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story on page 58

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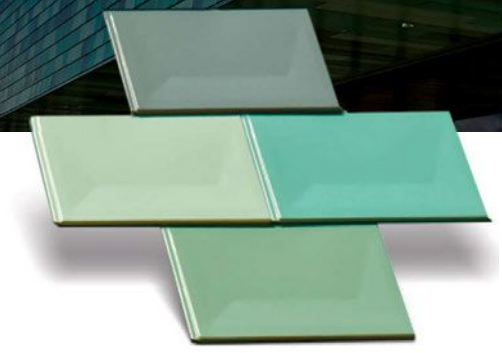
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retrofit's second-annual Metamorphosis Awards has culminated in 17 winners with outstanding achievements in retrofitting commercial, industrial and institutional buildings.

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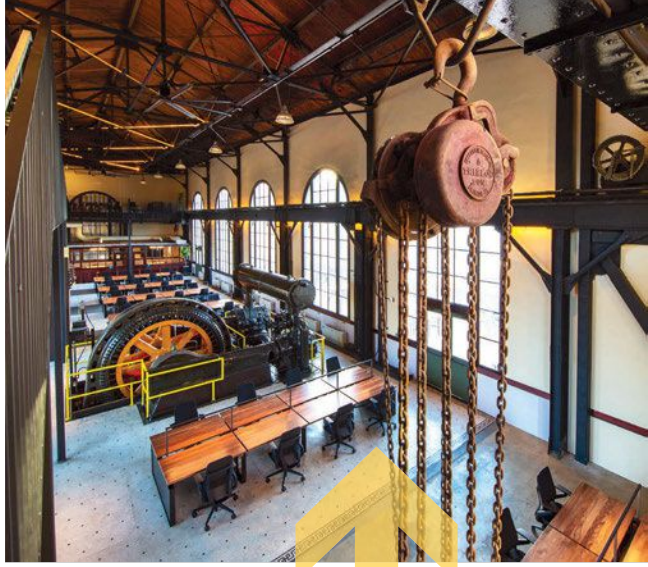
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COVER PHOTO: **RON BLUNT, RON BLUNT ARCHITECTURAL PHOTOGRAPHY**

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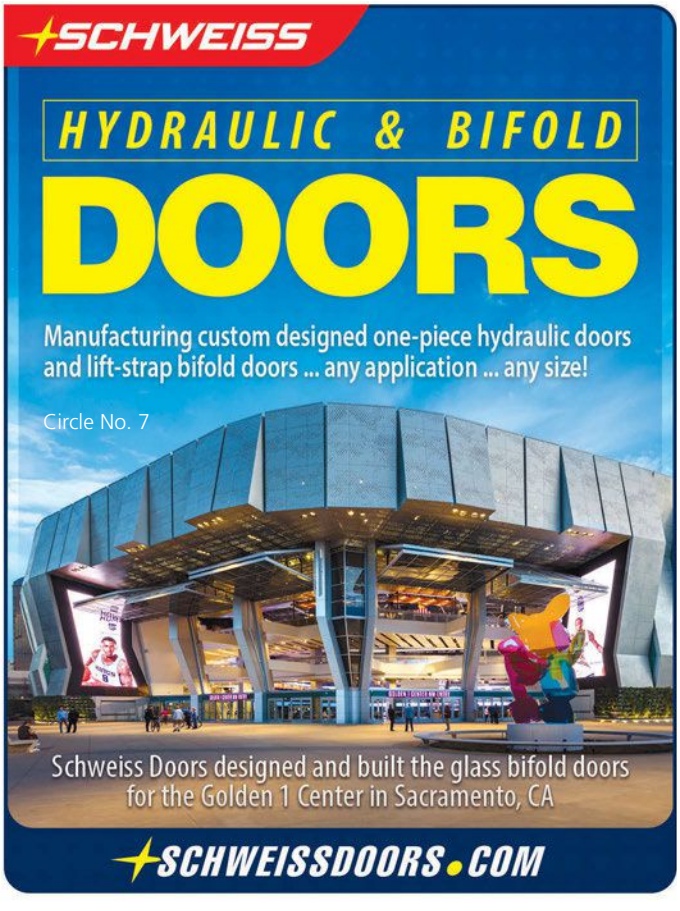
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pointofview



RELICS OF THE PAST

It probably was inevitable that my husband Bart and I would become farmers. We live in Iowa, after all! Bart's knowledge of livestock, grain and their markets as an ag lender, along with his desire to make investments for our family, led to buying a farm. Today, I can say we're the proud owners of 158 acres of land and 80 cattle.

Our farm is located in Iowa's Loess Hills, a beautiful area in the western part of the state that was created by wind-deposited soil (my headshot this year was taken in the Loess Hills). The undulating terrain can be challenging, so Bart has spent countless hours since buying the farm, filling in areas of erosion, removing invasive species, improving the ponds so our cattle have natural water sources available to them, building fences and more. While he was working on the farm in August, he texted me a couple photos of a round disc he found on our land (right).



A Google search uncovered the disc is a geodetic marker, part of the National Spatial Reference System. It was set by the U.S. Coast & Geodetic Survey in 1950 and actually points with its arrow toward the main triangulation station. The stations are reference points for land surveys, mapmaking, engineering, construction, environmental measurements and geological studies and are protected from disturbance by federal law. Bart and I were pretty amazed by this discovery and invited one of our friends, who is a land surveyor, to take a look. Our friend the surveyor spent an entire day at our farm, "geeking out" over the marker and searching for others. He said the marker likely was placed on our farm because it is one of the highest points in the county.

One of the reasons editing ***retrofit*** is so satisfying for me is because our writers constantly are uncovering time capsules within their stories, like my husband uncovered this geodetic marker. One of my majors in college was history, simply because I loved it. Now I get to dive into the history of existing buildings every day and learn about the unexpected discoveries from the past found inside them. I'm not the only one, obviously, that finds delight in these historic items because—as we see time and again within the pages of this magazine—they often are reused within the retrofitted buildings. They maintain a building's historic character and set it apart from new construction, which attracts tenants looking for unique spaces.

This issue features our second-annual Metamorphosis Awards winners and many of the winning firms found and reused artifacts in their projects. For example, the First Place Multifamily category winner, Hirsch MPG LLC, wanted residents to recognize Fields Lofts' history as a warehouse for Chicago's beloved (and now defunct) department store, Marshall Field's. The interior designer used Marshall Field's signage from the building in the sixth-floor co-working space and incorporated Field's iconic shade of green throughout. Read the story on page 40.

Marcy Wong Donn Logan Architects has won Metamorphosis Awards two years in a row. (Read about the firm's 2019 Metamorphosis Awards projects in our November-December 2019 issue, pages 42 and 76.) This year's winning project, which can be found on page 66, is a 1912 powerhouse at Pier 70 in San Francisco. Now imaginative office space, the project maintains its historic character via artifacts from its time as the pier's electrical substation. For example, the team refurbished a compressor, which once powered shipyard tools, and left the 5-ton bridge crane intact. According to James Madsen, partner with Orton Development, "These projects continue to make sense despite all the challenges because companies with creative cultures seek out special workplaces."

With a new year approaching, we at ***retrofit*** look forward to continuing to find and cover these creative renovation stories for the betterment of our communities and the environment. Cheers to a peaceful and healthy end to 2020 and hope for 2021!

Christina Koch

CHRISTINA KOCH
Associate Publisher/Editorial Director ***retrofit***

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As principal-in-charge of Cooper Carry's Washington, D.C., office, **David W. Kitchens**, AIA, has made the office an innovator in the urban design and architecture of mixed-use projects that create walkable community environments and transit. **Lauren Perry Ford**, AIA, LEED AP BD+C, is an associate principal with Cooper Carry. She specializes in integrating vibrant retail and entertainment uses within the context of the larger mixed-use urban environment. The pair's design talents have resulted in Ballston Quarter, a previously enclosed mall that literally was turned inside out with street-facing storefronts enlivening the adjacent sidewalks to create an active pedestrian experience. The project, which is featured on page 26, is the First Place winner of a Metamorphosis Award in the Mixed Use category.



After a 150-year history of ship production and repair, San Francisco's Pier 70 stands mostly vacated. The Port of San Francisco has implemented a redevelopment masterplan that honors the site's historic significance. **KJ Fields**, a Portland, Ore.-based ***retrofit*** contributor, describes Orton Development Inc.'s resurrection of Bethlehem Steel's former powerhouse within the pier. Now transformed into inimitable office space, the project, which is featured on page 66, won First Place in the Historic category of this year's Metamorphosis Awards.



Nathan M. Gillette, AIA, LEED AP O+M, CEM, is director of Natura Architectural Consulting, Grand Rapids, Mich., and a ***retrofit*** editorial advisor. As a Michigan native, Gillette has personal interest in the revitalization of his state's architectural gems. He writes on page 72 about the Shinola Hotel, which mixes historic early-20th century Detroit architecture and new construction into a transformative urban redevelopment. The project earned two 2020 Metamorphosis Awards: Second Place in the Transformation category, page 20, and Second Place in the Historic category, page 72.

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BEHIND THE SCENES

RETROFIT MAGAZINE METAMORPHOSIS AWARDS

The 2020 Metamorphosis Awards Judges Were 2019 Winners

retrofit's second-annual Metamorphosis Awards program tapped three winners from the inaugural competition as judges: Scott Elofson, design principal, HDR; Michael Hoying, LEED AP, vice president, Brackett Builders; and Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole. Each judge was gracious with their time and knowledge contributions.

The jury was asked to evaluate each project on the success with which it met its own requirements. They were told to weigh projects individually—not in comparison to others—and choose as many projects as they felt deserving of winning. [Editor's Note: Wright recused himself from judging Anthem Row, the Hickok Cole project that won First Place in the Whole Building category, page 58, and graces our cover.]

Through a judging platform, jurors were able to review entries and score them on their own time. John Riester, ***retrofit***'s publisher, and Christina Koch, ***retrofit***'s editorial director, conducted a phone session with the judges in mid-August to discuss highest-ranking projects, determine placements of winners and speculate about cover possibilities. Winners were notified in late August.

The 2021 Metamorphosis Awards program will open in January 2021 at www.retrofitmagazine.com/metamorphosis-awards.



SCOTT ELOFSON

Scott Elofson is the design principal of HDR's Minneapolis office, leading the studio's design efforts over multiple markets and project types. With 22 years' experience, his work on health-care facilities, sports arenas, civic buildings, arts institutions, transportation projects and urban design lends itself well to his role. HDR was recognized with two Metamorphosis Awards in 2019: A former five-and-dime in St. Paul, Minn., won in the Transformation category for its update into speculative office space, and the Springfield Union Station project in Springfield, Mass., won in the Historic category. Read these stories in the November-December 2019 issue, pages 16 and 72, or bit.ly/2pEJPzb and bit.ly/2rl2iB7, respectively.



MICHAEL HOYING, LEED AP

Michael Hoying is vice president and partner at Dayton, Ohio-based Brackett Builders where he oversees the greater Dayton market. Hoying has directly managed the development of nearly 1,000 multifamily apartments across more than 1.5 million square feet, representing more than $125 million of development. In 2019, Brackett Builders earned a Metamorphosis Award in the Mixed Use category for Delco Lofts, Dayton. Read the story in the November-December 2019 issue, page 32, or bit.ly/34Aw2ls.



JASON WRIGHT, AIA, LEED AP BD+C

With more than 20 years' experience in design and construction, Jason Wright's specialty lies in the details of how buildings are assembled to reinforce a design's overall concept. As Hickok Cole's associate principal and director of technical operations, he is responsible for training and mentoring the firm's project architects, as well as managing the quality of the firm's technical drawings. Hickok Cole achieved a 2019 Metamorphosis Award in the Transformation category for its work repurposing a former Washington, D.C., YMCA into office space. Read the story in the November-December 2019 issue, page 26, or bit.ly/2PWeUsQ.

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TRANSFORMATION 1st Place Winner

ABOVE AND BEYOND

A Train Station Transcends Its Architectural Restoration to Express Its New Role in the Community

TO READ A FULL FEATURE ABOUT THE RICHARD AND NANCY DONAHUE FAMILY ACADEMIC ARTS CENTER AT MIDDLESEX COMMUNITY COLLEGE, SEE THE SEPTEMBER-OCTOBER 2019 ISSUE, PAGE 66, OR VISIT bit.ly/2kCNACr.

The Richard and Nancy Donahue Family Academic Arts Center at Middlesex Community College (MCC) in Lowell, Mass., reimagines a 140-year-old railroad depot as a state-of-the-art performing arts center. The innovative design vision earned Leers Weinzapfel Associates First Place in the Transformation categrory of ***retrofit***'s Metamorphosis Awards.

The railroad depot opened in 1876 and was supplanted by a larger terminal 20 years after opening. As the 20th century dawned, the building became a telephone exchange, theater, movie palace and, finally, a bowling alley. Through these transitions, it lost its impressive clocks, towers and cornice detailing and, after a 1980s fire, its tenants. After sitting vacant for years, MCC acquired the building. The college recognized a tremendous opportunity in downtown Lowell, both in its buildings and its underserved community's needs. Searching for a home for its long-awaited performing arts center, the college identified new life for the unique depot building as the place for its theater, dance and music departments.

The design challenges of the project were many: The proposed program far exceeded what the existing building could hold. The building's age and three-decade vacancy took their toll. Daylight streamed in through holes in the brick wall; the roof and windows let the elements in; birds made their homes within; and the masonry's overall integrity was substantially degraded. Given its historical importance as a gateway to the city and the desire to preserve its presence at Towers Corner, expansion opportunities were limited for a building sitting atop bedrock with almost no site beyond its footprint.

The design for the new center needed to address these challenges while creating an expressive and identifiable home for the students who would bring it back to life. It needed to be program efficient—making new space within the existing building and a careful addition on a sliver of land next to the building—to preserve the original prominence. Structurally, the solution had to go beyond retrofit and embrace the existing masonry exterior's qualities. Architecturally, the building needed to transcend restoration and express its new use and role in the community. The resulting crafted modern insertion locked with the original building meets these goals.

The completed design accommodates a proscenium theater, music recital hall and dance studio in a simple ovoid shear-wall volume—essentially an "egg" theater—inserted within the 1876 brick shell. The theater's shape is metaphorical, symbolizing the building's rebirth and the burgeoning talent of student actors, dancers and musicians. The new insertion's curved shape serves as the structural core of the building, supporting new spaces and buttressing the restored and reconstructed historic envelope.

There was no extra space onsite, and nearly all construction work occurred from within the building. The "egg" that became the structural core rose from footings pinned to bedrock, block by block, like the historic masonry façade had 140 years previously.

The "new" is placed in an interconnected balance with the historical, revealing the life inside the building to differing degrees, depending on the time of day, the tenor of activity and the viewer's position. The addition's service towers are clad with custom-perforated imagery that highlights the historical and renewed performances within. The wood-paneled "egg" is revealed through the unexpectedly diaphanous façade. The reinstalled tower clocks have an ingenious secret—as day turns to night, the historical details recede, and the façade becomes a frame. The clocks invert and shine like beacons. The volume within glows in stark relief, highlighting the students' place and inviting the community.

Its outside curve, clad in maple-veneer panels, allows for circulation from the building's ground floor public lobby front to its academic back. Viewed through the center's generous sash windows, the egg form delivers a sense of drama illuminated by programmable LED lighting, the color of which can be changed to reflect the mood of the evening's performance or community events.

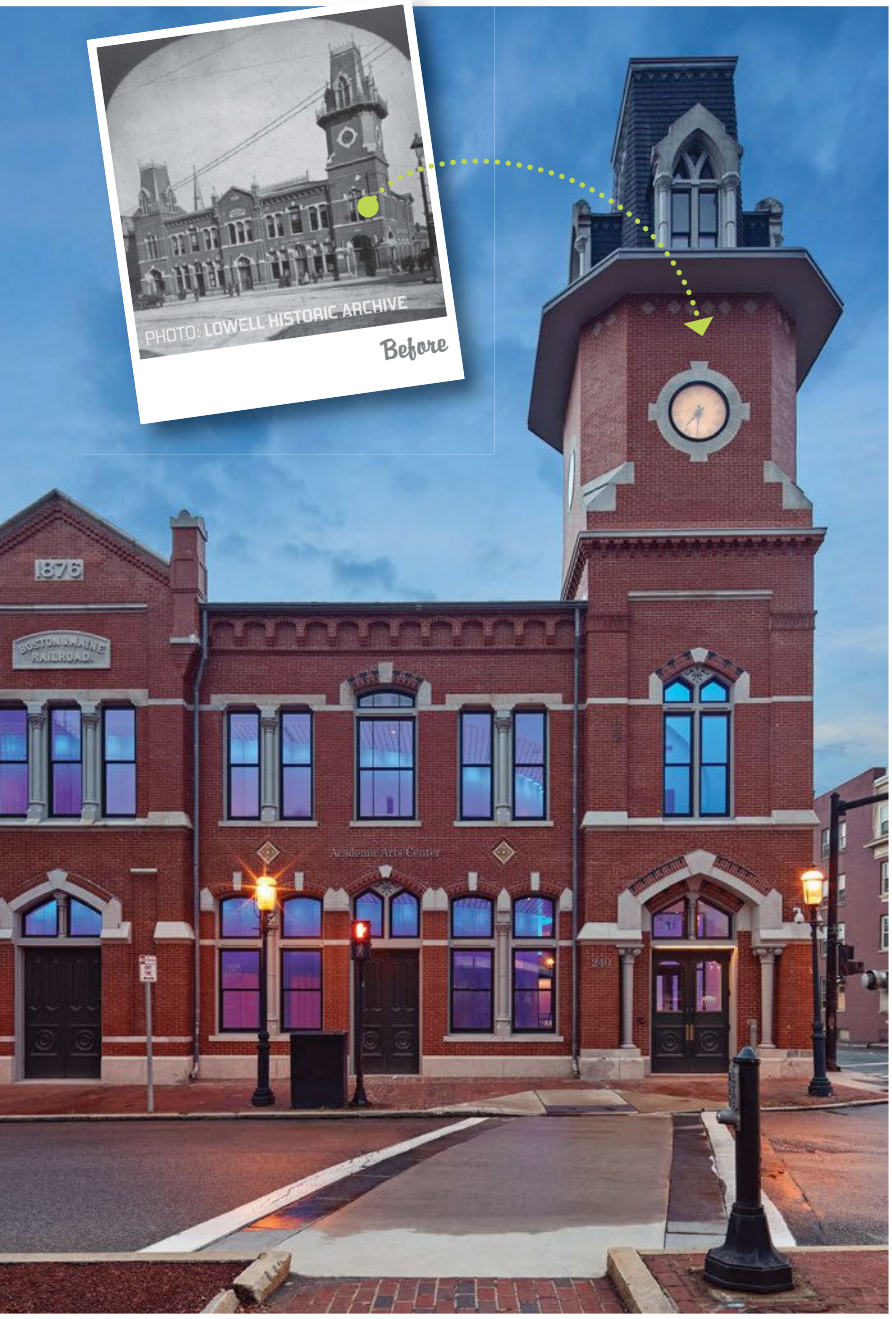
On the second floor, the recital hall and dance studio take advantage of the center's high roof. Along the sidewalk, a linear gallery and lobby display student activity and invite the public through the main entrance at the base of the building's landmark clock tower.

The new performing arts center is more than reimagining a historic train depot in Lowell. The jewel box with an egg-shaped space inside is an architectural feature and a pivotal inflection point in this postindustrial city's rebirth.

Judge's Comment

"This project is the essence of what I think about when I think of retrofit awards, particularly looking at the history the train station went through, like the '70s when the spires and towers were removed to what it has become now as a performing arts center."

—Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole




Building model

IMAGES: LEERS WEINZAPFEL ASSOCIATES

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METAMORPHOSIS AWARD WINNER!

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- Seung-Jin Ham, AIA, designer
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The Shinola Hotel project mixes historic early-20th century Detroit architecture and new construction into a transformative urban redevelopment. The creativity earned Kraemer Design Group two ***retrofit*** Metamorphosis Awards: Second Place in the Transformation category and Second Place in the Historic category. Read about the project, including key team members and materials used, on page 72.

Judge's Comment

"This project not only preserved a beautiful example of a terra-cotta façade but it gives the building new life and serves to anchor the redevelopment of the entire city block."

—Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole

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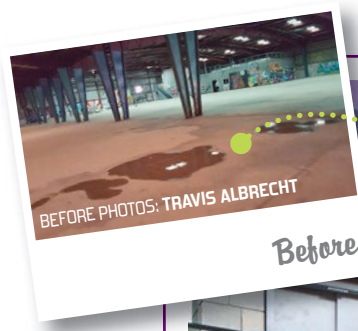
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TRANSFORMATION *Honorable Mention*

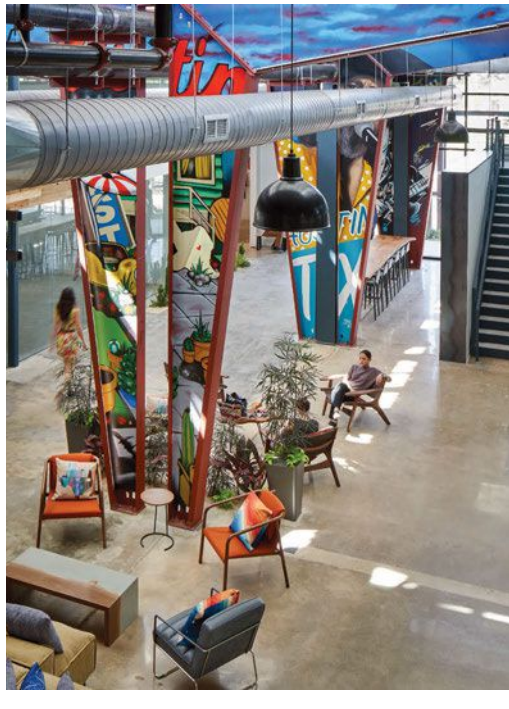
UPCYCLE

A Former Recycling Center Is Repurposed as Office Space while Maintaining Its Unique Appearance


BEFORE PHOTOS: TRAVIS ALBRECHT

Before


PHOTOS: DROR BALDINGER



TO READ A FULL FEATURE ABOUT UPCYCLE, SEE THE JANUARY-FEBRUARY ISSUE, PAGE 34, OR VISIT bit.ly/3a5imZJ.

Positioned at the heart of vibrant east Austin, an abandoned warehouse has been reincarnated as an active, dynamic neighborhood hub. Built in 1972, the 65,000-square-foot warehouse's unique appearance was preserved while transforming the structure into a modern office space, optimized for collaboration.

As the former location of the Balcones Recycling Center, the design team at Gensler decided early that recycling the existing structure was crucial to the success of the project. But the team wanted to go beyond mere preservation. It wanted to improve the often sought after character of the east Austin neighborhood in which the building resides. The word "upcycle" embodies the design approach for this project. This vision earned Gensler an Honorable Mention in the Transformation category of ***retrofit***'s Metamorphosis Awards.

The decision to reuse was also an economic one. One big benefit of restoring an existing structure was extreme affordability. New office building construction in Austin can range from $150 to $250 per square foot. UPCycle was transformed into a new creative office environment for $84 per square foot. This low cost of construction was achieved through low-cost, high-impact materials (such as reclaimed wood and steel panels) as well as the reuse of materials (such as the existing corrugated metal panels as exterior cladding, exposing of the steel structure and concrete slab as finish floor).

Every component found onsite, from the steel structure, to the metal panel skin, to the existing railroad tracks, to the graffiti art found from past exhibitions, was reused and enhanced to transform the existing warehouse into a dynamic creative environment. If a component could not be reused then it was salvaged to be utilized in another project. By recycling and upcycling 95 percent of the existing building, approximately 1.83 million kilograms of embodied CO2 was saved and the life of the existing structure significantly lengthened. This savings amounts to the equivalent of taking nearly 450 cars off the road.

The reuse of the entire building and its materials and the incorporation of reclaimed materials make this project unique. The embodied form of carbon will make up about half of all carbon emissions from new construction during the next 30 years. Because of this, a focus on repositioning existing buildings will become a more important strategy to combat climate change. Instead of tearing down and scrapping what has existed for decades, UPCycle envisioned a new life for the building.

New elements upgrade the building and turn it into a more attractive office environment, including butterfly trusses covered in graffiti by local artists and a new roof with clerestories to introduce more natural lighting. The site also includes a repurposed train car functioning as a front porch lounge equipped with seating, Wi-Fi and music. The boxcar plays an integral role in making this project forward-thinking and respectful of the building's history with the site's direct access to the adjacent rail lines and train tracks.

What was an opaque, uninviting warehouse is now a light-filled, creative office building. A mere metal shed is now a comfortable and efficient space that encourages interaction and connection between the tenants and the surrounding neighborhood.

Judge's Comment

"$84 per square foot is pretty impressive. Wow!"
—Scott Elofson, design principal, HDR



METAMORPHOSIS AWARD WINNER!





Retrofit Team

ARCHITECT // Gensler, www.gensler.com
- Travis Albrecht, project manager
- Todd Runkle, principal in charge
- Christina Clark, designer
- Chris Curson, architect
- Mark Epstein, designer

LEAD DEVELOPERS // Larry Lance, EverWest Real Estate Investors, everwest.com, and Curt Kremer, George Oliver Cos., georgeoliver.com

GENERAL CONTRACTOR // The Burt Group, burtgroup.com

MEP ENGINEER // Integral Group, www.integralgroup.com

LANDSCAPE ARCHITECT // Big Red Sun, bigredsunaustin.com

CIVIL ENGINEER // Jones | Carter, www.jonescarter.com

STRUCTURAL ENGINEER // Cardno, www.cardno.com

Materials

INSULATED METAL PANELS // Karrier-Panel from Kingspan, www.kingspan.com

PERFORATED ALUMINUM PANELS // Ecoscreen 3/4-inch Econolap from CENTRIA, www.centria.com

COMPOSITE DECK BOARDS // Symmetry Decking from Fiberon, www.fiberondecking.com

INTERIOR AND EXTERIOR WOOD CLADDING, RECLAIMED CEDAR FENCE BOARDS AND SHIPPING PALLET MATERIAL // Trestlewood, www.trestlewood.com

SKYLIGHTS // Skypro Skywave IR Dual Glazing from Skyco Skylights, www.skycoskylights.com

CURTAINWALL // 3250 Wall from U.S. Aluminum, www.crlaurence.com

STOREFRONT // IT451 from U.S. Aluminum

TPO ROOF // Sure-Weld TPO from Carlisle Syntec, www.carlislesyntec.com

ROLLUP DOOR // Service Door Model ESD10 from Cookson, www.cooksondoor.com

GLAZED ROLLUP DOORS // 3295 Aluminum Full-View Doors from C.H.I. Overhead Doors, www.chiohd.com

CHILLER // Air-cooled Sintesis from Trane, www.trane.com

RETROFIT MAGAZINE
METAMORPHOSIS AWARDS
Winner

TRANSFORMATION *Honorable Mention*

WONDER-FUL

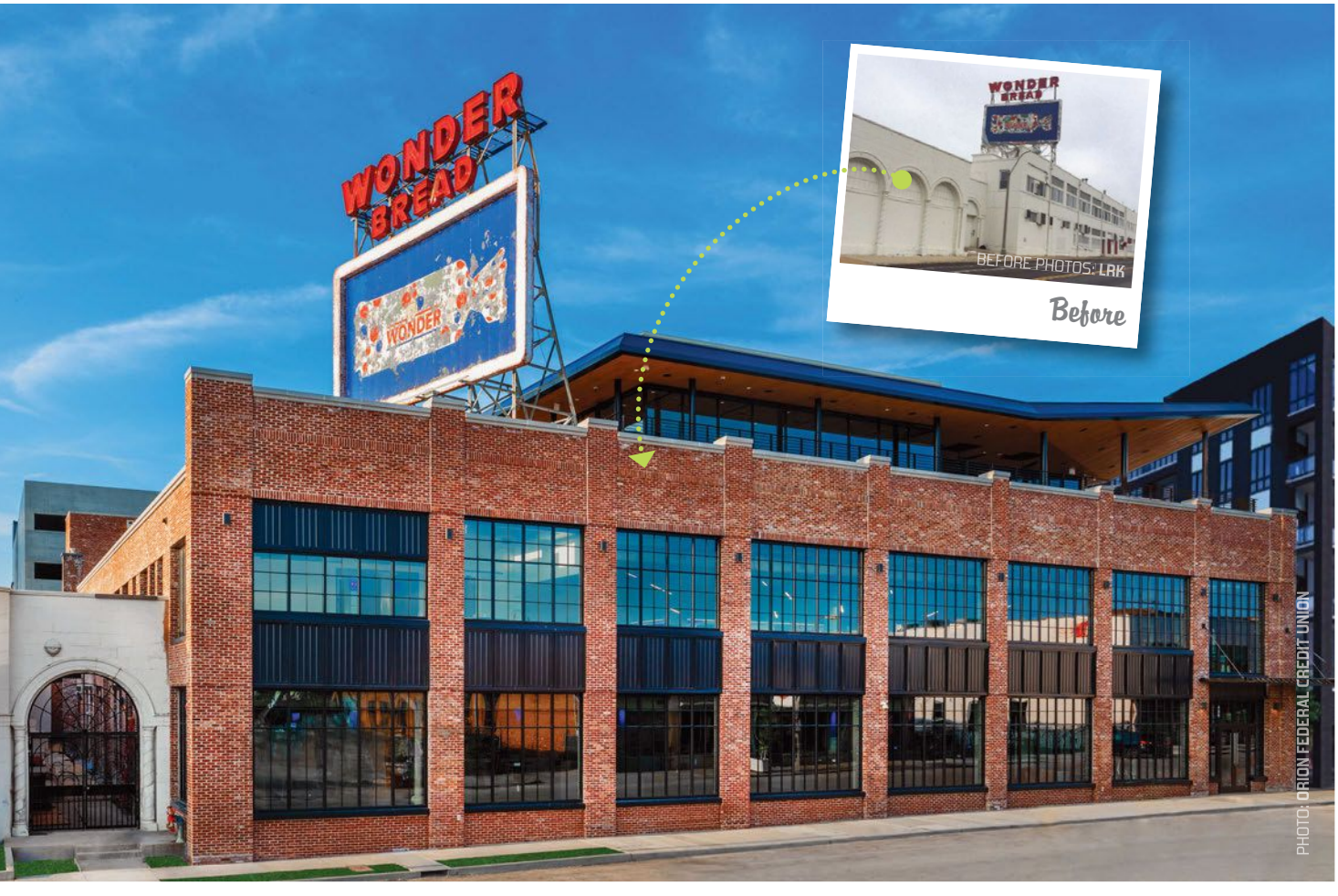
A Wonder Bread Factory Is Converted into Class A Office Space to Help Drive Downtown Development

LRK was charged with repurposing an abandoned Wonder Bread factory into a vibrant new headquarters for Orion Federal Credit Union. The choice to move the headquarters from a suburban location was an intentional decision by the executive team to help drive long-term economic development within downtown Memphis. Equally important was creating a work environment that was so compelling the credit union's employees would find the relocation worthwhile. LRK's design earned the firm an Honorable Mention in the Transformation category of ***retrofit***'s Metamorphosis Awards.

Vacant since 2013, the 63,000-square-foot factory now provides Class A office space for more than 225 employees. The 3-story, daylit lobby with a central staircase reveals the interior, part of the client's desire for transparency and connection with the city. The office environment encourages collaboration and is supported by various-sized conference rooms and open, informal meeting spaces. Central coffee and copy areas also connect open-office space on each floor.

The modern 7,100-square-foot rooftop addition provides a breakroom, pre-function space and a rooftop deck. Available to all employees, it showcases scenic views of downtown Memphis.

The exterior façade was reconstructed with bricks salvaged from buildings that were part of the existing factory complex. To pay homage to the factory's history, the Wonder Bread sign has been restored, an old flour chute now is a chandelier and former dough beds are raised flower gardens.



Retrofit Team

METAMORPHOSIS AWARD WINNER!

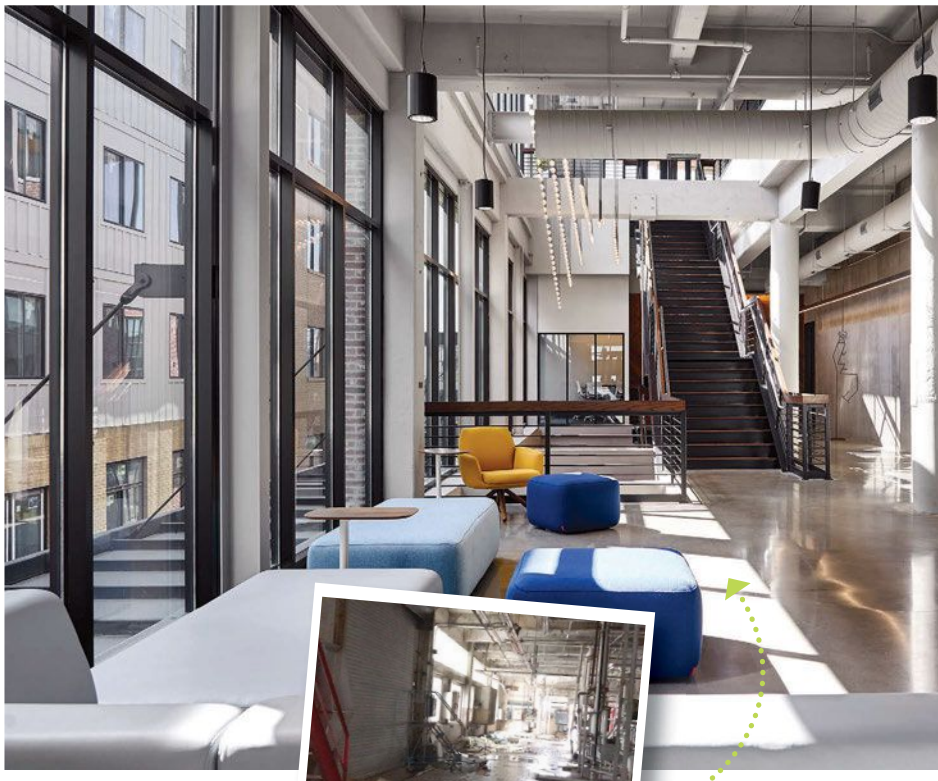
ARCHITECT // LRK, www.lrk.com
- Tony Pellicciotti, AIA, CDT, LEED AP BD+C

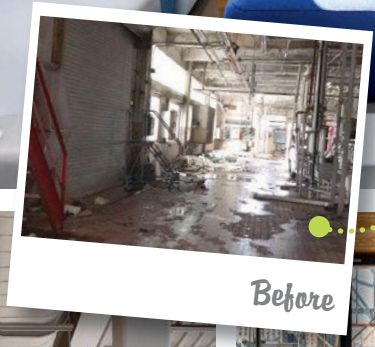
GENERAL CONTRACTOR // Montgomery Martin Contractors, www.montgomerymartin.com
INTERIOR DESIGNER // LRK, www.lrk.com
- Rebecca Courtney, ASID, IIDA

STRUCTURAL ENGINEER // Chad Stewart & Associates Inc., www.csastructures.com
MEP/FIRE PROTECTION ENGINEER // HNA Engineering, www.hnaengineering.com
CIVIL ENGINEER // ETI Corp., www.eticorp.com
LANDSCAPE ARCHITECT // Hodgson Douglas, www.hodgsondouglas.com

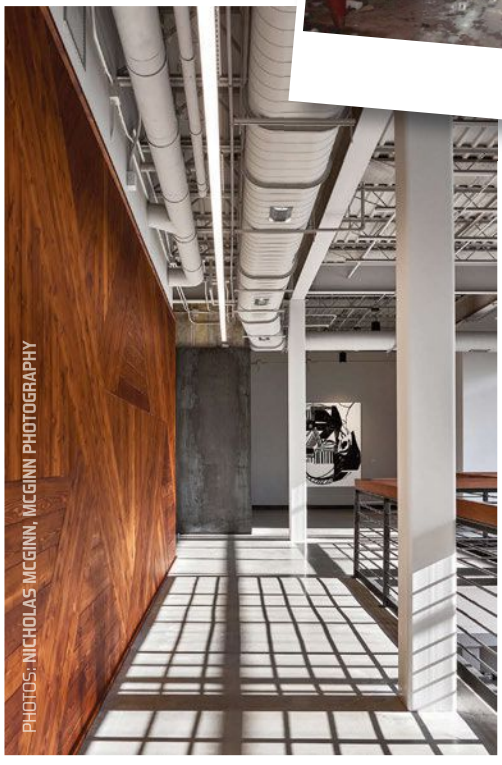
Materials

TOILETS, LAVATORIES // Sloan, www.sloan.com
SHOWERS // Moen, www.moen.com
TOILETS, URINALS // Kohler, www.us.kohler.com
BATHROOM COUNTERTOPS // Corian, www.corian.com
DOOR HARDWARE // Adams Rite, www.adamsrite.com; Best Access Systems, www.bestaccess.com; Falcon from Allegion, us.allegion.com; Pemko and Rockwood from ASSA ABLOY, www.assaabloydooraccessories.us; Sargent, www.sargentlock.com; and Stanley, www.stanleyhardwarefordoors.com
ELEVATORS // Otis, www.otis.com
STOREFRONT SYSTEM // Oldcastle Building-Envelope, obe.com, with Vitro Architectural Glass, www.vitroglazings.com
CERAMIC TILE FLOORING // Concept Surfaces, conceptsurfaces.com
WOOD FLOORING // HF Design, www.hfdesignllc.com
HVAC // Trane, www.trane.com
KITCHEN CABINETS // Formica, www.formica.com
KITCHEN FITTINGS // Delta, www.deltafaucet.com
KITCHEN FIXTURES // Elkay, www.elkay.com
KITCHEN COUNTERTOPS // Durasein, www.duraseinusa.com
LIGHTING // A-Light, www.alights.com; Architectural Lighting Works, alwusa.com; Lithonia Lighting, lithonia.acuitybrands.com; Louis Poulsen, www.louispoulsen.com; Targetti, targettiusa.net; and Vibia, www.vibia.com
PAINTS, STAINS // Sherwin-Williams, www.sherwin-williams.com
ROOFING // Johns Manville, www.jm.com
WINDOWS // Quaker Windows & Doors, quakerwindows.com





Before







PHOTOS: NICHOLAS MCGINN, MCGINN PHOTOGRAPHY

Judge's Comment

"I really appreciated this project. The addition of the flying roof element and the interiors are great. It's a very clean office space. This would be a nice place to go to work."—*Scott Elofson, design principal, HDR*

RETROFIT MAGAZINE
METAMORPHOSIS AWARDS
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INSIDE OUT

Reimagination of a 1950s-Era Mall Flips the Retail Experience for the Modern Age

WRITTEN BY | **DAVID W. KITCHENS, AIA, AND LAUREN PERRY FORD, AIA, LEED AP BD+C**

When the doors reopened on the renovated Ballston Quarter in Arlington, Va., last year, visitors were thrilled with the fresh mix of retail and dining options and captivated by the development's stunning design—transforming a dated, enclosed shopping mall into a dynamic, open Main Street experience.

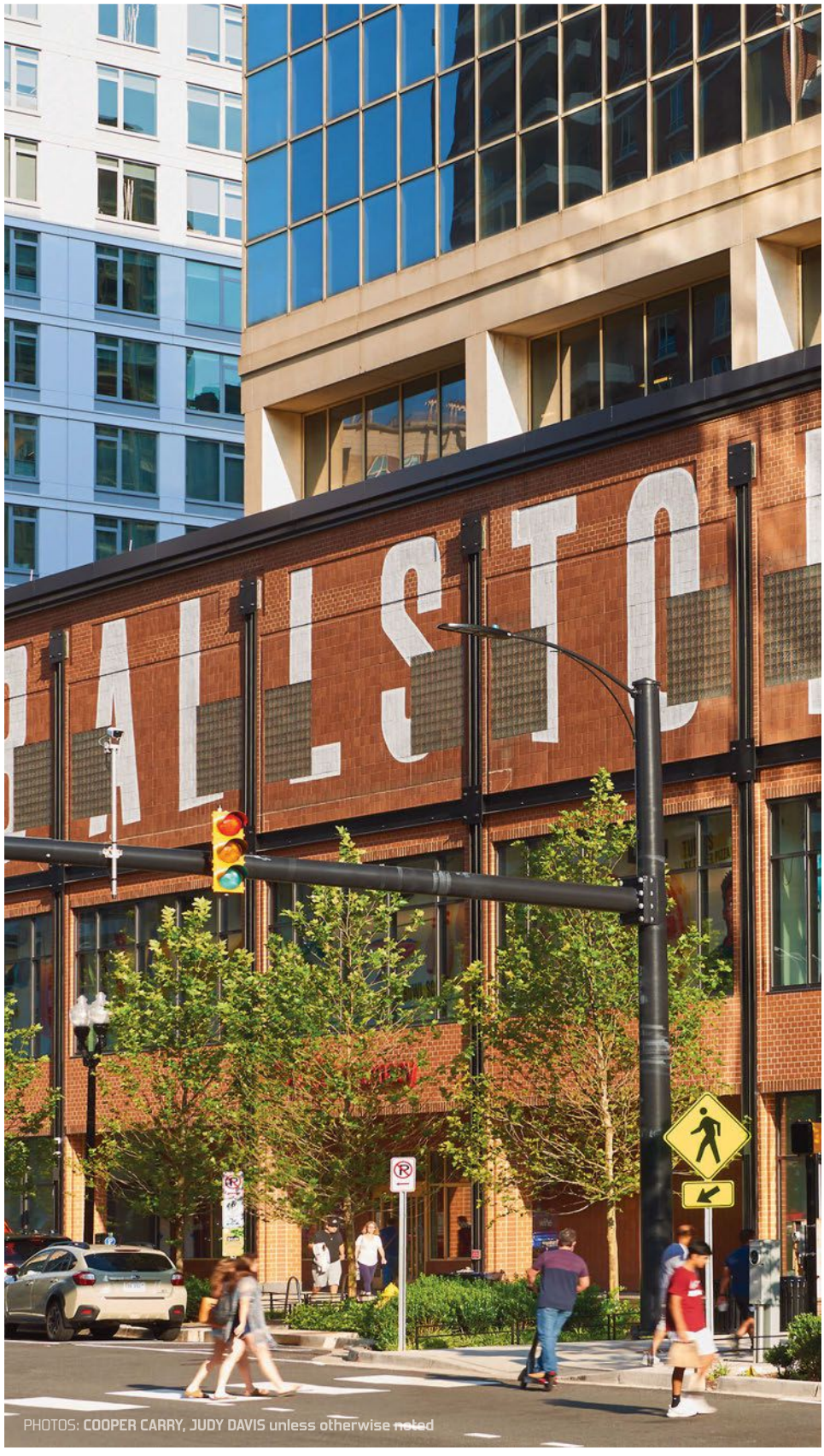
The intriguing design of Ballston Quarter has been decades in the making. Through multiple iterations and an increasing mix of uses, the center's evolution mirrors larger societal shifts and the needs of the immediate surrounding community—from the advent of parking garages to the online shopping revolution to blending public and private realms for modern placemaking. By enhancing the existing infrastructure, blending indoor-outdoor spaces and creating destination-worthy community spaces, the third time is definitely the charm.

In fact, the project earned the design team, a collaboration between Cooper Carry and CallisonRTKL, First Place in the Mixed Use category of ***retrofit***'s Metamorphosis Awards.

THEN AND NOW

First, a quick history lesson: For those old enough to remember the heyday of the original Ballston Quarter, which was then called Parkington Shopping Center, images of time-worn retail storefronts, eateries dishing out American classics and mid-century modern decor immediately come to mind.

Parkington Shopping Center—the first of its kind for the Washington, D.C., area—encapsulated the traditional shopping center of the 1950s, a fairly new concept as hundreds of similar centers began popping up across the nation, from major cities to small townships.



PHOTOS: **COOPER CARRY, JUDY DAVIS unless otherwise noted**



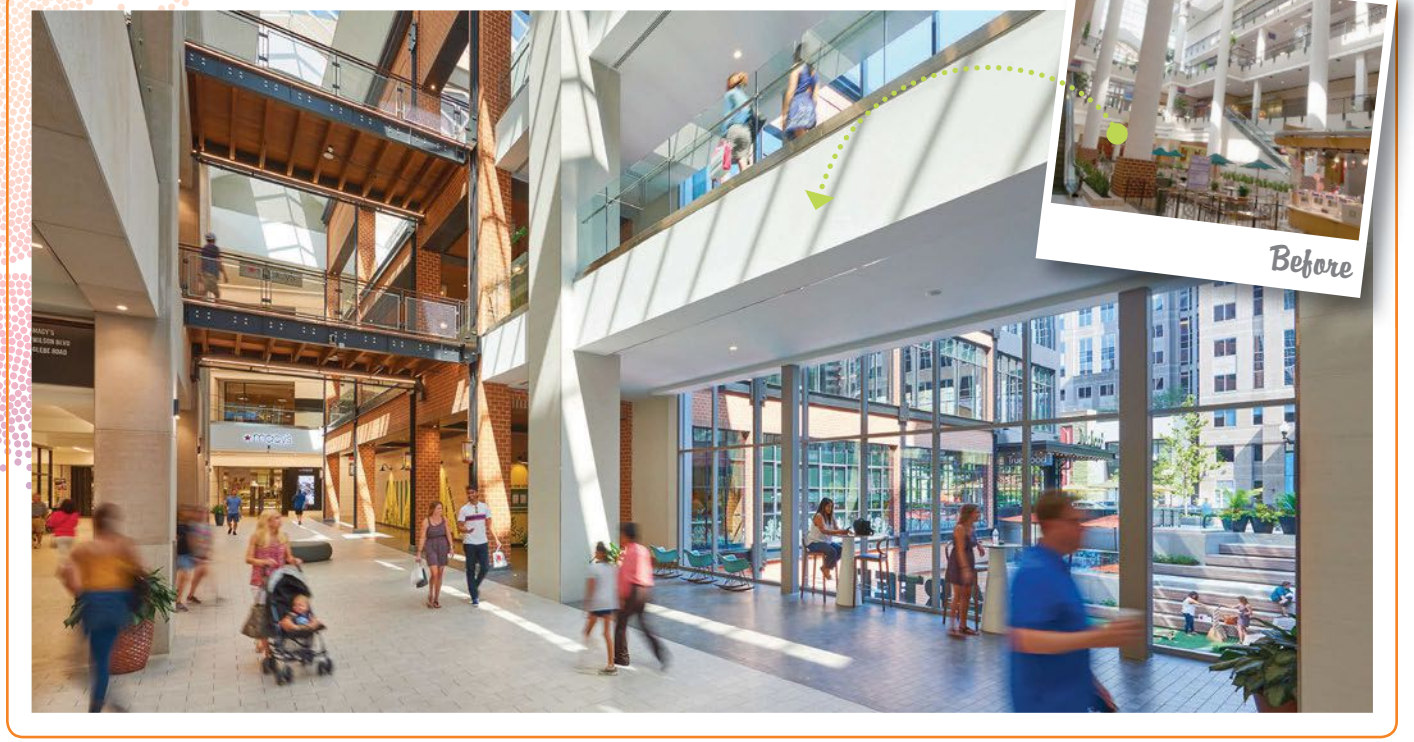


PHOTO: CRTKL, 2019-DAVIDMADISONPHOTOGRAPHY.COM

Judge's Comment

"This is a dramatic transformation."

—Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole





Shoppers flocked to explore the modern idea of an all-in-one shopping and eating destination. However, by the time the 1980s rolled around, this once-trailblazing shopping center was outdated and required a new approach to the consumer experience. Referred to as Ballston Common Mall, the retail center received a substantial expansion in 1986 led by RTKL (now CallisonRTKL) for owner Forest City (now Brookfield Properties) in partnership with Arlington County to once again appeal to the next generation of shoppers.

By the arrival of the millennium, the property was due for another update. With retail facing headwinds as a result of the digital pivot that transpired in the early 2010s, Ballston Common Mall had become a shell of its former self with foot traffic dwindling and several stores closing their doors. Still, people crave common spaces to gather and explore. For the latest transformation, Cooper Carry served as Architect of Record and collaborated with CallisonRTKL, which also acted as Design Architect, on the redesign of the mall. (CallisonRTKL provided full Design Architect and Architect of Record services on the project's new-construction residential tower.) A true collaborative effort, Gensler and Hapstak-Demetriou+ also contributed to various interior spaces throughout the property while significant public investment from the county made the holistic design approach possible.

The main issue at hand? Discovering a foolproof way to make the mall more appealing to local shoppers and visitors. Traditionally enclosed malls have fallen out of favor with the rise in outdoor malls and mixed-use developments catering to a variety of tastes and needs. With Brookfield Properties in pursuit of vibrant shops and exciting restaurants to diversify the tenant mix and draw new visitors to the freshly rebranded Ballston Quarter, the design team was charged with repositioning the architecture of the site to best showcase its slate of new offerings. The team decided to rework the design from the inside out, establishing a plan that would create a thriving mixed-use destination anchored by green space for the modern age.

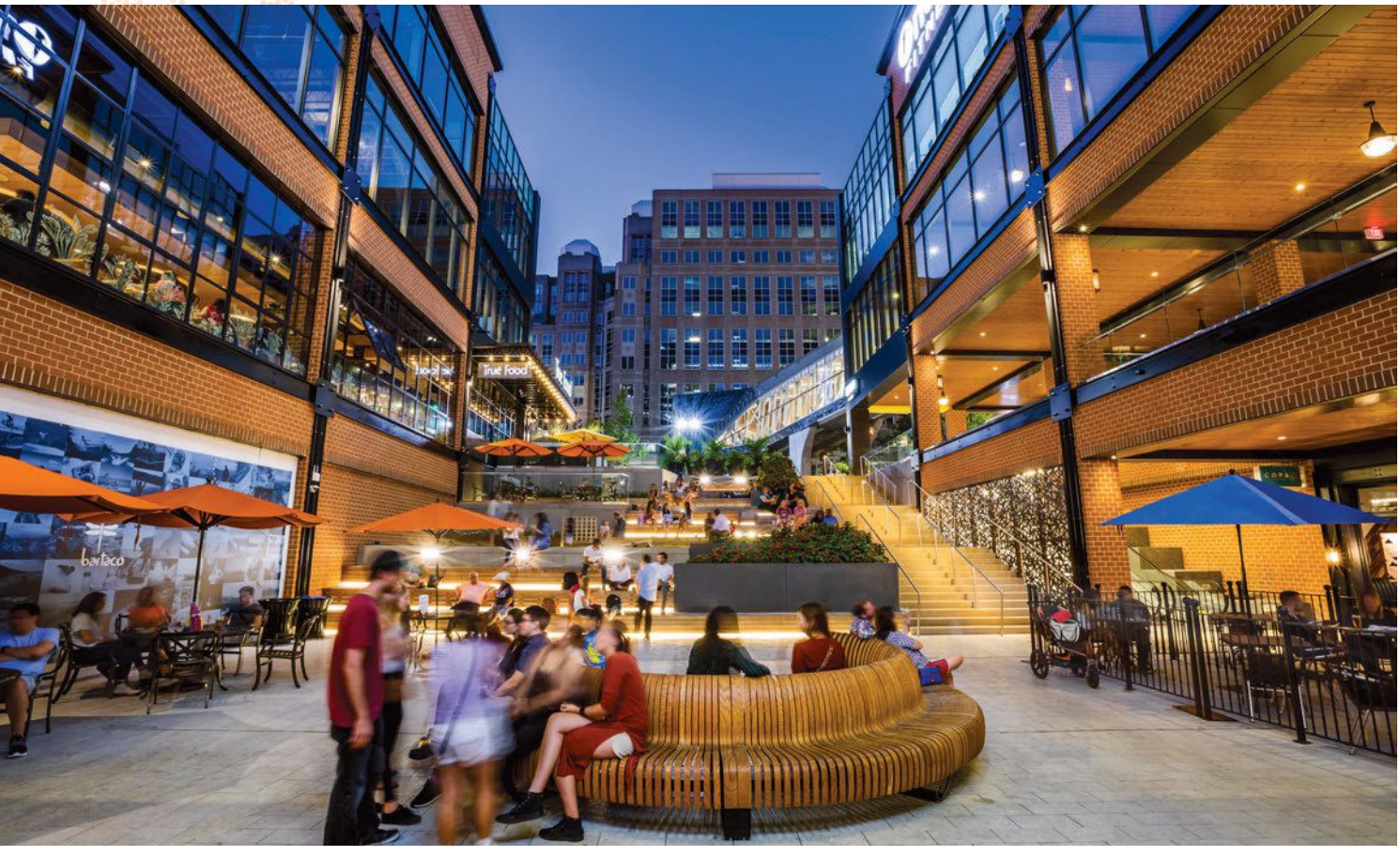
ENHANCING THE EXISTING INFRASTRUCTURE

Located along bustling Wilson Boulevard, Ballston Quarter is a cultural landmark for the area. This status prompted the design team to craft an environment that celebrated the historical reference points, including keeping a large section of the existing brick exteriors and extending the material into the interiors. The building skin was also outfitted with black-framed windows and large painted signage proclaiming "Ballston".

Ballston Quarter also is directly adjacent to the Washington Capitals hockey team's MedStar Capitals IcePlex that sits atop an eight-level parking garage and sees more than 1 million visitors each year. Yet the previous mall lacked easy connections to capture these visitors. In the new design, multiple exterior entryways, pedestrian bridges and escalators work together to enhance circulation and connectivity throughout the development, facilitating a more



Cooper Carry served as Architect of Record and collaborated with CallisonRTKL, which also acted as Design Architect, on the redesign of the mall. CallisonRTKL provided full Design Architect and Architect of Record services on the project's new-construction residential tower (shown here).



Where the atrium of the previously enclosed mall stood, an outdoor gathering plaza takes its place.





porous environment that better addresses the street and engages pedestrians. The multi-level design of the remaining enclosed atrium creates a vertically connected hub of dining, shopping, entertainment, recreation and experiential uses that directly engages visitors regardless from which level they enter.

Perhaps the most impactful step, however, in rehabbing the decaying mall was to remove the roof to unveil an open-air architecture that was more palatable to emerging tastes. With portions of the roof strategically extracted, the traditionally enclosed mall could now present as the exact opposite, creating an open-air, multi-level network of space. To further deliver an attractive base for shops and restaurants coming to the center while keeping the core of the mall intact, the design team repositioned storefronts to face outward toward the street.

BLURRING THE LINE BETWEEN INDOOR AND OUTDOOR

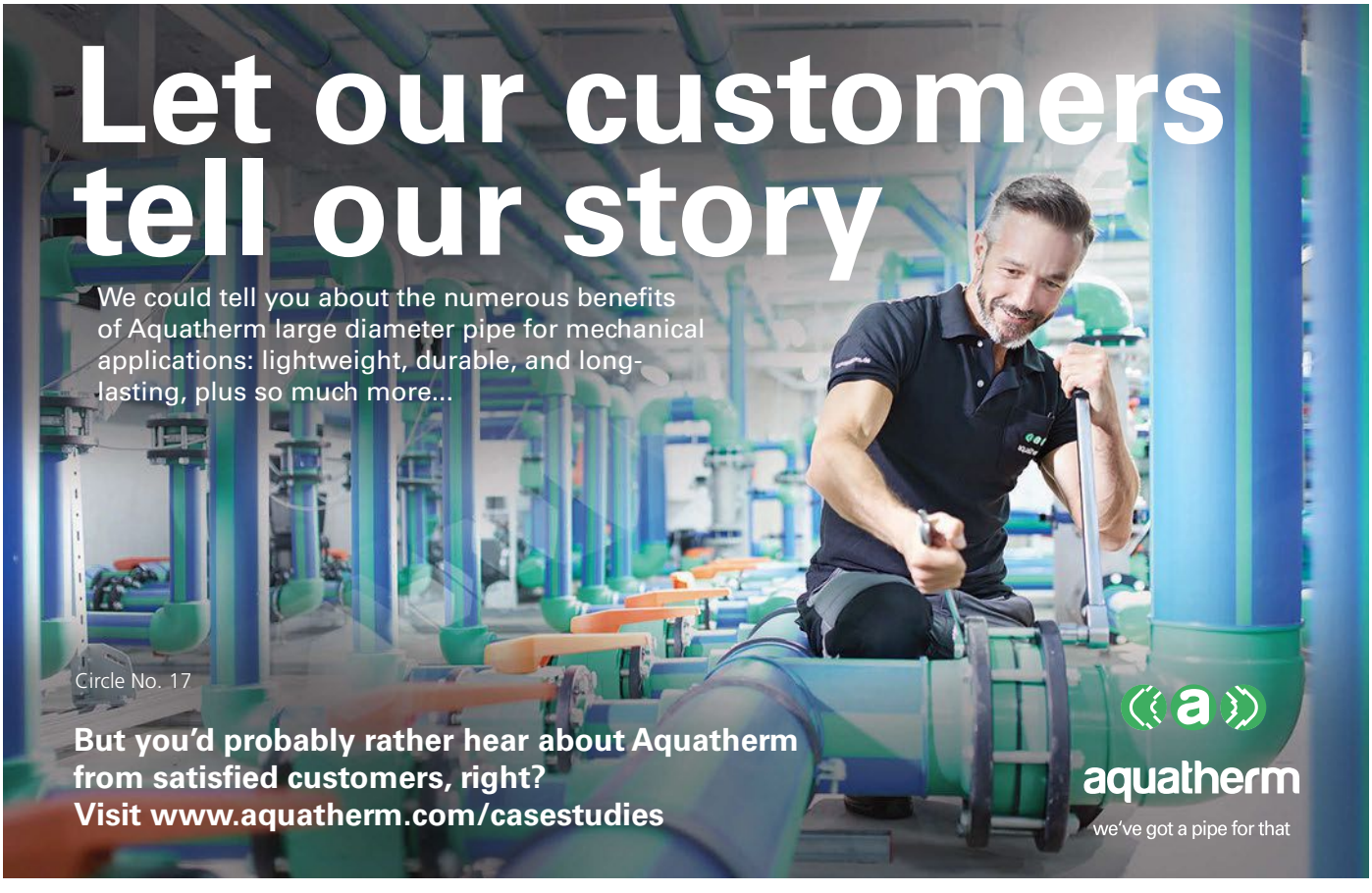
Previously enclosed and hidden within the structure, the street-facing storefronts now enliven the adjacent sidewalks and create an active pedestrian experience. The visually appealing façade, anchored by experience-driven restaurants and entertainment concepts, including Punch Bowl Social, 5 Wits, Ted's Bulletin and True Food Kitchen, are the gateway to a mix of locally owned retailers and service providers, such as Steadfast Supply, Grooming Store and Cookology.

At Ballston Quarter, the outdoor experience was intricately designed to complement the shops and restaurants present at the center. Public-gathering plazas were created along Wilson Boulevard for guests to gather and linger longer while restaurant patrons spill out onto patios, further activating the streetscape.

The street environment surrounding Ballston Quarter was drastically altered by extending the site's existing curb line farther out on Wilson Boulevard, narrowing the road and making it possible for pedestrians to amble along wide sidewalks to check out new retail and restaurants. This "road diet," which nixes one lane of Wilson Boulevard and leaves three with street parking, slows down traffic and allows pedestrians to cross the road more safely.

Where the atrium of the previously enclosed mall stood, an outdoor gathering plaza takes its place. The plaza, anchored by an expanse of green space, amphitheater-style seating and a public performance stage,





Retrofit Team

METAMORPHOSIS AWARD WINNER!

ARCHITECT OF RECORD // Cooper Carry, www.coopercarry.com
DESIGN ARCHITECT // CallisonRTKL, www.callisonrtkl.com
GENERAL CONTRACTOR // Clark Construction Group LLC, www.clarkconstruction.com
CIVIL/SITE ENGINEER // VIKA, vika.com
STRUCTURAL ENGINEER // TCE & Associates Inc., tadjerco.com
MEP ENGINEER // Century Engineering, www.centuryeng.com
LANDSCAPE ARCHITECTURE // Landscape Architecture Bureau, www.labindc.com, and Mahan Rykiel Associates Inc., www.mahanrykiel.com
LIFE SAFETY/SECURITY // Jensen Hughes, www.jensenhughes.com
LIGHTING DESIGN // KGM Architectural Lighting, www.kgmlighting.com, and The Lighting Practice, www.thelightingpractice.com

Materials

BRICK // Bowerston, www.bowerstonshale.com
METAL PANEL // Reynobond from Arconic, www.arconic.com/aap/north_america/en/home.asp
CURTAINWALL // EFCO, efcocorp.com/products/curtainwall
WOOD CEILINGS/SOFFITS // Woodtone, woodtone.com
GLASS HANDRAILS // Synergi, www.synergillc.com

abuts the Quarter Market, one of the largest food halls in the region. Spanning 25,000 square feet, the Quarter Market is an exercise in control for visitors, offering 18 unique eatery concepts thoughtfully assembled from the best-known chefs in the city. The interior space offers an industrial, warehouse-inspired aesthetic that seamlessly connects to the outdoors via operable glass garage doors. This feature solidifies the indoor-outdoor environment today's guests crave in public spaces.

To enhance natural lighting and connectivity, a European-inspired stairstep entryway that leads guests to Quarter Market was created. The oversized stairs serve as a place to gather, relax and catch up with friends while the lower level opens out as an open-air plaza with restaurant seating and a performance area for live music, entertainment and event programming.

CONNECTING WITH THE COMMUNITY

Retrofitting older buildings comes with its significant share of challenges, which can be further complicated when the community feels left out of the decision-making process. To navigate this process, Cooper Carry and CallisonRTKL worked closely with the developer to ensure the needs of local residents were heard and met.

A key example: One of the final components of the Ballston Common Mall was a pedestrian bridge connecting the mall to the nearby Metro station. The bridge was frequently used by locals to access the train. At the urging of the community, the development team and county sought to upgrade the pedestrian bridge for public use and through a design competition enlisted Cleveland-based TECHNE Architects to replace the existing bridge. Now sporting an angular, geometric design, the revamped bridge is a reminder of Ballston Quarter's central place in the fabric of the densifying neighborhood.

From an undervalued shopping center to a walkable, mixed-use destination offering sought-after restaurants, in-demand retail shops and a variety of entertainment venues, Ballston Quarter represents an Arlington that is evolving for the future. The success of the private-public partnership is expected to generate $150 million in direct tax revenues for Arlington County during the next 30 years alone. Facilitating a blended environment, the re-envisioning and renovation of Ballston Quarter has transformed the center into a vibrant space that will continue serving as the region's community hub for the next century.



RETROFIT MAGAZINE METAMORPHOSIS AWARDS Winner



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INTERIOR *Honorable Mention*

REACH OUT AND TOUCH SOMEONE

A Formerly Cold, Stone Lobby Now Invites Tenants and Others to Interact and Collaborate

After being part of a design competition, NELSON Worldwide was retained to provide various services for AT&T Tower, a 33-story tower located in downtown Minneapolis. AT&T Tower's 25 businesses employ more than 1,700 people and an additional 4,000 people pass through the skyway and lobby levels each day. The main driver of the project was to refresh the lobby because of high foot traffic at the entry point. Ultimately, the update garnered NELSON Worldwide an Honorable Mention in the Interior category of ***retrofit***'s Metamorphosis Awards.

NELSON Worldwide delivered the project with an integrated team, bringing all consultants and vendors on early, similar to a design-build approach.

The client challenged the team to constantly achieve more value throughout the duration of the project. For example, the original design included a conference center, which was taken out mid-project, then added back in. Despite the changes, the team still was able to keep costs under budget.

The client's primary focus was to retain current tenants and appeal to a newer, more mobile workforce through innovative design solutions and rebranding. In response, NELSON Worldwide created an updated plan with various spaces for tenants and visitors to enjoy, including communal work and gathering spaces for tenants on separate floors.

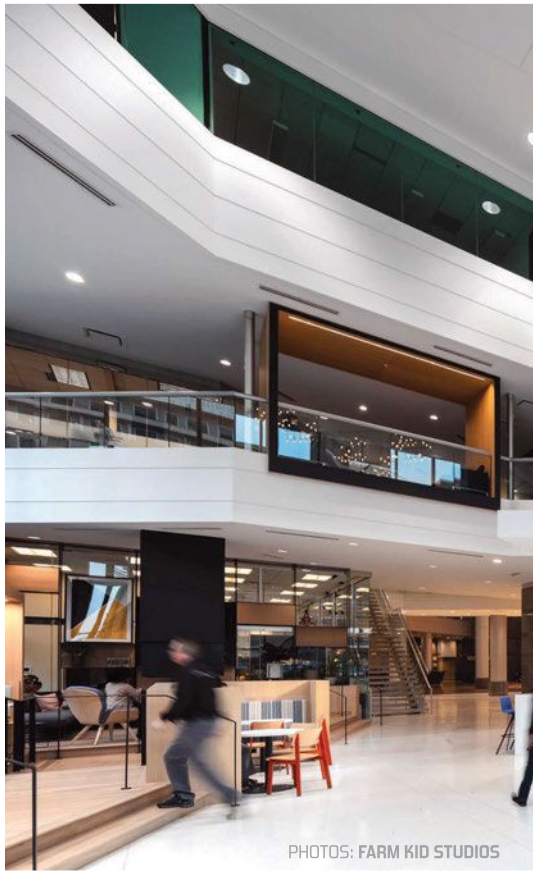
For instance, the lobby and second-level skyway have more than 100 different seating options, including high-top and diner-height tables, benches, booths, comfy chairs and a large L-shaped couch around a cozy fireplace. Books on the shelves in the lobby are not just for decoration; they are part of the building's library.

In addition, an organic, fair-trade coffee vendor, Peace Coffee, is positioned inside the main entrance. Open from 6 a.m. to 4 p.m., tenants can grab their morning cup of coffee on the way up to their suite or stop down for a mid-afternoon pick-me-up.

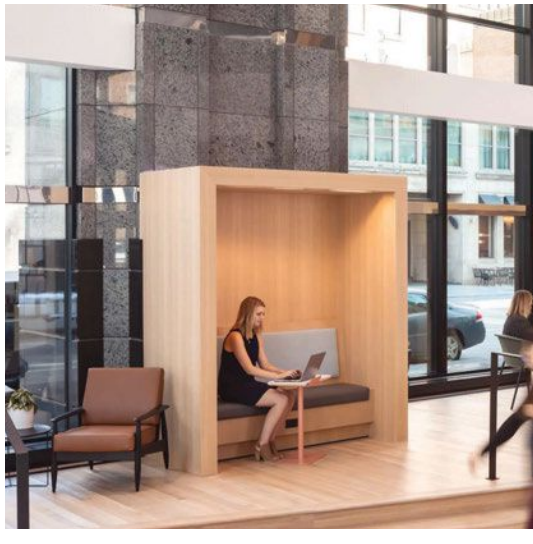
LED lighting is used throughout the main lobby, skyway and elevator lobbies for energy efficiency at a savings of 6,754 kWh annually.

Tenants have exclusive access to the conference center located in the lobby. The conference center is equipped with technology and presentation capabilities for all types of meetings. The mail center also is located in the lobby for convenience, and a touchscreen building directory is located near each elevator bank, allowing visitors to search companies and individuals through user-friendly navigation. Directories also supply information about weather, traffic, building events, building sustainability practices and more.

By bringing tenants and neighbors together and encouraging interaction, the lobby's atmosphere is a warmer and more inviting space.



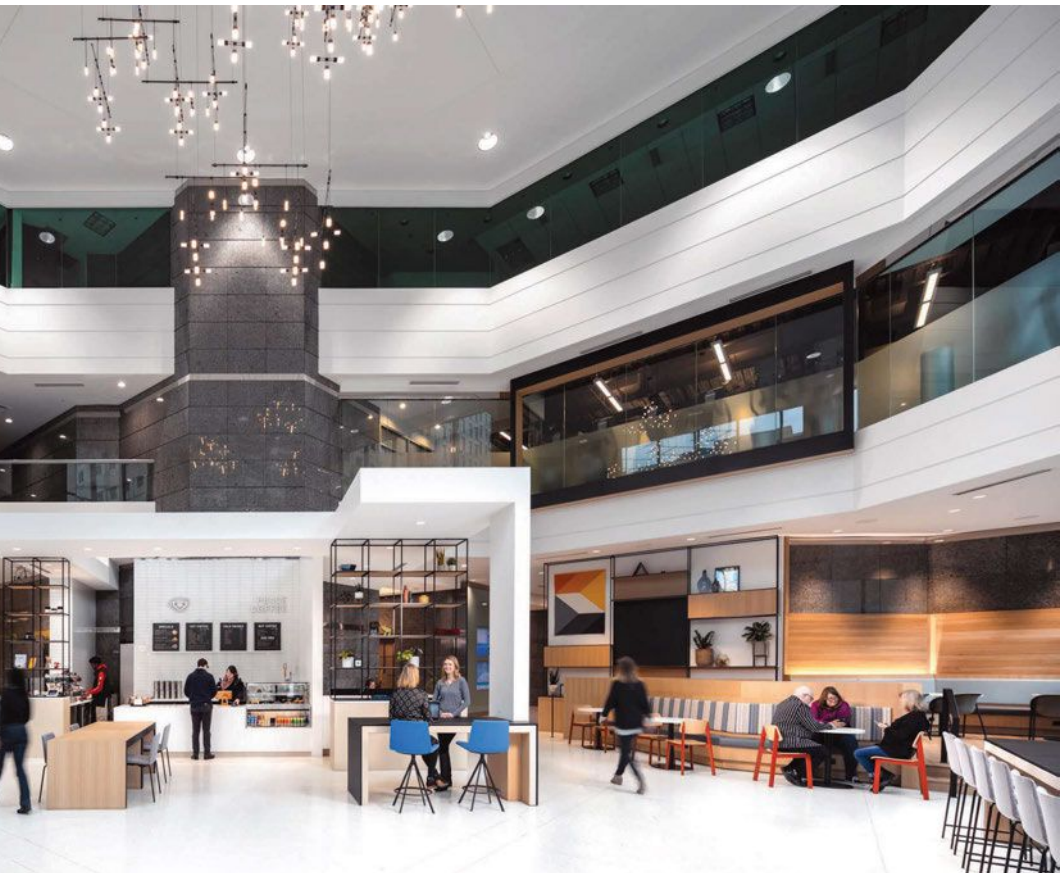
PHOTOS: FARM KID STUDIOS



Judge's Comment

"Removing the emerald-green columns that blocked much of the natural light allowed the design team to showcase the 3-story-tall exterior windows and activate the lobby through the seating areas, coffee shop and collaboration sections."

—Michael Hoying, LEED AP, vice president, Brackett Builders



Retrofit Team

PROPERTY MANAGER // Ryan, www.ryancompanies.com

METAMORPHOSIS AWARD WINNER!

OWNER // ASB Real Estate Investments, www.asbrealestate.com

ASSET STRATEGY // NELSON Worldwide, www.nelsonworldwide.com

BROKER // CBRE, www.cbre.us

GENERAL CONTRACTOR // Crawford Merz Construction, crawfordmerz.com

FURNITURE // Fluid Interiors, fluidinteriors.com

Materials

PAINT // Snowbound from Sherwin-Williams, www.sherwin-williams.com

CARPET // Near & Far Collection from Interface, www.interface.com

TILE // Tomei in Canvas from Lunada Bay Tile, lunadabaytile.com, and Quarry in Arid Gray from Daltile, www.daltile.com

LIGHTING // Focal Point, www.focalpointlights.com

VINYL WALLCOVERING // Herring from Maharam, www.maharam.com









RETROFIT MAGAZINE
METAMORPHOSIS AWARDS
Winner

INTERIOR *Honorable Mention*

THE GLORY

The Grand Design of the Nation's First Commodities Exchange Is Uncovered and Celebrated

TO READ A FULL FEATURE ABOUT THE BOURSE, SEE THE MAY-JUNE ISSUE, PAGE 54, OR VISIT bit.ly/2SLNINX.

The Philadelphia Bourse opened in 1895 as the nation's first commodities exchange, a building in which merchants could meet, share ideas and conduct business. The design, which combines Victorian and Renaissance styles, features an open trading floor at the ground level and seven levels of office space above that wrapped a central light well open to the sky. The building occupies an entire city block in a prime location for commerce then and attracting tourists, visiting Independence Hall and the Liberty Bell, now.

When the Great Depression hit, the grandiosity of the Bourse began to fade. By the 1950s and '60s, the building showed signs of neglect and, in 1971, the stockholders sold the property. New owners capitalized on the building's proximity to Philadelphia's tourist attractions and converted the main space to a retail, food and beverage destination. These successive renovations buried the grandeur of the interior, eroding the beauty of the building to suit the new tourist-focused uses.

By the time of the Bourse's recent purchase by MRP Realty, the 358,000-square-foot building was stale, partially occupied and the remaining office spaces were undesirable. Beautiful architectural details were muddied by dim, surface-mounted incandescent globe lights and a nearly monochrome beige paint.

MRP Realty approached BLT Architects to develop a design vision for the Bourse to use in conjunction with a competitive bid to purchase the building. The architect recognized the opportunity to restore the interiors to their original splendor and create a space with great social impact, engaging the community in a meaningful and productive way. BLT Architects' design vision, which centered on the restoration of the Bourse's signature elements, creation of a top-tier food hall, revitalization of its office spaces and adding new amenities, earned the firm an Honorable Mention in the Interior category of ***retrofit***'s Metamorphosis Awards.

The architect worked closely with the contractor to ensure that renovations were sensitive to the original detailing and new details were keeping with the original design, complementing the historic ornament. The team began renovations by removing a portion of the inserted mezzanine level to restore the original double-height grand entrance, uncovering original architectural details that were retained and restored. The renovated lobby serves as an entrance for the food hall and the offices above and is a dramatic announcement of the restored glory of the building.

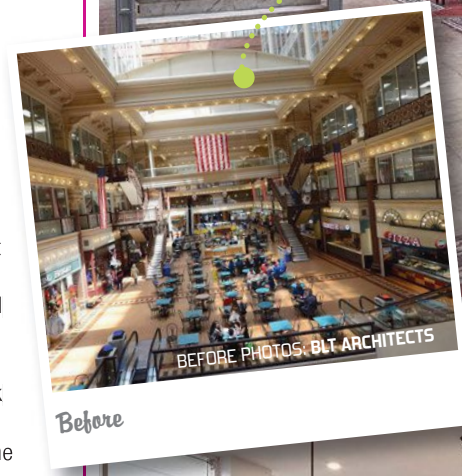
Then, focus turned to the central atrium that housed the ill-fated food court. Mammoth openings in the floor created during a previous renovation were filled, resulting in greater programmable area and flexibility for the food hall.

By removing all surface-mounted lights and introducing concealed LED lighting, the original architectural ornamentation is celebrated. A cool, bright color palette highlights the ornament throughout the space. The original wrought-iron rails of the stair and balconies are painted a cool gray to provide contrast against the white walls. The whiteness of the space and the brightness of skylights enhance the Bourse, bringing it back to life.

The final major focus of the renovation was the office component. A highlight is a concept called "The Exchange," an amenity space for smaller-office tenants to meet, dine and share ideas. This space includes floor-to-ceiling windows that look into the atrium, as well as tables and stadium seating for working or relaxing.

The original vision for a building in which individuals meet, exchange ideas and conduct business stands true once more, and the Bourse's 1895 architecture is embraced and shown in its true beauty.




BEFORE PHOTOS: BLT ARCHITECTS

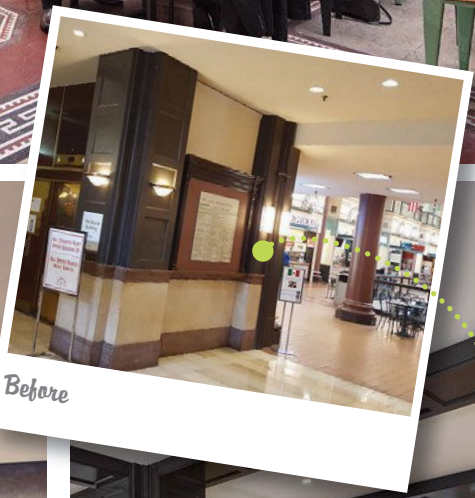
Before



Judge's Comment

"Revealing the historical details, improving the lighting and restoring the historical character really captured my intrigue."—*Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole*





Before





PHOTOS: JEFFREY TOTARO PHOTOGRAPHY

Retrofit Team

METAMORPHOSIS AWARD WINNER!

OWNER // MRP Realty, www.mrprealty.com
ARCHITECT // BLT Architects, www.blta.com
STRUCTURAL ENGINEER // O'Donnell & Naccarato Structural Engineers, www.o-n.com
MEP/FP ENGINEER // Concord Engineering, concord-engineering.com
CONSTRUCTION // Daniel J. Keating Co., djkeating.com
LIGHTING DESIGN // Lighting Design Collaborative, www.lightingdesign collaborative.com

Materials

PORCELAIN TILE // Tabula Wood-look Tile from Garden State Tile, www.gstile.com
MINI BLINDS // Bali Customiser 1-inch Aluminum Blinds by SWF contract, www.swfcontract.com
STOREFRONT // Bliss Noram, www.blissnoram.com/EN
LINEAR DIFFUSER // Architectural Linear Diffuser by Titus, www.titus-hvac.com
LOBBY PENDANT LIGHT // Litecontrol Inde-Pendant by Hubbell Lighting, www.hubbell.com
FLEXIBLE LINEAR LED LIGHTS // Solara Flexible Lighting System by Apogee Lighting, www.apogee-lighting.com
LED ARCHITECTURAL LIGHTING // Lumenfacade by Lumen Pulse, www.lumenpulse.com
LIGHTING GRID // Global Trac Pro by Nordic Aluminum, www.nordic aluminium.fi/global-trac-pro
EXHAUST HOOD // Captiveaire, www.captiveaire.com
COMMERCIAL SINKS // Hand Sink and Three Compartment Sink by Eagle Group, www.eaglegrp.com
WATER HEATER // Lowboy Electric Water Heater by Bradford White, www.bradfordwhite.com
AUTOMATIC GREASE INTERCEPTOR // GreaseStopper Automatic by Highland Tank, www.highlandtank.com

RETROFIT MAGAZINE
METAMORPHOSIS AWARDS
Winner

INTERIOR *Honorable Mention*

RIBBONS OF REPOSE

A Modernized Entry Celebrates the Existing Brutalist Structure



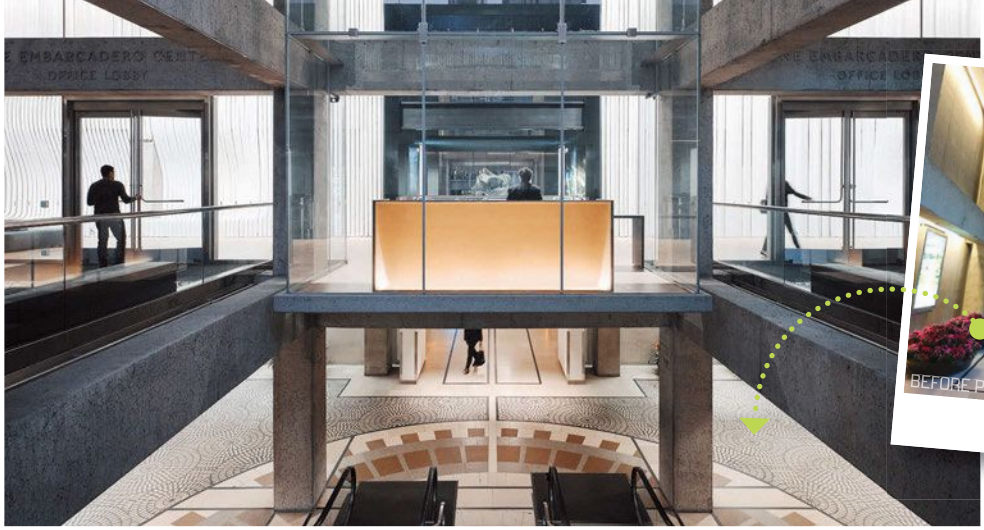
PHOTOS: JOE FLETCHER

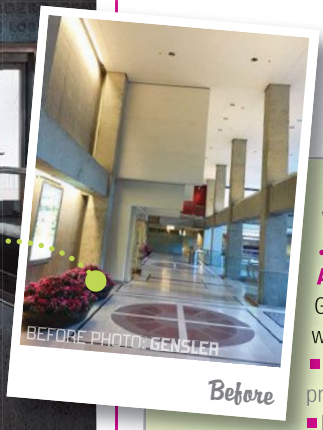
Designed and built between 1968 and 1983 by notable futurist John Portman, the Embarcadero Centers in San Francisco were a jewel of the "city within a city" movement. Albeit groundbreaking at the time, the towers struggle to meet the demands of the city's current market. Gensler and its team were tasked with modernizing the entry and providing security for the existing office building, which sits within a three-level retail podium. Because the existing entry was hidden behind a pair of retail escalators, the project scope was expanded to facilitate pedestrian circulation and create a gracious entry space for tenants and visitors.

Gensler's innovative design solution earned it an Honorable Mention in the Interior category of ***retrofit***'s Metamorphosis Awards.

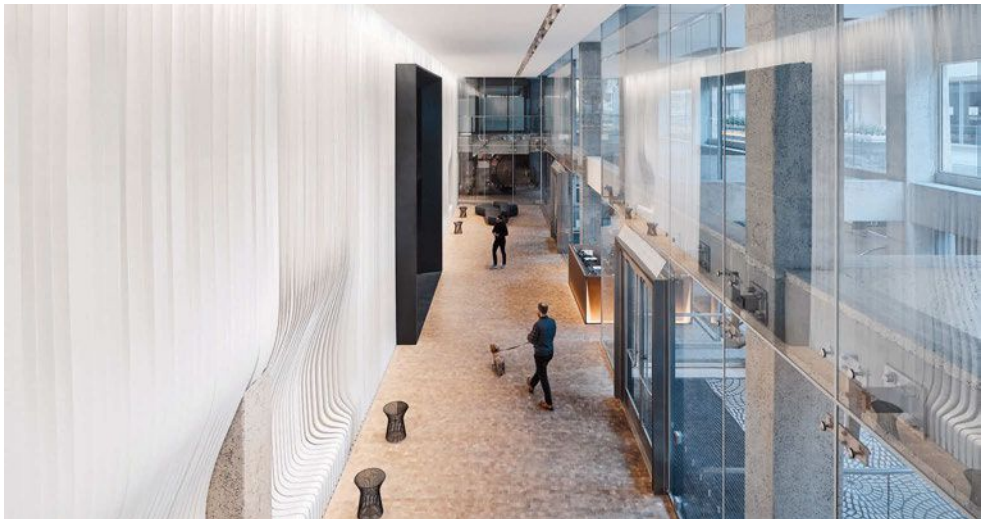
Gensler's goal was to utilize the existing structure as much as possible and provide critical improvements to the user experience. The obscured office lobby was exposed by removing the pair of escalators. The new clear line of sight to the tower's reception desk helps to mitigate common visitor confusion. Doubling the lobby's area alleviates visitors and tenant traffic, reinforces building security and provides a comfortable waiting area for visitors. The dark metal "sleeve" creates a powerful visual connection through the building. Also, it allows access to daylight on both sides of the tower, making the lobby feel elegant and graceful.

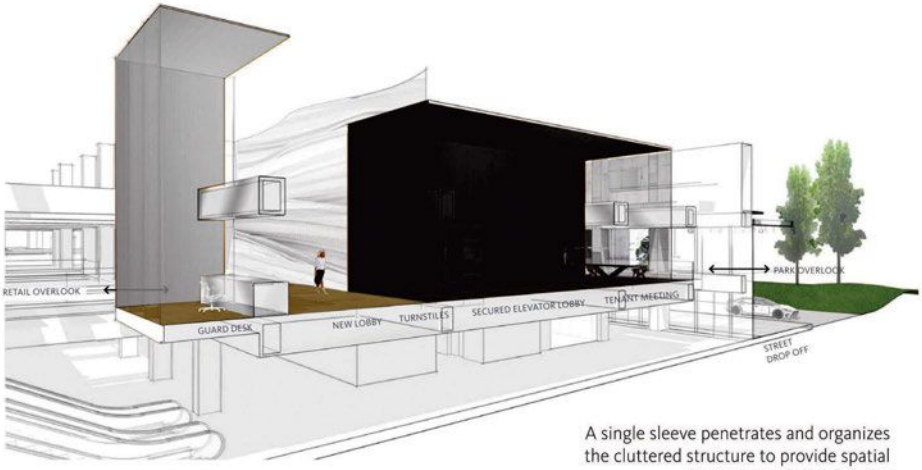
In contrast, a glowing veil of white concrete ribbons drapes over the existing Brutalist structure. Developed in collaboration with fabricators Concreteworks, the twisting forms of the glass-fiber-reinforced concrete strands that form the integral bench were designed and developed through computational modeling. Each form was studied in virtual reality and through a series of full-scale mock-ups. The 250 individually cast ribbons stand 1-inch apart from each other, creating a transparent layer through which to view the original fluted concrete core and super structure. Rather than burying the existing Brutalist core, it is now the backdrop for a veil of dynamic white ribbons that create an area of repose.





Before





A single sleeve penetrates and organizes the cluttered structure to provide spatial hierarchy and visual clarity

IMAGE: **GENSLER**

Retrofit Team

METAMORPHOSIS AWARD WINNER!

ARCHITECT // Gensler, www.gensler.com
- Doug Zucker, principal in charge
- Batya Keshet, design lead
- Craig Slavsky, design manager
- John Bender, senior project architect
- Luda Hoe, project architect
- Caroline Duncan, designer
- Jin Peng, designer
- Alan Sinclair, graphics/signage

GENERAL CONTRACTOR // Hathaway Dinwiddie Construction Co., www.hathawaydinwiddie.com

CUSTOM CONCRETE RIBBONS AND PANELS // Concreteworks, www.concreteworks.com

GLASS CURTAINWALL SUBCONTRACTOR // Novum, novumstructures.com

MILLWORK // Design Workshops, www.design-workshops.com

Materials

END GRAIN OAK FLOORING // Kaswell Flooring Systems, kaswell.com

CUSTOM BLACK EPOXY TERRAZZO // Associated Terrazzo, www.associatedterrazzo.com

CUSTOM ACID-ETCHED BLACK MIRRORED GLASS CLADDING AND 1-INCH-THICK ACID-ETCHED AMBER-COLORED GLASS (Security Desk) // McGrory Glass, mcgrory.com

DOLOMITE WHITE MARBLE, SLABS AND TILE FLOORING (Elevator Lobby Walls/Floor) // DaVinci Marble, davincimarble.com

Judge's Comment

"The innovation and sensitivity of the wall and seat is out of the ordinary; it's new and fresh. Overall, it made this a much better lobby experience.—*Scott Elofson, design principal, HDR*"

RETROFIT MAGAZINE METAMORPHOSIS AWARDS

Winner

MULTIFAMILY *1st Place Winner*

PROBLEM SOLVER

A Massive Chicago Warehouse Now Is an Eclectic Mix of Uses, Including Thoughtful and Affordable Lofts

WRITTEN BY | **CHRISTINA KOCH**

Chicago is a proud city. Proud of its history, proud of its buildings and proud of its distinctive neighborhoods. Although locals may differ on the neighborhoods' exact names and boundaries, a 1993 city ordinance officially divided Chicago into 178 neighborhoods, each with its own claims to fame, such as restaurants and breweries, unique shopping, and annual celebrations and festivals that attract Chicagoans, suburbanites and visitors alike.

The northwest side of the city is known for its industrial past because of the railroads that crisscross the area. It contains several blue-collar neighborhoods, including Logan Square, which has become a hot-spot in recent years with its quirky coffee shops, art galleries and music venues, and Belmont Gardens, which borders Logan Square to the west and is among the smallest but most densely populated neighborhoods.

Teetering along the boundary between Belmont Gardens and Logan Square is a 1.5-million-square-foot concrete warehouse built on 22 acres in 1928 for Olsen Rug Co. As one of Chicago's largest employers for years, Olsen Rug's warehouse became a neighborhood and city institution. During WWII, when resources were scarce, people sent scraps of rugs, clothing and rags to Olsen Rugs to be turned into area rugs. When the building changed hands in 1963, it was sold to another iconic Chicago business, Marshall Field's. Known as Field's to locals, the retailer used the warehouse to store furniture. The building remained active for a few years after Macy's purchased all of Field's assets in 2004.

However, by 2008, Macy's closed the warehouse and it sat vacant until 2013 when a Chicago developer began creating a unique mixed-use development within the structure. With its ample space, the building, now known as The Fields, includes a grocery store, indoor parking and warehousing, as well as light manufacturing, office, retail and residential space.

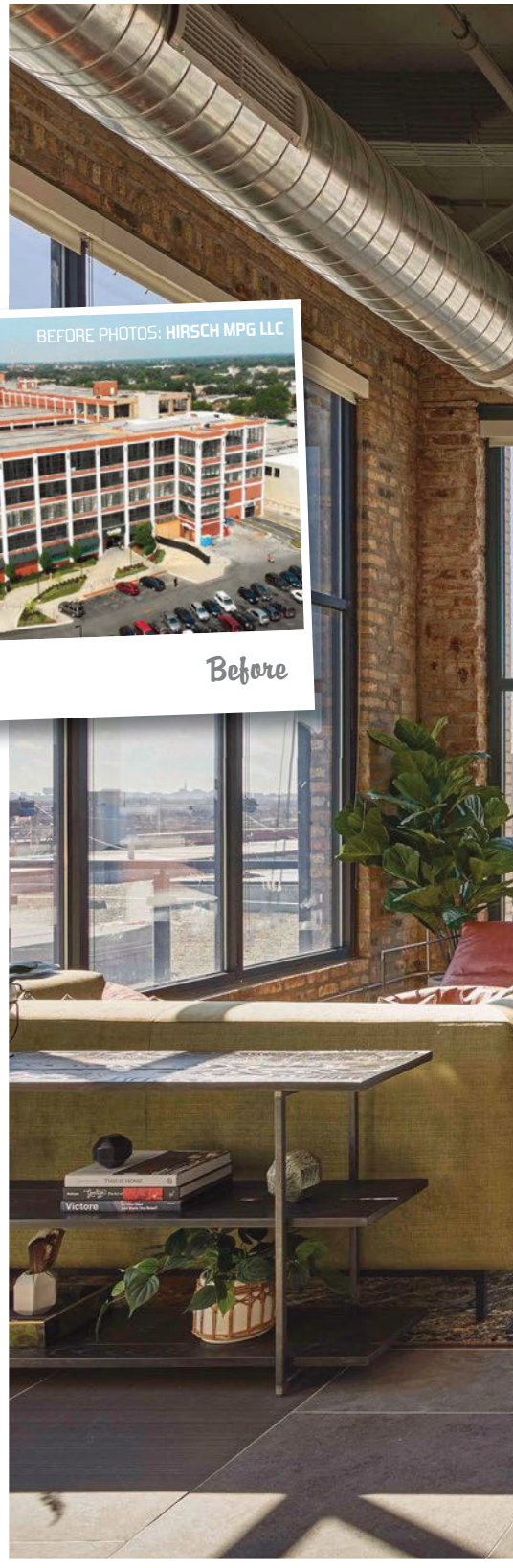
The residential units, in particular, posed design and financial challenges. The Fields' location—in an emerging area with a mostly working-class population—could not justify the high-end rents of neighborhoods closer to downtown. To succeed, the developer had to price the residential units affordably to attract a wide range of renters, including people already in the neighborhood who could appreciate The Fields' raw, rustic charm.

Today, approximately 144,000 square feet of The Fields' easternmost sections contains 123 dwelling units known as Fields Lofts. Designed by Hirsch MPG LLC, the conversion on floors three through six earned the Chicago



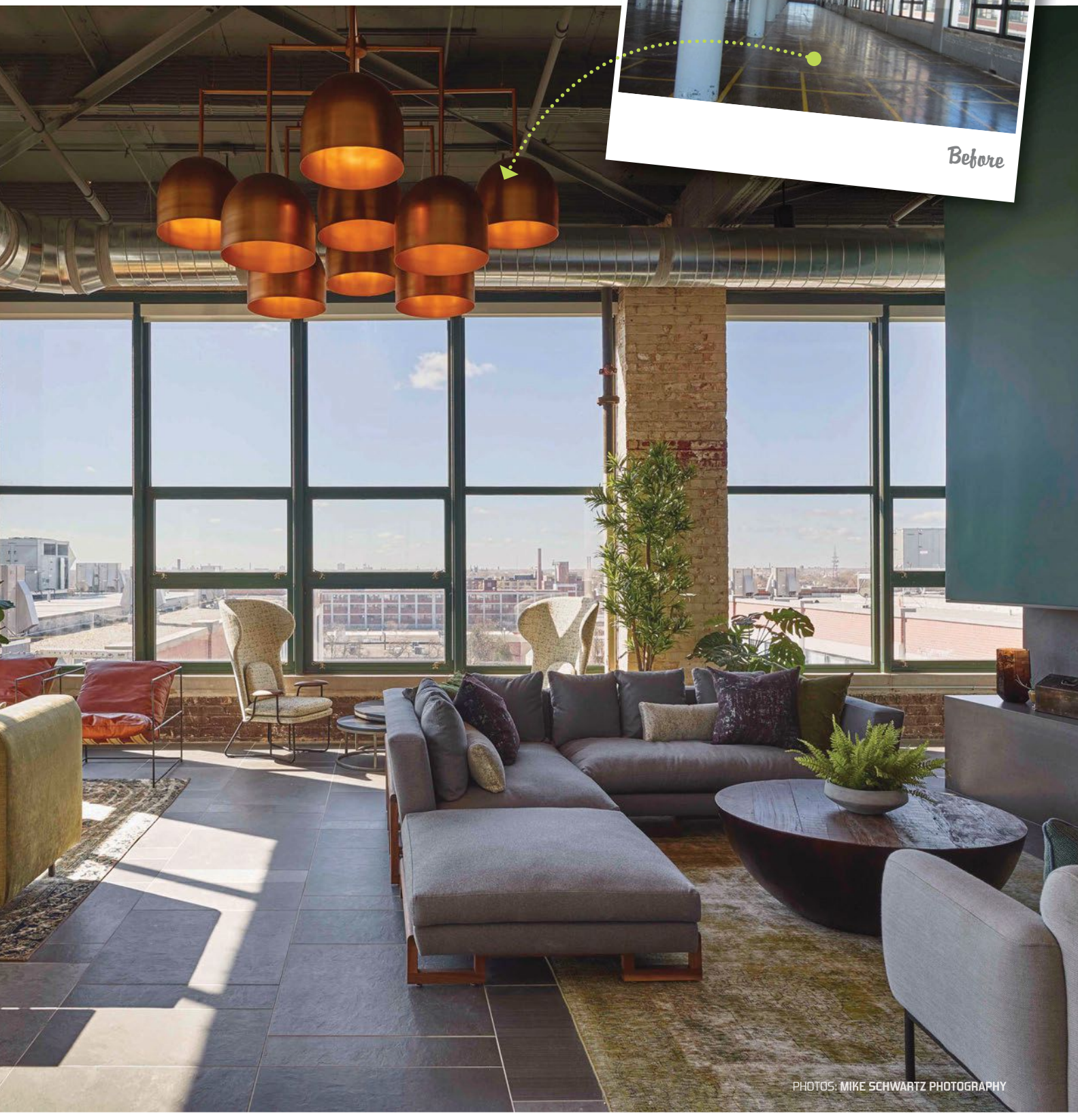
BEFORE PHOTOS: **HIRSCH MPG LLC**

Before



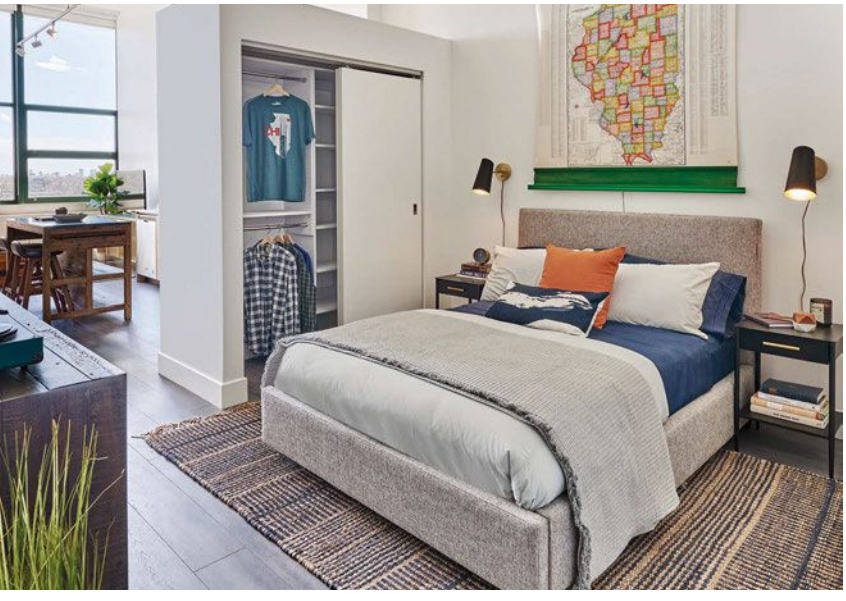
Judge's Comment

"Fields Lofts was the clear-cut winner."—*Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole*



PHOTOS: MIKE SCHWARTZ PHOTOGRAPHY







A modern lobby (right) greets residents and visitors to Fields Lofts, a mix of one- and two-bedroom units, along with junior one-bedroom units, which are similar to studio spaces. The units range from 542 to 1,330 square feet, larger than comparable new-construction projects in Chicago but 20 to 30 percent more affordable.

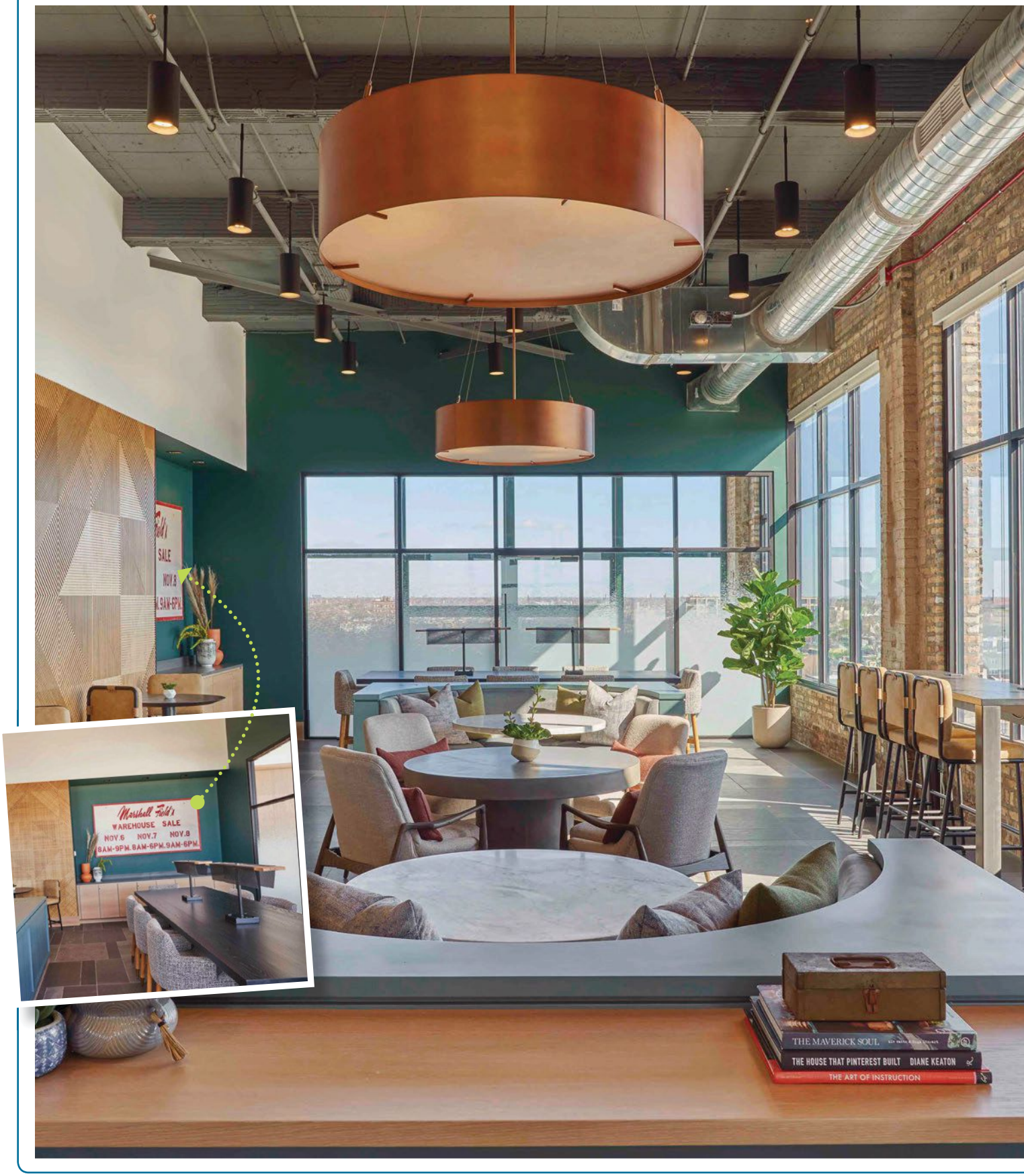
firm the First Place prize in the Multifamily category of ***retrofit***'s second-annual Metamorphosis Awards.

SUPPORT FOR A UNIQUE IDEA

While the mammoth warehouse stood abandoned, there had been numerous proposals from various developers to replace the iconic structure with a large retail development, though the idea wasn't popular. Nobody in the community wanted to see the building torn down, recalls Principal-in-charge Howard Hirsch, AIA, ALA, LEED AP, founder and president of Hirsch MPG. When the new owner came forward with a unique mix of live, work and play solutions for the building—practically a city within a city—the idea for The Fields was launched.

Hirsch's goal for every client is to listen carefully, ask the right questions, and provide creative and appropriate solutions. Thus, his team initially was hired in 2013 by the developer to establish some basic parameters, such as what parts of the warehouse would be appropriate for what use. "It was a year or two of getting everyone comfortable with this odd mix of uses that were going to be put in the building," Hirsch says. "The most controversial use was the residential portion of it. This is a neighborhood that is very concerned about gentrification and was concerned if market-rate residential units came in, it would start gentrifying the neighborhood. The developer landed on this live-work concept, which is something the city had been talking about but had not really been done."

Hirsch and his team began laying out a design for live-work units, but the idea stalled because it was too limiting as to who could actually live and work in The Fields. "The laws required that whoever opened a business there and lived there had to have a business license,"



The interior designer, Harken Interiors, used Marshall Field's signage from the building in the sixth-floor co-working space and incorporated Field's iconic shade of green throughout.

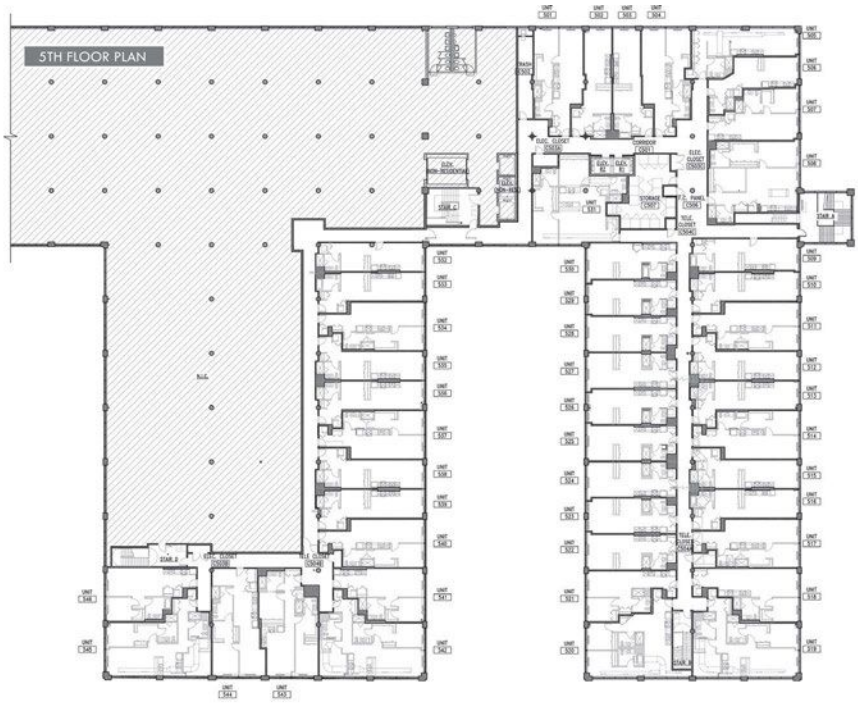


IMAGE: **HIRSCH MPG LLC**

Today, approximately 144,000 square feet of The Fields' easternmost sections on floors three through five contains 123 dwelling units known as Fields Lofts. The sixth-floor space now features a co-working area, shared kitchen, large fitness center and bathrooms for resident use.

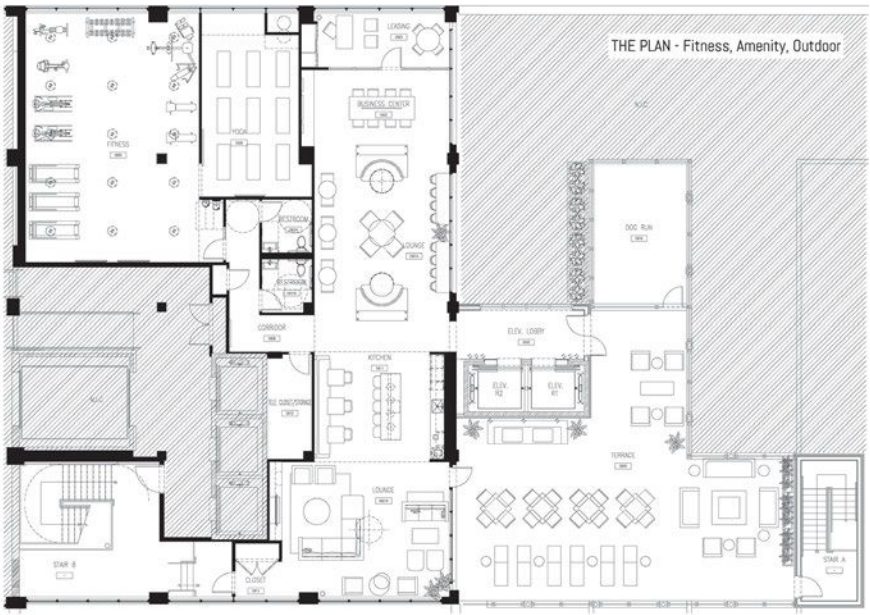


IMAGE: **HARKEN INTERIORS**

Hirsch says. "There are a lot of professionals, like architects, for example, who don't have business licenses in Chicago, so this idea became difficult."

Meanwhile, the developer was moving forward with the infrastructure for other parts of The Fields. The grocery store came to fruition, and a warehouse began operating in the building. To reignite the residential idea, the developer determined the units had to be small and geared toward younger people who wouldn't mind close living quarters but still could appreciate the uniqueness of the building.

"We spent a lot of time amending the plan from the original 84 live-work units to 123 loft-style units," Hirsch remembers. "These units have 14- to 17-foot ceilings, massive windows and a raw concrete look to them. After a change in the alderman [an elected official who represents a ward, composed of several neighborhoods, on Chicago's city council] and a bunch of community group meetings, we got buy-in from the community and the alderman to switch it to a true residential product."

TRUE LIVING UNITS

A mix of one- and two-bedroom units, along with junior one-bedroom units, which are similar to studio spaces, was created. The units range from 542 to 1,330 square feet, larger than comparable new-construction projects in Chicago but 20 to 30 percent more affordable, Hirsch says.

Rather than designing typical borrowed-light bedrooms, Hirsch and his team took advantage of The Fields' high ceilings and large windows and created thinner, deeper units. The units are segregated into zones, meaning they aren't divided by walls but by furniture or cabinetry, which gives the impression they contain a true bedroom (or two). "It makes the unit feel bigger because it doesn't feel broken up into smaller pieces," Hirsch notes. "A small bedroom with a 17-foot ceiling feels very awkward, but if a bedroom is just defined by a partial closet or piece of furniture, the whole unit feels bigger."

The almost full-height industrial windows certainly are a benefit to the units but also could have been a drawback because they were not energy efficient. "We really couldn't do anything with the windows because of budget and the sheer amount of glazing, but we knew we had to meet certain standards of comfort or people wouldn't want these units," Hirsch states. "The system that we used for heating these spaces—because they're so tall—is a VRF system. We located the units directly under the windows, so that allowed us to offset the hot and cold air that's coming in through those windows right at the source."

A complaint of many apartment and condo

(continues on page 46)

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Circle No. 20

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Retrofit Team

DEVELOPERS // Hubbard Street Group, www.hubbardstreetgroup.com; Knickpoint Ventures, knickpoint.ventures; and Merit Partners, www.meritre.com

METAMORPHOSIS AWARD WINNER!

ARCHITECT // Hirsch MPG LLC, hirschmpg.com

- Howard Hirsch, AIA, ALA, LEED AP, principal in charge
- Andrew Myren, AIA, design principal
- Yoshiki Hatakeyama, project architect

INTERIOR DESIGNER // Harken Interiors, www.harken-interiors.com

GENERAL CONTRACTOR // Macon Construction, macongroup.com

STRUCTURAL ENGINEER // Alta Engineering Ltd., www.altaengineeringltd.com

MEP/FP ENGINEER // Elara Engineering, www.elaraeng.com

PERMIT CONSULTANT // Cornerstone Permit Co., www.cornerstonepermit.com

dwellers is hearing their neighbors too well. Fortunately, that is not the case at Fields Lofts. The 10-inch-thick concrete between the floors of the building mitigates sound transfer vertically. To ensure noise doesn't travel between side-by-side units, Hirsch MPG followed its standard multifamily acoustical design, which features multiple layers of drywall and insulation for sound attenuation.

Because the ceilings are so high, linear LED lighting was hung at about 10-foot level. Under-cabinet lighting highlights the streamlined Italian-style kitchen cabinetry. In addition, each kitchen features a moveable work surface that can be used as an island or a kitchen table.

AMPLE AMENITIES

The sixth floor of The Fields originally contained an odd, 3,000-square-foot space with 20-foot-tall ceilings but a lack of rhythmic windows, so lofts couldn't easily be built in this area. The floor also was about 3-feet lower than the fifth-floor roof, so the team raised the floor with a lightweight fill material and then poured a new slab to align it with the adjacent roof. The team then created a walkout to the roof, which features a sun deck, barbeque stations and a dog run. "There are beautiful views of the city skyline because there's nothing taller than this building for quite a distance," Hirsch says. "The developer wanted to take advantage of these views."

The interior of this sixth-floor space became a co-working area, ultimately achieving the live-work idea the developer originally planned. Glass walls, built-ins and furniture create separate co-working and lounge areas. In addition, a shared kitchen, large fitness center and bathrooms are available for resident use. Access to the co-working area is provided by two new elevators, which were inserted into the concrete structure and also serve the residential lofts.

The design team wanted residents to remain familiar with the heritage of The Fields so pre-renovation photos are hung throughout Fields Lofts' common spaces. "Harken Interiors, who was instrumental in developing the planning and the look of the amenity spaces, as well as the lobby, corridor and unit finishes, did a lot of research on the history of Marshall Field's," Hirsch recalls. "They found old Marshall Field's signage from the building, which was used in the co-working space, and incorporated Field's iconic shade of green throughout to bring a little bit of history to the development."

Hirsch MPG spent five years—from basic planning in 2013 to completion of the residential lofts in May 2018—working on The Fields and Fields Lofts. The firm continues to work on other phases to this day. Its team members are



Materials

LOBBY

PLASTER // Artisan Venetian Plaster, www.artisanvenetianplaster.com

LIGHTING // Spike Lighting, spikelighting.com

RESIDENT FLOORS

CARPET // Mohawk, www.mohawkflooring.com

SCONCES // Spike Lighting, spikelighting.com

DWELLING UNITS

KITCHEN COUNTERTOPS, BATHROOM FLOOR AND SHOWER TILE // Daltile, www.daltile.com

KITCHEN BACKSPLASH // Ann Sacks, www.annsacks.com

FLOORING // Balterio, www.balterio.com

BERLONI CABINETRY // Bristol Design Group, bristolcabinetry.com

PLUMBING FIXTURES // Kohler, www.us.kohler.com

AMENITY FLOOR

TILE FLOORING // Ceramic Technics Ltd., ceramictechnics.com

WOOD ACCENT WALL // Plyboo, www.plyboo.com

KITCHEN BACKSPLASH // Ann Sacks, www.annsacks.com

LIGHTING // Spike Lighting, spikelighting.com

INTERIOR PLANT DESIGN // Variegated Designs, www.variegatedchicago.com

KEY FURNITURE VENDORS // Gather Table Co., www.gathertableco.com; Four Hands, fourhands.com; Harbour, www.harbouroutdoor.com; New Traditionalists, www.tntcommercial.com; Restoration Hardware, rh.com; and YLiving, www.ylighting.com

ART // Kevin Barry Fine Art, kevinbarryfineart.com

FITNESS FLOORING // Spartan Surfaces, www.spartansurfaces.com

WALLCOVERING // D.L. Couch, www.memosamples.com, and Carnegie, carnegiefabrics.com

PLUMBING FIXTURES // Kohler, www.us.kohler.com

LIGHTWEIGHT FILL MATERIAL // Geofoam, www.geofoam.com

VRF SYSTEM // LG, www.lghvac.com

pleased the project fills a niche in Chicago for high-end, contemporary dwelling units—with coveted parking—at a lower price. "This building meets the needs of younger people who are being priced out of many neighborhoods and are looking for housing further from downtown but still within the city," Hirsch says. "Knickpoint [one of the developers] is looking at bringing in a whole array of retail, restaurant, maker-spaces and more into this area."

Hirsch is gratified that the design and construction teams, along with forward-thinking developers, were able to repurpose a beautiful building that is important to Chicago's blue-collar history. "This building is a one-of-a-kind structure and I hated the thought of tearing it down or doing something that was detrimental to it," Hirsch says. "It has been wonderful to see this underutilized property be developed in a way that upholds how it fits into the neighborhood while preserving the historic feel of the building."

RETROFIT MAGAZINE
METAMORPHOSIS AWARDS
Winner

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MULTIFAMILY *Honorable Mention*

PRINT WORTHY

A Former Printing Facility Is Reimagined as Residential Lofts with Details from the Building's History

The Woodward & Tiernan Printing Co. consolidated three scattered offices in 1925 by constructing a 2.5-story, 246,000-square-foot facility. The new home for St. Louis' largest printer exemplified innovative factory design with five clerestory monitors and mushroom-capital concrete floors, features that helped place the building on the National Register of Historic Places.

The sweeping south façade created a monumental presence against the freight rail lines, a spur of which played a large role in the placement of shipping for the new factory. Corporate offices and lithography spaces were housed in the east-facing brick "head house," demonstrating the building's versatility with an industrial and commercial presence. The building was still considered fully modern as late as 1959 when Woodward & Tiernan Printing was absorbed for expansion specifically because of its "modern plant."

By the late 20th century, the building's presence and use had shifted dramatically. For more than 30 years, packing materials were stored and shipped from a loading dock tacked on to the building's north loading dock and west façade, formerly used to bring towering box cars into the building itself. A small portion of offices occupied the third floor, accessed through a nondescript corner entrance, leaving the building's ornate brick and terra-cotta face mostly shuttered.

The original soaring, single-glazed steel industrial windows were badly rusted and had been covered with corrugated transite panels on all but a handful of south-facing openings. Although the concrete structure largely outlasted time, brick façades and terra-cotta ornamentation were in disrepair. The building was heated with several industrial package air handlers, which constantly struggled to keep up with heat lost through window openings and rotted roof insulation. The building had become an enormous, uninviting presence at the edge of a struggling residential neighborhood.

In 2016, with a 20,000-housing-unit shortfall in the region, adapting the former printing factory into residential use became an appealing challenge for Trivers. The design firm's impressive update of the facility earned it an Honorable Mention in the Multifamily category of ***retrofit***'s second-annual Metamorphosis Awards.

GOING HOME

The deep floor plates of the daylight factory resisted conversion to dwelling units, where exposure and connection to outdoors is paramount. Initially presented with a request to "donut" the building and create a large internal courtyard, Trivers' team endeavored to retain the character of industrial innovation of clerestories and maximize the amount of original structure that could be maintained. It was imperative that the proposed design provide at least the number of units to maintain the developer's pro forma.

The original high-bay clerestories provided space to create small footprint, lofted units within each structural bay. By removing the timber roof deck between clerestories, a series of internal courts were carved into the building, ringed by new operable storefront enclosure and steel-replica windows, thus creating communal outdoor space shared by clusters of units at the center of the floor plate. By maintaining the original steel purlins and adding new tie-rods for lateral stability, each garden maintained an open-air "roof," which scales down the space, creating a sense of intimacy within the massive building. Through this strategy, basic human needs of access to daylight, fresh air, and connections to nature and community were met while preserving the original beauty and character of the historic structure.

Material stewardship is central to the success of Trivers' design concept. By utilizing cross-laminated timber (CLT) floors for lofts within units, the depth of the floor assembly was reduced by more than 12 inches from joist construction. This maintained a viable head height in the lofted bedrooms, as well as reduced the length of stair run to save valuable space in a 20- by 20-foot unit footprint. Providing viability to the concept, the design maximized 11,000 tons of embodied carbon in the original steel and concrete, as well as created a total carbon benefit of 376 metric tons by using CLT in lieu of a traditional floor structure.

A surprising discovery during design revealed that the original factory floors were a dark, monolithic terrazzo obscured by years of dirt. Polishing these floors and leaving the original timber roof deck exposed further minimized the use of new construction materials and strengthened the atmosphere of the project.

DETAIL-ORIENTED

Integrating the residential program into the industrial volume is also embraced in the details of the design. Two of six massive steel water tanks that fed the original sprinkler system were retained in place and carved open to create intimate lounge seating as a building amenity. The remainder of the rooftop sprinkler tank room was adapted into a sky lounge, opening to a rooftop deck and pool with views of the nearby urban skyline.

Vestiges of the printing factory are woven throughout the interior design with a dark, "inky" color palette; early-century furniture pieces; and artwork inspired by original typesetting procedures. Built on a solid foundation of historic industrial architecture, Woodward Lofts is a home unique to its place, woven throughout time.

Judge's Comment

"I thought the section was interesting—how they repurposed the different portions of the building. They did some unique things.—*Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole*"

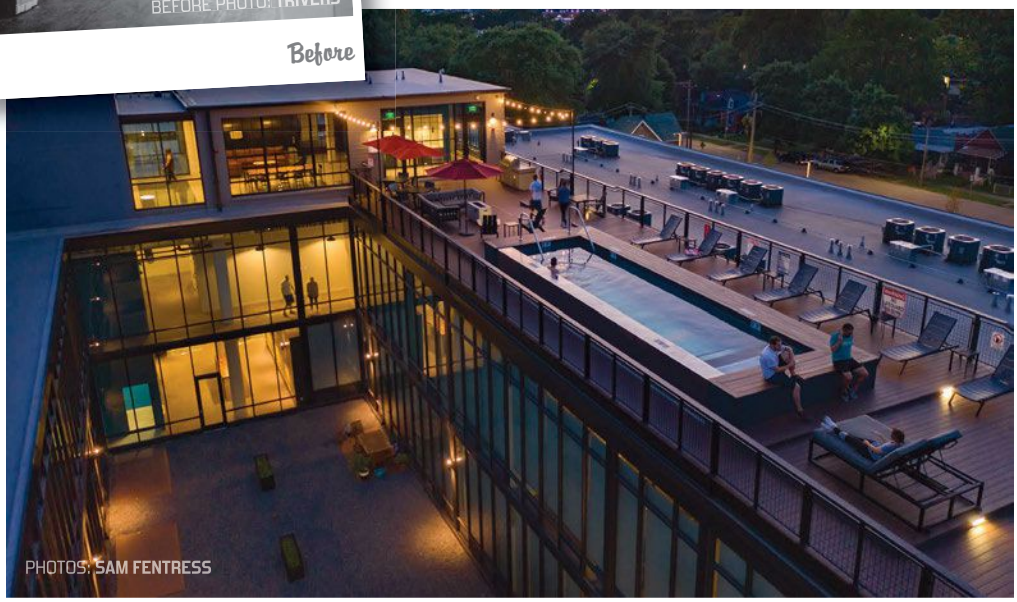








Before



Retrofit Team

METAMORPHOSIS AWARD WINNER!

OWNER // Pier Property Group, www.pierpropertygroup.com
ARCHITECT // Trivers, www.trivers.com
GENERAL CONTRACTOR // ARCO Construction Co., www.arcoconstruction.com
MEP DESIGN-ASSIST ENGINEER // G&W Engineering, www.gandwengineering.com
STRUCTURAL ENGINEER // KPFF Consulting Engineers, www.kpff.com
CIVIL ENGINEER // Civil Design Inc., www.civildesigninc.com
ACOUSTIC CONSULTANT // Designed Acoustics, www.designedacoustics.com
INTERIOR/EXTERIOR SIGNAGE // Designery, www.designery.com

Materials

HISTORIC ALUMINUM REPLACEMENT WINDOWS // H600 Series from Quaker Windows & Doors, quakerwindows.com
ALUMINUM STOREFRONT // 451T from Kawneer, www.kawneer.com, and 1150 Windows and NC82 Terrace Doors from Winco Window, www.wincowindow.com
CROSS-LAMINATED TIMBER // Smartlam North America, www.smartlam.com
POOL // Diamond Spas Inc., www.diamondspas.com
ROOFING // Genflex Roofing Systems, www.genflex.com
CABINETS // Advanta Cabinets, www.advantacabinets.com
CARPET // Lapidus from Milliken, floors.milliken.com; Kinetex from J&J Flooring, www.jjflooringgroup.com; and Color Choice/Facet from Patcraft, www.patcraft.com
PAINT // PPG Architectural Coatings, www.ppgac.com

RETROFIT MAGAZINE
METAMORPHOSIS AWARDS
Winner

EXTERIOR 1st Place Winner

FABULOUS FACELIFT

A 1980s Monolithic Glass Building Is Updated with Energy-efficient Metal Panels and Strategic Glazing

WRITTEN BY | **CHRISTINA KOCH**

The 1980s were a decade of business growth and advancements in technology. Desktop computers stand out among the life-altering technology developments of the '80s, and one of the most respected companies offering these new-fangled systems was Hewlett-Packard. By 1985, HP's sales had reached $6.5 billion and the company had 85,000 employees, including many in a new 215,532-square-foot monolithic glass building in central Pennsylvania.

The 3-story building and its 6-story addition at 225 Grandview in East Pennsboro Township were composed of a non-thermal aluminum I-beam-framed curtainwall system with reflective vision- and spandrel-glass panels—a common but problematic building technique of the time. Over the years, water penetrated the building because of the absence of a thermal break. High dewpoints resulted in deterioration of most of the light-gauge wall framing weeps and other water-control systems. A lack of maintenance didn't help matters.

The 2011 Black Monday market crash resulted in massive layoffs at HP and the company vacated 225 Grandview. Select Capital Commercial Properties Inc. purchased the vacant building in 2018, noting its structural strength and its optimal location for Class A multitenant office space. The new owner then initiated a design competition, asking entrants for a new façade that was sustainable and energy efficient, as well as met the owner's budget and strict timeline.

Murray Associates Architects P.C. was awarded the project and not only met the owner's requirements for 225 Grandview, but also achieved the First Place prize in ***retrofit***'s second-annual Metamorphosis Awards in the Exterior category for the transformational project.



PHOTOS: **MIKE MIHALO PHOTOGRAPHY** unless otherwise noted

DESIGN DECISIONS

Murray Associates Architects was established in Harrisburg, Pa., in 1935. Throughout its 85-year history, the firm's talent has witnessed and been part of changes in design styles and technology, embracing challenges and applying their experience to create outstanding buildings.

Judge's Comment

> The metamorphosis of this '80s building to what they ended up with is a true representation of what these awards are about. —*Scott Elofson, design principal, HDR*



Murray Associates mainly focuses on corporate and education projects and, according to firm Principal Benedict Dubbs Jr., AIA, LEED AP, about 78 percent are renovations.

"Renovations are so complex, we don't assume anything," Dubbs says. "If we get drawings of a product, even though they're as-builts, we still go out and use our 3D scanner. We still point-cloud the entire project. We'll spend days walking through, making sure the drawings are accurate, because most of the time we find as-built drawings don't really reflect the actual conditions. We spend a lot of time establishing a very good fundamental base for the product so that we, our client and our consultants can have a productive discussion based on factual information."

Murray Associates' strategy certainly assisted with the redevelopment of 225 Grandview. "The week after we were awarded the commission, we started on a lot of exterior and interior renderings," Dubbs recalls. "We did interior views of people at different office layouts, also open-plan areas; we wanted to give the owner a sense of what the building looks like from the outside and what it looks and feels like on the inside. We did daytime, evening and night renderings because buildings in Pennsylvania come alive at night. We want owners to be proud of their space, and that sets a tone for tenants' corporate culture in a building."

The retrofit performance requirements included a maximum U-factor of 0.38 for the curtainwalls/window walls, a maximum solar heat-gain coefficient of 0.39, an air infiltration rate limited to 0.06 cubic foot per minute per square foot at 1.57 pounds per square foot and visible transmittance of 0.429.

In addition to creating a high-performance façade, Murray Associates Architects sought to modernize the building's appearance by updating the entrances, lobby, roof, and overall lighting and security. Utilizing the maximum amount of exterior glass possible while synchronizing with the interior structural columns and supporting the tenant office floor





BEFORE PHOTOS: MURRAY ASSOCIATES ARCHITECTS P.C.

Before



During

plans was another main design criterion. Four different façade concepts were designed and evaluated to assist the owner's final decision (see page 53).

"The differences in concepts were the openings in the façade," Dubbs explains. "Really important in terms of choosing a façade were the heights of windows, the rhythm of the windows and the scale of those openings, so that's what really changed on the different design options."

ALL ABOUT THE GLASS

Special considerations were taken to select the proper curtainwall, glazing and high-performance shading systems in regard to solar heat gain, R- and U-value, bird protection, transparency and maximizing daylighting to each floor while maintaining the current net-rentable floor area that would visually entice large regional tenants.

The final design provides 63 percent glass area on the exterior. "We wanted to get as much opening in the façade as possible and we used a very high-quality glass," Dubbs notes. "Numerous studies attest to the importance and benefits of natural light on workplace productivity and the psychological well-being of employees."

Several different types of glass were installed depending on the location of the glass on the building. Each type was selected to achieve a high-performance building envelope that was aesthetically pleasing and cost-effective. For example, a gray-tinted glass was installed facing south and east—areas that receive a lot of direct sun. Above the sunshade in those areas, a gray-dot fritted pattern covers about 25 percent of the surface of the glass.

"The frit is our solar shading," Dubbs states. "It's a good energy tool because we're stopping the solar gain at the face of the glass. We did not want someone to have to install blinds on those windows; once the heat gets to the glass and goes through the glass, the heat is now in the building and the HVAC system has to overcome that solar gain. Keeping that heat out allows us to reduce the size of the HVAC systems, which means we can have smaller duct sizes and higher ceilings."

Meanwhile, on the building's north side, clear glass was installed because the façade of the building does not receive as much solar gain.

"The different glasses are based on some energy modeling and solar studies we did to ensure we were spending the client's money wisely," Dubbs adds. "When you start to use high-performance glass, it gets a little more expensive, so we wanted to use the more expensive glass on the façade where it would have the most impact on the energy usage. It was also about creating a pleasant working environment; when someone walks up to the gray-tinted glass below the sunshade on a sunny day, it's comfortable for them."

Dubbs underscores the importance of ensuring the new glass does not resemble the monolithic look of the 1980s. "As architects, we do buildings for humans and we really designed this building based on human scale and that sense of someone looking out the window," Dubbs says. "If you open up your door to your office, you're looking right outside. The visual connection between the office space and the outdoor space is seamless, so I really think it grounds the spaces. It really gives this building a very different feel when you're inside."

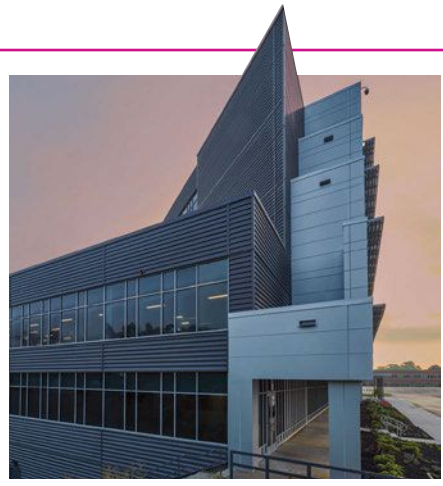
TIME SENSITIVE

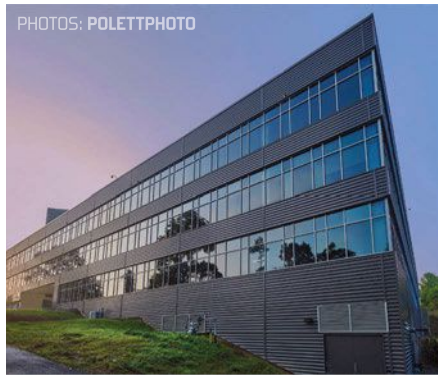
The building's new owner had an extremely tight timeline for the design team and construction crew. Dubbs says only three months passed from the time his team won the contract until construction began on the façade.

Fortunately, Dubbs' team already had spent a great deal of time on the initial submission to win the project. "We worked with the owner to refine the module knowing that in central Pennsylvania a typical office will be within a certain size range. Our design incorporates an asymmetrical rhythm of windows so that we could hit walls and still produce either a rectilinear office or workspace that was perpendicular to or aligned with the façade," he explains.

Another way to meet the tight schedule was to specify a panelized system in which the new

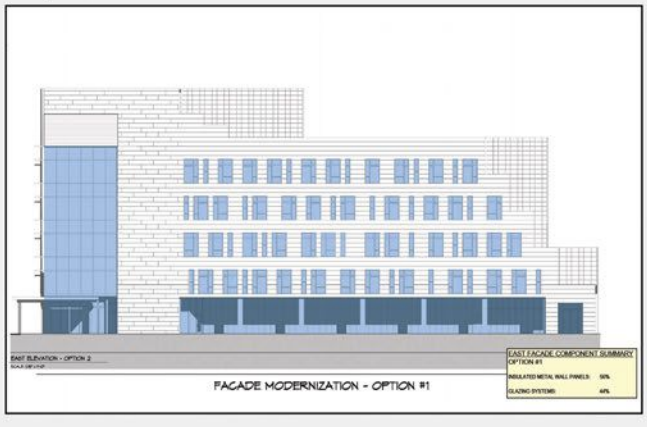


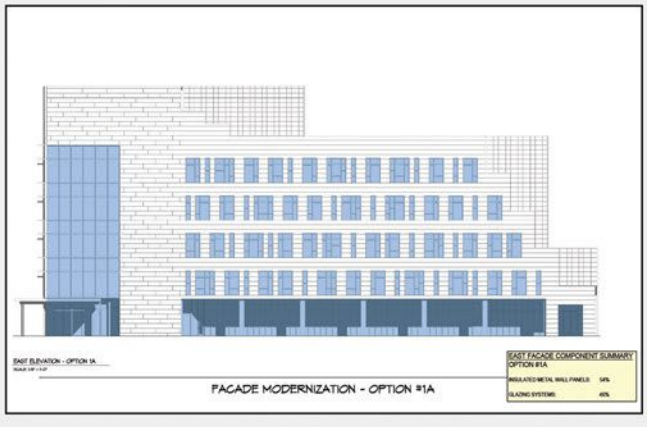


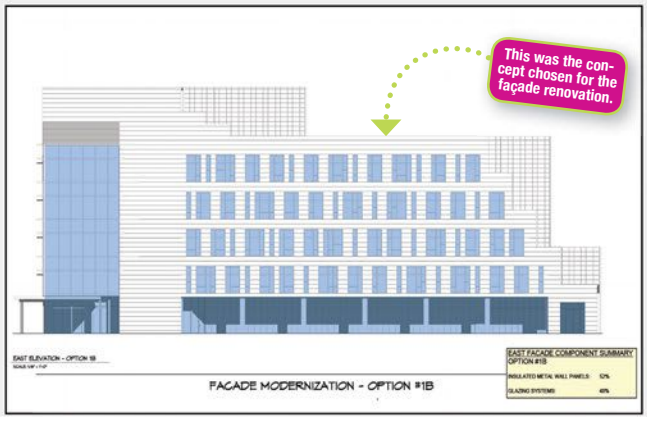


PHOTOS: **POLETTPHOTO**

TIME COMPARATIVE FAÇADE ELEVATIONS







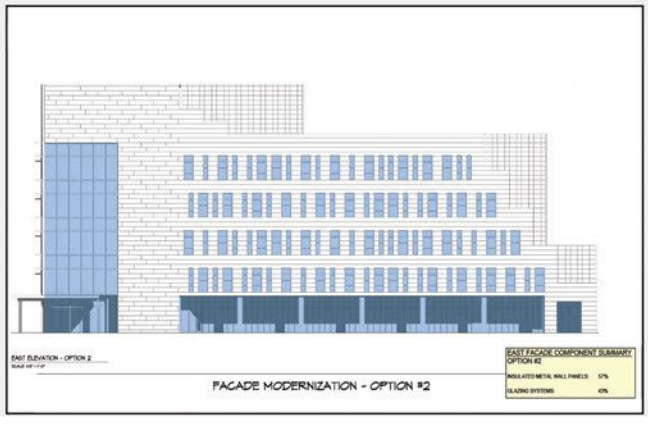


IMAGE: **MURRAY ASSOCIATES ARCHITECTS P.C.**

cladding was made in a nearby controlled environment with strict quality assurance. The installation team literally could follow on the heels of the demolition crew as they dismantled the existing building down to its structural framing. Spray foam was applied, followed by a universal barrier wall solution which was covered by aluminum composite material (ACM) panels. The exterior wall assembly has an insulation value of R-21.6 while the roof's insulation achieves R-40. Dubbs' team chose a light silver ACM for the walls with a 30-year finish to visually lighten the building and juxtapose the gray glass.

"There's a subtle elegance to the façade because the windows are pushed back a bit, the silver is out front and the sunshade provides some subtle movement, if you will," Dubbs adds.

Dubbs likes that the ACM panels come in large formats for fewer joints and less waste. "We developed a very rigid module with the local panel manufacturers," he recalls. "The ACM allows us to wrap the module and get clean joints with a tapered seal that is weathertight."

SO LONG, '80s

To complete the exterior transformation, the previously small, almost unrecognizable, entrance was moved out from a corner of the building. The new main entrance features a canopy that identifies it to building visitors.

Synthetic turf was installed on top of the roof membrane on the 3-story part of the building. It allows tenants above the roof to look out over a "green" roof. It also eliminates the heat-island effect that would be adjacent to the façade. "That turf will extend the life of the membrane roofing by maybe 25 to 30 percent because the EPDM roofing is not being deteriorated from UV," Dubbs says.

225 Grandview opened for leasing in fall 2019, and when potential tenants visit the building, they often mistake it for new construction. "We are very proud that someone would look at the building and think it is new construction," Dubbs says. "But we're even prouder that we were able to avoid the carbon footprint of a new building. We saved so much by putting a new skin on the building and keeping the floors the way they were. Plus, we recycled all the aluminum curtainwall and all the glass from demolition. It is a very sustainable building in terms of the way the demolition and new construction were handled."

Dubbs believes 225 Grandview demonstrates the possibilities that can be created from an existing building of a bygone era. "Here's a 215,000-square-foot building that is no longer of the '80s. It's of 2020. It's beautiful. It's modern. It really has a timeless appearance now," he states. "We think renovating millions and millions of square feet nationally is a better way to go than new construction. It's a matter of using creativity to appreciate, study and use its structural and aesthetic bones to make it the very best building it can be for the next half a century or more."

Retrofit Team

METAMORPHOSIS AWARD WINNER!

ARCHITECT // Murray Associates Architects P.C., murrayassoc.com
STRUCTURAL ENGINEER // WBCM, wbcm.com
GENERAL CONTRACTOR // A.P. Williams Construction, www.apwilliams.com
PANEL FABRICATOR // Novinger's Inc., www.novingergroup.com
GLAZING CONTRACTOR // Hershocks, hershocks.com
CANOPY FABRICATOR // Ritter Industries, www.ritterindustries.com

Materials

GLASS // Solarban 90, Solarban R100 and Solargray Glass from Vitro Architectural Glass, www.vitroglazings.com
FRITTED GLASS // Clear Heat-strengthened Glass with Solargray Dots from Vitro Architectural Glass, www.vitroglazings.com
ALUMINUM COMPOSITE PANELS // WS-100 Reynobond, Mica Finish, from Arconic, www.arconic.com
INSULATION // KarrierPanel from Kingspan, www.kingspan.com
CURTAINWALL SYSTEM // 1600 Wall System 1 from Kawneer, www.kawneer.com
SUNSHADES // Versoleil Sunshade Outrigger System from Kawneer, www.kawneer.com
DOORS // Kawneer, www.kawneer.com
LUMINAIRES // Seem 4 from Focal Point, www.focalpointlights.com
EPDM ROOFING // Versico, www.versico.com
TURF // Xgrass, www.xgrass.com

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Circle No. 24

EXTERIOR *Honorable Mention*

A RETAIL DESTINATION

Façade Improvements and Artwork Invigorate a 1970s Shopping Center

In the heart of Dallas, architect LRK was challenged to create a retail destination from an existing 1970s shopping center called The Hill. The outdated 236,050-square-foot complex featured brown brick, detailed with radius corners and nautical windows. The tenants lacked good visibility and the only people who frequented the shopping center were those who had a specific reason or tenant to visit. The team planned work around the existing tenants to minimize disruption, and the developer hoped to selectively add tenants as the renovation progressed, based on a tenant's contribution to the development's overall experiential quality.

LRK's ability to meet and exceed the developer's goals of making this shopping center a destination garnered the firm an Honorable Mention in ***retrofit***'s second-annual Metamorphosis Awards in the Exterior category.

Judge's Comment

> "All the moving pieces and parts are commendable."
> —*Scott Elofson, design principal, HDR*

CONNECTIONS

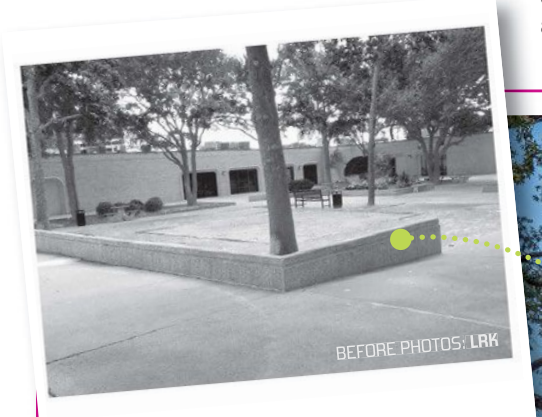
LRK oriented the design to avoid "dead zones", or spaces that were not interlinked to the rest of the development, and used the massing and skin to provide a glimpse into the alleys that led to the courtyard. Although alleys and nodes can be especially tough for retail sites, LRK's team was vigilant about incorporating all the individual areas into a single experiential narrative for patrons. In the past, the courtyard was sunken, muddy and lifeless. By using changing grades, the designers ensured continuity across the site, creating a natural but accessible experience for everyone entering and exiting the courtyard.

DESIGN INTRIGUE

In keeping with the goal of creating a destination, LRK focused on façade material selection, artwork, and rainscreens, creating interest and intrigue around every corner.

Seeking to avoid a typical strip-mall experience where every storefront feels the same, the goal was to make each storefront look like an independent design with each retailer having its own distinctive place.

To enhance the development's visual identity, the team utilized natural materials with a complementary palette of earth-tone colors. The team varied canopies, so each building was unique, cultivating intrinsic curiosity to



BEFORE PHOTOS: LRK

Before



PHOTOS: CHARLES DAVIS SMITH



explore around each corner and encouraging patrons to continue moving throughout the site.

Outdoor dining spaces and patio seating also add to the activity within the development, giving the space a new vibe. The dynamic interior courtyard, complete with 30-year-old oak trees, is now an exclusive destination feature, serving as a refuge and escape from the routine hustle of north Dallas.

RECREATE VERSUS REPLACE

Layers of interest create an eclectic effect with different moods. In revitalizing an existing "found" retail center, the team utilized other found objects—old shipping containers, re-clad skin and old barn tin from West Texas—to create optics totally new and unique. In some cases, these layers also had practical value. Rainscreens, for example, were used in layers to help maintain the building, waterproof it and enhance façades.

Another visual element that differentiates this project from its local counterparts is the integration of artwork. The team worked with many local artists whose work is displayed throughout the space. In some areas where waterproofing was exposed, several artists were commissioned to paint murals. These not only created aesthetic appeal, but also helped to diversify building materials to optimize cost and value. For example, metal panels were creatively combined with fire-treated cedar and weathered-steel panels in a way that created interest without looking inexpensive.

A STANDOUT

This project's conscientious design approach resulted in a destination development whose unique features and fresh optics stand out in the crowded, evolving Dallas retail market. The design team and developers saw the site's potential and seized the opportunity to create an exceptional experience while saving the cost of new construction. The architecture draws from the early roots of Texas commercial ventures: metal buildings, exposed steel, low-sloping roofs and sun-protected storefronts. The eclectic design provides an alternative to the otherwise sterile north Dallas shopping choices.

Retrofit Team

DEVELOPER // Cypress Equities, www.cypressequities.com
OWNER // CAPREF Walnut Hill, www.eba-us.com
METAMORPHOSIS AWARD WINNER!
ARCHITECTS // LRK, www.lrk.com, and Farrell Architects, www.farrellarchitects.com
GENERAL CONTRACTOR // Core Construction, www.coreconstruction.com
SECONDARY CONTRACTOR // Schaffer Construction, www.schafferconst.com
LANDSCAPE ARCHITECT AND CIVIL ENGINEER // Pacheco Koch, www.pkce.com
STRUCTURAL ENGINEER // Hunt & Joiner Inc., www.h-jinc.com
MEP ENGINEER // Jordan & Skala Engineers, www.jordanskala.com

Materials

BRICK // Endicott, endicott.com
STEEL PLATE WITH CUSTOM LASER-CUT PATTERNS // Maximum Industries Inc., www.maximumind.com
WOOD SIDING // Accoya, www.accoya.com
PERFORATED CORRUGATED METAL ROOF PANEL // CENTRIA, www.centria.com
METAL WALL PANELS // MetalTech-USA, metaltech-usa.com; AEP Span, www.aepspan.com; and CENTRIA, www.centria.com
FIBER-CEMENT SIDING PANEL // Viroc, www.investwood.pt/en/viroc
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WHOLE BUILDING 1st Place Winner

OFFICE UPGRADE

A Focus on Tenant Needs Drives Revitalization of a D.C. Office Building

WRITTEN BY | ALLAN BARRY

There is a lot about the 1980s that is fun to look back on—sitcoms, pop music and break dancing, for example. But there are also styles and fashions from that era that feel a little cringeworthy today. That applies to parachute pants and perms as much as it does to some architecture from that time.

One example was an office and conference space at 700-800 K Street NW in Washington, D.C. The 12-story office building, which was part of a tech-focused revitalization of the neighborhood in the 1980s, is an element of a larger, six-building complex that covers one city block and includes a hotel with a large conference and below-grade meeting facility.

As the neighborhood evolved and grew around it, the building increasingly felt like a relic of days gone by. It even appeared on a published list of ugliest buildings in the District. It was bought by a development group in the mid-2000s, which had an eye on renovation. At that time, the owner group turned to design firm Hickok Cole for assistance in the redevelopment.

"We have been involved with this project for a long time," recalls Tom Corrado, senior associate with Hickok Cole and senior project designer for 700-800 K Street NW. "We started working on it in some form in 2007, two owners ago. The building had grown stale and was never really successfully revitalized. We worked with a series of owners to bring the building up to current market standards."

"It's a great site," says Jason Wright, AIA, LEED AP BD+C, associate principal with Hickok Cole and senior project architect for the building. [Editor's Note: Wright was a judge on this year's Metamorphosis Awards but recused himself from judging this project.] "It sits across the street from Carnegie Library and the convention center and has access to the portrait gallery, but it did suffer from some bad architecture."

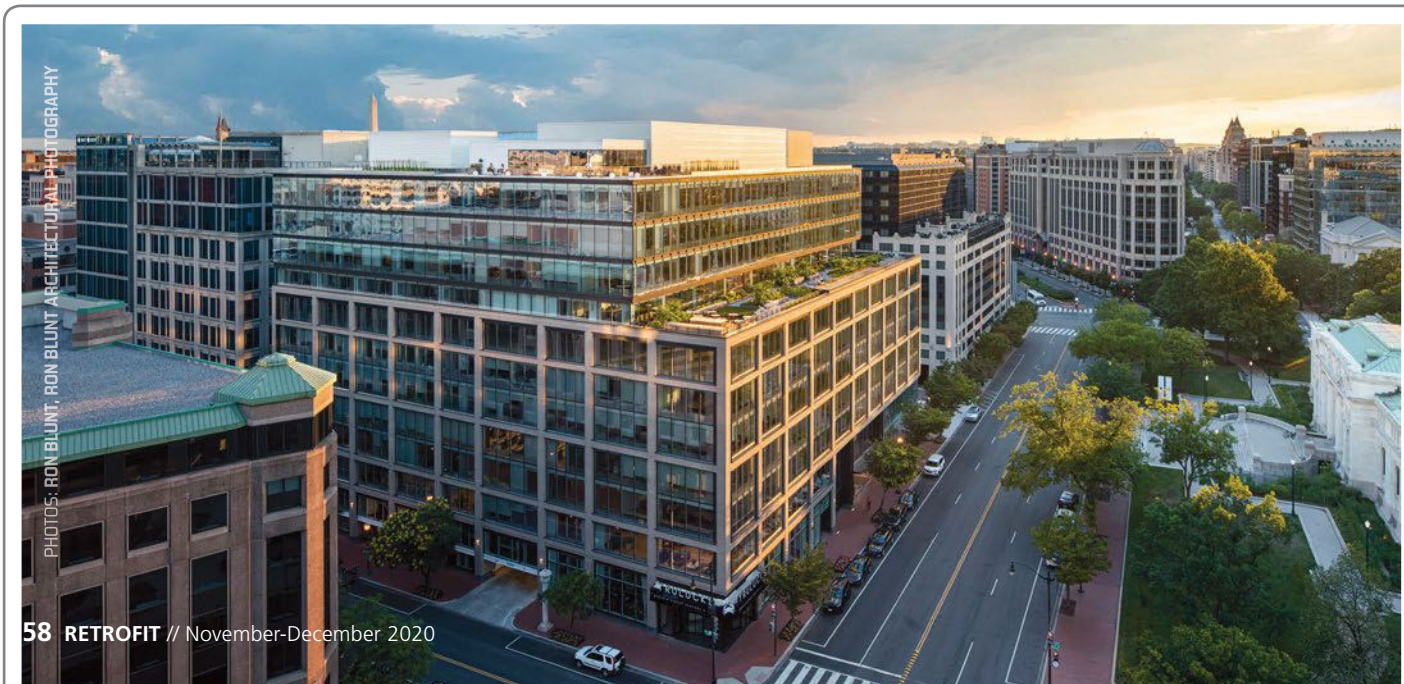
The building passed from the first ownership group to another and then was acquired by The Meridian Group in 2013. Hickok Cole had conducted a number of studies and stuck with the project. With The Meridian Group, the effort began in earnest to transform the existing 455,000-square-foot building into Trophy Class and Class A commercial office space. The project's success earned Hickok Cole the First Place prize in the Whole Building category of ***retrofit***'s second-annual Metamorphosis Awards.

Judge's Comment

> "I love this project. The building is so much more inviting."—*Scott Elofson, design principal, HDR*

RIGHT SITE

Although the building's location provided a great deal of potential, there were numerous challenges in front of the design team. Some of these challenges bedeviled the previous ownership interests and delayed the work but



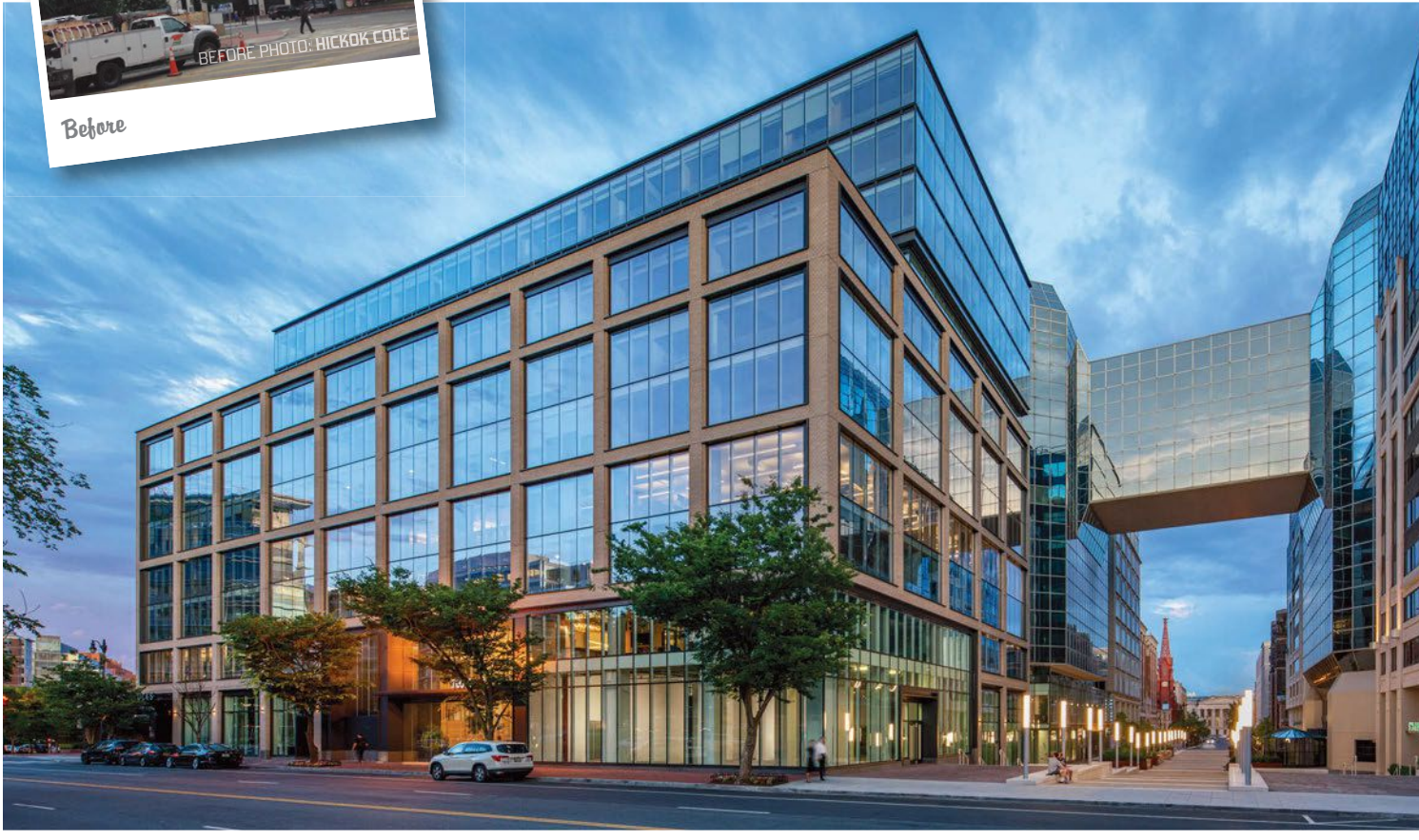
PHOTOS: RON BLUNT, RON BLUNT ARCHITECTURAL PHOTOGRAPHY

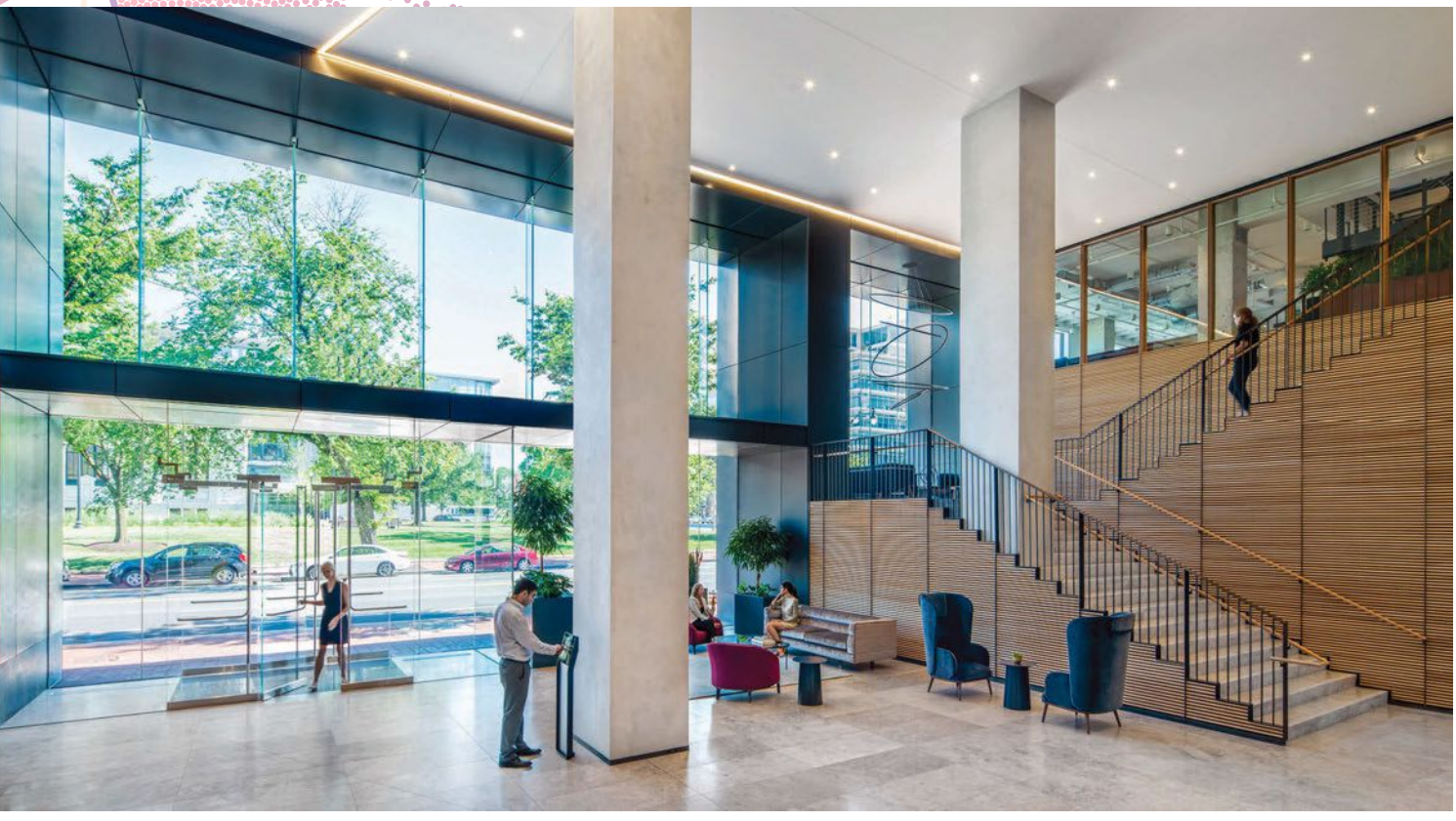




Before

700-800 K Street NW, which was built in the 1980s, needed a complete facelift because the neighborhood had changed over time. For example, there was no retail in the building because retail would not have been viable in that neighborhood in the '80s. Hickok Cole had to reimagine how the building was going to operate and engage the existing neighborhood.








700 K



ultimately needed to be addressed.

"The building needed a complete facelift," Corrado says. "We had to come in with fresh eyes and fix some of the physical mistakes made in the original development. Some of that came from the context of the neighborhood at that time, which led to the decision back then to not put the building lobby on K Street, facing Mount Vernon Square. There also was no retail put in because retail would not have been viable in that neighborhood back then. We had to reimagine how the building was going to operate and engage the existing neighborhood."

"It has proximity to Metro lines and is situated on the edge of Chinatown," Wright adds. "It has a unique plaza space, but the way the building was organized and oriented undervalued it and didn't fully take advantage of the site."

"We did a number of studies. We looked at tearing the building down to grade and building back up," Corrado says. "The building itself is on a 20 by 20 structural grid, which is not the best for contemporary workspaces. We looked at a variety of ways to reshape and maximize the density of the building. Ultimately, we looked at the fact that the building has a setback on the north face at the ninth floor, so there is a natural break in the building. We started to think about how the building could be marketed and if we had to live with a 20 by 20 grid on the lower floors, we could change the upper floors to target a different type of clientele."

TENANT FOCUS

Before taking on the physical transformation of the building, the design team did some intensive homework on what would and wouldn't sell on the commercial real-estate market. The brokerage firm JLL was a major contributor in developing the project goals and strategies.

"We can come up with the most beautiful building, but if we can't get tenants to pay the rent, what's it for? The owner had the brokers in all the design meetings," Wright recalls. "We looked at rents in the city and what our target rents would be. You can't get the same rent on the fourth floor as you can on the 12th, and it is law firms that pay the highest rents. Our play became to carve out 120,000 square feet on the top of the building and make it aggressive, Trophy Class space."

Trophy Class tenants demand things, like floor to ceiling glass and 30 by 30 grids; on the top three floors, the first two bays were cut back and built on a 30 by 30 grid. A glass curtainwall provides 360-degree views of the downtown neighborhood. The lower floors were targeted for high-end class A office space and remained on the 20 by 20 grid with good access to natural light.

"We looked at the bottom floors—three through eight—as space for tech and creative firms," Corrado notes. "We weren't so worried about the column grid because those types of tenants would want open-office floorplans and flexibility in the workplace. We liked the idea that there could be cross-collaboration between different groups of tenants and that there would be a certain demographic of client that might say, 'we're a law firm that wants to be in the same building as a tech company.' You get those collisions between people at different types of companies, and that's proven to be exactly what's happened."

STRUCTURAL CHALLENGES

The main entrance needed to be moved from its somewhat hidden location on the southern façade to the much more prominent K Street side of the building. The new lobby is double height, encased in a structural glass curtainwall. This established a new identity for the building and enhances its connection to nearby Mount Vernon Park.

A combination of wood, concrete and

> "For us, getting a law firm to move from Pennsylvania Avenue, two blocks from the White House, to this building was validation that we did the right thing. —*Jason Wright, AIA, LEED AP BD+C, senior project architect, Hickok Cole*"

[Editor's Note: Wright was a judge on this year's Metamorphosis Awards but recused himself from judging this project.]

Retrofit Team

METAMORPHOSIS AWARD WINNER!

OWNER AND DEVELOPER // The Meridian Group, tmgdc.com
ARCHITECT // Hickok Cole, hickokcole.com
GENERAL CONTRACTOR // Clark Construction, www.clarkconstruction.com
INTERIOR DESIGNER // Hickok Cole Lifestyle, hickokcole.com/portfolio_service/lifestyle
STRUCTURAL ENGINEER // SK&A, skaengineers.com
MEP ENGINEER // Girard Engineering, www.girard.com
WATERPROOFING AND ENVELOPE CONSULTANT // Wiss, Janney, Elstner Associates Inc., www.wje.com
LIGHTING CONSULTANT // SBLD Studio, www.sbldstudio.com
LANDSCAPE ARCHITECT // ParkerRodriguez Inc., www.parkerrodriguez.com
PROPERTY MANAGER // Cushman & Wakefield, www.cushmanwakefield.com
LEASING SERVICES // JLL, www.us.jll.com

Materials

EXTERIOR

BRICK // Platinum Norman Brick, C-410 Mortar from Calvert Masonry, www.calvertmasonry.com
GLAZING // VRE1-54 from Viracon, www.viracon.com
EMBOSSED AND LASER-CUT ALUMINUM PANELS // 399C8660 Fluropon Classic II from MetalTech-USA, www.metaltech-usa.com
STONE // Crystal Black Granite, Scarpaletto Finish, Engraved Chinese Characters from Lorton Stone LLC, www.lortonstone.com

LOBBY

WOOD SLAT WALL // Ash Woodgrille System from Architectural Surfaces Inc., www.asiarchitectural.com
STONE FLOOR // Tundra Grey Marble, Honed, from Lorton Stone, www.lortonstone.com
WALL FINISH // Troweled Concrete Wall Finish, Color 1612, from Get Real Surfaces Inc., www.getrealsurfaces.com
LIGHTING // Lohja Chandelier, Brushed Black Nickel Finish, from Cameron Design House, camerondesignhouse.com
CEILING // Sound-absorbing Plaster System, Classic Fine Finish, from BASWA Acoustic, www.baswana.com
BLACKENED STEEL GUARDRAILS, PANELS AND TRIM // Ted Turner Co. Inc. Architectural Metals, www.tedturnercompany.com
BACKLIT FEATURE WALL // Laser-cut Aluminum Panels, Blackened Steel Finish, from MetalTech-USA, www.metaltech-usa.com

CONFERENCE ROOM

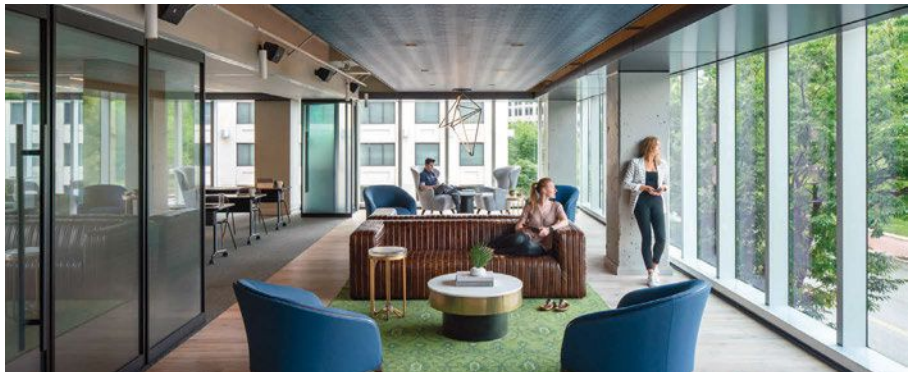
CARPET // Full Volume, Tandem from Tandus-Centiva, commercial.tarkett.com/en_US/brand/tandus-centiva

PENTHOUSE EXTERIOR TERRACE

CONCRETE PAVERS // Matrix M#1676 from Hanover Architectural Products, www.hanoverpavers.com
STOREFRONT GLAZING // VRE1-54 from Viracon, www.viracon.com







steel finishes complement the industrial interior environment. There is lounge seating, curated artwork and a monumental stair with wooden slats that flows to a third-floor co-working loft.

Building the new 2 1/2-story lobby was not an easy task. Because of an elevation difference from the original entrance, the first floor needed to be raised 5 feet. Also, to achieve the open feeling the designers were seeking, a centrally located column had to be removed and replaced with a massive transfer beam on the ninth floor, which would support floors five through eight.

"On the structural side, SK&A was a key player on the team," Wright says. "We took out a column in the lobby, and we also needed to take out a column on the sixth floor as part of a tenant lease. They were vital in finding ways to structurally modify the building without breaking the bank."

Another structural challenge derived from the desire to include retail into the scheme. To accomplish this, the existing courtyard was infilled. However, because it is located over occupied hotel event space that would not allow structure to pass through, the design utilized long-span steel trusses that support the new third-floor roof and the second floor below. Two-story steel columns that support the trusses were dropped through openings in the existing slab by a crane to minimize disruption to the hotel space below.

"Planning with the operating hotel below was very challenging," Wright recalls. "The costs for just compensating for event space rental and associated room nights would have been astronomical, so we had to find ways to do this project with the hotel running beneath us. We would meet with the hotel and discuss what would be high noise activities and they would review their events booking schedules and look for windows to work with. This was probably the biggest challenge because it impacted everything else."

THE BEST BUILDING

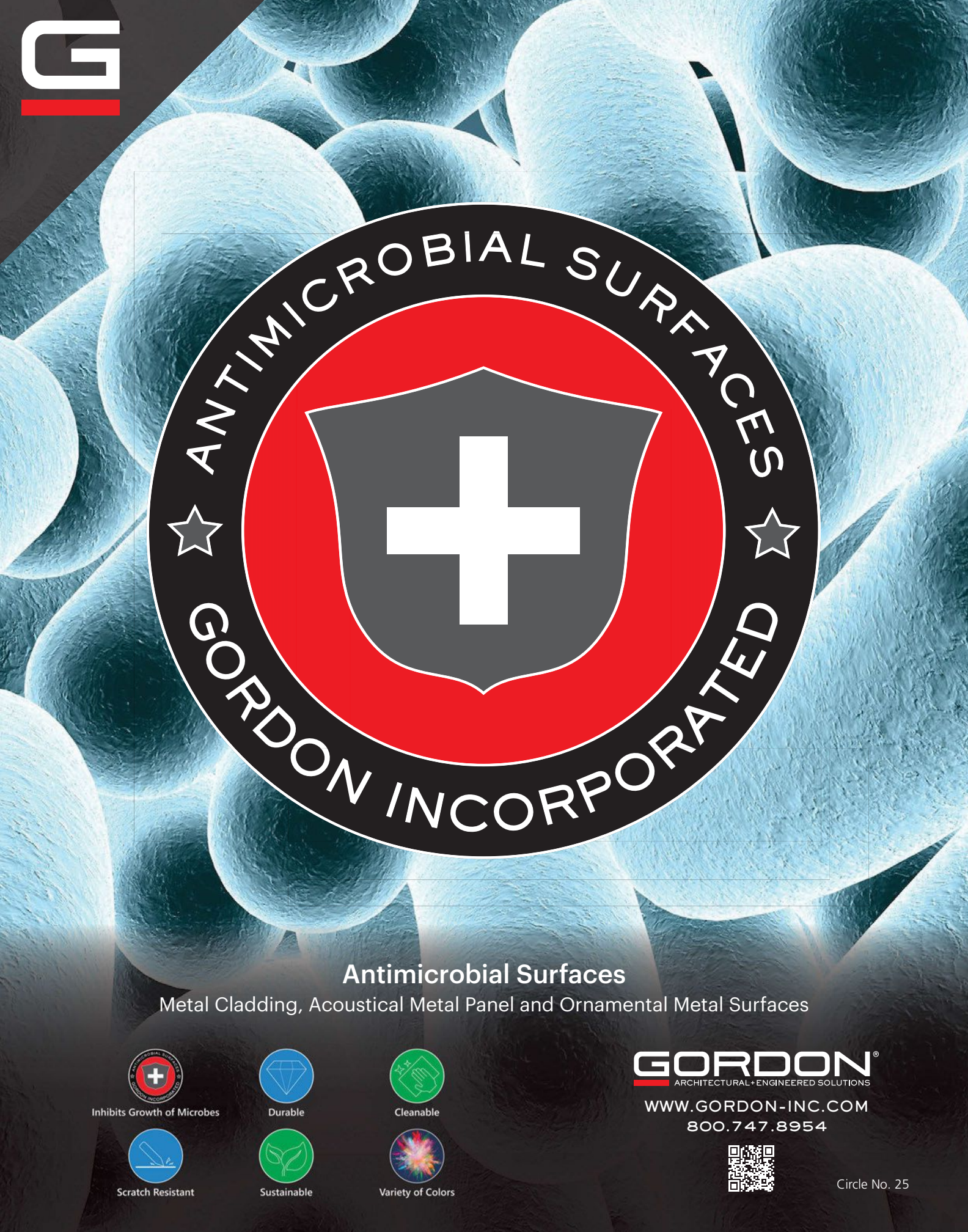
All the hard work and outside-of-the-box thinking paid off, and the finished product is a completely transformed building with a remade envelope and upgraded, energy-efficient mechanical system. Anthem Row was fully leased nearly a year before construction was completed.

"The person Tom and I report to likes to say, 'What's the best building? A fully leased building,'" Wright says. "For us, getting a law firm to move from Pennsylvania Avenue, two blocks from the White House, to this building was validation that we did the right thing. People who come in think it's a brand-new building. It has the amenities, feel and character of a new Trophy Class building."

"It's been an exciting project," Corrado says. "We did what we set out to do from the very beginning, which was to revitalize this building and make it fit the neighborhood that has grown up around it. We are happy with how the building looks and how it is functioning."

"For us, in our office, this is where our passion lies," Wright adds. "Taking these buildings and their embodied energy and giving them a second life. But it takes more than us having a vision. It takes an owner with a vision and a broker to help sell that vision. You can't underestimate the importance of a good team."

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WHOLE BUILDING 2nd Place Winner

BIGGER AND BETTER

After Major Structural Work, a 1911 Building Receives the Addition Its Original Architect Had Intended

TO READ A FULL FEATURE ABOUT THE HOTEL JULIAN, INCLUDING A MATERIALS LIST AND EXTENDED TEAM LIST, SEE THE SEPTEMBER-OCTOBER ISSUE, PAGE 48, OR VISIT bit.ly/3IZdScZ.

The Michigan Avenue wall is an iconic part of what makes Chicago such a special place. It is full of beautiful examples of historic architecture, modern interventions and terra-cotta-clad buildings. The Hotel Julian is the renovation, addition and adaptive reuse of one of these iconic structures: the Federal Life Insurance Building of 1911, designed by the noted Chicago architect Benjamin Marshall (Marshall and Fox). This once beautiful terra-cotta-clad structure sat vacant and in major disrepair after a failed redevelopment attempt. Saving it from the wrecking ball; adding five floors and a penthouse to the top of the existing structure; and transforming it into the Hotel Julian, a boutique 210-room hotel, has helped preserve an important part of the city's history and extended the scale and character of the Michigan Avenue wall north of Millennium Park.

Leading the charge on this project was local design firm Hirsch MPG LLC, which earned the Second Place prize in the Whole Building category of ***retrofit***'s second-annual Metamorphosis Awards for its work on the hotel.

STRUCTURAL FEATS

When the project team started on the design in 2016, the existing structure was in bad shape because of the partial demolition performed by a previous developer. Thirty to 40 percent of the terra cotta was missing or damaged, including on the first three floors, which had been removed during a mid-century modern renovation in the 1960s. Large holes had been cut into the clay-tile-arch floor structures. The roof was leaking, windows were missing and wet construction debris was piled in the basement.

From this starting point, figuring out how to insert new vertical transportation elements within the compromised existing structure, reinforce the existing structural elements for the increased lateral and gravity loads, and add additional floors on top—all within a very limited footprint—required detailed coordination. Creative construction techniques were needed because of the small site that would not allow for a tower crane or adequate staging areas. The team worked together to reinforce the existing structure to support mobile cranes on the highest constructed floor to erect the floor above; then, the crane was raised to continue construction upward.

The 12-story steel-frame and clay-arch building was originally designed for a future 4-story addition. Although original construction drawings for the building were obtained through the Benjamin Marshall archives located at the University of Texas, no images of the building with its future 4-story addition could be found. The addition itself was clad in a facetted, chamfered glass curtainwall that extended down through the terra cotta into the punched openings of the original façade, aligned with the curtainwall above.

The building's existing terra-cotta façade underwent a careful restoration with each piece identified for cleaning, repairing in place, repairing in the shop or replacing with new.

INSPIRATION FROM THE ORIGINAL

The Hotel Julian project allowed a beautiful but deteriorated Benjamin Marshall building to be saved and transformed into a unique addition to the Chicago skyline and Michigan Avenue streetscape. From design, engineering and construction viewpoints, there were many obstacles overcome and creative solutions implemented. Completed in 2018, the modern design is fully integrated into the old, creating something better than could have been achieved by tearing down or renovating the existing structure on its own.



PHOTO: ANTHONY MAY PHOTOGRAPHY

Retrofit Team

METAMORPHOSIS AWARD WINNER!

ARCHITECT // Hirsch MPG LLC, www.hirschmpg.com
- Howard Hirsch, AIA, ALA, LEED AP, principal in charge
- David Genc, AIA, design principal
- Matthew Starman, AIA, project architect

GENERAL CONTRACTOR // W.E. O'Neil Construction Co., www.weoneil.com

STRUCTURAL ENGINEER // TGRWA, www.tgrwa.com

TERRA-COTTA PRESERVATION // Central Building & Preservation L.P., www.centralbldg.com

TERRA-COTTA RESTORATION CONSULTANT // BTL Architects Inc., www.btlarchitects.com

Judge's Comment

"The addition is clearly its own thing; I like that it's not pretending it's something it's not.—*Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole*"

RETROFIT MAGAZINE METAMORPHOSIS AWARDS Winner



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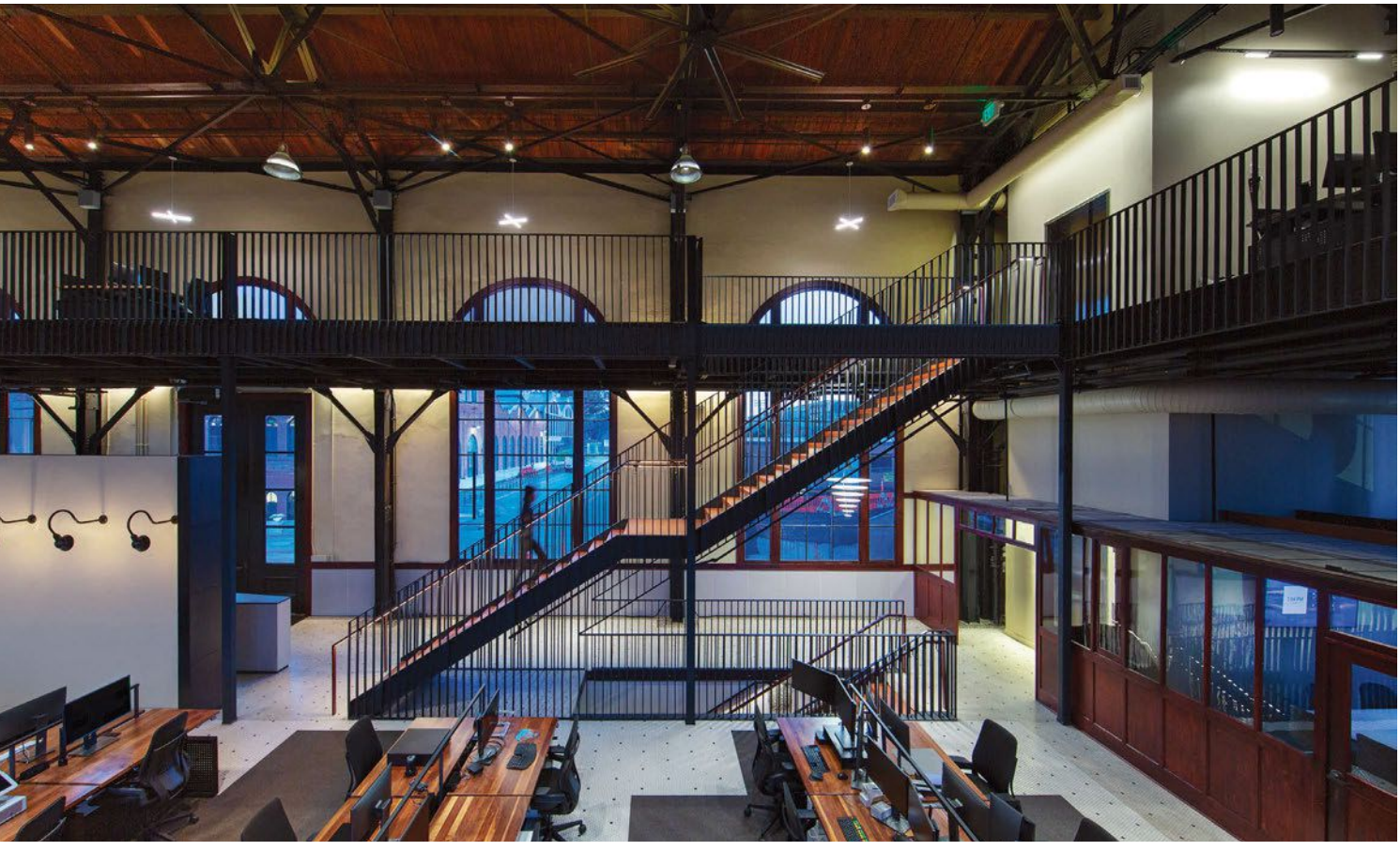
SEE WHAT GLASS CAN DO GGI

HISTORIC 1st Place Winner

PRESENT GENERATION

Rejuvenation of a Historic Powerhouse Brings New Energy to San Francisco's Pier 70

WRITTEN BY | **KJ FIELDS**



Pier 70 on the San Francisco waterfront recalls a prominent and fascinating history. With more than 150 years of continuous ship production and repair, Pier 70 was influential in the West Coast's industrial development and U.S. naval activities from the Spanish American War through World War II. Bethlehem Steel had a large role in the pier's evolution but when the company went bankrupt, the Port of San Francisco stepped in to purchase the site.

By 2010, most of Pier 70 was vacated, and the Port completed a redevelopment masterplan that honors the site's historic significance. Orton Development Inc. won a public-private partnership with the Port for a subsection of the masterplan called the Historic Core, and Bethlehem Steel's former powerhouse was one of the core's eight structures. (Read about four other Historic Core structures' renovations in ***retrofit***'s November-December 2019 issue, page 76, or bit.ly/33rSGTr. These projects won 2019 Metamorphosis Awards.)

"We specifically started on the portion of the site with important, historic buildings that needed the most care and attention," says James Madsen, partner at Orton Development. "Pier 70 was Bethlehem Steel's West Coast headquarters and even their purely utilitarian structures were stunning buildings designed by master architects."

The 1912 historic powerhouse generated compressed air to power shipyard tools and served as an electrical substation that transformed and distributed electrical power to shipyard operations. Although the building contained a bridge crane and pneumatic compressors, the structure had Beaux Arts detailing, a mission-tile roof and mosaic-tiled flooring.

Orton Development worked with Marcy Wong Donn Logan Architects and Preservation Architecture to design a rehabilitation that met the Secretary of the Interior's Standards for the Treatment of Historic Properties and was compatible with the powerhouse building's listing on the National Register of Historic Places. The team managed to retain the project's

Judge's Comment

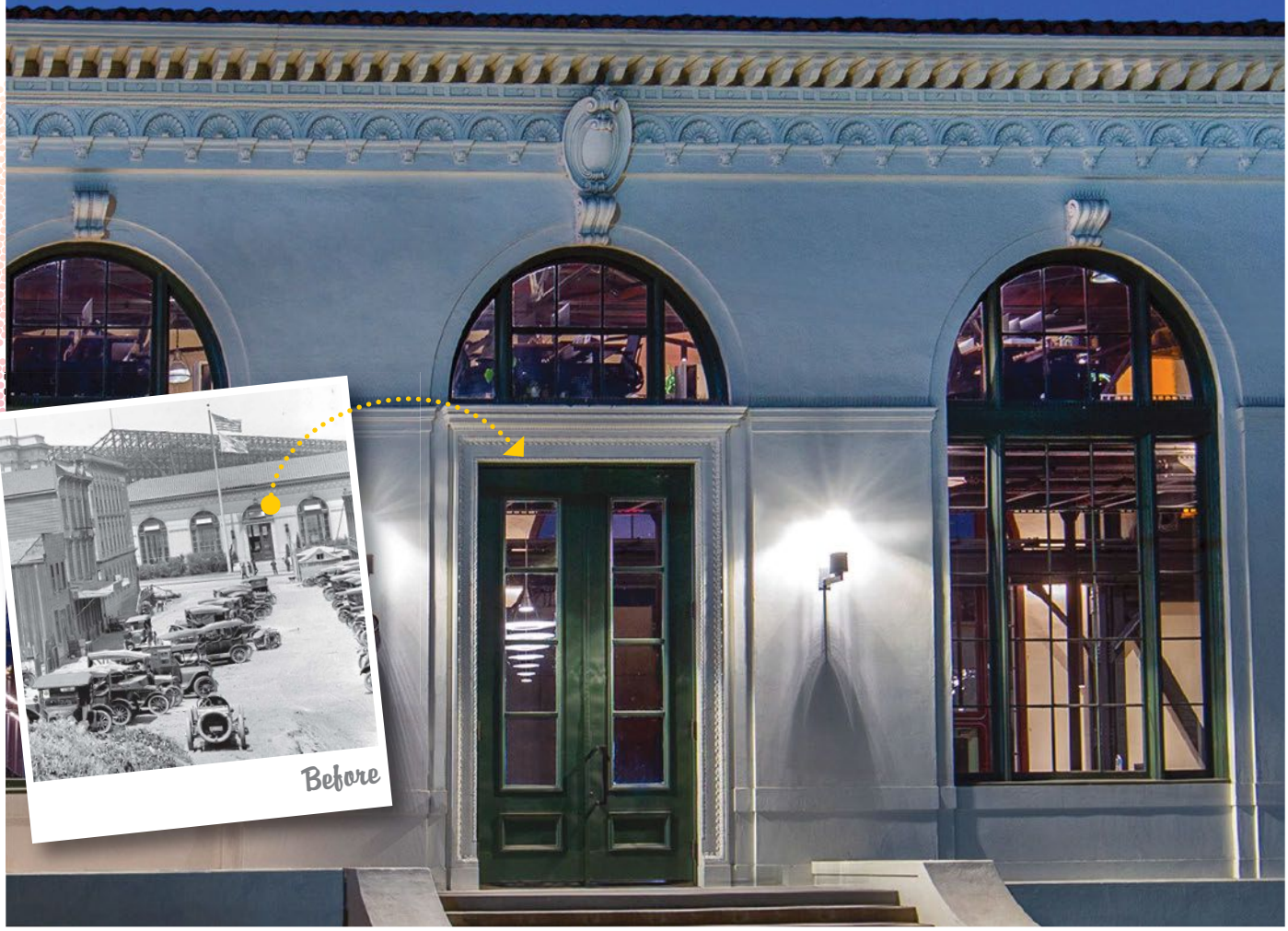
> This project is the clear winner in this category.
> *Jason Wright, AIA, LEED AP BD+C, associate principal, Hickok Cole*



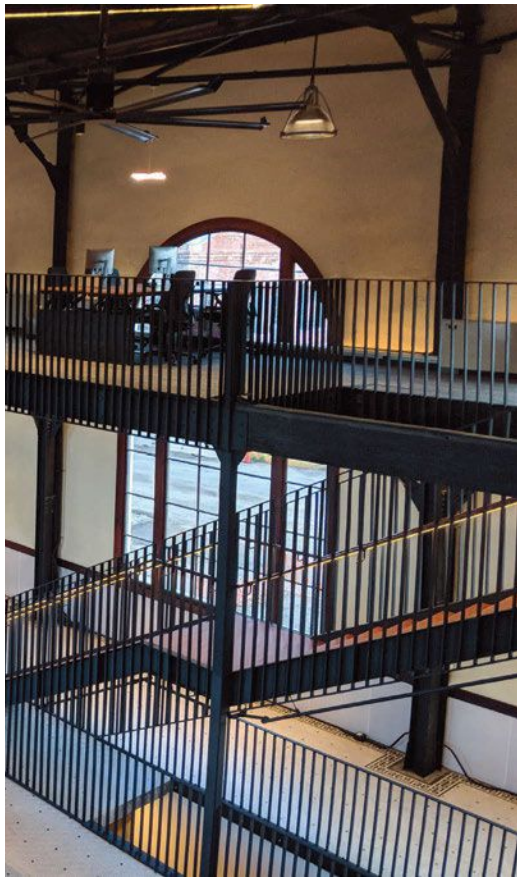
BEFORE IMAGES: JEREMY REGENBOGEN AND THE PORT OF SAN FRANCISCO

Before

PHOTOS: BILLY HUSTACE AND MARCY WONG


Before





Retrofit Team

DEVELOPER/GENERAL CONTRACTOR // Orton Development Inc., www.ortondevelopment.com

METAMORPHOSIS AWARD WINNER!

ARCHITECT // Marcy Wong Donn Logan Architects, wonglogan.com
HISTORIC PRESERVATION // Preservation Architecture, www.preservationarchitecture.com
STRUCTURAL ENGINEER // Nabih Youssef Associates, www.nyase.com
LIGHTING DESIGNER // Architecture & Light, www.architectureandlight.com
LANDSCAPE ARCHITECT // GLS Landscape Architecture, glsarch.com
MECHANICAL DESIGN-BUILD CONTRACTOR // Allied Heating & Air Conditioning Co. Inc., (415) 459-5232
ELECTRICAL DESIGN-BUILD CONTRACTOR // Helix Electric, www.helixelectric.com

historic character, receive hard-won tax-credit funding from the State Historic Preservation Office (SHPO) and produce a creatively reimagined office space. In fact, the inventive project earned Marcy Wong Donn Logan Architects the First Place prize in the Historic category of ***retrofit***'s second-annual Metamorphosis Awards.

ALTERNATING CURRENTS

Located at the base of Potrero Hill in the Dogpatch neighborhood, Pier 70's Historic Core is zoned for a wide range of uses, from light industrial to office. One of the powerhouse project's main challenges was making the originally 15,500-square-foot project financially feasible. "It had a small footprint but the building still required all the expenses of a modern retrofit, including new utilities, ADA compliance, seismic bracing, and fire- and life-safety requirements," Madsen notes.

The four enormous historic compressors inside the powerhouse further constricted the limited space. To create enough usable tenant square footage, the team needed a novel solution. But the project was under high scrutiny, not simply from multiple historic preservation agencies, but also neighborhood groups, advisory boards and the port. Often, these varying organizations' priorities were at odds with each other.

"It was an exercise in revision, presentation and collaboration with all these groups," Madsen says. "There was a real sense that something had to be done. Everyone wanted these buildings to be saved before it was too late, but it took nearly two years to get everyone on the same page."

The approved design removed three compressors on the main level, inserted a partial mezzanine and built a 2,600-square-foot addition.

POWERFUL REMINDERS

The building's main level interior height rises 37 feet, exposing a historic wooden roof structure, steel roof trusses and 18-foot-tall arched windows. The team refurbished the remaining compressor as an impressive artifact and left the 5-ton bridge crane intact. These elements, along with the historic exterior, are dramatically lit with colorful LEDs.

"Keeping one compressor helps showcase the building's character and history and provides an asset to the tenant," Madsen says. "These projects continue to make sense despite all the challenges because companies with creative cultures seek out special workplaces."

The team put down carpeting where the three compressors had been removed as a reminder of their former presence, and they restored the main level's mosaic tile flooring. In addition to the historic floor tiles, the project refurbished the original hardwoods, brass railings, wainscoting and original factory lighting fixtures in the space.

The new mezzanine is constructed of heavy timbers to complement the exposed wooden roof. Lining the building's south and west sides, the open mezzanine overlooks the main level. Beneath the 12-foot ceiling created by the mezzanine, the team added a concrete reception desk facing the entrance door. A hardwood wall at the entry defines the reception area from the main level's open workspace.

Workstations on the mezzanine are tucked into the tall window archways, offering unique views to neighboring historic buildings. New steel mezzanine balustrades and the steel stairwells that traverse the mezzanine, main floor, and lower level are modern in design but aesthetically relate to the historic steel roof trusses visible from below.

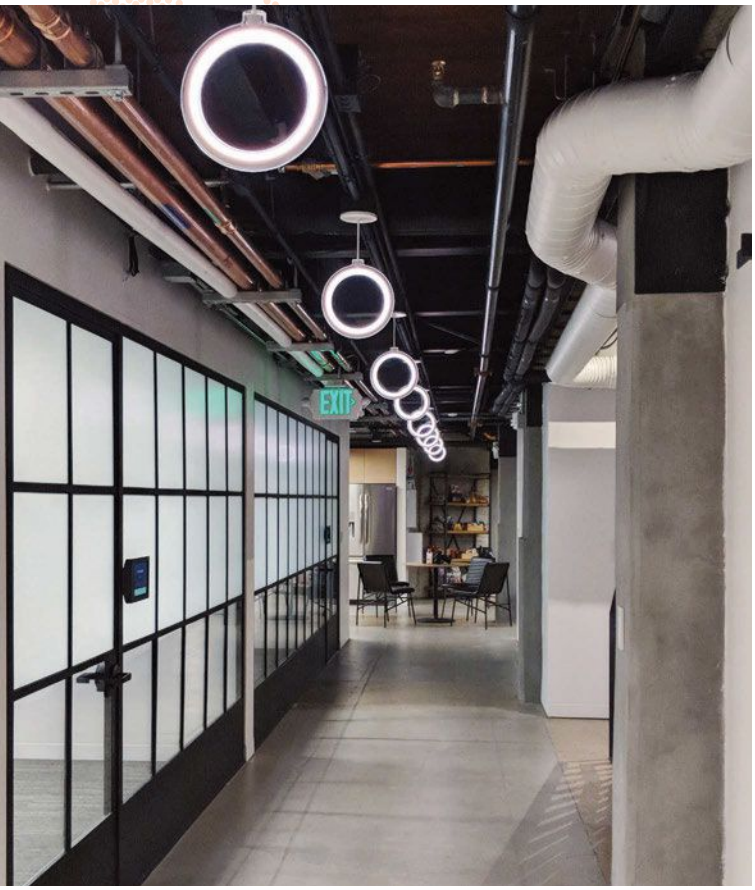
Materials

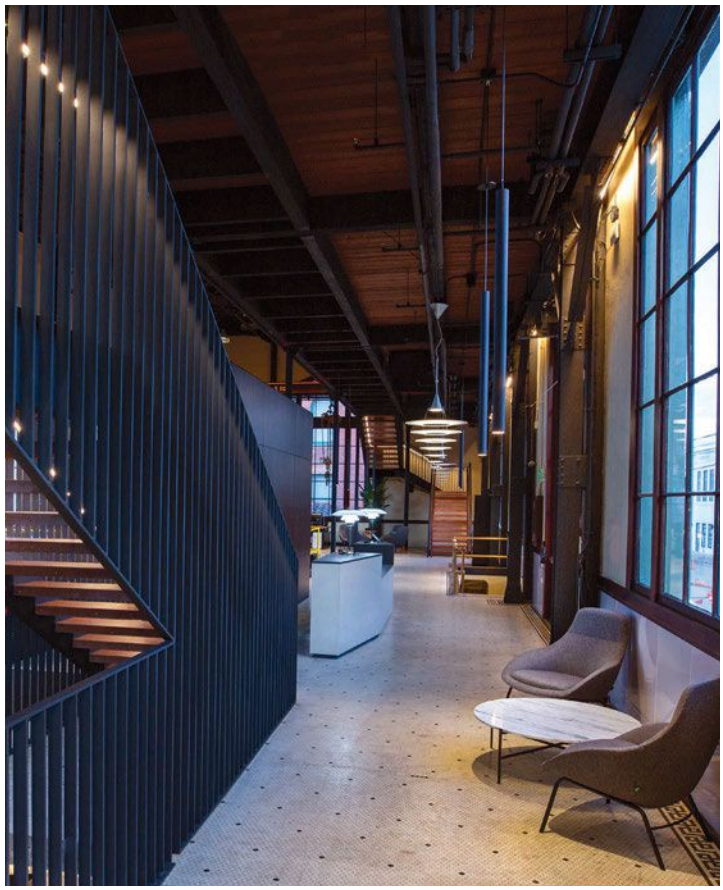
LIGHTING

AMBER SURFACE-MOUNT TAPE // Aion LED, aionled.com
LINEAR WALL-DOWN LIGHT (Restrooms) // Axis Lighting, www.axislighting.com
WALL-MOUNT GOOSENECK INDUSTRIAL LIGHT // Barn Electric Light Co., www.barnlight.com
ECOLOR BLAST TURBINE (Lower Level) // Color Kinetics, www.colorkinetics.com
LINEAR WALL WASH (Elevators) // Lumium from Ecosense Lighting, www.ecosenselighting.com
SOURCE 4 PAR (Mezzanine Horizontal Bracing) // ETC, www.etcconnect.com
SUSPENDED LINEAR (Lower Level) // Profile from Fluxwerx, fluxwerx.com
SUSPENDED PENDANT (Main and Lower Levels) // 4Spoke from Fluxwerx, fluxwerx.com
SUSPENDED CYLINDER (Mezzanine and Main Level) // Tule from Lindsley Lighting, www.lindsleylighting.com
PENDANT CYLINDER DOWNLIGHT (Main Level) // Reed from Lindsley Lighting, www.lindsleylighting.com
TAPE LIGHT (Break Room Cabinets) // Luminii, www.luminii.com
LIGHTING BETWEEN CRANE RAIL AND CONCRETE WALL // Graze from Moda Light, modalight.com
TABLE LAMP (Reception Desk) // PH 4½-3½ from Louis Poulson, www.louispoulsen.com
PENDANT (Main Level) // Enigma 825 from Louis Poulson, www.louispoulsen.com
MICROWASH (Main Level and Lower Level) // Prudential Ltg., www.prulite.com
VANITY LIGHT (Restrooms and Mother's Room) // Twiggy S1 from PureEdge Lighting, www.pureedgelighting.com
X PENDANTS (Mezzanine and Lower-level Office) // Lithium from Two Parts, two.parts
O PENDANTS (Lower-level Corridor) // Oxygen from Two Parts, two.parts
WALL WASH (Lower Corridor and Mother's Room) // USAI Lighting, www.usailighting.com
BOXTRAIL TABLE ARM (Main Level) // Vode, vode.com

STRUCTURES AND FINISHES

CASEWORK // M2 Woodworking, m2woodcraft.com, and Ross Craig Cabinetry, rosscraig.net
WORKSTATIONS // Pair, www.madebypair.com
FURNITURE DESIGN // Two, www.twofurnish.com
CONCRETE COUNTERS AND ENTRANCE DESK // Concreteworks, www.concreteworks.com
STAIR AND GUARDRAIL FABRICATION // Zarate Steel Works, zaratesteelworks.com
STAIR DETAILING // McMahon Steel Detailing, msdetailing.net
WOOD DECK TILES // Bison Innovative Products, bisonip.com
MEZZANINE STRUCTURE // Black-painted PSL Wood Beams with Tongue-and-groove Wood Decking
SHADES // Burris Window Shades, www.burriswindow shades.com, and Skyco, www.skycoshade.com





SMART ASSEMBLY

The project required a great deal of structural-steel bracing to meet current seismic code, and the team incorporated the mezzanine's construction into the new bracing.

To support the walls and maintain the historic façade, careful staging and intensive metalwork took place. More than 50 sections of heavy steel—many measuring more than 12-inches square—were threaded through holes in the wall piece by piece and welded together inside the structure.

Adding an elevator for ADA compliance was a similar effort. The elevator shaft's steel was incorporated piece by piece to create a massive seismic brace in one corner of the building. Much of the bracing was hidden in required architectural elements, like the elevator shaft, and the bracing that remained was painted to match the walls.

The crew added more bracing in the ceiling diaphragm and welded a plate into the ceiling's edge to tie the roof diaphragm into the wall supports. "We kept the existing exposed structural trusses in the ceiling in place and added unobtrusive bracing that matched the original. Once it was painted, the new bracing seems to disappear into the architecture," Madsen explains.

LIGHT TRANSMISSION

Set into a sloped site, the building's front façade aligns with the street, but the lower level is at grade in the back of the building. The combination of little access to daylight and low ceilings in this partially subterranean level made it an inhospitable space. To create a useable work area and provide more natural light, the team designed a 2,600-square-foot addition in the back, bringing the powerhouse's footprint to just more than 18,000 square feet. Because the addition is not visible from the main façade, SHPO agreed to its construction.

The team further capitalized on the addition by building a 26-foot wooden deck on its roof which is accessible from the main level. The deck overlooks a waterfront port park and the Bay Bridge beyond.

"The addition made the project viable while maintaining the integrity of the building," Madsen explains. "The deck connects the main level to the waterfront in a way that wasn't possible before, and the downstairs area now has a lot of light from the addition's windows. The quality of light works really well."

Sculptural pendant light fixtures brighten the lower level's windowless hallway, and the level's other daylight-deprived areas house bathrooms, conference rooms and a kitchen.

The powerhouse's mission-tile roof was in good condition, so the team removed the tiles, installed a new waterproofing membrane and replaced the original roof tiles.

The historic façade posed a challenge because the decorative metalwork in the eaves and cornicework had rusted away. The team laboriously rebuilt and re-inserted these artistic pieces, which are critically important to the building's original appearance.

Although the last corner of Pier 70's shipyard activities closed in 2017, the powerhouse stands as a reminder of how the maritime industry once was fueled here while simultaneously bringing a spark of new activity to the area.

"This project is the result of many hands and a meeting of the minds," Madsen asserts. "The team was very creative and really thought outside the box. You have to have that to obtain this kind of success."

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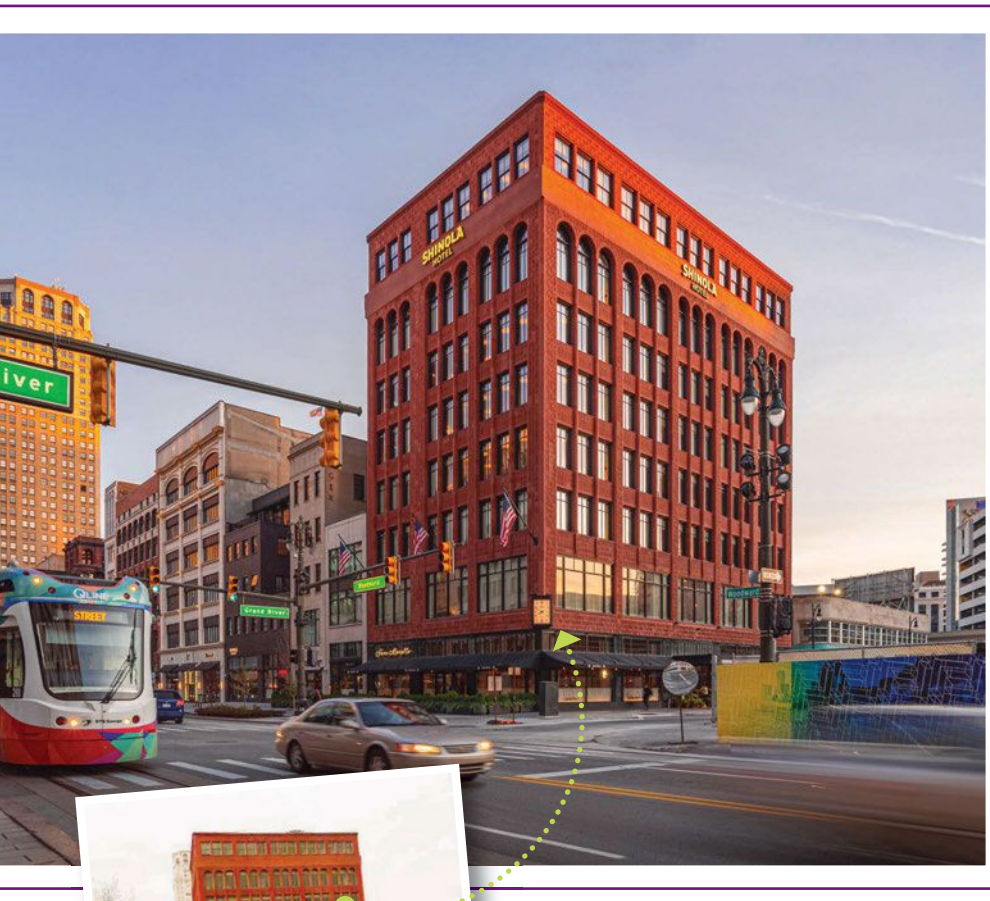
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HISTORIC 2nd Place Winner

URBAN COHESION

Historic Buildings and Complementary New Construction Produce an Innovative Boutique Hotel Experience

WRITTEN BY | **NATHAN M. GILLETTE, AIA, LEED AP O+M, CEM**




Before

The early 1900s were a bustling time in the city of Detroit. The automobile was king and Detroit was alive with development in the commercial, industrial and manufacturing realms. The 1400 block of Woodward Avenue in downtown Detroit was front and center of this boom. By the 1920s, the Woodward corridor was one of the most active shopping districts in the nation.

As was the story of Detroit, unfortunately, there was boom and there was bust. During the turbulent times of the late 1960s and well into the 1980s, Detroit's downtown deteriorated into vacancy and blight. As people moved out of the urban core and headed for the suburbs, the core of Detroit withered. The entire downtown was in a state of decline until the 1990s when several prominent developers started taking an interest in grand old vacant buildings and began repurposing them. Further redevelopment was fueled by large civic projects, including the construction of Ford Field and Comerica Park, homes of the Detroit Lions and Tigers, respectively.

One developer responsible for a large portion of the city's resurgence is Bedrock Detroit, led by Dan Gilbert, who also is CEO of Quicken Loans (now Rocket Cos.). After redeveloping other high-profile vacant structures in the downtown area, Bedrock Detroit's team

Judge's Comment

"The Shinola Hotel combines ingenuity and high-level craftsmanship on a property that had long been neglected. The design and execution were very intentional, clearly visible through the restored exterior terra-cotta details, rooftop conservatory and Parker's Alley connector."—*Michael Hoying, LEED AP, vice president, Brackett Builders*

PHOTOS: KRAEMER DESIGN GROUP

> Exceptional communication between ownership, the client, architect and construction manager is key. The more complex the building, the more communication is required.
> *—Brian Rebain, RA, NCARB, principal in charge, Kraemer Design Group*

turned to the 1400 Block of Woodward Avenue in 2014. At first, the team couldn't identify a use for the existing buildings but brought in local historic preservation architect Brian Rebain, RA, NCARB, of Kraemer Design Group, to help analyze potential uses. It wasn't long before representatives of Shinola Detroit, a manufacturer of watches, jewelry and fashion accessories, became interested in creating a boutique hotel experience that aligned with its brand.

The Shinola Hotel project mixes historic early-20th century Detroit architecture and new construction into a transformative urban redevelopment. The creativity earned Kraemer Design Group two ***retrofit*** Metamorphosis Awards: Second Place in the Historic category and Second Place in the Transformation category (see page 20).

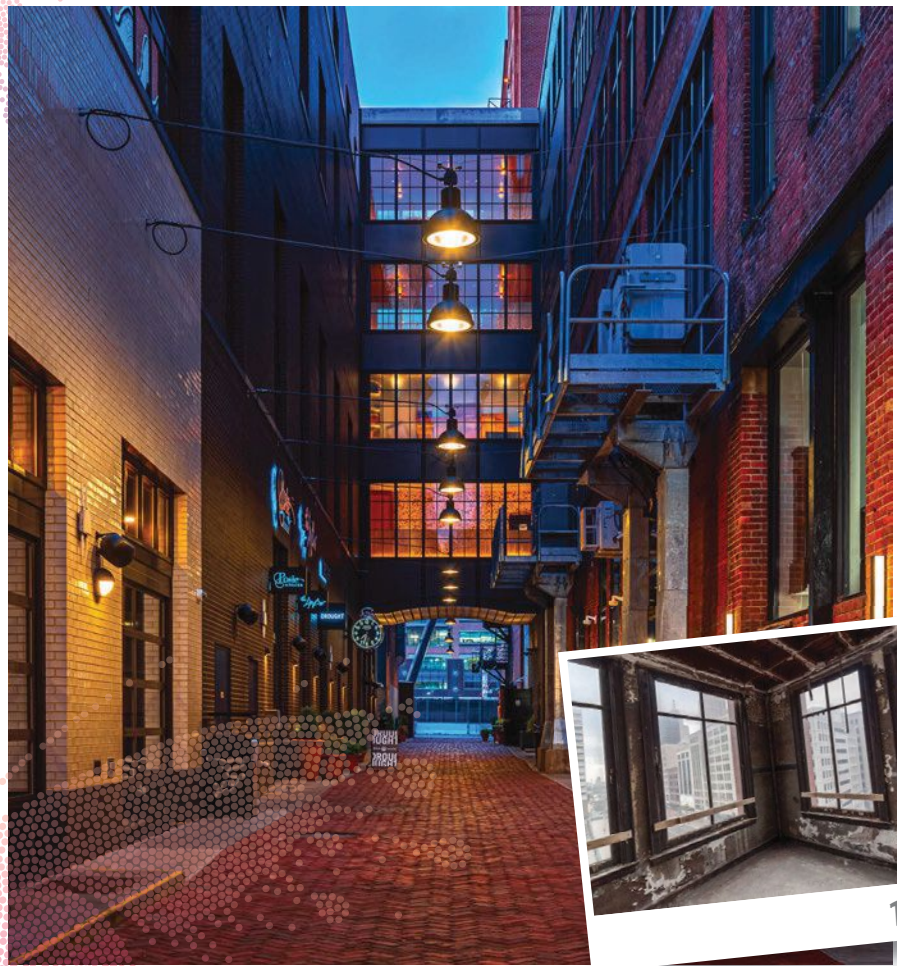
THE VISION

The structures on the 1400 block of Woodward Avenue were built in different styles but were typical of urban commercial development of the 1910s to 1930s. During early analysis of the project site by Bedrock Detroit and Kraemer Design Group, it became clear only two buildings could be transformed into the Shinola Hotel: the 1400 Woodward Avenue Building and Singer Building.

The 1400 Woodward Avenue Building, which was constructed in 1915 for a hardware and household goods company, is 8 stories and is sited at the northeast corner of the intersection of Grand River and Woodward avenues. Its Sullivanesque-style red terra-cotta tiles on its street-facing façades make it one of the most distinctive buildings in downtown Detroit—a perfect front door for the hotel. The Singer Building—at 1416 Woodward—is a 5 1/2-story structure designed by the Detroit architectural firm of Smith, Hinchman & Grylls in 1936 for the Singer Sewing Machine Co.

The 1400 Woodward Avenue and Singer Building would be stitched together with a series of modern infill buildings at 1412 and 1420-1424 Woodward that complement the historic character of the site. On the backside of the block sits the Annex, an extension of the Woodward buildings built over a vacant site that formerly housed one of downtown Detroit's central steam power plants. At the heart of the project is the Bridge, an urban monument intended to provide an elegant photo-ready moment.

Three other historic buildings on the block









(1430-1456 Woodward) were rehabilitated by the developer to activate the adjacent sites around the hotel. Parker's Alley, a once dilapidated city alleyway on the site, has been transformed into a one-of-a-kind urban experience.

CHALLENGES ABOUND

The Shinola Hotel was an incredibly complex project that posed numerous design, programming, engineering and life-safety challenges. The team used several innovative construction and design methodologies to achieve the goals of the project, including high-tech survey equipment; custom expansion-joint assemblies; knowledge of the Michigan Rehabilitation Code; and a clever design trick to mitigate the extreme floor-height differences between the connected historic buildings, which includes the new construction 9-story building at 1412 Woodward.

Perhaps the most difficult initial challenge of a project like this—combining two historic buildings, three new construction buildings, a connector bridge and a central steam exhaust system—is knowing where everything is, exactly, on the site. To make matters more complicated, it's difficult to get an accurate read on many of these conditions prior to demolition of the existing building fabric.

Once the interiors were completely cleared, scans were taken, and a comprehensive building scan model was then assembled and overlaid with a digital architectural model to check for dimensional clashes. With each guestroom carefully planned to a fraction of an inch, it was critical to identify these types of clashes as early as possible so design adjustments could be made. The model then was used to coordinate the labyrinth of mechanical and plumbing lines snaking throughout the buildings, so final finishes could be made as seamlessly as possible.

Constructing the 20-foot wide, 9-story building between 1400 Woodward and the Singer Building was kind of like threading a needle; when the tolerance between buildings is only inches, knowing exactly how much room there is to work with is critical. It was determined that the gap between the buildings actually varied from floor to floor as much as 3 to 4 inches vertically, indicating the building was not plumb. There are no expansion joint floor covers on the market that accommodate that height of transition. The solution was a custom-engineered floor cover that doubles as an ADA-compliant ramp between the buildings. There were three versions of this floor cover with different widths based on the severity of the height discrepancy. A significant amount of effort was spent detailing each individual location to coordinate the surrounding construction and minimize the aesthetic impact.

"One of the initial challenges we faced was how to connect the existing buildings and the planned new construction. There was as much as 4 feet of difference between the floor to floor heights between the existing buildings," explains Rebain, the principal in charge of the project at Kraemer Design Group. "In the 1400 building, we had issues with the structure because there was 4 inches of floor slope from front to back, as well as columns that were out of alignment. Overall, we were able to work with the existing structure without serious modification."

In addition, the retail storefronts of the existing buildings had been modified many times through the years and required replacement to historic standards. When the 1400 Woodward Avenue Building was converted to a jewelry store in the 1950s, the upper-level windows were infilled with block. To bring it back to its early 1900s origins, custom historic-replica windows were installed.

INTERIOR DETAILS

Although no specific green-building certification was pursued, Rebain and his team incorporated many energy-efficiency and sustainable principles as a matter of best practice. For example, heating and cooling are provided by a central plant that feeds all five buildings with hot or chilled water to water-source heat pumps throughout. There are three fresh-air ventilation systems located in different zones around the complex, equipped with energy-recovery ventilators to aid with energy efficiency.

Acoustics between rooms and floors was a concern for the design team. "The buildings are constructed of concrete, which helps with certain sound ranges but not with others," Rebain explains. The first acoustical treatment actually occurred while leveling floors with a cementitious floor leveler. "In a floor system like this you worry about the sound of heels clicking on the floor," Rebain notes. "To combat that, we designed the floor system to include 1/2-inch plywood and a 3/8-inch acoustical mat before the flooring was installed." The design team also specified a custom wall system with a high STC rating for the walls

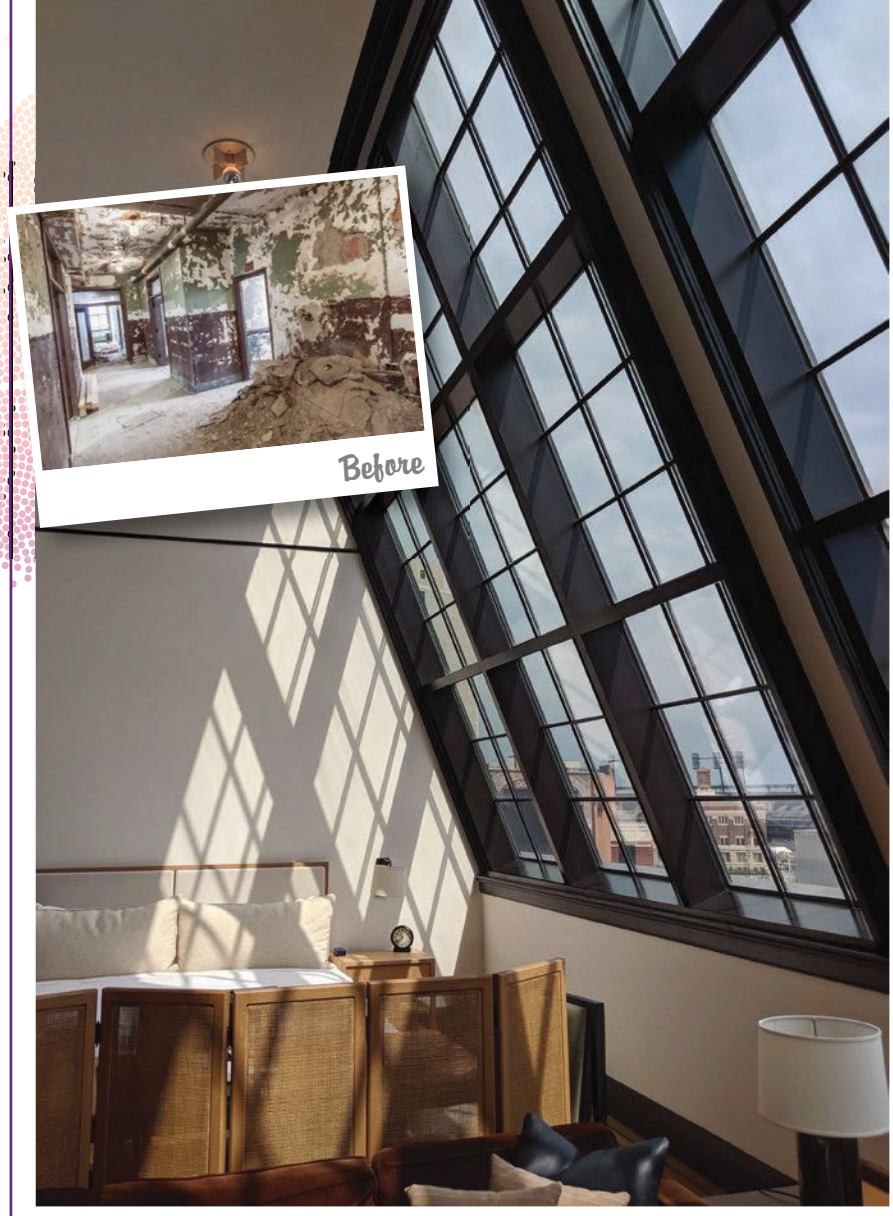
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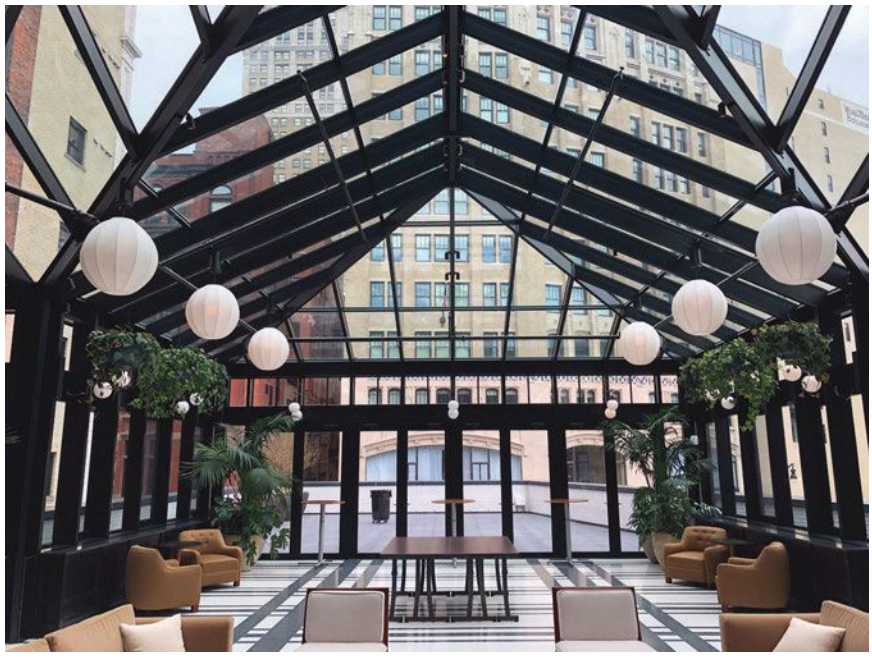
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between the rooms and corridors.

Interesting elements of the existing buildings were reincorporated into the new design, including main staircases, an exterior fire escape and painted building signs that were uncovered. “Shinola was interested in incorporating a nod to the industrial past of the city and to the roots of their own company in the design,” Rebain says. “The windows are reminiscent of industrial steel-framed windows, and the black exterior brick on 1420 and 1424 Woodward hints at the character of many industrial buildings nearby.”

A UNIQUE EXPERIENCE

The Shinola Hotel is an immersive hospitality experience that includes a 129-room boutique hotel, innovative culinary concepts, curated retail and private event spaces. Construction of the hotel began in late 2015 and was ready for a soft opening in late 2018. The official grand opening occurred in January 2019.

“There’s no playbook for a building like this,” Rebain explains. “Exceptional communication between ownership, the client, architect and construction manager is key. The more complex the building, the more communication is required. Thankfully, our office is within walking distance of this project, so we were able to meet four times a week onsite to address issues as they were identified. Bringing issues to the table early was the key to our success.”

Rebain is gratified by the positive implications this project has made to the area. “For me, the most rewarding aspect is the transformation of the city block,” he says. “When we started with this site, the block was only half occupied and was partially occupied by non-contributing buildings that really needed to go. Being able to bring this block to a cohesive whole is extremely satisfying.”

As part of the continued rebirth of downtown Detroit, the Shinola Hotel project is an exquisite example of building off the design cues of the historic urban fabric while adding a modern twist. The project has become one of the most unique boutique destination hotels in the country and has revitalized a tired area for many generations to come.

RETROFIT MAGAZINE
METAMORPHOSIS AWARDS
Winner



> **It was really good to have Graham as a partner on this project. Very easy to work with and great team players.**

STEPHEN TORELL, PE, LEED AP
SENIOR PROJECT MANAGER,
PRISM CONSTRUCTION

PROJECT: THE RESIDENCES AT EDISON LOFTS
OWNER: DGP URBAN RENEWAL LLC
ARCHITECT: MINNO & WASKO ARCHITECTS & PLANNERS

HISTORIC REPLICATION WINDOW EXPERTS

Necessity truly is the mother of invention, as Graham discovered in replicating the former Thomas Edison Battery Building's nearly 2,500 windows. The solution required nearly 40 new extrusion dies. But by extensively modifying its rugged S6800 Series window, Graham was able to replicate the original windows' look while also delivering high-end thermal and structural performance. Edison would be proud.

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HISTORIC *Honorable Mention*

MOVIE STAR

Although Its Pre-renovation State Made this 1914 Building Famous, Its Recent Rehabilitation Is Oscar-worthy

PHOTOS: **KRAEMER DESIGN GROUP unless otherwise noted**



The renovation of the Farwell Building in Detroit by Kraemer Design Group is a dramatic transformation from an abandoned, dilapidated office building into a prime residential property with second-floor offices and ground-floor restaurant space. The awe-inspiring rehabilitation earned Kraemer Design Group an Honorable Mention in the Historic category of ***retrofit***'s Metamorphosis Awards.

HISTORY

Located on Griswold Street in Capitol Park in the heart of downtown Detroit, The Farwell Building was built in 1914. The architect was Harrie W. Bonnah, one of the first architects licensed in the state of Michigan. He designed the Farwell Building with his firm Rogers & Bonnah Architects. The project started as a concept to transform the small structures in Capitol Park into high-end office and commercial buildings. Originally built to house shops and offices, over time the distinguished high-end commercial hub became a deteriorated broken shell of its former grandeur as building owners changed and the commercial and office tenants left behind vacant premises.

In 1956 the ornate terra-cotta cornice with historic Pewabic tiles was removed and bricked over, and the ground level underwent significant changes. A fire in the building caused interior damage in 1974; the Tiffany chandeliers in the lobby were removed in 1975; and by 1984 the building was vacant. The Farwell Building remained vacant for the next 35 years, becoming known as one of the most deteriorated historic buildings in downtown Detroit.

While vacant, scrappers removed metal railings, equipment and systems and the building was heavily covered in graffiti. The extensive level of interior deterioration gave the building a dramatic, distinctive post-apocalyptic feel and the Farwell Building was featured in several major motion pictures during its days as an abandoned building. The deteriorated atrium, with murky, deep views and half-missing guardrails, particularly captured the imagination of action-film directors. "Transformers 3" (2010), "Transformers: The Last Knight" (2016) and "Batman v Superman: Dawn of Justice" (2016) all include scenes filmed in the Farwell Building prior to renovation.

Kraemer Design Group was hired by the developer, Capitol Park Partnership, as the historic consultant, architect and interior designer for the 8-story building. Seeing through the grime, Kraemer Design Group documented historic features and materials to be restored and preserved in compliance with requirements for historic tax credits. The firm's research into the building's history provided information needed to reconstruct missing features, such as the large decorative cornice.

GRAND DESIGN

The building exemplifies early 20th-century commercial architecture with Chicago School architectural elements. When it opened, the Farwell Building's distinguished design was considered grand and upscale. Original interior finishes in the lobby included custom Tiffany Studios-designed architectural iron and bronze work; Tiffany Studios-designed mosaic-tile domed lobby ceiling, stained glass and chandeliers; Greek Skyros marble walls; and African mahogany wall trim. The building also displayed scrolled architectural ironwork throughout, which was fabricated by the Russel Wheel and Foundry Co. of Detroit.

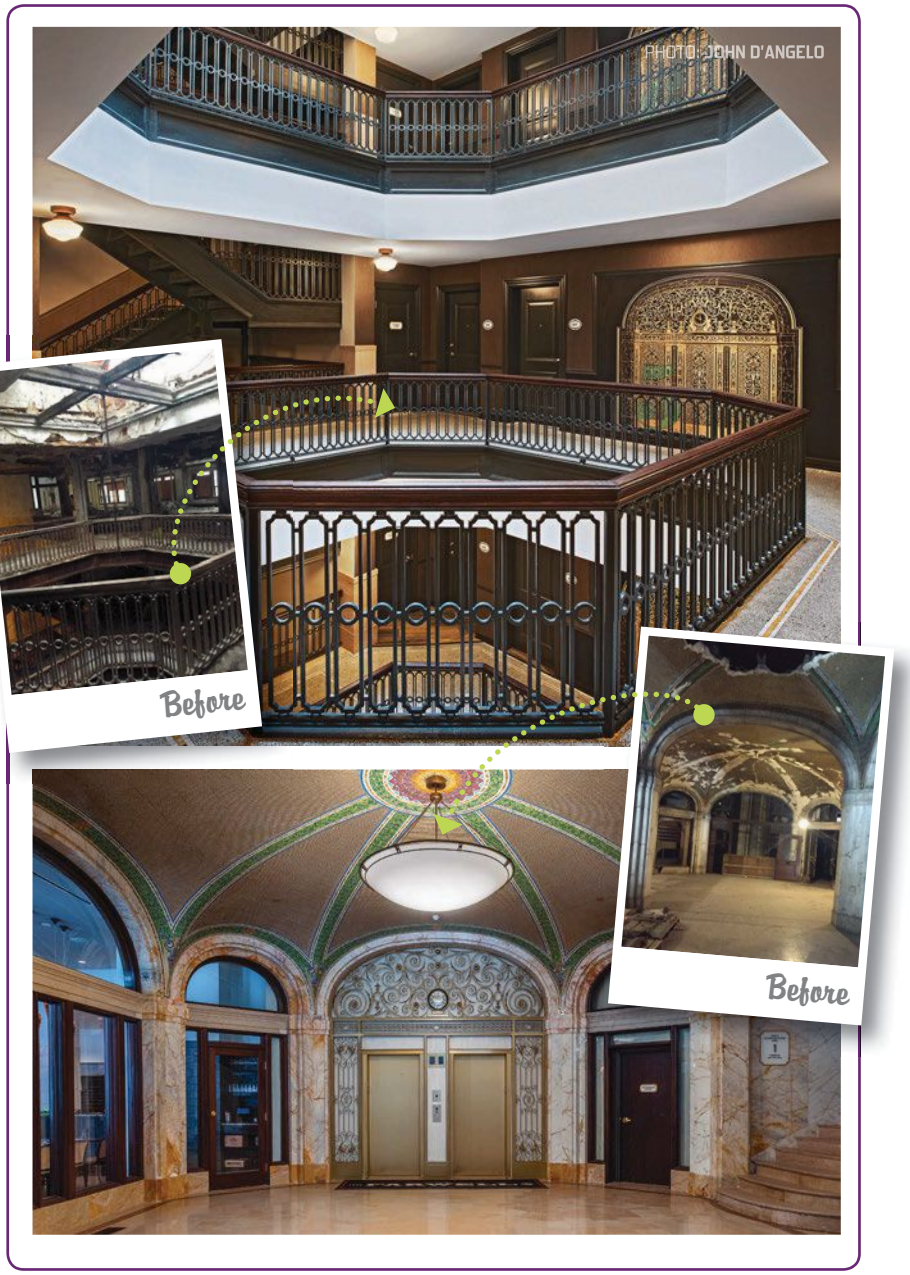
The lobby was characterized by two open vestibules flanked by large wood storefront windows and stained-glass arched windows above, ending in a large octagonal mosaic-tile domed space at the foot of the ornamental stair and elevators. Scrolled architectural ironwork from the exterior was continued on the interior elevator surround and stair handrail. The marble and ironwork staircase was open for the height of the building, and connected by terrazzo flooring to the central atrium that is open from the third floor to the roof. The central atrium is characterized by an ironwork and wood guardrail, as well as a cast-metal elevator surround.

RENOVATION AND RESTORATION

After approximately two years of construction and $40.5 million in development cost, the Farwell Building has undergone a full historic renovation and conversion into a mixed-use development, including residential apartments, office and restaurant space. The Tiffany mosaic-tile domed ceilings, ornamental stair, cast-iron railings, decorative elevator surrounds, and terrazzo floors were repaired and refinished. A new brass elevator surround was created for the main lobby based on historic photos, and a

Judge's Comment

> "Looking at the before photos and then seeing the after was like 'wow!'"
> *—Scott Elofson, design principal, HDR*



new skylight was installed above the atrium. The northern half of the first floor and a portion of the basement is home to high-end Lebanese restaurant Leila. The second floor was converted to commercial office space. The third through eighth floors were renovated into 82 apartment units. All units are equipped with quartz countertops, stainless-steel appliances, porcelain tile flooring and in-unit washers and dryers. A roof deck available for resident use was constructed offering fantastic views of Capitol Park, the city and surrounding buildings.

The exterior restoration included cleaning and repair of the primary brick and terra-cotta façades. New aluminum-framed windows were installed that match the historic profiles of the original windows. An important part of restoring the exterior of the building was recreating the roof cornice. The new cornice is made of glass-fiber-reinforced plastic to look like the original based on historic photos. All non-historic storefront infill materials at the first floor were removed, and new aluminum storefront was installed in each bay. The decorative metal panels throughout the façade were cleaned and repaired where needed, and new cast-iron scrollwork was installed over the main entry door.

The overall project was approved by the State Historic Preservation Office and National Park Service as complying with the Secretary of the Interior's Standards for Rehabilitation. The transformation of the Farwell Building from ruin back to its original splendor is one of the most pronounced examples of the resurgence of Detroit.

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Eemax is leading the evolution of hot water with cutting-edge technologies that provide advanced tankless electric water heating solutions for building retrofits. We are empowering building design professionals with trusted and versatile products that can accommodate a multitude of installation scenarios. Today, Eemax products deliver energy-efficient hot water for whole homes, multi-family properties, and commercial enterprises.

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Circle No. 30

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