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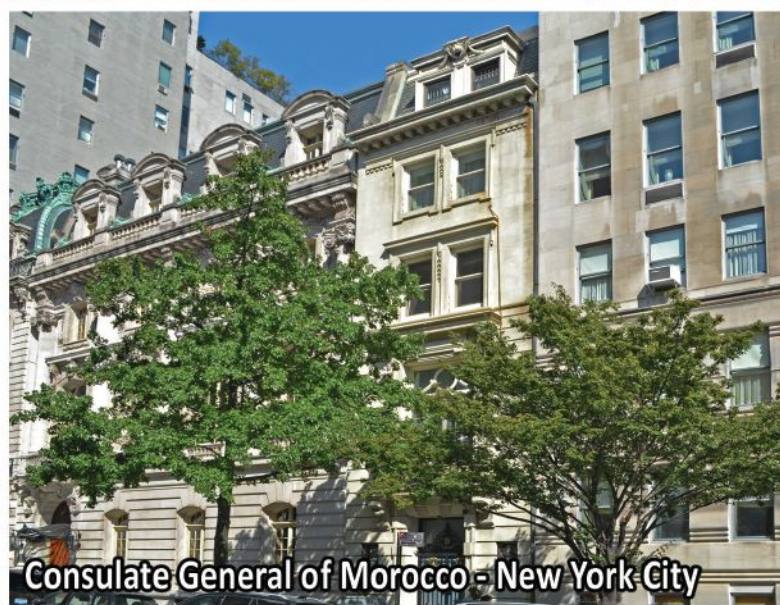
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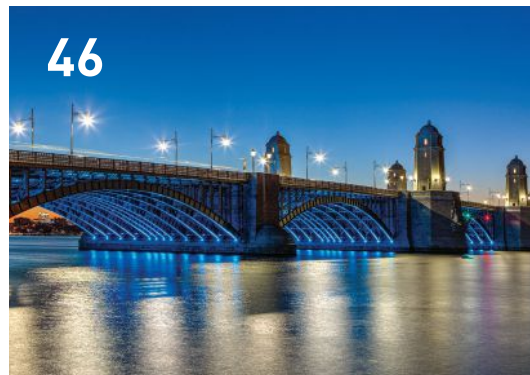
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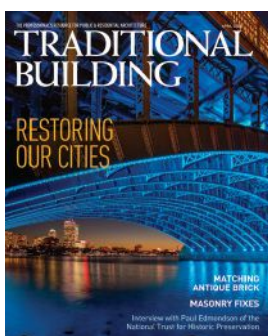
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The restoration of the Longfellow Bridge.
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Traditional Building (ISSN # 0898-0284) is published February, April, May, June, August, September, October and December by Active Interest Media, 5720 Flatiron Parkway, Boulder, CO 80301.

Subscription rate to professionals in architecture, interior design, construction and landscape design in the U.S. and possessions: \$48/yr. (8 issues). Not available outside the U.S. postal system.

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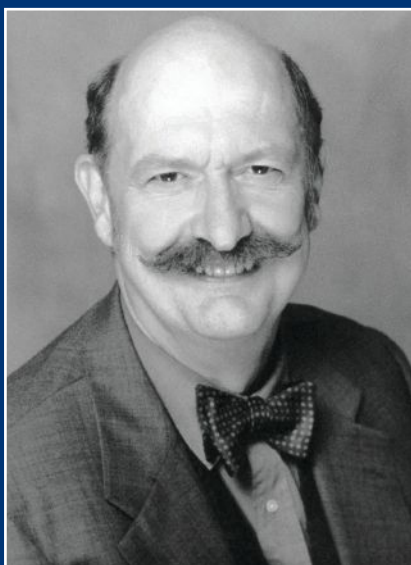
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In addition to our seminars on traditional building materials and methods, we will host a behind-the-scenes architectural tour of George Washington's Mount Vernon.



CLEM LABINE
Founder and Editor Emeritus,
Traditional Building magazine

Clem Labine to Receive Henry Hope Reed Award

The Henry Hope Reed Award is given in conjunction with the Driehaus Prize to an individual working outside the practice of architecture who has supported the cultivation of the traditional city, its architecture, and art through writing, planning, or promotion.

Clem Labine, the publisher and founder of *Traditional Building*, *Period Homes*, and *Old House Journal* and creator of the prestigious Palladio Awards, will receive the 2020 Henry Hope Reed Award for his vital role in creating and maintaining a national network of architects, academics, and artisans devoted to the promotion of traditional architecture.

"Clem Labine created a vibrant forum for ideas that have undoubtedly changed the course of contemporary classicism in America," said Driehaus. "His vision allowed strangers


to become collaborators, leading to a true professional community."

The jury citation reads, "(Labine's) audience reach transcends the academic, professional, and construction industries and dignifies all the disciplines that produce beauty in the built environment. Labine's work has encouraged an entire industry to thrive, making information and connections available to broad audiences, and ensuring that the practice of traditional and classical architecture could grow beyond the regional to the broad constituency it enjoys today."

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A Moment with Paul Edmondson

We sit down with president & CEO of the National Trust for Historic Preservation.



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PAUL EDMONDSON

1 How did your professional career begin? How have your roles shaped your perspective? After graduating college, I worked for several years in Upstate New York as an archaeologist. Most of that work was to fulfill the requirements of federal and state environmental and preservation laws—laws that were

intended to ensure that projects supported with federal or state funding did not damage historic or archaeological resources. That intersection of law and history fascinated me, and after a while I decided to pursue the legal side. My goal was somehow to combine my interest in preservation with my interest in law, but it was totally a long shot—I didn't know any preservation lawyers, and the field of preservation law was really in its infancy. Thirty-plus years later, I consider myself very lucky to have spent most of my professional career as an advocate for historic preservation.

2 What brought about a passion for preservation? Why do you believe it's important? My passion for preservation really began as a passion for history. I'm one of those people who firmly believes that we can't tell where we are going without understanding the path that others have taken before us. And nothing makes history more real than standing in the place where history happened,

whether it's a Civil War battlefield or the corner of Haight and Ashbury. Preserving historic places helps us to define our identity, at the personal level, at the community level, and at the national level. These places resonate with the past, good and bad, and can inform and inspire the future. They can help us celebrate our successes, and also illuminate our mistakes. But the more I learned about the preservation movement, the more I understood that preservation has many other benefits at the community level. These include environmental sustainability, economic vitality, and simply the benefit of defining community character in a society that finds it easy to fall into a pattern of favoring the new and nondescript.

3 Are there certain types of places you feel are more worthy of preservation than others? Say homes vs. public buildings or vice-versa? Each has its place. Iconic landmarks serve as statements that speak to the higher

aspirations of our society, or define major events or movements in history, or that represent important architectural achievements. But the places we live, work, learn, play, and pray—the more ordinary places—are important too, because they represent what we value in our daily lives, or tell individual stories that reflect our history as a society. There are challenges in preserving each type of resource. Many iconic landmarks are threatened because of disinvestment, or changing societal norms, or because their original uses are no longer viable; preserving them as monuments or museums is rarely the answer, and so the challenge is to find opportunities to repurpose and reuse those places in a way that respects their history but gives them economic viability. And historic neighborhoods are living, breathing places. The goal of preservation isn't to stop change, but to manage change in a way that respects and celebrates the historic character and distinctiveness of our communities.

National Trust for Historic Preservation photos unless otherwise noted



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LITTLE HAVANA
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Named to the list of America's 11 Most Endangered Historic Places and also later designated a National Treasure.

Steven Brooke Studios photo

oriented preservation. We also take direct action to save historic sites through our easement program that protects commercial and residential properties while allowing them to continue to evolve and remain in active use.

This combination of stewardship and advocacy is a powerful one, and we intend not only to continue this work, but also to increase its impact across all the incredible historic places where we are involved.

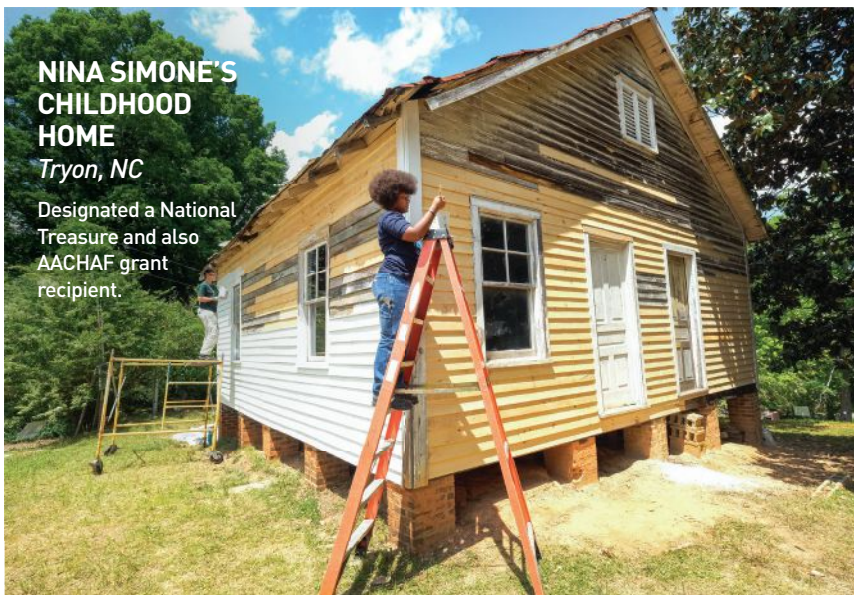
Our second strategic priority is telling the full American story. What we choose to preserve reflects our current values, and for too long the places that represent the history of minorities and women in this country have not been well-recognized, and their stories have not been properly told and celebrated.

We are working to change that, and will continue to invest in programs like our African American Cultural Heritage Action Fund, as well as our newest initiative, a Campaign for Where Women Made History. Both of these programs are bringing important new investments in areas that have been underrepresented

in the way that we tell the history of this country. We are also focused on telling the full American story at our own National Trust Historic Sites, working to address their complex histories and sharing that process with the public and our colleagues along the way. Through programs like our National Treasures and 11 Most Endangered Historic Places campaigns, we also are telling and celebrating the stories of Latino communities, Asian American communities, as well as the struggle to establish LGBTQ rights.

Our third strategic priority is to build stronger communities. Main Street America, for example, a program created by the National Trust in 1984, is thriving today by helping communities recognize and celebrate the cultural and economic value of historic downtowns. On the policy side, we have worked closely with local partners to improve preservation planning in communities as different as Philadelphia and Miami's Little Havana. We are also working hard to improve access to incentives like tax credits for preservation at both the federal and state levels, since investments in anchor preservation projects can spark transformational revitalization across communities. We don't just talk about this work; each year we invest millions of dollars in grant support for preservation projects, and we connect investors with developers to support the use of rehabilitation tax credits to help underwrite preservation projects through our National Trust Community Investment Corporation.

The fourth strategic priority is investing in historic preservation's future



NINA SIMONE'S CHILDHOOD HOME
Tryon, NC

Designated a National Treasure and also AACHAF grant recipient.

Nancy Pierce photo

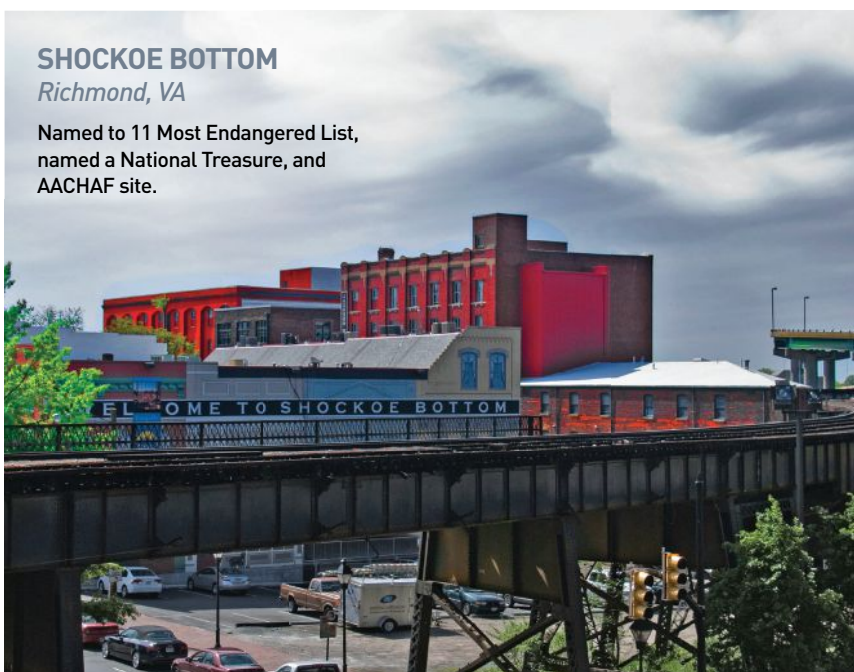
4 Can you tell us what plans are on the horizon for the National Trust for Historic Preservation? The National Trust is currently pursuing four major strategic priorities.

The first of these priorities may seem obvious, since it is the core of our mission: to save historic sites. We are doing that in two interrelated areas of work that reflect the mission of the organization across its 70 years of existence—stewardship and advocacy.

Our stewardship is grounded in our 28 National Trust Historic Sites, which we began acquiring in 1952, and where we care for complex cultural resources—historic buildings, landscapes, and collections—while also developing relevant and inclusive uses and programs for them. We do this work with a host of remarkable partners and we do it with the shared goal of ensuring that these remarkable places are vital community assets for the long term. We also support saving historic sites through our grant programs and technical assistance provided by our field offices, as well as initiatives that highlight and support these special places, such as our Historic Artists Homes and Studios network or our Distinctive Destinations program.

The other way in which we save historic sites is by taking direct action through our advocacy campaigns, such as our National Treasures program, that bring to bear the full range of our expertise in legal, policy, media, and other forms of public engagement. These campaigns take many forms but they are always opportunities to model solution-

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POPE-LEIGHEY HOUSE
Alexandria, VA

A National Trust Historic Site, this Usonian house was developed by Frank Lloyd Wright as a means of providing affordable housing for people of moderate means.

as a field, and we are doing that by building stronger connections with our preservation partners across the country, and improving our training, convenings, and educational programs for practitioners. Our annual PastForward conference draws people from around the country who are passionate about preservation and connects them to each other and to the broader movement. Right now, we are taking a fresh look at our approach to all our trainings and content—and how they can best serve the entire field—and I'm excited to see where that leads us. Ultimately, preservation is best done in partnership with local advocates, community leaders, and ordinary citizens, and we intend to strengthen those partnerships going forward.

5 What are your biggest challenges? Perhaps the biggest challenge is to address the broad misconceptions about our work, and particularly the idea that preservation means freezing historic places, as if we could suspend them in amber. If historic places are not considered to be living assets in the communities in which they are located, they will be at risk—and to be assets they must be economically viable. Often people don't realize how much these places are part of their communities until they are threatened or even lost. Part of our work is to help people see and appreciate the distinctive old places all around them, and then to find ways to keep them as useful parts of community life. Sometimes that means maintaining historic

uses, but often that means adaptive reuse. Both require creativity, flexibility and adaptability to realize the full potential of these important places for people today.

6 What is inspiring you right now? Probably the most inspiring work that we are doing today is our effort to recognize and support historic places associated with African American history. There are a tremendous number of historic sites associated with African American history, but many of these places have been ignored, and in many cases neglected. Their stories deserve to be told. With support from a number of major foundations we are well on our way to our \$25 million fundraising goal

for this initiative, through which we are providing grants, technical assistance, and direct support. The need is great. For example, we just closed applications for our latest round of about \$1.6 million in grants, and we received 540 applications for projects representing almost \$58 million in funding needs. We can only serve a small fraction of this need.

7 How do we keep preservation relevant in today's world? It is not so much a matter of keeping preservation relevant, but articulating how it is relevant in today's world. In fact, preservation often has an essential role to play in the hottest topics in American society. What could be more relevant than our work through the African American Cultural Heritage Action Fund to tell the full story of America?

And we shouldn't be defensive about wanting to preserve our history and the character of our communities: we have seen first-hand how preservation provides a host of benefits, among other things serving as a catalyst for revitalization, economic development, tourism, and sustainability. The National Trust's role—as both a stewardship organization and an advocacy organization—is to help define and demonstrate those benefits, and in the months to come we will be very focused on doing so.

8 How will your expertise as a lawyer with a depth of experience in historic preservation shape your leadership at the Trust? As a lawyer, I believe in the power of advocacy—of standing up and shouting “no!” when the bulldozers are on the threshold. But through my experience as the National Trust's general counsel, I have always worked to find common ground. Litigation, for example, is an important tool, but it should always be a last resort. Coming up with the creative compromise has been an essential part of the success that we have had. In many cases the forces that threaten historic places can be redirected to less sensitive locations, or demolition can be avoided by identifying incentives for preservation. But often alternatives won't be given a chance without the tool of strong public advocacy.

9 Do you see a backlash against preservation in the current political environment—roll backs on local preservation commissions for example? How will you address such challenges? Overall, historic preservation has strong support across the political spectrum; we like to think of our movement as “purple,” not red or blue. At the same time, of course, opposition does exist—particularly around the issue of local preservation

controls, even though local historic districts represent only a small portion of the overall building stock in most communities. Arguments made in opposition to local preservation laws are often based on isolated anecdotes and generally ignore the broader benefits that such laws provide, including stabilized property values, walkability, diversity of business uses, community cohesiveness, and environmental sustainability, among others. Again, it is important that we articulate those benefits.

10 How is the drive for net zero and other energy conservation matters shaping the role of historic preservation today? As far as energy conservation goes, historic preservation is one of the most sustainable practices possible: the high carbon footprint of new construction, even of the most energy-efficient buildings, far exceeds the sustainable practice of preserving and adaptively using buildings that were constructed years ago. And that doesn't even count the enormous amounts of waste materials that go into landfills when older buildings are demolished and replaced with new buildings. The saying that "the greenest building is the one already built" is absolutely true. In addition, many historic buildings already come with sustainable building features designed to keep their original occupants cool in hot summers and warm in cold winters.

At the same time, preservationists are as sensitive to the climate crisis as anyone else, and we are working to incorporate green practices in the management of historic sites. Building rehab projects often include such features as solar panels, green roofs, and sustainable landscape features that lessen water use or minimize runoff. At the National Trust, we have initiated a project we are calling "Sustainable Stewardship," through which we will identify and implement sustainable practices within our portfolio of 28 National Trust Historic Sites, as models for other historic sites across the country.

11 Where do cultural diversity and historic preservation intersect? Cultural diversity and preservation intersect at all levels. Part of our responsibility as a national organization is to ensure that the work we are engaged in as preservationists reflects the diversity of America, which is why one of the National Trust's priorities is to tell the full American story. We also have a responsibility to ensure that the field itself reflects the diversity of America, which is why the National Trust has a number of paid internship programs and



ACOMA SKY CITY New Mexico

A National Trust Historic Site that is owned and operated by the Pueblo of Acoma, the adobe houses, plazas, and walkways on the 367-foot tall mesa have been used for nearly one thousand years, making Acoma Sky City the oldest continuously inhabited community in the United States.



THIS PAGE: Douglas Merriam photos

scholarship funds which are helping to make the broad field of preservation more inclusive of people with a variety of different backgrounds. Programs such as our HOPE Crew are engaging young people, including participants from Job Corps training programs and architecture students at Historically Black Colleges and Universities, with Hands-On-Preservation-Experiences, while our Mildred Colodny Scholarship program helps to make graduate studies in a preservation-related area of study more affordable.

12 Are there specific strategies the Trust is undertaking to attract corporate or foundation support for its work. The most effective strategy to

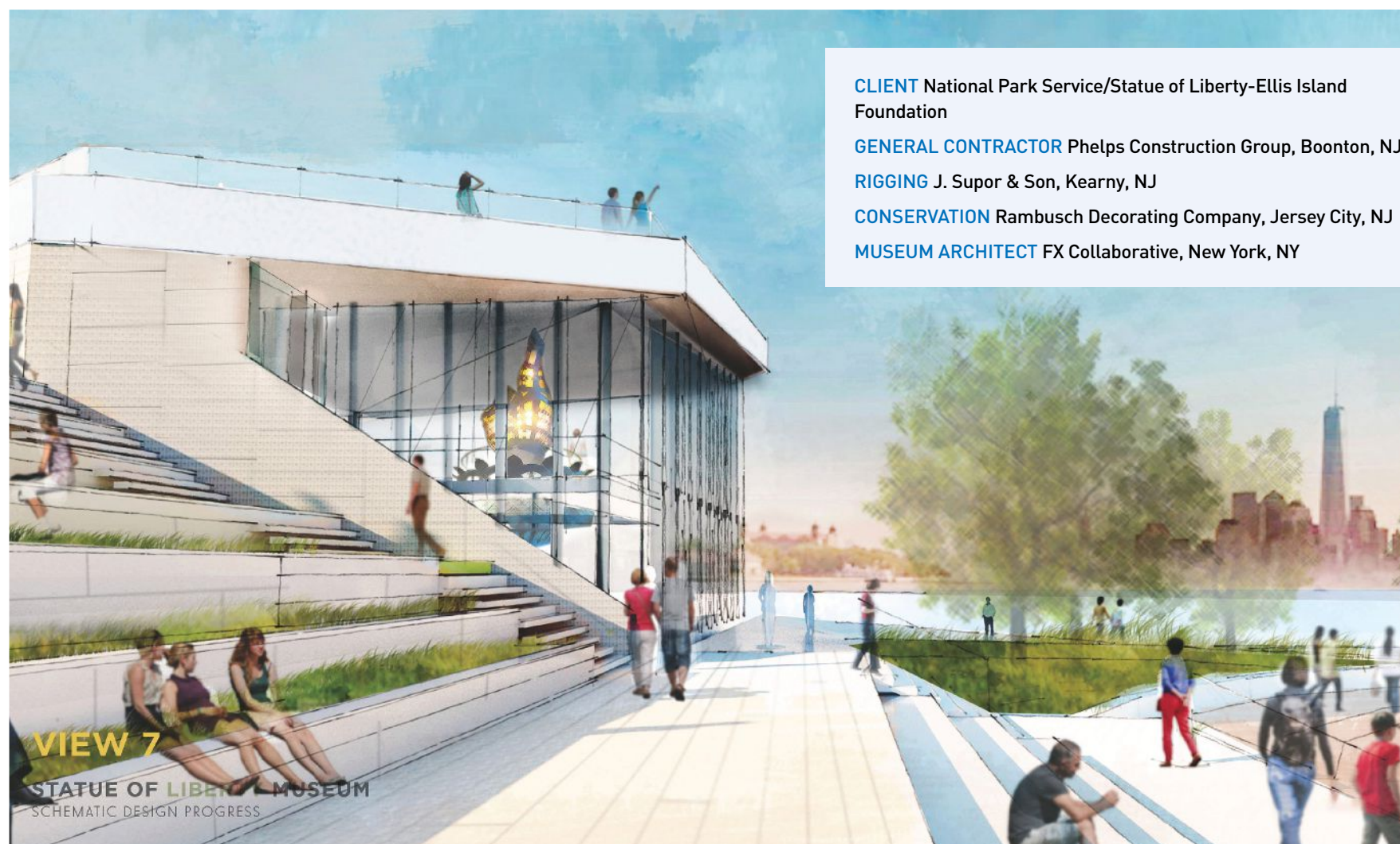
attract corporate and foundation support—which is critical to our work—is to combine impactful, ambitious work with true partnerships around issues and values that we hold in common. Our longstanding partnership with the American Express Foundation, for example, reflects our common appreciation of cultural heritage as a valuable resource that benefits all Americans and together we've given away millions of dollars in funds to great preservation projects in communities all around the country and demonstrated the power of social media engagement with preservation. Our African American Cultural Heritage Action Fund is the largest fundraising campaign every undertaken on behalf of these resources and it has attracted strong

support from foundations that recognize and celebrate diversity as a fundamental value in our society, including the Ford Foundation, the Andrew Mellon Foundation, the JPB Foundation, and other major funders. Our National Fund for Sacred Places just received its second \$10 million grant from the Lilly Endowment so we can continue to provide critical support for historic religious properties across the country through capital grants and technical assistance that are combined with capacity-building and development training from our long-time allies at Partners for Sacred Places.

Our relationships with these and other funders and partners reflect an alignment of our interests, with the public as the real beneficiary.

Relamping Lady Liberty

The original torch shines again after a meticulous conservation.



CLIENT National Park Service/Statue of Liberty-Ellis Island Foundation

GENERAL CONTRACTOR Phelps Construction Group, Boonton, NJ

RIGGING J. Supor & Son, Kearny, NJ

CONSERVATION Rambusch Decorating Company, Jersey City, NJ

MUSEUM ARCHITECT FX Collaborative, New York, NY

The Statue of Liberty enjoyed a comprehensive renovation to commemorate its centennial in 1986, but it took until 2019 for the iconic torch to be blessed with its own renaissance. “At the time of the centennial renovation, the original torch was replaced with a replica of sculptor Frederic Auguste Bartholdi’s intent,” explains Martin Rambusch of Rambusch Decorating Company of Jersey City, New Jersey, “while the original moved to a museum in the pedestal underneath the Statue.” Recently, as part of \$100 million project that includes building the new Statue of Liberty Museum, the original torch has now been cleaned and conserved as the feature of the museum’s Inspiration Gallery right there on Liberty Island.

Just relocating the 16-ft tall, 3,600

lb. torch out of the pedestal became a significant project on its own. “This is an important artifact and we agreed that, prior to any move, the torch required a condition survey. So we at Rambusch, along with our colleagues and associates, Phelps Construction and J. Supor & Son, mocked up the lighting and surveyed every single piece of glass as to its color, texture, and condition, as well as the metal, and how those pieces should be addressed in their new environment.”

“It became very clear that, although wonderful, this was an old object that has lived in the ever-changing, harsh environment of New York Harbor for a long period and been radically altered three times.” Indeed, the torch and hand were the first sections to arrive in the U.S., and displayed at the 1876 Centen-

nial Exhibition in Philadelphia as well as later in Manhattan. Initially, flame was a closed copper shell (with two flame tips relocated in the 1880s) but just before the 1886 dedication, the U.S. Lighthouse Board cut a double row of holes in the torch and placed lights inside, later expanded with windows in 1892. “Until a nearby munitions explosion impacted the torch in 1916, visitors had access to the balcony around the flame,” reports Rambusch. Shortly thereafter, the torch was redesigned by Gutzon Borglum, the sculptor of Mount Rushmore, to add 600 various pieces of tinted yellow cathedral glass.

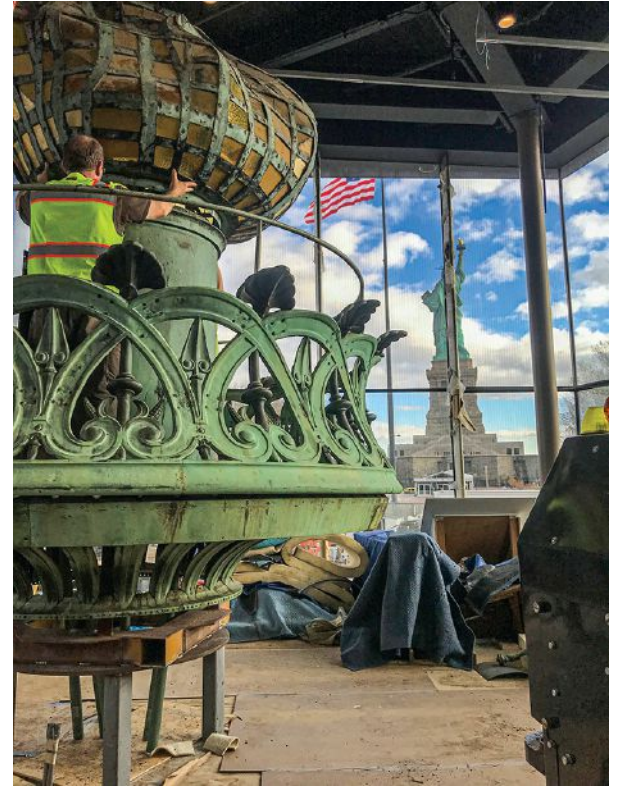
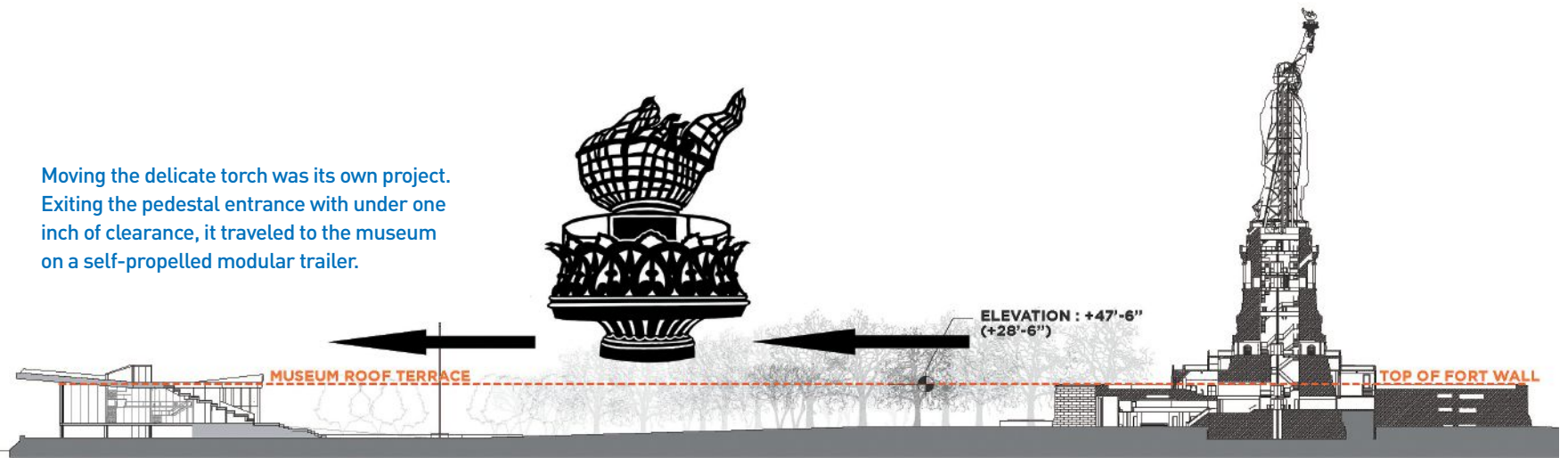
Once the torch was in the new space, Rambusch and team began to clean, stabilize, and conserve the glass and metal finishes, and then install a new, flexible

lighting system.

Over time, pieces of glass had cracked or failed and been replaced. “Some glass is original and slumped to shape; in other cases, subject to location on the flame, the glass is less dynamic. They’re all in the range of yellow but, depending upon the fabrication, there are slight differences in texture and tonalities. There was a program in the 1950s to repair and waterproof, and while those men did the very best they could, sometimes the replacement glass isn’t a perfect match.”

The metalwork of the flame, however, is all copper in two different forms. “The lower portion, which was changed multiple times, is an assemblage of shaped and formed copper strapping. The upper portion is closer to shaped

Moving the delicate torch was its own project. Exiting the pedestal entrance with under one inch of clearance, it traveled to the museum on a self-propelled modular trailer.



CLOCKWISE FROM ABOVE Ahead of the glass walls, the torch was craned into the museum in three pieces.

Once reassembled in the Inspiration Gallery, the torch was stabilized and cleaned to present a consistent surface.

The walkway, closed to the public since the 1910s, is all copper like the rest of the torch.

The flame dates to the 1916 redesign with hundreds of amber glass pieces in a repousse copper shell.

copper that has been cut out to accommodate the glass.” Like the rest of the Statue, the shaped copper is repousse: sheets heated and formed with wooden hammers. “Replaced parts sometimes used fasteners that were not copper, so there were some dissimilar metal issues, but we didn’t feel they put the torch in jeopardy structurally.”

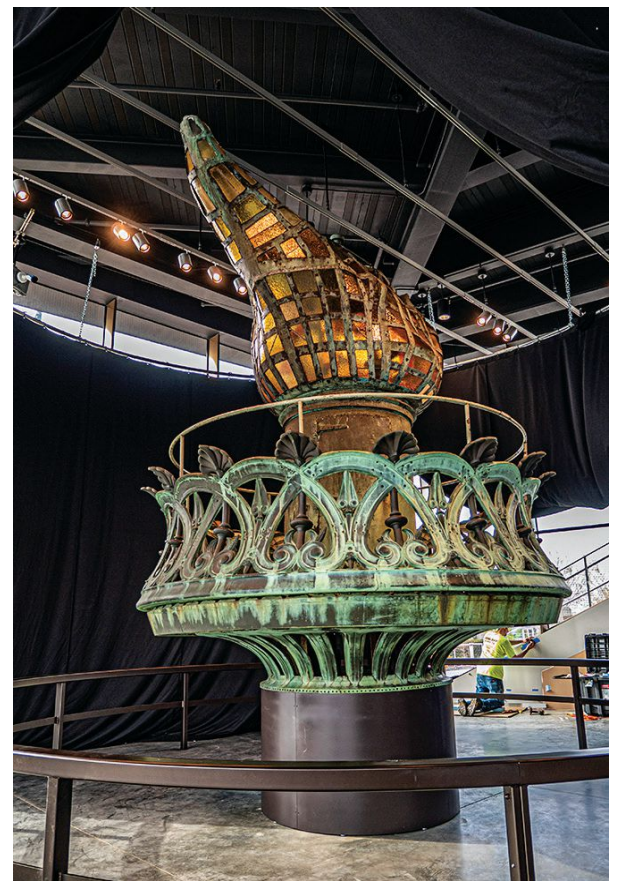
The goal was not to have the torch look brand-new, he says. “It was to be a century-plus-old artifact that tells a story, so we didn’t try to clean or conserve it back to perfection, but to a weathered, patina-ed surface.” They used de-ionized water (water purified of all charged particles so that it readily dissolves or leaches any salts or ions), and other surfactants where appropriate.

“We found a variety of different conditions—some oils, some tar, some dirt—so in all cases we first treated with de-ionized water, and then ascertained what the stain was and how it would be best cleaned and/or stabilized. At all times we took a very conservative approach—that is, when in doubt leave dirt instead of try to get the surface clean.”

The lighting itself is all state-of-the-art LEDs moving through a Lutron dimming system that allows for wide flexibility. “The client—the National Park Service, supported by the Statue of Liberty Ellis Island Foundation (SOLEIF)—was not sure what they wanted for a final color, so we gave them the most opportunity.” The flexible lighting system controls

volume, density, and hue, and can produce an infinite variety of color. “It’s as simple or sophisticated as desired; they can have one setting or multiple settings. The lights can only turn on or off, or they can move through a sequence of low, high, low, changing color densities throughout the day.”

Preparation, estimating, and planning the move consumed many months in advance of the two weeks of actual site work for relocating the torch. Cleaning, stabilization, and conservation on-site took another several weeks before the final cleaning and rededication in May 2019. “You have to be careful what you’re doing,” observes Rambusch, “because this is a truly unique, once-in-a-lifetime project.”





Health Hazards

Assessing and abating dangerous materials.

Buildings of any age may contain hazardous materials. Many of them were once “wonder materials”—but ultimately ended up as long-term human health hazards.

Identifying hazardous materials in advance of construction prevents against accidental exposure, for both building occupants and workers, as well as assists in managing project costs. Hazardous materials include: asbestos, lead, polychlorinated biphenyls (PCBs), chlorofluorocarbons (CFCs), heavy metals, and, occasionally, radioactivity. For the purposes of this article, hazardous materials that are not part of building construction (such as laboratory chemicals) will not be covered.

Architects’ liability insurance does not cover hazardous materials abatement. It is important for anyone undertaking a construction project to use a qualified consultant to perform a hazardous materials survey prior to renovation or construction. The Environmental Protection Agency’s (EPA) asbestos regulations requires this, based on 40

CFR 61-National Emissions Standards for Hazardous Air Pollutants (NESHAP). While many states and cities follow federal guidelines, it is important to check local and state codes for any modifications, which are typically more stringent.

Once the hazards are properly identified, the method for management or removal can be determined and completed prior to construction.

ASBESTOS

Used for its fire-proof qualities, insulating qualities, strength, and resiliency, asbestos was prevalent in many construction materials prior to 1973, when asbestos-containing spray-on fireproofing was mostly banned. In 1989, the EPA took steps to ban all asbestos-containing materials but was met with a lawsuit preventing a full ban. Some products can still be manufactured if they contain less than one percent asbestos, but continued efforts are being made at the federal level to expand the ban.

Asbestos can be friable (easily crumbled to powder by hand pressure

when dry) and non-friable. These definitions are in federal regulations; however, friability of a material is not always the cause for concern as rarely are renovations done by “hand pressure.” Friable materials include pipe wrap, vermiculite insulation within concrete blocks, and spray-on fireproofing. Non-friable include floor tiles, sheet flooring, underlayment, mastics and adhesives, ceiling tiles, dry-wall, roofing, and sealants. While removal of non-friable asbestos may pose less risk, both versions require trained, licensed contractors to execute the work plus potential air monitoring and post-abatement air clearance testing.

Identification of these materials is not simple and visual observation is not enough. Sprayed acoustic insulation looks very similar to asbestos-containing sprayed fireproofing, and ceiling tiles with and without asbestos can look similar. These materials need to be inspected, assessed, and sampled by a trained, certified, and (in almost all states) licensed asbestos inspector. Bulk samples collected by the inspector are sent for analysis by

an accredited laboratory. Determining the best approach in managing or abating asbestos-containing material is best handled by trained asbestos professionals working with architects.

LEAD

Lead is toxic to humans and causes a variety of ailments that, depending on the concentration, can even result in death. Lead is typically contained in older oil-based paints, piping and solder, batteries, window putty, and colorant for plastics and ceramic glazes. The application dictates the required management or abatement to avoid negative health exposure for those working on or around the lead-containing material.

Lead-based paint can be managed in place with a variety of treatment methods if the paint is sound and fully adhered to the substrate. If it is present in childcare facilities, schools, or homes, it must be addressed according to EPA and U.S. Department of Housing and Urban Development (HUD) treatment requirements to prevent contamination from

FIGURE 1 Asbestos containing pipe insulation.

FIGURE 2 Asbestos containing 9" x 9" tiles and suspect mastic exposed.

FIGURE 3 Lead-based paint.

FIGURE 4 Mold on a ceiling tile caused by water leaking. Fluorescent light of an era that may contain PCBs in the ballasts, the fluorescent bulbs still contain mercury.

FIGURE 5 Mold on a ceiling tile cause by water leaking.



FIGURE 1

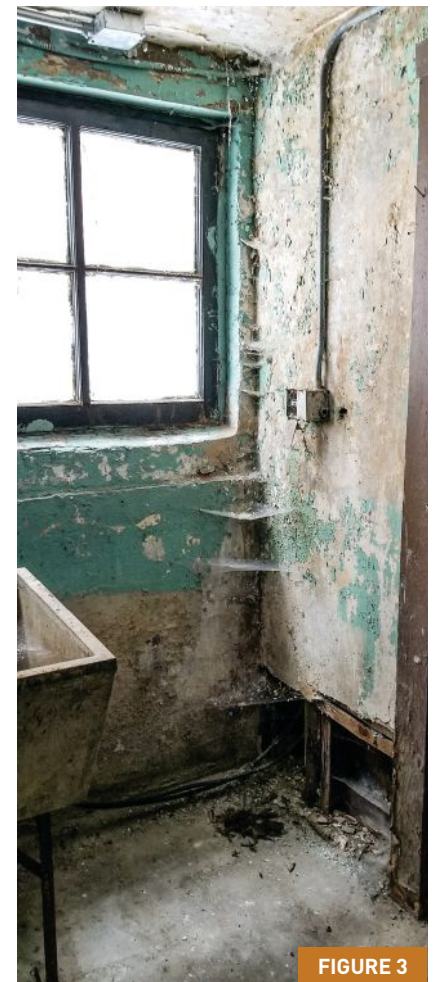


FIGURE 3



FIGURE 2

sanding, cutting, or demolition.

POLYCHLORINATED BIPHENYLS (PCBS)

PCBs are a group of synthetic organic chemicals used in a variety of building materials such as ballasts for fluorescent lighting, coolants and lubricants in transformers, and capacitors. From 1950 to 1970, PCBs were also present in some sealants applied on windows, doors, vents, etc. PCBs can leach into the air and are hazardous to humans. While they were banned from production in 1979 and are not being produced in the U.S., they are still present on job sites in transformers, ballasts, and possibly sealants, which require removal as hazardous waste.

CHLOROFLUOROCARBONS (CFCs)

CFCs are organic compounds containing carbon, chlorine, and fluorine and are byproducts of ethane and methane. The chemical compound was developed in the 1930s as a safe alternative to ammonia for refrigeration and accelerants. Over time, it was determined that exposure to ultraviolet radiation released the chlorine gas into the upper atmosphere, resulting in the destruction of ozone. CFCs were banned in 1994. HCFCs were an attempt to replace CFCs, but these were found to contain high amounts of volatile organic compounds (VOCs) and have been discontinued as well. When addressing existing HVAC systems, identify alternative coolants that are not ozone depleting and have a low global warming potential (GWP).

HEAVY METALS

Some old buildings have loose brick debris and "clinker" or slag from industrial operations placed between joints in an effort to fireproof. Before disturbing this material, have it tested for heavy metals such as mercury (Hg), cadmium (Cd), nickel (Ni), manganese (Mn), lead (Pb), chromium (Cr), and hexavalent chromium (VI) (Cr (VI)). If heavy metals are present and the clinker needs to

be disturbed, it should be assessed for abatement.

MERCURY

Mercury is naturally occurring in the environment but even low exposures can seriously impact human health. While mercury is a heavy metal as discussed above, it has its own special hazardous material category because of the quantity of its use. Mercury is present in a lot of building elements such as ("silent") switches, HVAC elements (thermostats, manometers), light bulbs (fluorescent and HID), batteries (in smoke detectors and emergency lighting), and relays (pneumatic controls). It is typically included in a small, sealed cell that needs to be disposed of as hazardous waste.

RADIOACTIVITY

Some smoke detectors and exit signs use radioactive sources. These are typically governed by state and local codes for disposal.

ABATEMENT

To identify hazardous materials, enlist licensed environmental consultants, who will visit the site with preliminary drawings to understand which areas of the building will be disturbed. They can concentrate on just that area unless assessing the entire building; assess the condition of the materials and indicate whether the material needs abatement, encapsulation, or no work; and determine what federal, state and local codes require. They will prepare drawings and specifications that describe all this work. Abatement work can be bid out separately to be completed in advance of the construction project, or it can be included as part of the construction documents. Once the abatement work is scheduled, notify the building stakeholders of the activity. At the end of the project, the records of abatement should be turned over to the facilities managers for permanent record.

While certain time frames of usage have been indicated above to identify the likelihood of encountering specific



FIGURE 4



FIGURE 5

hazardous materials, the dates are only guidelines, and not hard and fast dates on which you can depend.

REFERENCES:

Mr. Gary P. Flentge, Vice President, Industrial Hygiene, Environmental Design International, Inc. Chicago, Illinois

www.theozonehole.com/cfc.htm

https://ec.europa.eu/clima/policies/f-gas/alternatives_en

SUSAN D. TURNER is a Canadian architect specializing in historic preservation of national registered buildings. She is the Director of Architecture for The Tradesmen Group, a restoration contractor specializing in the repair and preservation of historic buildings. She can be reached at sturner@tradesmengroup.com.

TECHNIQUES

BY JUDY L. HAYWARD

The rich heritage of neoclassical architecture in Virginia is exemplified in Monticello, Thomas Jefferson's home, a designated World Heritage Site. The April 2020 Traditional Building Conference will dig deeply into the stewardship of masonry at its stop in Alexandria, Va.

MASTERING MASONRY

Continuing the education, awareness, and appreciation of masonry.

Master stonemason and architect Andrea Palladio encouraged us to build with “firmness, commodity, and delight” in mind. What is it about the enduring power of masonry that drives us to better understand its construction, materials, deterioration, and restoration?

For the past couple years, surveys returned from the Traditional Building Conference Series events (both in person and online) indicated a large interest in learning more about masonry topics. When the conference moves to Alexandria, Virginia, on April 7 and 8, 2020, it will continue its successful focus on materials and methods. However, there will also be masonry programs involving structural stabilization and cleaning, practical geometry, and the influence of Palladio on Mid-Atlantic building design and construction.

When you think about Virginia architecture, how many of you envision neoclassical designs rendered in brick? How many immediately think

of Thomas Jefferson? Who thinks of Virginia's proximity to Washington, D.C., and the capitol's neoclassical buildings and monuments in marble, granite, and concrete? Here are some key points from the sessions that will take place this April at the historic Lyceum.

LESSONS IN NEOCLASSICAL DESIGN: *Firmness, Commodity, and Delight*

Noted classicist, architect, designer, and educator Christine G.H. Franck will delve deeply into the Palladian legacy of architecture found in her native Virginia and surrounding states. The vocabulary of classical design endures because it functions well once built, the design elements support durability of materials, and its classical proportions and aesthetics delight the eye.

LESSONS IN PRACTICAL GEOMETRY: *Delight*

Jane Griswold Radocchia, architect and architectural historian from Bennington,

Vermont, will lead a session on the use of practical geometry to create buildings with balanced proportions. The “rule of thirds” found historically in building instruction will be one of the topics she covers. Radocchia notes, “This division of the rectangle into thirds is often found in pre-Industrial Revolution design. I do not think framers drew out the whole diagram on a sheathing board or a framing floor. Rather, because the diagram was common knowledge, they just drew the parts they needed.”

LESSONS IN PRACTICAL MASONRY: *Commodity*

Architect David Bell assembled a team that included an engineer and craftsman to stabilize and interpret one of the nation's few remaining ice wells in Alexandria, Virginia. Made of brick and located beneath the street outside Gadsby's Tavern, the well was constructed in 1793 to store up to 62 tons of ice for the tavern and the town of Alexandria. Bell notes, “The integration of art, architecture, and



Bruce Ellis Shutterstock photo

craft, along with the collaboration of museum curator, architect, carver, stone mason, and metal and glass fabricators, was critical to the project. Blending in and standing out were balanced within the context of the 18th-century surroundings.” View more photographs at bellarchitects.com/portfolio/gadsby.

The Menokin Foundation in Warsaw, Virginia, has undertaken a \$7 million project to stabilize and interpret one of America’s great Georgian-style houses, Menokin Hall. The house suffered serious losses but still retains over 80 percent of its historic fabric, and the foundation recognized that those losses revealed structural sections not normally visible. How could they interpret these views and provide for a safe visitor experience? Architecture firm Machado Silvetti, aided by an early construction drawing (1769) and photographs from the 1940s in the Historic American Buildings Survey (HABS), employed glass curtain wall construction for the missing areas, allowing visitors a rare glimpse at interior structures while retaining the adventurous feel of exploring a ruin.

Consigli Construction’s director of historic preservation, Bob Score, notes his company’s work on the project:

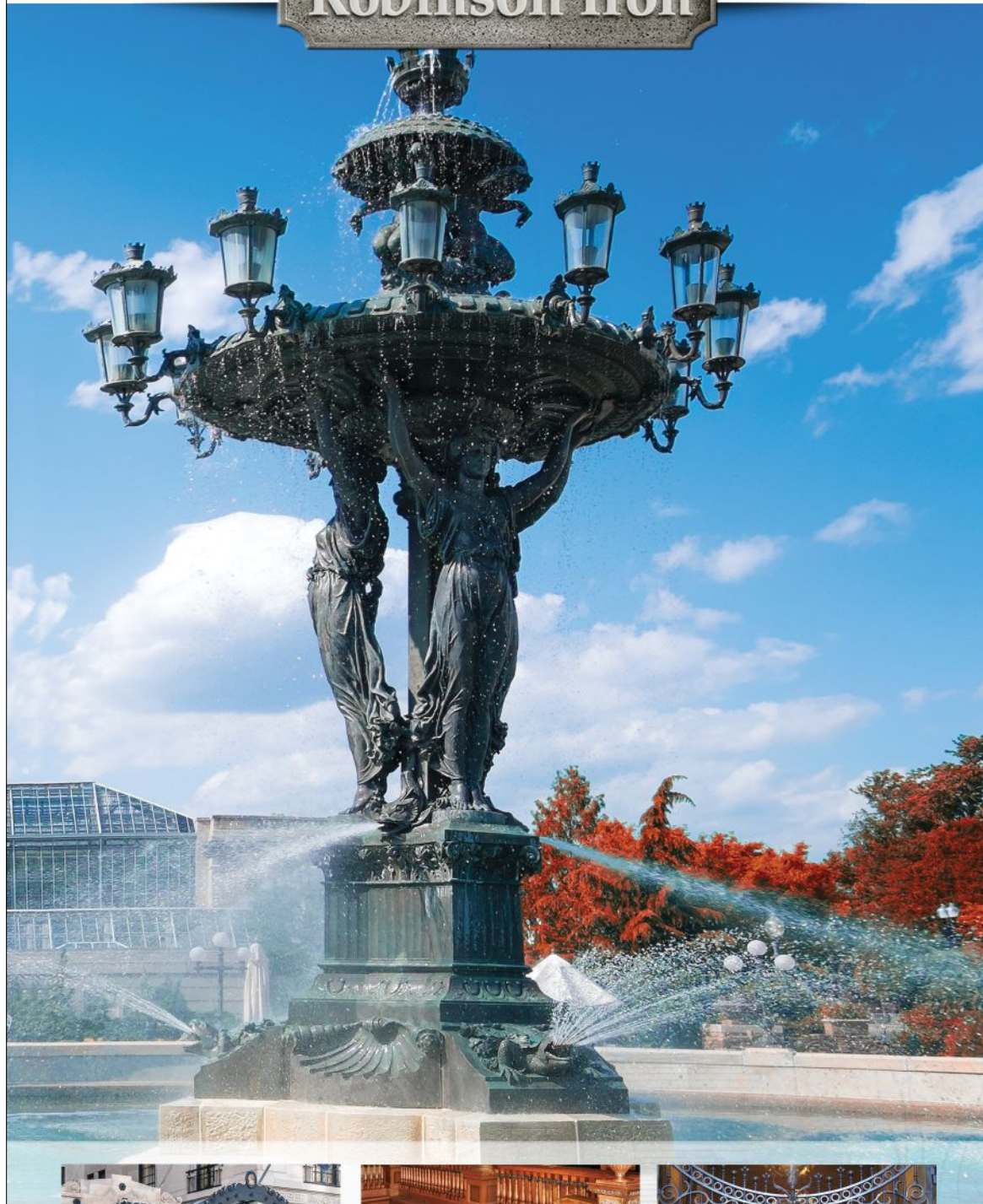
“Our team is leading an intensive pre-construction effort to investigate existing conditions and perform mockups and stability reviews for glass, masonry, steel, and wood connection points. During the stabilization, we will install Cintec anchors, stabilize two chimneys, and install steel to support the addition. The masonry will be painstakingly cataloged so that it can be accurately reconstructed. Once the structure is

BELOW A canopy covers Menokin House in advance of extensive structural reinforcement commencing in 2020.



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Old World Stone photo

ABOVE A craftsman works on stone tracery detail.

TOP Cleaning the masonry on the U.S. Capitol and adjacent buildings comprising the Capitol Complex demands a variety of techniques to suit everything from granite to marble to concrete.

stable, we will integrate a modern curtain wall system to replicate the missing structural elements, including walls, floors, and the roof. M/E/P systems will be installed and the building will meet all current safety, building, and accessibility codes. Upon completion, the facility will serve as a museum and education center celebrating conservation and the heritage of our nation.”

Visit consigli.com/project/menokin-glass-project to learn more.

LESSONS IN CLEANING MASONRY: *Firmness, Commodity and Delight*

Masonry is cleaned to protect it from deterioration and to revive a building’s color and architectural elements. The U.S. Capitol Complex includes some of America’s most important buildings and landscapes. The building exteriors are a veritable repository of the nation’s geological heritage, including marble from Georgia, Maryland, Massachusetts, New York, and Vermont; granite from across the country; regional sandstone; and Indiana Limestone. The range of stone types and physical conditions require various cleaning materials and methodologies. Mary Oehrlein, FAIA, LEED-AP, the director of historic preservation for the Architect of the Capitol, will review recent cleaning campaigns using water, chemicals, lasers, micro-abrasion, and poultice. This session is a rare opportunity to learn firsthand about different cleaning methods and their impact on masonry materials. aoc.gov/architecture

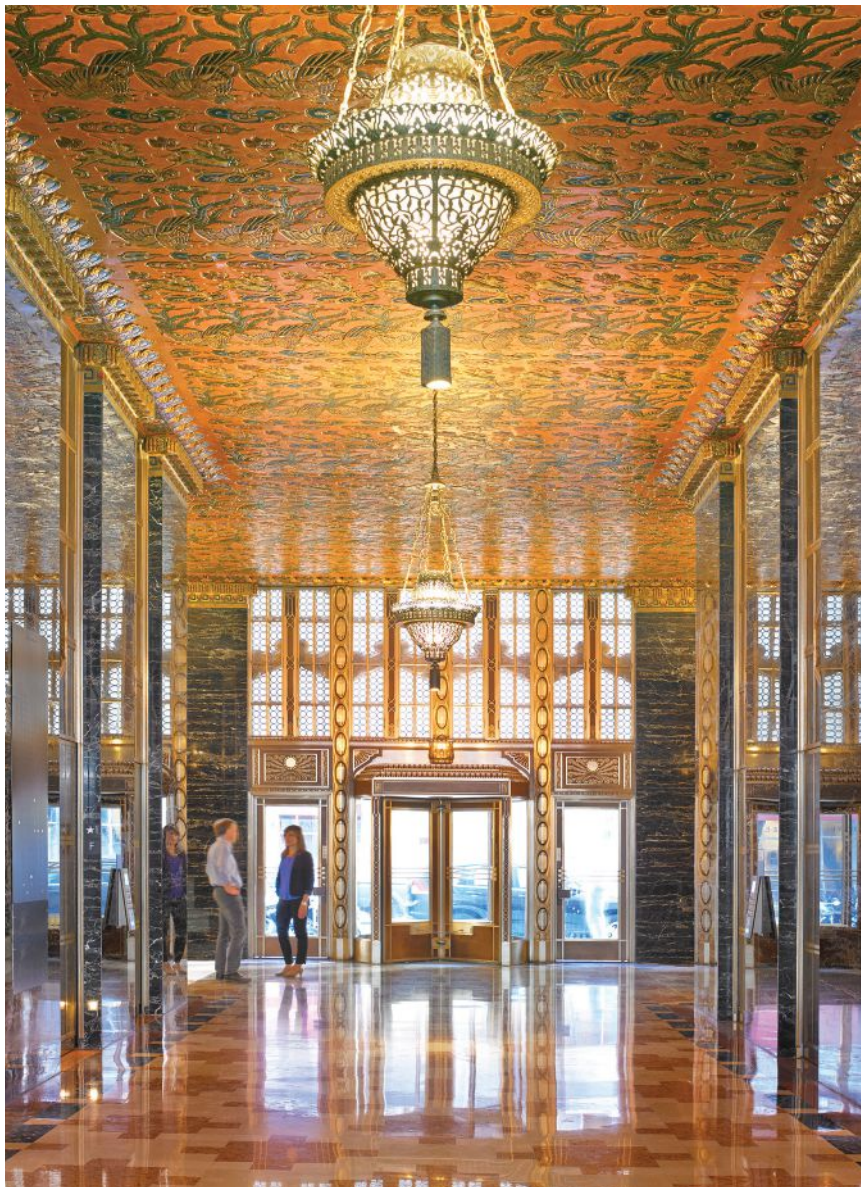
LESSONS IN RECONSTRUCTING DAMAGED STONEMWORK: *Firmness*

In 2017, a weather event known as a micro-burst impacted the First Presbyterian Church of Oklahoma City, causing its beautiful west window to bow inwards 16 inches, cracking or fracturing every stone tracery unit.

Three-dimensional scans were made of the damaged window to rebuild each piece using robotic milling, CNC routing, and the manual talents of stone masons. Once shipped to Oklahoma City, these units were carefully installed by a local masonry contractor, and the new stone tracery window is now fully assembled. Laurie Wells, vice president of sales and marketing for Old World Stone, will detail the careful reconstruction process now aided by scanning technology.

Architect and author Stephen Mouzon says that we should begin discussions about continuing our living traditions with the words “We do this because...” There are many ways to complete this sentence, concepts that further the journey of continuing education.

JUDY L. HAYWARD is executive director of Historic Windsor Inc. and the Preservation Education Institute. She serves as education director for the Traditional Building Conferences Series and Online Education Program. She blogs and writes this “Techniques” column regularly for Traditional Building. She specializes in the development of educational programs for builders, architects, and tradespeople. She can be reached at peihwi@gmail.com or 802.674.6752.



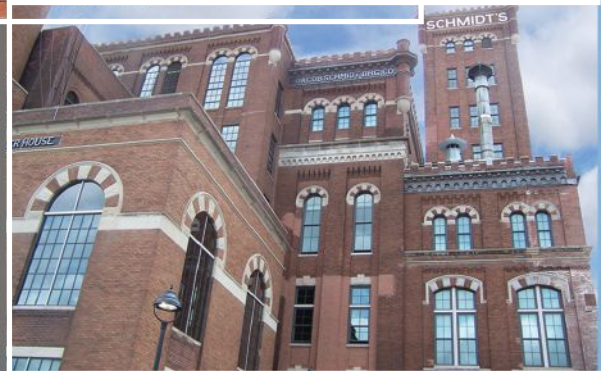
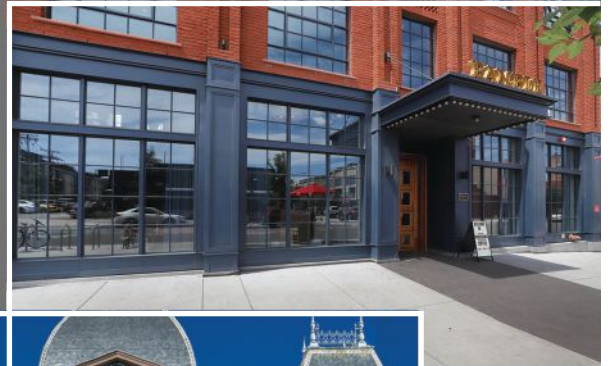
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STANFORD WHITE AWARDS

Features

The Institute of Classical Architecture & Art's 2018 Stanford White Awards

The winners have been announced for The Institute of Classical Architecture & Art (ICAA)'s 2018 Stanford White Awards.



Features

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Acquisition showcases Merritt's continued company expansion and commitment to excellence.

CLASSICAL CAMPUS DESIGN
HOW TO DESIGN A CLASSICAL CAMPUS

Features

Traditional Building Turns 30!

We're celebrating TRADITIONAL BUILDING magazine's 30th year this fall.



Book Reviews

Book Review: Robert Venturi's Rome

A book review on Robert Venturi's Rome by Frederick Fisher and Stephen Harby.



Features

Buckland, VA: A Labor of Love

The community in Buckland, Virginia, has a deep commitment to historic preservation.

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The Trick to Matching Brick

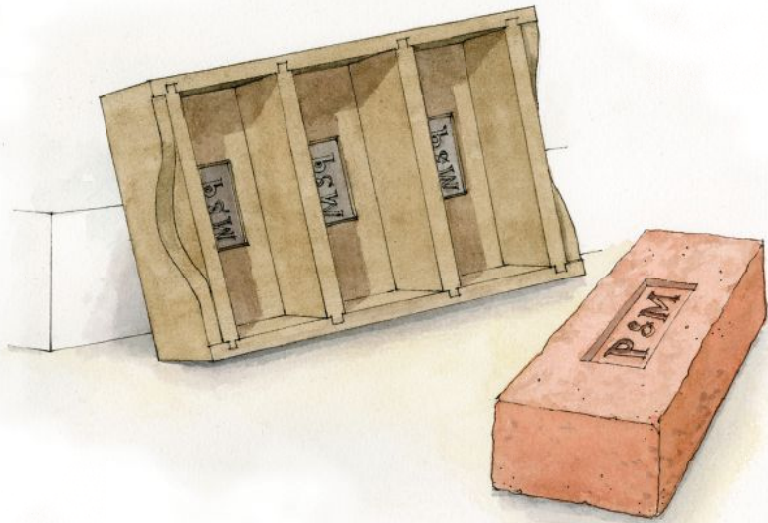
The many variations of this timeless masonry unit come from how they're made.

Sourcing bricks for repairing or enlarging historic masonry takes finding equivalents not only in color and texture, but mechanically in shape and performance. The problem is, bricks have been made in many ways over the last 400 years—and seldom uniformly due

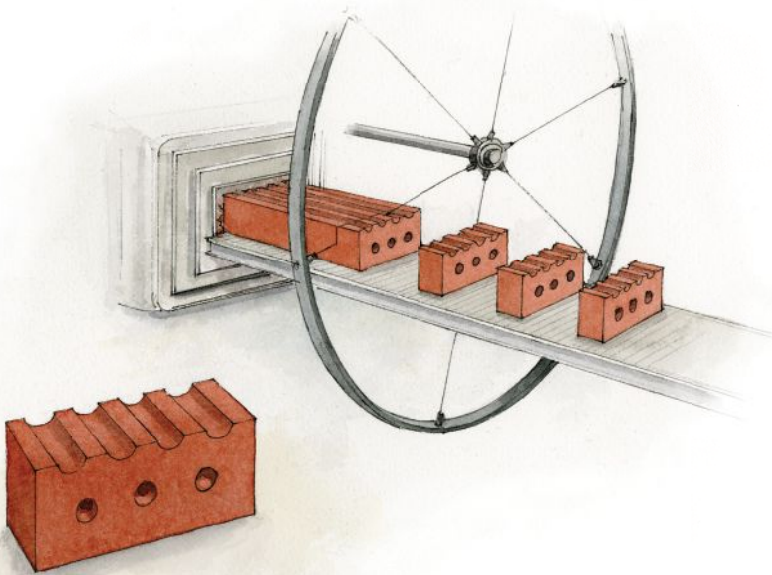
to differences in clays, shrinkage from drying, or morphing during firing. Since matching historic bricks starts with understanding how they were produced in the past, and why they look the way they do, here's some clues to the most widely seen types and characteristics.

TOP Subtle variations in color and shape make it likely the face brick of this mid-19th-century urban building is molded brick.

Brian Goodman/Shutterstock photo



MOLDED (soft-mud process) From pre-history until well into the 19th- and early-20th centuries, bricks were hand-made by hand-packing soft, wet, clay paste into wood or later metal molds to form one to six bricks at a time. After unmolding, these bricks were laid out by the thousands to dry before firing in a kiln. In the 1800s, machines mechanized the molding step somewhat, but the basic process remained the same. Molded bricks are readily identified by a frog, an indentation that typically bears the maker's name. The soft-mud molding, as well as subsequent drying and firing, typically produces slightly rounded arises (edges) and corners and an imperfect shape. Molds might also be first dipped in water or sand to aid unmolding. Such water-struck bricks had comparatively smooth sides but rounded edges and corners. Making sanded bricks might leave sand or streaks on surfaces or a sand-finished texture, if desired.



WIRE-CUT (stiff-mud or extruded process) Brick makers attempted machines in the 1830s, but true mechanization had to wait until steam provided the power to thoroughly mix clay and ingredients, then manipulate it as a stiff paste. While an early stiff-mud machine was perfected in 1852, the invention that really propelled the industry was the wire-cut process, patented in 1863. Here a drier, stiff paste is extruded through a die (like making pasta) to produce a continuous clay ribbon that is then sliced into bricks (like cheese) by wires on a rotating wheel. The wire may cut off bricks at their sides (side-cut bricks) or ends (end-cut bricks). Bricks so produced are very consistent in composition, with precise sides and edges due to the knifelike wire. Wire-cut brick grew increasingly popular throughout the Victorian era for refined brickwork and, in one form or another, extrusion is the dominant process today. The die also makes possible textures in the brick face or holes in the body that reduce weight.

Drawings by Rob Leanna



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CLOCKWISE FROM ABOVE Washington, D.C., row houses are showcases of Hydraulic-Press Brick, especially in window arches and wall ornament.

These radius-top windows are protected by heavy, projecting, pressed-brick arches, a cross-brick frieze, and an ornamental brick cornice.

These arches are actually multiple pressed bricks: pairs of plain and decorative bricks topped by ball-and-wedge bricks. Note the crisp detail.

The Hydraulic-Press Brick Co. process also made possible deep relief ornament, such as this medallion and the ones seen in the photo above.

PRESSED (dry-clay process) The logical, next development in brick-making was to all but eliminate water by compressing dry or semi-dry clay into molds with the immense pressure of hydraulic machinery. This dry-clay process not only obviated the need to dry bricks before firing, expediting manufacture, it enabled bricks of exceptional density and detail. Pressed bricks are noticeably heavy, hard, and smooth, with sharp edges and shapes, and therefore ideal for face brick. The primary developer of pressed brick in the 1860s was what became the Hydraulic-Press Brick Co. of St. Louis, who held patents on the technology for many years. Their products enjoyed extensive popularity from the 1880s on as highly ornamental brick replaced stone for decorative features like window and door lintels, and refined face brick became the cladding of choice for new, steel-skeleton buildings.

The vagaries of natural raw materials and crude kilns increased the chances a brick would turn out either desirable, charmingly distinctive, or useless. While bricks from high-temperature zones became hard-fired, high-strength, and durable, those from low-temperature zones would be under-fired, low-strength, and slightly larger and lighter in color than hard-fired bricks. Under-fired bricks were also more porous and water-absorbing, making them unsuitable for exteriors and weather exposure. If not imme-

diately culled as rejects, these lighter-colored “salmon bricks” might be salvaged for laying up inner walls where they would remain dry. Even today, salmon brick will not endure if recycled for exterior use. Bricks too close to the heat would be over-fired and twist and distort as they melted into a glassy state. Where minimal over-firing only glazed and darkened brick ends, these units were saved for decorative patterns in walls.

Early brick color varies widely according to the clay minerals and the makers’ limited control of them. The classic hues of red or orange come from the presence of 5% to 6% ferric oxide, an iron compound. Lime content produces cream, yellow, or greenish bricks; magnesia and alumina are the source of buff-colored bricks; blues and purples are common too. Bricks could also be face-colored with treatments such as salt glaze (sodium chloride added during firing) or, after the latter 19th century, actual colored glazes. Presence of iron salts yields an iron-spot effect, coarse grit or pebbles in the clay creates a textured surface, and the list goes on. While long-standing producers can be a source for some of the many types of historic bricks, recycled brick companies are a growing option for local or long-gone makes.

GORDON BOCK is an architectural historian, instructor, and speaker through gordonbock.com.

Photos by Gordon Bock

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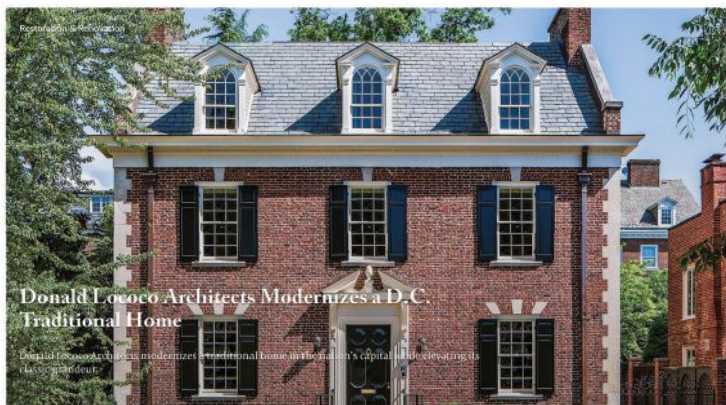
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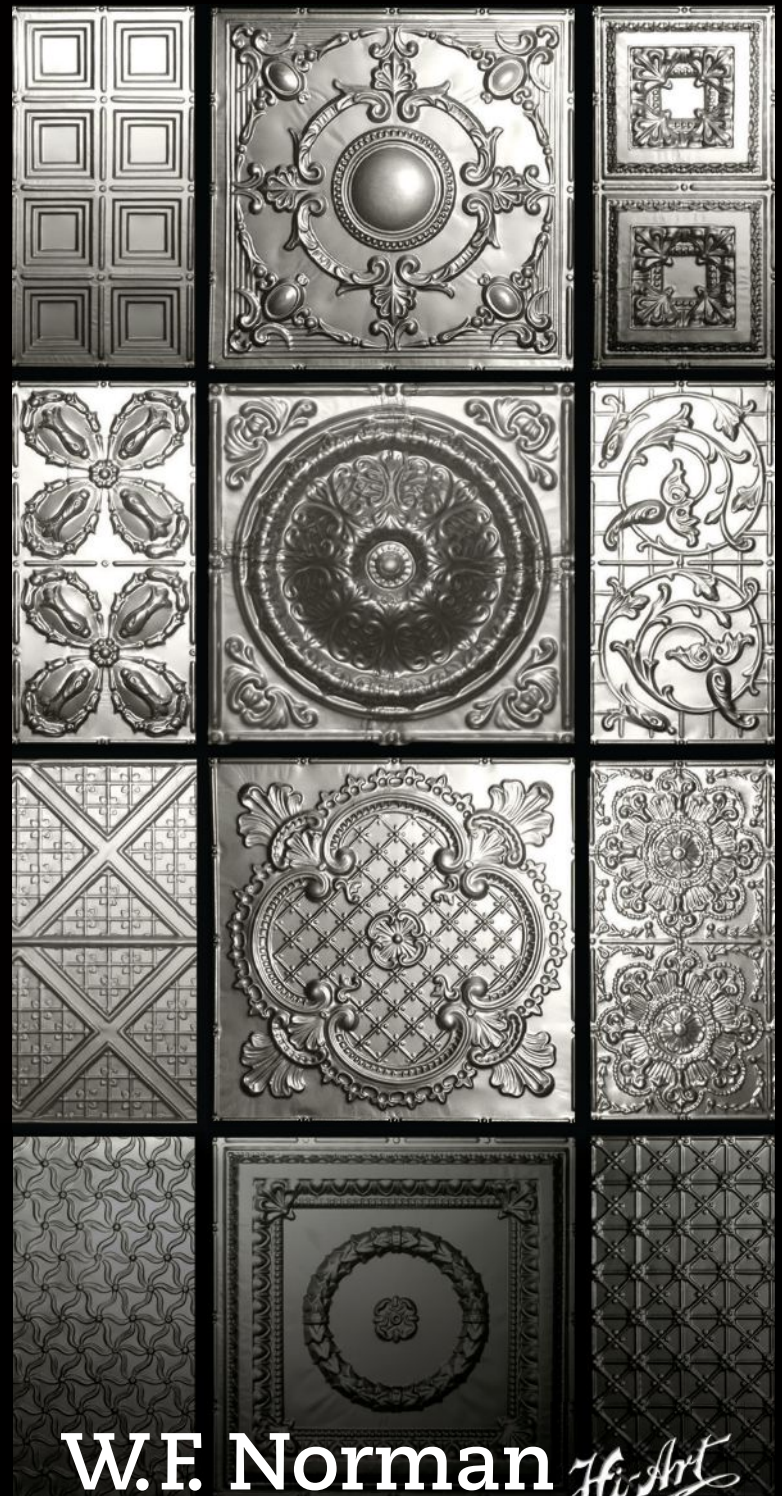
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PROJECT The Lyceum Block

ARCHITECT Thadani Architects + Urbanists

A grand archway leads from the Gateway Building to the Lyceum.

RIGHT A pair of stairs leading to the upper level of the two-story colonnade that encircles the Lyceum lawn.





CONNECTED ACADEMY

**Thadani Architects + Urbanists creates
an academic village at Seaside.**

BY NANCY A. RUHLING | PHOTOGRAPHY BY JACK GARDNER (EXCEPT WHERE OTHERWISE NOTED)



ABOVE A view of the Lyceum lawn from the amphitheater.

RIGHT Seven 357-square-foot Katrina Cottages create a small residential court.

OPPOSITE A digital aerial view of the Lyceum shows the four pairs of school buildings flanking the Lyceum lawn. The circular building at the far end is the Town Hall designed by Ricard Economakis.



Digital rendering (left) and photo (right) courtesy of Thadani Architects + Urbanists

The Lyceum Block, one of the prime public spaces of the late 20th-century New Urbanist community of Seaside, Florida, has been more than two decades in the making.

Its transformation—from a vacant lot to a vibrant community center in the vernacular classicism style that defines the architecture of the town—began in 1998 with the founding of the state’s first charter school.

As the school grew, adding two

buildings on the west side and connecting them with a two-story outdoor colonnade, so did interest in utilizing the 2.1-acre, horseshoe-shaped block as an important public room within Seaside.

In 2011, Architect Dhiru A. Thadani, whose Thadani Architects + Urbanists is based in Washington, D.C., was tapped by the Seaside Community Development Corporation to develop the block, which he calls “the academic heart of Seaside.”

Thadani had become associated with Seaside in 1983 and has done numerous small projects there through the years.

“We wanted to amplify all the civic spaces in Seaside and make them more formal and important visually so they would stand out from the white picket fences of the houses,” he says, adding that the Lyceum green serves as the school’s playfield and well as a venue for a variety of public and private events.

The major goals were to connect the Lyceum with the community’s Central Square by formalizing the link and adding Quincy Plaza to serve as a vestibule; to create an Academic Village within the grounds that provides inexpensive rental

housing for the students and scholars who wish to study not only new urbanism but also a variety of other artistic endeavors; to complete the two-story colonnade; and to build an amphitheater.

The inspiration for the Lyceum was Thomas Jefferson’s Academic Village at the University of Virginia. The central green is defined by the two-story colonnade that engages with various styled buildings that flank the walkway.

Quincy Plaza is organized by a grid of palm trees mediating the movement between Seaside’s two major public spaces:



the Lyceum and Central Square.

“The plaza and existing road interface with each other, to accommodate pedestrians and cars without intense signage,” Thadani says. “The plaza is elevated and designed as a ‘shared space.’ The floor surface is a formal grid of concrete and brick pavers. The road on either side of the plaza ramps up to make pedestrians more visible, hence drivers instinctly go through the space slowly.”

From the Central Square one moves axially through a tall arched entryway toward the plaza and sees a pair of dramatic symmetrical stairways that provide access to The Lyceum Block’s second-story walkway.

The biggest challenge of the project was performing architectural magic to trick the eye to believe the composition was symmetrical and about the central axis.

“Seaside was developed incrementally, and surveying was occasionally ad hoc,” Thadani says. “So the axis linking the Lyceum and the archway on the Gateway building didn’t line up. We adjusted the axis so it looks symmetrical, but to do this we had to make the pair of stairs of different lengths. The stair

landings vary in size to make a convincing illusion.”

He adds that the floor levels did not line up, so the curved portion is actually a subtle ramp connecting the two levels.

The perimeter of the other three sides of The Lyceum Block is defined by a double row of native oak trees. The parking surface is permeable crushed stone and the sidewalks and wooden deck have 1/8th-inch gaps to enhance drainage.

Thadani says there was much discussion during the programming phases of the project about affordable housing for students.

“When we had events, students found it too expensive to rent places in Seaside,” he said.

Ultimately, the team bought eight Katrina Cottages, 440-square-foot factory-built residences that were designed by the Mississippi Renewal Forum Charrette after Hurricane Katrina savaged the Gulf Coast in 2005, and sited seven of them in the southeast corner of The Lyceum Block.

“We removed the kitchens and converted them to two-bedroom, two-bathroom dwellings for a total of 12

students,” he says, adding that the entire composition is a platform to aid drainage. “We made the one in the middle ADA-accessible with a porch in the back with a courtyard and trees for outdoor classes.”

He added that like Jefferson’s Academic Village, the buildings get closer to each other as they move toward the curved amphitheater and stage.

“It’s a perspective trick to make the space look longer than it really is,” he says.

The cap of the Lyceum Green is a semicircular wooden amphitheater, which will replace the one in the Central Square that is being closed during construction of a Léon Krier-designed tower.

“In the summer, the amphitheater in the square is used every night for concerts, movies and ballet,” Thadani said. “All the events are free, but Seaside wanted an option to host ticketed events.”

The new amphitheater holds 350, plus those seated in the two-level colonnade, where dinner and drinks may be served. “The illuminated steps were designed to be wide enough to accommodate chairs for viewers,” he says.

An illuminated brass emblem is embedded in the center of its wooden floor. It was crafted by master metalworker Manish Waghdhare of Mumbai, India, and Thadani says, “folks comments on it.”

Thadani says that, by design, all of the materials used in the project are off the shelf.

“One of the charms of the block is people can look at it and realize that they can build everything themselves,” he says.

He notes that the colonnade is made of 8 X 8s wrapped by 1 X 10s and that the amphitheater is made of kiln-dried pressure-treated wood in 16-foot lengths.

“We worked out the wood joints to have little wastage,” he says.

With the addition of four pairs of buildings flanking the green and a circular, copper-topped Town Hall and the relocation of the Katrina cottages to the north side, The Lyceum Block will be complete in 2023.

The residents of Seaside have already praised the latest iteration of The Lyceum Block. “The space has been booked for a lot of events,” Thadani says. “People who have used the space have sent me complimentary notes.”



ABOVE The upper landing of the staircase is crowned by an aedicule structure.

RIGHT Custom metal light fixtures, designed by Thadani and fabricated in India by Manish Waghmare.

CENTER The brass medallion at the center of the amphitheater was crafted in India by Manish Waghmare.

FAR RIGHT, TOP The colonnade separating the Lyceum lawn from the Academic Village.

FAR RIGHT, BOTTOM The Academic Village courtyard.





KEY SUPPLIERS

ARCHITECT

Dhiru A. Thadani,
Thadani Architects + Urbanists

ARCHITECTURAL DESIGNERS

Christopher Rodriguez,
Andrew Krizman II,
Marc Gazda

TOWN PLANNERS

Andres Duany and
Elizabeth Plater-Zyberk,
DPZ CoDESIGN

METAL CRAFTSMAN

Manish Waghdhare

PROJECT Courier Square

DESIGN ARCHITECT Robert A.M. Stern Architects

MASTER PLANNER & ARCHITECT OF RECORD LS3P

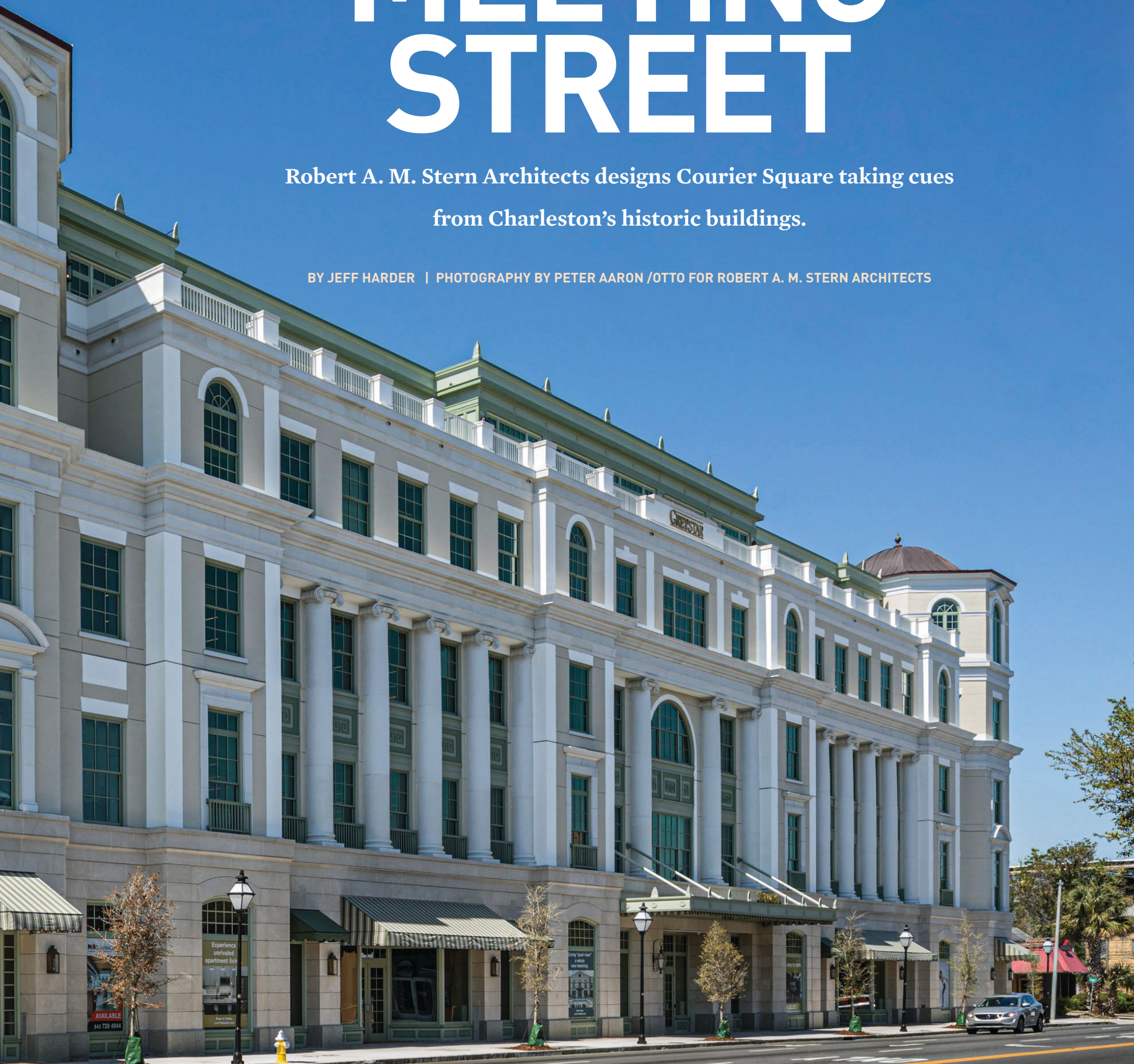
The Guild, a red-brick residential building offering 220 loft-style apartments, adjoins developer Greystar's headquarters office building, which faces Meeting Street.



Mixed Use on **MEETING STREET**

Robert A. M. Stern Architects designs Courier Square taking cues
from Charleston's historic buildings.

BY JEFF HARDER | PHOTOGRAPHY BY PETER AARON /OTTO FOR ROBERT A. M. STERN ARCHITECTS



The centerpiece of the Guild where it faces the Low Line—a former freight rail easement to be developed as a greenway—is an iconic clock tower.

OPPOSITE On Meeting Street, ground-floor shopfronts flank the entry to the colonnaded office floors of the Greystar headquarters.





One morning in Charleston, South Carolina, Gary L. Brewer was looking up at the Ionic columns that had just been installed on his new five-story Greek Revival building on Meeting Street when a bicyclist stopped beside him. The cyclist and the architect struck up a conversation about the building in front of them. Brewer hadn't identified himself; the cyclist could have been talking to any random stranger. In fact, she was talking to the lead architect behind this new, consequential addition to the bustling city. "It's great," the cyclist said. "This is what Charleston's future could be."

Designed by Robert A.M. Stern Architects, Courier Square is a nearly three-acre mixed-use project on Charleston's Upper Peninsula comprising two primary structures. On Meeting Street, cupolaed towers bookend the roofline of the 70,000-square-foot headquarters for international developer Greystar. And around the corner on Columbus Street is The Guild, an eight-story, red-brick luxury apartment building with a rooftop pool deck and a stately clock tower visible from Highway 26. Thoughtfully conceived and expertly executed, Courier Square makes a case for how larger buildings can take cues from Charleston's 19th- and 20th-century architectural heritage to point the way forward.

"There's an ongoing debate in the community: what should new buildings look like?" says Brewer, the Partner at Robert A.M. Stern Architects who led the design. "Should they be in the character of traditional buildings in Charleston? Should they be more modern? Or something in between? From our perspective, which you can hopefully see in the design of Courier Square, there's room both to add to historic Charleston's architectural character, and also to be inventive at the same time."

Bordered by the Cooper and Ashley Rivers, Charleston's past as a coastal hub for shipping and trade—including a lamentable role in the slave trade—made it a city of opulence, reflected in the city's refined, modestly-scaled architecture that manifests in everything from Greek Revival to Federal to Queen Anne. In the 1920s, architects who built large-footprint projects in southern cities like Atlanta and Charlotte bypassed Charleston, and when urban America began demolishing historic buildings in the name of redevelopment in the 1960s and 70s, a lack of funds as well as interest spared Charleston's signature architecture. ("From an architectural perspective," Brewer says, "Charleston is one of those cities that was rich at the right time, and poor at the right time.") Now, while earning wide renown for top-tier restaurants and a thriving arts scene, the city is in the midst of a long-running population boom.

In recent years, Robert A.M. Stern Architects has completed several projects in the region; Brewer served as Partner in charge of the Ocean Course and Cougar Point golf clubhouses on nearby Kiawah Island. After building local connections, including a collaborative relationship with Scott Parker of the land-

scape architecture and urban planning firm DesignWorks, the firm met with Pierre Manigault of Evening Post Industries—the media company that operates The Post and Courier newspaper and owns the property where Courier Square was built—and Greystar. With the area around the property recently redistricted to allow for taller buildings, Brewer says the firm received its marching orders: create a large project that would "represent, stylistically, what Charleston was about." Working alongside LS3P, the Charleston-based company who devised Courier Square's master plan, Brewer and his team navigated the architectural review process with municipal and neighborhood-level organizations: the Board of Architectural Review, the Historic Charleston Foundation, the Preservation Society. And while those steps could have produced gripes and headaches, Brewer says, "a lot of people we met had good suggestions about how to make the project better. If you listen, good ideas come from everywhere, so we used that approval process to help make the project better."

Ultimately, Courier Square comprises three smaller buildings in a single large footprint—Greystar's headquarters office building, The Guild, and an





A residents' lounge adjoins the Guild's rooftop pool terrace.

enclosed parking structure facing Line Street—to harmonize with Charleston's more diminutive historic buildings. In conceiving the office building, Brewer borrowed Classical elements from government and public buildings in the historic district around Meeting and Broad Streets. "We were, in a way, carrying the character of the historic district up to the more northern side to help plant a flag," Brewer says. The cupolaed towers on the corners are picturesque icons. Sixteen 21-foot-high Ionic columns and clean, symmetrical detailing play off the rusticated stone that greets pedestrians walking by the street-level shops, while a metal-paneled penthouse on the uppermost floor looks out over the Cooper River.

Meanwhile, The Guild seizes on the industrial character of late 19th- and early 20th-century Charleston for its red-brick detailing, large windows, and 220 high-ceilinged, loft-style apartments overlooking a historic train line to the west. The most impressive feature is the tower, rising 120 feet from the greenway down below, with a clock set into the living room of one of the units. A rooftop over the garage is equipped with a pool and lounge areas, looking east toward the blue beyond.

With other projects afoot elsewhere in the city, Courier Square is only the beginning of Robert A.M. Stern Architects' work in Charleston. Ultimately, Brewer says, the extra time, money, and effort devoted to adapting Charleston's historic character has helped developers break records for rental rates. "To convince a developer and a client to build something nicer from an architectural perspective, you have to translate it into the language they speak: what's the return going to be? And this building really helps to set an example."

And as much as Courier Square looked to the past, the future—that subject conjured by the cyclist talking with Brewer on the street—was never a faraway thought. "The construction manager from Greystar told me that this was a legacy project," Brewer adds. "And for all involved—from the highest levels of management at Greystar, all the way to the artisans, the people who made the windows and the bricks—this was a legacy project for everyone."



ABOVE A model apartment opens to a courtyard facing the Low Line.

RIGHT The kitchen and dining area in an upper-floor apartment.

CENTER Cupolas mark the corners of the Greystar headquarters building.





ABOVE One of the Guild's two entrance courtyards facing the Low Line.

LEFT The Guild's rooftop pool terrace sits above the concealed parking garage.



PROJECT Longfellow Bridge
ARCHITECT Rosales + Partners

ICONIC



SPAN

After five years of reconstruction work, the Boston–Cambridge Longfellow Bridge is a model of historic preservation and 21st-century modernization.

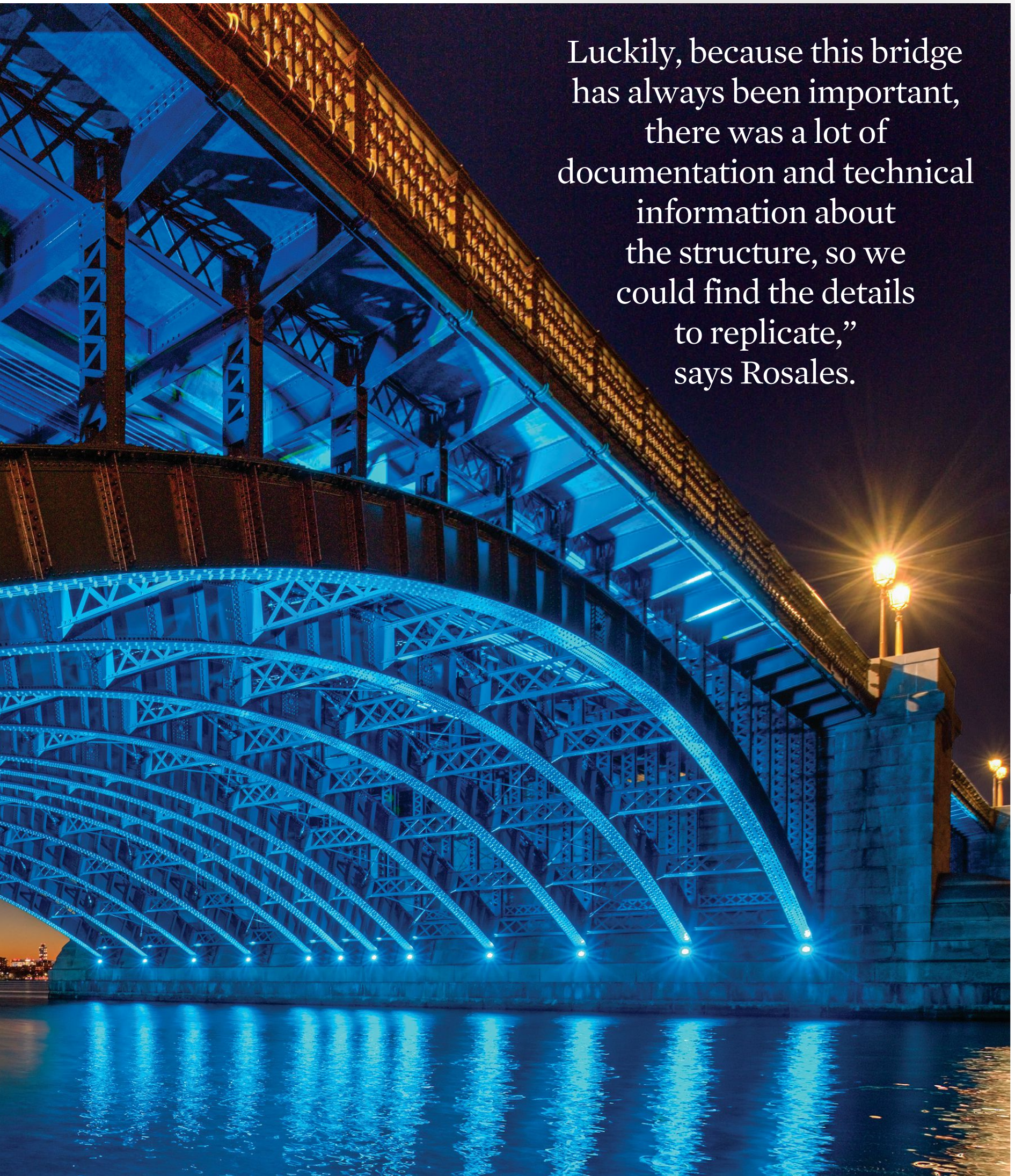
BY KILEY JACQUES



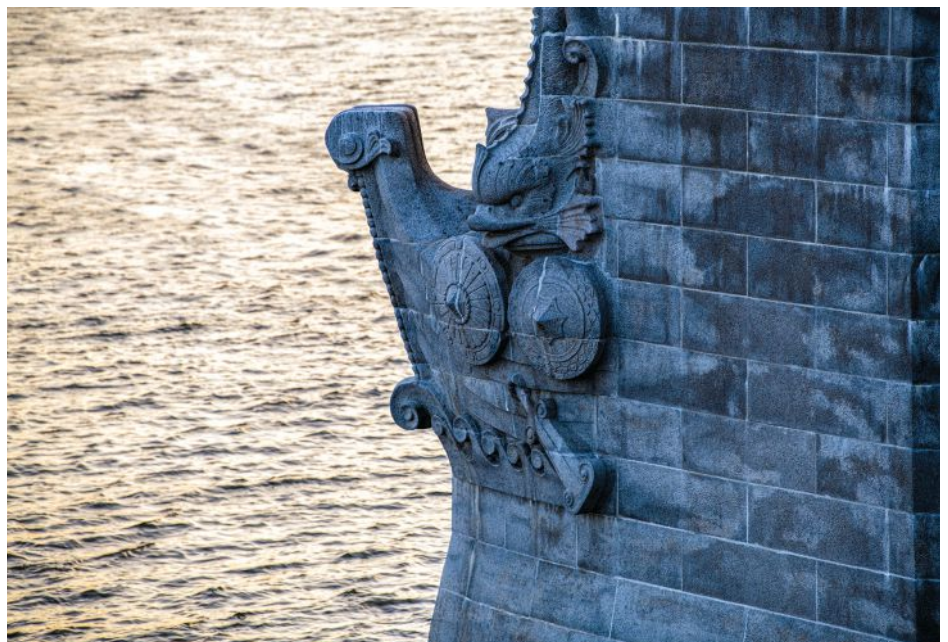
The Longfellow Bridge over the Charles River at night with new lighting enhances the historic steel arches and granite “salt-and-pepper” towers.



The restored and recently illuminated steel arches are part of the original century-old bridge.



Luckily, because this bridge has always been important, there was a lot of documentation and technical information about the structure, so we could find the details to replicate,” says Rosales.



FAR LEFT: Miguel Rosales photo; LEFT (2): Ian MacLellan photos

ABOVE A replicated historic light post and lantern with new concealed energy-efficient LED integrated lighting.

TOP RIGHT One of the replicated globe lanterns placed in its original position. There are four lanterns per tower.

BOTTOM RIGHT The granite tower carvings were inspired by prows of Viking ships.

When architect Miguel Rosales describes the restoration work performed on the Longfellow Bridge, he uses the word integrity a lot. His firm, Rosales + Partners, in collaboration with engineering firm STV and a task force of nearly 40 government and local agencies, helmed the \$300 million-plus project completed in 2018. The arched steel bridge is a protected landmark that spans the Charles River, connecting Boston and Cambridge. The original structure was built between 1900 and 1907, and was ultimately named for poet Henry Wadsworth Longfellow, though it is perhaps better known among Bostonians as the “Salt and Pepper Bridge,” a moniker referencing its shaker-shaped towers.

For over a century, the bridge has

been in continuous use and hadn’t been upgraded since the 1950s. The goals for this project included increasing its seismic capacity, improving its functionality, and preserving its historic architecture. The structure’s 2,132-foot length, its complex detailing, and its poor condition made it an expensive and laborious undertaking that took five years to complete.

Rosales + Partners was a natural fit to lead the charge, as they specialize in bridges—typically new construction but some restoration work, too. Here they were dealing with 11 open-spandrel steel arches, a 105-foot-wide deck, a substructure of granite masonry in the form of ten hollow piers and two abutments, and four Neoclassical granite towers—the restoration of which was a Herculean effort complicated by the fact that the bridge needed to remain operational

while under construction. (The structure handles 28,000 vehicles and nearly 100,000 transit riders on average per day.) At one point, the trains had to be moved to one side in order to repair the center of the bridge, which was rusting on the underside.


Among the initial decisions was how to divide the space. The bridge has always been multimodal—initially with a trolley system, then the metro Red Line train, plus vehicles and pedestrians. But Rosales explains that the structure is fixed in terms of its width: “We could not expand it without destroying the architecture because of the towers at the edges.” He says there were many lengthy discussions about how to configure the layout that resulted in a tug of war between those who wanted it to carry more cars and those who wanted it to cater to pedestrians. Arguably, the train is the

Frances Appleton Pedestrian Bridge

Rosales + Partners also designed the \$12.5 Frances Appleton Pedestrian Bridge as part of the Longfellow Bridge restoration project. It replaced the existing Boston Esplanade Pedestrian Bridge, which was built in the 1950s, and was thought to be too close to the vehicular bridge. Plus, the connection between the two structures was awkward. The new 230-foot-long steel span links Beacon Hill/Charles Circle to the Charles River Esplanade. It is named for Longfellow's wife, Frances Appleton, in honor of their courtship during the 1840s when he would cross the Charles River from Cambridge to Beacon Hill to visit her.







Original granite towers, pedestrian railings, and steel arches cleaned and restored.

IN RECOGNITION

2018 LIGHTING DESIGN AWARD

Heritage Lighting

2019 PRESERVATION ACHIEVEMENT AWARD

Boston Preservation Alliance

2019 PRESERVATION AWARD

Massachusetts Historical Commission

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American Public Works Association

2020 BULFINCH AWARD

Institute of Classical Architecture & Art

most important mode of transportation to consider because it carries the bulk of users. “Everybody wanted more space,” Rosales recalls. “With about 100 feet in width, every inch counted. One of the compromises we made was to remove one lane going into Cambridge in order to install wider sidewalks and bike lanes on half of the bridge, which resulted in an asymmetrical structure.”

Another challenge was to determine which architectural elements to restore and which to replicate and replace. Analysis determined that the granite towers, main steel arches, and most of the railings could be restored. The rest needed to be replaced. “Luckily, because this bridge has always been important, there was a lot of documentation and technical information about the structure, so we could find the details to replicate,” Rosales reports, pointing to the example of the tower windows, which are new but modeled on the original profiles and made of the same wood.

Many of the columns connecting to the deck were damaged or weakened and had to be replaced with a different style column. The originals were held together with massive rivets—an old welding technique no longer in common use. “We had to find people willing to do that work in Massachusetts, which added some costs and complications,” Rosales notes, “but I think it paid off.” He explains that the traditional rivet method was used on the exterior steelwork that is visible to the public. They also restored or replicated the original steel buckle plates used to support the bridge deck in certain locations along the river banks.

A significant portion of the restoration work lay with dismantling, cleaning, restoring, and re-erecting the 58-foot-tall towers, which had settled over time. Each tower is made of more than 500 Quincy granite blocks, which vary in size—some weighing up to three tons. As the towers were deconstructed, the blocks were numbered for accurate reassembly. Before rebuilding the towers, concrete liner walls were added to increase the bridge’s seismic capacity. “From one tower to another, the stones do not match,” says Rosales. “It was like putting together a puzzle. It took some time to get them all straight.”

He points to another factor complicating the towers’ restoration: Quincy granite is no longer available. To get an exact match, they had to use pieces from other bridges and regions. They also moved some of the granite that was in the middle of the bridge to rebuild visible sections. However, they still couldn’t source a sufficient supply so a granite

veneer was used in some places, and one of the walls by the park on the Boston side had to be completely redone. “You can’t tell,” Rosales says. “It’s essentially the same material but the technique was different—they weren’t working with solid pieces.” Inside the towers, a new shell was built for additional strength against seismic loads.

The towers’ bronze doors were restored, too. Six were cleaned and repaired, and one needed to be replicated, as they had been removed and put into storage in the 1950s to protect them from vandalism, and one was lost in the process. Likewise, the cast-iron pedestrian railings were restored or replicated when missing.

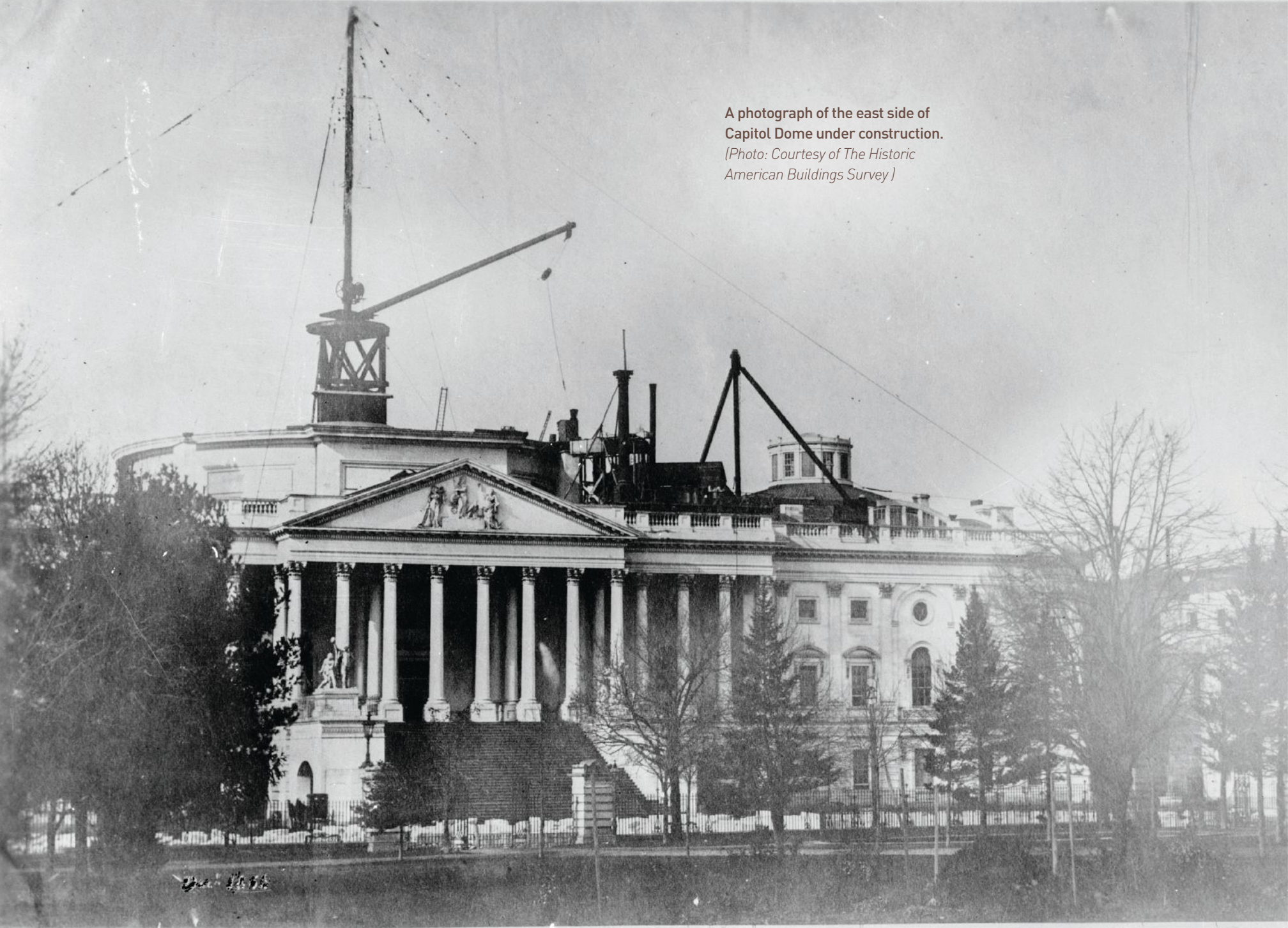
Many of the lighting fixtures had also disappeared over the years; when they were replaced, it was without regard for the original style and location. During this project, the lamps on the towers were replicated and accurately placed. “The lighting is pretty close to what existed there 100 years ago,” says Rosales. “I think it’s very compatible with the structure.” For additional lighting on the roadway, new light posts were designed to resemble the catenary poles once used along the trolley lines. Rosales also calls attention to the never-before illuminated towers as a popular introduction, saying they now have a nighttime presence, which is enhanced by the blue lighting added beneath the arches. “For 100 years, the bridge was always dark at night. Now it comes to life.”

Other modernization efforts included: the widening of sidewalks, the addition of dedicated protected bicycle lanes, the installation of an open-rail barrier between the sidewalks and the vehicular lanes for improved safety, the modification of abutments and approaches for ADA compliance, and the clarifying of connections to the adjacent parkland.

The project received the highest recognition bestowed by the National Trust for Historic Preservation, which is not typically given to bridges but rather to important buildings. “It’s interesting because it is winning engineering and architecture awards as well as historic preservation awards,” Rosales notes. “It’s a combination of three different fields that came together for these results, of which I am very proud. I think it’s a fine example of how to restore a bridge to a high level of integrity, and I hope it serves as a model for other cities to show it is worth spending the money and time on a historic bridge, especially one with such significance and visual importance. It would have been very sad had it been demolished.”

A photograph of the east side of
Capitol Dome under construction.

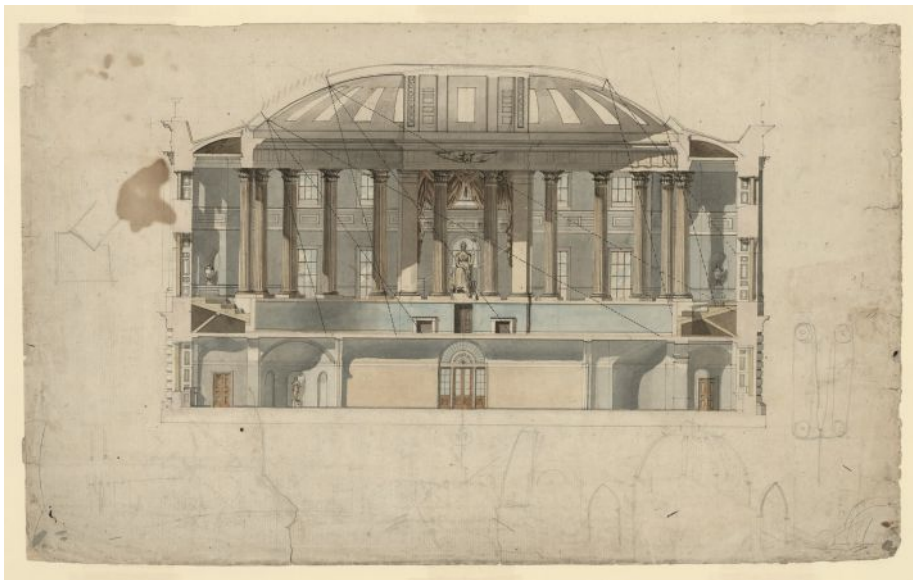
*(Photo: Courtesy of The Historic
American Buildings Survey)*



Reviving Classicism

Modernist Architecture answers to a cloistered elite—it's time for a change.

BY CATESBY LEIGH



Rendering of the Thomas Jefferson Memorial.
 (Photo: Courtesy of The Historic American Buildings Survey)

First Published for the *City Journal*

Whatever the fate of a proposed executive order designating the classical and other traditional architectural styles as America’s “preferred” modes for courthouses and office buildings, while elevating classicism to the status of “default” style for federal buildings in our nation’s capital, the controversy it has aroused demonstrates the intellectual and aesthetic bankruptcy of the status quo. Critics of the proposed order, like the *Chicago Tribune’s* Blair Kamin, appeal to “diversity,” but what they champion is a half-century or more of stylistic confusion that has far more to do with the arrogance of our cultural elites than grassroots sentiment.

“What’s So Great About Fake Roman Temples?” the *New York Times* editorial page asked last weekend, in its broadside against the White House proposal. Do people really think of the U.S. Capitol, Supreme Court, or National Archives buildings in Washington, not to mention the White House, Union Station, Corcoran Gallery of Art, or the Lincoln or Jefferson Memorials in that way? True, they all employ the classical formal vocabulary, though in distinctive ways. One must drink deeply from the chalice of politically correct, art-historical Kool-Aid to regard them as “fake Roman temples.”

“The problem with the [White House] proposal,” Kamin wrote this week, “isn’t classicism. It’s the imposition of classicism and other traditional styles from a single central authority, a move that would undercut the very democratic ideals that classicism is supposed to rep-

resent.” His argument makes no sense. He emphasizes the ban on “development of an official style” in Daniel Patrick Moynihan’s 1962 “Guiding Principles for Federal Architecture.” But in stipulating that “[d]esign must flow from the architectural profession to the Government, not vice-versa,” Moynihan entrusted federal architecture to an unelected elite. What’s democratic about that? The General Services Administration, which oversees the design and construction of federal buildings, is part of the executive branch. It’s perfectly democratic for a duly elected president to mandate the reform of the government’s architectural patronage in order to reestablish a legible and symbolically appropriate federal presence in the nation’s public realm.

Kamin avers that “official styles were for the totalitarian governments America was fighting during the Cold War era of the 1960s. The [P]rinciples, in contrast, equated democratic freedom with architectural pluralism: Federal buildings should reflect regional architectural traditions and, by implication, the diverse character of the American people.” Of course, classicism has always lent itself to stylistic inflections that reflect regional traditions, and Moynihan wouldn’t even have mentioned that criterion but for long-established precedent in the nation’s institutional and domestic architecture.

Moreover, for decades following the Principles’ promulgation, Federal buildings tended to be almost undistinguishable from the generic and anodyne structures erected by private corporations. This includes Kamin’s beloved Federal Center in Chicago. Designed by Mies van der Rohe, the Federal Center is arguably

the best example of federal architecture of the Cold War period—and that’s the problem. The aesthetically reductionist box, whether tower or horizontally oriented slab, constituted our official style, supplemented by some high-profile structures designed in the universally reviled (except by architects and critics) Brutalist idiom. The Guiding Principles did not unleash a wave of diversity, but rather a wave of depressing, inhuman architecture.

Kamin fails to recognize that the Miesian modernism he admires, including the Richard J. Daley Center skyscraper (1965) by Mies’s pupil Jacques Brownson, cannot serve as a default idiom for the creation of a satisfying urban environment. It cannot create a superbly monumental urban canyon like the classical

frontages along Chicago’s LaSalle Street, which Kamin justly praises. Imagine LaSalle Street lined with Miesian boxes; it would be an urban desert. On Manhattan’s Park Avenue, a cluster of knock-offs near Mies’s Seagram Building (1958) is widely acknowledged to have degraded its setting. The diagrammatic Brownson box at the Daley Center has an essentially parasitic relationship to its surroundings, and particularly to the classical City Hall (1911) that it faces. The Brownson building exploits City Hall’s august formal vocabulary as a crutch for its own formal impoverishment, an all-too-familiar trick in modernist architecture.

Moynihan himself was aware of the underlying issues. Whatever hopes he may have entertained that his Guiding

National Trust for Historic Preservation Opposes Proposed Executive Order Mandating “Traditional” Architectural Styles for Federal Buildings

The great American architect, Frank Lloyd Wright said that an architect should “be a great original interpreter of his [or her] time.” In that way, architecture is a record of the American lived experience, and our work at the National Trust for Historic Preservation is to ensure that a record of places that matter is retained as a recollection of our journey as a people.

This week several media sources reported that the White House is being lobbied to adopt an executive order that would effectively mandate the use of “traditional” and “classical” architectural styles for future federal buildings and even for renovation projects at existing federal buildings.

While the National Trust values—and protects—traditional and classical buildings throughout the country, to censor and stifle the full record of American architecture by requiring federal buildings to be designed, and even altered, to comply with a narrow list of styles determined by the federal government is inconsistent with the values of historic preservation. The draft order would put at risk federal buildings across the country that represent our full American story, and would have a chilling effect on new design, including the design of federal projects in historic districts.

Current federal standards require that federal architecture be based on “designs that embody the finest contemporary American architectural thought.” As preservationists, we know that the country has been well served by that standard, evidenced by the rich architectural record represented in the diverse portfolio of federal buildings, and by the expertise of architects, engineers, builders, and artists who would be excluded from critical decision-making roles by the executive order. We strongly oppose any effort to impose a narrow set of styles for future federal projects based on the architectural tastes of a few individuals that will diminish, now and for the future, our rich legacy of federal architecture.



ABOVE The Lincoln Memorial. (Photo: Courtesy of The Historic American Buildings Survey)

LEFT Brutal Washington: Hubert H. Humphrey Department of Health and Human Services Building (1977), by Marcel Breuer (Photo: Shutterstock)

Principles would inspire architectural evocation, in new modes, of the federal government’s “dignity, enterprise, vigor and stability” were soon disappointed. In 1970, he lamented the fact that “[t]wentieth-century America has seen a steady, persistent decline in the visual and emotional power of its public buildings, and this has been accompanied by a not less persistent decline in the authority of the public order.”

In 1994, GSA launched the Design Excellence program to improve Uncle Sam’s architectural game. The program’s upshot has been a series of architectural failures in a wide variety of modernist architectural flavors—Kamin’s “diversity” in action, in other words. These debacles reflect modernism’s chronic stylistic instability, its ongoing failure to generate a normative, enduring idiom. Modernism is not about norms; it’s about negation, about architecture that is simply not traditional. Fortunately, and often due to pressure from powerful politicians like Alabama’s Richard Shelby, now chairman of the Senate Appropriations Committee, small allowance has been made for classical courthouses. And a small number of decent postmodern courthouses, reflecting a more serious engagement with architecture’s history, have been built.

But Kamin insists that federal architecture isn’t so much about style, not to speak of formal norms, as it is about “function, security, sustainability, and compatibility with a specific site, climate, and culture.” Over many hundreds of years, of course, classical buildings have proved adaptable to different social, geographic, and technological conditions. And even if El Paso and Las Cruces, New Mexico, can now claim bizarre U.S. courthouse agglomerations in what has been dubbed a “Deconstructed Adobe” style, it’s

extremely doubtful that these buildings are doing the regional culture any favors. Very little attention was evidently given to “regional architectural traditions” or compatibility with the local climate in the design of Richard Meier’s glassy U.S. courthouse in Phoenix (2000), famous not for its decidedly exogenous architecture but for the sweltering heat in its extravagantly spacious atrium. And what does celebrity architect Thom Mayne’s discombobulated San Francisco Federal Building (2007) have to do with regional architectural traditions or local climate, which his design conspicuously failed to accommodate? Kamin can forget about community input so far as this and many other Design Excellence projects are concerned. The bottom line is that Mayne was a favorite of the Design Excellence program’s initiator, Ed Feiner.

We’ll pass over the curious new blue-glass, neo-Brutalist Corbuncle (as in “Le Corbusier” and “carbuncle”) in Miami; a lofty pile of green glass in Buffalo in the shape of a bisected ellipse, with an adjacent pie-slice-shaped glass pavilion; or the depressingly boxy courthouse in Orlando, whose construction two federal judges who had served on the architect-selection panel sued unsuccessfully to prevent, on grounds that the selection process was rigged. The *Times* editorial advertises the Miami Corbuncle, but Kamin is more restrained, lauding instead the new federal office building in Oklahoma City (2005). This structure’s fragmented envelope is pierced by an elliptically curving glass wall terminated by a pie-slice portico sporting an array of skinny stilts. The portico is bling masquerading as symbolism. This is pretentious corporate architecture that would fit right into a suburban office park and bears no vital relationship to the nation’s tradition in federal architecture.

That tradition is predominantly classical. This official style was acknowledged by the government’s senior architect, then employed by the Treasury Department, in a 1901 report. He wrote: “The Department . . . decided to adopt the classic style of architecture for all buildings as far as it was practicable to do so, and it is believed that this style is best suited for Government buildings. The experience of centuries has demonstrated that no form of architecture is so pleasing to the great mass of mankind as the classic, or some modified form of the classic.” As I recently explained in *City Journal*, the classical idiom engages us as embodied beings, rendering its idealization of structure symbolically resonant. This is why, in a 2007 AIA poll ranking the public’s favorite 150 buildings, John Russell Pope’s classical West Building at the National Gallery of Art ranked high, while I.M. Pei’s abstract and fragmented East Building (which modernist critics love) didn’t even make the cut.

Pope’s building speaks to people. It ennobles the art within. Kamin takes me to task for saying that modernist government buildings “fail to speak to the aspirations of ordinary citizens,” but my reply would be, first, to point to my imaginary Miesian LaSalle Street cityscape. What modernist could have created the enthralling vistas classically oriented architects created there? Not one. What modernist architect, or team of modernist luminaries, could give us the equivalent of a U.S. Capitol? We need to bear in mind that classicism is hardwired to engage the public at large, while modernism is more attuned to private sensibilities and personal identity. Where our federal architecture is concerned, that isn’t good enough.

There’s little reason to believe that Moynihan, who died in 2003, would have

changed his mind about the general state of public architecture as a result of the Design Excellence program. In his book about modernist architecture, *From a Cause to a Style* (2007), Moynihan’s good friend Nathan Glazer wrote: “I believe that Moynihan, like so many of us, was no enthusiast of the breathless variety of innovative forms and materials and arrangements that are the trademarks of leading contemporary architects.”

Maybe Kamin will someday realize that GSA’s Design Excellence patronage really has been rigged—and mainly to empower modernist GSA bureaucrats and their allies at the American Institute of Architects. Again, GSA patronage does not totally exclude the classical, but systematically marginalizes it. In his important book, *Art from the Swamp* (2018), Bruce Cole—the late art historian and onetime chair of the National Endowment for the Humanities—describes GSA’s Byzantine jury system, which ensures that GSA, not the communities it supposedly serves, let alone the stakeholders affected by a given project, is all too often in control. This was especially the case with the Design Excellence process that led to the ill-suited Frank Gehry being chosen as the architect of the Dwight D. Eisenhower memorial now under construction in Washington. Gehry’s stage-set design is notoriously unpopular.

“Communities should continue to have the right and responsibility to decide for themselves what architectural design best fits their needs,” the AIA intoned in a letter to President Trump cosigned by its CEO, Robert Ivy. That’s especially rich, considering that Ivy served on the Design Excellence jury that selected Gehry. One wonders whom he claims to speak for when he declares, as he did on NPR this week, “In the twenty-first century, we’re very different people from the people

Response to AIA from Michael G. Imber, FAIA

The American Institute of Architects recently released its response to the President's intention to issue an executive order instructing, "In the Capital region and for all Federal courthouses, the classical style shall be the preferred and default style..." There is now an outcry; opponents argue that architectural style should not be mandated. The loudest among those voices is the AIA.

Just to be clear, I am in agreement—even as a classicist. Neither the government nor a professional organization should dictate a single architectural style. However, I question—isn't that exactly what the AIA has been doing for decades?

As a Fellow, I wish to point out several falsehoods in the letter released on my behalf by the AIA on February 6, 2020:

1. The AIA "always works with communities to assess the most appropriate architecture within those communities. A one size-fits-all mandate simply ignores needed input from impacted parties."

The AIA has consistently ignored the local history, culture, building traditions, and materials of our communities in favor of academically and technologically derived styles that have little to do with those communities existing urban fabrics. Technology and innovation alone have taken precedence over beauty and dignity in determining what is 'good' for the public.

Example:

In 2007, the AIA announced the 150 winners of the "America's Favorite Architecture," a nationwide survey of buildings voted on by the public. Nine of the top ten best buildings were classically designed, and five of those nine classical buildings were federal buildings in Washington, D.C.

When complete, the San Francisco Federal Building designed by Thom Mayne had an occupant approval rating of 13%, but the building won an AIA Excellence in Architecture Honor Award. Mayne has written: "Maybe art should adopt a more aggressive attitude towards the Public." In 2013, Thom Mayne won the AIA Gold Medal.

2. "The AIA has not, and does not, prioritize any type of architectural design over another."

It would be interesting for Mr. Ivy, a noted author of the letter and vocal proponent of modernist architecture, to demonstrate how he has supported traditionally practicing members of the organization. Although the AIA's mission statement notes "Diversity" as one of its pillars, this attitude in no way extends to architectural philosophies. The AIA and its press consistently and ardently promote modernist architecture and modernist architecture alone. There is a large contingent of internationally noted classical architects in the United States, but rarely has one been acknowledged, awarded, published in the organization's journals, or given an opportunity to share their work or their ideas with the organization as a whole.

3. "...the specific type of architecture preferred in the order can increase the cost of a project (to up to three times as much), [the AIA] would hope the GSA, Congress and others would take pause. Since these costs would have to be borne by U.S. taxpayers, this is not an inconsequential concern."

Beautiful, functional and lasting classical buildings are commonly and consistently built within the same budgets that are typical for modernist buildings. In fact, modernist buildings are often exorbitantly over budget. Whether a building is in the classical idiom has no bearing on its cost or the probability that it will be over budget. What is not mentioned anywhere in this letter is the fact that classical buildings are built out of tried and tested materials that have been proven to last generations. Modern buildings test technologies and innovations that are often quickly outpaced, outdated, and expensive to maintain—if not impossible due to obsolescence of assemblies and technologies.

Examples:

- The classical Tuscaloosa Federal Courthouse (including technology and security) cost approximately \$377/sf.
- The modernist Austin Federal Courthouse is approximately \$487/sf.
- Santiago Calatrava's Oculus, built in lower Manhattan, cost nearly \$4 billion. The original budget estimate was \$2 billion.
- Thom Mayne's Federal Building's budget was only reduced by eliminating the air conditioning in order to save his signature screen.

As a Fellow of the AIA, I have remained with the organization in order to work for unity and the diversity of practice among our members. It has been difficult. Because I practice traditional architecture my work has now been branded by my fellow AIA colleagues (all of them modernist practitioners) as racist, elitist, and even as fascist. These labels don't come from the public, with whom my work has remained popular—I am well-published and have received numerous awards from organizations not related to the AIA. Nor, are they monikers that come from my political or personal beliefs. These are labels that come from my peers in the AIA that disparage the fact that I believe in the continuum of cultural history and the beautiful and meaningful architecture that has been and can be born from those beliefs.

It is true that both modernist and classical buildings can be good civic buildings. I believe classicist, modernist, and the public alike have one thing in common: we can all agree that egotism among architects, the lack of a common architectural language, the disregard for cultural histories, and disunity within the organization have created a mess out of the public realm. The solution should not be a mandate for the "classical" or the "modern." It should be a mandate for the good. That mandate should begin with the leadership at the American Institute of Architects.

who popularized Greek Revival architecture in the nineteenth century, beautiful as it was"—as if there were no such thing as a shared human nature across space and time. Ivy added: "To try to force-fit new systems in old forms is in and of itself difficult to do, inefficient, and is not who we are today." That's a modernist apparatchik's way of saying, "We can't build 'em like we used to because we don't want to build 'em like we used to"

Some distinguished voices presuming to speak for the classical camp don't like the idea of a classical mandate for federal architecture. It's hard to gauge

how much of their opposition is driven by hostility to President Trump. But this isn't about Trump. This is a rare opportunity to improve America's architectural culture. The White House, for its part, should make the classical the default style for federal architecture throughout the nation, as the Treasury Department once did, and raise the bar for other traditional and modernist idioms, while retaining the richly deserved ban on Brutalism and Deconstructionism in the current draft. This would be change that sensible Americans, regardless of political orientation, can support.



CATESBY LEIGH writes about public art and architecture and lives in Washington. He is a past founding chair and research fellow of the National Civic Art Society, which supports the proposed executive order discussed in this commentary.

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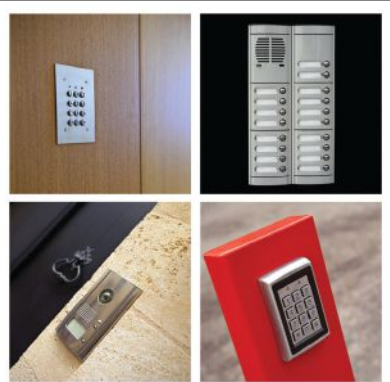
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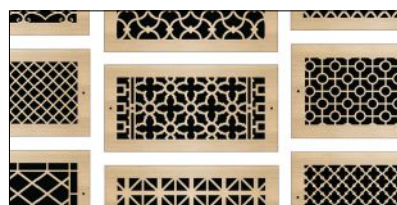
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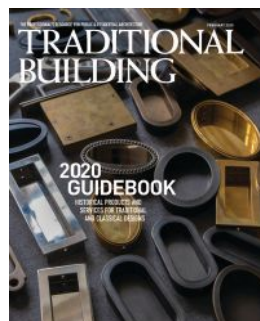
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Manufacturer of fully custom hardwood windows and doors, exact Landmark matching details, modern and traditional profiles, all glazing types available, rated for coastal properties, high level OITC, air and water proof, professional installation available.

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HEARTWOOD FINE WINDOWS & DOORS
585-340-9085; Fax: 585-254-1760
www.heartwoodwindowsanddoors.com
Rochester, NY 14606

Manufacturer of custom architectural wood windows & doors: Honduras mahogany & other species; traditional mortise-&tenon construction; standard & decorative glazing; related window & door hardware; 68-year-old company.



HISTORICAL ARTS & CASTING
800-225-1414; Fax: 801-280-2493
www.historicalarts.com
West Jordan, UT 84081

Designer & custom fabricator of ornamental metalwork: doors, windows, hardware, stairs, balustrades, registers, fences, lighting, gutters, columns, weather-vanes, snow guards, cupolas, planters, fireplace tools & more; iron, bronze, aluminum & steel; restoration services.

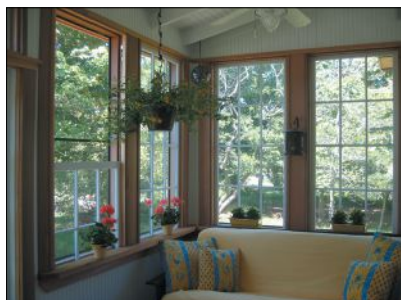
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HOPE'S WINDOWS, INC.
716-665-5124; Fax: 716-665-3365
www.hopeswindows.com
Jamestown, NY 14702

Manufacturer of custom-designed windows & doors: handcrafted, hot-rolled, solid-steel & solid-bronze window & door systems.

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JIM ILLINGWORTH MILLWORK
315-232-3433
www.jimillingworthmillwork.com
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Manufacturer of custom wood windows, doors & moldings: for homes & historic buildings; matches any existing wood windows, doors, moldings; custom millwork.

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KOLBE WINDOWS & DOORS
800-955-8177; Fax: 715-845-8270
www.kolbewindows.com
Wausau, WI 54401

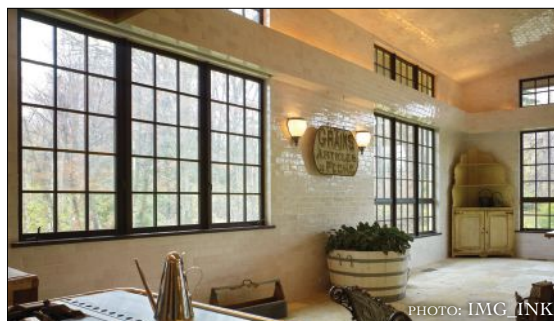
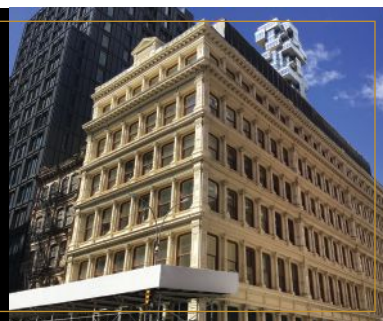
Manufacturer of windows & doors: traditional details; extruded aluminum-clad, roll-formed aluminum-clad, wood & vinyl energy-efficient windows & doors; fiberglass doors.



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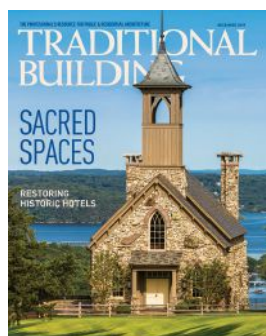
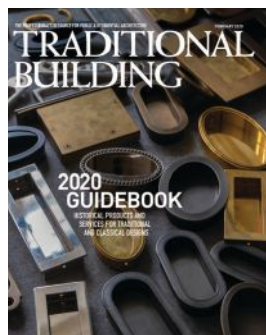
Manufacturer of custom, quality wood & aluminum-clad windows & doors: vast array of options, numerous wood species & complete finishing capabilities; historical replications; screen doors, casings & moldings.

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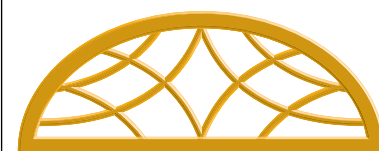


PELLA WINDOWS AND DOORS
800-847-3552; Fax: 641-621-3466
www.pella.com
Pella, IA 50219

Manufacturer of windows & doors: wood, aluminum-clad wood, fiberglass, & vinyl; variety of wood types; renovation & new construction; experience on National Park Service projects; standard and custom sizes, shapes, colors, styles, muntin patterns, and exterior casings/brickmolds; many glass and hardware options; high transparency screens, wide variety of installation systems, local representation & service.



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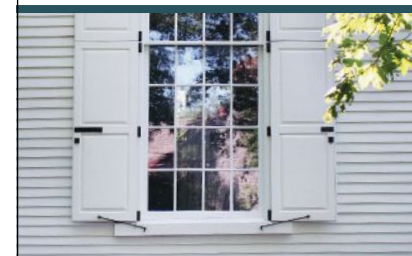


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Manufacturer of aluminum windows for heavy commercial & architectural replacement: dual windows for acoustical abatement; screens, metal windows & doors.

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www.coppawoodworking.com
San Pedro, CA 90731

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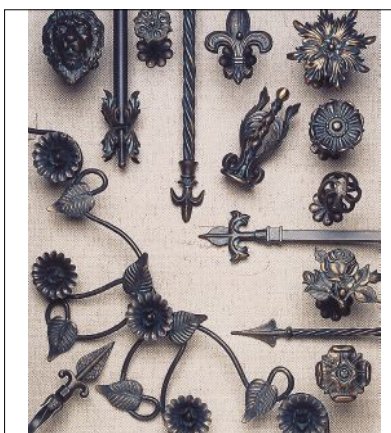
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www.ballandball.com
Exton, PA 19341

Custom manufacturer & supplier of ornamental metalwork & hardware: door, window, shutter, gate & furniture hardware; fireplace tools; wrought iron, steel, aluminum, bronze, brass, copper & cast iron; custom reproductions.



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www.erbutler.com
New York, NY 10012

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HAMILTON SINKLER

866-900-3326; Fax: 212-760-3362
www.hamiltonsinkler.com
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www.historicalarts.com
West Jordan, UT 84081

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www.phelpscompany.com
Hinsdale, NH 03451

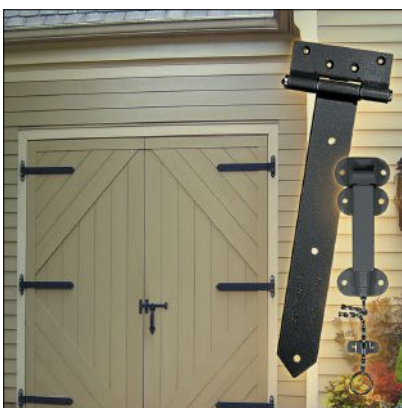
Manufacturer of traditional hot-forged solid-brass window hardware: sash pulleys, weights, chains, lifts & locks; stop-bead adjusters, spring bolts, window ventilation locks, push-out casement hardware, storm/screen-door latch sets & more.

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www.wmcraft.com
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Designer, fabricator, finisher & installer of fine quality custom ornamental metalwork: railings, fences, gates, custom, hot-rolled steel doors & windows, lighting, grilles, bronze & aluminum entry doors; all cast- & wrought-metal alloys, finishes & architectural styles; since 1940.

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DOORS & ENTRYWAYS



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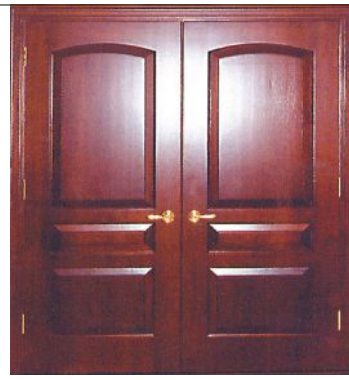
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JIM ILLINGWORTH MILLWORK
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Manufacturer of custom wood windows, doors & moldings: for homes & historic buildings; matches any existing wood windows, doors, moldings; custom millwork.

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Calverton, NY 11933

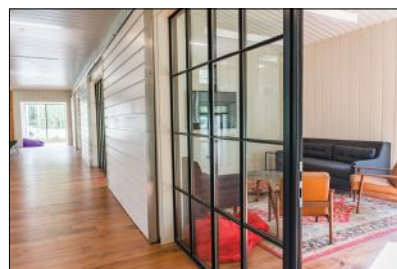
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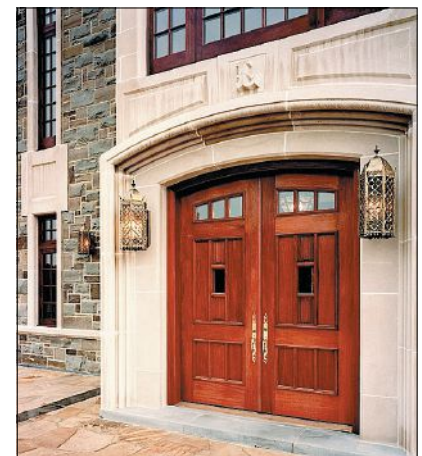
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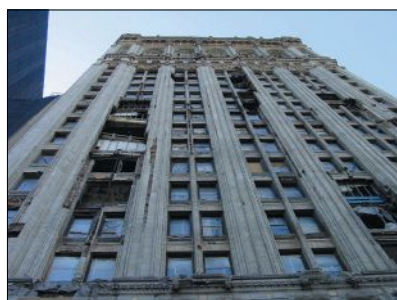


HISTORICAL ARTS & CASTING

800-225-1414; Fax: 801-280-2493
www.historicalarts.com
West Jordan, UT 84081

Designer & custom fabricator of ornamental metalwork: doors, windows, hardware, stairs, balustrades, registers, fences, lighting, gutters, columns, weather-vanes, snow guards, cupolas, planters, fireplace tools & more; iron, bronze, aluminum & steel; restoration services.

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Salt Lake City, UT 84104

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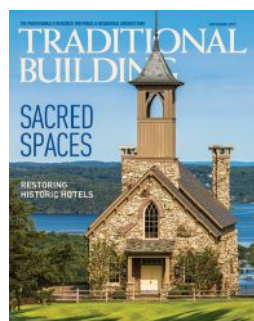


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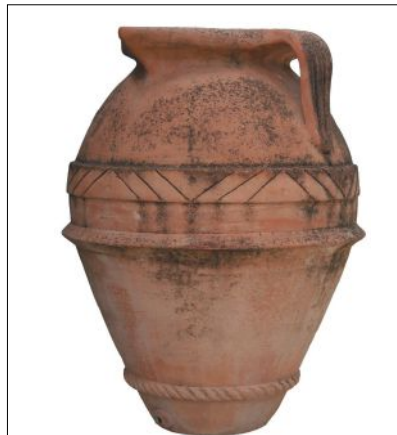
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ROBINSON IRON CORP.
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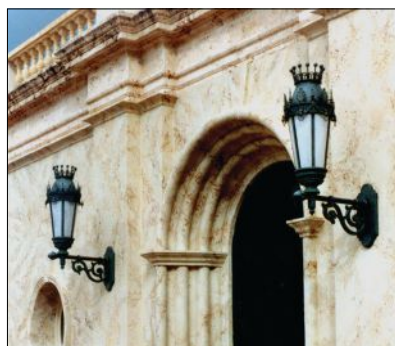
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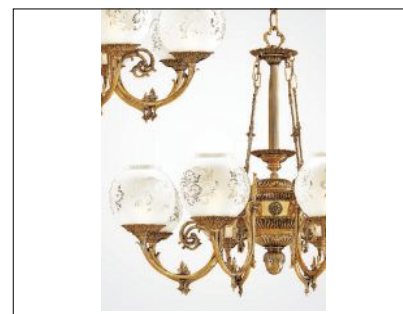


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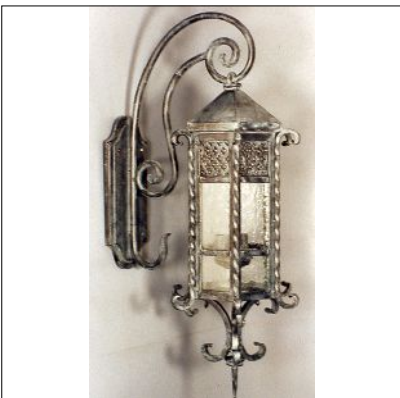
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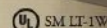
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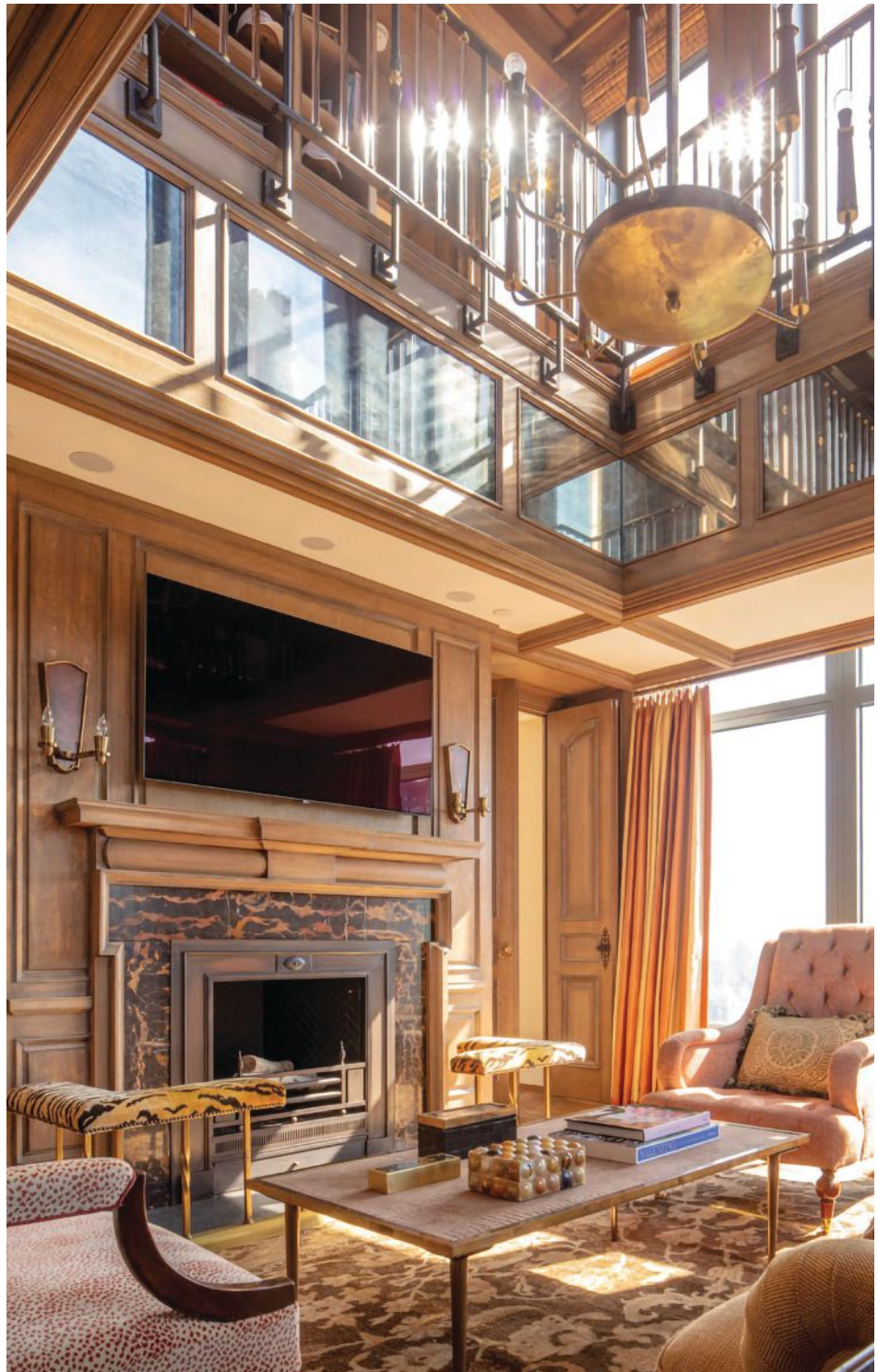
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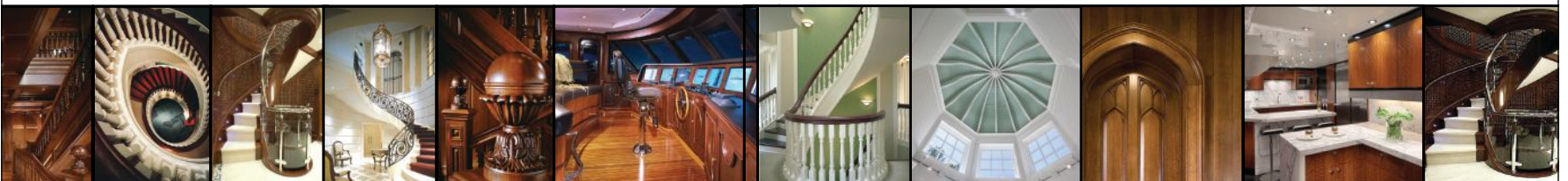
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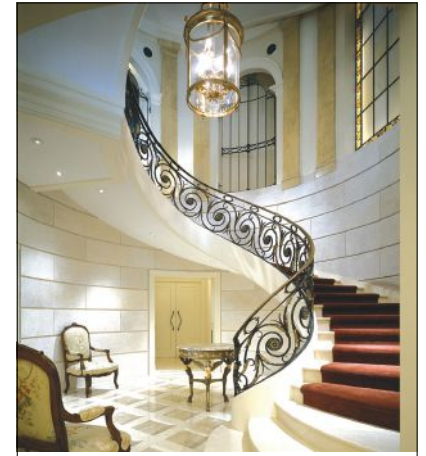
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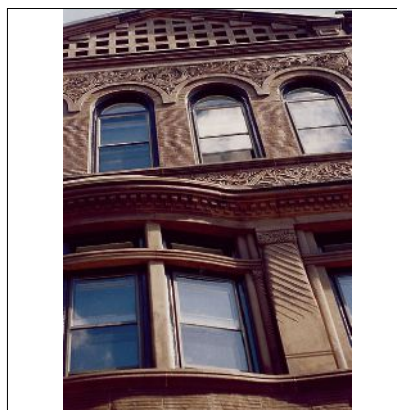
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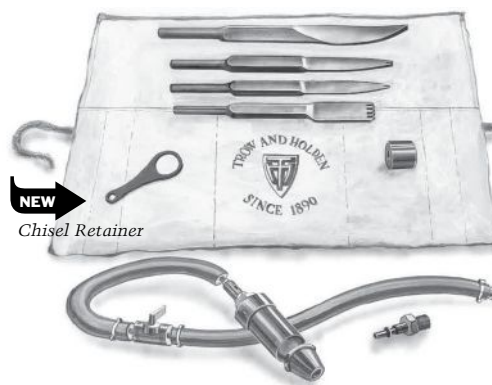
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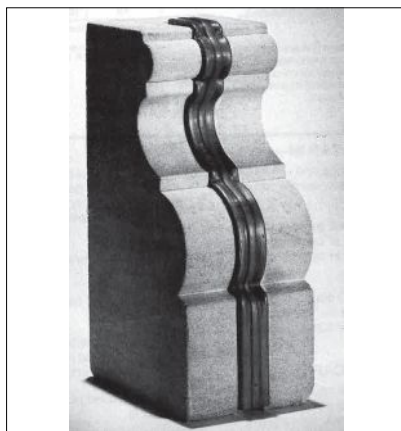


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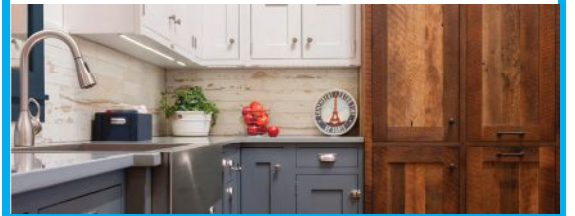
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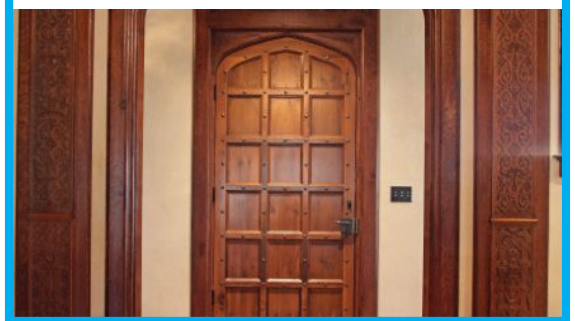


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The Art of Classic Planning: Building Beautiful and Enduring Communities

BY NIR HAIM BURAS

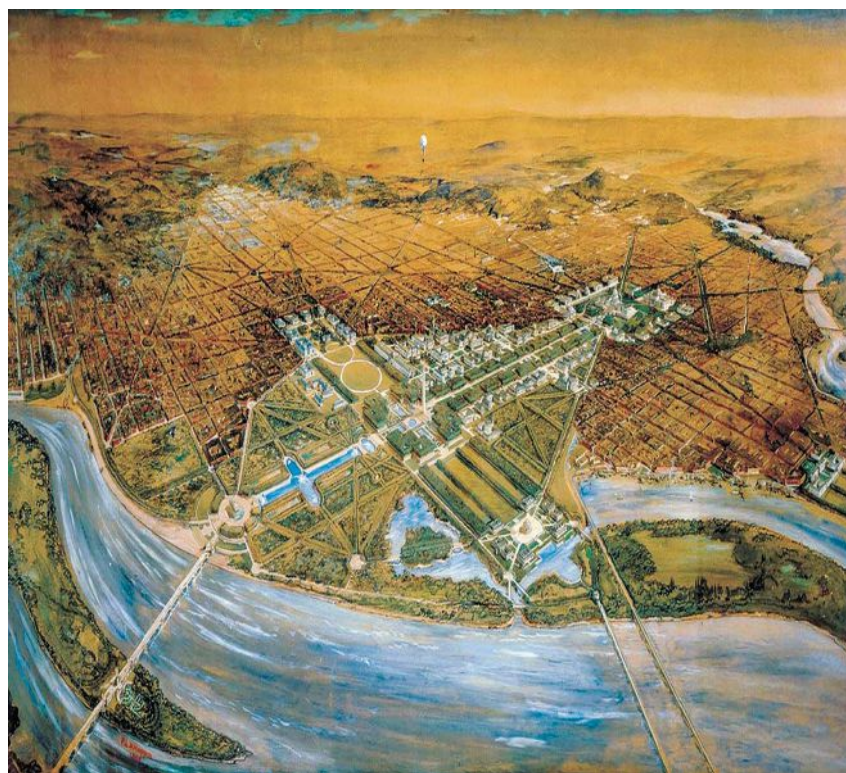
January 28, 2020

Harvard University Press

First Edition

Hardcover

\$95



CLOCKWISE FROM ABOVE: Aerial view of the McMillan Plan for Washington DC; rendering by F. L. V. Hoppin, courtesy of the U.S. Commission of Fine Arts. So-called pedestrian “space” in Brasilia courtesy of Nir Buras. The street as a civic “room” in Lisbon courtesy of Nir Buras.

OUR CITIES ARE IN TROUBLE. Undoubtedly with the best of intentions every new idea under the sun has been thrown at them for the past century to solve the many problems they face. During that time no other author has taken up the subject of Classic Planning. In *The Art of Classic Planning* Nir Buras unpacks for the reader the embedded wisdom of the previous 5,000 years of city building that carries many a legacy of beautiful places created to meet the aspirations of their community.

How Did We Get Here?

For thousands of years the spirit of the place, known by the Romans as “genius loci”, was the single most important principle in the establishment and directed growth of cities. In the 19th century certain architects and planners sought to displace the genius loci with the Zeitgeist, “the spirit of the age” which proposed a kind of social Darwinism that saw the “end of history” being completed in a socialist utopia forever freed from tradition and the past.

Beautiful places at first were degraded, becoming less beautiful until eventually many urban environments within cities came to invoke pain, terror, and fear...sometimes deliberately so. The response of other urban planners was to abandon the city, envisioning gardened enclaves that would segregate peaceful habitation from toil and commerce, an escape that was short lived, as the suburban frontier soon became overrun by sprawl. *The Art of Classic*

Planning scrupulously documents this entire history and more importantly clearly outlines the faulty thinking that led to the defacing and abandonment of our cities.

Classic Planning Fundamentals

Aristotle considered that it is in the nature of man to make cities to achieve the good. That seemed to be the case not just for the Greeks but mankind in general. Despite superficial aesthetic differences, disparate cultures around the world have organized their cities in remarkably similar ways. All archaeological evidence points to cities as having first begun not as overgrown villages, rather as communities planned whole cloth from their very inception. A prominent feature in coherent cities is the persistent application of a grid layout for basic city fabric, even if loosely applied to adapt to terrain whereas what has come to be known as designing in the “Grand Manner” accommodates occasional departure from the regular grid to focus special attention on civic structures and monuments that encode urban, collective memory. Together these approaches were effectively employed in a number of plans including Haussmann’s plan for Paris and the McMillan plan for Washington DC. Dr. Buras uses these plans to demonstrate that beautiful cities do not arise haphazardly or by chance but according to Classic planning fundamentals that remain available for our use today.

The Application of Classic Planning

Classic planning exercises the appropriate technology for human habitation and accomplishes this upon simple design principles. One of these is tripartite design. The overall presentation of Classical architecture (of a variety of cultures) is consistently found in three principal divisions: a base, body, and crown. This three-part division is fractally reflected in their individual components. There are three basic sizes of traditional buildings as well: small, medium, and large that we can expect to adapt to a multitude of functions throughout their practical life. Designs of city streets, blocks, squares, and transport hubs that seem to bewilder contemporary planners are demystified by the Classic approach that seeks to maximize human mobility and interaction.

Buras goes on to address contemporary concerns of sustainability, the balanced relationship of cities to the countryside, and the social implications of engaging the artists and craftsmen necessary to create cities worth caring about. All of the above is conveyed in a common sense approach that is free of jargon and readily accessible to the professional planner, city official, and engaged citizen alike. *The Art of Classic Planning* is not merely a “must have” book for the old library, it is a once in a generation treatise that contains within its pages the power to heal the world.

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