September 2016

Four Dollars

AIA New Hampshire

NH forum

For those who shape the built environment

AIANH & Plan NH Host Film Preview: Net Zero in New England

AIA New Hampshire and Plan NH are pleased to invite you to a preview of John Hession's film *Net Zero in New England* (a project of the New Hampshire Environmental Guild and the NH Architecture Foundation, the charitable foundation associated with AIANH.) The screening, followed by a panel discussion and a networking reception, will be at the Red River Theatre, 11 So. Main St. L1, Concord, NH, September 22, 5:30-8:45 pm.

The evening will open with three short films (30 min. total running time). The first two show how Net Zero Design has been implemented in two projects, the Tin Mountain Conservation Center (see page 8) and a Canterbury residence. A third film will show how architects in New England have achieved significant results by making integrated design a mainstay of their design process. It shows how the difficulties in implementing integrated design are overcome, how putting together an integrated design team in the beginning of a project is the best way to

Continued on page 14

Inside View

Perspective 2

Emerging Professionals Network 3

AIANH Design Awards/Sheerr Award 4

2030 & Beyond: Sessions 2 & 3 5

Where the Dragon Descends into the Sea 6
by Bruce Hamilton AIA

Tin Mt. Conservation Center 8

Bird-Friendly Buildings 11
by Laura Deming

2015 AIANH Annual Report 12

Construction Summary 15

Photo of the Month 16

Calendar 16

AIA
New Hampshire

2016 Board of Directors
President: **Jay Lawrence Purcell AIA**
Pres-Elect: **Sheldon Pennoyer AIA**
V-President: **Alyssa Murphy AIA**
Sec/Treas: **Tracy Kozak AIA**
Immediate Past President:
Paul Bourbeau AIA
Directors: **Nick Isaak AIA**
Susan Phillips-Hungerford AIA
Bart Sapeta AIA
Associate Director:
Tony Nazaka
Affiliate Director:
Liz LeBlanc
Executive Director: **Carolyn Isaak**

NH Forum is published monthly by AIA New Hampshire, the New Hampshire Chapter of The American Institute of Architects.

For advertising rates and sizes, contact the AIANH office.

For membership information, contact the AIANH office.

Articles and graphic submissions should be sent to the AIANH office by the first of the month prior to publication.

NH Forum Editorial Board:
Bruce Hamilton AIA, Liz LeBlanc,
Dale Doller AIA, Carolyn Isaak Hon. AIANH
Proofreader: John Urdi AIA;
Lead-in thumbnails by **Eric Palson AIA**

The AIANH Editorial Board reserves the right to edit articles for available space and to review all material for appropriateness prior to inclusion.

The editors of the NH Forum seek to encourage a lively discussion of design and other topics of concern to designers. Opinions and proposals presented in the newsletter are those of the writers to whom they are attributed and are not a statement of official policy by AIANH, unless so stated.

AIANH
310 Marlboro St., 2nd Floor
Keene, NH 03431
Tel: 603-357-2863; Fax: 603-357-0835
E-mail: office@aianh.org
Visit our Website at **www.aianh.org**

Perspective

Point of view from the President of AIANH
Jay L. Purcell AIA

With summer behind us and the fall weather coming on, many of us are programmed by our years of schooling to see this month the beginning of another year of learning. And perhaps we naturally gravitate to our subjects of curiosity and the desire for moving ahead with a better understanding of our pet topics. As in past Septembers, I am happy to say that I often get a mental boost from this season and dive in anew; thank goodness!

Feeling a bit of that in the air recently, I found myself thinking about the 'sustainability movement' and wondering how we are doing with sustaining the sustainability movement. It certainly seems that interest in LEED® certifications has waned in New England.

In our American culture and our media's constant search for the latest interesting topics, it seems a challenge to keep the attention of the media and the resulting public attention on the sustainability issue, which in my opinion has been one of the most important developments to date in the contest of ideas here on what Bucky Fuller liked to refer to as "spaceship earth." Some folks remember Bucky's philosophical books as containing some of the underpinnings of this thinking about sustainability, but often with a technological focus.

So I thought I would begin this month's article with a bit of an overview on the good work since then, a few thoughts on some of the later developments, and next month perhaps offer some more detailed insights.

I won't belabor this article with the complex task of trying to define sustainability, but rather just dive in with what we all know to be the important environmental issues we are concerned with as participate daily in the creation of the built environment. I think I'll start by listing some of the organizations and big picture tools out there that have evolved over the years to help us, as they identify issues and foster environmentally responsible design work.

A few important examples of these are:

COTE – The Committee On The Environment. This is AIA's own contribution to focusing on this issue and was founded in 1990. Many chapters and components have an active COTE group. AIANH calls the AIANH COTE "the Environmental Guild," which is open to all NH chapter members and other interested persons.

LEED® and its latest v4.0 rating system created by the USGBC – (US Green Building Council)

Architecture 2030 – the carbon neutral planning and design group founded by Ed Mazria FAIA. Our next AIANH educational event related to this mission is a presentation by the often entertaining, quite knowledgeable Dr. Joe Lstiburek on October 5.

IGCC – International Green Construction code – a model code published by the ICC organization.

Continued on p. 10

Emerging Professionals Network

Point of view from the AIANH Associate Director & EPN Chair
Tony Nazaka

Do You Want To Be An Architect?

Well, do you? Do you have grand dreams of designing a notable project that graces the front of *Architectural Record*? Are you ready to spend 60 hours a week checking drawings done by someone else, visiting sites for construction administration, dealing with difficult clients, paying yearly fees, spending time on continuing education requirement, etc.? If not, maybe you should reassess becoming an architect…

Now, this post isn't a list of reasons why you don't have the drive, or you need something 'special' to become an architect. Actually, it's quite the contrary. Just like I don't believe everyone needs to be on certain diets, or own a home, or work out a certain amount of hours in a week, I don't believe everyone who graduates from an architecture school needs to become a licensed architect. I think I just felt the collective gasps from all you aspiring architects out there; hear me out though!

Practicing architecture, just like many other things in life, should be a decision you make wholeheartedly and that becomes part of who you are. Personally, I take part in competitions, moonlight design work, and (obviously) am involved with AIA New Hampshire. I have embraced the architectural world as something that is part of who I am, not just something I do. That being said, I have had reservations about actually wanting to become licensed, and I think it is an idea that every aspiring architect should at least explore. I have put together some ideas on why you should not become a licensed architect.

Many students of architecture think there is one path to a successful career: college; internship; working and taking the AREs; licensure. I would say yes, this is the most efficient and effective path to becoming an architect. But, sometimes life just isn't that simple. A more realistic path might look something more like this: college, first architecture job; laid off due to a recession; unrelated job; graduate school; significant other; homeownership; second architecture job; finish IDP; third architecture job; mull over taking AREs; marriage; take AREs; fail some AREs; take some time off from taking AREs; promotion/more of a manager role in job; finish AREs; become licensed. If life is not allowing you the time to become licensed, don't force it.

I know what you may be thinking; not becoming licensed is a waste of an education, and essentially a failure. I couldn't disagree more. Your education provided you with the tools to enter the field of architecture. Your hard work got you to the position you may hold at the moment, and any position you may hold in the future. A piece of paper provided by the State does not dictate what has made you successful.

Furthermore, being a project architect or an owner of your own firm means you have to spend the majority of your time on many different areas. You may not have the luxury of spending hours designing, sketching, or conceptualizing a building. You most likely won't be spending full weeks drafting up CD's. The point is, maybe there are just a few things in the architectural world you really enjoy doing, whether it be drafting, renderings, project managing, etc. You may be best utilized in the profession for a skill for which licensure doesn't really even matter.

Finally, I do believe the line of architecture opens so many doors in all sorts of professions. Again, I am not trying to question the 'classic' architecture license. But, if you are questioning what you're doing, there is

Continued on p. 14

ABC Associated Builders and Contractors, Inc.
New Hampshire/ Vermont Chapter

Striving to be the leading voice promoting free enterprise within the construction industry!

For more information or to learn more about membership contact the Chapter office: 603-226-4789

NCARB & You: AXP, ARE, and Certification — September 29

Join us September 29 for a special presentation on a range of licensure topics relevant to students, aspiring architects, supervisors, architects, and people in the architecture profession.

A representative from the National Council of Architectural Registration Boards (NCARB) will visit New Hampshire to review the steps necessary to achieve licensure to become an architect and other programs to get the most out of your career in architecture.

Topics will include:

- Background of NCARB
- The entities involved in the licensure process
- How to establish an NCARB Record
- How to progress successfully through the Architectural Experience Program® (AXP®)
- What to expect with the Architect Registration Examination® (ARE®)
- Recent changes to NCARB programs
- Value of the NCARB Certificate

The presenter will remain on-site after the presentation to help address specific questions on an individual basis. This is your opportunity to get all of your questions answered!

Please join us, 5:30 pm, at Lavallee Brensinger Architects in Manchester, NH. Pizza and beer are part of the program!

You must pre-register, and information on that is on our event page: www.aianh.org/news/aianh-events.

We hope to see you there!

PLEASE SHARE WITH OTHERS IN YOUR OFFICE!

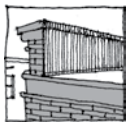
Job Opportunities, Positions Sought

Job listings and positions sought listings are on the AIANH website: www.aianh.org/careers.

To submit an ad, please email ad text to office@aianh.org. Job opportunity listings are free for AIANH members and $320 for four months for non-members. Listings for Positions Sought are free for everyone. Please include your contact information with your ad listing.

AIANH Design Awards

Early bird submission rates until Sept. 15. Submissions due October 14.



We hope you are getting your submissions ready for the 2017 AIA New Hampshire Design Awards. The deadline for entries is October 14. Early-bird submission rates are in effect until September 15.

Find information about the Design Awards program and the Call for Entries at www.aianh.org/design-awards/2017-call-for-entries.

Also on that page are two documents with hints for putting together stellar submissions! There is some good advice there, so take a look. . .

Also, see the July/August *NH Forum* for more details. ■

Clinton Sheerr Award for Excellence in NH Architecture

The Clinton Sheerr Award honors and promotes New Hampshire architects whose work exemplifies excellence in design at the highest level and who have shown extraordinary dedication to the profession and to the community.

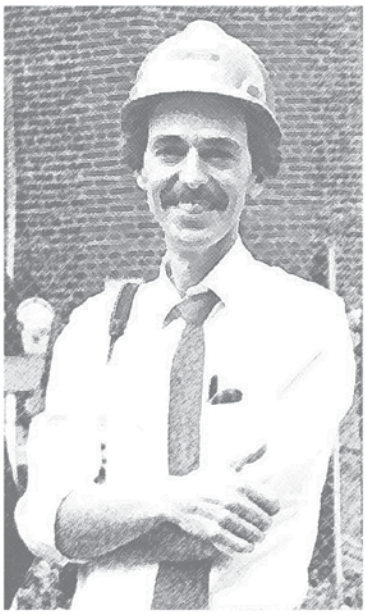
Clinton Sheerr AIA was a well-known New Hampshire architect who died in 1997 and whose uncommon love for the profession and the state is memorialized through this honor award. Sheerr was responsible for designing numerous award-winning New Hampshire buildings, notably the New Hampshire Charitable Foundation and St. Paul's Church, and was active in professional and community organizations.

Sheerr exemplified the spirit of great passion for beauty and design, a dedication to the community, and the tenacity to follow one's tasks and dreams. This award honors other similarly outstanding architects in the state who carry on the tradition of deep love and dedication for the State, its architecture and environment.

Deirdre Sheerr-Gross AIA created the fund for the award in honor of Clint, and it is supported by donations in his memory. The funds are held and managed by the NH Charitable Foundation.

Nomination guidelines:

- The Award will be given to an individual primarily domiciled for the past five years in New Hampshire.
- The award will consist of a cash prize and an accompanying certificate and will be announced at the Annual AIANH Awards banquet.
- Applicants should submit a one-page (maximum) nominating letter, and may append back-up materials. It is anticipated that the applicants and their work will be reasonably well-known already to the NH architectural community. Materials submitted may be used in the promotion of the award.
- You may self-nominate or nominate another.
- Send nomination letters and materials in PDF format to the AIANH office, office@aianh.org.
- Deadline for submissions is Dec. 1. ■



2030 & Beyond: Oct. 5 & Nov. 2
Retrofitting Buildings and Key Topics in High Performance Design

Session 2: Oct. 5

The second session of this year's 2030 & Beyond Series, Retrofitting Buildings – Mass Buildings vs. Frame Buildings, will be held at Manchester Community College on October 5, 8 am to 5 pm.

We're pleased to present **Joe Lstiburek Ph.D, PE** for this day-long seminar that will cover interior vs. exterior approaches for retrofitting and answer these questions: Is freeze-thaw and issue? Is frost-heave or ad-freezing an issue? Is fire and issue? What is efflorescence and is it an issue? What is done in other countries? What limitations are based on historic preservation?

Lstiburek is a principal of Building Science Corporation and one of the world's foremost authorities on energy efficient construction techniques. He is a noted educator who has taught hundreds of professionals over the past three decades and written numerous books and papers. This is an excellent opportunity to hear from one of the most respected individuals on energy efficient construction.

Admission includes the seminar, continental breakfast, lunch, and break refreshments.

AIA New Hampshire 2030 & BEYOND

Session 3: Nov. 2

Our third and final 2016 seminar will be on Key Topics in High Performance Design, Specifications, and Construction, presented by **Peter Yost** of BuildingGreen, Inc.

The workshop builds on the content of our AIANH 2030 series, but is suitable for newcomers as well. Residential building enclosures today are complex and highly variable, in their design, specification, and construction. The course will move quickly from the basic principles of hygrothermics (how heat and moisture move on, in, and through our assemblies) to the techniques to evaluate conventional and alternative enclosure systems. Participants will learn techniques from projects the instructor has worked on over recent years and then in small groups, participants will employ the same techniques on their own projects.

Attendees will receive an additional 3 months complimentary membership to GreenBuildingAdvisor.com.

Registration information for Sessions 2 and 3:

Participants who have attended previous 2030 & Beyond sessions in 2016 are eligible for a $15 discount. Please contact the office for your discount code.

More information and details at: www.aianh.org/news/aianh-events.

7 AIA LU/HSW each seminar ■

THE ARCHITECTS' CHOICE SINCE 1933

Spaulding Brick Co., Inc.

Wilmington, MA · Cranston, RI · Goffstown, NH

28 Daniel Plummer Road
Goffstown, NH 03045
603-647-8442 Fax 603-647-8439

5 Lopez Road
Wilmington, MA 01887
617-666-3200 Fax 617-625-8110

250 Station Street
Cranston, Rhode Island 02910
401-467-2220 Fax 401-467-2359

2030 & Beyond: SPONSORS

Gold Sponsors:

EnviroVantage
Commercial • Industrial • Residential
Asbestos • Demolition • Lead • Mold • Duct Cleaning

GARLAND since 1895

Integrity from MARVIN Windows and Doors Built to perform.

MARVIN Windows and Doors Built around you.

Silver Sponsors:

Crown Point Cabinetry
Liberty Utilities
North Branch Construction
Pella Windows and Doors
PROCON
ReVision Energy
Siga Cover Inc.

Become a sponsor! Information at www.aianh.org/news/aianh-events

AIA Antitrust Compliance

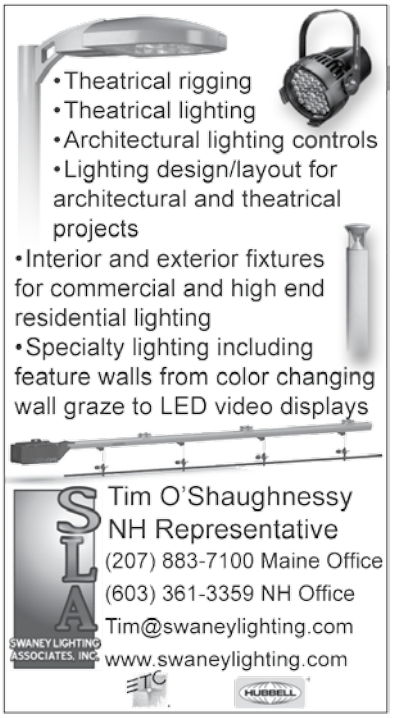
Antitrust guidelines and potential antitrust violations that AIA Chapters and AIA members should be aware of are on the AIA New Hampshire website. Go to: www.aianh.org/content/governance

Details...

Market Square Architects PLLC has announced that Jason Nieuweboer has joined the firm as a Project Manager. Jason brings seven years of experience on both residential and commercial projects to this new start-up.

"Jason has a wonderful balance of design skill, technical competence and management experience," firm partner Rob Harbeson AIA said. "He is a Swiss Army Knife of talent and reaches into each of his skill sets to make the other ones better."

A graduate of Wentworth Institute of Technology with both a Bachelor's and Master's degree in Architecture, Jason's technical abilities out-pace his years in the field. "He understands the tectonics of buildings and how to turn a sketch into a working set of construction documents, that contractors actually enjoy working off of." Harbeson continued, "Jason is a critical component in our ability to grow and provide unparalleled architectural services to our commercial and residential clients in the seacoast region."



Where the Dragon Descends into the Sea

Text & Photos by Bruce Hamilton AIA

It is said that the perfect way to discover and enjoy the world's natural wonders is to jump onto a traditional junk rig and sail to the far-most corners where there are hidden lagoons, unexploited beaches, and exotic grottoes that can be found nowhere else in the world.

Last November I boarded the Paradise Luxury Cruise (built according to the traditional junk rig design) for the purpose of cruising through Ha Long Bay (known as "where the dragon descends into the sea"). Legend says that this mystical seascape was created when a giant mountain dragon charged toward the coast, its flailing tail gouging out valleys and

Local merchant at Ha Long Bay

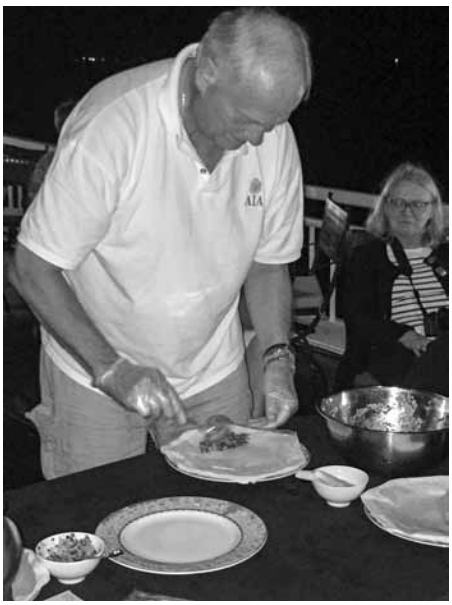
Crusing through at Ha Long Bay

Photo of Traditional Junk Rig

crevasses. As the creature plunged into the sea, the area filled with water leaving only the pinnacles visible. Ha Long Bay is one of Mother Earth's most amazing natural wonders and one of Vietnam's most prized treasures. Located on the shores of the Gulf of Tonkin, Ha Long Bay is dominated by more than 1,600 limestone karsts and islets which rise out of the bay to heights of up to 330 feet. In addition, there are numerous caves and grottoes that spread throughout the bay. Designated a World Heritage site in 1994, Ha Long Bay's spectacular scatter of islands, dotted with wind and wave-eroded grottoes, is a vision of ethereal beauty and Northern Vietnam's number one tourism hub.

The combination of environment, weather, geology, and geomorphology has brought a high diversity of stunning landscapes and majestic caves to the area. One of the most visited is the Sung Sot Cave. Situated in the center of the UNESCO World Heritage area, we arrived on Bo Hon Island where the Sung Sot Cave, one of the most regarded caves, is located.

The path visiting Sung Sot Cave (known as surprising cave) is covered with shady trees and foliage. Walking up through steep stone steps, a few of our tour group members had a feeling of climbing a mountain and experienced the excitement as if they were stepping to the sky.



Globetrotter preparing an evening meal.

Sung Sot Cave is divided into two main areas. The first one is like an immense theater. The ceiling of this area is covered by stalactites and stalagmites, which gives the appearance of a silky "velvet carpet" with beautiful motifs or a myriad of glistening and glowing chandeliers. Entering the second area through a small path, we were able to enjoy a completely different space in comparison to the first one. At the side of the entrance, the rock seems to form the shape of a horse with a long sword. As we traveled further inside Sung Sot Cave there were many surprising sceneries waiting for us to explore, such as stalactites having many different shapes.

The formations in the cave inspired a lot of imaginative visions of humans and animals in varying poses. In addition, the cave was disturbed by monkeys that were looking for fruit, which made for a lively landscape.

Our next journey after leaving Sung Sot Cave was on a small row boat (sampan) to travel to Luan Cave (known as Tunnel Cave), located northeast of Bo Han Island. After passing through Luan Cave, we reached a lake which gave the appearance of a stadium surrounded by a high podium. According to our tour guide, the cliffs contain many fossilized fresh water snail shells that are highlighted with pristine setting of ferns and orchards. We were fortunate to take pictures of beautiful golden monkeys zigzagging up and down trees and along cliffs requesting bananas from tourists. This setting was the perfect place to let your mind run free and enjoy the extreme peace of the magical bay.

On our cruise ship we glided across the emerald waters of Vietnam's Ha Long Bay, whisked away from a cosmopolitan city to a serene landscape. With more than 300 spectacular limestone islands, Ha Long Bay in Vietnam is one of the most visually stunning places in the world. We were able to sit back, relax, and soak up the epic landscape while enjoying scrumptious meals cooked on board the Paradise Luxury Cruise. I highly recommend taking this relaxing trip and staying overnight in these idyllic surroundings on a traditional junk rig cruise.

This World Heritage site in the Northern Province of Quang Ninh is not to be missed. ■

View from the top of Song Sot Cave

Details...

PROCON has been named #88 on the Engineering News-Record (ENR) 2016 Top 100 Design-Build firms in the U.S. and ranked #337 on the "Top 400 Contractors in the U.S." PROCON is the only New Hampshire based company ranked on both lists.

As an 81-year-old, third generation family-owned business, the architecture and construction management team serves commercial developers in the aviation, education, commercial, hospitality, industrial, multi-family and senior living markets, with projects extending from Maine to New Jersey. PROCON is unique in the industry with in-house architects, engineers, and construction management professionals.

"We are proud to be a leader of the design and construction industry in the Northeast. We have an outstanding team of professionals who consistently work to develop, nurture, and value our partner relationships," said PROCON Co-President Lance Bennett. "We owe our growth and success to their dedication to providing services that bring our client's dreams into reality."

The Top 400 Contractors in the U.S. generated $344.14 billion in contracting revenue in 2015, an increase of 3.7% from 2014's $331.94 billion. vvv

Submit Your Details...

Do you have an interesting job on the boards or one that is newly completed? How about a new hire, a promotion at your firm, or someone had a baby? Maybe you've recently received an award or had your project featured in a magazine?

Send us the information and we'll print it in our "Details..." columns. Email to office@aianh.org. Photographs can also be used (300 ppi).

Tin Mountain Conservation Center Nature Learning Center

In 2002, the Tin Mountain Conservation Center acquired a 100-acre piece of land in a rural part of Albany, NH, close to the Town of Conway. The property had historically been a farm, and had a historic barn, an orchard and woodlands, which had been logged. In addition, the property contained an abandoned quarry. The farmhouse was across the road on a separate piece of property. The property contains a wide variety of ecological zones and was an ideal parcel of land for promotion of their environmental education and ecological training programs for their members, schools, and the public.

At the outset, the Conservation Center wanted to build a new facility to house their programs and that would be integrated into its landscape and be as environmentally balanced as possible. In approaching Chris Williams AIA of Christopher P. Williams Architects, PLLC, they were struck by the fact that he had a career-long interest in marrying his buildings to the landscape as well as a commitment to utilization of alternative energy strategies. He built his own passive solar house in 1978 of timber that he harvested himself. The passive solar systems continue to work well.

In the initial phase of design at Tin Mountain, it was decided to locate the building on the site to take advantage of the logging yard on the property, as an open area of the solar cone south-southwest of the building and to expand the solar cone to the south east to optimize solar exposure and create a meadow environment to the south of the building with limited shrubbery to lure birds out of the woodlands toward the building.

Early on in the design process, a donor made a significant commitment toward the project with the intent of not just taking advantage of alternative energy strategies, but to commit to getting the building as close to net zero energy as possible. That was the point at which Steven Strong of Solar Design Associates was added to the project team. Steven's firm brought in additional skills, including energy modeling as well as solar and mechanical

TFM Design®
Landscape Architects

Creating sensitive and thoughtful land planning and landscape plans.

Contact: Michael Krzeminski PLA ~ Landscape Architect
(603) 472-4488 www.tfmoran.com
TFMoran, Inc. 48 Constitution Drive, Bedford, NH
MSC division of TFMoran, Portsmouth, NH (603) 431-2222

engineering. Both firms worked well together.

As the design evolved, the energy modeling guided design decisions for insulation systems, window placement and glazing choices, as well as mechanical systems. There was also the constant issue of balancing costs as the organization was trying to keep within their very tight budget.

The building incorporates Solar Design Associates' proprietary solar hot water and solar photovoltaic panels, which are not applied to the roof, but are the roof. The solar hot water system has two large insulated tanks in the basement of the building, which supply a radiant floor heating system through the building. Supplemental heating for the tanks is supplied by an HS Tarm wood fired boiler. The building also includes heat recovery ventilation units. The building controls for both the solar thermal and the solar photovoltaic systems are set up in the basement with diagrams and data on performance as teaching tools for building tours.

Although LEED® certification was discussed, it was not pursued due to cost issues. At one point during the design process, the issue of motion sensors for lighting was raised and Mike Cline, the Executive Director, said "if my staff can't learn to turn off the lights they won't continue working here." That was a hard point to argue.

The building was conceived as a teaching tool for Tin Mountain. It is built of native materials and features 20 different native woods, which are displayed throughout the building. Many products made from recycled materials were also used in its construction. The timbers for the timberframe were donated by one of their members as were many of the featured wood types. The slate flooring is from Vermont. The fireplace, a feature desired by Tin Mountain, is built from quarry rubble from the onsite quarry and features an insulating layer in the masonry separating interior and exterior, including a separation at the foundation. It also includes multiple dampers to minimize heat loss in the chimney itself.

The project was completed in August 2006. Since that time, the building has been net zero with the solar hot water, the solar photovoltaic system, and the wood backup boiler, which utilizes wood cut on site.

Tin Mountain Conservation Center has added an intern cabin and is in the process of adding photovoltaic panels to it to continue their goal of having a net zero property.

Tin Mountain Conservation Center wanted a building that felt at home in its rural environment, was comfortable for staff, functional, and inspiring for visitors. ■

— This building is featured in the preview of *Net Zero in New England,* to be shown at our September 22 event with Plan NH. See page 1 for details!

Welcome

New AIA & Assoc. AIA Members

Renee M. Fair Assoc. AIA,
Sheldon Pennoyer Architects

Michell T. Hobbs Assoc. AIA
DeStefano Architects

Sean M. Landry AIA, Lavallee Brensinger Architects

Jasmine L. Pinto Assoc. AIA
Sheldon Pennoyer Architects

Reinstated

Robert T. Westhelle AIA
NAVFAC Midlant

New AIANH Affiliate Members

Genella McDonald,
Stibler Associates

AIA New Hampshire

Visit us on Facebook!

AIANH: www.facebook.com/AIANewHampshire

AIANH Emerging Professionals Network: www.facebook.com/AIANH.EPN

Details...

DeStefano Architects (D|A) announces the addition of Joseph Almeida to the firm as the Commercial Design Studio Manager. In this role, Almeida will be responsible for the management, development and delivery of all commercial projects. He will oversee and coordinate project teams while lending expertise to production and implementation of designs. Almeida brings over 20 years of experience to the role in the design, management and delivery of projects throughout New England. He currently serves as the Chairman of the City of Portsmouth Planning Department's Historic District Commission and contributes to boards and volunteer efforts around the city.

Almeida joins DeStefano Architects from the United States Navy, Department of Defense where he served as architect and project manager at the Portsmouth Naval Shipyard. Previously Almeida was a Project Manager for the New England Aquarium and the Museum of Fine Arts in Boston, The Boston Conservatory, Simmons College, and Harvard University. He holds a B.Arch. and an Associate Degree in Engineering from the Wentworth Institute of Technology.

PURCELL Cont'd from page 2

2015 International Energy Code (The latest iteration of the ICC code regulating energy use in buildings)

The **LIVING BUILDING Challenge** (now administered by The Living Futures Institute)

Building Green LLC – a complementary organization to the Environmental Building News, based in Brattleboro, VT

Declare (focused on transparency for pollution-free manufactured materials)

The Living Product Challenge 1.0 – The International Living Futures Institute's challenge to manufacturers to provide transparency and clean up their products

The Natural Step – process and methodology from Sweden, founded in 1989 focused on broad goals for sustainability

Passive House – a certification program for very high efficiency buildings

Energy Star Program – the federal program begun in 1992 to encourage energy efficiency in buildings

Whole Building Design Guide – a program from the National Institute of Building Sciences

Building Science Corp. (co-founded by Joe Lstiburek)

Net Zero Buildings movement, described fairly thoroughly and with much practical information and detail by Bill Maclay in his book *The New Net Zero*.

And of course this is just a partial list of some of the better known sources and organizations working to address the issues of sustainability for the built environment. There are many more.

Now to provide a bit of a context for these issues, I'll list the broad categories from the Living Building Challenge (3.0). I believe it attempts to be quite holistic in its consideration of the things to be included. It's similar but a bit broader than the LEED rating system you may well know.

- ✓ Place
- ✓ Water
- ✓ Energy
- ✓ Health & Happiness
- ✓ Materials
- ✓ Equity
- ✓ Beauty

As you read this list of categories you may be wondering what the category of Equity refers to (a discussion for a later article), and you might be surprised to see the category of Beauty. Both are a bit of an expansion on the LEED Categories.

You might also not be surprised that this challenge was initiated by a couple of architects who had some history with LEED, but were interested in pushing beyond some of the LEED baggage into a new realm of regenerative design based on nature, and the metaphor of a flower. (The categories in this system are called petals.) The two architects I am referring two are Jason Mclennan and Bob Berkabile FAIA, his mentor and former business partner at BNIM Architects in Kansas City. Bob was the key speaker at an event in Maine a year and a half ago (co-sponsored by AIA Maine, AIA New Hampshire, AIA Vermont, and the BSA) and he inspired many of us with both his long history and continued dedication to focusing his career on issues of sustainability in building design. BNIM projects have received several awards for their notable work in the sustainable design field from the COTE annual programs and others.

In his book *Zuganruhe,* Jason Mclellan, who is the initial author of "The Living Building Challenge" criteria, tells the story of his move from a comfortable career at BNIM in Kansas City to take the CEO position at the Cascadian Green Building Council and also head up the Living Building Institute, now called the Living Futures Institute. The central idea according to Jason (quoting from his book for educational purposes that I believe he would support) is "the idea that nature, not machines, provides the ideal metaphor and performance measuring stick for buildings of the future… imagine a building to function as elegantly and efficiently as a flower; one that is informed specifically by place, climate, topography, and microclimate.

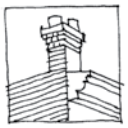
"Imagine buildings that generate all their own energy with renewable resources; capture, treat, and reuse water in a closed loop process, operate pollution-free with no toxic chemicals used in any material all while being a beautiful inspiration to anyone who interacts with them."

Yes. It's an ambitious set of criteria to meet when you look at the detail. But, if you're looking for a heartfelt and inspiring story to sustain your interest in sustainability, Jason's book will likely get you there. It was published in 2011, so it's a few years back, but it is full of timeless wisdom; check it out.

To be continued next month… ■

Bird-Friendly Buildings

by Laura Deming, NH Audubon



The U.S. Green Building Council has recently incorporated Bird-Friendly Building Design (LEED Pilot Credit 55: Bird Collision Deterrence) into the LEED certification program to address the problem of birds colliding with buildings. This credit, now LEED v4, has three components related to façade and site design, lighting, and performance monitoring.

To be bird-safe, a building's design must make the building and associated structures visible to birds as physical barriers. Birds do not see glass, and often fly into windows that reflect vegetation. Although any untreated glass is dangerous, glass windows, walls, and doors on the first few floors above ground level, as well as the floors at and just above green roofs, are especially deadly. Other hazards for birds are glass guardrails, bus shelters, windscreens, noise barriers, and gazebos.

New buildings can use alternatives to clear glass, such as glass manufactured with frit patterns, etched surfaces, or even ultraviolet patterns (although not all birds can see into the ultraviolet range). Stained glass and photovoltaic glass are also visible to birds. New and existing buildings can cover untreated glass on lower floors with screens, grilles, shutters, or other external structures. In addition to deterring bird strikes, many designs and materials that reduce the amount of exposed, untreated glass can also serve to reduce energy use, comply with security measures, and provide aesthetic appeal.

Lighting is a critical feature in bird-safe building design. Biologists have found that bird collisions occur most frequently during spring and fall migration, when many bird species fly at night. Birds can navigate thousands of miles each year by an internal "compass" in their brains that enable them to follow the earth's magnetic field. Brightly lit urban and suburban centers disrupt their ability to stay on course, and millions of birds end up flying directly into cities and suburbs instead of safer natural areas. Some birds hit buildings at night, but most die the next morning, when they try to fly out of wherever they've landed, and hit windows or other glass that reflect vegetation.

To address this problem, LEEDv4 requires minimizing excess brightness, reducing upward-projected light, and automatic nighttime shut off of exterior lights not essential for safety and building function. Because bird conservationists have been aware of the lighting issue for many years, more than 20 North American cities have adopted Lights Out programs to encourage building owners and managers to reduce interior and exterior lighting during migration periods. Lights Out Toronto (www.flap.org/toronto-lights-out.php), established in 1993, was the first of these programs, and provided the model for other cities to follow.

LEED v4 requires buildings to be tested for their effectiveness in deterring bird collisions by asking for a three-year post-construction performance monitoring plan. Any bird-collision problems identified can be resolved voluntarily.

For more information on Bird-Friendly Building Design, please visit the American Bird Conservancy website (www.abcbirds.org), and download the document (http://www.zoolex.org/publication/sheppard/Bird-FriendlyBuildingDesign.pdf). ■

Above graphic from www.flap.org/toronto-lights-out.php

when design matters

3S ARTSPACE
terra *firma*
landscape architecture
portsmouth, new hampshire
www.terrafirmalandarch.com
since 1993
603-430-8388

AIANH Corporate Allied Partners

Platinum

Gold

For information on our Corporate Allied Partner program (CAP), please contact Carolyn Isaak, office@aianh.org, 603-357-2863.

2015 AIANH Annual Report

by Paul Bourbeau AIA, 2015 President

The 2015 year began with the culmination of the AIA+2030 Professional Series from the previous year. This led to a member-requested follow-up 3-part educational series known as "2030 & Beyond." The all-day seminars were led by professionals in the building and design industries. Members had the opportunity to explore design and building principles associated with sustainable design practices in much greater detail. This is part of AIANH's strategy to provide high level educational opportunities for New Hampshire architects while at the same time promoting sustainable design principles in their everyday practices. (The 2030 & Beyond Series has continued into 2016.)

AIA New Hampshire's accomplishments in 2015 were marked by a number of achievements highlighted by the final passage of the Good Samaritan Bill-HB292, which the Governor signed into law in July. This expands the good Samaritan law to engineers and architects during a State sanctioned emergency. Without this important piece of legislation, architects and engineers would have no professional liability coverage, potentially putting their practices and life savings at stake. This was a grass roots effort that started nearly three-years ago by AIA New Hampshire under the direction of Executive Director Carolyn Isaak, and with the help of architects, engineers, and others throughout the State. Efforts to expand the good Samaritan law to include architects and engineers originally started nearly 15-years earlier without success. Success this time was due in large part to individual architects and engineers contacting their state legislators and personally urging them to support the bill. The NH AEER (New Hampshire Architects and Engineers Emergency Response Task Force) has organized and strategized with the State for mobilization and training and is now able to activate during an emergency.

A blog was added to our AIANH website, which includes news items, the monthly President's Perspective, and the Associate Director's monthly Emerging Professionals Network column. While these items appear in the *NH Forum,* we felt that inclusion on the website would provide wider exposure. And, even if you're not an Emerging Professional, be sure to check out these reports, which are well-written and enlightening.

The 2015 Public Relations Committee, under the direction of Alyssa Murphy AIA, focused on increasing our presence on social media, primarily Facebook, and developing a Strategic Plan.

The Strategic Plan was drafted and reviewed at our annual retreat in October and formally adopted at the December board meeting. It outlines AIANH's Goals and Objectives for 2016-2018 in five areas: Improve Communication of Mission; Serve Membership – Engage/Educate NH architects; Transition to new Executive Director; Exploration of AIA NH Physical Space; and Maintain Financial Health.

With the coming October 2016 retirement of our long time Executive Director Carolyn Isaak, a committee was formed, spearheaded by Shannon Alther AIA, to establish a job description and hiring criteria for the next Executive Director. AIANH is at a critical juncture in its history with Carolyn's departure, so decisions made by the committee during 2016 will have a long and lasting impact on the organization and its future.

In 2015 the Board put much effort into reviewing policies and procedures, and an extensive report was sent to AIA National documenting the fact that AIA New Hampshire satisfies the AIA Core Member Services requirements. Our Resource Allocation funds are based on our accreditation and the number of members in our Chapter as of August 1.

A new sponsorship initiative was implemented with some promising results. The AIANH Corporate Allied Partner Program (CAP), which is specifically focused on supporting the development of

The May 2015 Chapter Meeting was at Savidge Library at the The MacDowell Colony in Peterborough, with a new addition designed by Tod Williams Bille Tsien Architects. *Photo by Nancy Belluscio*

2015 AIANH Board of Directors (at the October 2015 Board Retreat)
Front row: Liz LeBlanc, Jay Purcell AIA, Susan Phillips-Hungerford AIA
Back row: Bart Sapeta AIA, Paul Bourbeau AIA, Alyssa Murphy AIA, Sheldon Pennoyer AIA, Nick Isaak AIA, Dennis McNeal AIA, Shannon Alther AIA. Missing: Tony Nazaka

strategic relationships between our members and our sponsors, rolled out in June of 2015. The hope is that the program will expand to the point that the monies generated from it will help supplement the loss of revenue from AIA National as a result of the change in the AIA Contract Document sales model. This, coupled with new, high quality learning initiatives and continued growth of our membership base, will ultimately help offset this loss.

2015 was another positive year for us financially, the result of a lot of hard work on the part of the Executive Director, the AIA New Hampshire Board of Directors, and the NH Environmental Guild. Each of our programs made a little bit of profit, which left us well in the black at the end of the year. At the end of the year, we were able to transfer $10,000 to our Reserve Investment Fund. Reserve Funds are used for budget deficits, special projects, such as website development, and special programs. During the recession we needed to use these funds as we did to create a new website in 2011-2012.

The Reserve Fund is an important part of our financial planning, and the Board constantly monitors our finances and works to make the best use of our income for our membership.

Summary

Overall, the 2015 Board had a number of accomplishments that left the organization in good financial health and positioned it well for future success and growth. Please see our full report on the website at: www.aianh.org/governance/documents, which includes updates from the following committees:

- Affiliates
- NH AEER TF
- Design Awards
- Educational Outreach
- Emerging Professionals Network
- Environmental Guild
- Legislative Affairs
- Events and Continuing Education
- Public Relations/Membership

Please contact the AIANH office with any questions about the Annual Report and/or membership, sponsorship and programming: 603-357-2863, office@aianh.org. ■

AIANH 2015 Financial Report

2015 Operating Revenue	
Affiliate Membership	12,609
AIA Membership	49,850
AIA Revenue Sharing	43,105
Annual Awards 15	14,625
Annual Awards 16	17,237
Bank Int.	12
Misc.	80
Publications	10,016
Programming & Sponsors	40,612
Programs Dedicated	2,000
Sponsorship-CAP	7,500
Total Revenue	**197,646**
2015 Operating Expense	
Awards Program 15	17,320
Awards Program 16	1,457
AIA Conferences	5,237
AIANE Dues	647
Board Expense	516
Operating Exp. & Admin.	107,008
Publications	7,912
Programming	37,104
Programs, dedicated	3,847
QBS dues	300
Total operating expense	**181,348**
Total Inc/Exp 2015	**16,298**
Net Worth as of 12/31/15	
Checking account	60,800
Reserves: Investment Savings	71,612
TOTAL 12/31/15	**132,412**

Operating Expense and Administration includes salaries, outsourcing, AIA Contract Document expenses, printing, shipping & postage, supplies, telephone, trade shows, executive director travel, insurance, accounting, internet, merchant account fees, public relations, website, and other incidentals.)

2015 Coporate Allied Partners

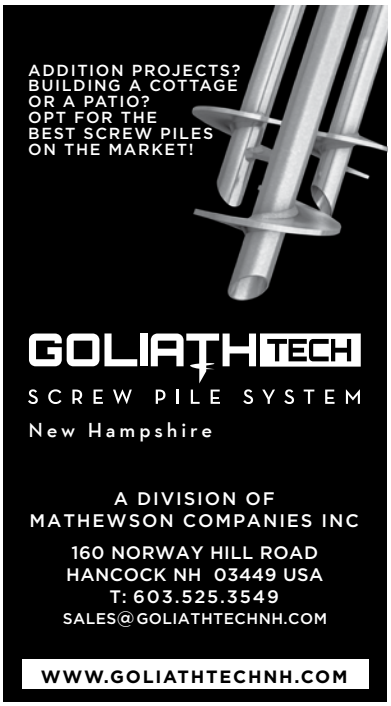
Platinum:
Marvin Windows & Doors
Gold:
ReVision Energy
Silver:
PROCON, Inc.

Details...

North Branch Construction recently began construction of the Fine and Performing Arts Center (FPAC) at Colby-Sawyer College. The new 16,000 sf single-story facility will feature a state-of-the-art black box theater, fine art gallery, studios for ceramics, sculpture, painting, and graphic design, outdoor art areas, along with faculty offices and support areas.

The College's goal is to unify the instructional, performance, and exhibit spaces essential to its art program into one facility, located at the south end of the core campus as part of a developing academic quad. The new FPAC is being built on the former site of Colby Farm, a single-family residence owned by the College, which has been demolished. In order to reduce construction waste and preserve parts of Colby Farm, Deconstruction Works of Dummerston, VT, salvaged materials from the demolished farm house to be used in future construction projects across New England, including the reutilization of the farm house's wide plank wooden floors within the FPAC.

Construction is expected to be complete by summer 2017. Design for the project is provided by The S/L/A/M Collaborative of Glastonbury, CT.



NET ZERO IN NEW ENGLAND
Continued from page 1

achieve 2030 goals, and why sharing strategies for sustainable design benefits everyone – architects, designers, engineers, builders, developers, planners, building owners, and society as a whole.

The panel discussion will address how meeting the 2030 challenge — all new buildings, developments, and major renovations shall be carbon-neutral by 2030 – is not only achievable but is no longer a constraint on the design process. We will also discuss policy trends at the state and national level that are making renewable energy mainstream and fully suited to any building or planning project. Panelists include Paul Leveille, High Performance Building Program Specialist for The Jordan Institute and Resilient Buildings Group, Inc.; Steven Strong, president of Solar Design Associates, Inc., of Harvard, MA; Chris Williams AIA, founder and managing principal of Christopher P. Williams Architects, PLLC; Kate Epsen, Executive Director of the NH Sustainable Energy Association; and Craig Cadieux: Craig, Solar Design Specialist with ReVision Energy.

1.5 AIA/HSW

More information and registration: www.aianh.org/news/aianh-events.

Platinum Sponsor: Liberty Utilities
Gold Sponsor: ReVision Energy ■

NAZAKA *Continued from page 3*

nothing wrong with seeing where the field of architecture can take you. At one point in my life, I thought about moving out west and trying to land a job designing movie sets. Many young architects these days are very skilled on computers and could probably easily transition to graphic design. Being trained in the field could translate into a job as a realtor, or a construction manager. When you're trained to be an architect, you're ultimately trained to be a fantastic problem solver. The career possibilities are endless.

I know this is a strange view to take, but I do believe being the 'classic' licensed architect is not only not for everyone, but there are so many possibilities as a trained architect, that licensure shouldn't be viewed as the only conclusion to the profession, but rather one of many. ■

CONGRATULATIONS to the
2016 MARVIN ARCHITECTS CHALLENGE WINNERS

- 2016 WINNER -
BEST TRANSITIONAL/ECLECTIC PROJECT
EDGEWATER II, Harrisville, NH
Architect: Dan Scully
Architect Firm: Daniel V. Scully Architects

MARVIN Windows and Doors
Built around you.®

FOR MORE INSPIRATION
visit **marvinwindows.com/architectschallenge**

Construction Summary

Project Type: Wolfeboro Public Library Renovation & Addition (Design/Build)
Location: Wolfeboro, NH
Owner: Wolfeboro Public Library
Architect: Lavallee/Brensinger PA
Design/Build Contractor: Milestone Engineering & Const.

Project Type: Chase Ocean Engineering Lab Building Expansion
Cost: $2,700,000 - $3,800,000
Location: Durham, NH
Owner: University System of NH
Design/Build Contractor: Milestone Engineering & Const.

Project Type: Exeter Region Cooperative Middle School Renovations & Additions
Cost: (Construction Budget: $15,000,000 - $20,000,000)
Location: Exeter, NH
Owner: Exeter School District
Architect: Harriman Architects & Engineers
Const. Mgr.: Harvey Construction Corp.

Project Type: City Hall Annex Renovations
Cost: (Base Bid) $2,764,000
Location: Rochester, NH
Owner: City Of Rochester
Architect: Oak Point Associates
Gen. Cont.: CMGC Building Corp.

Project Type: Construction Management Services (National Field Representatives Office Addition & Renovation)
Cost: $5,500,000
Location: Claremont, NH
Owner: National Field Representatives
Architect: SMP Architecture
Const. Mgr.: Milestone Eng. & Const.

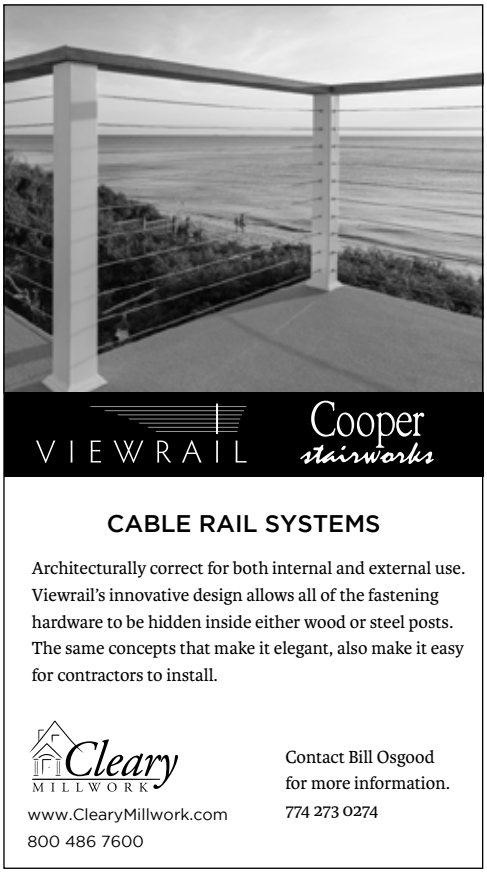
Project Type: The Meadows At Grapevine Run Apartments (24 Units)
Cost: (Base Bid) $4,711,000
Location: Hampton Falls, NH
Owner: Avesta Housing & Redevelopment Corp.
Architect: Lassel Architects
Engineers: Jones & Beach Engineers, Engineered Building Systems Inc., Petersen Engineering, JSN Associates
Gen. Cont.: TPD Construction

Construction Summary is provided by Construction Summary of NH, Inc.
734 Chestnut St., Manchester, NH 03104

Project Type: Hampshire House & Dixville House Renovations (The Balsams Grand Resort Hotel)
Location: Dixville Notch, NH
Owner: Balsams View LLC
Architect: TMS Architects
Engineers: Horizons Engineering, Yeaton Associates, Summit Engineering Group
Const. Mgr.: PROCON Inc.

Project Type: Community Correction Facility
Cost: $7,300,000
Location: Laconia, NH
Owner: Belknap County Commissioners
Architect: Sheerr McCrystal Palson Architecture Inc.
Const. Mgr.: Bauen Corp.

Project Type: Salt Building
Cost: $709,500
Location: Derry, NH
Owner: State Of NH-DOT
Architect: HL Turner Group
Gen. Cont.: Careno Construction Co.



Calendar of Events

Sept 22 Net Zero in New England, Red River Theatre, 5:30pm to 8:45pm. Sponsored by **AIA New Hampshire** and **Plan NH** ***1.5 AIA/HSW.*** Info: see page 1 and www.aianh.org/news/aianh-events

Sept 29 NCARB & You: AXP, ARE, and Certification, Lavallee Brensinger Architects, 5:30pm to 7:30pm. **AIA New Hampshire** brings the **National Council of Architectural Registration Boards (NCARB)** to present on a range of licensure topics. See page 3.

Sept 30-Oct 1AIA New England Regional Conference, Portland, ME. Workshops such as: Regionalism, A New England Point of View; Leading the Way to 2030; Passive House and Maine — How did a Small Rural State Become a National Design Leader in Energy Efficiency. Keynote Speaker: Susan T. Rodriguez FAIA, a founding partner and design principal in Ennead Architects, recipient of the AIANY Medal of Honor. ***AIA LUs available.*** www.2016aianewengland.org/

Oct 2 SAP (Safety Assessment Program) Training, Gulf of Maine Research Institute, Portland, ME, 9:00am to 4:00pm. SAP utilizes volunteers and mutual aid resources to provide professional engineers and architects and certified building inspectors to assist local governments in safety evaluation of their built environment in the aftermath of a disaster. The program is managed by Cal OES. SAP training is required for anyone who wishes to join the NH Architects and Engineers Task Force (NH AEER TF), volunteering your expertise on structural safety during an emergency event, should we be called in by NH Homeland Security. Details: www.2016aianewengland.org/

Oct 5 2030 & Beyond: Retrofitting Buildings – Mass Buildings vs. Frame Buildings, Manchester Community College, 8:00am to 5:00p, with **Joe Lstiburek Ph.d, PE**. Info on page 5 and www.aianh.org/news/aianh-events. ***7 AIA LU/HSW***

Oct 19 AIANH's ARCHtoberfest, with AIAVT, 5:30pm to 8:30pm, Harpoon Brewery, Windsor, VT. Join us for our third ARCHtoberfest, this year with AIA Vermont members. Info: www.aianh.org/news/aianh-events

Nov 2 2030 & Beyond: Key Topics in High Performance Design, Specifications, and Construction, Alumni Center, Keene State College, 8:00 am-5:00 pm, with **Peter Yost**. ***7 AIA LU/HSW.*** Info on page 5 and www.aianh.org/news/aianh-events.

Dec 1 AIANH Education Day, Audubon Center, Concord, NH, 8:30 am-4:30 pm. Morning session on *Transitioning from the 2009 to 2016 Building Codes in NH* with Jerry Tepe FAIA. Afternoon presentations: *Waking up disabled in an able bodied world: Insights of a disabled architect,* by Todd Hanson AIA; *Age Friendly Cities,* by Jim Warner FAIA; and *Universal Design,* by Valerie Fletcher, Institute for Human Centered Design. ***6 AIA LU/HSW total, 3 each session.*** Registration available soon at aianh.org.

AIA
New Hampshire

310 Marlboro St. 2nd Floor
Keene, NH 03431

Address Service Requested

Presorted Standard
US Postage
PAID
Permit No. 9
Jaffrey, NH

Printed on Recycled paper

Photo of the Month

Stone Wall on the property of a home designed by Sheldon Pennoyer AIA, one of our stops on the AIA New Hampshire House Tour, June 30.

Photo by John Benford, John Benford Photography

Do you have an interesting photo? Why not send us one to print? 300 ppi jpegs, approximately 4 x 6 inches, BW or color. (photos are also posted on the website at www.aianh.org/news/photo-of-the-month.) Send along a title, caption, and your name, to office@aianh.org.