# NorthCarolina ARCHIECT

JULY-AUGUST 1980

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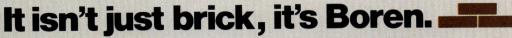
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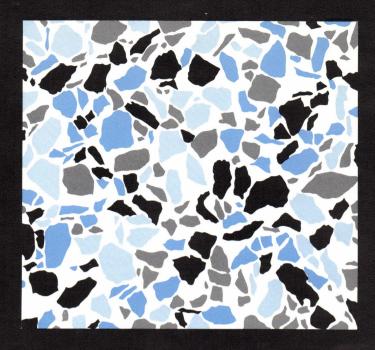
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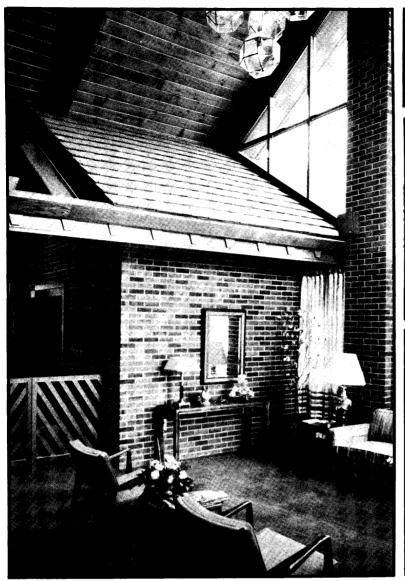
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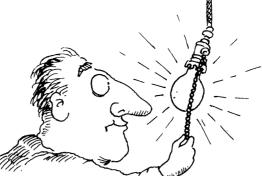
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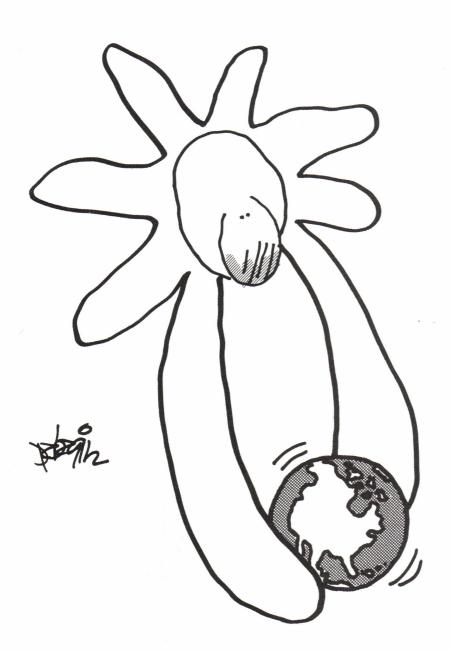
### North Carolina Architect,

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# Who Owns The Sun?

### Predicting Future Legal Problems of Solar Access

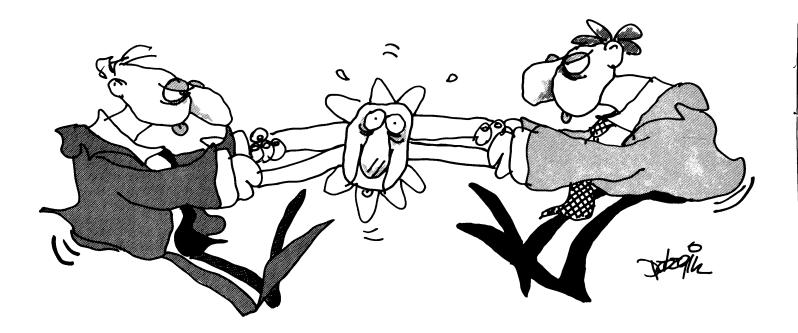
by Janet E. McKinnon



he need for a change in national energy consumption habits is becoming painfully obvious. The use of conventional fossil fuels represents major problems at every turn: supplies are becoming exhausted, prices are rising, international calm is jeopardized, the land is becoming scarred, and the quality of the air is threatened. However, many studies and experts show that remedies are available; we can reduce our consumption of non-renewable fuel sources while maintaining and improving the national standard of living. (Ford Foundation, 1974, WAES, 1977, CEQ, 1978, Lovins, 1976) These reports all agree that changes in perceptions and approaches to our traditional pattern of energy consumption are a vital ingredient in the solution.

In President Carter's speech in July, 1979, a belief was expressed that solar energy can supply 20 per cent of the nation's energy demand by the year 2000. And one of the easiest applications of solar design and technology is the non-commercial and the residential home heating and cooling sector. Some public encouragement of solar use, such as the incentive of tax credits, has already been implemented. As more owners become interested in installing solar equipment or making use of solar design in response to the changing economic forces guiding decisions, the administrative, legislative and judicial bodies need to be prepared to encourage and respond to the needs of owners using solar systems.

The deregulation of petroleum prices and the experience with shortages of home heating oil will probably be a major incentive for the promotion of a reliance on solar energy. However, to



respond to Carter's objectives to (1) reduce dependence on foreign oil; (2) reduce oil imports to help ease balance of payments problems; and (3) to rely on renewable energy sources for the long term, it is logical to look for potential forces which may have an inhibiting effect on the use of solar energy, and methods of removing those institutional barriers.

As the use of solar systems expands, the "obvious" sites-large lots in rural areas, for example-likely will be the first to use solar energy systems. The next wave of acceptance will probably come from residential and low-density commercial areas which are already developed. Concern over the perpetual right to the energy powering those systems once the investment has been made may be a serious psychological deterrent to many would-be solar users. Any earnest public committment to the encouragement of solar energy use should include measures that shift some shoulders of appropriate public bodies. judicial directive foreshadowing future

As an analogy, if a homeowner uses electricity to heat his house, he does not give any thought to the problem of trees interfering with power lines and threatening his energy supply. The legal avenues are well established for him: the power company has the authority to trim trees in advance of any obstruction they may cause. In the case of solar systems, however, the worry and responsibility is now set squarely with individual investor. He can the negotiate with his neighbor himself, or purchase sufficient land to protect himself, or hope for the best. However, the "aggravation expense" will be calculated into his decision for or against relying on solar energy. Strong public policy can help reduce that worry factor.

This article looks at the extent of the legal problem as it now stands, and tries to predict possible future legal requirements. In establishing a framework for looking at the issue, of the individual worries about the long some legislative history of solar access run viability of a solar system onto the cases is discussed, and evidence of a

interpretations is presented. Finally, three separate legal and administrative options for dealing with the active encouragement of residential solar energy use are analyzed and compared for their applicability and appropriateness to the problem.

#### The Nature and Extent of the Problem

Solar access can be considered a legal issue due to a simple astronomical fact: solar rays hit the surface of the earth at an angle. The solar energy required for the operation of the system of one homeowner will be in the form of rays which will pass over the property of his neighbor. Since the decisions of one property owner-such as the placement and size of buildings, and the location of vegetation-will directly affect the ability of his neighbor to employ a solar system, disputes between land owners are likely to arise. The issue, then, is one of property rights.

Because the use of solar energy systems for residential and commercial heating and cooling is still a relatively fledgling practice, the issue has not yet

become a major legal problem; therefore, no consensus on what, if any, public direction should be taken in terms of defining the legal rights of present and future solar energy users. Some advocates of solar energy use believe that well defined rights and public policies will encourage the movement towards increased solar use. Others argue that the problems are presently so limited that any action should be postponed until the future legal requirements are well known and understood; that the public attitude toward legislation and the limitation of property rights is generally negative, and that the "when in doubt, regulate" approach should be avoided. Another opinion is that no institutional changes are necessary since agreements between private property owners in the form of easements and covenants are all that are needed to guarantee solar access, and that any stronger regulations will be declared unconstitutional under either the Fifth or Fourteenth Amendments of the United States Constitution.

The lack of definition of the solar access problem is worsened by the lack of legislative history and precedent for public statutory policy for solar access. Two historical legal interpretations are ordinarily called upon as analogies to the problem; the first is based on English Common Law, the Doctrine of Ancient Lights; the second is a relatively recent Florida court case involving two private property owners.

In Britain the Doctrine of Ancient Lights grants the prescriptive right to indirect interior light. The criterion for enforcement of the doctrine was historically based on the concept of a "grumble line" in a room-on the far side of this imaginary line a person would be inclined to grumble about the inadequacy of the lighting. Although appealing in a folksy sort of way, the Doctrine is not applicable to the problem of the protection of solar technology on several counts, the most important of which is the time period required for a solar use to become a prescriptive right. In Britain presently the period is 27 years-which offers little peace of mind to an owner concerned with protecting his investment in a solar system.

The Florida case of Fontainbleau vs. Forty Five Twenty Five, Inc. arose after the owner of the Fontainbleau Hotel erected an addition which blocked sunlight to the swimming pool of the Eden Roc Hotel. The Eden Roc sought an injunction claiming possible damage to their tourist trade. The argument for the Eden Roc was dismissed:

"No American decision has been cited, and independent research has revealed none, in which it has been held that—in the absence of some contractual or statutory obligation—a landowner has the legal right to the free flow of light and air across the adjoining land of his neighbors.

114 SO 2d 357, 359 (Fla. App. 1959) This was a conflict between private

interests; the court left wide open the question of how the issue might be treated if solar access was in the realm of the public interest. The section of the decision addressing that possibility shows that the decision was not the final word on the matter:

If public policy demands that a landowner...refrain from constructing buildings upon his premises that will cast a shadow on the adjoining premises, an amendment of (the city's) comprehensive planning and zoning ordinance applicable to the public as a whole, is the means by which such purpose should be achieved. (emphasis added)

(IBID at 360)

The Fontainbleau decision, therefore, is not the last say in the matter. As economic factors affecting the use of solar energy systems change the dynamics of the market, there probably will develop a growing interest in the legal options available both to private users, and to public agencies responsible to those users.

#### Legal and Administrative Options

There are possible approaches that state and local decisionmakers can use to deal with the formal encouragement of solar energy systems. The first, and strongest alternative is the outright establishment of solar property rights modelled on the western states' appropriative water rights laws. One state, New Mexico, is trying this, and others are considering similar action. The second approach relies on private easements and convenants. Essentially this would involve the public support of





private agreements which are already protected under common law. Critics argue that this can be potentially detrimental to the advancement of solar technology because the burden of the transaction cost is on the homeowner, and as such is an ineffective public response. The third possibility involves changes in local zoning ordinances to guarantee the right of solar access. Although this raises constitutional questions, zoning changes are arguably the most logical means of assuring a consistent encouragement of private homeowners' investments in solar systems.

#### Solar Property Rights: The New Mexico Decision

New Mexico based its solar access law on the traditional Western water rights laws. Constitutional property rights are appropriated on a first-comefirst-served basis (Johnson, 1979, 120). An "unobstructed line-of-sight path from a solar collector to the sun" is guaranteed to claimants. The water rights concepts of beneficial use and prior appropriation are applied to settle conflicting claims. The law, passed in 1977, is constroversial on several issues, and may not stand up to constitutional challenge. The fact that a property

owner may be denied full use of his property because of a prior appropriation claim by his neighbor while at the same time he may be too late to file his own claim may violate the equal protection and due process clauses of the Constitution.

One critic observed that the prior appropriation tradition is based upon the problem of scarcity of water in the Western states. The situations therefore, are not strictly analogous, since every parcel of property receives sunlight in an even distribution. It is argued that New Mexico would be better to base its law on the riparian rights model which decides between competing uses on the basis of reasonableness of use (Johnson, p. 121).

Other states may however, follow the lead of New Mexico. A Washington statute proposed in 1979 (SB 2014) seeks to make solar access a property right (SERI, p. 24). Sen. Rasmussen declared that "the right to use the natural resource of solar energy is a property right, the exercise of which is to be encouraged and regulated by the laws of this state." As with New Mexico, in cases of conflict, the rule of prior appropriation would be applied. Also, as in New Mexico, the bill faces strong

opposition; early indications are that the bill does not have enough support to pass. Interest in encouraging the idea of residential solar use in Washington is strong, however, and expectations are that the issue will be re-introduced in a bill calling for solar easements and solar access zoning. (Ibid, p. 25).

#### The Encouragement of Solar Easements: Working Within The System

easement is the explicitly An negotiated right of one property owner to restrict a neighbor's use of his property. The use of easements, as in driveway rights-of-way, is well established in real estate law, and as such is applicable to the problem of solar access without any major administrative policy, or legislative changes. The right to receive sunlight upon and over land may be attached to other land. An easement between property owners providing for solar access would provide enduring control of solar access coming to a site since an easement becomes part of the property, and is registered with the deed. Case law on the subject has shown that easements for solar radiation, light, and air are in themselves property which can have monetary value, and can be bought, sold, leased, rented, traded and taxed. (Eisenstadt, 1976, p. 373).

Several states have passed laws recognizing the validity of solar easements, although it appears that, from the wording of the Fontainbleau decision, agreements between property owners concerning solar access would have been upheld without special legislative action. The primary importance of these explicit state laws, then, is the model they provide for the drafting of easements to provide maximum effectiveness.

Colorado was the first state to pass a solar easement law in 1975 (Johnson, p. 111). Since then, California, Georgia, Florida, Idaho, Illinois, Kansas, Maryland, Minnesota, New Jersey, North Dakota and Virginia have followed suit in declaring solar easements as valid property restrictions. The approaches vary, but most of the state laws require that specifications must include a measurement of the dimensions of the easement-either in angular degrees or times of day, any terms of grant or termination, and allowances for compensating provisions.

The use of solar access easements or covenants is most promising in new subdevelopments, when the restriction can be imposed against many residential sites by the recording of a single document at the time the plat plan is registered (Myers, 1978, 15). Beyond this specialized application, however, when an individual developer can, with little effort or expense, dedicate solar easements for many parcels of property, the idea of relying on solar easements to insure adequate protection for potential users has many drawbacks. Although it is appealing because the mechanism already exists in common law, and requires at most the drafting of a model easement document, the transaction costs, in both real and psychological terms, could serve as an impediment to the acceptance of solar energy as an important residential fuel source.

Since the idea of solar easements is relatively unfamiliar to most owners, the process of obtaining an easement would require research, legal advice, legal fees, and the worrisome possibility of appeals and arguments before zoning boards. The total real and implied costs of this procedure may overwhelm the economics of the solar system, and may serve to deter would-be users from building or retrofitting in developed neighborhoods. At best, the negotiations involved in case-by-case applications to property parcels would be cumbersome.

A sidelight on the impact of covenants on the promotion of solar energy use is the problem of restrictive aesthetic covenants in some neighborhoods which prohibit structures placed on rooftops. Cases are already appearing in which owners want to build with or retrofit a solar system but are restrained on aesthetic grounds. In Kraye vs. Old Orchard Association a Los Angeles Superior Court held the negative covenant to be invalid since it was impediment to the statewide policy of encouraging the use of alternative energy sources (SERI, p. 8).

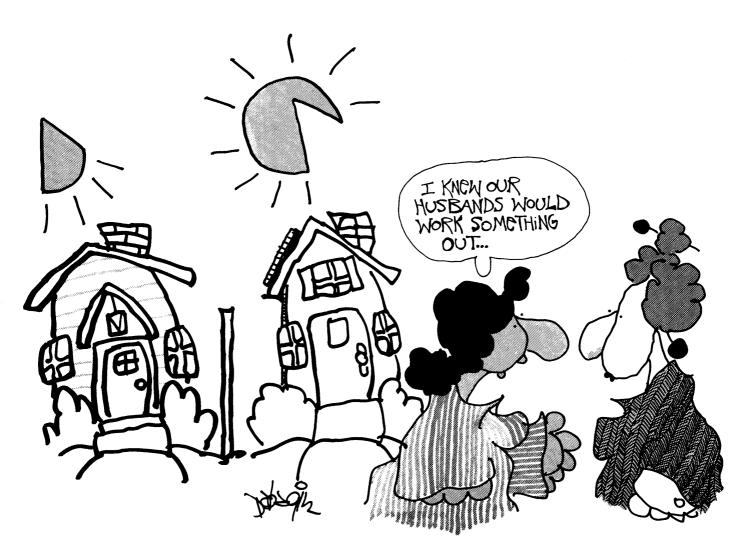
#### Zoning and the Application of the Public Nuisance Doctrine

Zoning is the use of police power to limit the discretionary uses of private property in the interest of the public good. Ironically, zoning in this country has its roots in the issue of solar access. In 1913, the Fifth Avenue Merchants Association influenced the legislators to pass height and setback controls on tall buildings so that employees would be guaranteed enough light to work. The result, besides representing an important precedent, led to the development of the "wedding cake" architecture of the Manhattan skyline (Roberts, p. 5). As with the Doctrine of Ancient Lights, this decision dealt with indirect interior light, and not the direct solar radiation required to power a solar energy system. Solar access zoning has not been applied on a wide scale to date. However, there are arguments to show that a thoughtfully reasoned zoning plan could be implemented which would provide full administrative and legislative incentives for residential solar energy use, while avoiding some of the pitfalls discussed above of relying on appropriative property rights, or private easement agreements.

The major legislative questions concerning the use of zoning laws are whether an individual's property is taken without compensation, and whether the Due Process clause of the Constitution is violated. Local zoning ordinances have historically dealt with changing issues as prevailing attitudes change. The Fontainbleau decision pointed the way towards judicial acceptance of solar access rights if public policy supported the concept. Therefore, the determinant of whether zoning changes are appropriate hinges on the committment of state and local policy makers.

Local governments considering zoning changes must be concerned with questions of constitutionality of their ordinances, since it is likely that zoning alterations will eventually face court





challenges. As a guideline, Congress passed the Administrative Procedures Act (APA) which basically serves as a support for carefully reasoned administrative action. The APA tells local agencies that in cases involving technical issues, such as solar access, judicial review will sustain agency decisions if it is apparent that they are supported by reasonable evidence (Heath, 1975, p. 131). The directive, therefore, gives local agencies considerable latitude in making decisions without the fear of judicial restraint. The Act holds that a reviewing court shall set aside an agency action only if "found to be arbitrary, capricious, or unsupported by that a use of police power bear a substantial evidence.

In The Quiet Revolution, (Bosselman, 1971, p. 317), the issue of changing attitudes towards zoning is discussed. Early real estate decisions were handled strictly by a private value-maximization criteria, with government intervention expected to be at a minimum. Now, however, the trade-off of the general public good as opposed to private gain is routinely

handled in the courts in balance of convenience suits. Many restraints of the use of private property are judged valid and proper today on the grounds of the promotion of public health and safety that might earlier have been thought to have been so strict as to require compensation. A strong argument can be presented that the promotion of renewable energy sources, lessening of the dependence on foreign and hostile sources of petroleum, and working towards the preservation of a livable environment is clearly within the realm of the local and national public welfare.

The Fourteenth Amendment rquires relationship to the health or general welfare of the community and states that prohibitory regulations must not be arbitrary or deny equal protection under the law. However, consistently applied zoning ordinances apply to all landowners. Whereas a property owner might be denied certain uses of his land which might interfere with a neighbor's solar energy system, he would at the same time be guaranteed protection

from new structures or vegetation from his own "up-sun" neighbor which could block solar rays. An individual gives up certain airspace rights, but reserves solar access protection (Eisenstadt, 1976, 379).

This is the advantage which zoning has over New Mexico's appropriative rights concept: no landowner could find himself without protection for a solar system because of prior application for solar permits. Prior solar access appropriation by existing trees and buildings in developed areas is an obvious problem, but this can be dealt with consistently within the scope of a solar zoning ordinance.

Model solar zoning ordinances have been devised by various interested groups. The American Planning Association recommends changes which reduce maximum building height, reduce minimum frontage requirements on east-west streets, use zero lot line zoning to increase the south lot under the control of the homeowner, and establish setback architectural provisions (Jaffe, 1979, 50). A model prepared for Santa Clara, California by

Wilson, Jones, Morton and Lynch of San Mateo includes a provision for a City Forester with the authority to trim or remove trees which interfere with "access to sunlight between the hours of 1000 and 1600 of any solar collector located on adjacent property...affected by the tree" (Los Angeles City Planning Dept. 1977, A-7).

The problem of encouraging solar energy use in developed areas is tricky, but Eisenstadt (1976) argues that zoning ordinances, while especially valuable and beneficial in developing areas, can be applied easily to established neighborhoods. All structures and vegetation in existence before the passage of the statute would be labelled 'prior nonconforming uses" and would be treated with a particular set of guidelines. In general theory they would be expected to conform eventually. The balance of convenience test would apply to the length of time nonconforming uses would be allowed to exist. A majority of jurisdictions have held that the period should be commensurate with the investment involved. In making a judgment, the financial burden of tearing down a building and replacing it with a conforming design would be weighed against the financial benefit to the prospective solar energy user; for all practical purposes, the amortization would probably last the lifetime of any functional building. A landowner would not be allowed to extend or expand a non-conforming use, and a replacement must be a conforming use (Eisenstadt, p. 392).

Vegetation, however, may not fare as well, since the investment in a tree may not compete with the value of a lost solar right (Ibid, 397). The balance of equity test does, however, allow the calculation of benefits obtained from shade trees which may reduce summer air conditioning energy requirements.

Although the aesthetic value of trees is often used as a strong argument against their removal, the 1928 case of Miller vs. Shoene demonstrates that the required destruction of healthy trees to protect the general welfare does not constitute a taking. The message of the Miller case is that if economic or environmental regulations have been carefully and rationally put together, the Supreme Court will rarely strike them down. In this balance decision of aesthetics versus the importance of encouraging solar energy development it may be that "the need for an ecologically sound energy source

dominates the question" (Ibid).

Another landmark case which bears on the subject, *Commonwealth vs. Alger*, in 1851, upheld the right of the State of Massachusetts to restrict the erection of structures which would extend into the harbor. Furthermore, the State was not required to compensate the property owner for this restriction. The court ruled that the State's power to limit property rights is distinct from the right of eminent domain if the regulation is reasonably determined, and is in the public interest.

Interestingly, Eisenstadt places the responsibility of paying for vegetation removal on the shoulders of the recipient of the solar access by comparison to the Miller case, when the State of Virginia, by analogy the beneficiary, paid for removal. The Santa Clara model ordinance, and the Shade Tree Control Act of California, which allows for the trimming or cutting of trees grown after the installation of a solar collector, require the tree owner to be responsible for preventing solar obstruction by his vegetation.

The State of California has gone so far as to declare the shading of solar collectors (no mention is made of passive solar systems) a public nuisance. The Solar Shade Control Act of 1978 declares:

After January 1, 1979, no person owning or in control of property, shall allow a tree or shrub to be placed, or if placed, to grow on such property subsequent to the installation of a solar collector on the property of another so as to cast a shadow greater than 10% of the collector absorption area... between the house of 10 a.m. and 2 p.m. (emphasis added).

(NCSEA, 1975, p. 3) Even the public nuisance doctrine falls short of Eisenstadt's recommendation, based on the general public acceptance of vegetation control for power lines, that existing vegetation not be allowed to grow to obstruct solar collectors.

The Comparison of Alternatives As presented above, the three options differ in the degree to which legislative and perceptual changes are employed. On its surface, a constitutional guarantee to solar access as a property right seems appealing in its simplicity. That very simplicity, however, may be disguising many controversial constitutional problems, and may, because of court challenges on the horizon in New Mexico, be an





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The use of covenants and easements to solar access is a good and acceptable approach, but is, unfortunately, very limited in its application. While useful for new developments, it could easily turn into an administrative headache if applied to developed neighborhoods. The largest criticism to be levied against relying on solar access easements and covenents is that the responsibility falls on the individual homeowner not only to purchase and install a solar collection system, but also to insure its eventual This is in contrast to legality. conventional power supplies where, as discussed above, for instance, the homeowner can rely on a utility company to arrange for tree trimming as well as any other access and right-ofway problems. If the objective is to promote solar energy use, the shifting of the legal obligations from the owner to an appropriate administrative agency is an important issue.

Zoning for solar access falls in the middle ground. It is much more flexible than a simplistic constitutional change, since it can be written to reflect local conditions. However, it shifts more of the responsibility to the public sector, which in turn receives protection from the Administrative Procedures Act. However, the essential ingredient is that explicit public policy be drafted on the state and local level expressing a committment to the promotion of solar residential energy use. With this public support backing the growing public awareness, solar energy could become an important fuel for the private sector, and would have a major impact on the energy profile of the future.

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Janet McKinnon received her Masters in Regional Planning from the University of North Carolina at Chapel Hill this year. Presently, she is employed by the Environmental Protection Agency's Analytic Center in Dallas, Texas.

ILLUSTRATIONS BY MARC DABAGIAN



July-August 1980

# The Man Who Made It Happen

An Interview with Dean Charles C. Hight, The College of Architecture, UNC-Charlotte

by Kim J. Devins



PHOTOS BY ART GENTILE, KPC PHOTOGRAPHY

"...an uncompromising committment to excellence."

Five years ago, the architecture program at the University of North Carolina at Charlotte was about as significant as the invention of the electric pencil sharpener; both were good ideas, but neither made much impact on the profession one way or another.

But that was before Charles C. Hight became dean of the College of Architecture at UNCC in 1976-and the program hasn't been the same since. Within three years after his arrival, the College was accredited for the first time since it was started in 1970. Out of a montage of courses and a group of enthusiastic but disordered students and faculty, the unassuming architect/engineer from Baltimore shaped an educational program that was awarded a five-year initial accreditation instead of the usual two. Major national and international figures in the profession began appearing regularly on campus. The freshman class doubled in size.

"What has Charlie Hight done for architecture at UNCC?" Betty Silver, executive director of the NCAIA

nal program that develop an interest in architecture. five-year initial "So I started taking courses at Io

"So I started taking courses at Johns Hopkins and the Maryland Institute of Architecture," he said in a recent interview. "Then the engineering firm I was working with transferred me to Birmingham, Alabama."

recently commented. "Why, he put it on

come easy for the 48-year-old dean. Tall

and tanned, with greying temples and

lively blue eyes, Hight has received two

professional degrees, has been a

member of major international research

teams, and has now pushed two

struggling architectural schools into

November 24, 1932, Hight's family

moved to Baltimore a year later

where his maternal grandfather

was a builder and architect. He attended

the University of Maryland, where he

received his degree in engineering. And

after three years of practice, he began to

Born in Richmond, Virginia

Major accomplishments seem to

the map."

accreditation.

By then, however, his fascination for architecture was piqued. He enrolled in Auburn University where he eventually graduated with a degree in his new pursuit.

For several years, Hight combined his two professions in Baltimore, working with various firms on industrial, commercial and residential projects.

In 1965, he decided to take up another career: teaching. He went back to Alabama and became an assistant design instructor at Tuskegee Institute. Three years later, he was made head of the architecture department and, in 1970, under his leadership, the Institute received accreditation for the first time.

In 1973, Hight was made a consultant to the East-West Center in Hawaii on low income housing. In 1974, he received a "Senior Fulbright Fellowship in Research" to study architectural design and planning in the Netherlands.

"I was intrigued by the Dutch," he said, removing his glasses and leaning intently across his desk to emphasize his point. "You're talking about a small country that's highly industrialized, highly commercial, but which has limited energy and resources; they import everything. Nevertheless, they have a very high standard of living and a long, fine reputation of involvement in major architectural movements. I wanted to find out how they did it."

Then in 1976 another challenge presented itself: a young university in Charlotte, North Carolina was struggling to get its architecture program off the ground. The first dean, Bob Anderson, had resigned in August of 1975 and an associate professor, Michael Gallis, was acting as interim dean while the search committee which included architect Scott Ferebee, Jr., FAIA of Charlotte—looked for a replacement. Hight accepted the challenge... and the rest is history.

#### **On The Cutting Edge**

Perhaps the greatest commendation a school of architecture can receive is what Betty Silver said she frequently hears among the state's practicing architects. The general consensus, she said, is that graduates from UNCC are "very well trained."

"That's nice to hear," Hight said simply. But he won't take the credit. The College has become an educational success, in his opinion, mainly for the same reasons that he was attracted to it four years ago.

"The environment out of which a successful school could grow was already created here when I came—bya very good, dedicated faculty and a strong, committed student body. The university was also dedicated to developing a quality program. And I was extremely impressed with the enthusiasm and support from the practicing profession in Charlotte. That — the local architects' interest — has been an invaluable factor."

Harry C. Wolf III, FAIA, of Wolf Associates in Charlotte has served as visiting critic at the College on several

occasions. In a telephone interview, Wolf said he believes the College has made "terrific progress" under Hight's leadership, and he's particularly impressed with the "visiting architects" program that the dean and his faculty have instituted over the last four years. In the program, nationally and internationally acclaimed architects who are, in Hight's words, involved in the "cutting edge" of contemporary design, regularly lecture, assist courses and exhibit their work at UNCC. Among these have been Frank Lloyd Wright's grandson, Eric Wright, the renowned British architect James Sterling, Helmet Jahn of Chicago, Bart Prince of New Mexico, Michael Graves, Peter Eisemen, Robert Stern, Collin Rowe, Fred Koetter, and "the one architect Frank Lloyd Wright really respected," Bruce Goff.

#### The Balance and The Open School

Although Hight insists that this program, as well as the structure of the College's curriculum, is a product of the dedicated and combined efforts of faculty and dean, he admits that he does have very definite ideas about architectural education which have "helped" shape UNCC's program.

"First of all, it goes without saying that a student must have marketable skills which will be useful to a firm upon graduation," he began. "He can study all the theories in the world, but if he can't pick up a pencil and competently carry out the mechanics, he's not going to do the firm much good.

"Yet at the same time," he continued, "a student has got to be able to think, to have the ability to deal with the unknown future. If the College has taught him nothing more than the mechanics, then the College is nothing

more than a trade school.

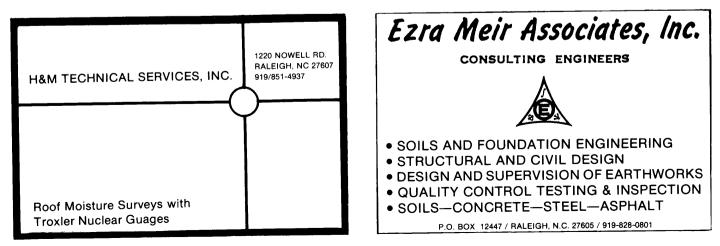
"There are some who believe an architecture school should teach mostly mechanics, and there are others who believe it should concentrate on the theories. We believe it should — and can — do both. So what we're attempting to do is to find a balance between the theoretical and the applicational, between information and skill development."

Hight said that he and the faculty are also committed to what he calls an "open school" in which "the students are exposed, through the faculty and visiting professionals, to a wide range of philosophies, experiences and expertise. They're presented with a broad series of viewpoints, and they're asked to address major issues in architecture without us telling them *the* answer or *the* truth."

This approach, he admitted, is not the easiest to take from an administrative standpoint. "When you bring people of such diverse attitudes and philosophies together, you're asking for trouble," he laughed. "Naturally there are going to be disagreements. But it's worth it. I'm very proud of the way our faculty works together and pulls together toward the common goal."

In the College's April newsletter, he reiterated the need for students and faculty to work through any problem that might result from the committment to an open school.

"A university," he wrote, "must be a place of inquiry with the presence of a substantial breadth of philosophies. The approach must be a search for truth and understanding rather than the student being issued 'the truth.' Thus, the college unity should solidify around the search for knowledge and an uncompromising committment to excellence."



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Besides the enthusiasm and dedication of the students and faculty and the support from the local professionals, Hight credits the College's "strong curriculum" with making the young program successful. "The program is just that," he said, "a *program*. It's not just a menu of courses and studios; it's a very carefully defined, very carefully designed program in which every year and every semester is linked with the preceding ones."

The program is divided into three phases over five years. The first two years comprise the "foundation program," which is highly structured, he said. "The students have different instructors, of course, but there's a fundamental agreement on what's to be covered during the first two years of an architecture student's education. There are certain areas of knowledge and certain skills that each student must have if he or she is to become a professional." The "middle program," or the third and fourth years, offers students more opportunity for optional study, he said, but this phase is still structured. "They have more freedom to select courses of special interest, but even those maintain a linkage with the first and second years; they're still in a structured progression from the foundation period."

The fifth year is the time for students to "begin addressing individual projects," he said. "The first semester is for research, the second for executing the project."

#### **Travel Programs**

The walls of the dean's large office reception area, in a building that used to be a library and is now being converted into College space, are lined with color photographs from Hight's sojourn in the Netherlands.

"Photography is a real passion of mine," he said, and mention of the photo essay surrounding him reminded

him of another major facet of architectural education at UNCC. "Our students have several oportunities to travel in this country and abroad to study architectural design and planning. We feel that's a very important part of the educational process. We have field trips within the program in which an instructor takes students to major United States cities for general education, or to specific locations to study something in particular; for example, a group has been to Atlanta to study a high-rise office building complex. Students also initiate their own trips - which we encourage — and we help with arranging the financing."

Hight is particularly excited about the College's new travelling fellowship program in which students are selected on merit to study in a country of their choice for a year. When they return, they're required to devise a major presentation for the entire College and

"Growth in itself doesn't necessarily mean better... what we're after here is quality growth — not just growth for the sake of growing."



community. "As a result, we're all able to learn from what they've learned," he said.

This summer, Professor Tom Incze is taking a group of students on a fiveweek tour of European cities to study building and urban design, worth five hours college credit. In August, three students will leave for the University of Copenhagen in Denmark to live and study for a full school year.

The day before this interview, Hight returned from a trip to New York City where 15 UNCC architecture students and two faculty members are involved in a study progam with the full use of Avery Library at Columbia University.

#### Active and Growing

Dean Hight's past travels have also taken him to Salzburg, Austria where, in 1974, he was one of the United States' representatives to the Salzburg Seminar on Urban Planning and Problems in Austria.

Involvement in a variety of architecture-related activities is another side of Charles Hight. He has served on several national AIA committees, was president of the Auburn section of the Alabama Chapter of the AIA, is now the director of the Southeastern Association of Collegiate Schools of Architecture, and serves on the Historic District Commission's design and review board in Charlotte which is involved in developing the historic Fourth Ward neighborhood where he and his wife Jeannette and 10-year-old son Christopher live.

He is also chairman of the NCAIA Continuing Education Committee. In fact, continuing education is one of his primary concerns right now.

Hight believes architectural schools "must begin to develop research

cast plaques

building directories

programs with the practicing professionals and the public; the general public, needs to be educated about architecture and planning issues because, in my opinion," he said, "architecture touches all of society."

He is also interested in the growth of the city of Charlotte and feels that "the College could play a positive role in that development."

"Growth in itself doesn't necessarily mean better," he said. "What we must do is look at what other cities have done, what has occurred before, then look to ourselves to create a *better* environment *for* ourselves."

Although Hight may have put the College "on the map," as Silver said, he still has many goals he wants it to reach — including growth.

"But, again, I mean 'qualitative' growth," he emphasized. "If a school is too small, for example, it won't have the critical mass — the large number of diverse attitudes and expertise — that it needs to be truly functional. On the other hand, a school can get so large that all it has is a menu and not a program. What we're after here is quality growth — not just growth for the sake of growing."

He said he feels the student body could be increased by about 25 per cent and the faculty by "a substantial number — which we're working on now."

The College is also in the process of establishing a masters program in metropolitan and community planning, he said. He will continue the visiting architects program, bringing in practitioners "of the same quality but with other viewpoints than we've had so far." And he hopes eventually to incorporate programs in interior and landscape design into the College. When asked if he's planning to take a break this summer and squeeze a vacation into his schedule, the dean chuckled good-naturedly. "I don't think so; the work won't permit it," he said, his relaxed demeanor implying that this doesn't bother him in the least.

He will, however, find time to play a little tennis, he said, continue his photographic pursuits, practice his building abilities around his house, and perhaps get started on the book about Dutch urban planning he's been wanting to write.

With the second summer school semester now over, the faculty and dean will be gathering to discuss the past academic year and plan for the next. "We're in a constant evolutionary state," Hight said. "We're always working towards defining our purposes and finding ways in which we can make our program even better."

Both faculty and dean continue to push towards one primary goal: "to see the College of Architecture at UNCC become truly distinctive."

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# **Chapter Notes**

#### Asheville

Asheville has been the scene for several significant Chapter events.

A presentation on architectural education was conducted by Charles C. Hight, dean of the College of Architecture at the University of North Carolina at Charlotte (UNCC) during the May meeting of the Asheville Section of the NCAIA, followed by a discussion with Sylvia Reed, director of Continuing Education at UNCC, on the recent statewide survey of architects concerning the process of continuing education, types of courses needed, locations, etc.

The Asheville Section is also investigating an "Architect/Engineer Selection Procedure" to be recommended to local public bodies, and a report from the A/E Selection Committee was presented at the Section's June meeting. The committee's proposal is now being reviewed by member architects.

\* \*

The Southern Highlands Folk Art Center, designed by Wood and Cort, P.A. AIA Architects of Asheville has been selected for the cover of the 1980 Asheville telephone book.

\* \* \*

Anthony Lord, FAIA, a former president of the NCAIA and one of the founding principals of Six Associates, Inc., now retired, appeared as the King in an adaptation of James Thurber's "Many Moons," presented by the Pack Players on Pack Library's new outdoor stage on Haywood Street.

#### \* \* \*

Asheville architects recently received "Griffin Awards." These annual awards are presented by the Preservation Society of Asheville and Buncombe County for outstanding contributions to historic preservation.

Padgett and Freeman, Architects, P.A., received an award for the design of The Family Ministries Center of the First Baptist Church. The building was commended for being a compatible contribution to an historic structure.

J. Michael Cox, AIA, of the same firm, also received a Griffin for restoration of what is now his residence in the Historic Montford District. The house was slated for demolition in the Spring of 1979.

#### \* \* \*

Also in Asheville, Jan. M. Wiegman, AIA, Architect P.A., recently announced the addition of Barbara Field and Havwood Plott to the firm.

Field studied Fine Arts at the University of Miami and was the first woman to graduate in architecture from the Georgia Institute of Technology. She has worked with several wellknown architects, including John Portman in Atlanta, John Johansen in New York and Benjamin Thompson of Cambridge.

Plott, a native of Waynesville, N.C., is a former member of Six Associates in the field of architectural construction supervision. He is responsible for project administration and brings to the office his extensive field experience for projects in the planning stage.

Asheville architects will also be participating in "Bele Chere 1980," a downtown festival sponsored by the Bele Chere Committee of the Asheville Revitalization Commission, to be held August 14-16.

The festival will feature a variety of events ranging from ethnic speciality foods, children's events, and historic tours to various forms of music, dance, crafts and displays — including a display event by the Asheville Section of the NCAIA. The display committee is headed by Danie Johnson, AIA. Carroll Hughes, Section president, is on the festival steering committee.

Among the activities planned for the three-day event are a special "Holiday on Ice" show with performances throughout the festival, a Thursday evening concert, a Saturday night gala ball following the after "Shindig-onthe-Green," a criterium bicycle race, a downtown pig roast, fashion shows and crafts fairs. Festival planners are also trying to organize a "Bele Chere Special" steam locomotive which would depart from Raleigh on Thursday and pick up festival-goers across the state. The train would arrive in Asheville Thursday evening and return to Raleigh Sunday.

Individuals or organizations interested in participating in Bele Chere

Retired architect Anthony Lord, FAIA (center, seated) of Asheville, appeared as the King in the Park Players' production of "Many Moons."

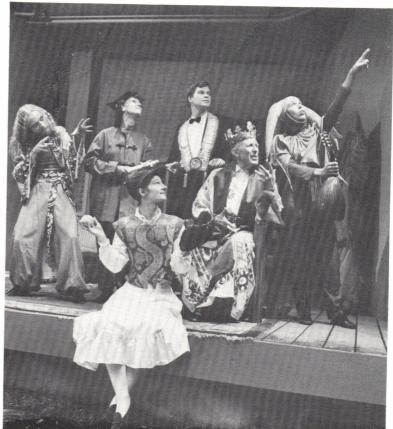


PHOTO BY JUNE GLENN, JR.

1980 should contact Carroll Hughes at Space Plan, 29 North Market St., Asheville, N.C. 28801.

#### Wilmington

Wilmington architect Leslie N. Boney Jr., FAIA, was elected Chancellor of the College of Fellows for 1980-81 at the National AIA Convention in Cincinnati on June 2, succeeding Robert L. Durham, FAIA, of Seattle.

The College is an arm of the AIA composed of architects who have been elevated to fellowship as a result of "their distinguished service to the profession of architecture." Fellowship is the highest honor the AIA bestows on a member other than the Gold Medal.

The new chancellor is a partner in the firm Leslie N. Boney, Architect. He was the 1965 president of the NCAIA and a national director representing the South Atlantic Region 1973-76.

Boney was installed at the Institute's convocation dinner which also featured the investiture of 92 new AIA fellows.

#### Winston-Salem

Newman Calloway Johnson Van-Etten and Winfree, Architects, of Winston-Salem have completed the preliminary design work on a \$2.5 million downtown "artists' colony," which includes almost three acres of residential, shop and studio space in three old buildings, for the North Carolina School of the Arts Foundation.

The plans call for development of 15 apartment units in the upper floors of the old Carolina Theatre-Hotel building at the corner of Fourth and Marshall streets, to be occupied by artists or performers who need less extensive studio or shop space, according to Michael Newman. The former Belk-Stevens store at Trade and Fifth streets, and the former Brown-Rogers-Dixson hardware store with entrances from Fifth, Trade and Cheery streets, will be adapted for residencestudio units with shops on the ground floors. The four-story Belk building will have 28 units. The Brown-Rogers-Dixson building will have 25 units, plus an open-air courtyard entry, second floor balconies and an interior mall.

The project, which is still awaiting final financing, would be the first of its kind in the country, according to Foundation Director Samuel M. Stone,



Leslie N. Boney Jr., FAIA, was elected Chancellor of the College of Fellows. Left to right: Vice Chancellor William R. Jarratt, FAIA; Chancellor Boney; Former Chancellor Robert L. Durham, FAIA; Secretary William Muchow, FAIA.

and would be the first development to take advantage of the "loft living" amendments in local zoning codes which were made several years ago to encourage residents to move into vacant spaces over the downtown storefronts.

A six-month study of the artists' colony concept by the architects was financed by a \$17,000 grant to the Foundation from the National Endowment for the Arts. And according to Stone, the study indicated that the project is fiscally and architecturally feasible.

#### Charlotte

The Mecklenburg County Courthouse in Charlotte was one of five national winners in the Fifth Concrete Reinforcing Steel Institute (CRSI) Design Awards Program. The awards, presented at the annual CRSI convention in San Diego, honor creative achievements in aesthetics, engineering, functional excellence, and construction economy.

Sharing the award for the courthouse are: Wolf Associates, Architects, Charlotte, architect; King-Hudson

The Mecklenburg County Courthouse, by Wolf Associates of Charlotte, is a 1979 CRSI Design Award winner.





Pictured with the CRSI Award are, left to right: Robert T. Stafford, CRSI president; Harry C. Wolf III, FAIA; Jay Carroll, CRSI chairman.

Associates, Charlotte, structural engineer; Mecklenburg County, owner; and Larke Construction Company, Charlotte, general contractor.

The courthouse is a three-story structure that links a parking garage and county office building and forms a backdrop for a large plaza. It features exposed columns in the major corridors "which create a feeling of Greek-style colonnades." Reinforced concrete, poured with a repetitive one-way panjoist system, was more cost-effective than other materials and eliminated the expense of suspended ceilings.

The Design Awards Jury cites the courthouse as "functional, practical, distinguished... the straightforward design provided overall economy."

#### \* \* \*

Charles L. McMurray, AIA, a founding partner of McMurray/ Abernethy/Poetzch Architects in Charlotte has been elected to serve a three-year term on The Octagon Committee. The committee advises the professional curatorial staff of the historic house museum in Washington D.C., which is owned and maintained by the AIA Foundation.

The Octagon Committee is comprised of architects, engineers, attorneys and museum and decorative arts specialists. Now observing its 10th Anniversary as a public historic house museum, The Octagon was built by Col. John Tayloe III between 1798 and 1801, and served as a temporary home for President and Mrs. James Madison after the British burned the White House during the War of 1812.

McMurray is a member of the NCAIA, the AIA Committee on Historic Resources and the Historic Preservation Society of North Carolina.

Also elected to the committee were Roy E. Graham, AIA, Resident Architect of the Colonial Williamsburg (Va.) Foundation, and William R. Johnston, Assistant Director of the Walters Art Gallery in Baltimore.

Two Charlotte firms will be working with the Proctor and Gamble Manufacturing Company on the company's new manufacturing facility to be built in the Greensboro area. J.N.

\* \* \*

Pease Associates will provide the architectural and engineering design with Metric Constructors, Inc., serving as construction managers.

Located on a 288-acre site, the 350,000-square-foot facility will manufacture, package, warehouse and distribute toilet goods products. Administrative and laboratory areas will also be a part of the plant.

#### \* \* \*

J.N. Pease Associates has also designed the Byron Jackson Pump division plant of the Borg-Warner Corp. in Charlotte. The groundbreaking ceremonies were held May 22 with Gov. James B. Hunt Jr. wielding the traditional gold shovel for the event.

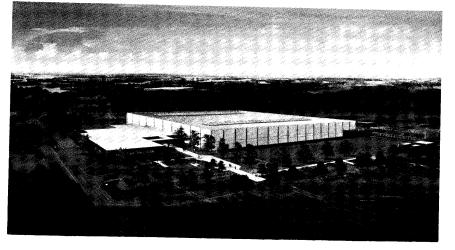
The \$9 million facility, to be located in Westhall Industrial Park off I-77 South, will produce pumps for refineries, petro-chemical plants, pipelines, synthetic fuel applications, and other industrial projects. It will also house a staff of approximately 25 engineers for the design of specialized pumps for energy projects.

The 120,000-square-foot plant is scheduled for completion in mid-1981.

And speaking of J.N. Pease Associates — an apology is in order. In the Chapter Notes of the May-June **North Carolina Architect**, it was stated that "Odell Associates is the only firm in the area with computerized capabilites," when, in fact, JNPA has had complete in-house computer capabilities for over 10 years. Since 1972, Mark Computer Services (MCS) has been a wholly owned division of JNPA and its director is a principal associate of the firm.

#### \* \*

The Byron Jackson Pump Division plant of the Borg-Warner Corp. in Charlotte, designed by J.N. Pease Associates.



Two new architectural firms recently opened in Charlotte. E.H. Copeland Jr., AIA, AICP, has announced the opening of an architecture and planning office at 120 Brevard Court, and J. Michael Hodges, AIA, Ronald W. Touchstone, AIA, Howard A. Ahern, AIA, and Sandy Gibbs Clarke have opened the Hodges-Touchstone-Ahern Architects, P.A. firm in Suite 216, 4 Woodlawn Green, Charlotte.

\* \*

On November 13 and 14, the Charlotte Civic Center will be the site for a region-wide Energy Conservation Fair focusing on the special needs of the residential and small commerical energy users.

The fair will be sponsored by the Mecklenburg County Citizens Committee for Energy Conservation, the North Carolina Energy Division, UNCC, Duke Power Company and Piedmont Natural Gas Company. The two-day event will feature displays and information on techniques and equipment which help conservation and management of energy. Both informational and commercial exhibits will be supplied by governmental and educational agencies, energy supplies, manufacturers and distributors.

For more information, contact Patricia Dillingham at 704-374-8059.

#### Special Exhibits: The Bizarre World of "Best Products" and "Visionary Drawings"

One of the New York Museum of Modern Art's most unusual exhibits opened July 20 in the Student Center Gallery at NCSU and will run until August 30.

The show brings together the work of six architects commissioned by Best Products Inc. and incorporates some of the most original work in the field of design in the country.

"Best was interested in contemporary art in general, and fascinated by artists' interest in the ordinary, everyday, supermarket-type life," said NCSU art curator Ben Williams. "They have commissioned architects to come up with facades for their buildings that are a commentary on this sort of life."

The facades for the Best Products showrooms range from a gigantic American bungalow, the picture of suburbia, to imaginative outer-space styles.

The suburban home is built on a

gigantic scale, with huge bricks, a giant mailbox and larger-than-life basketball goal. The garage door is broken, left open enough for the customers to enter the store.

Another facade is a play on a Grecian temple, complete with trophies and spoils of war topping its columns. The trophies, however, are television sets, tennis rackets and other items prized by present-day warriors and housed within the store.

One of the most fascinating facades draws spectators simply for the opening of the store, when a huge section glides away from the building. Crowds gather again at closing time to watch the corner slide back into place.

The exhibit features blueprints, photographs, architects' drawings and models of the showrooms.

One of the facades, a rendering in the classical tradition, was conceived by architect Allan Greenberg and the model built by NCSU design graduates Richard Weis and Suzanne Butolph.

The architects commissioned for the projects and featured in the show are those under the aegis of SITES, Inc. the Smithsonian Institution Traveling Exhibition Service — and Hardy Holzman Pfeiffer and Venturi and Rauch.

\* \* \*

"Visionary Drawings of Architecture and Planning," an exhibit spanning the 20th Century through the 1960s, will be on display at the North Carolina Museum of Art August 10 through September 21.

Sponsored by SITES, Inc., the exhibit features work by Frank Lloyd Wright, Reginald Malcolmson, Frederick Kiesler, Charles Lamb, Louis Kahn and Buckminster Fuller.

John Reuer, of North Carolina State University's School of Design, will speak on the special display at 3 p.m., September 7.

#### **On A More National Note...**

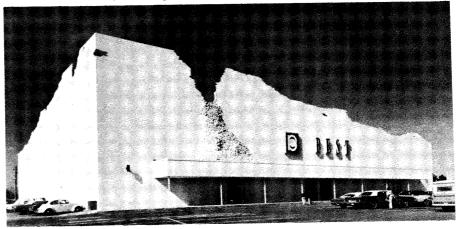
The 112th AIA National Convention held this year in Cincinnati, Ohio, was attended by several North Carolina architects including Marvin R.A. Johnson, FAIA, president of the NCAIA.

During the 1980 Convention, Robert M. Lawrence, FAIA, of Oklahoma City, was elected first vice president/president elect of the AIA. He will assume this office in December 1980 and become president one year later. R. Randall Vosbeck, FAIA, of Alexandria, Va., the AIA's current first vice president, will succeed Charles E. Schwing, FAIA, of Baton Rouge, La., as president of the 34,000-member national professional society this December.

Lawrence, who is completing his second term as AIA secretary, previously served a three-year term on the AIA Board of Directors representing the Central States Region. He currently chairs the AIA Legal Decision Impact Task Force and the Secretary's Advisory Committee.

Convention delegates also elected three national vice presidents: Robert Broshar, FAIA, of Waterloo, Iowa; George M. Notter, Jr., FAIA, of and Ray K. Parker, AIA, of Little Rock, Ark. Harry W. Harmon, FAIA, of Long Beach, Ca., was elected to a two-year term as secretary of the Institute, and Jay W. Barnes, FAIA, of Austin, Tex., will continue his two-year term as treasurer.

Collapse and decay as an architectural motif: the Best Products Showroom facade in Houston, Texas, part of the new exhibit at NCSU.



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# A Gift Of Art



Quadriform 1975

"Quadriform 1975," a 400-pound fibre sculpture by nationally acclaimed artist Barbara Shawcroft, is one of 25 art objects given to North Carolina State University by School of Design Dean Emeritus Henry Kamphoefner.

Over the past two years, Kamphoefner has been donating works from his private collection to the University which are now on display throughout the Student Center and the D.H. Hill Library. The Shawcroft sculpture, which Kamphoefner purchased last Fall when the artist was working out of San Francisco, now hangs in the second floor lobby of the Student Center near the entrance to Stewart Theatre.

Kamphoefner, who served as dean of the School of Design from 1948 until 1973, began collecting art work by faculty members when he was with the University of Oklahoma. Since then, his collection has grown from international travels that he and his wife, Mabel, have taken, and from works he purchases from NCSU faculty artists.

The pieces on display at the University include pen and ink drawings by Duncan Stuart, a stainless steel sculpture by Roy Gussow, a bronze sculpture by Max Daen, two Navaho prayer rugs, an American Indian blanket, a steel engraving of a 1700 map of Rome, and numerous other paintings, drawings, prints and sculptures.

The Shawcroft sculpture, composed of hand-dyed hemp rope in shades of yellow, blue, green and brown, was purchased specifically for the University, Kamphoefner said. He first saw it when he and Mrs. Kamphoefner visited the artist's home in San Francisco on their way back from China last August. Shawcroft, English by birth, lived in Raleigh for several years and is now teaching at Boston University. Her unique art, including one sculpture 50feet tall, is displayed in several foreign countries as well as across the United States.

The dean's most recent gift to the University is a John Batho photograph which Kamphoefner purchased at the Zabriskie Gallery in Paris in May.

### A GOOD DESIGNER CAN SAVE HIS CLIENTS THOUSANDS WITH A FLICK OF THE WRIST.



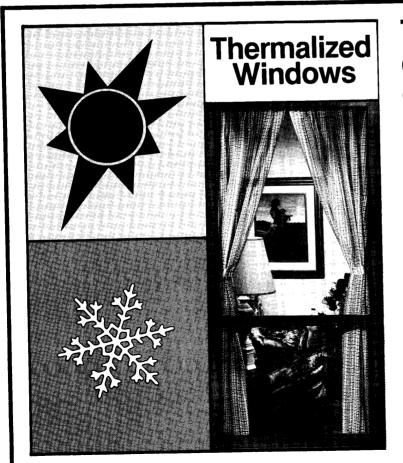
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By designing structures that are energy efficient, you help your clients save money on energy costs, you help your country resolve the energy problem and you help yourself by having clients who will gladly recommend your firm since you're saving them so much money.

At Duke, we have the resources to help you solve almost any energy-related problem. If we can be of assistance, contact J.M. Foreman, Jr., General Manager of Energy Services, at 704/373-4697. Or write P.O. Box 33189, Charlotte, N.C. 28242.

By contributing to a happier nation and happier clients, you'll wind up with a smile on your face, too.

**Duke Power** 

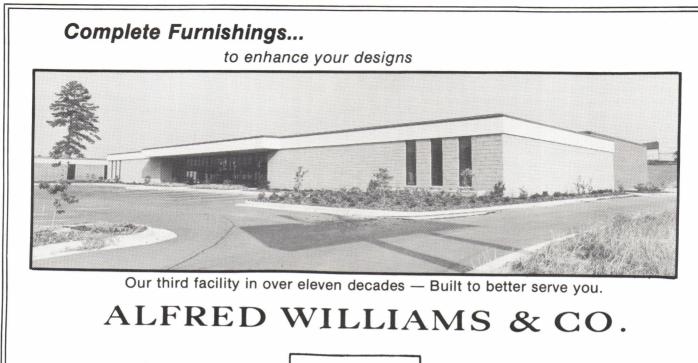


There's more energy-saving quality built into new construction with Binning's Thermalized Windows.

For more information and a free brochure, contact: Binning's, P. O. Box 868, Lexington, N. C. 27292. Telephone 704-249-9193.

Binning's Building Products

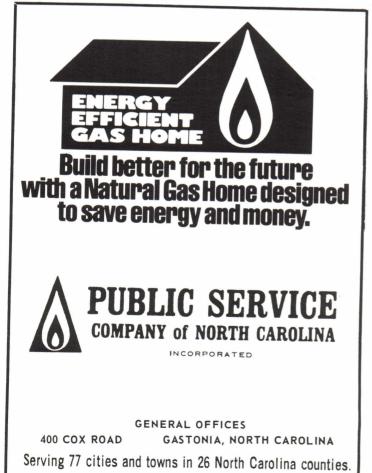
National Gypsum Company

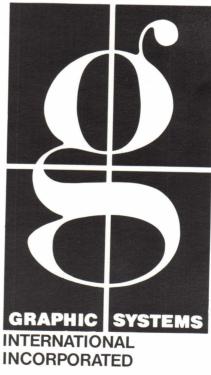


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431 Spring Garden Street Greensboro, NC 27401 telephone 919 273 2891

# Meet CAPA's Safety All-Star Team for 1979.



The company emblems shown above represent Carolina Asphalt Pavement Association's all-stars in safety for 1979. Each of the companies had no losstime due to accidents during the past year and subsequently have been presented with CAPA Safety Awards.

Safety, whether it is in hot-mix plant operations or paving construction, is an important part of the asphalt industry. CAPA staff and member firms are actively engaged at the local, state and national level in developing safe practices in asphalt production and construction.

Safety awards are just one more way Carolina Asphalt Pavement Association recognizes member firms for their excellence in operations as a member of the asphalt industry.

So, for 1979, hats off to our all-star safety team.



### Carolina Asphalt Pavement Association. Inc.

Caswell Building, Koger Executive Center P.O. Box 30725 - Raleigh, North Carolina 27622 Telephone 919/781-3770



#### It saves maintenance.

Wood rots, burns, splits and warps. And it needs repainting or staining about every 2 years. That means wood continues to cost you money. Forever. Sanford brick doesn't.

And energy. Wood siding is a very poor insulator. Brick is a good in-sulator. That's why, when you build with Sanford brick, you not only save substantially on the cost of fuel and electricity but you can also temperature control your home with a smaller heating and cooling unit. And, if you build with insulated brick cavity walls, you can re-duce your heating bill by 28% and your cooling bill up to 9%.

### And pest damage.

Wood invites termites, pine borers, woodpeckers, carpenter ants, etc. Sanford brick is pest-proof. A lot of wood home owners wish they had thought of that.

## Here's the beauty part. Sanford Handcraft brick styles give you all the savings

plus a truly beautiful home. They come in a wide range of colors and textures that recreate the mellow warmth and dignity of old landmarks. You'll find one just right for your building project.

### And the final payoff.

Brick homes always maintain a higher resale value than wood homes of comparable size. And their values appreciate faster.

If you're thinking of building with wood siding, you should get all the facts first.

### Call Toll Free: 1-800-672-7555



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### THE STRENGTHS OF THE TRADITIONAL. AND THE MODERN.

The architecture of the Greenwood Forest Baptist Church in Cary, N.C., calls on the strengths of the traditional and the modern. And it makes extensive use of brick. Wallingford Gray by Borden.

The brick contributes to the strength and beauty of the design; and, because the floors are also of brick, the acoustics in the Greenwood Forest Church are excellent.

Wallingford Gray is only one of the thousands of textures, shapes and sizes produced by Borden. And we've been doing it for nearly seventy years. Whatever brick you need, give us a call. We probably have it — or we'll make it.

And there's one brick made only by Borden. Handtique<sup>®</sup>, a brick made with the methods of today, and the look of yesterday. By Borden.

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