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A material world

Building materials are not what they once were as new technology and environmental concerns continue to expand product selection

By Bill Beyer

In the paper-thin subplot of the movie Death Wish II, Charles Bronson plays an architect designing a new radio station who makes a laughingly brief presentation to the client. He hangs three overlaid drawings showing alternate materials on an easel and says, "If you get it in the steel frame with reflective glass, it's $250 per square foot; (flip) wood frame, $100 per square foot; (flip) concrete, $150 per square foot." In and out in 30 seconds, so our hero can get back to the real business of blowing away bad guys.

Building materials themselves have become moving targets as natural-resource balance sheets go into the red and as manufacturers go green. Steel gets ever stronger as new alloys are added and tested, and recycled steel accounts for an increasingly large portion of building products. Dead Toyotas are born again as bar joists. Fabricated glass is becoming more sophisticated, laminated with thin films and gels to reflect heat and light and deflect fire, even while the curtainwall framing systems that hold the glazing units unaccountably and perversely continue to leak. A construction attorney I know calls curtainwall systems "our little annuities."

Concrete was the hidden core of Roman architecture, dressed in brick and marble. It can now be tuned by weight, reinforced, formed, foamed, colored and cured to perform as never before. The manufacture of concrete's active ingredient—cement—consumes significant amounts of energy, so promising cement substitutes like power-plant coal ash are being explored. Interior-finish materials are evolving to become thanklessly less poisonous, and stealth technology fresh from deflecting Saddam's radar is now on the market as low-e wall paint designed to reflect heat back into your home. Carbon-fibers, ceramics and other "high" technologies may give birth to future exotic building materials.

Wood has always been one of architects' favorite building materials, admired for its strength, durability, economy and beauty. From ash wood to zebrawood, quarter-sawn or plain-sliced, wood has it all, including an incomparable tactile and humane warmth. But wood isn't what it used to be.

In the 50 years from 1865 to 1915, more than 5 billion board feet of white pine and Douglas fir were logged from the "endless" forests just north of the Twin Cities' seven-county metro area. As we lumbered forward, old species were harvested to near extinction and new ones were bred for strength and sliced for economy. Douglas-fir-larch, hem-fir, spruce-pine-fir and other hybrids were touted as the best things since sliced bread. Now at the local lumberyard we find white-wood studs, seemingly bred of marshmallows and bleached crabgrass.

As our old-growth forests went by the board the venerable 2-by-4 was also shaved and slimmed to 1 5/8-by-3 7/8 inch, and now to a sleekt 1 1/2-by-3 1/2 inch. An old office trick was to ask an intern architect, "What's the nominal size of a 2-by-4?" The answer, of course: two inches by four inches.

Matching historic woodwork can be difficult these days because the snowy hardwoods of yesteryear no longer grow in our diminished forests. And while cedar and redwood were always an architect's best friends for rot resistance, they seem less friendly of late. Trees are harvested younger to meet demand, and cedar is not graded to eliminate the less-rot-resistant sapwood. An architect I met told of visiting an early modern house that had a redwood deck. The redwood was clear, vertical grain, all heart material, and after 40 years of limited maintenance in Minnesota's weather it looked good as new. He has seen too many five-year-old redwood decks already rotting.

Architects' options for using wood have expanded even while shrinking. A budding market in salvaged timbers from demolished buildings has replaced old-growth as our source of the really good stuff. Better to adapt and recycle the whole building, but we take what we can get. Other positive developments use the fibrous strength of cellulose from waste wood. Scraps and chips are glued, lamined and pressed to make new generations of engineered structural wood products of consistent character, if marginal beauty.

Manufacturers of many different building products are beginning to take responsibility for the materials they use from cradle to grave, detoxifying their processes and recycling as they go. And a sort of compost-modernism is now the fashionable ethic for architects. So, as we slog on with materially important research and log on to new product paradigms, we can't afford to pine for the past. If we don't aim to have professional death wishes too, architects must continue to understand and master the inexorable changes of a material world.
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Kandiyohi, Atwater, Rollingstone

By Robert Roscoe

A collage of wood cut-outs, charmingly painted to depict yesteryear’s building façades along Atlantic Avenue in the western-Minnesota town of Kandiyohi, hangs on the office wall of James Strouth, vice president of Home State Bank. His newly minted bank building on Highway 12 sits in view of these buildings in their current condition—vacant, architecturally decrepit structures waiting for eventual demise.

This folk-art-inspired assemblage of building fronts, arranged two dimensionally, recalls that Kandiyohi once gave pleasant respite to long days of hard field-work, as well as functioned as economic anchors. The structures, built to last generations, expressed an architecture of modest grace and reassuring rec- titude. They contributed to the time-honored cycle of work, home, church, school and memorable Saturday nights.

The name Kandiyohi derives from the Dakota or Sioux, meaning, “where the buffalo fish come.” Kandiyohi grew up before the turn of the century, poised to be a prairie city and Kandiyohi County seat. In the early 1900s a new north-south railroad route cut through Willmar instead of Kandiyohi. Soon the county seat itself moved to Willmar. Kandiyohi’s present population of approximately 500 people is substantially less than it was a half century ago.

Throughout most of this century, Kandiyohi’s downtown contained a hardware store, farm-implement dealership, butcher shop, two grocery stores, a bank, cafe and lumber-yard, as well as many ancillary services. Today a bank, a convenience store/filling station and a minimally functioning grain elevator are the only active commercial enterprises. Yet the town’s housing market is healthy, befitting Kandiyohi’s role as a bedroom community for nearby Willmar.

Seven miles to the east, Atwater, population approximately 1,100, is a growing housing community for retired people and for nearby labor markets in such larger towns as Willmar, Litchfield and Hutchinson. But Atwater’s downtown struggles to maintain economic vitality. Many storefronts are vacant, and a few empty lots appear where commercial buildings once stood. The once-elegant Atwater Inn is empty, except for a tavern in a rear first-floor area. The town newspaper is gone, as are a lumberyard, drugstore and clothing store. A nearby church, converted into an antique shop, was razed after the antique business closed. Atwater, whose main downtown street is also named Atlantic Avenue, features a relatively intact streetscape of 19th-century brick structures. Atwater City government has made efforts to engender downtown revitalization, promoting businesses that are attuned to serve the local community.

Rollingstone, a picturesque town of approximately 800, is nestled in a river valley in Winona County’s bluff region. The town once depended on the local agricultural economy for its economic well-being. Today its butcher shop, welding shop, funeral parlor and dry-goods store are gone. The bank building now houses a pizza restaurant. Rollingstone’s residents do their main shopping in nearby Winona.

These three towns are part of the same story, told in four chapters of rural America. The 20th century’s first broad movement—urbanization—started a slow population drain, yet the small-town business districts managed to survive by internal change instead of growth. The second major change saw the construction of highways, providing easy access to newly developed outlet shopping centers that competed with main street’s stores.

Ardell Thompson, a retired mailman living in Atwater, says that “in the early ’70s, people would jump in their cars and drive 12 miles to Willmar to buy a quart of milk just because they liked the fact they could do it.”

The third phase, rural-school consolidation, diminished a sense of local identity as rural residents and townspeople chose to do business where their children attended school. The fourth and most dramatic factor has been the shift in agriculture from small farms to large agri-businesses.

A recent issue of The Land, a weekly newspaper serving agri-businesses, carried the lead article, “What is a family Farm?” The answer states that “sustainability” defines a family farm, then adroitly includes farms of all sizes in its definition.

Richard Engan, who heads a Willmar-based architectural-engineering firm, has seen the effects of large-scale agriculture on these communities. “A typical township several decades ago could hold

Continued on page 42
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Prairie restoration

THE REDEEMER MISSIONARY BAPTIST CHURCH on 32nd Street in south Minneapolis will undergo a $2.3 million renovation by MacDonald and Mack Architects this spring. The Prairie School masterpiece, designed by William Gray Purcell and George Feick, Jr. in 1910, is listed on The National Register of Historic Places. The church is one of the few Prairie School churches left in the nation. Minneapolis-based architect Purcell, along with his colleagues George Grant Elmslie and Feick, was among the leading figures in the Prairie School movement at the beginning of the 20th century. Among the architect's more significant local projects is the Purcell-Cuts house, also restored by MacDonald and Mack. To kick off the final phase of the fund-raising campaign, Prairie School expert Roger Kennedy will discuss the church's architectural significance. Restoration of the church is expected to be completed by Christmas 1999. For more information regarding the 7 p.m. program with Kennedy call (612) 823-1081.

Bridge work

THE TEAM OF CLIFF GARTEN AND AARON PARKER have been selected to design the new Arcade Street Bridge spanning a shallow waterway between Gervais and Spoon Lakes. The 42-foot span bridge, which replaces a concrete arch, connects the two towns of Maplewood and Little Canada in Ramsey County. The elliptical bridge deck, which accommodates motorist, pedestrians and cyclist, separates pedestrians from vehicles with metal guard rails to form a 10-foot-wide lake overlook. Openings in the pedestrian and road deck peek at the water below. The pedestrian deck is made of epi, which will weather to a silver-gray; the bridge's overall structural cordon steel will age to a reddish-bronze. The Twin Cities-based team, collaborating with structural-engineering consultant Bruno Franck, was selected from a pool of 11 submissions in response to the county's call for conceptual designs. Garten is an artist and landscape architect; Parker is an architect and urban designer.

Jungle drama

THE JUNGLE THEATER, one of the Twin Cities most innovative theater companies, celebrated the opening of its new facility in a renovated two-story commercial building on Lyndale Avenue in south Minneapolis this February. The 140-seat theater retains the intimate scale of its former home kitty-corner on Lake Street while offering a bigger lobby, wing and stage area, dressing room, and administrative offices. Designed by Jon Baker of Baker Associates, Inc., the theater features a lobby mural (painted) designed by Minnesota artist Kenneth Palko. The colorful mural includes images of Pompeii-inspired frescoes, Italian Renaissance puppet stages with movable objects, a six-foot abstraction of an ancient timepiece, and a stone concession counter. Palko also designed the marquee.

Urban winners

THE COMMITTEE ON THE URBAN ENVIRONMENT OF THE CITY OF MINNEAPOLIS named 17 winners at its annual CUE Awards program this winter. The awards program recognizes individuals, groups or architectural projects that enhance the urban environment. The winners are:

- Anodyne Coffeehouse 4301 Nicollet Avenue Geoffrey Warner, Alchemy
- Basilica of St. Mary Restoration 88 North 17th Street Miller Dunwiddie Architects
- Blooming Boulevards Awards Program for recognizing 1,000 urban gardeners
- W. Paul Farmer Former Director of the Minneapolis Planning Department
- David Fisher Former Superintendent of the Minneapolis Park and Recreation Board
- Fourth Avenue Bridge Fourth Avenue South and 29th Street
- Crystal Court Renovation at the IDS Center Seventh Street and Nicollet Mall Hammel Green and Abrahamson
- Great River Road Completion West River Parkway
- Lake Calhoun and Lake Harriet Improvements
- Lakewood Cemetery Chapel Restoration 3600 Hennepin Avenue Jim Miller Architect
- Linda Mack Staff Writer, Star Tribune
- Loring Park Formal Garden and Superintendent's Office Miller Dunwiddie Architects
- Minneapolis 5th Precinct Police Building 3101 Nicollet Avenue Julie Snow Architects
- R.F. Jones (Longfellow) House Minnehaha Park Kodet Architectural Group
- Rebecca Yannish Former Director of the Minneapolis Community Development Agency
- Thomas Lowry Park Douglas Avenue Damon Farber Associates
- University of Minnesota Preservation Plan Master Planning Office Hokanson-Lunning Associates

Correction

In the January/February 1999 issue we neglected to credit Stein Design of Minneapolis as design architects of the Museum Shop and Family Center within the revamped Minneapolis Institute of Arts. We regret the omission.

Calendar

Robert Polidori: Sixty Years of Modern Design
Minneapolis Institute of Arts March 27–July 25
Frederick R. Weisman Art Museum
University of Minnesota March 27–May 22

Berence Abbott: Changing New York
Frederick R. Weisman Art Museum
University of Minnesota Minneapolis April 10–Sept. 12

Pulled from the permanent collection, the exhibit features Abbott's documentary portrait of New York. For more information, call (612) 625-9494.

Timothy Trent Blade: The Story of a Collector
The Goldstein McNeal Hall
University of Minnesota St. Paul Through May 2
Selected pieces highlight the vast collection of Blade, who died in 1996. For more information, call (612) 624-7434.

Maya Lin: Topologies
Des Moines Art Center
Through May 23
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Michael Graves, one of the world’s leading architects, refuses to be "pigeonholed." Architect of hotels, wineries, museums, libraries, government buildings, banks, office towers and condominiums in the United States and around the world, Graves is also well known for his design of furniture, furnishings and artifacts. The architect who created the Walt Disney World Dolphin and Swan Hotels, as well as the acclaimed 1999 Spring Parade of Homes in the Twin Cities, Graves received his architectural training at the University of Cincinnati and Harvard. In 1960, he won the Rome Prize and studied at the American Academy in Rome, of which he is a trustee. Graves is also an architecture professor at Princeton University, where he has taught since 1962.

A fellow of the American Institute of Architects, Graves has received nine national AIA Honor Awards, more than 50 AIA New Jersey awards and 15 Progressive Architecture awards. Architecture Minnesota talked with Graves about his partnership with Target, what satisfies him most as a designer and the new Michael Graves Design Collection for Target.

You are an internationally acclaimed and award-winning architect, as well as a foremost designer who has created items for Atelier International, Alessi and Steuben. Why design a line of products for Target, a chain store for the masses?

Because they asked. And breadth in the character of what you do is always of interest to me. The last thing I want is to be pigeonholed as an architect who only designs libraries, or museums or houses. I'm always interested in doing other things. I'm a general practitioner rather than a specialist. Nothing could interest me more than designing for a group like Target, with great buying power and which brings products to a great number of people. I've never seen design as just for the cognoscenti. I think the country at large is a different place than in the '40s and '50s, when the Museum of Modern Art put tags on products and called them good design. We don't do that anymore because so many things made in this country, or re-tailed in this country, are of extraordinary quality and design. It's about time.

What was your primary objective in designing this collection for Target?

We started by looking at a few kitchen utensils, then little by little Target made relationships with vendors and manufacturers they've already used so we started designing everything from appliances to spatulas to a garlic press. We wanted the line in various areas to hold together and have common themes. We used not just appearance, but how things would feel, and how one would engage the product with the hand or eye.

Are you referring to the oblong or colored handles on the toaster and teakettle, for instance?

Yes. You have this kind of elongated egg that's a theme in the small appliances. And an elongated blue handle, for example, is a quiet metaphor for cool, so the handle feels good, feels cold, not hot. But it's not so abstract as a lot of modern design. You asked why I would partner with Target. It's that many modern designers make objects so abstract we don't know how to use them. I wanted to make a handle that's a handle, so you know which end to pick up.

What sort of effect will your collection have on Target and the people who purchase these products?

I think it will expand Target's audience and offer the present audience a range of products not available at any store at that level. In American retailing today...
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Concrete's ubiquity makes it easy to ignore its singularity. The oldest synthetic building material, concrete is both ancient and modern in the truest sense. Developed by the Romans 2,000 years ago, the material's secrets were only rediscovered in the early 1800s. The alchemy process by which water, aggregate and binding agent—cement—transforms through chemical reaction to become concrete remains enigmatic to most.

In constructing walls, Roman concrete was simply infill. Brick or stone formed wall faces with concrete and rubble poured within the cavity. This technique was utilized in the Middle Ages, and later as concrete was merely utilized as a type of binding mortar. The Romans went much further. For instance, in domes and vaults concrete was clearly used according to its plastic attributes, with forms molding it through curing. Exploiting concrete in such ways allowed Romans to advance beyond Greek construction. In other applications, concrete's capacity to harden in water made it a key component of breakwaters and other civic works. Eventually, the Romans used concrete in all structural elements except columns.

Concrete is integrally aligned with the Romans' architectural and engineering marvels, yet their innovative material and its applications were lost for centuries. The tools of their techniques were revived in 19th-century England when the calcining process—burning finely broken limestone to produce cement—was replicated. Advances quickly followed. Combined with such newer products as iron or steel, concrete allowed the industrial age to reach beyond the Romans. Concrete's compressive capacity coupled with metal's tensile strength created unprecedented building systems—fire resistant, flexible to form and shape, and able to withstand great loads.

Minnesota's connection to these developments is particularly noteworthy. "Peavey's Folly," a cylindrical grain elevator with steel-reinforcing rings built in 1899, was the first of its kind in concrete. The structure's nickname stemmed from its untested construction method, but this did not deter grain dealer Frank Peavey and his architect Charles Haglin. Still standing in St. Louis Park near highways 7 and 100, the tower offered key advantages over wood, steel, clay tile and brick elevators. Concrete offers fire resistance unlike wood and better protection from temperature extremes than steel; its monolithic nature is more watertight than clay tile or brick. Concrete elevators were ultimately the preferred means of grain storage, all lead by Peavey's experimental tower.

About the same time, Claude A.P. Turner, a Minnesota engineer, perfected an economical flat-slab, reinforced-concrete construction method. A mushroom column capital, flared to reduce shearing stresses at the column-slab junction, permitted designs without the typical beams and joists. The idea of laying a concrete slab directly over columns had occurred to others before Turner, but his applications were the first examples of mature column-slab framing. Turner received patents for aspects of his work, which were notably applied after 1905 in Minneapolis's five-story Johnson-Bovey Building, St. Paul's Hamm Brewery and other structures. Turner's column-slab method was also the first utilized in a bridge—the stretch of St. Paul's Lafayette Avenue over the Soo Line.

Concrete continues to be explored in new ways, many with an environmental angle. The fact that aggregates and water are locally sourced has always been positive, reducing the environmental costs of transportation. Beyond this, concrete walls and floors are often integral to passive-solar designs, their thermal mass retaining the sun's energy. Now concrete is additionally viewed as a sink for landfill waste. Concrete additives can include fly ash, a by-product of power plants burning finely ground coal, which may positively influence workability, cure time and other factors. Blast furnace slag is also used in a similar capacity while crushed recycled concrete and mining-waste fines can supplement the aggregate component. Under correct conditions, these additives and aggregates may help control concrete-mix variables, while simultaneously reducing the waste stream.

Of course, selecting proper concrete additives and controlling mix variables is not just the engineers' domain. Concrete's plastic nature, great durability and such other traits as integral color are unique attributes, offering multiple factors to explore from mixing through finishing.

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Architectural prize

Used as marketing tools, barometers of emerging trends or badges of honor, the Honor Awards are the architectural profession’s own Oscars

By Camille LeFevre

Recognition, especially by one’s peers, is arguably the greatest reward a creative professional can receive. Every year, the Academy of Motion Picture Arts and Sciences bestows its Oscar on notables in the film industry. The Academy of Television Arts and Sciences hands out Emmy Awards. The theater community confers various forms of recognition, including the Tony Award. Outstanding dancers and choreographers receive Bessies. For architects, the pinnacle of peer recognition is an AIA Honor Award.

On the national level, the American Institute of Architects operates about 15 different awards programs, including the Honor Awards for architecture, interior architecture, and regional and urban design. "The Honor Awards serve a couple of purposes," says Robin Lee, director of honors and awards at AIA national in Washington, D.C. "They not only recognize individuals for their outstanding achievements, which then elevates a standard of excellence against which other architects can measure their performance, but it also serves to inform the public on the breadth and value of architectural practice."

Such recognition is also welcome on a local level, which is why AIA Minnesota has an honors and special awards committee that oversees the annual 25 Year Award, Young Architect’s Citation, Divine Detail Awards and Honor Awards. AIA Minnesota has operated its Honor Awards program since 1957. Over the years, juries have bestowed awards on a variety of completed projects, from institutional facilities and residences, hospitals and churches, theaters and restaurants, schools and summer cabins, police stations and museums, to the Lake Harriet Band Shell and a St. Paul Winter Carnival Ice Palace.

"There is a lot of prestige associated with these awards for architects," says Dave Dimond, principal with The Leonard Parker Associates, Architects, Inc., and chair of the AIA Minnesota awards program. "To have your work selected by those you respect in the profession sets a standard that is, in fact, high above the bar. Equally significant is the public awareness the awards generate. The AIA Honor Awards share with the public what we as architects believe to be the highest quality work we produce."

"The awards do play an important role in identifying new ideas and new talent," adds Tom Fisher, dean of the College of Architecture and Landscape Architecture at the University of Minnesota. For 15 years Fisher helped run the awards program at Progressive Architecture, and this year he was a juror for the PIA awards now handled by Architecture magazine. "Looking at awards over the years, you see where the thinking and profession has gone and is going. Awards have been a bellwether of changing attitudes. But they also enable us to draw public attention to the characteristics of good architecture. So in that sense, these awards have a valuable communication and education role."

Carol Ross Barney, of Ross Barney + Jankowski of Chicago, agrees. "Awards are a historical record; benchmarks in history. We can look back and see what was important to this particular group in time. The other obvious reason awards are important is that architecture is everywhere, and everyone knows a lot about it and nothing about it. So the awards are a good opportunity for AIA to show people what we do and thus fulfill an education objective."

The selection process—on the national and local levels—is conducted by a jury comprised of architects of significant stature. As a juror for the 1998 AIA Minnesota Honor Awards, Ross Barney says he sought out "architecture at a higher quality level, that represents not only the values of the community but the highest craft of the architect. I think there is some regionalism in the way you approach looking at work and I think it’s good. Because architecture really reflects the value of the people it’s built for, regionalism helps define architecture in that community for that time."

Yet jurors sometimes arrive with less than open minds, Dimond contends. "Our jurors most often have served on three or four other juries around the country in the last year, have seen what’s going on in the profession, are aware of different intellectual movements or trends, and may come with an agenda," he explains. "They come to Minnesota with something in mind and look for projects to sell that point of view."

The frustration and confusion some Minnesota architects may experience with a particular jury are ameliorated by the fact that

Continued on page 44
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Architectural Species

In Terrence Malick's World War II film, The Thin Red Line, soldiers crawling through the tall grass of Guadalcanal suddenly encounter a snake arching in front of them. In the immediacy of the moment, who's the enemy now? The snake poised with its venom or the Japanese perched with their guns at the top of the hill? Man and nature are inextricably linked in Malick's mesmerizing reflection on life and death, good and evil, peace and war. Just as the wheat fields of Texas and plague of locusts thrust man toward his fate in Malick's other great film, Days of Heaven, the beauty and danger of a south Pacific island bind man to nature, himself and his fellow man.

Homo Sapiens, thinking man, is part of nature. Yet by the fluke of evolution that enables us to think—and not simply react by instinct—we view ourselves as existing above nature. Since the advent of agriculture 10,000 years ago, we have waged a battle against nature. If only we could conquer nature, we tell ourselves, we could control our destiny. The annual death toll from earthquakes, tornadoes, hurricanes, blizzards and fires tells us that we cannot conquer nature, despite our scientific and technological advances.

To the best of our knowledge so far, this is the only planet in the universe that sustains life. Scientists have identified approximately 1.75 million species, with man among the 4.500 species of mammals. Millions of species remain undiscovered as some scientists estimate up to 100 million species on the planet. Since a hot cloud of cosmic dust formed our earth nearly 4.6 billion years ago, life has been plentiful. There are more living species today than ever before—although 99 percent of all species that have lived since microbes first appeared 4 billion years ago are extinct. The resilient earth has suffered through five great extinctions, the first cutting a swath of death 440 million years ago, eliminating the competition for a whole new set of species to arise. The last great extinction pummeled the earth 65 million years ago when a crashing meteorite kicked up a toxic cloud of debris that killed two-thirds of all animals, including the giant dinosaurs.

From the ashes of this last disaster, slowly simians seized their advantage, and through millions of years of chance mutations and genetic breaks stood upright and evolved into thinking man. While the whims of nature and vagaries of the universe caused the first five mass extinctions, the actions of man alone are responsible for what scientists are calling the Sixth Extinction. Our rapacious appetite is devouring the planet as we continue to destroy land to expand our cities and feed our 5.9 billion inhabitants.

In our feature article on sustainable architecture, "Earthwise Living" (page 38), a homeowner confronts the challenge of building a house without destroying a small part of the environment in the process. She learns, regrettably, that you simply can’t build architecture without causing some environmental havoc, as she notes when beginning to clear the land for construction. “Armed with sickles, my husband and I began this task on a hot, humid July day, with summer in its prime. As we swung away, lobbing off goldenrod heads just barely in bud, a small, pretty, red-bellied snake wriggled across my path… I realized that we were fragmenting habitat, albeit on a small scale, and that we would likely kill off individuals because of it, in precisely the same way that larger-scale fragmentation—the leading cause of extinction—kills off species. In the three years since that day, we have never seen another red-bellied snake.”

Perhaps it’s asking too much of architecture to save the environment. Our Honor Awards round-up (pages 18–31) features buildings and interiors that have been selected for their architectural innovation, aesthetic appeal and client satisfaction. Environmental consciousness plays a small—if inconsequential— role in the buildings’ selection.

Architecture is a destructive profession. As we learn from “Earthwise Living,” you simply can’t build without causing some damage to the planet. Yet every effort to prevent or lessen further environmental damage is important. In the early ‘90s, sustainable architecture was the buzzword du jour. Sustainable design still drives architectural thinking as new and better construction technology and building products frame more energy-efficient buildings. Through continued research and development of products and technology, we can help mitigate the Sixth Extinction.

Eric Kudalis
A renovated warehouse steers Compass into full view

Since its founding in 1985, Compass Marketing, Inc., has been on the cutting edge of the Twin Cities entertainment scene. The media-and-entertainment company books some of the biggest national and local names in the music business, as well as produces and markets music on private labels. Compass, for instance, was behind the Mill City Music festival, as well as Governor Jesse Ventura's inaugural bash at Target Center. Those into the easier sounds of New Age music can sample Compass's work on the Lifescape series at Target.

Despite some of the marketing firm's high-profile activity, its offices long languished in bland obscurity in a suburban office park in Eden Prairie.

Compass's new offices on the second floor of the McKesson Building in Minneapolis's downtown warehouse district provide a hipper, more visible home for a firm positioning itself as a leading player in the entertainment industry. The warehouse's industrial shell provided the design inspiration for Collins Hansen Architects of Minneapolis, as the downtown-Minneapolis firm maintained the best industrial features with the high ceilings, brick walls, and exposed columns and structural support system.

The architects chose materials that are appropriate to the building's industrial origin. All new mechanical systems drop unobscured...
Collins Hansen designed work stations (top) in the same masonite panels. The mezzanine along the eastern wall (above) hangs from steel rods. The open cafe (opposite) is the central gathering spot at the center of the floor plan. The architects and client envisioned this colorful space as a casual place for members of different divisions to gather and share ideas.

from the ceiling. Composite masonite panels in alternating natural and tinted finishes define work stations and conference areas while remaining aesthetically compatible with the building's industrial past. An old metal conveyer belt hanging from the ceiling provided inspiration for modern electronic needs. The architects designed a similar metal cable tray to encircle the second-floor space to hold all necessary wiring for the entire office. Cords simply drop down to work stations. A red datum line encircling the space reflects the shoulder height of the original windowsills. A series of smaller windows punched into the eastern facade offers additional light. Collins Hansen picked up on the nautical reference of the Compass name with a strake-plank and gunwale reception desk and compass floor pattern that points due north. Conference-room doors, painted silver, resemble metal ship doors with portals.

The 16,000-square-foot space retains its open quality to encourage interaction between the company's different divisions. The architects grouped most of the main functions toward the center of the floor plan: the reception area, conference room, open office stations and cafe. Private offices encircle the periphery. Added square footage is provided on a steel and opaque-glass mezzanine, suspended by steel rods along the eastern wall. A circulation corridor encircles the entire floor, keeping the different divisions attuned to each other's activities. The colorful cafe, in fact, is the office's main gathering space and foci of intraoffice communication as it's strategically stationed in clear view of the work stations.

E.K.
Julie Snow Architects designed the panels on steel frames (above) for easy installation and removal by assembling the steel frame with flush mechanical fasteners, thus minimizing welded connections. The architects brightened the interior space with two 60-foot light monitors (drawing) jutting four feet above the roofline. Natural and artificial light filters through the translucent “hood” at the center of the floor plan (opposite top). Glass-walled conference rooms (opposite bottom) and offices maintain visual connection between different engineering groups.
The power of light transforms a suburban industrial facility

transparency and light are key design ingredients in the transformation of the Minnesota Rubber–Engineering Center in St. Louis Park, Minn. A division of Quadion Corporation, Minnesota Rubber designs and manufactures rubber products for automotive, industrial and fluid-delivery needs.

Julie Snow Architects, Inc., which worked with Quadion several years ago on the design of QMR Plastics’s new facility in River Falls, Wisc., approached the project by essentially opening the box. The 30,000-square-foot facility, once partially occupied by QMR before moving to River Falls, is a rather banal single-story structure that has grown gracelessly through a series of additions since the 1970s. To tailor a proper design fit for Minnesota Rubber, Snow and her team, including project architect Christian Dean, sought to expedite internal communication between engineering groups while ushering in more light. The architects envisioned the renovation as a series of “subtractions,” removing nonstructural partitions and walls to open the space, and peeling back the ceiling to reveal the steel beams and precast tees. The architects then sliced open the ceiling with two parallel 60-foot-long light monitors that rise four feet above the roof height along the periphery. The light monitors define two new circulation corridors on either side of a central work station the architects dub “the hood.”

Positioned at the center of the floor plan, the hood groups engineers’ work stations under a 40-by-40-foot suspended translucent ceiling made of cellular polycarbonate panels. The panels, suspended between structural steel, are held in place by rods inserted through cells. Natural light from the monitors diffuses through the translucent panels, thus minimizing glare across the computer screens. Snow says that they got the idea for the hood from one of the engineers who was using a cardboard box to shield his screen from glare.

As with her other industrial projects, Snow applied democratic design principles to Minnesota Rubber. The visually open, nonhierarchical space, as seen in glass-walled private offices and conference rooms, encourages interaction and awareness between the three different engineering groups.

E.K.

Honor Award
Minnesota Rubber—Engineering Center
St. Louis Park, Minn.
Julie Snow Architects, Inc.
A renovation restores the monastic tradition to a Benedictine church

Rafferty Rafferty Tollefson has a strong reputation for designing and renovating churches. With St. Joseph Abbey in St. Benedict, La., the architects restored a church to its original intent as a monastic home for Benedictine monks. Over the decades, the architects report, the church had evolved from a traditional abbey to a regular parish church for families and lay people. Yet the central monastic activity is the Liturgy of the Hours, the monastic form of prayer that brings the monks to their choir stalls several times a
day. The placement of the stalls did not ideally engage this activity.

RRT approached the renovation by re-arranging the seating and altar. The choir stalls were positioned behind the altar under the apse, giving less prominence to the stalls. To remedy the inappropriate placement, the architects pulled the monastic choir stalls forward, placed them at the transept crossing under the dome and repositioned a new granite altar back toward the apse. New oak stalls, which face each other across the transept, are now in full view of the entire church without visually blocking the altar.

Aside from the stalls, the architects sought to restore simplicity to the church. A series of sculpted Gothic-style plaster cornices and balcony projections were incongruous with the straightforward Romanesque architecture. RRT removed the overly ornate detailing and replaced it with simpler plaster molding. New finishes, furnishing and lighting further enhance the interior. RRT installed new oak pews, replaced the cement and terrazzo floor with quarry tile, and positioned a small granite baptismal font in place of a larger one. The smaller font emphasized that in a monastic church monks have long-since been baptized.

RRT brought more illumination into the church by replacing darker windows with art-glass windows that filter in soft light, and installed improved lighting with electronic controls. The sandblasted cypress ceiling trusses project a warm hue that enhances the red-tile floors, while wall murals, cleaned and restored, reflect a renewed vibrancy.

**E.K.**

**Legend**

1. Altar
2. Celebrants Chair
3. Lectern
4. Choir Stalls for 68
5. Nave Seating 268
6. Baptismal Font
7. New Entrance
8. Reservation Chapel
9. Vesting Room
10. Storage Room
11. Ambulatory/Overflow
A renovated Crystal Court reemerges as downtown Minneapolis’s civic oasis

the Crystal Court has always been Minneapolis’s unofficial town square. When built in the early 1970s by renowned architects Philip Johnson and John Burgee, the Crystal Court established itself as more than a retail atrium serving the IDS Center/Marquette Hotel complex. Johnson himself, who modeled the glass-roof court after Milan’s Galleria, envisioned the space as an all-weather focal point for central Minneapolis, a place for people to meet.

Urban-design critics hailed the Crystal Court as an important new public space that encouraged civic vitality. The fact that the Crystal Court is not actually “public” made it all the more unusual. Here was a case of private corporate needs reaching out to the larger community. Unlike many modernist downtown developments that turned an icy glass façade toward the street, the IDS Center reached out to the street, encouraging pedestrians to cross through the Court. For years the Crystal Court remained downtown Minneapolis’s most heavily used space, where seating and plantings and cafes offered welcoming reasons to stay. Only when the complex’s crowd-格力y management removed the seating and plantings in the early 1990s did the Court lose its appeal. A once vital urban space became a vacuous 24,000-square-foot shell, no longer a civic magnet.

Under the design guidance of Hammel Green and Abrahamson, enlisted by new management with a civic commitment, the Crystal court has reemerged as an important downtown gathering spot.

Hammel Green and Abrahamson took its design cues from Johnson’s original concept to provide a civic gathering space that would be a symbol for Minneapolis and image for the IDS Center by using three basic ingredients: water, greenery and comfortable seating. Not much mystery there. People like water features and plants, and if you provide chairs or benches they’ll stay awhile. The more people who gather, the more interesting and invigorating a place becomes.

HGA incorporated water elements with a 105-foot-high fountain, in which water falls from a stainless-steel ring in the ceiling grid into a 29-foot-diameter granite basin that serves as seating along its perimeter. Lighting in the ceiling and basin illuminates the cascading water column.

HGA pays homage to Johnson’s original unbuilt fountain design by placing the new fountain on the same spot. While the fountain provides the Court’s visual focus, 72 benches and 18 granite planters with tropical black-olive trees surrounded by flowers offer an interior parklike environment. New signage and additional lighting at key spots further enhance the interior court. Ancillary improvements include HGA’s renovation of the Marquette Hotel lobby, which now opens onto the Court, and Architectural Alliance’s design of a new high-end restaurant called Aquavit.

With these upgrades, the Crystal Court has taken on a revigorated character reminiscent of its heyday in the 1970s. In a city gripped by winter nearly six long months of the year, designing warm and inviting interior spaces is essential. The Crystal Court offers the best of both worlds: It’s a respite from the biting outdoor temperatures, yet it remains aesthetically connected to the exterior with its interior plantings, natural light flowing through the glass-cube ceiling and pedestrian crossways to the streets.

E.K.

Honor Award
The Crystal Court Renovation
Minneapolis
Hammel Green and Abrahamson
Built on a 146-acre site, the Hennepin County Public Works facility (top and opposite) curves with the rural setting. Heavy machinery is hidden in the back (above) out of sight of nearby houses and highway.
Public maintenance buildings usually conjure grim architectural images of concrete-block bunkers in the industrial section of town. The Hennepin County Public Works Facility in Medina, Minn., dispels such banal precedence. This is a highway-maintenance building meant for big smelly trucks, but it transcends its working-class program with an architectural self-assurance worthy of the best civic architecture. Programmed as the central facility for the design, operation and maintenance of the county’s highway system, the building includes office space, vehicular storage, maintenance, warehousing and fabrication, as well as truck fueling, salt storage and construction material.

Because of the facility’s prominent visibility from the highway and nearby residential area, Architectural Alliance of Minneapolis designed the 242,000-square-foot building to harmonize with the 146-acre rolling prairie landscape accentuated with wetlands and elevated natural plateau. The architects worked with the natural...
The main curving structure separates the public functions, entered from the wetlands, from the private operational functions disguised on a higher plateau. The layered building gently ambles with the land as the architects envisioned a series of site structures that create appropriate degrees of enclosure, from open-air to fully controlled environments.

The building is clearly divided between public/office needs and operational/maintenance, connected by a two-story lightwell that serves as a central passageway between office, public and operations staff. In this democratic layout, everyone arrives at the public entrance, including maintenance personnel.

In addition to preserving the wetlands and restoring the native prairie landscape, the design team ensured that the building employs numerous technical environmental innovations. A water-recycling system, for instance, reuses water and reduces the amount of wastewater discharge. Special drains and holding tanks contain fuel spills and salt-water runoff from vehicles, preventing environmental contamination. Recycled, recyclable and natural materials are used throughout the building, while extensive daylighting reduces energy consumption and creates a pleasant work environment.

E.K.

Honor Award
Hennepin County Public Works Facility
Medina, Minn.
Architectural Alliance
A two-story linear lightwell (above and opposite) connects the different divisions, from public/office functions to operations/maintenance. The operational and maintenance functions (opposite top) are arranged in a linear format that allows various activities easy access to the yard and movement through the building.
Rapson unwrapped

A new book and exhibit focusing on Ralph Rapson reveal the many sides of this Minnesota modernist

The following is excerpted with permission from Ralph Rapson: Sixty Years of Modern Design, by Rip Rapson, Jane King Hession and Bruce N. Wright, published by Afton Historical Society Press, P.O. Box 100, Afton, Minn., 55001, (800) 436-8443.

From the time he was a preschooler, Rapson had grabbed any tool that could make marks and imprinted them on a range of receptive surfaces: pencil on paper, chalk on sidewalks, crayons on cardboard.

Born with a deformity in his right arm that required immediate amputation from the elbow down, Rapson simply couldn't build or handle materials in quite the same ways that others could. But he could, as he later recalled, "draw with one hand. So that's what I did, hour after hour—from the earliest time I can remember."

Little in his family background suggested that this interest in drawing would amount to anything more than a boy's attempt to compensate for a physical limitation. Born Sept. 13, 1914, in Alma, Mich., he grew up in the shadow of the Dow Chemical Company, located an hour's car ride away in the small northern Michigan town of Midland. His grandparents had "come south" from two thumb-of-Michigan villages: Bad Axe, where Rapsons were plentiful; and Rapson, where they were all there was. Both of his grandparents were village blacksmiths.

He was the son of Mabel Nickel Rapson, a homemaker and civic volunteer, and Frank Thomas Rapson, an electrical engineer with the Republic Trucking Company in Midland, a major supplier of trucks to the U.S. Army during World War I. His father kept long hours, often staying the night in Midland. Mabel died of cancer when Ralph was 8 years old, leaving the boy, his sister, Dorothy, 12, and his two brothers—Harold, 10, and Raymond, 9—alone a good deal of the time.

The brothers filled the time with school, sports and general preadolescent fooling around. They visited their grandparents' small shops, pitching in as best they could. They iceskated at midnight, against parental orders. And one afternoon in the mid-1920s, amid Prohibition, they decided to sample a neighbor's supply of bootleg wine. Entering clandestinely through his basement window, they opened the top of each of a dozen barrels and got tipsy enough to alert the neighbor. Their sampling of the goods not only spoiled the town's entire supply of illicit wine but also earned them a licking from Frank Rapson that left them unable to sit down without pain for two days.

Ralph read a great deal and drew all manner of things: a World War I biplane, an eagle, buildings and bridges from around town, a tea set from his imagination. By the time he left grade school, he had won two or three drawing contests sponsored by the local newspaper. He enjoyed the limited art instruction that junior high school had to offer, which mainly consisted of classroom visits by an art specialist once or twice a week. His father, who by that time had remarried—to a secretary at Republic Trucking named Ethel—and had transferred his electrical engineering skills to the Dow plant in Midland, wasn't around the house enough either to encourage or discourage him.

The Rapsons were near-poor, with Frank able to hang onto his job at Dow through the Great Depression. The brothers each worked odd jobs to bring in a little spending money and to repay the bootlegger down the street. Ralph had a large paper route that required him to get up before 4 a.m. every day.

There were no art-class offerings at the senior high level. Although Mr. Wrench's mechanical drawing class was offered as a catch-all preparation for students who aimed to enter trades ranging from automobile mechanics to...
carpentry, Rapson saw it as the best way to continue reading himself to be an artist.

He would stay with Wrench all four years of high school. Classes during the first three years followed a standard-exercise pattern in which students measured and drew in sections, elevations, and various perspectives increasingly complex sets of machine parts. Ralph responded well to the discipline, filling up many more pages of his assignment book than required; he also embellished the covers with whimsical freehand sketches of buildings, animals, and heroic figures.

Part of this productivity was attributable to his breaking his collarbone three times in the course of his freshman and sophomore years—once in a nasty fall during a football game, once falling off his bike while delivering newspapers, and once in a boxing match when his opponent landed a punch in the exact spot where the previous two breaks had occurred. Rapson was in a shoulder brace for the better part of two years, as well as under strict doctor’s orders to avoid physical activity as much as possible.

Besides filling up page upon page with mechanical drawings, he continued to read avidly. During one trip to the library, he discovered Louis Sullivan’s 1901 book of essays on architectural philosophy, Kindergarten Chats. He was intrigued by the world of creativity Sullivan described, a world in which drawing was called into the service of the design process, in which art was applied to the making of built forms.

His high school sweetheart, Opal Heins, also helped open Ralph’s eyes to architecture, albeit inadvertently. Her father was a carpenter who subscribed to a variety of construction-trade magazines. On his first visit to the Heins home, Ralph picked up an issue of American Builder and paid closer attention to it than to Opal, a behavior he would repeat on subsequent visits. Perhaps not surprisingly, their relationship didn’t last.

Frank Rapson approved of his son’s budding interest in the art of building. He was tired of reminding the youth that a career as an artist was not likely to pay the bills or support a family. The cumulative impact of mechanical drawing, Sullivan’s writing, construction magazines, and household admonitions surfaced in a junior-year English class essay that Rapson entitled “The Architectural Engineer.” One sentence in particular signaled his willingness to see in architecture a viable outlet for his creative passion: “The true architect is an artist, and the gratification of creating an artistic design is what he strives for.”

By his senior year, Rapson was ready to pursue architectural, rather than mechanical, drawing. Wrench was agreeable, suggesting that he work his way through architectural and engineering texts containing various standardized plates. Rapson did that, starting with drawings of cross sections and elevations of simple wood-frame houses and moving on to complex drawings of stadiums and hospitals. He worked in ink, using nibbed pens that had a screw to adjust line thickness. This was a painstaking process, made all the more difficult by the tendency of the ink to spot, ruining the drawing. By year’s end, however, Rapson had developed a facility with the medium, producing high-quality drawings in rapid succession.

He hoped his next step after graduation might be an apprenticeship with a practicing architect, someone who could help him move from classroom exercises to real projects. There was nobody of that description in Alma, so he looked to Midland, where the preeminent architect was Alden B. Dow, son of the Dow Chemical Company’s founder. Rapson made an appointment. Although Dow courteously reviewed the young man’s senior-year portfolio, he explained that he didn’t have enough work to support an apprentice. He suggested that Rapson talk with a friend of his at the Half-Moon Trailer Company, an Alma-based manufacturer of mobile homes. Rapson followed up. Half-Moon wasn’t ready to hire Rapson either but encouraged him to stay in touch, which he did. A few years later, the relationship bore fruit: Rapson designed a half-dozen prefabricated homes for Half-Moon, variations of which the company produced.

**From Alma to Ann Arbor**

Rapson decided that if he couldn’t work for an architect, he would do the next best thing. In the fall of 1933, he entered Alma College, a small, four-year liberal arts institution. With no design curriculum, it wasn’t ideal. But it enabled him to economize by living at home.

In addition to satisfying the required course work, Rapson set about stitching together a makeshift architectural-studies program. He took all the studio art courses he could. He focused his research in history classes on key developments in architectural history. Through the art department, he set up independent-study courses in which he explored visually the structures he was studying in the history classes—making drawings of the plans, sections, elevations, and perspectives of such buildings as the Acropolis, St. Peter’s, the Colosseum, and Palladian villas. All the while, he drew on his own: house plans, landscapes, people. Increasingly, he used his pen and pencil as devices for thinking—tools that helped him see more
Standing near a talking Paul Bunyan, Brainerd’s Babe the Blue Ox is one of Minnesota’s most noted roadside attractions. It must be something about bovines, as Babe’s cousin is Spain’s beloved roadside icon. Since the late 1950s, the popular Osborne bull billboards have promoted the vintner’s brandy and sherry throughout the Iberian Peninsula. Originally intended solely for advertising, the billboards have evolved to become integral to the countryside and national identity.

Looming large—three stories high—Osborne’s bulls have numbered more than 500 with little variation. Initially, the bulls were about 15 feet high, and marked “Osborne Veterano”—the company’s brandy. Later versions grew larger, with “Osborne Sherry and Brandy” branded across their breadth. Abstract in conception—black sheet metal cut to form a bull’s profile—this quality was reinforced by 1988 legislation prohibiting highway billboard advertising. As a result, Osborne dropped the lettering, the bulls becoming the laconic black silhouette seen along Spain’s highways today.

The billboard-busting legislation perhaps had the unintended consequence of threatening the bulls. The Spanish law, similar to the United State’s 1965 Highway Beautification Act eradicating bill-
boards in the United States, ultimately lead to the bulls' proposed removal—even without explicit letters advertising Osborne. The issue climaxed in the mid-1990s, with figures from all walks of life advocating a reprieve, arguing that the Osborne bull should be recognized as a cultural artifact. Some municipalities, a city's limits being outside the domain of the national law, even offered sites for the billboards should the icon's removal be compelled.

The controversy received substantial coverage in Spain's many national newspapers, with organized campaigns to save the bull. The Ministry of Culture received petitions on the bulls' behalf. The debate was such that it ultimately reached Spain's equivalent of the U.S. Supreme Court, which ruled in late 1997 that the Osborne bull "has outgrown its initial status as a simple advertisement and has become an integral part of the scenery...the aesthetic and cultural importance which collective opinion attributes to the figure of the bull should be the prevailing reason for the justification of its conservation."

Despite Spanish legislation prohibiting billboards, the Osborne bull is now protected. In Andalucia, Spain's southernmost and most rugged region, the local government went beyond the mandate, giving Osborne bulls monument status in the General Catalogue of the Historic Heritage—placing it alongside Granada's Alhambra or Cordoba's Mosque. Andalucia's abstract, barren countryside—the most Spanish of landscapes—ostensibly meshes with the bulls' qualities, the pair becoming indistinguishable. The two-dimensional bull resonates with the three-dimensional Spanish landscape.

This icon's power was perhaps best recognized by the late artist Keith Haring. In a noted piece, the bull silhouette is blanketed by his signature figures, the bull's connotations and the icon's pop nature forming a unique canvas for Haring's work. Elsewhere, the Osborne bull graced The New York Times Magazine cover, effectively leading into a feature story on Spain. The Osborne bull even promotes tourism, as its recognition factor is on par with the windmills that Don Quixote fought on the desolate, high plains of central Spain. The bull has become to Spain what the Eiffel Tower is to France or Big Ben to England.

Spain's roadside bull has transcended its advertising origin to become a national symbol

The irony behind the Osborne bull is that the sentences of real Spanish bulls are not commuted; the bullfight's ceremony and ritual culminate in death. Interest in Pamplona's annual running of the bulls, and other unique events throughout Spain surrounding the bullfight, remain high. Across the Mediterranean there is a compelling relationship between man and bull—dating from ancient Crete and Greece, the cradles of western civilization—but nowhere has the link survived as in Spain.

When the bull is simply viewed as a protein source or describes stock-market trends, the Spanish connection to the beast is difficult to appreciate. Yet the Osborne icon's galvanizing effect is not. The billboards along Minneapolis's Mississippi River—marketing Grain Belt, Pillsbury, and other firms and products—enjoy landmark status. Opposition has blocked removal attempts. St. Paul's First Bank sign remains a downtown marker, despite crowding skyscrapers. Such icons help define a region or area, especially in a time of cultural amnesia. The many books and web sites devoted to roadside culture, billboards and icons are not simple nostalgia.

The appeal of the Osborne bull is obvious as one speeds down a Spanish highway. The flat, abstract silhouette stands still, while cars race past. In bullfighting, the matador is stationary, with the bull charging—a role reversed on the highway. Of all the possible roadside advertising—including new billboard graphics adhered to buses and trucks—few are as compelling enough to ignite the imagination as the Osborne bull.
Center city green

Long regarded as Minneapolis's premier urban oasis, Loring Park has taken
Hip youngsters skateboarding dangerously down a hill, Michael Jordan wannabes playing basketball in the July heat, Russian immigrants walking around the pond: Welcome to Loring Park, a 35-acre urban oasis that is a 116-year-old phenomenon. The new and improved park—designed by Diana Balmori of New Haven, Conn., in partnership Brauer & Associates of Edina, Minn., as well as city and neighborhood organizations—embraces the present while championing its original design set forth by landscape architect Horace W.S. Cleveland.

Through research, Balmori discovered that this old park is one of the city’s favorite rendezvous. In the warm months it provides a perch for daydreaming and lively festivals; during the winter its pond becomes an ice rink. The park is not only decorated by towering oaks and pines, but also by Loring Pond, whose principal purpose is to be picturesque.

Balmori’s revamp, which is neither Disneyland cute nor contemporary kitsch, celebrates Cleveland’s plan full gallop. Her tribute begins with the revitalization of Loring Pond and the installation of a viewing pier, continues with the renovation of the 1889 Eastlake-style superintendent’s home by Millier Dunwindie Architects and culminates with the restoration of a central garden.

Originally known as Central Park, the green space was briefly called Spring Grove Park for 34 days in 1885. Then, on Dec. 20, 1890, Central Park gave way to its current title of Loring Park as a justified homage to Charles Loring, the father of Minneapolis parks. During the 1880s a small yet effective group of influential citizens advocated the creation of park boards in both Twin Cities, and continued working with enthusiasm to boost and improve recreational lands. Soon after establishing the Minneapolis Park Board in 1883, Loring convinced the city to hire Horace Cleveland as advisor.

It was Cleveland who designed the Roger Williams Park in Providence, R.I., the grounds around the National Bridge in Virginia and the Jekyll Island resort in Georgia. His park systems for Omaha and Minneapolis are known by contemporary landscape architects as among his most outstanding achievements.

Cleveland’s rejection of the older system of city squares in favor of continuous open spaces stands behind the grand-rounds parkway system in Minneapolis and the scenic boulevards of St. Paul. His philosophy of park design mirrors that of landscape architects of English gardens in the 18th century, for he believed in adapting the natural features of the land to the uses of everyday people.

Nowadays sylvan Loring Park provides visual relief from the dire clutter of urban sprawl. While Lake of the Isles is serene and Lake Harriet is family fun, Loring is utopia of verdure for city folk living in small apartments. In many respects our central park—set within skipping distance of downtown—epitomizes Cleveland’s belief that parks are about “beauty, democracy and recreation.”

In promoting her design to Minneapolisians, urban designer Balmori frequently cited her predecessor’s elegant yet egalitarian quotation. She did not reinvent Loring Park as an exclusive enclave by turning it inward. Instead, Balmori made the park even more inclusive through trumpeting its extroverted qualities.

Balmori understands that Loring Park is downtown’s front porch; her welcoming design invites interaction. A gateway welcomes visitors. The central garden is run by volunteers. The viewing pier is great for wanderers and fishermen. The performing-arts area is more user friendly. Youngsters love the playground, cyclists and rollerbladers zoom by on the pathways, old timers enjoy the gaming courts. The restoration of the dandelion-like Berger Fountain is an eye catching to all, especially on hot summer afternoons.

A fundraising brochure for the new improvements read, “Minneapolis’ parks are her priceless treasures and Loring Park is the crown jewel. Sadly, the jewel has become tarnished by time and wear.” Truth be told, the promotional copy veered toward the dramatic because Loring Park, either awash with patina or enlivened with fresh paint, is eternal.

The park has always taken everything in stride, including the good, the bad and the ugly. Highways slice across the neighborhood’s western edge, yet miraculously the park remains as vibrant as it was in 1883. So, hats off to Diana Balmori and the friends of Loring Park for nurturing our civic treasure.
Earthwise living

By Sue Leaf

When Henry David Thoreau set out to build a cabin in the woods by Walden Pond, he borrowed an ax and cut down tall white pines that grew at the cabin site. What bothered him most at the onset of his venture was that he had to borrow the ax. The necessity of cutting down trees did not trouble him. Indeed, he viewed this act as creating a kind of intimacy between himself and the trees. As he hewed the main timbers, his ax probed the secrets of their internal structure. The fragrance of pine pitch clung to his skin, mingling with his food as he ate his mid-day meal. For him, building his house was a simple, natural act, something akin to birds constructing their own nests.

What was true for 1845, however, is hardly true today. Neither my husband Tom nor I expected the process of building a house to be simple or natural, but however complex it would be, we thought we could control it. Although we had vacillated at length on the decision to build, we knew what we wanted in a house. I had taught a course at the local community college entitled “Energy Issues” which had heightened my awareness of the limited future of fossils fuels. In the course, I had lectured on renewable-energy sources and spent an entire class period discussing passive-solar houses. Tom and I were intrigued by their elegance and intelligent design. Here, we thought, was a way to build a simple, natural house.

In our small rural community of North Branch, Minn., we were known as environmental activists. As part of the driving force behind our local Audubon chapter, we were well-versed in the planet’s environmental ills—and we had a reputation to uphold.

From the beginning, we wanted the house to be environmentally responsible. We would whittle the energy requirements to a bare minimum, using super-insulation, compact fluorescent light bulbs and high-efficiency appliances. We would use no virgin lumber (particularly from the Pacific Northwest, home of the embattled spotted owl) in its construction. We would, in fact, use reclaimed lumber wherever we could. Our house would be a showcase for what thoughtful, informed people could do to live lightly on the land.

We also had requirements for the location of the lot. It needed to be oriented to accommodate a house with a long east/west axis (for an elongated south side, with maximum solar potential) preferably with a hill, so we could sink part of the house below grade. We wanted to be close to either our church or the high school, the two main destinations in our daily schedules; moreover, we needed to be within walking distance (less than a mile) of bread and milk.

We laid these requirements on ourselves to recreate the home we were leaving behind. For 12 years we had lived in a compact small town, with grocery stores, schools, church and work all within walking distance. In building a new house, we did not want to succumb to the “drive everywhere” mentality of conventional suburban development.

Incredible as it seems, we did find a lot that met all our requirements in Center City, about 12 miles east of
An environmentally conscious homeowner realizes that the quixotic goal of building a truly earth-friendly house that doesn’t harm the environment is a near impossibility

North Branch. A two-acre parcel of land went up for sale even before we had decided to build. It was only a half-mile from our church, three miles from the high school, even closer to the middle school and a 15 minute walk to downtown Center City, which had a small grocery store. Moreover, we were not usurping farmland nor destroying native vegetation by building on the lot. Platted in the 1850s, it had long been cleared of its native trees. Once a garden, it had been tended for 30 years. Best of all, the lot was on the eastern shore of a small, marshy lake. The water was weedy and rank; no one would consider swimming in it, but it would attract birds in all seasons and give us a sense of privacy without isolating us from town.

Even the smallest patch of earth, if left to its own devices, can bring forth a wealth of life, and we were delighted with what we found on our two acres. Green ash saplings had sprung up in great profusion, and several sugar maples and oaks had grown to a respectable size. Walking about on the lot, one was waist-high in goldenrod—several different species—and milkweed, of which I am very fond: Its robust, intricate flower heads are lovely and they attract all sorts of interesting fauna, including monarch butterflies. Poking about, we found some small ferns, a patch of asparagus, remnant of the old garden and wonder of wonders, a fringed prairie orchis.

On one side of the lot were three gnarled, unkempt apple trees. It was hard for us to determine their age, but they were obviously old and rugged survivors of many decades.

Having decided to build, we now needed an architect. We had one close at hand—a college friend—and for years we had half-planned, in a general and off-handed way, that he would build a house for us should we ever want one. We approached Steve with our ideas. Although he did not share our environmental views, he was certain he could design an energy-efficient dream house, one we would just love. All architects, he assured us, are well-versed in energy-efficiency matters.

The first set of plans intrigued us. The south and east exposures were lined with windows, to create warm, sunny rooms, but certain functional features were lacking. There was no thermal mass in the structure to retain the sun’s heat and no overhang to shade out the too-hot summer sun. Closets were not strategically positioned to give added protection from the north wind, and overall the rooms seemed too large, too spacious, too luxurious. We tried to work through our concerns with Steve, but we failed repeatedly. A second and then third plan were produced, each one progressively more expensive and still unsatisfactory. It became apparent to us that the problem was not an architectural one—not for a minute did we believe Steve to be incompetent—but rather, a philosophical and perhaps a moral one. In one crucial phone call, Steve let out his frustration, “You cannot—you cannot—live out your values. It is just impossible.”

The comment stunned me. I wondered for the briefest moment if it were true. Then my self-assurance rushed back into me. No, we could do this, I told myself. There is a word for people who do not live out their values: hypocrites. At that point, I knew the project had foundered. I told my husband, “We can’t work with Steve.”

We put a moratorium on our building plans while we pondered our next move. About a month later, serendipity stepped in and set the course for our future house.

A friend from our Audubon chapter introduced us to a man who would speak on urban sprawl at a forum our chapter was sponsoring. Artistic and intense, this man, it turned out, was a residential architect with a degree in environmental design. He specialized in passive-solar houses from his office in Marine on St. Croix, Minn. Over the next few weeks, as we got to know Tod Drescher better through the Audubon work, we wondered if he could design our house. When we finally approached him with the proposal, we felt as if we were asking him to be part of an intimate act of our family, on par with delivering a baby, or perhaps, performing a baptism. We knew this time the house would go up.

We set our ideas before Tod and were delighted to find that he not only understood them, but expanded upon them. What is more, he was able to reject some of our more tentative proposals because of actual experience with the product. He could tell us what would work and what would not work in Minnesota, since many of the environmentally friendly features had been developed in more temperate climates than ours. In this way, composting toilets and tankless hot-water heaters were taken off our list, and an air-to-air heat exchanger and in-floor heating, as a back-up system to solar heat, were added.
Tod brought a new dimension to our environmental project. Unlike us, he had Druid-like sensibilities and this nature-based religion subtly infused the house plans. He used a divining rod to locate water as an aid in siting the house, and set the house axis at due east, so that the rays of the rising sun at the equinox would enter the front windows straight on and flood the length of the house with sunlight. Because of its precise orientation, the house would be a mammoth sundial marking the seasons.

Tod designed his houses in conjunction with specific builders, so that the design of the house and its construction grew together in an integral way. We thus hired a builder without an extensive search. This proved to be another instance of serendipity, because in the end the success of the project rested on the skill and temperament of the builder. Born and raised on a farm outside of Center City, Joel Slattengren was a fine carpenter dedicated to his craft. As a native son, he had a network of friends and relatives that assisted him in construction. Our house, with its unusual features, became a focus of local interest.

Tod shared our views on building materials. He rejected one highly regarded window manufacturer as a supplier because the recent expansion of their plant had threatened to destroy a remnant of oak savannah along the bluffs of the St. Croix River. Instead, we ordered our windows from a company farther away, whose environmental transgressions were less obvious. This company was far from green, however—they had been a defiant major polluter of northern Minnesota for years. It was our first indication that no one in the building industry has truly clean hands.

But the first inkling of the environmental havoc we were about to wreak came some months later as we hacked out a rough driveway through the goldenrod into the building site. Armed with sickles, my husband and I began this task on a hot, humid July day, with summer in its prime. As we swung away, lobbing off goldenrod heads just barely in bud, a small, pretty, red-bellied snake wriggled across my path. It disappeared into a small triangular portion that we had just isolated from the rest of the lot. "Hmm," I thought, "I wonder if it will cross over open ground to get back to the rest of the yard; and is there enough food in that small triangle to support a red-bellied snake"? I realized that we were fragmenting habitat, albeit on a small scale, and that we would likely kill off individuals because of it, in precisely the same way that larger-scale fragmentation—the leading cause of extinction—kills off species. In the three years since that day, we have never seen another red-bellied snake.

There were other early casualties. The building site was cleared for excavation. This reduced the amount of cover available for mice and other small mammals by half. Presumably, then, the population of small mammals doubled in the remaining portion (or the mammals became easy prey and died off). In the following winter, all the old apple trees on the lot were girdled, probably by rodents, and died. We wondered if overpopulation, created by the habitat loss, had forced the mice to eat this less-preferred food.

The fringed prairie orchis turned out to be growing, once the house was sited, three feet from the future front door. Because of the mesh-like structure of their roots, orchids are difficult to transplant. The plant was destroyed with the first sweep of the bulldozer.

Construction of the house began in earnest. We found it nearly impossible and extremely frustrating to control all the building materials that were now arriving daily at the house. Even with an architect and a builder who shared our values, we were constantly wedged into the mold by which America constructs its housing. Despite our initial ban on old-growth lumber, it was inevitably put into the house. The window sashes, for example, were entirely built of old-growth pine from the western United States. All quality windows are. Although we were first told otherwise, the structural timber—and there was a lot of it—also came from old-growth forests, most likely spruce from the Pacific Northwest. We briefly inquired about using salvaged timber in the frame, but were told that in order for the house to be built true and solidly, to last for two centuries, we needed to have new wood in its frame.

That idea—constructing to last 200 years—became a watchword during the project. It takes a ponderosa pine about 200 years to reach old-growth status; hence, if the house could stand for that long, we would essentially replace what we had taken. Or so we told ourselves.

And then there were the exterior doors. Most solid-wood door manufacturers are based in the Pacific Northwest. Douglas fir doors, constructed out of old-growth trees from the last remaining coastal forests, are the cheapest. Oak and pine doors, made from (theoretically) replaceable forests, are nearly twice as expensive. The only other option is to hang steel doors, which was aesthetically unappealing to architect, builder and owners alike. We spent months resisting a decision on the doors until our architect came up with an interesting alternative. Through his many contacts, Tod had encountered a woodworker who offered to construct exterior doors for us using redwood reclaimed from enormous California wine casks. We hired the door maker and the door issue had a happy solution, one small triumph.

We were able to use reclaimed wood in another, highly visible way—in the trim and flooring of the house. In retrospect, this was a major accomplishment, achieved by considerable effort.

Salvaged wood, reclaimed from a demolished building, is not standard building material. It is not advertised in the Menard's ads, nor can it be found in stock at the local lumberyard. Through numerous phone calls, I located a regional source of it, but in the meantime, our architect had ferreted out a sawyer from
Environmentalists like to advocate “leaving no trace.”
But even in the simplest scenario it is impossible to do. Every living organism changes its world as it lives out its life.

While most of these changes can be accommodated within the larger web of life, human beings alone create changes great enough to rip the tensile web.

nearby Somerset, Wis., who had on hand a supply of Douglas fir beams taken from a Second World War arsenal building in Arden Hills, Minn., and some pine, salvaged from the Montgomery Ward building, in St. Paul. Both buildings had recently been demolished. Tod had used some of the Douglas fir in another building project and had been pleased with the results.

We decided to use the Douglas fir for all the trim and flooring in the main part of the house. The wood was duly delivered and the hard work of crafting with it began. When it arrived, our builder, who had never used reclaimed wood in a project before, was dismayed at what he saw. He spent a weekend sorting the fir into three piles: the good, the bad and the ugly. The ugly—which we had paid for, of course—was immediately discarded. The good, some of which was truly lovely, was reserved for showcase areas like the mantelpiece and four prominent bookcases. The bad, the largest category, was peppered with small, blackened splatters surrounding nail holes. These marred the original beauty of the wood, but actually added overall interest, especially when considered as part of a story. This wood was used as flooring, and as trim in less exposed areas.

It took a tremendous amount of effort on the part of our builder, an admitted perfectionist, to create an aesthetic effect with the wood. Upon rueful reflection, he claims that he underbid the project and would probably not do it again. But the results of his labor have been stunning. The fir, as it has been exposed to the light, has taken on a warm, rosy hue. The interior of the house glows with its color and the little pepper marks remind us daily that this beauty is an extended legacy of trees that were cut decades before we were born.

We ran out of Douglas fir and laid pine flooring in our study and our bedroom. It is pleasing for me to contemplate the study floor as I sit at my desk, researching and writing about the pine forests of Minnesota. I look at the glossy, amber-colored wood and wonder if any of it came from the Boundary Waters region or the White Earth Indian reservation, the last areas in Minnesota to be cut.

The point, though, is that we did run out of wood. Reclaimed wood is a limited resource, like any other. More of it could be used in construction, but there will never be an abundant supply of it. We were fortunate to come by a rather large amount of it, and for a reasonable price, mainly because we were among the first people to use reclaimed wood in new construction.

There is not enough salvageable wood to take more than the edge off the nation’s appetite for lumber. Reclaimed wood is not the environmentalist’s solution to the demand to cut our remaining forests.

It was much easier for us to incorporate energy-efficiency features into the house. Much of today’s energy-efficiency efforts rely on high-tech solutions, and technology is something society embraces wholeheartedly, so we weren’t rowing against the current by pursuing energy efficiency. We simply had to pay for it. Thus, super-insulating the house, installing an air-to-air heat exchanger to insure fresh indoor air and finding highly efficient appliances all proceeded without problems.

However, the most distinctive feature of the house—solar heating—is very low-tech and cannot be purchased on a market. The features that make it function—large expanses of south-facing windows, thermal mass (stone, concrete, tile) to store the heat gain and roof overhangs to shade in summer—must be built into the house. Thoreau would recognize that our house, while outwardly simple, is through our careful planning inwardly complex.

We enjoy our windows, snugly encased in their old-growth sashes. On sunny winter days, the house is flooded with sunlight and the boiler never turns on. Thermal mass is incorporated into the floor, hidden beneath the flooring. The overhang of the roof is precisely right for maximum sunlight.

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250 farms,” he says. “Today, it can be one farm, and that farm might employ eight people, whereas those 250 farms meant enough people that could provide sustainability for many of these small towns.”

Susan Granger of Gemini Research, a historic-preservation research-consultant firm in Morris, notes that towns with good highway access and interesting geographical features are growing as regional centers. One of these towns, Sauk Centre, has experienced regional growth and has kept intact its Main Street that once inspired author Sinclair Lewis. Kandyoshi banker Strouth says that the rural towns of western Minnesota are not dying, they are redefining their purpose. In becoming bedroom communities serving larger towns, their own downtowns are redefining their purpose, as well. He notes the pattern of businesses in these communities relocating from Main Street to main highway.

What is implied, however, is that businesses must grow in terms of square feet as well as market draw—or die. The narrow storefronts of main streets that now sit a distance from main highways are an endangered species. Thompson, the retired mailman, also measures growth in terms of the new buildings along Highway 12. These structures are emblematic of what their towns have become: quick, convenient access from the highway, with little incentive to provide a sense of place. The enrichment of being here isn’t as important as getting there.

**Up Close**

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There’s a blurring of high-end to low-end, middle-end design. When you see a Target ad in *The New York Times* you have to smile because it’s done with such cleverness, and adjacent to it is a Tiffany ad. So there’s a blurring that’s intentional on everybody’s part. We are not a class society. If I design a central library in Denver, there isn’t a sign outside that says only the upper class can come in. Everybody comes. We want for everybody to participate in our society. I find it very interesting that finally the middle has its say with the upper and the lower and vice versa. In populist culture that has always occurred.

How will the products in this new collection engage the middle? If you see a glass vase in Target that costs $15 and then go to Madison Avenue and find
exactly the same vase at another store for $79, you realize you're being had by one or the other. Part of it is the buying power, the markup or markdown; the product might be the same. But given our products will only be sold at Target, that will not be an issue with us. But you certainly can compare a spatula at Target and at an upper-end retailer and you'll be asking yourself why did I pay $10 for this one and $3 for that one. It will be quite clear that the one priced lower, with just as good or better design and materials, has an edge.

Should more architects be designing products for everyday use? Architects bring a kind of training to their view of the world, design and domestic interiors because architecture as a discipline engages culture, history, literature. Those cultural dimensions allow architects to use metaphor, to use psychology, to use the visual life of elements in a way that perhaps others do not see. So, yes, many architects are engaged in this sort of activity; I'm probably more engaged in it than most. And it isn't so far-fetched. Think of Frank Lloyd Wright, people coming through Bauhaus and so on, who designed the building, the room inside the building and the chair inside the room. It was a whole effort. Somehow after the Second World War large commercial firms started to specialize, and left the interiors to others, and little by little made that specialization honored.

Where did you find inspiration for the items in your collection? Again there's the idea of breadth rather than making everything the same, using the same colors and materials on everything. One thing any designer likes to do is work in a variety of materials—glass, wood, metal, plastics, even to use those materials in combination. And when you do that, you're automatically engaged in different aesthetics. If you use a classical theme in a modern material like plastic, there's a certain irony attributable to that; or wood in a very modern way, there's a certain irony to that.

We thought from the beginning, and the Target people thought as well, that there should be more than one way to look at these objects. If something is classically whimsical or something is whimsically classical, those things will appeal to different people and we know the audience is varied. To allow my interest in all of those ranges to come out is quite gratifying to me. I'm very interested in classicism, modernism, domesticity...these

think of it as an alphabet

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things get mixed up in the way one looks at the world and I find it quite engaging to portray a candlestick in various ways. Sometimes it's a casual dinner and sometimes a formal lunch. So you work in ways that allow people to use objects in a variety of manners.

Are there other ways in which the process of creating this collection has been satisfying to you as a designer and architect?

Architects and designers who work on one product or building for years are working on all phases and that's gratifying for them. But working on several things simultaneously, being constantly engaged in various scales and activities and materials with different clients is more invigorating for me. We designed about 350 products for Target in the last year; around 200 will see the light of day. That's a very good average.

With other manufacturers, because they have so much at stake and the volumes are so small, you do things in a very considered way and might work on a given product over five years. In building design, the client may use the design to raise funds for that building and not come back to you for two or three years. Target wanted to do all of this in a year so the level of concentration was greater.

You design a toaster, make a sketch, send it to the computer, fine tune the computer drawing, model the toaster in dimensions, make prototypes, modify the prototypes several times—all of that might occur in something like three months. The intensity allows a certain kind of growth that keeps you very much alive and attuned. The clock is ticking. I work well under that temporary pressure. And when you're doing 200 to 300 objects, the variations between them become interesting.

How do you think your designs will be influencing public taste through this collection?

Probably other retailers will feel the pressure. I think most people in the retail industry have felt over the last 20 to 30 years that location of their stores has been one thing, size and distribution another, how much buying power another. I think today it's probably design. That Target gets there before anybody else is something people won't be able to deny. Especially if it's a success.

technology  
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screed concrete or during troweling produces other custom effects. Texture can be heightened through objects like glass fragments cast in the concrete.

Highlighting qualities like these earned Minneapolis's Locus Architecture a 1998 AIA Minnesota Divine Detail Award for a countertop and integral sink. Handrails, window sills, light fixtures and benches are also in Locus' concrete vocabulary. Unlike other major materials seeing wide application in consumer products, such as wood and steel, concrete is almost exclusively utilized in the construction field. Playing on these margins, Locus and others are exploring concrete's potential, expanding its range of use.

In these and other ways, concrete continues to be rediscovered. That concrete technology was lost for more than a millennium is difficult to envision, as are the opportunities that have yet to be touched.

insight  
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projects are eligible for up to seven years. "That's important because it gives you seven different juries," Dimond says. "Most architects who are successful submit for several years and receive different views over time." Ross Barney agrees that projects should be submitted several times. "Some days juries just can't cover all the issues," she admits. "It is an exchange of ideas when looking for work to award and sometimes a jury gets on one topic or another. That doesn't mean a project isn't worthy."

Monitoring her own criteria when judging projects is important, Ross Barney says. "When I'm sitting on a jury, before I'm ready to say this is it, I want to make sure there's a balance of what we've seen; that we haven't concentrated on something in particular. Sometimes you start a discussion and it dominates and you can't return to some of the values. So my own habit is to stand back and make sure that what we've chosen represents what we've seen."

While some juries can be ideological, Fisher adds, such stances are becoming less common. "We're in a post-ideological age," he says. "In juries recently I've sensed diversity is important in terms of ideas and forms of expression, just as diversity is being recognized as being an important value in society at large."

Regardless of what jurors bring to the selection process, their job isn't an easy one. "One
of the problems with awards programs is you’re forced to review many things in a short period of time, and often with photographs,” Fisher argues. “There may be advances in the program or functional accommodations or in the structure or use of materials that don’t come across well in photos. Or you have to read for this information, and frankly you aren’t given enough time.”

To overcome such impediments, the AIA national Honor Awards program requires jurors to make site visits. “While architectural photographs are wonderful, many times jurors discover on site visits that the building doesn’t look exactly as it does in the photo,” explains Robin Lee of AIA national. “On the site visit, jurors also ask whether the building functions as it was intended and how the users feel about the building.” At times, she continues, jurors have found a building leaks or that energy costs have exceeded expectations. “A lot of elements go into site visits,” she says. “Jury make decisions based on their findings.”

Still, Lee argues, photography is an important, valid and critical part of the process. “Photographs give an instant view of the project and, coupled with the written materials provided, explain project parameters—what the architect or firm was trying to achieve and whether any innovations were produced as a result,” she explains. “Photos are visual and architects are visual people; the site visits are more technical. So these two complement each other.”

On the state level, the time and expense required to send jurors on site visits is prohibitive. The AIA Minnesota Honor Awards program receives 90 to 120 submissions each year. “At a practical level, if jurors had to visit every one of those projects, it would be too much,” Dimond says. “We’re also asking busy and important people to come here and view these projects. The time for site visits isn’t there.”

At the same time, Dimond argues, photographic submissions are more democratic as they “put all of the submittals into an equal and fair light. It could be rainy when the jury visits a building, or the cleaning crew didn’t come the night before or a juror isn’t feeling well... all those factors can influence the jury.” A “standardized submitting process” of photographs, drawings and written material, he says, allows jurors to more fairly study architectural values, philosophy of design and quality of materials among submissions.

No matter the submittal process or the jury, Lee says, “without fail, the cream always rises to the top. You’d be surprised how much consen-

sus there is on quality architecture. So the truth of the matter is, if it’s really good architecture the jury will recognize it.” Such projects, Dimond argues, often indicate or influence new directions in the profession. “These architects and projects are suddenly brought into the public eye and planted into people’s minds, and bring new life into the profession by challenging it to be more innovative.”

“When you do good work and are recognized by top architects it’s certainly motivating,” adds Dan Avchen, CEO of Hammel Green and Abrahamson in Minneapolis. “I believe most architects are in this field because they have a passion for building; what better way to support that passion than receiving an award for excellence.” Historically, he adds, “projects that have won awards clearly prove to be the best work done by our community. The choices tend to be accurate and over the long term indicate work done by the top of our profession in Minnesota. Ultimately, at some level, that encourages architects to do better work. If we do better work we’re going to enhance our community. I think that’s what it’s all about; doing good work and being rewarded for it.”

Spoilsports may argue the marketing value of awards supersedes more altruistic incentives. To which Dimond candidly replies, “I’m not sure anyone enters purely for marketing reasons, but if you win an award you market it as much as you can.” Duluth architect David Salmela, winner of many Minnesota and national AIA Honor Awards, agrees that “from a marketing perspective, of course awards attract attention. But if you look at winning awards for marketing, then maybe your focus is improper. If your motivation is marketing, you can distract yourself from doing architecture. There is another danger. There are a lot of awards out there and you have to evaluate the context of a good award. The AIA Honor Awards are about as high as you can get in the country. You have to have an extremely good project to win.”

To cynics who may still argue that such prizes simply constitute members of the profession patting each other on the back, Ross Barney has a rebuttal. “The awards I get from my peers are the most valuable because they know how hard it is to do some of this stuff,” he says. Salmela agrees. “Winning an AIA Honor Award means my peers acknowledge that the project I did stood out above all things being designed at that period of time,” Salmela says. “That’s a pretty big acknowledgment. I don’t know what bigger acknowledgment there could be. The awards where architects are the jurors? What higher accomplishment in your profession is there than that?”
clearly the way a structure and its constituent parts functioned.

In 1935, after two years at Alma College, Rapson won a scholarship to study architectural design in Ann Arbor at the University of Michigan’s College of Architecture. Although it was one of the nation’s finest schools of architecture and engineering, its programs were in the midst of transition when Rapson enrolled. The school was firmly rooted in mainstream architectural education, with its emphasis on the rationalist precepts of the École des Beaux-Arts. Established in Paris in 1819, the École had long held sway in both Europe and America in the teaching of painting, sculpture, and architecture. It sought to create universal architectural ideals through the study of the classical orders, as exemplified in the structures of Greek and Roman antiquity, the Renaissance and French classicism. The École’s design principles included emphasis on a highly ordered scheme based on a grid, symmetry, balance, axes, vistas, and the experience of human movement through a building. A student progressed through a tightly prescribed curriculum of mathematics, perspective and construction, and materials knowledge, based on a series of proficiency tests.

Like many American universities, Michigan had brought in a Frenchman with strong École des Beaux-Arts credentials to lead its architectural design program: Jean Hebrard. Among his other accomplishments, Hebrard had won the Grand Prix de Rome, the most coveted honor of a Beaux-Arts education, awarded to one student each year for advanced study in Rome. He was a firm proponent of the use of the easie (sketch). This was an exercise in which a student was handed the outlines of a problem on the first day of design studio class, then given a few days, often less, to complete an easie—a design that had to be adhered to for the rest of the semester. The trick was to work up a solution that was sufficiently vague and diagrammatic to permit “elbow room” for subsequent concept development. To add to the anxiety, professors who employed the easie hovered over the students’ boards, liberally reworking drawings to their own liking.

But in contrast to the rigidity of the Beaux-Arts side of Michigan’s curriculum there was a growing interest among a group of young faculty members in exposing students to the emerging modernist ferment in architecture generated by the work of Frank Lloyd Wright, the thinking of Le Corbusier, the teachings of the German Bauhaus, the energy of the pioneering 1932 show Modern Architecture: Inter-national Exhibition (mounted at the Museum of Modern Art in New York), and the 1933-34 Century of Progress exposition in Chicago. The efforts of these young teachers were reinforced by visiting lecturers, such as Gunnar Asplund, Erich Mendelsohn, and Eliel Saarinen, who espoused modernist ideas.

Although Michigan was among a very few architectural programs to offer this kind of counterweight to the Beaux-Arts tradition, it was not until Walter Gropius, the founder of the Bauhaus, was invited to head the architectural program at the Harvard Graduate School of Design in 1937 that the philosophy and direction of American architectural education began to shift.

Among those at Michigan who took a modernist approach was one professor Brigham, the only practicing architect on the faculty. In particular, he imparted to students such as Rapson an enthusiastic sense of the possibilities of modernist residential design.

Although Hebrard grounded his students in the technical mastery of Beaux-Arts drawing techniques, ultimately, in the design studios, they were free to pursue the design style of their choice. For Rapson, that increasingly meant pursuing modernism. Although he was intrigued by the rich historical sources of the Beaux-Arts courses, he found them confining. He viewed the tendency to reproduce historical forms slavishly as an impediment to exploring a design approach that reflected the materials, social realities, and technologies of the modern age. He was interested in an architecture that explored the future rather than the past.

Teachers such as Brigham were able to open a door to this kind of aesthetic. Upon entering, however, Rapson had to proceed largely on his own.

His history classes never moved beyond Frank Lloyd Wright; more often, they stopped at Henry Hobson Richardson, Louis Sullivan, or the Arts and Crafts movement. Accordingly, Rapson spent long hours in the library, devouring whatever publications he could find that described movements that were emerging in Europe. He was fascinated with the gridlike graphic qualities of De Stijl. He was strongly attracted to the Machine Age aesthetic of the Bauhaus. And once, while rummaging through a bookstore, he discovered a volume by Le Corbusier. He was powerfully affected by the Swiss-born architect’s line drawings—“clear and pure”—the spirit of which his own drawings soon began to reflect. He also found himself drawn to the functional, direct work of the German Hans Scharoun and of the Dutch architects Willem Marinus Dudok and J.J.P. Oud. Stimulated by the ideas he was discovering, Rapson determined that he wanted to play a part in their further development.

Because he had taken enough drawing courses at Alma College to allow him to skip Michigan’s introductory art classes, he set up an independent-study course with a professor Barnes, an elderly member of the art faculty. The two met once or twice a week during Rapson’s first year. Barnes would set up the dustiest possible models—a plain box, a cone, plaster casts of animal heads—to force Rapson to draw in accurate perspective. The simplicity of the assignment, together with the one-on-one attention, enabled Barnes to catch any mistake of fundamental technique. He demanded perfection in the rendering of proportions and the handling of light sources. He insisted on good line quality, showing Rapson the subtle ways that line can create form.

As the year progressed, Barnes made the exercises increasingly difficult—demanding drawings from every possible perspective and introducing complex light sources. By year’s end, Rapson’s technique was sufficiently accomplished that Barnes tried to convince him that his future lay in being an artist. But he was now fully committed to being an architect. The drafting style he was to develop, however, owed a powerful debt to those sessions with Barnes. As he would later note, “I simply am not capable of drawing out of perspective.”

In each of his first two years at Michigan, Rapson also gained relevant experience by indenturing himself to a final-year design student, agreeing to do anything and everything the student needed to complete his final design project. Cutting model parts, lugging around construction materials, helping with research, doing sketches—Rapson wanted to learn by closely watching what others did.

He brought all these endeavors—reading about new movements, drawing, and observation of advanced students—together in the design studio. His first design project was a simple teashouse. Rapson adhered to the prescribed program by providing a reasonable facsimile of a classical form, complete with pediment. But he departed from the program in two significant ways. First, he substituted for the meticulously rendered, delicately watercolor drawings typical of the Beaux-Arts tradition a series of loose, quickly done pencil sketches. Second, he added in small, cartoony-like figures, crouched in the pediment—an early example of the “peo-
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RAPSON

Continued from page 46

pling” of drawings that would come to distinguish his drafting style.

These early assertions of independence were magnified in his final project, the design of a multipurpose theater building. He had prepared a series of black-and-white presentation drawings in ink. When Professor Hebrand came by his boards for a preliminary review, he stopped, stared, motioned for Rapson to get off his stool, and proceeded to render the boards in watercolor. Getting up, he instructed the student to finish the work in blue tones. Rapson stewed for a bit, unable to bring himself to do what Hebrand wanted. Finally, he picked up the boards, took them to the large studio sink, and sponged off as much of the color as he could. He finished the boards in black-and-white and then stored them safely out of sight.

When Rapson’s turn came to make his final presentation, Hebrand started visibly as he brought out his boards for the jury to review. “His eyebrows twitched uncontrollably,” but that was all. That the boards didn’t elicit a more extreme reaction was likely attributable in equal measure to Hebrand’s professionalism and to the quality of Rapson’s work: The project received the highest mark in the class. AM

EARTHWISE

Continued from page 41

in the winter, and no sunlight enters the house from the south in June and July. Coupled with the super insulation, the system works: we paid less than $400 to heat the house in 1996-97, our first winter there.

Now that we have thermal shades installed on the windows, we expect the heating bills to be even less. The shades are like a giant sweater wrapping the house. As soon as the sun sets in the winter, we draw them close, to prevent the sun’s heat from flowing out through the windows into the cold night, and we raise them with even a suggestion of sun, to make the most of winter’s slight warmth.

Well into the project, we began to wonder if we were deluded in our environmental correctness. With dismay, we surveyed the wash of mud surrounding the house and recalled the lovely, verdant meadow, now gone forever. The mud was wet clay, the mineral soil, since the topsoil had been scraped off in the initial site preparation. The clay, in turn, had been compressed by the heavy equipment that had

Continued on page 54
Architecture Minnesota has published an annual directory of landscape architectural firms for the past nine years as a means of informing the public and other design professionals of this rich resource of design talent and judgment.

Firms listed in this directory are those which are either owned and operated by members of the Minnesota Chapter of the American Society of Landscape Architects or are registered landscape architects practicing within AIA Minnesota firms.

Should you wish further information about the profession of landscape architecture, call the Minnesota Chapter of the American Society of Landscape Architects (MASLA) at 612/339-0797.

Peter A. Rand, FAIA
Publisher

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**LEGEND**

AIA Registered and a Member of the American Institute of Architects
AICP American Institute of Certified Planners
ASLA Member of the American Society of Landscape Architects
FASLA Fellow, American Society of Landscape Architects
PE Professional Engineer
RA Registered Architect
RLA Registered Landscape Architect
RLS Registered Land Surveyor

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**ANDERSON - JOHNSON ASSOCIATES, INC.**
7575 Golden Valley Road, Ste. 200
Minneapolis, MN 55427
Tel: 612/544-7129
Fax: 612/544-0531
E-mail: aj@24344@aol.com
Established 1992

- Daniel L. Johnson PE
- Patrick Sarver ASLA
- Jay Pomeroy ASLA
- Roy Anderson ASLA
- Firm Personnel by Discipline
  - Landscape Architects 20
  - Other Professional 2
  - Administrative 2
  - Total 25

- Site planning & development studies 20
- Parks & open spaces 20
- Master/comprehensive planning 20
- Schools & athletic facilities 40

**ARTEKA CORPORATION**
15195 Martin Drive
Eden Prairie, MN 55344
Tel: 612/934-2000
Fax: 612/934-2277
E-mail: arteka@artekacorporation.com
Established 1970

- David Tupper ASLA
- Stewart K. Hanson ASLA
- Thomas Trynka
- Ted Maro
- Firm Personnel by Discipline
  - Landscape Architects 20
  - Other Professional 3
  - Technical 1
  - Administrative 4
  - Total 25

- Residential/decks/gardens 50
- Master/comprehensive planning 10
- Multi-family housing/PUDS 25
- Office park/commercial 15

- Meridian Crossings Office Buildings, Richfield, MN; Rotenberg Office Building, Minnetonka, MN; Arbor Pointe Housing Development, Inver Grove Heights, MN; The Murphy Residence, Edina, MN (drive and entry layout, bluestone terrace/pool deck, iron fencing, planting, lighting); The Mitchell Residence, Edina, MN (paver drive and entry walk, site planting and lighting); The Nelson Residence, Bearpath, MN (stamped concrete drive, entry walk and patio, site planting, lighting and brick entry columns)

**ARMSTRONG, TORSETH, SKOLD & RYDEEN, INC.**
(ATS&R)
8501 Golden Valley Road, Ste. 300
Minneapolis, MN 55427
Tel: 612/545-3731
Fax: 612/525-3289
E-mail: atrs_la@minn.net
Established 1944

- Other Offices: Miami, FL; Phoenix, AZ

- Paul W. Erickson AIA
- Robert J. Gunderson ASLA
- Todd R. Wichman ASLA
- Robert L. Binder ASLA
- Philip G. Behrend PE
- Firm Personnel by Discipline
  - Landscape Architects 3
  - Architect 51
  - Other Professional 26
  - Technical 7
  - Other 18
  - Administrative 9
  - Total 114

**BARTON-ASCHMAN ASSOCIATES, INC.**
111 Third Avenue S., Ste. 350
Minneapolis, MN 55401
Tel: 612/332-0421
Fax: 612/332-6180
E-mail: william_s_midness@parsons.com
Internet: www.parsons.com
Established 1946

- Other Offices in Principal Cities

  - Wm. Scott Midness ASLA
  - Joel L. McElhany ASLA
  - Thomas G. Ritzer ASLA
  - Frederick C. Dock AICP PE
  - David B. Warzala PE
  - Gary P. Orlich PE

- Firm Personnel by Discipline
  - Landscape Architects 3
  - Civil Engineers 6
  - Traffic/Transportation Engineers 6
  - Environmental 2
  - Graphic Artist 1
  - Technical 3
  - Administrative 4
  - Total 25

- Site planning & development studies 25
- Environmental studies (EIS) 5
- Parks & open spaces 25
- Urban design & streetscapes 25
- Master/comprehensive planning 5
- Transportation planning/design 15

- Allina Health System Campus
  - Grounds Study, Minneapolis/St. Paul Area, MN; Battle Creek Aquatic Facility, Maplewood, MN; Fairmont Downtown Plaza, Fairmont, MN; Hennepin County Public Works Facility, Medina, MN; Mills District Streetscape, Minneapolis, MN; Woodbury United Methodist Church, Woodbury, MN

Continued on next column
### CLOSE LANDSCAPE ARCHITECTURE

**ADDRESS**: 275 E. Fourth Street, Ste. 610 St. Paul, MN 55101  
**Tel**: 651/222-5754  
**Fax**: 651/222-1017  
**E-mail**: closelandarch.com  
**Established**: 1977

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<th>Parks &amp; open spaces</th>
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DAMON FARBER ASSOCIATES
253 Third Avenue South
Minneapolis, MN 55415
Tel: 612/332-7522
Fax: 612/332-0396
E-mail: dfarber@dflandscape.com
Established 1981

- Damon Farber
  FASLA, RLA
- Joan MacLeod
  RLA
- Thomas Whistock
  RLA
- Paul Kangas
  RLA
- Matthew Jones
  ASLA, RLA
- Peter Larson
  RLA

Firm Personnel by Discipline
Landscape Architects 9
Administrative 1
Total 10

Work %
Residential/decks/gardens 5
Site planning & development studies 10
Parks & open spaces 10
Urban design & streetscapes 30
Master/comprehensive planning 30
Multi-family housing/PUDS 15

Firm Personnel by Discipline
Landscape Architects 1
Urban Planners 1
Administrative 1
Total 3

Site planning & development studies 15
Parks & open spaces 10
Urban design & streetscapes 20
Master/comprehensive planning 20
Multi-family housing/PUDS 5
Redevelopment planning 10

France Avenue/Old Shakopee Road Redevelopment Study, Bloomington, MN; Webber Park, Minneapolis & Recreation Board, MN; Main Street Design Framework, Charles City, IA; Brooklyn Park Performing Arts Center EAU, Brooklyn Park, MN; Hastings Comprehensive Park Plan, Hastings, MN; Fridley Comprehensive Plan, Fridley, MN; Newport Economic Recovery Study, Newport, MN; Ramsey School Playground, Minneapolis Public Schools, MN

HAUCK ASSOCIATES, INC.
3620 France Avenue S.
St. Louis Park, MN 55416
Tel: 612/920-5088
Fax: 612/920-2920
Established 1990

- Robert P. Hauck
  ASLA
- Firm Personnel by Discipline
  Landscape Architects 1
  Technical 1
  Administrative 1
  Total 3

Work %
Residential/decks/gardens 80
Recreation areas (golf, ski, etc.) 10
Neighborhood amenities & renovation 10

Edina Country Club (monumentation, signage, lighting, brick paving, planting), Edina, MN; Parkers Lake SunCourt Homes (streetscape & intimate-scaled private yards), Plymouth, MN; Ashton Residence (pond/waterfall, prairie gardens, wildlife area), Medina, MN; Lake of the Isles 1917 Mansion (revealed by removal of overgrown vegetation, new landscape, extensive lighting, iron gates); Moore Residence (estate arrival area, entrances, swimming pool area, porch addition), Orono, MN; Coventry Townhomes (private courtyards featuring shade structures, lighting, decks, patios, waterfalls), Centennial Lakes Area, Edina, MN

HOISINGTON KOEGLER GROUP INC.
123 North Third Street #100
Minneapolis, MN 55401-1659
Tel: 612/338-0800
Fax: 612/338-6838
E-mail: HKG@HKGi.Com
Established 1982

- Mark Koegler
  ASLA
- Michael Schroeder
  RLA
- Paul Paige
  RLA
- Bruce Chamberlain
  RLA

Firm Personnel by Discipline
Landscape Architects 8
Urban Planners 3
Administrative 2
Total 13

Site planning & development studies 15
Parks & open spaces 10
Urban design & streetscapes 20
Master/comprehensive planning 20
Multi-family housing/PUDS 5
Redevelopment planning 10

France Avenue/Old Shakopee Road Redevelopment Study, Bloomington, MN; Webber Park, Minneapolis & Recreation Board, MN; Main Street Design Framework, Charles City, IA; Brooklyn Park Performing Arts Center EAU, Brooklyn Park, MN; Hastings Comprehensive Park Plan, Hastings, MN; Fridley Comprehensive Plan, Fridley, MN; Newport Economic Recovery Study, Newport, MN; Ramsey School Playground, Minneapolis Public Schools, MN

KEENAN & SVEIVEN inc.
756 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391
Tel: 612/475-1229
Fax: 612/475-1667
Established 1990

- Kevin Keenan
  ASLA
- Todd Irvine
  ASLA
- John Johnson
  ASLA

Firm Personnel by Discipline
Landscape Architects 3
Technical 6
Administrative 1
Total 10

Work %
Residential/decks/gardens 100

Perkins Restaurant, Orono, MN; Cummins Residence, Deephaven, MN; Rivich Residence, Minneapolis, MN; French/Hugger Residence, Woodland, MN; Hauser Residence, Orono, MN

DAVID A. KIRSCHT ASSOCIATES, INC.
5500 Lincoln Drive
Edina, MN 55436-1666
Tel: 612/938-4030
Fax: 612/938-0026
Established 1972

- David A. Kirscht
  ASLA

Firm Personnel by Discipline
Landscape Architects 2
Administrative 5
Total 7

Residential/decks/gardens 5
Site planning & development studies 15
Golf courses 45
Master/comprehensive planning 10
Multi-family housing/PUDS 10
Office/commercial 15


LANDMARK DESIGN, INC.
4045 Watertown Road
Maple Plain, MN 55359
Tel: 612/476-6765
Fax: 612/475-8984
E-mail: gregk@landmarkdesignmn.com
Established 1979

- Greg Kellenberger
  ASLA, RLA
- Dana Kellenberger
  ASLA, RLA

Firm Personnel by Discipline
Landscape Architects 2
Technical 1
Administrative 5
Total 8

Work %
Residential/decks/gardens 60
Site planning & development studies 5
Urban design & streetscapes 5
Residential, golf and equestrian communities (site planning & landscape architecture) 30

Miles/Cowley Residence (swimming pool and entry area), St. Louis Park, MN; Brunn Residence (swimming pool and fireplace area), Edina, MN; Koizloff Residence (garden renovation), Minneapolis, MN; Hutchinson Residence (spa and patio area), Excelsior, MN; Honeywell Corporate Headquarters (renovation and streetscape), Minneapolis, MN; Bearpath Golf and Country Club (clubhouse, pool and tennis, golf course), Eden Prairie, MN
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<th>ADDRESS</th>
<th>CITY</th>
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<tr>
<td>LHB ENGINEERS &amp; ARCHITECTS</td>
<td>21 West Superior Street, Ste. 500</td>
<td>Duluth, MN</td>
<td>55802</td>
<td>218-727-8446</td>
<td>218-727-8446</td>
<td><a href="mailto:joeljynn@lhb.com">joeljynn@lhb.com</a></td>
<td><a href="http://www.lhbcorp.com">www.lhbcorp.com</a></td>
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<td>Other MN Office: Minneapolis - 612/338-2029</td>
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<td>Mccaren Designs, Inc.</td>
<td>760 Vandalia Street, Ste. 100</td>
<td>St. Paul, MN</td>
<td>55114</td>
<td>651/664-4764</td>
<td>651/664-8393</td>
<td><a href="mailto:mccaren@aol.com">mccaren@aol.com</a></td>
<td>Established 1977</td>
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<td>St. Paul, MN</td>
<td>55101-1411</td>
<td>651/221-0401</td>
<td>651/227-6817</td>
<td><a href="mailto:swbinc@usinternet.com">swbinc@usinternet.com</a></td>
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<td>Lake of the Isles Master Plan, Minneapolis, MN; University of Minnesota Gateway Plaza/Alumni Building, Minneapolis, MN; Birch Coulee Battlefield Historic Site, Morton, MN; Lincoln Park Improvement Framework, Duluth, MN; Ellis Avenue Re-development Project, Ashland, WI; Lake Calhoun Ponds Wetland, Minneapolis, MN</td>
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<td>SAVANNA DESIGNS, INC.</td>
<td>ASLA</td>
<td>3511 Lake Elmo Avenue</td>
<td>651/770-6910</td>
<td>651/770-1166</td>
<td><a href="mailto:s.designs@worldnet.att.net">s.designs@worldnet.att.net</a></td>
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<td>Jim G. Hagstrom</td>
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<td>SRF CONSULTING GROUP, Inc.</td>
<td>One Carlson Parkway No., Ste. 150</td>
<td>Minneapolis, MN</td>
<td>612/475-0010</td>
<td>612/475-2429</td>
<td><a href="mailto:info@srfconsulting.com">info@srfconsulting.com</a></td>
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<td>Robert Roscoe</td>
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<td>TOLTZ, KING, DUVALL, ANDERSON &amp; ASSOCIATES, INC.</td>
<td>444 Cedar Street, Ste. 150</td>
<td>St. Paul, MN 55101-2140</td>
<td>612/292-4400</td>
<td>612/292-0083</td>
<td><a href="mailto:johnson.DA@TCKDA.com">johnson.DA@TCKDA.com</a></td>
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<td>Stillwater, MN 55082</td>
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<td>taste@<a href="mailto:ansl@aol.com">ansl@aol.com</a></td>
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<td>Amy Stefan</td>
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<td>Eden Prairie, MN 53544</td>
<td>612/937-5150</td>
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<td><a href="mailto:wps@westwoodps.com">wps@westwoodps.com</a></td>
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<td>717 SE 3rd Avenue</td>
<td>Rochester, MN 55904</td>
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<td><a href="mailto:rfiscus@yaggcolby.com">rfiscus@yaggcolby.com</a></td>
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excavated the basement. Hundreds of years of soil formation had been wiped out on the small patch of earth where we now anticipated growing a garden and seeding a yard. The destruction seemed violent in a way we had not anticipated.

Each of the new construction materials consumed in building the house took its toll on the earth. Structural lumber from the Pacific Northwest, high-grade plywood from pine plantations of the Southeast, porch pillars of old growth cedar—each added to society's collective demand for wood and the impetus to cut our forests for short-term gain, but long-term impoverishment. Paints, sealants, glues and resins, applied to preserve the materials, were created in toxic brews and left behind their trails of pollutants that tainted the air and water. Our consumption of materials added incrementally to the demand of a society that takes and takes without much thought.

I was embarrassingly naive to believe we could construct a house without harming the environment. Environmentalists like to advocate "leaving no trace." But even in the simplest scenario it is impossible to do. Every living organism changes its world as it lives out its life. For the most part, these changes can be accommodated within the larger web of life. Human beings alone create changes great enough to rip the tense web.

On the other hand, what redeems us is our ability to choose the impact we will have. The other creatures of earth are locked into the roles that they play. We alone can decide for greater or lesser harm to the planet.

This decision isn't made in a vacuum, however. It is fueled by our expectations and our ability to meet those expectations. My husband and I, and our four consuming children, did not expect to live in a simple cabin, as Thoreau did. We wanted five bedrooms, a room reserved just for thinking and space for a grand piano. Although our house has less square footage—and consequently, less materials—than most houses of comparable price range, the house is far from small. Though we had conscious intent to build responsibly and were slaves to the task for nearly two years, our house still falls short of the mark. We had the wealth to build to our expectations and we put our money into features at odds with each other: energy and material conservation, on the one hand, and our consumptive American standards, on the other.

Did we not try hard enough? Must we all live in teepees or igloos, or houses with similar low-impact materials? If this idea seems absurd, then tell me: what is environmentally responsible housing? Or is there no such thing? There are so many people on the planet now that even the simplest structures will take an enormous toll and most of the world's people are too poor to be able to choose. They live however best they can.

For our affluent American society, perhaps a deeper truth is even darker. Perhaps our affluence has blinded us to the choices we can make. Perhaps the plain truth is, we are too wealthy to be moral. Steeped in a consumptive society, with conventional expectations, we built ourselves a common-place house, conforming to American standards, standards that cannot be maintained anywhere else on the planet. Our standards are consumptive because there are still materials to consume. We don't really have to worry about scarcity—yet.
Credits

Compass
Location: Minneapolis
Client: Compass Marketing, Inc.
Architect: Collins Hansen Architects
Project architect: Dennis McGrath
Project designer: Dennis McGrath
Project team: Mike Collins, Merle Hansen, Dennis McGrath, Phil Rader, Ashley Stoner, Rob Grundstrom
Structural engineer: Mattson/MacDonald, Inc.
Mechanical engineer: Allan Mechanical, Inc.
Electrical engineers: Mayer Electrical Corp.
Contractor: Cirrus, Inc.
Interior design: Collins Hansen Architects
Acoustical consultant: AVI Systems
Lighting consultant: Craig Oty
Computer network consultant: Omni Delta, Inc.
Photographer: Don F. Wong

Crystal Court
Location: Minneapolis
Client: Wilson-Kennedy, Minnesota Management
Architect: Hammel Green and Abrahamson
Principal-in-charge: Jim Moravek
Design principal: Loren Ahles
Project architect: Mike O’Malley
Project designer: Kara Hill
Structural/mechanical/electrical engineer: Hammel Green and Abrahamson
Contractor: PCL Construction Services, Inc.
Lighting consultant: Hammel Green and Abrahamson
Fountain consultant: CMS Collaborative
Photographer: George Heinrich

Hennepin County Public Works Facility
Location: Medina, Minn.
Client: Hennepin County
Architects: Architectural Alliance
Principal-in-charge: Tom DeAngelo
Project manager: Peter Vesterholt
Project architect: Peter Schroeder
Project designer: Scott Sorenson
Project team: Tom DeAngelo, Peter Vesterholt, Peter Schroeder, Scott Sorenson, Sharry Cooper, Sandi Allen, Ellen Olson, Sheriff El Banna Christine Bleyhl, Ken Sheehan, Ron May, Greg Maxam
Structural/mechanical/electrical engineer: Dunham Associates
Contractor: Enbak Construction;
Knutson Construction
Interior design: Architectural Alliance
Landscape architect: Barton-Aschman
Photographer: Peter Kerze

Leaf House
Location: Center City, Minn.
Client: Tom and Sue Leaf
Architect: TOD Drescher Architecture
Principal-in-charge: TOD Drescher
Project designer: Roger Tomten
Contractor: Joel Slattengren Construction

Minnesota Rubber-Engineering Center
Location: St. Louis Park, Minn.
Client: Minnesota Rubber—A Quadion Company
Architect: Julie Snow Architects, Inc.
Principal-in-charge: Julie Snow
Project manager: Christian Dean
Project architect: Christian Dean
Project team: Christian Dean, Julie Snow, Ben Awes, Jim Carson
Structural engineer: Meyer Borgman Johnson
Mechanical engineer: Jack Snow Engineering
Electrical engineer: Kaeding & Associates, Inc.
Contractor: McGough Construction
Photographer: George Heinrich

St. Joseph Abbey Renovation
Location: St. Benedict, La.
Client: St. Joseph Abbey
Architect: Rafferty Rafferty Tollefsen
Principal-in-charge: Lee Tollefsen
Project manager: Lee Tollefsen
Project designer: Lee Tollefsen
Project team: Chad Tollefsen, George Rafferty
Mechanical/electrical engineer: IMC Engineers
Contractors: Gibbs Construction Company
Organ consultant: Delores Bruchs
Fine-art conservator: Christy and George Cunningham-Adams
Acoustical consultant: Robert Mahoney Associates
Lighting consultant: Ram Busch
Liturgical design: Frank Kacmarcik, OBL, S.B.
Photographer: Lee Tollefsen

Contributors

Bill Beyer is a principal of Stageberg Beyer Sachs, Inc., in Minneapolis.

Jack El-Hai, who writes our Lost Minnesota column, is a Minnesota writer whose books include Minnesota Collects and The Insider’s Guide to the Twin Cities.

Sue Leaf is a freelance writer living in Center City, Minn.

Camille LeFevre is a regular contributor of Architecture Minnesota and is editor of The Prairie Reader.

Robert Roscoe is head of his own firm, Design for Preservation, a commissioner on the Minneapolis Heritage Preservation Commission, and editor of Preservation Matters, published by the Preservation Alliance of Minnesota.

Todd Willmert is an architecture graduate practicing in the Twin Cities.
During the final decades of the 19th century, the biggest businesses in Chaska, then a mostly German settlement, were brick-making and brewing. At least three breweries vented the fragrance of hops and barley over the Carver County town at this time—and one beer-making building remained standing longer than the rest. Founded in 1866 by Christian Jung and Peter Itis, this brewery was located a few blocks from the town’s main business district and had several different names and owners through the turn of the century.

In 1906, however, a German immigrant named Fred Beyrer bought the brewery. For two centuries the Beyrers had been brewers, and Fred wished to continue the tradition in this two-story building with deeply recessed windows and walls of Chaska brick. Along with the brewery came an ice house dating from the 1880s, a single-story rectangular structure also built from local brick.

Twelve years later, Beyrer’s son, also named Fred, returned to Chaska after receiving training in a large Stuttgart brewery. He took over the family operation and guided it until Prohibition. Then he closed the brewery and ran a soda-pop factory in Northfield. When Prohibition ended in 1933, the younger Beyrer reopened the brewery and was ready for the rising tide of suds during the years after the Second World War.

He retired from brewing in the early 1950s and closed the business, although he sometimes tinkered with the equipment. The brewery never produced another keg. In 1976, Frieda Beyrer, Fred’s sister, inherited the brewery and ice house, tried to preserve them as a memorial to her family’s brewing legacy, and succeeded in having the buildings placed on the National Register of Historic Places.

By that time, though, the structures were in sad shape. In 1978 a surveyor noted that the brewery had a sagging and leaking roof, a displaced top story and deteriorating walls. But the century-old brewing equipment—including fermenting vats, a boiler, kettles, tanks, and beer kegs—remained in place. He estimated it would cost $500,000 to restore the brewery to operating condition. Nobody was willing to invest that much money. Chaska’s last remaining brewery was razed after Frieda Beyrer’s death in 1981.

Jack El-Hai
# AIA Documents Make Life Easier.

## A-SERIES DOCUMENTS: Owner-Contractor Series

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### Other Series:
- **B-SERIES DOCUMENTS:** Owner-Architect Series
- **C-SERIES DOCUMENTS:** Architect-Consultant Series
- **D-SERIES DOCUMENTS:** Architect-Industry Series
- **G-SERIES DOCUMENTS:** Architect's Office & Project Forms

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