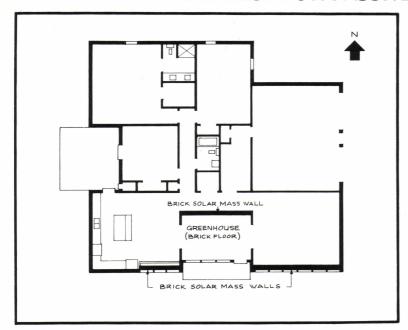
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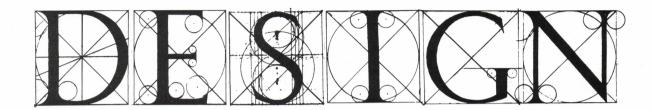
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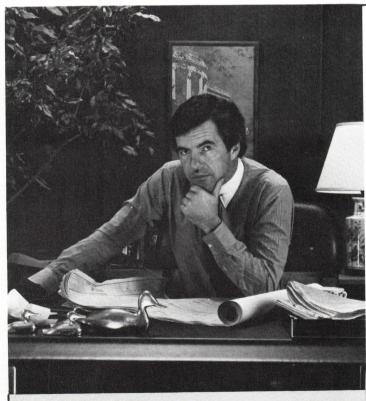


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Recent Projects: Office Buildings in North Carolina A look at four office building projects that "represent a serious effort to step beyond the minimum level of design quality," with an introduction by Pat Rand, AIA.	5
An Office Building System By Brian Shawcroft, AIA, ARIBA.	10
A Personal View  Architecture and Aesthetic Regulation: A Lawyer's Look Through the Looking Glass, by Arch T. Allen III.	14
Chapter Notes	17
Marketplace	22

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# Office Buildings in North Carolina

#### Introduction

In this issue we have again gathered a collection of recent office building projects. Office buildings clearly represent a major portion of the work undertaken by architects in this state; they also made up the largest portion of the entries for this year's NCAIA Awards for Excellence in Architecture. The projects that follow were selected from these entries. Although they were not award winners, they are projects which have significance because they represent a serious effort to step beyond the minimum level of design quality.

These projects are typically carried out in the context of demanding programs and tight budgets. In a survey of architects conducted by this magazine and published earlier this year, only three of the forty-five "Designs Architects Should Know About" were office buildings. So while office buildings may represent a large portion of the work coming out of offices, relatively few are seen as landmark designs. They are the cake but not the frosting in the diet of architectural firms.

Economic considerations are increasingly important in such projects. The survey mentioned above showed that five of the eleven most often cited "Concepts Architects Should Know About" had to do with economic considerations. Only two of the top eleven had to do with form development. Just as evening television has succumbed to ratings and the related capacity for revenue production, so can architecture succumb to forces which, if not creatively incorporated into the design process, will tend to subordinate principles of design as unnecessary and burdensome considerations.

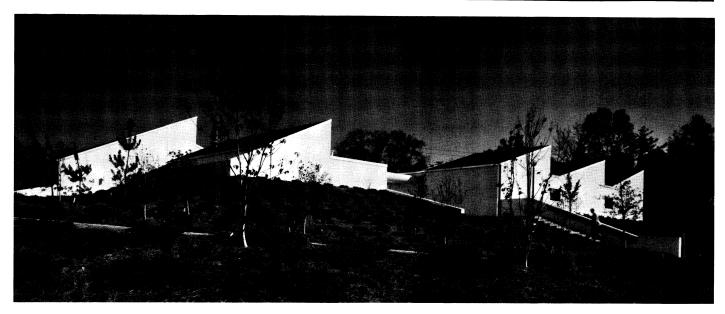
When looking at these projects, think about the issues which were considered by the architect, and to what extent each of them was resolved. Do they express the architect's design convictions with a special clarity? See what you think of these efforts.

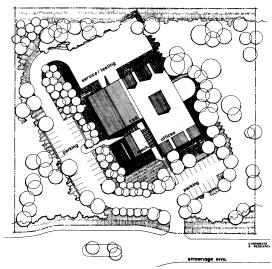
— Patrick Rand, AIA Editorial Committee Member North Carolina Architect W.R. Bonsal Co.

Corporate Headquarters and Research Laboratory Charlotte N.C.

Architect: Odell Associates, Inc. Charlotte, N.C.

Owner: W.R. Bonsal Co. Charlotte, N.C.







The client, a building products manufacturer, wanted the new corporate headquarters and research lab to feature solar energy design and to serve as a display model for the company's products. The one-story, 19,700-square-foot building, located on a four-acre wooded site in an industrial park, features eight large clerestory windows on the roof to allow the sun into the interior. The rear of the building is primarily southfacing glass which, like the clerestory windows, receives maximum exposure to low-angle winter sun. The glass is shielded by overhangs to block higher-traveling summer sun. The building's outside walls are nestled in earth berms for natural insulation.

To keep the trapped heat inside, the architect used his client's own surface bonding cement on

the exterior. Other surface materials and textures used throughout the building are also the owner's manufactured products.

The computer, dining room and record-keeping spaces were positioned to allow future office flexibility and change. Masonry partitions in the administrative offices also allow for flexibility. The research lab is adjacent and connected to the offices. A one-half-acre testing yard for the owner's products is positioned outside the lab. The mechanical equipment is housed in a detached structure.

**General Contractor:** Myers and Chapman, Inc., Charlotte

**Photography:** Rick Alexander Photography, Inc., Charlotte

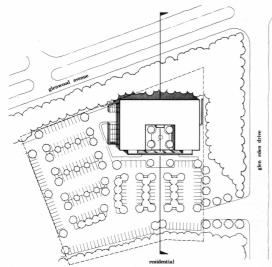
# Texas Gulf Chemicals Co.

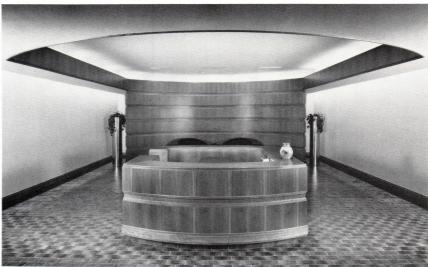
Corporate Headquarters Raleigh, N.C.

Architect: G. Milton Small and Associates Raleigh, N.C.

OWNER: Williams Realty and Building Co. Raleigh, N.C.







The program called for a 66,000-square-foot speculative office building for a single tenant, to be located on a five-acre wooded site bordered by a major street on the east and a residential neighborhood on the west. The U-shaped building form maximizes perimeter office space while reducing the building mass so that it wouldn't overpower the residential area. Following the natural land slope enabled the architect to decrease the building's height from three stories at the street facade to two stories at the west entry facade. A wooded buffer strip screens the building from street traffic; the perimeter offices overlook either the surrounding trees or the landscaped courtyard. A brick colonnade separates the courtyard from the parking area.

Two upper floors are for general office use. The lower floor houses more office space and kitchen/dining areas. Underground wings house the

tenant's corporate data processing center, mechanical and storage spaces.

Since the tenant is an international developer of natural resources, the architect used natural materials for the exterior and interior. Antique brick, standing seam copper siding, and bronze glass comprise the exterior. Bullnosed brick work simulates a cornice at the top of the building's elevations and frames the window openings. Cherry woodwork is the predominant interior material.

**General Contractor:** Williams Realty & Building Co., Raleigh

**Structural Engineer:** Lasater-Hopkins, Engineers, Raleigh

**Mechanical and Electrical Engineer:** Buffaloe, Morgan and Associates, Inc., Raleigh

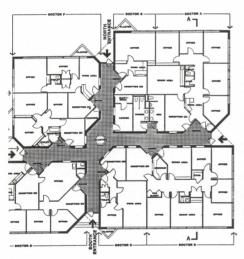
**Photography:** Jim Sink, ARTECH, Inc., Raleigh, and G. Milton Small and Associates

# Dresser Court Professional Building Raleigh, N.C.

Architect: Quick Associates, PA Raleigh, N.C.

Owner: Dresser Court Partnership Raleigh, N.C.









The structure was designed to accommodate eight separate practices of psychiatrists and psychologists. Individual patient protection, through anonymous entrances, circulation patterns and speech privacy, was considered paramount.

To solve these problems, the architect extended the exterior ribbed masonry block into an off-set, glass-roofed corridor system which divided the structure into a cloister arrangement. This main circulation element visually shields patients from other office entries and corridor areas as they enter the building. This, in turn, reduced the need for eight individual exterior extrances, which was an original client requirement.

Acoustical quality was achieved in the corridor through the mass of masonry construction and the irregular surface texture. Speech privacy in office areas was achieved through effective use of materials, textures, seals and electronic devices. Individual heat pump systems were installed for each office area for individual patient comfort control. Since the vehicular approach to the building is from a higher elevation, all roof-mounted equipment — which is extensive for this size building — is shielded from view through extended parapets.

**General Contractor:** Davidson and Jones Inc., Raleigh **Plumbing/HVAC/Electrical Engineer:** Jackson Associates, Raleigh

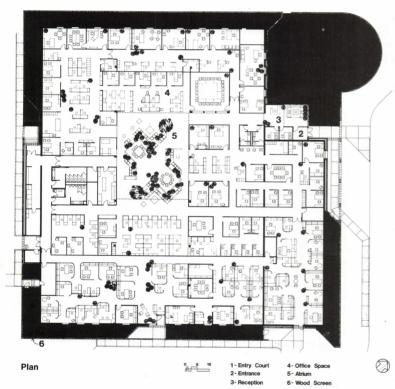
**Structural Engineer:** Ellinwood Design Associates, Ltd., Raleigh

Photography: Jim Sink, ARTECH, Inc., Raleigh

# Traveneaux Office Building Winston-Salem, N.C.

Architect: Newman Calloway Johnson Winfree OWNET: Traveneaux Partnership Winston-Salem, N.C.







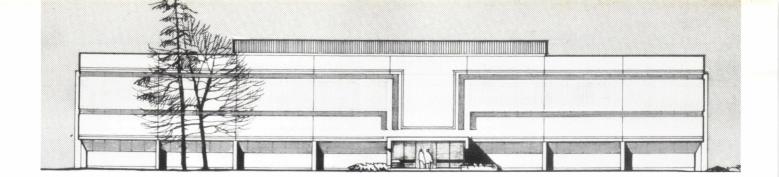
The architect was asked to convert a 35,000-square-foot non-descript, light industrial warehouse into office spaces. The solution involved introducing a wood "screen" around the exterior perimeter of the existing building. The screen: (1) creates a new facade; (2) hides the existing rooftop mechanical equipment; (3) creates a landscaped "layer" around the existing building which provides a controlled exterior view, blocking what would have been a view of the parking lot; and (4) articulates a new extrance.

For the interior, the architect designed a 50 ft. x 60 ft. landscaped atrium into the center of the

building by replacing the existing flat roof with a skylit gable roof. Company departments surround the atrium, which serves as both a conference area and interior focal point.

Building materials included T&G cypress for the exterior "screen," steel framing asbestos shingles, and acrylic skylights. The atrium features painted wood planters and benches.

**General Contractor:** John S. Clark Co., Inc., Mt. Airy **Photography:** Rick Alexander Photography, Inc., Charlotte



# An Office Building System

A DEVELOPMENT TEAM OF ARCHITECT, ENGINEER & CONTRACTOR

#### By BRIAN SHAWCROFT, AIA, ARIBA

A key cost factor in commercial office buildings today is the interest rate on construction financing. Time in construction is of the essence in keeping this element an acceptable and predictable part of the financing proforma.

A design-build team approach has been developed over a period, consisting of architect, structural engineer and contractor. By working closely together from the outset, costing, construction techniques, and the capabilities of equipment and manpower input can be obtained early from the contractor. A four to five-month time from groundbreaking to tenant occupancy has been averaged for the buildings illustrated, some of which exceed 45,000-square-feet in area. This basic approach is to construct the building using very large units developing as much repetition of similar elements where feasible. The entire exterior of the building is formed on site thus eliminating transportation cost. This is done by either pouring a casting slab in a strategic location, if more than one building is involved; or, in the case of tight site restraints, using the ground floor slab of the building.

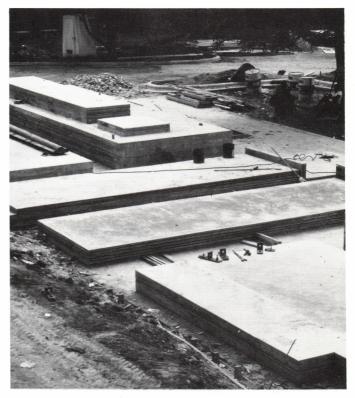
Panels of similar dimensions are poured in layers, similar to a lift slab system. Columns may be poured side to side or vertically. Up to ten panels may be formed on top of each other using a bond break to allow separation.

Since the concrete elements are already on site when the steel interior framing arrives, the panels and columns can be erected simultaneously with the steel, plumbed and welded together using plate inserts in the concrete elements. These weld plates then develop moment connections for wind bracing and lateral stability. Mobile cranes with a capacity of up to 50 tons are used to lift the larger panels, some of which weigh over 20 tons.

Another time-saving factor is the elimination of precast concrete shop drawings: all the dimensional, reinforcing and insert information is furnished by the engineer to be incorporated on the architect's drawings. These then are used directly on site by the contractor's carpenters and steel reinforcing placement crews.

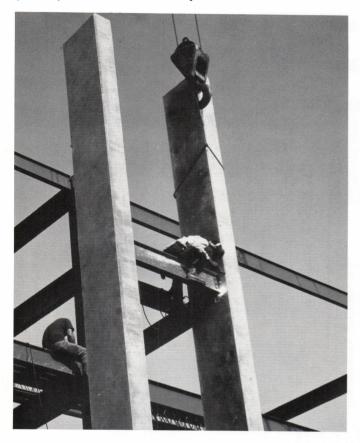
One of the design objectives of the architect was to develop a system that was flexible, energy efficient and easy to build. The buildings illustrated show the "variation on a theme" starting from the first prototypical building, then adapting, improving, and innovating with each successive project.

Credits: Shawcroft-Taylor, Architects
Edward M. Byrd, PE, Structural Engineer
Davidson & Jones, Inc., and
Clancy & Theys Construction Company, Contractors

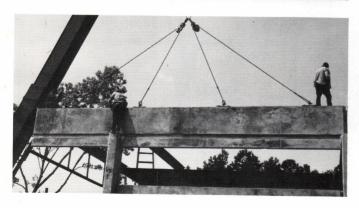


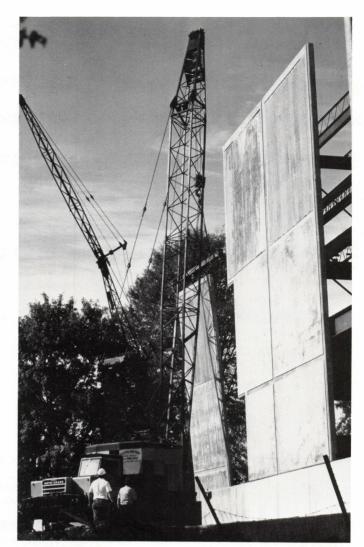
(Above) Concrete casting bed for panels

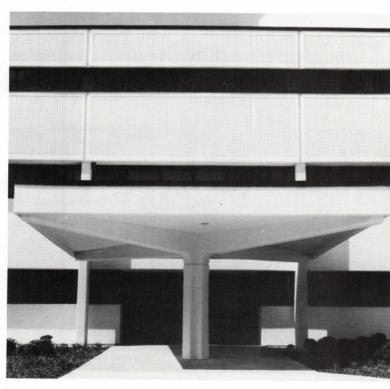
(Right) Erection of 18 ton end panels (Below) Site erection technique





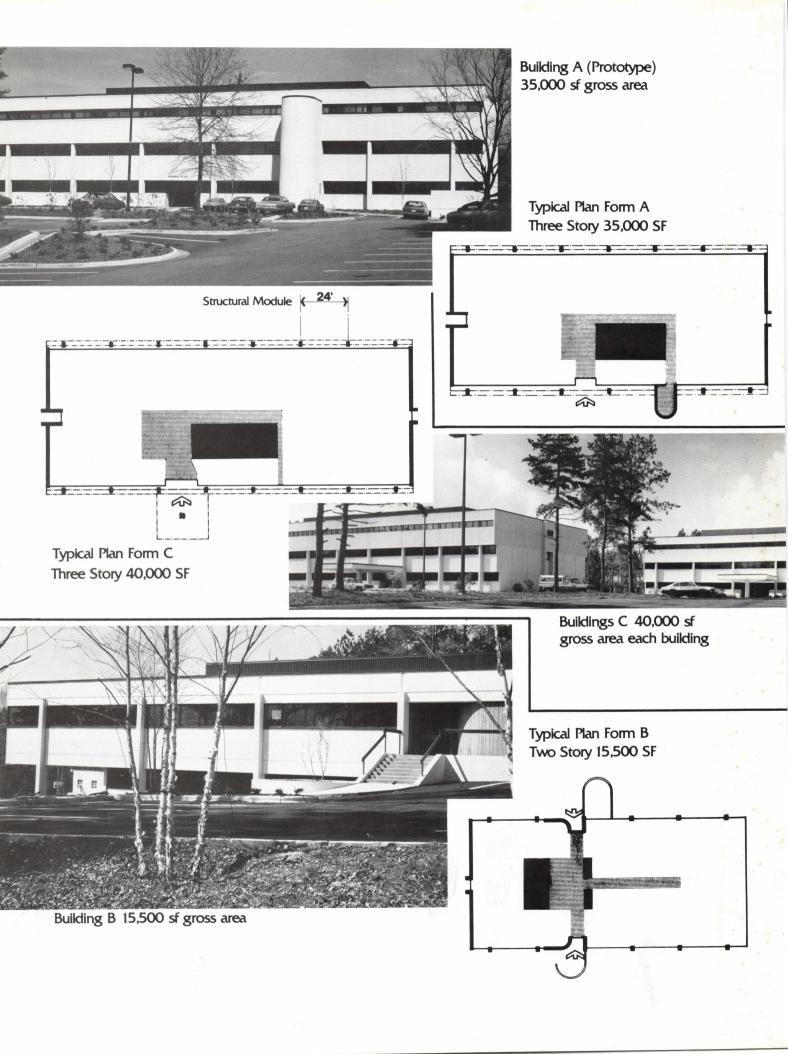


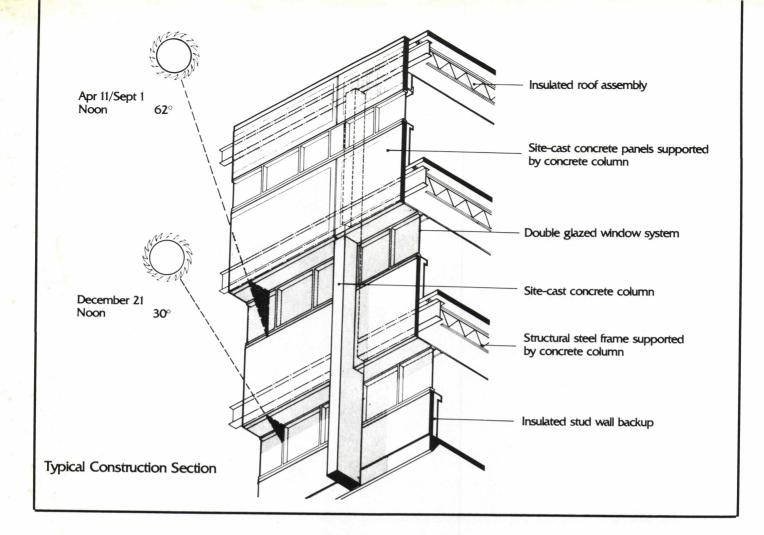


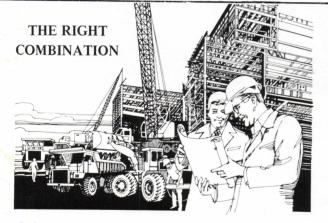


Cast-in-place freestanding canopy

(Continued)







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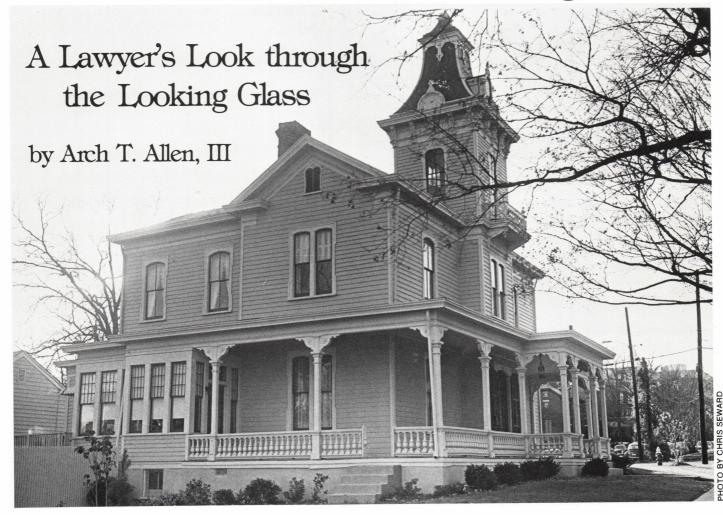
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# A Personal View

# Architecture and Aesthetic Regulation:



Zoning and other land-use ordinances are constitutional exercises of the police power of the State if substantially related to "public health, safety, morals, or general welfare." Earlier in this century, "the general welfare" was regarded as equivalent to health and safety. Typically, zoning restrictions were limited to height, setback, and lot size requirements intended to ensure adequate light and air for urban buildings. Minimum space standards were intended to prevent overcrowding, and land uses were separated to alleviate noise, traffic congestion, and similar effects in residential areas. "Health" and "safety" concepts sufficed to sustain those traditional zoning restrictions. Contemporary concepts of "the general welfare" are broader, however, and in recent decades courts have upheld more extensive land-use restrictions. The United States Supreme Court has said that land-use regulation may promote values which "are spiritual as well as physical, aesthetic as well as monetary." The Court has permitted zoning to be used to create spacious and quiet neighborhoods purportedly promoting "family values" and "youth values." Many state courts have also expanded the realm of zoning restrictions. For instance, one court upheld two-acre minimum lot requirements on a theory that the

general welfare includes protecting the "appearance and environment of this rural high-class residential community." By the 1960s, a few courts had held that the general welfare included zoning to preserve historical districts.

Historically, however, most courts have held that purely aesthetic ends alone are not sufficient to support a land-use ordinance. Those courts reasoned that "the general welfare" did not include aesthetics. More recent cases tend to reject that rationale and approve land-use regulations with aesthetic ends. Recognizing that the police power has always been "adequate to restrain offensive noises and odors," they have reasoned that "a similar protection to the eye should also be afforded." Under that legal rationale, although "beauty is in the eye of the beholder," the State, through land-use regulations, may become the beholder and establish aesthetic standards for land use.

In the 1970s, more cases upheld aesthetic controls in the context of historic preservation. Two cases are especially significant. First, a federal court of appeals upheld an ordinance of the City of New Orleans with architectural controls for buildings in the historic Vieux Carre. The courts extended the police power beyond "health and safety

in their narrowest senses" to be "more generous, comprehending more subtle and ephemeral societal interests." Second, the United States Supreme Court upheld the application of a New York City ordinance to the Grand Central Terminal, which had been designated a "landmark," so as to prevent construction of a planned 50-story office tower over the Terminal. Application of the ordinance was held not to be an unconstitutional taking of the property; it did not interfere with the owners' present use of the property or prevent it from realizing a reasonable rate of return on its investment. The Court stated that "States and cities may enact land-use restrictions or controls to enhance the quality of life by preserving the character and desirable aesthetic features of a city..."

North Carolina, like many states, had long held that landuse restrictions could not be based purely on aesthetic considerations without real or substantial relation to the "public health, safety, morals, or general welfare." The continued validity of those holdings became questionable, especially in light of the trend of cases in other jurisdictions involving historic preservation. The types of cases were distinguished, and one commentator stated: "While most aesthetic ordinances are concerned with good taste and beauty... a historic district zoning ordinance... is not primarily concerned with whether the subject of regulation is beautiful or tasteful, but rather, with preserving it as it is, representative of what it was, for such educational, cultural, or economic values as it may have."

In a 1979 case, these issues confronted the North Carolina Supreme Court. As a property owner and lawyer in the case, the author had distinct interests in the controversy. The supreme court's decision, adverse to those interests, has much broader implications for North Carolina architects.

#### The Historic Oakwood Case

The case arose from a City of Raleigh ordinance designating a 98-acre area known as Oakwood an "historic district" overlay upon existing zoning use classifications. The area was principally a residential area. Part of a block opposite the Governor's Mansion was zoned for office and institutional use. Within that office and institutional area were sites, including the author's vacant lot and the contemporary North Carolina State Medical Society Building. The Raleigh ordinance included the first three sites within the "historic district" overlay, but excluded the Medical Society Building. The ordinance adopted "architectural guidelines and design standards" to be applied by an Historic District Commission. Before a property owner could erect or alter the exterior portion of any building within the district, that commission had to grant a "certificate of appropriateness." Under the statute authorizing the ordinance, the commission is authorized to prevent construction within the district "which would be incongruous with the historic aspects of the district. Oakwood had been placed on the National Register of Historic Places upon a presentation that it was "composed predominantly of Victorian houses built between the Civil War and 1914." As to its architecture, the presentation continued: "The great variety of Victorian architectural styles represented by the houses reflects the primarily middle-class tastes of the business and political leaders of Raleigh for whom they were built as well as the skill of local architects and builders.

The *Historic Oakwood Case* challenged the ordinance as it applied to the vacant lot in the office and institutional use area. Two legal arguments against the ordinance are

important here: (1) that the ordinance was based solely on aesthetic considerations and, therefore, exceeded the police power to regulate for the "general welfare"; (2) that the ordinance did not contain sufficient standards and, therefore, was an unlawful delegation of legislative power. The supreme court rejected both of those arguments and others, and held that the ordinance was a valid exercise of the police power as applied to the vacant lot.

**Aesthetic Control:** Although the court declined to adopt the broad view of some courts that "the police power may be broad enough to include reasonable regulation of property for aesthetic reasons alone," it held that "the police power encompasses the right to control the exterior appearance of private property when the object of such control is the preservation of the State's legacy of historically significant structures." The court concluded that such control promotes the general welfare in several ways, including tending "to foster architectural creativity by preserving physical examples of outstanding architectural techniques of the past." The court extended that control to comprehensive regulation for new construction within an "historic district" so as to preserve "the setting or scene" or "tout ensemble" of the district. In the court's final analysis, the vacant lot remained within an office and institutional zone available for new construction; but any new construction must be, said the court, "in a manner that will not result in a structure incongruous with the historic aspects of the Historic District.'

Sufficiency of the Standards: The court also held that the enabling legislation contained sufficient standards for delegation of the regulatory power to the Historic District Commission. Those standards simply proscribed construction "which would be incongruous with the historic aspects of the district." The court called "incongruity" a "contextual standard" deriving its meaning from the "objectively determinable, interrelated conditions and characteristics of the subject to which the standard is to be applied." In Oakwood, said the court, the meaning must come from its "total physical environment." Although the court agreed that Oakwood "is to a considerable extent an architectural melange, that heterogeneity of architectural style is not such as to render the standard of 'incongruity' meaningless,' the court added that "the predominant architectural style found in the area is Victorian, the characteristics of which are readily identifiable." The court emphasized that the enabling statutes, not the ordinance, set the standard. The ordinance's "architectural guidelines and design standards" were said to give "varying degrees of specificity to that general standard...." The court did not deal with those guidelines which provided, among other things, that new structures within Oakwood "must reflect qualities and elements found in Victorian modes" but prohibited "any expression detailing which attempts in any manner to make a facade look older or of a different period than it is...." The guidelines mandated that new construction "follow a contemporary mode, which reflects the structural elements and aesthetic qualities found in strict Victorian architecture.

#### **Implications for Architects**

**Practical Implications:** To comfort those who may find the standards vague, if not meaningless, the court added that "procedural safeguards provided will serve as an additional check on potential abuse of the Historic District Commission's discretion." Under its procedures, the

commission will apply the standards to architectural plans submitted for its approval. The commission may reject proposed architectural plans, perhaps because they merely 'echo" Victorian forms rather than reflect "strict Victorian architecture." Indeed, the commission, like the city planning director who promoted the ordinance, may not be able to say whether proposed plans, much less the nearby Governor's Mansion, is "Victorian or not." In such cases, an appeal may be taken to the Board of Adjustment. There architects, who may have already appeared before the commission, may testify as expert witnesses in a more formal environment, under oath, about their opinions of "incongruity." Architects expected to testify as experts may be subjected to pre-hearing depositions and questioned extensively by lawyers for the other side. Of course. testifying architects will be subject to cross-examination, and their opinions may be countered by rebuttal witnesses. After architects' testimony, possibly conflicting, other appeals may follow. In the long run, an appellate court may effectively decide the issue of architectural "incongruity." Legal hairsplitting, perhaps urged by interveners with special interests, may lead to absurd results. After all, although the court said "incongruity" in Oakwood is to be determined "from the total physical environment," the controlling statute speaks of incongruity "with the historic aspects of the district." Those aspects were found to include "middle-class tastes" and "the skill of local architects." Of course, other legal doctrines should apply to prevent the commission from requiring "middle-class tastes" or only "local architects.

In any event, the practical implications of this form of aesthetic control include uncertainty during design stages, delay during approval and possible appeal procedures, increased costs, and potential intrusion by the commission

and others into the design process.

Philosophical Implications: Although the court declined to decide expressly that the police power can extend to aesthetic controls in other contexts, its reasoning in the *Historic Oakwood Case* renders such an extension constitutionally sustainable. If aesthetic controls in historic preservation can promote the general welfare through such presumed effects as promoting "architectural creativity," aesthetic controls in other areas can presumably promote the general welfare through similar effects. Conceivably, ordinances could constitutionally require exterior architectural design not "incongruous" with, for instance, "Williamsburg" residential areas or "contemporary" commercial areas. Indeed, one authority finds aesthetics "such a broad notion that it might plausibly be invoked to justify almost any zoning measure a municipality chose to enact."

Some legal scholars have suggested that objective standards could safeguard against abuse and that the aesthetic controls could be administered by experts such as city planners and architects. Others argue that, even with procedural safeguards, a bureaucratic approach to aesthetics affronts free speech and expression rights that are constitutionally protected parts of architectural design.

While the legal debate lingers, architects should examine their professional attitudes towards such potential aesthetic controls. Although the ultimate validity of such controls may be a legal decision for the courts, the initial exercise of the presumed power can occur only through the political process. Thus, architects should be prepared to express themselves should aesthetic-control ordinances be considered in their communities.

#### Conclusions

Aesthetic controls, if extended, will abound in controversy and conflict. Indeed, in an ironical footnote to the *Historic Oakwood Case*, the State of North Carolina opposed extension of historic preservation aesthetic controls to its own nearby state-owned property on the ground that the controls were too burdensome.

Whether burdensome or not, aesthetic controls under the "incongruity" standard will invite disagreement in their application. Added irony arises from the City of Raleigh's changing attitudes toward application of the "architectural guidelines" in the Historic Oakwood case. Although the guidelines themselves recited their reflection of "architectural and aesthetic forms," the city elsewhere claimed they "are not aesthetic." Although the phrases "contemporary architecture" and "contemporary mode" appear in the guidelines, the city elsewhere could not define the term "contemporary architectural design" and contended that it was "vague and ambiguous." Later, the city said that "contemporary buildings, including... contemporary office buildings, could be built in the Oakwood historic district" and that "all types of structures, including office buildings can be built in accordance with the regulations," only to add, unconcerned with consistency, that a property owner within the district could "be denied the use of its property for an office building."
Although the guidelines say the "streetscapes of the Oakwood neighborhood feature a rich variety of architectural styles" adding "variety and charm to the area," the city said the "attractive contemporary" State Medical Society Building contained "architectural elements wholly incompatible with the architecture of the historic district." Yet the city said the guidelines "would encourage new construction in the Oakwood Historic District to follow a contemporary mode, which reflects the structural elements and aesthetic qualities found in strict Victorian architecture.

From those illustrations of inconsistent arguments arising from the "architectural guidelines," another expression from the Victorian era portends the ultimate issue arising from them — power. In *Through the Looking Glass*, Lewis Carroll portrays "profundity in Humpty Dumpty's whimsical discourse on semantics" with Alice:

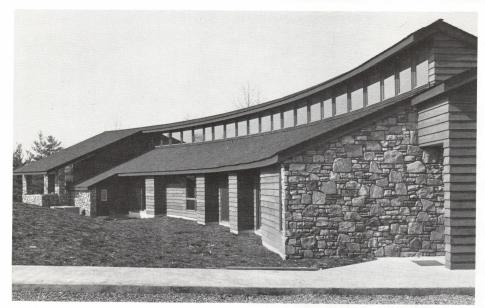
"When *I* use a word," Humpty Dumpty said, in rather a scornful tongue, "it means just what I chose it to mean — neither more nor less."

"The question is," said Alice, "whether you make

words mean so many different things."
"The question is," said Humpty Dumpty, "which is to be master — that's all."

"Which is to be master" of architectural aesthetics, the State or private citizens?

After preparation of this article but before publication, the North Carolina Supreme Court on May 4, 1982, upheld an ordinance requiring erection of a fence enclosing a junkyard. The court overruled its prior holdings "to the extent that they prohibited regulation based upon aesthetic considerations alone." The court did not grant "blanket approval of all regulatory schemes based upon aesthetic considerations," but extended the Historic Oakwood Case as establishing a "balancing test" for determining the validity of aesthetic controls. "We therefore hold that reasonable regulation based on aesthetic considerations may constitute a valid basis for the exercise of the police power depending on the facts and circumstances of each case."



#### Asheville

Spaceplan/Architecture, Design & Planning of Asheville announces the completion of a new facility for Weaverville Family Medicine Associates, PA. W. Keith Campbell, MD and Robert H. Fabrey II, MD are the owners of the new building on Monticello Road in Weaverville, which is adjacent to their former offices. They began use of the new facility on February 8, 1982.

The 4400-square-foot building, built by Duyck Construction Co., is a wood frame structure with a redwood and field stone exterior. "The plan," according to Benjamin M. Jones, AIA, project architect, "is an arc, designed to capture both sun and views. Exterior earth berms direct sight and movement.'

Traditional, low-maintenance materials were used for energy conservation. The main waiting area looks out over a meadow, with the mountains beyond. The ceilings are vaulted over both waiting areas, the consultation rooms, and along the central corridor.

The arc shape, spanning about onesixth of a circle, houses interior spaces. The arc is focused south towards the sun. Sliding glass doors open the entire south side of the

> Lineberger Cancer Research Center, UNC-CH. Designed by J.N. Pease Associates, Charlotte.

building to light, and to air in good weather. The south wall is topped with a clerestory that lights the corridor and warms the curved masonry heat storage walls during the day. At night the walls return the warmth to the inside air. A Trombe wall in the central waiting room holds additional warmth in winter. Deep overhangs above the windows block out the hot rays of the high summer sun, while directing inside the low rays of the winter sun.

Deliberate care was taken with building placement and orientation, according to Jones. Landscaping fits the building to its site and use: earth berms (mounds) direct traffic in and out of the building. They also frame the view and shield the building against road noise and motion.

#### Charlotte

The official groundbreaking ceremony for the Lineberger Cancer

Weaverville Family Medicine. Designed by SPACEPLAN/Architecture, Design and Planning, Asheville.

Research Center at the University of North Carolina at Chapel Hill, designed by J.N. Pease Associates of Charlotte, was held recently at the building site.

The building is named in honor of the Lineberger family of Belmont, long-time supporters of the University and the School of Medicine. Cancer researchers are scheduled to move in by June. The 35,000-square-foot three-story facility will house specialized laboratories, as well as offices and a library.

The Lineberger building is being funded by a \$1.37 million grant from the National Cancer Institute, \$3.2 million from institutional funds and \$3.83 million from private donations.

In Charlotte's rapidly growing Third Ward district, Reg Narmour/The Architectural Group, P.A. of Charlotte has designed and is now seeing completed "Clarkson Place." the first multi-family project to be built in this transitional urban neighborhood.

The Third Ward consists of small single family houses, many of which have been renovated and restored. New construction has received added incentive through low interest mortgage loans provided by the City of Charlotte and North Carolina National Bank (NCNB).

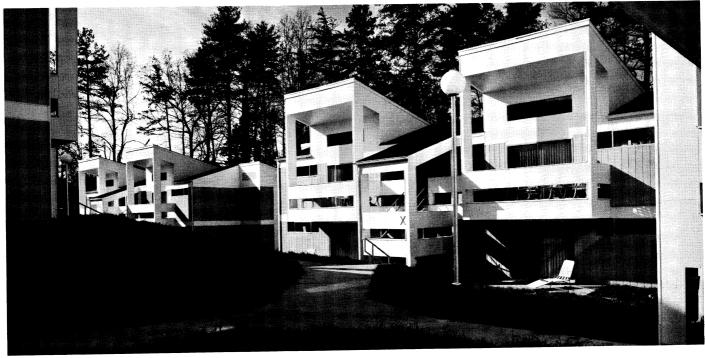
Clarkson Place, owned by NCNB Community Development Corporation/The Third Ward Neighborhood Association, is a two- and threebedroom, high density townhouse





Above and left: A rendering and photograph of Clarkson Place, the first multi-family project to be built in Charlotte's transitional urban neighborhood, The Third Ward. Designed by Reg Narmour/The Architectural Group, P.A., of Charlotte, the project is a two- and three-bedroom, high density townhouse community of three-story units.

Student housing at the University of North Carolina at Charlotte which won a Citation of Merit from the Plywood Design Awards Program. Designed by Gantt/Huberman Associates, Charlotte.



community consisting of three-story units ranging from 1300 to 1480 square feet. The units feature such options as hardwood floors, microwave ovens, and energy efficient fireplaces.

The exterior of the buildings is brick veneer and four-inch clapboard siding with front porches, balconies, decks, and enclosed patios. According to the architects, the design of the facade "was a sensitive issue because it was to be a character generator for future development of the community."

Contractor for the project was Carmel Land Company, Charlotte. Landscape architect was Landdesign, also of Charlotte.

Gantt/Huberman Associates, Architects and Planners, Charlotte, received a Citation of Merit in the Affordable Multi-Family category of the eleventh annual Plywood Design Awards program, sponsored by the American Plywood Association and Professional Builder magazine.

The firm, one of six to receive citations and awards in this year's competition, was honored for its design of student housing at the University of North Carolina at Charlotte.

The Plywood Design Awards program, which recognizes outstanding aesthetic and structural applications of softwood plywood, attracted entries from across the U.S. A feature on the winning entries will appear in a spring issue of *Professional Builder*. (For more information on the program, write Plywood Design Awards, P.O. Box 11700, Tacoma, Washington 98411.)

Awards jury members commented on the Gantt/Huberman project: "An excellent site plan on a wooded, rolling site with a bold new massing form properly settled in the ground, taking up grade where necessary, yet reaching skyward with an eye towards the future. The floor plans are good and appropriate for the use, the volume and brightness create an atmosphere probably foreign to college students, but not out of phase. The project is done on a domestic,

human scale that is dramatized by the voids on the balconies and walkways, which make the project clearly original. The attention to detail is simply stated, but good."

Michael R. Tye, AIA, was recently elected a principal of Odell Associates, Inc., of Charlotte. Presently, Tye is principal-in-charge of a new jet aircraft maintenance facility for Piedmont Airlines and for

international projects of Odell Associates.

Tye, a licensed architect, is president-elect of the NCAIA and past president of the Charlotte Section. He has served on the Charlotte-Mecklenburg Planning Commission and is a past president of the Citizens for Preservation, Inc. His other professional memberships include the Society of College and University Planning, the Mecklenburg Historical Association, and the



National Trust for Historic Preservation.

After Tye received a Bachelor of Architecture degree from Miami University in Oxford, Ohio, he worked in Charlotte until 1966 when he took a sabbatical year and joined the Architectural and Planning Department of the Greater London Council in England. In 1975 Tye was one of ten men who received the "Outstanding Young Man Award of Charlotte-Mecklenburg" given by the Jaycees.

#### Durham

Charles Franklin Knott, AIA, the architect who designed the new downtown building for the Durham County library, died at age 70 in March at Duke Medical Center after a critical illness of six weeks.

Knott graduated from the School of Architecture at North Carolina State College in 1933. He had been a member of Hackney, Knott & Sears for a number of years. The funeral was held March 13. Surviving are his wife, Mrs. Ruth Barton Knott; a son, Charles F. Knott Jr. of Durham; a daughter, Mrs. Charles F. Price of Arlington, Va., and three grandchildren. Instead of flowers, contributions were made to Trinity Avenue Presbyterian Church Memorial Fund.

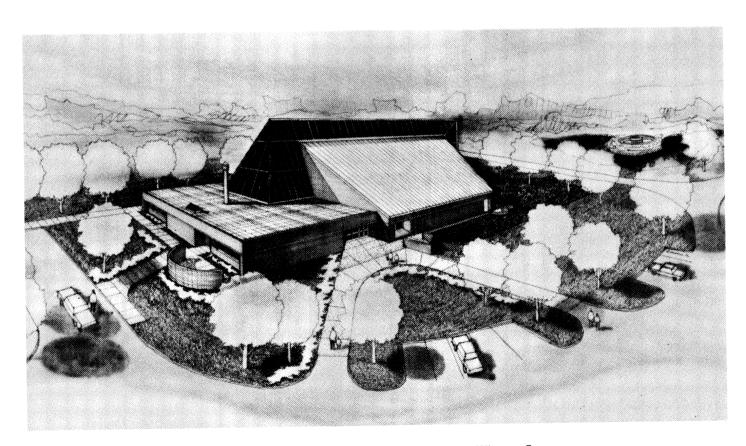
The first structure of a total longrange, complex plan for the Saint Paul's Parish Center in New Bern is now under construction, designed by Robert W. Carr, Inc., Associated Architects of Durham (formerly Carr, Harrison and Pruden, Inc.). This initial phase includes the Sanctuary, seating 500, plus various supporting spaces.

According to project architect Edgar T. Carr, AIA, future facilities in the Center project will include a school, gymnasium, play fields, rectory, bell location with amphitheatre, and a nunnery.

The immediate building features a large glass-roofed atrium space to take advantage of natural day lighting and heat gain. The interior wall and floor finishes are predominately brick with a greater amount of mass positioned at the interior of the insulation line. In the winter, high trapped hot air is recycled through the space. An exhaust system dispels this hot air in the summer, and roof-top sprinklers help cool the glass expanse when necessary. These sprinklers will also aid in keeping the glass clean.

The architects utilized laminated timber structural bays for economy of wood deck in span, and to delineate the "Stations of the Cross" positioned between each brick wall pier. In the future, brick relief wall sculptures will infill the present niches, according to Carr.

To achieve simple roof spans, the architects introduced a bearing point on the steel trusses near the ridge line. The skylite tube framing is also



Saint Paul's Parish Center in New Bern. Designed by Edgar Carr, AIA, of Robert Winston Carr, Inc., Durham.

integrated with the truss framing.

Besides its aesthetic value, the large atrium will serve as a space for dinners and before/after worship service gatherings. Included in the atrium is a flowing baptismal water font, plus a living tree and open fireplace. The additional service areas include offices, rest rooms, a kitchen, nursery, mini-chapel, tabernacle, sacristy, and a reconciliation space. According to Carr, the Center should be completed by October of this year.

Other design and construction credits include: structural engineering — Bigger and Agnew, Inc., Raleigh; mechanical and electrical engineering — Knott and Roberts, P.A., Durham; liturgical consultant — Richard Vosko, Liverpool, N.Y.



Harwell Hamilton Harris, AIA

#### Raleigh

The Richard Neutra Medal for Professional Excellence was established in 1980 by Mrs. Neutra "to recognize those individuals in the practice of architecture and the field of education that represent a lifetime of effort in developing new environments centered upon the human setting in which to live, to work, to rest."

On May 3rd, Harwell Hamilton Harris, AIA, a Raleigh resident since

1962, received this honor. He and his wife, Jean, flew to California to receive the medal in person. Harris spent the remainder of the week on the Cal-Poly campus lecturing and critiquing.

Harris worked with Richard Neutra from 1928-32. In an article entitled "Harwell Hamilton Harris: The Architect as Artist" (North Carolina Architect, May-June 1980), he said of Neutra: "Neutra represented something quite different from the others (Gropius, Le Corbusier)... He saw things entirely differently from the way they saw them. Neutra saw architecture as a means of civilizing technology... Neutra's was a *new* modernism; he, and (Rudolf) Schindler, interpreted America to America."

While in California to receive the Medal, Harris also met with Esther McCoy who is writing a book on three California architects, of which he is one.



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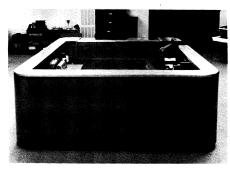
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# **Marketplace**



Among the new products offered this year by **Kohler Co.**, of Kohler, Wisconsin, is the Chablis Pedestal lavatory, one of the company's marbleized china fixtures for residential use. The marbleized china finish was designed to recreate the look and feel of real marble. Other fixtures available in this finish are the Rialto toilet and the Caxton countertop lavatory.

Images, Inc., of Raleigh, a support service for designers, custom designs and manufactures high-end contemporary furnishings for commercial and residential uses, such as this information desk, designed for Edwards and Broughton Office Supply Co. The desk features a solid oak counter top, high gloss laminate vertical siding, matching suede work surfaces, with built-in shelving and cases. Images, Inc. also recently released a catalogue of the company's products.



The National Lighting Bureau (NLB) has announced publication of a revised version of Getting the Most from Your Lighting Dollar. The new 24-page illustrated guidebook offers readers an overview of lighting and lighting system technology, with emphasis on the benefits to be derived from good lighting, and methods available to minimize energy consumption.

Knoll International, New York, introduces the new office seating line designed by Bill Stephens. The line consists of four chairs: a universal task chair, an operational chair, a management chair, and a high-backed executive chair (pictured here). The designs incorporate new advances in ergonomics and easy adjustment devices to allow users to alter the chair to a preferred sitting position.



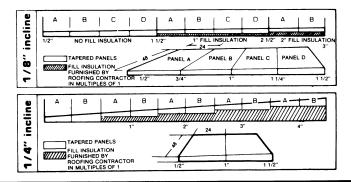
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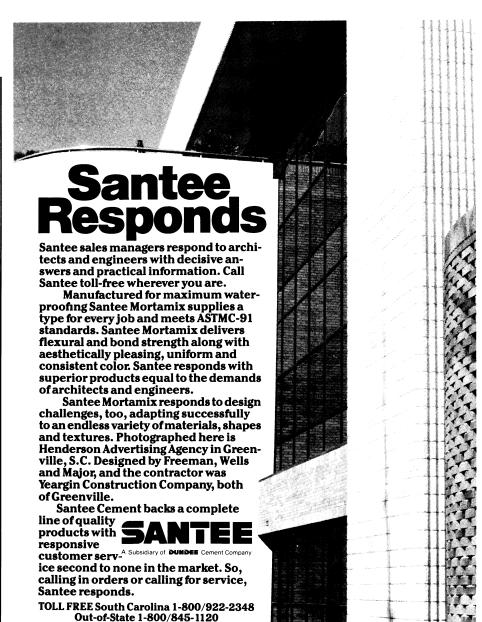
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Sunwood Energy Products, Inc., of Harrisburg, Va., has developed the "Rodwall" for passive solar design that features collection, storage and automatic movable insulation in one modular unit. The Rodwall uses phase change salts, and contains seven energy rods, each backed with one-inch R8 insulation board. On sunny days the rods automatically face out, passively collecting and storing solar energy. When the sun goes down, they automatically turn in to form a protective barrier to the cold. The slim profile allows each unit to be concealed behind normal drywall or paneling.



GF Business Equipment, Inc., of Youngstown, Ohio, spotlighted its GF/Giroflex seating collections at NEOCON XIV in Chicago. The chairs feature gas cylinder activated seat height adjustment capabilities which can be adjusted from a seated position. Each of the new lines — the Lignas, the Polytrop, and the Monty — includes a variety of models for meeting the needs of task-oriented, executive, and conference room seating.





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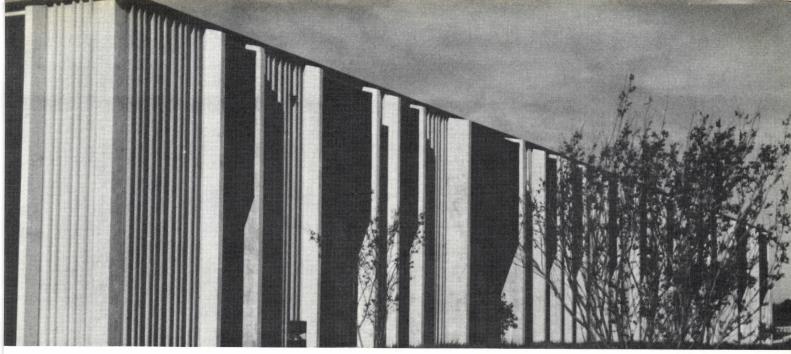
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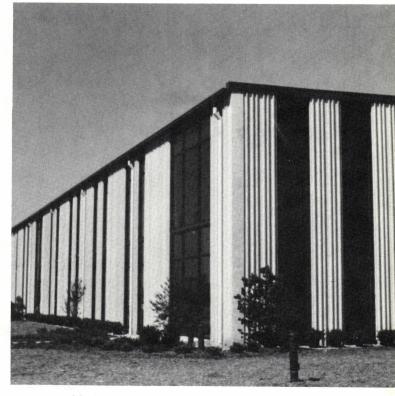
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Deep Rib Corewall Panels — Allen Bradley building, Greensboro Architect: John D. Latimer, AIA. Contractor: JMD Contractors



Lee County Library, Sanford
Architect: Hayes, Howell & Associates, AlA. Contractor: J. H. Allen, Inc.



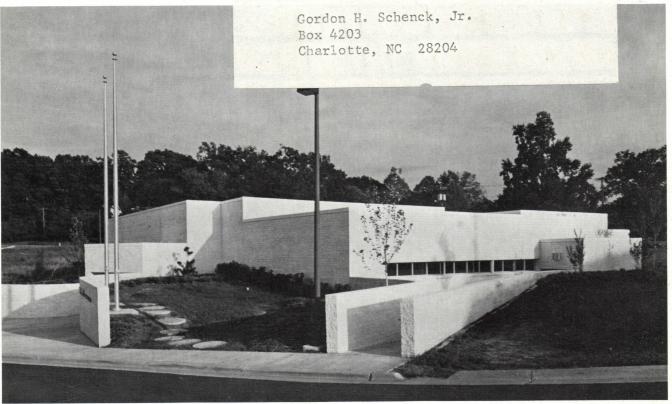
M. A. N. Truck & Bus Corp, Cleveland County Architect: Charles K. Goode, AIA. Contractor: G. L. Wilson Building Co.

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