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What do these two building types have in common in Minnesota? They both point to the future—to increased urban density and high-tech education, respectively.

43 Look Again
By Jane King Hession
“Although they continue to be well used, they are not well loved,” writes Jane King Hession of a grouping of University of Minnesota West Bank buildings. “They are benignly ignored by most and reviled by some. But photographer Pete Sieger thought they merited a closer look—through the lens of his camera.”

ON THE COVER
The Nic on Fifth
Minneapolis, Minnesota

“The city’s pulse had slowed from rush hour to happy hour, and I was looking for an angle that captured the Nic’s strong urban integration,” says photographer Brandon Stengel. “As it turned out, the best spot from which to photograph this new hub of life and movement was an emptied parking garage across the street.”

Street Smart: The Nic on Fifth
page 24
By John Reinan

High Profile: LPM Apartments
page 28
By Joel Hoekstra

Modern Breakthrough: Bioscience and Health Careers Center
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For most people, the word architecture first brings to mind skyscrapers and high rises. But the cover of this issue is only the third Architecture MN cover this century to feature a tower: The 300-meter-high Kingdom Centre in Riyadh, Saudi Arabia, graced the front of our November/December 2004 issue, and the 17-story Reflections at Bloomington Central Station made our January/February 2007 cover—although the image we used was a close-up of the glass facade.

So it's a big deal that we highlight not one but two new towers in this issue: The Nicollet in downtown Minneapolis (page 24) and LPM Apartments (page 28).

Their openings signal both a new wave of high-rise construction in Minneapolis and a welcome filling-in and filling-out of the downtown skyline. Their many residents will help fuel the urban core's commercial and cultural growth. But what about their design impact? Do these buildings enrich the downtown environment?

"It's not attempting to be iconic," says ESG Architects' David Graham, FAIA, of the Nicollet in downtown Minneapolis. "It doesn't attempt to stand out or shout. I would say the building is a straightforward, high-quality design that is part of a fabric of downtown building massing." And yet the bottom of the Nicollet, with its glassy lobby and integration of the adjacent light-rail station, and the top of LPM, with its sophisticated curvilinear tower (shown here), do make strong statements about city-making design.

If you like two-story buildings and surface parking lots downtown, this is not the decade for you. But if you like downtown Minneapolis pulsing with activity every day and night—the way it does on Target Field game nights when the Twins are in the playoff hunt—get ready. Things are looking up.

Christopher Hudson
hudson@ata-mn.org
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Amy Goetzman is a Minneapolis freelance writer. She writes about the arts and culture and other inspiring things that happen in inspiring spaces.

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Frank Edgerton Martin is a veteran contributor to Architecture MN, Landscape Architecture, and other design journals. He specializes in historic landscape preservation and teaches in the Publications Design program at the University of Baltimore.

Angie Mckinley is program director at AIA Minnesota and lead planner of the organization’s annual Homes by Architects Tour.

John Reinan, a reporter for seven newspapers from Alaska to Florida, also spent nearly a decade marketing high-end architectural products.

Morgan Sheff is a St. Paul-based architectural photographer.

Pete Sieger (www.siegerarchphoto.com) is a Minneapolis architectural photographer.
BUDDING STARS

Want an early look at a few of the architects who'll be shaping Minnesota in the decades to come? Check out our film short on the five winners of the 2014 AIA Minnesota Young Architect Award, by Ryan Siemers. We sat down with Bob Ganser, AIA, Mamie Harvey, AIA, Karen Lu, AIA, Josh Stowers, AIA, and Pauv Thouk, AIA, at the Bachelor Farmer restaurant in Minneapolis' North Loop to hear about the people, places, and ideas that inspire them. We also asked which Hollywood actor could best play them in a movie (we couldn't resist a little levity).

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INSTAGRAM CONTEST

Stay tuned to @archmnmag throughout 2015 for Architecture MN Instagram contests. We'll post the first challenge in early January, the winner of which will be treated to an ice cream at Izzy's Ice Cream Kitchen in Minneapolis with the building's architect, David Salmela, FAIA. David's one of the nicest people we know, so we expect the winner will also get a tour of the actual kitchen.

Twin Cities photographers Corey Caffer, Morgan Sheff, and Peter VonDeLinde are making @archmnmag on Instagram our fastest-growing social media channel. Follow us for compelling architectural scenes, early looks at highly anticipated projects, and coverage of cultural events.

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Surly Brewing Company's highly anticipated destination brewery on the Minneapolis–St. Paul border is finally here. Take the Architecture MN tour in January.

When Surly Brewing Company founder Omar Ansari helped shepherd the "Surly bill" into Minnesota law in 2011, it opened the floodgates for local craft breweries to open brewpubs and taprooms all over the Twin Cities. The catalyst for proposing the change in legislation was Ansari's vision for a destination brewery. Three and a half years later, that dream is now a reality, with an eye-popping new complex designed by HGA Architects and Engineers. The brewery and beer hall open in late December, while the event center, restaurant, and beer garden are scheduled for openings in early 2015.

Surly and its architects are confident that the brewery will quickly take its place as the crown jewel of metro-area taprooms, offering visitors something no other brewpub experience can match: a memorable encounter with the Surly brand in a space where edgy, Brutalist design provides a suitable tableau for showcasing the brewing process.

With brews touting names such as Furious, Hell, Bender, and Darkness, the new brewery needed to embody a similarly coarse aesthetic. HGA's Steven Dwyer, AIA, gleaned design inspiration from the company's raw, hardcore identity, using industrial materials such as concrete, painted steel, and glass to play up the stark beauty of the brewing implements visible from many points inside the venue. Natural light and subtle placement of wood offer a warming counterpoint.

Conceptually, the design guides visitors through a series of visual experiences, with each space providing enticing glimpses of what lies beyond. "We used a theatrical approach," says Dwyer, "to provide a backdrop for multiple points of engagement." Come spring, the beer hall will spill out onto the garden with its intimate seating areas and stage.

For citizens of Surly Nation, the long wait has been rewarded with a brewery that truly raises the bar. Says Dwyer: "I think it's going to be one of the most significant cultural additions to the Twin Cities in a long time."

—Angie McKinley
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Profusions of Grandeur
A RICHLY WRITTEN AND ILLUSTRATED NEW VOLUME FROM LARRY MILLETT SURVEYS A BROAD RANGE OF HISTORICALLY SIGNIFICANT RESIDENCES IN MINNESOTA

MINNESOTA'S OWN: PRESERVING OUR GRAND HOMES
By Larry Millett, with photography by Matt Schmitt
Minnesota Historical Society Press, 2014

From Alexander Ramsey's Second Empire mansion in St. Paul to the Usonian-flavored Malcolm Willey House (1) by Frank Lloyd Wright in Minneapolis' Prospect Park, Minnesota's Own showcases 20 distinctive examples of Minnesota residential architecture, some of which are nationally significant. Included here are Cass Gilbert's exquisite William Lightner House on St. Paul's Summit Avenue and Purcell & Elmslie's E.S. Hoyt House in Red Wing—both among the finest residential work these designers ever produced—as well as the Colonial Revival George Draper Dayton House (2) in Worthington.

Architectural historian Larry Millett tells the stories of the families who built these houses, how they made their money (sometimes with great social benefit but quite often not), and how they worked with architects. The book is divided into four sections: Urban Mansions, Victorians, Modern Living, and Great Estates. The book benefits from watercolor floor plans and elevations by Minneapolis' MacDonald & Mack Architects. Together, the photos and plan views create a sense of walking through and around the house.

One could argue that this book is not really about historic preservation, as its subtitle suggests, and that its focus on high-style design for generally affluent families represents only a small (but highly publishable) piece of historic preservation today. Yet Millett's writing conveys a much more balanced view of history than the glamorous photos might alone. Each house chapter includes several sidebars providing broader historic context and a narrative of events related to the house and its builders. Some of Millett's background stories are quite dark—such as Alexander Ramsey's ruthless assault on Native Americans during the Dakota Wars, and Swan Turnblad's shady business dealings, which likely financed his Park Avenue castle (cover), now the American Swedish Institute.

The volume also notes important connections in the careers of leading architects, such as the fact that Cass Gilbert was a draftsman for the powerhouse New York office of McKim, Mead & White before returning to Minnesota, where he ultimately hired Edwin Lundie in a similar role. Many architects practicing today are familiar with Thorshov & Cerny, the seminal modern-era firm that designed the Harry A. Blackmun House (3) in Golden Valley. This 1950 split-level, along with the Moderne-style David Park House in Bemidji, are great modern surprises in this book.

Millett also helps us to see that designers like Lundie, who resisted modernism, could be extraordinarily creative within an historic palette. Lundie understood the syncopation of space, with large rooms connected by intimate halls and historic woodwork; he also knew how to detail the metal for a small switch plate. Understanding space and detail at many scales is what made him a great architect and not just a house builder—someone who could create beauty without needing to be grand.

"—Frank Edgerton Martin"
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"There's an education component in talking to people about architecture. Often, they simply don't understand the value of good design," says Perkins + Will associate Meredith Hayes Gordon, AIA. "It's about so much more than creating an aesthetically pleasing space—it's about making a positive impact on their culture."

It's even more critical to explain that return on investment when the client is a nonprofit. When every dollar that organization spends on its office space is a dollar that could be spent carrying out its mission, the design has to accomplish more than mere functionality. It needs to work for a cause.

In 2007-08, international architecture firm Perkins + Will committed to Public Architecture's 1% program (www.theonepercent.org), an initiative that challenges design firms to dedicate one percent of their billable hours to pro bono projects. When Perkins + Will's Minneapolis office heard that the Twin Cities-based Center for Victims of Torture (CVT) was about to lose its original headquarters, the firm offered its services.

The 30-year-old nonprofit had actually been split across three separate spaces—two administrative offices and a healing center. The original headquarters, located in a Victorian home on the University of Minnesota campus, needed to undergo costly upgrades or be vacated. CVT chose the latter route and, with Perkins + Will's assistance, consolidated its offices at the second administrative location—in a way that would help its staff work better.

"Perkins + Will was a true partner in this process," says CVT executive director Curt Goering. "They were deeply involved in early visioning workshops, programming, and property searches for a preferred location. They worked diligently to keep costs low. Partnering with Gardner Builders, they helped us connect with product manufacturers and subcontractors to solicit donations and reduce labor costs. I really had the impression that this was not just another project for them. I felt their deep and genuine personal engagement with the organization and the cause."

Perkins + Will dramatically changed the way CVT's employees lived in their space. Previously, the center had a tiny, dark kitchen in the basement. "We gave them a bigger, more central area to prepare and eat food, and to gather with coworkers for lunch or impromptu meetings," says Hayes Gordon. "That got them out of their 'silos' and into collaborative space where they could connect and share ideas."

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IT TAKES A VILLAGE

Architecture and engineering firm LHB inventories energy and water use, vehicle miles traveled, and waste generation for 27 Minnesota cities. The five-year effort, supported by ULI Minnesota, is called the Regional Indicators Initiative, and it allows the cities and other interested observers to compare consumption data in a variety of ways.

Measuring the energy and environmental performance of buildings, neighborhoods, and cities

2008 2009

BY DEL HOEKSTRA

Debate on the question of whether global warming can be linked to greenhouse-gas emissions is all but over, and the United States is among the largest producers of such gases—including methane, carbon dioxide, and hydrofluorocarbons. In 2010, the last year for which data is available, the U.S., which has less than 5 percent of the world’s population, accounted for nearly 16 percent of all greenhouse-gas emissions. In order to mitigate the effects of climate change at a regional scale, Minnesota passed the Next Generation Energy Act of 2007, which sets an aggressive target of reducing statewide emissions by 80 percent by 2050.

But how does that translate on a local level? How much do businesses in Eagan or residents in Edina contribute to that total? In search of answers to such questions, the Urban Land Institute (ULI) Minnesota and the Regional Council of Mayors partnered with architecture and engineering firm LHB—a leader in sustainable design in the Upper Midwest—to develop a tool that helps cities assess their annual emissions contribution.

In 2010, as part of a pilot program, LHB and Orange Environmental gathered information on three Twin Cities suburbs—Edina, St. Louis Park, and Falcon Heights—seeking to quantify each city’s total consumption levels in three areas that most significantly contribute to emissions—energy, waste, and travel—as well as water. Proponents hoped the measurements would allow participants to compare data and to learn from each other. Cities with high consumption levels might model themselves on cities with low consumption levels.

“It was really interesting,” says Rick Carter, FAIA, Commercial Focus leader at LHB. “For example, how is it that the average consumer in one city uses 38 gallons of water a day, while the average person in another city uses 106 gallons a day? Sometimes the differences were predictable. Sometimes they were shocking.”

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Above, from left to right: LHB’s Abby Meuser-Herr, Assoc. AIA, Maureen Colburn, AIA, Rick Carter, FAIA, Thea Holmberg-Johnson, Assoc. AIA, and Becky Alexander, Assoc. AIA, meet to review the latest Regional Indicators presentation materials.
The results can be eye-opening.
The color-coded chart below compares per-capita trends in five areas over a five-year period. A closer look at the data reveals some surprising findings:

ENERGY: Minnesota's largest city, Minneapolis, tops the list in terms of total energy consumption. But on a per-capita basis, it is among the smallest consumers of residential electricity, natural gas, and other forms of power, along with St. Paul, Richfield, Hopkins, and Falcon Heights.

WATER: Citizens in the Land of Sky Blue Waters were on the road to water conservation from 2008 to 2011, as consumption fell from 112 gallons per person per day to 101 gallons. But consumption jumped back up again in 2012, to 108 gallons per person.

VEHICLE MILES TRAVELED: Although the majority of cities saw little change in vehicle travel over the study period, Bloomington had a 14 percent decrease in per-capita vehicle miles traveled within the city boundary from 2009 to 2010, and it has maintained this lower level ever since.

WASTE: The typical resident in the cities participating in the Regional Indicators Initiative throws out about 7 pounds of solid waste per day. But residents in Washington County dispose of just 4.3 pounds on average. What are they doing differently?

EMISSIONS: Calculated per the U.S. ICLEI (www.icleiusa.org) Community Protocol, the largest contributor to greenhouse-gas emissions is energy, which is responsible for 68 percent of the total. Vehicle travel accounts for 25 percent, waste management only 1 percent.

"The data is a resource that becomes a tool for shaping a city's sustainability plan. It gives participating cities the ability to know how they're doing, and to pursue policies and practices and projects that can help achieve the outcomes that they want. Before Regional Indicators, they didn't have any of this."

- ULI Minnesota executive director Caren Dewar
Revitalizing cities and campuses with signature residential design.
Residential Towers

Young professionals and empty nesters are leading a residential migration to downtown Minneapolis and its immediate surroundings, an area that offers exceptional walkability, transit options, and commercial and cultural vitality. New amenity-rich high-rises are riding the wave.

THE NIC ON FIFTH features a pool deck with an outdoor bar and an unforgettable backdrop, page 24 >>

LPM APARTMENTS, page 28 >>
By John Reinan

STREET SMART
THE NIC ON FIFTH TOWER TAKES ITS SPOT IN THE DOWNTOWN MINNEAPOLIS SKYLINE WITH EXCEPTIONAL RESIDENTIAL AMENITIES AND VIEWS. BUT ITS BEST FEATURE MAY BE ITS GENEROUS EMBRACE OF THE STREET.

26 STORIES: The Nic on Fifth, clad in glass and cast stone, blends with the massing of the surrounding downtown buildings. The lobby and other connecting spaces were designed to knit the public and private realms together at the Twin Cities' busiest transit stop.

You'd expect Minneapolis' most important luxury apartment tower of the new millennium to grandly announce itself to the world. And at 26 stories, with a sleek exterior of glass and cast stone, the Nic on Fifth presents an elegant face. But this 253-unit building has loftier goals than attracting attention to itself. According to the architectural team that designed the project, the Nic on Fifth is most concerned with breathing new life into the city's core.

"It's not attempting to be iconic. It's not trying too hard," says David Graham, FAIA, principal-in-charge for Elness Swenson Graham (ESG) Architects. "It doesn't attempt to stand out or shout. I would say the building is a straightforward, high-quality design that is part of a fabric of downtown building massing."

The Nic on Fifth, says Graham, provides a lively connection to the street and to the transit line running down South Fifth Street. The building also intends to serve as an anchor for the northern end of Nicollet Mall, opening a path to future development linking downtown to the Mississippi River. The plan is already working; 4Marq, a new 30-story apartment tower, is under construction one block north.

"It's a building that sits nicely within its context," says Ed Gschneidner, AIA, president of Opus AE Group, the architect of record. "We tried very hard to make sure that the street is an active and engaged part of the project, to make it a comfortable building to walk by and through and around.

"The idea is that we want to have the things that go on at the street level be part of the city. We think that's part of the attractiveness of living downtown; people want that connectivity."

Transit was in the bones of the Nic on Fifth even before the first shovel of earth was turned. More than 65,000 people a day already passed through the transit station in front of the building— the single busiest station in the Twin Cities' growing light-rail system.
“IT ISN’T THE OBLIGATION OF URBAN RESIDENTIAL BUILDINGS TO COMPETE WITH ICONIC CIVIC BUILDINGS LIKE THE GUTHRIE THEATER OR THE WALKER ART CENTER,” SAYS DAVID GRAHAM. “THE ARCHITECTURE IS IMPORTANT. BUT CREATING VIBRANCY IN THE CITY IS MOST IMPORTANT.”

The station was designed by ESG’s Trace Jacques, AIA, who also served as project designer for the Nic on Fifth. The station is physically incorporated into the sidewalk streetscape in front of the building—the only station on the light-rail line with a built-in connection to the sidewalk, says Graham.

“The Fifth Street station provided an opportunity to do truly integrated, high-density residential and transit,” says Graham. “You’ve got this billion-dollar investment in transit. Our goal was to connect physically to that.” The Nic on Fifth also features a public escalator connecting the skyway to the street, a rarity in the city’s extensive skyway system.

The generous use of glass, especially at street level, resulted in a building that sits very lightly. “We wanted it to not be an imposing structure at ground level,” says Gschneider. At night, the lit building “becomes a little jewel on the street,” says Jacques.

Designers didn’t forget about the occupants, of course. Built with concrete floors and columns, the Nic on Fifth is a “100-year building” that provides solid, quiet comfort. Parking is on the third through fifth floors, creating a second “ground floor” on six. There, fitness spaces and a clubroom with an entertainment kitchen flow out onto an expansive pool deck and a green-roof area with a winding walking path—the latter helping earn the building LEED-Silver certification. Designed by Damon Farber Associates, the deck also boasts cabanas, fire pits, and an outdoor bar, but the top attraction is the jaw-dropping skyline environment.

“A lot of the investment was on the inside,” says Graham. “That’s part of the value proposition for people living downtown.”

The Nic on Fifth offers apartment sizes ranging from 560 (an alcove unit) to nearly 2,800 square feet (the largest of the 26 penthouse units, which rents for about $9,000 a month).

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LOBBY CONCIERGE DESK: As a luxury rental, the Nic on Fifth has the kind of amenities expected in that category—as well as unexpected touches like a rooftop dog walk.
COMMUNITY SPACES: People living downtown expect dazzling interior spaces, the Nic on Fifth designers say. Opening onto the spectacular roof deck, the community spaces offer a seamless transition between indoors and out.

LIVING SPACES: ESG Architects designed the unit interiors of this 100-year building. The goal: contemporary and clean, simple yet refined. Floor-to-ceiling windows maximize light and views.

FITNESS SPACES AND A CLUBROOM FLOW OUT ONTO AN EXPANSIVE POOL DECK AND A GREEN-ROOF AREA WITH A WINDING WALKING PATH—THE LATTER HELPING EARN THE BUILDING LEED-SILVER CERTIFICATION.

UP ON THE ROOF: The rooftop recreation area, on the sixth floor above the three-story parking garage, functions as a second ground level and gives the building “breathing space,” says ESG's David Graham, FAIA. It also serves as a visual amenity for the neighboring buildings that look down on it.
LPM APARTMENTS

Location:
Minneapolis, Minnesota

Client: IM Loring, LLC

Architect:
Loewenberg Architects, LLC
www.loewenberg.com

Principal-in-charge:
James R. Loewenberg, FAIA

Project lead designer:
David Lencioni, AIA

Interior designer:
Alliance
www.alliance.us

Alliance team: Ken Sheehan, AIA (project manager); Deb Gil (designer); Heather Rose-Dunning (designer)

Energy modeling:
dbHMS

Landscape architect:
Damon Farber Associates
damonfarber.com

General contractor:
McHugh/A&G Venture, LLC

Size: 584,000 square feet

Hard cost: $85.5 million

Completion: October 2014

At 36 stories, the elegantly curvilinear LPM Apartments soars above Loring Park. But its five-story podium, containing a parking garage and ground-level retail, matches the massing of neighboring buildings.
HIGH PROFILE

Minneapolis' historic Loring Park gets a sleek new residential tower—the city's TALLEST

By Joel Hoekstra
Loring Park has long welcomed fresh faces to Minneapolis.
Located just southwest of the city's downtown, the neighborhood that surrounds the Horace Cleveland–designed park is filled with coffee shops, restaurants, and small-scale apartment buildings. For decades, affordability and proximity to downtown have made Loring Park the first stop for young adults and many others moving into the city.

But a few years ago, when a Chicago-based apartment developer, Magellan Development Group, proposed building a luxury apartment tower in the neighborhood, many longtime residents were wary. What would this new high-rise look like? Would it dwarf the surrounding neighborhood? And—as the economy bottomed out—would the structure be able to draw residents who could afford the rent?

Answers to those questions gradually surfaced over the past year as the building grew floor by floor. At 36 stories, LPM Apartments is officially the tallest apartment tower in the downtown Minneapolis skyline. But its sleek, curved profile also makes it one of the loveliest structures, say some locals. And LPM's rental managers say they've had little difficulty filling the building, despite pricey rents and amenity packages. "People say it reminds them of buildings in Chicago or Miami," says Magellan project services manager Kara Pellaton. "They really like it."

The north side of the tower enjoys a panorama of downtown Minneapolis. The south side offers vistas of the Minneapolis Institute of Arts to the southeast and even a glimpse of Lake Calhoun in the distance. Nearly every room in the tower has astonishing views.
Top: Views through floor-to-ceiling glass steal the show in every unit. Left and above: The sixth-floor social spaces are every bit as comfortable as the apartments.
The tower, which opened this past fall, sits atop a five-story podium that contains a public parking garage and space for commercial build-outs. It’s sheathed in blue glass—a departure from the green-glass towers that have sprung up in so many cities, says Dave Lencioni, AIA, of Loewenberg Architects, the Chicago firm that designed LPM. (Loewenberg is affiliated with Magellan, which has a reputation for building elegantly designed residential structures. The developer’s signature project is Aqua, an 82-story tower with undulating exterior fins in downtown Chicago, conceived by architect Jeanne Gang, FAIA.)

The sculpted design might not maximize the rentable space available on the property (imagine a leaf-like shape—an oval pointed at both ends—set on a city block), but it does maximize the surrounding scenery. The north side of the tower enjoys panoramic views of downtown Minneapolis. The south side offers vistas of the Minneapolis Institute of Arts to the southeast and even a glimpse of Lake Calhoun in the distance. With the exception of the hallways that bisect the floor plate and the bathrooms in each unit, nearly every room in the tower has astonishing views.

LPM’s 354 units range in size from studios to three-bedrooms. The first renters can select from two finish packages that include such materials as white granite countertops, wood kitchen... 

"People say it reminds them of buildings in Chicago or Miami. They really like it."
—Magellan’s Kara Pellaton

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In the 21st century, college science buildings need to house more than just technology-powered laboratories and classrooms; they also need to offer inviting, light-filled common spaces for academic interaction and studying. Two new Twin Cities projects reflect advances in the field.
North Hennepin Community College dramatically updates its suburban campus with the addition of the crisply contemporary Bioscience and Health Careers Center.
North Hennepin Community College stands on the front line of higher education. Its 10,000 students hail largely from the northern suburb of Brooklyn Park, where the campus is located, and include immigrants from North Africa, Vietnam, and India, as well as many first-generation college students.

When a new Science Center opened in 2002, it immediately ran full-bore, says Elaina Bleifield, the two-year college’s dean of Science and Mathematics. “We had classes going from 8 A.M. to 10 P.M.,” she says. So planning began for an expansion.

After years of waiting for construction money, the $21.4 million, Perkins + Will–designed Bioscience and Health Careers Center opened in August 2014, housing nursing and bioscience classrooms, labs, and faculty spaces. Its long,
BIOSCIENCE AND HEALTH CAREERS CENTER

Location: Brooklyn Park, Minnesota
Client: North Hennepin Community College
Architect: Perkins + Will perkinswill.com
Principals: Jeff Ziebarth, AIA; Dave Dimond, AIA; Robert Novak, AIA
Designer and project architect: Paul Neuhaus, AIA
Interior designer: Heidi Costello

Energy modeling: Energy Design Assistance program led by the Weidt Group twgi.com
Landscape architects: Close Landscape Architecture+ Perkins + Will
Construction manager: Mortenson Construction
Size: 62,615 square feet
Cost: $21.4 million
Completion: August 2014
Photographer: Gaffer Photography (except where noted)

Above and right: A see-through fireplace and comfy chairs make the atrium an inviting place to study and interact with other students. Below: In the nursing simulation lab, robotically controlled mannequins show symptoms of disease.

"IT'S IMPORTANT THAT STUDENTS BEGIN TO SEE THEMSELVES AS SCIENTISTS."

Elaina Bleifield
Dean of Science and Mathematics
Pushing the long, narrow science building toward the street created space for an outdoor courtyard. The benches are etched with microscopic images.

glassy facade stretches along 85th Avenue North, heralding a new era for the formerly inward-looking campus. "The campus is ordered around a courtyard, almost like wagons around a campfire," says senior project architect Paul Neuhaus, AIA. "We wanted to reach out to the community."

And unlike the college's modest red-brick buildings, the two-story, 62,675-square-foot Bioscience and Health Careers Center embraces a classic modern aesthetic that elevates the educational environment. "This isn't a college. It's a university!" Neuhaus says a student exclaimed when he first walked in.

An almost block-long wall of glass framed in silver metal is cantilevered over an unadorned brick base. The materials are familiar to the campus, but their use is more compelling. "They asked us to match the existing brick or find a compatible one," says Neuhaus. "We chose a longer Norman brick to emphasize the horizontality."

Inside, similarly refined brushstrokes create an expansive character. Glass-walled corridors are wider and have higher ceilings than those in the older buildings. Polished concrete floors and exposed concrete columns are complemented with warm, white-oak acoustical panels and benches.

A monitor brings natural light into the atrium, a two-level gathering space where students and faculty can meet, study, drink coffee, and enjoy the warmth of a double-sided, see-through fireplace. (Places to hang out are especially important at a community college, where nobody has a dorm room, says Neuhaus. "What are you going to do when you have three hours between classes?".) Even the classrooms and labs have clerestory windows to bring in daylight. "More natural light is always good!" says Kevin Dorn, who was teaching a DNA lab.

The classrooms and labs sport the latest learning technology. The two lecture rooms are equipped with video-capture technology so lectures can be filmed and shown elsewhere. Three meeting rooms feature collaborative technology where five people
The University of Minnesota's new physics building expands the possibilities for research into nanotechnology, particle physics, and more.

"Science these days is all centered on the exchange of information."
—Ron Poling, head of the School of Physics and Astronomy
NEW FRONTIERS

By Joel Hoekstra

When the University of Minnesota's Tate Laboratory of Physics opened in the early 1930s, the observatory dome that topped the red-brick building signaled the occupants' fascination with gigantic things—the sun, other planets, the galaxy. Scientists were reaching for the stars.

Today, physicists are increasingly interested in tiny things. Nanoscience—the study of ultra-small structures and devices—has further expanded an academic realm that includes cosmology and astrophysics, condensed matter and materials physics, particle physics, nuclear physics, and much more. And as activity in each of these subfields has grown, Tate Hall has strained to accommodate their diverse and complex needs.

So when the gleaming new 144,000-square-foot Physics and Nanotechnology Building opened in late 2013, faculty and staff were both relieved and impressed. With a glass-and-recessed-red-brick exterior and a four-story central atrium that allows light into the core of the building, the structure is visually striking, says department head Ron Poling. But more important, the $70 million project will help attract outstanding faculty, bright grad students, and research...
The bright atrium with its neutral finishes and the adjacent interaction spaces (below) highlight the surrounding campus architecture.
The building is visually striking, says Ron Poling. But more important, the $70 million project will help attract outstanding faculty, bright grad students, and research dollars to Minnesota.

Below: The atrium's 3M Lobby allows generous views into the expansive clean room through amber-tinted glass.

dollars to Minnesota. "Just to have spaces that are designed for the programs of 2014 rather than the programs of the 1930s is an enormous advantage," says Poling.

The building was designed by a team of two architecture firms—Minneapolis-based Alliaice and the Seattle office of ZGF Architects—that worked closely with university researchers and technical consultants to develop spaces that were both flexible and state-of-the-art. Every lab, for example, has multiple inputs for handling basic services such as water, power, data, and gases.

But certain spaces were also configured to accommodate more specialized experiments: Some labs have shields against electromagnetic radiation, or dark rooms that allow for optical experiments, or pits where equipment can be installed below floor level. Labs dedicated to cryogenics research—in which materials are super-cooled by the transformation of liquid helium into gas—are connected to a gas-recycling system that allows the element to be collected, compressed, and used again.

"Each lab has its own requirements, which is part of what made the project so complex," says Alliaice project designer and principal Mamie Harvey, AIA. "At the same time, we had to make things flexible enough that the spaces wouldn't be obsolete or unusable in 10 to 15 years."

Two spaces in the new building significantly expand the possibilities for physics research at the U: a state-of-the-art, 10,000-square-foot clean room for nanotechnology research, and a 32-foot-tall high bay with a crane and loading dock. The clean room, part of the U's Minnesota Nano Center, serves the physics department as well as the Academic Health Center and the College of Science and Engineering. Amber-tinted windows permit building visitors to view research activities in the room (the
coloring prevents possible light damage), while mechanicals above the space keep it sterile.

"It's highly unusual to have that degree of transparency in a clean room because of the kind of research that happens inside," says ZGF project manager Taka Soga. "But it was incredibly important to the university researchers that the space be part of the natural circulation—the ebb and flow—of the building. They believe that visibility is the best way to tell the story of their research."

Down the hall, the 3,000-square-foot high-bay laboratory is large enough to accommodate the assembly of balloon payloads or satellite

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"To have spaces that are designed for the programs of 2014 is an enormous advantage."
—Ron Poling, head of the School of Physics and Astronomy.

Minneapolis-based Alliance and the Seattle office of ZGF Architects worked closely with university researchers and technical consultants to develop spaces that were both flexible and state-of-the-art.
LOOK AGAIN

Pete Sieger's striking black-and-white images of the University of Minnesota's West Bank campus invite a fresh look at unheralded midcentury architecture.
"We tend to see things without really seeing them," says architectural photographer Pete Sieger. "Most of us move through our daily lives without stopping to reflect on the quality of our environment."

Case in point: On any given day, scores of people walk, run, or bike through the heart of the University of Minnesota's West Bank campus. One heavily traveled route winds its way past...
four of the earliest buildings constructed on the new campus when the U jumped the Mississippi River in the early 1960s. The brick facades of the 12-story Walter W. Heller Hall (1961) and its near twin, the 15-story Social Sciences Building (1962), both designed by Cerny Associates, are characterized by a rigidly (some might say relentlessly) rhythmic pattern of windows.

To the south stands the enormous bulk of the O. Meredith Wilson Library (1968, also by Cerny Associates), the largest of the university's 13 libraries. Collectively, the three structures dwarf Blegen Hall (1962), a relatively diminutive four-story building by Setter Leach & Lindstrom, which is linked to Heller Hall and Social Sciences via triple-decker, glass-walled skyways. Although the four buildings continue to be well used, they are not well loved. It's unlikely they would make anyone's list of the best University of Minnesota buildings. They are benignly ignored by most and

"I liked the fenestration, which in a way seemed like a throwback to what Mies [van de Rohe] was doing with glass and steel, in terms of proportion and rhythm," says Sieger.
While Sieger acknowledges that the Frank Gehry–designed Weisman Art Museum brought "spice and variety" to a campus previously dominated by "brick boxes," he favors a balance between architectural superstars and stalwart citizens. "There is a place for modest buildings that have stood the test of time."

Sieger was familiar with the buildings, but he hadn't given them much serious thought himself until recently. As he traveled back and forth to the U along Washington Avenue this past summer, the Heller and Social Sciences towers caught his eye. "I liked the fenestration, which in a way seemed like a throwback to what Mies [van de Rohe] was doing with glass and steel, in terms of proportion and rhythm," he says.

The massing of Wilson Library reminded him of something else: the imposing forms of Brutalism, an architectural movement that prevailed when Sieger was an architecture student at the U in the late 1960s and early 1970s. It struck him that the buildings—in their variety, contrast, and balance—would make a compelling photographic study. "Photographs can go beneath the surface of what one might casually see," he says.

His artistic vision for the study was inspired by the black-and-white images of noted architectural photographers Ezra Stoller and Balthazar Korab of now iconic midcentury buildings. "Black-and-

>> continued on page 55
Let's Get Straight to the Point

Glazed ceramic tile offers infinite design possibilities for office and reception areas. Need multiple colors? Done. Need durable flooring? Done. Need a classy reception desk with laser cut porcelain glass tiles? Done. When you've got ideas, ceramic tile has answers.

Irregular mosaic glass tile and stone inserts provide a colorful accent to solid tile surfaces on the WTG and Carciofini reception counter. Easy to maintain, easy to clean and a nice complement to the terrazzo and stone floor.

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Mission Possible

<< continued from page 15

Not surprisingly, that space was an immediate hit. It mixes the high ceilings and brick walls of a classic historic warehouse space with clean, contemporary furnishings and a prep kitchen and bar. It feels like a hip urban coffeehouse. But changes to the workspaces were a more difficult sell.

Perkins + Will looked at workspace trends in the corporate world and transferred them to the nonprofit. Instead of high-walled cubicles flanked by private windowed offices, the new CVT headquarters would have a centralized bank of smaller, low-walled workspaces. Conference rooms and open community space on the perimeter democratized the windows. Daylight could now reach everybody in the organization, energizing the environment.

“When you talk about taking away private space to gain community space, that’s a big change for some people,” says Hayes Gordon. “I won’t say everyone was ready to buy in right away. But we asked them to trust us, and a month in they told us they wouldn’t have it any other way.

“By including high-quality public space, everyone feels more valued,” she continues. “That’s part of what it takes to attract and retain good employees. Now they can move around the space to access technology, meet with coworkers, welcome donors, or just get away from their desk for a while.”

One person who didn’t need convincing was Goering. “He wanted the organization to be flat, not hierarchical,” says Hayes Gordon. “He said, ‘I want to be accessible. Put me in a workspace, not an office.’”

Education goes two ways. Of course, and the architects say they learned new things about efficient design, site procurement, and cost-reduction strategies. They also learned about the mission of the Center for Victims of Torture.

“I attended a tour of the healing center to better understand what the organization does, and I came in completely unprepared for what I was going to see and hear,” says Hayes Gordon. “I couldn’t contain my emotions. There are so many people out there who have experienced this horrifying thing called torture. Helping CVT staff do their job better was incredibly powerful and will impact us for a long time. We got just as much from this experience as they did.”

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It Takes a Village

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Today, 27 cities are involved in the Regional Indicators Initiative, representing more than 50 percent of the metro area’s population and 33 percent of the state’s total population. Data is gathered from a wide range of sources, including utilities and state, county, and city governments. Anyone can access the data on the Regional Indicators website (regionalindicators.mn.uli.org), and the information can be sliced and diced in a number of different ways, including per-capita use and by commercial and residential consumption. LHB’s Carter says the tool currently gathers information on only Minnesota cities, but it could ultimately be used at a national or even global scale.

Meanwhile, interest in participation among Minnesota cities continues to climb. And Carter says the snapshots provided by Regional Indicators regularly remind him that the decisions made by architects and their clients have lasting effects when it comes to emissions—shaping energy usage, as well as travel habits and waste production, for years and even decades to come. “It shows that the work we do every day has an impact.” AMN

Street Smart

<< continued from page 26

The majority of the apartments enjoy a balcony, and three have a larger terrace or terraces. The target demographic is affluent empty nesters looking for a true urban living experience. Not bad for a building that rose on one of the empty surface parking lots that have blighted that part of downtown for decades.

“It sits right there at a critical point in downtown Minneapolis,” says Gschneidner. “It’s providing a level of density that starts to make sense for a city that’s encouraging urban living.”

The developer, Opus Development Company, isn’t done. It expects to start work within a year on another apartment tower a block away, on the site of the former Sheraton-Ritz Hotel, says Gschneidner.

“It isn’t the obligation of urban residential buildings to compete with iconic civic buildings like the Guthrie Theater or the Walker Art Center,” says Graham. “The architecture is important. But creating vibrancy in the city is most important.” AMN
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High Profile
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cabinets with steel pulls, wood-plank flooring, and—in the bath—white subway tile and marble vanity tops. All units have nine-foot ceilings and operable windows. The majority of apartments have balconies.

But it’s the public spaces and amenities that tend to impress prospective tenants the most. Beyond LPM’s front lobby is a business center with conference rooms available for impromptu meetings and computer kiosks for checking email. (Free Wi-Fi is available in all public spaces, too, of course.) The first floor also features a bicycle workshop and a space where you can walk (or even wash) your dog. A music room—where residents can rock out without irritating the neighbors—will soon be added.

The public interiors, designed by Minneapolis-based Alliance, have a warm, contemporary Scandinavian vibe, from a large felt sculpture in the elevator to bark veneer on cabinets in the party room. “We wanted to use natural materials but in a more contemporary way,” says Alliance principal Ken Sheehan, AIA.

The sixth floor, perched atop the podium, houses a fitness center, an indoor lap pool, sauna and steam rooms, and a variety of gathering spaces where residents and their guests can eat and drink, shoot pool, or play video games. Outside, on the deck, are grilling stations, fire pits with lounge seating, and a pool and hot tub. Yoga enthusiasts can practice their downward dogs on soft outdoor flooring on the podium’s north side.

Pellaton says Magellan is working toward LEED-Silver certification and is collaborating with a local nonprofit to make the entire neighborhood LEED-certified—a move that may soften the attitudes of any Loring Park residents who remain skeptical about the building’s impact. “We want to be part of the neighborhood,” says Pellaton. “We want this to be a great area to live.” AMN
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Modern Breakthrough
<< continued from page 37

can link to one screen. A tele-presence classroom is designed so students can interact with a class or lecturer located in another location.

Perhaps most impressive is the nursing lab, which is set up like a hospital ward, with mannequins robotically controlled to exhibit symptoms of a disease, giving students an experience that mirrors the jobs they’re training for. What goes on in the lab, in three single hospital simulation rooms, and in a separate home-health simulation lab is videotaped for students to watch and learn from later in debriefing rooms.

The chemistry and biology labs on the second floor are equally state-of-the-art, with a generous prep space behind them and a display window along the hallway to showcase the work going on inside. The building even includes a Bioscience Research Lab in which students can conduct their own research—a rarity at a community college.

"It’s important that students begin to see themselves as scientists," says Bleifeld, who is thrilled with the building. "It’s wonderful to have a space that is comfortable and cozy, where students and faculty can work together. That’s what we hoped for." AMN

New Frontiers
<< continued from page 42

equipment. Instruments can be built and tested in the lab, then rolled out onto a loading dock for their eventual transport to space, the poles, or the deep ocean. Aeronautics and astronomy researchers are able to sight their instrumentation through the high bay’s tall clerestory windows.

The new facility also contains several conference rooms with video screens and computer hookups for interactive collaborations with researchers off campus and around the world. Global conversations and cooperation are vital to the advancement of physics, notes Poling: “Science these days is all centered on the exchange of information.”

Poling says he’s heard nothing but praise for the new facility, and that the opening went more smoothly than the launch of similar facilities elsewhere. Already, buzz about the building’s capabilities has attracted grants and grad students. “Since we opened,” says Poling, “the level of enthusiasm for the building has only grown.” AMN
Look Again

white adds a timelessness to whatever you are shooting," says Sieger. In the absence of color, the image tends to be "less literal and more abstract, and I believe abstraction is a superior way of photographically representing design elements in architecture," he adds. Unlike Stoller and Korab, Sieger shot the original images in color and later digitally converted them to black-and-white.

Aesthetically, Sieger favors high-contrast images because "contrast is an effective way of modeling texture, form, and space." To that end, when shooting the buildings, he used a polarizing filter to darken the sky and heighten contrast between it and the tonally lighter structures. According to Sieger, that juxtaposition of dark and light "enhances the representation of a building's form . . . in a way that places the focus squarely on the architecture itself."

He was also intrigued by the idea of starting with "vignettes" or close-ups and progressively moving to wider shots of the buildings—a technique he recently put to the test in Barcelona ("Barcelona in Focus," November/December 2013 issue). "There's more drama in seeing pieces of the whole before revealing the whole. It's like solving a mystery," he says.

Although Sieger had no preservation agenda in mind when he photographed the buildings, his powerful and provocative images urge a second look at the underappreciated structures, which he argues are "competently designed and capably done." While he acknowledges that the Frank Gehry-designed Weisman Art Museum (1993) brought "spice and variety" to a campus previously dominated by "brick boxes," Sieger favors a balance between architectural superheroes and stalwart citizens. "There is a place for modest buildings that have stood the test of time," he notes.

There is also a place for imagery that helps us to better understand our surroundings. By nature of its focused view, "architectural photography offers another way of seeing and interpreting the world around us," says Sieger. He hopes his photographs will encourage viewers to slow down, step back, and look more closely at the landscapes of their lives. AMN
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Minneapolis Central Library (design/ commissioning), Minneapolis, MN; Grinnell College New Campus Center (design and LEED certification review), Grinnell, IA; MCF Fairbault Campus (energy infrastructure/ renovation/new buildings), Fairbault, MN; Unisys NAEC Data Center (design/ commissioning), Eagan, MN; Macalaster College (athletic/recreation center), St. Paul, MN; Bethel University Commons, Arden Hills, MN; Eli Lilly Corporate Data Center, Indianapolis, IN.
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2550 University Avenue West, Suite 201-S
St. Paul, MN 55114
Tel: (651) 251-7570
Fax: (651) 251-7578
Email: info@eraeng.com
www.eraeng.com
Established: 1984
Total in MN Office: 62
Other Office: Eau Claire, WI
Total in Other Office: 6
Contact: Kent Larson, (651) 414-6166

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

ERA (Erickson Roed & Associates) provides full service structural engineering for a broad range of facility types. We pride ourselves on being a team of knowledgeable professionals, working toward the common goal of providing our clients affordable structures that stand the test of time.

Representative Projects
Target Center Renovation, Minneapolis, MN; 7200 France Ave, Edina, MN; St. Paul Saints Stadium (Lowertown Ballpark), St. Paul, MN; Mall of America Phase 1C, Bloomington, MN; 602 Condominiums, Minneapolis, MN; Downtown East Residential Apartments and Office Buildings, Minneapolis, MN; Be the Match Headquarters (NMDP), Minneapolis, MN; Life Time Fitness Projects, Nationwide.

GAUSMAN & MOORE ASSOCIATES, INC.

1700 Highway 36 West,
700 Rosedale Tower
Roseville, MN 55113
Tel: (651) 639-9606
Fax: (651) 639-9618
Email: gmmail@gausman.com
www.gausman.com
Established: 1935
Total in MN Office: 20
Other Offices: Duluth, MN; Santa Clarita, CA
Total in Other Offices: 19
Contact: Mark Leutgeb, (651) 604-3141

Firm Principals
Edward L. Studinski, PE, LEED AP
James D. Manning III, PE, LEED AP
Dave Blumle, PE, LEED AP
Paul Haslach, PE, FPE, LEED AP

A full-service mechanical and electrical consulting firm, Gausman & Moore provides design services for corporate, government, health care, industrial, institutional, and retail clients throughout the United States. Our specialized services include: sustainable design, commissioning, fire protection and smoke control, energy audits, forensic studies, arc flash studies, and mission critical power systems design. Our staff includes 12 licensed Professional Engineers and 13 LEED Accredited Professionals. We are committed to innovative, timely, and sustainable solutions for your building needs.

Representative Projects
Maurices Headquarters, Duluth, MN; Eti Smart Microgrid, Commerce, CA; Habitat for Humanity Office, St. Paul, MN; Mosaic East Building, Minneapolis, MN; Design Within Reach, Nationwide; MnSCU RCTC Precinct, Rochester, MN; St. Luke’s Hospital MOB Generators, Duluth, MN; DNR Lake Vermillion State Park Buildings, Soudan, MN.

HGA ARCHITECTS AND ENGINEERS

420 5th Street North, Ste. 100
Minneapolis, MN 55401
Tel: (612) 758-4000
Fax: (612) 758-4199
Email: info@hga.com
www.hga.com
Year Established 1953
Total in MN Offices: 332
Other Offices: Rochester, MN; Milwaukee, WI; Sacramento, Los Angeles, San Francisco, CA; Washington DC
Total in Other Offices: 278
Contact: Julie Luers, Dir. Mkgt.
(612) 758-4613

Firm Principals
Paul Asp, PE, SE LEED AP (Structural)
Chuck Cappellin, PE, LEED AP (Science, Technology/Mfg) Producing/Construction
Ehsan Dibashi (Energy & Infrastructure)
Leighton Deer, PE, LEED AP (Sustainability)
Jeff Harris, PE, LEED AP (Mechanical)
Leigh Harrison, PE, LEED AP (Electrical)
Kenny Horns, PE, LEED AP (Civil)
Yan Shagalov, PE (Structural)

HGA offers Civil, Electrical, Mechanical, Structural and Industrial engineering services. HGA also has specialists in commissioning, clean environments, central plants, district energy, renewable energy production, energy master planning, energy saving, utility infrastructure, facility assessments, telecommunications systems, lighting and sustainable design. Our engineering teams work collaboratively with owners, stakeholders, contractors, and architects to create comprehensive solutions that meet the needs of each project. With contemporary knowledge and extensive experience we deliver reliable solutions that achieve operational, aesthetic and sustainability goals with responsive, cost-effective service.

Representative Projects
B.H. Whipple Federal Building Renovation, Ft. Snelling, MN; Dakota County Whitetail Regional Park, Empire Township, MN; Fairview Southdale Hospital, Emergency Center Expansion, Edina, MN; Emerson Facility Renovation and Metal Sensor Manufacturing, Eden Prairie, MN; Minnesota State Capital Renovation, St. Paul, MN; Surly Destination Brewery, Minneapolis, MN; University of Minnesota, Northrup Auditorium Renovation, Minneapolis, MN; Department of Veterans Affairs, Biomass Cogeneration Plant, Battle Creek, MI.

KIMLEY-HORN

2550 University Avenue West, Ste. 238N
St. Paul, MN 55114
Tel: (651) 645-4197
Email: tom.lincoln@kimley-horn.com
www.kimley-horn.com
Established 1967
Total in MN Office: 114
Other Offices: 62 Offices Nationwide
Total in Other Offices: 2,284
Contact: Thomas J. Lincoln, (651) 643-0453

Firm Principals
Thomas Lincoln, PE
Will Matzek, PE
Paul Danielson, PE
Brian Smalkowski, PE, AICP, PTP, PTDE
Jon Horn, PE
Jeanne Witzig, AICP
Chris Leverett, PE
Michael Lamb, AICP

Kimley-Horn is a national consulting firm with a growing presence with nearly 120 professionals in its Twin Cities and Rochester offices, serving public and private sector clients across the Midwest. Kimley-Horn’s capabilities encompass all phases of a project from early planning and due diligence through construction phase services. The firm effectively integrates planning, transportation planning, traffic engineering, transit design, civil engineering, structural engineering, and environmental services to efficiently meet the needs of our clients.

Representative Projects
MSP International Airport Transportation Consultant, Minneapolis, MN; TCAAP Site Infrastructure Design, Airden Hills, MN; Heywood Campus Master Plan, Minneapolis, MN; Penn and America, Bloomington, MN; Bloomington Central Station, Bloomington, MN; Carlson Island Development, Minneapolis, MN; Anytime Fitness Headquarters, Woodbury, MN; West End Residential, St. Louis Park, MN.

ARCHITECTURE MN January/February 2015
KRECH, O'BRIEN, MUELLER + ASSOCIATES

KRECH, O'BRIEN, MUELLER & ASSOCIATES, INC.

615 Cahill Avenue
Inver Grove Heights, MN 55078
Tel: (651) 451-4605
www.komainc.com
Established 1985

Firm Principals
James H. Krech, PE
Brady R. Mueller, AIA, CID
Matthew J. Van Hoof, PE
Marc R. Dubois, AIA
Brian L. Riley
Stephen T. Iaria, AIA
Michael J. Lisowski, PE

Krech, O'Brien, Mueller + Associates, Inc. offers comprehensive architectural, structural engineering and interior design services. We create inspiring, functional, people-oriented structures and spaces to meet the varied needs of a broad spectrum of organizations and industries.

Representative Projects
Fairview Chisago Lakes Clinic, Chisago, MN; Mall of America South East Court Remodel, Bloomington, MN; Minnesota Eye, Minnetonka, MN; Longhorn Steakhouse, various locations; Cophet Resource Corp., Eagan, MN; Sanimax, South St. Paul, MN

LARSON ENGINEERING, INC.

3524 Labore Road
White Bear Lake, MN 55110
Tel: (651) 481-9120
Fax: (651) 481-9201
Email: info@larsonengr.com
www.larsonengr.com
Established 1979

Total in MN Office: 45
Other Offices: Scottsdale, AZ; Denver, CO; Norcross, GA; Seattle, WA; Des Moines, IA; St. Cloud, MN; St. Louis, MO; Omaha, NE; Bismarck, ND; Appleton & West Allis, WI
In Other Offices 205
Contact: Kesh Ramdurlar, PE (651) 481-9120

Firm Principals
Lee Cranquist, SE, PE
Kesh Ramdurlar, PE
Henry Voth, SE, PE

Celebrating 35 years of business, Larson Engineering specializes in structural and civil services. This includes new designs and remodels for industrial, commercial, retail, religious and residential facilities; as well as, materials handling systems and plant expansions. We provide site design, pavement maintenance management programs, rehabilitation services, and athletic facility engineering services. We also excel in exterior cladding, curtain and masonry wall renovation, and lifeline anchor inspections.

Representative Projects
NAC Mechanical & Electrical Services, Vadnais Heights, MN; Confidential Medical Company, Upper Midwest; Becker High School, Becker, MN; United South Central school district k-12 facility, Wells, MN; West Health, Plymouth, MN; Foundry Square, San Francisco, CA; 3M Building 280, Maplewood, MN; 910 Medical Building, Minneapolis, MN

LHB, INC.

21 West Superior Street, Suite 500
Duluth, MN 55802
Tel: (218) 727-8446
Fax: (218) 727-8456
Email: info@lhbcorp.com
www.lhbcorp.com
Established 1966
Total in MN Office: 244
Other Office: Superior, WI
Total in Other Office: 6
Contact: Joelyn Cum, (218) 279-2240

Firm Principals
Bill Bennett, PE
Dave Sheedy, PE, LEED AP
Dan Healt, PE
Joseph Litman, PE
Tom Cook, PE
Michael Fischer, AIA, LEED AP
Rick Carter, FAIA, LEED Fellow
Kevin Holm, AIA, LEED AP

LHB is a multi-disciplinary engineering, architecture, and planning firm known for our design leadership and loyalty to clients. LHB goes beyond good intentions and focuses on measurable performance. We are experts in public works, pipeline, industrial, housing, healthcare, government, education, and commercial design. LHB is dedicated to being environmentally responsible, reducing long term operating costs, and improving the quality of life for our clients.

Representative Projects
Midway Stadium Site Redevelopment, St. Paul Port Authority, St. Paul, MN; Third Street Parking Structure, Essentia Health, Duluth, MN; Superior Street Reconstruction, Duluth, MN; MnPower Boswell Energy Center Retrofit Critical Lifts, Boldt/Jamar, Cohasset, MN; L13 Pump Station, Enbridge Energy, Superior, WI; Knollwood Central Mail Redevelopment, Rouse Properties, St. Louis Park, MN; UMD Cina Hall and Tweed Museum of Art HVAC Upgrades, Duluth, MN; Covanta HERC Inventory Building Addition, Minneapolis, MN

LKPB ENGINEERS, INC.

1935 West County Road B2, Suite 300
St. Paul, MN 55113
Tel: (651) 533-1223
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Established 1969 Total in MN Office: 37
Contact: Karla Sampson (651) 288-6110

Firm Principals
John M. Killeen, PE
Gayland J. Bender, PE
Michael A. Westemeier, PE
Allen V. Theisen, PE
John Costello, PE

LKPB Engineers provides mechanical and electrical design consulting services using the most current, proven technology blended with our commitment to sustainable design. Our full-service firm also offers specialties such as energy modeling, custom lighting, commissioning, and computational fluid dynamics. We give our clients comfortable, healthy buildings that operate efficiently, are easy to maintain and have reduced long-term costs. LKPB offers superior expertise in the education, healthcare, corporate, commercial, historical, recreational and government markets.

Representative Projects
Anoka Ramsey Community College Bioscience Addition, Coon Rapids, MN; Mayo Clinic Dan Abraham Healthy Living Center Sports Medicine Infill, Rochester, MN; Beckman Coulter Remodel, Chaska, MN; State of Minnesota Centennial Office Building Electrical Distribution Upgrade, St. Paul, MN; Unity Unitarian Church Remodel, St. Paul, MN; Seward Coop, Minneapolis, MN; Rochester Public Schools Service Center, Rochester, MN; Minnesota State University Mankato Dining Facility, Mankato, MN
MATTSON MACDONALD YOUNG, INC.

901 North 3rd Street
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Tel: (612) 827-7825
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Email: Stephanie@mattsonmacdonald.com
www.mattsonmacdonald.com
Established 1983
Total in MN Office: 16
Contact: Stephanie Young, (612) 827-7825

Firm Principals
David H. Macdonald, PE
Stephanie J. Young, PE
Joe A. Cain, PE
Kenneth J. Green, PE
Arlen P. Grant, PE

Mattson Macdonald Young is a full-service structural engineering firm providing innovative and economical design for a wide range of building types and sizes. With expertise in wood, light gauge, structural steel, concrete and masonry, our engineers collaborate with clients on everything from residential renovations to public sculptures to multi-million dollar high rises. Our history of client satisfaction is evident in our many long-standing relationships with architects, contractors, homeowners and other clients.

Representative Projects
Higher Ground Building, Minneapolis MN; Hmong Academy Addition, St. Paul, MN; Emanuel Housing, Minneapolis, MN; MnDOT Maintenance Facility, Maple Grove, MN; Pillsbury "A" Mill Design/Development Package, Minneapolis MN; The Chambers Hotel, Minneapolis, MN; Lyndale Green Housing, Minneapolis, MN; "Homes by Architects" Tour, Multiple Residences.

MICHAUD COOLEY ERICKSON

333 South Seventh Street, Suite 1200
Minneapolis, MN 55402
Tel: (612) 339-4941
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Email: info@michaudcooley.com
www.michaudcooley.com
Established 1984
Total in MN Office: 114
Contact: Mary Deeg, (612) 673-5867

Firm Principals
Dean Rafferty, PE, Partner
Doug Cooley, PE, Partner
Kerry Cooley Bruggemann, PE, Principal
Tim Eckman, PE, Principal
Thom Jackson, PE, Principal
Jason Peterman, PE, Principal
Sean Terwill, PE, Principal

As the largest full service consulting engineering firm in Minnesota, providing quality service since 1946, Michaud Cooley Erickson is proud of our market diversity and the talents of our engineers and design staff. Our services include mechanical and electrical engineering, fire protection, security, technology systems, lighting design and energy management solutions for our clients. We offer specialized services of commissioning, building automation, computer modeling, master trades services and energy modeling. Our dedicated LEED accredited professionals are leaders in sustainable design providing innovative engineering solutions for our valued clients.

Representative Projects
3M Building 280 Laboratory; Fairview Southdale Hospital; Target Stores Nationwide; Metropolitan Airports Commission; Campbell Mithun Corporate Office; University of Minnesota Student Residence; Abbott Northwestern Hospital MEP Infrastructure; Macalester College Fine & Performance Arts Center

REIGSTAD & ASSOCIATES, INC.

192 West 9th Street
St. Paul, MN 55102
Tel: (651) 292-1123
Fax: (651) 292-9565
Email: astorey@reigstad.com
www.reigstad.com
Established 1979
Total in MN Office: 25
Other Office: Gulfport, MS
Total in Other Office: 1
Contact: Alanna Storey, (651) 292-3173

Firm Principals
Gordon H. Reigstad, PhD, PE, SE
Jason Reigstad, Project Manager
Jared Reigstad, PE
Jim Collins, Parking Consultant

Reigstad & Associates, Inc. provides structural design, parking consulting, precast engineering, signage & wayfinding design, steel connection design, and special inspection for both new and renovation projects. Our goal is to provide safe, efficient and economical designs tailored to our clients' needs and vision. We are creative in everything we do and offer design options, while using the latest technology with consideration of material and labor.

Representative Projects
Potawatomi Hotel and Casino Milwaukee, WI; Hard Rock Biloxi Hotel, Biloxi MS; Grainbelt Terrace, Minneapolis, MN; Five 15 on the Park, Minneapolis, MN; City Vue Parking Garage, Eagan, MN; West End Market, Saint Paul, MN; City Place, Woodbury, MN; Northern Stacks, Fridley, MN

SHORT ELLIOTT HENDRICKSON INC. (SEH)

Building a Better World for All of Us

5353 Vadnais Center Drive
St. Paul, MN 55110
Tel: (651) 490-2000
Fax: (888) 908-8166
Email: trustedadvisor@sehinc.com
www.sehinc.com
Established 1927
Total in MN Office: 417
Other Offices: 298

Other Offices: Brainerd, Duluth, Grand Rapids, Hutchinson, Mankato, Minnetonka, Rochester, St. Cloud, St. Paul, Virginia, MN; Appleton, Chippewa Falls, Delafield, La Crosse, Madison, New Richmond, Rice Lake, Sheboygan, WI; Mason City, IA; Denver, Lakewood, Pueblo, CO; Munster, IN; Bismarck, ND; Omaha, NE; Sioux Falls, SD; Laramie, WY.

Contact: Scott Blank, AIA, (651) 490-2000

Firm Principals
Scott Blank, AIA
Larry Koch, AIA
Trevor Frank, AIA LEED AP
Brian Bergstrom, AIA
Jeff Pedersen, AIA
Bob Kost, AICP, ASLA, LEED AP
Pat Feihenbach, AIA, LEED AP
Greg Calpino, LA, LEED AP BD+C

Short Elliott Hendrickson Inc. (SEH®) is an employee-owned company of engineers, architects, planners, and scientists serving public and private sector clients. Our work – providing valuable solutions in the Buildings, Energy, Environmental, Infrastructure, Transportation, and Water markets – is focused on Building a Better World for All of Us®. We understand how design can improve flow and functionality, facilitate business goals and connect the community. Markets include: municipal; transit/public transportation; facility management/office; and food service/retail.

Representative Projects
SEH Office Building, Chippewa Falls, WI; Kimberly-Clark Life Science Laboratory, Neenah, WI; Maplewood Police Department, Maplewood, MN; Maplewood Emergency Center, Maplewood, MN; Dan's Supermarket, Bismarck, ND; Kimberly-Clark Atumn Fresh, Neenah, WI; Sweetwater High School Aquatic Center, Green River, WY; Civic Center Plaza Transit Station, Denver, CO
Stein 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.

Representative Projects

- Crystal, MN: Hamline College-Minneapolis
- Bloomington, MN: Zion Lutheran Church
- Minneapolis, MN: Apple Valley
- Minneapolis, MN: Whole Foods
- Fostoria, OH: Agricultural Research Center
- St. Paul, MN: Hamline College-Rockwell

Firm Principals

Mark R. Brengman, PE
Steven M. Youngs, PE

TKDA

444 Cedar Street, Suite 1500
St. Paul, MN 55101
Tel: (651) 292-4400
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www.tkda.com
Established 1910
Total in MN Offices: 205
Other Offices: Duluth, MN; Chicago, IL; Kansas City, KS; Irvine, CA; Tampa, FL
Total in Other Offices: 35
Contact: Scott Nortrom, (651) 292-4400

Firm Principals

William E. Detner, PE
Thomas S. Stoneburner, PE LEED AP
Kevin R. Cluen, PE
Dean Johnson, AIA
John Ahren, PE
Larry Bohrer, PE
Bret Farrar, PE
Kenneth D. Johnson, AIA


Representative Projects

- Minnesota Power - Coal to Natural Gas Conversion, Laskin Energy Center
- Minnesota Valley Transit Authority (MVTA) - Apple Valley Layover Facility
- Chisago County - Government Center Building, Boiler, Chiller and Exterior Improvements
- Hennepin County - Adult Correctional Facility Generator & Electrical Improvements, Magnetation LLC - Plant 4
- St. Paul Public Schools - Harriet Bishop HVAC Renovation, University of Minnesota - Bridge 9, Pier 3 Steam & Condensate Modifications, Flint Hills Resources - Various Plant Engineering Projects

VAAs

2300 Berkshire Lane North, Ste. 200
Plymouth, MN 55441
Tel: (763) 559-9100
Email: info@vaaeng.com
www.vaaeng.com
Established 1978
Total in MN Office: 120

Firm Principals

Jeff Schrock, PE
Keith Jacobson, PE
Mark Mielke, PE
Scott Stangeland, PE
Kelsey Brown, PE, SE
Shawn Shahriar, PE
Bernie Jensen
David Olheiser, PE

Serving our clients with integrity is VAA's highest priority. VAA provides civil and structural engineering services to architects, builders and owners throughout the United States and Canada. VAA has an extensive resume of commercial and industrial buildings of all types, including corporate, medical, mission critical, hospitality, retail and DoD projects. We are experts in seismic design and pro-active collapse. VAA understands how to partner with you to control project costs and maintain project schedules.

Representative Projects

- The Boat House - Lake Buena Vista, FL: The Waters (senior living) - Plymouth, MN; Roseville Fire Station #1, Roseville, MN; Target Corporation - Nationwide and Canada; Fort Carson Brigade Battalion Headquarters - Fort Carson, CD, MN
- Veterans Home, Minneapolis, MN; Harrah's Resort & Casino - Murphy NC; Olympus Surgical Technologies - Brooklyn Park, MN

WESTWOOD

PROFESSIONAL SERVICES

7699 Anagram Drive
Eden Prairie, MN 55344
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Fax: (952) 937-5822
www.westwoodps.com
Established 1972
Total in MN Office: 130
In Other Offices: 350 total
Other Offices: St. Cloud, MN
Contact: Dan Parks, (952) 906-7435

Firm Principals

Jason McCarty, PE
Daniel Parks, PE
Ryan Bluhm, PE
Paul Schroeder, AIA
Vern Swing, PE
Steve Schanke, AICP
David Bade, PE
Kevin Tepper, ARA

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

Representative Projects

- Trillium Woods Retirement Community, Plymouth, MN; Orchestra Hall, Minneapolis, MN; Minnesota Veterans Home Building 17, Minneapolis, MN; Whole Foods, Centennial Lakes, Edina, MN; Minneapolis Convention Center Solar Farm, Minneapolis, MN; City Place, Woodbury, MN; Northern Stacks, Fridley, MN; The Nic on Fifth, Minneapolis, MN
The Nic on Fifth
Page 24
Location: Minneapolis, Minnesota
Client: Opus Development Company, LLC
Design architect: Elness Swenson Graham (ESG) Architects, Inc.
Principal-in-charge: David Graham, FAIA
Project lead designer: Trace Jacques, AIA
Architect of record: Opus AE Group, LLC
Principal-in-charge: Edward Gscheidle, AIA
Project manager: Scott Cochrane, AIA
Project team: Joe Mamer; Kyle Erickson
Energy modeling: AKF Group, LLC/The Weidt Group
Structural engineer: Opus AE Group, LLC
Mechanical engineer: Horwitz Mechanical
Electrical engineer: Collins Electric
Civil engineer: RLK, Inc.
Lighting design: Schuler Shook, Inc.
Unit interior design: Elness Swenson Graham Architects, Inc.
Public space interior design: Opus AE Group, LLC
Design builder: Opus Design Build, LLC
Landscape architect: Damon Farber Associates
Landscape project team: Tom Whitlock; Jesse Symynkwyicz
Precast concrete: Gage Brothers
Concrete Products, Inc.
Cabinetwork: Grandview
Cabinetwork: Concrete Products, Inc.
Cabinetwork: Weidt Graham (ESG)
Concrete work: Opus Design Build, LLC
Landscape architect: Damon Farber Associates
Landscape project team: Jesse Symynkwyicz; Matthew Stewart
Window systems: EFCO Corporation
Architectural metal panels at tower: Alucobond
Concrete work: Adolfson & Peterson Construction
Millwork: Aaron Carlson Corporation
Photographers: Brandon Stengel, Assoc. AIA; Farm Kid Studios
Gaffer Photography

Bioscience and Health Careers Center
Page 34
Location: Brooklyn Park, Minnesota
Client: North Hennepin Community College
Architect: Perkins + Will
Principal-in-charge: Jeff Ziebarth, AIA
Design principal: Dave Dimond, AIA
Designers and project architects: Paul Neuhaus, AIA
Project manager and lab planner: Bob Novak, AIA
Project team: Heidi Costello; Ryan Forster; Peter Grafunder, AIA; Anna Zabinski, Assoc. AIA; Dave Koenen; Susie Nelson; Mark Enlow; Andrew Kordon, Assoc. AIA; Laura Lyngdaaga-Kamin; John Spohn
Energy modeling: The Weidt Group
Structural engineer: BKBM Engineers
Mechanical and electrical engineer: LKPB Engineers
Civil engineer: Piero Pini + Associates
Interior design: Perkins + Will

Structure: Magnuson Klemencic Associates
Mechanical engineer: Metropolitan Mechanical Contractors, Inc.
Electrical engineer: Hunt Electric Corporation
Interior design: Alliance
Interior design team: Ken Sheehan, AIA (project manager); Deb Gill (designer); Heather Rose-Dunning (designer); Hannah Cooper; Mollie Devich; Matt Byers, AIA
General contractor: McHugh/A&P Venture, LLC
Landscape architect: Damon Farber Associates
Landscape project team: Jesse Symynkwyicz; Matthew Stewart
Window systems: EFCO Corporation
Architectural metal panels at tower: Alucobond
Concrete work: Adolfson & Peterson Construction
Millwork: Aaron Carlson Corporation
Photographers: Brandon Stengel, Assoc. AIA; Farm Kid Studios
Gaffer Photography

Physics and Nanotechnology Building
Page 38
Location: Minneapolis, Minnesota
Client: University of Minnesota
Architect: Alliiance in collaboration with ZGF Architects
Principal-in-charge: Tom DeAngelo, FAIA
Project lead designer: Allyn Stellmacher, AIA (ZGF)
Project designers: Mamie Harvey, AIA; Randal Bennett (ZGF)
Senior project manager: Carey Brendalen, AIA
Project managers: Ellen Olson, AIA; Michitaka “Taka” Saga (ZGF)
Project architects: Peter Schroeder, AIA; Erin Ward, Assoc. AIA (ZGF)
Interior designer: Sharry Cooper
Sustainability leader: Chris Chatto, AIA (ZGF)
Alliance project team: Joe Simma, AIA; Matt Boreen; John Tapp; Anna Pravinita, AIA; Hannah Cooper
ZGF project team: Whitney Pearse; Fred Marcial, AIA
Lab planner: Research Facilities Design
Energy modeling: The Weidt Group

Structure: Roper Engineering
Mechanical and electrical engineer: Affiliated Engineers, Inc.
Civil engineer: Pierce Pini + Associates
Noise and vibration consulting: ESI Engineering, Inc.
Information technology: ESI

Indexed by: Alliiance
Landscape architects: Close Landscape Architecture+
Concrete work: Opus Design Build, LLC
Stone: Grazzini Brothers
Concrete work and brickwork: Mortenson Construction
Wood panels: AcousticGreen
Photographers: Gaffer Photography; Paul Crosby

Structural engineer: Meyer Borgan Johnson
Mechanical and electrical engineer: Affiliated Engineers, Inc.
Civil engineer: Pierce Pini + Associates
Noise and vibration consulting: ESI Engineering, Inc.
Information technology: ESI

Indexed by: Alliiance
Landscape architects: Close Landscape Architecture+
Concrete work: Opus Design Build, LLC
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"In September I photographed the U's recently renovated Amundson Hall. The building's stunning new 20,000-square-foot glass curtain wall features vertical glass fins that are coated with 3M dichroic film. The finish creates a color-shifting effect that's both playful and dynamic: Light reflected by the fins displays one range of colors, while light transmitted through the fins displays another. At certain times of day the colorful facade pattern can even be seen reflected onto Washington Avenue."

—Photographer Morgan Sheff
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