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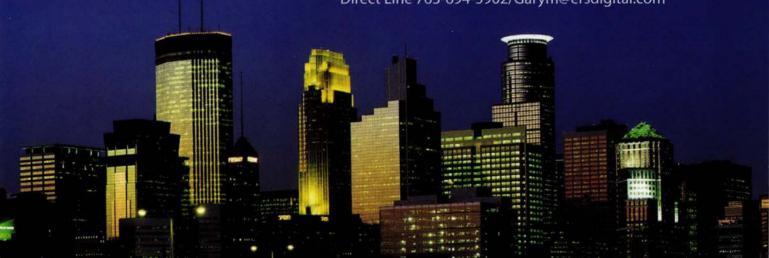
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2002 Honor Awards

By Camille LeFevre

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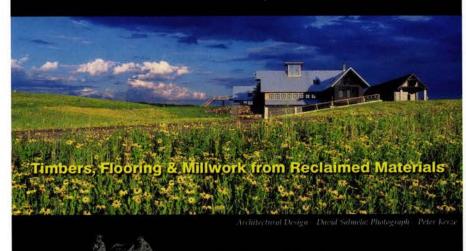
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Continuity

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he 2002 Honor Awards jury was a congenial bunch; perhaps made more so by the presence of a camera crew taping their final deliberations for an upcoming program on public television. They were firm in their opinions, yet flexible enough to entertain other points of view. And their selections indicated a willingness to embrace both the large-corporate, experimental-interior and small-residential project, as long as the architecture showed restraint, economy and sensitivity to site.

The trio lauded the "high standards," "rigorous tectonics" and "tremendous care" shown in projects submitted and projects awarded. But they were disturbed by two things: the lack of well-articulated urban-design projects and the "troubling" number of corporate and residential projects inhabiting what they called "the middle landscape"-the "contentious zone" between inner city and rural; both of which contribute, they said, to the "continuing fall of cities."

So I asked about another aspect of architecture today, in which more architects could demonstrate leadership, that was missing from the 124 Honor Award submissions: sustainable design. Only then did the jurors think to consider the entries from this perspective. Having been prompted, they pointed out sustainable-design initiatives reflected in their final selections: adaptive reuse of an existing building, the incorporation of salvaged materials, orientation to maximize daylight. And yet, they conceded, there was not "a systematic approach" to sustainable design in any of the submissions.

The paradigm shift necessary to automatically think "sustainably" is ongoing and challenging. Many architectural firms are struggling to put sustainability at the core of their design approach. Architects must meet the needs of the clients who demand sustainable design and construction and, conversely, educate those who insist on paving prairie in "the middle landscape."

In planning this and forthcoming editions of Architecture Minnesota, I've considered how to continuously incorporate information on sustainable design, not just in one themed edition appearing every one or two years. It isn't easy. This issue is devoted to projects the jurors selected for an Honor



Award. While these projects incorporate such important sustainable aspects as those mentioned above, arguably the best example of an article on sustainable design in these pages is the feature on

Suggestions for continuity have included establishing a sustainable-design column in the magazine; but I'm also interested in how to instigate—and sustain—a paradigm shift in my own approach to assembling Architecture Minnesota so architects' thoughts on and innovations in sustainable design are integrated throughout the magazine. Could AIA Minnesota's Awards Committee help, by requiring Honor Award submissions to include information on a project's sustainable-design strategies? Would such information matter to next year's Honor Awards jury?

The projects awarded in 2002 evidence the jury's sensitivity to how some basic tenets of sustainable design contribute to award-winning architecture. This jury also clearly stated that they were intrigued by and pondered over many additional submissions that a different jury might be quick to award instead. Whether judging architectural submissions, designing a building or editing a magazine, the ability to maintain continuity is critical; but one must also be flexible enough to allow for diversity and relativity. Easier paths are never as rewarding.

> Camille peterre Camille LeFevre lefevre@aia-mn.org



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BIG & GREEN: TOWARD SUSTAINABLE ARCHITECTURE IN THE 21ST CENTURY **THROUGH JUNE 22** NATIONAL BUILDING MUSEUM WASHINGTON, D.C. (202) 272-2448 www.nbm.org

In conjunction with a broad examination of global ecological and economic forces, the exhibition focuses on such large-scale buildings as skyscrapers, factories, apartment complexes, convention centers and shopping complexes to demonstrate the transformative powers of sustainable design.

NATIONAL DESIGN TRIENNIAL: INSIDE DESIGN NOW APRIL 22-AUGUST 3 SMITHSONIAN'S COOPER-HEWITT, NATIONAL DESIGN MUSEUM **NEW YORK, NEW YORK** (212) 849-8400

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The exhibition is a critical overview of leading developments in contemporary American architecture and design over the past three years.

TOBACCO: ARCHITECTURAL PHOTOGRAPHS BY MAXWELL MACKENZIE **THROUGH MAY 2** THE AMERICAN INSTITUTE OF ARCHITECTS HEADQUARTERS GALLERY WASHINGTON, D.C. (202) 638-3221 www.archfoundation.org/octagon

The exhibition follows the architectural photographer, a contributor to Architecture Minnesota, in his pursuit of the archetypal tobacco barn.

AIA 2003 NATIONAL CONVENTION MAY 8-10 SAN DIEGO CONVENTION CENTER SAN DIEGO, CALIFORNIA (202) 626-7467 www.aia.org

"Design Matters! Poetry and Proof" is the theme of this year's AIA National Convention, which will focus on the challenges of communicating the value and magic of good design. Three theme sessions, 148 continuing-education programs, 58 tours, 64 special events and more than 600 exhibitors make up this year's convention.

GREENING ROOFTOPS FOR SUSTAINABLE COMMUNITIES CONFERENCE MAY 29-30 **CONGRESS PLAZA HOTEL** CHICAGO, ILLINOIS (416) 971-4494 www.greenroofs.ca

The first North American green-roof conference, a networking opportunity for policymakers, researchers, designers, manufacturers and consulting professionals, will include opportunities for training on green-roof design and implementation, technical and policy support, and products and services.

Nouvel in America

n enhanced design for French architect Jean Nouvel's first North American building, the new Guthrie Theater in Minneapolis's historic milling district, was recently released. Neither the building's siting nor its forms have changed. The 250,000-square-foot, three-theater complex features a circular form (housing the thrust theater) that echoes the adjacent grain silos; its massing harmonizes with the volumes of nearby flour mills; its metal sheathing evokes the industrial and agrarian buildings of Minneapolis's past. The tall LED sign masts atop each of the three theaters will continue the tradition of industrial signage in the area. A cantilevered bridge, extending toward the Mississippi, will provide spectacular views of historic St. Anthony Falls, the Stone Arch Bridge and Mill Ruins Park.



The most significant change in the design is the building's color: midnight blue. At twilight, the theater complex will disappear into the dark, leaving only a few giant-size images from past Guthrie productions (silkscreened onto the building's exterior) floating like ghosts. "The character of the building at night is one of the main aspects of this architecture," says Nouvel. "Theater is always a dream and the building will be part of that." In addition, the cantilevered bridge will be partially enclosed, with a series of windows, like cutouts, framing views of the river and the milling district. The bridge, which appears to terminate mid-air, actually slopes down to a guardrail.

The building's design, Nouvel, explains, "has a relationship with the river, a good dialogue with the mills and bridges, a consciousness of the waterfalls, is in harmony with the existing buildings around it and is symbolic of the theater. This is not a generic building." The character of the design, he adds, is "a juxtaposition of two notions"—the neighborhood's agrarian industrial past and its future as the site of a new kind of cultural industry: theater production. - Camille LeFevre



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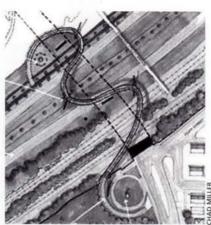
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St. Paul Prize

had Miller, intern architect, Damberg, Scott, Gerzina, Wagner Architects, Inc., Duluth, won the 2002 St. Paul Prize Design Competition, sponsored by the AIA St. Paul Chapter. As winner of the prize, Miller received \$1,000 and a oneyear membership in AIA St. Paul. Rhet Fiskness, intern architect, Grooters, Leapaldt & Tideman Architects, St. Cloud, received Honorable Mention and a prize of \$300.

Each year, the chapter chooses a St. Paul site that lends itself to a small design project. This year, can-



The jury selected Miller's "blue serpentine design" for its "exciting, sculptural and organic form."

didates were required to design a pedestrian/bicycle connection between the Uppertown Neighborhood on the Mississippi River bluffs west of downtown St. Paul and a new housing development on the river flats along Shepard Road. The upper site is located near Smith Avenue and Cliff Street at the northern end of the High Bridge. The lower site for the connector is the bike/pedestrian path along Shepard Road.

The original High Bridge, which was demolished in 1984, had two staircases, which were not replaced with the construction of the new bridge in 1987. With these designs, the Uppertown Community Organization is applying for funds for a project that would bring pedestrian and bicycle traffic back to the area. As such, the competition's program required that entries allow people, bicycles, strollers and pets to move up and down; be safe for users; complement or contrast with the design of the High Bridge; and use structurally sound and durable construction materials. Judging was also based on design, creativity, clarity of presentation, the design's ability to be constructed and how well the entries met the program requirements. There were no size limitations or set budgets for the project.

Jury members were Rachael Kaul, Uppertown Neighbors Association; Tim Griffin, Riverfront Development Corporation; and Kevin Nelson, St. Paul Public Works, Bridge Engineering Department.

The jury selected Miller's "blue serpentine design" for its "exciting, sculptural and organic form that relates to the river and to the bluff-top park where the pedestrian connector starts," they said. "The design of the connector seems to suggest the river and is a contrast to the massive rectilinear forms of the High Bridge."

Miller says his design was "inspired by the contrast between the industrial nature of the adjacent power plant/utility bridge and the river bluffs. I tried to carry this contrast into my design through the use of industrial materials that were assembled in an elegant fashion."

"I feel this bridge would be more that just a means of circulation," he adds. "It's a symbol of the community's dedication to the future."—Jennifer Gilhoi

Paul Neuhaus, AIA, Receives National Young **Architects Award**

he American Institute of Architects has selected Paul Neuhaus, AIA, designer/project manager. The Leonard Parker Associates, Minneapolis, and member of the Architecture Minnesota and Honor Awards committees, as one of five



architects to receive the National 2003 Young Architects Award. The Young Architects Award is given, regardless of age, to those in an early stage of their architectural careers who show exceptional leadership in design, education, and/or service to the profession.

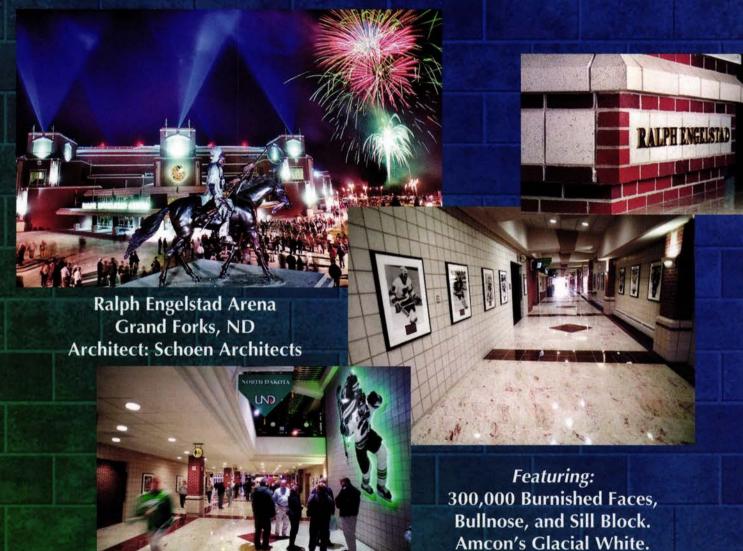
Since the program's inception in 1993, AIA Minnesota architects have dominated the winners at a national level. AIA Minnesota architects who have received an AIA National Young Architect Award include: Joan M. Soranno, AIA, 1993; Vicki L. Hooper, AIA, 1993; William A. Blanski, AIA, 1995; Michael Fischer, AIA, 1996; Robert Rothman, AIA, 1996; Jeffry Kagermeier, AIA, 2001; Mohammed Lawal, AIA, 2002; and Paul Neuhaus, AIA, 2003.

Neuhaus wrote in his application that he gains his highest sense of purpose as an architect from "collaborating on the design of a project that lights a fire in me, excites and inspires my client, and enriches the lives of those who come in contact with the building." Neuhaus came to architecture from the visual arts and says he has always regarded the discipline as an art form. His decision to use architecture to benefit society began when he entered the Peace Corps after college, making his home for two years in a small community of subsistence farmers where he initiated projects that relied on his experience in art and design to improve their quality of life.

Since returning to the U.S. and entering the architectural profession, Neuhaus has focused on making a direct contribution to his community through his designs of public buildings, including libraries, a school, courthouses, a university dance studio, an art museum, a police station and laboratories that benefit their neighborhoods by providing important civic, cultural, educational or public-safety functions. - C. L.

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2002 Rapson Traveling Fellowship

ichael Kennedy, AIA, design director, Ellerbe Becket, Minneapolis, received the 2002 Ralph Rapson Traveling Fellowship, administered by the Minnesota Architectural Foundation. The purpose of the competition, held every year since 1989, is to offer young architects the opportunity to advance their education in architecture by pursuing foreign or domestic travel and study. To assist in their education, \$12,000 is awarded to the winner.

The 2002 competition program consisted of designing a Twin Cities gateway at one of the major vehicular and pedestrian connections in the Twin Cities: University Avenue at Emerald Street, an intersection at the boundary of Minneapolis and St. Paul. Competitors were required to design a gateway structure to serve the current vehicular and pedestrian program, and to allow for future proposed modifications of the site.

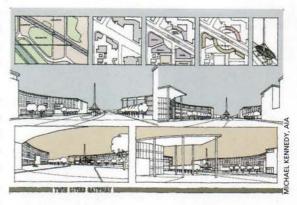
Kennedy has been a finalist in the competition for three consecutive years. This year, his winning design was selected from 40 other entries. A 1990 graduate of the University of Minnesota's College of Architecture and Landscape Architecture, where

he received his bachelor's degree, Kennedy began his 12-year career at Ellerbe Becket as senior program designer and was recently promoted to design director.

Commenting on the competition, Kennedy said, "I was somewhat surprised to find out I was a finalist because my design went out on a limb. I treated the gateway not as an object, but as an urban space with

buildings. I think the approach stood out toric urban places in Italy, namely piazzas, because it was very different from the rest and modern urban places in Berlin. of the designs."

His winning design is an urban space that forms the gateway. Viewed from above, the space comprises two semicircular buildings facing one another with a boulevard running through the middle. On either side of the boulevard is a plaza; in the middle is a monument/light-rail transit station for motorists and pedestrians to view as they travel through the development. Kennedy said the four-story, arc-shaped buildings could be mixed-use, meaning they have the potential to offer residential, office and retail space. Kennedy will use the fellowship to study his- for at least one year. - Jennifer Gilhoi



The jury consisted of Herb Baldwin, landscape architect; David Graham, AIA; Clint Hewitt; Toby Rapson, AIA; Rich Varda, AIA; and Ralph Rapson, FAIA. Other finalists included Tracey Jacques, AIA, Matthew Kreilich, Jeffrey Mandyck and Paul Ormseth. The competition is open to individuals under the age of 40 who have either graduated from the University of Minnesota's College of Architecture and Landscape Architecture and worked anywhere for at least one year; or graduated from any accredited architectural school and have worked in Minnesota

INSIDER LINGO By Gina Grensing

Registered Architect, Licensed Architect, AIA Member

Because a building project involves the collaborative efforts of so many professionals, the role of the architect is critical: to protect the health, safety and welfare of the public. This role is granted only to those architects licensed by the state of Minnesota to assume that responsibility.

The state process of deciding what licensure means began in the early 1900s, when the term "registered architect" was used to imply a person had the background and experience to practice architecture, but no license. The state instituted licensure for architects as a way of protecting the health, safety and welfare of the public.

Licensure results after someone has met all of the education (a graduate of an accredited school of architecture), experience (three years of practice under a licensed architect) and the state examination requirements. Licensure for architects is administered by the Minnesota Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience and Interior Design through Minnesota Rule 1800.4200.

In 2000, the state also began requiring licensed architects to participate in continuing education to maintain the architectural license. Licensed architects who have AIA after their names are members of the American Institute of Architects.



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By Bette Hammel

amon Farber Associates, Minneapolis, has nearly completed a large-scale greenway project in St. Louis Park for a new town center at Excelsior and Grand. The 15-acre site (near Highway 100 and Excelsior Boulevard) is the first in a Twin Cities suburb to mingle generous amounts of green space and landscaping structures with high-density residential, retail, office space and parking ramps designed by Elness Swenson Graham Architects, Inc., Minneapolis. "The town green becomes the focal point for both the development and the city as a public gathering space," says Craig Nelson, project manager, Damon Farber. The entrance features an artful combination of arbor, pergola, flowering trees, fountain and public art. Plantings of maple trees and honey locusts line Grand Way, the site's center spine leading to the north end, where the land slopes down to a new Veterans Memorial amphitheater designed by Farber's team. The hillside open space is already planted with spruce and other trees. The landscape architects also designed three large private courtyards for the apartment complexes with such amenities as a playground, a swimming pool and gardens. According to Farber, his firm, ESG and TOLD Development feel "St. Louis Park should be commended for setting up a great public/private partnership."

an you recall names of the celebrated scholars who made the University of Minnesota famous? Eventually those names will appear along the "Scholars Walk," a pedestrian walkway from the McNamara Alumni Center to the main campus mall in Minneapolis. This long-awaited project is gaining momentum thanks to Larry Laukka and his Gateway Corporation partners, who are determined to raise funds necessary to complete the plan. The design was initiated two years ago by Gary Fishbeck, landscape architect, Hammel, Green and Abrahamson, Inc., Minneapolis, working with Clint Hewitt, then the university's director of planning. Laukka says the walkway connection is badly needed, adding that "The Gateway Corporation will undertake [the task of] completing the design, funding the materials and contracting within university guidelines." Various ways to recognize scholars along the walkway have been discussed, including names in pavers, carvings on stone walls and commemorative columns. "Whatever materials we use should speak long term, in keeping with these great names of inspiration," Fishbeck says.

r. Charles Mayo (1865-1939), a founder of what became the world-famous Mayo Clinic, would be happy to know his wooded land and open fields will be preserved for future families to enjoy. Thanks to forward-thinking members of the Mayo family, Mayo Woodlands, 220 acres located near Rochester, have been plotted for a new type of residential community designed by Coen & Partners, Minneapolis, as a model for new communities across America. David Salmela, FAIA, Salmela Architect, Duluth, and Tim Alt, Altus Architects, Minneapolis, are designing residences with simple open plans and lots of daylighting. Landscaping of the former agricultural land includes tall prairie grasses. Rows of red pines behind the houses will ensure privacy; walking trails will weave through the woods. Wood fences and low stone walls will mark the edges of homes and reach into the prairies. Already, many Mayo Clinic doctors, their families and others are planning on moving out of Pill Hill in favor of living close to nature in Mayo Woodlands.

The north plaza of the Hennepin County Government Center across from Minneapolis City Hall will soon take on a safer, more attractive face as repaying begins this spring. Linda McCracken-Hunt, AIA, principal, Studio Five Architects, Inc., Minneapolis, is coordinating the project with Damon Farber Associates, Minneapolis, and INSPEC Waterproofing Consultants, Golden Valley. The circular design, she says, repeats the existing plan but specifies brick pavers accented with granite strips. Originally the plaza was paved with quarry tile, which proved slippery. The design team will also add seating, planters and lighting to increase pedestrian use of this urban space. The fountain will probably remain as is with a hoped-for moss garden underneath. In 2004, the south plaza, already a popular civic green space, is scheduled to be enhanced.

any AIA Minnesota firms are practicing internationally. Perkins & Will, Minneapolis, for instance, is working on its fourth international project, a shopping-center complex in Mecca, Saudi Arabia. While there last fall, James Young, designer, also visited Riyadh where he photographed a project recently completed by Ellerbe Becket, Minneapolis, in conjunction with the Saudi firm Omrania Consortium: the Kingdom Centre. This spectacular multiuse tower, winner of a worldwide design competition in 1996, soars over the low-scaled city. Rising to 984 feet (the same height as the Eiffel Tower), the shiny slim tube of reflective glass and brushed aluminum culminates in a hollowed-out parabolic curving arch topped with a flat observation deck. Since local laws dictate buildings can have no more than 30 occupied floors, the top third of Kingdom Centre is purposely sculptural. Lower levels contain offices for HRH (His Royal Highness) Prince Alwaleed (grandson of King Abdulaziz, founder of Saudi Arabia), a hotel, a shopping mall, a conference center, a sports club and luxury condominiums. So far, Richard Varda, AIA, who led the design team while at Ellerbe Becket and is now vice president of design at Target Corporation, has not been able to see the finished work. Who knows? Maybe he can convince the prince to include a Target store inside.

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Harvest States Head House and Sack House

St. Paul, Minnesota

BY ROBERT ROSCOE

n endangered older building typically exhibits some telltale characteristic that signifies its raison d'être. A church may have a battered belfry. A theater shows traces of its former marquee. A vacant downtown department store's display windows are still plastered with clearance signs, one of them an ironic statement of urban metaphysics: "EVERYTHING MUST GO!"

Perched above St. Paul's Mississippi River shoreline at the foot of Irvine Park near Shepard Road, however, a one-story brickwalled gable-roofed shed connected to a concrete tower sits forlorn, bereft of any signifier telling how, why or for whom this architectural oddment came to be. Last year, the Saint Paul Riverfront Corporation decided to turn this problem into an opportunity and organized the WHAZIT? Head House and Sack House Idea & Design Competition, inviting architects and designers to envision in graphic form a new use for the 70-year-old Harvest States Head House and Sack House complex.

Last May, a jury of distinguished architects, planners and public officials reviewed more than 200 entries and selected four design concepts to headline the competition, with several honorable-mention awards. Since then, the Saint Paul Riverfront Corporation has formed a team to study many of the design concepts to see whether any ideas leading to an appropriate reuse could be formulated.

The city of St. Paul's raison d'être comes from the 1840s and '50s, when its geographical attribute as the uppermost navigable location on the Mississippi River spawned docks and freight sheds for steamboats carrying hardware and hardy people needed for the nascent development of the Upper Midwest.

Even before the settlement became temporarily known as Pigs Eye, this riverfront harbor served as the terminus for a network of oxcart trails originating in the Red River Valley that carried furs and hides to be transferred to the paddle-wheeled carriers. Later, as barges able to carry huge quantities of bulk products replaced steamboats, most of the harbor facilities moved away from the now densely built-up downtown St. Paul riverfront.

In 1917, Equity Cooperative Exchange built a large grain-elevator complex in this area, then known as Upper Landing. The cooperative was part of a Midwest populist agricultural movement organized by small farmers and grain-processing operators to



Now a roosting place for pigeons, the Head House and Sack House were an integral part of St. Paul's grain industry. Their possible adaptive reuse has inspired such suggestions as a fitness center and a theater complex.

break up the grain-trading monopoly upriver in Minneapolis that controlled the trade in this region.

In the early 1930s, the Equity Cooperative Exchange built the Head House and Sack House. Grain was loaded into rail cars and barges in the Head House; milled flour was bagged in the Sack House. An immigrant community called Little Italy sprang up around the grain businesses. That community disappeared in the 1960s and was replaced by a scrap yard.

The Head House and Sack House, now owned by Harvest States Foods, have been long abandoned and now serve as a roosting place for pigeons. The complex is eligible for the National Register of Historic Places, however, for its role in St. Paul port history and as the first successful grain-terminal elevator owned and operated by an agricultural cooperative in the United States.

Although the Sack House and Head House have probably escaped demolition because there has been no economic reason to tear them down, there have been no attempts to renovate the structures either. The floor area of the one-story Sack House is insufficient for economic development, and the Head House floor plates vary from 44 by 42 feet at the ground floor to 44 by 25 feet at upper floors, with six floors of uneven ceiling heights.

Continued on page 48

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Kathleen O'Brien

As vice president of University Services, O'Brien aims to make the University of Minnesota the institutional benchmark for architecture and facilities management

BY CAMILLE LEFEVRE

or the past two decades, Kathleen O'Brien has dedicated her career to directing, setting a vision for and improving two of Minnesota's largest public institutions: the City of Minneapolis and the University of Minnesota. In her current position as vice president for University Services, to which she was appointed in September 2002, O'Brien oversees 3,000 employees and an annual operating budget of \$250 million in the following service areas: dining services, housing, parking and transportation, the police force, university bookstores, emergency preparedness, environmental health and safety, facilities management and new construction.

O'Brien came to the university from Minneapolis City Hall, where she served as city coordinator and oversaw a \$94 million annual budget and 800 full-time employees. During her tenure, Governing Magazine ranked Minneapolis as the third best managed city in the nation. Prior to that position, O'Brien served as chief of staff and senior policy adviser for university president Nils Hasselmo from July 1989 to February 1994. She directed the university's external-relations efforts and initiated a community-relations program to strengthen university relationships with local government and with community and business organizations.

Elected to the Minneapolis City Council in 1982, O'Brien represented the city's Second Ward and university community for seven and a half years. She served as majority leader, chair of the Ways and Means Committee and chair of Zoning and Planning. She engineered the nationally recognized Neighborhood Livability Program, redesigned the budgeting process to link services

with resources, and represented the city on several state and regional boards and commissions.

O'Brien is a 1967 graduate of the College of St. Catherine in St. Paul, received a Master of Arts degree from Marquette University in Milwaukee and completed coursework toward a Ph.D. in history at the University of Minnesota. She serves on the boards of the Minneapolis Red Cross, the Women's Campaign Fund and the DFL Education Foundation. Since 1999, O'Brien has been a member of the Gilmore Commission, a Congressional Panel to assess the nation's preparedness for domestic terrorism. She has chaired the State Review Board for Historic Sites and Minnesota Women in City Government.

Architecture Minnesota talked with O'Brien about her new role, the ways in which architects and architectural firms contribute, and the university as a showcase for architecture.

Why did you return to the University of Minnesota to take on this complex, difficult position?

I believe the University of Minnesota is the most important institution in the state; it's essential for our economic vitality and cultural renewal. If you go back in history-and remember, I'm a historian-it's easy to see the university's inherent role in the state's economy and creation of knowledge. The creation of agricultural and forest-service products, as well as inventions that have led to the mining, medical and biotechnology industries all grew out of the work of university faculty and then transferred into the private sector. At the same time, whether it's our studio-arts, music or architec-

Continued on page 49



"We have a role as stewards of architectural history at the university, but we also have a role to test concepts with regard to sustainability, functionality and how people use spaces."



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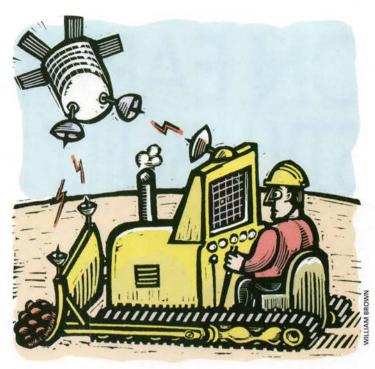
BY PHILLIP GLENN KOSKI, AIA

rom caveman to Copernicus, humankind has looked up to the sky and pondered its rich complexities and precise mechanics. Today, it is the sky, or more precisely the constellation of global-positioning-system (GPS) satellites suspended within it, that enables grading and excavation contractors to reshape the earth's surface with awe-inspiring accuracy.

For decades the professions of landscape architecture, civil engineering and surveying have been awash in the constant evolution of digital technology. Geographic-information systems (GIS) have expanded the scope of available electronic topographic information to a global scale. Computer-aided-drafting (CAD) programs have increased the ease and precision of drafting site plans. Laser-based robotic survey equipment has quickened and improved the practice of local topographic measurement.

Yet, until recently, the construction industry relied exclusively on blueprints and wooden stakes to guide bulldozers and scrapers through the tabula rasa of the construction site. The introduction of GPS-guided heavy-equipment systems completes the digital loop—from survey through design to construction.

The term "GPS-guided heavy equipment" is actually misleading. It's not the heavy equipment being guided, it's the human being behind the wheel. Consider the case of Pat Huiris, a heavy-



Global-positioning devices are being used to help contractors grade and excavate with new measures of accuracy.

equipment operator for 27 years, now working for the Minnesota-based excavation contractor Bel-Air. Sitting in the cab of a bright-yellow Caterpillar 814F wheel dozer, Huiris has immediate access to the grading plan via a color LCD control panel located just above the blade levers. Using a simple, user-friendly interface, he zooms in and out on the plan, tracking his progress and planning his next move.

While he's pushing dirt along the edge of a future curb or building pad, light bars on either side of the cab dashboard indicate the degree of cut, fill and blade tilt required for each pass. At regular intervals, Huiris drops his blade to determine the accuracy of his work against the digital terrain model of the proposed design, also downloaded into the control panel. He works without stakes and grade checkers.

While quick to laud the new technology, Huiris believes GPS is no replacement for field experience. "It's a grading tool," he says. "It doesn't always make sense when you're working with so many different soils. GPS doesn't know the moisture content, for example, and that makes a difference if you're doing a lot of fill in an area, because dry soil won't compact like wet soil."

While listening to Huiris talk, one realizes that earthmoving requires an intuitive sense, an innate

Continued on page 53

THE BEST BUILDINGS **VEARTH ARE** L BUILT BY HAN



More than a million bricks laid in a series of unique patterns, textures and colors make the Veterans Administration Health Care Facility in Detroit, Michigan, a striking example of masonry design by architects Smith, Hinchman & Grylls Associates. But masonry was chosen for more than its beauty and flexibility of design. Buildings built of masonry by skilled union craftworkers will outperform, outshine and outlast any others. Add to that the speed and efficiency of union masonry contractors, and you have a prescription for health care facilities that satisfies any schedule and budget. We're The International Masonry Institute, and we'd like to help you design and construct the best buildings on earth. Visit us on the World Wide Web at www.imiweb.org, or call us toll free at 1-800-IMI-0988 for design, technical and construction consultation.



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The International Masonry Institute — a labor/management partnership of the International Union of Bricklayers and Allied Craftworkers and the contractors who employ its members. @1998, IMI

Bahn Voyage

BY BILL BEYER, FAIA

ercedes-Benz. Porsche. BMW. Audi. Volkswagen. The autobahn. Those Germans really love their cars and roads. But what impressed me most on a recent visit to Germany was how equally perfect their national and local rail-transportation systems are-and how important those publictransit systems were to my enjoyment of their beautiful country.

I arrived in Frankfurt with rusty language skills and only a vague notion of where my hotel was located. As it turned out, the place was about 50 miles south of the city in scenic Bensheim. Not to worry. After a short light-rail hop from the airport terminal to Frankfurt's main train station and a quick perusal of the posted schedules, I was ticketed, aboard a regional train and at my hotel in an hour.

After my business in Frankfurt was completed, I had time to visit my niece and her family in Rostock on the Baltic Sea, to get my first taste of Berlin and to revisit my student haunts in Munich. With a six-day German rail pass and no fixed plans, I set out.

My circuit from Frankfurt to Berlin, Berlin to Rostock and back, then to Munich and back to Frankfurt was accomplished with need for neither auto nor autobahn. The punctuality, speed, cleanliness and efficiency of the Deutsch Bahn rail system are legendary and did not disappoint. In each city, I was able to purchase a public-transit day pass at a convenient vending machine; total city accessibility for about \$5. This personal mobility was the geographic

equivalent of flying into Minneapolis, having a hotel in Northfield, then touring to Chicago, Green Bay, Kansas City and back, all sans auto.

Munich's spectacular subway was also enjoyable. The first leg of the nine-leg system had just begun construction when I studied in Munich in 1971. The subway system is now complete and fully integrated with surface light rail and buses. In contrast, public transit in the Twin Cities has been stalled in its tracks for the past 30 years.

Germany is about the size of Minnesota plus Iowa and most of Wisconsin. It has a population of about 83 million, about six times our tristate total. Had the Germans decided the autobahn would be their only solution to mobility, Germany would be one giant parking lot. With fewer people and plenty of land to waste, we appear to be in a big hurry to use as much land as possible on roadways and parking.

We could embrace regional rail, linking cities from Chicago to Duluth; commuter rail. connecting us to St. Cloud, Northfield and Rochester; and light rail, as a high-speed backbone for an integrated metro-train/busway system. Had we started 30 years ago, we might now have a regional system in place.

But Minnesota's antirail forces continue to roll. A recent newspaper opinion columnist embraced sprawl and new highways, berated transit and claimed that given the choice, Europeans would rather drive their cars. A choice Minnesotans should have, as well.

Hobson's Choice: "A choice without an alternative; the thing offered or nothing."



²⁰⁰²Honor Awards

BY CAMILLE LEFEVRE



en Honor Awards and one Divine Detail Award were announced during AIA Minnesota's 68th annual state convention last November. The winners, chosen from 124 Honor Award submissions and nine Divine Detail submissions, were selected by Shirley Blumberg, Assoc. AIA, partner, Kuwabara Payne McKenna Blumberg, Toronto, Canada; Tom Buresh, chair and professor of architecture, the University of Michigan, Taubman College of Architecture and Urban Planning, Ann Arbor, Michigan; and Scott Sickeler, AIA, design quality-assurance principal, Thompson, Ventulett, Stainback & Associates, Atlanta, Georgia.

Though this year's jurors selected a mix of awardees—from large corporate buildings to small houses and office interiors to complicated restoration/renovation projects—their choices indicate unifying themes, which they articulated during the jurying process. Their selections, the jurors said, indicated a mastery of craft; aesthetic restraint and rigor in construction detailing; the ability to create simple, rich solutions to programs with size, budget, site and material constraints; and interiors that experiment with form and materials. Their choices also indicated a preference for projects that maximized the potential of existing urban or suburban sites.

Listed are the award-winning projects, firm names and locations, the edition of Architecture Minnesota in which coverage has or is appearing, and a portion of the jurors' comments.















Honor Awards

- Bureau of Criminal Apprehension, **Northern Services Center** Bemidji, Minnesota The Leonard Parker Associates, a part of the Durrant Group, Minneapolis See this issue, pages 32-35. "A tremendously provocative and unglamorous program, simply and beautifully handled."
- Grain Belt Brew House Renovation Minneapolis, Minnesota RSP Architects, Minneapolis Published November-December 2002 "A lot of care was lavished on retaining and restoring this industrial artifact to a contemporary use. The building's best features were retained and celebrated, while the additions were quietly and sensitively handled."
- Open Book Minneapolis, Minnesota Meyer, Scherer & Rockcastle, Ltd., Minneapolis Published September-October 2000 "How wonderful that 50,000 square feet are devoted to book concerns. This artful revitalization retains the spatial patina that represents the best of what living and working in the city can be about."
- Ceridian Corporate Headquarters Bloomington, Minnesota Hammel, Green and Abrahamson, Inc., Minneapolis Published November-December 2000 "A simple and elegant form, wellexecuted with a limited materials palette, and which also turns and bends the work environment to frame views."
- Temporary Como Zoo Visitor Center St. Paul, Minnesota Hammel, Green and Abrahamson, Inc., Minneapolis See this issue, pages 36-37. "A rough-and-ready building compelling for its lack of pretension."

- 6 Circus Juventas Performance Lobby St. Paul, Minnesota Locus Architecture, Ltd., Minneapolis See this issue, pages 40-41. "A project fresh, spirited and full of life, completed on an incredibly tight budget and work schedule.
- 7 Cathedral of St. John the Evangelist Milwaukee, Wisconsin Hammel, Green and Abrahamson, Inc., Minneapolis See this issue, pages 30-31. "A thoughtfulness permeated every aspect of the project, from the tasteful restoration to the new loggia, which defers to the existing building."
- 8 359 Day Road St. Croix Falls, Wisconsin Kerrik Wessel, Assoc. AIA, St. Paul See this issue, pages 28-29. "Thoughtfully extends an agrarian vocabulary with poetic, economic means."
- James Ford Bell Technical Center, General Mills Golden Valley, Minnesota Hammel, Green and Abrahamson, Inc., Minneapolis See this issue, pages 24-27. "An elegant insertion into an existing collection of buildings that uplifts the quality of the whole environment."
- 10 Two Popes Film Minneapolis, Minnesota BKV Group, Inc., Minneapolis See this issue, pages 38-39. "A simple plan with a fresh execution."

Divine Detail

11 Ner Tamid Ark San Francisco, California Locus Architecture, Ltd., Minneapolis Published January-February 2002 "Laden with symbolism, the ark is imbued with spirituality."





ModernInsertion

eneral Mills's original request was for more lab space, which led Hammel, Green and Abrahamson, Inc. (HGA), Minneapolis, to analyze its longtime client's research and development facilities on the Golden Valley campus. Much of the original lab space, housed in sprawling 1950s-era brick buildings, had been converted to offices. "If those offices were renovated back into labs," says Tim Carl, AIA, design partner, HGA, "then what they really needed was office space, which costs less to design and construct."

The resulting James Ford Bell Technical Center provides the campus with much needed daylit office and conference space.



JURY COMMENTS

"A RESTRAINED INSERTION INTO AN EXISTING COLLECTION OF BUILDINGS THAT LIFTS THE QUALITY OF THE WHOLE ENVIRONMENT."



Design team (from left to right): Todd Messerli, Tim Carl, AIA, Mia Blanchett, Anita Barnett.

The 80,000-square-foot building also acts as a central hub for the campus and gives it a new front door, with a two-story atrium/cafeteria and demonstration kitchens threaded alongside existing test laboratories and "pilot plants" used for replicating manufacturing processes. "When you walk through the corridors," Carl says, "it smells like some combination of brownies, cereal and popcorn."

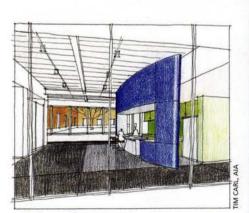
"The exterior of the building is very straightforward and in keeping with the modernist style of the existing campus," Carl explains. The three-story glass and metal building is framed by two of the existing brick wings; its aluminum cornice replicates that of the masonry buildings, while its staggered forms and cantilevered entrance seem weightless in comparison. A



As the research campus's new front door (top) and a campus connector (left), the modern building includes hovering forms that house conference and meeting rooms (opposite).







A lively use of curves, wood and color (top, right, opposite) warms the building's interiors while demarcating various areas and their uses.





bar of conference rooms and core space anchors the back of the building, while providing a fourth wall between two existing courtyards; one landscaped to complement a three-story block of conference rooms, the other covered with a glass-andsteel roof that converted the courtyard into the double-height atrium/cafeteria.

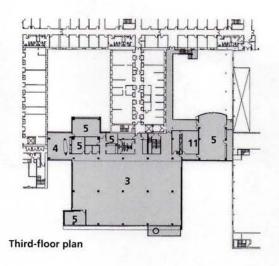
"Inside, we wanted to warm up the building and introduce curves and colors that soften the exterior's hard angles and cool palette," Carl says. Cherry-wood doors and cabinetry, a curved cherry-wood lobby wall and conference overlook, a surfboard-shaped form demarcating the employee lounges, and a color palette of blue and red enliven the interior. A "street" of first-floor amenities, including a credit union, company store, health clinic and fitness center, connects the new lobby to the campus's main artery. "This wasn't a high-budget project," Carl says. "We figured out a creative way to relate this new building to the existing campus while using standard systems and materials."

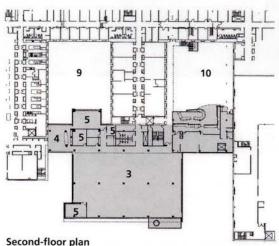
"Not only did the project save us money, as we took a different approach than we first envisioned," says Glenn Blake, chief construction officer, General Mills. "The building has certainly met and exceeded all of our functional expectations, as well as exceeded our aesthetic desires, not only for employees but for visitors that come to our research campus. With the large atrium/cafeteria, for the first time we have a space that is big enough for a full campus meeting."

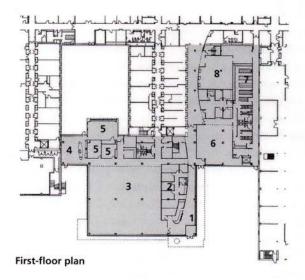
The Honor Awards jurors lauded the building "for its simple series of moves, masterfully handled, that make a nice composition with a sensitivity that translates from the exterior through to the interiors." In particular, the jurors commended the client for "not stringing buildings down the road" and contributing to suburban sprawl. Instead, the building is a "restrained insertion that lifts the quality of the whole environment." — C.L.



James Ford Bell Technical Center, General Mills Golden Valley, Minnesota Hammel, Green and Abrahamson, Inc. Minneapolis, Minnesota

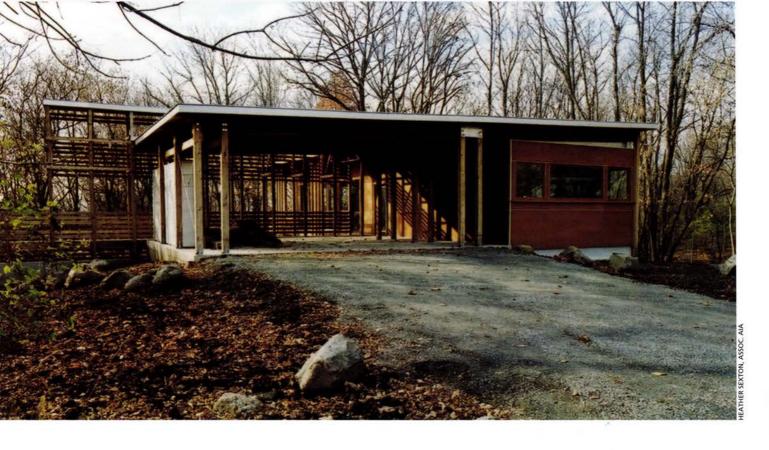






Plan

- 1. Entrance
- 2. Vendor conference
- 3. Office space
- Product-demonstration/ meeting rooms
- 5. Conference
- 6. Fitness center
- 7. Employee lockers
- 8. Company store
- 9. Exterior courtyard
- 10. Cafeteria
- 11. Computer room



Agrarian Rhapsody

y day Kerrik Wessel, Assoc. AIA, works on dream houses for clients of SALA Architects, Inc., Stillwater. For the past three years, however, he's devoted his nights and weekends to designing and building his personal vision of the ideal single-family home. "I wanted to get out from behind the drawing board," he says. "The experience of building is important to me." Wessel's great-grandfather and grandfather were architects and built houses, he explains. His father, St. Paul developer Brian Wessel, who helped on the project, is also an architect and builder. "I was anxious to have something to show for myself," Wessel says.

Sited on a steep inexpensive lot in residential St. Croix Falls (it was considered unbuildable by local developers and the neighbors dumped lawn clippings and garbage there) with the ruins of a stone barn foundation nearby, the 2,000-square-foot house was affectionately dubbed "the corncrib project" by the Honor Awards jurors for its "simple poetic connection to agrarian architecture." The



Design team: Kerrik Wessel, Assoc. AIA, Heather Sexton, Assoc. AIA.

house's defining feature—a corncrib-inspired walkway composed of cedar strips, which separates the upper street level from the lower private courtyard before extending toward the old barn foundation—"is a penetrable enclosure that thoughtfully extends an agrarian vocabulary with poetic, economic means," the jurors said.

In addition to the house's easy flow between interior and exterior spaces, the jurors were impressed with the project's "simple, thoughtful plan." Built into the site's slope, the structure's lower level can be used as two large rooms or partitioned into three spaces. Constructed of exposed poured concrete partially submerged in the earth, the space stays cool in summer while in-floor heat warms the floors in winter.

The upper level of the house, an open multipurpose room, has floor-to-ceiling windows facing south; glass and screen doors open to an outdoor porch. Large overhangs and trees shade the windows in summer, yet allow light to pene-

JURY COMMENTS

"THOUGHTFULLY EXTENDS AN AGRARIAN VOCABULARY WITH POETIC, ECONOMIC MEANS."



trate interiors in winter. An air exchanger, cross ventilation and super-insulated roof panels eliminate the need for air conditioning in summer.

Materials include concrete, galvanized metal siding and roofing, cedar posts and plywood, custom cedar windows and wood flooring. To finish the house, Wessel used store-bought metal shelving framed with wood, custom-built steel-and-plywood casework in the kitchen topped with reused laboratory countertops, and Douglas fir beams and trim salvaged from a northeast-Minneapolis warehouse.

Although the site's rural character and the nearby barns, corncribs and sheds largely inspired his design, Wessel says-"the materials have a purpose that's expressed simply in the details of the building"-he also cites Japanese detailing and modernism as influences. His wife, Heather Sexton, Assoc. AIA, designer, Hammel, Green and Abrahamson, Inc., Minneapolis, who also helped with the house, calls it "retro-pioneer," he continues. "The term speaks of something modern but harks back to the past, when craftsmanship was everything."

"This house is close to our hearts," he says of the family's project. "We wanted to do something small, affordable and accessible. It's another definition of dream house." — C.L.

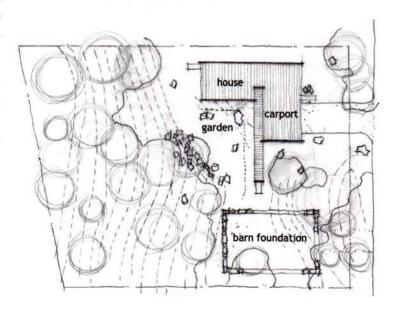


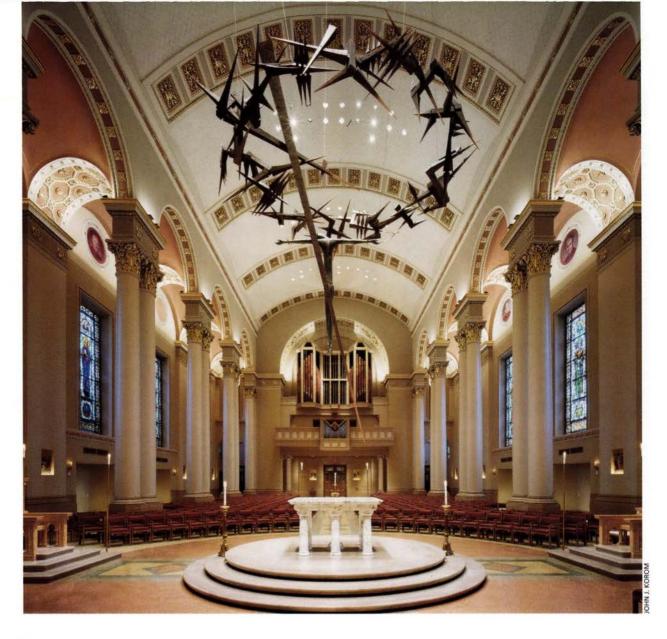
359 Day Road St. Croix Falls, Wisconsin Kerrik Wessel, Assoc. AIA St. Paul, Minnesota





The simplicity of the house's defining gesture—a corncrib-inspired walkway composed of cedar strips (opposite, above left)—is continued indoors, with an open plan and the use of such materials as salvaged wood, reused countertops and wood flooring (top, above).





Divine Intervention

he Cathedral of St. John the Evangelist, known in Milwaukee as "the jewel of the city," needed a renovation in accordance with Vatican II. The 1960s papal edict specifies changes in the liturgy and design of Catholic churches to make worship services more relevant to parishioners. The cathedral also needed to be more functional and better integrated with the city. Occupying an entire block, the cathedral and adjoining buildings sit across from Cathedral Square, the site of such city functions as ice skating and an annual Bastille Day celebration.

JURY COMMENTS

"TASTEFULLY DONE, RESULTING IN A BUILDING WITH NEW LIFE."



Design team (from left to right): Russ Drewry, Paula Verboomen, James Shields (Steve Fiskum, AIA, not pictured).

"The goal of the project was to heighten public awareness of the cathedral," says Steve Fiskum, AIA, project adviser and chief operating officer, Hammel, Green and Abrahamson, Inc., Minneapolis. "But we also viewed this as an urban-design project in which to open up the complex to the rest of the city."

The brick cathedral was built in 1853. Its interiors were damaged in a 1935 fire and rebuilt in 1943. At that time, the altar was moved from the main worship space into a new apse

and a 40-foot-tall baldachin was installed over the altar, dwarfing other features of the space. In the 1970s, lights were hung in front of the stained-glass windows and the interior was repainted in 20 different colors.

The renovation repositioned a new altar—composed almost entirely of white marble salvaged from four 1940s side altarsin the main nave "so it's more like a Thanksgiving table with people gathered around it," Fiskum explains. The altar's surface is crafted from a single white-marble slab from the same Italian quarry as the other marble. Suspended over the altar is sculpture that juxtaposes an abstract cross with an abstract crown of thorns. "There is an important relationship in church design between art and architecture," Fiskum notes. "Successful church design results from that collaboration."

The baldachin was removed, the tabernacle was placed in an original side chapel and a deep 1943 apse houses the cathedral's choir, organ and orchestra. Just inside the main entrance is a new full-immersion baptismal font of salvaged marble; grooves cut into the original stone bowl allow water to flow and spill into the pool below. A new ambo was crafted of marble and a new bishop's chair was created from marble communion rails removed in 1970. A day chapel was designed in the former sacristy and is lit by restored hanging fixtures and stained-glass windows. A reconciliation chapel was created in a former chapel at the end of one of the side aisles.

Finally, the project team returned to the 1940s color scheme of terra cotta, ivory, tan and taupe for the cathedral interior. The renovation also included a new terrazzo floor; new lighting, sound and mechanical systems; increased flexible seating for 940; and the cleaning, repair, tuckpointing and painting of the exterior.

The project team created a new courtyard after most of the long-vacant 1950s school building was demolished. The courtyard is bounded by the cathedral to the south, the old school's two-story cream-colored brick wall to the north and the east wing of the school (renovated for administrative offices) now fronted with a new glass-and-steel loggia that serves as a central organizing space.

The Honor Awards jurors cited the design team's "strong commitment to functional needs" while approaching the renovation "with a thoughtfulness that permeates every aspect of the project." While the cathedral restoration "is tastefully done, resulting in a building with new life," the jurors added, "the loggia addition makes a new space that's now the heart of the religious complex's collection of buildings." — C.L.

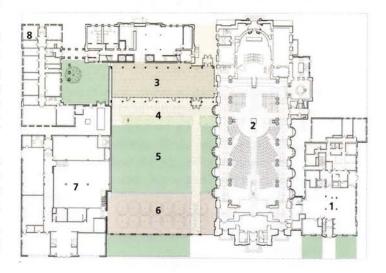


Cathedral of St. John the Evangelist Milwaukee, Wisconsin Hammel, Green and Abrahamson, Inc. Minneapolis, Minnesota





In addition to renovating the cathedral's interior (opposite), the team designed a new glass-walled loggia (left) and courtyard (above) that opens up the cathedral complex to the city.



Plan

- 1. Existing rectory
- 2. Renovated nave
- 3. New narthey
- 4. Terrace
- 5. Lawn
- 6. Grove
- 7. Existing gymnasium
- 8. Cathedral center





Crime Scene

he Honor Awards jurors were drawn to the Bureau of Criminal Apprehension (BCA), Northern Services Center, Bemidji, for "its tremendously provocative program," they said. They quickly dubbed the forensic laboratory and investigative offices the "CSI building" after the television program that portrays the crime-solving abilities of forensic scientists. Instead of "isolating the scientists in a windowless basement somewhere," they said, the design team produced a "finely handled, carefully done solution to an unglamorous program."

The Leonard Parker Associates (TLPA), Minneapolis, was hired to design the Bemidji center, located on a six-acre

wooded site near the edge of town, while working on a larger BCA facility in St. Paul. The Bemidji center's program includes offices for investigators who interview witnesses and others associated with the victim or the crime, and gather the crimescene evidence, which they submit to BCA forensic scientists for analysis. In another wing of the building, scientists evaluate crime-scene evidence from the state's most serious crimes to assist the state's law-enforcement agencies.

Virginia Pappas.

Design team (from left to right): Paul Neuhaus, AIA, Francis Bulbulian, AIA,

Steve Huh, FAIA, Randy Deopere,

"Investigators are restricted from entering the lab areas," explains Paul Neuhaus, AIA, designer, TLPA, "to prevent conflictof-interest issues, since investigators focus more on the people

JURY COMMENTS

"A FINELY HANDLED, CAREFULLY DONE SOLUTION TO AN UNGLAMOROUS PROGRAM."

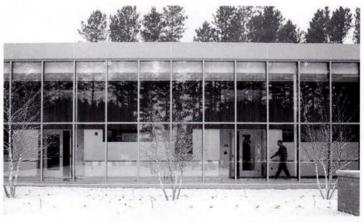


involved and scientists on the evidence. An important part of the BCA's work is not only to connect suspects to crimes, it's also to clear innocent people who may be thought to be connected."

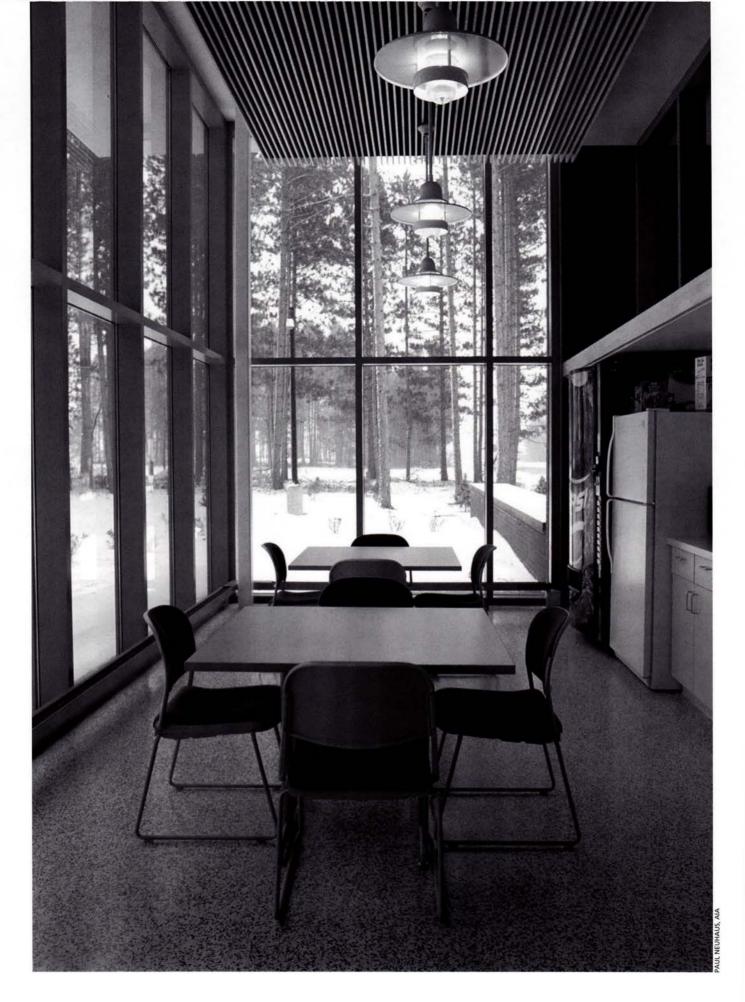
How close are the activities at Bemidji's BCA to those depicted on television? "I have heard the show is fairly accurate," Neuhaus says, "but on CSI the few characters are performing a variety of forensic tests, where in reality, forensic scientists specialize in such areas as blood and urine analysis, latent prints, firearms, blood splatter, DNA and microanalysis."

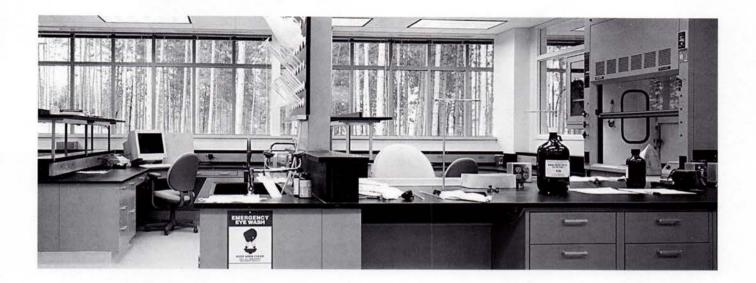
Also in the building are offices for criminal-justice information systems and classrooms for training police officers in such skills as administering breath-alcohol tests or handling evidence. In addition, security for the building and staff was crucial and the client "didn't want the building's design so open it would invite vandalism, or worse, from someone with a grudge," Neuhaus says. "At the same time, we didn't want the building to be completely closed off and inhospitable for the employees."

"We resolved that with a front entry that conveys a protective posture and a building that uses lots of brick and a limited amount of glass," Neuhaus continues. "The back of the building faces a pine forest where we felt we could safely



The building's front entry communicates strength and security (opposite left), while the side facing the woods (top and above in close up) are open to light and views.





open up the interior to views of the landscape." A glasswalled "interaction corridor" overlooking a clearing in the pine forest provides a place for scientists and investigators to meet, enjoy conversation and experience a connection to the outdoors.

Facing west along the north wing, labs offer views to the most wooded section of the site. To provide expertise on forensic labs, TLPA brought in SmithGroup, Phoenix. "TLPA was responsible for the architecture of the site and building," Neuhaus says, "while SmithGroup focused on the labs and evidence storage."

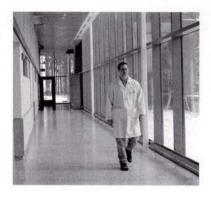
The investigators' offices are on the building's east side, directly behind the bullet-proof reception area, and classrooms and public restrooms are inside the public entry. "The investigators wanted to be behind reception," Neuhaus explains, "so they could promptly assist staff in the event of a disturbance in the lobby."

To the south is the mechanical/electrical room and yard; on the west are the garages and other building services. To access each wing of the building, organized around a center circulation spine like a pinwheel, staff need a special keycard.

"No nonsense," "restrained" and accomplished with a "seriousness and authenticity to its purpose" were among the jurors' comments about the facility's design. "The client is to be commended," they added, "for allowing the design team to make this program into a beautiful piece of architecture." — C.L.



Bureau of Criminal Apprehension, **Northern Services Center** Bemidii, Minnesota The Leonard Parker Associates Minneapolis, Minnesota



Whether lunchroom (opposite), labs (top) or corridor (left), the building's interiors use a modern aesthetic that conveys discipline while giving employees light and views to the outdoors.





Staying Power

or three years, Hammel, Green and Abrahamson, Inc. (HGA), Minneapolis, has been working with the Como Zoo in St. Paul on renovating the main 1930s-era Works Progress Administration building, as well as designing a new visitor-and-education-resource center and an addition to the Marjorie McNeely Conservatory. All of this construction left the zoo without a space for a gift shop and visitor services. One option was a double-wide trailer. The solution was a 7,000-square-foot temporary building that's become so popular, the zoo may never take it down.

Completed in 2002, the temporary Como Zoo visitor center sits on two existing parallel sidewalks and is anchored to the lawn by concrete piers. As such, the building can be dismantled or moved when the permanent building is complete. "We barely wanted to touch the site," says Kara Hill, AIA, designer, HGA, "and we created an extremely simple volume, because the building is such a busy space with people, merchandise and exhibits."

JURY COMMENTS

"A ROUGH-AND-READY LITTLE PROJECT. . . COMPELLING FOR ITS LACK OF PRETENSION."



Design team (from left to right): Chad Clow, Kara Hill, AIA, Bob Lundgren.

The two-by-eight wood frame forms two rectangles stabilized by perpendicular walls. Because many of the zoo's buildings are concrete, the temporary building is clad in insulated plywood panels sheathed in cement board; translucent acrylic panels (which shield office space from view while allowing in light), and glass windows and doors set into cedar frames are also used.

Inside, exposed wood studs hold slat board and the gift store's display systems. Clerestory windows in the two-story gift shop are positioned to provide full daylight in winter and sun filtered through trees in summer. "It's bare bones because we didn't have a lot of money to put into it," says Roberta Sladky, director, Marjorie McNeely Conservatory. "But while the interior is plain, even austere, it's a great backdrop for all of the gift-shop products and the windows bring in nice light. The building certainly serves its purpose."

The Honor Awards jurors agreed, calling the building "a rough-and-ready little project that's a successful response







Using such simple materials as cement board, glass and wood (opposite), the temporary building provides a light-filled backdrop for the zoo's visitor services (left) and gift-shop merchandise (above).

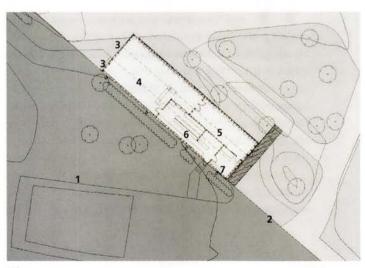
to the problems of temporary structures." Citing the building's "freshness," "spontaneity" and "innovative use of such simple materials as cement board and glass," the jurors also felt it was "compelling for its lack of pretension."

"Rumor has it the zoo may potentially use the building as a secondary classroom, a secondary gift shop or a sleepover space for students," Hill says. "Really, they could make it into anything. People have told me, if the zoo plans to tear it down, they want to buy it for a lake house." —C.L.



Honor Award

Temporary Como Zoo Visitor Center St. Paul, Minnesota Hammel, Green and Abrahamson, Inc. Minneapolis, Minnesota



Plan

- 1. Amusement yard
- 2. Zoo fence
- 3. Existing sidewalks
- 4. Gift shop
- 5. Lobby
- 6. Storage
- 7. Office



A Simple Plan

e love the plan of this project," the Honor Awards jurors enthused, "which is almost nothing! It's a simple plan with rich execution." The project is the 2,000-square-foot offices of Two Popes Film, an advertising-production company located in the historic Grain Belt Bottling Building No. 2, which is part of the larger brewery complex in Minneapolis. Owned by two brothers, Jerry and Greg Pope, the space needed to include two offices, a lobby, a meeting room, a kitchen and a staging space with the flexibility to allow for a wide range of production needs.

The design team began by partitioning the space into a traditional series of boxlike rooms. "But that scheme was too expensive," recalls William Baxley, AIA, BKV Group, Minneapolis. "We needed something that would be incredibly cost effective and still fulfill the program."

They came up with a single move: a thick birch "spine," realized as a multipurpose cabinet, that longitudinally divides the space, is accessible from both sides, and stores all of the company's supplies and equipment. "The idea came from the organization and philosophy of the Popes," Baxley says, "who identify themselves as being of 'two heads, one body.""

The fractured quality of the cabinet resulted after the design team realized that "that simple gesture had to have some impact," Baxley says. "Instead of rectangular doors, we created a series of fractures to make the cabinet more interesting, as if we were breaking the wall into a bunch of

JURY COMMENTS

"A SIMPLE PLAN WITH. . . A SPATIAL COMPLEXITY AND MATERIAL RICHNESS."



Design team (from left to right): Chris Hand, William Baxley, AIA, Bryan Axell.



The fractured multipurpose cabinet (opposite and above in detail) acts as the office's spine, dividing and defining each of the offices (opposite and right).



pieces, like a puzzle. The cabinet then became a three-dimensional object that's accommodating."

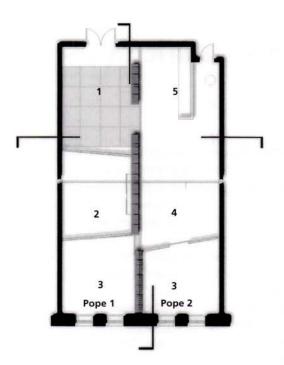
The jurors lauded the cabinet, calling it "architecture as furniture" that "compresses the needs of the clients into a storage cabinet" designed to "make you conscious of its purposefulness."

Polycarbonate panels faced with steel studs and strapped with lacquered steel-bar stock form the east and west divisions so that light can reach deep into the space. The panels are also angled to enhance acoustics. All spaces are connected via sliding doors of polycarbonate and steel with "barndoor" hardware. 3 Ring Scenic, contractors integral to the project, "built everything," Baxley says.

The office's existing walls, ceiling, floor and exposed structure were kept largely intact. An existing skylight was uncovered and reglazed to add daylight in the long, narrow space. "This is not architecture as spectacle," the jurors said. "But there's a spatial complexity and material richness that has a freshness and solemnity." — C. L.

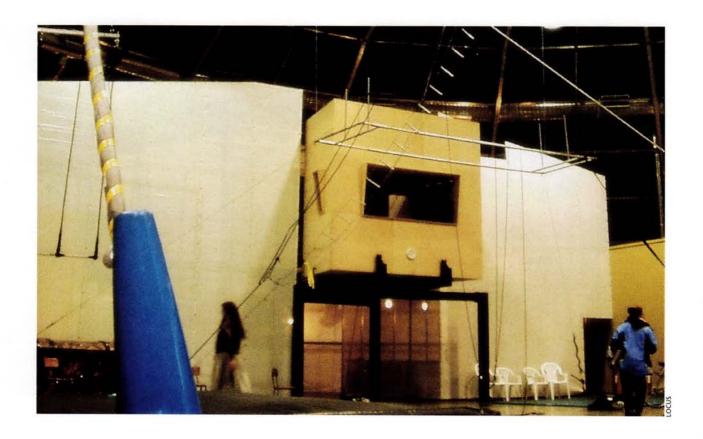


Two Popes Film Minneapolis, Minnesota BKV Group, Inc. Minneapolis, Minnesota



Plan

- 1. Lobby
- 2. Conference
- 3. Office
- 4. Workroom
- 5. Kitchen



Performance Architecture

he directors of Circus Juventas were in crisis. Essential elements of their nonprofit circus-arts school and performing center in St. Paul-including the 20,000square-foot concrete slab, utilities and trusses for the big topwere in place. But Dan and Elizabeth Butler weren't happy with the lobby and entry.

"We needed more panache, style, drama, intrigue, mystique," says Dan Butler. "A design that would better reflect our mission."

They also needed a team that could design and construct the project before an opening gala in seven months and within a modest contractor's budget. That team was Locus Architecture, Ltd., Minneapolis.

JURY COMMENTS

"IT'S AS THOUGH THE LIFE OF A CITY IS HELD INSIDE THIS INTERIOR SPACE."



Design team (clockwise from lower right): Wynne Yelland, AIA, David Brach, Paul Neseth, AIA, Tim Daniel, Adam Jonas.

"The only way we could make it work was to build it ourselves," says Wynne Yelland, AIA, principal, Locus. "We could do limited drawings, go right into production, design as we were building. That was crucial."

Rather than creating a design that responded to the program in a static way, Locus took a kinetic approach that transformed the 1,000-square-foot lobby into an extension of Circus Juventas's performance arena. The architecture is an assemblage of catwalks, rigging, steps and counters the performers use to dance, twirl and cavort above and around arriving spectators.



A white fabric called Textilene, "an inexpensive, garden-variety umbrella and awning fabric with the same properties as theater movie screens," Yelland says, is stretched over a Unistrut structure to demarcate spaces within the lobby. "We especially like the way the fabric becomes opaque when lit from the front and almost transparent when backlit," Yelland adds, "which worked well for the mood and mystique we were trying to establish."

Because of its big-top materials and spaces, adds Paul Neseth, AIA, principal, "the lobby acts as an immersion tank, rather than a threshold, to introduce spectators to the illusion world of the circus."

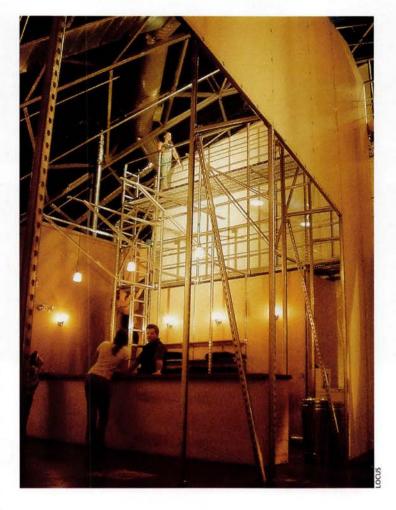
The Honor Awards jurors cited the team's ability to complete design and construction on an incredibly tight budget and schedule. "We built during rehearsals for the gala," Yelland says. "We watched how performers used the space, which really helped us in making decisions as we went along." (Locus actually installed the last piece of fabric hours before the gala started.)

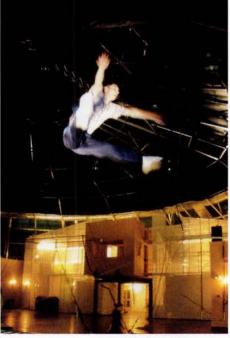
At the same time, Neseth adds, "the lobby is influencing the performers' work as they discover the unique qualities of it on a daily basis. They are learning how to use it and are developing their work to respond to it. In this sense, our design was just the first step in a longer process of discovery and a fitting response to a circus-arts environment."

The jurors agreed, exclaiming that the project "is full of life and spirit. The process of making a stage set was done so spontaneously, deftly and with quality. It's as though the life of a city is held inside this interior space." — C.L.

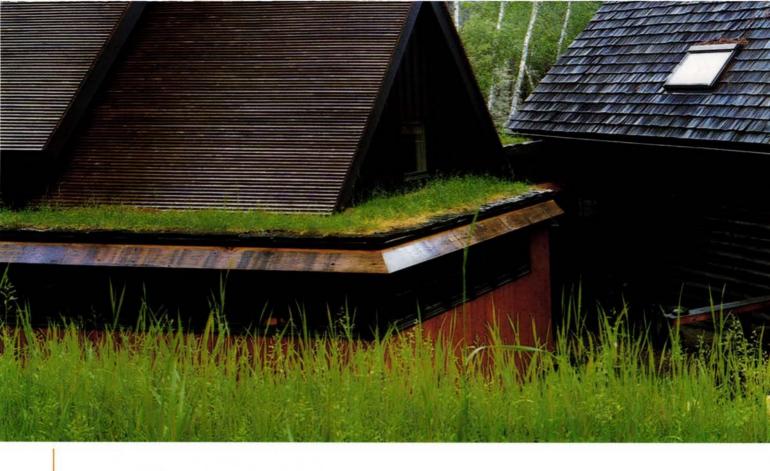


Circus Juventas Performance Lobby St. Paul, Minnesota Locus Architecture, Ltd. Minneapolis, Minnesota





The circus's boxy, buglike entrance (opposite and below) leads to a lobby (top) and catwalks (top left) where young performers dance, twirl and cavort for arriving spectators.



Feature

ROOFTOP OASES

LONG CULTIVATED BY NORTHERN CULTURES FOR THEIR THERMAL BENEFITS,

GREEN ROOFS ARE SPROUTING UP IN EUROPE AND THE UNITED STATES AS A SUSTAINABLE STRATEGY

THAT ADDRESSES AESTHETIC, ENERGY AND STORM-WATER ISSUES By Jane King Hession, Assoc. AIA

hink back to the last time you were looking out an upper-floor window of a tall building (any tall building) in a city (any city). What did you see? Chances are it was acres of uninhabited flat, asphalt rooftops that radiate heat in summer and are frozen barren islands in winter. Now imagine the same view but with acres of "green roofs"-roofs covered in sod or native grasses, landscaped with flowers and trees, dotted with paths and benches, inhabited by butterflies, birds and people. Not only is the view more aesthetically pleasing, it is alive with a new ecology that thrives in a once forgotten realm of the city.

Today, green roofs are becoming more than just an exercise in imagination. They're beginning to appear in many American cities and not simply because they are beautiful. Green roofs are a sustainable-architecture tool that addresses serious air, water and pollution issues facing urban centers today.

Roofing a structure with a layer of vegetation is not a new idea. The Hanging Gardens of Babylon (c. 600 B.C.) were described by one Greek historian as having "plants cultivated above ground level and the roots of the trees are embedded in an upper terrace rather than in the earth." Although Nebuchadnezzar II reputedly constructed the gardens to recreate a distant mountain landscape for his nostalgic wife, other cultures built green roofs for more practical reasons.

Early Icelandic structures featured roofs of sod and turf because wood was scarce and vegetative



roofs provided a relatively good layer of protection and insulation. These prevalent green roofs became a hallmark of Icelandic vernacular architecture and many examples, including the recently restored 9th-century home of Erik the Red, still stand in rural Iceland today.

The feasibility of green roofs in more urban settings, however, has always been problematic. Throughout history, many architects explored the idea of incorporating green spaces into their designs, including LeCorbusier, who favored roof gardens. Although most cities boast a few elegant rooftop gardens, for the most part green roofs never caught on as a standard building practice. The technologies needed to address the complex technical, structural and hydrologic challenges of building and maintaining a green space on top of a building did not exist.

It wasn't until the environmental movement of the 1970s that green roofs were first considered from an ecological point of view. Yet despite a rash of earth-sheltered structures of the period, such buildings did not find favor with either the architectural community or the general public, primarily because the cost and technical challenges of green roofs seemed to far outweigh any environmental positives.

Modern green-roof technology began in Germany more than 30 years ago and Germany remains a leader in the field today. Early on, the Germans grasped the positive environmental impact and energy-saving potential of green roofs. According to one expert, the Germans "believe it is part of their duty, just as recycling is, to use as little energy as possible." Nearly half of all German cities have zoning, regulatory measures or financial incentives in place to encourage or mandate the inclusion of green roofs on existing and new construction, which in turn is supported by a burgeoning greenroof-manufacturing and -construction industry.

North American cities, by comparison, are newcomers to the green-roof technology arena. Few offer any economic incentives or have any regulatory measures in place. Recently, however, several cities have built high-profile green-roof projects, including a 33,000-square-foot Heat Island Initiative on top of Chicago City Hall; the Green Roof Infrastructure Demonstration Project atop Toronto's city hall; and Pittsburgh's Heinz 57 Center's 12,000-square-foot roof garden, which wraps around the 14th-floor penthouse office space.

There are two basic categories of green roofs: intensive and extensive. Intensive green roofswhich require deeper soil, artificial irrigation and

David Salmela, FAIA, introduced green roofs to Ravenwood (above) that harken back to Finnish building traditions and help the building blend into its wilderness site.





Early Icelandic structures featured roofs of sod and turf (top, above), which have become hallmarks of Icelandic vernacular architecture.

intensive management, and are often intended as landscapes or gardens for people—are heavier systems that can have structural implications for a building. Extensive green roofs require only a thin layer of soil, no artificial irrigation and little management. Often planted with sods or grasses, extensive green roofs are useful in reducing the environmental impact of a building and in creating habitats.

In either case, the basic components of a greenroof system consist of layers of vapor barrier, thermal insulation and waterproof root-repellant membrane over the structural support followed by layers of drainage material, filtering membrane, growing medium and vegetation.

Sometimes a green roof is easy to spot. Especially when someone is mowing it. A good example can be seen on the Minneapolis garage designed by Jim Nestingen, who is of Norwegian ancestry and was inspired by the ancient building tradition of the *torvtak*, or sod roof, he had studied on a trip to Norway. In 1998, he designed an addition to his garage that he covered with a green-roof system. It also functions as an extension of the family's backyard.

With one gesture, "I doubled the size of both my garage and my yard," Nestingen claims. The roof remains an object of curiosity for many. Nestingen recalls the day a fire truck pulled up in front of his house. He was both relieved and amused to discover the fire fighters had come only to see the green roof. "They even climbed up on it," he adds.

David Salmela, FAIA, Salmela Architect, Duluth, traces some of his interest in green roofs to Finnish-

vernacular building traditions of northern Minnesota, specifically the birch-, sod- and grass-covered structures on and near his father's farm. But his motivation for incorporating green roofs into his design of Ravenwood Studio in Ely, for *National Geographic* photographer Jim Brandenburg, was logical problem solving. (See *Architecture Minnesota*, May–June 1998.)

For Brandenburg, the architect designed a compound of structures at the edge of wilderness that built upon existing structures on site, including a log cabin. The challenge was to link the pieces. Salmela realized that a simple flat-roofed structure could facilitate the connection yet not overwhelm the log cabin. He opted to cover the roof with sod because it was sensitive to the wilderness surroundings, referenced the cultural traditions of the region and was aesthetically pleasing. Although he contends that "we need nostalgia and things that have a softness to them in architecture," in this instance a green roof afforded "the simplest solution to a complex situation."

Sometimes a green roof looks like an urban park. Consider Marquette Plaza (designed as the Federal Reserve Building by Gunnar Birketts in 1973) on the north end of Nicollet Mall in Minneapolis. As originally designed, the extensive granite-paved plaza in front of the building functioned as little more than a haven for skateboarders. When FRM Associates, Minneapolis, redeveloped the long-troubled building, they entered into a partnership with the City of Minneapolis to redesign the hard-surface plaza into the only public park in downtown Minneapolis (see *Architecture Minnesota*, November-December 2002).



The park is actually a green roof covering office space and a parking ramp below. "The building was built as bomb-proof," says park designer Gary Lampman, landscape architect, Walsh Bishop Associates, Inc., Minneapolis. "The weight of the granite pavers was taken into account in the original structural design." Therefore, once the granite was removed, he continues, the structure was "able to accommodate the substantial soil load necessary to anchor plants and trees."

The pleasing appearance and inviting nature of green roofs belie the fact that they are environmental workhorses. Their public benefits are enormous: They improve air quality and reduce smog by filtering airborne particulates; they promote carbon dioxide/oxygen exchange; they mitigate the urbanheat-island effect and noticeably affect a building's heat gain and loss, and they are remarkably effective as storm-water-retention devices.

Consider Minneapolis's Phillips Eco-Enterprise Center (PEEC), one of the nation's first comprehensive green buildings and business centers, developed by the Green Institute and designed by LHB Engineers and Architects, Minneapolis. One of the environmental design goals of PEEC is that the building play an active role in the protection and conservation of water resources. The most serious threat to be addressed is combined sewer overflows (CSO) that occur during heavy rainfalls when storm-water runoff floods the sanitary sewer system and raw sewage enters the Mississippi River in violation of federal law.

Green roofs can help mitigate this problem because they decrease, retard and filter storm-water runoff. According to Michael Krause, executive director, the Green Institute, "green roofs are [becoming] increasingly important to private developers because of new fees that are likely to be charged based on a project's impact on the storm-water system."

The green roof planned for PEEC, which will be clearly visible from the Hiawatha LRT line as it passes over East Lake Street, is one strategy toward attaining the goal of managing 100 percent of the center's storm water. Krause adds that integrating a green roof in an office/light-industrial building complex has been "a real selling point for prospective tenants. The paybacks will only increase over time."

As will the number of Minnesota architects and landscape architects-in-training familiar with greenroof technology, thanks to a demonstration project underway at the College of Architecture and Landscape Architecture (CALA), University of Minnesota. According to Peter MacDonagh, adjunct faculty member, CALA, and a landscape architect with the Kestrel Design Group, Inc., Edina, half of the 900square-foot roof surface on an entry canopy at CALA's Ralph Rapson Hall will soon be covered with conventional roofing material and the other half in a extensive green-roof system.

Rainfall, runoff and temperature will be monitored and compared for five years. MacDonagh is confident that data gathered will support other positive green-roof research to date, but additionally will provide a convincing "local example" that will lead to greater green-roof use in the Twin Cities and on campus. Optimistically, he adds, "the university's administrative offices are just across the way on an upper floor," with a view to the roof. "We hope they notice."



As rendered in this computergenerated image (top), the green roof planned for PEEC will replace asphalt (above) with plants for storm-water retention and seating areas for employees.



Project

ALFRESCO Living

FOLIAGE, FOLLIES AND FORMAL RESTRAINT COMBINE TO CREATE AN URBAN

OUTDOOR ROOM By Barbara Knox





Design team: (top) Rehn Hassell, Martha Yunker, AIA; (left) Sarah Nettleton, AIA.

rom the first, this project was special because of the extraordinary vision of the client and their dedication to what it could be," says Rehn Hassell, project architect, YA Architecture, Minneapolis, of Thomas Morin's and John Skogmo's Minneapolis garden. The "outdoor room" is the charming result of a collaboration between the clients, Hassell, and garden designer Sarah (Sally) Nettleton, AIA, Sarah Nettleton Architects, Minneapolis.

"Everyone saw this project a little differently," says Morin, a professional decorator. He and Skogmo, a lawyer and banker, had been plotting the backyard for 12 years. "When we finally set out to do it," Morin says, laughing, "we did make a lot of changes along the way."

Having worked with YA on previous projects, Morin and Skogmo were excited to have the firm help them complete their garden. Their first priority was a backyard building for entertaining and living space. But when bids for the initial building were too high, Morin and Skogmo needed to rethink the concept.

"We had never really investigated plant materials," explains Morin, "and we knew we needed a landscape architect. So we hired Sally. She came up with the idea of splitting the building into two smaller buildings."

The garden quickly evolved to put more emphasis on greenery while still focusing on the two follies. Designed by Hassell, the garden shed is tall, solid and simple in appearance; the screen porch is wider and lower. A gravel terrace planted with pleached linden trees connects the two structures.



The main design challenge was to accommodate the offset placement of the house on the site; thus, the design team centered the grass court and fountain on the house's axis to create the illusion of symmetry. The surrounding planting beds, however, are of unequal size. Seen as a whole, the garden sits in harmonious balance with the house, which had been renovated years earlier to provide transparent views and generous access to the garden.

Careful attention to detail elevates the garden to outdoor living room. On the garden shed, Hassell specified cedar-lap siding laid in narrow coursing for the roof, which reinforces the building's small scale. The chevron-paneled teak door echoes the design of the garden gate. The screen porch features an acidetched concrete floor edged in stone, an exposed timber frame and a lead-coated copper roof.

Paired yews and crab apples flourish on the garden's diagonals. Austrian pines planted outside the back wall provide additional privacy. A dark-green-and-gray foliage palette offsets the primarily white and blue flower plantings. On the sunnier north wall, Nettleton specified espaliered apple trees that bloom in spring; on the shadier south walls, she chose dwarf-euonymus shrubs for fall color.

"Because of the sight lines that run from the front to the back of the house," Morin says, "the garden is ever present. It absolutely completed our vision for the home."

Morin and Skogmo Garden Room Minneapolis, Minnesota **YA Architecture** Minneapolis, Minnesota Sarah Nettleton Architects Minneapolis, Minnesota

The urban walled garden includes formal plantings and two follies (above) that extend the house with a charming outdoor room (below).



endangered

Continued from page 15

The Head House was built with a reinforced-concrete structure, with composite clay tile and concrete infill walls. The Sack House uses similar construction, with a clear span interior and several overhead doors. Both structures are supported on piers. The purpose of the concrete structure with infill walls has to do with the flood-plain location. The concrete and tile is impervious to water, and surging floodwaters can take out the wall panels without affecting the concrete structural frame.

In 1985, St. Paul acquired the Upper Landing sites and cleared the land for future redevelopment. In the following years, the Saint Paul Riverfront Corporation prepared a comprehensive planning document, the St. Paul on the Mississippi Development Framework, guided by Ken Greenberg, an urban-design consultant based in Toronto. The master plan, augmented by consider-

able community participation, calls for a balance of economic, recreational and cultural resources to guide development. The area is within the Mississippi National River and Recreation Area, administered by the National Park Service, adding both complexities and opportunities to development of the former Upper Landing site.

One of the four designated development sites around the Head House and Sack House (which features medium-density townhouses) is under construction; another designated site with a mix of commercial uses, underground parking and stacked townhouses will begin construction soon. Also under construction is a hiking and biking trail that will pass within 100 feet of the Head House and Sack House, connect with the planned Bruce Vento Regional Park just east of downtown St. Paul, and eventually join the Phalen Corridor out to the city's eastern boundaries, then travel northward to Duluth.

As the St. Paul on the Mississippi Development Framework sees its components shaped into implementation stages, planners at the Saint Paul Riverfront Corporation need to settle the status of the Head House and Sack House. Gregory Page, director of special projects, speaks enthusiastically about the structures' potential. He also says the competition was very successful in giving his review team brilliantly imagined concepts that heightened public awareness of the issue.

One team proposed a theater complex featuring an outdoor theater with the seating area built as an open-topped slant-floored pan submerged in river water, with moviegoers viewing images projected on a wall of the Head House. Another team proposed a farmers' market. Another plan would treat the buildings as a partial ruin. Another proposal created an urban fitness center, using the Head House interior wall for simulated rock climbing.

Many of the design ideas entailed significant additions or transformations of

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the buildings that would result in drastic alteration, while others sought minimal architectural intervention. None of the design proposals, Page notes, presented architecturally sensitive solutions ready for implementation. Also, none of these schemes were immediately viable for commercial development.

The challenge is to find a solution with minimal economic impact, that can bundle together committed funding now available publicly and privately. For instance, Centex Corporation, which plans to develop housing sites adjacent to the Head House and Sack House, has committed \$200,000 to either building stabilization or demolition. For Centex, a renovated Head House and Sack House would be a welcome amenity for its nearby residential development, while the complex's continuing degradation would have a negative impact. This comes as part of a development agreement with St. Paul officials that sets a time limit of year end 2004 for a plan in process; the agreement

stipulates that without a plan, the complex interview be razed.

Page, nonetheless, is optimistic. So is Lucy Thompson, senior planner, Department of Planning and Economic Development, St. Paul. "The Head House and Sack House can be our Milwaukee Railroad Depot," she says, referring to Minneapolis's recent preservation success. Unlike the depot, however, the Head House and Sack House have zero lot lines all around, so there is no adjacent property to hold complementary buildings that would offset renovation costs and guarantee economic return.

Still, Thompson calls the Head House and Sack House complex an "iconic statement" that signifies St. Paul's working heritage and historic relationship with the river. "It's an on-the-water amenity," she says of the complex. "There are views from these unique structures that cannot be duplicated. Built before flood-plain laws, a place like this right on the river cannot be built again." AM

Continued from page 17

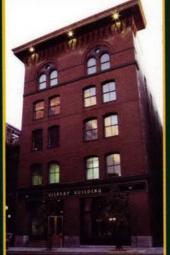
ture program, the university is also building creative leadership. For me, it's hard to separate the university from Minnesota.

How do you view your role as vice president of University Services, which includes overseeing such disparate units as housing, emergency preparedness and new construction?

The common thread between all of those units is that University Services is the platform or stage for the academic enterprise, the support for the academic infrastructure. As an executive, I have three roles: to give a sense of purpose and direction to academic enterprise; provide the resources-human and financial-to get the job done; and finally, act as support, counsel, mentor and fire fighter for all of the units that report to

Continued on page 50

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interview

Continued from page 49

me. In order for the university to be an excellent research institution, support services need to be as excellent as the academic units. That means being service oriented and recognizing that we serve students, faculty, the university community and everyone else in the state.

What do architects and architectural firms contribute to your work?

In the past decade there was a master-planning process on campus in which individuals and firms from Minnesota's architectural community participated. In the future, we're going to be strengthening that master-planning process and utilizing the expertise of AIA Minnesota and the architectural community in making sure our facility design, construction and management is excellent.

I have just established an expert panel with nine members of the architectural, engineering and construction professions to help us do four things: give the university

the opportunity to critique its work and improve the way we design, construct and manage facilities; give us strategic advice so we address the right issues in the right order; provide the expertise we need to deal with issues like plan review, quality assurance, procurement and contract management; become a national model among our peer institutions so we're the organization they benchmark against and emulate.

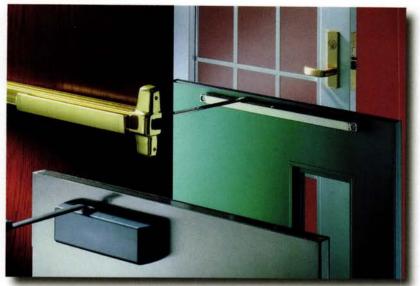
In addition, many Minnesota firms have been selected and are under contract to produce a university building.

Do you think the university is or should be a showcase for architecture? If so, is the showcase that currently exists a good one? I'm looking at Pillsbury Hall, one of the finest examples of Richardsonian-Romanesque architecture, looking out at the mall, bracketed by Northrop Auditorium and the restored Coffman Union, and I think these buildings are important symbols to the people of Minnesota. I think Minnesotans expect the university to be a model or showcase in a number of ways.

Certainly, when we think about the buildings themselves-the physical presence and civic presence of the university-the architecture of the buildings and our stewardship of those buildings are important. We have a role as stewards of architectural history at the university.

But we also have a role, as we build new buildings, to test concepts with regard to sustainability, to functionality and to how people use spaces. When people visit the restored Coffman, they notice many instances in which the historic structure was preserved, but also how the architects created spaces that presage how we will want to use space in the year 2010. We hope people will view the new arts building and the molecular-science building as positive additions, as well as the projects we have coming up: the arboretum visitor center, the restoration of Jones and Nicholson halls, and the Translational Research Facility, a research center for translating basic medical research into products.

Continued on page 53



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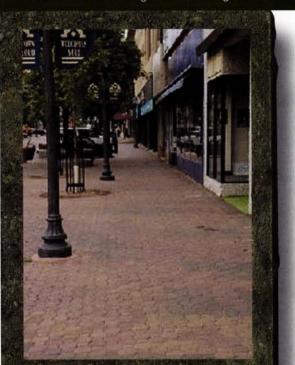
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interview

Continued from page 50

In order to be chosen to design a new university building, architectural firms respond to a Request for Proposals and have their qualifications reviewed by the state's Designer Selection Board. The state then offers you two firms to choose from. Can you explain why it's so valuable for firms to pursue university projects?

I believe being an architect of a university building provides a showcase for the firm's work, of course. But because of the size of the university's physical infrastructure, even if the state experiences an economic downturn, the university will continue to have work. Whether it's labs or horse barns, library restorations or residence halls, operating rooms to student centers, there's just about every type of building one could imagine at the university. But I would also hope that architects would view the opportunity of working at the university as an opportunity to give back to the institution in which many of them were trained.

The College of Architecture and Landscape Architecture, for example, really produces leadership that then not only provides design expertise and creativity, but also sound business leadership for the architectural community and other businesses in the state. The architectural profession is really essential to the functioning of our economy and our business, because architects are the people who envision how we create the spaces to get the job done, with functional ease and design excellence. AM

technology

Continued from page 19

understanding of how the ground will react to the equipment operator's will. In near poetic terms, he discusses the difference between compacted soil, sandy soil and uncovered fill, and how they need to be dealt with according to their composition and characteristics. For the most part, Huiris still does his job by "feel."

Even so, he's convinced GPS has improved his productivity. Unlike today's Hidden strength Obvious beaut

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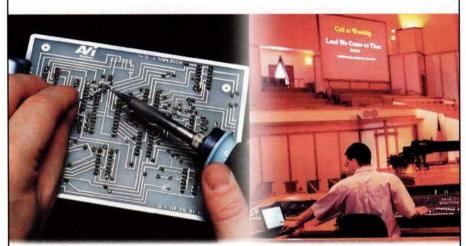




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technology

Continued from page 53

conventional job site, where operators frequently leave their equipment to check their location, refer to a plan or ponder the geometry of grading stakes and strings, a dozer operator guided by GPS can immediately reference a digital site plan without stopping work. "When you can stay in your cab," Huiris says, "you're most efficient."

The U.S. Department of Defense created GPS; public and commercial applications were developed in the 1970s. A worldwide radio-navigation system formed from a constellation of 24 satellites and five ground stations, GPS enables anyone with a land-based receiver to use the satellites as reference points to calculate any position on the earth's surface, typically to within a couple of meters. Orbital wobble and temporal deviation limit the signal's precision to about a meter. This degradation can be overcome, however, by locating a reference station nearby with its own GPS receiver.

Because the reference station "knows" where it is, it can calculate orbital deviation in the signal and transmit the correction to any number of mobile receivers (such as a bulldozer) on the ground. A real-time radio signal delivering the correction data can ensure an accuracy of 2 to 5 centimeters, which is well below accepted industry tolerances for rough and finish grading.

To guide the heavy-equipment operator, two "ruggedized" GPS receivers are mounted on either end of the dozer's blade. These are hard-wired to a display panel consisting of a full-color LCD screen with large, simplified key controls. Site-plan and digitalterrain-model (DTM) information is downloaded with standard 48-megabyte PC data cards, similar to the memory cards used with digital cameras.

The GPS data is sent to three LED light bars located on either side and above the dashboard. With green and red arrows, the light bars indicate in real time the degree to which the blade should be raised or lowered. The light bar across the top indicates changes in desired heading according to a predetermined path chosen by the operator.

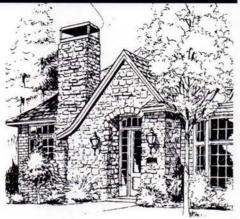
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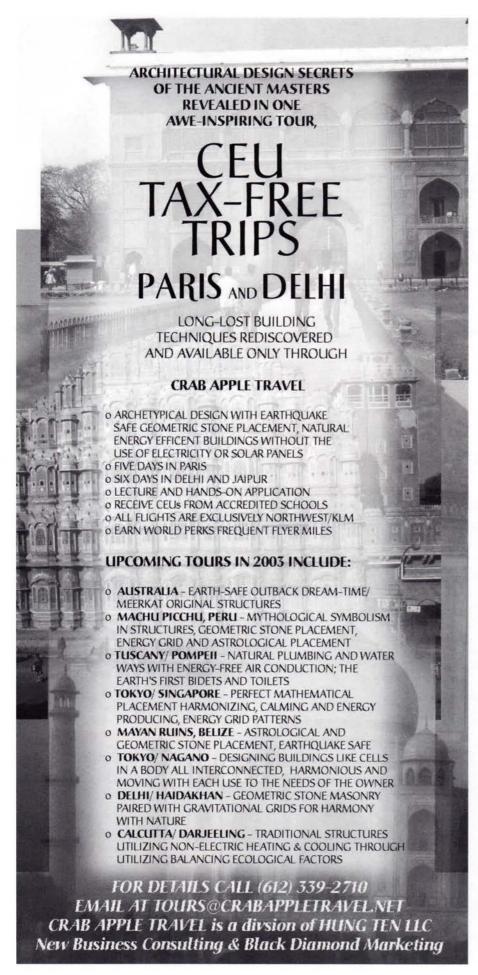
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technology

Continued from page 54

Although each piece of the system represents established technology, integration of the hardware and software into a form useful for earthmoving did not happen until recently. Trimble, a nationwide provider of GPS systems, introduced its first viable products for the construction industry in 1999. Today, the company boasts installation of more than 500 systems nationwide.

TopCon, another provider that acquired GPS-product-manufacturer Javad in 2001, has more than a hundred systems installed. GPS systems have been installed in bulldozers, motorgraders, scrapers, compactors and loaders. Trimble is currently testing GPS with excavators that can tell the operator the location the bucket's teeth as it sweeps the bottom of a trench.

Reports of GPS's increasing accuracy are impressive, yet no bulldozer can anticipate or correct errors, mistakes or poor assumptions embedded in the site plan.

GPS use places a greater burden on landscape architects and civil engineers preparing site plans, terrain models and working points. According to Mike Reed, product consultant, Trimble, designers and contractors can achieve almost 100-percent quality control through the use of virtual construction models and drawings. "It's a matter of moving from a 2D to a 3D world," Reed explains, as this approach allows the designer or contractor to see "how the job will truly get built."

Many technological advances promise improved efficiency, cost savings or time reduction. In this regard, GPS-guided heavy-equipment systems do not disappoint. One of the largest inefficiencies in rough grading is routine regrading due to misplaced or fallen survey stakes, or poor interpolation of grading contours by the operator. With GPS-guided systems that allow operators to check their own work, grading is usually done right the first time. By eliminating regrading, contractors also see a substantial, and somewhat surprising, reduction in fuel costs.

According to Trimble, contractors using the company's system enjoy on-site pro-

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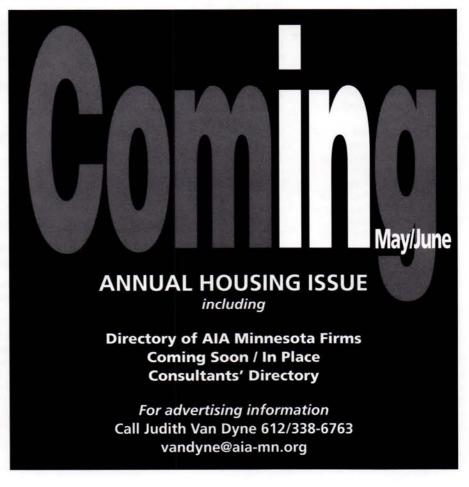
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ductivity increases of between 25 and 30 percent. Because those increases are largely due to a decrease in construction time, the overall project duration is also reduced—an obvious benefit for professionals engaged in "fast-track" project delivery.

Costs for GPS systems vary, as each contractor customizes the system package to his or her needs. A basic system with a base station, software and one fully outfitted machine can cost about \$100,000. Additional machines can be added for a portion of the initial cost. The cost/benefit ratio currently favors such large projects as commercial and residential subdivisions and large industrial and agricultural operations.

GPS technology, however, will likely filter down to smaller and more budget-minded applications until it becomes the new industry standard. Pat Huiris, for one, wouldn't mind a bit. "It's the wave of the future," he says. "I'm never going back." AM

This article originally appeared, in a slightly different form, in Landscape Architecture, July 2002, and is reused here with permission.



rchitecture Minnesota has published an annual directory of landscape architectural firms for the past 12 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 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.

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Landscape Architects	2
Engineers	7
Other Professional	2 7 1 3
Technical	3
Administrative	5
Total	15
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	Work %
Site planning/	JIK /

Wor	k %
Site planning/	
development studies	30
Environmental studies (EIS)	10
Recreation areas (golf, ski, etc.)	10
Master/comprehensive	
planning	20
Multi-family housing/PUDS	30
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	Landscape Architects	4
	Engineers	2
	Technical	1
	Administrative	2
	Total	9
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		ork %
	Site planning/dev. studies	10
ĕ	Parks/open spaces	10
	Schools/cemeteries	80
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	Lakeville, MN; Hopkins High	1
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Firm Personnel by Discipl	ine
Landscape Architects	5
Architects	61
Planners	5
Engineers, interior design,	
technology	55
Technical	7
Administrative	9
Total	142
<u>~</u>	
	Work %
Site planning/dev. studies	20
Parks/open spaces	5

Urban design/streetscapes

Multi-family housing/PUDS

Schools/campus planning

Master/comprehensive

planning

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Firm Personnel by Disciplin	ne
Landscape Architects	6
Architects	9
Engineers	125
Planners	2
Other Professional	28
Technical	166
Administrative	58
Total	394
_	Vork %
Site planning/dev. studies	20
Environmental studies (EIS) 5
Parks/open spaces	25

Urban design/streetscapes

Master/comprehensive

planning

Recreation areas (golf, ski, etc.) 10

Transportation/transit facilities 20

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—	osta Rica	St. Paul, MN; The Towers, Site		Other MN Office: St. Cloud —		& structures		5
Bryan D. Carlson R	LA, FASL				AICP	Best Buy Campus, Ri		
	and the second	Ramsey Town Center, Town I			ASLA	Dancing Waters, Wo		MN;
Firm Personnel by Disci		ning and Urban Design, Rams			AICP	Heritage Park, Wayza		
Landscape Architects		2 MN; Firefighters Memorial, St			ASLA	Brickyard Redevelop		
Technical		Capitol Grounds, St. Paul, MN			ASLA	Streetscapes, Chaska,		
Administrative		Como Park Campus Framewo		Jay Blake	AICP	School, University of		
Total	25	Plan, St. Paul, MN; Wirth Bead		 -		Minneapolis, MN; So	uthwest	Sta-
_		Restoration, Golden Valley, M	ſΝ	Firm Personnel by Discipline		tion, Eden Prairie, M	N	
D4314 241 172 1840 1841 1841 1841	Work 9			Landscape Architects	8			
Site planning/dev. studi	ies 20			Planners	12	*		
Parks/open spaces	10			Market Research Analysts	2	DAMON FARBER ASS	SOCIATE!	5
Urban design/streetscap	oes 10	400 1st Avenue N., Ste. 710		Technical	2	923 Nicollet Mall		
Recreation areas (golf, sk	i, etc.) 10	Minneapolis, MN 55401		Administrative	3	Minneapolis, MN 55	3402	
Master/comprehensive		Tel: 612/341-8070		Total	27	Tel: 612/332-7522		
planning	20	Fax: 612/339-5907				Fax: 612/332-0936		
Resort planning/design	30	E-mail: contact@coenpartners	.com	Wo	ork %	Web: www.dfalandso	cape.com	1
		Web: www.coenpartners.com		Site planning/development		Established 1981	104 Excess (150 cm)	
Peninsula Papagayo Res	ort Com-	Established 1992		studies	15	_		
munity, Guanacaste, Co		<u></u>		Environmental studies (EIS)	10	Damon Farber	RLA, FA	ASLA
Mayo Statuary Park, Roc		Shane Coen	RLA		10	Peter Larson	RLA, A	
MN; Minnesota Landsca		Nathan Anderson		Urban design/streetscapes	20	Dana Schumacher	RLA, A	
boretum, Chanhassen, 1		Travis Van Liere		Master/comprehensive		Tom Whitlock		RLA
Cloud State University I		Bryan Kramer		planning	15	Jesse Symynkywicz		RLA
Stadium, St. Cloud, MN		Stephanie Grotta		Multi-family housing/PUDS	15	Terry Minarik		RLA
veristy of Minnesota Art		-		Market research	10			3777.0
Minneapolis, MN; Wells		Firm Personnel by Discipline		Expert testimony	5	Firm Personnel by Di	scipline	
Home Mortgage Campu		Landscape Architects	5			Landscape Architects		11
Minneapolis, MN		Administrative	1	Burnsville Heart of the City F	rame-	Administrative		1
		Total	6	work Plan, Design Guidelines		Total		12
*		Table Section 1		Codes, MN; South Robert Stre				0.75
CLOSE LANDSCAPE		Wo	rk %	Development Strategy, West			Wo	rk%
ARCHITECTURE		Residential/decks/gardens	20	Paul, MN; Nicollet Mall Enha		Residential/decks/gar		5
275 E. 4th Street, Ste. 61	10	Urban design/streetscapes	20	ment Study and Extension, N		Site planning/dev. str		20
St. Paul, MN 55101		Master/comprehensive		neapolis, MN; Mississippi Reg		Parks/open spaces		20
Tel: 651/222-5754		planning	40	Park, Minneapolis, MN; Moo		Urban design/streetse	canes	30
Fax: 651/222-1017		Multi-family housing/PUDS		Downtown Redevelopment	incuci	Master/comprehensiv	ve	50
E-mail:		_	27040	Framework Plan and Streetsca		planning		20
tfrechette@closelandarcl	h.com	Mayo Woodlands, Planned Re	esi-	MN; Nicollet Commons Park		Multi-family housing	/PUIDS	5
Web: www.closela.com		dential Community, Rocheste		Burnsville, MN	,	—	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Established 1977		MN; Collegeville Developmen		During me, mi		Minneapolis Institu	te of Art	S
_		Group, Planned Residential C		*		Minneapolis, MN; C		
Bob Close	RLA, ASLA			ERNST ASSOCIATES		netonka, MN; Henn		
	RLA, ASLA	[2]		122 West 6th Street		ty Government Cen		
Bruce Jacobson	RL/			Chaska, MN 55318		neapolis, MN; Excel	경기를 잃었다고 하다.	C
	RLA, ASLA			Tel: 952/448-4094		Grand, St. Louis Par		ity
	RLA, ASL			Fax: 952/448-6997		of Eagan Communi		
Ben Erickson		Louis, MO; David Salmela Arc		E-mail: ernstla@mn.rr.com		MN; Marshall Street		-,
—		tect, Residential Collaboration		Established 1977		Plan, Minneapolis,		
Firm Personnel by Disci	pline	Various Locations	- T. C.	_		,	146.1	
Landscape Architects)		Gene F. Ernst	RLA			
Administrative				Curt H. Claeys	ILLI1			
Total	10			_				
				Firm Personnel by discipline				
Continued on next column				Landscape Architects	2			
The second second				Administrative	1			
				Total	3			
					3			

Continued on next column

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Los Angeles, CA	
-	
Gary Fishbeck	RLA, ASLA
Theodore E. Lee	RLA, ASLA
Emanouil Spassov	RLA, ASLA
Jill S. Jones	RLA
Krisan Osterby-Benso	n RLA
Firm Personnel by Dis	scipline
Landscape Architects	6
Architects	256
Engineers	124
Planners	6
Other Professional	14
Technical	22
Administrative	133
Total	561
_	Work %
Site planning/develor	110.00000000000000000000000000000000000
Parks/open spaces	10
Urban design/streetsc	0.5
Interior landscape/pla	
interior ianuscape/pia	inungs

Abbott Northwestern Hospital Campus Master Plan, Minneapolis, MN; Canterbury Park Master Plan, Shakopee, MN; Downtown East LRT Station Plaza, Minneapolis, MN; Hennepin Theatre District Streetscape, Minneapolis, MN: Saint Paul Public Housing Agency Central Office Building, Saint Paul, MN; University of Minnesota Scholars' Walk, Minneapolis, MN

30

Master/comprehensive

Plazas/courtyards/rooftop

planning

gardens

*	
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3620 France Avenue S.	
St. Louis Park, MN 55416	
Tel: 952/920-5088	
Fax: 952/920-2920	
Established 1990	
	
Robert P. Hauck	RLA
Susan K. Simon	
Firm Personnel by Discipline	
Landscape Architects	2
Technical	1
Administrative	1
Total	4
Wor	rk%
Residential/decks/gardens	80
Recreation areas (golf, ski, etc.)	10
Neighborhood amenities/	
renovation	10
_	

Miller Residence, Courtyard Replacement of Parking Area, Minneapolis, MN; Peterson Residence, Selective Removal of Overgrown Vegetation and Additions (plantings, lighting, automatic driveway gate), Minneapolis, MN; Coventry Townhomes, Design of 30 Tiny Courtyards, Edina, MN; Larson Residence (custom pool, whirlpool/ waterfall, deck, lighting, gazebo), Orono, MN; Edina Country Club, New Arrival Area, Edina, MN; Hotchkiss Residence, Renovation of a Kenwood Federal-style Home, Additions (custom ornamental iron fencing, automated gates and formal gardens), Minneapolis, MN

*	
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Fax: 612/338-6838	
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Web: www.hkgi.com	n
Established 1982	
-	
Mark Koegler	RLA, ASLA
Michael Schroeder	RLA
Bruce Chamberlain	RLA, ASLA
Paul Paige	RLA
Brad Scheib	AICP
— Fi — P — — — I I — F	N1-11
Firm Personnel by I	
Landscape Architect	
Planners	3
Administrative	2
Total	14
	747 1 04
	Work %
Site planning/dev. s	tudies 15

Environmental studies (EIS)

Urban design/streetscapes

Multi-family housing/PUDS

Master/comprehensive

Redevelopment/TOD

Parks/open spaces

planning

planning 25 Golden Triangle Land Use/Multimodal Transportation Study, Eden Prairie, MN; Hastings Downtown Revitalization Master Plan, Hastings, MN; Elk River Comprehensive Plan, Elk River, MN; Parks and Open Space Master Plan, Mankato, MN; East Ravine Neighborhood Pre-design, Cottage Grove, MN; Central Avenue Streetscape, Faribault, MN

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Associates.com

Continued on next column

Greg Ingraham RLA, AICP Firm Personnel by Discipline Landscape Architects 3 2 **Planners** Other Professional 1 Administrative Total

Work % Residential/decks/gardens 5 10 Site planning/dev. studies Environmental studies (EIS) 5 Parks/open spaces 25 Urban design/streetscapes 15 Master/comprehensive planning 20 Multi-family housing/PUDS 10 Commercial/industrial landscape design 10

Round Lake Park, Eden Prairie, MN; Burroughs School, Minneapolis, MN; East Lake Harriet Gateway, Minneapolis, MN; Stonegate Apartments, Prior Lake, MN; Fischer Marketplace Business Park, Apple Valley, MN; Rosemount Park, Trail and Open Space Plan, Rosemount, MN

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Kevin Keenan

5

10

20

20

5

Todd Irvine RLA. John Johnson RLA Firm Personnel by Discipline Landscape Architects 4 2 Other Professional 5 Technical Administrative 1 Total 12

RLA

Work % Residential/decks/gardens 90 Urban design/streetscapes 10 All "design/build" projects

Radichel Residence, Apple Valley, MN; Redstone American Grill, Eden Prairie, MN; Central Bank, Golden Valley, MN; Starkey Residence, Shorewood, MN; Vlahos Residence, Deephaven, MN; Cornelius Residence, Eden Prairie, MN

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Fax: 612/252-9077	
E-mail: dlazan@landform	msp.com
Web: www.landform.net	,
Established 1994	
Other Office: Phoenix, A.	Z
Tom Kerby	RLA
Darren Lazan	
Steve Johnston	PE
Ross Larson	
Carolyn Krall	AIA
Mike Cannon	LS
Figure 1	
Firm Personnel by Discip	line
Landscape Architects	2
Architects	6
Civil Engineers	14
Other Professional	7
Technical	18
Administrative	7
Total	54

Landform provides landscape architecture, land surveying, civil engineering, planning and architectural services. Our broad range of local and national clients includes developers, architects, corporate/ commercial groups, builders, and government entities. Specialties are industrial, restaurant, office, retail, housing, institutional, public sector, hospitality and medical.

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Other MN Office: Minneapolis

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Gary C. Findell	RLA, ASLA	1
David M. Chmielewski	RLA, ASLA	
Bruce D. Chalupsky	RLA, ASLA	
Matthew Fair-Jones	RLA, ASLA	
Mike A. Fischer	AIA	
— Firm Personnel by Disc	inline	
Landscape Architects	ipinie 5	
Architects	23	
Engineers	29	
Planners	1	
Other Professional	Ç	
Technical	-	
	35	
Administrative	28	-
Total	130)
_	Work %	
Residential/decks/garde		50
Site planning/dev. stud		
Parks/open spaces	10	
Urban design/streetscap		
Recreation areas (golf, sk	i, etc.) 10)
Master/comprehensive		
planning	20)
Multi-family housing/P	UDS 15	
		

Lake Superior College Master Plan, Duluth, MN; Barkers Island Master Plan, Superior, WI; MNDOT TH53 Piedmont Avenue, Duluth, MN: Lowry Avenue Corridor Redevelopment, Minneapolis, MN; Minnetonka Parks Redevelopment, Minnetonka, MN; Burnsville Heart of the City Family Housing Project, Burnsville, MN

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Paul Kangas	RLA, ASLA
Tom Loucks	
Jeff Shopek	PE
Mike St. Martin	PE
Paul McGinley	LS
_	
Continued on next column	

Firm Personnel by Discipline Landscape Architects Engineers 7 Planners 4 Other Professional 11 Technical 30 Administrative 5 Total 60 Work % Site planning/dev. studies 20 Parks/open spaces 40 Recreation areas (golf, ski, etc.) 10 Master/comprehensive planning 10 Multi-family housing/PUDS 20

P.D.L. Corporate Campus, Brooklyn Park, MN; Village @ Shingle Creek Redevelopment, Brooklyn Park, MN; Maple Grove Civic Campus, Maple Grove, MN; South Elm Road Park, Maple Grove, MN: Cormorant Links Golf Course, Pelican Rapids, MN; Brooklyn Center Retail, Brooklyn Center, MN

oslund.and.assoc.

115 Washington Avenue N. Minneapolis, MN 55401 Tel: 612/359-9144 Fax: 612/359-9625 E-mail: infoslund@oaala.com Web: www.oaala.com Established 1998

Thomas R. Oslund RLA, FASLA, FAAR

Jay D. Coatta

Firm Personnel by Discipline	
Landscape Architects	5
Architects	2
Administrative	2
Total	9
Wo	rk%
Residential/decks/gardens	5
Site planning/dev. studies	30
Parks/open spaces	5
Urban design/streetscapes	5
Interior landscape/plantings	5

Recreation areas (golf, ski, etc.) 10

40

Master/comprehensive

planning

Medtronic Master Plan and Site Development, Fridley, MN; Valparaiso University, Valparaiso, IN; General Mills, Minneapolis, MN; University of Minnesota Duluth. Science Center, Duluth, MN; Windsong Farms Golf Club, Maple Plain, MN; Blue Cross/Blue Shield, Eagan, MN

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Wm. Scott Midness RLA, ASLA Joel L. McElhany RLA, ASLA Jeffrey A. Feulner Assoc. ASLA David B. Warzala PF John H. Payton PE Rex A. Brejnik PE Firm Personnel by Discipline Landscape Architects Civil Engineers 11 Traffic/Transportation Engineers 8

1

1

3

Environmental

Graphic artist

Technical

Administrative 2 Total 30 Work % Site planning/dev/ studies 40 Environmental studies (EIS) 5 Parks/open spaces 20 Urban design/streetscapes 25 Master/comprehensive planning 10

Jackson County Central Schools, Jackson, MN; Pershing Park, Minneapolis, MN; River Park Marina, Bayport, MN; Hiawatha LRT Station Site Design/Build, Minneapolis, MN; Abbott Northwestern, Minneapolis Heart Hospital, Minneapolis, MN; Super Target Site Development in Minnetonka, Chaska, Lakeville, Lino Lakes, MN

2

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*	
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Duluth, Hibbing	
	1000 117 1101201101
John Dietrich	RLA, ASLA
Steve Schwanke	AICP
Gary Brown	PE
John Jamnick	PE
Michele Caron	PE
— Firm Personnel by I	Discipline
Landscape Architec	
Landscape Architec	

Engineers

Technical

Other Professional

Planners

Administrative 12 102 Total Work % Site planning/dev. studies 25 Environmental studies (EIS) 5 5 Parks/open spaces Urban design/streetscapes 10 Master/comprehensive planning 5 Multi-family housing/PUDS 10 Commercial/retail 40 developments

28

1

18

39

Planners

Total

Administrative

Gift of Mary Children's Home, Eagan, MN; Savage Crossings Retail, Savage, MN; Valley Green Corporate Center, Shakopee, MN; DNR, Off-highway Vehicle Park, Gilbert, MN; National Market Center, Blaine, MN; Cochranes Marine Redevelopment, Greenwood, MN

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William D. Sanders	RLA, FASLA
Larry L. Wacker	RLA, ASLA
David Wanberg	AICP, RLA
Gregory Johnson	RLA
Bill Bleckwenn	RLA, ASLA
James Harbaugh	RLA, ASLA
Firm Personnel by D	iscipline
Landscape Architects	5 7

—	
Work	3%
Residential/decks/gardens	5
Site planning/dev. stujdies	10
Environmental studies (EIS)	5
Parks/open spaces	25
Urban design/streetscapes	25
Recreation areas (golf, ski, etc.)	5
Master/comprehensive	
planning	10
Multi-family housing/PUDS	5
Cemetery planning	10

Lake of the Isles Master Plan, Minneapolis, MN; Traverse de Sioux Historic Site, St. Peter, MN; Central Hillside Neighborhood Plan, Duluth, MN; Minnesota State Veterans Cemetery, Little Falls, MN; Cedar Side Trail System, Rice Lake, WI; Downtown Streetscape Plan, Spencer, IA

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Continued on next column

Laurie McRostie	RLA, ASLA
Mark Salzman	RLA, ASLA
Dan Cornejo	AICP
Nancy Schultz	AIA
Trent Luger	RLA, ASLA
Nancy Jacobson	RLA, ASLA
_	

_	
Firm Personnel by Discipli	ne
Landscape Architects	11
Architects	26
Engineers	280
Planners	25
Other Professional	87
Technical	180
Administrative	120
Total	699
 1	
	Work %
Site planning/dev. studies	10
Site planning/dev. studies	1

Environmental studies (EIS)

Parks/open spaces Urban design/streetscapes 5

25

25

Master/comprehensive	
planning	10
Transportation aesthetics	25
I-35W Aesthetic Design Stud	lies,
Minneapolis, MN; Fortune I	Bay
Casino and Club House Site	De-
sign, Tower, MN; Chicago A	venue
Riverfront Plaza, Minneapol	is,
MN; Paul Bunyan Drive Aes	thetic
and Recreational Amenities,	Be-
midji, MN; Gitchi Gami Stat	te

Trail, Split Rock Lighthouse State

Park, MN; City Hall Site Design,

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Hugo, MN

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A. Graham Sones	RLA, ASLA	
-		

	Work %
Residential/decks/gardens	5
Site planning/dev. studies	10
Parks/open spaces	80
Master/comprehensive	
planning	5

Mayowood Road Transportation Enhancement, Rochester, MN; Bassetts Creek Bank Restoration Project, Minneapolis, MN; Mayo Woodlands Trail Master Plan, Rochester, MN; Wolff/Stone Residence, Ramsey Hill, St. Paul, MN

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bwarner@srfconsulting.com Web: www.srfconsulting.com Established 1963

_	
Barry Warner	RLA, FASLA, AICP
John Larson	RLA, ASLA
Joni Giese	RLA, ASLA
Ken Grieshaber	RLA, ASLA
Mike McGarver	y RLA, ASLA
Tom Thorson	RLA, ASLA

Firm Personnel by Discipl	ine
Landscape Architects	11
Planners	8
Environmental	10
Traffic/Transportation	26
Parking	4
Civil/Site Engineering	44
Structural	16
Hydrology	12
Highway	40
Surveying	9
Construction Services	10
Technical	34
Administrative	6
Total	230
	Work %
(Landscape Architecture/	

Urban design/streetscapes Master/comprehensive planning 10 Redevelopment/CBD design 10 Landmark Plaza, St. Paul, MN; Heritage Park (Near North), Minneapolis, MN; Excelsior Boulevard Streetscape, St. Louis Park, MN; Franklin Riverside T.O.D. Planning, Minneapolis, MN; Campus

Design Standards, University of Minnesota; MAC Airport Site Planning and Design, Minneapo-

lis/St. Paul, MN

Planning)

Parks/open spaces

Site planning/dev. studies

Environmental studies (EIS)

20

20

15

*	
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Web: www.tkda.com	
Established 1910	
Other Office: Aurora, IL	
- 15 - 15 - 15 - 15 - 15 - 15 - 15 - 15	
Dean A. Johnson	AIA
Richard L. Gray RI	A, ASLA
Richard E. Thompson	Planner
David A. Mayer	
== 1	
Firm Personnel by Discipli	ine
Landscape Architects	2
Architects	10
Engineers	89
Planners	3
Other Professional	15
Technical	68
Administrative	17
Total	204
_	
	Work %
Site planning/dev. studies	25
Parks/open spaces	25
Urban design/streetscapes	
Master/comprehensive	
planning	10
A CONTRACTOR OF COMMENT AND ADDRESS OF THE CONTRACTOR OF THE CONTR	

Harriet Island Park Pedestrian Gateway Entrance, Saint Paul, MN; Minnesota State Fair, Food Service Building Pedestrian Plaza, Saint Paul, MN; Downtown Lake Elmo Streetscape Design, Lake Elmo, MN; Birch Park Trail Boardwalk, Lino Lakes, MN; Concordia University New Campus Entrance and Library Technology Center Development, Saint Paul, MN; Waterous Company Corporate Office and Manufacturing Facility Campus Development, South St. Paul, MN

20

Athletic fields/track

*		
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Craig Amundsen	AIC	P
Steve Durrant	RLA, ASL	
Miles Lindberg	RLA, ASL	
Bob Kost	RLA, ASL	A
Arijs Pakalns	AIC	
Tom Harrington	RLA, ASL	
— Firm Personnel by Di	scipline	
Landscape Architects	2	0
Architects		3
Engineers	5	
Planners		
Other Professional	10	173
Technical	3	
Administrative	3	
Total	25	
_		
C:t	Work 9	
Site planning/dev. studies		5
Environmental studies (EIS)		0
Parks/open spaces		5
Urban design/streetso		J
Master/comprehensiv		0
planning	/DUDG	70
Multi-family housing	/PUDS)

Bayfront Festival Park, Duluth, MN; Euclid Avenue Bus Rapid Transit Streetscape Improvements, Cleveland, OH; Urban Village Overlay Districts, St. Paul, MN; Central Park, City of St. Anthony, MN; Community Plan, Alkafji, Saudi Arabia; Kevhole State Park Management Plan, WY

Transportation

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_	
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Ed J. Hasek	RLA, ASLA
Tim Erkkila	RLA, ASLA
Dan Sjordal	RLA, ASLA
The state of the s	
Firm Personnel by D	iscipline
Landscape Architects	
Engineers	15
Traffic Planners	2
Environmental	5
Land Surveyors	13
Technical	59
Administrative	8.5
Total	113.5
_	147 - 1- 0/
Cir. 1	Work %
Site planning/dev.stu	
Environmental studi	
Recreation areas (gol	
Master/comprehensi	
planning	20
Commercial/enginee	ering,/
surveying	40
— Cobblestone Lake, A _l	oplo Vallov
Cooblestone Lake, Ap	opie valley,

MN; Evermore, Rosemount, MN;

MN; Timbercrest, Lakeville, MN;

Riverdale, Coon Rapids, MN; Hart-

ford Commons, Eden Prairie, MN

Liberty on the Lake, Stillwater,

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Don Borcherding	PE, LS
Chris Colby	AIA, CID
Jose Rivas	AIA
_	
Firm Personnel by Disci	pline
Landscape Architects	9
Architects	4
Engineers	36
Planners	4
Other Professional	18
Technical	30
Administrative	37
Total	128
 :	
	Work %
Site planning/dev. studie	es 40
Environmental studies (EIS) 10
Parks/open spaces	10

RLA, ASLA

RLA, ASLA

15

20

Mayo/Eisenberg Landscape Master Plan, Rochester, MN; IBM Landscape Improvements, Rochester, MN; Houston Trailhead, Houston, MN; Downtown Streetscaping, Lake City, MN; Rochester Public Library Streetscape, Rochester, MN; Chester Woods Regional Park, Olmsted County, MN

Urban design/streetscapes

Multi-family housing/PUDS

Master/comprehensive

planning

James Ford Bell Technical Center

Location: Golden Valley, MN Client: General Mills, Inc.

Firm or record/contract: Hammel, Green and

Abrahamson, Inc.

Partner-in-charge: Anita Barnett Design partner: E. Tim Carl, AIA

Project architect: Mia Blanchett, AIA Project managers: Todd Messerli, Mike Conley

Project designer: Michael Roehr

Additional project-team members: Bob Ganser, Mark Zevenberger, Steve Peper, Ted Lee Structural-engineering team: HGA. Joy Gjevre,

Jim Galina

Mechanical-engineering team: HGA, Mark Fynboh Electrical-engineering team: HGA, Paul Cram

Civil-engineering team: HGA

Lighting designer: HGA, Paul Cram General contractor: McGough Construction

Landscape architecture: Tom Oslund, Tadd Kruen; Oslund & Associates

Flooring systems/materials: access floor was by ReSource MN

Window systems: Twin City Glass Architectural metal panels: Armetex, Inc. Concrete work: McGough Construction Millwork: Aaron Carlson and installed by McGough

Photographer: Timothy Hursley, The Arkansas Office

359 Day Road

Location: St. Croix Falls, WI Client: The Wessel Company Architect: Kerrik Wessel, Assoc. AIA Project team: Kerrik Wessel, Assoc. AIA, Heather Sexton, Assoc. AIA Construction manager: The Wessel Company

Structural-engineering team: McConkey & Associates

Mechanical: Northeastern Mechanical-Ray Schaefbauer

Electrical: Kuehl Electric- Dean Kuehl Plumbing: B & B Plumbing- Bill Pfannes Site work: Cross Country Excavating-Greg Rivard

Carpentry: Kerrik Wessel Assoc. AIA, Randy Gould Assoc. AIA, Chris Boland

Cabinetwork: Duff Thury Window systems: Bergerson Windows and Doors Architectural metal: Dan Bertelsen, Jeff Semlak Concrete work: St. Croix Valley Concrete-

Terry Ekstrom

Millwork: Slattengren Construction-Joel Slattengren

Photographer: Heather Sexton, Assoc. AIA

Cathedral of St. John the Evangelist

Location: Milwaukee, WI Client: The Archdiocese of Milwaukee Firm: Hammel, Green and Abrahamson, Inc. Principal: James Vander Heiden, AIA Project manager: Russ Drewry, AIA Project designer: James Shields, AIA Project architect: Kurt Young Binter, AIA Additional project-team members: Paula Verboomen, AIA, Patti McNair, AIA, Robert Docter, AIA

Structural-engineering team: HGA Mechanical-engineering team: HGA Electrical-engineering team: HGA

Civil-engineering team: Graef Anhalt Schloemer & Associates

Lighting designer: Gary Steffy Lighting Design Interior design: Jim Shields Interior painting: Conrad Schmitt Studios Liturgical consultant: Richard S. Vosko General contractor: Grunau Project Development Landscape architecture: KEI Face brick: C.D. Smith

Stone: Milwaukee Marble and Granite

Cabinetwork: Central State Construction Management

Flooring systems/materials: Stark Mantel and Tile

Window systems: Central State Construction Management

Architectural metal panels: Construction Supply and Erection

Concrete work: Central State Construction Management Millwork: Central State Construction

Management Photographer: John J. Korom

Bureau of Criminal Apprehension, Northern Services Facility

Location: Bemidji, MN Client: The City of Bemidji Architect: The Leonard Parker Associates, a part of The Durrant Group Principal-in-charge: Stephan Huh, FAIA

Project manager: Francis Bulbulian, AIA Project architect: Paul Neuhaus, AIA Job captain/construction administration:

Randy Deopere

Project lead designer: David Dimond*, AIA Project team: Matt Krelich*, Steve Dwyer*, Doo Ho Baek, Hyun Ju Hong, William Engelhardt

Structural-engineering team: Widseth, Smith, Holting

Mechanical-engineering team: Michaud Cooley Erickson

Electrical-engineering team: Michaud Cooley Erickson

Civil-engineering team: Freebury and Grund, Inc.

Interior design: Virginia Pappas, Sara Weiner*, Assoc. AIA

Construction manager: Kraus Anderson Landscape architect: Stefan Associates Landscape project team: Stefan Associates Face brick: Ochs Brick Company Cabinetwork: Northern Woodwork, Inc. Flooring systems/materials: Grazzini Brothers

& Co. Architectural metal panels: Copper Sales Inc.,

UnaClad Pre-cast concrete work: Continental Cast Stone Millwork: Northern Woodwork, Inc. Photographer: Paul Neuhaus, AIA *no longer with TLPA

Temporary Building, Visitor Services Center

Location: St. Paul, MN Client: Como Zoo

Firm or record/contract: Hammel, Green and

Abrahamson, Inc. Principal: Gary Reetz, AIA

Project manager: Bob Lundgren Project designers: Kara Hill, AIA, Chad Clow

Project architect: Chad Clow Structural-engineering team: HGA: Tony Staeger, Jon Weaver

Mechanical-engineering: HGA: Vicki Violet Electrical-engineering team: HGA:

DeeDee Liebrecht Civil-engineering team: HGA: Mark Flumerfelt Lighting designer: HGA: Pat Hunt

Landscape architect: City of St. Paul, Division of Parks and Recreation

General contractor: Schreiber Mullaney Construction Co.

Insulating glass: Hoffer's Glass Exterior wall panels: Cembonit, Hardyboard Nail-base insulation: Atlas Roofing Corporation Roofing membrane: Genflex Roofing Systems

Interior wall panels: Polygal Doors: Algoma Hardwoods Inc.

Hardware: Commercial Door Systems

Flooring materials: Colors Plus Vinyl Composition Tile Photographer: Peter Bastianelli Kerze

Two Popes Film

Location: Minneapolis, MN Client: Greg and Jerry Pope Architect: BKV Group Principal-in-charge: William Baxley, AIA Project manager: William Baxley, AIA Project architects: William Baxley, AIA Project lead designer: William Baxley, AIA Project team: William Baxley, AIA, Raphael Lavine

Lighting designer: 3 Ring Scenic Interior design: BKV Group, 3 Ring Scenic Cabinetwork: 3 Ring Scenic Flooring systems/materials: 3 Ring Scenic Window systems: Polygal Panels in existing iron framework @ skylight

Concrete work: 3 Ring Scenic Millwork: 3 Ring Scenic

Photographer: William Baxley, AIA, Jerry Pope

Circus Juventas Performance Lobby

Location: St. Paul, MN Client: Circus Juventas Architect: Locus Architecture, Ltd. Principal-in-charge: Paul V. Neseth, AIA Project manager: Paul V. Neseth, AIA Project architect: Paul V. Neseth, AIA Project lead designer: Paul V. Neseth, AIA Project team: Paul V. Neseth, AIA, Wynne G. Yelland, AIA, Timothy Daniel, David J. Brach, Adam Ionas

Structural-engineering team: Duane Thorpe Lighting designer: Locus, Circus Juventas Interior design: Locus Architecture, Ltd. Construction manager: Paul V. Neseth, AIA Cabinetwork: Locus Architecture, Ltd. Flooring systems/materials: Concrete slab

(by others), with L. M. Scofield Concrete ChemStain (by Locus)

Concrete work: Locus Architecture, Ltd. (poured counters and stair, and floor staining) Millwork: Locus Architecture, Ltd. Fabrics: Textiline PVC-coated polyester Strut system: Cooper B-line Strut System Photographer: Locus Architecture, Ltd.

Garden Room

Location: Minneapolis, MN Client/conceptual planners: Tom Morin and John Skogmo

Architect: YA Architecture, Rehn Hassell Principal-in-charge: Martha Yunker, AIA Project manager: Rehn Hassell Project architect: Rehn Hassell

Project lead designer: Rehn Hassell

Project team: Rehn Hassell, Martha Yunker, AIA Landscape design: Sarah Nettleton Architects Ltd,

Sarah Nettleton AIA, Christine Albertsson AIA Structural-engineering team: Stroh Engineering Mechanical team: Vogt Heating and Cooling Electrical team: Brite Lite

Lighting designer: Tom Morin Interior design: Tom Morin

General contractor: Choice Wood Company Landscape architect: Sarah Nettleton Architects Ltd. Landscape project team: Sarah Nettleton, AIA,

Christine Albertsson, AIA Landscape contractor: Kerker Inc. Stone contractor: Stonewerks Flooring systems/materials: Stonewerks Window systems: Marvin, Bennett Lumber Lead/copper roof: Total Roofing Concrete work: LaMere Concrete Millwork: AWP - Associated Wood Products General contractor: Choice Wood Landscape contractor: Kerker Inc. Photographer: Peter Bastianelli Kerze

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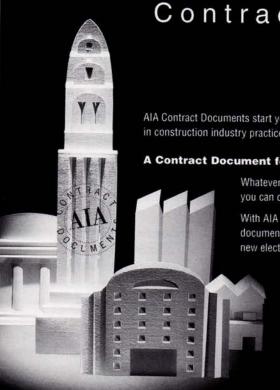
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f the four creeks that run through Minneapolis, Bassett Creek (sometimes called Bassett's Creek) was the most important to the city's early settlers. Originating at Medicine Lake, the creek snakes 12 miles across the present-day boundaries of Plymouth and Golden Valley before entering Minneapolis en route to the Mississippi River. Until the late 19th century, Bassett Creek flowed unimpeded through the city, supporting a wildlife-rich chain of marshes and meadows. Its outlet to the Mississippi, near the meeting of First Avenue North with the river, became the site of many of



Bassett Creek, Minneapolis (1933).

Minneapolis's first industrial enterprises, including sawmills, shingle and sash factories, and rail yards.

Nowadays, Bassett Creek remains visible in Minneapolis only at Theodore Wirth Golf Course, Wirth Lake Park and a short stretch east of the park. A culvert near Colfax Avenue North and Second Avenue North diverts the creek into an 80-foot-deep tunnel that carries the water in darkness to a new outlet near the Stone Arch Bridge. For 80 years, Bassett Creek has flowed invisibly for its final mile and a half.

Originally named Haha Wakpadan ("Little Falls River") in the Dakota language, the creek took its current moniker from Joel Bean Bassett, a New England transplant who in 1850 bought 160 acres along the creek's outlet to the Mississippi. Bassett built a house and sawmill north of the creek. He eventually sold this property to the city and to others eager to tap the commercial potential of the river's west bank. By 1890, the Chicago, St. Paul, Minneapolis and Omaha Railroad had built two trestles across the creek, the mouth of which was confined to a culvert.

Further west, the near north side of Minneapolis—an important part of the creek's watershed—was gaining in population. Bassett Creek frequently flooded the unstable land on which the new homes and businesses sat. In 1913, the city

launched a flood-control project designed to enclose much of Bassett Creek in underground tunnels. It took 10 years and \$280,000 to finish the work. The creek was gone from the sight and minds of most residents.

The city's western portion of the creek remained exposed, however, and it grew into a smelly, ugly dumping ground for trash. The Minneapolis Park Board proposed a massive cleanup in 1929, but little happened until Works Progress Administration workers became available in 1934. (The photo, from about 1933, shows the creek before the cleanup.) The result was a cleaner creek and a new park named after park commissioner Theodore Wirth.

Bassett Creek saw little change for the next 55 years. A new underground tunnel to the Mississippi was built in 1992. (Speleologists who have explored the tunnel report sighting schools of goldfish.) Meanwhile, the public-housing projects on the creek's former wetlands in north Minneapolis were cracking and sinking in the unstable soil. The housing projects were razed in the 1990s, clearing the way for a new community development, which may include a park with an aboveground stream that draws some of the water from the tunnel. Residents of north Minneapolis may come to know Bassett Creek once again. *Jack El-Hai*