

Annual Meeting 🖄 Symposium

Preservation in a Campus Environment: CHALLENGES OPPORTUNITIES

New Haven, CT / February 2, 2018

Association for Preservation Technology Northeast Chapter

www.aptne.org

Who We Are

Originally founded as the APT New York Chapter in the mid-1980s, the organization was restructured in 2003 as the **Association for Preservation Technology Northeast Chapter** (APTNE) encompassing New England, New York State, and northern New Jersey. At present, we have approximately 200 members.

APTNE is committed to this large geographic community with regional and local preservation events. We conduct workshops, co-sponsor events with local and statewide preservation organizations, and sponsor symposia including our annual meeting. We support preservation students by offering scholarships and outreach for student chapters. We invite you to learn more about our organization at www.aptne.org.

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APTNE

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Schedule of Events Friday, February 2, 2018

8:30 - 9:15	Registration & Breakfast	2:00 - 2:20	Brutalist Concrete
9:15 - 9:30	APTNE Welcome Address APTNE President, Chris Dabek		Conservation at the University of Massachusetts Amherst Shelby Schrank, <i>Student</i>
9:30 - 10:00	Keynote Speaker: The Institutional Mission and Preservation, a University Perspective Laura Cruickshank	2:20 - 2:40	New York City's Schools— A History and Guide to Rehabilitation Bruce Nelligan
10:00 - 10:20	Thinking Like James Gamble Rogers: Collegiate Gothic Decoration with a Twist John Canning	2:40 - 3:00	Planning for the Future While Respecting the Past—Central Campus Development at the University of Vermont
10:20 - 10:40	Anticipating Patina in		Marc Loranger and Luce Hillman
	Campus Building Stone Heather Hartshorn	3:00 - 3:10	Afternoon Q&A
10:40 - 11:00	Coffee & Refreshment Break	3:10 - 3:30	Coffee and Refreshment Break
11:00 - 11:20	Preservation, Demolition, and Urban Campus Expansion: Case Studies in Philadelphia, PA Arielle Harris, Student	3:30 - 3:50	Preservation and Infrastructure at a Historic Community College Campus Robin Auchincloss
11:20 - 11:40	Recording the Landscape: Strategic Cultural Landscape Planning through GIS Neela Wickremesinghe and Joseph Charap	3:50 - 4:10	30 Years of Preservation Engineering with Amherst College James Norden and Amy Jagaczewski
11:40 - 12:00	Spanning the Sawkill: Bard	4:10 - 4:30	One Size Does Not Fit All Richard Tobin
	College, Montgomery Place and the Limits of Adaptive Re-use	4:30 - 4:45	Final Q&A/Open Discussion
	Matt Alexander	4:45 - 4:50	Closing Remarks
12:00 - 12:15	Morning Q&A	5:00 - 7:00	Reception Peabody Museum of
12:15 - 1:45	Lunch, Annual Board Meeting		
1:45 - 2:00	Chapter Highlights, Annual Report		Natural History

For tour information please see page 26.

Speaker Abstracts

> An aerial view of the Storrs Campus, University of Connecticut. (Courtesy of UConn)

The Institutional Mission and Preservation, a University Perspective

Keynote Speaker Laura Cruickshank

Most institutions have a mission statement. A university mission statement almost always involves the acquisition, preservation, development and dissemination of knowledge. This mission guides the institution's decisions and influences the prioritization of initiatives and allocation of budgetary resources. The more robustly that an initiative, which includes the preservation of natural, cultural or human built resources, supports the institution's mission, the more likely it is that the institution will support the initiative.

How does university planning—academic, operational and capital—influence the prioritization of initiatives and resources? How are deferred maintenance, infrastructure and sustainability issues considered? What are some examples of preservation initiatives that support the institution's mission?

About the Keynote ...

Laura Cruickshank, FAIA, is the University Master Planner and Chief Architect and Associate Vice President for University Planning, Design and Construction at the University of Connecticut. Ms. Cruickshank is responsible for the immediate and longrange planning, design and construction of UConn's two billion dollar Capital Improve-



ment Plan for the Storrs and Regional Campuses and the Law School.

Prior to joining UConn, Laura Cruickshank was the Yale University Planner and directed planning and design on the Yale central campus; and led Yale planning, design and construction for the new Yale-NUS College in Singapore. Prior to her tenure at Yale, she was in private practice for over twenty years.

Ms. Cruickshank received her Bachelor of Arts degree from Mount Holyoke College and her Master of Architecture degree from the University of New Mexico School of Architecture and Planning. She holds architectural registration in Connecticut and is a member of the College of Fellows (COF) of the American Institute of Architects (AIA), the Society for College and University Planning (SCUP), the Association of University Architects (AUA) and the National Organization of Minority Architects (NOMA).

KEYNOTE SPEAKER SPONSORED BY: PULLMAN A Structural Group Company

Thinking like James Gamble Rogers: Collegiate Gothic Decoration with a Twist

Presented by

John Canning

The restoration of the intricate decoration at Yale's Battell Chapel in the 1970s was John Canning's first, large scale project at the university. We have been honored to restore a number of Yale properties since. Among them, the most challenging projects have been those designed by James Gamble Rogers.

Gifts to the university from alumni Edward Harkness and a large (\$17 million in 1918) bequest from John W. Sterling funded the 20-year building boom that started in the 20s. James Gamble Rogers, Harkness' favorite architect, designed Harkness Tower, completed in 1921. He is responsible for Yale's 1924 general plan and 18 more buildings on campus through 1935.

Working in the collegiate gothic style, like so many other university architects before him, Rogers added an interesting twist. His new, 1920s buildings were designed to look as if they had been standing since the 15th century, the original era of Gothic architecture. To achieve this look, Rogers would add cracks repaired with lead cames to brand new windows. In Harkeness Tower, the treads of the stone stairs were ground down in the center to mimic the wear that 600 years of traffic would have produced.

His "aging" idea creates interesting restoration challenges when it comes to interior decoration. In order for us to "restore to the designer's original intent" our goal must be to restore the decoration to that aged look.



Using examples from the recent restoration of Sterling Library and other buildings, our presentation will cover:

- How we identified Rogers original, multi-layer decoration finishes when the traditional paint study approach is designed to define single colors: clues found in archival documents.
- The process of conserving and replicating "aged" painted decoration schemes: colors, coatings, application techniques.
- The process of conserving and protecting "aged" wood: cleaning methods and coatings.
- Creating new wood elements woodgraining to match the 600-year-old variety.
- Documenting the restoration treatment plan for the future, and a guide to creating new decoration in the Rogers style.



Preservation is especially important for universities because the built environment also has much to teach us. Buildings are lasting evidence of cultural thought and practice. And, in the case of James Gamble Rogers' buildings, one man's creative twist on the academic legitimacy represented by the Collegiate Gothic style.

About the Presenter ...

John Canning, PA AIC,

Honorary AIA arrival from Scotland coincided with the beginning of the architecture preservation movement here in the US. He brought with him an education in art history and decorative trades combined with a 5-year apprenticeship working under the direction of master painters on the restoration of ecclesi-



astical decoration in centuries-old European churches. The apprenticeship earned him an advanced certificate from the London City & Guilds.

Fifty years later, John is an industry-recognized authority on all periods of historic decorative arts, the methods and materials used during those periods, and the ethical conservation and restoration of historic interiors. He is a generous collaborator, gladly sharing his knowledge by always providing the "why" behind the "what" of his recommendations.

His company's impeccable work has been recognized for restoration excellence with numerous industry awards, including the Arthur Ross Award, two Bullfinch Awards, and the Stanford White Award all from the Institute of Classical Architecture & Art (ICAA).

John has been recognized personally for his contribution to the preservation of our built environment. He was awarded the Connecticut Governor's Medal for Art and Architecture, is a Professional Associate Member of the American Institute for Conservation of Historic and Artistic Works (AIC), and he was inducted into the American Institute of Architects (AIA) as an Honorary Member—the only tradesman to be so honored.

Anticipating Patina in Campus Building Stones

Presented by

Heather Hartshorn

Campuses typically consist of multiple largescale masonry buildings with stone that has been installed for decades or even centuries. When historic preservation projects are undertaken in these campus environments, it is typically desirable to retain as much original material as possible. However, there is sometimes a need for more widespread replacement of original material. When this is the case, it is necessary to vet replacement materials for compatibility with the originals in terms of both performance and aesthetics. Part of a diligent evaluation often involves a full gamut of physical property and durability testing. The research presented here focuses on a singular part of this testing program - the evaluation of replacement stone from an aesthetic perspective. It looks specifically at the alteration of stone appearance over time through environmental interactions, which is often referred to as "patina".

Although the potential for visual change is only one of the properties that should be evaluated when considering stone sources, it can be argued that it has the most tangible impact and the greatest visibility to the public. This project involves subjecting

samples of building stone to a weak, yet replenishing, acid. This is meant to recreate chemical conditions that might be expected to occur in the field and potentially induce a patina on the stone. These methods are based on a historical test first described by geologist William Parks in his "Report on the Building and Ornamental Stones of Canada". Though the test is over a century-old, it has not been a commonly employed part of materials testing programs until recently. As part of this research, patina testing has been performed on a variety of stone types and sources including various limestones, marbles, sandstones, and granites. Some stone types, namely limestone, are found to be more susceptible to visual changes through this test. Where other methods may be necessary to recreate a similar patina observed in more siliceous stones, these are also discussed. Still, the test has been demonstrated to act as a good predictor of actual stone patina on several different types of limestones tested for projects carried out across multiple campuses.





The results of this testing have given specifiers a fairly straightforward way to distinguish between replacement stone contenders, particularly when those stones were otherwise similar in terms of overall composition and physical properties. It has certainly been shown to act as a litmus test for undesirable visual changes that might occur in a given limestone source.

In some cases, limestone sources that are essentially identical before testing develop markedly different patinas. The visual disparities between stones may be so dramatic as to completely rule out a source from consideration as a replacement material. These sometimes significant aesthetic changes are often attributed to only very small differences in composition and would not be anticipated based on a general characterization of the stone alone.

About the Presenter ...

Heather Hartshorn, MS, BA is a materials scientist with a background in chemistry and preservation as well as a special interest in historic construction. She is the supervising chemist at Highbridge Materials Consulting, Inc. Heather holds a Bachelor's in Chemistry and Art History from Trinity University and a Master's in Historic Preservation from Columbia University. In addition to her thesis, which focused on reactions in dolomitic lime, Ms. Hartshorn's work at Highbridge focuses on the modification of chemical methods to better solve problems in historic mortar analyses, research on unique historic binder materials in American masonry that may not be well documented or understood, and the development of novel test methods to evaluate performance in historic masonry materials.

Preservation, Demolition, and Urban Campus Expansion: Case Studies in Philadelphia, PA

Presented by student Arielle Harris

Universities in cities have a choice when expanding their campus: to demolish existing urban fabric or to keep the surrounding neighborhood's buildings and density. Philadelphia's colleges and universities have taken both of these approaches over time. This paper seeks to analyze the recent planning decisions of La Salle University in regard to their campus' historic resources, and will compare their campus undertakings to the latest preservation practices of peer institutions in Philadelphia.

Since moving to its current location in the 1930s, La Salle has acquired historic properties in East Germantown that range from austere nineteenth century cottages and farmland to hospital buildings and churches. While some of the structures have been successfully integrated into the campus' purpose-built infrastructure and landscape, others are immediately demolished for new construction or sometimes without any clear plan at all.

Last summer, I nominated one of the extant historic houses on campus, which had most recently served as La Salle's fine arts building, to the Philadelphia Register of Historic Places. Within one month of the historic designation (which was fought by the university), La Salle applied for and was issued a demolition permit for the house next door, which had been used as an on-campus daycare facility for over a decade. Demolition was completed in early June, and the lot remains vacant.

The demolition of this house was a missed opportunity for the university. Older buildings on college campuses—whether purpose-built or absorbed into the campus—have value as teaching tools for students and staff and help keep alumni connected to the college. They also create a link between the campus and the city's history—whether as a physical gateway to the institution or as a link to the neighborhood's past.



Penn, Drexel, and Temple's largest campus expansions in the 1960s and 70s were pursued with the support of federal urban renewal legislation and funding, and have been criticized as neglecting to acknowledge the by-right fragmentation of established communities and the loss of architectural heritage. As such, more recent expansion has been informed by an increased sensitivity to the history and needs of the surrounding neighborhoods. Over the past 5 years, Drexel and The University of Pennsylvania have used historic preservation as a tool to redevelop previously owned historic properties or in acquiring new facilities. Perry World House at Penn and the Dornsife Center for Neighborhood Partnerships at Drexel are two examples of such projects. Their positive reception by internal and external stakeholders is a testament to the promise of using historic buildings to anchor new development on campus.

None of Philadelphia's colleges and universities have stellar historic preservation track records. While some schools might be amending for past preservation mishaps by expanding or adapting their portfolio of historic structures, La Salle has not, and in fact, appears to resist preserving their absorbed architectural and social heritage. Rather than haphazardly acquiring land and demolishing buildings, La Salle would benefit from a transparent master plan attentive to historic resources. As an institution of higher learning, La Salle can embrace and learn from the history they have intentionally acquired—with the help of students, faculty and staff—rather than ignore, mothball, or worse, demolish it. •

About the Student Presenter ...

Arielle Harris holds a MS in Historic Preservation from the University of Pennsylvania (2017) and a BA in the Growth & Structure of Cities from Haverford College (2013). Her undergraduate and masters theses examined historic preservation tools and policy in Philadelphia-in particular, the impact of historic tax credit project distribution on neighborhood architectural identity, and the aesthetic and political limitations of the city's neighborhood-bound historic districts. For her advocacy work in graduate school, Arielle was the recipient of The Elizabeth Greene Wiley Award for Outstanding Promise by Penn's Graduate Program in Historic Preservation and was featured in the exhibit "Saved! Preserving Philadelphia: 85 Years of the Philadelphia Society for the Preservation of Landmarks" at the Philadelphia History Museum. Arielle currently works for the City of Philadelphia as a research and GIS analyst for the Department of Licenses & Inspections, and consults as an architectural historian for ACME Heritage Consultants in Larchmont, NY. In Philadelphia, Arielle serves on the Design Advocacy Group's Historic Preservation Task Force and is a contributing writer for Hidden City Philadelphia.

Recording the Landscape: Strategic Cultural Landscape Planning through GIS

Presented by

Neela Wickremesinghe and Joseph Charap

Campuses contain multitudes. They feature an array of evolving assets, from ever expanding world-class plant collections, to historic buildings, structures, and monuments, to significant art and vital archives. As stewards of these diverse landscapes, we are ever aware that the maintenance records of the past reflect the historical fabric of our institutions, and influence future decisions and day-to-day operations. Incorporating these archival records, we must refine our approach to record keeping as technology evolves, moving from a paper-dependent system to one that incorporates geo-locating technology, increased automation, and comprehensive data analysis. Founded in 1838 in Brooklyn, New York, Green-Wood is a National Historic Landmark of 478 spectacular acres of hills, valleys, glacial ponds and paths, throughout which exists one of the largest outdoor collections of 19th- and 20th-century statuary and mausoleums. Four seasons of beauty from centuryand-a-half-old trees offer a peaceful oasis to visitors, as well as its 570,000 permanent residents, including Leonard Bernstein, Boss Tweed, Charles Ebbets, Jean-Michel Basquiat, Louis Comfort Tiffany, Horace Greeley, Civil War generals, baseball legends, politicians, artists, entertainers and inventors.

Green-Wood's landscape also contains 300,000 monuments, several landmarked buildings, and 7,000 trees. We needed a system that tracked the location of assets, the corresponding data, and all related archival records. After coming up short in our search for a commercially available system that met our needs, Green-Wood endeavored to have one



built. By utilizing the power of GIS, our software analyzes our landscape's varied assets simultaneously and streamlines the implementation of the work necessary to maintain those assets, thus offering an enhanced, multi-faceted portrait of Green-Wood. Software such as this could be used across other large historic cemeteries, college campuses, large archeological sites, city and state park land, throughout museum environments, and scores of other cultural landscapes.

Our presentation will document our path to this development, and its implications for other diverse campuses.

About the Presenters ...

Neela K. Wickremesinghe, MS, BA is the manager of Restoration and Preservation at Green-Wood Cemetery. Ms. Wickremesinghe holds MS in Historic Preservation from Columbia University's Graduate School of Architecture, Planning, and Preservation.

Joseph Charap, MA, BA is the Director of Horticulture and Curator at Green-Wood Cemetery, in Brooklyn, New York. He graduated from the New York Botanical Garden's School of Professional Horticulture. He is a certified arborist and has a Masters in English Literature from Brooklyn College.

Spanning the Sawkill: Bard College, Montgomery Place, and the Limits of Adaptive Re-use

Presented by Matthew Alexander

In this presentation, an argument is offered for restraint in the pursuit of an adaptive re-use project at the Montgomery Place mansion. Since 2013, assessments and investigations into conditions at three historic structures on Bard's Annandale-on-Hudson, NY campus have illustrated the challenges currently faced by the college administration in its efforts to develop a new use for the national landmark. Without programmatic clarity built into the design, an adaptive re-use project at the mansion is less likely to achieve long-term success.



The January 2016 acquisition by Bard College of the neighboring Montgomery Place estate has resulted in numerous difficulties relating to its integration into the liberal arts campus. In addition to the numerous physical and logistical challenges associated with applying contemporary institutional standards to a publicly interpreted cultural landscape (mansion, outbuildings, working farm, 380 acres of forest and orchards, and a seasonal roadside farm-stand), the college's administration is also facing philosophical questions about the role of adaptive re-use on its campus.



Before the purchase, the college was spread over 580 riverside acres of former estates and pleasure grounds. The re-purposing of historic homes and outbuildings, gate houses, and barns has been the primary vehicle for Bard's expansion beyond its initial donated footprint. It has resulted in a visually stunning landscape, currently book ended by the 1804 Montgomery Place mansion near its southern boundary and Frank Gehry's 2003 Fisher Center for the Performing Arts to the north.

The campus, though wealthy in historic architecture, is also exceedingly difficult to maintain, and the in-house buildings and grounds staff is often overwhelmed. The added responsibilities associated with the Montgomery Place estate have rendered the maintenance demands even more difficult to meet.

This presentation examines the college's experiences with two of its historic buildings in order to inform the current Montgomery Place discussion. Whereas Blithewood, and its late 20th century reinterpretation as the home for Bard's Jerome Levy Economic Institute, is described as a largely successful example of the re-purposing of historic architecture at the college, the Drill Hall is included as a cautionary tale. Stabilized in 2013 to allow for the development of a re-use program, the imposing brick structure with its timbered truss roof and clear-span interior has largely been abandoned for the past century, and there are currently no serious plans for its re-use.

The current state of the Montgomery Place mansion is described, along with some of the proposed changes that have been suggested. Current campus needs, as well as the rationale behind the purchase of the property is also discussed, as part of an effort to develop a more suitable purpose for the mansion and the estate, generally. With foresight, a new appreciation for the role of historic preservation at Bard can emerge from the experience.

About the Presenter ...

Matt Alexander MS, BA has been working in historic buildings and traditional homes of the Hudson River Valley since 1998, specializing in restoration, sensitive renovation, and adaptive re-use. He received his Masters in Historic Preservation from UMASS in 2013. His thesis project focused on the Drill Hall at Bard College, and led to a collaboration with the college's buildings/grounds staff and administration that continues to the present day. Over the past five years, the emphasis of his work has shifted from contracting to consulting, though his years of experience in the trades continue to inform his efforts. OHR Preservation Services works with municipalities, private owners, stewardship groups, designers, and trade professionals to facilitate preservation projects through documentation, assessment and research.

Brutalist Concrete Conservation at the University of Massachusetts Amherst

Presented by Student Shelby Schrank

The University of Massachusetts Amherst, the Commonwealth's flagship campus, is home to several well recognized Brutalist buildings. Similar to other buildings of this genre, they have gone unrecognized for their importance to the campus and their prominent architectural significance. Additionally, due to the ravages of close to 50 years of exposure coupled with limited maintenance and, in some instances, neglect, they are now at a point where restorative maintenance is critical in ensuring their future contribution to the campus. As an opportunity approaches for these structures to gain nomination to the National Register of Historic Places, there is a pressing need to properly document and provide a comprehensive maintenance plan. Originally and erroneously, concrete maintenance was thought to be a minimal requirement. Today, the buildings have accumulated significant amounts of mold, mildew, algae, and miscellaneous visual contaminants that have only been addressed with exigent repairs. The University's Historic Preservation Program Director and Professor of Architecture, Max Page, has advocated the importance of including a preservation professional on the campus facilities team to assist in documenting and creating a maintenance plan.

I plan to address the importance of the goal Professor Page has sent forth, by contributing an inventory of the Brutalist structures on campus, with research based in investigating why each architect chose to specify a specific concrete type. Research in creating this inventory would include documentation of existing conditions, historical maintenance, remedial interventions, and existing restoration technology



and strategies. Investigation would include conducting visual inspections and sampling invasive growth on each building in order to gain an understanding to the proliferation of mold, mildew, and algae that has formed on each concrete type. Sequentially, I would examine cases of prior concrete cleaning on campus to understand the procedures and limitations that existed. Finally, I would investigate the use of alternative cleaning and restoration protocols compatible with returning each building to its original intended appearance.

The purpose of creating a maintenance plan is to address a significant gap in the University's existing maintenance plan with a direction looking toward the future. The aesthetics and architectural value of these Brutalist structures would be enormously increased and would add substantively to the campus' public realm. This is an opportunity for the University of Massachusetts Amherst to be a leader in Brutalist conservation. Critics have named Kevin Roche's Fine Arts Center as one of his finest buildings. The Fine Arts Center now stands as the southern gateway to our campus. Restored to its 1974 splendor, it would be not only a gateway to a campus but a gateway to Brutalist maintenance.

About the Student Presenter ...

Shelby Schrank is a current graduate student at the University of Massachusetts Amherst pursuing a dual master's degree in Architecture and Historic Preservation. She has a strong interest in sustainable preservation practices, building physics, material science and building conservation, particularly related to the concrete maintenance of Brutalist buildings. Her research interests have been molded through involvement in organizations such as APT, Docomomo, the AIA Committee on the Environment, and the National Trust for Historic Preservation. While working towards architectural licensure, she has gained field experience working with architecture firms specializing in the conversation and preservation of historic buildings.

New York City's Schools— A History and Guide to Rehabilitation

Presented by Bruce Nelligan

New York City's public school system includes over 1,600 properties that house public schools, charter schools, and support facilities. These buildings are the heritage of perhaps the greatest public school system in history, and certainly one of the largest portfolios of historic buildings in the country. Over half of these buildings are old enough to be considered eligible for listing as historic properties under New York State's Historic Preservation Laws. Independently, many of them are NYC Landmarks or are located in Landmark Districts. These buildings must be preserved not only as architectural, historic and cultural assets, but also as facilities essential to the success of their original mission – the education of New York's children. Because of the size and age of the New York City public school system, the task is daunting.

As part of its duties as steward for these buildings, the NYC School Construction Authority has commissioned Nelligan White Architects to prepare a history and guide to rehabilitation of its public schools. The firm has pioneered the use of twentyfirst century techniques and materials in rebuilding and restoring important nineteenth and twentieth century structures. We have completed restoration of more than 30 landmark-eligible school buildings.



The guide will provide readers with an overview of the history of these buildings and practical information for professionals and builders involved in their preservation and rehabilitation. It documents the SCA's efforts of the last two decades to rehabilitate and modernize some of these schools to continue to serve the purpose for which they were conceived.

Additionally, there is an epilogue and bibliography, to allow readers to go to the original sources for the material and a searchable database of the buildings to allow easy extraction of information on the individual buildings. It is hoped that in the future, more case studies will be added to the guide to help build the SCA's institutional knowledge of its historic schools.

About the Presenter ...

Bruce G Nelligan, AIA has 35 years of architectural experience and currently serves as Principal-in-Charge at Nelligan White Architects. In this role, Nelligan has overseen more than 250 public, private and commercial projects, the majority of which have been for NYC Housing Authority, NYCSCA, NYC Department of Design and Construction, State Office of General Services and Dormitory Authority of the State of New York.

Planning for the Future While Respecting the Past— Central Campus Development at The University of Vermont

Presented by

Luce Hillman and Marc Loranger

The University of Vermont's (UVM) Burlington campus is currently experiencing a construction boom with \$400 million in new construction and historic preservation constrained within an 11-acre area known as Central Campus. The magnitude of development and building renovations occurring simultaneously has resulted in the need for innovative management practices to ensure UVM's historic assets are maintained while new development flourishes.

Established in 1791, UVM incorporates 280 buildings and structures with over half on a historic register. In 1896, only 1,200 feet of pasture stretched between the Rutland marble Converse Hall Dormitory and the stately brick and terra cotta Williams Science Hall. These highly visible, grandeur buildings made an enduring imprint. Current development includes renovation and new construction on campus while expansion at the adjacent UVM Medical Center continues. To make way for new development that coexists with the commanding presence of historic architecture, challenges for campus planning involve determining which buildings should be preserved and which should be demolished.

The use of a Facilities Risk Assessment Tool (FRAT), a scoring, rating, and mapping management tool will be demonstrated for establishing historic building project prioritization. With completion of evaluation, funding can be directed toward construction of modern educational facilities or renovations and repurposing of historic buildings.

Central Campus projects include demolition of a 1960's era hazardous-material laden chemistry/ physics building, renovation of a 1950's era engineering building, and construction of a new STEM facility. Growth of UVM has resulted in razing three 1940's era residential dormitories and replacing them with an 800- bed dormitory and dining facility while curriculum changes dictated an addition to the Business School. Many other buildings constructed in the mid-century modern architectural



style are being saved or repurposed. Buildings that are historically significant to the university, and to architecture in general, are being preserved. H.H. Richardson's c.1885 Billings Library is being restored and transformed into a Special Collections Library that incorporates modern temperature and humidity control. Other projects include restoration of c.1863 Torrey Hall, restoration of McKim Mead & White's c.1925 Ira Allen Chapel, and Converse Hall repairs (a.k.a. "the Castle").

Constructability, economic feasibility, permitting, and logistics of development close to historic sites will be reviewed. New development has resulted in the struggle to maintain visibility and presence of the historic campus fabric. UVM's response has been strategic positioning of new buildings. A view corridor, across what once was pasture, has been maintained as a gesture toward preserving Converse Hall's presence on campus. Other site constraints require logistics planning and collaboration with internal UVM departments, adjacent institutions, and neighbors to address pedestrian pathways, project deliveries, neighborhood traffic patterns, bus routes, and ambulatory services. With sound facilities management practices and innovative campus logistic and evaluation tools, UVM has been able to successfully balance development with historic preservation.



About the Presenters ...

Luce Hillman, P.E., LEED AP BDCA graduated from The University of Vermont with a Civil Engineering degree and began her career as a consultant performing concrete, soil and material lab construction inspection, and testing services. She continued her career designing civil and structural engineering projects throughout New England, specializing in wood and masonry renovations of historic buildings that met code requirements while maintaining the historic fabric and integrity. As a Certified Educational Facilities Professional, and after 20 years in consulting, Luce changed career paths and transitioned to facility management duties at UVM in 2002. She currently oversees deferred maintenance renovation projects that include stone, wood, brick, and concrete structures, as well as utility systems upgrades. As Assistant Director, Luce also oversees a team of in-house professionals, as well as outsourced architects, engineers, and contractors.

Marc Loranger, P.E., LEED AP, is Senior Project Manager, Associate, and Director of Gale Associates, Inc.'s Glastonbury, CT office. Studying at Wentworth Institute in Boston, Marc was enrolled in a variety of Architecture and Construction Management courses and graduated as a Civil Engineer. He immediately began working on building enclosure evaluation, design, and construction administration projects throughout the Greater Boston area, later relocating and spearheading the Gale operations in Connecticut. Since 1999, Marc has participated in and managed numerous historic renovation, forensic analysis, and building enclosure commissioning, design, and construction projects.

Preservation and Infrastructure at a Historic Community College Campus

Presented by Robin Auchincloss

More than a third of colleges in the US are community colleges: publicly funded, affordable, two-year institutions offering associates degrees, certificates and remedial education. Bronx Community College at City University of NY (BCC/CUNY) is a bellwether example of the preservation challenges and opportunities specific to community colleges.

BCC's distinctive campus was purchased from New York University in 1973. The campus is home to four buildings designed by Marcel Breuer and four New York City Landmarks designed by Stanford White—including Gould Memorial Library (GML). These Stanford White buildings comprise the only National Historic Landmark sites at a community college.

BCC/CUNY, like many community colleges, has endured decades of disinvestment. Recent recognition of the value and large enrollments at community colleges, has led to increased capital work. As BCC/ CUNY struggles to reclaim the deteriorated campus there is stark competition between the imperative to provide appropriate spaces to facilitate students' efforts to raise themselves out of poverty, and the imperative to preserve the campus's historic landmarks. BCC/CUNY is negotiating this challenge in the following ways:

 Balancing Preservation and Infrastructure Upgrades—While BCC/CUNY is a relatively small college in the poorest community district in the state, as a community college there is the potential for substantial city and state funding. Currently BCC/CUNY is in phase four of a campus-wide utility upgrade project and design for restoration of the Gould Memorial Library dome. Carrying out these infrastructure upgrades and preservation work simultaneously has limited concern about spending precious resources on preservation.

The Utility Upgrade projects support preservation and re-use plans by bringing chilled and hot water, power and data to all landmark buildings and eliminating the need for condensors and chillers at landmark buildings. These projects have also resulted in landscape work around landmark buildings.





Because of the architectural value of the Breuer buildings, all HVAC equipment in landmarked Begrisch Hall was recently replaced—helping to keep the building viable.

- 2.Combining Infrastructure Upgrades to Historic and non-Historic Buildings—BCC/CUNY has roof, fire alarm and lighting replacement projects in process. Each combines historic and non-historic buildings. This tendency to fund multi-building projects has a halo effect, for the non-historic buildings, of improved funding, design and construction quality. For instance, the dome restoration for GML was combined with a roof replacement for an adjacent old, but non-landmark, building. The documents for that non-landmark call for a large number of mock-ups, had similar copper restoration specifications and will be using terra cotta sourced from the original 1890's manufacturer.
- 3.**Material Choices**—Because of financial stresses on community colleges, alternatives to exact replacements are considered if deemed appropriate. For example, aluminum is being considered to replace the copper cupola at GML. And, recent stone repairs at the GML entry included cast stone and epoxy crack repair with hand-painted granite texture in tinted epoxy instead of full replacement.

Measures like this make preservation feasible on a campus where students are struggling financially and budgets are tight.

About the Presenter

Robin Auchincloss, RA, AIA, is the Director of Campus and Facilities Planning. She is responsible for planning and scoping capital improvement requests and for managing campus input on the design and construction of these projects. Her office also plans and coordinates BCC-funded improvement projects. Prior to this position, Robin was a Senior Associate with Dattner Architects where she worked as an architect for 16 years managing a broad range of projects for public clients, including new construction and renovation of schools, subway stations, libraries and firehouses. Robin was the manager for development of the NYC School Construction Authority Green Schools Guide. She has experience with public architecture, New York City zoning and building codes and sustainable design. Robin has a Master of Architecture from Columbia University School of Architecture, Preservation and Planning and a Bachelor of Arts in Urban Studies from Brown University. She is a member of the American Institute of Architects.

30 Years of Preservation Engineering with Amherst College

Presented by

James F. Norden and Amy Jagaczewski

Amherst College of Amherst, MA provides an excellent model for academic campuses responsible for maintaining their historic built environment while allowing for modernization and expansion. With the campus' oldest building dating back to 1827, and their new Science Center scheduled to open in 2018, the average age of the College's structures is approximately 95 years old. In GNCB's 30 years as Amherst College's preservation engineering consultant, we have worked on the majority of the campus's historic buildings, many pre-dating the establishment of building codes.

Our portfolio with the College encompasses an extensive range of building types and Owner intentions. A sample of these projects includes the renovation of Johnson Chapel (1827); the adaptive reuse of College Hall (1829); the conservation of the Octagon Building (1848); the restoration of Stearns Steeple, the last remaining element of Stearns Church (1873), and various renovations of Robert Frost Library (1965). In this presentation, GNCB will discuss our experience with the College's heritage structures and how Amherst College can serve as a model for other academic campuses balancing the care of historic buildings with constant growth. We will begin with providing a brief history of our relationship with the College and an overview of the types of historic buildings we have been responsible for, and structural systems we have encountered, in our role as the campus' preservation engineer. Two projects will be expanded as case studies demonstrating the College's philosophy towards conservation of heritage structures and towards adaptive reuse as a means of updating historic facilities to meet modern requirements.

The presentation will conclude with a discussion of the challenges associated with implementing historic preservation projects on academic campuses as well as the opportunities associated with working for one of the top-ranking liberal arts colleges in the United States. We will provide recommendations for ways that other academic campuses can begin to implement some of Amherst College's philosophies in order to achieve similar success in the management of their facilities.

About the Presenters ...

James F. Norden, P.E. has 50 years of structural engineering experience and has specialized in the field of historic preservation since 1995. His structural engineering career spans across the United States and has served a variety of sectors including cultural, institutional, religious, residential, and commercial. Mr. Norden's



historic preservation experience includes projects involving over 50 sites on the National Register of Historic Places as well as a number of National Landmark sites.

Amy Jagaczewski is responsible for the site investigation, documentation, research, design, and construction administration for GNCB's historic preservation and adaptive reuse projects. She has worked on numerous projects for academic institutions throughout the northeast including Amherst College, Smith College, Connecticut College,



Yale University, and Cornell University.

One Size Does Not Fit All

Presented by Richard Tobin

With a portfolio of 64 buildings in the Borough of Queens, the Queens Library as an education and cultural institution is faced with the challenges of renovating Carnegie Libraries from the early 20th Century, renovating the Lindsay Boxes of the 1960's and 1970's, and constructing new Libraries in the 21st Century to meet the needs of one of the most diverse populations in the United States. The integration of new technologies as well as meeting current Energy codes and the integration of new MEPS and ADA standards often require site specific solutions even though the institutional pull of the standardization of specifying the same formulae often falls short of its intended results to simplify the maintenance of these structures. This topic will explore the current planned renovations of the NYC's last Carnegie built in 1924 at Woodhaven and the undoing the previous renovation of the 1970's, the expansion of the Lindsay Box at Kew Gardens Hills built in 1966 and recently opened to the public in 2016, and lastly SHA's design at Hunters Point now in construction and Snohetta's Design for the new Far Rockaway Library just going out to bid.



About the Presenter ...

Richard Tobin MS, MA, BA,

has over twenty-five years of experience within the construction industry in both the public and private sectors in the New York City area. In addition to his educational background in Historic Preservation, he has also managed the exterior and interior renovations and restorations of several



National and Local Historic Landmarks as well as new building construction. Richard brings a unique perspective to the project having managed as such for the owner, architect, or as the construction manager/ contractor. For the past nine years, Richard has worked at The Queens Library's Department of Capital Project Management where he is the Project Manager for the expansion and renovation of the Kew Gardens Hills Community Library, The new Far Rockaway Community Library, The new Hunters Point Community Library and the gut renovation and restoration of the Richmond Hill and Woodhaven Community Libraries. He had previously been employed at the New York Public Library, The American Museum of Natural History, and The City College of New York. Projects have included the restoration of the New Jersey State House Dome, The Pierpont Morgan Library, Cass Gilbert's Essex County Court House, 67 WallStreet, The Celeste Bartos Forum and The McGraw Rotunda at the NYPL. Richard had received a fellowship from the Smithsonian Institute while at Columbia University and worked for the Center for Building Conservation.

Annual Symposium Tours

Saturday, February 3

Pre-registration for tour is required as space is limited. Check with symposium registration for availability.

Tour 1: Restoration and Modernization of the Sterling Memorial Library Nave

Yale University Campus

10:00 a.m. - 11:30 a.m or 11:30 a.m. - 1:00 p.m.

Meeting Place: Sterling Memorial Library, 120 High Street, New Haven, CT 06511

Led by Helpern Architects and Jablonski Building Conservation, Inc.

How do you totally restore an untouched 1931 James Gamble Rogers masterwork? Come tour the glorious, stone-on-stone, cathedral-like nave [entrance] to Yale's main library. From the dingy ceiling to obsolete card catalogs, old and [very] new had to be seamlessly combined. You'll hear the architect and conservator team of David Helpern (Helpern Architects) and Helen M. Thomas-Haney (Jablonski Building Conservation, Inc.) tell how they restored deteriorated stonework, woodwork, decorative painting, stained glass, and metalwork. They'll also show how they refurbished spaces while hiding the latest library technologies, lighting, and HVAC. Photography is allowed. ADA accessible.

Photograph by Brian Rose



Annual Symposium Tours

Saturday, February 3

Pre-registration for tour is required as space is limited. Check with symposium registration for availability.

Tour 2: Conservation of the Yale Center for British Art

Yale University Campus

10:00 a.m. - 11:30 a.m

Meeting Place: Yale Center for British Art, 1080 Chapel Street, New Haven, CT 06510

Led by Constance Clement, Deputy Director of the Yale Center for British Art, and George Knight, Principal of Knight Architecture, LLC.

The Yale Center for British Art, designed by Louis I. Kahn, opened to the public in 1977 and houses the largest collection of British art outside the United Kingdom. In May 2016, the Center completed the third phase of the most extensive and complex building conservation project it has undertaken to date. The project included improvements to all building systems, comprehensive repairs to the structure, and refurbishment of interior spaces. It was informed by a conservation plan that resulted from a decade-long study of the building, published in 2011; it is the first conservation plan of its kind in the United States. Join us for this unique tour through recently renovated spaces led by the architect and a Center staff member as they give their perspective on the conservation of this iconic structure.



Library Court, Yale Center for British Art. Photograph by Richard Caspole

Photography is allowed. ADA accessible.



Notes:



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