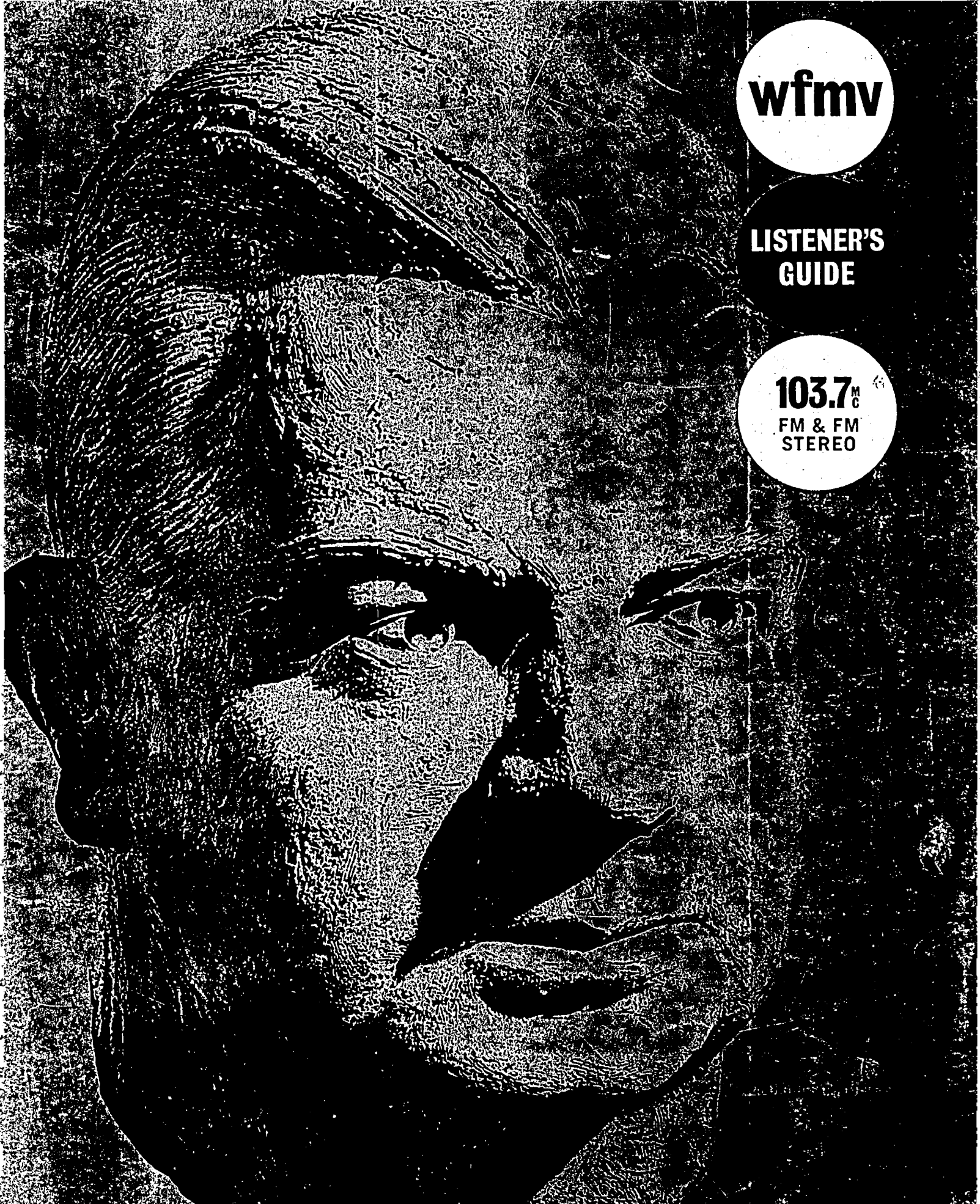




**LISTENER'S
GUIDE**



THE FM BROADCASTING STUDIOS OF FIDELITY BANKERS LIFE & QUALITY LISTENING IN VIRGINIA



By HAIGH JAMGOCHIAN,

Architect - Sculptor

The architect's role as a sculptor dates back to Michelangelo, Bramante, Bernini and other earlier artists. In the twentieth century of mass production methods and emphasis on square-foot cost construction, one nearly forgets that the strength of the architect is his artistic abilities.

Sculpture is the most natural of the arts to the architect. In this medium he may exercise his sensitivities in a three-dimensional composition of line, space and mass—without the restrictions inherent in architectural design.

The architect is the creator: conceiving new and unique ideas in form for a specific purpose. The sculptor is the reporter: sensitive to that which already exists, recording his impressions in form. What he sees, of course, is the important question. In portraiture, the sculptor must study personality and make a judgment on the character of his subject. It is then a simple matter of technique to emphasize the expressive element. He is working a all times in three dimensions, seeing the actual product take shape under his hands; while the architect must work in the two-dimensional world of sketches and blueprints, depending upon his ability to perceive the third dimension accurately. While the sculptor works unhampered by codes and ordinance the architect must be aware of his restrictions legally and technically abiding by the necessary rules

the architect's natural art

engineering, building codes, and economic considerations. Clay is cheap, square footage must be paid for with client's dollars. And there is still another dimension in which the two must work: Time. From conception to completion, the sculptor can find satisfaction in watching his work take shape steadily and relatively quickly. The architect, however, may often lose sight of such satisfaction because of the length of time needed for construction and a continuous procession of new projects needing his attention.

Despite—or perhaps, because of—these differences in technique, sculpture is the pleasing art form to the architect whose eye is conditioned to perspective. Two-dimensional painting becomes static and may be viewed out of perspective; but sculpture can answer the artistic needs of the architect on all counts. Each role involves his ability to perceive and create forms appropriate to the needs, practical or aesthetic. The artist, sculptor or architect, conceives and creates his work through a process of experiences and beliefs. While the viewer, with a different set of experiences, may derive a different emotional satisfaction from that of its creator, the work itself remains valid—and the only true goal of art in our civilization is reached.

It is obvious that the architect, even though he is the creator rather than reporter, must design in conformity with a building's natural surroundings. Most forms in nature are beautiful. Close observation and study of these forms brings us to the realization that they have evolved through the struggle for sur-

vival. Purity, beauty, practicality in their most elemental form. Both architect and sculptor should be aware of the results of this struggle in nature for their own work. The closer this natural evolutionary process is approached in architecture and in sculpture, the more beautiful the finished product.

In both arts, the designer has a powerful ally in the texture of his materials: providing the contrast necessary to express movement, to emphasize and define space. The architect can learn to integrate sculptural technique with his building design through experiment with this theory. Stairs, for instance, should be sculptural and monumental—not a utilitarian afterthought tacked on to the finished design. Stairs should be the salutation in a letter, the preface to a book, the introduction to a speech—in other words, they are the most immediate design element to be solved.

The artist has a responsibility to his own integrity and to history. Portraiture in sculpture is the artist's most lasting, truthful report to society. The character of its leaders, preserved in sculptural form, is an important record for the community. Portraying the Governor of Virginia has been a great honor, especially for an architect, because to him the responsibility of preserving the community is as important as its formation. By creating a third-dimensional portrait characterizing the vigorous leadership of our Governor, we are adding to the philosophic record of our state—just as our buildings inform future generations of the wisdom and dreams of their forebears.

The present fad for abstraction in

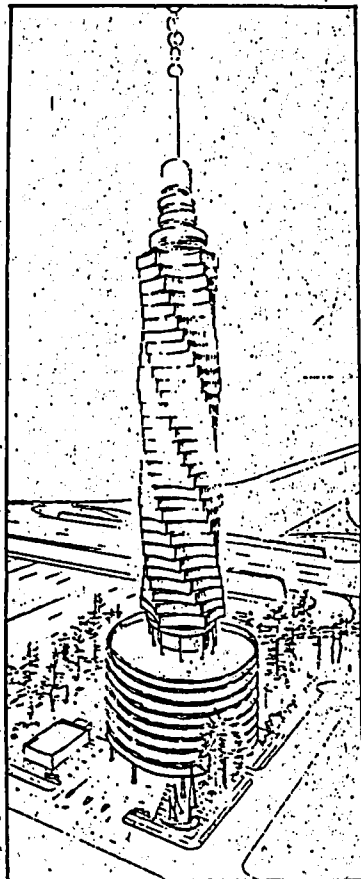
art, and particularly in sculpture, does little except relieve the artist's own monotony. An abstract record of an individual sculptor's vague emotions may be of a certain passing interest, but will make little impact on a world engaged in the struggle for survival. The abstract artist of today is a master salesman, not a master craftsman. (The best abstractionist would be a child who has never learned the prejudices of life to distract him from expressing his pure emotion-in-form.)

The architect today is in danger of falling into the same error: that of becoming simply a businessman, in contrast with the 15th century architect who was a true artisan on the job as well as its designer. Good design, true to natural forms, should be standard practice for an architect. His title should be synonymous with artistic integrity, rather than with shrewd salesmanship, concerned only with the erection of a building to meet the code requirements. The demand for an architect's knowledge and responsibility in the related fields of engineering and art should be equally recognized. Whenever the arts are related unnaturally, architecture suffers.

An architect's foremost position is one of responsibility: to his client, of course, and to his community as well. He has an important share in formulating and shaping civilization. Through the process of imaginative design and planning, an architect establishes the structure and philosophy of a building. In turn, this building will bring to bear, through the years, a significant influence on the structure and philosophy of the community and its people.

City considering a spiral building

Architect Haigh Jamgochian wants to build a 31-story, 744-foot "communications executive center" office building with a spine of sophisticated electronic hookups for the computerized communications age now starting.



Architect's drawing

Spiral adds strength
Escape route on outside

The towering, six-sided spiral would apparently be the tallest building in Virginia and would provide fire escape routes on the outside. A drum-shaped parking garage for 450 vehicles would be above ground at the base of the spiral building.

Tenants would get complete personal computer systems, including terminals at home and in their cars. Connected to the system, a tenant would be in touch at all times with his business and with all the information available in the "data base," Jamgochian said.

The parking decks, offices, a revolving restaurant at the top and two floors for clubs would be in the 504-foot structure. A tower at the top would bear dish antennas for communication transmissions. The tower would reach to 744 feet.

But despite its height and unusual design, it needs only an agreement to widen access streets and a special-use permit to exceed the 60-foot height limit, said Jon P. Weersing, head of development review in the city Planning Department. Otherwise, the design, as is, satisfies the planning staff and the zoning ordinance.

It has also been approved by the Federal Aviation Administration as no hazard to aircraft, Weersing said.

The special use permit will be before the Richmond Planning Commission June 18 and before the City Council a week later.

The site for the building is at the Midlothian Turnpike-Chippenham

Continued from first page
Parkway cloverleaf, north of Midlothian and east of Chippenham.

It contains two parcels of land. One is owned by Melvin W. Burnett, retired Chesterfield County administrator. The other is owned by Security Federal Savings and Loan Association, which has a branch office adjacent to the site.

Jamgochian is the developer of the project, with agreements from the two landowners. Aviation Electronics Inc. of Atlanta is designing the electronic equipment and participating in development, he said. Two financial backers are interested, one in Norfolk and the other in Dallas, he said.

Jamgochian said he conceived the use of the building before its appearance. At its circular core cables, electronics equipment and elevators will supply access and technology to each floor. Offices will surround the central spine so each is connected to the spine and convenient to hookups.

The spiral shape increases the structure's inherent strength, Jamgochian said, so that fewer, lighter and less expensive materials can be used.

That keeps construction costs at about \$50 per square foot, he said. All the electronic gear the building will contain adds another \$50 per square foot to the cost. At roughly 115,000 square feet, the project cost would be about \$11.5 million.

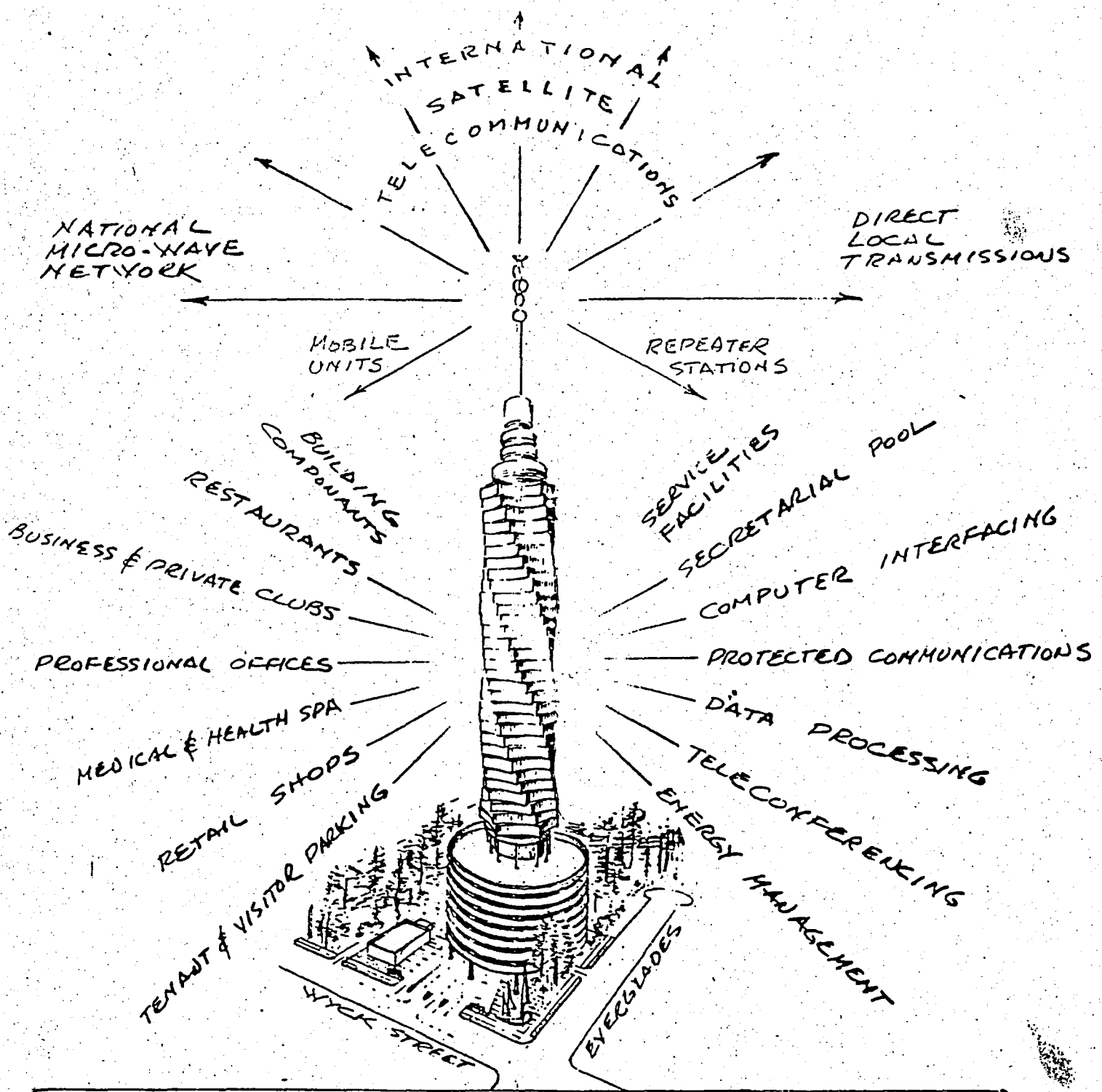
Weersing said papers filed with his office show a net leasable area of about 1,800 square feet per floor.

Jamgochian said he learned in a house fire last year, which badly burned his hands and arms, that traditional fire escape routes on interior stairways are no good.

Although the building's stairways would meet fire safety specifications of the building codes, its recommended escape route would be through doors in each concave face of the hexagonal building and down the outside of the building like steps in a circular stairway.

Continued on page 3, col. 1





COMPLIANCE WITH PROVISIONS OF CITY CHARTER ASSURES THAT THE PROPOSED SPECIAL USE WILL NOT:

- 1 BE DETRIMENTAL TO SAFETY, HEALTH, MORALS & GEN. WELFARE.
- 2 CREATE CONGESTION IN STREETS & OTHER PUBLIC WAYS.
- 3 CAUSE HAZARDS FROM FIRE, PANIC OR OTHER DANGERS.
- 4 OVERCROWD LAND & CAUSE CONCENTRATION OF POPULATION.
- 5 ADVERSELY AFFECT SCHOOLS, PARKS OR OTHER IMPROVEMENTS.
- 6 INTERFERE WITH ADEQUATE LIGHT AND AIR.

COMMUNICATIONS EXECUTIVE CENTER

MILOTHIAN TURNPIKE

HAIGH JANGOOCHIAN, ARCHITECT RICHMOND, VA. JUNE 13, 1984

Architect Haigh Jamgochian designs a contemporary "tree house"

New design freedom
in the Open World
of L·O·F glass

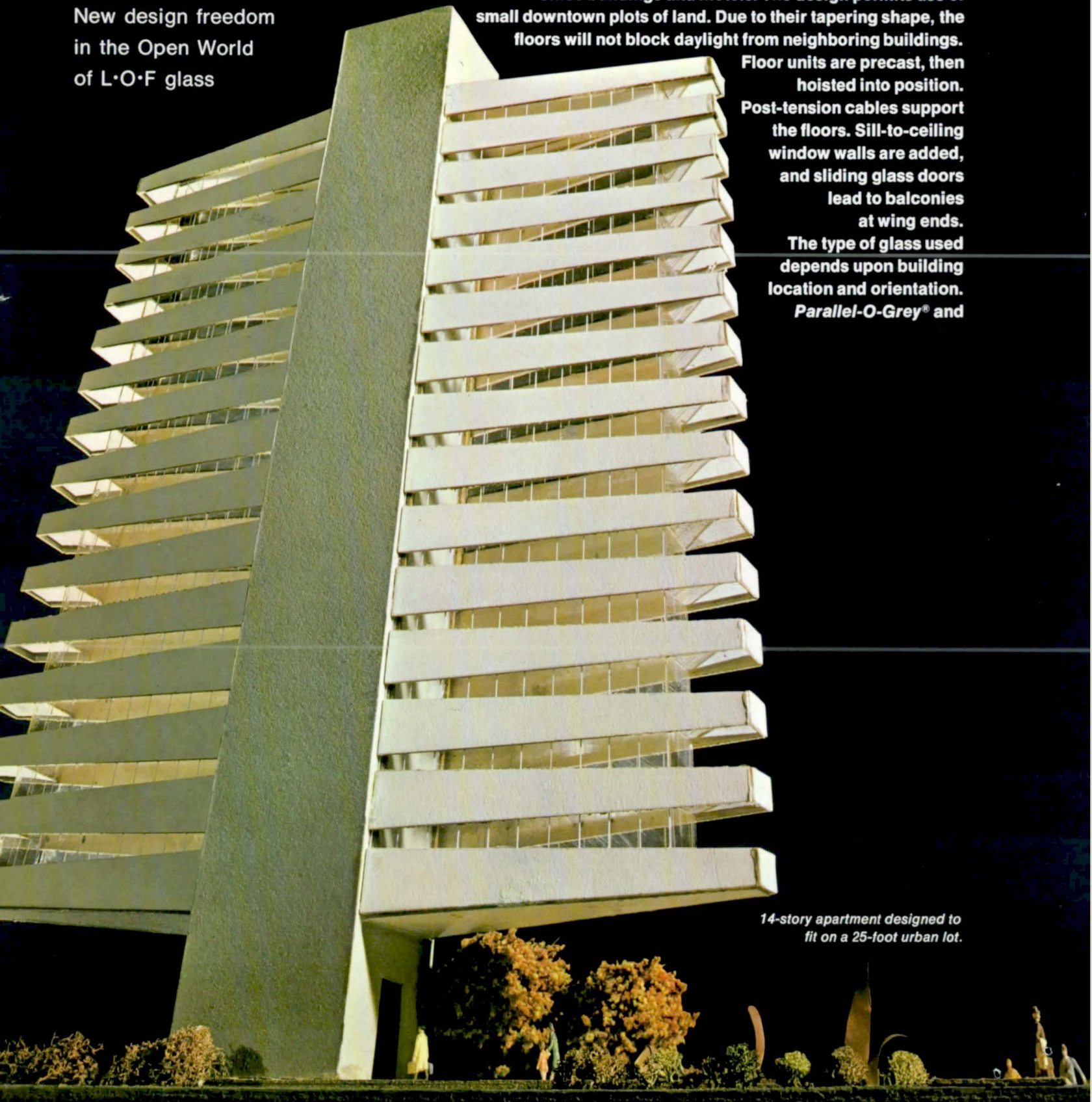
Each floor is attached to the trunk like limbs of a tree. The trunk is a central "slip formed" concrete core. This cantilevered design concept is suitable for apartments, office buildings and motels. The design permits use of small downtown plots of land. Due to their tapering shape, the floors will not block daylight from neighboring buildings.

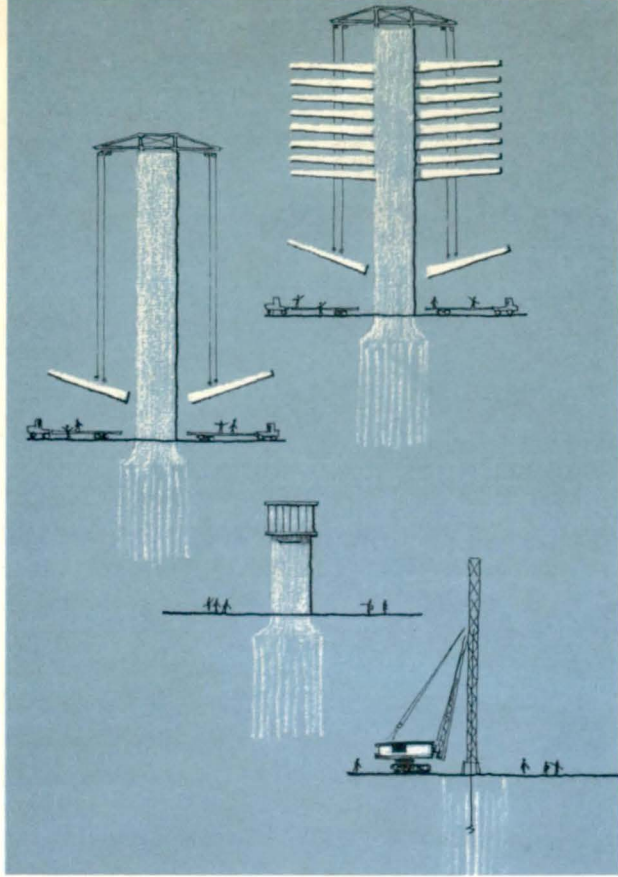
Floor units are precast, then hoisted into position. Post-tension cables support the floors. Sill-to-ceiling window walls are added, and sliding glass doors lead to balconies at wing ends.

The type of glass used depends upon building location and orientation.

Parallel-O-Grey® and

*14-story apartment designed to
fit on a 25-foot urban lot.*

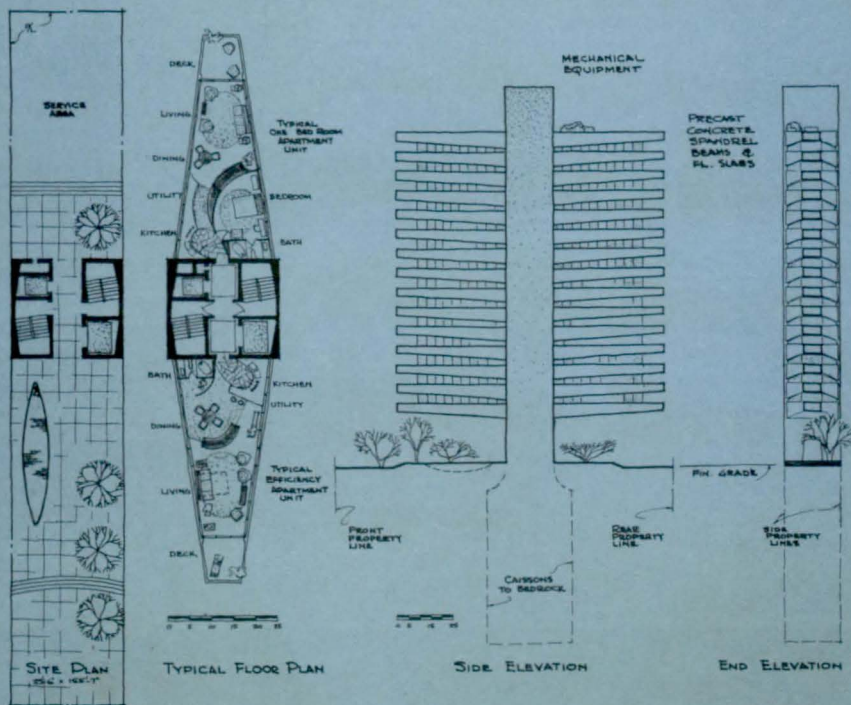




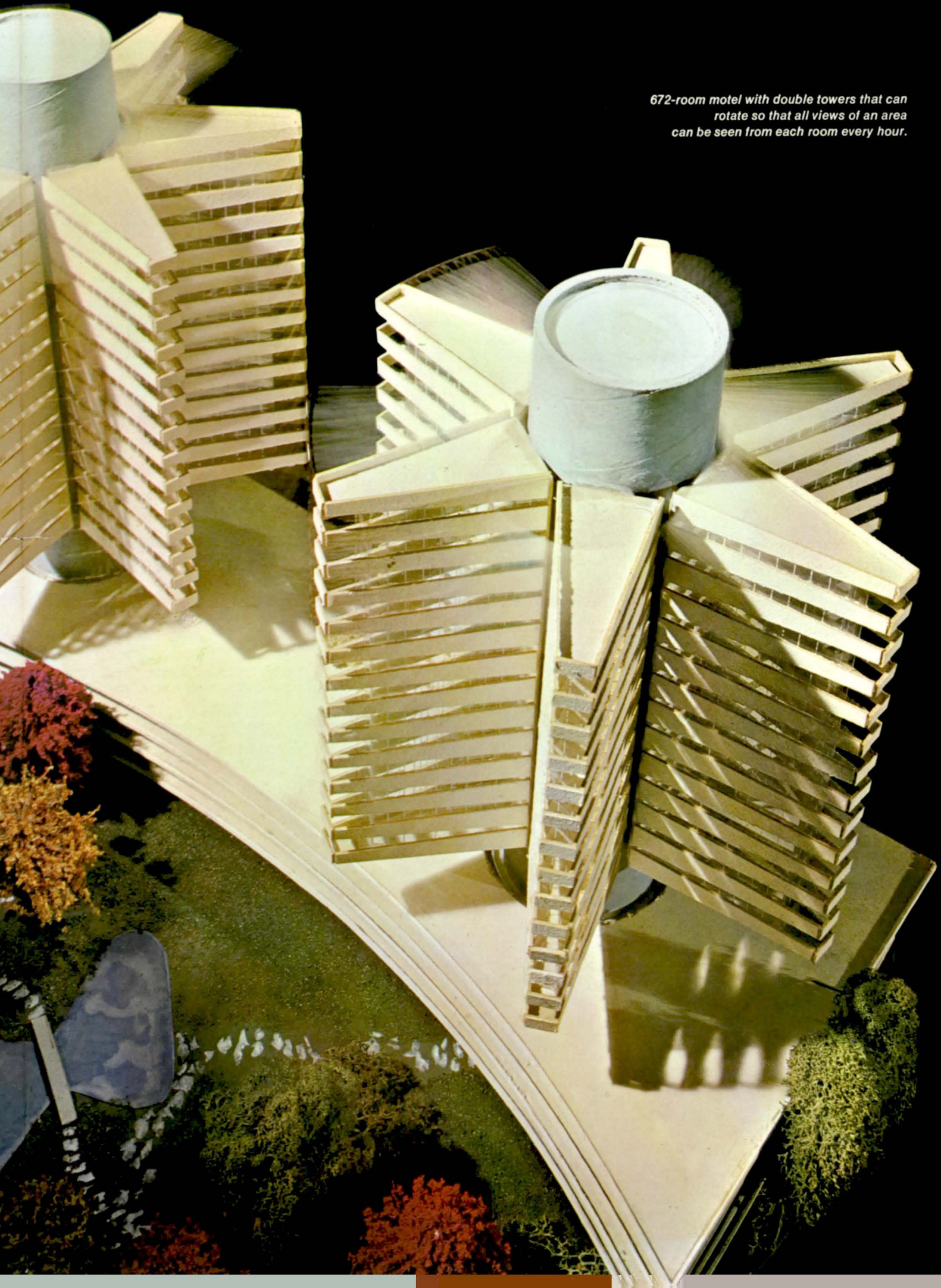
Caisson-type foundation for mechanical core goes down to bedrock. Precast floor units are hoisted into position.

Parallel-O-Bronze® Plate Glass are recommended for sun heat and glare control. **Thermopane®** insulating glass will reduce heating and air-conditioning costs.

A two-wing version of the "tree house" apartment can be constructed on a 25-foot-frontage lot at a cost, the architect estimates, of \$20 per square foot. Additional units would reduce this cost. Ideal for urban renewal. Floor plan and variations of "tree house" buildings are shown. They were conceived by Architect Haig Jamgochian of Richmond, Virginia.



672-room motel with double towers that can rotate so that all views of an area can be seen from each room every hour.





115,000 sq. ft. office building.

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Architect's original sketch of the "tree house".

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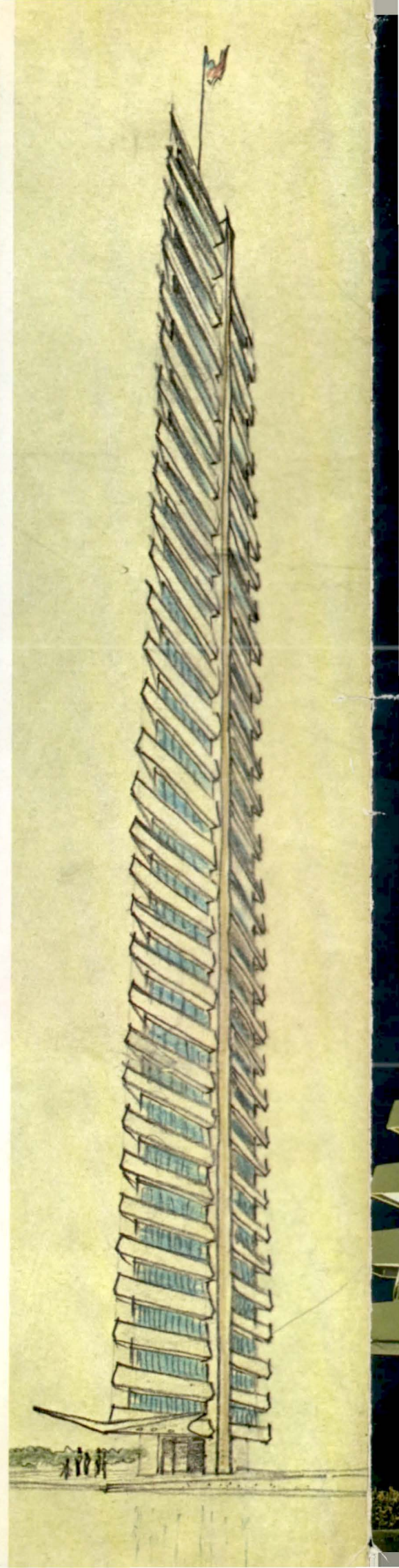
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Cantilevered Building Plan Gets Support

Willing Sponsors Offer Land and Funds to Build

By Conrad Lemon

Nearly three months ago, a Richmond architect announced his intentions to build a cantilevered concrete apartment building at 8 East Franklin st.

THE REACTION to his proposed structure ranged from startled disgust to enthusiastic praise to amused curiosity.

It doesn't belong in Richmond, said many.

It would revive the city and put it on the map, said some.

It looks good on paper, but he couldn't be really serious, said others.

A rejection of an application for a building permit because the structure lacked adequate side setback temporarily killed the issue to the satisfaction of some and the disappointment of others.

But it didn't kill the plans, not according to Haigh Jamgochian, the architect, or to Thomas Hanson, the building's structural engineer.

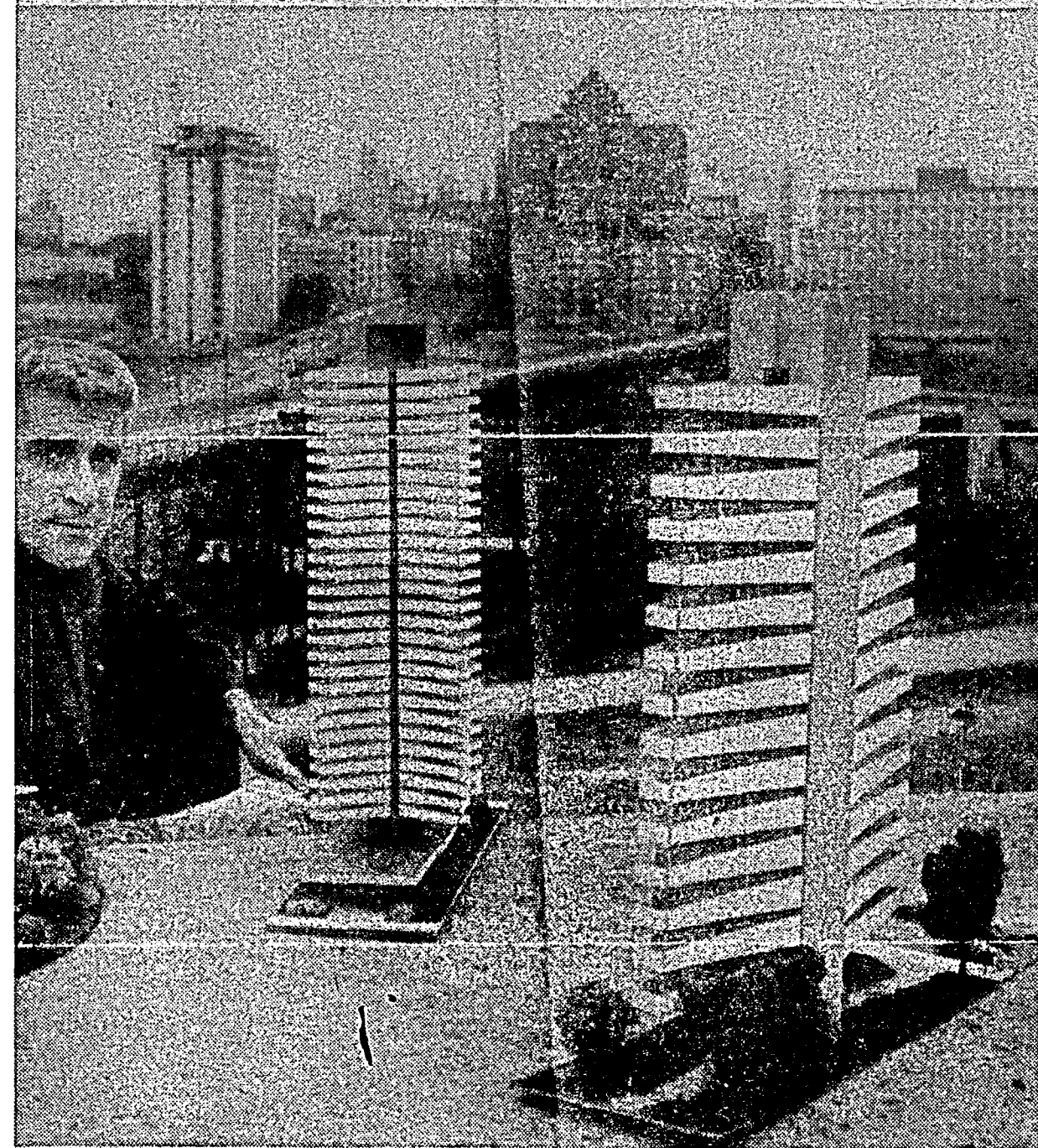
"SINCE THAT TIME," said Jamgochian recently, "we have been approached by men with land and money who want to build it at other locations."

Not only do they want to back the apartment building, he said, but also an office building and a dual-tower revolving motel.

"There are several interested investors and syndicates," Jamgochian added, "who have expressed a desire to finance structures such as these."

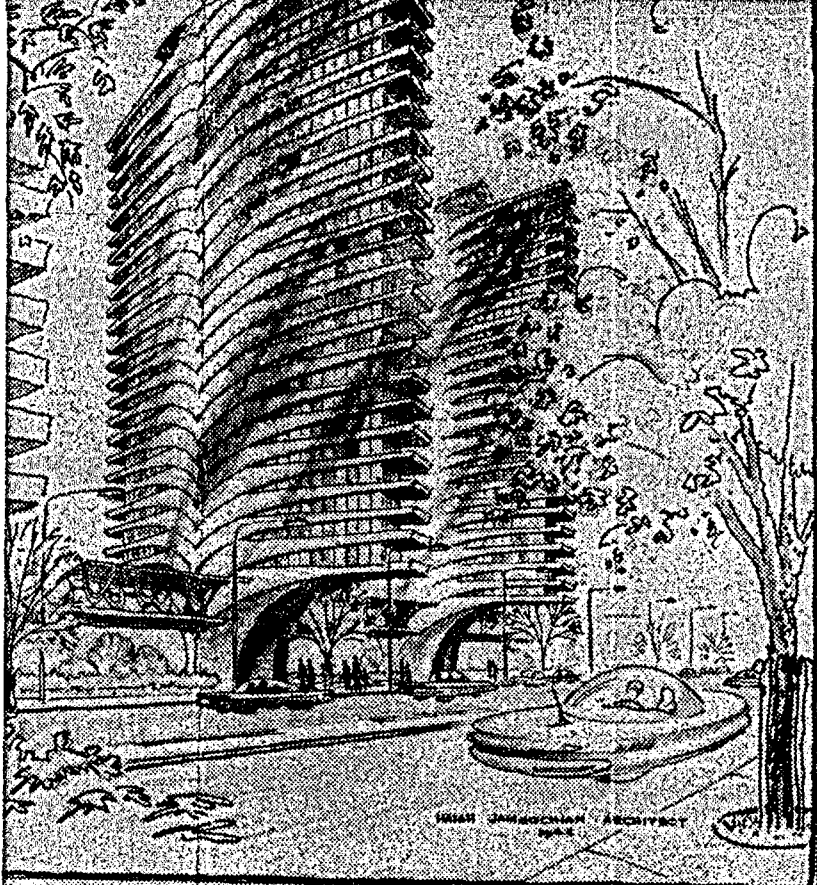
His immediate objective, however, is to build the 15-story, 28-unit apartment structure which branches off a 24-foot-square column of reinforced concrete.

There will be no ground floor. The entrance will be an archway in the base of the column. Above, thirty 50-foot-long cantilevers will branch off the column, which contains an elevator and the stairs, like limbs of a tree. Each cantilever will contain two apartments which will be about 23 feet wide at the entrance and taper to a width of about 11 feet. Beyond the apartment there will be a balcony.



With Models of Motel and Office and Apartment Buildings

—Staff Photo © by David D. Ryan



HUGH JAMGOCHIAN ARCHITECT

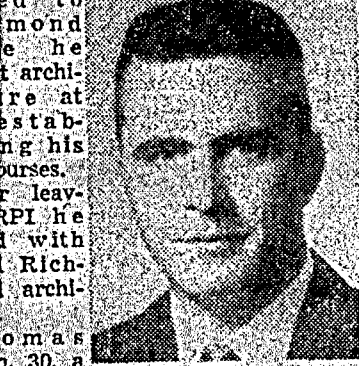
Advanced Design Cantilevered Apartment Building
Architect and Engineer Say It Is Not Far Away

CANTILEVER PROJECT

VPI Grads Form Team

itect Haigh Jamgochian, 38, is a of Richmond and a graduate of s Jefferson High School. After with the marines in World War enrolled in Virginia Polytechnic e and was graduated in 1951 MS degree in architecture.

r further study at Princeton Uni- which he attended on scholar-



T. A. Hanson

ated from VPI, receiving the MS hltectural engineering.

He started his own counseling firm in Roanoke before coming to Richmond in 1960 where he has a consulting practice in structural engineering.

Hanson, who is married and has four children, designed the hyperbolic paraboloid thin shell concrete roofs of the gymnasiums of the new Varina and Azalea schools in Henrico county.

In addition, he has been the consulting engineer for the high rise Berkshire apartment building in downtown Richmond and for the First Mortgage Corp. building at Willow Lawn, both of which are now under construction.

Hanson is now chairman of the national committee on connection details for the Prestressed Concrete Institute.

Where to Find It

Area Permits	6-7
Building Deeds	7
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Craft Pattern	5
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Gardens	2
House of the Week	4
Obituaries	9
Resorts, Travel	8

After the column is constructed, the floor slab and side beams of each cantilever will be precast at the site, moved to the tower, joined with mortar and raised by crane into position.

They would be attached to the column by a post-tensioning system termed "unique" by Hanson and developed by him for this project.

With the outer ends of the cantilevers higher than the base, cables would be fed through conduits in the side beams and anchored in the cantilevers and in the column. As the ends are lowered, Hanson said, the cantilevers will be pulled against the column. In addition, a temporary load of 16,000 pounds will be placed on the ends, bringing them just below a horizontal position. Wedges would then be inserted at the top base of the beams and the weight removed.

"TO MY KNOWLEDGE," said Hanson, "this system has never been used before.

"The safety of the cantilever," he said, "is guaranteed by the fact that a large load is applied at its end during the construction process. This load is greater than any load that would be placed on the cantilever when in use."

Although it appears structural problems have been ironed out, another problem remains—opposition to the very design of the building.

This opposition was first expressed, Jamgochian said, when he asked for a zoning variance. His neighbors on Franklin st. just did not want a building of that nature near them, he said, and expressed it at the hearing.

Jamgochian countered this criticism with some criticism of his own.

"History," he said, "has proven that great civilizations develop their own architecture. Those who insist upon clinging to heritage and tradition had better recognize the danger of regression.

"Unwillingness to question and to propose solutions for today's needs can readily deprive this generation, and future generations, of the privilege of fulfilling a life which will mark advancement in history.

HE CALLED MODERN SKYSCRAPERS "merely large boxes with cubicals packed inside" and credited the architectural giants, Louis Sullivan and Frank Lloyd Wright, with leading architects, including himself, toward the idea that "buildings are beautiful when they express their function and purpose."

Although Jamgochian's project actually has received no official endorsement or support, Henry R. Gonner, executive director of the Central Richmond Association said the group believes "that anyone who is going to create desirable housing facilities so that people can find ideal living quarters in and around the heart and hub of the city are satisfying one of the basic requirements for a healthy economy in central Richmond.

"We are hopeful," he added, "that there will be a satisfactory arrangement worked out where either this or some similar approach can be made which will meet the satisfaction of the governmental authorities and the business and residential property owners in the adjacent area."

Jamgochian's plans now range beyond the "adjacent area" of 8 East Franklin st. His office building, he said, would be located at another site here and the revolving motel was designed for Virginia Beach "where there is only one view—the ocean—and everyone would have it."

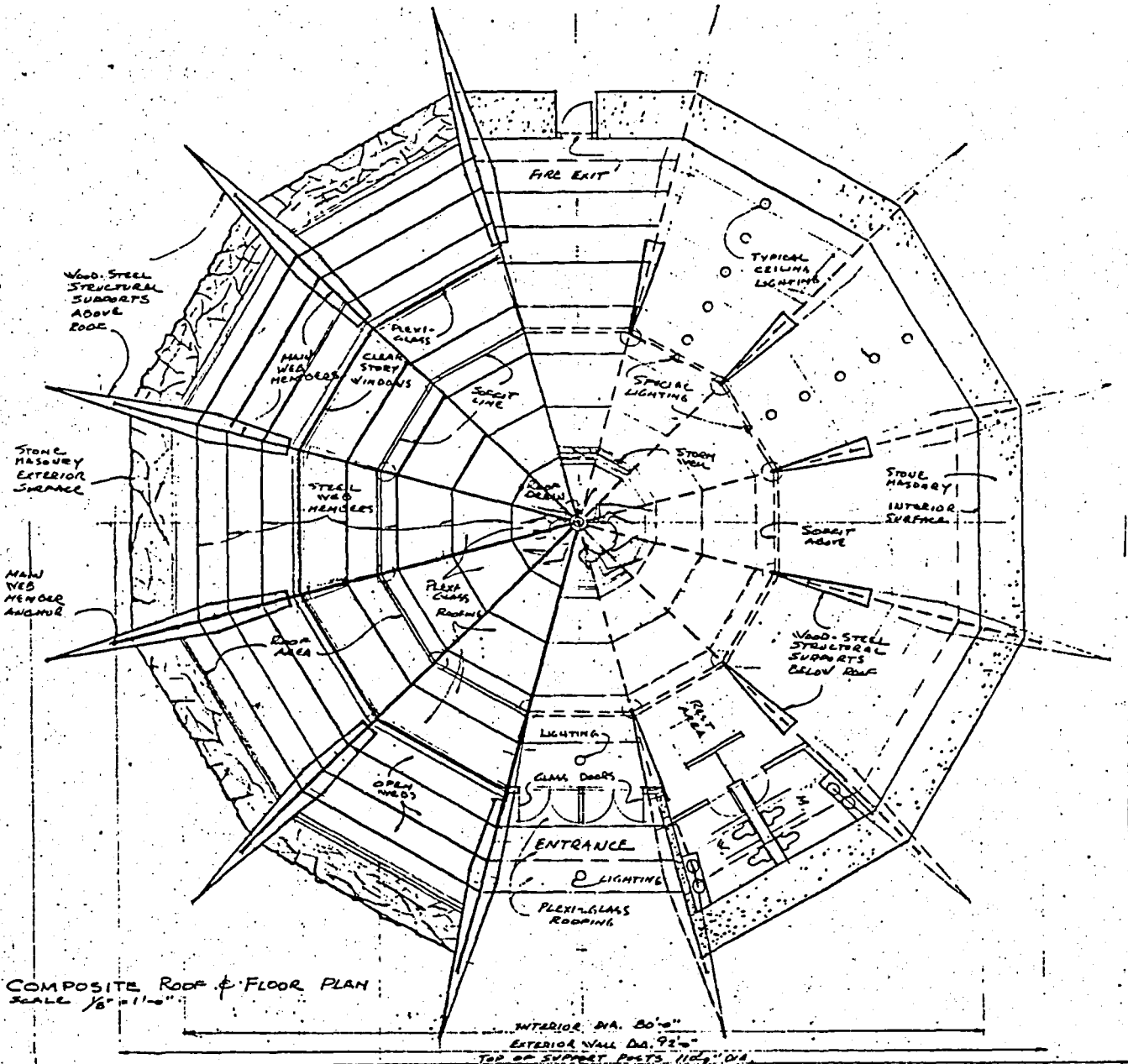
AND HIS PLANS range even further—to a refined version of the apartment building proposed three months ago.

This building, with its curved 75-foot cantilevers, "more accurately describes the structural behavior of the cantilevers," Hanson said. "The design is not superficial . . . We are approaching forms of nature, and nature has never been surpassed structurally."

He compared the cantilever with the limb of a tree and said that when "the load is applied along its length, stress becomes greater where the cantilever is supported (at the trunk) and therefore it is thicker . . . It has been structurally analyzed and this is an accurate description."

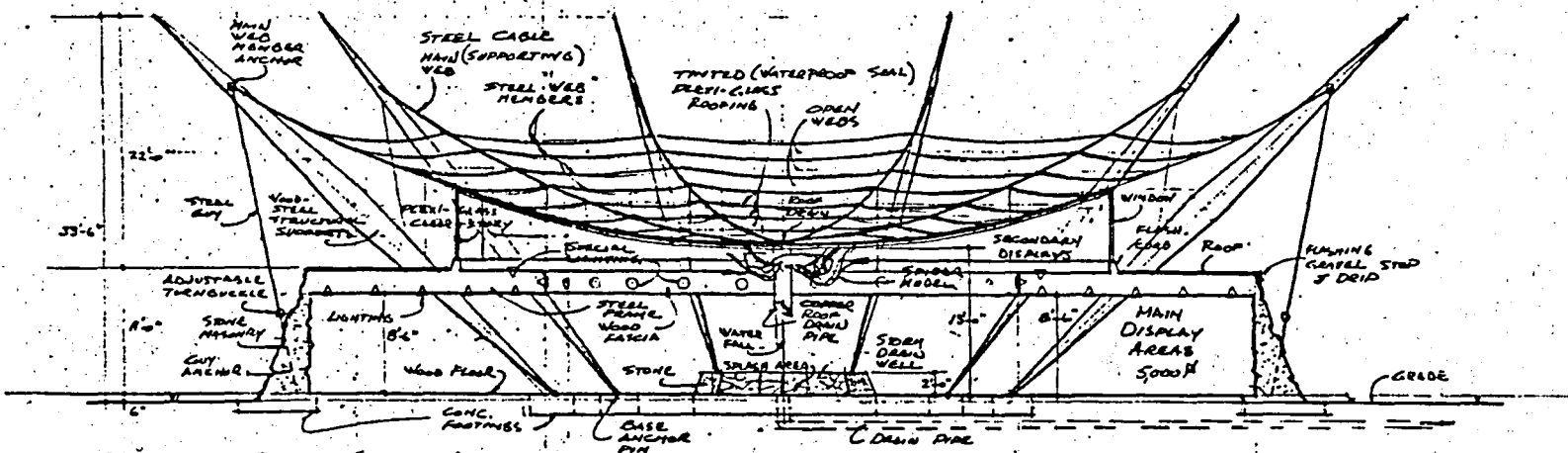
This building is now no more than a rough sketch. The 15-story building, however, can be built now, according to the two men. And they say they will build it and build it here if possible.

"We're trying to start it here in Richmond," said Jamgochian, "before it's started somewhere else. This can belong to Richmond."



COMPOSITE ROOF & FLOOR PLAN
SCALE 1/8" = 1'-0"

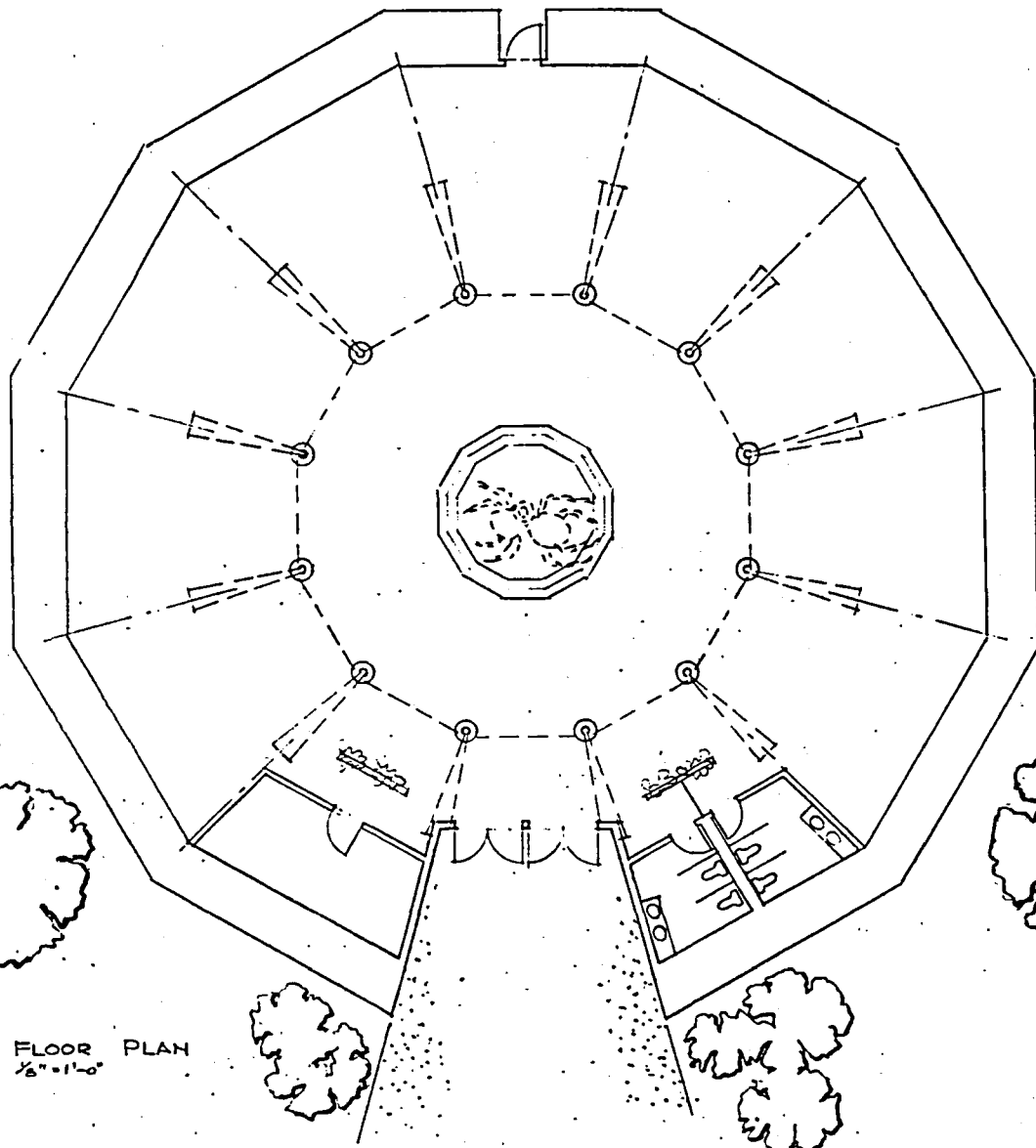
INTERIOR DIA. 80'-0"
EXTERIOR WALL DIA. 92'-0"
TOP OF SUPPORT PELTS 112'-0" DIA.



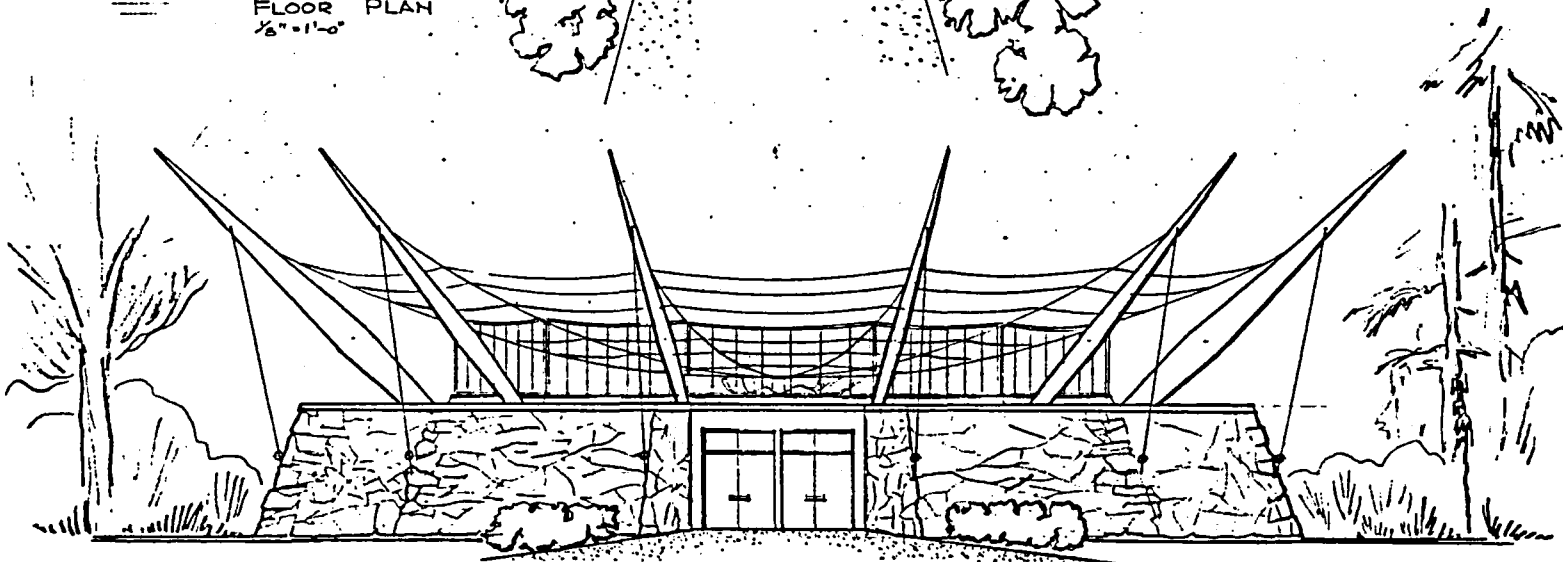
TYPICAL CROSS SECTION
SCALE 1/8" = 1'-0"



<p>THE SPIDER MUSEUM POWHTAN, VIRGINIA</p>		<p>SHEET I OF 2</p>
<p>HAIGH JAMGOCHIAN. ARCHITECT RICHMOND, VA.</p>	<p>MAY 4, 1984</p>	



FLOOR PLAN
 $\frac{1}{8}'' = 1'-0''$

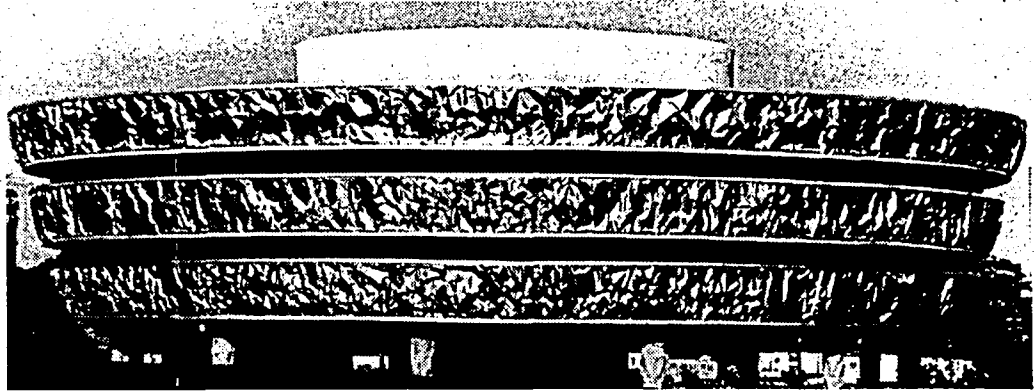


FRONT ELEVATION
 $\frac{1}{8}'' = 1'-0''$



<p>THE SPIDER MUSEUM POWHATAN, VIRGINIA.</p>		<p>SHEET $\frac{2}{2}$ OF 2</p>
<p>HAGH JAMBOGCHIAN - ARCHITECT. MAY. 4, 1984 RICHMOND, VA.</p>		

The finished Markel Building in Richmond, Virginia, another unusual design by Haigh Jamgochian. Exterior is clad with a hammered aluminium skin to give a textured look.



Richmond architect builds a "flying saucer"

The Markel Building in Richmond, Virginia, is a circular structure designed by Richmond architect Haigh Jamgochian, and already it's known as the "Flying Saucer".

Jamgochian planned the building to meet the requirements of the Markel Service Corporation who wanted direct and functional communication between six departments with minimum traffic congestion.

In addition to being an ideal architectural client, the Markel Service Corp is a young, spirited, and forward-thinking organisation. Fifteen years ago they were the first firm to build in the Willow Lawn area, a mile beyond the western boundary of Richmond.

Approximately five years ago, this nation-wide truck and bus insurance company began to think of expanding their facilities. They were interested in a building that would not only function efficiently in their departmental operations but one that would identify them as a unique and progressive organisation.

The chosen site (approximately 160ft wide x 200ft deep) had a 50ft drainage ditch and right-of-way cutting diagonally across the centre. The alternate choice of a building site, adjacent to the first site and about the same size, had two right-of-way strips crossing the site diagonally.

The challenge was to design a building that would fit either site.

Building in America

To permit this flexibility of choice, the foundation had to avoid the right-of-way strips which affected one-third of the site.

The client requested approximately 1400 square feet of office space for their immediate use with the possibility of including another 12,000 to 13,000 square feet in the near future. Other requirements were provisions for wheel chair ramps, a loading dock for tractor-trailers, parking for eighty cars, protection from floods (which occur several times a year in this section of Henrico county), and all the conventional facilities common to an office building of this nature. Budget for the project was set between \$14 and \$15 per square foot.

Architect's task

"For an architect to design a building that is ultimately complete and beautiful," Jamgochian says, "he must satisfy the client, the critics, and himself. The client is the least difficult to convince because he is the one who prescribes the requirements which are to be provided in the architectural solution. Some architects are satisfied with a building design after the building

is completed. There is no ultimate design solution to a building . . . unless time could stand still.

"An architect never knows all there is to know about the solution to a building design. If he should wait until he does know all, the building would never be completed. Design must be subjected to all known solutions; in addition, experiment and research are necessary. The architect, like any artist, has the tendency to believe the next design will be a better one. Thus, the architect is never satisfied, the search never ends."

Mass and texture

The form of the new Markel building is easily determined. It is a bold statement in mass and texture. The mass evolved from enclosing a specific space in which to work. The texture is the result of the natural behaviour of sheet aluminium. There was a certain amount of experiment and research involved in the realisation of the completed form.

The use of materials and methods were as follows: Locating of columns to coincide with the diagonal drainage ditch, spacing of columns to facilitate required parking area and establishing spans to clear driveways led to a radiating 12-beam framing system with cantilevered ends. The cantilevers allow ample clearance of piers from pro-

• Continued Page 33

• From Page 31

perty lines and permit the 15-degree taper desired on the exterior walls. The presence of bedrock at near surface and the use of high strength structural steel assure economy in the brief number of supporting piers.

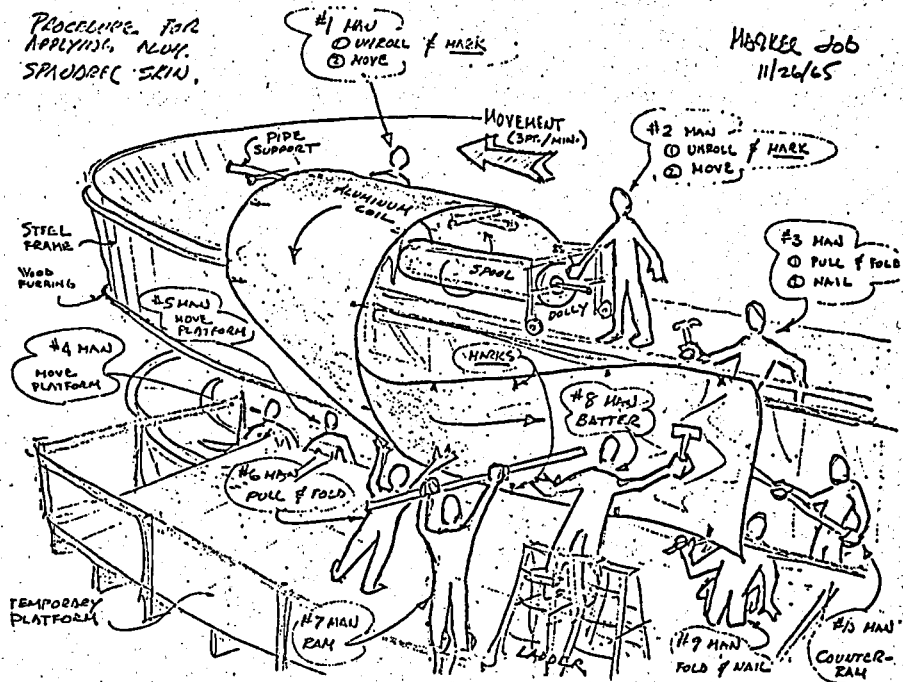
Steel framing satisfied the time schedule for erection and the following local practices facilitate the economy of construction: (1) Concrete footings and piers on bedrock. (2) Concrete floors on bar joists. (3) Built-up roof on metal deck and rigid insulation. (4) Custom aluminium windows with gray tinted glass, matching anodized members. (5) Portland cement stucco underside of building and soffits. (6) Acoustical plank ceiling on exposed grid for future flexibility. (7) White split stone for elevator shaft and penthouse. (8) Permanent interior partitions on steel studs. (9) Aluminium coil spandrels.

Aluminium cladding

One 700-foot continuous piece of .032-inch aluminium was used for cladding, rather than conventional sectional pieces, to achieve a desired free-form textured pattern while staying within the budget of the project. This method of eliminating panel joints and special fasteners saved the owner \$40,000. A stage, mounted on rollers pulled forward with block and chain fall, provided a travelling platform for the workmen. This method of applying the aluminium coil on the spandrels eliminated expensive and time consuming scaffolding. The absence of scaffolding, meanwhile, permitted work to continue on the ground.

As the aluminium sheeting was unrolled from a portable spool and positioned, workmen crimped it at top and bottom around 2in x 4in furring strips and secured it on the inside with screw nails (steel to aluminium contact was avoided to prevent electrolytic corrosion). The speed with which the building was enclosed also contributed to economy. The contractor managed to attain a rate of three feet per minute.

The corrugations, dents and wrinkles serve a structural purpose as well as appearance. They enable the aluminium to accommodate the



Jamgochian's drawing to illustrate the procedure for applying the aluminium skin to spandrels. Note how man No. 8 batters the sheet to give textured effect. Ingenious?

difference in expansion and contraction between itself and the structure. The stiffness gained from folds of the texturing exceeded the architect's expectations, so he abandoned the plans to undercoat the aluminium to dampen the sound of wind flexure and thermal oil-canning. The interior is insulated with fibre glass batts hung from a wire net just inside the sheeting.

Plumbing and ductwork run behind the insulation. In addition, there were savings realised in the structural steel because of the outer wall's lightness being less than one pound per square foot.

Direct, functional

Jamgochian planned the building to meet the owners' requirements for direct and functional communication between six departments with minimum traffic congestion. An inner-core corridor eliminates the need of a main aisle through the building by providing short-cut access across the centre of the building.

Interior columns located on 30 degree centres permit a free flow of windows necessary for the flexibility of office partitions. Steel beams

spanning radially from the central core to and over the single storey columns insure positive cantilevered ends, and the shape of the building eliminates the problem of side sway and torsion.

Open web steel joists are used to span between radial beams supporting the concrete floor structure. The floor transmits lateral loads to the central core. Floor loads are transferred through steel columns down to concrete cussions which bear on rock. The steel columns are encased in a 4ft diameter concrete protective mass to resist impacts from tractor-trailer trucks entering weekly. ASTM A36 Steel was used for economy, availability and simplicity of construction.

Haigh Jamgochian, Architect.

William B. Blanton and Associates, Structural Engineers.

Robert S. Spratley and Associates, Mechanical Engineers.

Brandt and Morse, Electrical Engineers.

Albert Ardman, Interior Decorator.