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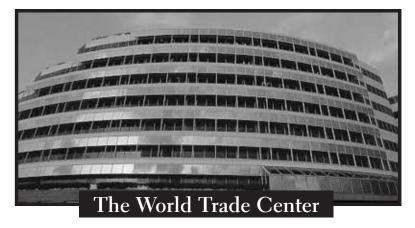
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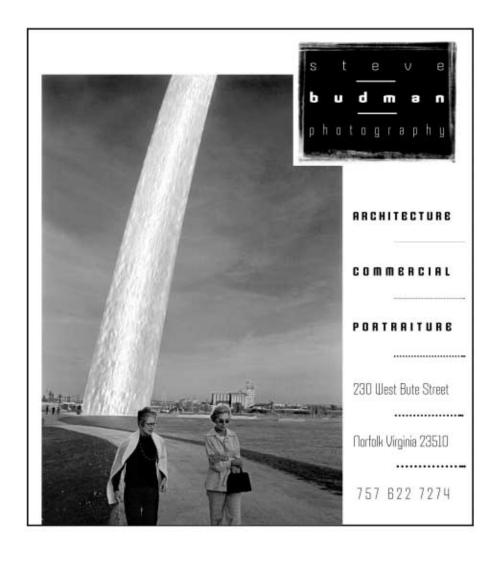
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SUCCESSFUL STRATEGIES A B E T I E R



When we founded Hargrove, Brockwell and Associates Inc. in 1974, our strategy for building a better future simply was to provide good service to our clients. For more than 27 years, providing good customer service has been our guiding principle: We strive to help our clients make informed decisions about their projects; we endeavor to give our clients more than they expect through inventive design; and, most importantly, we seek to develop long-term partnerships with our clients.

We generate more than 80 percent of our current projects from repeat customers. By forming partnerships, we understand more fully our clients' ever-changing business environments and their goals and objectives. Thus, we respond to their needs more quickly and more efficiently.

HBA delivers projects on time and within budget

We look at architecture and its related disciplines as tools to help our clients solve their architectural challenges. We look at the uniqueness of each project, and, after listening carefully to our clients' wants and needs, we design and build projects that exceed their expectations. And we deliver those projects — each with a "something extra" — on time and within budget.

HBA is on the forefront of technology

The landscape has changed drastically since we formed HBA more than a quarter of a century ago. Our quest has been to stay abreast of change. Our vision in 1974 incorporated the three disciplines of architecture, engineering and interior design. Today our vision also includes facilities management, planning, interior architecture and design-build. We also provide structural engineering services.

To meet the demands of today's fast-paced environment, HBA is committed to the continuing education of our staff. They are our greatest resource. They offer each project a wealth of talent, knowledge, experience and enthusiasm. They eagerly integrate new design technologies, methods and materials into our clients' projects.



From left: Dan Brockwell, Bill Hargrove, Steve Childs, Bruce Prichard and Buddy Sivils strive to maintain HBA's reputation as a hands-on, proactive architectural firm that offers design-build services. This has earned HBA a repeat client base of about 80 percent and achievement awards from professional associations and community organizations.

While HBA is on the forefront of technology, the firm draws upon its tradition of service and uses that new technology to enhance its relationships with its clients.

Spend a few minutes with HBA. Learn more about our strategy for success, our commitment to our communities and our willingness to push the design envelope . . . then call us. HBA is ready to help you solve your architectural challenges.

Sincerely,

Bill Hargrove

Dan Brockwell

Bill Hargrove

Dan Brockwell

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The renaissance of the master builder

Until about 100 years ago, a master builder — such as Frank Lloyd Wright — had control of the design, engineering and construction of a new or renovated building. He was one of the most respected men in the community. But as technology evolved, the master builder gradually disappeared. Specialists took his place as building techniques and requirements became more sophisticated.

"The industrial revolution led to what is known today as the design-bid-build project delivery system," says Stephen Childs, vice president of the design-build arm of Hargrove, Brockwell and Associates Inc. "That method offered owners and developers a three-step approach — design, bid, build — but the architect and contractor each worked in a 'vacuum' and had little or no communication with each other during the design and bidding phases. Projects often were awarded to the lowest bidders. For years, many

"When HBA designs and builds
a facility, there is no
adversarial relationship between
the two disciplines."

people believed that the design-bid-build approach and sealed construction bids were the most economical and fair way to award construction contracts."

But that methodology led to inefficiencies, increased errors, higher costs, drastically increased change orders and longer construction times for projects in both the private and public sectors. "Those are the negative effects on projects awarded on the basis of purely competitive bids," Childs says. "As a result, the industry is returning to design-build and the concept of the master builder is enjoying a renaissance."

Design-build offers a single source of responsibility

The pendulum began to swing about 15 years ago. According to a 1997 survey, by the mid-1990s more than half of the public agencies in the United States awarded design build contracts. Congress had enacted legislation authorizing federal contracting officers to use the design-build project delivery system in the public sector.

The survey also revealed two critical keys to successful construction projects:

- A knowledgeable, trustworthy and decisive facility owner/developer and
- A team with relevant experience and good chemistry assembled as early as possible but before 20 percent of the project design is completed.

Allan "Buddy" Sivils, Child's counterpart, says, "Our designbuild clients already are our design clients. That makes our rela-



From left: Dan Brockwell, Steve Childs and Bill Hargrove discuss a recent study that says, on average, projects delivered using the design-build project delivery system cost 6.1 percent less than similar projects delivered under the design-bid-build project delivery system.

tionship — the owner/developer, the contractor (HBA) and the architect (HBA) — more effective. And HBA is one of a very few single-source design-build firms. We are one-stop shopping."

Childs says the team approach is crucial to successful projects. "We listen to our clients and get lots of input from them. We offer owners and developers a seamless, faster and more cost efficient approach to design and construction."

He adds that finger pointing between designers and construction contractors has become outrageous. "When HBA designs and builds a facility, there is no adversarial relationship between the two disciplines," Childs says.

"The construction side gets involved in the project early on," Sivils says. "We monitor the budget and provide constructability input from day one. If a design is too fancy or too costly, we tell the design side the concept won't work and suggest alternative ways of achieving the same results that are less expensive."

Another advantage of design-build, Childs says, is that as the construction contractor HBA can preorder materials before the drawings are complete. "Our overall understanding of the project is increased because we're so involved. We don't have to learn in one week what the architect spent four months learning."

"We've literally built the project in our heads during those

four months," Sivils says. "We significantly reduce the amount of errors and omissions."

Design-build is value-added construction

A recent study shows that, on average, "projects delivered using the design-build project delivery system took 33.5 percent less time to deliver."

Childs says HBA constructed Beach Eye Care on a very compressed schedule. "This facility is a great example of the expediency of design-build. Dr. Neitrourer needed the building completed on a tight schedule. Since the design side of our firm and the build side of our firm have a great, intuitive relationship, and because we were involved from day one, we were able to make decisions, place orders and begin construction very early on in the design process. The scheduled completion date would have been out of reach without the design-build program."

He says as the build side completed each phase of construction, the design side gave it the next detail. "We were in constant communication with them. We'd say, 'In 10 days we'll need....' and it was there. In other situations, that could have been a disaster."

The study shows, too, that, on average, units delivered using the design-build project delivery system cost 6.1 percent less than similar projects delivered under the design-bid-build project delivery system.

Childs says design-build allows the cost of a project to be controlled more effectively. "Through constructability reviews, value engineering and budgeting, we provide owners with a tremendous amount of cost data then guide them through the decision process. What they end up with is the best overall mix of cost, design and quality. Design-build limits mistakes and provides a greater return for our clients' dollars. Design-build gives owners far more than what we could achieve by the conventional design-bid method."

For example, the exterior façade or skin is one of the most expensive and one of the most controllable costs of a project. "We work with the design professionals and key subcontractors to come up with the best exterior for a building. We look at durability, design, constructability and cost," Sivils says.

"Perhaps our architect has specified a certain brand for the heating and cooling system. Our subcontractor might know that company is having problems and recommend a competitor. We intensely manage the entire process and work to maximize value," Childs says. "The owners get 100 percent of the savings."

HBA offers clients a smorgasbord of options

HBA's design-build uses the open-book method of accounting. "We offer our clients a smorgasbord of options — a cafeteria plan — on how we can cost out their projects. The owners always know where they stand."

With cost-plus, HBA negotiates its fee and the costs are the costs. A tighter version is a guaranteed maximum price. HBA devel-



Just as the industrial revolution altered construction methods more than a century ago, technology plays a vital role on today's job sites. And HBA is leading the way.



Jean-Claude Guilbaud and Jimmy Nugroho approach is crucial to successful projects. Design-build offers owners and developers a seamless, faster and more cost-efficient approach to design and construction.

ops a budget — cost, plus fee — and the total project is completed within a design maximum.

The third option is the stipulated sum contract — 100 percent pricing. HBA agrees to the price and that's it. "If it costs more, it's our problem," Childs says.

"There is a misconception that the first two options are not competitively bid. People are worried the prices are not competitive. On the contrary, we solicit bids from three subcontractors in every trade category then evaluate the subcontractors for price, responsiveness and completeness. We want to guarantee the best mix of price, schedule availability and ability to perform on the type of work. We look for the best overall subcontractor. That's a competitive bid," Childs says. "And we don't play games with our subcontractors; we commit to the lowest, responsive bidder."

Good subcontractor relations are key to a successful project

"Contractors don't build projects, subcontractors do. Much of what determines the success or failure of a project is in the hands of the subcontractors. A large percentage of our effort is directed toward finding and maintaining excellent subs. We know what to expect from them and they know what to expect from us. The combination of good management and quality subcontractors is key to the success of all projects," Childs says.

Sivils, with more than 30 years' experience in construction in Hampton Roads, says subcontractors have a comfort level with HBA. "We treat them right and we have high expectations. We always want to take the high road. It's the better way. We're busy proving it's possible to be a contractor and still have integrity."

Technology revolutionizes the construction industry

Just as the industrial revolution altered construction methods more than a century ago, technology plays a vital role on today's job sites. And HBA is leading the way.

"We use the latest technologies, including Web-based cameras on our job sites. Owners can log onto our Web site and see real-time progress," Childs says.



Douglas Williams

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Energy-conscious designs stand the test of time

"Preserving our natural resources is a responsibility HBA takes seriously," says Larry Weinstein, an associate with the firm. "Buildings account for nearly half the energy consumption of developed countries. They are a major contributing factor to global warming, which is one of the world's most urgent environmental problems. By implementing 'green' design principles, HBA can create buildings that are less taxing to the Earth's resources."

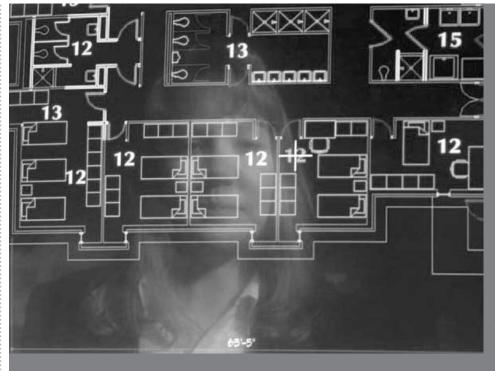
To ensure the firm adheres to green principles, Weinstein developed a checklist. "The designs really are nothing new. Responsible architects have been practicing these techniques for centuries. We want to ensure that our designs, details and specifications respond to our commitment to sustainable design and that the elements are addressed in our specifications and contract documents."

"We can do so many things that sustain the life of a building and simultaneously preserve our natural resources."

Weinstein says the terms "sustainable design" and "green building" are synonymous. The federal government uses a green building rating system known as LEED — Leadership in Energy and Environmental Design. "The basic concept is that we not destroy the ecology. We can do so many things that sustain the life of a building and simultaneously preserve our natural resources."



Joe Bovee (left) and Larry Weinstein (right) say preserving the Earth's natural resources is a responsibility HBA takes seriously. Sustainable design is nothing new; it's a rethinking.



Buildings account for nearly half the energy consumption of developed countries. They are a major contributing factor to global warming, which is one of the world's most urgent environmental problems. By implementing "green" design principles, HBA can create buildings that are less taxing to the Earth's resources.

Proper orientation reduces heating and cooling costs

Although he acknowledges that the proper orientation of a building isn't always possible, it's a basic principle that should be a top priority. "A building that is oriented for southern exposure in the morning doesn't place the greatest heat load on the building during the middle of the day," he says. "And the western sun on the broad side of a building will burn it up. Mechanical consultants will overcome the heat load by adding lots of extra systems, but that drives up the initial construction costs, as well as the monthly heating and cooling bills."

Weinstein says the use of landscaping materials can help by shading a building from direct sunlight.

He says using native plants reduces the need for soil amendments and irrigation. "If soil amendments are needed, we urge people to consider the use of biosolids and sludge from wastewater treatment facilities."

For irrigation, he suggests using bubbler systems and avoiding high-pressure misting sprinklers. "Use soaker hoses made from recycled rubber."

Energy-efficient lighting lowers electricity usage

Weinstein encourages the use of the most efficient lighting system appropriate to the given application. Offices can be lit appropriately with daylight, energy-efficient light fixtures and task lighting.

Place windows such that they maximize interior lighting and minimize glare and overheating.

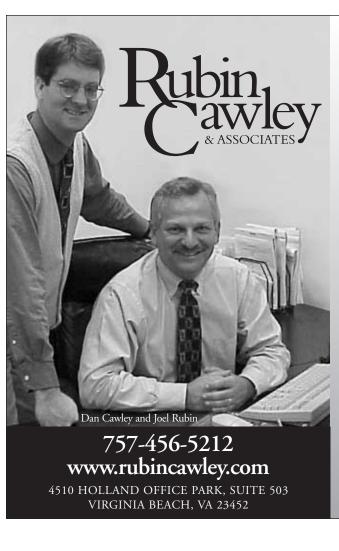
"Low-E windows have much higher visible light transmittance than reflective windows," Weinstein says. "And some utility companies offer rebates on window coefficients. Qualifying coefficients range from .30 to .75. Lower numbers transmit less energy."

Don't flush away natural resources

Showerheads with manual shut-off valves and infrared sensors, water-conserving toilets and urinals, and water-saving dishwashers and washing machines offer substantial water conservation. "The Energy Policy Act of 1992 set maximum water-flow standards for many plumbing fixtures. Many of today's products use less water than allowed a decade ago," Weinstein says.

"To conserve water, the federal government is considering the use of waterless urinals. And appliances are being redesigned to use much less water than earlier models." He advocates the use of self-closing, slow-closing or electronic faucets for high-use public areas where people may be careless and leave the water running.

Another water conservation measure the federal government has implemented is the use of rainwater. "Some buildings collect rainwater rather than let it dissipate into our waterways. The water is recycled for use in toilet systems," Weinstein says. "That's the sort of thing we want our clients to consider. That's sustainable design — nothing new, just a rethinking."



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HBA pushes the technology envelope with the U.S. Navy

HBA has a longstanding history with the United States military. As early as 1974, HBA's architectural talents began to take shape on military installations along the U.S. eastern seaboard as well as in Guantanamo Bay, Cuba, and Puerto Rico.

"HBA has designed many types of military facilities, including airplane hangars, housing complexes and schools," says Bill Hargrove. "Officers stationed at Guantanamo Bay live in quarters that offer a spectacular view of the bay. Submariners specializing in firefighting and damage control train in a state-of-the-art facility at the Norfolk Naval Base. Design work for the Antilles Intermediate School in Puerto Rico, a 600-student facility, was recently completed, and three new operations, maintenance and storage facilities are under construction in Camp Lejeune, N.C., for the Marine Corps."

The FACD streamlines military construction projects

HBA delivered each of those projects on schedule and on budget partially because of the successful application of a new delivery procedure, says Joe Bovee, an associate with HBA. "Historically, it took the government three to four years to write the building program, hire design professionals to develop construction documents, redesign the project at 90 percent because of changing needs, then finally approve the plans for these kinds of projects. The actual construction was at least another 18 months. Furthermore, despite this lengthy process, when their doors opened, the buildings didn't fit the military's needs because the users had not been invited to participate in the buildings' designs."

Today there's a better way. The FACD — Function Analysis Concept Development — streamlines design and programming approval procedures through a two-week process, thereby reducing potential project redesign.

To facilitate the FACD, the HBA design team gathers together the necessary consultants, as well as those who will use or be responsible for the building, including the base commander and the custodial staff. HBA's design team identifies and works through every project issue, typically developing and presenting four concepts that reflect the group's decisions and conclusions. "It is a very intensive two-week process. We spend a lot of late nights trying to solve complex design and budget problems. But it is a new and exciting way to deliver a project," Bovee says. "FACDs eliminate redesign time and the clients value the opportunity to participate."

The HBA design team was skeptical when the Atlantic Division Naval Facilities Engineering

Command first suggested this methodology. The design team worried about participation and the ability to formulate a consensus on the many intricate design issues. "But we've completed six FACDs," Bovee says. "Now it's a science — we're better at facilitating the FACDs and, as a result, the military is able to respond better."

HBA raises the bar for presentations

Each FACD involves HBA's design team "moving" to the military installation for two weeks. "Monday morning we present our first concept, which is based on the preliminary details we have received," Bovee explains. "Then we generate discussion by asking a lot of questions and listening. We gather their input and work Tuesday and Wednesday to produce a second concept that we present Thursday morning. That scheme is further developed, and by the fourth presentation, we have a solution that fits the budget and needs of the users. In two weeks time, we have assembled the puzzle pieces and the final concept is officially 'signed-off' on."

Because the HBA team uses the latest in graphics and estimating software during this process, the design team is able to redesign, estimate and present a new concept every third day using both computer-generated projection and paper formats.

"One of the technologies we take is a sensitized 'Smart Board®.' We can present drawings and pictures, highlight them and draw over them on the board. The presentation is not static and people connect to that. The Smart Board® makes it easier to identify critical points and look at the options," Bovee explains. "If you interact graphically and verbally, people don't forget."

FACD saves the government from costly mistakes

HBA's facilitation produces substantial results. For example, during the last FACD, HBA moved the location of a new hangar at Cherry Point Marine Corps Air Station from the initial programmed site and saved the government more than \$2 million.

"The original design called for an airplane stripping hangar to be built above a hub of underground utilities. Using that site would have required moving the utilities at a cost of more than \$2 million. By using the FACD, we brought together all of the users and solved the problem," Bovee says. "The process allows us to give the military buildings extra design features — on schedule and on budget."

LANTDIV was so pleased with HBA's performance and efficiency that it nominated the firm to receive an award from the Pentagon stating that the firm has "saved" the government more than \$19 million in building design and construction costs.

In a letter of *Recognition of Outstanding Performance* presented to HBA, William H. Crone wrote, "Expectations of the FACD were exceeded in every way...Great job by your staff; you've raised the bar."

HBA is on the forefront of new technology

Because of its reputation for technological competency, LANTDIV invited HBA to be the lead architectural firm in a pilot program for a new process of delivering construction documents for review, bidding and construction.

"The new Electronic Bid Solicitation process will replace the old paper standard," Bovee says.

The EBS process uses Adobe® Acrobat® to convert computer-assisted design documents, word processing documents and scanned images into a digital portable document format. The PDF files are consolidated into one file and 'book-marked' electronically.

"PDF files allow everyone quick reference to an entire project's drawings, specifications, calculations and data from one easily stored location, whether it is on a project Web site or on a compact disk. It also provides reviewers and designers a central place to leave comments, responses and professional stamps," Bovee says. "The savings in printing costs and time are significant as well, especially for the large projects."

Crone explains, "The days of entire hallways being filled with plans and specs are going to be a thing of the past. No longer will we spend countless hours distributing enormous amounts of paper. This new process is going to change everything."

HBA delivered the first EBS project to LANT-DIV for final technical analysis November 2000.

"HBA has made a huge commitment to staying on the leading edge of technology," Bovee says. "That makes a big difference in the way we do our job."



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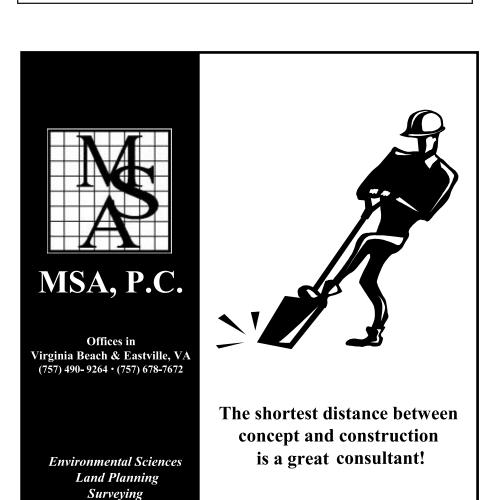
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HBA school designs earn an A+

"Many teachers say they can teach anywhere," says Dan Brockwell. "But HBA wants more for their students. We want to enhance those learning environments. Since no municipality has enough money to do what it really wants to do, our challenge is to design schools that not only enhance classroom learning but also are cost effective."

HBA's design solutions recognize and respond to the current criteria and facilitate a school's expansion and evolution in cost-effective ways. "Our designs envision the education program as a master plan. Such designs allow for growth in the student population and evolve in a logical and efficient manner as educational programs change," adds Michael Ross, head of the Educational Design Studio.

Schools are lifelong learning centers

"Our designs also allow spaces to be used for multiple educational programs," Ross says. "Learning spaces that sit empty during one or more periods during the school day are a burden on the overall efficiency of the facility. The ingenuity to design flexible facilities and multiuse spaces is even more critical when a school program encourages a variety of learning environments, such as individual study, small group discussions or large group presentations."

One of the most exciting learning environments is the concept of lifelong learning. "More and more schools are forming community partnerships that include workforce development programs," Ross says. "These after-school programs sometimes create opposing programmatic needs that must be resolved efficiently without the loss of security and control for each use."

Incorporating these elements is the key to designing today's successful educational facility.

HBA creates a wave of fun

Success also means having a little fun with the designs, too. "My favorite current project — the one I'm the most excited about — is the modernization of Malibu Elementary School in Virginia Beach. We were able to incorporate some interesting design features to make learning fun."

The school's mascot is a surfer on a wave. Ross designed the entrance canopy with a wave motif. "The inside main hallway separates the media center and the cafeteria and is a serpentine 'wave' with built-in display cases. We tried to create a fun environment and play on the school's theme. We added excitement by going outside the box. We took something that is precious to the students, the faculty and the staff and weaved it into the theme of the architecture."

HBA designs earn high marks

Brockwell says aesthetics are important when designing schools, "but function comes first." He says HBA's strategy to addressing function is simple — elicit input from the stakeholders who will be impacted by the project and listen.

As a result, several school designs have become prototypes for their locales. "The design of our first school — Rosemont Forest Elementary School — in the early 1980s became a prototype for elementary schools of that generation in Virginia Beach," Brockwell says.

"And in neighboring North Carolina, Mike Ross designed the



Bill Hargrove (left) and Mike Ross (right) reflect on the firm's "trial by fire." Days before the 1995 school year was to begin, an arsonist set Princess Anne High School ablaze. The damage totaled \$7 million. HBA had people working night and day and students returned to the undamaged portion of the school just four days late.

prototype of an elementary school that features sloping roofs, economical construction and durable materials. The plan is flexible enough to allow for student growth without requiring major changes to the overall design."

"Our designs envision the education program as a master plan. Such designs allow for growth in the student population and evolve in a logical and efficient manner as educational programs change."

HBA is a good steward of public funds

HBA understands that school boards are accountable to their communities. "The citizenry expects a school board to spend public funds wisely. HBA strives, with each design, to maximize the efficiency of each building. We are good stewards of public funds," Brockwell says.

In North Carolina, one municipality received an emergency \$2 million grant to renovate two schools. "The challenge was to combine a 1950s elementary school with an adjacent 1930s high school and create a middle school," Brockwell says. "We provided a façade that united both units and made it look like one school."

HBA's good deeds have not gone unnoticed. The Virginia Department of Education awarded HBA the commonwealth's highest honor for HBA's most recent new high school in Williamsburg-James City County.

HBA faces a trial by fire

Days before the 1995 school year was to begin, an arsonist set Princess Anne High School ablaze. The fire consumed 28 classrooms, a newly renovated library, computer labs, the cafeteria and administrative offices. The damage totaled \$7 million.

"The school board called us right away. We were right there beside the fire trucks," says Bill Hargrove. "The next day the school system asked us to coordinate the planning for the school's immediate and long-term needs."

It was an enormous task. "It was exciting, demanding and unique. This was a true emergency situation. We had to do what we had to do to keep the school operational. We had people working night and day," Hargrove says.

Asbestos was a problem. "We couldn't go into asbestos-filled areas. We had to train people immediately to assess the real damage and determine what could be saved. Structural engineers told us what we had to do."

Within a week, HBA had completed drawings to house some of the school's functions in a nearby vacant mini-mall and had worked closely with contractors and city work crews so that students could return to the undamaged portion of the school just four days late.

"Time was of the essence," Brockwell says. "Four months later, a restored and enhanced Princess Anne High School reopened."

HBA did more than just put back what an arsonist had burned. "We widened the corridors, gave the school more light and provided better working arrangements for classrooms, the art rooms and the library," Hargrove says. "We asked lots of questions, provided a unique perspective and improved the students' working spaces."

The exterior architecture is not glamorous, Ross says. "We had to make it compatible with the existing exterior. But it was exciting to work with the school administrators, the teachers and the insurance company. It was very challenging."

The important part, Hargrove adds, is that the students didn't lose a day of instructional time.

And the bottom line, adds Ross, is that schools can provide quality environments for learning when the designer establishes a partnership with the educators.



A design competition shapes the future of education

Imagine a high school six stories tall. Farfetched? No — just out-of-the-box thinking. Imagine high school students using "smart cards" to check out library books, access their schools' media centers and buy lunches. Farfetched? No. College students have used this technology for years.

The high-rise school and the smart card application are two of the ideas high school students would like to see incorporated into the "School of the Future." For two years, HBA, in cooperation with Virginia Beach City Public Schools, has invited Virginia Beach high school students to design their ideal schools. The competition challenges the students to develop fresh ideas about how classes should be taught, school buildings designed and educational tools used.

"More than 20 teams last year and 100 teams this year of up to four students each accepted the challenge to conceptualize ways to improve learning. Their ideas ranged from new designs for facilities and educational tools to substantial changes in the educational process," says Michael Ross, lead architect for HBA's Educational Facility Design Studio.

With more than 15 years' experience designing schools, Ross says the design competition is a byproduct of his interviewing students. "When I start the design process for a school, I interview everyone — all the shareholders, including the teachers, the prin-

cipal, the custodian and select groups of students. Over the years I found that the student sessions were more informative and on point than the other sessions. If it's an existing building, the students have a clear understanding of what's wrong and what needs to be improved," Ross says.

"The competition challenges the students
to develop fresh ideas about how classes
should be taught, school buildings designed and
educational tools used."

Students offer a fresh perspective

"We have tremendous respect for how young people view their educational environment. They have firsthand experience with the way the building design, teaching tools and methodologies impact the quality of their education. Having grown up with the technology revolution in the classroom, their ideas are fresh and relevant."

He notes an interesting commonality among the entries. "Students tend to want more structure in their environment. They're concerned about security issues and they want supervision. They see freedom as derived from a controlled structure."

He adds, "Kids think outside of the box when planning and organizing their educational environment. Teachers think of everything in terms of their classrooms — the number of feet of shelving they need, where the blackboards should be placed. Kids have a much broader view. They are very aware of the educational process. They want to be interactive and not just on the receiving end. They get a kick out of contributing and I enjoy learning from them."

In addition to awarding cash prizes to first-, second- and third-place winners at each high school and cash prizes to first-, second- and third-place citywide winners, HBA invites selected students to participate in mentorships. "We bring the students into our office and let them work with us to integrate their ideas into current school projects," Ross says.

HBA intends to publish the students' ideas in a book that the firm will make available to decision makers in the community. "Who knows?" Ross says, "Maybe someday high school students will use smart cards to check out our book at the library."



FROM THE COAST TO THE CAPITOL

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We look forward to the opportunity to work with HBA Design Build Services, Inc. The design build method of construction fosters teamwork because of the selectivity of qualified subcontractors. Communication between the builders and designers is positive and timely. Team Masonry will be working very hard to become a starter on the HBA Design Build Team.

Interior architecture redefines the working environment

Flexibility is the buzzword for today's corporate offices. "The trend is workstations that employees can tailor to individual job requirements," says Bruce Prichard, a principal with HBA who heads up the firm's interior architecture and facilities management consulting departments. "A second trend is to incorporate different types of work areas into a facility's overall design. Work often takes place outside of traditional offices and workstations and spills over into break rooms, hallways and informal meeting areas."

As a result of a more relaxed working atmosphere, private offices are becoming a tradition of the past. Prichard says that trend allows HBA to use one of its most important design tools — daylight.

"We try to bring daylight into the office environment whenever possible. It's much better to have open spaces around a floor's perimeter and closed spaces toward the interior."

Two recent projects that successfully defied tradition are the corporate offices of Royster Clark and Norfolk Southern Corp. "We opened those exteriors, used systems furniture and lots of glass in the interior walls so that daylight will come into the interior spaces," Prichard says. "It was a pleasant change. Now it's not so dark."

Prichard says eliminating closed offices has functional advantages, too. "Workstations promote better communications among workers — no one can hide behind a closed office door."

A resized workforce calls for interior architecture

Interior design is more than furniture and furnishings, Prichard says. "HBA's work focuses on the corporate world. We primarily design the working environment — whole workspaces — and incorporate interior design with interior architecture. We don't treat interior design as a separate discipline."

The firm specializes in both new construction and renovating existing spaces. "Our first interior architecture project was in the late 1970s — the Portsmouth City Hall. Our current workload is about 80 percent renovation and 20 percent new construction."

Prichard says a huge work place issue is dealing with resized workforces. "When Sovran Bank and NCNB merged to create Nation's Bank, now known as Bank of America, it consolidated the credit card service and moved the operation to Hampton Roads. Within about 18 months, we had completed a fast-track reorganization of the bank's Norfolk complex and reduced the bank's occupancy by about 24 percent."

HBA renovated about 550,000 square feet of space and 2,700 workstations. "The project included more than 100 moves without the bank losing a single day of work," Prichard says.

Another interesting renovation involved Royster Clark. "That project was interesting because of timing. Our client was in the process of merging two entities and creating a new organization when it asked us to begin redesigning its workspace. Because the consolidation had just been announced, the management team was sorting through workflow issues," Prichard says.

HBA listened to the firm's needs to anticipate how the new entity might conduct business. "We prioritized what was most critical and worked with the management team until the design made sense," Prichard says.



Mike Winner says daylight is one of the most important interior design elements in today's corporate workspaces. HBA's strategy is to bring daylight into the office environment whenever possible.

Drywall dusts covers everything

Transforming older building into brighter, lighter and more productive workspaces energizes HBA's interior design team.

"I like solving problems," Prichard says. "I enjoy getting to know my clients and doing things to make their work environments more pleasant and more efficient. It's nice to see a completed space after months of drywall dust."

Facilities management consulting

Facilities management consulting provides good customer service

Communication is the primary reason for the success of any project. Facilities management consulting is no different. "Our desire is to meet our clients' needs," says Bruce Prichard. "For many of our clients, providing good customer service means managing the complexes HBA has designed and built."

Facilities management for those clients encompasses many issues, but can be categorized into three main areas: Strategic planning, record keeping and building systems assessment. All require good listening and communication skills.

Strategic planning improves a building's efficiency

"Strategic planning for a building means understanding an organization's long-term plans. That helps us assess how a company uses its real estate assets, define any inefficiencies and determine ways to make the buildings more efficient," Prichard says.

Record keeping includes maintaining such information as rent records, a building's plans and an inventory of the uses for the building's spaces.

"Whether it's a multi-tenant office building or an owner-occupied facility, we inventory all aspects of a building, including who occupies each office and those lease rates," Prichard says.

"Because projects produce vast amounts of large-scale drawings, we condense our working drawing into books that show the layouts of each building. The books are easier to read and help management with day-to-day operations." Manageable drawings are especially important for owner-occupied buildings in terms of internal rent allocations.

HBA identifies air quality issues

The third most common area of facilities management is the assessment of building systems. "We are consultants for several large

complexes. When we assess building systems, we evaluate all "systems," including a building's exterior skin, its egress paths and life safety issues. We also work with owners and consultants on air quality issues," Prichard says.

Air quality is an emerging area of scientific investigation. According to the American Lung Association, 20 percent of all commercial buildings have unhealthy air, which results in workmen's compensation claims and litigation.

Prichard says assessing building systems is pretty straightforward. "When problems exists, they usually are apparent and we facilitate the repairs."

Prichard says HBA's expertise in facility management consulting comes from its long history of listening to its clients. "We understand their needs and we know how to convert data into useable forms. That enables owners to manage their projects and facilities more efficiently."



HBA: Leaders and partners in creating your community

HBA has made a commitment to the community to be responsible corporate citizens. It has demonstrated that commitment through sponsoring community events, such as the Neptune Festival, the SandSoccer program, which is the forerunner of the North American Soccer Championships, and the School of the Future, a design competition for high school students. The firm has donated money to area scholarship funds and it has donated tens of thousands of dollars of in-kind services to area nonprofit organizations.

"Every year the firm picks a community project," says Dan Brockwell. "When an arsonist set Princess Anne High School ablaze just days before the school year began in 1995, we donated about \$40,000 worth of services to the school system."

"The firm has donated tens of thousands of dollars of in-kind services to area non-profit organizations"

Other worthy projects for which the firm provided services at reduced fees include the Disabled American Veterans building in Virginia Beach, the Wesley House in Elizabeth City, N.C., and its current project, the Ronald McDonald House in Norfolk.

"The Ronald McDonald House and the Wesley House are similar projects," says Bill Hargrove. "Both facilities are temporary homes for people whose family members are hospitalized."

On a more whimsical note, Brockwell says, "We designed a mermaid that the city of Norfolk auctioned to raise money for its arts programs. A Virginia Beach couple bought it."

Mentoring provides on-the-job training

To help high school and college students gain valuable experience in a professional work environment, HBA established a mentoring program. "Michael Ross, one of the principals, oversees the project," Brockwell says.

Typically, one or two high school students work with Ross throughout the school year.

"One student worked with us for four months," Ross says. "He had Photoshop and AutoCAD experience. He drew construction details for Malibu Elementary School and rendered a computerized 2-D drawing, which is on our Web site."

He adds, "Each summer students from Virginia Tech intern with us. We'd like to expand that program and include other colleges."

Community ties are strong

Hargrove's volunteer credits encompass a wide range of community programs. "I live in the city of Portsmouth and stay active in city and community affairs by serving on several commissions and boards. And I stay active in local school functions as well."

Brockwell's love of the outdoors prompts him to serve on the city of Virginia Beach's Shore Drive Commission and its Beaches and Waterways Commission. Brockwell chaired the committee that designed the city's outdoor plan. He coached soccer for nine years and is a past member of the city's Parks and Recreation Commission.

"I also served on the city of Virginia Beach's golf commission, which is responsible for bringing the Tournament Players Club to the area," Brockwell says.

"It's important that we partner with our communities. That's why Hampton Roads is a nice place to live, work and visit," Hargrove says.

History

Building and designing your community: Yesterday, today and tomorrow

A quick glance around Hampton Roads and beyond will illustrate the inventiveness and creativity of Hargrove, Brockwell and Associates Inc. At the helm of this award-winning architectural firm stand Bill Hargrove and Dan Brockwell, the founding principals. When the two men founded HBA in February 1974, their vision was to offer architectural services not offered by their colleagues. Their goals were to make life easier for their clients and, in a professional manner, complete projects on time and within their clients' budgets.

"Our main tenet was service, service," Hargrove says. "That is what made us different and more successful than a lot of our colleagues." Good customer service was a priority then as it is today.

Sitting at the drawing board is fun

Hargrove and Brockwell had worked together at other architectural firms before opening the doors to Hargrove, Brockwell and Associates Inc.

"Our first office was on Village Street in Portsmouth," Hargrove says. "We bought an interesting two-story house that had been built in the 1930s. We used the downstairs as our reception and conference areas. The family room, which had a fireplace, became our conference room. A narrow stairway led to upstairs bedrooms, which we used as offices."

Hargrove says he and his partner and their four employees practiced their professions in some unusual ways. "Our drafting tables were our desks. We held many meetings while drawing."

Those drawings were accurate and complete. "Contractors were not afraid to price the projects because our documents were clear and accurate. They didn't leave room for a lot of guessing."

Hargrove says the old days of sitting at the drawing board were fun. "Dan and I were on drawing boards just like everyone else. It was a fun way to practice; we were in the trenches. And that made it nice because we knew everything about each project. We've always been hands-on, even as our firm has grown larger."

The founding partners maintain one-on-one with their clients

The partners built their firm with the idea of being generalists. "The ability to take on all sorts of projects made us interesting,"

Brockwell says. And the firm grew. "We've expanded our facilities four times."

By the early 1980s, it was time to relocate. "We conducted a study to determine the most central location for our office," Hargrove says. "Since most of our work covers the entire Hampton Roads area, including northeast North Carolina, we saw Virginia Beach as the most convenient location. We moved our office in 1982."

HBA's reputation as a hands-on, proactive design team blossomed. "Our philosophy still is to work to maintain a one-on-one relationship with our clients," Brockwell says. This has earned HBA a repeat client base of about 80 percent and achievement awards from professional associations and community organizations.

"Along the way we added two partners — Bruce Prichard and Michael Ross — and expanded our staff to about 50 people," Hargrove says.

"When Dan and I started the firm, we concentrated on architecture, engineering and interior design. We still offer those disciplines, as well as facilities management, interior architecture, planning, design-build services and structural engineering services. Our team has the expertise to manage an entire project — from design to construction to occupancy."

HBA creates a lasting impression

In its 27-year history, HBA has built and renovated myriad attractive, functional structures throughout Hampton Roads and beyond. The buildings include public schools and other educational buildings, office parks, financial institutions, military installations, healthcare facilities and religious facilities.

"We look at each project with a fresh perspective," Brockwell says. "We listen to our clients' wants and needs. We transform those wants and needs into physical environments that exceed our clients' expectations and enhance their relationships with their customers. And each project includes that 'extra' something — a nifty idea and an added zest."

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