold interior spaces. Note ladder leaning against portion of existing building, second floor frame work, left in place to become a bridge connecting second floor areas.

The building construction, restoration, renovation started by removing all of the uld wine bottles, beer cans, broken chairs and tables, sagging posters, and other items discarded over the past hundred years. Work then started on the Sixth Street brick exterior which was left unchanged architecturally. Scaffolding was erected and sandblasting removed the dozens of coats of paint and uncovered the original rich, yellow hue, Austin common brick. The original tin cornice capping the front facade was cleaned and restored to original condition and painted burnt umber. Of the three brick arched front entrances, the side arches were enclosed with mahogany trim with fan shaped wrought iron grill work and etched glass above. The center arch now leads to the entry which can be closed off with a wrought iron gate. The original second floor framing remained intact except for two large openings that provide a two story space at the living room area. The remainder of the rooms, spaces and details were sketched on boards, bits of paper or the walls themselves to communicate to the various trades and workmen the ideas of how this town house would be put together. As the months of construction neared an end and David Graeber's vision became a reality, visits from local inhabitants of the East Sixth Street area became more frequent. However, interest soon died when they found that the Old Shamrock Saloon would not once again be open for business.

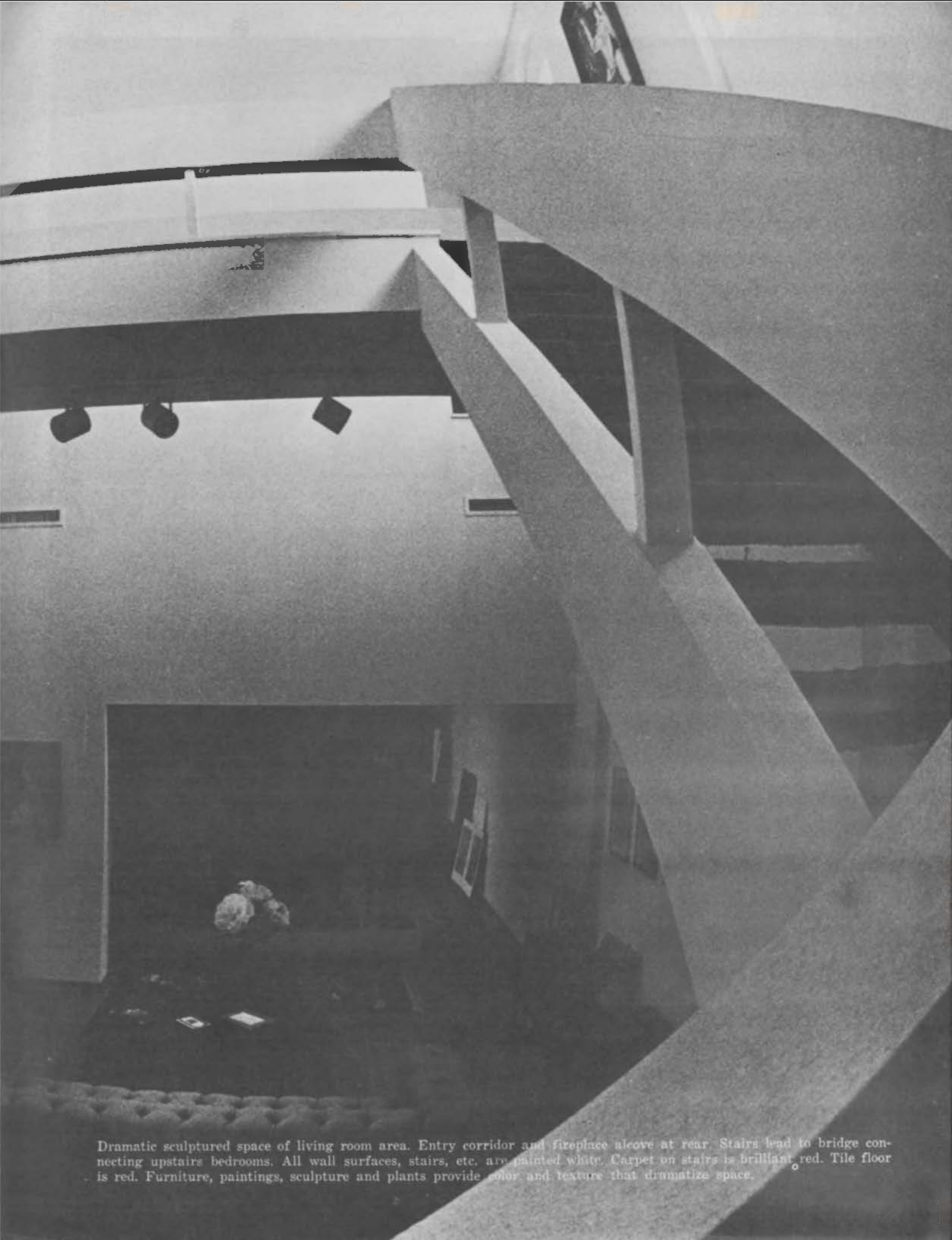
The Shamrock Saloon Urban Town House is a mixture of architectural terminology. It is not a true restoration nor is it a preservation. But as the Austin-American Statesman and Professor Roy Graham of the University

The spaces start to take shape. Gypsum board applied to wood frame work has been taped and floated and is ready for finish and paint.



Voids on each side of bridge call attention to areas of existing second floor framing that have been removed.

Brick has been sandblasted, mahogany trim and etched glass fill arched openings and even a modern gas light and newly planted tree are in place at the curb side as construction nears completion in December 1968.



Dramatic sculptured space of living room area. Entry corridor and fireplace alcove at rear. Stairs lead to bridge connecting upstairs bedrooms. All wall surfaces, stairs, etc. are painted white. Carpet on stairs is brilliant red. Tile floor is red. Furniture, paintings, sculpture and plants provide color and texture that dramatize space.

Brick arches surround entry area. Decorative wrought iron gates close off entry from street.

Study-work space just off entry corridor.

Main living room space. Master bedroom above, fireplace alcove at lower right, kitchen and dining room at lower floor rear, guest bedroom upstairs rear.

Sculptured space of dining room area. Fixed glass allows view of courtyard at rear of house.

Upstairs connecting bridge looking down at living room, fireplace alcove spaces.

Urban Town House

of Texas School of Architecture have noted it as an imaginative remodeling of a historic old building. Professor Graham at a recent lecture to the Women's Architectural League of Austin, in the Graeber town house, noted: "Preservation means stabilizing a structure in its existing form by preventing further change or deterioration. Restoration, used architecturally, means putting back a building as nearly as possible into the form it held at a particular date of period of time. The value of a restoration is measured by its authenticity. Preservation takes a structure as found, so it does not relate to a specific period in time and is, architecturally, the most intellectually, honest treatment of a monumental structure. A great many historic structures in all parts of the country are in need of preservation or restoration or both." ■

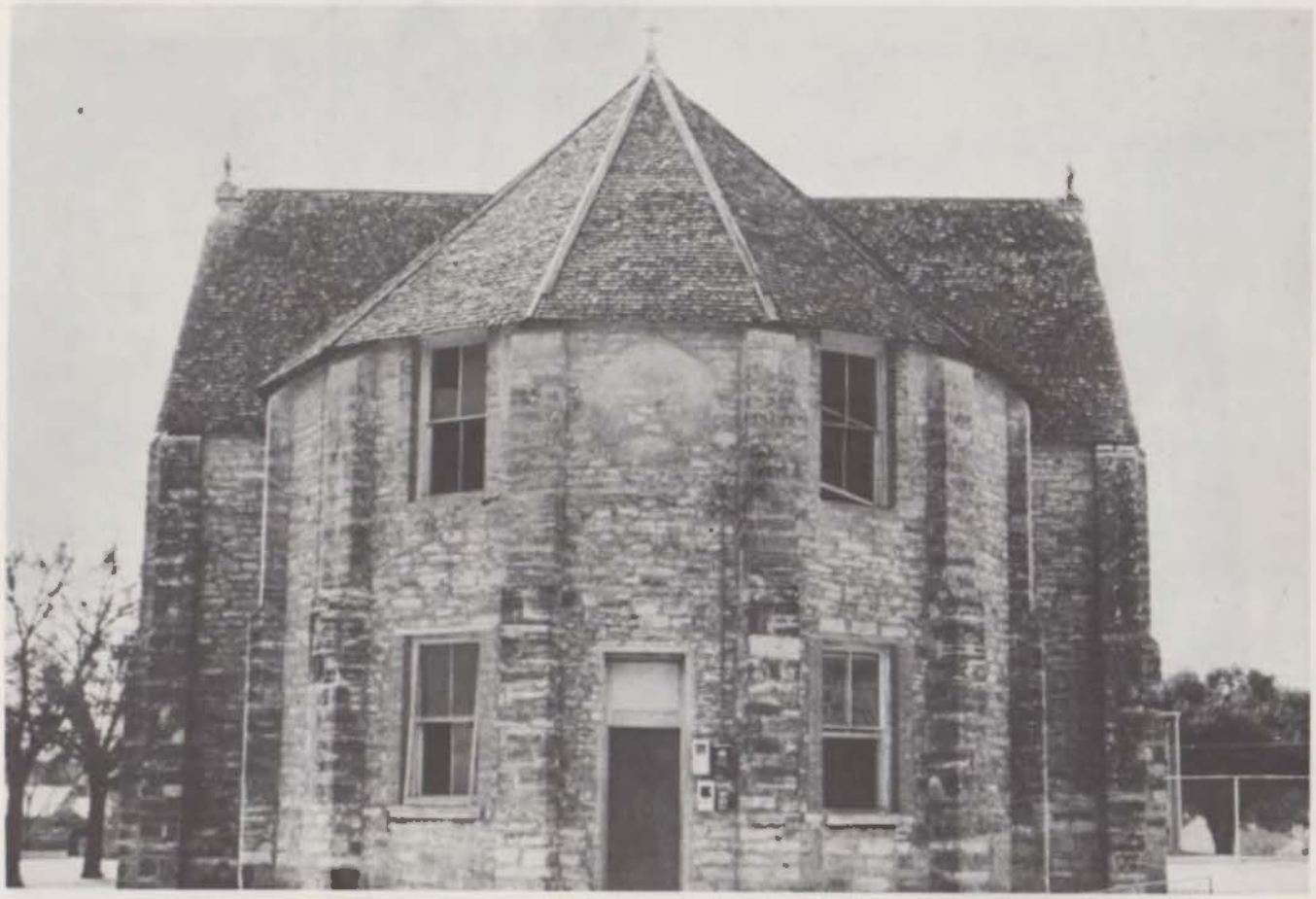
Master bedroom. Brilliant colors used in furnishings and wood finishes provide atmosphere that every red-blooded bachelor should have.

From bridge looking across two story space. Guest room as seen above and portion of living room space below.

ST. MARIENKIRCHE ZU FRIEDRICHSBURG, TEXAS

TEXAS HISTORICAL ARCHITECTURE

excerpts from a graphical essay by William M. Hudgens



This church building was started in the early spring of 1861. The corner stone was laid on June 9, 1861. The completion of the building was in the fall of 1863. Solemn consecration of the church took place on November 22, 1863. There was no formal architect for the church, but according to history, the priest in charge of the parish, Father Peter Baunach, was not entirely satisfied with the original plan of a building measuring 84 x 34 feet even though the workers had already started the foundation. For several days, this priest paced round and about and finally told the workmen that he thought that the church should be built in the form of a cross, because this was the oldest Christian church construction form. The church should have five doors honoring the five wounds of Christ and twelve windows honoring the twelve Apostles, the lights of the world. A Father Gallus happened by Fredericksburg, and since he was a good draftsman, he drew up this new plan and the workers went about measuring and putting in the foundation for the new cross-form church.

The building is constructed with load-bearing masonry walls, covered with simple untrussed rafter-and-ridge pole roof framing. Though no construction drawings have been found as yet, it is assumed that the foundation consists of large limestone blocks resting on raw compacted earth or bedrock. Since there is no lack of stone, the walls are constructed of small limestone blocks smaller in size to our present day brick. The joints are formed and filled with a lime and sand mortar of a very high grade, it being difficult to rake out with a metal tool. The stone is native to the area and was quarried by the people of the town. There were a few stone masons from Germany in town at the time of construction. Moritz Hartmann was one of these masons, and it is interesting to note that he climbed to the top of the steeple to place a cross of his own handicraft on the highest point of the church, where it remains today.

The roof is a pitched affair covered with hand split cedar or pine shingles. The rafters are hand cut. The wood used in the construction of the building was transported from Bastrop, Texas. The pitch is a few degrees less than a 45° triangle causing opposing roof planes to be more open from perpendicular. The rafters are continuous in length from ridge to bearing point and are spaced on about 20" centers. There are no purlins in evidence, but the shingles are nailed to wood strips on top of and perpendicular to the rafters.

There is little arch construction found in the structure and that mainly utilized for composition. The best example of "arch" construction is

found on the steeple roof itself. It is actually a four-part vault of limestone, which at one time was finished with stucco, though it is now for the most part gone, due to weathering. The dome or vault, was centered with wood timbers and boards. There are still sockets in the walls used for anchoring the centering timbers. Stone crosses adorn the steeple vault, the gable ends of the transcepts and the peak of the apse roof. It would be safe to assume that Mr. Hartmann also carved these crosses as well as the one on the steeple vault. These crosses are of the Latin type. Above the main door there is a different type of cross, of the Maltese variety. The eight points are said to symbolize the eight beatitudes of the Bible.

It is interesting to find that this sort of cross is generally associated with Germany. Clocks are located on the southeast and northeast face of the vault. They consume the space originally used by small lancet arch windows, which are also found on the other two sides. The clocks use the windows to house their mechanisms. They are made of iron and have round plates for the faces.

Father Tarillion, the longest lived pastor, was indeed a busy man with his parish work if not with building things. It is noteworthy to mention that it was he, being an educated and brilliant man, who made one of the clocks. One clock was bought between 1868 and 1873 at the cost of $500.00. It was called the "Stadtuhr" or town clock because many of the townspeople helped the parishioners to buy it.

Entrance to the interior is gained primarily through the narthex. The narthex is not enclosed from the climatic elements as such, it being merely the space in the base of the steeple. The dimensions are about 8' x 8' the same as the steeple above. The ceiling (soffit) is finished with wood boards on framing. The walls are unfinished masonry. Upon entering the nave in the "old days", one must have been impressed by the space in which he stood. Perhaps for the esthetic implications, the designer wanted the beholder to be awed after entering through the somewhat cramped, dark narthex, and then stepping into the vast two-story high nave. The nave walls are two stories high of masonry, and braced with the exterior pilasters. Windows are modularly spaced on the wall. Wall finish consists of a"skim coat" of fine lime plaster on a rough adobe type base over the rough masonry. The walls are quite austere in a "non-commital" natural tan color. There is a marked lack of applied or architectural wall decoration.

A simple wood cove mold crowns the wall and conceals the wall and ceiling joint. There is no

base finestration, the plaster being merely grounded to the flagstone floor.

The floor is on the same level throughout and is paved with random cut and placed flagstones. The joints are sealed with a fine mortar of about 1/2" thickness. The flagstones are indiginous to the region and especially to the Barrons Creek's banks about one and one-half blocks southwest of the church. The ceiling is of rather unique design. It follows the pitch of the rafters and is nailed directly to them. Wood boards comprise the ceiling. Approximately three-fourths of the distance up the rafters the ceiling gently curves away from the roof pitch and becomes flat across the center line of the nave. The flat area is continuous until it meets the intersection of the apse roof planes. On the crossing area of the ceiling there are several six-pointed stars, possibly symbolizing heaven. Such stars are quite unusual to cathedral design and decoration. However, there is no information pertaining to them. As stated above, the church is unbroken with no interior columns, it being a one-aisle basilica plan.

This feature probably contributes to the impression of the vastness of the sanctuary space. The line of sight is unbroken until stopped by the apse walls. For the most part, the whole interior space is marked by austerity and vastness. The space is lighted adequately, in fact quite well owing to the orientation of the building. Coloration is very "earthy", utilizing the natural tans and oranges of the flagstone floor and the tan plaster wall finish. The ceiling at one time must have been whitewashed. These light colors also lend to the aspect of spaciousness.

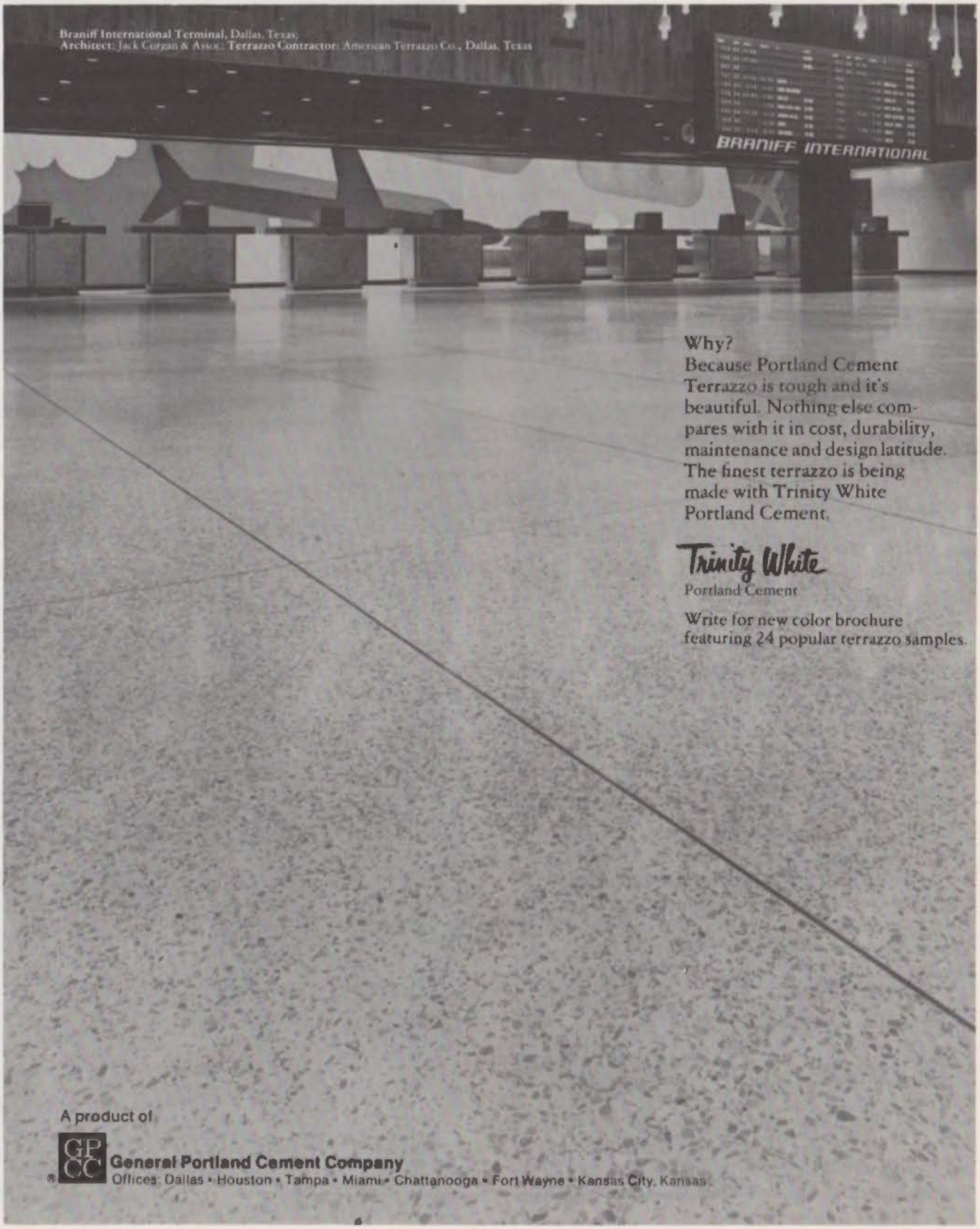
In the earlier discussion of the ceilings there was no deliberate mention of the construction and unusual form. More careful examination will reveal that German ingenuity was again at work.

The builders had to be quite mindful of geometry when they began to curve the various ceilings to a flat intersection. There are about ten different planes which originate at different places and finally meet over the crossing, which even today would be difficult to accomplish.

The church throughout is in an extremely bad state of repair. The roof is falling in, the windows are broken, the second floor is in precarious condition. It haw now become the home of several pigeons who roost in the steeple and make access to the belfry difficult in the least. It can only be hoped that someone will soon strive to restore the church to a usable condition, either as a museum or some other function instead of letting it gather the cobwebs and smell of decay.

article layout by B. Canizaro

Braniff International chose the enduring eloquence of Portland Cement Terrazzo.



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STUDENTSTUDENTSTUDENTSTUDENTSTUDENTS

From North Georgia to San Francisco Bay, American cities are getting help from a new source—architectural students. Students are moving out of the nation's 92 architectural schools into the field "where the real problems are". Architectural students, before they graduate, always had to design buildings that could be constructed. This was called studio work, because it took place at school. Students designed model homes, schools, city halls, etc., sometimes for design competitions. The ideas they uncovered often popped up later as they practiced their profession. Laboratory work is different because it occurs in the market place of opinion where ideas clash. The student must consult with the general public, users, as well as the men and institutions that will pay the bill. He may become an advocate like medical and legal students who uncover human needs when they operate clinics in the city. Students have to spend time in the neighborhood, perhaps live there. Part of their job is to advise what should not be built.

Adequate housing and a resulting boost in civic pride could keep the young and better educated black and white in smaller cities. Now smaller cities lose much of their future leadership because the young migrate to big cities. Around 10 million Americans moved from rural areas and smaller cities to metropolitan regions from 1950 to 1960, according to the U.S. Bureau of the Census. Many did not find improved living conditions and their frustrations added to urban unrest. Many would prefer a less congested setting if jobs and housing are available.

At Gainesville, Georgia, 14 Georgia Institute of Technology students have just designed a bright future for a 139-acre poverty pocket, with new kinds of housing, a projected highway relocated, stores, and a community center to build neighborhood pride. The Georgia Tech students had to go to the people and translate needs of black citizens in Gainesville into a design. A Tech sociologist helped write a questionnaire students used to interview families in the neighborhood. Questions covered space needs inside houses, where people met, distance to churches and jobs, incomes and other matters. The students will never be the same again, now they are much more concerned about what physical plans can do to people and how they harm or help. The Georgia Tech crew is urging that a planned new highway be rerouted so it will not split the neighborhood. Other key student findings for the area include:

—More people, not less, should be housed in the 139 acres because of Gainesville's acute housing shortage, high cost of lots, and blocks to Negro ownership elsewhere.

—A systems approach to housing is needed and possible. Prefabricated concrete or wood components should be brought to the site and assembled like building blocks, providing from two-to five-bedroom homes.

—Trailer manufacturers in Georgia could make the prefab parts.

—Pedestrian paths could link the neighborhood's 800 homes and apartments and underpasses would avoid automobiles.

—Gainesville should modify its zoning ordinances and make other adjustments to cut costs so the citizens could own their homes. This would help stabilize the neighborhood, meet the city's 1,000 to 1,500 shortage of workers, and promote better home maintenance.

—A small shopping center and a community center next to an existing elementary school would give focus and identity which builds pride.

University of Kansas students are at work on both sides of the Missouri River, 34 miles from their campus, in the two Kansas Cities. From patch-up to rehabilitation and entirely new buildings, half of the university's 400 architecture students will take part in the work, some of which is underway in Kansas City, Kansas' Model Cities area. "We have tried very carefully," explained Dean Charles H. Kahn, AIA. "It's ticklish for outsiders to come in and try to take over di-

rection. We have to work through existing community organizations."

Sometimes, students feel they must help start the community organizations and get involved in local politics. That has happened at Cambridge, Massachusetts where students from Harvard's Graduate School of Design are providing data and leadership for tenant groups seeking rent control. Charles Morrow, a Negro educator who lives in the Model Cities neighborhood of dirt streets, trees and scenic vistas, who is vice chairman of the advisory Model Cities committee, said he backs the student findings.

However, he pointed out the root problem in most U.S. cities is the powerlessness of the poor and minorities. Physical design alone cannot overcome this, he said. Cambridge is under tremendous pressure at the moment, from highways, real estate investors and speculators, from Harvard and M.I.T. and from offices and research operations that are spinoffs now from a major university. Students—who have a personal stake in the future of the Boston suburb since they must hunt for housing—cast their lot with local residents. They are battling an Inner Belt Freeway that would remove homes for poor whites and blacks and students. And they are supplying ammunition for obtaining rent control. In Boston, M.I.T. and Harvard students helped "awaken citizen awareness" to save an eight-block neighborhood in South Boston from urban renewal demolition. They also presented physical plans "showing what could be done in this neighborhood."

A warning on the new student surge comes from Harvard Prof. Reginald R. Isaacs, who fears "Crocodile tears" and "amateur sociology". Work in the field based on demands by citizens and politicians, can result in compromise built on top of compromise. The student should be engaged in both studio projects and laboratory projects. Otherwise there is danger of peanut planning and peanut architecture. There has to be equilibrium. We've been cursed with the super ego architect too long. This could be a new chapter.

From the people themselves one begins to get an understanding of what the people want. Students at University of Detroit School of Architecture found out. The student writes the program but only after thorough investigation on the scene. Detroit students have already helped rehabilitate houses in two parts of that clamorous city. Detroit Chapter AIA co-operated. Students are also at work on the analysis of Highland Park, an incorporated city of 40,000 inside Detroit and near the school.

Oklahoma State University at Stillwater is reaching 75 miles east to open a field office in Tulsa's Model Cities neighborhood. Under a $62,000 grant from the Model Cities agency, the School of Architecture will have five to seven students working in the black district. Working with the Tulsa Chapter, American Institute of Architecture, the OSU team will use black professionals, and advise on rehabilitation and the design of new buildings such as a community center to replace one in an old gas station that burned down. Stanford's architecture department has gradually shifted from designing "more beautiful and functional" downtown urban renewal in California to solving garbage disposal for the affluent mid-San Francisco Peninsula, and even thornier civic issues. Two years ago the department's community planning laboratory—which now includes law students and others—advised the tiny and stubborn bay port town of Alviso to join booming San Jose (pop. 450,000).

Alviso was sinking and even though San Jose had helped the sinking by pumping water from beneath the port town, citizens reluctantly did vote to annex. Students found two sides, the grass roots against incorporation and the landowners for it which made them aware of problems they will encounter. Next fall, Stanford will attack housing problems in Metro San Jose which has a vacancy rate of around one per cent and soaring housing prices. They will confront tax and land use problems as well as design.

Students, of course, don't have to pay for their solutions or even suggest how to finance them. At Michigan City, Indiana in 1962, twelve Notre Dame students proprosed "dramatic" downtown rebirth including a shopping mall, highrise building and other uplift. "Grandiose" was the reaction of some skeptical officials. A law suit and other complications stalled Michigan City urban renewal. Finally a new outlying shopping center forced landowners to form a development corporation which now plans to vacate part of the main street and erect "the first downtown shopping mall in Indiana." "You know, those student plans are strangely coming true," says Robert A. Bailey, executive director of the city urban renewal department. □

Goliad Primary School. Architects: Noonan, Krocker & Rogers, AIA. Mechanical and Electrical Engineers: Schuchart & Associates Professional Engineers, Inc.

"...sometimes we need to heat one side of the building and cool the other."

Thanks to *all electric year-round multi-zone* (individual room) *airconditioning and comfort control*, the Goliad Primary School boasts an educational environment that has noticeably increased student achievement levels. Superintendent Norman Davis says, "Students work harder and do a better job because of the quiet comfort conditioning. Also, teachers' efficiency has improved. They are just as enthusiastic in the afternoon as in the morning."

Individual room thermostats provide just the right temperatures needed, even to heating the north side of the building and cooling the sunny south side on certain days. A morning and evening time clock control adds to an already economical, efficient systems operation.

There's more. New band and vocational buildings at Goliad's high school campus utilize the same type heating and cooling systems... and an *all electric kitchen and cafeteria* provides food for all the Goliad schools. *Who could ask for more.*

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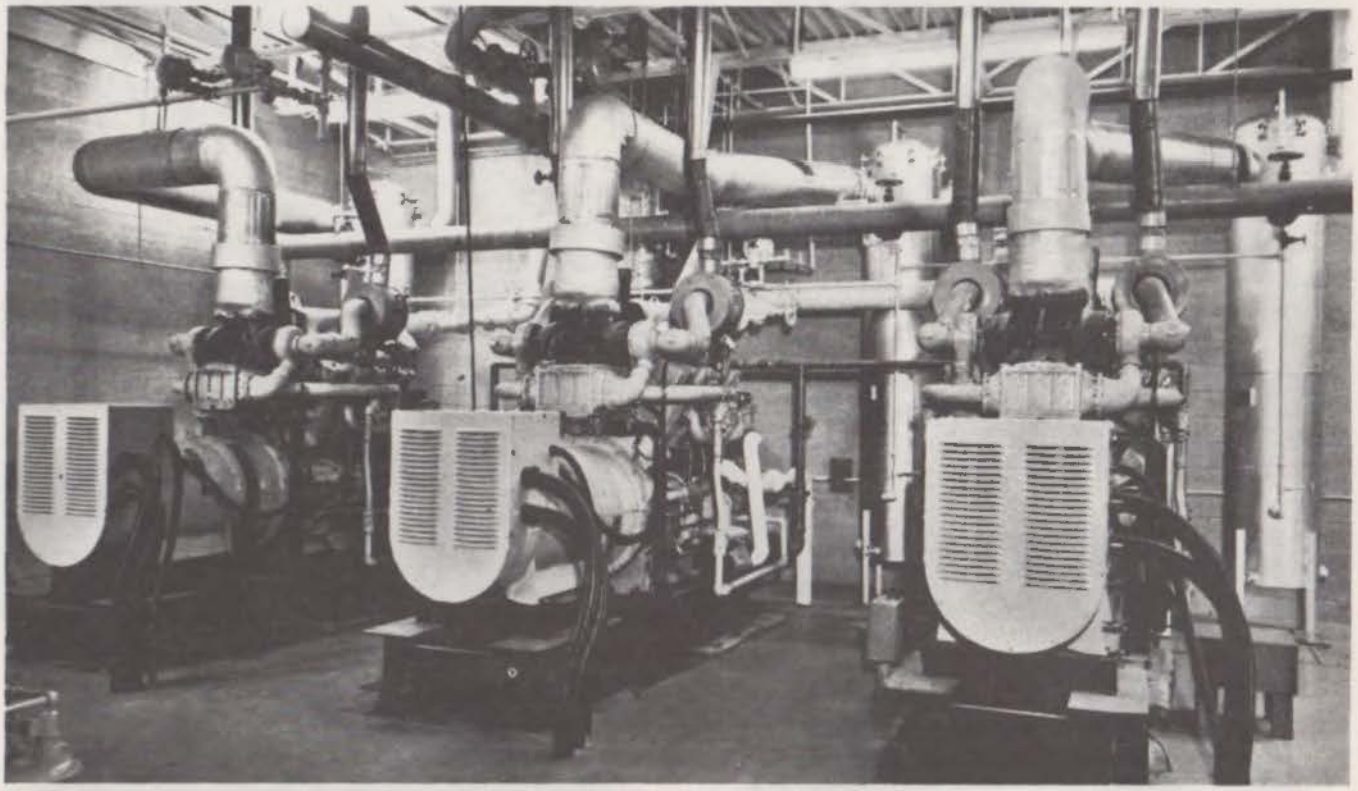

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IN OUR BUILDING! NO . . . WE WILL NEVER HAVE A FIRE

U. S. Losses from major fires declined by more than 20 per cent last year, the National Fire Protection Association (NFPA) reported recently. Property destroyed in 1968 by large-loss fires totalled $314,363,000.

The report, compiled annually by NFPA, includes only fires individually causing a quarter million dollars or more in damage. These are the fires, the association points out, which in almost all instances started small but grew to destructive size because of failure to use adequate protection measures. Only 487 fires —a tiny fraction of all 1968 fires in the United States—were responsible for this $314,363,000 worth of destruction. They involved buildings of all types, industrial facilities, transportation equipment, and other property. Earlier estimates reported by NFPA indicate there were about 2,400,000 fires of all sizes in this country during the past year, with losses totalling in the neighborhood of $2,180,000,000.

Three aircraft fires were in the multi-million-dollar loss category last year. A $7,500,000 Douglas DC-8 was destroyed in a training flight crash near Atlantic City, N.J. An unsuccessful take-off in Chicago resulted in a $4,750,000 crash fire which destroyed a Boeing 727 aircraft. Losses were estimated at $3 million when a U.S. Air Force KC-135 Strato-tanker exploded during a training mission near Castle Air Force Base, California.

The worst U.S. fire last year in terms of dollar loss occurred in an industrial complex of 21 mill buildings in Bondsville, Mass., where more than $10,000,000 worth of property was destroyed. The year's second most costly building fire did $6 million damage to New Rochelle (N.Y.) High School. Set by a student, this fire was especially difficult to fight because of major renovation and construction work in progress on the school building at the time. The $5 million fire at the Gannon Steam Power Plant of the Tampa (Fla.) Electric Company began when a high-pressure oil supply line broke, spilling oil which burst into flames. Losses were $3,905,000 at the Tacoma (Wash.) Boat Building Company fire. A $3,450,000 fire destroyed furniture company warehouses, salesrooms and offices in Linden, N.J.

Principal factors permitting minor building fires to develop into major fire losses included construction weaknesses, absence of protective sprinkler and alarm systems, and the fire hazards inherent in the contents of structures which burned. Frequently-found examples of structural weaknesses which violated fire safety standards were missing division walls and enclosed stairways and elevators. In many cases, these structural designs allowed fire to sweep throughout a building, instead of being confined near the area where it originated. Proper design of structures, combined with proper use of automatic sprinkler and alarm systems and other protection equipment, could have eliminated or at least minimized many of the dollar losses suffered in the large-loss fires of 1968.

HOME SWEET HOME . . . . ON THE MOON

The first thing man will need when he settles on the moon for a prolonged period of time is a giant aspirin. Or so Professor C. Herbert Bowes, AIA, of the University of Colorado contends. But he hasn't in mind the regular type aspirin. His type is a pressurized aluminum shelter with only the shape of the common tablet. However, it is designed to take some of the headaches out of living in the hostile lunar environment. The shelter would have some of, while certainly not all, the comforts of home: kitchen, bath, sleeping quarters, exercise and recreation space, a TV set and a microfilm library. It would be covered with lunar soil for added protection against radiation, storms and extreme temperatures.

The shelter is planned for a six-month stay for two men and is completely self-contained, although it might be part of a larger station. Power initially would be supplied by small nuclear power plants; as the colony grows, a larger plant could be used and the smaller ones be held in reserve in case of emergency.

Professor Bowes, who has studied extraterrestrial design for the past eight years doesn't expect a building boom on the moon. Even so, he feels that architects should become involved in the design of moon shelters and the planning of moon stations, which may well influence construction on earth.

In view of the predicted population explosion, man will need more room. Space technology may encourage development of regions of the earth so far considered uninhabitable for larger communities as a normal way of life, such as the polar and subpolar regions and our many deserts. If in the near future we are to create housing worthy of, and within reach of, most people, architects could learn from the aerospace industry a fresh and more efficient approach to design. □

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