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Carol Hiatt, President
E&O Liability Consultants, Inc.
Greensboro, NC

Question: Many architectural firms feel if they don't have insurance, they won't be sued. What are your feelings on this?
Answer: "False economy allows them to think they can avoid liability by not having insurance. Design Professionals that design anything other than just houses—well, it should be considered a cost of doing business."

Question: How does an architect know which attorney to choose?
Answer: "An Architect ought to get a lawyer before he needs it. This way, the lawyer will be familiar with the way he runs his shop. Also be familiar with any problems. Ask other architects who they use, ask your agent or insurance carrier."

Question: A lot of architectural firms still do not use written contracts with the owner/client. What are your feelings on that?
Answer: "Always have written contracts with the owner. The owner can withhold payments; that's another very good reason for a contract."

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ON THE COVER
Greene County Middle School, a design award winner at the recent School Facilities Conference, is featured. Photography by Dewane Frutiger/ACI Photographics
Certificate of Merit Proposal

A Look At Upcoming Legislation

As a partner in the architectural firm of Camille Alberice Architects for the last year and a half, Peter Y. Alberice, AIA, of Asheville is accomplishing his personal version of the American Dream.

"We do mostly residential and renovation projects now," says Alberice, "but we hope to move into commercial and publicly-funded work in the future. There comes a point, though - the scale of the project, the competition and the budget - where you cross the line into a much riskier realm."

For Alberice and his fellow 1,530 registered architects in North Carolina, risk is frequently defined as frivolous malpractice litigation, also known as nuisance lawsuits.

One example might involve a person who is assaulted at a shopping mall. When the victim is unable to obtain financial reparations from the criminal, a lawsuit is filed against everyone associated with the mall, including the owner, developer, contractor and architect. Such a tactic is commonly referred to as "shotgun litigation."

Another example might involve a developer whose project falls short of financial expectations. The developer, in hopes of recouping his financial losses, sues everyone involved with the construction - including the architect.

In cases such as these, architects face a no-win proposition. They must spend thousands of dollars defending their reputations in court to fight an unfounded claim, which, if somehow successful, could put the architect out of business.

That's why AIA North Carolina supports the passage of Certificate of Merit legislation during the 1991 session of the N.C. General Assembly.

Similar legislation has been adopted in several states including Georgia, California, Colorado and Hawaii. The general concept is simple. Before a malpractice claim against an architect goes to court, an expert panel must determine whether the claim is legitimate.

Samuel H. Johnson, legal counsel for AIA North Carolina, says, "We want to reduce the volume of protracted litigation and the cost to the architectural profession by establish-
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ing a mechanism to evaluate claims against design professionals."

In helping to draft the legislation, Johnson is working with the support of a coalition of engineering groups, including the Consulting Engineers Council of North Carolina. Johnson is also seeking cooperation from the N.C. Academy of Trial Lawyers, whose members could benefit, in the long run, by purging frivolous litigation from our over-burdened court system.

The proposed legislation, in its initial draft form, would give the N.C. Board of Architecture (the state’s regulatory agency for architects) authority to appoint a claims review panel of two architects and one member of the general public whenever an architect who is a defendant in a civil action requests a review. The panel shall then render a decision within 90 days.

In California, Certificate of Merit legislation has been on the books for 11 years and has accomplished its purpose. A study by Ralph Andersen & Associates indicates fewer malpractice lawsuits are now filed, more suits are dismissed and there are fewer jury trials. From 1980 to 1985, malpractice suits against architectural and engineering firms decreased by five percent at a time when related civil litigation increased by 21 percent.

Architectural firms operate on a very narrow margin of profit. One lawsuit can devastate a firm’s business. The average cost of a claim is $75,000. Most firms, by necessity, obtain liability insurance. The average annual premium for a 10-person firm is about $15,000.

Stuart Thomas of Professional Liability Consultants in High Point says that when one architect faces a frivolous lawsuit, the entire profession ends up the loser.

"The individual architect or firm has to protect his or its reputation. There's no way to measure the time lost in having to fight a claim, no matter how bogus it may be. There's no time to pursue new work. There's also likely to be an increase in overall insurance rates due to a big claim. One claim ripples through the entire profession."

Stuart Thomas
Professional Liability Consultants

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Alberice and the other architects in North Carolina will be watching the progress of Certificate of Merit during the 1991 General Assembly.

"All of the architects I know bend over backwards to make sure their clients are pleased," says Alberice. "I feel I ought to be responsible for my work. It's difficult, though, to practice architecture in an environment where frivolous lawsuits can occur."

For more information on certificate of merit or other legislation affecting the architectural profession, contact:

Timothy D. Kent
Executive Director
AIA North Carolina
115 West Morgan Street
Raleigh, NC 27601
919-833-6656
"My partner and I rest a whole lot easier at night knowing that DPIC is there for us. Until we became acquainted three years ago, we didn't realize just how vulnerable architectural firms were or how devastating a single claim could be. We certainly didn't realize the difference an insurer could have in our continued success.

Protecting our 20-year investment in this business and the livelihood of our 25 employees has always been a foremost objective of Lee Nichols Architecture, but rather than resting on our laurels of continued success, we now have a more realistic approach to new projects.

The greatest benefit DPIC offers us is their knowledge and quick, personal service. When Stuart Thomas of Professional Liability Consultants in High Point called on us three years ago, DPIC made an exceptionally thorough evaluation of our firm before issuing any policy. They asked questions we had overlooked ourselves. At that point, we knew we weren't dealing with just any insurer. And since then, they have continued to evaluate all our written contracts so we can avoid complications down the road.

As far as we're concerned, DPIC is changing the way the insurance industry does business. They've caused us to have greater expectations, but, more importantly, a healthier attitude toward professional liability. Now we think in terms of loss prevention, which benefits us as well as our clients. It's a comfort zone we never had before."

Don Lee, FAIA, and Bill Nichols, AIA, are principals in Lee Nichols Architecture, a Charlotte firm founded in 1969. Don Lee is past president of AIA North Carolina. Bill Nichols is past president of the Charlotte Section of AIA North Carolina. We value our relationship with their firm and appreciate their willingness to talk to you about us.
Harwell Hamilton Harris, a man of consummate dignity and reserve, sat barefoot in his famous living room and slowly ate a lunch of fruit and meringue pie. The minutes slipped by silently while his interviewer looked on, until Harris laid down his fork and raised his head. "What information can I provide you with?" he asked, as though at a loss for words. The darling of the architectural press during the peak of his career, Harris died at his Raleigh home on Nov. 18, following a long bout with cancer. His aversion to self-promotion notwithstanding, the chance to talk about his work — even near the end, in the face of physical weakness and lapses in concentration — was an invitation he would not decline.

It seems forever ago that Harwell Harris' name frequented the conversation of students and practitioners of architecture: his theories and built projects circulated most during the '30s and '40s, when the seeds of modern architecture were sprouting along the California coast where he lived. Perhaps little-known by today's budding designers, Harwell Hamilton Harris once was, in his own way, a cult hero. As a young architect, Mason Hicks of Fayetteville got excited whenever he saw Harris' latest projects in a magazine. "They always caught me right in the middle of my stomach," says Hicks, now a seasoned veteran. "They, to me, were what I thought architecture ought to be."

When Harris departed the west coast for Texas in 1952, he left behind a legacy of houses that historians and critics now credit as one of the few true regional styles of architecture. They were beautiful objects, pure art, deceptively simple in form and texture but immensely complex in their sculptural manipulations of space. Friends say the buildings reflected the man who built them. "His work always had a simplistic commonality about it that made it pleasing," says Hicks. "But it's not that way at all. It's very sophisticated stuff."

Harris built a house for himself and his wife in Raleigh soon after coming to N.C. State to teach in 1962. The residence is typical of Harris' earlier work: it is an essay in overlapping space, natural materials and simple form. To achieve both economy and a structural logic, he generated the floor plan based on a system of standard dimensional units, a grid of three-foot modules. That was a technique he learned from his great teacher, Richard Neutra, who emigrated from Vienna in 1923 to work under Frank Lloyd Wright. In her
monograph on Harris' work, author Lisa Germany pinpointed both the link and the break between Harris and his mentors from abroad. "Like the Europeans," she wrote, "(Harris) delighted in the freedom from the past that the Modern attitude made possible, but it was never enough for his buildings to be simply new and efficient. Nor was it necessary for them to be heroic. They had to be as warm as they were lean."

As a youth, Harris was unmoved by architecture. But that changed after a fellow student persuaded him to visit the Hollyhock House, a Hollywood residence built by Frank Lloyd Wright. "(He) was the one who aroused my interest in architecture," Harris acknowledged. "I still admire him above all others." But it was Neutra, with whom Harris apprenticed for five years, who left the more visible imprint.

Harris points to his Havens House (1939-40), which exploited the dramatic views afforded by a steep and difficult site, and English House (1949), a big-budgeted commission for a crippled painter, as his proudest accomplishments because "they best expressed the needs of the client." In the case of the English House, Harris created "a place where an ailing person could feel comfortable, a disfigured person could feel dignified and a sophisticated connoisseur could feel uplifted," wrote Germany.

Perhaps because of his personal qualities, Harris was never widely canonized in architectural circles. Yet he is regarded correctly as one of the pioneers of American modernism and, as such, has secured a place in the history of American design. "He's one of perhaps four or five American architects of this century whose work I admire because of its thoroughness and authenticity," said longtime friend Frank Harmon, a Raleigh architect and professor at N.C. State. "Harwell's buildings are generally thought-built; that is, you can look at anything he has done and learn from it, because you know that it has been built with great integrity."

This story is excerpted from a profile of Harris that recently appeared in Inform, a bi-monthly publication of the Virginia Society of the American Institute of Architects, for which Vernon Mays serves as editor.
School construction in North Carolina has increased dramatically over the past few years, spurred not only by the need to update antiquated educational facilities across the state but also by the passage in 1987 of the Public School Facilities Financing Act, which identified funding sources for school building projects.

Public school design thus has become a steady source of revenue for North Carolina architectural firms. Little & Associates in Charlotte, for example, has a complete education division of 16 staff members who’ve completed over 140 school projects valued at more than $160 million for 34 North Carolina school systems. With critical-needs funding covering many of the projects initiated in recent years, several architects expect the school building trend to grow even more in the 1990s as more sales tax funds and matching funds are made available for further construction.

Selecting the right architect to design a new school or renovate an existing structure is crucial to the local system superintendent and school board responsible for a community’s educational needs. Though they are not usually construction experts, school board members often have to decide between 40 or 50 highly-competitive firms interested in designing their school. Financially, that decision typically will represent only 3.6 percent of the total project cost, but the results will impact, quite literally, on generations of their students.

How best to select an architect for a new school project? State law mandates only that the firm be chosen on the basis of qualification, not...
price. The procedure itself is left up to the individual school board, but most use similar methods. The Charlotte-Mecklenburg system, for example, has a clearly-defined five step process as outlined by Charles Allison, assistant superintendent of auxiliary services:

- A public announcement of the intended project, with a request for proposal (RFP) distributed to a list of about 60 architectural firms.
- A review of the qualifications of all firms who respond.
- Interviews with those firms determined to be best qualified for the project, usually six to eight firms.
- A ranking of those firms after the interview, with the top-ranked firm being submitted to the Board of Education for approval.
- Negotiation of fee for the chosen firm.

"It takes several weeks and a lot of man-hours to do it right, but we insist on doing it right," says Allison. "We feel that this is the right way, the fair way to do it."

The key to the whole process may be the initial RFP. The more specific the school board is in describing its project, the stronger an architect can make the proposal. AIA North Carolina has developed a model RFP for those school systems that might not have as much construction experience as Charlotte-Mecklenburg and other big-city systems but still need competitive proposals. The model RFP includes everything from a precise description of the size and scope of the project to an evaluation of the proposed site, an explanation of the project's budget and time schedule, the proposal's deadline and background information on the selection committee.

"We're fortunate in North Carolina to have a very good department in the division of school planning for the public schools to assist school boards in the planning of their schools, and it's been able to set some standards," says Lloyd Walter, immediate past president of AIA North Carolina. "But one of the areas they can't do a lot about is recommending architects because that would offer favoritism. We felt that often the RFPs we get from school boards are all over the place. The information they ask for is not going to tell them a lot, or else it's too detailed. We hope that if clients will use the model, then both parties in that initial contact will exchange valuable information — the architect to decide if he wants to pursue it and the owner to have enough information to narrow down 40 responses to four or five for interviews."

A point system sometimes is used to objectively narrow all the respondents down to a short interview list. Some of the more pertinent criteria in that process include an evaluation of the firms' past performance records on similar projects, a review of their existing staff and the qualifications of those who will actually work on the project, a look at the workload of the firms during the time the project will be undertaken, and the firms' past records in bringing projects in on time and on budget.

Allison also is interested in a firm's track record for completing projects without legal problems as well as its willingness to collaborate with the numerous individuals who will use the school, including the principal, faculty, staff and students. In that regard, school projects differ from many other typical clients.

"In a developer market with, say, an office building, you may have one strong individual who makes all the calls," says James Metze, senior vice president of the education division at Little & Associates. "But with a school system, there are so many people that you need to be sure..."
you are getting their input and satisfying their needs. It's a matter of constantly being aware of who the decision-makers are and what they are trying to accomplish."

"One of the main factors in the decision-making process," says John Thompson of DePasquale Thompson Wilson in Durham, "is determining if the architects are accustomed to doing participatory design, involving a lot of people from the school in thoroughly planning the project. It's extremely critical that an owner understand that he has a firm he has accessibility to."

Accessibility, as well as identification of the design professionals who would work on the project, should be addressed during the interview process. Architect Paul Boney, of Boney Architects in Wilmington, suggests that firms have the proposed project architect participate in the interview along with the company's marketing personnel. "It's paramount for the owner to know who will be working on the project," Boney says. "You need to lay out a schedule for them of when things will happen, how the project will unfold and what are the different roles the individuals will play."

Boney, whose firm was honored with three design awards at a recent School Facilities Conference, believes that demonstrated competence by a firm is the chief attribute to a winning proposal. Nothing beats a solid track record.

"There is a big difference between marketing and selling," he says. "Once you are in an interview, it's more of a selling job. But marketing is something you do every day. Client references are important. That is your best marketing tool — how you treated others in past projects."

The student population may be contracting nationally, but growth in North Carolina along with the need to replace outdated facilities has raised significantly the number of school projects on the drawing board in this state. Most see the trend continuing, further amplifying the importance of the selection process for architects.

"There is a general awareness in communities that the school system for quite a few years languished," says Walter. "As techniques of teaching have changed, some school systems have buildings that are inadequate. What we are seeing now is the reassessment of the physical plant for education and trying to provide a learning environment that will be more useful."

"We've seen in the last five years this awareness creep back in and money being voted at the state level and county level to come back and address those concerns."

In designing a new middle school for the Greene County Schools, architect Michael Dunn, AIA, wanted to develop a circulation pattern just a touch different from the traditional long hallway lined by rows of student lockers.

His solution? Cluster the lockers in pod areas and use an angled circulation spine to link the school's various wings and educational centers together.

Organizational ideas such as those were rewarded with "Design for Excellence" awards at a recent School Facilities Conference hosted by the North Carolina Department of Public Instruction. At the conference, a panel of architects picked the best elementary, middle and high schools designed in the state over the last few years, choosing from a group of over 40 designs featured in the current edition of the periodical "Schools of Interest."

"When looking at schools, one looks for any kind of organizing idea," said lead juror Robert P. Burns, FAIA, the head of the architecture department at N.C. State University's School of Design. "Many of the ones we are familiar with
tend to be disorganized assemblages of boxes.”

With organization and functional planning as chief criteria, Greene County Middle School was selected as the best middle school, Youngsville Elementary in Franklin County as the best elementary school and New Bern High as the best high school. Several other schools were awarded second place and honorable mention. Other jurors were retired architects Rolf W. Seifert, AIA, and A. Lewis Polier, AIA.

Greene County is a 93,000-square foot structure on a rural 50-acre site that was constructed below budget for $6 million. Dunn, of The East Group in Kinston and Greenville, was the project architect. The school includes 47 classrooms, media center, vocational wing, music and art studios, cafeteria/commons area, gymnasium and administrative offices.

The organizing principle is the creation of separate wings for each class grade radiating out around a central core that contains the media center, science, art and administrative functions. A continuous, but angled, circulation spine links the various wings and allows for creative expression.

"The spine is turned at two different angles
and at each turn there is a triangular entrance space created that serves as a dramatic, expressive entrance into the classroom wings,” said Burns. “This addresses a problem a lot of schools don’t do very well— they don’t handle the connections between all these elements. This gives the school a kind of heart, and it also seems to reduce the length of the school.”

Dunn credited the creative participation of Greene County Schools superintendent Dr. Earl Watson, as well as very thorough specifications, with facilitating the design process. “It was a team effort all the way,” he said. “We went out and looked at other schools together, worked on thumbnails together, reviewed plans together. Their (the school board’s) signature is very much on the project, especially the idea of an organizational hierarchy that places the high-activity noisy areas at one end and the quieter classroom wings at the other end.”

Youngsville Elementary in Youngsville also has a clearly-defined organization principle of linked blocks that were manipulated to fit a difficult site. The 63,700 square foot school, which opened in 1988, is designed for 600 students and was built for $4 million. Shawcroft-Taylor of Raleigh was the architectural firm.

“We had to create the site,” said Brian Shawcroft, AIA, partner in charge of design for the project. “It was all playing fields for an old school that was there and we had to fill it. To minimize the amount of fill, the school steps down the site, with (handicap) ramps used between the various blocks....With this arrangement, we were also able to individually air condition each unit. The administration and media center blocks, which are used 12 months a year, can be air conditioned while the classroom blocks can be shut down during the summer when they are not in use.”

“It is rigorously and clearly
organized in terms of functional planning,” said Burns. “Classroom elements are broken down into very distinct building forms and the other blocks are given a unique and distinct expression as well. Circulation through the building is crystal clear, and each juncture where one moves from one part to the other has a special architectural element that defines it. The skylights, with the colored fins or panels, add a great deal to the circulation space and make it very distinctive.”

Shawcroft said the school was designed simultaneously with Franklin County’s Gold Sand Elementary School using the CAD System, with similar elements and drawings used for both schools.

Burns said the jurors recognized that designing a high school can be more complicated than an elementary or middle school, simply because of the size and diversity of functions that must be addressed. This can lead to overly-institutional, sterile results. New Bern High School is basically a contained form, but avoids sterility through its use of key appendages for the administrative offices, auditorium and the vocational shops.

Designed by Stephens & Francis, PA, of New Bern, with Charles Francis, AIA, serving as project architect, the school comprises 237,000 square feet on a 100-acre site, of which 34 acres are designated wetlands. Still
under construction, the school is planned for 1,900 students.

Francis' design organization places all the major commons facilities — such as the gym, media center, dining area and large courtyard — at the center of the two-story building, with the classrooms flanked around the edges in the form of a large rectangle. The noisy shops have their own wing, connected to the larger building by a simple corridor. The administrative function and auditorium/lecture room also have a separate wing, making them accessible to the public after hours.

The color scheme also makes a statement. Exterior colors and colors in the public places reflect the red and black school colors: red brick with red mortar; black exterior frames around the doors and Pella windows; and interior paint colors of red, burgundy, black and various shades of gray.

School Facilities Conference
Design Awards

Elementary Schools
Design Award: Shawcroft-Taylor, Brian Shawcroft, Youngsville Elementary, Franklin County
2nd Place: George M. Smart Architects, George Smart with Larry Deckard and Mete Gurel, Vance Elementary, Wake County
Honorable Mentions: Boney Architects, Inc., Paul Boney, Lilesville Elementary, Anson County
Alpha Design Group, Charles Woodall, Windsor Elementary, Bertie County
Ballard McCredie Elliott Associates, Roger Ballard, Riverview Elementary, Hertford County
Robert Winston Carr, Inc., Edgar Carr, Saint Paul's Parish Center, Private School in Craven County

Middle Schools
Design Award: The East Group, J. Michael Dunn, Greene County Middle, Greene County
Honorable Mentions: James B. Willis, Architect, Jim Willis, Broad Creek Middle, Carteret County
Boney Architects, Inc., Jack Claywell, Myrtle Grove Middle, New Hanover County

High Schools
Design Award: Stephens & Francis, Charles R. Francis, New Bern High, New Bern-Craven County
Honorable Mentions: Boney Architects, Inc., Paul Boney and Jack Claywell, Northside High, Beaufort County
MacMillan & MacMillan, Dan MacMillan, Triton High, Harnett County

Githens Middle School - Durham
DePasquale Thompson Wilson
This 133,000 square foot facility for 900 students includes academic "houses" that are separated from elective and noise-generating activity, as well as two formal entrances at opposite ends of the school. Administration, guidance, media services and arts areas are located near a public/auto drop entrance, while student commons, athletic facilities, food service and other interaction areas are located near the student/bus entrance. Photography: Jerry Markatos.

Fairview Elementary School - Asheville
ENG/Six Associates
An 83,000 square foot school for 700 students, Fairview was designed to replace an existing school sharing the same site. Construction took place while the existing school was in session, with demolition of old buildings during the summer. The single-story structure includes 38 classrooms divided into color-coded wings by class levels, as well as extensive special needs facilities and a computer lab with 21 stations. Photography: Robert Niedzwicky.
Northwest Elementary School
Mecklenburg County
Hemphill Associates
This circulation plan is the most recent of four elementary schools designed by Hemphill Associates for Charlotte-Mecklenburg over the last 10 years, using a similar design with improvements made each time. Constructed at cost of $4,083 per student, Northwest was most cost-effective of the 20 elementary schools featured in "Schools of Interest." All service areas are designed around a core corridor, reducing the maximum travel distance between any two interior points to 214 feet.

Vance Elementary School - Garner
George M. Smart Architects
"When people walk in, their heads go up and their mouths go open," says principal John Butler. "Visually it's gorgeous...and the design is very functional. The community has so much pride in it." A second-place winner at the School Facilities Conference, Vance was built for 450 students and is expandable for up to 1,200. The media center, located at the heart of the X-shaped facility, is the centerpiece. Other features: real oak trim and shelving throughout the building, marble windowsills and restroom partitions, and a covered entrance canopy. It has drawn raves for the way it is scaled to relate to the children using it.

York-Chester Jr. High
Gastonia
Little & Associates
Gaston County needed a new junior high, but rather than build one for over $5 million, the school system renovated an old elementary school for a little over $2 million, thus preserving a city landmark and allocating funds to more critical areas. Included in the 73,000 square foot project was the addition of this solar-paneled reading room, one of the most popular places in the school.

Charlotte Country Day School
Lee Nichols Architecture
This K-12 private school, one of the 10 largest independent schools in the nation, has been involved in a master planning process with Lee Nichols for the past year, with several new buildings and renovations planned. Foremost is the International Studies Center, which will become the gateway to the campus. It will house foreign language and English as a second language classrooms, a resource room, conference and seminar rooms and school-wide administrative offices.
1991 KAMPHOEFNER PRIZE

Sponsored by NCAF

The North Carolina Architectural Foundation, through the generosity of the late Dean Henry L. Kamphoefner, FAIA, established in 1987 an annual $10,000 prize to be awarded to an architect or architectural firm which has, for a sustained period of not less than ten years, consistently contributed to progress and excellence in the development of the modern movement in architecture. The recipient must be a member of AIA North Carolina.

The Kamphoefner Prize Selection Committee will begin reviewing all nominations in April 1991. The committee will select likely recipients and thoroughly investigate each of the nominees' works. The committee will make a selection which will be announced on August 9 at the AIA North Carolina Design Awards banquet in Wrightsville Beach.

This award recognizes an individual or firm for an entire body of work and truly represents the highest level of recognition of architects by their peers.

You are invited to send a nomination for the 1990 Kamphoefner Prize to the AIA Tower no later than April 15, 1991. You need only state the firm or individual being nominated.

The selection committee for this award believes that the chosen architect has "demonstrated a consistent integrity and devotion over an acceptable period of time to further the development of the modern movement in architecture without yielding to any of the undesirable current cliches, neomodernistic mannerisms or artless historicisms that have flawed the building culture of today."

— Henry L. Kamphoefner

Nomination for 1991 Kamphoefner Prize

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Address ___________________________

City _______________________________

Return nomination form to:
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Raleigh, NC 27601

Name of nominator (optional)
In southern Davidson County, students from grades K-12 all were attending a school built in 1922. New middle and high schools were needed, but building two new schools was cost-prohibitive. A combined South Davidson Middle School/High School answered the needs. The 100,000 square foot facility was designed for 750 students from grades 6-12. To accommodate both middle and high school, there are two gyms and two sets of locker rooms. The commons area, media center, administrative and guidance offices are shared spaces separating the classroom areas. Hallways are color-coded, with grades 6-8 and 9-12 operating on separate bell systems. There is also a unique music room with sliding partitions that open to the commons area, providing more space for performances.
The key to effective design process requires open minds and accurate communication among architects and school personnel. In September of 1990, an advisory committee of 18 professional people representing the Charlotte Mecklenburg School System (CMS) met with the selected architects to begin the planning of a new middle-grade school. The advisory committee recognized in the initial process that the building should be program-sensitive and aesthetically pleasing. That is, the building would be reasonable in cost, be designed to accommodate and enhance the middle school program concept, be a source of community pride and be a beautiful place for children and teachers to work and learn. The attitude of the architects, which was dominant from day one, was "help us to understand what you want and we will create the design to fulfill your requirements."

The Site

The first task of the group was to recommend to the school board a site from among three that had been chosen by CMS planning staff and their real estate advisor. The advisory committee was shown these sites and invited to visit them individually prior to a presentation that would objectively analyze the various characteristics of each site. At that presentation, both CMS planning staff and the architects showed maps, photographs and charts for each site, and there was group discussion about the attributes such as topography, vegetation, curb appeal, cost, etc., of each site. The architect's weighted matrix was used by the planning staff since it assigned priorities to various attributes. In the selection process, it was demonstrated that two of the sites would have had a constraining impact on the design of the building.

One of the key determinants in this site selection decision was the high priority given to adjacent property use, a planned 100-acre district city park. This fact alone may do a great deal to enhance the success of both projects, since the school will benefit from amenities it would not normally be able to afford such as a lake, tennis courts, lighted ball fields and a nature trail. And the park will be able to use school amenities it would normally have to build such as large playing fields, toilets and parking lots.

Southeast Middle School in Charlotte, the model school referred to in this column, is scheduled to open in the fall of 1992. An 850-student middle-grade school for the Charlotte Mecklenburg School System, the facility is a 132,000 square foot structure arranged around an interior courtyard that can be used for outdoor dining and outdoor teaching by the art studios and the media center. The triangular shaped classroom pods allow separation of team corridors as well as grade levels, and each includes team planning, conference, storage and toilet spaces. Designed by Gunn-Hardaway Architects.
The Program – Ed Specs

A program is more than just square footage allocations to spaces. In the first meeting, the architects presented a rationale for the formulation of a complete set of Educational Specifications, better known as Ed Specs. Although the tight time schedule for the project allowed only six weeks for Program/Ed Spec development, the architects felt that this could be fast-tracked and overlapped with the Schematic Design process. The advisory committee also was asked by the architects to commit to weekly meetings at 8:00 a.m. on Friday mornings to review, debate and make decisions, and the committee agreed.

In the weeks that ensued, square footages, space priorities and functional aspects of circulation and form were debated, sometimes hotly. During this process, the architects asked the advisory committee to accompany them on tours of both junior high schools and middle schools in the area to aid in the communication process. The committee traveled as a group to the buildings and thus formed a cohesive basis for discussions of various aspects of the sites visited. Committee members were given ranking sheets and asked to judge each facility on everything from finishes and acoustics to room sizes and lighting. The result of these field trips was a common basis of communication for subsequent discussions so that committee members could be asked to compare suggestions and options presented in the places they had visited.

As inevitably happens, the desire for more rooms and space in each area had to be balanced against a fixed budget. The architects were careful in every instance to avoid the wishful thinking trap and let the committee know in every instance where they had to make a choice between gross area and quality of space. In each case, what I witnessed was an advisory committee making the right choice for quality versus quantity. The result is a space program that balances all of the functional needs against a budget that affords
Models and Computer Imaging

Once the site was selected, the architects made weekly presentations on both site plan alternatives and building arrangements. In the first meeting, they presented a Scheme A and a Scheme B along with three building orientation alternatives. The advisory committee discussed and debated each, finally concluding that there were desirable attributes of each scheme. The following week, a Scheme C was approved by consensus, then presented the next week in both model and computer image form.

The response from the advisory committee was overwhelming. The computer image plan showed all the spaces and circulation in clearly defined colors with legible text, and the sketch model translated that plan into three-dimensional form with computer image prints attached to various facades showing realistic colors of brick, windows, patterns, etc. Once again the committee was given alternative choices and visual information they could understand, so they felt comfortable making choices of the fenestration scheme and option design.

The architects were nondirective; yet they listened and provided options for the committee. The options presented were creative and sensitive to the suggestions.

Consensus Building

This is a difficult process requiring skilled leadership. Even with the highly effective visual tools of computer imaging and models, the one key element in the entire process was the successful consensus building. The architects were nondirective, yet they listened and provided options for the committee. The options presented were creative and sensitive to the suggestions. The process of consensus building and brainstorming was time-consuming; however, the committee and the architects stuck to the time schedule. Although everyone had the opportunity without penalty to make suggestions and raise concerns, design solutions were not compromised.

Summary and Conclusions

The architects who designed this model middle school used a process in which they and their clients collaborated to design a model middle school. Many elements employed in the design process contributed to this success. Certainly a tight but un rushed schedule of planning sessions was one of the key elements. The schematic design process takes time on the part of the architect as well as school personnel. A compressed schedule of frequent (weekly) meetings, however, proved to be adequate and highly successful. Key elements in the process were visual examples of options provided by the architect at each meeting. These visuals enabled the school people to understand the effects of their decisions and heightened their enthusiasm for the end product. No detail was too small to merit discussion and note. The architects made careful note of each suggestion and each concern expressed by members of the planning committee. Thus, the process was a truly joint effort of architects and school personnel.

As is the case of every school building, the final test will come when the building is occupied and begins to serve children and teachers. This building, however, gives every indication of being the model middle-grade school the Charlotte Mecklenburg School System asked the architects to design. The present plans call for the building to be occupied in the fall of 1992. The architects and the advisory committee will tour the building at its opening and after the first year of operation to listen to faculty, students and staff to see what improvements can be made in the design for future middle schools. A formal post-occupancy evaluation should happen at the conclusion of any project in order to provide data on which to base future school plans.
North Carolina Gov. James G. Martin has proclaimed the week of April 14-20 as Architecture Week in the state.

The week is aimed at heightening public awareness of architecture and developing greater awareness of the built environment.

Several AIA North Carolina sections have scheduled activities during the week, including:

- Winston-Salem has organized a tour of the downtown area and scheduled a lecture on campus planning by UNCC dean Charles Hight.
- Charlotte has organized a downtown tour, will host a sand castle building contest downtown and has worked with its public television outlet for a rebroadcast of NOVA’s skyscraper series and an ensuing panel discussion.
- Asheville is hosting a group of visiting architects from its sister city in the Soviet Union.
- The Piedmont section is working on a use-and-development plan for a lower income neighborhood in Greensboro.

In The Works

**Snowdon and Associates** P.A., of Laurinburg has been selected by the Charlotte-Mecklenburg School System for a $2.7 million addition and renovation project, which will be handled jointly by the firm’s Laurinburg and Charlotte offices. The work will cover media centers and classrooms for four schools in the system. **H. Joseph Wynn, AIA**, of the Charlotte office will serve as project architect.

**Snowdon and Associates** also has been selected to provide design services for a complete exterior and interior renovation of the JFK Center at Fort Bragg. The Center is a six-story “corporate headquarters” building for Special Forces. The project will be handled by Snowdon’s Laurinburg office.

**CPAA** of Chapel Hill has been selected to design a clubhouse facility at the Twin Lakes Center, a retirement community in Burlington. CPAA also has completed work on a 50-unit garden residence project for the Carol Woods Retirement Community in Chapel Hill.

**The Lee Nichols Office** of South Carolina, James Lee Nichols Architecture,
has been awarded the Harcombe Dining Hall Renovation at Clemson University.

Shive/Bohm-NBBJ of Charlotte has been selected as the architect for the new Dining Hall/Student Center at The Asheville School, a private preparatory school in Asheville. The 24,000 square foot facility will contain a dining hall, snack bar, recreational areas and post office, and is located to connect with the new landscaped mall, developed as part of the firm’s Master Plan for the school.

Groundbreaking has taken place for the new North Carolina Biotechnology Center headquarters in Research Triangle Park. Designed by Shive/Bohm-NBBJ of Charlotte, the 47,000 square foot facility will contain the program management center offices and a major conference and education center.

Ramsay Associates, Inc., Architects, with offices in Raleigh and Salisbury, has been selected by Lexington City Schools to design a Development Center for Exceptional Children. The new school will serve children with special needs from Lexington, Thomasville and all of Davidson County.

Middleton, McMillan, Architects, Inc., and Odell Associates Inc., of Charlotte, have been selected as architects by the Federal Bureau of Prisons for the design of new facilities to be constructed in Butner. The new facilities, an expansion of the Federal Correctional Institute at Butner, will include a major medical center for the Federal Bureau of Prisons and will be a referral center for the Bureau’s prisons located in the eastern section of the country. The expansion will bring the inmate population at Butner to approximately 2,500. Middleton, McMillan, Architects originally designed the Butner facility in 1972.

Gunn-Hardaway Architects of Charlotte has been chosen by the Board of Trustees of Mayland Community College in Spruce Pine to design the school’s Student Activities Complex. This multi-phase project will include renovation and new construction to provide facilities for a 600-seat theater, classrooms and conference rooms for continuing education, child care facilities and shop areas for vocational training.

Awards And Recognition

J. Hyatt Hammond Associates Inc., of Greensboro received an honorable mention award in the 1990 Precast/Prestressed Concrete Institute’s annual awards program. The architectural and engineering firm was recognized for its design of the Jefferson-Pilot Parking Garage in Greensboro. Gantt Huberman Architects of Charlotte also earned honorable for its design of the CPCC Advanced Technologies Center. As was reported in the November-December issue, Odell Associates Inc., received a merit award in the same competition for the Charlotte/Douglas International Airport Parking Structure and Plaza.

Walter Robbs Callahan & Pierce Architects, PA, of Winston-Salem received an excellence in design citation from American School & University magazine for the Z. Smith Reynolds Library addition and renovation at Wake Forest University. The project, currently under construction, was one of just 21 to receive citations. It will provide a 50 percent expansion to Wake Forest’s existing 35-year-old facility.

Donald R. Lee, FAIA, of Lee Nichols Architecture, has been appointed as South Atlantic Regional Director of the AIA and will represent North Carolina, South Carolina and Georgia in various AIA activities. Lee, a former president of AIA North Carolina, begins his term as a SAR director in December 1991.

Randolph C. Henning, AIA, of Walter Robbs Callahan & Pierce, has been appointed to the Forsyth County/Winston-Salem/Kernersville Historic Properties Commission. His term expires in 1994.

Contributions to "Off The Drawing Board" should be mailed or faxed to Moore Marketing, 2200 West Main Street, Suite 510, Durham, NC 27705, fax 919-286-7799. All items regarding awards, recognition and projects in the works will be considered.
Ceiling System

Alcan Building Specialties Group has introduced the Metaline Ceiling System, a line of specialty metal ceilings for commercial use.

Metaline panels are available in aluminum or steel and are designed for use in hospitals, laboratories, cafeterias and other situations that require repetitive washing and a clean-room environment.

They are available in a wide variety of fashion earth-tone colors, and there is a fungus-resistant version called Woodlands Edge designed to combat the unsightly effects of high humidity and heat in the Southeast.

Manville Product Information Center, P.O. Box 5108, Denver, CO 80217. Phone 800-654-3103.

Roofing

Manville Roofing Systems Division has introduced its Woodlands Signature Series line of fiber glass shingles. Because of their bold textured appearance and more random architectural look, these laminated shingles are said to be ideal for both new construction and reroofing.

The shingles consist of layers of inorganic fiber glass mat, making them more durable, more dimensionally stable and more fire-resistant than organic shingles, earning UL’s highest fire-resistance rating, Class A.

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Manville Product Information Center, P.O. Box 5108, Denver, CO 80217. Phone 800-654-3103.

Computer Software

Wind-2 Software, Inc., has released a collection of reports, utilities and programs called Wind-Tools to supplement the management information of its Wind-2 financial management system.

The Wind-Tools collection includes 33 different tools that enable users to improve the custom characteristics of the Wind-2 system, which is aimed at architects, engineers and other professional consultants. Each Wind-Tool performs a different management function or provides a management report not already included in the Wind-2 system, allowing companies to customize reports unique to their particular management styles.


Lighting Fixture

Visa Lighting now offers a new Outdoor Four Bar Sconce lighting fixture. It features a 100 percent virgin white acrylic one-piece lens, can accommodate incandescent or fluorescent lamping and is UL listed. The top and bottom of the fixture are translucent, and
vertical or horizontal placement may be used in mounting.
Visa Lighting Corporation, 8600 West Bradley Road, Milwaukee, WI 53224. Phone 414-354-6600.

Whirlpools
American Standard has introduced a collection of whirlpools and bathing pools it bills as the first complete line in the industry to reflect the international design trends toward sculptural, asymmetric shapes and styles.
The new Symphony collection includes eight acrylic whirlpools with soft shapes that are formed to cradle the human body. Each model is a different blend of four geometric elements: circle, arc, wave and straight line. Sizes range from 60x34 inches to a 74x62-inch side-by-side model for two. All models are 20 inches deep. One is a pure oval shape while another is a corner model.
Robin Levien of Queensbury Hunt Partnership of London designed the collection, along with its complementary line of faucets and accessories.

Wiring Devices
Power, voice and data feeds can be made from the same box with Hubbell's new versatile plastic floor box for concrete floors three inches thick or more.
The round floor box is molded from nonconductive, noncorroding PVC. It has a depth of three inches, a diameter of five inches and a volume of 100 cubic inches for extra wiring room.
As a three-service feeder, the plastic floor box has an optional patent pending low-voltage divider that slides into the box. Power cables are fed through a tube in the divider and are wired to a duplex receptacle in the insulator cradle. Data and communications wiring runs outside the divider tube. An adapter ring permits precise leveling of the floor box and facilitates future retrofits.
Users have a choice of styles in thermoplastic, brushed brass or aluminum covers. Above-floor service pedestals are available in brushed aluminum with stainless plates or thermoplastic.
Hubbell Incorporated, Wiring Devices Division, State Street and Bostwick Avenue, Bridgeport, CT 06605-0933. Phone 203-337-3100.
The Charlotte Section AIA Design Awards for 1990 were presented in December, with Honor and Merit Awards selected in both the built and unbuilt categories. Three distinguished professionals juroried the program this year: John D. Rogers, FAIA, of Rogers/Dameron Associates of Asheville; Lynn Nesmith, senior design editor for Architecture magazine; and Dr. Joseph Golden, president of the Spirit Square Center for the Arts and former executive director of the Cultural Resources Council in Syracuse, N.Y.

### Honor Award
**Built Category**

**David Furman Architecture**

**Buckingham Station**

*Richmond*

A 358-unit apartment project that attempts to distinguish itself from other typical large rental unit developments by bringing a sense of order and focus to a planned community. Located on a heavily-wooded 50-acre site, the project features a Lodge Building as its centerpiece. The X-shaped Lodge consists of four separate buildings plus a clubhouse building combined into one structure. The core of the 4-story Lodge includes administrative, recreational and entertainment facilities on the first two floors and luxury penthouse apartments on the top two floors. Typical individual units form the arms of the X.

### Honor Award
**Built Category**

**J.N. Pease Associates**

**Mecklenburg County Intake System**

Located between the County Jail and Criminal Courts Building, and connected to both by a security tunnel, the Intake Center streamlines the movement of an arrestee through the booking and judicial process by housing representatives of all criminal justice agencies within one facility.
Merit Award, Built Category
David Furman Architecture
Runaway Train, Inc., Office Renovation

Located in a designated historic district, this renovation provides a transition in scale from adjacent large office buildings to single family housing in the same neighborhood. Built in the early 1900s as one of the area’s grand houses, the structure’s renovation work began in January of 1989. Interior alterations were designed to provide maximum natural lighting and an open working environment. Features include multiple skylights and gables full of glass, a full height metal stair, stained glass accents in windows and custom casework.

Honor Award
Unbuilt Category
Calloway Johnson Moore, PA
Guilford County Middle School

Under construction near High Point, this 125,000 square foot school will accommodate 800 sixth-through-eighth graders upon its completion in 1992. The basic design was generated in response to the site, which features a heavily-wooded northern portion and a generally flat, open southern portion separated by a line of mature red cedars running east to west.

Merit Award, Built Category
Odell Associates
N.C. State University Centennial Center

Scheduled for 1994 completion at a cost of $52 million, the Centennial Center is a multi-purpose arena that will house the university’s basketball team and serve as a regional center for the Friends of the College Artists series of concerts, drama, dance and international performances.

Merit Award, Built Category
Odell Associates
Charlotte/Douglas International Airport Parking Structure & Plaza

This parking structure is the new facade of the airport expansion program, which is being built in phases. It consists of two separate structures around a grand plaza that serves as the focal point of the airport entry.
Equivalent Thickness and Fire Resistance of Typical Solite Lightweight Aggregate Concrete Masonry Units.

"Equivalent Solid Thickness" is the average thickness of the solid material in the unit, and is used as a criteria for fire resistance. We can compute Equivalent Solid Thickness by this formula. If Ps equals percent solid volume, T equals actual width of unit, then equivalent thickness, 

\[ \text{EQ. TH.} = \frac{T \times Ps}{100} \]

If this 7% Hollow Unit has 52% solid material, Then its Equivalent Solid Thickness is

\[ \frac{7.62'' \times 52}{100} = 3.97'' \text{ (2 Hour Rated)} \]

FIRE RESISTANCE RATINGS BASED UPON MINIMUM EQUIVALENT THICKNESS OF CONCRETE MASONRY UNITS.

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*UL618 "Standard for Safety—Concrete Masonry Units" specifies strength, mix composition and dry rodded density of lightweight aggregates—(blending of natural aggregates compromises fire ratings) Full scale fire tests in accordance with ASTM E-119
**Estimated Ratings—"Tests of the Fire Resistance and Strength of Walls of Concrete Masonry Units", Portland Cement Association 1934

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(804) 288-7712

Top Photo: Alamance Community College Haw River, NC

Middle Photo: Sherwood Guthens Middle School Durham, NC

Bottom Photo: Wayne Community College Goldsboro, NC

Architects:
Six Associates, Inc. — 1974 Asheville, NC
Boney Architects, Inc. — 1987 Wilmington, NC

Architect:
Depasquale Thompson Wilson, Architects LTD. Durham, NC

Architect:
Hayes, Howell & Associates Southern Pines, NC