

C O L U M N S

CULTURAL evolutions



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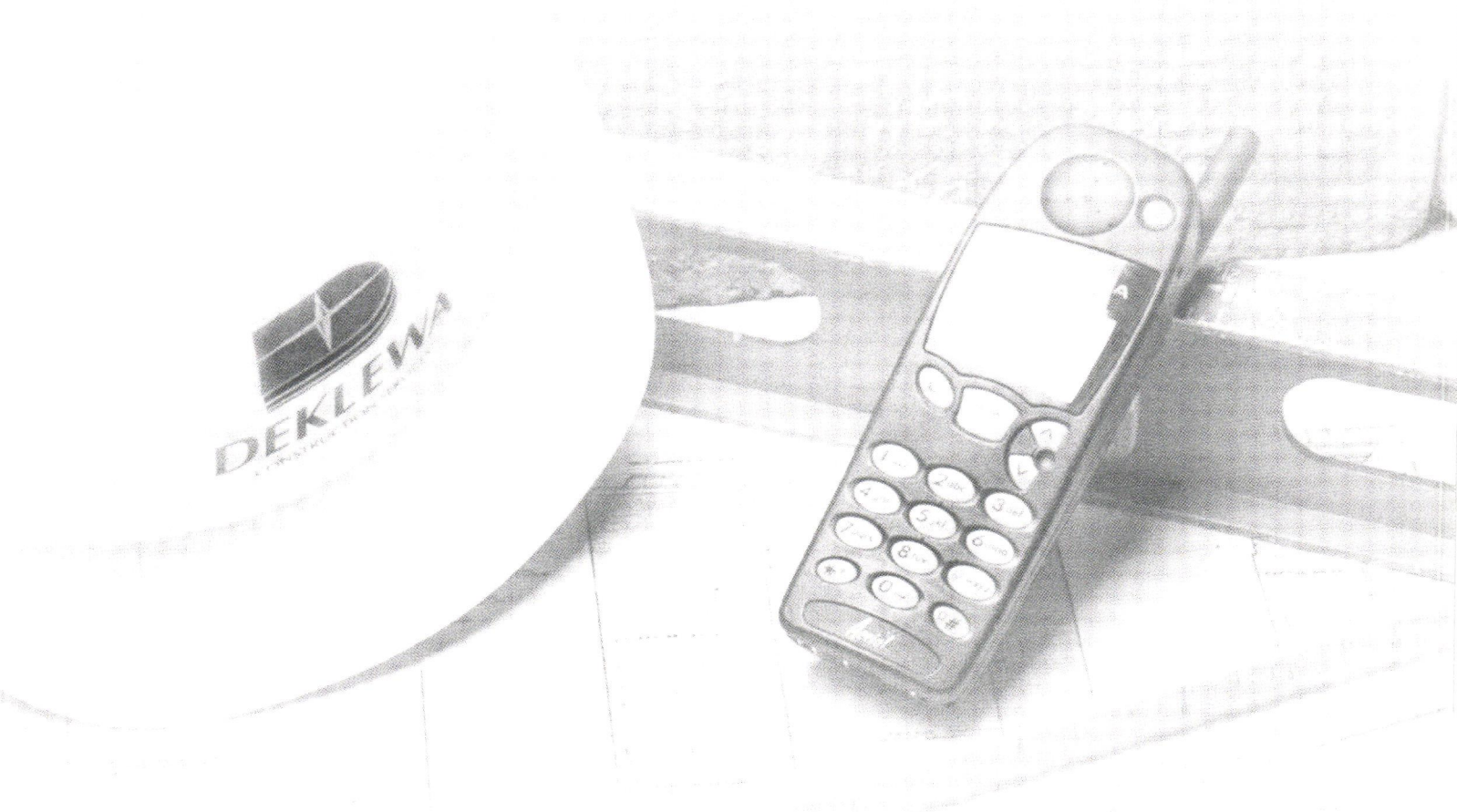
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The Case for Permanent Art

By Tracy Certo



Architecture is permanent art, Viñoly said, and good architecture supports a system for people to be creative.

At the GreenBuild conference here

this past November, architect Rafael Viñoly, FAIA spoke about designing the center and noted “the revitalization of architecture as a substantial component of moving the city forward.” Architecture is permanent art, Viñoly said, and good architecture supports a system for people to be creative.

My first thought was of CAPA, the Pittsburgh High School for the Creative and Performing Arts, featured in this month’s issue. With its dramatic curving glass wall and prime riverfront setting, it’s an ideal example of design providing the framework and support to help creative souls achieve their potential.

And here’s another: the Children’s Museum of Pittsburgh, soon to be 80,000 square feet of good design—part classical, part playful—to spark creative, hands-on learning and exploration. Opening this fall, the expanded museum will connect two of Pittsburgh’s gorgeous historic buildings with a new connector building that boasts a large environmental art piece by artist Ned Kahn. More on that in a future issue.

Even the new The Pittsburgh Cultural Trust parking garage, which makes commuting a little more bearable, can spark creativity. Park high then enjoy the view as you’re whisked down on the glass elevator with the cultural district at your feet and the subtly lit artwork in the Agnes Katz plaza below. You can only really see it from above. (“Are all the garages this nice?” asked our Princeton, New Jersey visitors. “Yours aren’t?” we answered in mock surprise.)

In this issue, and others to follow this year, Columns celebrates a number of newly renovated or expanded cultural institutions. There’s a burst of activity—the Mattress Factory which just added an education center, the Senator John Heinz History Center with its major addition and the ongoing work at the lush and classic Phipps Conservatory—and most of it is green.

If good design is essential to a thriving city, it’s imperative in its cultural institutions. And ours don’t disappoint.

During the GreenBuild conference I asked many architects and engineers from across the country and beyond what they thought of the new convention center and the city of

Pittsburgh. They were, in a word, dazzled. “It’s good to see a convention center taking this kind of risk,” said one architect who had never been here before. “Pittsburgh’s great and *this* is great.” A young architect from D.C. was enamored with the William Penn Hotel and the convenience of a compact city where you can walk everywhere. Another was impressed with “the layering and different styles of architecture”. An engineer went on at length about the beauty of the center—“modern and sleek but not sterile, very welcoming”. Her favorite part? The interior anchors.

At one conference session, Carnegie Mellon’s Vivian Loftness introduced Viñoly and presented 7 Steps to Greening the Convention Center (which we have included it in this issue). She personally thanked the architect for the amazing new convention center. He in turn threw bouquets of gratitude to Rebecca Flora, executive director of the Green Building Alliance who served on the design committee. The gold LEED rating for the center was granted the Friday before the conference. And although the timing is something Rebecca is sure the USGBC pushed for, she said there was no slack granted in gaining the Gold rating. It was, she declared, “rigorous”. More on LEED and the year-old LEED 2.1 on page 12.

As I was leaving the conference that Friday, I spotted an attendee checking out the glass elevator on the third floor. He looked up then down and all around and I was thinking, “Engineer.” “Going up?” he asked. Sure. We were whisked to the top where a stunning view of the split gleaming curved roofs framed the city sights beyond. The man gasped in delight as he ran to one side of the roof and then the other. He was shouting (yes, from the rooftop) comments such as “Look at this!” “Look at that!” It was a double bonus to be there, soaking up the dramatic views while watching the reaction of someone clearly intoxicated by it all.

Rafael Viñoly received many accolades during the conference but this was one he really should have experienced. As I stepped into the elevator to slip away, I watched the explorer continue his discovery. He spotted me and waved goodbye, signaling an enthusiastic thumbs up and I nodded in understanding. Clearly, this kind of permanent art is helping the city move forward.

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On the cover: View from the Main Stage at the new Center for the Creative and Performing Arts, designed by MacLachlan, Cornelius & Filoni. Photo: Dennis Marsico.

AIA Pittsburgh serves 12 Western Pennsylvania counties as the local component of the American Institute of Architects and AIA Pennsylvania. The objective of AIA Pittsburgh is to improve, for society, the quality of the built environment by further raising the standards of architectural education, training and practice; fostering design excellence; and promoting the value of architectural services to the public. AIA membership is open to all registered architects, architectural interns, and a limited number of professionals in supporting fields.

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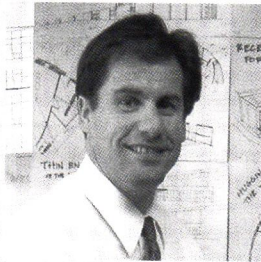
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What is a BRAND?

By Dan Rothschild, AIA, 2004 President of the Board

Have you ever been in a grocery store

at the cereal aisle, staring at the panorama of colors and messages, and wondering which one to select? Chances are you were influenced by the manufacturer's **branding strategy**. Separate from advertising, branding distinguishes a product in the marketplace.



Among all professions, architects have the distinction of owning one of the highest "Q" ratings.

Branding is to Advertising as Public Relations is to Marketing. Branding arrives before an individual, distinct advertising effort to motivate you to buy something, just as public relations puts your name out there before your specific marketing effort. Branding sets the table for a positive outcome. It characterizes a product's uniqueness, while advertising provides incentive for purchasing.

Branding is an untapped resource for most architects. Among all professions, architects have the distinction of owning one of the highest "Q" ratings. A "Q" rating is a "quality" rating used by advertisers and marketers to rate the acceptance of people and professions in the marketplace. That is why architects so often appear in ads and movies. (Although the image of an architect on his drafting stool endorsing Preparation H was not a highlight of this acceptance.) It is why you hear people say, "I always wanted to be an architect . . ." The public holds an image of architects as talented, concerned, ethically minded individuals.

The AIA is in the midst of a three-year effort to study the **branding of the American Institute of Architects**. I have attended several seminars on this issue, at both the state and national levels. Some of their findings are extraordinary, and will be detailed in later columns.

For this year's President's Messages, I am going to focus on **BRANDING** as a theme that will help you **distinguish yourself as an architect**, and help your firm to be distinctive in the marketplace. Some of the information will include:

The four essential pillars of our Brand, attributes that you as a member of the AIA have that other non-affiliated architects do not have:

1. A recorded Canon of Ethics
 2. Requirements for Continuing Education
 3. A 100-year history of Industry Standard Documents
 4. An association that encourages Intellectual Exploration and Social Interaction
- The branding of AIA Pittsburgh's product line to increase synergies
 - The use and designation of your firm as an "AIA Firm"
 - Findings from the National AIA Branding Study

I look forward to a year of exploration with you and welcome any input. I'm just a click away at danr@rdarch.com. Let me know your thoughts.

The photographers who contributed to last month's 2003 Design Awards issue were:

Castcon Stone, Inc.
LINDA JEUB

Pittsburgh Glass Center
MASSERY PHOTOGRAPHY

947 Liberty Avenue Lofts
MASSERY PHOTOGRAPHY

Natural Sciences Building
DAVID HEWITT ANNE GARRISON ARCHITECTURAL
PHOTOGRAPHY

EDGE studio New Design Offices
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Whole Foods Market
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Renovations to the Mother of Divine Providence Chapel
ROY ENGELBRECHT PHOTOGRAPHY

Bally Design @ ROAM North Shore Center
JACK WOLF PHOTOGRAPHY

903 Liberty Avenue Façade Reconstruction
DAVID ASCHKENAS

Waterfront Corporate Park, Building Number 2, Truss Detail
MASSERY PHOTOGRAPHY

South Side Works
JIM SCHAFER



In the News: Carnegie Mellon's Lee and Loftness

Carnegie Mellon University's Laura Lee, AIA has been appointed to the 2004 AIA Board Knowledge Committee. This committee was created by the AIA Board last September as one of three standing committees of the Board to lead the development, implementation and integration of the AIA's knowledge initiatives. Ms. Lee holds one of three at-large seats for a one-year term.

At the USGBC's GreenBuild conference, the Local/Regional Leadership Award was presented to Vivian Loftness, FAIA for her work as professor and Head of School of Architecture at Carnegie Mellon University. Ms. Loftness was noted for leading the development of the BIDS' Life-Cycle Building Decision Support Tool which is used by the federal government to quantify the financial, human, organization, societal, and environmental benefits of green design.

Study Proves Green Buildings are Highly Cost Effective

According to a new study for 40 California agencies by the Capital E Group, investments in green buildings pay for themselves 10 times over. This study is reportedly the most definitive cost-benefit analysis of green building ever conducted.

Based on the findings, the California Department of Finance has signed off on the existence of financial benefits associated with improved health productivity and lowered operations and maintenance costs in green buildings. The California Board of Regents also drew on the early findings of this study, moving forward in pushing for all state higher education new construction to be green. The study draws on national data for a hundred green buildings and an in depth review of several hundred existing studies, concluding that sustainable buildings are a very cost-effective investment.

The report concluded that financial benefits of green design are between \$50 and \$70 per square foot in a LEED building, over 10 times the additional cost associated with building green. The financial benefits were found to be in lower energy, waste and water costs, lower environmental and emissions costs, and lower operational and maintenance costs and increased productivity and health.

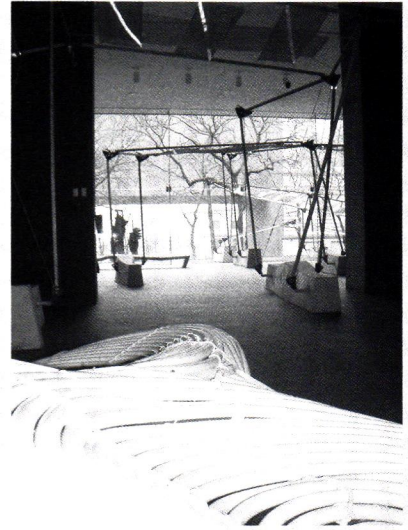
For a copy of the report, go to: <http://www.usgbc.org/Docs/News/News477.pdf>



Anne J. Swager, Hon. AIA, (center) hosted a tour of Fallingwater for (from l. to r.) Peter Fink, who is doing the master plan lighting for Three Rivers Park, City Council member Sala Udin, Riverlife Task Force design manager Lareese Hall and Riverlife's Sallyann Kluz.

New Installation at the Carnegie

Carnegie Museum of Art presents Animated Public Spatial System (APSS) Pittsburgh, an installation by Garofalo Architects which reconfigures the structure of the museum. Opened in late November, the exhibit is located in the the museum's Forum Gallery, extending into the adjacent Scaife Foyer and outdoor Sculpture Court.



Chicago-based

Douglas Garofalo (b. 1958) has created a career from experiments with new materials, technology, and programs in addition to a series of actual construction projects ranging from temporary interiors to residences and cultural facilities.

Animated Public Spatial System (APSS) is assembled with concrete and freeform wooden benches, steel beams, and hundreds of yards of yellow fabric awnings. The work makes a temporary insertion that weaves its way, colorfully, through the ground floor spaces of the museum. Presented alongside these artifacts is a video project titled Storm Hangar, a collaboration between Douglas Garofalo and Chicago-based artist and 1999 MacArthur Foundation Fellow, Inigo Mangano-Ovalle.

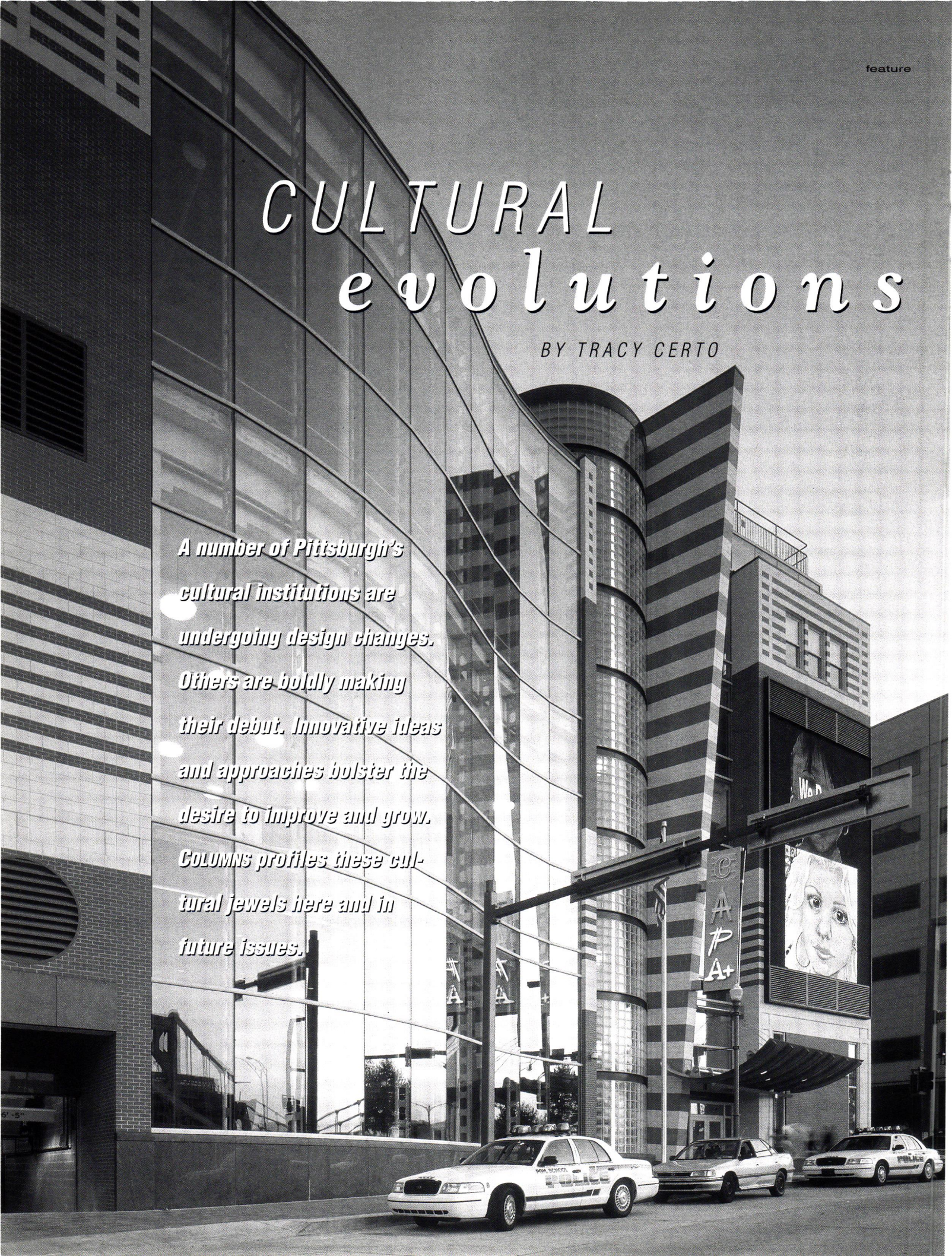


THE WIG IS PASSED! Outgoing President Rich DeYoung, AIA (right) passes the ceremonial wig to incoming President Dan Rothschild, AIA at the annual Holiday Party at The Penn Brewery on December 10.

CULTURAL evolutions

BY TRACY CERTO

A number of Pittsburgh's cultural institutions are undergoing design changes. Others are boldly making their debut. Innovative ideas and approaches bolster the desire to improve and grow. Columns profiles these cultural jewels here and in future issues.





CAPA PHOTOS BY DENNIS MARSICO

Part new building, part adaptive reuse, CAPA is a world-class arts and performing arts high school for up to 600 students. Located in the Cultural District, it is on a prime riverfront site of a former gas station.

Center for the Creative & Performing Arts (CAPA)

\$39 million

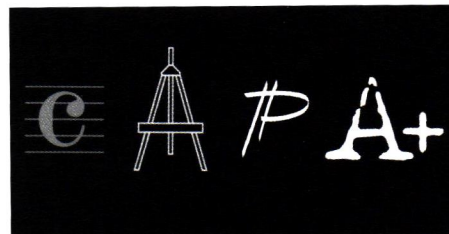
175,000 square feet

Architect: Maclachlan Cornelius & Filoni

Albert Filoni, AIA, principal in charge of design and Kenneth Lee, AIA, senior project manager, gave COLUMNS Magazine a private, behind the scenes (literally, folks) tour of the building. From the carpeted catwalks to the soaring six-story stagehouse, it's a gem of a design that for theater aficionado Al Filoni was a "total love affair".

When François Bitz donated the riverfront corner lot and part of the Bitz Building to the city of Pittsburgh to build an arts and performing arts high school, he had two stipulations. He asked that they build a world-class facility for one. And two, the founder of FORE systems, who lives in a penthouse in his Ninth St. building, asked if they could put a parking lot below the new building with a spot reserved for him.

It was a wildly generous offer that the Pittsburgh School Board accepted with joy and the requisite sense of duty. Parking space? Not a problem.



The CAPA logo, designed by Agnew Moyer Smith

"You have to give the Pittsburgh school board enormous credit since this building is absolutely at the cutting edge," says Al Filoni. So when the designers approached the school board for approval of the design, "every vote was unanimous" resulting in a bold and creative project that wasn't dealt ruinous budget-cutting alterations.

Rubic Cubism

Good thing. The architects had enough to contend with in the formidable design challenge presented in the site. The prime riverfront site came with a cost of one kind: restrictive size limitations due to the lot size. Also a factor was the connection of the Bitz Building through the third through eighth floors to the new building on Ft. Duquesne Blvd.

"CAPA is the embodiment of every art student's dream of a place to study." — DR. JOHN THOMPSON, PITTSBURGH PUBLIC SCHOOL SUPERINTENDENT



The main theater seats 420 and features a six story stagehouse that allows students to fly scenery on and off the stage. Students who learn to work this stage can work in any other theater in the world, says architect Al Filoni.

Configuring space to fit the many irregular performance spaces was a Rubik cube puzzle. The focal point, around which everything else was designed, was the main theater with its six-story stagehouse which had to be tucked inside sans windows.

"The whole school is built around the stage. You end up walking around the stagehouse going from classroom to the riverfront," explains Ken Lee. Then it was a matter of piecing together the remaining spaces around it. "We have a gym on top of a cafeteria on top of a theater that aren't in any way the same shape," Lee says.

"Every square foot in this building is accounted for," says Filoni who during the tour marveled at how student artwork filled all available spaces. On top of that, so to speak, the artistic spaces had to be flexible as well as technically state of the art. And they are. The 420-seat theater features a motorized lift in the orchestra pit and the stage house has an impressive six-story high wall of counterbalanced rigging so students can "fly scenery on and off stage". Students trained in this theater could work in any theater in the world, says Filoni.

Like most well-designed theaters, this one is itself theatrical, an imaginative and fun space showcasing the performers onstage. Alive with color, the room is drenched in a deep palette of emerald with peach accents, plum-colored rails and burgundy curtains. Above, the coffered ceiling is a sky blue, homage to outdoor theaters centuries ago, explains Filoni who then jokes to Ken Lee, "I wouldn't mind

if students painted white clouds up there." Suspended from the ceiling are green panels which serve to diffuse the air conditioning and further dampen any noise.

To make it suitable for various performances, including dance, the stage floor is cushioned tongue and groove fir with removable traps. The stage also boasts an adjustable height orchestra shell and a proscenium that accommodates different openings for dance, drama or music performances.

On the ground floor facing the river is the black box theater, which is all black as the drama department requested. The concept was born in the 60's as a rebellion to traditional theaters, explains Filoni. Black box theaters sprouted in alternative spaces such as garages, lofts and basements, allowing for more informal and experimental theater. In this black box, the stage can be placed anywhere and seats can be endlessly moved to accommodate a wide variety of performances and rehearsals.

While they were maximizing flexibility, the design team also had to work some acoustical magic (courtesy of Bob Jones) to achieve professional performance standards in the theaters while also separating the sounds, such as the gym which is over the cafeteria. That sound separation accounts for the section of dry walling in the private garage below. And there were other specific design considerations of course, such as extra wide elevators for the Steinway pianos (30 in all) not to mention 19-foot high doors leading from the stagehouse to the workshop in back.

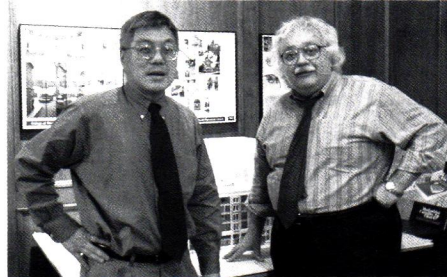
Would you like fries with that?

The café on this wintry day is in full swing, smelling of ketchup and fries and filled with students talking and laughing. A mini screen on the wall mimics the one outside so students get a close-up view of their own displayed artwork. This, says Filoni, who insisted on the round tables which provide the best interaction, is the social heart of the building with the library off to one side.

On the academic side of CAPA, the Bitz Building, adaptive reuse resulted in classrooms that look new and feature signs with am/pm distinctions such as "English/Acting". At CAPA the faculty changes daily: the academic teachers finish and the arts and performance teachers arrive.

In between the two buildings, on the third through eighth floors, is a curving corridor/seating area transition space with floor to ceiling glass windows that overlook the courtyard of the student entrance. Each floor is dramatic and appealing filled with lively and colorful student sculpture, paintings and mobiles. Even the oversized plants placed by the windows lend an artistic touch.

Throughout the building, dramatic and impressive touches underscore the design, making it the showpiece it was meant to be. The front stair features white plastic tubes



Kenneth Lee, AIA and Al Filoni, AIA of MacLachlan, Cornelius & Filoni

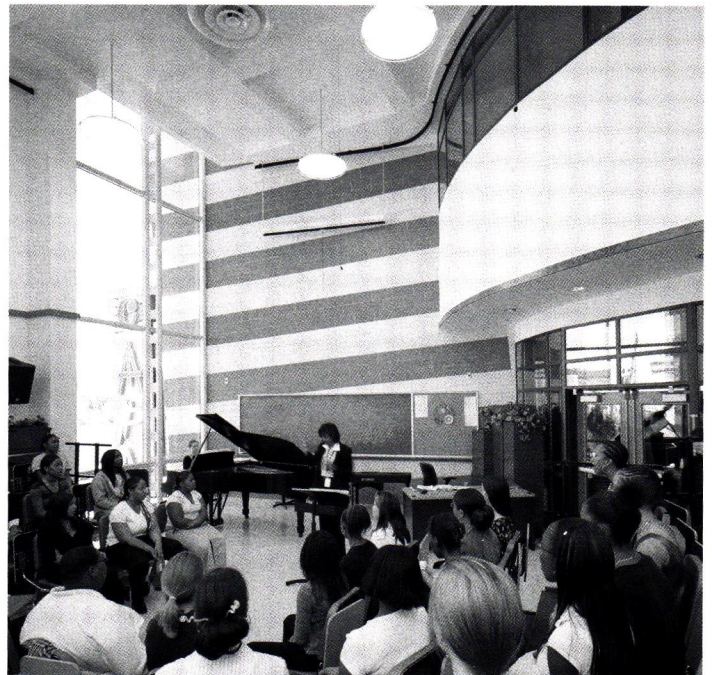
that soar as tall as the building behind the glass block and are lit at night, a theatrical touch that complements the chaser lights on the riverfront marquee entrance. Heightening the visual appeal is the striped leaning exterior wall with its pattern of white and terra cotta-glazed concrete block. It mimics the original terra cotta and white on the adjacent Bitz Building on Ninth Street.

Livening up the exterior is the 30-foot high by 20-foot wide electronic video screen where initially students simply displayed their art but lately, says Filoni, they've been getting more creative.

After all, the goal of the CAPA design is to showcase the arts in a bold and dramatic way and the screen, which the



In the ballet rehearsal room, riverfront views provide a stunning backdrop and the ballet bar curves with the exterior glass wall.



(LEFT) The Orchestra Rehearsal Room and (RIGHT) the Choral Rehearsal Room. Student rehearsals can be viewed from the second floor above, and from outside the building from the riverfront park and the Ninth Street Bridge.

students love, fits the bill. The other goal was to honor the city's "magnificent" riverfront site. The architects succeeded with elements such as the 75-foot high curved glass wall that fronts the building, opening up dramatic views on both sides.

From the riverfront, the public is welcome to view the performances and rehearsals inside in a number of ways, whether it's the electronic screen, peering in at street level, or observing layers of activity on the various floors from the river park or Ninth St. Bridge. Soon students will be projecting their performances right onto large sections of the 75-foot curved glass wall. This flourishing of the arts in downtown Pittsburgh, as part of the Cultural Trust District, has many in this city cheering the accomplishment.

And to think this used to be a gas station. The entire site, explains Lee, was meticulously cleaned with extra precautions taken since they were dealing with a school. They not only hauled away contaminated soil but also injected chemicals into the ground which they monitored afterwards. In addition, they made provisions to isolate the underground garage so it's airtight. ■

Filoni and his firm already have three major renovations in Pittsburgh performance spaces to their credit: Heinz Hall, Benedum Center and the Byham Theater. And now, they add to that the Center for the Creative & Performing Arts.

As he stands in the hushed and darkened control room overlooking the main theater Filoni pauses. "I can't imagine if they had a facility like this when I was in school what I might have done." The architect, who has staged opera and studied in Europe on a Fulbright scholarship is left wondering. "I might not have been an architect," he says with a slight smile and a shrug.

Although he is enamored with theater—"lighting a stage set is like painting"—this project has given him immense satisfaction. (At the same time, he fully credits Ken Lee for his role.) Recently, when Filoni was outside of Heinz Hall, a student approached him and asked if he was the architect for CAPA. When he told her he was, the student gushed, "Thank you! Thank you! Thank you!"

He could consider that the equivalent of a standing ovation for a bravo performance.

Coming Attractions

Senator John Heinz History Pittsburgh Regional History Center, 1996

ATTENDANCE 2000/2001: 110,000

FUNDRAISING GOAL: \$19.5 for new facility

ORIGINAL PROJECT: \$13 million renovation of the Chautauqua Lake Ice Company

COMPLETION DATE FOR EXPANSION: 2004

ARCHITECT: Astorino—architecture, engineering and interior design

SQUARE FOOTAGE: with expansion 175,000 sf

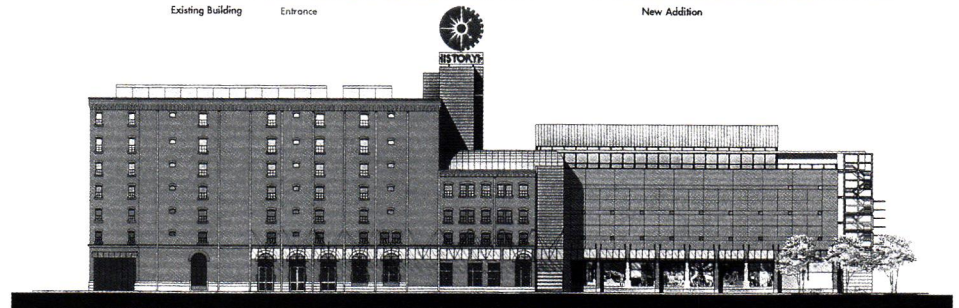
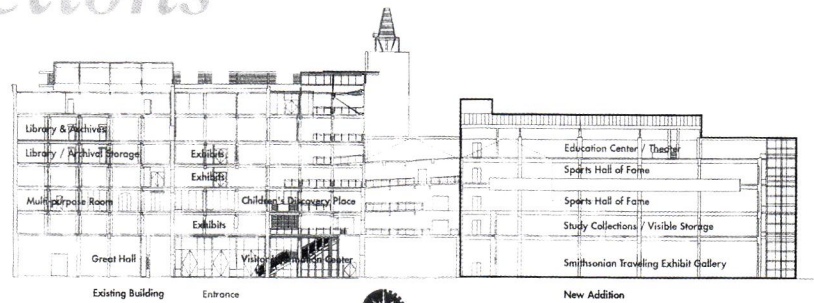
Who could argue with the idea of a Western Pennsylvania Sports Hall of Fame? In this sports-crazed city, the addition of the Hall of Fame is likely to attract a broader audience to the Senator John Heinz History Center of Western Pennsylvania, housed in a former ice factory in the city's Strip District. Designed to hold tons of ice, the building is a fortress of strength with three-foot thick brick walls in some places and 170 tons of structural steel posts and beams.

Only five years old, the center is already being expanded, one block towards downtown. Highlights include:

■ Smithsonian Traveling Exhibit Gallery: With blockbuster exhibits, such as the American Presidents planned for this year, expectations are high to attract many more visitors to the center. One exhibit being planned is a commemoration of the 250th anniversary of the French and Indian War (July, 2004) which started in Western Pennsylvania. The History Center will host the premier exhibit which will then travel to other cities and Great Britain.

■ Western Pennsylvania Sports Hall of Fame. What better attraction for Pittsburgh? The Hall of Fame will occupy the third and fourth floors and feature the rich history of the Pittsburgh Pirates, Steelers and the Penguins, as well as other professional and school sports with special exhibits on legends such as golfer Arnold Palmer.

■ The Education Center: This planned theater is in response to the educational programs that have proved to be a hit with area schools. Up to 700 removable seats will provide flexibility in staging a variety of events and serve as a small conference center as well.



TO LEED OR NOT TO LEED?



PHOTO BY MIKE KELLEY, PROJECT MANAGER, AMEC

If you feel like you're losing ground keeping up with the latest LEED developments, take heart. You're not alone. Architects and others in the industry have expressed frustration at what seems to be a tedious and expensive process aiming for LEED certification. Yes, it's a standard that automatically confers value on a building in many areas including performance and employee productivity. But is the process of attaining LEED accreditation worth the extra expense and effort? Who benefits, and how much? Why not do right by building green anyway and avoid the hassle of documenting the process?

To shine more light (natural, of course) on the subject, *Columns* talked to Nigel Howard of the U.S. Green Building Council along with Rebecca Flora, executive director of the Green Building Alliance and Gary Moshier, AIA, of Moshier Studios who serves on the GBA board. The bottom line? Sure, LEED has its problems. But it's all we've got and it's a valuable tool to measure the many shades of green on the horizon.

For the uninitiated, The LEED Green Building Rating System (trademark) is a standard to support and validate successful green building design, construction and performance. LEED evaluates building performance in six categories for its certification. They are: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality and innovation and design process. — *By Tracy Certo*

Leadership in Energy and Environmental Design (LEED)-certified buildings now make up 4% of market share of all new construction in the US in 2002.

Currently 67 projects are certified:

PLATINUM	2
GOLD	19
SILVER	16
CERTIFIED	30

More than 90 projects registered

Nigel Howard, Vice President-LEED & International, U.S. Green Building Council

Howard, a self-proclaimed "lapsed chemist" spent twenty years studying the environmental impact of buildings—mostly in the United Kingdom before moving here two years ago to work at the USGBC in Washington, D.C.

In a phone interview with *Columns*, Howard addressed the difference in document requirements in the latest version of LEED. "The object of version 2.1 was to streamline the documentation requirements of LEED," he states, adding that there are significant improvements in LEED 2.1 such as the software template provided. "The template allows people to fill in the key LEED attributes which makes compiling their documentation much easier." Although some documentation will still be needed to verify performance, it's far less than before.

As for commissioning, which some critics of LEED deem expensive, Howard says the requirements for commissioning are better viewed as an investment, not an expense. "They can deliver substantial savings in running costs of building. The commissioning costs are usually recovered within months, or certainly the first year of the building's life."

The problem, he concedes, is that some costs may be incurred by the building sector while the benefits are reaped by the tenants. That's why the USGBC is focusing on the things that make the biggest difference such as the commission template. "We're defining more clearly what we're looking for from the commissioning activity so that LEED projects can get 80 to 90 percent of the benefits from 10 to 20 percent of the costs," he says.

As for the cost of LEED registration and certification, the USGBC pegs the estimated cost at three cents a square foot. "We think those are very low prices and very good value," says Howard who adds that "the real barrier is the potential cost of achieving the standard itself. But even here, most experienced teams can now produce green buildings that cost no more—and in some cases less than—conventional buildings."

To further convince, he cites recent USGBC research. "We've graphed the first cost per square foot of LEED cer-



PHOTO BY TRACY CERTO

Architect Rafael Viñoly, FAIA at the GreenBuild Conference in November in his gold-LEED rated convention center.

tified buildings and there is no correlation at all between how green the building is and how much it costs. The cheapest building in this small sample of buildings that we have data for per square foot is *gold* and the most expensive is just plain *certified*. The preconception is wrong. There is no correlation between cost and greenness. This research shows that all the other factors like location, quality, and time in the economic boom/bust cycle are much more important in determining the costs than how green the building is," he insists.

In any scenario, the USGBC still views the benefits as far outweighing the costs. "The potential savings are much more significant than the cost of the building," says Howard who points out that green building features such as improved energy performance and less water consumption contribute to reducing costs in the long run. "Even more important though is the benefit that can come from improved productivity in the buildings. If construction cost is one on a scale then life cycle costs are five on the same scale; but the value of the business that takes place in the building is 200 on that same scale. Small percentage improvements in productivity, reduced absenteeism and improved ability to attract and retain the best staff in green buildings are hugely beneficial."

To those who claim to build green but choose to forego LEED certification because of perceived costs, he says,

"They can save three cents a square foot but will they really get the performance they're looking for?"

The bottom line is LEED certification acts as it was intended, as a third party rating tool. "Unless your feet are held to the fire to document performance for certification, the discipline to go to the end just isn't there," he says. From his vantage point at the USGBC, he knows of cases where people decided not to file for certification for a green building only to realize that the resulting building was "indistinguishable" from any other. For their next building, they did achieve LEED certification. "They now find there is a significant difference and people recognize the difference," claims Howard.

LEED, which was developed two years ago—the latest 2.1 version appeared in 2002 at the Austin conference— is still evolving and experiencing the requisite growing pains along the way.

One sticky issue the USGBC is confronting now is related to high-rise residential buildings. How can you allow people the freedom to smoke in their own homes without exposing their neighbors to their tobacco smoke - a prerequisite requirement under LEED? "We're working on technical ways to contain smoke within the smokers' own homes," he says. It's one of many tricky areas. "There's a whole bunch of minor things that we can only learn from real practical experience implementing LEED, the way we have defined something might be problematic in a way we hadn't anticipated," he says.

The group is already working on LEED 2.2 to further refine some of the credits and improve and update the performance of LEED. These are not very substantial changes, he reveals, and the documents, he says reassuringly, will remain substantially the same.

Gary Moshier, Moshier Studios

Gary Moshier, AIA who worked with the Green Building Alliance before LEED was even developed, calls the system "imperfect but we have to realize it's a starting point." He believes LEED can be improved in what it rewards and what it promotes. "It's better than nothing," he says, "but it can be a lot better."

The first thing to consider with LEED, says Moshier, is this: It's a product of the politics of USGBC. That group, he explains, is not a government organization but rather, a private nonprofit and it's owned by its contributors which include major suppliers of products in the industry—building and construction and large architectural firms and material suppliers. So in other words, "A lot of people with vested interests are shaping the LEED product. As long as you recognize that and don't get too hung up on it you'll be fine," he concludes.

He suggests another thing to recognize. "Just because a building has a medal rating doesn't mean it's not toxic in some way and conversely, just because a building is not rated doesn't mean it's not green," he says.

For example, Moshier says a number of buildings on the GreenBuild tour were not LEED rated but could have been—such as the Alcoa building and the Penn Center West office building—that were constructed prior to LEED. Other green buildings never underwent LEED certification. "There are a lot of reasons and cost is one of them," he says, citing the sliding fees rate structure based on construction value.

For a company such as PNC Financial Services, which already commissions their buildings, the additional cost for LEED isn't that big, says Moshier. Private businesses which stand to gain little from the public relations value might think twice about going for a LEED rating, he suggests, quickly adding, "I don't think they should think twice about going for a green building."

How green is the horizon these days? "There are still a vast number of architects who have no intention of doing a green building. The market penetration of green is still pretty small," he states. Currently in the commercial sector, four percent of buildings are LEED certified, according to the latest USGBC figures.

"It's a good tool," Moshier says of the LEED rating systems. "It's a good strategy but it's flawed. USGBC admitted it was flawed but they've been changing the company line recently," he added with a chuckle.

He looks at it this way. "LEED is the program that ate USGBC. It was once one of so many things they did but it has become their primary focus—good, bad or indifferent. It is "a big profile raiser."

Rebecca Flora, executive director, the Green Building Alliance

"The value of a LEED certified building is something that ultimately the owner has to decide," says GBA's Executive Director Rebecca Flora. "LEED is an incredible tool. It's a way for developers to get their hands around what it means to green a building because it's quantifiable and it serves to define green."

As for the actual implementation of LEED, "I can see where clearly the system has to continue to develop," says Flora who recognizes the fine line between a system that's rigorous yet at the same time maintains respect and credibility. If it becomes overly burdensome, then it presents a problem. Flora has been convincing builders to go green before the LEED system was developed. "I teach it. I spend a lot of time assessing it. I hear a lot of critics, and I don't disagree with some of that criticism. But I think you have to take a step back and think of the purpose, of what LEED is doing.

"LEED certification is my only way of measuring," she says matter-of-factly. Although the idea of green building long preceded the LEED ratings, there is no other method of accounting. "Even though I know it's not perfect, what can I do? Otherwise, how do you differentiate?"

Although she is aware that "it's the best they can come up with right now," she adds, "Does it need improvement? Absolutely."

For now, LEED certification is the best tool they've got to create a fundamental change. "We're trying to create something that helps transform the market, that helps push the market to the notion that environmental responsibility and healthy buildings should be part of the design. There's nothing else out there with that message," she says. While she admits that the system is basically cumbersome and can be expensive in cases, the bigger objectives make it worthwhile.

Certainly Pittsburgh is benefiting from LEED certification. "We definitely lead the country in the number of buildings," says Flora. "It's been incredibly useful for us in getting the message out about how we're doing regionally."

Since the market at this point is aware of LEED, the current objective of GBA is to pay less attention to LEED 2.1 and more to existing buildings. "Our job as a nonprofit is to jumpstart the market," explains Flora. "We've brought something to the market locally and we think we've had a big role in Pittsburgh's leadership. Now I need to go back and say, where are the barriers now?" One example is breaking down the policy and code barriers to green building. "If this whole market transformation is going to be suc-

cessful—to the point that green becomes mainstream and it's not even necessary that we're involved—then we have to deal with some of these barrier issues," she says.

She also continues to ask if we are getting better performing buildings through the process and, to that end, she would like the GBA to do more collaborative research with universities on that subject.

Coming off the success of the GreenBuild conference, which so effectively displayed the new LEED gold-rated convention center as well as the city of Pittsburgh, Flora has reason to believe that Pittsburgh has plenty of reason to be proud of the progress thus far. If LEED certification

helps further that goal, it's a tool she'll use to the max. At the same time, she can empathize with the plight of one beleaguered architect who recently voiced a concern that he can't keep up with LEED. "The train is too far down the track," Flora says, nodding, and agreeing that we've all been there, in a meeting where we're expected to know something but we don't. She pauses for just a beat before expressing a summarizing thought on LEED: "No one expected it to be this big."

THE **Greening** OF PITTSBURGH

The David L. Lawrence Convention Center, where Flora served as the LEED Accredited Professional and Chair of the Design Commission overseeing the design competition, received approval of gold certification the Friday before the GreenBuild conference. If the USGBC timed the announcement to the opening of the conference, that was a lucky break. And it was the only one. In terms of going for the gold, "they didn't cut us any slack," she insists. "It was rigorous."

Much of the challenge stemmed from the unique nature of the building. "This project isn't a good comparable to any other project," she warns. "LEED is in no way designed for a convention center. There was so much interpolation." That, plus the convention center design started five years ago when LEED was in the pilot stage. "It's an extremely different building type in a very unique situation," she says.

To help navigate the uncharted waters, GBA hired Palladino & Company, a green consultant, to do an interim LEED review early on to see if they were going to meet the goal of gold certification. Aided by an \$800,000 funding grant for technical assistance and documentation from the Heinz Endowments, they were also able to get assistance with further documentation of pending and appealed LEED points from Palladino. And even then the obstacles and the process proved time-consuming and demanding. Heinz also provided a \$3 million loan to the Sports & Exhibition Authority for green related capital costs that had life cycle paybacks associated with them, like the water reclamation system.

Despite the many challenges, it was well worth it as Pittsburgh boasts the only green convention center and the largest green building in the country. And it certainly played a role in attracting the GreenBuild conference to the city. Flora sees it's a part of the "natural evolution of Pittsburgh".

"I think people are really getting into the notion of green building and want to be part of it," she says. "Certainly the nonprofit sector: Phipps, the aviary, the Children's Museum, Science Center, the Heinz History Center, Children's Hospital, you name it. They're all doing buildings or expansions that are green because the foundations are onto it," she says.

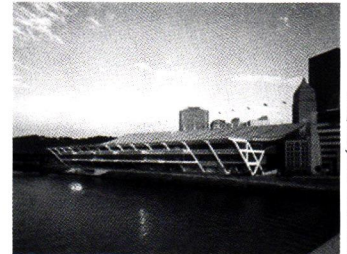
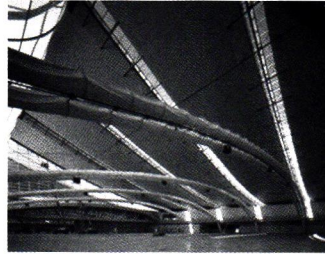
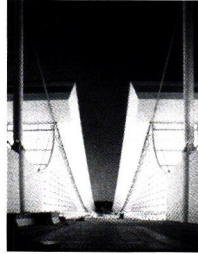
As for the private sector? "There's a lot of work to do there. And we definitely need folks like PNC to be cheerleaders and to speak out about what this means to employee retention and productivity and operating costs. We need more Gary Saulsons out there (from PNC Firstside, who is vice-president of the GBA board) experiencing these kind of results."

Results like that spur on momentum. "I'm optimistic we're going to keep growing this market, expanding it," says Flora. "It kind of comes down to the construction industry and the amount of construction we do." That kind of dependency is one reason they're concentrating on LEED certification of existing buildings.

SEVEN STEPS TO THE MAKING OF A SPECTACULAR & Green Convention Center

By Vivian Loftness, FAIA

Professor and Head, School of Architecture
Carnegie Mellon University



PHOTOS BY ROMÁN VIÑOLY

1. THE RIGHT RFQ AND GOALS STATEMENT: GREEN BUILDING ALLIANCE

(See appendix A for relevant excerpts from the Competition Brief/RFP)

■ The project was undertaken by the Pittsburgh Auditorium Authority (PAA) now the Sports & Exhibition Authority (SEA). The Green Building Alliance, an unprecedented regional catalyst in greening the Pittsburgh region, ensures leadership, client and professional awareness of the importance of a green convention center.

■ With funding from the Heinz Endowments, the Green Building Alliance (Rebecca Flora*) helps the Southwestern Pennsylvania Convention Center Design Commission to draft an RFQ for integrated design teams to achieve six major goals with collaborative design processes:

- 1) Excellent urban buildings;
- 2) Excellent convention centers from the exhibitor and visitor point of view;
- 3) Excellent image buildings from the air, car, pedestrian level;
- 4) Environmentally sustainable (green) buildings and building processes (this includes natural conditioning strategies (daylight and natural ventilation, outdoor spaces) energy conserving systems and controls, green materials, assemblies and delivery processes.
- 5) Advanced and visionary technological buildings (flexible, modular non embedded infrastructures) in relation to the convention of the future.
- 6) Excellent cost/quality management on projects

■ After interviewing a shortlist of the 25 RFQ respondents, 4 teams were selected for a competition phase, all leaders in 'high performance' design: HOK/ARQ architects; Cesar Pelli and Associates; SOM LLP; Rafael Vinoly Architects/HNTB.

2. THE RIGHT RFP AND COMPETITION PROCESS: THE HEINZ ENDOWMENTS

(See appendix B for relevant excerpts from the Competition Brief/RFP)

■ Funding for a competition phase was offered from local foundations, led by the Heinz Endowments, with a stipulation that green design and good urban design would be fully incorporated by the teams (Melisa Crawford*). In addition, a low interest loan of \$3 million was provided to offset the costs of green items that had reasonable payback and/or offered excellent public education value.

■ The Commonwealth of Pennsylvania, a national leader in green design at the state level, made its \$149 million match for the project dependent on meeting green design goals (Governor's Green Government Council, Catherine Brownlee*).

■ The convention center programmer was challenged to incorporate the six RFQ goals since the program was very antiquated in technology and environmental response.

■ Larry Whitzling was hired to establish a performance based jury (not a jury of big name architects) and four 4 jury consultants to reflect four of the six major goals.

■ Specified models and drawings were received from all four teams by the deadline. These made a beautiful show of innovation in the old Convention Center, which was later displayed at the Carnegie Museum.

■ One of four stood out as breathtaking in its integration - meeting the six goals with the highest level of systems integration for performance (Appendix B); a unanimous vote.

■ Contract successfully negotiated.

3. AN INTEGRATED DESIGN TEAM WITH A VISIONARY LEADER: RAFAEL VIÑOLY*

■ The clarity of vision and the integration of the team in creating the vision was unique and carried forward throughout the project through the very last decision, including:

- Clarity and functionality in the circulation plan, fully integrated with structure and infrastructure.
- A dramatic structure with daylight and mechanical integration.
- Innovative mechanical and electrical approaches, components and integrated systems.
- Urban responses to the waterfront and rooftop utilization; hotel as urban front door.
- No compromising on the quality of detailing related to green design goals.

4. THE RIGHT ENGINEERS: BURT HILL KOSAR RITTELMANN & ASSOCIATES

■ Green engineering was part of the vision from the outset - daylight, natural ventilation, evaporative cooling, aquifer cooling, high efficiency equipment, distributed controls

■ The lead engineer was committed to the marriage of natural conditioning and high technology (David Linamen*); never waffling on the viability and criticality of natural conditioning approaches.

■ Parametric Simulation and physical modeling teams were created to debate each material and assembly as to life cycle and performance as value engineering came into play.

5. THE RIGHT MEASURE OF SUCCESS: LEED™

- The client and design team was committed from the outset to LEED silver or gold, despite the challenges of applying LEED to the convention center building type.
- Leading green designers from around the U.S. joined a LEED design charrette during design development to establish tradeoffs, to focus simulation, physical modeling and consultants.
- Peer review of construction documents was introduced to ensure performance goals.
- GBA joined the commissioning team to continuously evaluate points and choices in final specification and construction (Gary Goodson*).
- Client states commitment to ongoing commissioning to ensure long term performance.

6. THE RIGHT CLIENT: SEA LEADERSHIP

- The SEA client established their commitment to innovative environmental quality from the beginning, with impact on design and implementation team, fundraising and marketing.
- SEA maintained their commitment to quality as budgets ran out and on-site compromises were requested, with a level of energy on site that recognized that the Convention Center was a major civic building and ours for a very long time (Steve Leeper*).

7. "TO BE TEEMING WITH VITALITY" THE CRITICAL NEXT STEPS (See appendix C.)

- The hotel has to be a front door to the Convention Center and teeming with vitality.
- The urban park on the roof and cascading terraces and waterfront has to be a landscaped recreational delight.
- The conventioners' continuous urban experience has to be orchestrated, from arrival to hotel to Center to dinner to entertainment to recreation to culture to departure.

APPENDIX A. RFQ excerpt DESIGN GOALS

To achieve a design that will meet the highest expressive, urban, operational, and technical standards, the design goals are:

- To create, through design excellence, a prominent public building with a vibrant and inspiring image.
- To create an urban building that is inviting to people and widely perceived as a major architectural destination.

- To alter the image of the existing convention center.
- To integrate public art into the design of the building.
- To create and celebrate a relationship between the building and the riverfront.
- To be responsive and respectful of the adjacent historic and cultural districts in the massing and detailing of the building.
- To encourage social interaction within the building, between the building and the city, and outside the building by the linking of internal activities to external public places, activities, and pedestrian circulation.
- To create a flexible and adaptive interior that can respond easily to the operational and technological needs of an evolving convention market.
- To utilize advanced technological systems for ease of upgrades and future adaptability.
- To utilize "green materials" and "green technology" in order to maximize long term resource efficiency and to minimize harmful environmental and human health impacts in both initial construction and operations/maintenance.
- To create a high quality, effective building environment for visitors, users, operators, and employees.
- To incorporate direct transportation connections between the Center and all modes of vehicular transport—boat, light rail, automobile, and bus.

APPENDIX B. Competition Brief/RFP excerpts

B.1 Response to the environment

From an environmental perspective, the Design Proposal should, where feasible:

- minimize the Center's impact on waste and water treatment facilities.
- feature visible natural and operational systems in the design (*options that have been suggested include living roofs, gray water treatment, the use of water features, movement of people and materials, interior planting, etc.*)
- optimize daylighting and natural ventilation.
- integrate natural and mechanical systems and rely on the building enclosure to minimize unwanted climatic influences.
- optimize energy consumption, materials, and use of resources.
- incorporate primary renewable systems, include geothermal, hydrothermal, solar, and photo voltaic energy.
- produce energy, and help purify the air and water.

- include the reuse of impacted site elements and account for salvaged building materials.

B.2 Building systems

From a building system standpoint, a collaborative process should be undertaken to establish a truly integrated design among core consultants of the Competitor's team. This should involve expertise in structural, heating and air conditioning, plumbing, networking, acoustical, lighting and enclosure quality. The Design Proposal may consider:

- HVAC solutions which focus on system quality and energy efficiency and effectiveness; that afford modularity/ accessibility and related flexibility in the system design, that focus on local comfort through distributed control, access to the natural environment and natural conditioning opportunities, that focus on redundant systems capitalizing on the splitting of ventilation and thermal conditioning and system integration; and that reflect these systems in the aesthetic part of the architectural solution.
- Structural solutions that maximize material efficiency and Sustainability, which provides a modular system layout which affords flexibility; which interfaces well with lighting, HVAC and telecommunication systems and which provides a well designed enclosure interface efficiently considering thermal and moisture control.
- Telecommunications and connectivity solutions that are modular, accessible and flexible; that offer data/voice/power/environmental; and video networking approaches; that incorporate floor based infrastructures and system integration.
- Lighting solutions which afford modularity, efficient zoning and the ability to be reconfigured, and which incorporate natural daylighting interfaces, while considering energy efficient and sustainable ideals.
- Acoustical solutions which consider adjacencies and which recognize volumes, dividers and materials and which incorporate advanced technology.
- Enclosure solutions that consider system massing and load management for lighting, air and cooling; which provide access to the natural environment, exterior views, places and walkways; which consider material selections which are translated into a progressive sustainable building delivery process from initial design through construction and operation and maintenance.
- Interior finish solutions which consider use, maintainability and durability, which can be easily adaptable to changing layouts and various functional demands, and which utilize healthy, resource conscious materials.

**Individuals within the institutions are as critical as the institutions for ensuring innovative green design.*

From the Firms

► **Celli-Flynn Brennan Turkall** has been commissioned to design the new St. Francis Central Catholic Elementary School for 600 pupils on a dramatic site high above Interstate 68 in Morgantown, WV. **CFBT** is also working for the Boy Scouts of America on an addition/renovation to the assembly hall at Camp Twin Echo and on a 150-seat expansion of The Commons at Washington & Jefferson College. The architecture of this dining expansion will remain rooted in the Collegiate-Gothic tradition.

The Toronto Waterfront Revitalization Corporation (TWRC) announced that **Urban Design Associates**, along with Toronto-based architect Joe Lobko, will be the consultant urban design team leading the development of London's West Donlands precinct plan. The 80-acre waterfront area is located between the mouth of the Don River, Parliament Street and south of King Street.

Urban Design Associates also has been selected to lead the master plan update for Birmingham Center City, Alabama. It will include an urban design master plan, development opportunities and strategies, market analysis and implementation recommendations.

DRS Architects, Inc. announced the recent completion of an executive conference room at Slippery Rock State University (SRU). The conference room was constructed in historic Old Main by in-house SRU personnel and included state-of-the-art audio/visual capabilities and an adjacent kitchen. The president and other SRU administrators will use the room for board meetings and other executive functions.

DRS Architects, Inc. also announced that construction has begun on the Butler Township municipal building, a \$3.4 million dollar facility. Principal-in-charge is **Greg Madej, AIA**.

Phil Hundley, AIA, principal at **DRS Architects, Inc.**, **Jim Platt, AIA**, also of **DRS** and **Peter Greer, AIA**, have begun working with Oglebay Park on the design for a 40,000 sf addition to Wilson Lodge.

Ligo Architects continues to provide pro bono consultation services to store/building owners for the \$4,500,000 renovation program of the original business district of Slippery Rock initiated last spring. The firm is assisting owners with recommendations for brick cleaning, paint color selections, complete façade face lifts, signage and lighting. To date 15 façade renovations have been provided.

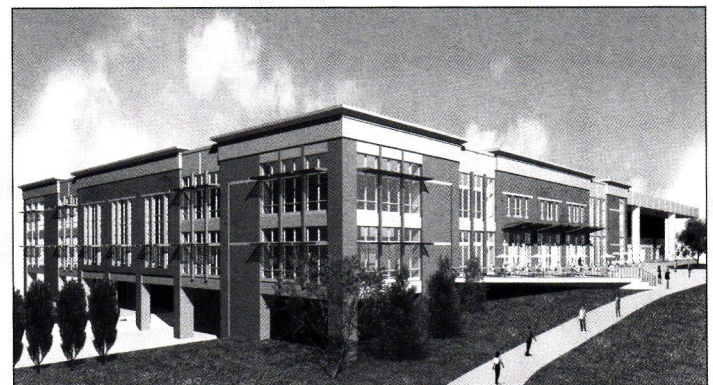
JSA Architecture Planning Engineering Interior Design announces that the new dining hall facility for the YMCA Deer Valley camp located in Somerset County this month. The new 11,000 sf dining hall will provide seating for approximately 300 people and will also house the gift shop and staff offices. **JSA** project manager is **Dwayne Mihalow, Assoc. AIA**. General contractor is Burchick Construction Company, Inc.

JSA recently completed the expansion and renovation to the Louis Anthony Jewelers store at the Norman Center II Shopping Center in Bethel Park, PA. **JSA** project manager was **Dwayne Mihalow, Assoc. AIA**. General contractor was Aidan Contracting.

WTW Architects has been selected to complete an interior renovation design project for The Department of Veteran's Affairs' facility (below) on New Castle Road in Butler Township. The project will consolidate a number of clinical outpatient specialty services in one location, making the facility more patient-friendly and comfortable for patients while improving services. Principal-in-charge is **Bryant Robey, AIA**.



WTW Architects has also been selected to complete a major renovation and redesign for the University Center (below) at Western Kentucky University in Bowling Green, Kentucky in cooperation with Taylor Whitney of Lexington. **WTW** is also an active member in the team developing programming for a phase two \$7 million project that will address future building needs for the center. Construction should begin next summer and be completed by the fall of 2005.



Business Briefs

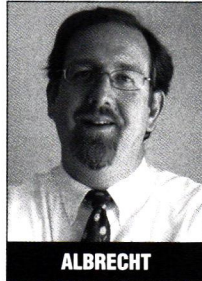
→ **Tony Albrecht, AIA** has opened his own firm. His practice will focus on residential and commercial architecture and sustainable design.

L. Robert Kimball & Associates has named **Christopher R. Haupt, AIA**, vice president and managing principal of the firm's architecture and engineering office in downtown Pittsburgh. Mr. Haupt brings more than 15 years of award-winning design and project management leadership experience on some of the region's most high profile and complex projects including PNC Park, UPMC Sports Performance Complex and PNC Firstside Center.

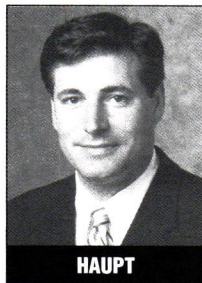
Jennifer Martella, AIA has joined **Urban Design Associates** as its director of marketing and operations. In her new position, Ms. Martella will draw upon her prior experience as the founder of Tennessee's second woman-owned architectural firm.

Maryanne C. Stone is the newest addition to the professional staff at **WTW Architects** in Pittsburgh. Stone is a member of **WTW's** design team for the Pennsylvania State University's new Blue Band/Hazmat Building on the main campus in University Park.

Celli-Flynn Brennan Turkall is pleased to welcome Paul Kane as a project architect.



ALBRECHT



HAUPT



MARTELLA



STONE

Kudos

→ **Apostolou Associates, Inc.** has been awarded a Post-Secondary Citation in the 2003 American School & University Architectural Portfolio competition for University of Pittsburgh, Peterson Events Center.

As a member of the Learning Spaces Advisory Committee of the Network for Information Technology in Liberal Education (NITLE), **Thomas Celli, AIA** recently addressed 25 elite liberal arts colleges at DePauw University. NITLE is a national organization founded by librarians and information technology directors to act as a catalyst for innovation and collaboration among national liberal arts colleges and universities.

Agnew Moyer Smith Inc. is currently being featured in a series of Wall Street Journal ads by Steelcase Inc. The ads announce the measurable improvements in innovation, communication and work process that they were able to achieve through the design of their new state-of-the-art office (featured in the November, 2003 *Columns*). – *By Maya Haptas*

PROJECTS OF MERIT

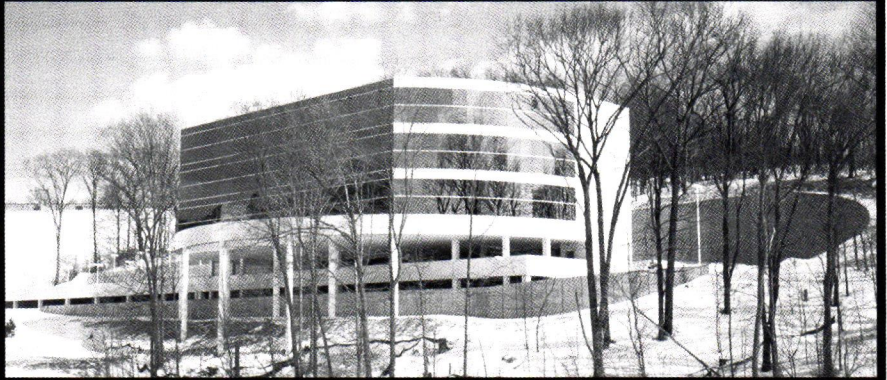
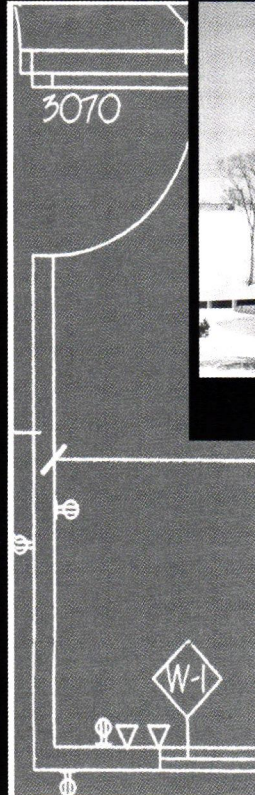


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BRIDGES pbt

The American States Insurance Building, which is now occupied by Civil & Environmental Consultants, is located in Robinson Township, Pennsylvania. It sits against a steep hillside and is almost completely made of glass. The 125,000 square foot facility is constructed of structural steel framing with a glass curtain wall exterior and includes three floors of above ground office space and two lower levels for a 200 space parking garage. This project won both the local ABC Chapter "Award of Excellence" and received the National "Excellence in Construction Award" as one of the Best Built Construction projects in the United States.

Architect: Michael S. Gouloff / Ft. Wayne, IN



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C A L E N D A R

AIA ACTIVITIES

JANUARY 13, TUESDAY

AIA Pittsburgh Board Meeting. 5 p.m. at the Chapter office. All members are welcome 412-471-9548.

FEBRUARY 10, TUESDAY

AIA Pittsburgh Board Meeting. 5 p.m. at the Chapter office. All members are welcome 412-471-9548.

AROUND TOWN

JANUARY 13, TUESDAY

CSI Meeting. A representative from Soffer Organization will present an overview of the firm's developments on Pittsburgh's Southside. Holiday Inn, Greentree. Social time, 6 p.m., dinner at 6:30 p.m. Cost is \$25. Please RSVP to Deborah Merges at dmerg@comcast.net or 412-855-0928 by January 9th.

JANUARY 21, WEDNESDAY

SMPS Workshop. "Marketing Action Plan Workshop" from 8 a.m. – 12 p.m. at the Rivers Club, Oxford Center. Larry Silver of Contractor Marketing, Inc. will lead a hands-on workshop that guides participants through a real-life planning methodology. The cost is \$125/members; \$150/non-members. Please contact Mary Ann Berg at mberg@mascaroconst.com for further information.

FEBRUARY 11, WEDNESDAY

SDA Members Meeting. Please join SDA at their members meeting from 12-1:30 p.m. at the Engineers Club. Cost is \$17/members, \$19.50/non-members. Please RSVP with Cheryl Marlatt at 412-281-1337.

FEBRUARY 11, WEDNESDAY

CSI Meeting. CSI presents "Why Mold, Why Now?" To be presented by Dr. Joseph Lstiburek, PhD, a forensic engineer who investigates building failures. Holiday Inn, Greentree. Social time, 6 p.m., dinner at 6:30 p.m.. Cost is \$25. Please RSVP to Deborah Merges at dmerg@comcast.net or 412-855-0928 by February 6th.

BUILDING BLOCKS

JANUARY 22, THURSDAY

Law of Easements: Legal Issues and Practical Considerations In Pennsylvania

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Ramada Plaza Suites & Conference Center
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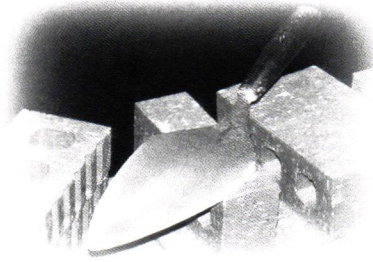
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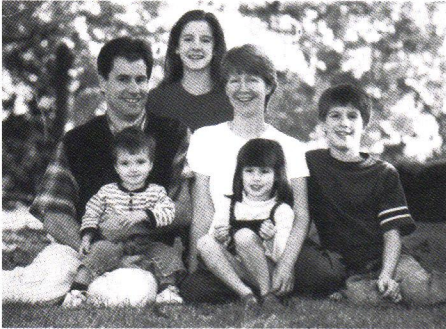
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FAMILY: Married to Lori with children Becca, Ben, Sarah, Sam (no pets, my hands are full).

YEARS IN PRACTICE: 21, the same amount of time I first set foot in Pittsburgh with my U-Haul truck.

EDUCATION: Master's of Architecture, North Carolina State University; Bachelor's of Environmental Design, Miami University; Architectural Association, London, England.

PROJECT WITH SPECIAL MEANING: My Master's thesis: "Duality in Architectural Form." Even after all these years, it signals a moment that allowed me to understand that architecture can be shaped to personal will. There are many elements of that thesis that appear in our work, and continue to allow me to interpret the built environment around me. The thesis was also the time in which the method of describing the architectural design process was crystallized through the use of a design sketchbook, another element that our firm uses to this day.

WHEN I DECIDED TO BE AN ARCHITECT: As a high school senior I spent a weekend visiting a friend at Miami University who was studying architecture. I may have confused the parties with the curriculum.

IF I HADN'T BEEN AN ARCHITECT: I would have liked to be a political cartoonist because it blends my affection for sketching with my interest in world events.

A BUILDING I VISITED THAT HAD A TREMENDOUS IMPACT ON ME WAS: Hans Hollein's Municipal Museum in Mochengladbach, Austria was a fascinating example to me of a building that serves as a transition between two distinct environments, a park and an urban street. The building begins as a series of undulating brick retaining walls, becomes a museum, and culminates in a modernist glass tower.

MY FAVORITE THING ABOUT BEING AN ARCHITECT: Revisiting projects and watching people do unexpected things.

BEST PART OF MY JOB AND WHY: Continuing to learn in a collaborative environment.

I COMMUNICATE BEST: When actively listening.

ADVICE FOR ARCHITECTS: Never, ever, compromise your personal values.

WHAT I LIKE TO DO IN MY SPARE TIME: Have fun with family and friends in interesting settings, swim during my lunch hour, take on projects that I can't finish (I have lots of those.)

I WOULD LIKE TO BE REMEMBERED FOR: Making the world a better place.

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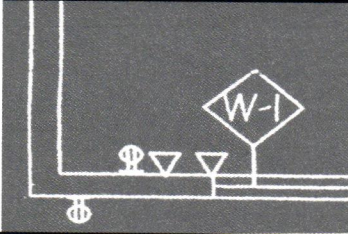
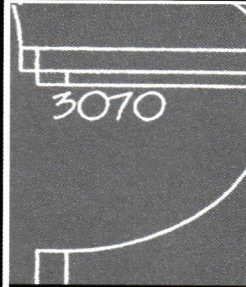


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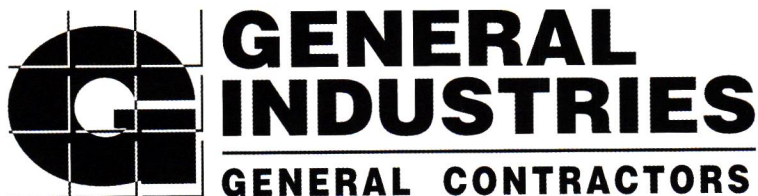
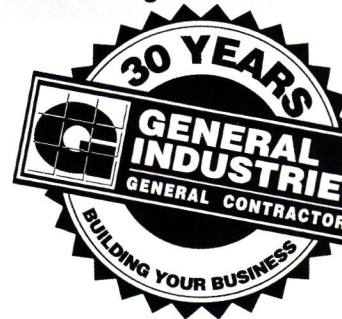
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