MAY-JUNE 1984

# North Carolina

20922 BVFEICH\* MC 450 N. BOYLAN AVE.

III ''SGHAMUB 'M SEMAL VGL

Bulk Rate US Postage Paid Charlotte, N.C. Permit No. 2180

TOTA MAL

ONE NORTH MeDOWELI

# Murphy was wrong.

Until now, there's been a Murphy's Law for CAD systems. The ones you can afford can't do what you want. And the ones that can do what you want, you can't afford.

But this is ICON,<sup>™</sup> the new, fully integrated CAD system that defies Murphy's Law. With capabilities to brag about. And a price tag to cheer about: \$37,250.\*

ICON is a complete design and drafting system with a variety of application packages. Architecture. Civil Engineering. Surveying. Cost Estimating (R/S Means) and Word Processing.

It's easy to use and to learn. Flexible too. With single and dual user configurations. ICON requires no special environment. Takes up no more space than an office desk. And we support the system with full documentation, comprehensive training, and in-depth field support.

If you think you have to sacrifice performance for price, check out ICON. You'll discover that you *can* afford the CAD system that can do what you want. So there, Murphy!

For more information, send for our new brochure: Summagraphics Corporation, 777 State Street Extension, P.O. Box 781, Fairfield, CT 06430. Or call Alex Kramer at (203) 384-1344.





# It's only natural

to consider David Allen Company a valuable source of information. With sixty years of experience, we welcome the opportunity to provide you with technical information, specifications, product recommendations or budget prices on *tiles, terrazzo, acoustical, resilient flooring, special flooring, marble and movable partitions.* Give us a call at 919-821-7100.



DAVID ALLEN COMPANY

P. O. BOX 27705 + RALEIGH, N. C. 27611 + (919) 821-7100

Volume 32, No. 3 May–June

Publisher/Editor Whitney Shaw

*Editor in Chief* Gaylord Shaw

Art Director Jim Burris

Advertising Director Sam Rogers

Sales Representatives Tamara O'Brien Shaw Elizabeth Jackson

*Editorial/Research Associate* Stacey H. Brown

Graphic Artist Bonny Boswell

Patrons Of North Carolina Architect Magazine: Tashiro Associates, Wilkesboro Peterson Associates, Charlotte Hakan/Corley & Associates, Chapel Hill Robert W. Carr, Inc., Durham Hammill-Walter Associates, Inc., Winston-Salem Ramsay Associates, Salisbury Clemmer, Bush, Sills, Abernethy, Inc., Hickory Owen F. Smith, Architect, Raleigh Newman Calloway Johnson Winfree. Winston-Salem Skinner, Lamm & Highsmith, Wilson O'Brien/Atkins Associates, P.A., **Chapel Hill** L. Pegram Holland, Jr., Architect, P.A., Shelby Daniels-Worley, Architects A.I.A., Brevard G. Milton Small & Associates, Raleigh Odell Associates, Inc., Charlotte J. N. Pease Associates, Charlotte

North Carolina Architect is published six times a year by Shaw Communications Inc., Charlotte, N.C., for the North Carolina Chapter of the American Institute of Architects. Advertising and editorial offices are located at 212 S. Tryon St., Charlotte, N.C. 28281. NCAIA offices are located at 115 W. Morgan St., Raleigh, N.C. 27601. Address editorial, advertising and circulation correspondence to North Carolina Architect, 212 S. Tryon St., Charlotte, N.C. 28281. Telephone (704) 372-9794. Subscription rate: \$12 a year for non-NCAIA members. Third class postage (permit number 2180) paid at Charlotte, N.C. Copyright © 1984 NCAIA and Shaw Communications Inc. POSTMASTER; Send Form 3579 to North Carolina Architect, 212 S. Tryon St., Charlotte, N.C. 28281.

# NorthCarolina ARCHITECT



#### COVER STORY

24.Brick in Design. North Carolina is the nation's leading producer of brick, and the state's architecture reflects it.

#### Features

- 4. Searching for Solutions. Norma DeCamp Burns makes a name for herself by stressing freshness and creativity.
- **14.Eduardo Catalano on Architecture.** Excerpts from the Greensboro speech of internationally known architect.
- **32.A Unique Veterinary School.** North Carolina State University complex successfully blends the new and the old.

#### DEPARTMENTS

#### **18.0ff** The Drawing Board.

Cover Photography by Joann Sieburg-Baker.



#### ART CLASSROOM STUDIES BUILDING UNC-CHAPEL HILL CAMPUS

ARCHITECT: CLARK, TRIBBLE, HARRIS, & LI PA GENERAL CONTRACTOR: R. K. STEWART MASONRY CONTRACTOR: A & D MASONRY







Brick Association of North Carolina

The interior of Green's Jewelers, located in a renovated late 19th century commercial building in downtown Raleigh, reflects architect Norma DeCamp Burns' emphasis on color, light and the quality of finished surfaces. WHI II

T

23

117

Cit.

Photo By Hank Ercolani



### Searching For Solutions

Norma Burns makes a name for herself by stressing freshness and creativity

aleigh architect Norma De-Camp Burns says she confronts each project with the idea that "there is a unique and wonderful and previously unknown solution waiting to reveal itself . . ." And reveal itself it has, time after time:

• A grimy storefront building in downtown Durham becomes a law office a la Modern piazza, complete with arches, columns and great splashes of unexpected color.

• A dilapidated shoebox of a building in downtown Raleigh is transformed into an elegant jewelry store with sculptural interior architecture swathed in gleaming laminates and lit by giant torches.

• A new social services building in rural Chatham County takes its exterior cue from nearby tobacco barns while its interior evokes images of a European street scene.

Discussing these and other projects, Burns says "I hope that if my work is ultimately known for anything, it will be for its freshness and creativity." And her work is nothing if not "fresh" and "creative." Since she has been practicing professionally, she has at times stunned and startled her more pragmatic colleagues, yet she also has managed to win over a traditionally conservative community to her free-wheeling approach to design. Her view of architecture is wide-angled, taking in all at once the whole of historic precedent, from Palladio to Pei, from Gropius to Graves.

Although Burns' work has been praised for its gutsy bravado, it also has been described by some critics as historical pastiche and trendy avant-garde.

"I have no sense of being avantgarde," she says. "I guess I'm just part of a generation of architects who feel free to claim the whole realm of architecture as our own. What I do have a sense of is that, in every building proj-

By Kim Johnson Devins Photography By Hank Ercolani and Jimmy Williams ect, in every building problem, there lies a statement that's specific to *that* client, *that* place, *that* time, and *that* concept of what the building is supposed to achieve. I love the search for that statement, and I enjoy taking risks. It all feels to me like a great adventure ..."

Burns' "adventure" began in 1977 when she founded Burnstudio Architects P.A. with her husband Robert Burns, a professor of architecture at N.C. State University's School of Design and currently acting head of the Department of Architecture. Bob Burns had accumulated a portfolio of impressive projects by then, but hadn't established a design firm per se. That became Norma Burns' first priority when she received her master's degree from the school in 1976.

But it has been only within the last two or three years that her personal expertise has been recognized. Her husband's reputation at times proved more of a frustration to her professional development than the path to immediate success: regardless of the work she put into a project, the client invariably turned to Bob Burns for consultation and credit. So she took whatever jobs she could get-"a lot of kitchen and basement renovations," she recalls with a smile—as she struggled to establish her own presence in the profession. And today, she's well on her way to becoming not only a presence but an influential-and sometimes controversial-force in the architectural community.

Burns' work over recent years has included a series of adaptive re-use projects in downtown Raleigh and Durham, each involving narrow, run-down old storefronts. In a few months she will have completed her sixth such renovation, and the projects are helping to beautify and revitalize the Triangle area's too-long ignored center cities.

"I get a perverse sort of pleasure out of taking those little dog-eared buildings and making something special out of them," she says. "It's very gratifying to see an old building reborn into a fresh new purpose. I enjoy the challenge of taking the best of what's old and attempting to combine that with special new elements born out of the influence of the old. It's a generative experience, and that's what fascinates me about architecture as a whole—the generative experience."

Like most architects, however, her "first love" is new construction, and last year she completed her first opportunity to design a building "from the ground up." That project was the Chatham County Social Services building, which was not only a "great adventure" but also a risk. The design, which recalls simultaneously a vernacular barn, an industrial warehouse and a colorful little streetscene complete with lamp posts and sash windows, wasn't easy to sell to a group of rural county officials. Despite the raised eyebrows at her presentation, she persevered. And not only was the design accepted, but the awards have been rolling in: a 1983 Owens-Corning Energy Conservation Award, a Triangle J Development Award, and a 1984 NCAIA Design Award (see North Carolina Architect, March/April). The building was also recently published in Architectural Record.

Overcoming obstacles—from skeptical clients to her husband's high profile has been a matter of course for this energetic woman behind the purple-tinted glasses.

Growing up in Miami, the daughter of a mechanic and the niece of an engineer. Norma DeCamp was surrounded by people who "put things together." From the age of six, she was intrigued by the process of building. "I spent my childhood building things," she recalled one afternoon, as she took a break from her typical 16-hour work day to talk for awhile in the living room of the rambling, two-story home/studio she and Bob share in Raleigh's Cameron Park. "I used to build little huts and shacks .... There was also a lot of construction going on in my neighborhood, and I'd walk around the framing of houses trying to imagine where the different rooms would be."

But her fascination with construction didn't automatically lead to an architectural career. "If I'd been a boy," she mused, "my parents would've said I should be an architect. As it was, they said I should be an art teacher."

When she entered Florida State University, however, she decided to major in



A storefront building in downtown Durham became a stylish law office through one of Norma DeCamp Burns' renovation projects.

# Prefer Custom Elevator Interiors? Southern is the Simple Solution.

More and more elevator interiors are taking on a sophisticated look...a discriminating image extension of the building's own interior design.

Southern Elevator realizes those first and last impressions are important. That's why we custom build our elevators tailored to your particular design requirements. Period.

Whether the image commands rich woods, sleek mirrors, or carpeting. Subtle tones or vibrant colors.

Be demanding.

Call Southern Elevator: 800-632-1307. Outside NC, call collect: 919-274-2401. Main offices and plant in Greensboro, NC. Branches in Charlotte, Raleigh, Durham, and Fayetteville.



A Southern Company for Southern Services.

English instead of art "because I knew there were more jobs for English majors than art majors." She graduated in 1962 with a degree in English.



Natural light floods the interior of the Chatham County Social Services building.

It wasn't until she and her first husband were married that she became seriously interested in architecture. "My husband was in pre-architecture at Miami Dade Junior College, and like a lot of wives of architecture students, I worked on his boards, went to lectures with him . . . And in the course of the time we were married, I became very interested in the study of architecture. I thought it was something I could do."

She and her husband divorced in 1969, and she and her daughter moved to Columbia, Md., where she continued as a teacher. It was there that she met Claude McKinney, who at that time was vice president of the Rouse Corp. (and president of the school PTA). He was about to move to Raleigh to assume his new position as dean of the NCSU School of Design, and discovering her desire to study architecture, told her about a special program at the school which would allow her to apply previous education credits so that she could graduate in three or four years, instead of the usual six. He also encouraged her to apply for federal aid and a fellowship,

both of which she received. She entered the School in 1973 and managed to land both a teaching fellowship and an assistantship which, combined with the federal aid, allowed her to support herself and her daughter while she pursued her new career.

After teaching school for 11 years, it was a frightening prospect to drop everything and go back to school. "But I've never had a minute's doubt that I made the right decision," she says. "I just wish I'd started in architecture from the beginning so that I wouldn't still be a neophyte in the profession at 43."

Shortly after entering the School of Design, she met Bob Burns—not, she stresses, in a classroom. "He was never one of my teachers, and we kept it that way." They were married in December, 1973.

"What we shared and found so positive, and still share, is architecture. Our children (Bob has two by a previous marriage) think it's so boring that, according to them, all we ever talk about is architecture!"



# Why business people like doing business with Southern National Bank.

The best advertising for a bank is its satisfied customers. If you don't find your type of business represented here, just call our marketing department toll-free at 1-800-672-9863, and we'll be happy to give you all the references you need.

#### AUTO SALVAGE

"With the help of Southern National, we've grown from 3 employees to 50."

> Tom Hunter, President Hunter Auto & Wrecker Service, Charlotte, NC

#### BICYCLES

"If you operate a small business, you know that getting a small loan can be tougher than getting a big one. That's why we switched to Southern National originally. Along with better rates, they were ready to give us more personal attention, and we've never regretted our decision."

Toad Davis, Owner Piedmont Schwinn, Gastonia, NC

#### CONTRACTING

"Banking with Southern National means we don't have to borrow operating money until the last minute."

Joan Bowling, President Industrial Roofing Co., Inc. Winston-Salem, NC



#### DENTISTS "Someday I'd like to do an ad for Southern National Bank to show my appreciation. They've never played games with me, and they've met most of my needs on the spot."

Dr. John Pfefferle Pedodontics. Raleigh, NC

#### **INSURANCE**

"Instead of dictating their rules to you, Southern National actually responds to your problems. They invest time that other bankers just don't have for you. All in all, it's the best service I've ever received, and I've been in the insurance business for 19 years."

> Dave McAndrew, Owner Dave McAndrew Insurance Agency Charlotte, NC

#### MICROFILMING

"When we first started this business, Southern National was the only bank that took the time to give us step-by-step instructions for putting together a professional financing package. Today I deal with three different divisions of the bank and I have nothing but praise and appreciation for all of them."

> Jim Rumph, President Southeastern Microfilm, Inc. Raleigh, NC

#### PLASTICS

"When we shopped the banks in this market for an industrial revenue bond, it was obvious that Southern National was the only one that really wanted our business. Since then, they have never left us with an unsatisfied need or an unanswered question."

> Ken Barbee, President Plastics Manufacturing, Inc. Harrisburg, NC

#### SCRAP METAL

"Southern National's quick-decision policy gives us terrific purchasing leverage. We never

have to pass up a good deal."

Bill Allen, President Republic Alloys, Inc. Charlotte, NC



#### TRANSMISSIONS

"Working with Southern National gives me a very comfortable feeling. I know they're looking out for me, so instead of wasting my time shopping the market for rates and services, I can attend to my business."

> Dick Lang, Owner Aamco Transmissions, Raleigh, NC

**SOUTHERN NATIONAL BANK** You can tell we want your business. But all has not been rosy along the professional path of their relationship. "As I went through school and as I've grown professionally, it's become apparent that we have a lot of different views," she explains. "We *are* competitive; we each want to do a project our way. So we've discovered that we really work best together when one is in charge and the other acts as critic. We're the most helpful to each other in supportive roles."

In the summer of 1982, she founded WorkSpace, her own design firm separate from Burnstudio—a move she decided was necessary if she was ever going to truly establish her own practice. She and Bob have continued to work together on one project, however: the Chatham County Government Complex which is still under construction in Pittsboro, N.C. And she credits her husband with giving her an understanding of the technical elements of architecture and with being her "best critic."

Besides the architectural titans that have influenced her work over the years—Le Corbusier when she entered school, later Frank Lloyd Wright, then Michael Graves—perhaps the most important influence on her professional development, she feels, was Roger Clark, one of her professors at the School of Design.

"One of the most influential experiences I had as a student was in my first semester. I was in one of Roger's studios and I'd done a community recreation center—wonderfully sculptural forms with skylights and stairs ... I was so involved in the technical aspects of the project and it's 'great form.'

"Roger and I were looking at the model one day and he said, 'Yes, but what would it be like to be *in* that space?' I didn't know what he meant. 'Have you stood in that space and tried to picture what it would be like to *be there*?' he asked me. Well no, I hadn't. I'd been looking at the exterior only. At that point I discovered the experiential quality of architecture—that special life in each building that won't emerge unless you search for it multidimensionally and analyze every detail. Roger taught me that concept. And now I start there." Burns designs, she says, in a "concentric, spiraling fashion; never linear. It's an alternating implosive, explosive process as I look at the interior elements, the exterior elements, and back in again."

The beginning of the design process, she adds, is "so laborious, so grueling for me. I'm sure I spend more time on that period than one would expect; I'm not a fast designer. I can spend eight or 10 hours just searching and groping and sketching ...

"Then there comes a point after that period when, suddenly, out of all those sketches and thought, the proverbial lightbulb goes on. It's as though the image at that point assembles itself before my eyes and—Eureka! I really live for that moment."

If there's a specialness about her work, Burns feels it's due to her attention to details, particularly color, light and the quality of finished surfaces. "I think I put an unusual emphasis on the details as major parts of the total design," she says.

Color, in fact, is one of her primary



### Get the hard facts about crushed stone!

- FACT: Architects who specify Vulcan Materials realize significant savings on over-all construction costs.
- **FACT:** Vulcan's plants are strategically located to supply all of your construction needs.
- FACT: Plants and equipment are specially designed to provide prompt and efficient load-out service ... economically.

**FACT:** Constant laboratory testing, rigid quality control standards and uniformity in grades combine to make Vulcan your logical choice.



Highly trained sales representatives work with architects to solve specific problems and find ways to meet specific requirements.

NEED MORE FACTS? Call or write your Vulcan sales rep today!



MIDEAST DIVISION 4401 PATTERSON AVE., P.O. BOX 4195 WINSTON-SALEM, NC 27105 (919) 767-4600

SALES LOCATIONS – N.C. • Asheville • Charlotte • Elkin • Henderson • Hendersonville • High Point • Stoneville • Wilkesboro • Winston-Salem SALES LOCATIONS – VA. • Danville • Fredericksburg • Stafford • Lawrenceville • Manassas • Norfolk • Occoquan • Richmond • South Boston • Springfield



#### HEWLETT-PACKARD / HOLGUIN COMPUTER-AIDED DESIGN / DRAFTING

No doubt you've heard stories of the increased productivity, total dependability, and unfailing accuracy of Computer-Aided Design/Drafting (CADD) systems. Perhaps you've even wondered if a system exists for your operation.

The answer is YES. The Hewlett-Packard / Holguin System is a total solution; a comprehensive turnkey design and drafting package that is a leader in the CADD industry in these major categories ...

 Cost effective performance with a quick return on investment; considering the savings in man hours alone, we make it possible to incorporate design changes without redoing drawings.

 Adaptable for use in any design/ drafting department.

• A unique implementation plan (The "Holguin Method") that produces 2 to 1 or 3 to 1 productivity levels within the first weeks of operation.

- So easy to learn that the staff you now have can become expert even without prior computer experience.
- Powerful state of the art single or multi-user workstations.
- Proven track record with over 1200 systems installed.

... All this leads to increasing your competitive edge in the market. Please call your nearest Hewlett-Packard office to arrange a demonstration today.





ble to utilize the sun's hr. Energy storage devices

Out of this mutual interest came a cooperative working relationship between their engineers and our experts. Which eventually resulted in an innovative airport facility designed to keep energy costs to an absolute minimum. For instance, sky-

are employed to store energy during off-peak hours as a way of cutting the airport's peak demand charges.Extra insulation in the walls and ceilings results in lowered heating and cooling costs. And much more. The significant lowering

of energy costs produced by these efforts hasn't gone unnoticed. Douglas Airport - won the Southeastern Electric Exchange's 1983 Energy Efficiency Award.

Obviously, you don't have to have a facility as large as Douglas Airport to realize significant energy savings. Nor do you have to have a new building. There are lots of energy saving ideas you can put to work today. And we'd like to help.

For more information on making your facility more energy efficient, contact your local Duke Power office. **DUKE POWER** 

concerns, as is immediately evident in each of her projects, from the muted blues and greens of a small law office in Durham to the black, silver and cherry red of a nightclub she recently renovated in Raleigh. "In a funny way, color often dictates the way a form is detailed for me," she says. "I will often look at colors before the form is fixed in my mind."

Although Burns doesn't consider herself a Post Modernist per se, she admits to being greatly influenced by the crown prince of Post Modernism, Michael Graves. "Graves is concerned about the same things I'm concerned about," she says, "color and other details, decoration and a sense of precedent ... He, as well as other young architects whose work I admire, have given me the courage to do some things I might not otherwise have done. I now feel the the freedom to select from an eclectic set of formal alternatives to find what is appropriate for a particular project. So if columns and other classical elements feel right for one job, I'm not afraid to use them. But I don't think they apply everywhere."

What Burns and avowed Post Mod-

ernists also share is a disdain for the purist form-follows-function principle architects have embraced for half a centu-



Children are comfortable in the waiting area of the Social Services building.

ry. "There's more to function than size and volume and the relation between the two that function dictates," she says. "There's also the experiential quality of design for which function suggests alternatives. That includes personal experiential things, like transparency and the progression from one space to the next, like the overlapping and layering of space, of color interacting and articulating form. Those things are as much a part of how a space functions and how people experience that function than the stripped-down Modernist theory allows."

So, unencumbered by theoretical restraints, Burns has felt free to flex her creative muscles, to instill her designs with elements of wit and whimsy, of metaphor and symbolism, and often of elegance and artistry. She is driven, it seems, to push her creativity to the limit, regardless of the size or import of the project. And realizing that she's still a "neophyte," she continues to work long, arduous hours, caught up in the "creative fervor," as she calls it, of making architecture.

"I don't know if, at professional maturity, my abilities as an architect will produce any great measure of quality or achievement," she concludes. "But what's important to me is having made the effort."





### Eduardo Catalano On Architecture And Rhinoceroses

Excerpts of the internationally known architect's address to the NCAIA convention.

nternationally known architect Eduardo Catalano told the NCAIA convention in Greensboro that contemporary architecture has overemphasized technology but has not placed enough emphasis on human needs and concerns.

Catalano taught at the North Carolina State University School of Design from 1951–56, at MIT from 1956–77 and has been in practice in Cambridge, Mass., since 1977. His many designs include Raleigh House, the U.S. Embassy in Buenos Aires, the Julliard School of Music in New York, the Government Center in Greensboro and the Portland, Ore., Civic Center.

Excerpts of his address:

My favorite story, (one) that best describes the lack of intellectual honesty that we see today in that pseudo architecture, is based on the play by Ionesco called Rhinoceros.

It tells the story of a man—let's say he was an architect—with deep social, cultural and technological concerns, and intellectual honesty.

As a man and as an architect he would not give up principles in exchange for notoriety, neither would he distort the forward path of the evolution of ideas and processes.

One day, that architect read that a Rhinoceros has appeared in downtown, but he did not believe it.

After a few weeks, architectural magazines begin to publish pictures of that Rhinoceros, referring to him as a fresh face in the cityscape, and later reported many more Rhinoceroses.

But the architect still did not believe it ... Then he heard that Rhinoceroses had invaded the architectural design studios, and history of architecture courses and, as time passed by, all the architectural offices began to hire Rhinoceroses as project designers.

The architect began to feel isolated, lonesome, rejected. He did not have the mentality, neither did he want to speak



the language of the Rhinoceros and, being proud of his intellectual integrity, he stayed apart.

However, one morning while shaving, he discovered a horn growing in the middle of his forehead, and that his skin was becoming thick, gray, and full of wrinkles. In desperation he could not believe it, until he looked at his rear and found a tail tearing his pants . . .

The architect, in spite of his deep intellectual honesty, succumbs to the success of the new breed of monsters . . .

We architects make noise in order to call for attention . . . We confuse the fruits of rebellion with the waste from imitation.

The Rhinoceros is one more reactionary movement in the history of architecture. But fortunately, with the ever increasinging frequency of change, it will be short lived ...

I want to clarify that I use the word Rhinoceros indistinctively for the architectural movement he represents, for buildings that he has built, and for himself, as an architect. It is only one and all the same.

1. Contemporary architecture has

overemphasized technology, but not enough human needs and concerns.

2. The most talented people move from the fields of art into the challenging fields of science and technology.

3. Contemporary architecture has wrongly produced only frozen obsolete custom-made objects, instead of timeless organisms adapted to growth and to change.

4. Contemporary architecture has ignored context.

5. In its brutality it has also ignored nature and the earth.

6. Its lavishness and fast obsolescence deplete our exhaustable natural resources.

7. Contemporary architecture has never been addressed to social issues but to the superficiality of fashion and the power of the corporate world.

8. A continuous infatuation with Industry has made of contemporary architecture an unworkable complex technological instrument.

9. Contemporary architecture has ignored urban needs, and urban life ...

To redirect architecture we need a tremendous political, social, moral and



### Since 1920 We Have Taken Your Ideas And Helped Make Them A Reality. Thank You For Your Trust And Confidence.

#### GEORGE W. KANE, INC.

#### \_\_\_GENERAL CONTRACTOR\_

Durham 1923

Greensboro 1925

Henderson 1953

Winston-Salem 1955

EPDM/Firestone

### The name to write for the roof that's right.

EDPM/Firestone means membrane materials that are the result of more than twenty years of performance testing throughout the world.

EDPM/Firestone means three separate roofing systems with the flexibility to conform to the designer's concept.

#### Contact: N.B. HANDY CO.

Manufacturers Agents and Distributors to the Architectural and Roof Contracting Community



economic renaissance.

Were we willing to allocate the \$300 billion used per year for defense we could build 8 million dwellings a year or 60,000 buildings of 100,000 square feet each.

This new volume, added to the present one, would trigger a change much deeper and honest than all theories and intellectual speculations.

Changes are produced by strong forces and not by minor accidental fashionable events.

The foundations of science lie in its intellectual honesty. Research and development follows a *continuous process*, in which each experience feeds the growth of a new one.

On the contrary, architecture follows the *discontinuous antiprocess* of the Rhinoceros.

I have never known of a scientist who wanted to use the compass of Copernicus or Galileo to design a computer chip.

What is the architecture of the future, many people keep asking, as if it were possible to describe it in visual terms.

No matter how much we can foresee, precedents and preconceptions always betray us. Leonardo da Vinci foresaw man flying, with wings of a large bird attached to his back. He could not foresee the invention of the propulsion engine, or the discovery of gasoline...

Architecture can only become alive in times of national renaissance, of national fulfillment, of social and intellectual commitments.

It will become contagious. It will be in the blood of everybody—of those who govern, of those who live within the buildings, of those who design and who build, the craftsman and the simple worker.

We remember the story of a man who asked of three masons what they were doing.

"I am cutting a stone," one replied.

"I am building a building," said the other. But the third worker responded, "I am building a cathedral."

We should not talk any more about Rhinoceroses, neither to be concerned with them.

Instead we should always seek that our work responds to the many legitimate concerns of our time expressed with honesty and in the language of our times.



REGENCY PARK OFFICE BUILDING, CARY General Contractor: Metric Constructors, Charlotte Architect: Thompson, Ventulett & Stainback, Atlanta



CENTRAL MAINTENANCE FACILITY, CHARLOTTE General Contractor: D. C. Neal Const. Co., Inc., Charlotte Architect: Gantt/Huberman Associates, Charlotte

#### Four More Examples of the Versatility and Economy of Precast and Precast-Prestressed Concrete Construction



CENTRAL PRISON, RALEIGH General Contractor: Metric Constructors, Charlotte Architect: J. N. Pease Associates, Charlotte



ALLEN-BRADLEY COMPANY, GREENSBORO General Contractor: JMD Contractors, Inc., Greensboro Architect: John D. Latimer & Associates, Durham



# Off The Drawing Board

#### Hammill-Walter Wins AIA Honor Award For Reynolds Building

Hammill-Walter Associates, a Winston-Salem architectural firm, has been named one of 13 national winners of the profession's highest award for excellence in design: the American Institute of Architects 1984 Honor Awards.

Hammill-Walter and associate architect Croxton Collaborative of New York City won the award for their restoration and renovation of the Reynolds Building, the Winston-Salem headquarters for R.J. Reynolds Tobacco Co.

The 1929 Reynolds Building, a prototype for the Empire State Building, was restored to enhance its original beauty while joining it to the Reynolds Plaza, RJR's contemporary office and operations center.

The AIA jury which selected the winners called the project "a superb solution to the difficult problem of harmonizing an old style with a contemporary interpretation. (It) . . . is so expertly designed and crafted that it is difficult to tell where the old leaves off and the new begins. The architects' rich use of materials, creative lighting schemes, and superb detailing exude a sense of quality

#### British Firm Selects CHR to Design Plant

CHR Associates, a Chapel Hill architectural/engineering firm, has won an international design competition sponsored by Bespak Inc., a British firm which is locating a manufacturing plant in Cary.

Bespak invited four firms to participate in the competition, which was administered by the AIA. The goal was to provide a design solution for the plant that offered maximum flexibility while allowing undisturbed growth; offered an



and understated elegance that is rarely achieved . . ."

A.J. Hammill, co-founder of Hammill-Walter, says "this is a first for Triad area architects, and I believe only the fourth time the award has been given to anyone in North Carolina. We are extremely proud that the Reynolds Building restoration deserved the honor."

Project architect, C. Laurence Robbs, who accepted the award along with Hammill on May 6 in Phoenix, says, "It was the most exciting project I've ever managed."

The project required specialists in

attractive work environment; and sensitively integrated the facility into the site. The jury found CHR's solution responsive to all three areas.

CHR developed a modular plan with 48 foot square modules connecting in all directions for maximum expansion. The natural daylight used throughout the structure and the view of the lake and pine forests create a pleasant atmosphere for the employees.

The initial phase of 35,000 square feet will be under construction this summer with occupancy scheduled for early 1985. The completed project of 120,000 every area and materials from around the world. Lloyd Walter, co-founder and president of Hammill-Walter, says "we went to Italy to choose Carrara marble. Since the nickle-silver of the original metal interior trim was no longer available here, we had it smelted in Germany, hand-tooled in New Jersey, and installed here by special Reynolds millwrights."

Other recipients of the 1984 AIA Honor Awards include the Vietnam Veterans Memorial in Washington, D.C.; the High Museum of Art in Atlanta; and Fragrant Hill Hotel in Beijing, China.

square feet will have a budget approaching \$7 million.



Bespak planning director Michael Schumann (left), and CHR Associates president Arthur Cogswell.

#### Raleigh Firm Receives Landscape Merit Award

DockeryHunterReynoldsJewell, a Raleigh-based landscape architectural firm has received a merit award from among 300 entries nationwide in the Copley Square design competition in Boston.

Copley Square is a public open space which occupies a city block in downtown Boston and is the site of Trinity Church, an acknowledged masterpiece of American architecture.

In North Carolina the firm's projects include the N.C. Museum of Art, the Microelectronics Center of N.C., the National Humanities Center, the Sarah P. Duke Gardens and the Bald Head Island Inn.

#### IBM to Aid Schools in Charlotte, Durham

IBM has announced grants of equipment and cash to improve two-year technical curricula in drafting at Central Piedmont Community College in Charlotte and Durham Technical Institute in Durham, two of 33 schools sharing in a \$9.2 million IBM grant program.

Each of the schools will be given IBM Fastback Systems for computer-aided drafting, as well as \$60,000 over three years to develop work-study programs with local industry and to upgrade faculty and course offerings.

#### \$2,000 is Awarded to 3 at N.C. State

Cash awards totaling \$2,000 went to three students in North Carolina State University's School of Design for their designs of passive solar multi-family residences using concrete masonry.

Christopher Downey, a senior from Raleigh, won the \$1,000 first prize in the competition sponsored by the architecture program in the design school and the Carolinas Concrete Masonry Association.

Second prize of \$650 went to Richard M. Preyer Jr., a junior from Southern Pines, and third prize of \$350 went to Alan Bolzan, a senior from Raleigh.

Entrants in the competition were required to explore the potential of concrete masonry as the primary building material, incorporating passive solar energy design for efficiency in heating and cooling.

Sponsors said this year's contest is the first in a series of annual competitions to be rotated among N.C. State, Clemson University and UNC-Charlotte.

#### Cherokee Brick Owner To Buy Sanford Brick

Thomas F. Darden, owner of Raleighbased Cherokee Brick of North Carolina Inc., has agreed to buy Sanford Brick Corp., presently owned by Justin Industries in Fort Worth, Tex. The sale is contingent upon specific details, none of which, including the sales price, have been disclosed.

Darden told The Raleigh *News and Observer* that he has no plans for major changes in personnel or operations at Sanford Brick.

Cherokee Brick, which has about 100 employees, and Sanford Brick, which has about 225 employees, will operate as independent companies.

#### Paragon Group Begins Durham Shopping Center

The Paragon Group of Charlotte has begun construction on the 63,452square-foot Woodcroft Shopping Center on Highway 54 eight miles south of Durham. In addition to major tenants, Food Lion and Kerr Drugs, the crescent-shaped shopping center will offer 27,100 square feet of retail space for specialty shops and restaurants.

The Kirkland Group of Atlanta is the project architect with the Paragon Group as the general contractor.

#### Ferebee, Walters Wins Award for Presentation

Ferebee, Walters & Associates placed second nationally among entries submitted by 300 design firms in a competition sponsored by the Society of Marketing Professionals.

It was one of 40 firms receiving awards, and it was the only corporate service presentation winner from the southeastern United States.

The Ferebee, Walters' corporate service presentation, entitled "Design Excellence," was prepared as a 9½ minute two-projector slide show with dissolve. It featured personalized messages by key executives and testimonials by clients.

It was originally produced by Panorama Productions of Charlotte. A videotape of the presentation, which was submitted in the awards competition, was completed by Visual Impact Productions, also of Charlotte.

In reporting on the results of the competition, Architectural Record magazine said in its February issue that "the audio-visual entries were straightforward rather than the 'razzle-dazzle' of previous years. Audio-visual entries this year reflected greater professionalism and more attention to techniques, a sign that the industry is becoming comfortable with this medium as a marketing tool."

Ferebee, Walters is a 38-member professional firm with offices in Charlotte and Research Triangle Park.

#### Names and Changes In N.C. Architecture

Michael R. Tye, immediate past president of the North Carolina Chapter of AIA, has become vice presidentarchitecture of RS&H of North Carolina Inc. in Greensboro.

The firm is a wholly owned subsidiary of Reynolds, Smith and Hills Architects-Engineers-Planners Inc., the nation's seventh largest architecturalengineering company.



Michael R. Tye Tye, a graduate of Miami University of Ohio, previously was director of design for J.N. Pease Associates of Charlotte and most recently was a principal of Charlotte-based Odell Associates Inc.

# -plantscapes-

Interior Landscaping • Plant Design Commercial • Residential Purchase • Lease Maintenance (Guaranteed Plant Replacement)

> Retail Short Term Rentals Corporate Open Houses Special Events • Seasonal Displays

11412 Strickland Road • Raleigh • 847-5929



SUPPLYING NORTH CAROLINA ARCHITECTS FOR OVER 40 YEARS WITH QUALITY DRAFTING ROOM FURNITURE AND AC-CESSORIES — REPRODUCTION MACHINES AND MATERIALS.

#### - AIA DOCUMENTS -

#### **BRANCHES IN**

GREENSBORO, NC • CHARLOTTE, NC • DURHAM, NC • FAYETTEVILLE, NC HIGH POINT, NC • WILMINGTON, NC • BURLINGTON, NC • LYNCHBURG, VA.



Leslie N. Boney Architect Inc. has recognized the participation of six members of the Boney family in the business by changing its name to Boney Architects. The Wilmington-based firm has also recently opened a branch office in Wrightsville Beach to be headed by **Paul D. Boney.** 

Jerry V. Ledwell of Charlotte has been named regional director of architecture by CE McGuire Inc., the international firm of architects, engineers and planners. He will direct architectural design and marketing at McGuire offices in Charlotte, Spartanburg and Florence, S.C. A North Carolina State University graduate, Ledwell headed the Charlotte firm of Ledwell Associates for 11 years before joining McGuire.

Jeanne Rawlings has been named an associate partner and director of interior design at Jenkins-Peer Architects in Charlotte. In announcing the appointment, Gerard Peer, principal in the firm, said Rawlings will reinforce the firm's commitment to providing integrated architectural and interior planning.

Nina Skopik has also joined Jenkins-Peer Architects as a staff architect with primary focus on laboratory design. Skopik is a Pittsfield, Mass., native with a masters degree in architecture from Virginia Polytechnic Institute.

Charlotte-based J.N. Pease Associates has announced the promotion to vice president of John H. Duncan and Jerry D. Stacy. Duncan is the director of project development and Stacy heads the firm's Research Triangle Park offices. Both are members of the board.

Jordan' Snowdon & McVicker PA, the 80-year-old firm in Laurinburg, has changed its name to Snowdon, Stogner and Associates P.A., Architects, Engineers and Planners. In addition, principal **Wayne Stogner** has been made vice president and **Joan A. Ramsey** has been named principal and corporate secretary. **Donald F. Jordan**, a principal since 1955, is treasurer and will remain as a consultant for Snowdon, Stogner civil engineering projects.

Jaqueline D. Polier, interior designer, and E. Burton Elliott, project architect, have become corporate partners of Polier, Ballard, Associates, PA in Raleigh.



# Your Customers Demand the Best... We build the Best!

Since 1956. The Prestige Pool Builder in North and South Carolina. You Design it:

We can Build it!



North Carolina Architect 21

# SELLING YOUR SERVICES

Competition for the good jobs is more intense than ever and a solid marketing effort is more important than ever.

Village Graphic Design specializes in the design and production of presentation materials, audio/visual programs, brochures, and associated materials for a wide range of firms. For full information call Roger Jennings or Henry Carrouth (collect) 919/929-0225.

Suite 202-B 1801 East Franklin Street, Chapel Hill, North Carolina 27514.



Marketing/Advertising/Corporate Design



J.J. Rose Associates, Architects, in Fayetteville, opened a new office at 2003 Fairview Road in Raleigh. The managing architect is associate **Steven M. Tayton**.

Newman & Jones PA, an architecture and engineering firm, announced its new location at 1068 West 4th Street in Winston-Salem.

Sears Design Group, a landscape architectural firm in Raleigh, announced two additions to its professional staff. **Derek C. Williams**, president-elect of the North Carolina Chapter of the American Society of Landscape Architects, joins the firm as a principal landscape architect and project director. **Glen Morris**, former landscape editor for *Southern Living* magazine joins as a landscape designer, writer and plant specialist.

**Dana H. Staats**, a registered landscape architect in North Carolina, will lead the expansion of CHR Associates P.A. into the areas of landscape architecture and municipal zoning consultation services. Staats, who was a planner with the Town of Chapel Hill for  $3\frac{1}{2}$ years, has a degree from the University of Kansas and a master's degree in landscape architecture from Kansas State University. CHR recently moved to a new location at Bolin Creek Center in Chapel Hill.

Odell Associates Inc. has elected two new associates of the firm in its Charlotte headquarters. **Randall W. Allen** and **G. Ward Whitney Jr.** were selected for the promotion, the firm announced, on the grounds of professional and educational experience, contributions to the firm and recognition by individuals within the professional practice.

**Corrections & Amplifications** In the March-April issue of *North Carolina Architect*, an article on the Graylyn Estate incorrectly identified the spouse of Connie Gray. Her husband is Lyons Gray, not Tom Gray.

In the same issue, an article on an award-winning art deco project, the Glenview Steel House, incorrectly identified those aiding in the historical investigation. The correct names are William and Ruth Knack.

#### Richard B. Reeves, Designer of Major N.C. Buildings, Dies

One of North Carolina's leading architects, Ralph Bernard Reeves of Raleigh, died in his sleep May 12 of an apparent heart attack.

Reeves, 63, was president of Holloway-Reeves Architects, which he and John S. Holloway established in Raleigh in 1948. In the 36 years since then, the firm established itself as one of the Southeast's best-known designers of government, school and institutional buildings.

For example, the firm collaborated with the New York firm headed by Edward Durell Stone on both the N.C. Museum of Art and the North Carolina Legislative Building. In addition, Holloway-Reeves provided design services for more than 30 major hospitals, 40 public and private schools, and 100 churches, banks and other facilities.

In the Triangle area alone, the firm's projects included the schools of pharmacy and medicine at the University of North Carolina at Chapel Hill, Harrelson Hall at North Carolina State University, the music building at Duke University, the Wake County Courthouse and the Wake Medical Center.

Reeves, who was born in Brunswick, Ga., moved to Raleigh at the age of 10,



attended school there and graduated from the old N.C. State College in 1941 with a bachelor's degree in architecture. During World War II, he was an Army captain in the Pacific and won the Silver Star, Bronze Star and Purple Heart.

He is survived by his wife, Frances Campbell Reeves; two sons, Ralph Bernard Reeves III of Raleigh and Ross Campbell Reeves of Norfolk, Va.; a brother, retired Col. Owen T. Reeves of Santa Rosa, Calif.; and four grandchildren.



Wake Medical Center, one of scores of North Carolina buildings designed by Holloway-Reeves Architects.



Used extensively in Living Attic conversions and cathedral ceilings, our **MODEL GGL** roof window comes in 9 sizes.

With its fully integrated screen and reversible sash, our new top-hung **MODEL TPS** is the most advanced roof window made today.





Our ventilating skylight **MODEL VS** with integrated screen is specifically designed for out-of-reach applications.

Our fixed skylight **MODEL FS** is made to the usual VELUX quality standards. Priced as low as \$122, it is America's outstanding skylight value.



#### VELUX<sup>®</sup> gives you a greater choice in roof windows and skylights

What you see above is the tip of the iceberg. Because we also offer a full range of accessories and options that include colorful roller blinds, awnings, venetians, electric remote controls, special glazings and much more. We offer you not only the best choice but the best roof window and skylight value in America! See us in Sweet's 7.8/Vel or 8.16/Ve.

#### Free 24-page color brochure! VELUX-AMERICA, INC.

6180-A Atlantic Blvd. Norcross, GA 30071

The world leader in roof windows
and skylights.
VELUX is a Registered Trademark
This coupon onewand in 24 hours

rered in 24 hours. In Canada: VELUX-CANADA INC. 16805 Hymus Blvd. Kirkland P.O. Canada H9H3L4
State
(Area Code)

© VELUX-AMERICA INC



North Carolina leads in brick production and state's architecture reflects it.

By Gaylord Shaw Photography By Joann Sieburg-Baker

Graceful curves distinguish an addition to a 40year-old building on the Lenoir Rhyne College campus, designed by Clemmer Bush Sills Abernathy architects in Hickory.

hen architect Hal Tribble began to design the One North McDowell office condominium project in uptown Charlotte, one of the problems he had to resolve was how to modulate the long facade so that the new construction was in harmony with an old stone church sanctuary in the middle of the site.

"The scale needed to be broken up in order not to overpower the sanctuary," says the Charlotte architect. "The long facade needed to be modulated."

He settled upon an exterior design making extensive use of brick to help add "texture . . . depth . . . richness" to the two-story condominium, and he is satisfied that the new construction "responds in character" with the preserved sanctuary.



for the finest brick,



#### LEE BRICK AND TILE

Sanford, NC

Phone: (800) 672-7559 (NC only) (919) 775-2134



SERVING RALEIGH and EASTERN NORTH CAROLINA

VISIT OUR SHOWROOM COMPLETE DISPLAY OF SAMPLES

PRODUCTS

FACE BRICK HAND-MADE BRICK GLAZED BRICK GLAZED TILE PAVERS

#### SUPPLIERS

Nash Brick Company Borden Brick and Tile Company Hanley Company Taylor Clay Products Company Lee Brick and Tile Company Boren Clay Products Company Old Virginia Brick Company Pee Dee Ceramics Company

1613 Old Louisburg Rd., Raleigh, N.C. Ph. 832-2804



A new brick skin was added to an existing dormitory at Wingate College (above) under a project designed by Meyer-Greeson PA, Charlotte architects, while brick was used extensively in construction of new office condominiums in uptown Charlotte (right and below) designed by Hal Tribble Architects of Charlotte.





Like architects through the centuries, he made successful use of brick in design. And widespread use of brick in North Carolina architecture seems only natural, since the state is the leading brick producing state in the country.

Last year, North Carolina manufacturers shipped 839 million brick, or 14.5 percent of total U.S. shipments of 5.8 billion. "Even Texans have to admit they are number two when it comes to brick production," says Marion R. Cochran, general manager of the Greensboro-based Brick Association of North Carolina.

While there's no readily available measure of which state or region uses the most brick in construction, North Carolina surely ranks high. Of the total output of N.C. brick producers, North Carolina shipments amounted to 477 million brick

-or 56.8 percent of the total.

And conversations with N.C. architects invariably turn up examples of how they have used brick in design. Sometimes, the use of brick is dictated by the fact that a project is an addition to an existing brick building, and sometimes the client specifies that brick be used.

James E. Meyer of the Charlotte firm of Meyer-Greeson PA has encountered both situations in recent projects.

When he set out to design a twostory building to serve as the Family Life Center for Charlotte's Calvary Church, for instance, Meyer says church officials asked that brick to be used. "They did want it in brick," he says, and from a design standpoint he readily agreed because "we felt the building would be more successful" by using brick blended with large windows overlooking a wooded area on the sloping site. The lower floor of the building basically contains classrooms while the upper level is devoted to a large assembly hall.

Brick also was the obvious choice when Meyer designed an addition to Smith Hall on the campus of Wingate College. The project called for a windowless animal storage facility on the lower level, and a greenhouse, work room and mechanical space on the second level. "It was an addition to fit into the existing space between two Georgian style buildings of similar design," Meyer says. "The existing buildings were of brick, and the brick company

### EZRA MEIR ASSOCIATES, INC.

#### CONSULTING ENGINEERS

Structural Engineering

 Geotechnical Engineering
 Civil Engineering
 Materials Testing Services
 Inspection Services

401 Glenwood Avenue – P.O. Box 12447 – Raleigh, N.C. 27605 919/828-0801



### **SANSPRAY** STONE WALL. PANEL PRICE.



Sanspray stone walls give you the permanence and beauty of stone at a fraction of the cost. The panels utilize all natural stone, may be cut with a saw and are easily fastened, offering versatility and fast job completion.

**Important product notice:** In addition to CAB or APA approved structural plywood based panels, Sanspray is now available with Minerit HD substrates. The incredible cement panel is **asbestos free and U.L. Class I approved.** (Minerit is available bare or with the Sanspray finish.)

Sanspray's passed the tests: ICBO, BOCA, SBCC, HUD, Military Specification, Army Corp of Engineers, boil and bake, freeze and thaw. Grade? A+. And it's backed up with a 10 year warranty and some of the best service in the business. Write or call today for a free catalog:

> AFI, 1941 Bancroft St. Charlotte, N.C. 28233 704-377-3461 800-438-4088 (GA, SC, VA)



was still making the same brick, so it was easy to match."

Brick was the choice, too, when Wingate officials sought to improve the appearance of a dormitory near the campus entrance. "It was built in the late 50s or early 60s as a poured-in-place concrete structure with metal panel walls," Meyer says. "We designed a new skin for the building" from brick. The dormitory is "the first thing you see" when entering the campus and the new brick exterior "makes quite a difference."

On the Lenoir Rhyne College campus, brick was the obvious choice when the Hickory firm of Clemmer Bush Sills Abernethy was called on to design an addition to a 1940s Gothic Revival classroom building—since the original building was also brick.

With such projects, says the firm's Ernest K. Sills, "we've been pretty lucky" in matching the color of the original brick. "The brick people are pretty good, and have been very cooperative, in trying to match it," he says.

The color of brick is determined by a multiple set of variables. According to "Technical Notes" prepared by the Brick Institute of America, "the color of burned clay depends upon its chemical composition, the burning temperatures,

Meyer-Greeson PA designed an addition to an existing building at Wingate College (right) and the Family Life Center at Calvary Church in Charlotte (below). and the method of burning control.

"Of all the oxides commonly found in clays, iron probably has the greatest effect on color. Regardless of its natural color, clay containing iron in practically any form will burn red when exposed to an oxidizing fire, due to the formation of ferrous oxide. When clay is burned in a reducing atmosphere, the same clay will take on a purple cast. Creating a reducing atmosphere in the kiln is known as flashing."

As this description indicates, the manufacture of brick involves a complex process. The "Technical Notes" summarizes it: "Essentially, brick and tile are produced by mixing finely ground clay with water, forming it into





### "SOLAR-SAVER" BRICK

the desired shape, then drying and burning it. In ancient times, all molding was performed by hand. However, since the invention of brick-making machines during the latter part of the 19th century, practically all structural clay products produced in the United States have been machine made."

According to Cochran, who became general manager of the N.C. trade association last year after serving since 1956 as one of its staff engineers, brick manufacturers in North Carolina moved into a pre-eminent position with a wave of modernization following World War II. Now, he says, some plants are so automated that brick "sometimes is not touched by a human hand until it reaches the bricklayer on the job."

The association is "primarily a promotional arm" of the industry, Cochran says. "We try to work with everyone involved —the consumer, the builder, the designer."

The N.C. association has 19 members: Borden Brick & Tile Co., Durham; Boren Clay Products Co., Pleasant Garden; Boren Clay Products Co., Kendrick Brick Division, Charlotte; Chatham Brick & Tile Co., Gulf: Cherokee Brick Co. of North Carolina, Raleigh; Cunningham Brick Co. Inc., Thomasville; Hanford Brick Co. Inc., Burlington; Isenhour Brick & Tile Co., Salisbury; Kings Mountain Brick Inc., Kings Mountain; Lee Brick & Tile Co., Sanford; The Moland-Drysdale Corp., Hendersonville; Nash Brick Co. Inc., Rocky Mount; Old Carolina Brick Co., Salisbury; Pine Hall Brick & Pipe Co., Winston-Salem: Sanford Brick Corp. Sanford; Stanly Shale Products. Norwood; Statesville Brick Co., Statesville; Taylor Clay Products Co., Salisbury, and Triangle Brick Co., Durham.

Output of the brick manufacturers in North Carolina has mirrored the ups and downs of the construction industry. In the early 1970s, for instance, N.C. brick shipments exceeded an annual rate of 1 billion, then dropped to 763 million in 1975 before rebounding to top the 1 billion mark again each year from 1977 through 1979. Shipments in 1980 were 784 million; in 1981 were 668 million; and in 1982 were 565 million before increasing to 838 million in 1983.

And 1984, says Cochran, "looks better than 1983."



Distributed in the Carolinas by Maxson-Betts Company, Charlotte, N.C.





# "Good fences make good neighbors." – Robert Frost

Look around in the backyards of your neighborhood and you'll see something very interesting. People are building with brick.

People are building with Patios, barbecues, walls, fences. They're finding out that building with brick is much easier than they thought,

much cheaper than they

believed and much more beautiful than they ever dreamed. And the brick they demand more than all others is Boren. Because if you're going to give it the best you've got, you demand the best brick you can get. Boren.

## It isn't just brick, it's Boren. 🗰

BOREN CLAY PRODUCTS COMPANY / PLEASANT GARDEN, NORTH CAROLINA



# A Unique Veterinary School

t's fitting that the site chosen for the School of Veterinary Medicine at North Carolina State University has a definite agrarian texture. Sturdy, old barns are framed by the new complex, which is surrounded by grassy "pastureland." Nearby, a five-acre lake punctuates the setting.

"When we started working on this project, the state had several sites it was considering and had available," says Harold James of Ferebee, Walters & Associates, the architectural, engineering

#### By Whitney Shaw

and planning firm that designed the school. "We were able to evaluate the sites and detail the plusses and minuses of each. It's unique to be able to do that; normally, the site is already determined."

When Ferebee, Walters started working on the project in 1976, not only was the site not determined, there was little else to draw on.

"The initial challenge was that we were given a project with no program," says James. "There was no staff existing in the owner's house, so to speak. What you had was someone hired as the dean to develop the school.

"We really had to go through an entire programming effort. The dean, for example, pulled a group of people from the university and veterinarians with expertise in many areas.

"From that foundation, we were able to determine the needs and establish a definite program. We were also able to establish a budget from that, which is unusual. Usually you are handed a bud-

get to work with."

Most agree the result is exceptional, both in design and location.

The striking brick complex has seven acres (about 320,000 square feet of space) under roof. Included in that space are classrooms, laboratories, offices, animal holding spaces and operating rooms.

Despite the size, the barns, lake and pastureland are not overwhelmed.

"We were able to create a village of buildings rather than one big building," says James, project coordinator on the job. "We were able to work around the lake, and we decided very early that the barns were historical enough to save and reuse. That further determined where to place the new construction and how we'd accentuate the barns."

Ferebee, Walters met that challenge by designing a series of broken roof lines that step back from the barns themselves.

Those barns will be put to use in the future.

"We've actually already studied how they can be used to expand the school," James says.

The lower floors have cow milking areas and stalls. The haylofts have reinforced concrete floors capable of supporting laboratory space and offices.

"I fully anticipate that the barns will be used in the future," James says. "I think the prime need in the future is going to be for lab space and offices. The barns can certainly be adapted and used that way."

One other design challenge was determining a way to indicate clearly where the main entrance to this "village of buildings" was.

"Something we noticed when we travelled to other vet schools was that it was hard to determine the location of the central entrance," says James, a vice president of the Charlotte-based firm. "We felt it was important to make it apparent where the entrance was."

The firm answered those questions by placing the parking farther from the school than normal and building a bridge to the main entrance. James says the solution works visually and in practice, at least partly because "students are used to walking farther to class than most people would be."

N.C. State officials say they are pleased with the veterinary school. James adds he's been told by faculty members and students that the ample spaces and feeling of openness are particularly effective.

"People tell us it's a real joy," James says, while quickly admitting that the school—like any other building—is not perfect.

The \$26 million school opened officially last year, although parts of it have been used longer.

"The university needed to occupy some of the space early, so we looked at the construction schedule and decided the only way we'd be able to do that was to get things like the site preparation, the shell for the boiler building and things like that under way while we were actually completing the rest of the working drawings," James says.

The school was built in four phases, with each being let for bids separately and administered individually.

"One of the challenges in that is knowing what the finite construction costs are supposed to be and making sure the parts equal that," James says, adding that it was the first time the state had allowed one of its projects to be handled that way.

By handling the job in phases, Ferebee, Walters was able to get smaller contractors involved. One result was opening opportunities to a broader spectrum of local contractors, James



Sleek exterior lines are a hallmark of the School of Veterinary Medicine at North Carolina State University.



PAINT & GLASS COMPANY Main office: Charlotte, N.C. / Branches: Asheville, Durham, Gastonia, Hickory, Raleigh, Salisbury, Wilmington, Rock HEL, S.C.



Students and faculty relax in the spacious interior of the NCSU's School of Veterinary Medicine in Raleigh.

says, although the general contractor for the largest phase was from out of state.

"This is actually a very sophisticated project," James says. "The animal hospital area is very similar, for example, to hospitals that treat humans. It has X-ray machines and operating rooms, just like hospitals. Integrating that with the teaching function of the school has been a helpful experience.

"And before this project, we had not done a lot of research and laboratory facilities. Since then, we've gotten three jobs of that type. I think most of us in the firm agree the school is some of our best work. The joy I had personally was pulling it all together and meeting the owner's needs and our schedule."

Education officials say N.C. State's School of Veterinary Medicine has one very big advantage over similar facilities at other universities: It was developed under a single, coordinated plan rather than piece-meal.

James agrees.

"There's probably not another school like this in the United States that was built under one contract," he says. "I imagine from that standpoint this is a unique situation. We have a total school integrated into what is essentially a master plan."



**DRESSER, INC.** Serving North Carolina for over 50 years. COMMERCIAL-INDUSTRIAL CONTRACTOR

Flooring. Accoustical Tile. Gymnasium Flooring Access Floor System

> 4100 Winton Road, Raleigh (919) 876-4141

Jimmy Edwards, President





INDUSTRIAL - COMMERCIAL - INSTITUTIONAL 516 WEST CABARRUS STREET / POST OFFICE BOX 11008 RALEIGH, NORTH CAROLINA 27604 (919) 834-3601

# The Beauty Of Real Brick Floors. At A Price That Beats The Imitations.

Nothing matches the warm beauty of Borden brick floors. Nothing matches their durability, easy installation or care-free maintenance. So why settle for vinyl tile that just *looks* like brick? Get the real thing for the same price – and sometimes a lot less.

Our pavers are thin and light enough for indoors, sturdy enough for outdoors. You can lay them in dozens of interesting patterns



Available in 11/8" and 21/4" thicknesses.

because their length is twice their width. Choose from buff, medium gray, dark gray, chocolate, red and full range red.

New paver brick from Bordenone of the thousands of colors, shapes and textures we produce. Whatever

brick you need, call us.



In North Carolina call 1-800-672-0081 Outside North Carolina call 1-919-596-8241