A Vital Project Swings on GRIFFIN

Supplying the hinges for the National Aeronautics and Space Administration's Manned Spacecraft Center in Houston is a challenging responsibility. Griffin is extremely proud to participate with Post & Webb, Hardware Consultants of Houston, Texas, in the multi-million dollar project. Solving problems and alleviating emergencies on construction projects are Griffin's business. Our success is graphically indicated by the growing list of projects which swing through the years on Griffin quality hinges. Just as every door needs a hinge, every construction job, large or small, needs Griffin's dependable assistance.

GRIFFIN HINGES
Griffin Manufacturing Company
MEMPHIS, TENN. Plant: Tupelo, Miss.

Griffin and hinges just go together.
BILLBOARDS OFFEND 'UTOPIAN' IDEALS

Our editorial attitudes have been called "Utopian" on occasion and we are sometimes inclined to think the term is a good one. If to be Utopian is to speak and work for the beauty and serenity of the community, then Utopian we are.

At this moment our Utopian ideals are being seriously assaulted by a steadily increasing blight on the face of Memphis. The phalanx of billboards, particularly in the vicinity of Aulon Viaduct near Poplar and Union Extended, is indeed rough on us Utopians.

Rather than become involved in the intricacies of billboard ordinances and regulations, we are going to take the Will Rogers' approach and say "Something should be done." If the regulations governing the frequency, location and size of outdoor advertising are inadequate, the regulations should be changed. Many of the gaudy advertisements that desecrate the local scene not only offend the visual senses; they also offend the intelligence of the populace.

We fully well recognize the economic importance of outdoor advertising to business and industry. Advertising in its many forms is an integral part of the American scene. But, for the sake of visual harmony, visibility, beauty and peace of mind, some discretion should be used. The practice of "stacking" billboards in a location as a competitive measure could and should be eliminated. The names of outdoor advertising firms that are guilty of that practice are normally shown somewhere on their handiwork.

Apparently, there are too many ways to circumvent the rules on billboards. Limitations on the number of square feet permitted on a board may be bypassed by use of several small units. The shape of many sign boards alone is enough to discourage a close computation of the square footage.

The furor created some time ago in the aforementioned Aulon Viaduct area has diminished somewhat, but the influx of unsightly billboards, posterboards, painted signs, outdoor ads, or whatever you choose to call them, continues. Architecture-Memphis intends to say more on this topic in the near future.
FROM 42 feet beneath the surface depth of its 770 pilings, the 100 North Main Building is moving steadily toward its 38-story zenith from which occupants will look down on the remainder of Memphis.

"It is a city within a city," said Harry Bloomfield of Bloomfield Building Industries, Inc. "It will have practically all the facilities of a small city." To the company president, raising gigantic buildings is not a new experience. But, the 100 North Main Building has extra significance to him. Memphis is home and the building represents a greater challenge on home grounds.

Robert Lee Hall & Associates, with Ben Waller carrying the major portion of the design load, faced the challenge along with Mr. Bloomfield of planning a large commercial building adaptable to the varying needs of tenants who have been leasing space as construction proceeds.

The co-operative spirit between builder and architect appears to be a significant factor, because the structure is rising at a rate of five to six floors a month with the "topping out" expected by September 15 or October 1 this year. Adherence to that schedule would mean that piling and pouring would be completed 14 months from the time it was started. Completion of the entire building is set for July 1, 1965 with the first tenants due in by the preceding January 1.

From the standpoint of size and population, the description of "a city within a city" is an apt one. The structure will be the tallest in the Mid-South

(Continued on Page 6)
WHAT BRIDGES DID...

... TO THIS VIEW
Modern concrete forming


**STRENGTH OF CONCRETE FOR SAFE FORM REMOVAL**

<table>
<thead>
<tr>
<th></th>
<th>AVERAGE TIME TO OBTAIN STRENGTH*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete not subject to bending (tops of sloping surfaces)</td>
<td>500 psi 24 hours</td>
</tr>
<tr>
<td>Concrete subject to bending caused by:</td>
<td></td>
</tr>
<tr>
<td>1. dead load only</td>
<td>750 psi 36 hours</td>
</tr>
<tr>
<td>2. dead and live load</td>
<td>1500 psi 3 days</td>
</tr>
<tr>
<td>Concrete subject to high stresses (roof or floor slabs and beams)</td>
<td>2000 psi 4½ days</td>
</tr>
</tbody>
</table>

*Concrete with Type I portland cement: 6½ gallons/bag at about 70°F.

Prepared as a service to architects by Portland Cement Association

New forming and casting methods, as well as advanced building techniques, encourage dramatic increase in use of sculptured concrete. The advantage of rapid form removal (in some cases forms can be stripped after one day and reused immediately) has given concrete an economical and esthetic design versatility. In addition, new forming methods and materials permit the higher reuse of forms, sometimes as high as sixty times. An example of one method of new form construction is shown in Fig. 1. The master mold is draped with fiber glass reinforcement, which will be firmly embedded in a thick coating of polyester resin. (Photo: Engineered Concrete Form Corp., Chicago.) Fig. 2 shows completed forms for Marina City, Chicago. Fig. 3: True hyperbolic paraboloids were used in the Henry Ford Hospital parking structure, Detroit. The 7-ft. 4½-in. concrete panels have a 90° twist, are 24 in. wide top and bottom and 18 in. at waist. (Architect: Albert Kahn.) Fig. 4: The Wyoming National Bank at Casper, Wyoming, illustrates the complete freedom possible in concrete. (Architect: C. Deaton.)

Write for free information. (U.S. and Canada only.)

815 Falls Building, Memphis, Tennessee 38103

PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete
and will house some 5,000 persons during the workday peak. Between 600 and 700 automobiles can be housed at one time. The cars will come and go on "streets" that are marked with lane indicators designed to expedite movement in the direction of heaviest travel.

The vehicular lanes will accommodate three cars abreast. During peak influx periods, two traffic lanes will handle self-parkers and a single lane will be used for serviced parking. Just inside the Second Street auto entrance there is a "well" or reserve parking area for about 27 cars, acting as a buffer for service parking. Similar "wells" accompany other floors housing parking spaces.

Excluding parking, the building will contain 525,000 square feet of office and commercial space. Structurally, the 100 North Main Building establishes several precedents for the Mid-South. The block-long, half-block-wide unit is unique because the basic structure is being poured of concrete from bottom to top. Most buildings of similar stature utilize steel or prestressed concrete frames.

Because of the poured structure, the design is based on the central core system with all facilities radiating from the elevators. The two banks containing 12 high speed elevators will be divided to serve on one hand the first 22 floors and on the other serving floors 22 through 34. Two of the elevators will operate from floor 34 up. In addition there will be two escalators from the Main Street lobby to the next floor. Persons entering the building on the Main Street side will do so at the second level. Those entering from Second Street will be at the first level.

The building will be marked by liberal use of marble and terrazzo on the interior while the exterior will glister with white marble precast panels. The exterior skin is being completely insulated from the remainder of the structure with a one-inch thick layer of expanded polystyrene. In geometric pattern, the building facade will be enhanced with vertical panels in the shape of a structural channel. Horizontally, the lines will be interrupted by pre-cast louvers that provide shade for the occupants.

Among the interesting items of utility is a full-height trash chute that opens directly onto the loading dock. The truck dock will comfortably handle several large trucks off the adjoining alley. The arrangement should preclude traffic congestion problems in the alley.

Most any needs of occupants or visitors in the 100 North Main Building have been considered in the design. Union Planters National Bank will have the largest of its banking lobbies in the building. There will be a variety of dining facilities to accommodate 500 people. The large cafeteria alone will handle about 300 persons at a time. In addition, there will be a kosher-style restaurant and a combination soda fountain and sandwich shop.

A wide variety of commercial establishments is planned. There will be sportswear shops, barber and beauty shops, camera shop, gift shop, drug store, jewelry shop and others.

The real highlight of the building, however, and the builder's most prized portion of it is the Top of the 100 Club. The Top of the 100 is a membership situation aimed at giving participants the ultimate in social and recreational opportunities. Mr. Bloomfield emphasizes that the club will retain nominal membership fees and prices within reach of most downtown people.

On the 34th floor will be a deluxe supper club; on 35 a complete gymnasium, and on 36 will be an 18 by 40-foot steel tank swimming pool with retractable roof and on 38 will be the glass-enclosed roof-top lounge. The lounge is significant primarily for what will be an uninterrupted view of Memphis and surrounding area. Patrons of the lounge may sit on couches on a revolving platform and view the entire panorama as they move through the complete circle each hour.

Also a part of the club will be a health studio featuring steam rooms, sauna dry-heat room, and

(Continued on Page 16)
Traditional Windows Are Still Being Designed
For Installation In Older Churches

A story is told by using different symbols in each of twenty windows in the Hazelhurst Presbyterian Church.

One of six leaded stained glass figure windows installed in the Dresden, Tenn. Methodist Church.

An addition to Mullins Methodist Church is the window below installed in the Prayer Room.

HAZELHURST, MISSISSIPPI

DRESDEN, TENNESSEE

MEMPHIS, TENNESSEE

MAY 1964
ARCHITECTURE and swimming pools have more in common than is generally assumed. It is true that the major portion of problems in construction of private pools concerns engineering, but what about the location, the shape and the ancillary facilities? Such factors should be of prime concern to the homeowner who is contemplating a private pool.

Although purchase and installation of a pool may be likened in price to a new automobile, the similarity ends there. An auto may be replaced in a year or two or three. A swimming pool is a permanent fixture that could well be a lifetime proposition. Its location, size, durability, maintenance costs and numerous other facets deserve study.

One of the first questions the prospective pool owner will encounter is whether his property is suitable for a pool. Size and shape of the lot have heavy bearing on the initial question. Can large construction equipment reach the area without difficulty? Who pays for removing and reinstalling fences? Is the soil conducive to a pool?

In addition, before any dirt is turned, it behooves the pool planner to investigate local ordinances governing construction and use. In Memphis, plans, specifications and shop drawings must be submitted to the Bureau of Sanitary Engineering prior to award of the work contract. Such plans must be by an architect or professional engineer.

Memphis ordinances require that pools be enclosed by fences. All plumbing must be inspected by the sanitary engineering people and the Plumbing Department before pipes are covered. Even before the digging and plumbing are begun, there are literally dozens of important decisions to be made.

Looking back to the location factor, persons planning pools in the city are reminded that back-wash water from the filter cleaning process must flow into a sanitary sewer. Such matters as the pool's relation to sun and shade as well as its proximity to and visibility from the home are important.

In other words, a private swimming pool is much more than a vessel containing 20,000 to 40,000 gallons of water. It is an integral part of the occupants' environment. Not only the pool, but the area surrounding it and the accouterments accompanying it should be thoroughly planned.

A proven aid to pool planning, which came about as pool popularity grew more rapidly than the industry, is a visit or visits with people who already are pool owners. Their testimonials offer well-based opinions. They can explain what plants grow best around a pool, which materials are more or less susceptible to the purifying chemicals, what it costs
IS A MAJOR PROJECT

to operate and maintain a pool and most important, whether they feel the entire project is worth the effort and money.

Once the homeowner has examined the overall project and decided to carry it through, he probably will contact one of several firms that specialize in pool construction. In the meantime, the homeowner will have placed many of his ideas on paper. He should also have studied pool feasibility from all angles. The pool builder must assume that the owner knows what he is doing; that such matters as easements, property lines and underground utilities permit pool construction.

Without complete investigation, the prospective pool owner may encounter much unnecessary delay and expense.

Selection of size and shape of a pool is a matter of individual taste that is often limited by space and terrain. Prices begin in the neighborhood of $2,000 and go up from there. As with most any saleable item, the price depends on the end product. But, a pool to fill practically any family need is available generally between $2,000 and $6,000.

The basic pool is a far cry from the completed pool area where sun decks, entertainment space, bath houses, wind screens and splash areas contribute to the scene. Often, the price of the basic pool includes only the pool and the pump and filter system. Such conveniences as diving boards, ladders, underwater lights and a pool cover are listed as extras in some cases.

It is certainly important for the pool buyer to know if the prices quoted include the "extras." A good diving board and ladder may add $200 to the original price of some pools.

For the average pool shopper, the type of structure will be one of four or five most commonly used. Once again, the amount of money to be spent influences the selection of structural material. The basic materials include concrete (five different forms), vinyl liners, fiberglass and metal.

Vinyl liners offer a low cost factor not easily matched by any other product. Using such a liner with solid sand base and supporting walls, a basic pool can be installed at a price of slightly under $2,000 for 16 by 32 feet. Reputable manufacturers guarantee the liners for as long as 10 years, but the actual life has not been definitely determined.

The greatest problem that has faced vinyl liner producers has been the material's weakness against ultra-violet rays from the sun. The rays were breaking down the molecular structure and causing deterioration.

(Continued on Page 14)
MASONRY AWARDS GIVEN

Gardner's Masonry Contractors received top honors in the 1964 masonry execution competition for their work in Williamsburg Village.

The Village development of shops and offices near Mt. Moriah Road and Poplar was designed by Haglund & Venable, architects, with William Culbreath as general contractor. Boyle Investment Company is the developer.

The first-place masonry firm also received an honorable mention for Westwood Shopping Center.

Charles W. Ellis, Jr., was chairman of the judging team from Memphis Chapter, American Institute of Architects. Other architects on the team were Dean E. Hill and Gerald Stratton. There were 22 projects in the judging. The judges excused themselves from judging any structure they designed.

Additional winners included:

Second Place—Everett W. Cook & Sons, Inc., for First Church of Christ Scientist, designed by George Awsumb & Sons.

Third Place—Young Bros. Masonry Contractors for Motion, Inc., designed by Wadlington & Marshall.

Honorable Mention—Frank Norris, Jr., for Shady Grove Presbyterian Church Sunday School Building, designed by John Millard.

Honorable Mention—Young Bros. for Tri-State Mack Distributors, Inc., designed by Sanford & Ellis.
“The Romans were acquainted with the simple hydrostatic law that water rises to its own level in pipes, and the upper rooms of houses were supplied by ‘rising mains’ in the same way as in modern buildings.”

— A HISTORY OF ARCHITECTURE, on the comparative method, by Sir Banister Fletcher.
SANITATION CONTEST PLANNED

The City Beautiful Commission of Memphis is reviving its effort to get residents to improve garbage and sanitation areas. The commission members feel that the increasing use of yards and patios for cooking, dining and entertaining brings new importance to the location and condition of garbage areas.

Competition will open about June 10 with members of the Sanitation Department delivering entry forms during regular pickup service. Prizes of $50 and $25 Savings Bonds and a cash prize of $10 will be presented on Sept. 21. Preliminary judging by
35 commission board members will be held August 10-20. Additional entry forms will be mailed on request by the commission.

Judging will be in three major areas of improvement: house, fences and outhouses; sanitation area and landscaping. Within those categories fall such matters as regulation containers, accessibility to house and collectors, consideration for neighbors, blooming plants, flowering trees and shrubs.

The commission recommends three 20-gallon containers with lids for a family of five. Containers should be galvanized or plastic.

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MAY. 1964
PLANNING A POOL
(Continued from Page 9)

One vinyl liner distributor in Memphis guarantees his product for 10 years, the period during which the company has been in production. The distributor claims that none of the pools have had to be replaced because of deterioration and that as the first pools installed continue to function, the guarantee time is very likely to be lengthened.

Vinyl requires little maintenance, primarily because of its anti-scale and anti-algae qualities.

The most common material used in pool construction is concrete, either poured, gunite, hand-packed, pre-cast or in block form. The gunite process, in which concrete is sprayed on reinforcing materials under extreme pressure, is most economical in metropolitan areas that can support the builder's investment in application equipment.

Fiberglass is coming into its own in pool construction. The product is easily maintained, but has some problems of being susceptible to chemical damage. Although there is a spray-on process for fiberglass, most such pools originate as shells that have been cast on molds.

Steel and aluminum are used in some pools, but the cost factor has been a prime deterrent to unlimited application.

Regardless of the material selected for a pool, the prospective owner should acquaint himself fully with mechanical and maintenance demands. Compare the cost of pump and filter systems against their durability and cost of operation.

In addition to the basic pool, pump, filter and such items as diving boards and ladders, a pool requires purchase of certain maintenance equipment. A vacuum cleaner may cost from $100 to $200; a leaf skimmer, brushes and handle will cost in the area of $50.

Using the equipment to keep a sparkling, clean pool will take six or eight hours a week. Overall

COAL TAR PITCH

The one material that meets all specifications for dead level and low pitch built-up roofs.
maintenance costs for an unheated pool during summer months, including utilities, average from $15 to $30 per month.

Another question arising in any discussion about private pools is "What does a pool do to your insurance rates?" From the standpoint of liability in which most persons are interested, Tennessee requires that coverage be automatically included in the homeowner's policy. The requirement was established last July. For persons who have policies written before that date, it is best to have the old policy rewritten on the anniversary of the original writing. To have the policy rewritten between anniversaries is sometimes difficult.

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massage rooms. Provision also has been made for 11,000 feet of party and meeting rooms. The club will operate in conjunction with the new Rivermont Apartment-Hotel where some facilities will be available to members.

Such design projects as the 100 North Main Building have served to move the Hall firm into the top 100 architectural firms in the nation from the standpoint of dollar volume. Robert Lee Hall & Associates is rated in the 25 to 30-million-dollar bracket of figures on "construction put in place." The figures for 1963 were published by Architectural Forum in April.

Robert Lee Hall & Associates.................. Architects
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SUPERSTITIOUS OBJECTIONS

"Limitations on size, density, and area are absolutely necessary to effective social intercourse; and they are therefore the most important instruments of rational economic and civic planning. The unwillingness in the past to establish such limits has been due mainly to two facts: the assumption that all upward changes in magnitude were signs of progress and automatically "good for business," and the belief that such limitations were essentially arbitrary, in that they proposed to "decrease economic opportunity"—that is, opportunity for profiting by congestion—and to halt the inevitable course of change. Both these objections are superstitious."

—THE CULTURE OF CITIES, by Lewis Mumford.
EVERYTHING AND
Bennie
James
Norrell
I{erman
John
S.
Donald Ray Bingham
W.
William
William
John W. Burroughs
James
Spencer
William Burnett
Robert Lee Browne
James L. Burke, Jr.
William Burnett
John W. Burroughs
G. A. Chandler
William P. Cox
William R. Eades, Jr.
W. Jeter Eason

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