

Flying with Eagles:

An Interview with Bob Berkebile, FAIA, Founder and Principal, Berkebile, Nelson, Immenschuh, McDowell Architects

In 1970, along with Bruce Patty, FAIA (deceased); Thompson Nelson, FAIA; and Bill Love, FAIA, Bob Berkebile, FAIA, founded Patty, Berkebile, Nelson, Love Architects (PBNL), the forerunner to BNIM Architects. The practice has since grown to be nationally recognized as one of the best green firms in the nation—a new generation of design firm—setting the course for multi-disciplined, responsible architecture generated through a team of experts. BNIM's collaborative paradigm and interdisciplinary model have contributed to examples of successful vital community living across the nation.

Any list of accomplished, influential environmentalists and preservationists includes Bob Berkebile. He is well known for helping to create the green building movement. For nearly two decades, he has led an international endeavor by architects to create healthy buildings and sustainable communities. He has conducted sustainable design charrettes and workshops for the White House, National Park Service, U.S. Department of Energy, Federal Emergency Management Agency, and Canadian Provincial Architects. Bob has been particularly effective in assisting stakeholders with diverse attitudes (occasionally including opponents) to identify their common interest and collectively apply their resources for the common good. For this reason, governments, universities, corporations, and organizations such as the National Science Foundation, National Trust for Historic Preservation, Rockefeller Foundation, and Urban Land Institute seek his advice and participation.

Berkebile and his firm are setting new design standards for resource efficiency at the building and community scales including energy, materials, and human resources on a broad range of projects: the Greening of the White House; the Greening of the Pentagon; the David and Lucile Packard Foundation; the University of Texas Health Science Center in Houston; a 3,000-acre redevelopment in North Charleston, SC; and the Missouri Department of Conservation's Urban Conservation Campus in Kansas City.

Bob is a board member of the U.S. Green Building Council, the Nature Conservancy, and the Center for Global Community and has taught, been a juror, and/or a guest lecturer at numerous universities including Harvard, Rice, Stanford, and Cambridge. He has practiced

architecture for more than 37 years and was elected to the College of Fellows of the American Institute of Architects in 1989.

Carol Sindelar, a founding partner of Sindelar Associates, marketing and management consultants based in Kansas City, visited recently with Bob Berkebile to understand the critical success factors, strategies, and lessons learned that motivate and inspire BNIM's collaborative approach and *raison d'être*.

Carol Sindelar (CS): What measures have you taken to keep your competitive edge and to increase your share of the green-building market?

Bob Berkebile (BB): In 2000 we spun off our green team as a separate consulting division called Elements. This model green team provides green-building consulting services to BNIM as well as to other firms, governments, and building owners. The division goes beyond the basics of energy-efficient green design to provide services such as daylight modeling and analysis, natural-ventilation design, green-materials selection and specification, and other types of research and systems analysis such as Baseline Green, a tool we developed with Sylvatica and the Center for Maximum Potential Building Design Systems. Baseline Green is a computer model that allows us to analyze the upstream environmental impact of our design decisions as well as the economic impact at the county, state, and federal scale. These value-added green-building services help us stay on the cutting edge of high-performance design and building science.

CS: To what extent has BNIM's design process contributed to your market position as a national leader in sustainable design?

BB: Our goal is to deliver strong design-driven solutions that are holistic in nature—from master planning, to strategic planning, to architectural design, to interior design. Our design process is inclusive and pedagogical and aims at eliciting an elegant solution appropriate to each client and site. Every act or design decision is either restorative or destructive. We are seeking design strategies that lead to actions that simultaneously increase the vitality of social, economic, and environmental systems and solutions that celebrate our client's mission and become pedagogical.

For example, our design for the Missouri Department of Conservation's Urban Conservation Campus is symbolic of BNIM's approach and collaboration with our clients. It teaches the notion of resource conservation and includes a Discovery Center (hands-on workshops) with the mission of increasing knowledge, understanding, and compassion for Missouri's natural resources. It also teaches "life skills" to urban dwellers in an effort to reconnect them with the state's natural resources, be it in rural Missouri or in their own backyards.

Our research and integrated design process has definitely made a difference in the service we offer our clients and has enhanced our access to potential clients. Increasingly we are sought out as a result of new approaches or performance results an existing client shares with a prospective client—or that have been published. Companies and institutions are contacting us to partner with them to increase the level of performance of their facilities—or to change the performance of their organizations. The result is we are creating new levels of service through our client relationships and collaborative team approach. It's all about client relationship building.



Deramus Education Pavilion at the Kansas City Zoological Gardens.

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CS: What key lessons have you learned in this marketplace?

BB: A slow economy can create more innovation and efficiency. I believe today three to five percent of the population is embracing the change to sustainability. That is the point at which most scientists believe significant change is happening. The probability is that sustainability will become a "movement."

One indication is that many businesses, organizations, and governments are adopting the U.S. Green Building Council's (USGBC) LEED Program. For example the General Services Administration, Department of Defense, Department of Energy, and many state and local governments are embracing LEED to inform their design and construction decisions. I'm encouraged there is growing national interest in designing for efficiency and health of human systems and ecosystems. And we are encouraged that, even in this slow economy, our work is increasing.

On the Cutting-Edge of Environmental Excellence: Pushing the Envelope of Sustainable Solutions

BNIM's work in the sustainable design field goes back several decades with the vision of Bob Berkebile, FAIA, one of the founding principals of BNIM in 1970, and more recently, of Elements, BNIM's sustainable consulting division. Bob was the founding chairman of the AIA Committee on the Environment in 1990 and partnered with the U.S. Environmental Protection Agency, manufacturers, and environmental groups to create the *Environmental Resource Guide*, the first published research on healthy materials and Life Cycle Analysis concepts created for the building industry. Since that time, BNIM has been involved in nearly every significant national effort to create sustainable standards such as the LEED™ (Leadership in Energy and Environmental Design) rating system. Today, members of BNIM and Elements work collaboratively with scientists, other consultants, foundations, and institutions to advance the state of the art in smart, energy-efficient design. Over the last decade, members of the Elements group have been helping BNIM remain on the cutting edge of sustainable thinking through the development of groundbreaking technologies. The cross-fertilization of talent and skills of these two entities is charting new territory in creating innovation in the design field and as a way of life.

CS: What is your most spectacular achievement in business?

BB: I wouldn't characterize any of our business decisions as spectacular but clearly my smartest business decisions were choosing my partners well and taking Joseph Campbell's advice to "follow your bliss" seriously.

CS: What is your most stunning failure or disappointment in business?

BB: I was principal in charge on the Hyatt Hotel in Kansas City whose skywalks collapsed, bringing death or serious injury to hundreds of my neighbors in the summer of 1981. I spent the longest night of my life on the rescue team. I was devastated! My first question was: Did I kill these people? As failure analysis experts and attorneys answered that question over the next five years, the larger question was: What is the impact of our designs on the people we intend to serve? My partners and my wife, Libby, were very supportive, but it was very painful. Ultimately, it was my epiphany.

I set off on a process of introspective research and discovery that caused me to rethink our designs and the impact of the built environment on human and natural systems. The Smithsonian had just published a special issue identifying the individuals they thought might change the future of life on the planet. I called them and asked for help. They were generous, and several were very helpful including Amory Lovins, founder of the Rocky Mountain Institute; Wes Jackson of the Land Institute; Tom Lovejoy of the Smithsonian; Robert Muller, Under Secretary General of the United Nations; Iroquois Chief Leon Shenandoah; and Janine Benyus, author of *Biomimicry: Innovation Inspired by Nature*.

Each new perspective brought new possibilities and more questions. My partners at BNIM supported my journey of discovery for five years, which led to the creation of AIA's Committee on the Environment and the funding of research

which was published in the *Environmental Resource Guide*. This research initiative also created larger collaboration efforts with U.S. industry, scientists, environmental groups, and government. It also launched a series of national demonstration projects beginning with the Greening of the White House. And most recently the discussion has expanded to become the U.S. Green Building Council. Our definitions of beauty, elegance, and efficiency have changed. BNIM's design approach evolved with this experience. We try to create meaningful architecture with an integrated, holistic, collaborative design approach informed by the rules of natural systems. We have reorganized our thinking to embrace that reality. Our goal is to be designing only restorative projects in the future.

Design in the third millennium is moving beyond energy conservation and reducing negative impacts to creating restorative designs that increase health and vitality of human and natural systems. We already have the technology to create buildings that generate their own energy and purify their own air and water. As Gandhi said, "We must be the change we wish to see in the world."

CS: Given BNIM's penchant for relationship building, do you encourage employee participation in community activities?

BB: Yes, it is a cornerstone of BNIM's culture! Being active participants in the community is who we are and is what enables us to create design solutions that add social, economic, and environmental vitality to our community. The firm actively supports and sponsors volunteerism on boards, commissions, and in professional organizations. It encourages and rewards employee pursuit of community interests from AIA, Habitat for Humanity, SMPS, and USGBC to local education groups and community leadership programs.

CS: Has your firm's philosophy and approach changed in the 21st century, and if so, how?

BB: Our focus has always been design and service. The change is that we have enlarged our definition of good design. Our philosophy toward design and holistic thinking has informed the collaborative goal-setting process we utilize. By exploring issues of environment, health, productivity, flexibility, context, and budget with all the key stakeholders, BNIM fosters a discovery process that facilitates a solution which ultimately furthers the design expectations for both the client and the community.

We are committed to becoming agents of change in any community we are involved with through close collaboration with all

	
BUSINESS FACTS	
Headquarters Location:	Kansas City, MO
Number of Domestic Offices:	4
Number of International Offices:	0
Total Staff:	106
Marketing Staff:	4
Gross Fees in 1997:	\$6.2 million
Gross Fees in 2002:	\$15.2 million
Projected Gross Fees in 2007:	\$25 million
Technology Budget in 1997:	\$230,000
Technology Budget in 2002:	\$330,000
Projected Technology Budget in 2007:	\$625,000
Percent of Gross Revenue Allocated to Marketing:	4%
Web Address:	http://www.bnim.com

stakeholders, from end users, to local agencies, to neighborhood groups. We work at bringing all their “voices” together, implementing a rigorous approach that informs the design solution. Skilled designers integrate this information with state-of-the-art tools and efficient project management and communication to transform a space into a place that increases human potential.

CS: In listening to you, I’m hearing a recurring theme of close client participation and collaboration. Can you elaborate?

BB: Our multi-disciplined approach stems from our experience on national design charrettes and our research on the power of collaborations experienced by organizations such as Disney and IDEO, where teams of visionary individuals intuitively generated more innovative responses than an individual working alone. Our practice is predicated on several tenets—community building and design excellence being two major assets of the firm and the pursuit of restorative design as a foundation for strengthening each project. Through close client participation and in-depth contextual research, we strive to bring to light commonly overlooked symbolic and regionally significant building practices and materials.

The University of Texas Health Science Center (UTHSC/H) in Houston is a good example of entering into a partnership with our client to create new building solutions and new institutional programs to enhance the teaching, learning, research, and efficiency of the system. Our relationship began when UT engaged us with Lake/Flato Architects to design the \$40 million UT School of Nursing and Student Community Center. The project is now under construction, with an estimated completion date of March 2004. The university’s goal was to create a new standard for healthy buildings and pedagogy and to certify the facility at the Platinum Level of the USGBC’s LEED™ Program. We appear to be on track to meet these goals and more.

Partnerships with UT, the Texas Energy Cooperative, and the USGBC fostered a decision to accelerate the phase out of chlorofluorocarbons-producing equipment even though the School of Nursing is only one percent of their load. Utilizing Baseline Green, we reduced the upstream environmental impacts of materials harvesting, manufacturing, and transportation and increased the economic activity in Harris County with our design.

Early in the conceptual design process for the School of Nursing, the university invited us to interview for the Mental Sciences Institute. Again with Lake/Flato, we were selected to help UT increase their potential for research and services in this critical area. The university’s aspiration of



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Missouri Department of Conservation, Urban Conservation Campus.

becoming the model health science university of the 21st century is reflected by its commitment to the fundamental notion that human health is inextricably tied to the quality of the built environment.

CS: What events or activities have shaped your firms recent success?

BB: Wonderful clients coming to us are the biggest factor. A current example would be John Knott of the Noisette Company. John is a visionary, a very successful developer. His goal is simple but daunting: create the ‘new American City.’ This planning is a collaborative effort with the Noisette Company, the City of North Charleston, and its citizens. The design team is a diverse collection of national expert consultants managed by BNIM/BHKR. I believe this 3,000-acre redevelopment is the most comprehensive development plan anywhere. The major objective is to offer an alternative to urban sprawl by setting a new benchmark for renewal and smart growth. The plan reclaims the waterfront for public use while integrating the former Navy base into the city—in short transforming how the whole community (human, natural, and built) functions, interacts, and lives. This \$1 billion project is expected to be completed over a 20-year period as a public/private-sector partnership.

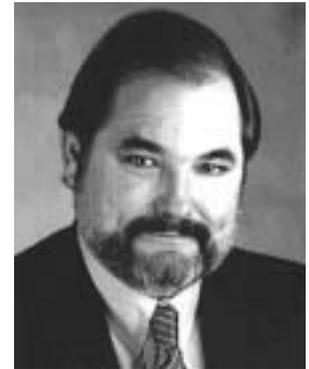
CS: Does your firm have a strategic plan? How often is it updated? Has it been valuable?

BB: Yes, we do have a strategic plan for the firm, and we officially update it at our annual ‘advance’ with a deeper review every other year. It is difficult to know if you are on course or the degree to which you are succeeding without a plan.

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Vision: Turning Green Into Gold

For this special green issue of Marketer, Richard Staub, president of Richard Staub Marketing Services, caught up with Alan Whitson, president of the Corporate Realty, Design and Management Institute (www.squarefootage.net), to get his views on marketing green design and building today. Whitson leads a nationwide educational program called "Turning Green into Gold" for building owners, managers, architects, and engineers who want to realize the financial rewards of green design. For over 30 years, he has been involved in every aspect of commercial and corporate real estate. Whitson has over 25 million square feet of projects under his belt. His byline can be found in Buildings magazine.



Alan Whitson, president of the Corporate Realty, Design and Management Institute

RS: How can sustainable design be marketed more effectively?

AW: What architects and engineers miss in marketing green is the economics: showing how sustainable design can actually make developers, owners, and managers real money. Remember that a commercial building is a business, and everything that goes into it should maximize the value of the building. Thinking competitively on how to develop value for a client is what sells, and good design creates value faster than it adds costs.

As I wrote recently in *Buildings*, sustainability is about adding value, whether it's shareholder value or the value of the building. And the sooner it is integrated into the design and engineering process, the greater the opportunity for making money. You want to make the best use of resources, reduce inefficiencies, and save time and money.

My focus is on demonstrating savings in operating costs and how that creates value. Operating costs are important, because the present value of 40 years of operating costs is 125–150% more than a building's initial construction cost. It's not hard to show how systematically employed sustainable design features can reduce building operating costs. It's getting engineers and architects to take an integrated approach to design and engineering—that's the challenge.

You have to get past the line-item mentality that considers only the first cost of each component in the building but doesn't factor in how spending more on one item can reduce or eliminate items and their associated life-time operating costs. A few obvious examples: If you buy high-performance windows, you can eliminate the perimeter heat system and reduce the size of the air conditioning system. Reducing the lighting load from the typical 2 to 3 watts per square foot down to .6 to .8 watts per square foot will significantly reduce the electricity bill for both lights and air conditioning. It's a very elegant solution, reducing first cost, lowering operating costs, increasing value while dramatically reducing

green house gas emissions. It's very important to get beyond the mindset that green equals a more expensive building. Having facts and figures ready that substantiate how sustainable design saves money is the proof that sells.

RS: It sounds like engineers have a big role in developing the sell.

AW: Marketing green can probably be done best by engineers. Most buildings tend to be over-engineered, and since building systems will be the greatest source of first cost and long-term savings, engineers can take the lead in showing how green systems can reduce both first cost and operating costs. What can be frustrating here is that building design professionals are still a distance from the tightly knit design teams you would find at, say, Ford or Honda where designers and engineers work very closely together.

Many people in building development and management who should understand finance don't, and so sometimes it's difficult to get the building owners themselves to appreciate at first glance where the savings appear. Architects and designers often lack a good science orientation, and engineers tend to get locked in a box where they simply apply a formula to create the design. It takes a consultant team that's willing to take a fresh approach to assemble a fully integrated, sustainable system, do a cost analysis, and market the benefits of a total green-building solution.

Also important is getting beyond equating green with simply buying recycled products. That's the patchwork solution. It doesn't address the need to think about sustainable design as a comprehensive approach to building systems and materials, how they get introduced, used, and maintained. I know the problem of getting beyond *green wash* and the use of hype as a

substitute for real environmental benefit. For all the discussion about sustainable design and saving the environment, the education process and the availability of reliable criteria are still at an early stage.

RS: How did you become a sustainable design advocate?

AW: My background is in project management, and I've always looked for more economical ways to do projects of high quality that generate increased value. I didn't get started in this because of my interest in sustainable design; that came later. Green started making sense because it was an effective way to save money. I think of myself as a committed capitalist who became an accidental environmentalist. Of course once I started thinking along those lines, I incorporated sustainable thinking in most of my analyses because it kept making sense.

RS: What about LEED certification? Do you feel it's effective in marketing green?

AW: When I talk about sustainability I don't talk about LEED, which I think of more as a credential than as a bottom-line goal. LEED is a consensus-based standard that reflects group-think and can be somewhat arbitrary and cumbersome. Yet, it shows you've *walked the walk*.

In preparing *Measuring the Success of Green*, the research project that the Institute did with *Buildings* magazine, we found that LEED still lacks acceptance in the private sector. Respondents found the guidelines ambiguous and very general, making decision-making that much harder. It's just one way to shape the goals of your program, and as a marketing tool, it's not the most effective sell. However, for some clients LEED is a criterion, so it cannot be ignored. You still need to do the numbers; they are a powerful tool in differentiating your team from your competitors.

RS: And thinking green continues after the building opens?

AW: What I look for are sustainable solutions to facilities problems after move-in. For example, a company in Boston found that each year, because of churn, they moved 10% of their walls, and they were using fixed drywall construction. That meant they went through the expense of demolition, new construction, and cleanup, plus the dislocation of workers and the disposal of a large amount of waste. Using movable walls did cost more up front, but over a 10-year period they recovered the initial cost premium and saved an additional \$740,000. They also limited employee disruption and downtime and, of course, eliminated waste.

I have instances of savings through sustainable design that range from shortening a project's construction time and thereby reducing the total interest expense, to the design of more efficient structural systems, and the reexamination and lowering of actual power needs. Of course putting all of this into place goes beyond doing design as usual. But a firm's commitment to the economics of green would be a selling point any marketer would appreciate—and a client reward. ■



About the Interviewer **Richard Staub** is the president of Richard Staub Marketing Services, a marketing and communications consulting firm that focuses on the A/E/C industry. Staub is a member of SMPS New York's Board of Directors and chairs its

Professional Development Committee. Based in New York City, he can be reached at 718-384-6136 or by e-mail at staubmarket@aol.com.

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CS: What motivates, inspires you every day? What gets you going?

BB: My children and grandchildren's futures. Every life support system on the planet is in decline and the rate of decline is accelerating. We Americans hold all the records for consumption, waste, and pollution, and the developing world is rushing to embrace our lifestyle. We have an enormous opportunity and responsibility to design a community model that is worthy of replication. We don't have much time but fortunately we have the technology. Do we have the will? ■



About the Interviewer **Carol Sindelar, AICP**, is President of Sindelar Associates, a Kansas City, MO-based marketing and management consulting firm specializing in A/E/C firms since 1993. A Past President of SMPS Kansas City and a former SMPS

Regional Director, she has been an adjunct professor at the University of Kansas School of Architecture and Urban Design since 1995, teaching the marketing curriculum. Carol focuses on strategic market planning, market research, marketing communications, and public relations. She can be reached by telephone at 816-333-0183 or e-mail at sindelarc@aol.com.