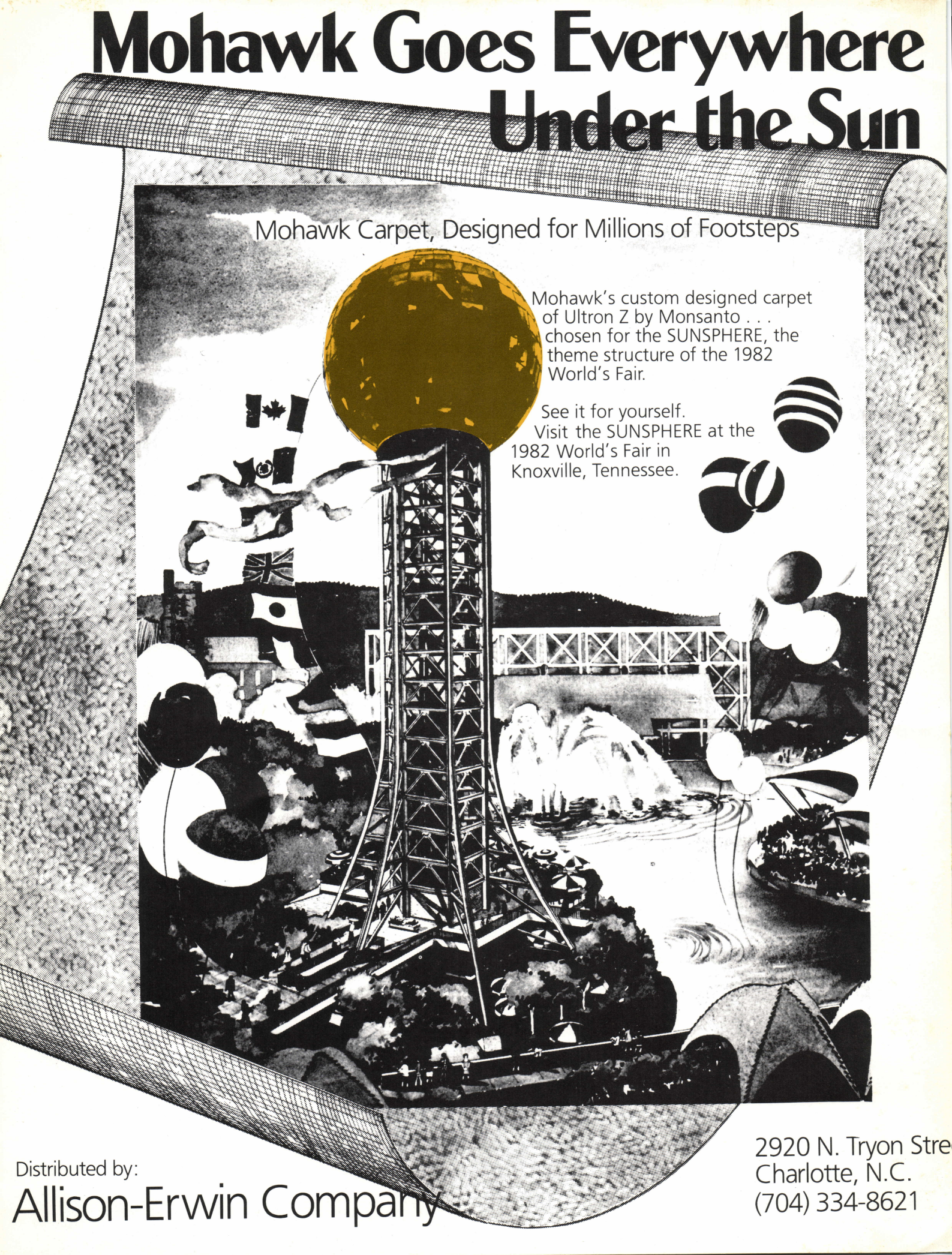
NorthCarolina
ARCHITECT
September-October 1982

Where Is The Research Triangle Park?

Mohawk Goes Everywhere Under the Sun



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Where Is The Research Triangle Park?

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Coming Next Issue: Wilmington — a look at the historic preservation phenomena that has reshaped the port city, and some contemporary designs.

Where Is The Research Triangle Park?

Directional signs at Davis Drive exit

The careful, thorough planning and design necessary to translate the Research Triangle Park into a mature and effective physical expression is developing now.

The Research Triangle Park has been a success over the past two decades in terms of quantitative growth. Yet two planning-related problems have become evident, and they are very likely to become worse with time: peak-hour traffic congestion and disorientation.

Many people who work in the Park know only the routes to their work places; the names and locations of other companies and facilities are virtually a mystery to them. Many who use the Park only occasionally are unable to form reliable mental "maps" for future recall; in other words, they can't remember the correct sequence of roads they must use the next time they visit the Park. If this disorientation could be corrected, congestion would be greatly reduced. The roots of this physical dilemma seem to lie in the founders' earliest concepts. Dr. Howard Odom, credited with the original inspiration to pool the research capacities of the three major universities in the area, apparently did not envision that this endeavor would occur in a specific place. It was later, in the early 1950s, that Romeo H. Guest, with a degree in architecture from M.I.T., suggested that Odum's idea be given a particular location. This fortuitous suggestion led to the acquisition of about 4000 acres of strategically positioned pine forest.

Once the location was set, the broad, abstract concept *should* have immediately bowed to very careful, thorough planning and design, not more generalities. Those decisions should have been guided by such questions as "What will it be like? What kind of experience will result from this particular decision?" Such questions are reiterative, and seem to precede any experientially successful outcome.

Disorientation and congestion, in fact, speak of failure at the experiential level; they are current manifestations of the disjuncture which occurs when broad concepts are not given physical expression.

In 1958, after the Park's location was established, a general plan was presented by City and Town Planning Associates of Chapel Hill. This plan, however, was a simple, abstract, two-dimensional diagram. To give us a true idea of the ultimate results, a more tangible plan should have been presented.

Original Planning Rules and the Results

If we examine the major rules that have guided development in the Park so far, more specific insights into present problems become apparent: (1) zoning has been limited to research and research manufacturing — very loosely interpreted; (2) six acres is the minimum lot size; (3) the minimum building setback of 150 feet increases as lot

About the author: Spencer Wolfe is a member of the architecture faculty at the NCSU School of Design and was project director for a research design study of the physical elements and their organization within the Research Triangle Park. That study was part of a larger undertaking, chaired by William Friday, which examined various factors that affect the future of the Park. A subsequent effort was chaired by Claude McKinney which looked specifically at the physical Park. The other members of the study team that developed the design recommendations referred to in this article were Kenneth Pittman, Glenn Simmons, John Tector and Richard Wilkinson.

areas increase; and (4) building coverage is limited to 15 percent of a total site.

Considering the implications of these rules, it is evident that the Park's founders attempted to incorporate aesthetics into their rules with "corporate subdivision" as the guiding image. Clearly, the forested setbacks and limited site coverage rules were established to protect each tenant from what the other might build. Further, the forest itself was seen as a passive, "forgiving" element that could be used to conceal what was constructed.

The fear of what others might build betrays the notion of a park where every element or feature is read in relation to many others, not concealed from them.

Finally, the rules control the behavior of the smallest part without offering any guidance for organizing the whole. Just as nature wouldn't create oak leaves without evolving the oak tree, consideration of the individual parcel should not overwhelm a careful evolution of the total fabric on which it depends. As building density increases, our visual awareness of the separate tenants in the Park overwhelms our sense of the whole. Basically, the rules established to insure functional and aesthetic order are, at best, incomplete. Major structural issues — such as the correspondence between the form of the land and how it is subdivided, and the form of the land and the road network — were never clarified. The result: today's congestion and disorientation.

As all architects know, orientation is fundamental to any design, whether it involves a whole city or a single building. In any setting, we must be able to distinguish "here" from "there" and be able to traverse between the two. This way-finding is so basic to human conduct that a plan that fails to facilitate it is seriously flawed. (Fig. 1)

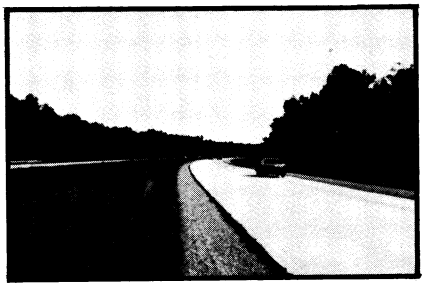


Fig. 1 *Is this scene inside or outside RTP?*

Running Interstate 40 through RTP has also created a serious orientation dilemma because it slices through the Park but it isn't actually a part of it. I-40 is, however, the only major, fixed element that architects could enfront when designing adjoining sites and buildings. Thus, in the absence of fixed and reliable planned features in the Park, to which individual site and building designs could relate, individual companies and their architects seeking status locations had only the free way to "play to." I-40, is not, however, analogous to a town's main street; it does not directly service those buildings fronting it. So the expressway has a certain advertising value for the tenants, but it is not a useful feature around which to structure the Park.

The absence of a reliable visual structure for the Park has led most people to conclude that I-40 is the main feature

Orientation also has temporal dimensions as well as locational ones — such as orienting us in time and in the history of the place. Historical bearings are lacking within RTP; nothing remains of the farms, fields, and homesteads that once existed there. Planning decisions, dominated by exclusive zoning, have created a scene that is one-dimensional in an historical sense, lacking any connections to its past.

The site design at NIEHS is successful in that the building relates to a strong feature in the landscape, a man-made lake. However, both the lake and building are concealed from the major roads and are therefore unavailable as orientation devices.

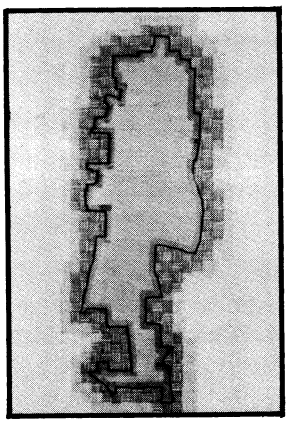


Fig. 2 *Yellow/Gray Park.*

The Search for Additional Planning Principles: A Computer-Stored Data Base

In a recent study authorized by the forward-looking RTP Board, and conducted by a research-design team from the NCSU School of Design, the above conditions were uncovered and clarified.

Prior to determining necessary additional planning principles, however, a computer-stored data base was created. It contained precise information about physical and legal aspects of the Park including topography, building footprints, property lines, rights-of-way, drainage, roads and parking lots, and vegetation. The information system was so structured that the stored components could be quickly called up in various combinations or composites, depending upon the purpose of the inquiry. The computer then became helpful as an organizer of *ideas* as well as facts.

The computer-stored data base can be used by the Board for central planning or for sales-related decisions, or by tenants for developing their individual sites.

While creating the information base, the team came to understand better the vocabulary of physical elements. It became apparent that every element had potential as a device for communicating order within the Park. Also, the team realized that the principles they discovered

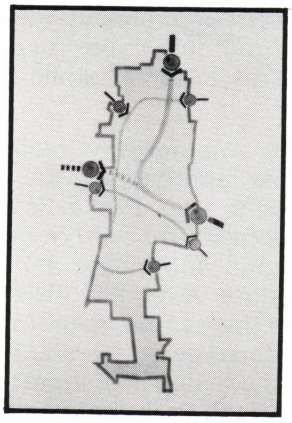


Fig. 3 *Plan of Gateways — Locations of major and minor gateways.*

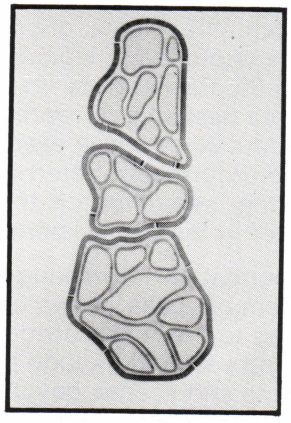


Fig. 4 *Zones and sub-zones*

Fig. 5 *Main Park Road*

Preliminary study indicates that the existing roads can be modified to achieve the necessary heirarchy without abandoning any road beds.

would have to produce design results that would be: (1) readable by the average citizen, not so esoteric or subtle that they would elude those dependent upon them; and (2) within the performance capabilities of the elements themselves.

Additional Planning Principles

The following recommendations emerged as the problems became clear, and as the nature of the Park's physical elements were gradually understood. Adoption, refinement, and implementation of these principles will: (1) correct the problems of disorientation and congestion; and (2) lay the neccesary pre-conditions for the RTP to become a rich, park environment.

I. Distinguish the Park from its surroundings.

A major reason why people become disoriented in the Park is that they can't be certain when they're in or out of its boundaries. "Inside" could be set apart visually by creating a perceptually different scene through the ordering of physical elements according to principles not governing the outside. (Fig. 2) That difference must be immediately recognizable from each road as it crosses the Park boundary. Thus, all planning or maintenance decisions with visual results should consider that the view from those road-boundary crossings is critical. Finally, a driver's awareness of moving from inside to outside, or vice versa, could be greatly assisted by making those crossing points vivid: the act of entering or leaving could be commemorated by the equivalent of a "threshold" or "gateway." (Fig. 3)

II. The Park's internal circulation must be understood.

Not only must the driver realize when he is in the Park, he must also know how to use the circulation network. The team proposed the following to clarify and communicate that order.

(A) Three zones and their sub-zones. First, it is essential to recognize and enhance the three major, identifiable zones that exist in the Park. (Fig. 4) They differ from one another in topography, vegetation, dominant use, and stage of development. The *north portion*, with its large flat areas, was relatively inexpensive to develop, and it accommodated those tenants who required large contiguous floor areas, such as Union Carbide and IBM. The *central zone* has slightly more relief in its terrain, accepting intermediate-sized enterprises such as Becton Dickinson Company and many service businesses. A more intricate and rugged terrain characterizes the *southern portion*; the lack of sewer and water has deferred development there. (Eventually this southern zone will provide beautiful settings for those activities that can reside on small or precipitous sites.) And within each of these three large zones are *sub-zones* with discernible identities which can be further cultivated and enhanced, providing one more cue to help people know their locations.

(B) A main park road in a hierarchy of roads. Once the zones are identified, the entire Park should then be united by one continuous, dominant road. (Fig. 5) The current internal roads convey little sense of their relative importance. Because Alexander Drive, Cornwallis Road, N.C. 54, and Davis Drive appear to be extruded from the same mold, people approaching most existing intersections cannot discern if the road they're approaching is of more or less importance than the one they're already on. This, of course, causes disorientation. (Fig. 6) Once a dominant road has linked the three major zones, the secondary roads would connect it into each of the sub-zones. A tertiary level of roads would then connect or service the companies within each sub-zone. (Fig. 7)

A carefully ordered experience of the zone and road system like this will also eliminate problems such as have developed along N.C. 54 near

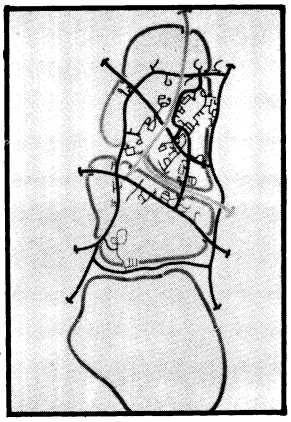


Fig. 6 *Existing road pattern—The identical weight of the major roads contributes to our sense of disorientation while abrupt changes in levels affects safety and congestion.*

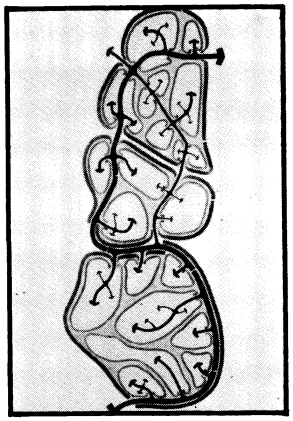


Fig. 7 *Road Hierarchy — A schematic diagram which shows relations between zones, sub-zones, and the road heirarchy.*

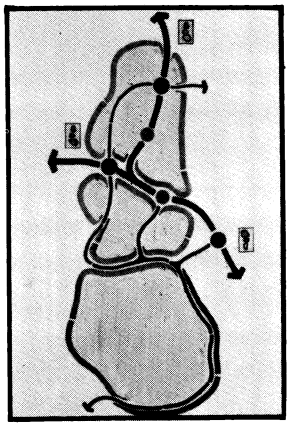


Fig. 8 *Front doors and back doors*

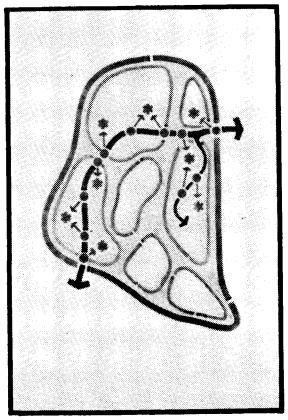


Fig. 9 *Vistas*

the Governor's Inn. There, long narrow tracts were created to allow as many separate enterprises as possible to front on a major road. This made the site planning of individual properties difficult, while creating problems of access to the back acreage.

(C) Signage, front doors and back doors. Another way to eliminate disorientation for first-time users or "guests" approaching the Park along I-40 is to clarify which exit they need to take. Five exits are now available, but three of these should be emphasized as "front doors," as entrances to particular zones. The north zone would have the I-40/Alexander Drive exchange as its front door. A modified Hill Drive connection would act as the entrance into the central zone. And eventually, the I-40/Park Road exchange could serve the south. In each case, the exits would connect directly to the main road, thereby placing the driver on *the* major reference feature of the Park the moment he enters the boundaries. (Fig. 8)

Curiously, the exchanges at I-40/Davis Drive and I-40/Cornwallis Road would continue to be used by the Park "family," those who work there daily. These people know the most direct routes to their destinations, and those routes would become their "back doors." Also, these two exits should purposefully have a minimum of signage so that they would not be used by drivers visiting the Park for the first time.

Finally, the overall signage system can be designed to represent the structure and circulation of the Park. Anyone could move easily and directly to a destination with three items of information: the zone, sub-zone, and company name. Tourists and other serendipitous travelers would be directed to the information center in the central zone.

(D) A network of vistas. A final recommendation for making the Park's internal order readable is to create a system of vistas. Views from the existing Park roads are frequently confined to the road corridor itself. Modification of the tree lines by the corridors should include open spaces to allow views of memorable objects and scenes beyond. A driver would then form much stronger mental "maps" composed of a variety of images. These stronger maps would be easy to recall on future trips over the same routes. (Fig. 9)

The proposed Microelectronics Center of North Carolina promises to become an important internal reference. It is sited on the east quadrant of the Cornwallis Road and Alexander Drive intersection. The building's placement and profile, the site development, and the disposition of the communications tower will determine if the Center works as a strong point of reference from a distance as well as from the immediate roadways.

III. Future planning should enhance natural features.

Future subdivision and the man-determined patterns which ensue need to correspond to natural features. This is of special importance in the south zone and can be simulated in the other two zones.

An examination of the stream system reveals a leaf-like structure, typical here in the Piedmont. The ridges interlock with the formation. Naturally the streams increase in size as they continue to converge with others; the pieces of land they define also progress in size. Those natural land units can be roughly categorized for development based on their size and other features. (Fig. 10) One benefit from this approach would be greater flexibility in assembling parcels for purchase. Also, a wetland network could be developed by defining the N.L.U. along the flood fringe (high water line), rather than along the center of the stream. (Fig. 11) Such a network, in conjunction with the rights-of-way and setbacks, could accommodate pedestrian movement, recreation areas, wildlife habitats, and provide vegetal definition for the meadows and other open spaces. This approach could be easily applied to those areas which have not been developed. In those areas already

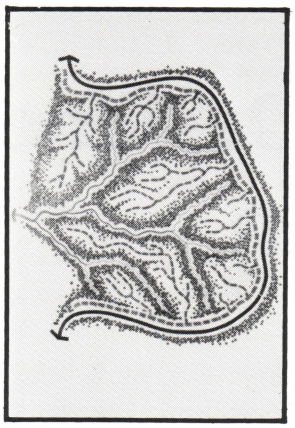


Fig. 10 *Streams and Ridges*

The natural land units are, in fact, the sub-zones.

Fig. 11 *N.L.U.'s*

The ability to create a significant place at the RTP depends entirely upon developing a sense of community among the Park's tenants and the RTP Foundation.

Fig. 12 *Natural land units possess great flexibility for subdivision*

developed, mechanisms for control and management of such networks will have to be evolved. (Fig. 12)

In summary, the roads and land parcels can be designed in direct response to the land's physical relief which would allow other steps of development to *enhance*, rather than weaken, the natural aesthetic.

A Renewed Vision Is Needed

The founders offered unusual and compelling ideas which have inspired the commitment of many others for over two decades. Although these ideas were general, they proved instrumental. The RTP's survival is assured, thanks to the generous personal efforts of many people, such as former Governor Luther Hodges, Archie Davis, William Saunders, Robert Hanes, Watts Hill and Pearson Stewart, to name but a few.

Now the Board recognizes that quality is the issue, especially under the pressures of growth and increased density. Quality is the issue because the necessary subsequent visions have not been developed and implemented yet. Instead of a comprehensive vision involving the total fabric of the Park as it grows and expands, we have a vacuous-generality from a current promotional piece: "The development plan of the RTP has been prepared to provide a maximum of design flexibility within the requirements of physiography and a major freeway plan." Flexibility in the presence of effective governing principles allows for orderly accommodation to local conditions; in the absence of such principles, arbitrariness can result.

Also, a renewed vision is needed because the RTP has not become a park; we have only been removing the forest and siting buildings as isolates. Our next step must be to make a strong commitment to culturing that land into a garden, a park — a profound place. That will require a shift in our attitudes towards concern for the physical results of what is being done. Those results must be such that each of us, regardless of his relationship to the Park, can find utility and pleasure there. Certainly, our aspirations have to be for something more than an enclave of "clean factories."

The Possibilities

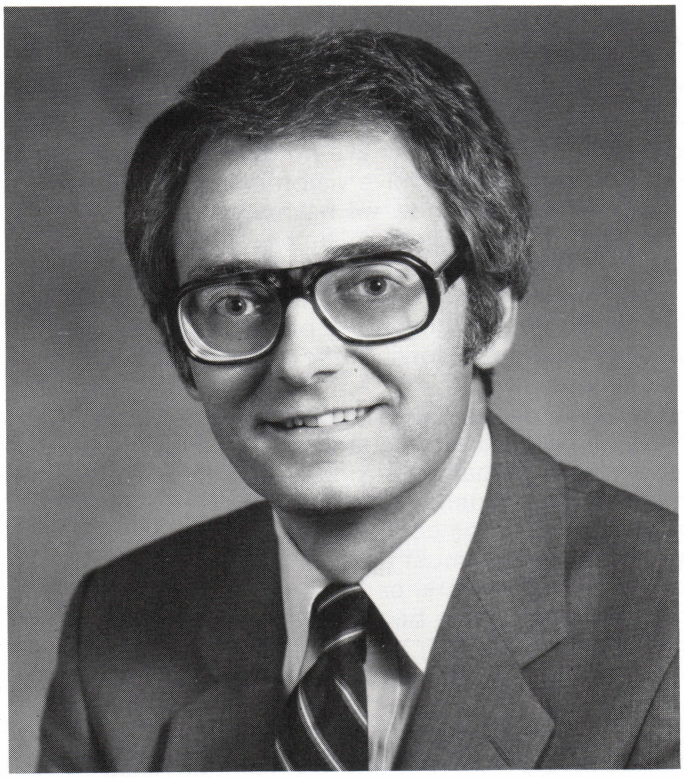
The potentials for RTP, beyond its current role as a corporate subdivision, might include incorporating within the Park: physical recreation for those working there and for the citizens of the Triangle area; a site for major conferences focusing on research or education; a refuge for indigenous wildlife; a setting for limited crop and animal studies; and a working model of applied planning principles for observation and evaluation.

These are only a few of the many possibilities that could make the Park a richer, more useful place. Such improvements, however, will require that the rights-of-way, setbacks, and wet areas be looked at from a Park-wide perspective and be cooperatively planned as a common resource. That common infrastructure would be the shared thread uniting the various pearls of tenant development.

These possibilities are beginning to transpire as the RTP Board realizes that the attitudes and repetitive techniques of a day-to-day sales operation, although essential to growth, can never be a substitute for continually clarifying goals and planning carefully towards *intentional* results. These possibilities are beginning to emerge as the Board takes a role in coordinating the tenants and other constituents, while providing the needed goals and technical support. The initiation of the computer-stored data base and the additional planning principles, commissioned in May 1981, strengthen the Board's basis for that role.

The RTP Board is faced with challenging opportunities not only to act as a steward of that land, but to author a tangible and inspiring vision. The next two decades promise to be exciting and fruitful. ■

Architects and Interior Designers: A Winning Team



Stacy Simmons, AIA/ASID — "good interior architecture begins when the building programming begins."

About the author:
Mr. Simmons is a graduate of Auburn University. A practicing architect for 18 years, he has, for 12 years, been president of Omnia Design, Interior Planning, Design, Graphics Consultants in Charlotte. In 1966 and 1970 buildings he designed won South Atlantic Regional AIA Awards. He served three years as a Charlotte Section AIA Board Member, three years on the National AIA Committee on Design, and will chair the National AIA Interiors Committee in 1983. He is a member of the American Society of Interior Designers and was the first architect in the Carolinas to pass the National Council for Interior Design Qualifications Exam. His firm has designed projects in 13 states. Recent works include a corporate headquarters for Engraph in Atlanta, a corporate condominium at Hilton Head, and Hotel Europa in Chapel Hill which is featured in the September 1982 issue of Interior Design.

By STACY E. SIMMONS, AIA/ASID

Schools that educate professionals in the field of designing interiors have, for more than 20 years, emphasized that they teach interior *design* rather than interior *decorating*. They argue that decorating is a superficial approach to design, applying surface cosmetics, such as moldings, paint, window treatments, and loose furnishings. Interior design, on the other hand, is a far more complex and, many would say, more professional endeavor.

Two organizations developed as a result of professional interior design societies' work to improve educational standards and professional recognition. The Foundation for Interior Design Education Research (FIDER) is the U.S. Office of Education's approved body for accrediting schools of interior design across the nation. The National Council for Interior Design Qualification (NCIDQ) is the council that administers the qualifying examination for corporate membership in either of the professional membership societies for practicing interior designers: the American Society of Interior Designers (ASID), and the Institute of Business Designers (IBD).

ASID has endorsed the following definition of an interior designer, a definition which has also been approved by FIDER and NCIDQ:

> A professional interior designer is one who is qualified by education and experience to identify, research, and creatively solve problems relative to the function and quality of man's proximate environment.
>
> His competency includes fundamental design, design analysis, space planning and programming, the design of all interior spaces and an understanding of other and related aspects of environmental design.
>
> His technical development includes knowledge of structure with emphasis on interior construction, knowledge of building systems, equipment, components and ability in communication skills.
>
> His education and experience have developed an awareness of an analytical understanding of the needs of man which can be fulfilled by the design of surroundings.
>
> His design sensitivity, creative and conceptual abilities combined with technical proficiency affect a

breadth and depth of design solutions that will serve the needs of man today and in the future.

As schools of architecture have varying success in producing graduates with the variety of skills necessary to fulfill that profession's highest expectations, so have schools of interior design differed in their ability to send graduates into the professional world who completely meet the criteria of the above definition. There are many competent designers, however, practicing across the nation who have studied in accredited programs of interior design.

Knoll, Eames, Pei...

Architects have always considered the interior of their buildings an appropriate and normal area for their consideration and design expertise. It is unthinkable that the designer of any significant building before the Modern Movement would have designed a shell and left the interior for someone else to detail. In more recent times, imagine Sullivan, Corbusier, or Mies van der Rohe failing to take great care with the interior spaces and detail of their projects. Was it not Mies who said, "God is in the details"?

Architects during the Modern Movement became increasingly interested in the furnishings that were placed within their buildings, perhaps because there was little or nothing available until they designed it. Certainly the Bauhaus influence cannot be ignored in this respect, since an interdisciplinary approach to modern design existed there.

Then in the Forties, Hans and Florence Knoll were married. He was the son of a furniture manufacturing family in Germany, and she was trained as an architect. That story is now history. By the end of that decade, Herman Miller was introducing the innovative work of Charles Eames. And the two companies have continued to inspire architects to this day.

With the explosion of knowledge and the post-World War II building boom, something has happened to the way architecture is practiced. Many buildings are designed as shells to be completed by the occupant and his own architect or designer. Many institutions and other large complexes are designed as creditable forms from the exterior, but for a variety of reasons — not the least of which is costly time in the drafting room — the interior spaces are finished in an anonymous style of eight-foot "supermarket ceilings," standard metal door frames, gypsum board walls, and vinyl asbestos or carpeted floors.

There are, of course, many small architectural firms which give loving care and attention to detail. And one only has to remember the work of I.M. Pei, among others, to know that even large buildings can be executed in our own time that extol their architect's concern for the smallest of detail.

Several years ago, The American Institute of Architects organized a new special interest committee to serve alongside such standing committees as Design, Architecture for Health, Architecture for Education, and Urban Design. The new committee was named the Committee on Interior Architecture, a term some architects found objectionable because, in it, they read the implication that there must be something opposite called "exterior architecture."

The strongest argument to the contrary may be that interior architecture is merely a focus on a smaller level of detail, much as urban design is a focus on a larger area of concern than is architecture. If "interior architecture" has an opposite, it would be *apathy* to detail, continuity and refinement, of the interior environment.

Notwithstanding all arguments in favor of the term, the committee changed its name voluntarily to facilitate discussion about the issues it considered worthwhile, rather than constantly discussing the name of the committee. The AIA now has, simply, an Interiors Committee.

Interior Architecture: Variations On A Theme

Interior architecture is practiced today in several ways. Some architectural firms have in-house specialists on their staff (not always trained in architecture) who provide the firm's capability in interiors, or generalist architects who coordinate the special concerns in that area. Other firms have established subsidiaries which offer services to their clients, as well as to private clients and other architectural groups. And a growing number of practitioners are specializing in interiors work as independent architectural organizations. In short, there are about the same variations on a theme as exist in engineering practice, along with the same arguments for which works best. The answers are as varied as the firms under discussion, but the real answer lies in the success of the finished project.

Interior architecture involves the whole interior environment. It is *space*: two dimensional in planning and adjacency studies. It is *detail* in refining the scale and proportions of the space itself, and in solving specific requirements with sensitivity for the overall continuity of forms and clarity of intent. It is *light*, both natural and artificial, using light to define form and color, and refining artificial light sources for simplicity and energy conservation. But it also involves *forms* within the space (furniture and other objects). Often the challenge is to avoid a proliferation of forms, again for clarity, or to solve very real problems, such as creating a home-like environment for people in an institution, without using residential furniture that could not withstand the inevitable abuse.

Certainly, no small part of interior architecture are *color* and *surface materials*. A lack of continuity

Continued on page 12

A Personal View

Continued from page 11
between the character of the building and its materials, and that of the loose objects within, has many times caused architects to regret having failed to encourage their client to see the entire interior as part of the design process. Without the architect's guidance, many clients see interiors as something to be treated superficially, and often unprofessionally, when the building is half built.

The Bottom Line

Whether a single Renaissance man does it all, from concept to final detail, or a team of specialists work together in a spirit of mutual respect and ability, seems unimportant. The option will probably be influenced most by the size of the project and the respective abilities of the individuals.

What *is* important is that architects and their clients recognize the need for early design input at a detailed level, not only to encourage conceptual design excellence, but also in order that specific problems can be recognized and intelligent decisions be made about things like service outlets for equipment and telephones; special lighting considerations; door, light switch, and thermostat locations in relation to furniture arrangement and traffic patterns; and the dozens, if not hundreds, of items that must be shown in detail, but which often are placed with a crystal ball.

In short, good interior architecture begins when the building programming begins, and goes, in a unified process, through the entire project with concern for the smallest detail, no matter how large the project or how broad a view the building's architect must maintain. The individuals who play a part on the design team will continue to come from a variety of backgrounds and training experiences. The excellence of the finished project will depend heavily on the architect's and client's understanding of the complex disciplines that *should* interact throughout the design process, and the architect's ability to assemble and manage a strong design team. ■

Letters

Another Lawyer's Look

I commend Arch T. Allen III for his concerns about historic district and properties regulations (**North Carolina Architect**, May-June 1982). Cautions are always in order with any governmental infringement of personal liberty. However, I do not view historic and appearance zoning with the same alarm. There are two reasons to account for this confidence: (1) lawyers and their scrutiny of both sides of the state's preservation laws; and, (2) architects with design skills and experience.

Lawyers draft and enact legislation, represent clients and historic commissions, and render judicial opinions which incorporate checks and balances into laws, and then continually monitor the fairness of those laws' application.

The courts have been especially careful to ensure that beauty is not simply "in the eye of the beholder."

In a recent ruling, the N.C. Supreme Court [State v. Jones, 1982] reviewed an ordinance which restricted junkyards. The defendant in the case, the owner of a junkyard, failed to erect a fence as required to enclose his junkyard from the adjacent residential area. The owner argued that the ordinance's language was too vague. The Court held that the ordinance must be somewhat general because it is impossible to describe in detail every circumstance that may arise.

Equally important, however, the Court required the adoption of carefully drawn guidelines on how the ordinance could be applied.

Several other important points should be noted about this decision. The Court specifically did not grant blanket approval of all regulations based on aesthetic considerations. Instead, it adopted a balancing test designed to weigh the lessened value of an individual's property against the gain to the public from such regulation.

In light of this case, historic district and properties commission members now must keep in mind several key factors in the balancing test: (1) whether the regulation results in the confiscation of a substantial part of the value of the property; (2) whether the regulation deprives the property owner of the property's reasonable use; (3) whether the means used to carry out the regulation are reasonable. No formula has been devised to determine what is "reasonable." It is clear, however, that some reduction in value of property is allowed from the application of a constitutionally sound historic regulation. (Studies show that historic district regulation actually results in a gain in property values.)

Finally, the courts can examine the commission's operations to be certain that a fair hearing has been held. Witnesses must be sworn. The board must make specific findings about the facts of each case. Decisions must be based only on actual findings.

In summary, this "junkyard" case is important for architects because: (1) it approves general standards for control of the visual environment; (2) it shows the necessity to weigh the owner's costs of meeting the regulation against the need for the regulation; and, (3) it reinforces the requirement that commissions must have guidelines and carefully follow procedural rules for a fair hearing.

Letters

Proverbs 22:28 reminds us: "Remove not the ancient landmark, which thy fathers have set." Today, more and more architects, citizens and courts have recognized the wisdom of preserving the ancient reminders of our past through historic preservation law. Moreover, the courts have recognized the public's right to preserve their historic and architectural heritage just as they preserve the quality of other aspects of the environment.

The effect of these laws is that additional effort must be made in planning the use of private property. However, we seldom find a property owner objecting that he must comply with restrictions established to protect public health. Aesthetic principles are no different: for years, architects have dealt with restrictions in ordinances and covenants relating to appearance concerns. Architects use aesthetics regulations as a tool to encourage their clients to a greater consideration of design principles in their projects.

Architects should applaud ordinances controlling appearance as a challenge to develop styles, designs and solutions to these problems in ways that bring together their many skills in dealing with forms, materials, scale and the other architectural elements. Historic preservation ordinances require little more than that the property owner look at the things that architects look at anyway. In a sense, the issues raised by aesthetic and historic zoning are no more than the day-to-day contextual problems architects face, such as siting, proper building form, scale or materials.

These are fundamental problems that architects have dealt with since the days of the Pharaoh — pleasing the client within the construction limitations of the times. Within a constitutional local ordinance's standards, there is nothing that demands mindless imitation.

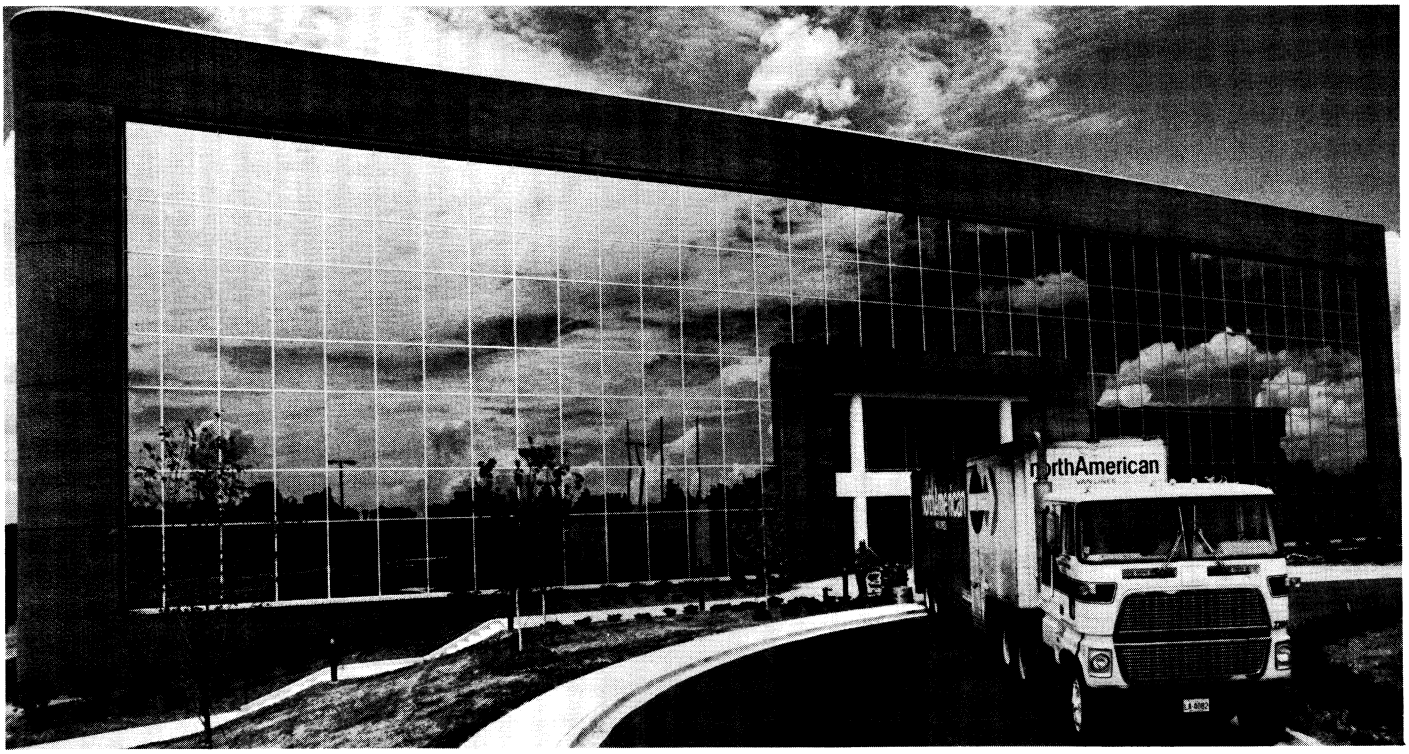
An excellent example of this principle is illustrated by the NCAIA Award of Merit for the Tenth Avenue Townhouses in Charlotte's Fourth Ward, an historic district. The jury stated "this project was cited for its skilled manipulation of a number of materials and colors in a picturesque composition reflecting the traditional and particularly Victorian architecture without becoming slavish imitation. The jury felt that the architect had created a humane and residential quality suitable for its site in a historic district providing a controlled and highly picturesque complex." (**North Carolina Architect**, March-April, 1982.) I heartily endorse the award of merit for these properties. These buildings do what Mr. Allen seems to imply architects cannot do.

Architects can leave the legal aspects to the work of their lawyers, trusting that the protections built into the law will ensure that they are not simply dictated to by the local historic district or property commissions. This should come as no surprise to most architects who are accustomed to dealing with different viewpoints, not only from regulatory officials, but from their clients.

The application of historic preservation law and the property rights of individual citizens are safeguarded from arbitrary views by the fair and impartial examination and everyday workings of our state's judicial system. Mr. Allen, as an attorney, has himself been instrumental in advocating and helping our Supreme Court to safeguard the rights of individuals and property owners just as preservationists have advocated protection of the visual environment we share. This is our judicial process at its best. The end result is a body of law that strikes a balance between modern requirements and traditional appearances, between the public's interest in community appearance and the individual's rights of property.

Rufus L. Edmisten
North Carolina
Attorney General

Chapter notes



Ferebee, Walters and Associates has relocated its offices to Woodfield Corporate Center in south Charlotte. The firm designed the building for the Walsh Corporation.

Charlotte

East Bay Trading Company, a restaurant in historic Charleston, S.C. that Ferebee, Walters and Associates of Charlotte shaped out of an 1880s warehouse, has won a Merit Award in the "Best Commercial Renovation Project" category in the Builder's Choice design and planning awards program. The competition is co-sponsored by *Builder* magazine, the official publication of the National Association of Home Builders (NAHB) and *Better Homes and Gardens*. Its purpose is "to recognize the best in design and planning of residential and commercial developments."

The restaurant, owned by Van Weatherspoon and Masten-Weatherspoon Realty Company of Charlotte, has gleaned much attention since its completion. It received a Merit Award for Historic Preservation in the 1981 NCAIA awards program (see **North Carolina Architect**, March-April 1981), and it won the "Carolopolis Award" from the Preservation Society of Charleston, S.C. The restaurant has been published in *Commercial Remodeling* magazine (August 1981), and *Restaurant Design* magazine (Spring 1981). It is also listed in the Federal Historical Register, U.S. Dept. of the Interior.

East Bay was selected for the award after a panel of judges comprised of builders, architects, planners and members of the architectural/ building press, reviewed 450 entries.

Ferebee, Walters and Associates also moved its offices recently from Providence Square to Woodfield Corporate Center in south Charlotte. Designed by the firm for The Walsh Corporation, the initial buildings in the Center feature bands of recessed, silver reflective glass and exposed, rounded structural columns accented by dark brown brick. The firm will occupy one-half of the second floor. The new address is: 8008 Corporate Center Drive, P.O. Box 241388, Charlotte, N.C. 28224; telephone (704) 542-5586.

Chapel Hill

Construction is now underway on the 80,000-square-foot Microelectronics Center of North Carolina in Research Triangle Park, designed by O'Brien/ Atkins Associates, P.A. of Chapel Hill.

Located on 36 and a half acres at the corner of Cornwallis Road and Alexander Drive, the three-story building will be divided into two basic parts, according to the architects: a support area and a fabrication area. The support area will contain administration and research offices, educational and design/computer areas. The fabrication area will house, in four divisions: (1) the clean room, where research and the development of the semiconductor chips will take place; (2) assembly and testing areas; (3) the mechanical equipment areas; and (4) the pad service area. Testing and evaluation of the chips will take place adjacent to the clean room fabrication area.

Additional areas in the Center are designed to accommodate educational activities, including an auditorium, seminar rooms, and

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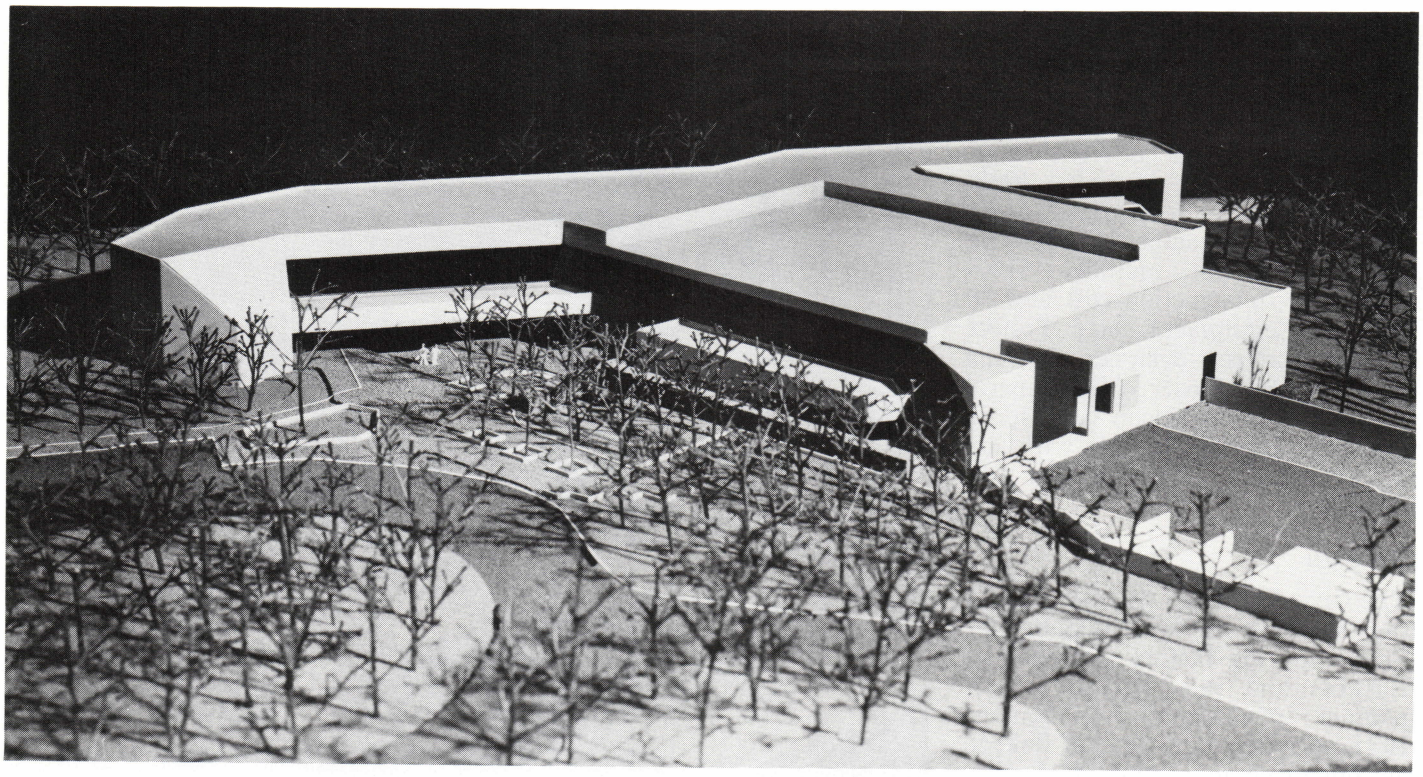

A model of the Microelectronics Center of North Carolina in Research Triangle Park, designed by O'Brien/Atkins Associates of Chapel Hill.

display areas. The integrated circuit design room will be supported by computer equipment. In turn, the largest occupied square footage allotment goes to staff support areas for research and development.

The exterior of the building will be comprised of flat-surfaced metal panels with reflective glazing on the bands of window. According to John Atkins III, AIA, the streamlined shell was designed "to suggest the high technology going on within the building," while the wooded site will be carefully landscaped to help avoid a "psychological fear of that same technology." At the entrance will be a formalized plaza — "a humanistic, calm entree," Atkins said — that will make the transition from the wooded site to the high-tech interior. Sky-lit interior corridors will also help to "open up the space," he said, "so that it doesn't have that sterilized kind of look."

And along these corridors in the fabrication area, where supervised visitors will tour the building, 75 percent of the walls will be glass so that the work going on within can be easily viewed. These same glass

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divisions between the fabrication work and guests will avoid the problem of potential contamination of the delicate chips, Atkins added.

Groundbreaking on the new Center took place May 13, 1982. Construction is expected to be completed by November of 1983. The proposed budget includes $10.5 million in construction cost and $8 million in equipment costs. Project architect/project designer for the firm was Bill Moser, AIA. General contractor is Davidson and Jones Construction Co., Raleigh, with site construction by Nello L. Teer Co., Durham.

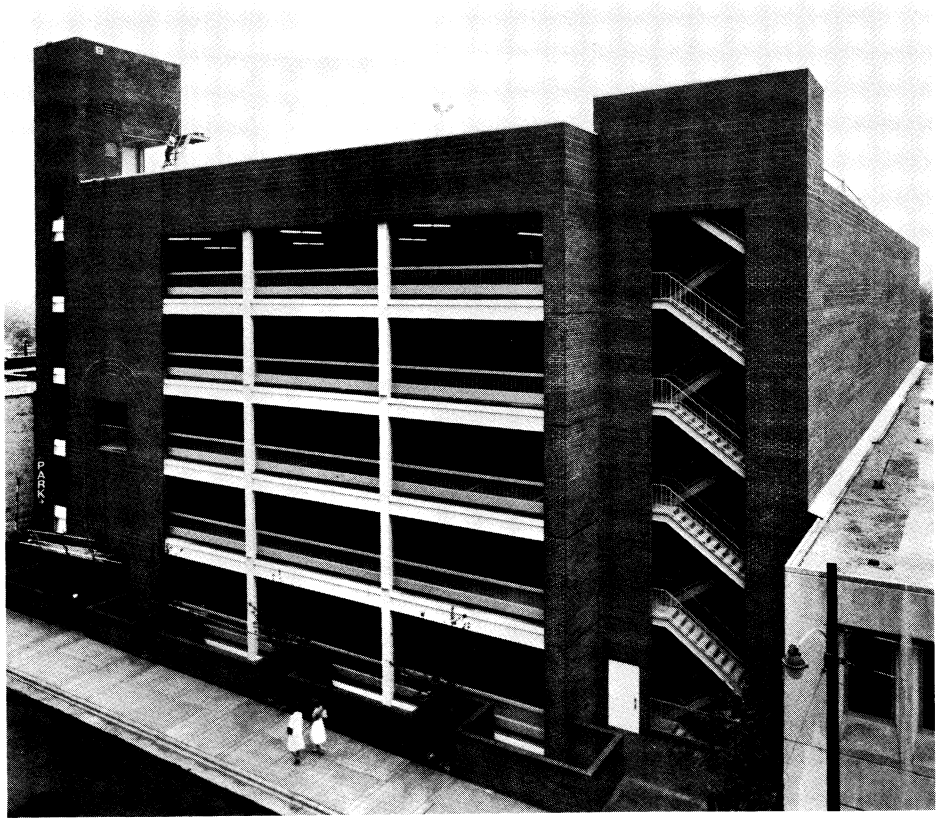
Raleigh

The City of Raleigh recently opened the steel-framed South Salisbury Street parking facility, designed by Haskins and Rice, architects and planners of Raleigh with Kimley-Horn and Associates, Inc. of Raleigh as consulting engineers. The facility offers 473 full-size parking spaces in a downtown area that serves the general public, the neighboring Radisson Plaza hotel, the Raleigh Civic Center, and Carolina Power and Light Co.'s Century Plaza building. It includes eight levels at the back on Gale Street and seven levels in front at Salisbury Street. From the hotel, motorists descend to the lowest level of the facility, then up to the main ingress-egress area at Gale Street.

The exterior of the facility is comprised of North Carolina-produced red brick and picket rails to harmonize with the recently completed hotel. Cost of the project was $2.29 million, which includes the full parking control system and deep foundation.

According to Donald H. Kline, vice president of Kimley-Horn, "One of the principal features (of the facility) from a functional standpoint involved moving the exterior lines of columns inward and cantilevering the structure past these column lines. This was originally conceived to facilitate the caisson foundation construction along the interior property lines, and the offset columns were then incorporated into the traffic pattern."

General contractor for the project was J.M. Thompson of Raleigh.



The new brick and steel parking facility was recently completed in downtown Raleigh, designed by Haskins & Rice, architects and planners of Raleigh, with Kimley-Horn & Associates, Raleigh, as consulting engineers.

Dodge and Associates, Architects and Planners of Raleigh, has received a 1982 Facility of Merit Award from *Architect Purchasing and Facilities* magazine for the design of Fetzer Gymnasium at the University of North Carolina at Chapel Hill. The award is designed "to recognize unique and exceptional sport, physical education and athletic facilities throughout the United States." It will be featured in an article in an upcoming issue of the Wisconsin-based national magazine.

The 153,000-square-foot physical education and intramural facility was dedicated in April 1982. Named for the late Robert A. Fetzer, former director of athletics at the university and executive secretary of the Morehead Foundation, the building occupies the site of the old "Tin Can."

Dr. John Billing, chairman of the UNC department of physical education, said "the building provides for maximum student participation." It contains three separate gymnasiums for basketball, volleyball and badminton, six regulation squash courts, 15 racquetball and handball courts, and two multi-purpose rooms for wrestling and martial arts. In addition, it houses an exercise physiology lab and a motor performance lab, six locker rooms, two dressing rooms, two conference rooms, five classrooms, and 18 physical education department offices.

The new five-year Bachelor of Architecture program commenced at the School of Design, North Carolina State University in Raleigh, this fall. To support the program, the School

Chapter notes

organized a series of public lectures on the practice of architecture in the state. The theme of the series is "excellence in architecture and the conditions necessary to achieve it."

According to Frank Harmon, associate professor of architecture at the School, the lecture series is intended "to promote a dialogue between students and professionals on the standard of contemporary architecture in North Carolina, and to suggest potentials and directions for future development." Future lecturers are: John Rogers of Six Associates, Asheville, Friday, Oct. 22; Brian Shawcroft of Shawcroft-Taylor Architects, Raleigh, Friday, Oct. 29; Marley Carroll, Corporate architect for R.J. Reynolds Industries, Winston-Salem, Friday, Nov. 5; and Eduardo Catalano of Cambridge, Mass., Thursday, Nov. 11. All lectures are at 1 p.m. in the School of Design auditorium except Catalano's, which will be at 8 p.m.

Harmon also noted that North Carolina architects are cordially invited to visit the Fifth Year Studio in the School at any time during the academic year to engage in discussions and critiques with students.

A National Note

The final block of commemorative stamps in the American Architecture series was dedicated during the first-day-of-issue ceremony, September 30, at the AIA Building, 1735 New York Avenue, Washington, D.C.

Part of the AIA's 125th anniversary celebration, the ceremony culminated a four-year, 16-stamp series initiated in 1979 by the U.S. Postal Service to honor American architecture and architects. The four blocks — one issued each year — feature examples of successful American architecture of enduring beauty, strength, and usefulness.

"The first-day-of-issue ceremony marks a significant milestone on our year-long 125th anniversary celebration to engender greater public awareness of architecture and the role of architects in shaping our built environment," said AIA President Robert M. Lawrence, FAIA. "The four 20th-century landmarks selected for this set represent monumental works in the development of American architecture. All were designed by recipients of the AIA's highest honor, the Gold Medal."

The four "Architecture USA" stamps in the 1982 block depict: Fallingwater at Mill Run, Pa., by Frank Lloyd Wright; Illinois Institute of Technology, Chicago, by Mies van der Rohe; the Gropius House, Lincoln, Mass., by Walter Gropius (in collaboration with Marcel Breuer); and Dulles International Airport, Chantilly, Va., by Eero Saarinin.

The USPS noted that the new stamps honor not only the structures and their architects, but the entire architecture profession.

The 16-stamp series was designed by artist and printmaker Walter Richards of New Canaan, Conn. He is known for his precise fine-line architectural drawings. ■

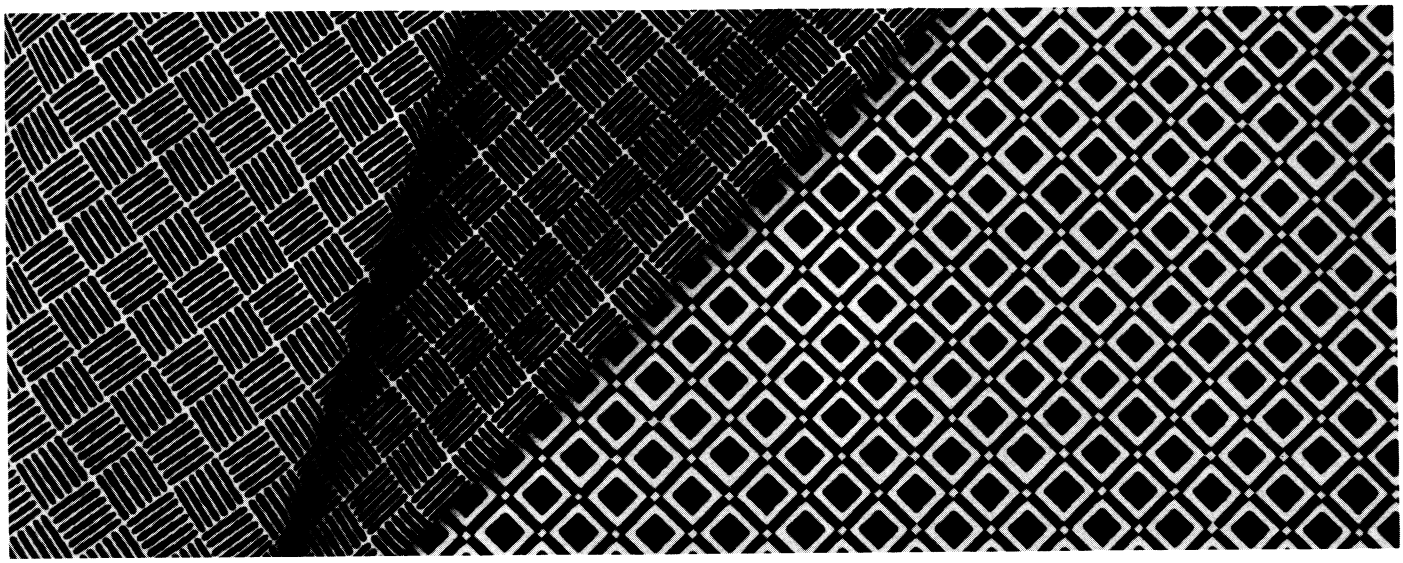
Marketplace

Butchal's Keraion 12"x15" glazed tiles were used by architect Geoffrey Hutchings to construct the 20-foot high sculpture in front of the European Pavilion at the Knoxville World's Fair. Approximately 10,000 square feet of the same tiles were also used in cladding the front of the European Pavilion (pictured here). The color tile ends were installed with silicone rubber adhesive, the first such vertical installation in the U.S. For more information, contact the U.S. corporate offices at 5780 Peacetree Dunwoody, N.E., Atlanta, GA 30342.

Butchal's glazed tiles cover the front of the European Pavilion at the 1982 World's Fair in Knoxville. (Architect: Geoffrey Hutchings.)

C.W. Stockwell, Inc. presents "Flannels with Flair" — small geometrics hand-painted on flannel, part of a new line of wall and upholstery fabrics. Four geometric designs may be printed on the 60-inch wide flannels, which come in 24 colors. The geometric prints are for wall use; coordinating solid-colored flannels are available for upholstery. For more information contact C.W. Stockwell at 320 Madison Ave., Los Angeles, CA 90004.

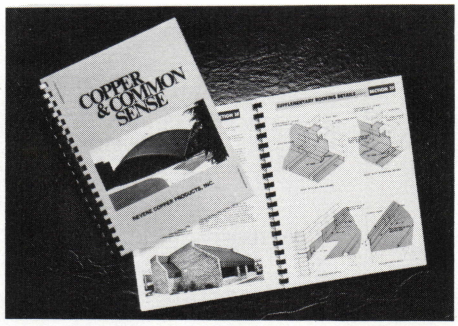
Knoll International introduced the CRT Terminal Stand, designed by Bill Stephens, at NEOCON 14. The stand consists of two separate articulated surface supports — one for the screen itself and one for the keyboard — both fixed to a five-leg base. The surface is available in five veneers and five laminates. Designed to integrate with a variety of office systems and components, the stand is fully compatible with both new and prior automated installations.



Marketplace

Stacor offers a 10-drawer utility cabinet that requires a space only 24½″ deep x 12¼″ wide x 48″ high. Drawers are 10⅜″ wide x 4½″ high x 23″ deep, and are slotted every inch to allow placement of the optional removable steel dividers wherever desired. The drawers are also easily removed and feature a handle at the rear for ease in carrying. The cabinet is finished in hard-baked enamel. For more information write to Stacor Corporation, 285 Emmet St., Newark, N.J. 07114.

From **GF Business Equipment, Inc.** comes the "Linges Series" of the company's GF/Giroflex Collection, introduced at NEOCON 14. The chairs feature executive styling, "anatomically correct seating," open natural wood or closed upholstered arms, and "girolift" gas cylinder activated adjustment mechanisms. The chairs are available in all GF upholsteries, including leather and suede, with walnut or oak frames, arms, and bases.



Now available from **Revere Copper Products, Inc.** is a new, updated edition of *Copper and Common Sense*, a reference text that contains "the latest state-of-the-art for the application and installation of sheet copper," including new photographs and detailed drawings, as well as instructions and specifications. It is bound in a plastic spiral so that every page can lie flat. This 103-page text is the seventh edition of the book. To obtain a copy ($15), contact Lauren J. Vandeveer, Building Products Specialist, Revere Copper Products Inc., P.O. Box 300, Rome, N.Y. 13440. A ten percent discount is available on orders of five or more. ■

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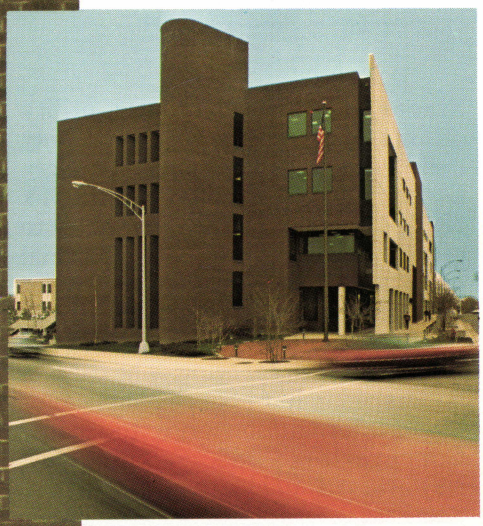

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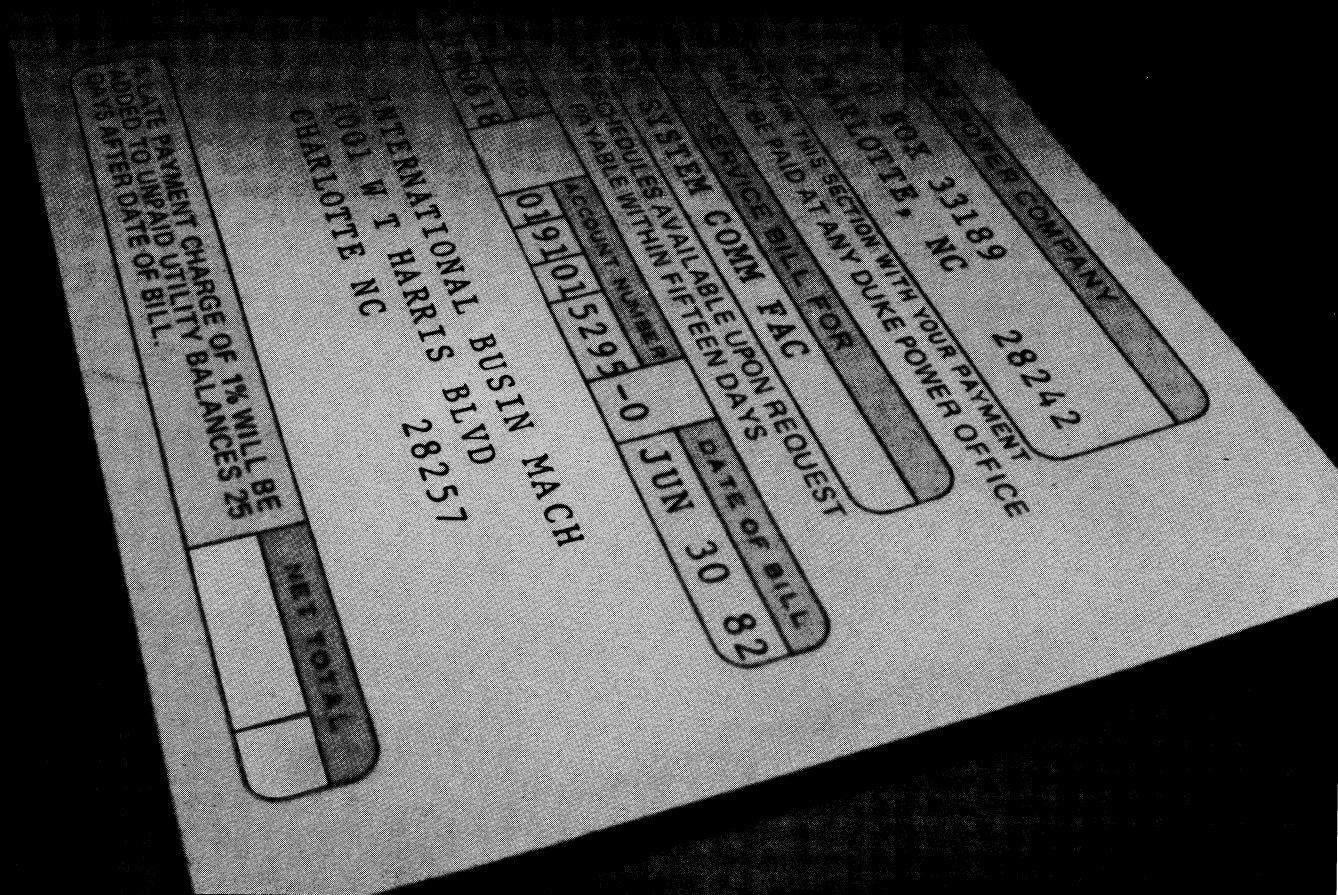

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