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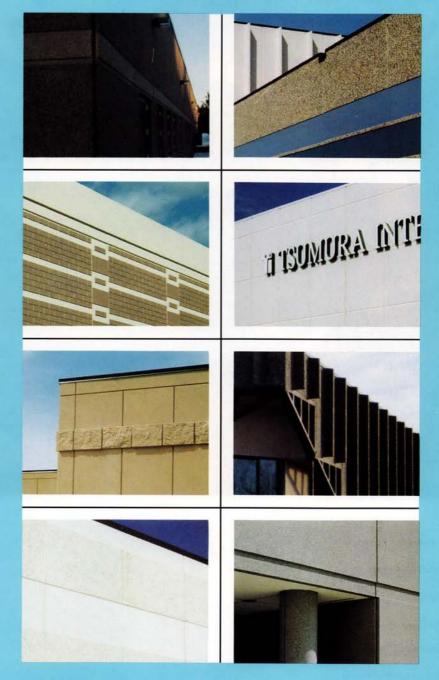
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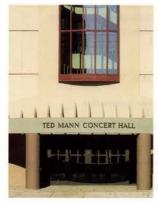
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VOL. 20 NO. 1



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28. Music on the river

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# Architecture Minnesota is published

bimonthly by AIA Minnesota. The opinions expressed herein are not necessarily those of the Board of Directors or the editorial staff of *Architecture Minnesota*. Editorial offices: International Market Square, 275 Market Street, Suite 54, Minneapolis, MN 55405. (612) 338-6763. FAX: (612) 338-7981. Note to subscribers: When changing address, please send address label from recent issue and your new address. Allow six weeks for change of address. Subscription rate: \$18 for one year, \$3.50 for single issue. Postmaster: Send address change to *Architecture Minnesota*, International Market Square, 275 Market Street, Suite 54, Minneapolis, MN 55405. Second-class postage paid at Minneapolis, MN, and additional mailing offices. Advertising and Circulation: *Architecture Minnesota*, International Market Square, 275 Market Street, Suite 54, Minneapolis, MN 55405. (612) 338-6763. Printed by St. Croix Press, Inc. Color separations by Colorbrite. Copyright 1994 by *Architecture Minnesota* (ISSN 0149-9106).

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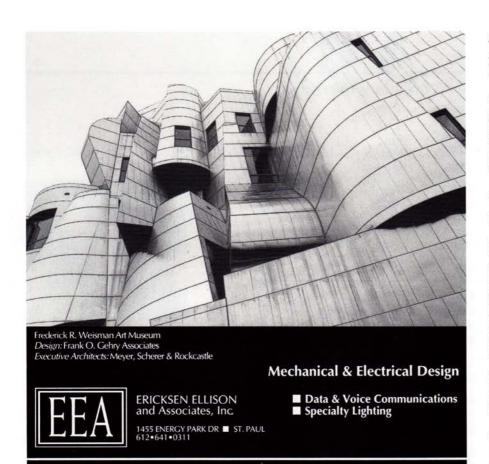
#### Cover:

The Frederick R. Weisman Art Museum at the University of Minnesota.

Architect: Frank O. Gehry Associates, Santa Monica, Calif.

Executive architect: Meyer, Scherer & Rockcastle, Ltd., Minneapolis.

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# Twenty-five years and going strong

n this throwaway culture, buildings are torn down almost as soon as they are put up. Sometimes they are razed because they have outlived their usefulness. Other times they are demolished because a developer wants to build something bigger and grander in its place. In Europe, buildings are used for hundreds of years. In America, 25 years is considered noteworthy. To honor buildings that have stood the test of time-at least as measured by 25 years-AIA Minnesota sponsors the annual 25-Year Award.

This year's winner is Christ Chapel, designed by Setter, Leach & Lindstrom of Minneapolis for Gustavus Adolphus College in St. Peter, Minn. Since the chapel was completed in 1962, the college has nearly doubled to 2,200 students. The chapel has remained a vital part of campus growth. The jurors-comprising Dennis Gimmestad of the State Historic Preservation Office, James Stageberg of The Stageberg Partners, and F. John **Barbour of Barbour Ladouceur Ar**chitects-were impressed with the vitality of the design.

"The original design was a strong, flamboyant statement that took a risk," they said. "The chapel could have gone the other way [over the years], but instead it has aged very well—spiritually, structurally and functionally."

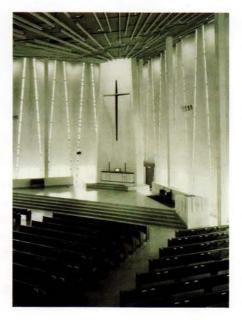
When built, the chapel was unique to southern Minnesota. Made of white precast concrete with stained glass separating each "fold-



Christ Chapel, designed by Setter, Leach & Lindstrom in the early 1960s, remains a focus of the Gustavus Adolphus campus in St. Peter, Minn. Like Marcel Breuer's chapel at St. John's University in Collegeville, Minn., Christ Chapel demonstrates the expressive potential of precast concrete.

ed" panel, the building is modern in its materials yet evokes a Gothic flavor. At night, the chapel is a beacon to the community with its lit tower and illuminated stained-glass windows. The church serves many functions, from religious services, daily chapel and vespers, to baccalaureates, convocations, concerts and seasonal events. The chapel seats up to 1,300, but also is designed for more intimate settings of 50.

Christ Chapel is a prime example of precast concrete's aesthetic potentials. The chapel is warm and inspiring. Thirty years is only the beginning. Christ Chapel will continue to inspire and serve its community for decades to come.







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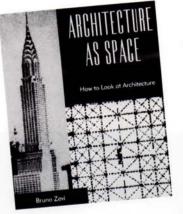
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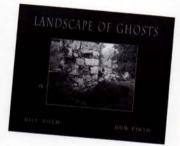
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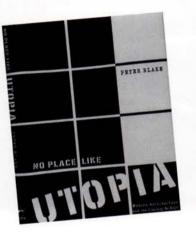


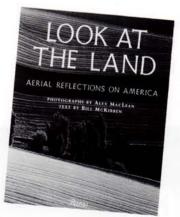
n the classic Architecture As Space: How to Look at Architecture, first published in 1948, author Bruno Zevi explores the evolving properties of space and its relation to architecture. Architecture is more than the floors, roof, interior and exterior walls that form a building, Zevi says. The author contends that architecture's essence lies in the void enclosed by those structural elements: A building is a hollowed sculpture that we discern by moving about within. Generously illustrated with photographs of such structures as the Parthenon to Frank Lloyd Wright's Falling Water, Architecture As Space examines space as it developed through the ages and looks at its vital role in architectural history. Zevi studies architecture's relation to beauty to see whether good and bad architecture can be based on a purely aesthetic criteria. Zevi's other books include Toward an Organic Architecture and The Modern Language of Architecture. He is currently editor of L'Architettura-Cronache e Storia in Rome. Architecture As Space is reissued by Da Capo Press, New York.

uthor Peter Blake has lived Athrough more than 50 years of contemporary architecture. As both an architectural practitioner and critic and writer, Blake counts among his friends and acquaintances some of the most important figures of the architecture and art world. In No Place Like Utopia, Blake shares his memories of the great innovators of this world. Filled with lively anecdotes, the book reacquaints us with such figures as Frank Lloyd Wright (whom Blake calls the perfect "Artist as Ham"); Buckminster Fuller; Mies van der Rohe; and Philip Johnson, among others. No Place Like Utopia looks at modern architecture's role in society. Modernism was born between the world wars with a mission to cure society's ills. In the 1960s, says Blake, modernism slipped into elitism, feeding the egos of rich corporations. Only now, the author contends, is modernism returning to its roots. Blake served as editor-in-chief of Architectural Forum from 1964-1972. He then headed the magazine's successor Architecture Plus until 1975. Blake has written widely for other magazines and has lectured at museums and universities. His other books include The Master Builders, God's Own Junkyard and Form Follows Fiasco. No Place Like Utopia is published by Alfred A. Knopf, New York.









andscape of Ghosts, written by Minnesota essayist Bill Holm and photographed by Bob Firth, captures the effects of time on rural America. In this 144-page, four-color book, 11 essays and 166 photographs highlight America's abandoned artifacts, from such icons as barns and farm machinery to cars and trucks, as well as country churches, roadside advertising, windmills and rock piles. Says Holm, "I think Bob [Firth] and I are both interested in saving history from the American disease: living in the eternal present." Holm is a native of Minnesota whose published works include Boxelder Bug Variations (1985), The Music of Failure (1985), and Coming Home Crazy: An Alphabet of China Essays (1990). Firth's photographs are widely seen on calendars, postcards and magazines. He is best known for his nature photography. Landscape of **Ghosts is published by Voyageur Press** in Stillwater, Minn.

n Look at the Land: Aerial Reflections on America, photographer and aviator Alex MacLean captures images of our landscape that can only be seen from above. In this large-format, fourcolor book, we see the interconnections and patterns of the built and natural environment. Our geography is in a constant state of flux, and Look at the Land is a textured guilt of the everchanging land. MacLean is particularly sensitive to environmental issues and the proper-and improper-use of land. From above, we see land used for housing, farming, recreation, transportation and energy generation. Shopping malls and tract-house developments, the San Andreas fault and ballplaying fields all come into focus through MacLean's lense. We also see the land exploited through deforestation, pollution and natural-resources excavation. Accompanying the photographs-which MacLean shot with one hand on the camera and the other on the plane's control gears-are six essays by noted environmental writer Bill McKibben, McKibben has written for the New Yorker, Natural History, Outside, the New York Times and Rolling Stone. His most recent book is The Age of Missing Information. MacLean founded the Boston-based aerial-photography firm Landslides in 1975. In addition to his commercial work, MacLean's fine-art photography has been widely exhibited and published. Look at the Land is published by Rizzoli, New York.

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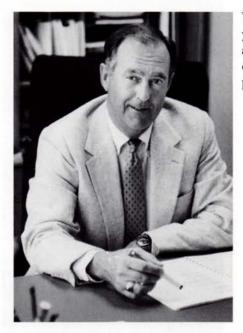


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# **Professional retrospective:**

A retiring architect discusses 39 years of practice



Fritz Rohkohl, president and principal of BWBR Architects for the past 15 years, is retiring after 39 years of architectural practice. He joined BWBR in 1954 (known then as Bergsted and Hirsch) and was named a principal in 1968. The firm cites Rohkohl's dedication to client service and quality control as factors in its growth and ability to retain longterm clients. Architecture Minnesota recently asked Rohkohl to reflect on his experiences and changes in the architectural profession. What are some of the changes you've witnessed in the practice of architecture? What drove these changes? Is change good for the profession?

When I entered the profession, architects normally sat back and waited for clients to call. In those days many contracts nearly consisted of gentlemen's handshakes. Then clients grew more knowledgeable about building design and function, and detailed requests for proposals (RFPs) became commonplace. More architects entered the field, firms multiplied and competition grew in intensity. As a result, architectural firms had to change their business approach by devising new strategies and marketing techniques to gain commissions.

Marketing today has become incredibly sophisticated. It's a function of competition—which is good for the profession—and has created new standards of client service and challenged architects to become more innovative in their business practices.

Litigation and regulation have also changed architecture. Highly detailed documentation and specification are now required because quality assurance is a major concern. Many firms have staff who do nothing but check the accuracy of documents. Specialization is also growing in response to government regulations. Federal, state and local governments, special-interest groups and regulatory agencies have complicated the building process, making it more difficult for clients to achieve their goals. This is an area where architects have had to play an enlarged role. Our role today on the building team includes counsel-we assist

the client in carrying projects from inception through completion.

Despite the complications, the profession and practice of architecture are better than 40 years ago. We are more responsive to clients' needs, while building technology and quality have improved significantly.

Architecture is really about people—to dream, to design, to build, to occupy, to enjoy. What do you see as the key to successful owner, architect, contractor and user teaming?

Our most successful projects have included the owner and the entire design and construction team. Clients have also included user groups in the planning process so we can gain their input and expertise early on, thereby eliminating many problems before they occur. This "teaming" approach with the client has been a major improvement in the design process. Preselection of contractors has also advanced the planning process. With contractor input design is improved, savings are achieved and construction problems are avoided. It's a professional approach that ultimately benefits the client and the project.

You spearheaded computerization at BWBR. Are you satisfied that CADD has revolutionized the practice? How has it affected total quality management?

BWBR didn't implement CADD for CADD's sake, rather our decision was driven by the needs of our clients. We have now evolved to the point where 85 percent of our firm's work is accomplished with

Continued on page 52

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# previews

#### Minnesota Celebrates Matisse **Minneapolis Institute of Arts Dayton Hudson Gallery** Through Jan. 9

Paintings, bronzes, drawings, prints and illustrated books by Henri Matisse (1869-1954) are taken from the museum's permanent collection as well as from private collections. Highlighted pieces range from Boy with a Butterfly Net, to Three Bathers, Collioure and the Jazz stencils.

For more information, call the Institute at (612) 870-3000.

#### **Medieval to Modern: A Selection of Graphic Art From the Permanent Collection Minneapolis Institute of Arts** Jan. 23-April 3

Coinciding with the opening of the new Herschel V. Jones study room, this exhibit features the museum's collection of prints, drawings, watercolors, pastels and artists' books.

For more information, call (612) 870-3000.

#### Lawrence Weiner Posters **Walker Art Center Minneapolis** Jan. 23-March 6

Lawrence Weiner bases his art on the written word. He composes brief texts that are placed on buildings or published as inexpensive posters, plaques and pins. Often site specific, his work plays with light, color, space, architecture and surrounding social conditions. This exhibit includes 130 posters from the Vancouver Art Gallery Archive of Lawrence Weiner Posters in Vancouver, where The abandoned homesteads and the show was organized. The Walker farms of Otter Tail County, Minn., will supplement the show with its own are captured in panoramic, four-colholdings of Weiner books and or photos by Washington, D.C.ephemera, as well as its most recent based architectural photographer the Walker building.

# A Common Ground: **Minnesota Communities Minnesota History Center** St. Paul Ongoing

The Minnesota Historical Society's latest exhibit is a grassroots program by and for the diverse people of Minnesota. Visitors explore six distinct Minnesota communities, as defined by shared ethnicity, beliefs, values, interests or geography. The exhibited communities are the modern small town of Chokio; the old Jewish and Mexican neighborhood of St. Paul's Lower West Side; Vietnam veterans; the Swedish immigrants in Isanti County; the deaf community; and the Winnebago Indian community. Displays are everything from a parish dress made in Sweden to combat gear of the Vietnam War and artwork of Winnebago women. In developing the exhibit, the Historical Society's staff worked with an advisory panel comprised of community representatives, as well as historians and sociologists. The exhibit is the third-phase opening of the History Center's three galleries. Communities depicted will change occasionally.

For more information, call the Minnesota Historical Society at (612) 296-6126.

In addition, Weiner will discuss his work with Walker's design director Laurie Haycock Makela on Sunday, Jan. 23 at 3 p.m.

For more information about the exhibit or public discussion. call Walker at (612) 375-7622.

#### Abandonings: Photographs of Otter Tail County, Minn. **By Maxwell MacKenzie AIA Headquarters Gallery** Washington, D.C. **Through January**

Weiner piece to be installed outside Maxwell MacKenzie. The show features 21 large-scale photographs, ranging in length from 4 to 8 feet. Otter Tail County is 175 miles northwest of Minneapolis. Says MacKenzie, "In the year that I turned 40, I returned to the place where I was born, though not raised, and was drawn to make photographs of the remnants of an earlier life there, which is now all but passed away." As a boy, MacKenzie spent summers helping in his grandfather's printing business in Otter Tail County, which was settled in the 19th century primarily by Norwegians and Swedes. Since 1980, MacKenzie has worked as a freelance photographer. He is widely published in magazines, books and newspapers. He also has a home in Ashby, Minn.

For more information, call (202) 638-3221.

Continued on page 52



# **U.S. Department of Agriculture**

"We wanted...(the structure) to tie into other buildings at the University, so we used a color of brick found on the adjacent structure, plus two other colors predominant on campus. The patterning of the brick draws from the Scandinavian tradition of enlivening utilitarian structures with color and pattern, creating visual interest during the long northern winters

– Loren Ahles, AIA, Project Designer – Hammel, Green and Abrahamson, Inc., Minneapolis Photography: Tom Hlavaty



### Burnsville Marketplace – Burnsville, MN

"Brick was chosen as the primary facing material...for all the long established, practical advantages; durability, low maintenance and cost effectiveness. Equally important ... were the major aesthetic benefits...Brick was consistent with the surrounding context. The inherent design flexibility of unit masonry coupled with the available ranges of color and texture ensured us that Burnsville Marketplace would indeed age with interest.

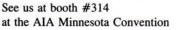
- John Gould, AIA, Director of Design - KKE Architects, Inc., Minneapolis Photography: Lea Babcock



Warroad Public Library - Warroad, Minnesota "We selected brick for this project both to emphasize the horizontality of the design and to root the building firmly into its site. Brick connotes permanence and stability, while its modular form gives pattern to otherwise unrelieved surfaces." - Sarah Susanka, AIA- Mulfinger, Susanka & Mahady Architects Photography: Peter Kerze

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# Lyndel King:

Propelling the University's art museum into the limelight

# By David Anger

To hear Lyndel King talk, she's sitting on top of a multimillion dollar act of fate. "I've never worried about having a life plan," says King, director of the University of Minnesota's Frederick R. Weisman Art Museum. "I've always done things by instinct."

Truth be told, however, King possessed a decade-long determination to find a new home for the school's art collection, as well as an education and research facility. Having initially steered toward an academic career, King will tell you that she simply happened upon a museum career. From 1976 to 1978, King served as the museum's assistant director, becoming director in 1978. She left the University in 1979 for a

three-year stint at Control Data, heading the corporation's exhibition and museum-relations program.

In 1981 King returned to the University to direct the art museum "with the idea to either build a new facility or discover that it wasn't possible," she says. "I knew that in order to convince the community that we needed a new building I had to make a commitment to the job because we had had a revolving door of directors. Yes, there were extremely discouraging times and a lot of politics to overcome." But then she pauses, looks out her massive office window toward downtown Minneapolis, and adds with a smile, "I'm glad I stayed. It was a gut decision-not a life plan."

Charlotte Karlen, board member filthy place."

of the Weisman, explains the unique role of a museum director: "A museum director has to be many things a scholar, business manager, creative catalyst and politician, especially at the University. Lyndel is all of those things, plus she has determination.

King has transformed an embarrassment—U of M was the only Big Ten school lacking a freestanding museum—into a landmark. Not only is the Weisman Art Museum Gehry's first public building in the Twin Cities (his previous Minnesota cred-



The new building proves that point."

Before the Frank Gehry-designed building was built on the east bank of the University's Minneapolis campus, the museum's collection was better known outside the Twin Cities. Out-of-towners would turn up at the museum's former hermetic location on the third floor of Northrop Auditorium, searching for Marsden Hartley's Adelard the Drowned. Master of the Phantom, only to be told: "It's in storage." Not only were the atticlike galleries inadequate, the University's conservation facilities were equally appalling, prompting one curator to pronounce that the conditions at the University gallery were "pretty terrible, some of the worst I've seen. It's just a dirty.

its include the 22-foot high glass fish in the Conservatory at the Minneapolis Sculpture Garden and the Winton guest house in Orono), the museum has garnered as much attention as others on the East Coast, such as Jose Rafel Moneo's museum for Wellesley College and Cesar Pelli's Frances Lehman Loeb Art Center at Vassar.

While the structure remains controversial on the home front, such design critics as

Suzanne Stephens applaud the building. "Architects are often accused of overwhelming art with architecture—as though stuffing everything into bleak, warehouselike boxes is the answer," she says. "The best museums foster interactions between art, audience and architecture."

In many ways Gehry's design speaks to the MTV generation highly visual and animated. While most museum directors assiduously plan for this kind of an achievement, such was not the case for King. Born Lyndel Irene Saunders in Enid, Okla., and raised in Hugoton, Kan.—population 2,500—art was not a mainstay in her early life. While Hugoton holds the distinction of be-

Continued on page 53

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A1/1	1.00	and Equipment (1990) with instruction sheet
A177	1.95	Abbreviated Owner-Contractor Agreement for
All	1.55	Furniture, Furnishings and Equipment (1990) with
		instruction sheet
A191	2.50	Standard Form of Agreement Between Owner and
0.000.00		Design/Builder (1985) with instruction sheet
A201	2.90	General Conditions of the Contract for Construction
		(4/87) with instruction sheet
A201/CMa	3.00	General Conditions of the Contract for Construction-
		Construction Management Edition (1992) with
		instruction sheet
A201/SC	1.50	General Conditions of the Contract for Construction
		and Federal Supplementary Conditions of the Contract
	-	for Construction (1990) with instruction sheet
A271	2.25	General Conditions of the Contract for Furniture,
1005		Furnishings and Equipment (1990) with instruction sheet
A305	1.50	Contractor's Qualification Statement (12/86)
A310	.30	Bid Bond (2/70)
A311	.50	Performance Bond and Labor and Material Payment Bond (2/70)
A312	.60	Performance Bond and Payment Bond (12/84) with
ASIZ	.00	instruction sheet
A401	1.50	Contractor-Subcontractor Agreement Form (5/87)
71101	1.00	with instruction sheet wrapped
A491	2.50	Standard Form of Agreement Between Design/Builder
	100000000000	and Contractor (1985) with instruction sheet
A501	2.75	Recommended Guide for Bidding Procedures and
		Contract Awards (6/82)
A511	3.35	Guide for Supplementary Conditions-incorporates
		A512 (6/87)
A511/CMa	2.90	Guide for Supplementary Conditions-Construction
		Manager-Advisor Edition (1993)
A512	.20	Additions to Guide for Supplementary Conditions (12/89)
A521	2.90	Uniform Location Subject Matter (1981/Reprinted 1983)
A571	2.75	Guide for Interiors Supplementary Conditions (1991)
4701	1 50	with instruction sheet
A701 A771	1.50 1.80	Instructions to Bidders (4/87) with instruction sheet Instructions to Interiors Bidders (1990) with instruction
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OF ARCHITECTS



Something strange just landed at the University of Minnesota. It's called the Frederick R. Weisman Art Museum, and it looks unlike anything else in Minnesota. Heads are turning and necks are craning as people zip down Washington Avenue and glimpse this geometric abstraction along the Mississippi River.

If people are surprised by the Weisman Art Museum, it's because the

Twigs and things building doesn't look "Minnesotan." That's all for the best. The building is a boisterous display of shapes and forms without attempting to mimic a particular architectural style.

> A couple of years back when daytime talk-show hosts Regis and Kathie Lee taped their program in the Twin Cities, the television station built a set complete with pine trees and lodge-style furniture. In the television show *Coach*, the main character escapes to his rustic cabin in the Minnesota woods. At the Mall of America, Snoopy hangs out in a woodsy theme park meant to evoke Minnesota's north woods.

> Look around the Twin Cities and you'll discover the rustic Minnesota look popping up everywhere, from a new restaurant at Calhoun Square to a gift shop at the Galleria and a coffee shop downtown. You would think Minnesota design is summarized by twig furniture, big-timber beams, fieldstone foundations and fireplaces, and moose trophies. This may be appealing to tourists, but for those of us who live here, enough is enough. Recent efforts to capture a Minnesota aesthetic are based on a skewed interpretation of the state's unique features. Good design does not copy styles—it stands on its own as an intelligent response to its program and context.

> So if the Frederick R. Weisman Art Museum is turning a few eyes, it's because it's refreshingly original without attempting to build upon a nonexistent vernacular Minnesota style.

Eric Kudalis Editor

# **Postcard perfect**

The University of Minnesota's new Frederick R. Weisman Art Museum sparks controversy and delight

**By Robert Gerloff** 

It's here. It's weird. Get used to it. Sing its praises or call it what you will—the car crash, the train wreck, the crumpled tin can or the alien spaceship from Planet Zog—the University of Minnesota's new \$14 million Frederick R. Weisman Art Museum, designed by Frank O. Gehry Associates, Santa Monica, Calif., with executive architects Meyer, Scherer & Rockcastle Ltd., Minneapolis, is here to stay.

No other building in recent Minnesota history has provoked such controversy. Everyone either loves it



Don F. Wong

With 11,000 square feet of exhibition space, the Frederick R. Weisman Art Museum occupies a key site next to Coffman Memorial Union. Large overhangs (opposite) mark the entrance near the pedestrian bridge linking the campus's east and west banks. The river-facing facade (top) is the building's liveliest section. Stainlesssteel panels meet terra-cotta colored brick walls (above) on the south façade. Stainless-steel skirts decorate the concrete bridge along the north side (model below). The geometric, stainless-steel exterior (overleaf) is a multichromatic light show at sunset

or hates it, and is delighted to tell you why. Such controversy is to be expected: not only is Frank Gehry the most original and fascinating American architect of the late-20th century—he has won every award there is to win—but art museums have become the highest visibility and status commissions in contemporary society, replacing cathedrals and city halls as symbols of civic virtue.

What's surprising is that despite Gehry's prominence and despite the commission's high profile, his design has glaring weaknesses. It is

> weak, for example, in three areas particularly important to many architects practicing today: planning, community and environmental integrity.

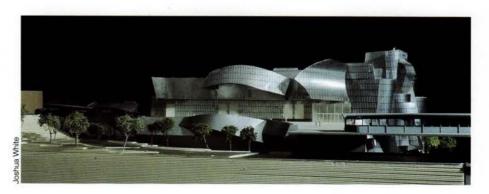
> Gehry's design doesn't even acknowledge the profession's current obsession with planning, the belief that buildings are not just isolated objects but should help create and define larger spaces between them.

The University's central quadrangle, known as The Mall, is the primary public space on the Minneapolis campus, the setting for rallies, demonstrations and festivals. While The Mall is strong and healthy around Northrop Auditorium (the

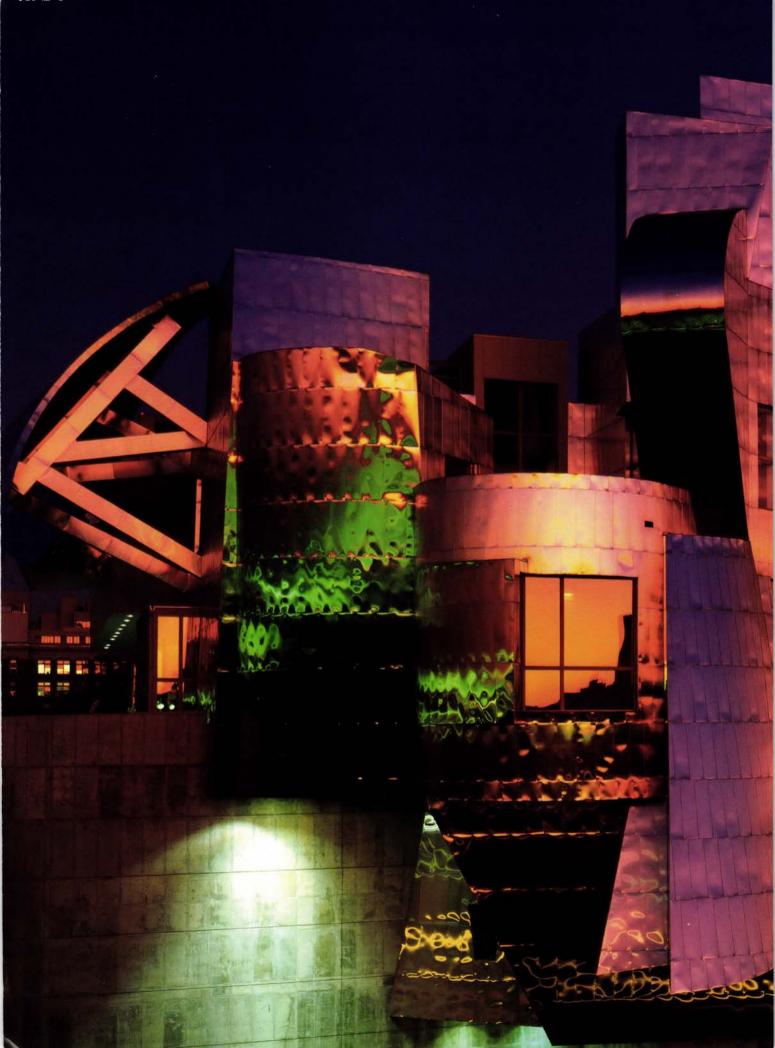


museum's former home), it is weak where Washington Avenue bisects it in front of Coffman Union. Gehry could easily have strengthened this campus core by facing his design towards the little plaza in front of Coffman Union, one of the most heavily used public spaces on campus. But instead he turned his back on the campus, literally facing a blank, featureless brick wall toward The Mall and orienting his main facade, with its explosion of stainless-steel forms, toward the Mississippi River. However striking this façade may be, as an isolated form it does nothing for the campus structure. If anything it weakens The Mall even further.

Gehry's focus on building form over campus structure also makes the design feel oddly dated. Architects back in the early 1960s defined architecture as "functional sculpture." Form, not planning, was important. The wilder the form, the better the building. This approach has its problems. Anyone who has driven the I-494 strip knows that a collection of disconnected formscar dealerships, motels, office buildings-however distinguished as individual buildings, does not a city make. Nor does a collection of disconnected forms magically create a good campus.











Gehry's design also ignores questions of community, the ideal that a building-especially a public building-should speak to the values, aspirations and yearnings of the larger community from which it springs. Whereas a university is a collection of individuals working together, the Frederick R. Weisman Art Museum is purely the heroic vision of an individual artist. It's a romantic work that stands aloof and isolated from the University community, both physically and spiritually. If the building doesn't care about the community, will the community-students and faculty, regents and parents-accept the building as their own, or will it forever stand like an alien in their midst?

Gehry also shrugs off the growing "green architecture" movement, which believes that architects should specify environmentally safe and renewable materials.

One green concern is reducing total energy consumption. This means reducing the energy consumed while heating and cooling the building, and also the energy consumed mining, milling and transporting materials, the so-called "embodied energy" within a building. Brick is benign,



Sculptural walls (opposite and top) provide kinetic backdrops for the museum's exhibits. Skylights include sun screens that can be closed. A final touch is a fish (above) designed by Gehry.

but stainless steel has one of the highest embodiedenergy contents of any material.

Another aspect of green concern is specifying such renewable materials as wood harvested from sustainable forests. Gehry specified windows made of teak and mahogany, both tropical hardwoods that are generally harvested from the rapidly vanishing rain forests.

Gehry's design may be weak in regard to planning, community and environmental integrity, but so what? He made his reputation flouting such pedestrian eat-your-peas concerns, focusing instead on designing exciting, dynamic and

visually challenging forms that will knock your socks off. Gehry wasn't hired to improve the campus plan. He was hired to design a postcard-perfect building that will catapult the museum into the public's imagination.

And without question the postcard view of the Frederick R. Weisman Art Museum is stunning. Stand on

> the Washington Avenue bridge and watch the setting sun bounce pink and golden hues off the fractured stainless-steel forms. Gehry's design, if not beautiful in the traditional sense, is oddly charming, even endearing. The facade may be awkward, it may be exuberant and goofy, but ultimately it is utterly secure in its sculptural strangeness. Love it or hate it, the University of

Minnesota's new Frederick R. Weisman Art Museum is Minnesota's newest icon.

But wait! Lost in all the hubbub surrounding the building's form is the most important question of all: Is it a good place to look at art?

Controversy will stop at the front door. While the exterior is flamboyant, the interior is unexpectedly sub-



tle. Paintings by American masters as diverse as Marsden Hartley and Alfred Maurer, Georgia O'Keefe and Milton Avery, Robert Motherwell and Roy Lichtenstein—paintings rarely exhibited in the Museum's cramped old galleries on Northrop's third floor—float on all-white walls, delicately bathed in natural light. Paintings, not architectural gymnastics, dominate the museum's interior.

Yet while subtle, the interior is anything but a blank shoebox. High above the paintings, high above the cool maple floor, an eccentric collection of all-white trusses, light scoops and forms seem to dance in the constantly changing natural light, light so complex and rich that the interior seems bathed in color.

However controversial the exterior, and however weak the building's connection to the campus, Gehry has designed an interior space of breathtaking simplicity that is simultaneously serene and animated, a delightful background to the University's collection. To answer the most important question of all, the Frederick R. Weisman Art Museum will be a wonderful place to study art.

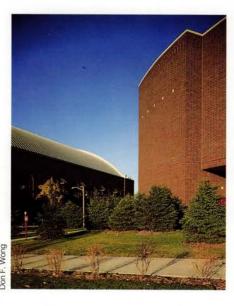
It's here. It's weird. Enjoy it.

Robert Gerloff is an associate with Mulfinger, Susanka & Mahady Architects in Minneapolis.

# CE H

The University hockey team finds cool guarters in the new Mariucci Arena

# **By Eric Kudalis**



hen the North Stars left town in 1993, the Twin Cities was left without a professional hockey team-an odd predicament for a region renowned for its pounding winters. The new Mariucci Arena on the University of Minnesota campus in Minneapolis will help fill the North Stars void.

Designed by Opus Architects & Engineers of Minneapolis and Graham Edmunds Architects of Calgary, Alberta, the facility houses the University's competitive hockey team, which formerly was relegated to a portion of Williams Arena across the street.

Working off a program developed by David Knoblauch, a hockey enthusiast who volunteered his time, Opus teamed with Graham Edmunds in a design/build competition because of the Canadian firm's expertise in designing athletic facilities. Graham Edmunds is noted particularly for Calgary's Saddle Dome,





F. Wong

regarded as one of the best hockey facilities around.

With a slim \$17.5 million budget, the architects concentrated on function and utility rather than architectural bells and whistles. The facility is straightforward. Approximately 9,500 seats wrap around the 100-by-200-foot Olympic-size rink under a 240-foot, clear-span roof. John Albers of Opus says devising superior site lines and plenty of leg room were paramount design con-



siderations, and something lacking in the old facility. Interior finishes are minimal and expressed in the steel structural systems and the concrete floors and risers. Seats are familiar maroon and gold University colors. To retain a bit of University sports history, the architects sheathed the concourse balcony with bricks salvaged from the demolished Memorial Stadium.

The exterior detailing follows traditional campus architecture. The bowl-shaped building is walled in brick. Patterned brick ribbing was inspired partially from detailing of the razed football stadium and Williams Arena. The largely windowless façade is enhanced by a series of brick stairwell towers, while maroon columns stretch upward along the east-facing glass entrance.

With the new Mariucci Arena, the architects have built a solid home for playing and watching hockey. Opus Architects & Engineers and Graham Edmunds Architects based the brick exterior of the Mariucci Arena at U of M (above and opposite) on traditional campus architecture. The inside features an Olympicsize rink (opposite bottom) under a 240-foot, clear-span roof.

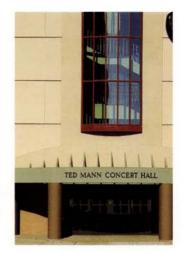


Designed by Hammel Green and Abrahamson, the 1,250-seat Ted Mann Concert Hall features a glass wall (above and opposite), whose curving form recalls the shape of a piano. The off-white exterior panels (above and opposite top) are made of EFIS, a synthetic stucco.



# Mississippi River concerto

The University of Minnesota's musical-performance programs settle into a permanent home in the Ted Mann Concert Hall



By David Anger

The Ted Mann Concert Hall, designed by Hammel Green and Abrahamson of Minneapolis, was far in the future when our forefathers witnessed the completion of the University of Minnesota's first building (Old Main) in 1857. For decades the University's musicalperformance programs were juggled

between a variety of venues throughout the sprawling campus. Finally, music has a permanent home at the University.

The new concert hall, an extension to the east side of the music school's Ferguson Hall, will house the University Opera and 12 ensembles, ranging from the University Symphony Orchestra to several jazz bands and the Concert Choir.

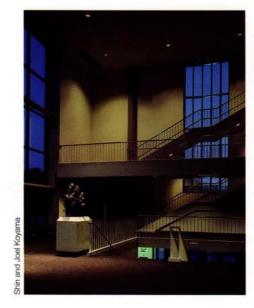
The history of Ferguson Hall and school had the lowest budget, the highest faculty-student ratio and the most inadequate facilities in the Big Ten.) Responding to these embarrassing revelations, the state legislature passed an appropriation to build Ferguson Hall, designed by the Close Associates in 1985. Ferguson Hall was meant to feature an



1,250-seat Ted Mann Concert Hall resembles an operetta, complete with a hero—Ted Mann, who generously donated \$2.5 million. The story begins in 1977 when faculty and students rallied to demand improved academics and facilities. (They came armed with a study revealing that the University's music

adjacent performance venue, but inflation soared past the government's allocation, making it fiscally impossible.

After three previous efforts, the legislature in 1990 approved \$6.7 million for the project and bids for the auditorium were reopened, with HGA snagging the commission.





Interior detailing is minimal, with the design emphasis placed on creating an acoustically solid auditorium (above). The lobby (opposite) overlooks the Mississippi River. John Bush's "Burning Bush" (top) is one of the lobby's few decorative elements. HGA has been designing performance halls for four decades, beginning with the Benedicta Arts Center in 1963 at the College of St. Benedict, Orchestra Hall in conjunction with Hardy, Holzman, Pfeiffer Associates in 1974 in Minneapolis, and most recently the renovations of the Guthrie and Orpheum theaters in Minneapolis.

While the Mann is a triumph of wills and a gem for budding musicians, it is chiefly a fine classroom rather than a riveting piece of architecture. Indicative of the University campus, a tunnel connects the Mann to neighboring structures, providing a shield against inclement weather. Backstage facilities are first rate, complete with rehearsal rooms that mimic the main stage. Other backstage resources include dressing rooms, costume and scene shops, a small greenroom and kitchenette, and storage for instruments.

Like the renovated Guthrie, the hall features an imposing glass wall, only the Mann's is curvilinear. It appropriately recalls the shape of a grand piano and the sinuous curves of the Mississippi River. The auditorium's position on the river is welcomed since the University ignored the waterfront for decades. Tucked behind the Ralph Rapson-designed Rarig Center and opposite an undergraduate dormitory, the Mann strikes a quiet note, properly tuned with the conservative tenor of the University's architecture.

Because money wasn't plentiful, the Mann's lobby never aspired to rival the Ordway's in St. Paul. The interior decoration is minimal. The only free-standing decorative element, John Bush's tactile *Burning Bush* (1956), is dwarfed in an enormous open space. Fortunately, the floor-to-ceiling curving window surveying the Mississippi and East Bank saves the lobby by offering a dramatic visual focus.

The Ted Mann Concert Hall, however, does succeed in its primary mission—to provide a fitting environment for the creation of music.

David Anger is a Minneapolis writer and frequent contributor to Architecture Minnesota.



TORONTO CITY HALL



ST. LOUIS "GATEWAY ARCH"



FEDERAL RESERVE BANK BUILDING

# Visible design

After 15 years of growth, RSP Architects eyes the future with a higher profile

# By Eric Kudalis

RSP Architects is a bit of a well-kept how we deal with clients," Ritter secret in the Twin Cities. The architectural firm has been around since 1978 and has grown to nearly 100 people with \$1.75 billion in completed projects. The firm's work is di- do admire RSP. Nearly 75 percent

tary, hightechnology, medical, educational. corporate and interiors, among other specialties.

Yet RSP lacks a signature style

-a particular look to its architecture-that says RSP. That, of course, is the secret to its success. RSP is able to adapt to many different building types. With a recession still breathing down the building industry's neck, diversity is the path to solvency. Of course, that chameleon adaptability is also the reason for the firm's quiet public image.

greatest internal challenge," says Michael Plautz, a founding principal. "It is difficult to form a composite image of RSP, and I don't think there's another firm in town quite like us."

RSP has many projects churning at once, but few of those high-profile ones that snag public attentionbuildings like an art museum or downtown high-rise.

"What's missing is a steady diet of unique, one-of-a-kind projects," says Plautz, who wants to target those missing links to round out the firm's design portfolio.

Alexander Ritter, another founding principal, says client relations is the firm's strong point.

"One of the underlying issues is

says. "Most clients like working with us because we make their lives easier through the services we deliver."

Apparently Ritter is right. Clients verse, ranging from retail to mili- of the firm's work is repeat business.



education. "Successful design should embody and reflect the client's mission and vision. Every client on every project is different. You have to be adaptable."

and

Adaptability has kept such clients as IDS, Target Stores, Montgomery Ward, the University of Minnesota and others coming back for more.

So how does RSP please clients? "Our greatest strength is also our First by developing specific market sectors. Each market sector is led by one or two principals. The principal develops an experienced core team of architects to work within that sector.

"Most clients don't want you to learn on them-they want you to § bring a certain level of experience," Ritter says. "Firms today comprise a series of specialists within a large firm—while 15 years ago large firms were more generalists."

Indeed, RSP functions more as several small firms under a largefirm umbrella. That's not the way it started 15 years ago.

RSP began in the late 1970s with the starry-eved idealism that propels many architects to break out on their own. Founders Michael Plautz,



Alexander Ritter and Don Suppes wanted the intimate, hands-on approach to architecture that seemed possible only in a small-firm environment. They wanted to be involved in a building's design solution from beginning to end, and still have time to pursue other creative interests. All



RSP Architects' principals are (opposite left to right) Alexander Ritter, Jim Fitzhugh, Dick Daniels, Michael Plautz, Robert Lucius, David Norback and Terry Wobken. Recently completed work includes the Ecology Building (above) at the University of Minnesota, St. Paul Campus.





A major client since the firm's formation is Target Stores. The stores often reflect regional architectural character and climate, as seen in outlets in Scottsdale, Ariz., (top); and Rancho Cucamonga, Calif., (above). Target Greatland (right) in Plymouth, Minn., is a prototype Greatland store, which offers expanded selling space. Other work includes the Anne Sullivan Communication Center (opposite top) for the Minneapolis Public Schools, and the Flight Simulator Building (opposite bottom) for the Minnesota Air National Guard.



three had experience working at large firms. Plautz and Ritter teamed up first, with Plautz strong in design and Ritter in marketing. Suppes soon joined to complement the others' strengths with his technical background.

"We've always been willing to grow into an opportunity," Ritter says.

Plautz, however, says growth was not necessarily his initial concept. "My views were to stay small, Sandy's [Ritter] were to go with the flow and grow. I have a natural resistance to largeness for its own sake."

But growth seemed inevitable from the start, especially with Plautz's Target Stores connection that has provided a steady flow of work ever since.

Says Plautz, "Target is what started our firm, and the spin-off opportunities that happened swept us into our size."

The firm occupied a couple of different Minneapolis venues before settling into its current home on First Avenue in Minneapolis's warehouse district. Plautz, Ritter and Suppes were something of pioneers when they bought the 3-story brick building in 1981. The district was just beginning to be redeveloped. They figured they could rent out most of the building once they renovated it. Of course, RSP is the sole tenant now, occupying all levels plus a mezzanine.

From the start, the founding

principals created a working environment that encourages leadership and profession- al growth. Even when Suppes left five years ago, there was never a battle for power. The name. fact, in was changed from Ritter Suppes Plautz in 1988 to RSP Architects to give the firm a lasting identity beyond its founders.



"Michael and I want to set up a practice that will have an ongoing life," Ritter says. "It's an advantage to build on other people's strengths, not just a few personalities."

Seven principals comprise RSP today.

**Dick Daniels oversees the Target** Stores program, while Robert Lucius rounds out the retail end with such clients as The Musicland Group, Sears Roebuck & Co., and Montgomery Ward. David Norback covers corporate architectural interiors and elementary and secondary education with such clients as Deluxe Corporation, IDS, Piper Jaffray, Inc., and the Minneapolis Public Schools. On the high-technology side of design is Terry Wobken working with Cardiac Pacemakers, Inc., INCSTAR, and Medical Graphics Corporation, among others. And Jim Fitzhugh directs much of the public-sector work, including the U.S. Army Corps of Engineers, U.S. Postal roles." Service and Air National Guard.

strategy, and Plautz serves as

design principal, guiding overall design.

If the two founders have created an environment that allows the other principals to excel, the principals in turn have allowed other architects and designers to assume leadership roles.

"We do a lot of [coaching] here to help train architects," Daniels says. "When we hire architects we try to expose them to a variety of situations and move people into responsible

Part of that responsibility is shar-Ritter conducts the marketing ing in the firm's good fortune. By adding an Employee Stock Owner-





Interior work is seen in a corporate office for Investment Advisers, Inc. (above). Other corporate work is the Oak Ridge Conference Center (right) for IDS Financial Services. A rapidly expanding retail client is the Media Play Store (opposite) for the Musicland Group. ship Plan (ESOP) that owns half the company's stock, the founding principals have made every employee a stockholder—and what's good for the whole company is good for the individual.

Individual strengths, indeed, fuel RSP. As building programs become more complex and stretch the capabilities of single firms, architectural offices find themselves coupling their individual qualities with outside experts. RSP, which has no engineering department, historically has relied on collaboration. Setter, Leach & Lindstrom of Minneapolis is a 13-year teammate on Target projects, with SL&L handling engineering, and

RSP architectural design. Recently, RSP joined Henningson, Durham & Richardson, Inc., of Omaha, Neb., as a midwest affiliate to pursue medical work in the region.

"It's a buyer's market, and the competition is fierce," Plautz says. "Collaboration gives you an edge by teaming with a firm that complements or reinforces your experience."

While collaboration continues to grow in importance, Plautz and Ritter see other pending needs within the profession and firm.

"I think we haven't done enough as a profession to educate the public about what architects do," Ritter says. "It's more than façades. A building's mechanical systems and operations all are influenced by an architect. Such factors as sustainable architecture and 'healthy buildings' are becoming major issues today. The downsizing of corporate America is providing opportunities for architects because we can offer a bigger service role. If we want to have a major public role. architects have to be advocates of good design and value. We need to educate people."

Plautz sees more of a need for architects to get involved in the frontend of design, during the programming stages before a project's scope becomes irreversible.

"We as a profession are not as effective in improving the built environment because we come in late in

> the planning process," Plautz says.

As for RSP, Plautz sees room for improvement.

"We've concentrated up to this point on building the business end of things," Plautz says. "I think it's a perfect time for me to push design and visibility. This means pursuing certain high-profile commissions that we might not have gone after before. Also we can select one or two competitions that pursue 'visionary design.'"

For Plautz and Ritter, the primary firm goals remain service and client satisfaction, and the professional opportunities continue to challenge them.

Says Plautz, "I still find architecture an exciting sandbox."





# Minnesota travelogue: Rochester

America's "best place to live" is riding a crest of development and growth

By Bette Hammel

The road to Rochester is well worth traveling, not only for a health check at the Mayo Clinic, but to see how architecture again is reshaping the face of this unique metropolis set amidst southern Minnesota's serene countryside.

As Highway 52 approaches town, the scene abruptly changes from bucolic to urban. A skyline bursts into view, complete with high-rise towers, cupolas, hotels, industry, shopping malls, skyways and construction cranes. If only the Mayo brothers could see their city now—a city bustling with construction equipment erecting a new government complex on the Zumbro River, a new public library and parking ramp, skyways and another major building for the Mayo Clinic.

Just last fall Rochester was declared "the best place to live in America" by *Money* magazine's annual survey based on several leading factors: clean air, healthy economy, low crime rate, superior medical care and affordable housing. The survey doesn't mention how Rochester has helped attract so many families with its modern schools, shops, theaters and restaurants. Civic leaders and planners have had a prominent role in making this city of approximately 74,000 the cosmopolitan center it is today.



Rochester has a rich heritage of historic architecture. One of the city's landmarks is Mayowood (right). Listed on the National Register of Historic Places, the mansion was completed in 1911 for Dr. Charles H. Mayo. Much of the house, which overlooks the Zumbro River Valley, was designed by Dr. Mayo himself and features stone, reinforced concrete and tile.



Driving the area's economic engine is Mayo, whose 100-year growth has lead to a steady stream of jobs. The Mayo Clinic became such a huge success that Rochester's fame spread worldwide as the home of this renowned medical center.

"We need to keep an environment that's attractive both for Mayo and the people it brings in because there are a lot of other attractive health centers around the country," says Douglas Knott, city administrator for the development district.

Dr. William Worrall Mayo came to Rochester in 1863 to examine men being inducted into the army



during the Civil War. He finally set up private practice and was joined by his two sons, William J. and Charles H., in the early 1880s. With the fund-

raising help of the nuns of St. Francis, the Mayo brothers established Saint Marys Hospital in 1889. As the Mayo brothers' practice grew, they added other doctors and

worked together as a group sharing their specialized knowledge. This teamwork was a unique concept in medical practice then.

By the early 1900s, the practice became known as the Mayo Clinic. Today the clinic and its two hospitals, Saint Marys and Rochester Methodist, make up the Mayo Medical Center, the world's largest private medical Other historic Rochester sites are two early designs by Thomas Farr Ellerbe: the Dr. Henry Plummer residence of 1924 (top); and Mayo Clinic Building of 1914 (below).

center. Mayo's major facilities in downtown Rochester now spread over a 7-block area connected by a pedestrian subway system.

Over the years, many architects have worked for Mayo, starting with Thomas



Farr Ellerbe in 1914, when he and his then-small firm designed the original Mayo Clinic building, a small redbrick structure that the doctors soon outgrew. By 1927, Ellerbe had designed the first major diagnostic center, the Plummer Building, a 15-story neo-Gothic sandstone building topped with an intricately decorated belfry. Ellerbe's firm also designed many other Rochester buildings, including the airport, Rochester Methodist Hospital and the elaborately decorated Chateau Theater.

Ellerbe's best-known work from the '50s is the Mayo Diagnostic Building, an International-style building with an elegant gray-marble façade marked by a graceful bronze sculpture, "Man and Freedom," above the entrance. Ellerbe Becket continues to design for Mayo in Rochester and at satellite campuses in Scottsdale, Ariz., and Jacksonville, Fla.

Today the big news in Rochester is Mayo's plans to construct the Damon Building, designed by the joint-venture team of Cesar Pelli & Associates of New Haven, Conn., and HKS of Dallas as associate architects.

Robert Fontaine, head of planning and programming for Mayo, explains the need for such a facility:

"The Mayo Building was designed for clinical space use, and over the years space limitations required many of the procedure and testing functions to be decentral-

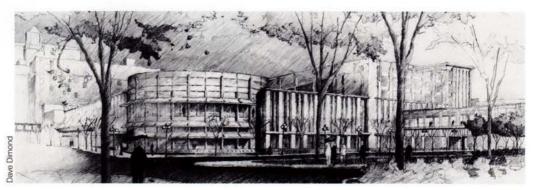


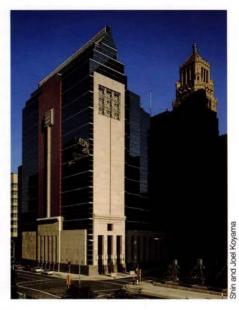
The 13-story H.W. Siebens Education Building (top), designed by Hammel Green and Abrahamson in 1988, reflects the ornate detailing of the historic Plummer Building next door. The Mayo Civic Center (above) features commemorative statues of Drs. William and Charles Mayo. Construction is slated for the new Rochester Public Library (right), designed by The Leonard Parker Associates of Minneapolis with associated architects Yaggy Colby Associates of Rochester. ized in other buildings. The Damon Building, to be connected on multiple floors, will allow consolidation of our procedure areas, thereby providing greater efficiency of clinic, staff and equipment."

Indeed, marrying such a massive new structure with the old will be a significant design challenge. The first phase will be 10 stories, with 10 more floors in a future phase. Completion is expected

in four or five years at an estimated cost of \$132 million. (At press time, the project has been put on hold.)

Just five years ago, Mayo completed construction of the Harold W. Siebens Building for medical education and communications next to the Plummer Building. The modernist high rise of steel and glass, designed by Hammel Green and Abrahamson of Minneapolis, reflects the Plummer's intricate ornamentation in its gray-glass cur-





tain wall and similar sandstone at the base. Underneath the Siebens' tower at concourse level is a 3-story lightfilled atrium and patients' lounge.

With all this growth in Rochester and Olmsted County, the need for public buildings also has grown. City and county government leaders struggled for space in their outmoded building. After much debate, they arrived at a consensus—to consolidate government services in one large complex.

The site was another problem. But thanks to plans completed in 1988 by the U.S. Army Corps of Engineers and the city for a flood-control project on the Zumbro

River bend, the perfect site became available.

Rochester's new Government Center was dedicated in June 1993. It houses Olmsted County offices, six courtrooms, a 100-bed direct-supervision jail, law-enforcement cen-



ter and a shared county-board/city-council meeting room. A new city hall will be added next year.

The county's new 6-story structure of warm red brick and mellow beige cast stone, designed by KKE (Korsunsky Krank Erickson) of Minneapolis, presents a stately civic presence on the river.

ivic presence on the river

According to Ron Erickson, principal, the architects planned the \$23.4 million complex to look historic with its heavy cornice and 2-story classical loggia across the front. A rotunda serves as shared space between the county-board and city-council areas.

Rochester's new \$10.8 million city hall is a project of two Minneapolis firms—Lindberg Pierce Architects

in association with Bentz/Thompson/Rietow. The building will be compatible with the courthouse as it connects with the rotunda.

"We wanted it to fit with the county building yet give the city a presence," says Douglas Knott.

The same exterior materials will be used: brick and cast stone with copper cladding on the roof. Milo Thompson of Bentz/Thompson/Rietow calls it "a modern building based on classical forms."



Shin and Joel Koyar

The forthcoming Rochester City Hall (top), designed by the Twin Cities firms of Lindberg Pierce Architects in association with Bentz/Thompson/Rietow, will link up with the recently completed Olmsted County Government Center (above), designed by KKE Architects of Minneapolis.

Continued on page 55



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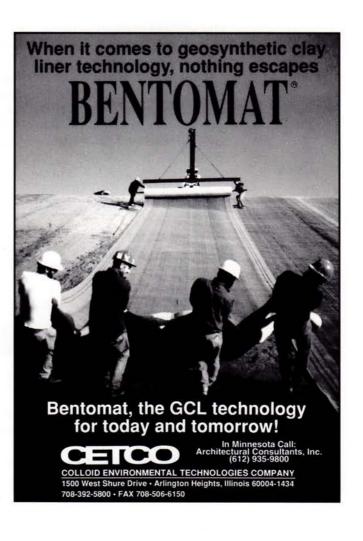
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# without an engineer.

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### **DIRECTORY OF CONSULTING ENGINEERING FIRMS**

AM has published directories of architectural and landscape architectural firms for some time. With this issue we present our third directory of those Minnesota firms which provide consultative engineering services. Principals of these firms are members of the Consulting Engineers Council of Minnesota or of AIA Minnesota.

Engineers provide those critical design skills which enable our entire built environment to be structurally safe, comfortably warm and well lit. They also design our highways and bridges, water treatment facilities and power generation plants.

In Minnesota, you will find there is a wealth of engineering talent available for your next project. Study this directory and call either the Consulting Engineers Council at 612/922-9696 or AIA Minnesota at 612/338-6763 for additional information and assistance.

Peter A. Rand, FAIA Publisher

#### LEGEND

PE	Professional
	Engineer
AIA	American Institut
	of Architects
FAIA	Fellow, American
	Institute of
	Architects
ASLA	<b>American Society</b>
	of Landscape
	Architects
FASLA	Fellow, American
	Society of
	Landscape
	Architects
RLS	<b>Registered Land</b>
	Surveyor

#### ARMSTRONG, TORSETH, SKOLD AND RYDEEN, INC.

4901 Olson Memorial Highway Minneapolis, MN 55422 Tel: 612/545-3731 Fax: 612/525-3289 Established 1944

James E. Rydeen	AIA
Donald L. Yungner	PE
James N. Riess	PE
Robert A. Martini	PE
Terry L. Stofferahn	PE
Firm Personnel by Disci	pline
Mechanical Engineers	14
Electrical Engineers	9
Architects	46

Architects	46
Other Professional/Technical	11
Administrative	10
TOTAL	90

ATS&R Expertise: Quality control/coordination during design, construction, post-occupancy; design of HVAC, plumbing, Direct Digital Control Systems; design of electrical systems including computer facilities, communications; energy conservation including active/passive solar, heat exchange systems, geo-thermal heat pumps, variable air volume, earth berming, ice storage, natural daylighting, energy management systems, energy efficient lighting, heat pumps.

Champlin Park High School, Brooklyn Park, MN; Stillwater Area High School, Stillwater, MN; Farmington Middle School, Farmington, MN; Maple Grove Junior High School, Maple Grove, MN; Calvary Lutheran Church, Golden Valley, MN

### BKBM ENGINEERS, INC.

219 North 2nd Street, #200 Minneapolis, MN 55401 Tel: 612/333-7101 Fax: 612/342-9482 Established 1967

Harold P. Bakke	PE
Charles L. Ballou	PE
Thomas J. Downs	PE
Personnel by Discipline	
Civil Engineers	3
Structural Engineers	15
Mechanical Engineers	5
Electrical Engineers	3
Other Professional/Technical	11
Administrative	5
TOTAL	42

Civil, electrical, mechanical and structural consulting services for buildings and bridges. Design of heating, ventilating, air conditioning, electrical power distribution, lighting systems, and energy management studies for industrial, commercial and institutional facilities. Structural design and investigations for buildings, bridges, heavy and special structure design together with field surveying including construction management service. Historic building preservation. Evaluation studies. Railroad engineering, bridges-track-facilities.

Lakeville High School, Lakeville, MN; Minnesota Judicial Center, St. Paul, MN; John & Sage Cowles Conservatory & Sculpture Garden, Minneapolis, MN; City/County Government Center, Rochester, MN; First Street Parking Ramp & Skyway, Rochester, MN.

#### BONESTROO ROSENE ANDERLIK & ASSOCIATES

2335 West Highway 36 St. Paul, MN 55113 Tel: 612/636-4600 Fax: 612/636-1311 Established 1956

Otto G. Bonestroo	
Marvin L. Sorvala	
Joseph C. Anderlik	
Glenn R. Cook	
Robert G. Schunicht	

PE

PE

PE

PE

PE

TOTAL

Firm Personnel by Discipline 34 **Civil Engineers** Structural Engineers 6 **Electrical Engineers** 2 **Other Engineers** 10 Architects 2 **Other Professional/Technical** 54 Administrative 15 TOTAL 123

Bonestroo specializes in structural engineering, site engineering, traffic engineering and transportation planning; environmental assessments; wastewater collection and treatment; water supply, distribution and treatment; stormwater quantity and quality management; buildings and recreational projects. Bonestroo provides services as a consultant in both design/ build and design/bid situations; feasibility studies, design and construction engineering, and project surveying.

Northwest Airlines Headquarters, Eagan, MN; Olympic Festival Sports Complex, Nashville, TN; Closed-Loop Traffic Signal System, Hudson, WIp Downtown Renovation, Fergus Falls, MN; Central Maintenance Services, St. Cloud, MN.

### DAVID BRASLAU ASSOCIATES, INC.

1313 5th Street SE, Ste. 322 Minneapolis, MN 55414 Tel: 612/331-4571 Fax: 612/331-4572 Established 1971

Dr. David Braslau	PE
Firm Personnel by Discipline	
Acoustical Engineers	1
Other Professional/Technical	1
Administrative	1

3

Architectural and performance space *acoustics*, building and partition noise isolation, environmental noise control, exterior facade attenuation for aircraft and other sources, sound system design, industrial noise control, acoustic and noise measurements, control of vibration, blasting and small arms ranges, land use compatibility, environmental assessments, impact statements and indirect source permits.

Minneapolis Convention Center, Minneapolis, MN; Eden Prairie Schools (music facilities), Eden Prairie, MN; Combined Operations Center/Heathrow, London, England; Brown County Jail, New Ulm, MN; Park Nicollet Medical Center, St. Louis Park, MN.

### DIRECTORY OF CONSULTING ENGINEERING FIRMS

# BRAUN INTERTEC

8000 Town Line Avenue South Minneapolis, MN 55439-0108 Tel: 612/946-6000 Fax: 612/946-6190 Established 1957

J.S. Braun	PE
George D. Kluempke	PE
Cameron G. Kruse	PE
Firm Personnel by Discipline	
Circil Englisher	56

Civil Engineers	56
Electrical Engineers	1
Other Engineers	17
Architects	1
<b>Other Professional/Technical</b>	324
Administrative	124
TOTAL	523

Braun Intertec is an engineering and environmental consulting and testing company providing services to public and private clients from 23 office locations in six states. Services include geotechnical materials and environmental engineering, infrastructure and pavement management; site assessments, natural resource management; lead-based paint consulting; and laboratory analysis.

Mall of America, Bloomington, MN; Target Center Arena, Minneapolis, MN; Dain Bosworth/ Neiman Marcus Plaza, Minneapolis, MN; Great Lakes Gas Transmission Company, Minneapolis, MN; Strategic Highway Research Program (SHRP), North Central Region, USA.

# CLARK ENGINEERING

2815 Wayzata Blvd. Minneapolis, MN 55405 Tel: 612/374-4740 Fax: 612/374-4749

Charles E. Hansen	PF
Larry G. McMurtry	PF
Hadi Sajadi	PE
Michael A. Fowler	PE

Firm Personnel by Discipline	
Civil Engineers	3
Structural Engineers	8
Other Professional/Technical	12.5
Administrative	3.5
TOTAL	27

Complete structural and civil engineering services for commercial, industrial and public buildings, bridges, towers, foundations, etc. Water supply, distribution and storage, solid and liquid waste collection, treatment and disposal; street, highway, storm water systems; site development planning. Investigations, studies, reports, plans and specifications.

Weyerhaeuser Company Shipping Container Plant, Aurora, IL; Mystic Lake Casino Expansion, Prior Lake, MN; Stillwater Senior High School, Stillwater, MN; Sharing & Caring Hands, Minneapolis, MN; Red Wing Senior High School, Red Wing, MN.

### COMSTOCK & DAVIS, INC.

1446 County Road J (85th Avenue NE) Minneapolis, MN 55432 Tel: 612/784-9346 Fax: 612/784-9395 Nine Minnesota Locations: Bemidji, Brainerd, Grand Rapids, Hutchinson, Lake Elmo, Little Falls, Moose Lake, St. Paul Established 1952

Julian Fenendael	PE
Tom Thiessen	LS
Firm Personnel by Discipline	
Civil Engineers	7
Land Surveyors	15
<b>Other Professional/Technical</b>	27
Administrative	4
TOTAL	53

Civil Engineering and land surveying services for the federal government, the State of Minnesota, counties, various municipalities and other design professionals. Site engineering, environmental assessments, water supply, treatment and distribution, waste water treatment and collection, storm water collection and quality management, roadway design, topographic, land title, and design surveying. Construction staking and inspection. Site engineering and surveying services for Minnesota Psychopathic Center and Correctional Facility at Moose Lake, MN; Washington County Law Enforcement Center, MN; Hinckley and Mille Lacs Casinos, MN; Mille Lacs Band of Ojibwe Infrastructure, MN.

### DARG BOLGREAN MENK, INC.

7575 Golden Valley Rd., Ste. 210
Golden Valley, MN 55427
Tel: 612/544-8456
Fax: 612/544-8914
Established 1966.

PE
PE
PE

Firm Personnel by Discipline	
Structural Engineers	3
Other Professional/Technical	2
Administrative	1
TOTAL	6

Complete structural engineering services for commercial/retail, office, warehouse, academic, industrial, governmental, medical/health, housing, religious and parking facilities. With expertise in steel, concrete masonry and wood, DBM has engineered new construction, additions, renovations/restorations and performed investigations, feasibility, and special inspections for the architectural profession, owners, developers, contractors and fabricators.

NCR Country Club, Kettering, OH; Lincoln School, Green Bay, WI; Lac Courte Orielles Casino, Hayward, WI; National Guard Armory, Montevideo, MN; One Pacific Place, Omaha, NE.

### DEI (DELTA ENGINEERING, INC.)

2365 McKnight Road North St. Paul, MN 55109 Tel: 612/779-7004 Fax: 612/779-7103 Established 1970

Stanley K. Rhyn William T. Abe John D. Bland

Firm Personnel by Discipline	
Mechanical Engineers	5
Electrical Engineers	7
Other Professional/Technical	8
Administrative	2
TOTAL	22

Electrical and mechanical consulting engineering services. Specializing in industrial facilities upgrading, new facilities power distribution, process and pollution control projects.

Incinerator, Cottage Grove, MN; Biofilter, Springfield, MO; Thermal Oxidizer, Cottage Grove, MN; Midwest Distribution Center, Cannon Falls, MN; Liquid-Nitrogen Process Upgrade, St. Paul, MN.

### DUNHAM ASSOCIATES, INC.

9141 Grand Avenue South Minneapolis, MN 55420 Tel: 612/885-1800 Fax: 612/885-1856 Established 1960

PE
PE
PE
PE
PE
10
31
24
46

Other Professional./Technical 46 Administrative 21 TOTAL 132 Dunham Associates, Inc. offers

Dunham Associates, Inc. offers mechanical, electrical and structural consulting engineering services. Specialized areas include health care facilities, retail, parking ramps and skyways, data centers, clean rooms, DDC systems, laboratories, structural load studies and design, industrial ventilation and process cooling, and master planning and energy conservation studies for central utilities.

MSP International Airport Ground Transportation Center, MN; Unity Hospital Surgery Addition, Fridley, MN; West Health

PE Campus, Plymouth, MN; UMD Student Center, Duluth, MN; U of M Shops Building Remodel, Minneapolis, MN.

PE

### EMANUELSON-PODAS, INC.

6607 18th Avenue S. Minneapolis, MN 55423 Tel: 612/866-8424 Fax: 612/866-8426 Established 1977

Paul Emanuelson	PE
	2.00
Robert Emanuelson	PE

3

2

8

Firm Personnel by Discipline Mechanical Engineers **Electrical Engineers** Other Professional/Technical 3 TOTAL

Preparation of mechanical and electrical facility study reports, energy analyses, plans and specifications for building construction and construction observations. Mechanical services include plumbing, fire protection, heating, air conditioning and temperature controls. Electrical services include lighting, power, communication and controls.

Minnewaska Area High School, Glenwood, MN; Shakopee Recreation Center/Sports & Health, Prior Lake, MN; Rock Bottom Brewery, Minneapolis, MN: Crystal Evangelical Free Church, Crystal, MN; Miller Chevrolet Auto Dealership. Rogers, MN

### ENCOMPASS, INC.

2850 Metro Drive, Suite 523 Bloomington, MN 55425 Tel: 612/854-4511 Fax: 612/854-3126 Established 1979

Howard Noziska	PE
Firm Personnel by Discipline	
Civil Engineers	3

Civil Engineers	3
Other Professional/Technical	1
Administrative	2
TOTAL	6

Structural design and façade detailing services for buildings, with extensive experience in masonry construction. Encompass provides preconstruction analysis of details and specifications for the purpose of preventing construction problems or failures. We offer inspection services to ensure compliance with contract documents or record conditions to facilitate problem analysis and repair.

Gran-A-Stone, Office, Warehouse and Stone Cutting Facility. St. Cloud, MN; ISD 196, Five-Year Facilities Maintenance Plan, Rosemount, MN: State Secondary Governmental Complex, Lansing, MI; MEECO, Office and Manufacturing Building, St. Louis, MO; Drummer Office Building, Troy, MI.

#### **ENGINEERING DESIGN GROUP OF MINNESOTA,** INC.

547 Lovell Avenue Roseville, MN 55113 Tel/Fax: 612/481-9195 Cellular: 612/799-3850 Established 1989

#### Sean K. Hallet

Firm Personnel by Discipline Structural Engineers **Other Professional/Technical** .5 TOTAL 1.5

PE

Structural engineering of commercial, industrial, residential and curtainwall systems. Complete design and analysis of contract documents for building systems. Facility engineering for mono rail and crane rail systems. Non-destructive inspections of all structures. Heavy equipment foundation engineering. Explosive room and venting engineering. Structural design for products. Structural design of amusement rides.

First Bank Place, Minneapolis, MN; West PAC Industries, New Hope, MN: Harding High School, St. Paul, MN; Humboldt High School, St. Paul, MN; Group Health Incorporated, Maplewood, MN.

### ENVIRONMENTAL SERVICES, INC.

7831 Glenroy Road, Ste. 340 Minneapolis, MN 55439 Tel: 612/831-4646 Fax: 612/831-6897 Established 1970

David L. Pederson	PE
R. Barry Whiteaker	PE
Firm Personnel by Disci	pline

Structural Engineers **Other Professional/Technical** Administrative TOTAL 5

3

1

1

Structural Engineering: finite element stress analysis of buildings, bridges, tanks, machinery and quipment. Vibration Engineering: vibration control and isolation design of buildings, foundations and equipment.

**Electrical Engineering/Computer** Science Building, University of Minnesota, Minneapolis, MN; Minnesota History Center, St. Paul, MN; Firing Impulse Simulator, Aberdeen Proving Grounds, MD: Hoffman LaRoche Multidisiplinary Science Building, Nutley, NJ; **Ochsner Medical Research** Building, New Orleans, LA.

### **ERICKSEN ELLISON and Associates Inc.**

1455 Energy Park Drive St. Paul. MN 55108 Tel: 612/641-0311 Fax: 612/641-0029 Established 1953

Bruce K. Johnson	PE
William F. Thiesse	PE
Richard A. Hoag	

Firm Personnel by Discipline	
Mechanical Engineers	6
Electrical Engineers	2
<b>Other Professional/Technical</b>	23
Administrative	4
TOTAL	35

**EEA** specializes in mechanical and electrical design including data and voice communications systems design for a variety of building types including public, institutional, educational, industrial, health care, office and commercial buildings. EEA has significant experience in design of libraries, schools, university facilities, data processing centers, manufacturing facilities for hightech companies, clean rooms, aircraft engine test facilities and airport facilities including terminals, hangars and airfield lighting and navigational aids.

Minnesota Judicial Center, St. Paul, MN; U. S. Embassy, Santiago, Chile; Minnesota World Trade Center, St. Paul, MN; Weisman Art and Teaching Museum, University of Minnesota, Minneapolis, MN; Mounds Park Magnet School, St. Paul, MN.

### **ERICKSEN, ROED AND** ASSOCIATES, INC.

300 First Avenue North, Ste. 420 Minneapolis, MN 55401 Tel: 612/342-9210 Fax: 612/342-9214 Established 1985

Alfred G. "Bud" Ericksen	PE
Thomas E. Amundson	
James D. Roed	PE
Robert A. Curtis	PE

Firm Personnel by Discipline	
Structural Engineers	11
Other Professional/Technical	10
Administrative	3
TOTAL	24

**Professional Structural Engi**neering services from planning through construction for corporate, commercial, educational, health care, industrial, sports facilities, parking ramps, aircraft engine test facilities, and restoration engineering. We provide construction documents, specifications, construction observation, existing building analysis reports and forensic engineering.

Target Center, Minneapolis, MN; University of Minnesota Basic Sciences, Minneapolis, MN; North Memorial Hospital Expansion, Minneapolis, MN; IDS Operations Center, Minneapolis, MN; AT&T Office Tower, Minneapolis, MN.

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### **DIRECTORY OF CONSULTING ENGINEERING FIRMS**

FOSS ASSOCIATES

810 4th Avenue South PO Box 306 Moorhead, MN 56561 Tel: 218/236-1202 Fax: 218/236-4945 Established 1898

Bill Cowman	AIA
Willis Stelter	AIA
Paul Jacobson	PE
Charles Zeltinger	RLS

Firm Personnel by Discipline	
Civil Engineers	1.5
Structural Engineers	1
Land Surveyor	1
Architects	7
<b>Other Professional/Technical</b>	4
Administrative	1.5
TOTAL	16

Structural and civil engineering, architectural and surveying firm with full design and construction observation services for commercial, educational, recreational, institutional, research, health care and governmental agency clients, including feasibility studies, programming, master planning, plus existing building structural deficiency surveys, and specialty of surveying existing buildings for FEMA emergency shelter capabilities.

Discovery Jr. High School, Fargo, ND (Associated with HGA); ISD 152 School Building Program (1993), Moorhead, MN; Emergency/Admitting Additions, Douglas County Hospital, Alexandria, MN; Renovate Wards/1st and 2nd Floor/Building G #51, Dept. of Veteran Affairs Medical Center, St. Cloud, MN; Verndale School Building Program, Verndale, MN.

# FOSTER, JACOBS & JOHNSON, INC.

345 Canal Park Drive, Suite 200 Duluth, MN 55802 Tel: 218/722-3060 Fax: 218/722-1931 Established 1922

James R. Johnson	PE
Charles F. Jacobs	PE

Firm Personnel by Discipline	
Mechanical Engineers	2
Electrical Engineers	2
<b>Other Professional/Technical</b>	3
Administrative	1.5
TOTAL	8.5

Mechanical and Electrical engineering services for all building types: Design of power, lighting, security and comunication systems. Significant experience in design of energy conservative systems in new construction and retro-fit. Including energy management systems, daylighting and energy efficient lighting.

Duluth Entertainment and Convention Center, Duluth, MN; Aircraft Fire Fighting Training Facility, Duluth, MN; Natural Resources Research Institute, Duluth, MN; Douglas County Courthouse Renovation, Superior, WI; Food Service Renovation, Federal Correctional Institution, Sandstone, MN.

### GAUSMAN & MOORE ASSOCIATES, INC.

1700 West Highway 36, Suite 700 Roseville, MN 55113 Tel: 612/639-9606 Fax: 612/639-9618 Established 1935

PE
PE
PE
PE
PE

Firm Personnel by Discipline	
Mechanical Engineers	7
Electrical Engineers	5
Other Professional/Technical	35
Administrative	8
TOTAL	55

Services offered: Mechanical and electrical engineering, including design of HVAC, plumbing, fire protection, power distribution, security and audio/visual systems. Also specialty lighting design, computer network/voice network design, energy conservation, design/funding studies.

Timberwolves Target Center Arena, Minneapolis, MN; Eden Prairie Public Schools, Eden Prairie, MN; University of Minnesota Cancer Center, Minneapolis, MN; ShopKo Stores (several states); St. Croix Valley Hospital, St. Croix Falls, WI.

### HALLBERG ASSOCIATES, INC.

2207 Third Street White Bear Lake, MN 55110 Tel: 612/429-5655 Fax: 612/429-6215 Established 1984

.

PE

Joe Hallberg

Firm Personnel by DisciplineMechanical Engineers5Other Professional/Technical8Administrative2TOTAL15

Mechanical System Design and Energy Conservation Services for schools, universities, churches, and office buildings.

Alexandria Junior High School, Alexandria, MN; St. Michael/ Albertville Senior High School, St. Michael, MN; Burnside Elementary School, Red Wing, MN; Osakis Middle School, Osakis, MN; University of St. Thomas Central Heating Plant Renovations, St. Paul, MN.

### HAMMEL GREEN AND ABRAHAMSON, INC. (HGA)

1201 Harmon Place	
Minneapolis, MN 55403-198	5
Tel: 612/332-3944	
Fax: 612/332-9013	
Established 1953	

Harry R. Wilcox	PE
James M. Moravek	PE
Steve Bieniek	PE

Firm Personnel by Discipline	9
Civil Engineers	5
Structural Engineers	12
Mechanical Engineers	17
Electrical Engineers	12
Architects	75
Other Professional/Technical	50
Administrative	40
TOTAL	211

HGA Engineering serves clients through the full-service A/E approach; in addition, it has its own independent client base. HGA engineers pride themselves on using creativity and innovation to develop cost-effective solutions to engineering challenges. Each discipline is highly capable and intent upon providing the best possible service to all clients. Northern States Power Company, Eau Claire and La Crosse, WI; 3M, Corporate Administrative Building and Cafeteria, St. Paul, MN; IBM Campus, Rochester, MN; Metropolitan Waste Control Commission, Minneapolis, MN; Williams Arena/ Sports Pavilion, University of Minnesota, Minneapolis, MN.

### HOLABIRD & ROOT

400 South Broadway Ave. Rochester, MN 55904 Tel: 507/288-8088 Fax: 507/288-7311 Established 1880

Gregory B. Cook	AIA
Nicholas A. Bilandic	PE
Gerald Horn	AIA

Firm Personnel by Discipline	
Civil Engineers	2
Structural Engineers	7
Mechanical Engineers	17
Electrical Engineers	12
Architects	43
<b>Other Professional/Technical</b>	14
Administrative	30
TOTAL	125

Holabird & Root's Engineering staff works closely with clients to develop appropriate engineering solutions based on economy, efficiency, and durability. Client interests include heavy and light industrial manufacturing, institutional, and commercial facilities. The strength of Holabird & Root's engineering is the commitment to high quality design for optimum solutions.

Hardfile Assembly Cleanroom, Rochester, MN; Collegiate Science Building, St. Paul, MN; Energy Audits and Retrofits, Faribault, MN; Coating Application Cleanroom, Seymour, IN; Electronics Research and Development Lab, Rochester, MN.

**48** ARCHITECTURE MINNESOTA

### **KRECH, O'BRIEN, MUELLER & WASS, INC.**

6115 Cahill Avenue Inver Grove Heights, MN 55076 Tel: 612/451-4605 Fax: 612/451-0917 Established 1985

PE
AIA
AIA
AIA

Firm Personnel by Discipline Structural Engineers 2 Architects 5 **Other Professional/Technical** 5 Administrative 1 TOTAL 13

Structural engineering for commercial, industrial, medical, retail, agri-facilities and residential projects. We offer Auto-CAD and have a current library of structural design software. Services are provided for architects, owners, contractors, and various agencies.

Catholic Charities, Minneapolis, MN: Mt. Airy Community Center, St. Paul, MN; NAHAN Printing Addition, St. Cloud, MN; CCH Assisted Living, Hudson, WI; First Federal Bank, Hudson, WI.

### LARSON ENGINEERING **OF MINNESOTA**

3524 Labore Road White Bear Lake, MN 55110 Tel: 612/481-9120 Fax: 612/481-9201 Established 1978

Wayne C. Larson	PE
Lee A. Granquist	PE

Firm Personnel by Discipline 2 **Civil Engineers** Structural Engineers 11 **Other Professional/Technical** 3 Administrative 3 TOTAL 19

Providing structural and civil engineering design services throughout Minnesota. Structural design of commercial, institutional, industrial, governmental and residential structures of all types. Structural evaluations and investigation of historic buildings and renovation projects. Special expertise in the structural design of curtainwall systems. Extensive experience in the structural design of schools and educational facilities.

Lowell Barnes Elementary School, Duluth, MN; St. Louis County Jail, Duluth, MN; First Bank Plaza Curtainwalls, Minneapolis, MN; Shoreview Public Library, Shoreview, MN: 1992 Winter Carnival Ice Palace, St. Paul, MN.

### **LHB ENGINEERS &** ARCHITECTS

4600 West 77th Street. Suite 302 Edina, MN 55435 Tel: 612/831-8971 Fax: 612/831-0115 Established 1965

Lauren A. Larsen	PE
Harvey H. Harvala	PE
William D. Bennett	PE
David M. Sheedy	PE
Richard A. Carter	AIA

Firm Personnel by Discipline	
Civil Engineers	5
Structural Engineers	8
Mechanical Engineers	1
Architects	13
Other Professional/Technical	8
Administrative	12
TOTAL	47

LHB offers complete A/E services to industrial, governmental, commercial, and health care clients. Specific services include: structural, civil and mechanical engineering, surveying, architecture, landscape architecture, and interior design. Specialties include providing innovative solutions to building renovations, healthy building design, convenience stores, roadways, bridges, curtain walls, building investigations, and building condition documentation and monitoring.

Potlatch Caustic Unloading Facility, Cloquet, MN; Appliance Parts Building Renovation, Minneapolis, MN; Lake Superior Place Office Renovation. Duluth. MN; Waseca Industrial Road and Bridges, Duluth, MN; Hwy. 55/ Mendota Interchange Condition Survey, Mendota, MN.

### LS ENGINEERS, INC.

200 South Main Street LeSueur, MN 56058 Tel: 612/665-6255 Fax: 612/665-6818 Established 1988

Robert L. Sprengeler PE William P. Lehnertz PE

Firm Personnel by Discipline Structural Engineers 5 **Other Professional/Technical** 2 Administrative 1 TOTAL 8

Structural engineering services for all building types in the areas of industrial, commercial, religious, institutional, residential, manufacturing, as well as specialized structures for water and wastewater plants. Full range of services including feasibility studies, investigations, construction documents, cost estimates, and field observations.

Mankato Middle School, Mankato, MN; Rochester Athletic Facility, Rochester, MN; MN Veterans Nursing Home, LaVerne, MN; Eden Prairie Community Center Addition, Eden Prairie, MN; Mankato State Utility Tunnel Addition, Mankato, MN.

### MATTSON/MACDONALD, INC.

1516 West Lake Street Minneapolis, MN 55408 Tel: 612/827-7825 Fax: 612/827-0805 Established 1983

Wesley C. Mattson	PE
David H. Macdonald	PE

Firm Personnel by Discipline Structural Engineers 4 2 **Other Professional/Technical** Administrative 1 TOTAL 7

Mattson/Macdonald provides structural engineering services to architectural clients. Mattson/ Macdonald has considerable experience with a broad range of project types: housing, retail, office, manufacturing, hospitals, churches, educational and governmental facilities.

Blue Earth Area High School, Blue Earth, MN: Mounds Park Academy Auditorium/Gymnasium, Maplewood, MN; National Computer Systems, Iowa City, Iowa: Mille Lacs Indian Museum. Mille Lacs Lake, MN: Mobilization and Training Equipment Building, Camp Ripley, MN.

### **MEYER, BORGMAN AND** JOHNSON, INC.

810 Plymouth Building Minneapolis, MN 55402 Tel: 612/338-0713 Fax: 612/337-5325 Established 1955

John E. Meyer	PE
Roland V. Johnson	PE
Richard E. Wiehle	
Daniel E. Murphy	
Michael J. Ramerth	PE
Firm Personnel by Discipline	
Structural Engineers	10
Other Professional/Technical	4
Administrative	2
TOTAL	16

Specializing in the design of structural systems and foundations for commercial, industrial, educational, institutional, performing arts and religious facilities. Services are rendered to architects, contractors and others for all types of projects which require structural engineering services.

Frederick Weisman Art Museum. University of Minnesota, Minneapolis, MN; Basilica of St. Mary Structural Renovation, Minneapolis, MN: Mankato Civic Center and Arena, Mankato, MN: West-Health Campus Clinic, Plymouth, MN; St. Jude Medical Carbon Facility, Little Canada, MN.

### **DIRECTORY OF CONSULTING ENGINEERING FIRMS**

### MICHAUD COOLEY ERICKSON

1200 Metropolitan Centre 333 South Seventh Street Minneapolis, MN 55402 Tel: 612/339-4941 Fax: 612/339-8354 Established 1946

Dean Rafferty	PE
Douglas Cooley	PE
Monty Talbert, Jr.	

Firm Personnel by DisciplineMechanical Engineers54Electrical Engineers30Administrative18TOTAL102

MCE's engineers design mechanical, electrical, lighting and special systems for corporate, medical, data processing, high-tech R&D, retail, industrial, educational, public and commercial buildings. Examples of special systems include: security and surveillance, life/safety, audiovisual and sound reinforcement, paging and intercom, cable or master antenna television signal distribution.

First Bank Operations Center, St. Paul, MN; Norwest Corporation - Tenant Fit-up and Owner Representation; USSB Satellite Uplink Facility, Oakdale, MN; North Memorial Medical Center Expansion and Renovation, Robbinsdale, MN; New Federal Reserve Bank, Minneapolis, MN.

# OPUS ARCHITECTS & ENGINEERS INC.

9900 Bren Road East Minnetonka, MN 55343 Tel: 612/936-4433 Fax: 612/935-1366 Established 1990

Dennis Neu	PE	
John Albers	AIA	
Firm Personnel by Discipline		
Civil Engineers	1	
Structural Engineers	7	
Mechanical Engineers	1	
Architects	28	
Other Professional/Technical	13	
Administrative	4	
TOTAL	54	

Architectural, interior, structural, civil and mechanical engineering services for design build projects. Projects include planning and design for offices, industrial, educational, institutional and special areas such as retail and sports facilities. To provide local service we have offices in Tampa, Chicago and Phoenix as well as Minneapolis.

ConAgra Corporate Campus, Omaha, NE; Labor and Industries Building, Olympia, WA; Mariucci Arena, Minneapolis, MN; 100 and 150 South 5th Street, Minneapolis, MN; Tucson Fiesta Retail Center, Tucson, AZ.

### SCHOELL & MADSON, INC.

10580 Wazata Blvd., Suite 1 Minnetonka, MN 55305 Tel: 612/546-7601 Fax: 612/546-9065 Established 1956

James Orr	PE
Kenneth Adolf	PE
Theodore Kemna	RLS

Firm Personnel by Discipline	
Civil Engineers	10
Other Engineers	7
Other Professional/Technical	11
Administrative	2
TOTAL	30

Complete wetlands identification, classification, and delineation; EAWs, EIS and natural resource services; environmental site assessments, regulatory compliance and permitting; civil engineering system studies, design and construction/contract administration; land surveying, topographic, construction, and as-built surveys; quality control soil testing.

Opus II Business Park, Minnetonka, MN; Norwest Properties, MN; Gaming Corporation of America, WI; Laurel Village, Minneapolis, MN; Restoration of Historic Main Street, Minneapolis, MN.

### SETTER, LEACH & LINDSTROM

1100 Peavy Bldg. 2nd Avenue at 8th Street Minneapolis, MN 55402 Tel: 612/338-8741 Fax: 612/338-4840 Established 1917

Richard Vasatka	PE
George Theodore	PE
<b>Basil Filonowich</b>	AIA
John P. Litchy	AIA
Kaare Faber	PE
Firm Personnel by Disci	pline
Civil Engineers	2
Structural Engineers	20
Mechanical Engineers	15
Floatnical Engineers	15

Electrical Engineers	15
Architects	30
<b>Other Professional/Technical</b>	10
Administrative	15
TOTAL	107

Setter, Leach & Lindstrom's design and consulting services include civil, structural, electrical (including specialty lighting and security) and mechanical (including HVAC and refrigeration) engineering. Engineering services have been provided for commercial, retail, industrial (principally distribution and processing facilities), educational and government buildings for over 75 years.

Minneapolis Convention Center, Minneapolis, MN; Edina Public Schools, Technology Design and Update, Edina, MN; US West, Automated Warehouse, New Brighton, MN and Denver, CO; Safeway, Inc., Food Distribution Center, Tracy, CA; North Star Steel, Plant Renovation, St. Paul, MN.

### SHORT ELLIOTT HENDRICKSON INC. (SEH)

3535 Vadnais Center Drive Saint Paul, MN 55110 Tel: 612/490-2000 Fax: 612/490-2150 Established 1927

Donald E. Lund	
Gary R. Gray	
Robert F. Pauly	
Richard A. Olsen	
fucharu A. Olsen	

Firm Personnel by Discipline	
Civil Engineers	42
Structural Engineers	6
Other Engineers	42
Architects	22
Other Professional/Technical	92
Administrative	46
TOTAL	240

SEH is a multidisciplined A/E consulting firm offering services in Architecture, Civil Engineering, Environmental and Transportation. Specialty services include VRI<sup>SM</sup> - Virtual Reality Computer Imaging and Public Involvement Programs.

Zumbro River Flood Control, Rochester, MN; Empire Wastewater Treatment Plant, Farmington, MN; Foley High School, Foley, MN; I-35E/University Sewer Separation Project, Saint Paul, MN; I-35E & County Road E Interchange and Bridge, Vadnais Heights, MN.

### STRUCTURAL DESIGN ASSOCIATES, INC.

4401 85th Avenue North, Ste 202 Minneapolis, MN 55443 Tel: 612/493-5560 Fax: 612/493-5561 Established 1989

Gregory J. Duerr	PE
Dorance J. Thorn	
Structural Engineers	3
Other Professional/Technical	3
Administrative	1
TOTAL	7

SDA specializes in structural engineering services to include schematic, design and analysis, construction documents, specifications, bidding and negotiations, construction phase and post-construction services. SDA's experience includes educational, municipal, medical, commercial office and retail buildings, industrial and manufacturing plants, warehouses, and specialized industrial structures.

PE Monticello Elementary School,

PE Monticello, MN; Big Lake High

AIA School, Big Lake, MN; Andersen AIA Corporation Building 14S.

Corporation Building 14S, Bayport, MN; Public Utilities Building, Brooklyn Park, MN; Sanofi (Kallestad) Diagnostic, Chaska, MN.

### WENCK ASSOCIATES, INC.

1800 Pioneer Creek Center Maple Plain, MN 55359 Tel: 612/479-4200 Fax: 612/479-4242 Established 1985

Norman C. Wenck	PF
Joseph J. Grabowski	RHSF
Michael A. Panzer	PE
Paul D. Josephson	PE

Firm Personnel by Discipline **Civil Engineers** 12 **Structural Engineers Other Engineers** 1 **Other Professional/Technical** 45 Administrative 11 TOTAL 70

Environmental engineering services including site development, drainage systems, site assessments, soil/groundwater contamination investigation and cleanup design, solid/hazardous waster management, landfill design, wastewater treatment, UST management, industrial environm ental compliance, stormwater management, lake restoration, and wetland management.

**Twin Cities Army Ammunition** Plant, New Brighton, MN: Minnehaha Creek Watershed District, Minnetonka, MN; St. Louis County, Hallock, MN; American Crystal Sugar, East Grand Forks, Crookston, MN and Fargo, ND; Elf Atochem, Blooming Prairie, MN.

### WENZEL ENGINEERING, INC.

10100 Morgan Avenue S. Bloomington, MN 55431 Tel: 612/888-6516 Fax: 612/888-2587 Established 1990

Lowell E. Wenzel PE

Firm Personnel by Discip	oline
Civil Engineers	.5
Structural Engineers	3.5
Administrative	1
TOTAL	5

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I20 Railroad Bridge, Shreveport, LA; Dulles International Airport, Washington, D.C.; Excelsior Elementary School, Excelsior, MN; White Bear Lake United Methodist Church, White Bear Lake, MN: United Health Care Corp., Golden Valley, MN.

### WOLD ARCHITECTS AND ENGINEERS

**6 West Fifth Street** St. Paul, MN 55102 Tel: 612/227-7773 Fax: 612/223-5646 Established 1968

N

AIA
AIA
AIA
PE

Firm Personnel by Discipline	
Mechanical Engineers	6
Electrical Engineers	5
Architects	33
Other Professional/Technical	5
Administrative 12	
TOTAL	61

Wold Engineering Capabilities: HVAC system design, plumbing system design, fire protection systems engineering, energy management engineering, voice/data communications systems, media technologies, design and specification of primary/secondary electrical systems, and security system design.

Lakeville High School, Lakeville, MN; Blackhawk Middle School, Eagan, MN; Wright-Hennepin **Electrical Cooperative Engineer**ing and Maintenance Facility, Rockford, MN; McLeod County Administrative and Justic Center Addition, Glencoe, MN; United Power Association Headquarters, Elk River, MN.

### **YAGGY COLBY** ASSOCIATES

717 Third Avenue SE Rochester, MN 55904 Tel: 507/288-6464 Fax: 507/288-5058 Established 1970

Ronald V. Yaggy	PE
Donald R. Borcherding	RLS, PE
Christopher W. Colby	AIA
Ronald L. Fiscus	ASLA

Firm Personnel by Discipline	
Civil Engineers	7
Other Engineers	2
Architects	6
Other Professional/Technical	36
Administrative	11
TOTAL	62

Yaggy Colby Associates focuses on providing prompt, personalized municipal, land development, transportation and geotechnical engineering services throughout the Upper Midwest. The firm's specialties within these services include municipal streets, department of transportation projects, residential and commercial development, water systems and municipal utilities. Other services provided by the firm include architecture, urban design. community planning, landscape architecture and surveying.

Northwest Plaza Shopping Center, Rochester, MN; Streetscaping Projects in Rochester, Stewartville, Lake City and New Ulm, MN; Chester Woods Regional Park, Olmsted County, MN; Apache Mall, Traffic Study, Parking Lot Redesign and Expansion, Site and Utility Work, Rochester, MN.

### **ROBERT YOURZAK &** ASSOCIATES, INC.

7320 Gallagher Drive, Suite 325 Minneapolis, MN 55435 Tel: 612/831-2235 Established 1982

Robert J. Yourzak	PE
Douglas G. Wolfangle	PE
Dennis F. Satterlee	PE

Firm Personnel by Discipline **Civil Engineers** 2 Structural Engineers 1 Mechanical Engineers 2 **Electrical Engineers** .5 .5 **Other Engineers** Architects 1 Other Professional/Technical 5 Administrative 1 13 TOTAL

Complete program/project/construction management services from concept to occupation for new facilities and those undergoing expansion and renovation. Services include: project direction, administration, planning, scheduling, estimating, budgeting, life cycle costing, team member requirements, progress control, computer utilization, value engineering, construction management, procurement and contract administration.

Northwest Airlines New Maintenance Base, Programming and **Conceptual Design Phase**, Duluth, MN - Program Manager.

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#### **JACOBSON** ENGINEERING, INC. 1323 West Main Street

Madison, WI 53590 Tel: 608/837-7822 Fax: 608/837-4067

Curtis L. Jacobson	PE
Mark Larson	
Jason Dale	
Firm Personnel by Discipline	
Electrical E	0

Electrical Enginners	2
Other Engineers	2
Other Professional/Technical	4
Administrative	4
TOTAL	12

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### sketches

Continued from page 9

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**previews** Continued from page 13

#### Art in Everyday Life: The Goldstein Legacy Goldstein Gallery U of Minnesota St. Paul Campus Through Jan. 30

The Goldstein Gallery's 100th exhibition honors former professors and gallery namesakes Harriet and Vetta Goldstein. Their tenure lasted from 1913 to 1949 at the University of Minnesota, where they started the art section in Home Economics, now the Department of Design, Housing and Apparel. The two believed that students learned best from direct contact with well-designed objects. Their vision of art and design is illustrated through personal memorabilia, including decorative arts, textiles, letters, teaching materials and their book Art in Everyday Life (1925).

For more information, call (612) 624-7434.

#### Paul Rudolph: Explorations in Modern Architecture, 1976–1993 National Institute for Architectural Education New York City Through Feb. 12

Nearly 400 models, drawings, photographs and furnishings from 15 completed buildings and projects will chronicle architect Paul Rudolph's career since the mid-1970s. Projects include office buildings, private residences, multiuse complexes and a church. Rudolph will create approximately 60 wall-sized panels to hold displays. The show's curator, Donald Albrecht, says the exhibition will demonstrate Rudolph's interpretation of modernism as a flexible medium that encompasses a wide range of individual approaches.

For more information, call (212) 924-7000.

#### Opening Exhibits Frederick R. Weisman Art Museum U of Minnesota Minneapolis Campus Through March 6

Three exhibits highlight the opening of the new Frederick R. Weisman Art Museum, designed by Frank O. Gehry of Santa Monica, Calif., with executive architects Meyer, Scherer & Rockcastle of Minneapolis. Portions of the museum's permanent collection are displayed in A New View: The Collections of the University of Minnesota. Augmenting this is Works from the Frederick R. Weisman Art Foundation. This contains contemporary pieces, many of which will be donated to the museum. In addition, An Architect's Eye, features work by artists who have influenced Gehry, who also designed a portion of the opening show.

For more information, call (612) 625-9678 or (612) 588-0728.

In a Classical Vein: Works from the Permanent Collection Whitney Museum of American Art New York City Through April 3

This exhibit explores the classical spirit in 20th-century American art. Included are paintings, sculptures, prints and drawings by more than 100 artists as the exhibit reconsiders classical characteristics in American art. Emphasis is on scale derived from human proportions and the importance of balance, symmetry, order and harmony.

For more information, call (212) 570-3633.

#### Minnesota A to Z Minnesota History Center St. Paul Ongoing

Minnesota A to Z showcases the Society's extensive collections. Arranged according to the 26 letters of the alphabet, the exhibit explores topics from Animals, Baseball and Canoe to eXtravagance, Yankee Girl and below Zero. In this ongoing show, new letters will come in to further highlight the collection.

For more information, call (612) 296-6126. AM

**up close** Continued from page 15

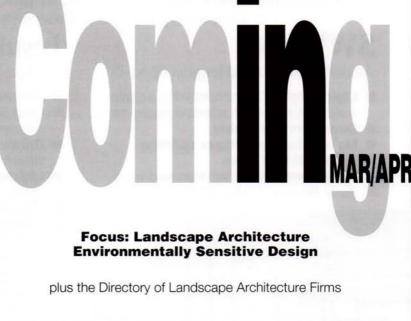
ing the natural-gas capitol of the world, the nearest art gallery was many miles away in Kansas City.

Unlike many visually oriented people, King doesn't reveal recollections of curating her childhood bedroom or painting her summer days away. "I didn't learn about the visual arts until I was a junior in college when I stumbled upon the art museum at the University of Kansas," King says.

Even though she describes that discovery as transformative, King completed her undergraduate degree in microbiology. King asks rhetorically, "What do undergraduates know?"

For five years King found herself working in a laboratory for scientists, who mocked her appreciation of art. "Everyone in the lab thought art was frivolous, which only strengthened my resolve." After taking "the grand tour of Europe" with her husband, the couple moved to Minneapolis. Bored and back in the lab, King applied for the master's program in art history, was accepted, and never wore a white lab coat again.

Continued on next page



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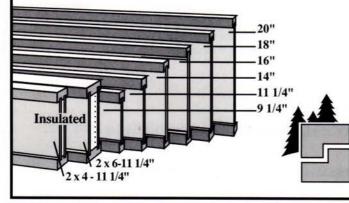
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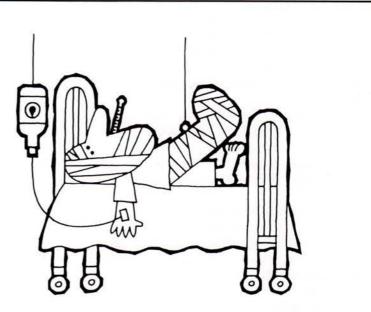
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"Art showed me that life was about more than just the everyday," King says. "I discovered that art could affect lives, whereas I had previously thought that the written word was the only vehicle of expression for a profound experience."

In graduate school King studied the London Art Union, a "middleclass, do-good group," that believed art and architecture could lift people out of poverty. Before the industrial revolution and the rise of progressive movements, museums were the domain of the rich, who feared that such modern ideas as extended hours, docents and labels for works of art would lead to mass vandalism. In keeping with her graduate studies, King views university museums as a part of the populist movement. Some 100 years after the London Art Union, museums like the Weisman are very different places from their predecessors-accessible and inclusive.

"I envision the Weisman as a drop-in center, where students can stop by for 15 to 20 minutes," King says. "I'm glad that we're not just a destination site, but a building that people will walk by everyday. I didn't want to be on the edge of campus. I see our location as a way to break down the barrier between art and the people."

With visitors streaming into an architectural gem to view an impressive collection of 20th-century art plus a notable cache of work by Marsden Hartley and Charles Beiderman, as well as pieces from the Weisman collection—the museum is the envy of the Twin Cities' cultural community. In some cases that sentiment has turned to jealousy, with detractors suggesting that the area can't absorb another museum. King disagrees.

"If we do a good job, we'll provide a mature audience for the arts in the community," King explains. "People underestimate how important art education can be in a student's academic training. It's our goal that every student experiences the museum at least once during his [or her] time on campus. The museum will provide students with both the intellectual and physical accessibility to the arts. As you know, this building is difficult to ignore. Nobody's ever going to say again that they didn't know the University had an art museum. In fact, the building proclaims itself as a work of art in and of itself. It won't take for everyone, but it does give students the same access to art as they have to basketball. Having those kinds of experiences will increase the pool of patrons for other art museums."

In the museum world, careers are made by groundbreaking exhibitions and capital campaigns, but legacies are established through buildings. King has secured a place for herself in the cultural history of this cityscape.

"This is a once-in-a-lifetime deal," King admits. "How many museum directors get to work with Frank Gehry?"

From where she sits, King is on the top of the world, looking on the jewel in the crown of her tenure. When asked about her next move, King reminds us, "I don't have a life plan."

David Anger is a writer living in Minneapolis. AM

### Minnesota travelogue: Rochester

Continued from page 43

Completing the civic district on the downtown side of the river will be a new public library, 600-car parking ramp, and skyway system linking the district to downtown. Designed by The Leonard Parker Associates, the \$20.3 million project will double the size of Rochester's library. Leonard Parker says the library will be "very much in the modernist mode."

An unusual feature, according to project architect Francis Bulbulian, will be a dramatic entrance canopy cantilevered over a drivein book drop. Completion is expected in fall 1995.

Private development also continues in Rochester. The newly com-



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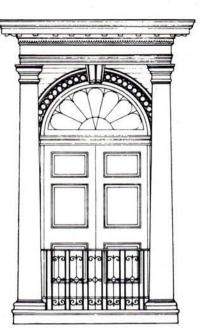
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pleted Rochester Athletic Club has attracted many area residents. Located near the junction of highways 52 and 14, this new sportsand- health facility sprawls over 34 acres with nine indoor tennis courts (plus plans for eight outdoors), three swimming pools, a full-service restaurant, special children's section, racquetball and basketball courts and many other features. The architect is Hervey LaVoie, a Denver architect who specializes in health-club design.

For the visitor driving around this hilly city, Rochester's historic homes hold great appeal. One such residence located at the top of "Pill Hill" (an elegant neighborhood near Saint Marys where many physicians live) is the Plummer House, a 3-story English tudor of limestone, stucco and half-timber designed by Ellerbe in 1924.

Also in Rochester are three Frank Lloyd Wright houses, including a Usonian house. Just outside Rochester is one of the most famous historic homes in Minnesota, Mayowood, the original home of Drs. Charles H. and Charles W. Mayo. The 40-room gray concrete mansion with its many terraces, fountains and pavilions, perches on a wooded hillside overlooking the Zumbro River Valley. Completed in 1911, the house is on the National Register of Historic Places.

Meanwhile, other new architecture goes up at a regular pace. Over the years, IBM has tripled the square footage of its campus. repeating the profile of the original Saarinen design. Health-care work also goes on continuously in **Rochester. Saint Marys Hospital** recently completed another expansion with the Sister Generose Gervais Building for the psychiatry and psychology by Henningson, Durham & Richardson, Inc., of Omaha, Neb. Next to this is a contemplative Peace Garden, another asset for Rochester's many visitors to enjoy.

Bette Hammel is a Minneapolis writer. AM

Credits (We encourage you to support the following architects, consultants and suppliers.) **Project: Ted Mann Concert Hall** Location: University of Minnesota, Minneapolis Client: University of Minnesota Architects: Hammel Green and Abrahamson, Inc. Principal-in-charge: Curt Green Project managers: Greg Haley, John Justus Project architect: Peter Graffunder. Becky Greco Project designer: Tom Johnson Project team: Jamie Milne-Rojek, Bill Kokotovich, Rey Custer, Sonya Larson, Alicia Creagh-Duncan Engineers: Hammel Green and Abrahamson, Inc. Structural engineer: John Bauch Electrical engineer: Terry Tangedahl Mechanical engineer: Kermit Olson Contractor: Bor-Son Interior design: (HGA) Roxanne Lange, Michelle Klein Landscape architect: (HGA) Tom Oslund Theater acoustical and audio consultant: Artec Consultants Acoustic and audio consultant (construction phase): Acoustic Dimensions Theater consultant (construction phase): Schuler and Shook Photographer: Shin and Joel Koyama Windows: Harmon Contract Kawneer/Heat Mirror Glazing Roofing: Ballasted EPDM, Carlisle Stone/brick: Bor-Son Flooring systems/materials: Lee's Commercial "Faculty IV" and Prince St. "Sisal" Ceiling systems/materials: Plaster/Mulcahy Casework/woodwork: Ron's Cabinets, Inc. Furniture systems: Accessible-Seating-KI "Versa" chair Acoustical fabric wall panels: Knoll Textiles "Jasmine" Auditorium seating: Irwin Theater equipment: SECOA **Project: Mariucci Arena** Location: University of Minnesota, Minneapolis

Client: University of Minnesota Architects: Opus Architects & Engineers/Graham-Edmunds Principal-in-charge: John Albers/ Barry Graham Project manager: Craig Larson, Jeff Kemp Project architect: Larry Everson Project designer: John Albers/Barry Graham Project team: Roger Mifek, Chuck O'Connell, Jim Fantuz, Bob Morgan, Jeff Magnuson, Barb Elton, John Lewis, Tony Dib, Scott Christiansen Hockey arena program: David Knoblauch Structural engineers: Opus Architects & Engineers Mechanical engineers: Opus Architects & Engineers, New Mech & Dunham Associates Electrical engineers: O.S.M. Contractor: Opus Corporation Interior design: Opus Architects & Engineers

Commercial Refrigeration Systems Windows: Gateway ACG Lighting: General Electric Roofing: B.L. Dalsin Roofing Brick: Corning-Donohue Inc. Structural concrete: Bladholm Brothers Co., Fabcon, Inc. Flooring systems/materials: Tuflex Skate Tile Structural steel: L.L. LeJeune Steel Co., Western Steel Erectors Arena seating: Interkal Architectural precast concrete: Kroeger Precast **Project: Frederick R. Weisman Art** Museum Location: University of Minnesota, Minneapolis Owner: University of Minnesota Architects: Frank O. Gehry & Associates Design principal: Frank O. Gehry, FAIA Managing principals: Robert G. Hale, Jr., AIA, Randy Jefferson, AIA Project designer: Edwin Chan Project architect: Victoria Jenkins Project team: Matt Fineout, David Gastrau, **Richard Rosa** Executive architects: Meyer, Scherer & Rockcastle. Ltd. Managing principal: Jeffrey Scherer, AIA Project architect: John Cook, AlA Project team: Greg Abnet, Joan Soranno, David Zenk, Pat Fitzgerald, Tim Carlson, Kelly Roemhildt, Jim Larson, Mark Fausner Structural engineers: Meyer, Borgman & Johnson, Inc. Contractor: Sheehy Construction Company Mechanical: Egan & Sons, Inc. Electrical: Electric Service Company Sheet Metal: A. Zahner Sheet Metal Company Windows: Duratherm Window Corporation Lighting: Linear Lighting, LSI, Macro Shade system: Mecho Shade System Roofing: Goodyear Roofing Brick: Belden Brick Co, Concrete: Cemstone Products Company Structural Steel: American Structural Metals, Western Steel Erection, Inc., Listul Industries, Inc. Plaster/Drywall: Minuti Ogle Co., Inc. Painting: Wasche Interiors, Inc. Wood floor: Harris Tarkett Plvwood casework: Ron's Cabinets. Aaron Carlson Company Furniture systems: Herman Miller Testing: American Engineering and Testing Mechanical/Electrical engineers: Ericksen, Ellison & Associates Civil engineers: Progressive Consulting Engineers Landscape architects: Damon Farber Associates Signage: Yamamoto-Moss, Inc. Cost consultant: Ted Jage & Associates Specification consultant: Jack Lindeman Lighting: Paul Helms Associates Parking/traffic consultant: Strager Roscoe Fausch Model Photographer: Joshua White Photographer: Don F. Wong

Landscape architect: Damon Farber

Ice rink refrigeration/dasher boards:

Associates

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T.B. Walker residence and art gallery, 803-807 Hennepin Avenue, Minneapolis.

The Upper Midwest's finest public-art gallery sprang out of a downtown-Minneapolis residence and out of the mind of the art-collecting lumberman who lived there. works by such masters as Rembrandt, Anthony Van Dyke, Frans Hals, Jean Corot, Henri Rousseau and Joseph Turner. He acquired an unmatched variety of Asian pottery,

T.B. Walker, who moved to Minneapolis from Ohio in 1862 and made a fortune in lumber and real estate, built a house for his large family at the corner of Eighth Street and Hennepin Avenue in 1876. At about the same time, he began collecting art, starting with a few canvasses, sculptures and prints to decorate his new home.

From those modest beginnings, Walker's art collection grew during 40 years into an immense hoarding of collectible objects of all kinds. He bought portraits and landscapes, works by such masters as Rembrandt, Anthony Van Dyke, Frans Hals, Jean Corot, Henri Rousseau and Joseph Turner. He acquired an unmatched variety of Asian pottery, porcelains and jade carvings. Musical instruments, ancient Greek vases, lamps, coins, agates, sea shells, paintings of American Indians, southwestern archaeological artifacts, antique furniture and old bronze pieces also entered the Walker collection.

The Walker residence, a large butnot-monumental chateau-style structure, quickly ran out of space for this behemoth collection. In 1879 he built an art gallery between the residence and the carriage house, furnishing it with a skylight and paintings. Anyone could visit and enjoy art at no charge. Two more galleries became necessary in 1892. In the style of the period, the walls of these art spaces supported a crowd of masterworks, while decorative furniture and sculpture filled the corners and heavy rugs muffled footsteps on the wooden floors.

By 1916, when the Walker family moved to the larger expanses of a mansion on Lowry Hill, 14 rooms of the Hennepin Avenue house were crammed with art. The lumberman established his own art foundation, which opened as the Walker Art Gallery on the present site of Walker Art Center in 1927.

The old Walker residence fell in 1920 to make room for the State Theater, which today is part of LaSalle Plaza. Jack El-Hai

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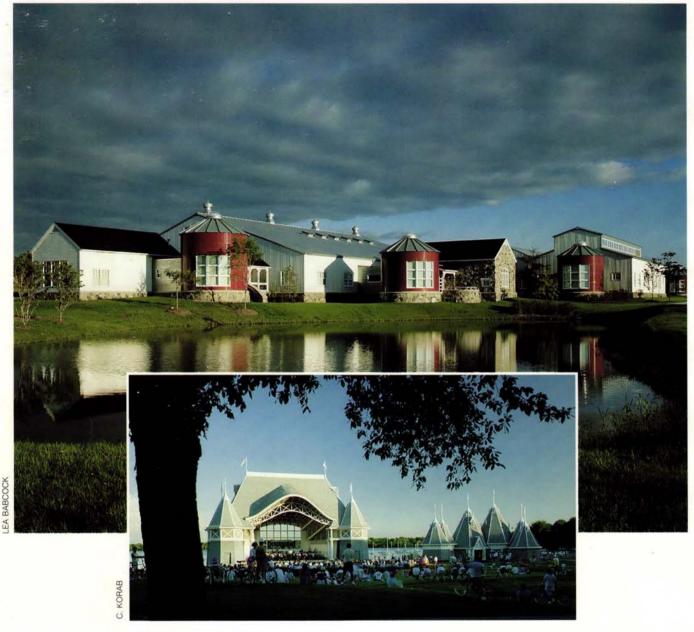
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