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SAVE THE DATE:

April 7, 2011

Minneapolis Wood Solutions Fair Minneapolis Convention Center

Photos: (top) Duke Integrative Medicine, Duke University Medical Center, Duda/Paine Architects; (inset) Robert Paine Scripps Forum for Science, Society and the Environment at The Scripps Institution of Oceanography, Safdie Rabines Architects, photo Anne Garrison

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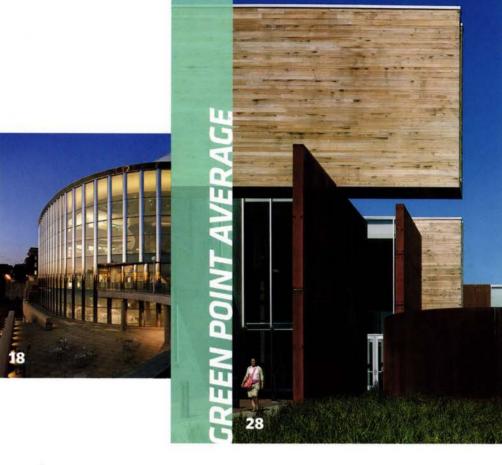
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Features



ON THE COVER

Science Teaching and Student Services Center, University of Minnesota Minneapolis, Minnesota

"It's always a pleasure to see great architecture in action," says photographer **Tim Griffith**. "The STSS Center has become the new gateway into campus. Capturing the constant activity and tangible energy coursing through the building was essential in conveying the quality of the design."

17 Green Point Average

Six institutions of higher learning in Minnesota ace their LEED and B3 tests with new buildings that are every bit as engaging as they are green.

The Confluence: U STSS Center

page 18 By Linda Mack

Prairie Star: Morris Welcome Center

page 24 By Amy Goetzman

Large-Scale Learning Model: UMD Civil Engineering Building page 28

By Ann Klefstad

Back to Nature: UMD Bagley Classroom Building

page 32 By Thomas Fisher, Assoc. AIA

Biodynamic: U Medical Biosciences Building page 34

By Linda Mack

Practice What You Teach: Carleton College Cassat and Memorial Halls page 38 By Camille LeFevre

40 Community Organizing

By Camille LeFevre

The University District Alliance is gaining ground in its campaign to catalyze the enhancement of the neighborhoods surrounding the U's Twin Cities campus. "The Alliance's overall approach," writes Camille LeFevre, "is to get the district's stakeholders-residents, businesses, neighborhood groups, hospitals and clinics, developers, the university, the city, and the county—to collaborate on creating a livable, sustainable community that builds on existing assets. From the university's intellectual capital to the neighborhoods' adjacency to the Mississippi River to the eventual arrival of light-rail transit, the district has tremendous potential to become a unique laboratory for modeling urban livability solutions."











Departments & Directories

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9 CULTURE CRAWL

BY SARAH BREMER, ASSOC. AIA Rouse yourself from your midwinter stupor for art, design, and music offerings at the U, UMD, St. Olaf College, and Winona State University.

11 SPEED READING

BY PHILLIP GLENN KOSKI, AIA A new book tells the whole steamy story of the Northwoods Finnish sauna tradition. Rated PG for brief nudity in the snow.

13 STUDIO

James Dayton, AIA, of James Dayton Design is game for Studio's new Q&A format. His soaring Northeast Minneapolis office and wood shop is game for just about anything.

15 CITIZEN ARCHITECT

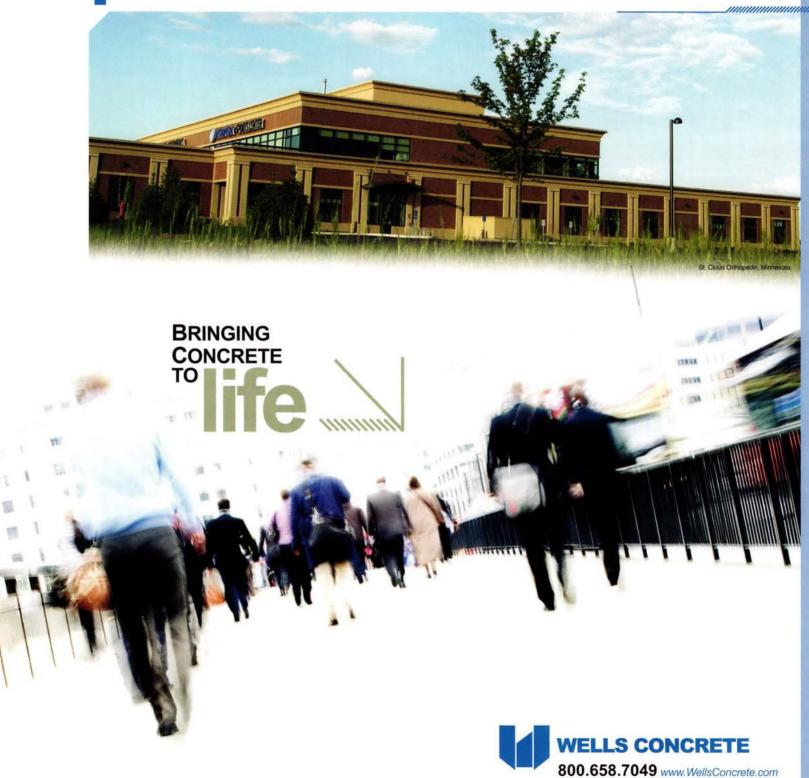
BY JOSEPH CONTI, AIA Volunteer architects, designers, and design students devote a winter weekend to assisting nonprofit housing organizations with their design needs.

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BY PAUL CROSBY
The design of the landscape surrounding
Westminster Presbyterian Church in
downtown Minneapolis is as compelling
in winter white as it is in summer green.

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POSSIBILITIES POSSIBILITIES





Why a photograph of a skyway at the outset of an issue on new collegiate architecture? It's because we have some big news to share: Architecture Minnesota is launching a video competition this winter that will explore the skyway's influence on urban life. It's called Videotect, but don't let the name fool you: You needn't be an experienced videographer or an architect to participate. All you need is a camera, a computer, and a point of view.

We've designed Videotect to be a monthlong event in which readers of all ages and backgrounds assemble creative, thoughtprovoking video commentary on our chosen architectural topic. And what a ripe-forcomment subject it is. Immortalized in song by legendary Minnesota rockers The Replacements and firmly lodged in the American mind as a symbol of the Twin Cities, the skyway has had enormous impact on the way we experience our largest cities. Does it drain vitality from the sidewalks below? Or is it a healthy, functional solution to our winter climate, one that can foster a street life of its own? These questions and others like them resonate with the George Heinrich photograph above. Skyways do indeed diminish sidewalk traffic and obstruct views; some even do an aesthetic disservice to the buildings they connect. But they can also enrich our cities—especially when you turn one into an art gallery, as artist Nancy Ann Coyne and Forecast Public Art did in 2008 with Speaking of Home, a photography installation on the immigrant experience in Minnesota (shown here).

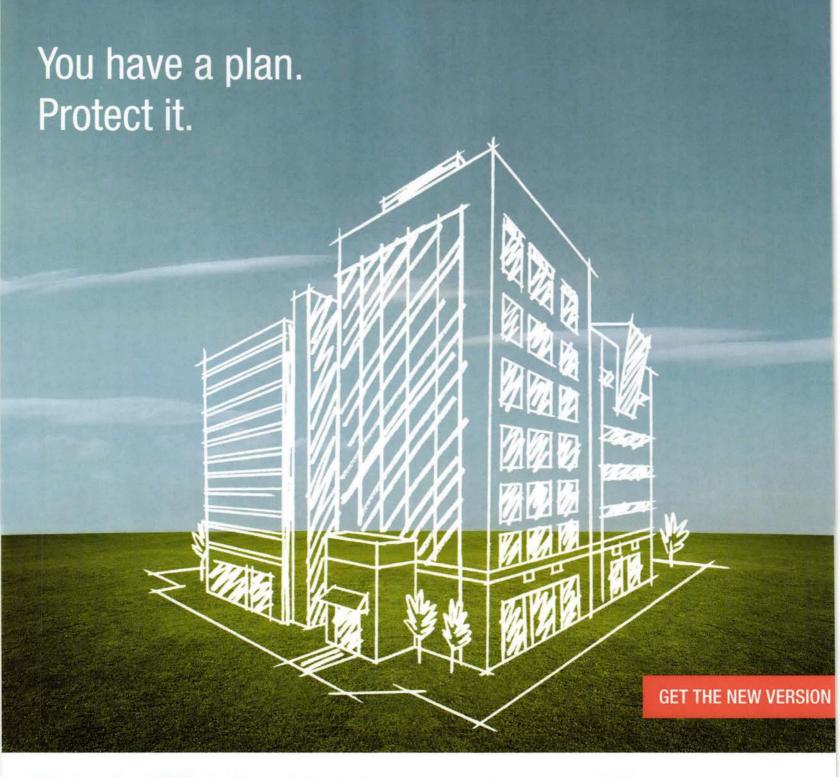
We'll post the full set of guidelines, including the entry categories, on the Videotect website on January 24, when registration begins. In the meantime, we can give you the basics: Videos should be between two and four minutes in length and may use any combination of moving images, stills, drawings, graphics, voice-over, music, live action, animation, or subtitles; entrants may work individually or in teams of any size; and submissions will be judged on their ability to stir, persuade, or entertain—not on the quality of their production.

Judged by whom, you ask? An all-star jury from Minnesota's film and architecture communities. But you'll be the judge, too: Shortly after the February 25 deadline, we'll post all of the submissions on our website for public viewing and voting. The top vote getters will be the finalists for the Viewers' Choice Award, which will be determined by a final round of voting at our screening party in March. Stay tuned to the website for more on the jury and the big-screen event—and the prize money we're offering.

Leading up to the launch, we'll also post a new video clip each week to spur your imagination. We created these ourselves; they're clearly not the work of Fellini or Truffaut. That we barely qualify as novice videographers is illustrated by the fact that the nine-year-old daughter of one of the Videotect planners helped assemble the first clip. So to all of you who've never given iMovie a whirl: Trust us, you can do this. Come join the fun.

Clu Halen

Christopher Hudson hudson@aia-mn.org



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University of Minnesota Duluth Tweed Museum of Art

February 8 and 15

Duluth-area residents can catch the Tweed Museum of Art's Visual Culture Lecture Series. First up, on February 8, is Dan Goods, a sculptor and a "visual strategist" for NASA's Jet Propulsion Laboratory. Goods creates wondrous visual experiences injected with a healthy dose of science; attending his lecture is a sure-fire way to kick your mind into gear. Check back in on February 15 when furniture designer John Christakos, founder and president of Minneapolis-based Blu Dot, presents the Real Good Experiment (pictured here). www.tweedmuseum.org

Got some free time and an Interest in design? Culture Crawl rounds up the latest cultural offerings from around the state



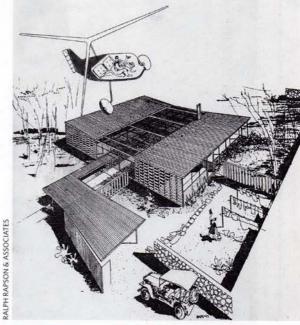




St. Olaf College St. Olaf Choir

February 13

The home finale of St. Olaf Choir's annual national tour is a can't-miss event for choral-music lovers across the region. This year's 16-stop circuit, preceded by a weekend hop in Denver, heads south through lowa, Kansas, and Nebraska before hitting the musical meccas of Austin, Memphis, and St. Louis. The closing performance takes place at Boe Memorial Chapel in Northfield on February 13. The choir's sacred-choral repertoire encompasses canonical classics but also delves into recent works by St. Olaf faculty and alumni, as well as folk hymns and spirituals. www.stolaf.edu/music/stolaf_choir



University of Minnesota

Goldstein Museum of Design

Through January 9

The late Ralph Rapson, designer of modern chairs, houses, and embassies, was also a master of the architectural drawing. If you've never perused a book of Rapson's illustrations. and especially if you have, come out and see the originals in "The Importance of Drawing: Ralph Rapson's Legacy" at the Goldstein Museum of Design. Every rendering is infused with personality; it'll grab you and pull you into Rapson's world. In addition to capturing some of Europe's ancient architecture. Rapson's sketches document architectural sites from Iran to Ecuador and from Cambodia to the U.S., including some in Minnesota. The exhibition runs through January 9.

www.goldstein.design.umn.edu



Winona State University Paul Watkins Gallery

January 12-February 2

Winona's historic downtown boasts a variety of Romanesque, Italianate, and Prairie School buildings adorned with local stained glass, including Purcell & Elmslie's breathtaking Merchants National Bank. And just a few blocks away is HGA's much-talked-about new addition to the Winona County Historical Society Museum. It's no surprise, then, that the arts have a strong presence in the island city. From January 12 through February 2, Winona State's Paul Watkins Gallery, not far from downtown, will showcase the work of experimental graphics artist Nathaniel Stern. www.winona.edu

-Sarah Bremer, Assor, AIA



Forward thinking

Power Thinker

Tom Kaldenberg is a Power Thinker who has played a crucial role in implementing Kirkwood Community College's (KCC) energy-efficiency plan. During the last three years, KCC has used Alliant Energy's Commercial New Construction (CNC) program to complete five projects and has saved over 2,300,000 kilowatt hours (kWh) of electricity, \$172,000 in annual energy costs and received \$327,000 in incentives. At Alliant Energy, we're Power Thinkers, too – always looking for ways to help our business customers save energy and work smarter. CNC provides free energy design analysis to help your customers select a package of cost-effective, energy-efficient strategies for new construction projects.

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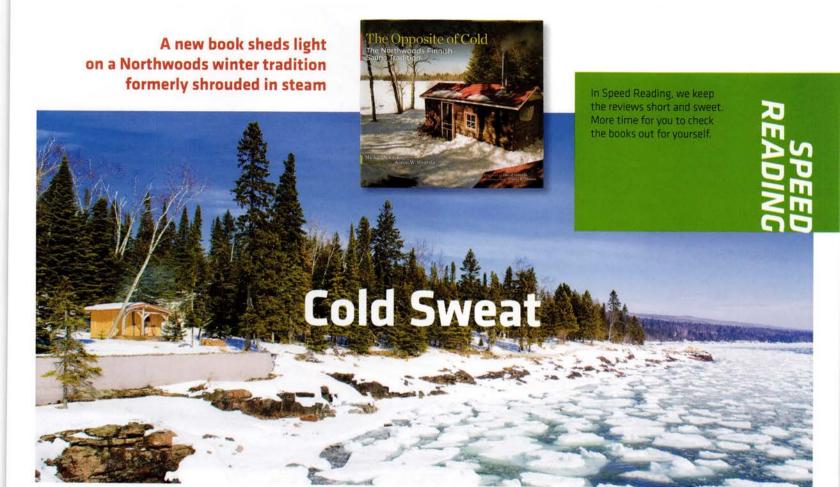
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THE OPPOSITE OF COLD: THE NORTHWOODS FINNISH SAUNA TRADITION

By Michael Nordskog, with photography by Aaron Hautala University of Minnesota Press, 2010

By far the biggest misconception Americans have about the Finnish tradition of the sauna is how to pronounce it. Nothing grates on

a true Finno-American more than the flat and wimpy-sounding sah-nah perpetuated in the mass media and criminally endorsed by Merriam-Webster. Sitting naked in a wood box with a pile of rocks heated to 180 degrees Fahrenheit, gasping for breath in a cloud of steam, requires the much more forceful, and linguistically correct, SOW-na.

However people pronounce it,

the tradition and architecture of the sauna is ingrained in the Northwoods culture of upper Minnesota, Wisconsin, and Michigan, its status as a cultural touchstone matched only by the legend of Paul Bunyan, wild rice soup, and the wreck of the Edmund Fitzgerald. And yet public

nakedness and jumping into icy lakes do not square with the Puritan values upon which the American ethos was founded. So outside of jokes and tales of heroic endurance of heat, the tradition of the Finnish sauna gets little serious discussion, and the story of its origins goes largely untold.

Just in time to hone your knowledge of the sauna tradition before the snow piles up, the University of Minnesota Press' *The Opposite of Cold* offers

Sauna de la company de la comp

a refreshingly up-to-date, non-jokey, and comprehensive treatment of the subject. Authored by Michael Nordskog with photography by Aaron Hautala, this compendium on the history of the sauna covers a lot of territory, from the sauna's ancient origins to construction techniques,

water-bucket etiquette, and the evolution from open-hearth fires to electric stoves.

Opening with a foreword by master sauna architect David Salmela, FAIA, *The Opposite of Cold* tracks the importation of the sauna tradition to the Great Lakes, starting with the mass immigration of Finnish farmers at the end of the 19th century. Often the first structure built on a new homestead, the sauna was a central and multifunctional building in the life of the farm, used for bathing (via sweating), drying grain, and even delivering babies. Salmela's own father, we learn on page one, was born in a sauna.

The text, organized into a half-dozen chapters, is generously seasoned with stunning photography, literary excerpts, historical postcards and posters, archival images of Iron Range communal steam baths, and (spoiler alert!) several candid snapshots of pasty-white sauna revelers doing what they do best—sweating profusely and running naked through the snow. Which all helps make this book about a curious Finnish institution worthy of a prominent place on any Northwoods coffee table, right next to the Paul Bunyan coasters and the Wild Rice for All Seasons Cookbook.

-Phillip Glenn Koski, AIA

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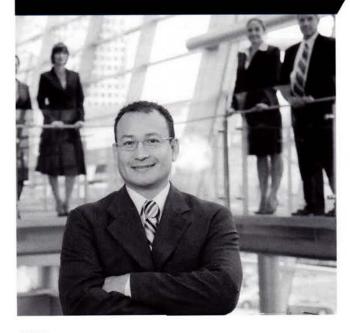




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Workspaces say a lot about us

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A lot of what you need to know about James Dayton, AIA—the architect of Minneapolis' MacPhail Center for Music and the Minnetonka Center for the Arts, among other notable buildings—is plainly evident in the location and design of his Northeast Minneapolis warehouse studio. But when we sat down with him in October, we still had some pressing questions.

Describe your studio space or culture in three words or less. Innovation, exploration, material

If you had \$5,000 for office improvements, what changes would you make? Throw a good Christmas party.

\$500,000? Pay my staff the salaries they deserve.

How does your location reflect or reinforce your values and interests as a firm? We have an open, honest, rough-and-tumble space with great daylight and a wood shop.

Favorite hangout in walking distance: Northeast Social

Employee with the most interesting extracurricular: Peter Aamoth, staff DJ

What activities or events have you hosted in your space? Board meetings, pinewood derby races, cocktail parties Favorite Beatle: Pete Best

Favorite socialmedia tool: A handshake

Least favorite buzzword: Modernity

Recent brush with celebrity: Coffee with Renzo Piano in L.A.

What efforts has your firm made to work with underserved individuals or communities?

We're always working with teachers and artists to improve their ability to work and teach kids.

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The biggest misconception about architects: We're expensive divas.

Favorite Minnesota building not designed by your firm: IDS Center

Dream project: The next one

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Citizen Architect profiles architects and designers who have taken on leadership roles in their communities. CITIZEN ARCHITECT

Clockwise from below: renovated Lyndale Neighborhood Association building, renovated vestibule at the People Serving People facility, and development scheme for a city block in Minneapolis' Audubon neighborhood.

GIMME SHELTER



AIA Minnesota's annual SEARCH FOR SHELTER charrette

brings volunteer architects, designers, and students together to assist nonprofit housing organizations with design needs on proposed building projects

On most weekends, the atrium of the University of Minnesota's Rapson Hall—the town square for the College of Design-quiets down considerably from its weekday bustle. The students who on Friday had been sitting on courtyard benches with their laptops open or congregating in threes and fours around pinned-up drawings on the balconies have mostly dispersed. But every February, the atrium's weekday energy carries into a weekend, thanks to an influx of architects, landscape architects, interior designers, and students participating in an annual volunteer design event. The only difference, outside of an increase in the average age of the courtyard occupants, is the addition of several tables strewn with paper coffee cups and boxed lunches.

The event, sponsored by AIA Minnesota's Housing Advocacy Committee, is called Search for Shelter, and it benefits local nonprofit housing organizations that need help getting building

projects started but lack the funds to hire an architect. Over the second weekend of February, the program will mark its 25th year by adhering to a tried-and-true schedule: On Friday evening, the volunteers will be given an overview of the needs of the five or six participating nonprofits and then gather in teams to meet with the representatives of the project they're assigned to. Site visits will take place Saturday morning, after which teams will spend all afternoon and evening developing a schematic design (general views of the building and site that show the components and the scale of the project). On Sunday, at a program that's open to the public,

the volunteers will present their drawings and supporting materials to the organizations.

These design diagrams are valuable tools; nonprofits use them to explain their housing mission to various audiences or jumpstart a fundraising campaign. In some cases, the proposed design solutions become the basis for an actual project. At the 2008 Search for Shelter, for example, Minneapolis' YouthLink, an organization serving homeless young people, sought ideas on how to enhance and better utilize its 30,000-square-foot facility on North 12th Street. Three of the volunteers who worked on the scheme-architect Tim Bicknell, AIA, and students Emma Pachuta and Kevin Ellingsoncontinued to donate services to YouthLink after the charrette, aiding the center in its quest to raise public and private dollars for the renovation. Bicknell's employer, Ellerbe Becket, an AECOM company, was eventually hired for the project and performed a portion of the work pro bono. Today, the building boasts a new entrance and a transformed interior that takes better advantage of natural light-improvements that can all be traced back to the Search for Shelter boards.

-Joseph Conti, AIA

Search for Shelter aids local nonprofit organizations that provide housing for the disadvantaged, homeless, those on low income or seeking safety, and those in need. The following organizations have participated in recent years: 180 Degrees | Aeon | Alliance Housing, Inc. | Audubon Neighborhood Association | Lyndale Neighborhood Association | People Serving People | Plymouth Church Neighborhood Foundation | Simpson Housing Services | Spac | Urban Homeworks | YouthLink

When it comes to renovating 72-year-old landmarks, you'd better perform at historic levels.





Originally built in 1924, as a 125,000 sq. ft. science research library, the University of Minnesota's famed Walter Library recently underwent massive renovation and expansion to bring the library's aging resources into the present while leaving the classic and historic beauty right where it was.

With a well-schooled respect for the surroundings, and a skillful, adept construction delivery method, Egan provided total electrical replacement in the original space while bringing full electrical service, wiring, fixtures and equipment to the expanded area.

The project required extensive demolition and a massive effort in trade coordination to bring everything together efficiently and with minimal disruption to campus life.

If you have a project where you want to meld the best of the past with the best of the future, Egan should be in your current plans.

> People you believe. Ideas you trust.





"As the long-term owners of buildings, universities have an opportunity—and a responsibility—to construct greener structures than what the private sector might consider," writes Thomas Fisher, Assoc. AIA, in his profile of the University of Minnesota Duluth's new LEED-Platinum Bagley Nature Area Classroom Building

Duluth's new LEED-Platinum Bagley Nature Area Classroom Building (page 32). If the six freshly minted campus icons showcased in the following pages are any indication, Minnesota's leading colleges and universities have taken Fisher's admonition to heart. In fact, with five of the buildings racking up or attempting to rack up enough LEED points to earn Gold or Platinum certification (the sixth project pursued Minnesota's own B3 standards instead), and with one of the campuses achieving carbon neutrality in 2010, this class of new buildings may be the greenest we've ever had in a single issue of *Architecture Minnesota*. These schools have enriched the endeavor of higher learning by not only imparting

These schools have enriched the endeavor of higher learning by not only imparting knowledge but also seeking it out themselves in the classroom of sustainable design and construction. Their students and faculty and surrounding communities will reap the benefits for decades to come. -CHRISTOPHER HUDSON

University of Minnesota Science Teaching and Student Services Center University of Minnesota Morris Welcome Center University of Minnesota Duluth James I. Swenson Civil Engineering Building University of Minnesota Duluth Bagley Nature Area Classroom Building University of Minnesota Wallin Medical Biosciences Building Carleton College Cassat and Memorial Residence Halls

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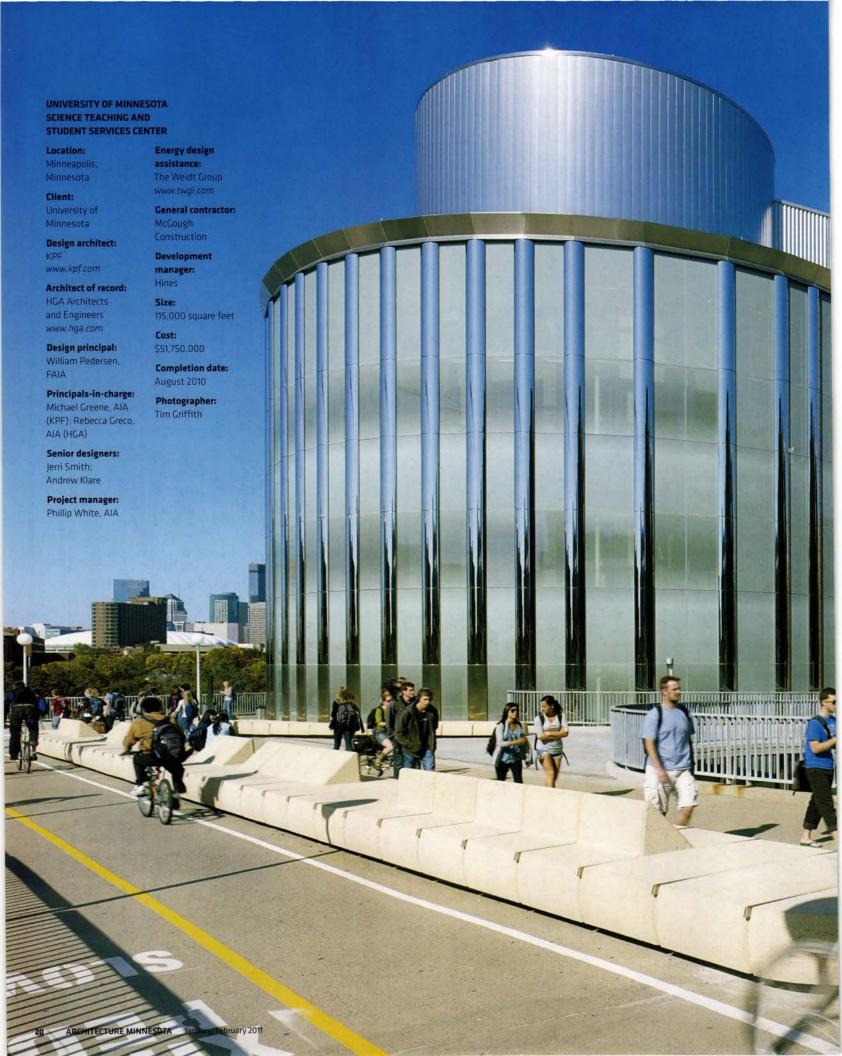


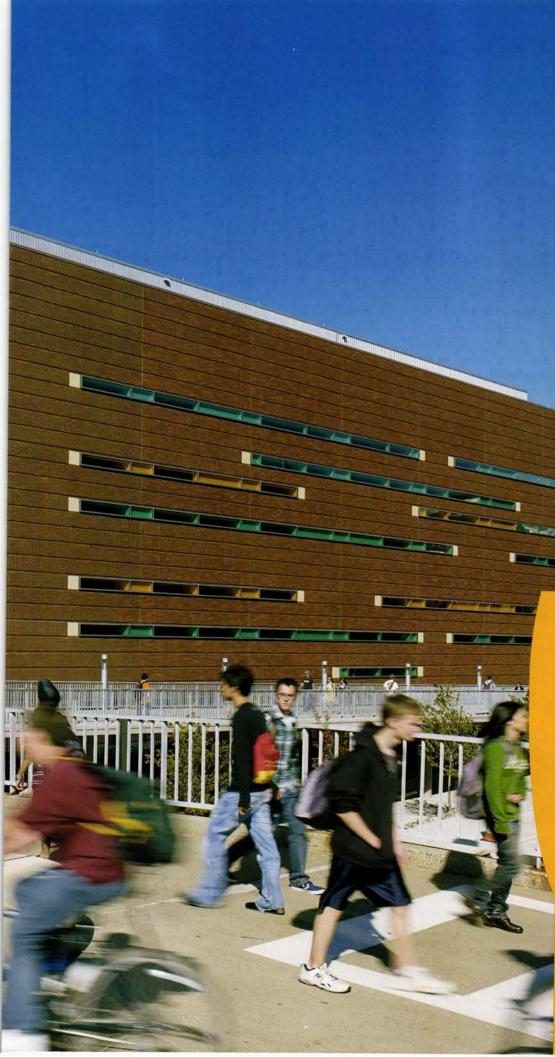


Can one building change
the student experience at
the University of Minnesota?
The answer is yes, if the
building is the striking new
Science Teaching and Student
Services (STSS) Center at
the Washington Avenue
bridgehead. Designed by
Kohn Pedersen Fox (KPF)
of New York with HGA,
the ovoid glass pavilion
is a stately counterpart
to Frank Gehry's landmark
Weisman Art Museum.

"The Weisman is about art. We're about science," says KPF's William Pedersen, FAIA, an alumnus of the U's architecture school. Like the Weisman, the building combines a brick-box fronting on the campus with a curving façade on the river side. But the new building's Euclidean curve offers a quieter, left-brain architecture to the Weisman's right-brain gymnastics. The two form a memorable gateway to the East Bank campus.

What's most revolutionary about the building is what's inside. The brainchild of U president Robert Bruininks, it combines two distinct functions—science teaching and student services—into an inviting magnet for an often unwelcoming campus. When he took office in 2002, Bruininks was eager to get rid of the unfinished Soviet-style Science Classroom Building that stood on the gateway site. And he "was very strong on the river and new teaching methods," says Orlyn Miller, the university's director of capital planning. "He wanted to make a statement that students are important."







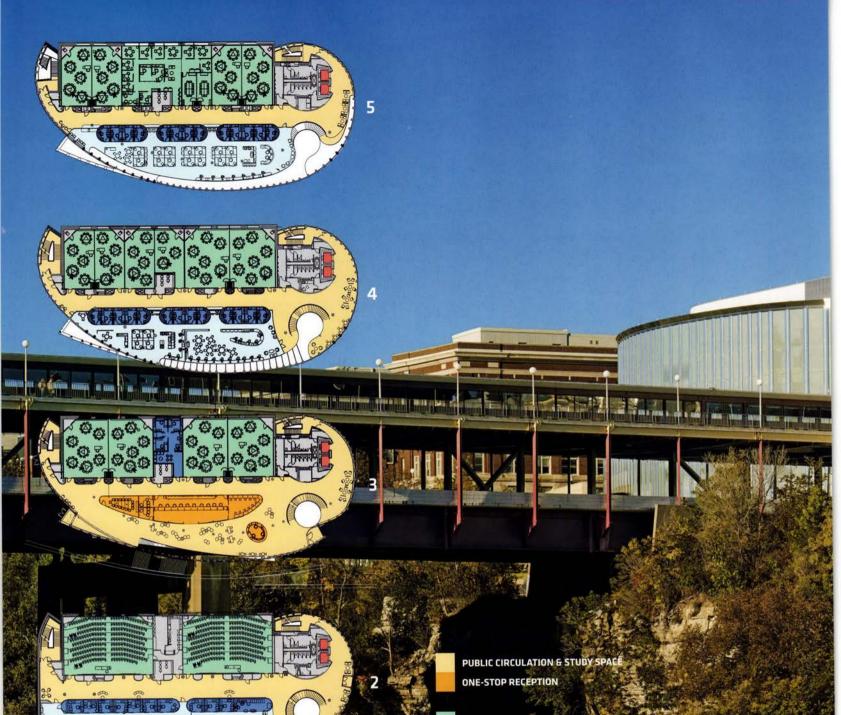
HGA principal Rebecca Greco, AIA, says the design supports the latest pedagogy, in which teachers guide rather than lecture. "The U was testing these 'active learning' classrooms," she says. STSS became the place to institute them. The five-story building contains two traditional tiered lecture rooms. The rest are classrooms where students sit around tables with computers in the middle, multiple screens offer images, and the teacher directs the interactive learning.

Although the focus was space for the foundational sciences—science, technology, engineering, and math—the classrooms are open to all disciplines. More than 100 classes meet in the 13 classrooms, which are stacked on the building's campus side.

Student services is housed in the other 40 percent of the building—the side facing the Mississippi River. It's a perfect place for this function, which was long squirreled away in a nearby building.

Students pour off the
Washington Avenue Bridge
on bike or on foot right
into the building's third floor,
whose river-view corridor
serves as an enclosed walkway.
It's a brilliant move that
activates the building and
routes students by the OneStop Student Services desk.

Here they can take care of business that they can't do online. A concierge desk directs students to the right person. Orange, red, and purple Allermuir "pebble" stools offer short-term seating, and high-top tables make it easy to fill out forms. When the services desk closes, sliding doors close it off but leave the sitting areas open.

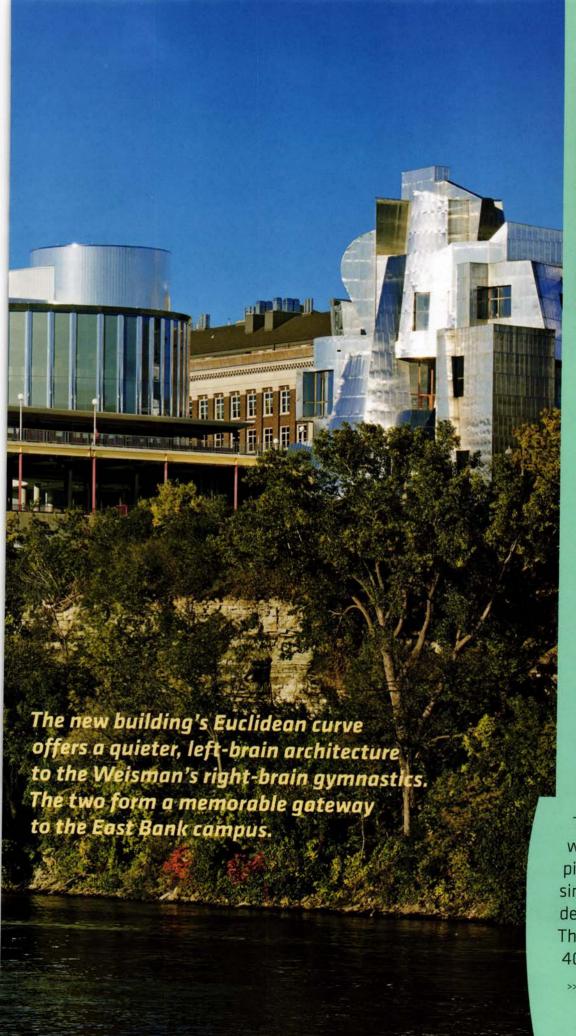


CLASSROOMS

OPEN OFFICES

MECHANICAL ELEVATORS

Classrooms, in turquoise, occupy the half of the building facing Northrop Mall. Only two are traditional tiered lecture rooms; the rest are interactive. Student services are grouped on the curving, river side of the building. Generous open spaces provide sought-after study spots.





Indeed, STSS's open study areas are as important as the classrooms and student services. "Trays" on each floor at the Washington Avenue end offer low- and high-back lounge chairs, low tables for laptops or coffee, and occasional high-top tables and bar seating. Students have taken to them like fish to water.

It's easy to see why: The building's almost mask-like exterior conceals a dynamic interior. The five-story atrium curves inside the glass-and-stainless-steel façade. Exposed concrete floors, also curving and carved away to minimize the use of material, animate the space. A sinuous cantilevered stairway serves as a visual and social centerpiece. It winds around an intriguing five-story sculpture by St. Paul artist Alexander Tylevich that catches light in panels of dichroic glass and reflects it in rainbow-like patches.

All this aesthetically pleasing and highly functional space is contained in a sustainable structure poised to earn LEED Gold certification. Never has design worn green so elegantly on its sleeve. The building's geometrical shape is compact: It has little exterior surface for its volume, Pedersen points out. The efficient displacement ventilation brings warm air in through the floor and vents it naturally, out the top of the atrium.

The signature west wall, with its rhythm of stainless piers and glass, may look simple, but it's intricately designed for optimal solar gain. The piers provide the needed 40-percent solidity.

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in a changing world, and the school practices what it preaches, with a campus-wide goal of carbon neutrality and energy self-sufficiency.

Last year was the campus' centennial, and it began with the reopening of the newly renovated Morris Welcome Center. Built in 1915 to house the school's engineering community (at that time, it was the West Central School of Agriculture), this brick building is on the National Register of Historic Places. "When history meets sustainability, those two things don't always get along," says Meyer, Scherer & Rockcastle's Josh Stowers, AIA, the lead designer of the Welcome Center.

MSGR took on a full restoration of the building with tight restrictions in place. It could not expand the building or alter the historic façade. Yet the renovation had to be green (the school wished to pursue entry-level LEED certification; the architects

have the project on track for a Gold rating). It also had to serve the needs of eight different departments, including the Center for Small Towns, an outreach program. So, a tall order.

"We looked at it two ways," says Stowers. "First we restored the 'envelope,' the exterior. In the 1970s, during the energy crisis, their idea of making a building efficient was to brick in all the windows. The lower level had huge windows, because it



Natural light filled the main shop classroom for engineering students in 1915; electricity wasn't yet in use. In the 1970s, those vast windows were bricked over. Today, sunlight has been restored and employed as a passive solar light solution.





2007





FIRST FLOOR A. Reception B. Lounge

C. Meeting D. Office



CHILLED-BEAM TECHNOLOGY IS INCREASINGLY COMMON IN EUROPE, BUT THE WELCOME CENTER IS THE FIRST MINNESOTA BUILDING-AND THE FIRST ENTIRE BUILDING ON THE NATIONAL REGISTER-TO USE IT.



UNIVERSITY OF MINNESOTA MORRIS WELCOME CENTER

Location:

Morris, Minnesota

Client:

University of Minnesota Morris

Architect:

Meyer, Scherer & Rockcastle, Ltd. (MS&R) www.msrltd.com

Principal-in-charge:

Thomas Meyer, FAIA

Project lead designer:

Josh Stowers, AIA

Energy modeling:

Karges-Faulconbridge, Inc.

Landscape architect:

oslund.and.assoc. www.oaala.com

Construction manager:

JE Dunn

Size: 18,700 square feet

Construction cost:

\$5 million

Completion date:

December 2009

Photographer:

Lara Swimmer

"If you are a prospective student, this is your first stop on campus. But the building also needed to charm the socks off alumni. So we had to design to impress 18-year-olds and 80-year-olds."

-MS&R architect Josh Stowers, AIA



Top left: An interactive kiosk in the lobby shows the building's energy usage in real time. Behind it, a cedar wall features reclaimed wood from an exterior demolition. Above: Stalks of wheatgrass are embedded in the translucent partitions. Throughout the building, simple yet elegant color and design decisions pay homage to the local landscape.



ELECTRONIC MEDIA ON SUSTAINABILITY



WORKPLACE DAYLIGHT



WARMBOARD SUBFLOOR



RECLAIME



OCCUPANCY SENSORS/ DIMMABLE BALLASTS

was built before electricity, and they needed that light for their machine shops." Today, natural light is valued for passive solar and to reduce energy consumption, so the firm installed efficient windows and reopened the building to the sun.

Second, the restoration brought the interior firmly into the 21st century. The building still requires heating and cooling, but it's powered by a power plant that employs a biomass facility (March/April 2010 issue, page 28) and wind turbines. MS&R

also added chilled-beam technology: thin tubes that gracefully carry cold water across the ceilings, with a low volume of air blown over the tubes to cool the people below. Although the technology is increasingly common in Europe, the Welcome Center is the first Minnesota building—and the first entire building on the National Register—to use it.

"Everyone involved was incredibly supportive about trying new things in this building," says Stowers. "They understood the benefits and just said, 'Go for it.'" The MS&R team worked closely with the school, from the chancellor to the janitors, to design a building that would function well for everyone. And the construction-management firm hired as many local people as possible to work on it. Area Amish craftspeople and the school's carpenter crew finessed elements of the interior.

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Inside and out, the
University of Minnesota
Duluth's new James I.
Swenson Civil Engineering
Building puts the science
of sustainable construction
on dynamic display

By Ann Klefstad

On a rainy fall day, the LEED-Gold James
I. Swenson Civil Engineering Building at the
University of Minnesota Duluth was showing off:
Its oversize rain scuppers were flinging waterfalls
down into the huge Cor-Ten steel drums that feed
the water into a massive French drain system.

Civil engineers make big things, and building systems such as water handling are their business. This building, the foundation of the university's new civil engineering major and graduate program, demonstrates scale, construction techniques, and building systems in immensely pleasing ways—like the giant wood or concrete scuppers,

the unfinished cast-concrete walls and floors, and the 15-ton gantry cranes that roll down the two-story main lab. It's almost a cartoon of a building with its oversize details and plainly revealed construction. When people look at it, they smile.

The need for the building was clear. For years, industrial employers on the Iron Range had been asking the school to provide a region-specific



training program for civil engineers. The stars finally aligned when then-chancellor Kathryn Martin's campaign to grow the university's infrastructure (see sidebar below) found common cause with James Swenson's generous impulse toward his alma mater. Chicago firm Ross Barney Architects, teamed with SJA of Duluth as the local liaison, competed for the commission and won it.

It was the architects who wanted to make the building a demonstration model of structural engineering and building systems—and an ode to Iron Range materials. To this end, the building's large-scale details—the scuppers and Cor-Ten

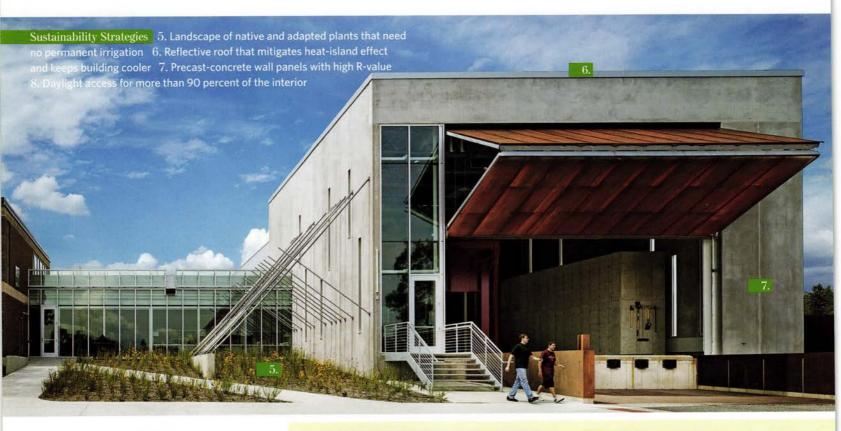
rain catchments, ore-filled gabion-basket walls, a cantilevered, 11-ton bifold door that opens for large structures entering the two-story-high lab areas—are visible both inside and outside the building.

The more subtle details of this 35,000-square-foot textbook for aspiring civil engineers are equally important. These include the glass walls of the main lab, which allow those passing through the building to witness the pouring of huge concrete beams or the load testing or destruction of these members. (There are many such passers-through: The building is the first available entrance

to the linked buildings of the campus from the main parking lot.) A small glass-floored overhang jutting from the main stairway offers another excellent sightline to the lab.

The design team understood transparency in other ways too: The precast concrete walls of the main labs are joined in a puzzle pattern, and the galvanized props and kickers used to assemble these large walls have been left

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Above: An 11-ton bifold door allows large structures and equipment to enter and leave the two-story structural and hydraulics labs. Opposite: These labs required a ceiling height of more than 30 feet to accommodate their two 15-ton gantry cranes.



The Perkins+Will-designed Labovitz School of Business and Economics

A DULUTH DOZEN Even before Kathryn Martin became University of Minnesota Duluth chancellor in 1995, she sought to pursue a campus building project. The library had been closed because of air-quality problems, and in Martin's letter of offer to serve she insisted on a commitment to replacing it. She engaged Stanius Johnson (now SJA Architects) to design the new library, and the building was dedicated in 2000.

The next big project was Weber Music Hall, a small auditorium designed by starchitect Cesar Pelli with exceptional acoustics for music performance. Martin had crossed paths with Pelli at the University of Illinois, where Martin had served as dean of the College of Fine

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2000

LIBRARY

Architect: Stanius Johnson (now SJA Architects)

2001

ROBERT W. BRIDGES
GROUNDS/FLEET BUILDING
Architect: Architects IV

2002

WEBER MUSIC HALL

Architect: Cesar Pelli & Associates

GRIGGS HALL STUDENT RESIDENCE ADDITION

Design-build team: Oscar J. Boldt Construction and LHB

2003

KIRBY PLAZA

Architect: Krech Ojard & Associates

2005

JAMES I. SWENSON SCIENCE BUILDING

Architects: Ross Barney Architects: Stanius Johnson (now SJA Architects)

Lab design: Kornberg Associates Architects 2006

SPORTS AND HEALTH

Architect: RDG Sports

2007

LIFE SCIENCE BUILDING RENOVATION LEED certification: Silver Architect: LHB 2008

LABOVITZ SCHOOL OF BUSINESS AND ECONOMICS LEED certification: Gold

Architect: Perkins+Will

JAMES S. MALOSKY STADIUM

Builder: Kraus Anderson Construction

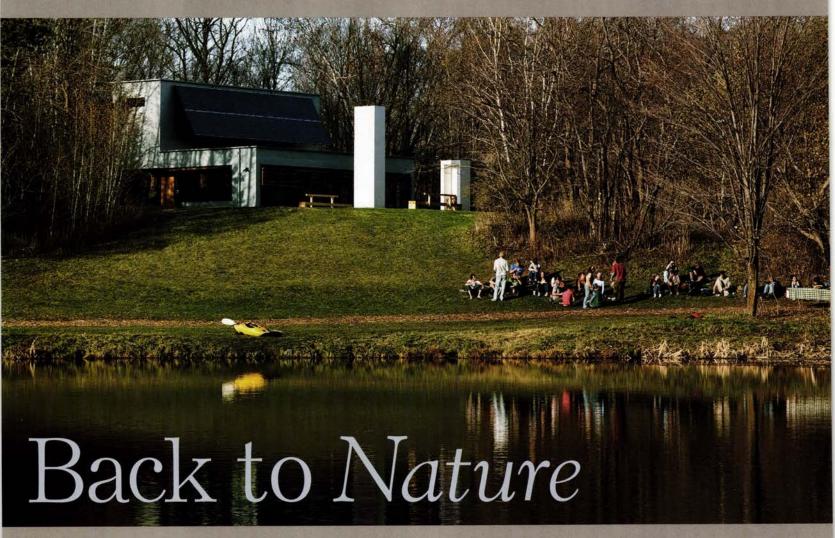
2009

JAMES I. SWENSON CIVIL ENGINEERING BUILDING LEED certification: Gold Design architect: Ross Barney Architects

Architect of record: SJA Architects

2010

BAGLEY NATURE AREA CLASSROOM BUILDING LEED certification: Platinum Architect: Salmela Architect



The University of Minnesota Duluth's Bagley Nature Area Classroom Building embodies a lesson in advanced sustainability

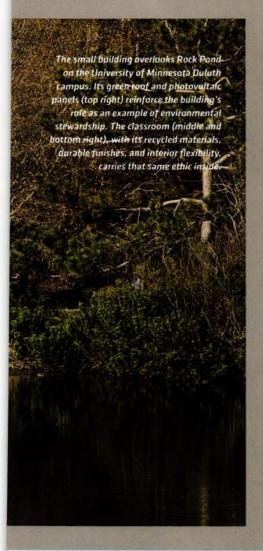
By Thomas Fisher, Assoc. AIA

As the long-term owners of buildings, universities have an opportunity—and a responsibility—to construct greener structures than what the private sector might consider. David Salmela's design for the Bagley Nature Area Classroom Building at the University of Minnesota Duluth shows how far universities can go to demonstrate the best of green building. Located in a clearing in the woods overlooking Rock Pond, the educational center consists of a large single-story teaching space adjacent to a two-story service zone containing toilets, storage, and a mechanical room. The simplicity of the structure helped reduce its cost and ease construction.

But the building, largely constructed by the university's facilities staff, was designed to earn a LEED Platinum as well as a Passive House rating. "We know of no other public building in the U.S. certified in both," says Salmela. Built with recycled timbers, the structure has 16-inch structuralinsulated-panel (SIP) walls and high-performance windows, oiled concrete floors and unfinished basswood finishes on its interior, recycled zinc and Skatelite panels on its exterior, recycled granite pavers and recycled wood benches in the landscape, and exterior louvered shades, a planted roof, and photovoltaic panels along the south elevation. "We wanted the building to be a learning facility," says Salmela. "It took an immense amount of time, but it will be worth it." AMN

> The building provides an outdoor teaching space, defined by an outdoor fireplace and benches, as well as a demonstration of how green building technology and sustainable design practices can lead to a compelling work of architecture.













PRESS CREDENTIALS

This article is an early excerpt from Thomas Fisher's *The Invisible Element of Place: The Architecture of David Salmela*, his second book on Salmela's work for the University of Minnesota Press. The first, *Salmela Architect* (2005), enjoys pride of place on coffee tables and bookshelves across the Upper Midwest and beyond. The new volume, available this spring, promises to be equally captivating. www.upress.umn.edu



BAGLEY NATURE AREA CLASSROOM BUILDING

Location:

Duluth, Minnesota

Client

University of Minnesota Duluth

Architect:

Salmela Architect www.salmelaarchitect.com

Principal and designer:

David Salmela, FAIA

Project architect:

Carly Coulson, AIA

General contractor:

University of Minnesota Duluth Facilities Management

Size:

2,000 square feet

Cost:

\$1 million

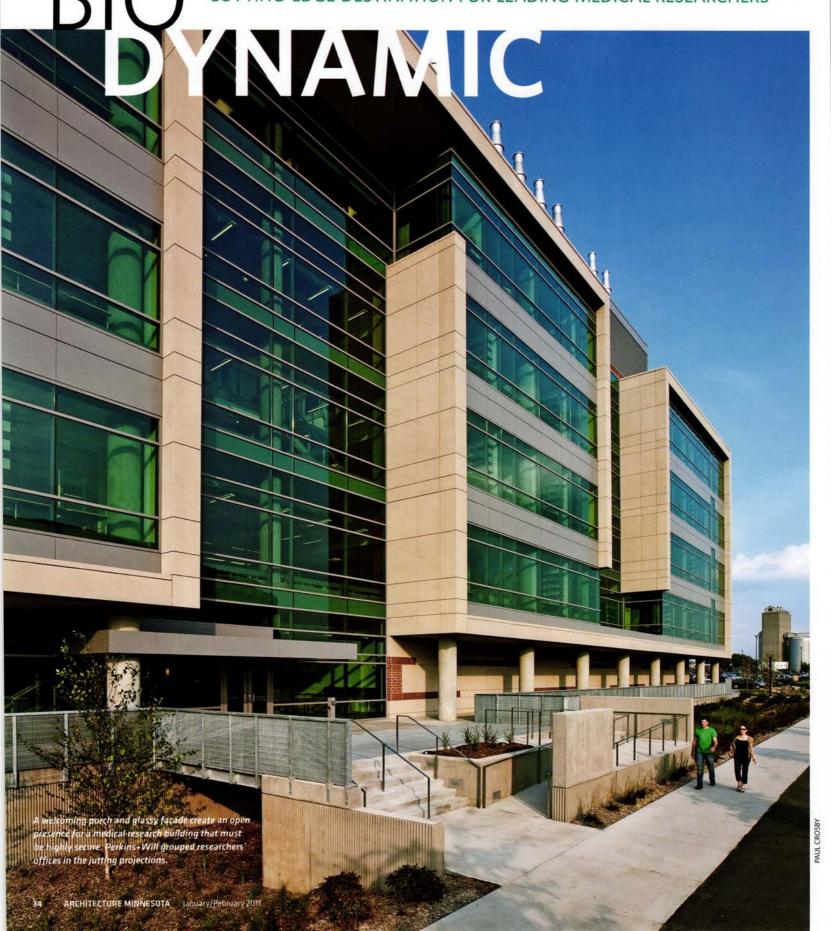
Completion date:

June 2010

Photographer:

Paul Crosby

THE U'S NEW WALLIN MEDICAL BIOSCIENCES BUILDING ESTABLISHES THE GROWING BIOMEDICAL DISCOVERY DISTRICT AS A THRIVING, CUTTING-EDGE DESTINATION FOR LEADING MEDICAL RESEARCHERS







BY LINDA MACK

Beyond the University of Minnesota's new football stadium, a whole new campus is rising. When built out, the 54-acre Biomedical Discovery District will surpass the West Bank campus in size. Its purpose: to provide state-of-the-art facilities to support high-level research that can be translated into medical innovations.

"These research labs speed the translation of promising discoveries into new treatments for clinical patients, shortening the 'bench-to-bedside' duration," says Perkins+Will's Bob Novak, AIA. Novak was project director for the latest addition to the research campus, the Winston and Maxine Wallin Medical Biosciences Building. The 115,000-square-foot building opened in December 2009, soon after its giant neighbor, TCF Bank Stadium, was unveiled.

Like the earlier buildings along the curving new stretch of Sixth Street Southeast—the Lions Research Building/McGuire Translational Research Facility and the Center for Magnetic Resonance Research—the WMBB, as it is known, was designed to serve the U's top researchers and to attract new ones. That means the labs are outfitted with the latest technology and are flexible enough to accommodate the changing needs of cuttingedge science.

The WMBB was also designed to link with adjacent lab buildings so that researchers can talk to each other and share support functions rather than remain isolated in their proverbial academic silos. A skyway connects to the Center for Magnetic Resonance Research, which houses the world's largest imaging magnet, and a future skyway will lead to the next Biomedical Discovery District building: the \$200 million Cancer and Cardiovascular Center. "We're trying to develop a research district, not a series of stand-alone research buildings," says Rick Johnson, the U's project director for the Biomedical Discovery District.



The labs are outfitted with the latest technology and flexible enough to accommodate the changing needs of cutting-edge science.

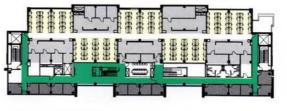


Generous walkways and cascading stairs facilitate spontaneous conversations, while two-story mini-atriums offer getaway space for lunches and informal meetings.



BIOMEDICAL DISCOVERY DISTRICT

- 1 Wallin Medical Biosciences Building
- 2 Center for Magnetic Resonance Research
- 3 McGuire Translational Research Facility
- 4 TCF Bank Stadium
- Rain garden
- Future green space
- Future buildings



Lab bench—daylit

Lab equipment

■ Office—daylit

team space

Mini-atrium

WALLIN MEDICAL BIOSCIENCES BUILDING FLOOR PLAN

The drive for casual interaction between researchers shaped the layout of the biosciences building. Three disciplines share the building: immunology, the Center for Memory Research and Care, and integrative translational neuroscience, which addresses such conditions as muscular dystrophy and ataxia. "The problems in research have become much more challenging, and interdisciplinary approaches work better," says Novak. "The building is designed to foster that interaction. You run into people instead of scheduling meetings two weeks out. It also fosters mentoring of graduate students."

Generous walkways and cascading stairs facilitate those spontaneous conversations, while two-story mini-atriums offer getaway space for lunches and informal meetings. The all-important labs are stacked in the back two-thirds of the five-story building; the front third is a glassy porch-like space, says WMBB lead designer David Dimond, AIA. Researchers' offices project out to the street. The building's glass-walled face activates and humanizes a totally secure environment: While the offices, corridors, skyways, and even the first-floor coffee shop require key-card access, their visual openness softens what could be a fortress.

Perkins+Will employed the same interior-arcade concept when designing the McGuire Translational Research Facility, which opened in 2005. Along with the rain gardens and bioswales designed by Close Landscape Architecture+, the glassy fronts create an inviting environment for the new campus

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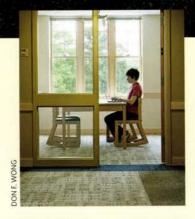






Practice What You Teach

CARLETON COLLEGE BUILDS TWO RESIDENCE HALLS TO A HIGHER STANDARD OF SUSTAINABLE DESIGN AND PERFORMANCE BY CAMPILE LEFEVRE



Students find quiet space in Cassat Hall's nine dedicated study rooms-a welcome alternative to a January walk to the library.

Carleton College has always been progressive in its educational approaches, academic standards, and political outlook. Unsurprisingly, the Northfield liberal-arts college is forwardthinking in its orientation toward energy use and conservation as well. The campus has a wind turbine that generates electricity, and the president signed the American College and University Presidents Climate Commitment, which includes committing to LEED Silver as a minimum standard for new construction.

So when the decision was made to build two new residence halls, the first to be built since 1967, the college aimed even higher. "For our first construction project since adopting the ACUPCC standard, we decided to go beyond our commitment and achieve LEED Gold instead," says director of facilities Steve Spehn. The two new buildings, Cassat Hall and Memorial Hall, are the first residence halls in Minnesota to be certified LEED-NC (New Construction) Gold.

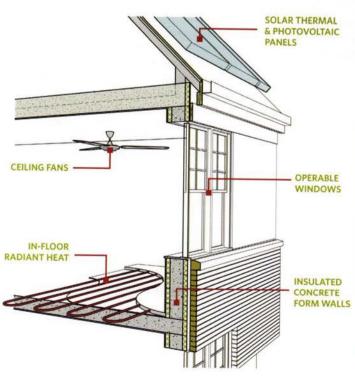
Designed by LHB in the Collegiate Gothic style to blend in with existing campus buildings, the four-story stone-and-brick halls, completed in 2009, house 230 students. More than half of those students, freshmen through seniors, reside in traditional singles and doubles in Cassat Hall; another 100 live in suites in Memorial Hall. An underground tunnel connects the two buildings, which total 82,000 square feet.

To conserve energy from the get-go, LHB constructed the building envelopes of insulated concrete forms (ICFs) for increased thermal performance. A solar thermal hot-water system on Cassat and photovoltaic panels on Memorial add to the renewable energy generated by the wind turbine. Both buildings have radiant in-floor heating systems and high-efficiency lighting with daylight and occupancy sensors.

"Through design and construction we eliminated one-third of the buildings' energy use," says Kim

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ENERGY-EFFICIENT SYSTEMS

For their energy, heating, and cooling strategies, Cassat Hall and Memorial Hall earned the great majority of LEED points available in the categories of Indoor Environmental Quality (14 out of 15) and Innovation in Design (4 out of 5).



4 Student rooms

5 Study room

CASSAT AND MEMORIAL RESIDENCE HALLS

Entry

2 Kitchen

Location:

Northfield, Minnesota

Client:

Carleton College

Architect:

LHB

www.lhbcorp.com

Principal-in-charge:

Kim Bretheim, AIA

Project lead designer:

Kim Bretheim, AIA

Energy design assistance:

The Weidt Group; LHB

Landscape architect:

Spencer Jones

Landscape Architect

Construction manager:

JE Dunn

Size:

82,000 square feet

Cost:

\$25 million

Completion date:

August 2009

COMMUNITY













The University District Alliance, a relatively new group composed of stakeholders in and around the University of Minnesota's Twin Cities campus, strives to harness the district's leading assets—intellectual capital, downtown proximity, and the coming LRT line, among others—to address the unintended adverse effects the university has had on the four surrounding neighborhoods. The goal? To create a national model for sustainable urban revitalization.

BY CAMILLE LEFEVRE

Heavier traffic than usual on game days. Marchingband practice at 6:00 A.M. on Saturdays. Whoopin' and hollerin' on nearby streets after a Golden Gophers win. When the Minnesota State Legislature commissioned a report in 2006 on the impact of the University of Minnesota on the surrounding community as part of the law funding the new on-campus TCF Bank Stadium, it learned that these repercussions weren't an issue for area residents and business owners. Instead, respondents called out the long-term impacts of living near the university. Chief among their concerns were the decrease in owner-occupied homes and the increase in deteriorating student housing, which were contributing to neighborhood decline.

In response, a year later, the legislature authorized and funded the formation of the University District Alliance, a consortium of diverse stakeholders led by a 17-person steering committee. "The legislature recognized there are special planning problems in our neighborhoods," says architect Richard Gilyard, FAIA, who lives in Prospect Park and chairs

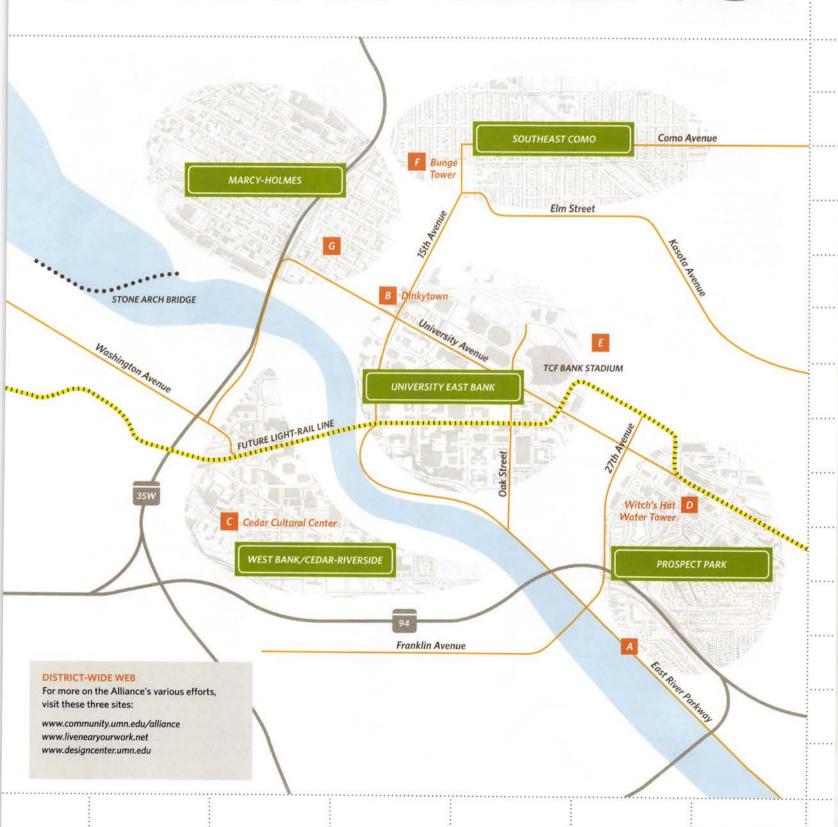
the Alliance's Vision and Planning Committee. The other neighborhoods in the district are West Bank/Cedar-Riverside, Marcy-Holmes, and Southeast Como.

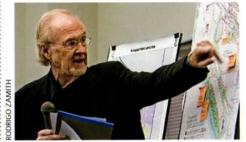
The housing situation "was an unintended consequence of the U's decision to bring most of its undergrads onto campus in their first year," Gilyard explains. According to research conducted by other universities, requiring freshmen to live on campus results in higher graduation rates. The university decided to follow suit. "The U's decision was successful," Gilyard continues, "but in their second year, students mostly move off campus into one of the nearby neighborhoods, which are, due to losses in home ownership, increasingly full of low-level rentals with absentee landlords."

The impetus for organizing the Alliance was "to stop the erosion," says Gilyard, in part by "nudging student housing closer to campus with projects like the Dinkydome Apartments and Lofts, to make the core of the neighborhoods

THE ALLIANCE is composed of stakeholders in and around the University of Minnesota's Twin Cities campus—including residents and neighborhood groups, the university, the City of Minneapolis and Hennepin County, hospitals and clinics, developers, and businesses.

ORGANIZING





"The four neighborhoods have been operating on their own for a long time. We're trying to build connectivity that reinforces shared elements, and encouraging them to think as part of a district with shared issues, problems, and opportunities."

-ALLIANCE VISION AND PLANNING COMMITTEE CHAIR RICHARD GILYARD, FAIA



principally owner-occupied housing." At the same time, he continues, the Alliance needs to "figure out how to make our neighborhoods more attractive to faculty, administrators, and hospital staff, as well as to the folks who want to live close to, but not in, downtown Minneapolis."

But Gilyard's also pushing the Alliance to aim even higher: "I want the district to be a cool place to live, not just a convenient place to live."

SMALL STEPS TO THE BIG PICTURE

The Alliance's overall approach is to get the district's stakeholders—residents, businesses, neighborhood groups, hospitals and clinics, developers, the university, the city, and the county—to collaborate on creating a livable, sustainable community that builds on existing assets. From the university's intellectual capital (including the sustainable-design thinking at work in the College of Design) to the neighborhoods' adjacency to the Mississippi River to the eventual arrival of light-rail transit, the district has tremendous potential to become a unique laboratory for modeling urban livability solutions.

One early accomplishment was the University District Home Buyer Incentive Program. The Alliance program offered qualified borrowers low-interest loans of up to \$10,000 for use toward the purchase of a home in the district; the loan is forgivable over five years if the buyer lives in the home. The Alliance's next move was to conduct a workshop during which each neighborhood presented its revitalization efforts.

"The four neighborhoods have been operating on their own for a long time," Gilyard explains. "In the last 20 years, the Minneapolis Neighborhood Revitalization Program had the unintended consequence of putting each neighborhood in a silo, to face shared challenges separately, with limited resources." The Alliance will continue to preserve the architectural character and distinctiveness of each neighborhood, he adds, "but we're also trying to build connectivity that reinforces shared elements, and encouraging them to think as part of a district with shared issues, problems, and opportunities."

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Top to bottom: A number of community leaders attended an Alliance forum in August 2009, including Minneapolis Planning Commission member Ted Tucker, state senator Larry Pogemiller (in yellow), city council member Diane Hofstede (in orange), and Metropolitan Design Center director Ignacio San Martin.

The Alliance organized a series of **COMMUNITY WORKSHOPS** in which each neighborhood presented its revitalization efforts and identified a transformational neighborhood project. Local architecture firm Cuningham Group worked with each group to develop its ideas, which resulted in the renderings shown below and opposite.



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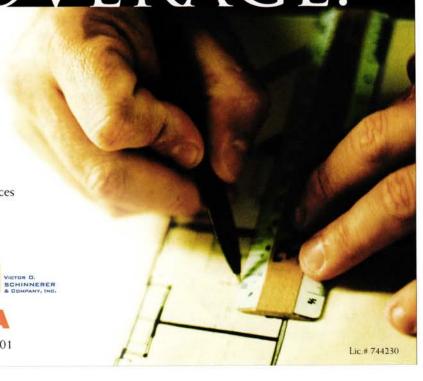
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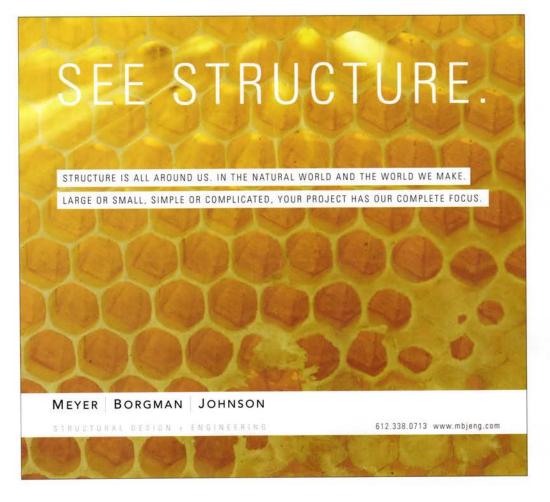
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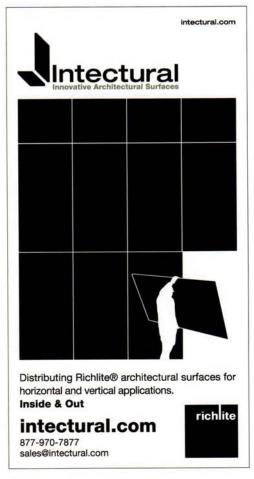
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The Confluence

<< continued from page 23

The ceramic frit baked onto the glass is graduated to filter the right amount of daylight. Windows vary in size depending on their location.

On the outside, the 70-foot-tall stainless piers are brushed at the lower level but polished above to enliven the façade. Inside, slivers of mirrored stainless frame a stainless-steel cap, picking up the movement of people to subtly animate the atrium. They also dematerialize the piers, says KPF project manager Phillip White, AIA.

STSS is a delight, from these well-crafted details to the urban siting—you can get outside on three levels, including to a stormwater retention garden on the East River Parkway and a piazza off the second floor. It's a campus landmark—in more than just visual terms. "This was to be the finest science learning structure in the U.S.," says Pedersen. "When you have that as a point of departure, and you have the finest site, not just on the campus but in the Twin Cities, it's pretty potent." AMN

Prairie Star

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"We wanted everyone to be a part of the project, because this building is incredibly important to the campus community," says Stowers. "If you are a prospective student, this is your first stop on campus. But the building also needed to charm the socks off alumni. And people come from all over to visit the Center for Small Towns. So we had to design to impress 18-year-olds and 80-year-olds."

The thoroughly modern design scheme does just that. Real wheatgrass is embedded in the translucent panels used as partitions, evoking the rural landscape that surrounds the campus. The sustainable Interface carpet, in a dun palette, suggests the patchwork of farm fields as seen from a plane. Exposed mechanicals show off the building's smarts, and an energy kiosk in the lobby measures in real time how the building—and campus—is performing.

But the true mark of the Welcome Center's performance can be seen in visitors' facial expressions. "This is not just another college admin building," says Stowers. "You can see the reactions right away. This is the new heart of the school." AMN



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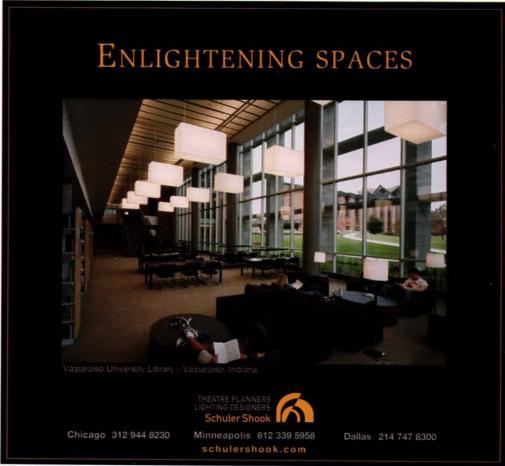
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in place along one outside wall. Inside these walls, the holes that gave holds to cranes, enabling the cranes to lift the many-ton panels into place, remain, unfilled and unhidden. Any student can plainly see how the wall was built.

Department chair Andrea Schokker smiles as she speaks of seeing clusters of students, sent by their professors, wandering the halls of the building to study the details of its construction: "There's an I-beam, and that's cast-in-place concrete..."

SJA Architects principal Brian Morse, AIA, concurs: "There's real satisfaction in watching people use the facility, hearing the excitement faculty members have for it."

The daily display of the large-scale doings in the building may be the reason Dr. Schokker has filled the department's classes twice over, from about 30 students per class to 60. A major that's a little lacking in glamour in most locales here has plenty of cachet, thanks to the strikingly appealing building that houses the program. **AMN**



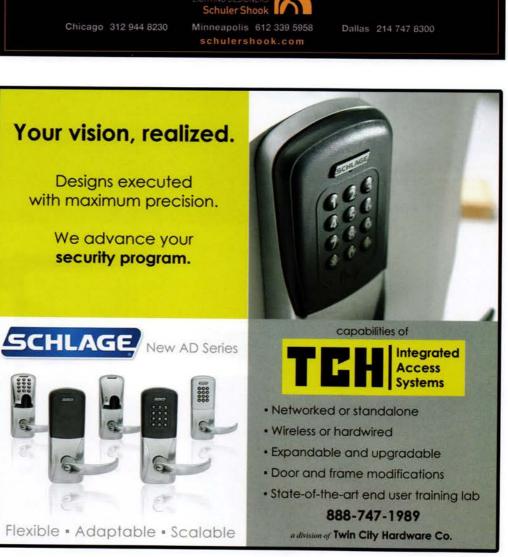
A DULUTH DOZEN

<< continued from page 30

and Applied Arts and Pelli had received his master's degree. The two often spoke of performance-hall design, so Martin knew whom to call when the project began to materialize. With donors Ron and Maryanne Weber enthusiastic about Pelli's involvement, the architect eventually won the commission.

The pace of construction continued with nine more new buildings or major renovations. Most recently, in 2010, the Bagley Nature Center Classroom Building (page 32), designed by celebrated Duluth architect David Salmela, FAIA, and built by the school's facilities staff, made news with LEED-Platinum certification.

In all, the building campaign enabled the expansion of the student body from roughly 7,500 to more than 11,000. Says Martin, with pride: "Our increasingly attractive campus has made possible the recruitment of excellent students and faculty who otherwise might not have considered UMD." AMN





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Biodynamic

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district. The Harvard brick and precast concrete used on the exteriors recall the U's brick-and-limestone vernacular. "The U was concerned that there be a familial relationship," says Dimond.

For the building's occupants, the labs hold their life's work. Twenty-foot-long benches with epoxy tops are designed for ultimate flexibility, says David Lee, the U's longtime manager of medical facilities. They can be raised or lowered to serve as desks or hold equipment, and can quickly be reconfigured for a new team of researchers. Electricity, vacuum, and telecommunications are delivered from the ceiling; equipment that generates noise and heat is housed in linear equipment rooms in back of the labs.

In most buildings of this sort, the labs are lined up in one long stretch. But neuroscientist Dr. Harry Orr wanted to avoid the assembly-line feel of that configuration, so labs were broken into five smaller units and flip-flopped in orientation. One is flooded with north light. The next receives filtered light from the front of the building through clerestory windows. In both cases, says Dimond, the researchers enjoy 25-foot candles of natural light, enough to carry on most of their work unaided by artificial light.

In this and numerous other ways, the building exceeds Minnesota's B3 (Buildings, Benchmarks, and Beyond) standards for sustainable design, which are comparable to LEED Silver. Once the location of a creosote-soaked rail yard, the Medical Biosciences Building now fosters research that will advance medical care. Dr. Karen Ashe, for example, is researching a cure for Alzheimer's. Dr. Matthew Mescher studies how the body mobilizes immune-system cells to fight invaders, research crucial to breakthroughs in treatment for cancer, infectious disease, and autoimmune disorders. Dr. Harry Orr, director of the U's Institute for Translational Neuroscience, is examining the role of genetic mutations in neurodegenerative diseases.

"I can't do this research, but I can do my part by supporting it," says Novak, who serves on the scientific and technical review board of the National Institutes of Health. "Just to see someone's life improved or extended—I take great satisfaction in that." AMN

Practice What You Teach

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Bretheim, AIA, leader of LHB's housing studio.

"But another one-third of the energy use is what kids plug into the walls." How do you address with students the impact of their individual decision-making and lifestyle choices related to energy use? One way is to demonstrate the impact.

LHB installed real-time electricity-use meters on every floor in Cassat Hall and in every suite in Memorial Hall to help students better understand their use of natural resources. "We also created information panels in the entries to each building that monitor energy production and use from the solar hot-water system and the photovoltaic panels," adds Bretheim.

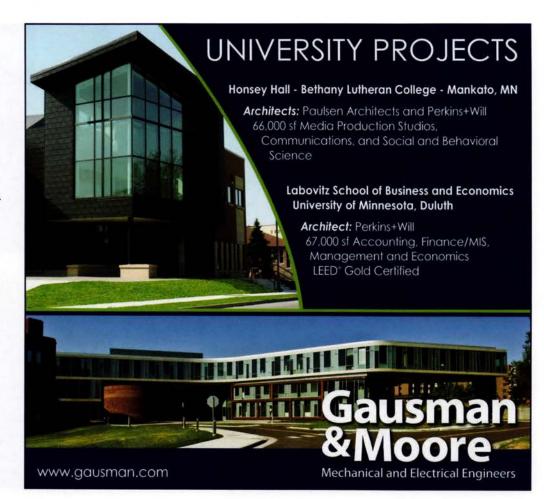
Because the residence halls are in use for only nine months out of the year, they don't have air-conditioning—except for the head-resident apartments and data closets for communication equipment. (Ceiling fans and double-hung operable windows that improve air circulation keep the rest of the spaces comfortable.)

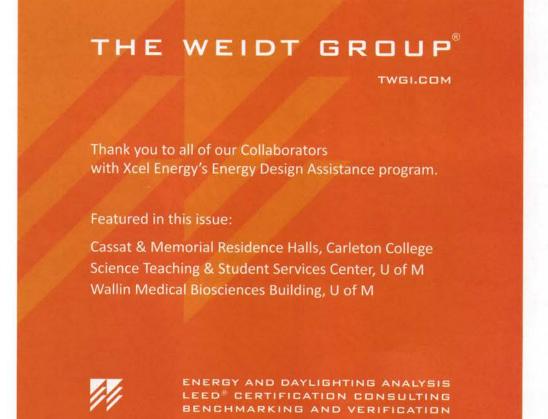
Nevertheless, no LEED points were forthcoming for this energy-saving strategy. "LEED assumes a building is in use all the time," Bretheim explains, "so if you choose not to include air-conditioning, you don't get any extra points."

LEED points were acquired for the projects' use of regionally manufactured materials and materials manufactured with high recycled content. More than 90 percent of construction waste was diverted from landfills, and the trees removed from the site were milled into much of the wood trim in the buildings. Rooms were designed to take advantage of natural light and views, and the design team specified low-flow plumbing fixtures and low-VOC (volatile organic compound) materials.

To foster community in the residence halls, LHB grouped both the one- and two-person rooms and the suites into pods or neighborhoods. Each floor has its own identity reinforced by lounges and study rooms. The main lounge with full kitchen on the first floor of Cassat can accommodate the entire population of the building, and students from both halls can access each other via the underground tunnel.

One year after opening, Cassat and Memorial residence halls "are second on the list of desired housing options," says Spehn, "just behind our townhouses, which are extremely popular with seniors." Moreover, he adds, "The new residence halls showcase how important sustainability is to Carleton College and to our students." **AMN**





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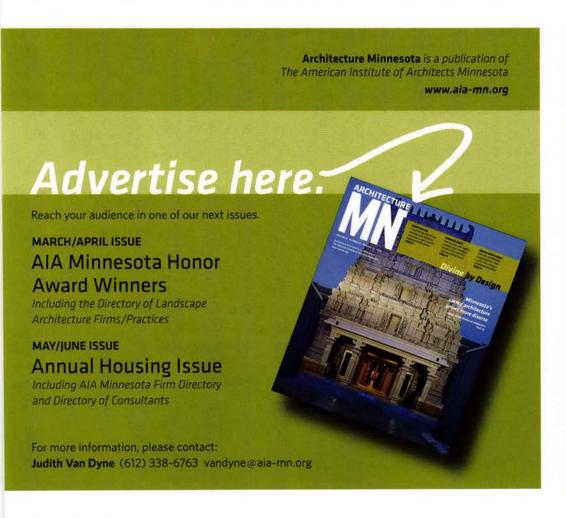
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Community Organizing

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At a second workshop, participants presented lists of their neighborhoods' most treasured assets, as well as ideas for new projects that would significantly stabilize and transform their area while contributing to the district's larger vision. The Alliance hired architecture firm Cuningham Group to lead that process and visualize each project.

"We worked feverishly with the neighborhood groups and Alliance representatives on putting all this together," says Mike Lamb, who heads Cuningham Group's Urban Design Studio. For West Bank/Cedar-Riverside, the design group envisioned the neighborhood reconnected with Seven Corners across the Washington Avenue trench via a variety of mixed-use "ribbon buildings" and pedestrianfriendly walkways along the Cedar Avenue bridge.

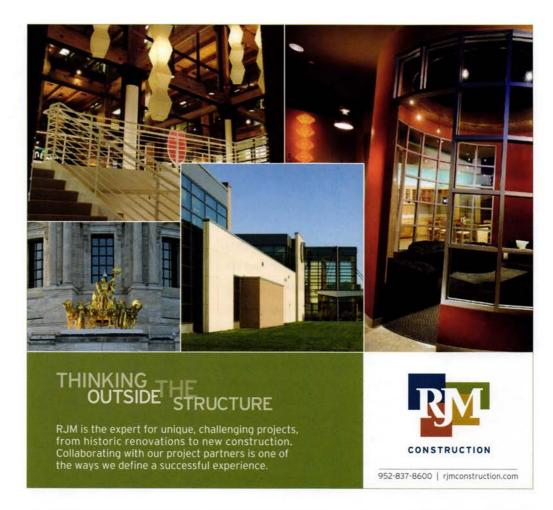
In Marcy-Holmes, the transformation included larger-scale, higher-density development at the neighborhood's edges (while preserving smaller-scale housing at the core); mixeduse buildings fronting a new pedestrian- and cyclist-friendly Granary Road; and architecturally significant gateway buildings at the I-35W intersection. Prospect Park received a vision for a new LRT station at 29th Avenue with a plaza and sustainably designed, high-density, mixed-use development.

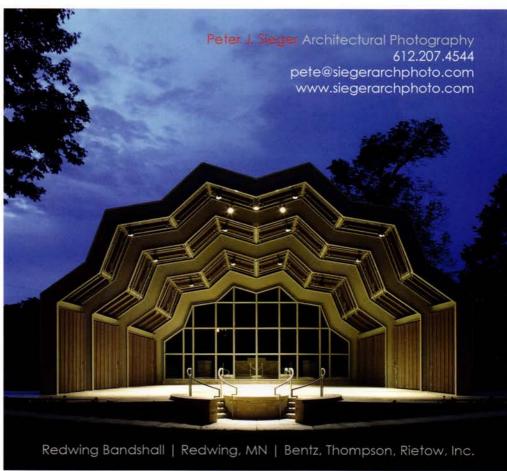
Southeast Como identified the need for a highquality 15th Avenue streetscape, especially along Van Cleve Park. The design team envisioned such improvements as wide, inviting sidewalks for walkers and bicyclists, extending the park farther into the neighborhood with a community garden, and high-density residential buildings that could house professionals as well as seniors who wish to remain in the area.

A common theme for the neighborhoods was celebrating University Avenue as a boulevard, promenade, and gateway. "The neighborhoods also organized around the river," says Lamb, "so we provided them with an aerial view that shows different locations and possibilities for development, as well as a consolidated district."

Concurrently, Ignacio San Martin, director of the U's Metropolitan Design Center, has been working on the first phase of an urban-design framework for the district. The framework identifies critical areas of intervention and involvement, and proposes opportunities for restructuring the

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Community Organizing

<< continued from page 51

district into a model sustainable community. San Martin says the design center's work has been guided by several questions:

- · Can the fragmented district be transformed into a cohesive network of well-integrated sustainable and livable communities?
- · Can the Mississippi River again perform a regenerative role in the transformation of the district?
- · What are the critical obstacles preventing the advancement of a substantive urban-design framework to guide this transformative process?
- · Are there other ways to effect difficult urban transformations outside of, or prior to, the typical master-planning process?

In November, San Martin presented the first phase of the work to district residents and to the City of Minneapolis' Community Planning and Economic Development office.

PREPARING FOR OPPORTUNITY

"We've developed a common voice that's recognized by City Hall," says Gilyard of the Alliance's efforts thus far. "We've created a standing with the development community, which is interested in what the Alliance is thinking. So now we're developing positions on questions about broader planning concepts in terms of land use."

Those questions range from how to incorporate urban agriculture into the district to how to create better access to the river. They also include how to craft a planning process and a governance structure that bring the four neighborhood entities together. Finally, Gilyard asks, "How can the City of Minneapolis and the University of Minnesota work in concert with four neighborhoods in a way they haven't before?"

"It's a challenging time, because the university is changing its leadership, and we're still in the midst of an economic recession," says Gilyard. "But taking on these projects now has given us more time to get organized and do some planning, because the area around the U is a magnet for future concentrated development. We want to ensure that new development in the district sets new standards in terms of quality and sustainability. So when the economy breaks loose and development picks up again, we'll be ready." AMN

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Rosa Parks Elementary School, Mankato, MN: MNDOT Regional Headquarters, Mankato, MN: Cold Spring High School (addition and remodel), Cold Spring, MN: Hosanna! Lutheran Church, Lakeville, MN; Village Cooperative Housing Complex, Asbury, IA: Worthington High School (HVAC replacement), Worthington, MN

DUNHAM ASSOCIATES, INC.

50 South Sixth Street, Suite 1100 Minneapolis, MN 55402-1540 Tel: (612) 465-7550 Fax: (612) 465-7551 Email: info@dunhameng.com www.dunhameng.com Established 1960 Other MN Office: Duluth, Rochester Total in MN Offices: 83

Firm Principals

Kathleen Kolbeck, PE, LEED AP Jay Rohkohl, PE, LEED AP Steve Gentilini, PE, LEED AP Tom Betley Dale Holland, PE, LEED AP

Dunham offers mechanical, electrical and telecommunications consulting engineering services to our clients across the United States for aviation, commercial, education, healthcare, hospitality and retail projects. We are engineering leaders in sustainable design strategies, energy modeling, system analysis, and commissioning, enabling us to help our clients optimize the performance of their building systems,

Margaret A. Cargill Foundation Headquarters, Eden Prairie, MN; Regions Hospital (expansion commissioning), St. Paul, MN; Mayo Damon Ramp PV Installation, Rochester, MN; University of Minnesota Duluth, Civil Engineering Building Duluth, MN; St. Cloud Hospital (east expansion and renovations), St. Cloud, MN; Gillette Ambulatory Care Center, St. Paul, MN

ELLERBE BECKET, INC., AN AECOM COMPANY

800 LaSalle Avenue

Minneapolis, MN 55402
Tel: (612) 376-2000
Fax: (612) 376-2271
Email: info@ellerbebecket.com
www.ellerbebecket.com
www.aecom.com
Established 1909
Total in MN Office: 276
Other Offices: Washington, DC; Kansas City,
MO; San Francisco, CA; Dallas, TX; Abu
Dhabi, UAE
Total Other Offices: 211
Contact: Dan Dickenson, PE, LEED AP,
(612) 376-2000

Firm Principals

Jon Buggy, AIA Mic Johnson, AIA Dan Dickenson, PE, LEED AP, GGP Kimberly Pierson, PE, LEED AP Prem Khera, PE Jon Iverson, PE

Ellerbe Becket, an AECOM Company, has a proven history of success in technically-complex projects. Our engineering team offers deep expertise in healthcare, mission critical, laboratories, workplace, education and energy project types. As part of AECOM, we provide a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments.

Austin Energy (new energy control center),
Austin, TX; GSA Office Building, Tucson, AZ;
Sanford Meritcare, Thief River Falls
Northwest Medical Center, Thief River Falls,
MN; NRG Energy (multiple projects),
Minneapolis, MN; Mercy Health System
(multiple projects), Janesville and Walworth,
WI; College of St. Scholastica, Science
Building (addition and renovation),
Duluth, MN

ENGINEERING DESIGN INITIATIVE

1112 North Fifth Street
Minneapolis, MN 55411
Tel: (612) 343-5965
Fax: (612) 343-5982
Email: jhruby@edilimited.com
www.edilimited.com
Established 2002
Total in MN Office: 21
Contact: Jay Hruby, (612) 343-5965

Firm Principals

Jay Hruby, PE Larry Svitak, PE

EDI provides innovative M/E engineering solutions for a variety of building types. Our services include M/E engineering, building commissioning, energy modeling and daylight modeling services. EDI is committed to delivering designs that are energy efficient, maintainable and sustainable. We are passionate in our creative design, attention to detail and commitment to teamwork – from defining initial performance goals through validation by commissioning.

St. John's Abbey Guesthouse and Chapter House, Collegeville, MN; Wright County Law Enforcement Center, Buffalo, MN; St. Cloud Public Library, St. Cloud, MN; SPPS Central High School Technology Upgrade, St. Paul, MN; City of Minneapolis Water Works Maintenance Facility, Fridley, MN; Blue Earth County Law Enforcement Center, Mankato, MN

ERICKSEN ELLISON AND ASSOCIATES

305 2nd Street NW, Suite 105 New Brighton, MN 55112 Tel: (651) 632-2300 Fax: (651) 632-2397 Email: tpeterson@eeaengineers.com

www.eeaengineers.com
Established 1954

Total in MN Office: 19

Contact: Todd Peterson, (651) 632-2320

Firm Principals

James H. Art, PE Terri A. Fleischhacker Todd A. Peterson, PE William F. Thiesse, PE

EEA is a mechanical/electrical engineering company with extensive experience in design and commissioning of - Public Projects: iudicial/correctional, libraries, government, and maintenance. Commercial: medical facilities, data centers, and retail. Education: recreation centers, libraries, laboratories, dormitories, and campus centers; EEA has LEED certified engineers specializing in system modeling and innovative approaches for reducing energy consumption without sacrificing utility or comfort.

Minneapolis Central Library (design/ commissioning), Minneapolis, MN; Grinnell College New Campus Center (design and LEED certification review), Grinnell, IA; MCF Faribault Campus (energy infrastructure/ renovation/new buildings), Faribault, MN; Unisys NAEC Data Center (design/ commissioning), Eagan, MN; Macalester College (athletic/recreation center), St. Paul, MN; Bethel University Commons, Arden Hills, MN; Eli Lilly Corporate Data Center, Indianapolis, IN

ERICKSEN, ROED AND ASSOCIATES, INC.

2550 University Avenue West, Suite 201-S
St. Paul, MN 55114
Tel: (651) 251-7570
Fax: (651) 251-7578
Email: info@ericksenroed.com
www.ericksenroed.com
Established: 1985
Total in MN Office: 40
Other Office: Eau Claire, WI
Total Other Office: 3
Contact: Michael DeSutter or Kent Larson, (651) 251-7570

Firm Principals

Michael A. DeSutter, PE James D. Roed, PE William T. Buller, PE, SE Robert J. Quinn, PE Michael S. Steenson, PE

Ericksen Roed and Associates are full-service, structural engineers who deliver our clients innovative and economical design solutions. Our range of markets include retail, commercial, medical, energy multi-family hospitality, arts and educational, parking facilities, sports/recreation/entertainment, high-rise, remodeling and renovation projects. We are registered throughout the United States; utilize Revit/BIM software, and are the developers of the (Patented) ER-Post precast building system.

TCF Stadium, University of Minnesota, Twin Cities Campus, Minneapolis, MN; Helmuth and Johnson Law Office Building, Edina, MN: Target Stores Nationwide; Fort Lewis Washington – Army Air Force Exchange Service and Battalion, Tacoma, WA; Life Time Fitness Facilities, Nationwide; Guthrie Theater and Parking Ramp, Minneapolis, MN

ESI ENGINEERING, INC.

7831 Glenroy Road, Suite 430 Minneapolis, MN 55439 Tel: (952) 831-4648 Fax: (952) 831-6897 Email: tbaxter@esi-engineering.com www.esi-engineering.com Established 1970 Total MN Office: 6 Contact: Anthony J. Baxter, (952) 831-4648

Firm Principals

R. Barry Whiteaker, PE Anthony J. Baxter, PE Carl A.Nelson, PhD, PE

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ESI Engineering, Inc. provides professional engineering services to A/E firms and industrial clients in the areas of structural dynamics, vibration control, noise control and isolation design for buildings and equipment. Established in 1970 as a Minnesota-based corporation, ESI specializes in solving challenging noise and vibration problems in precision manufacturing, research laboratory and hospital facilities.

US Army – ATC Roadway Simulator Building Foundation Design, Aberdeen, MD; Advanced Crash Simulator Foundation Design, Volvo Car Corporation, Goteborg, Sweden; Strong Wall/Strong Floor Design, MAST Laboratory, University of Minnesota, Minneapolis, MN: Noise and Vibration Control, Regions Hospital Expansion, St. Paul, MN: Vibration Control, Basic Sciences and Biomedical Engineering Building, University of Minnesota, Minneapolis, MN: Noise and Vibration Control for the NDSU Center for Nano-scale Science and Engineering, Fargo, ND

FOSTER, JACOBS & JOHNSON, INC.

345 Canal Park Drive, Suite 200
Duluth, MN 55802
Tel: (218) 722-3060
Fax: (218) 722-1931
Email: mail@fjj.com
www.fjj.com
Established 1922
Total in MN Office: 11
Contact: James Johnson, (218) 722-3060

Firm Principals

James R. Johnson, PE Charles F. Jacobs, PE

We offer full-service mechanical and electrical consulting services, including design and preparation of contract documents for fire protection, plumbing, HVAC, controls, lighting, power distributions, communications and life safety systems and construction administration.

Finland Community Center, Finland, MN:
Grant Elementary School (miscellaneous
improvements and addition), Duluth MN;
Minnesota Air National Guard (fuel systems
maintenance dock), Duluth, MN;
Northeastern Regional Correctional Center
(miscellaneous mechanical projects), Duluth,
MN: National Park Service Headquarters,
International Falls, MN; Itasca County
Highway Department (maintenance
facilities), Big Fork, Balsam and
Squaw Lake, MN

GAUSMAN & MOORE ASSOCIATES, INC.

1700 West Highway 36
700 Rosedale Towers
Roseville, MN 55113
Tel: (651) 639-9606
Fax: (651) 639-9618
Email: mleutgeb@gausman.com
www.gausman.com
Established 1935
Other MN Offices: Duluth
Total in MN Offices: 70
Other Office: Los Angeles
Total in Other Offices: 15
Contact: Mark Leutgeb, Dir. Bus. Dev.,
LEED AP, (651) 604-3141

Firm Principals

Edward L. Studniski, PE, LEED AP James A. Keller, PE, LEED AP D. Lane Hersey, PE, LEED AP Robert B. Full, PE James D. Manning, PE, LEED AP Dave T. Blume, PE, LEED AP

Gausman & Moore provides mechanical, electrical, fire protection, commissioning, and technology support engineering services. Areas of special expertise include sustainable design (LEED AP) mission critical power systems, forensic investigations, lighting design and healthcare.

University of Minnesota Duluth, Bagley
Classroom (LEED Platinum Certified),
Duluth, MN; UnitedHealth Group Katella
Building, Cypress, CA; General Services
Administration Offices at Norman Pointe II,
Bloomington, MN; Community Memorial
Hospital Phase II (addition and remodel),
Cloquet, MN; The Aerospace Corporation, El
Segundo, CA; Target Stores (new and
remodel), Nationwide; U.S. Army Reserve
(training and vehicle maintenance
centers), Nationwide

HALLBERG ENGINEERING, INC.

1750 Commerce Court
White Bear Lake, MN 55110
Tel: (651) 748-1100
Fax: (651) 748-9370
Email: hei@hallbergengineering.com
www.hallbergengineering.com
Established 1979
Total MN Office: 45
Contact: Amy Anderson, (651) 748-4370

Firm Principal

Joseph Hallberg, PE

Hallberg Engineering, Inc. (HEI) is a mechanical and electrical consulting engineering firm. We specialize in the design of mechanical, electrical, and technology systems, along with building analysis and commissioning. Our services also include system upgrades and retrofits to improve indoor air quality and energy conservation. Hallberg is the Minnesota distributor of the Schools for Energy Efficiency (SEE) Program and the CLASS 5 Workplace product.

St. Olaf College Science Complex (LEED)
Northfield, MN: Minnesota Sex Offender
Program (MSOP), Moose Lake, MN:
Chanhassen High School, Chanhassen, MN:
UnitedHealth Group Corporate Office (LEED),
Minnetonka, MN: REI Store (LEED) Chicago,
IL: University of St. Thomas, St. Paul, MN

HAMMEL, GREEN AND ABRAHAMSON, INC. (HGA)

701 Washington Avenue North
Minneapolis, MN 55401
Tel: (612) 758-4000
Fax: (612) 758-4199
Email: info@hga.com
www.hga.com
Established 1953
Other MN Office: Rochester
Total MN Offices: 281
Other Offices: Milwaukee, Sacramento,
Los Angeles, San Francisco
Total in Other Offices: 225
Contact: Julie Luers, Dir. Mktg.,
(612) 758-4613

Firm Principals

Chuck Cappellin, PE, LEED AP Jeff Harris, PE, LEED AP Leigh Harrison, PE, LEED AP Kenny Horns, PE, LEED AP Doug Maust, PE, LEED AP Yan Shagalov, PE, LEED AP

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HGA has engineering expertise in the design of a broad range of facility types. In addition to traditional civil, mechanical, structural and electrical engineering, HGA has specialists in commissioning, clean environments, industrial processes, central plants, energy saving controls, utility infrastructure, facility assessments, telecommunications systems design, healthcare technology applications design, specialty lighting and sustainable design, as well as alternate delivery methods.

Daikin McQuay, Applied Development
Center, Plymouth, MN; Federal Government
Agency Headquarters Building, GSA and
Federal Agency Tenant, Brooklyn Park, MN;
Target Field, Civil Site and Utility Work,
Minneapolis, MN; Union Depot, St. Paul,
MN; University of Minnesota Amplatz
Children's Hospital, Minneapolis, MN;
University of Minnesota Minneapolis,
Science Teaching and Student Services
Center, Minneapolis, MN

HDR ENGINEERING, INC.

701 Xenia Avenue South, Suite 600

Minneapolis, MN 55416
Tel: (763) 591-5400
Fax: (763) 591-5413
www.hdrinc.com
Established 1917
Other MN Offices: Rochester, St. Paul,
Thief River Falls
Total MN Offices: 199
Other Offices: 185 locations worldwide
Total Other Offices: 7,574
Contact: Brett Wolfe, Vice President

Firm Principal

Jim Thompson, Vice President/Managing Principal

HDR is an employee-owned engineering, architecture and consulting firm that provides a total spectrum of services. Our professionals represent hundreds of disciplines and partner on blended teams worldwide to provide solutions beyond the scope of traditional A/E/C firms.

Completed projects in 50 states and 60 countries: Banner Health, Mesa, AZ; Hoover Dam Bypass, Boulder City, NV; Calgary Courts Center, Calgary, Alberta, CA: Gills Onions Advanced Energy Recovery System, Oxnard, CA; Constellation Energy, Brandon Shores Air Quality Control Retrofit, Baltimore, MD

HEYER ENGINEERING

123 – 3rd Street North, Suite 600
Minneapolis, MN 55401
Tel: (612) 238-3805
Fax: (612) 238-3806
Email: dave@heyer-eng.com
www.heyerengineering.com
Established 1983
Total in MN Office: 2
Other Office: Fargo
Total in Other Office: 20
Contact: Dave Bruns, (612) 238-3805

Firm Principals

Jim Heyer, PE Dave Bruns, PE

Heyer Engineering offers full-service structural engineering with offices in Minneapolis and Fargo. Jim Heyer, PE is licensed and has designed structures in 38 states. Over a 24-year period, more than 7,000 projects have been accomplished. including all types of occupancies and construction materials. Over the years, we have formed excellent relationships with our clients, who frequently use our services for the majority of their projects. This is the result of our dependability, quality designs, creativity and wealth of experience.

Chanhassen High School, Chanhassen, MN; Horizon Middle School, Moorhead, MN; Ralph Engelstad Arena, Grand Forks, ND; Northwest Aerospace Training Center, Eagan, MN; Jackson Place/Bluff Block, Elk River, MN; Innovis Health Medical Center, Fargo, ND

HR GREEN

2550 University Avenue West, Suite 400N St. Paul, MN 55114 Tel: (651) 644-4389 Fax: (651) 644-9446 Email: rfroberg@hrgreen.com www.hrgreen.com Established 1913 Total in MN Office: 40 Other Offices: Iowa, Illinois, South Dakota, Missouri, Texas Total in Other Offices: 370 Contact: Rick Froberg, (651) 659-7757

Firm Principals

Rick Froberg, AIA, RRC, LEED AP Dave Raby, PE Jack Broz, PE Jonathon Kusa, PE, LEED AP

HRG offers a full range of engineering services, with expertise in all major building systems including structural, mechanical and electrical. HRG specializes in roof and green roof design and consulting, plaza waterproofing, masonry restoration, window replacement, site engineering and outdoor athletic facilities. Project types include educational, institutional, commercial, municipal, and industrial.

University of Minnesota (various engineering projects on the Minneapolis, St. Paul and Morris Campuses), MN; Minneapolis City Hall Courtyard (green roof waterproofing design), Minneapolis, MN; Rice County Courthouse (masonry restoration), Faribault, MN; Hopkins Public Schools (track restoration), Hopkins, MN; Metro Transit M.J. Ruter Bus Garage (HVAC retrofit), Brooklyn Center, MN; IBM (roof replacement projects), Rochester, MN, Tucson, AZ, Boulder, CO

INSPEC, INC.

5801 Duluth Street Minneapolis, MN 55422 Tel: (763) 546-3434 Fax: (763) 546-8669 Email: fking@inspec.com www.inspec.com Established 1973 Total MN Office: 54 Other Offices: Milwaukee, Chicago

Total in Other Offices: 12

Contact: Fred King, (763) 546-3434

Firm Principals

Mike Remington, PE Gary Patrick, AIA, RRC Brent Boelter, PE Dwight Benoy, PE Dave Campbell, AIA, RWC, GRP Gary Larson, AIA

INSPEC provides smart engineering for roofs, walls, windows, pavements, waterproofing, and other specialized services. Our services include: surveys, evaluations, failure investigations, design, consultation, expert witness testimony, construction administration/observation, on site and laboratory testing, and customized facility management programs. We also specialize in historic buildings and outdoor athletic facilities.

Target Center (roof replacement - vegetated and non-vegetated), Minneapolis MN; Minnesota State Community and Technical College (roof replacement), Wadena, MN; Hamline University, Old Main Building (window replacement), St. Paul, MN; Minneapolis/St. Paul International Airport (concourse expansion, tunnel/foundation waterproofing), Bloomington, MN; Iowa Hi-Rise (exterior re-cladding and window replacement), St. Paul MN; St. Thomas Academy (Synthec turf field construction), Mendota Heights, MN

KIMLEY-HORN AND ASSOCIATES, INC.

2550 University Avenue West, Suite 238N St. Paul. MN 55114-2006 Tel: (651) 645-4197 Fax: (651) 645-5166 Email: tom.lincoln@kimley-horn.com www.kimlev-horn.com Established 1967 Total in MN Office: 70 Other Offices: Raleigh (Corporate), 56 offices nationwide Total in Other Offices: 1,541 Contact: Thomas J. Lincoln, PE. (651) 643-0453

Firm Principals

Gary Ehret, PE Ion Horn, PE Mike Hermann, PE Paul Danielson, PE Jeanne Witzig, AICP Steve Pflipsen, PE

Kimley-Horn and Associates, Inc. is a national consulting engineering firm with a Twin Cities office that serves private and public clients across the Midwest. Our capabilities encompass all phases of a project from early planning through construction administration. Kimley-Horn effectively integrates engineering planning, transportation, and environmental services to efficiently meet our clients' objectives.

Central Corridor LRT, Minneapolis to St. Paul, MN; Metropolitan Airports Commission. MSP International Airport, MN; City of Maplewood Municipal Services, Maplewood, MN; Bloomington Central Station Development, Bloomington, MN; Penn and American Development, Bloomington, MN; Shingle Creek Crossing, Brooklyn Center, MN

KRECH, O'BRIEN, MUELLER & ASSOCIATES

6115 Cahill Avenue Inver Grove Heights, MN 55076 Tel: (651) 451-4605 Fax: (651) 451-0917 Email: ikrech@komainc.com www.komainc.com Established 1985 Total MN Office: 15 Contact: James Krech, (651) 789-4120

Firm Principals

James H. Krech, PE Michael J. Lisowski, PE Matthew I. Van Hoof, PE Daniel I O'Brien, AIA Brady R. Mueller, AIA

KOMA offers structural engineering, architecture and interior design services. Registered as structural engineers in 31 states, typical projects include industrial, commercial, institutional, ecclesiastical, forensic, agricultural, blast resistance and hazardous waste confinement. Specialties include granular material storage, hazardous liquid containment, corrosive environments, blast resistance and aluminum green house design.

Allina Medical Clinic, Ramsey, MN; Longhorn Steakhouse, Nationwide; Savage Medical Building, Savage, MN; Newport Elementary School (renovations), Newport, MN: Lego Imagination Center at the Mall of America, Bloomington, MN; Steak 'N Shake, Nationwide

LARSON ENGINEERING, INC.

3524 Labore Road White Bear Lake, MN 55110 Tel: (651) 481-9120 Fax: (651) 481-9201 Fmail-info@larsonengr.com www.larsonengr.com Established 1979 Total in MN Office: 47 Other Offices: Scottsdale, Atlanta. Macon, Chicago, Omaha, St. Louis, Annleton, Milwaukee Total in Other Offices: 110 Contact: Kesh Ramduler, PE, (651) 481-9120

Firm Principals

Lee Granquist, PE Kesh Ramdular, PE Henry Voth, PE Roger Pocta, PE

continued next column

Founded in 1979 Larson Engineering provides structural, civil, mechanical and process engineering services. We excel in curtain wall design, pavement maintenance programs, athletic facilities, and commercial/ industrial structures. As a member of the U.S. Green Building Council, we are especially proud of our work on alternative fuel, energy services and sustainable design projects.

Kennedy Community School, St. Joseph, MN; Army Aviation Support Facility, St. Cloud, MN: Target Stores PMP, Multiple U.S. Locations: Columbia Heights Public Safety Center, Columbia Heights, MN; Toyota Portals, Multiple U.S. Locations; Duke Energy Center, Charlotte, NC

LKPB ENGINEERS, INC.

1935 West County Road B2, Suite 300 St. Paul, MN 55113 Tel: (651) 633-1223 Fax: (651) 633-1355 Email: karla.sampson@lkpb.com www.lkpb.com Established 1969 Total in MN Office: 42 Contact: Karla Sampson, (651) 288-6110

Firm Principals

Peter A. Potvin, PE Gayland J. Bender, PE John M. Killeen. PE Michael A. Westemeier, PE

LKPB Engineers, Inc. (LKPB) is a mechanical and electrical consulting engineering firm founded in 1969. The firm provides services to clients in the education, healthcare, corporate, commercial, historical, recreational and government environments. Services include design phase, master planning, construction documentation, construction administration and commissioning.

TCF Bank Football Stadium, Minneapolis, MN: Carleton College Cassat and Memorial Residence Halls, Northfield, MN; Minnesota Army National Guard Army Aviation Support Facility, St. Cloud, MN; Como Zoo Polar Bear Odyssey, St. Paul, MN; Tettegouche State Park Visitors Center, Silver Bay, MN

LOUCKS ASSOCIATES

7200 Hemlock Lane, Suite 300 Minneapolis, MN 55369 Tel: (763) 424-5505 Fax: (763) 424-5822 Email: home@loucksassociates.com www.loucksassociates.com

Established 1976 Contact: Mike O'Brien, (763) 424-5505

Firm Principals

Jeffrey A. Shopek, PE Paul J. McGinley, PLS Michael J. St. Martin, PE Paul A. Kangas, ASLA

Services include site layout, grading, storm water conveyance systems, water quality retention ponds, wetland mitigation, EAW/ EIS documents, groundwater contamination, ALTA title surveys, site feasibility studies, comprehensive plan amendments, rezoning, permitting and approvals for industrial, commercial, retail, corporate campus, assisted living community, senior co-op, townhome and education facilities.

Beacon Bluff 3M Campus Re-development, St. Paul, MN; CVS Stores, Various MN Locations; St. Jude Medical Campus, Little Canada, MN; Children's Hospital, Minneapolis, MN; University of Minnesota (education/sciences building), Minneapolis, MN; Cuyuna Senior Housing, Crosby, MN

MATTSON MACDONALD YOUNG, INC.

901 North 3rd Street, Suite 100 Minneapolis, MN 55401 Tel: (612) 827-7825 Fax: (612) 827-0805 www.mattsonmacdonald.com Established 1983 Total in MN Office: 14 Contact: Stephanie Young, PE

Firm Principals

David H. Macdonald, PE Stephanie J. Young, PE Eric Bunkers, PE Joe Cain, PE

continued next column

Mattson Macdonald Young, Inc. provides structural engineering services for a wide range of building types and sizes. We provide analysis and design for new construction, adaptive reuse, renovation and expansion. We have provided services for multi-million dollar, high-rise construction and one-room porch additions. We strive to produce good work, and make sure our clients enjoy the experience of working with us.

The Chambers Hotel, Minneapolis, MN; The Humboldt Mill + Annex, Minneapolis, MN; St. Croix Lutheran High School Chapel, West Saint Paul, MN; Breck School Commons Addition, Golden Valley, MN; 7 of the 29 Homes by Architects 2009 Tour Residences, Various Locations, MN; Swedish Institute Solarium Restoration, Minneapolis, MN

MCCONKEY JOHNSON SOLTERMANN, INC.

241 Cleveland Avenue South, Suite B2 St. Paul, MN 55105
Tel: (651) 698-5626
Fax: (651) 698-5628
Email: rjohnson@mjs-inc.net
www.mjs-inc.net
Established 1978
Total in MN Office: 6
Contact: Richard W. Johnson,
(651) 698-5626 x16

Firm Principals

Richard W. Johnson, PE
Christian Soltermann, PE
We offer structural engineering
consulting services for commercial,
industrial, institutional and
residential projects; also structural
assessments of existing structures.
Design office that stresses
cooperation, communication and a
knowledgeable exchange of ideas.
Licensed in 16 states.

PPMNS Health Care Center and Administrative Headquarters, St. Paul, MN; Clear Lake Fire Station, Clear Lake, IA; Grand Dental Center, Grand Rapids, MN; TruStone Financial, Golden Valley, MN; St. Anthony Park Elementary School, St. Paul, MN; Vermillion State Bank, Inver Grove Heights, MN

MEYER BORGMAN JOHNSON

12 South Sixth Street, Suite 810
Minneapolis, MN 55402
Tel: (612) 338-0713
Fax: (612) 337-5325
Email: info@mbjeng.com
www.mbjeng.com
Established 1955
Other MN Office: Duluth
Total MN Offices: 51
Other Office: Phoenix, Green Bay
Total Other Office: 12
Contact: Daniel E. Murphy, PE, (612) 604-3604

Firm Principals

Daniel E. Murphy, PE Michael J. Ramerth, PE Jerod Hoffman, PE Brion Szwed, PE Anthony J. Polusny, PE

50 years of thorough, responsive, and creative structural design for all building types. Committed to provide design solutions that fulfill the architectural vision while maintaining constructability and value to the owner. Services include design analysis, feasibility studies, construction documents, field observation, special inspections, forensics, and ramp condition surveys.

University of Minnesota Amplatz Children's Hospital, Minneapolis, MN; Coloplast North American Headquarters (expansion), Minneapolis, MN; U of Minnesota Northrop Auditorium (renovation), Minneapolis, MN; Duluth Airport Terminal (expansion), Duluth, MN; Minnesota Orchestra Hall (expansion), Minneapolis, MN; Target Field (peer review, construction administration, steel connection design), Minneapolis, MN

MICHAUD COOLEY ERICKSON

333 South Seventh Street, Suite 1200 Minneapolis, MN 55402 Tel: (612) 339-4941 Fax: (612) 339-8354 Email: drafferty@michaudcooley.com www.michaudcooley.com Established 1946 Total MN Office: 105 Contact: Dean Rafferty, P.E. LEED AP, (612) 673-6802

Firm Principals

Dean A. Rafferty, PE, LEED AP Douglas C. Cooley, PE, LEED AP Joseph A. Tennyson

Michaud Cooley Erickson has provided consulting engineering services for over 60 years. With a team of 105, we are the largest consulting engineering firm in the region. In addition to mechanical and electrical engineering, we have specialists in fire protection, lighting design, low-voltage system design and commissioning. Our primary markets include corporate, health care, mission critical data centers, medical, manufacturing, retail and aviation.

United Hospital, St. Paul, MN; Metropolitan Airports Commission, MN; Macalester College, St. Paul, MN; Tier IV Data Center (for financial client), KS; General Mills JFB, Master Planning, MN; Musical Instrument Museum, Phoenix, AZ

REIGSTAD & ASSOCIATES, INC.

192 West 9th Street St. Paul, MN 55102 Tel- (651) 292-1123 Fax: (651) 292-9565 Email: greigstad@reigstad.com www.reigstad.com Established 1979 Total MN Office: 26 Other Office: Gulfnort, MS Total in Other Office: 1 Contact: Gordon H. Reigstad, (651) 292-1123

Firm Principals

Gordon H. Reigstad, PhD, PE, SE Charles R. Ashton, PE Yendranata, PE

Reigstad & Associates is a structural engineering firm providing engineering services throughout the United States. Our engineers and design professionals have the experience, qualifications and tools to provide cost-effective design and innovative solutions. Our Parking Consulting team provides full-service parking consulting, including functional/conceptual design, wayfinding design, complete documentation and project management. The Precast Engineering Department provides complete precast engineering and shop drawings required for producing precast components.

University of Minnesota Ridder Hockey Arena and Tennis Facility Minneapolis, MN; Maplewood Community Center, Maplewood, MN: RiverCentre (parking ramp restoration). St. Paul, MN; Epic Systems Corporation. Madison, WI; Westwood Church, Excelsior. MN: Mankato State University Student Athletic Facilities, Mankato, MN

SEBESTA BLOMBERG

2381 Rosegate Roseville, MN 55113 Tel: (651) 634-0775 Fax: (651) 634-7400 Email: info@sebesta.com www.sebesta.com Established 1994 Total in MN: 90 Other Offices, Arlington, Austin, Boston, Cedar Rapids, Chicago, Dallas, Fargo, Houston, West Palm Beach Contact: Randy Lorenz, (651) 634-7221

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Firm Principals

Tony R. Litton, PE, CEM Dan M. Tollman

Established in 1994, Sebesta Blomberg is a nationally-recognized provider of engineering and design services. As a company, we promote collaborative and sustainable solutions by providing engineering, commissioning client utility solutions, eco-management, energy performance, and owner's representation services. Our professional staff is linked across a network of offices throughout the country, including Boston, Chicago, Dallas, Minneapolis-St. Paul, and Washington, DC

NCSU Co-generation and Boiler Design, Raleigh, NC; Pentagon Wedge 4 and 5 Commissioning, Washington, DC; Embassy Commissioning, Overseas Locations; University of Minnesota CMRR Expansion, Minneapolis, MN; VA VISN 7 Retrocommissioning, AL, GA, SC; University of Iowa West Campus Power Plant, Iowa City, IA

STEEN ENGINEERING, INC.

5430 Douglas Drive North Crystal, MN 55429 Tel: (763) 585-6742 Fax: (763) 585-6757 Email: steen@steeneng.com www.steeneng.com Established 1993 Total in MN: 18 Contact: Eugene A. Striefel, (763) 235-4781

Firm Principals

Mark R. Brengman, PE Steven M. Youngs, PE Eugene A. Striefel

Steen Engineering provides mechanical and electrical engineering design from feasibility studies to preparing construction documents. Design experience includes corporate, municipal, medical, hospitality, institutional and retail. Providing HVAC, plumbing, fire protection, lighting, power distribution, life safety, automatic temperature control, energy and analysis and deficiency studies.

continued next column

St. Joseph - Carondelet, St. Paul, MN; Olmsted County Public Works Facility. Rochester, MN: North Country Health Services, Bemidji, MN; McDonalds Nationwide: Skilled Nursing/Assisted Living Projects, Nationwide; Frogtown Square, St. Paul, MN

STORK TWIN CITY TESTING

662 Cromwell Avenue St. Paul, MN 55114 Tel: (651) 645-3601 Fax: (651) 659-7348 Email: info.tct@us.stork.com www.storksmt.com Established 1938 Total MN: 80 Other Offices: Wausau, Des Moines Total in Other Offices: 12 Contact: Air McKee-Sexton, (651) 659-7327

Firm Principals

Michiel Graswinckel Tracy Toepper Steven Ruesink, PE John Stieben, PE

Stork Twin City Testing is a member of the Stork Materials Technology network of independent laboratories, providing materials testing, product testing, failure analysis and consulting worldwide. Stork TCT specializes in construction materials and geotechnical engineering, concrete, asphalt, and masonry testing, building product testing, fastener and anchor testing, acoustic evaluation, chemical analysis, nondestructive testing, windows and doors testing, and more.

Central Corridor Light Rail Project, St. Paul and Minneapolis, MN: Nobles Wind Project, Nobles County, Worthington, MN; Runway 17-35, Taxiway C-D, and 2008 Taxiway P Reconstruction Projects, Minneapolis/St. Paul International Airport, St. Paul, MN; Smith Avenue Transit Center, St. Paul, MN; 1-494 Design-build Reconstruction Phase II (TH 5 to I-394); Children's Tower and Parking Garage, University of Minnesota Children's Hospital - Fairview, Minneapolis, MN

STRUCTURAL DESIGN ASSOCIATES, INC.

10900 Noble Avenue North Champlin, MN 55316 Tel: (763) 560-5300 Fax: (763) 560-5400 Email: sda@sdaeng.com www.sdaeng.com Established 1989 Other MN Office: Brainerd Total in MN Offices: 6 Contact: Gregory J. Duerr, PE. (763) 560-5300

Firm Principals

Gregory I. Duerr, PE Mukhtar N. Giader, PE, SE

Structural Engineers providing design, construction documents, reports, and construction administration services for projects in the educational, industrial (manufacturing, warehousing, equipment supports, and repairs), commercial, municipal, medical, and renovation fields. Services provided to Architects, Owners, Contractors, Developers and others.

Rosedale Center (additions and renovations). Roseville, MN; Phalen Village Condominiums, St. Paul, MN; Woodbury-Eastridge High School, Woodbury, MN: Andersen Window Corporate Building #1, Bayport, MN; South Lake Minnetonka Public Safety Facilities, Shorewood, MN; CineMagic Atlantis Theatre, Burnsville, MN

TKDA

444 Cedar Street, Suite 1500
St. Paul, MN 55101-2140
Tel: (651) 292-4400
Fax: (651) 292-0083
Email: facilities@tkda.com
www.tkda.com
Established 1910
Total in MN Offices: 170
Other Offices: Chicago, Kansas City,
Irvine, Tampa
Total Other Offices: 18
Contact: Thomas S. Stoneburner, PE,
(651) 292-4485

Firm Principals

William E. Deitner, PE Thomas S. Stoneburner, PE Jack W. Griffin, PE Kevin R. Cullen, PE Christopher E. Rand, PE John W. Ahern, PE

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Nestie Infant Nutrition Plant (expansion), Eau Claire. WI: Amtrak Passenger Stations (improvements), Nationwide: MVTA Cedar Grove Bus Rapid Transit Park-and-Ride Facility, Eagan, MN: District Energy Integrated Solar Thermal Project, St. Paul, MN: Hennepin Technical College (boiler replacements), Brooklyn Park, MN: University of Minnesota Tandem Accelerator Building (demolition and site restoration), Minneapolis, MN

VAA, LLC (VAN SICKLE, ALLEN)

2955 Xenium Lane North, Suite 10
Plymouth, MN 55441
Tel: (763) 599-9100
Fax: (763) 559-6023
Email: info@vaaeng.com
www.vaaeng.com
Established 1978
Total MN Offices: 66
Other Office: Hutchinson, KS
Total Other Office: 3
Contact: Scott Stangeland, (763) 577-9132

Firm Principals

Keith W. Jacobson, PE, LEED AP Scott A. Stangeland, PE Kelsey F. Brown, PE, SE Mark D. Mielke, PE, LEED AP Jeffrey J. Schrock, PE, LEED AP David J. Galey, PE, LEED AP

VAA, LLC (Van Sickle, Allen) is committed to meeting the expectations of our clients, providing collaborative thinking, proactive communication, innovative solutions, and unparalleled service and support. We are engineering consultants providing structural and civil engineering services for commercial, corporate, retail, hospitality, education, civic, healthcare, wastewater, industrial, senior housing, and parking facilities.

Hazeltine National Golf Club. Chaska, MN; Target Corporation, Nationwide; Sydney Hall, Minneapolis, MN; American Hospital, Dubai, UAE; Shaller Family Sholom East Campus, St. Paul, MN; Isleta Casino and Resort Hotel/Convention Center, Albuquerque, NM

WENZEL ENGINEERING INC.

10100 Morgan Avenue South Bloomington, MN 55431 Tel: (952) 888-6516 Fax: (952) 888-2587 Email: info@wenzelengineering.com www.wenzelengineering.com Established 1990 Total MN Office: 6 Contact: Lowell Wenzel, (952) 888-6516

Firm Principals

Lowell E. Wenzel, PE Patricia A. Cole, PE Jeff A. Segar, PE

continued next column

Wenzel Engineering, Inc. is a structural engineering firm dedicated to understanding and meeting our clients' goals. Our experience includes new facilities, renovations, additions, and investigations for commercial, industrial, public, retail, educational, religious and healthcare clients.

Blue Lake Wastewater Treatment Plant Improvements: Twins Stadium, Minneapolis, MN; Gopher Stadium, Minneapolis, MN; McNamara Alumni Center (addition), Minneapolis, MN: Duluth Convention Center (addition), Duluth, MN: University of Minnesota (science teaching and student services building), Duluth, MN

WESTWOOD PROFESSIONAL SERVICES, INC.

7699 Anagram Drive
Eden Prairie, MN 55344
Tel: (952) 937-5150
Fax: (952) 937-5822
Email: wps@westwoodps.com
www.westwoodps.com
Established 1972
Other MN Offices: St. Cloud, Brainerd
Total in MN Offices: 105
Other Offices: Overland Park, Portland,
Dallas and Midland, Loveland
Total in Other Offices: 51
Contact: Daniel Parks, PE, (952) 906-7435

Firm Principals

Jason McCarty, PE
Dale Beckmann
Michele Caron, PE, LEED AP
Paul Schroeder, RLA, LEED AP
Miles Lindberg, RLA
Daniel Parks, PE

Westwood provides comprehensive sustainable solutions to Land and Energy development projects nationwide. Westwood's services include land surveying, aerial mapping, GIS, civil engineering, siting and land rights planning, environmental, cultural resources, landscape architecture, transportation engineering, visualization, construction management, and NPDES & SWPPP compliance.

Gateway Mixed-use Master Plan and AUAR, Brooklyn Park, MN; Presbyterian Homes, Spring Park, MN; Sydney Hall/Dinkydome, Minneapolis, MN; Whole Foods, Centennial Lakes, Edina, MN; Saint John's Solar Farm, St. Johns, MN; Minneapolis Convention Center Solar Farm, Minneapolis, MN

WIDSETH SMITH NOLTING

7804 Industrial Park Road
Baxter, MN 56401
Tel: (218) 829-5117
Fax: (218) 829-2517
www.wsn.us.com
Established 1975
Other MN Offices: Alexandria, Bemidji,
Crookston, Red Wing, Rochester
Total in MN Offices: 133
Other Offices: Grand Forks
Total in Other Offices: 9
Contact: Timothy Moe, PE, President,
(320) 762-8149

Firm Principals

Don Anderson, PE Neil Britton, PE Tim Schoonhoven, PE Dave Kildahl, PE Kevin Donnay, AIA Paul Richards, AIA

WSN is a fully-integrated engineering, architecture, land surveying, and environmental services firm. Our engineering group includes civil engineering, primarily municipal and water resources, structural, project specific, industrial, and bridges; and mechanical/electrical/ HVAC, plumbing and lighting. Our complete team of over 140 employees solves a variety of design and construction challenges from planning through compilation

Sanford Center Bemidji, MN; Todd County – Staples Old Highway 10 Turnback Project, Staples, MN; Crookston Sports Center, Crookston, MN; Bridge No. 60561 over the Red River, Polk County, MN; 2010 Street Reconstruction, Pine Island, MN; CSAH 20 Ahrens Hill Improvements and Vegetative Wall, Brainerd MN It takes a village to design, engineer, and construct a great building. So let's give credit where credit is due.

Science Teaching and Student Services Center

page 18

Location: Minneapolis, Minnesota

Client: University of Minnesota

Design architect: KPF

KPF design principal: William Pedersen, FAIA

KPF managing principals: Robert L. Cioppa, FAIA; Michael Greene, AIA

KPF design team leaders: Andrew Klare; Jerri Smith

KPF project manager: Phillip

KPF project team: Paul Bae; Britton Chambers; Michael Cluff; Jeremiah Geiman; Terry Hudak; Ephraim Lasar; Gregory Mell; Tae Woo

KPF environmental specialist: Tiffany **Broyles Yost**

Architect of record: HGA Architects and Engineers

HGA principal-in-charge: Rebecca Greco, AIA

HGA design leader: Bill Blanski, AIA

HGA project manager: Greg Haley, AIA

HGA project architect: Leigh Rolfshus, AIA

HGA project team: Greg Ramseth, AIA; Dan Yudchitz; Eric Amel; Gerhard Guth

Energy design assistance: The Weidt Group

Structural, mechanical, electrical, and civil engineer: HGA Architects and Engineers

Lighting design: HGA Architects and Engineers

Interior design: HGA Architects and Engineers

Landscape architect: HGA Architects and Engineers

Construction manager: McGough Construction

Development manager: Hines

Project manager: Chuck McNabney

Face brick and precast: Gage Brothers Concrete Products Inc.

Cabinetwork: Aaron Carlson Corporation (supply); McGough Construction (installation)

Flooring systems/materials: Architectural Sales (access flooring); Twin City Tile & Marble Company (terrazzo and resinous flooring): St. Paul Linoleum & Carpet Company (carpeting)

Window systems: Twin City Glass Contractors

Architectural metal panels: MG McGrath Inc.

Concrete work: McGough Construction

Millwork: Aaron Carlson Corporation (supply); McGough Construction (installation)

Ornamental metals: Metro Manufacturing Inc.

Gypsum assemblies: Custom Drywall Inc.

Photographer: Tim Griffith

Welcome Center

page 24

Location: Morris, Minnesota

Client: University of Minnesota Morris

Architect: Meyer, Scherer & Rockcastle, Ltd. (MS&R)

Principal-in-charge: Thomas Meyer, FAIA

Project lead designer: Josh Stowers, AIA

Project manager: Josh Stowers, AIA

Project architects: Michael Stickley; Aaron Wittkamper

Project team: Nuno Cruz; Megan Eckhoff; Traci Engel Lesneski; Greta Foster; Dan Vercruysse; Sean Wagner, AIA: Alana Zbaren

Energy modeling: Karges-Faulconbridge, Inc. (KFI)

Structural and civil engineer: BKBM

Mechanical and electrical engineer: KFI

Lighting design: MS&R

Interior design: MS&R

Construction manager: JE Dunn

Landscape architect: oslund.and.assoc.

Landscape project team: Thomas Oslund: Tadd Kruen

Cabinetwork: Ron's Cabinets

Flooring systems/materials:

Warmboard: Interface Flor

Window systems: Pella; National

Concrete work: Donlar Construction

Millwork: Ron's Cabinets

Photographer: Lara Swimmer

James I. Swenson Civil **Engineering Building**

page 28

Location: Duluth, Minnesota

Client: University of Minnesota Board of Regents

Design architect: Ross Barney Architects (RBA)

Principal-in-charge: Carol Ross Barney, FAIA

Project lead designer: Carol Ross Barney, FAIA

Project manager: Michael A. Ross, AIA Project architect: Kimberley Patten

RBA project team: Carol Ross Barney, FAIA; Michael A. Ross, AIA; Kimberley Patten; Jonathan D. Graves

Architect of record: SJA Architects

Principal-in-charge: Brian Morse, AIA

SJA project team: Brian Morse, AIA; Ron Stanius, AIA; Rick Stanius, AIA; Tari Rayala, AIA; Corey Beste; Ryan Weiss

Interior design: Ross Barney Architects

Landscape architect: oslund.and.assoc.

Landscape project team: Thomas Oslund; Tadd Kruen; Misa Inoue; Bret Wieseler

Civil engineer: MSA Professional Services

Structural engineer: MBJ Inc.

Mechanical and electrical engineer: Dunham

Energy modeling: Dunham

Lighting design: Dunham

Commissioning agent: Hallberg Engineering

Geotechnical engineering and special materials testing: American Engineering and Testing

General contractor: Stahl Construction

Cast-in-place concrete and flatwork: Kelleher Construction, Inc.

Precast wall panels and floor plank: Hanson Structural Precast

Concrete floor polishing: Terrazzo & Concrete Restoration

Masonry: Harbor City Masonry

Burnished masonry units: Premier Block Ultra

Structural steel: Duluth Steel Fabrication

Structural steel erection: Red Cedar Steel Erectors

Miscellaneous steel and railings: **Duluth Steel Fabrication**

Gantry cranes: Kone Cranes

Thermoplastic roofing and green roof: Peterson Bros. Roofing

Hot applied membrane waterproofing: Kremer and Davis

Light tubes: Solartube International, Inc. by Daylight Designs

Curtain wall and entrances: St. Germain's Glass

Reclaimed cyprus scuppers: Tekton Construction

Wood doors and hardware: Sell Hardware

Exterior bifold door: Wilson Doors Inc.

Operable walls: Hufcor

Raised floor system: TecCrete

Cabinetwork: St. Germain's Cabinet

Recycled concrete counters: IceStone

Wood casework: Dakota Burl veneer

Carpet tiles: Shaw Prisma Tiles

Floor and wall tile: DalTile

Cor-Ten steel panels, including rainscreen construction: Jamar Companies

Cor-Ten pedestrian bridge: Anderson Iron

Temperature controls: Siemens **Building Technologies**

Plumbing contractor: Shannon's Mechanical

Mechanical systems and displacement ventilation: Shannon's Mechanical

Fire suppression: A.G. O'Brien Co.

Electrical contractor and daylighting controls: API Electric Co.

Site work: Veit & Company

Taconite stone and gabions: Veit & Company Modular Gabion Systems

Site and roof plantings: Boreal Natives

Cor-Ten water retention basins: Jamar Companies

Photographer: Kate Joyce Studios

Bagley Nature Area Classroom Building

page 32

Location: Duluth, Minnesota

Owner: University of Minnesota Duluth

Owner's representatives: John Rashid, AIA; Kevin Claus; John Pastor; Tim

Architect: Salmela Architect

Principal-in-charge: David Salmela, FAIA

Bates; Ken Gilbertson

Project lead designer: David Salmela, FAIA

Project manager: Carly Coulson, AIA

Energy consultant: Conservation Technology

Structural engineer: MBJ Design engineer: Paul Johnson

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information on the products

Mechanical and electrical engineer: Gausman & Moore

Civil engineer: Salo Engineering Construction manager: University of Minnesota Duluth

Photographer: Paul Crosby

Wallin Medical **Biosciences Building**

page 34

Location: Minneapolis, Minnesota Client: University of Minnesota Architect: Perkins+Will

Managing principal: Jeff Ziebarth, AIA Design principal: David Dimond, AIA

Project manager: Bob Novak, AIA

Project architects: Ray Beets, FAIA; Gary Shaw, AIA; Tom Grimble, AIA; Pete Salmon, AIA; Chris Fischer; Trevor Dickie; Beth Latto; Jen Somers

Project team: Tom Beck, AIA; Alex Clinton; Edward Heinen; Anthony Paprocki; Matt Petermann

Energy design assistance: The Weidt Group

Wind studies: RWDI

Structural engineer: Ericksen Roed and Associates, Inc.

Mechanical and electrical engineer: Affiliated Engineers, Inc.

Lighting design: Affiliated

Engineers, Inc. Civil engineer: Pierce Pini &

Associates, Inc.

Interior design: Perkins+Will Landscape architect: Close

Landscape Architecture+ Kitchen design: Robert Rippe Associates Inc.

Construction manager: Kraus Anderson Construction Co.

Concrete work: Kelleher Construction, Inc.

Face brick: Gresser

Cast stone: Artstone

Mechanical contractor: Metropolitan Mechanical Contractors, Inc.

Electrical contractor: Hunt Electric

Window systems: Empirehouse, Inc.

Lab casework: Haldeman-Homme, Inc.

Photographers: Paul Crosby;

Lucie Marusin

Cassat and Memorial Residence Halls

page 38

Location: Northfield, Minnesota

Client: Carleton College

Architect: LHB

Principal-in-charge: Kim Bretheim, AIA

Project lead designer: Kim

Bretheim, AIA

Project manager: Maureen

Ness Colburn, AIA

Project team: Bill Niebur, AIA: Tu-Anh Bui, Assoc. AIA; Andy

Madson, Assoc. AIA Construction administrator:

Roger Purdy

Roof and waterproofing design: Inspec

Energy design assistance: The Weidt Group

Structural and civil engineer: LHB

Mechanical and electrical

engineer: LKPB

Lighting design: LKPB

Interior design: Isola Design

Construction manager: JE Dunn

Landscape architect: Spencer Jones

Landscape Architect

Face brick: Twin City Brick & Stone

Stone: Twin City Brick & Stone

Cabinetwork: ABC Kitchens

Flooring systems/materials: Schleis Floor Covering (resilient, tile, carpet); Schaefer Hardwood Floors (wood)

Window systems: Andersen Windows

Concrete work: Cemstone and Reward Wall (ICFs); County Materials (precast planks)

Roofing: Dalco

Mechanical: Egan

Electrical: Premier

Photographers: Peter Bastianelli-Kerze; Don Wong; Kim Bretheim, AIA

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	H. Robert Anderson		
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	Duluth Timber		
	Egan		
	Damon Farber Landscape Architects		
	Gausman & Moore — Mechanical and Electrical Engineers		
	Dennis J. Linder & Associates — Insurance & Risk Management		
	Marvin Windows and Doors		
	Meyer Borgman Johnson —		
	Structural Design & Engineering		

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LACE

Cities. Neighborhoods. Landscapes. The places we love, as seen through a photographer's eye.

> For its work on Westminster Presbyterian Church's Memorial Columbarium and Fellowship Courtyard, landscape architecture firm Coen + Partners, collaborating with Meyer, Scherer & Rockcastle, won 2009 design awards from the American Society of Landscape Architects and its Minnesota chapter.



"The copper fence that veils the Westminster Presbyterian Church courtyard in downtown Minneapolis features a pattern abstracted from an image found in the church's inspirational stained-glass windows. The two-walled perforated screen creates an inspirational effect of its own, thanks to a moiré shimmer that changes according to the passerby's speed and angle of view."—Photographer Paul Crosby