



Granite Columns



President's Letter



Happy New Year!

We are coming upon year three of the Structural Engineering Excellence Awards! I'm anxious to see what you've been working on and am happy to show our state what our structural engineers can do.

Engineer's week has taken shape, albeit still a month away. A highlight of the gathering is the presentation of Engineer of the Year and Young Engineer of the Year. Rest assured SENH will be putting our best foot forward and hope to be represented in 2019.

All in all, I think we have an ambitious strategic plan and goals for 2019. Reflecting back on 2018, I'd like to thank all of our volunteers who have given extra time to their profession, outside of your busy day-to-day responsibilities. I

would also like to extend a big pre-emptive thank you to those that have already committed to help out in 2019 and to those who will jump in to make us stronger. We have a lot to do, and remember "many hands make light work."

Moving forward, the Board has committed to reducing meeting attendance costs. It's part of a new strategy to reward our active members for showing up and to encourage more to join us, in-person. More details to follow, I expect this will be a well-received change.

It's dues renewal time of year, feel free to reach out to those folks in your office that could benefit from what SENH has to offer and encourage them to join in.

I'm looking forward to seeing you all soon in Concord as well as hearing Bob Landry give his annual update on the "State of NHDOT Bridges".

As always, I'm available at president@senh.org should you have any questions or concerns.

Chris

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Special Points of Interest/ Reminders:

- *Mark you calendars! The next meeting is January 17th—See inside for details.*
- *Excellence in Structural Engineering Awards are Just around the corner! Check out Inside for more information!*
- *Dues Renewals and Corporate Sponsorship forms are attached to this newsletter. Don't be late for the important due date—February 15th!!*

SENH Committee Updates

2018 NCSEA Structural Summit, Chicago, IL

Submitted by Robert Durfee, P.E.

SENH Delegate: Bob Durfee
SENH Alternate Delegate: Jeff Karam
Members: Alex Azodi & Peter Griem

The 2018 Summit was held on Wednesday, October 24th to Saturday, October 27th, 2018 at the Sheraton Grand Hotel in Chicago. Delegate Bob Durfee and Associate Delegate Jeff Karam representing SENH attended the full Summit. NCSEA Annual Committee meetings were held on Wednesday. Bob attend his Communication Committee meeting and Jeff attend his International Resident Code Committee (IRC) meeting. Member Alex Azodi was present at the Summit and attended his IBC General Engineering Committee. Member Peter Griem was present at the Summit and attended his Seismic Provisions Committee meeting. Member Chris Fournier was present at the Summit and attended the Joint NCSEA/SEI Structural Engineer Emergency Response (SEER) Committee as an SEI member. The SENH delegates will be submitting a report on attending the Summit to the Board, and will post this report on the website in January.

Nomination Committee Update

Submitted by Robert Durfee, P.E.

Co-Chairs: Bob Durfee & Sean James

The call for nominations for Engineer of the Year and Young Engineer of the Year in New Hampshire has been issued by NSPE-NH. The Nomination Committee is seeking a candidate to nominate for Engineer of the Year (EOY) and Young Engineer of the Year (YEOY) from SENH. Contact a co-chair with your suggestion of a candidate by January 2, 2019. Remember, candidates must be nominated confidentially and in strict secrecy. A candidate must not be aware her/she is being considered or nominated for an award.

NECSEA Committee Update

Submitted by Robert Durfee, P.E.

SENH Representatives: Bob Durfee & Jeff Karam

Member Organization Meetings

The Northeast Collation of SEA's held their annual meeting at the Summit on Thursday. Jeff Karam and Bob Durfee represent SENH at this Committee meeting. Members Alez Azodi and Chris Fournier were also in attendance at this meeting. Twenty-four members/representatives of the collation attended this meeting. All member organizations were present except Vermont and Rhode Island. The chair of this committee was rotated to Mane (SEAM) for the coming year (Teresa Price, Chairperson).

Ad-Hoc Awards Committee Update

Submitted by Robert Durfee, P.E.

Chair: Bob Durfee
Co-Chair: Bob Champaign
Fred Emanuel
Josif Bicja

The Committee has issued the [Call for Entries](#) for the 2019 Excellence in Structural Engineering Awards Program. Entry deadline is March 1, 2019. The Awards program will be held at the May 2019 Annual SENH meeting. Three awards will be presented for Buildings, Bridges and Special Structures. All award winners and their projects will be highlighted in this newsletter and posted on the website.

See **Excellence in Structural Engineer Call for Entries** elsewhere in this newsletter.

SENH Committee Updates

NCSEA Communications Committee Update

Submitted by Robert Durfee, P.E.

SENH Delegate: Bob Durfee

SENH Alternate Delegate: Jeff Karam

The SENH delegates that attended the NCSEA Annual Summit in Chicago in October will be submitting a report on attending the Summit to the Board, and will post their report on the website in January.



NCSEA Benefits for Individual Members of State SEAs

As a member of your **state-level SEA**, the following NCSEA benefits are available:

- A subscription to *STRUCTURE* magazine, the leading monthly magazine for structural engineering, both print and electronic versions.
- A subscription to *Structural Connection*, NCSEA's monthly member e-newsletter with information on NCSEA and SEA activities and events.
- An opportunity to secure a yearly subscription to unlimited live (20+ per year) and recorded webinars (from a library of 180+) available online, on-demand, 24/7/365. All NCSEA webinars are Diamond Reviewed for CE credit in 50 states.
- An opportunity to join NCSEA Committees including: Advocacy, Basic Education, Code Advisory, Communications, Continuing Education, Publications, SEER, Structural Engineering Summit, Structural Licensure and Young Member Support Group.
- Access to NCSEA web-based communities, including those on LinkedIn and Basecamp.
- Access to scholarships to the NCSEA Structural Engineering Summit for young members.
- Access to the NCSEA member portal that provides:
 - Committee documents & resources.
 - Tools for your SEA such as an MO Speaker List, the MO Toolbox and the MO Summary Report
 - Young member resources, including the NCSEA Young Member Start-Up & Resource Guide.
 - Resources for engineers, including white papers and resources like the Essential Book list for a Structural Engineer's Library.
 - Emergency response information, including the SEER Manual and Responder Matrix.
 - Online access to your PDH hours earned through NCSEA live and recorded webinars.
- Discounts for webinars, the NCSEA SE Exam Review Course, the Structural Engineering Summit and various NCSEA and ICC publications.

In addition, your SEA directly receives additional benefits from NCSEA:

- One recorded online webinar each year for free.
- Access to the Grant Program to help secure funding for Member Organization projects, programs and advancement.
- Telephone, face-to-face and web-based support to help your SEA run an effective volunteer-driven organization.
- Connection between your state SEA committees and national NCSEA Committees.
- Access to monthly MO Communication webinars to support your SEA operations.
- Recommended speakers list for your education programming.
- Exposure for your news and events through NCSEA's E-Newsletter and website.

SENH Committee Updates

NH Building Code/ Legislative Updates

Submitted by Linda McNair-Perry, P.E., SECB, SENH Legislative Liaison

A NH Legislative Sub-Committee was created in the spring of 2018 through [House Bill \(HB\) 1254](#). The purpose of this sub-committee was to study the code adoption process in New Hampshire. They completed the committee report (attached to newsletter) that included numerous recommendations to improve the code adoption and amendment process for all stakeholders. It appears there was dialog and understanding that value would be added to updating the codes in NH. Not every recommendation will find its way into NH law, but it is clearly a start.

Chairperson, Representative Beaudoin, and others are sponsoring 2019 bills related to the building code. The most anticipated of these would be to have the legislature adopt the 2015 family of I-codes as amended by the Building Code Review Board (BCRB). It is not yet clear when the implementation of the 2015 codes will be legislative set, but there is a hint that it may not become effective until January of 2020. If the recommendation of the committee is followed, the Legislature will be working towards the goal of adopting each new set of I-codes as they are updated (which occurs on a 3-year cycle) about 3 years after they are first published. Meaning, theoretically in 2021 the legislature would adopt the 2018 I-codes and in 2024 they would adopt the 2021 I-codes.

The 2019 Legislative Service Requests, LSRs, are being filed as this is being written. An LSR is step one in the process of drafting an actual legislative bill. LSR language only briefly and broadly identifies the topic. A recent search of “building code” on nh.gov website [LSR Search](#) found five (5) LSRs relative to various aspects of the building code:

2019-0269	Title: relative to adoption of state building code and fire code amendments. Sponsors: (Prime) Carol McGuire , John Reagan
2019-0304	Title: relative to the definition of the state building code. Sponsors: (Prime) Steven Beaudoin , Carol McGuire
2019-0367	Title: relative to building code requirements for properties with a current certificate of occupancy. Sponsors: (Prime) Steven Beaudoin
2019-0368	Title: relative to building code violations. Sponsors: (Prime) Steven Beaudoin
2019-0467	Title: relative to the state building code. Sponsors: (Prime) Rebecca McWilliams

As of the writing of this article, no actual text for any of the bills is available and no bill numbers have been assigned. When the legislative session begins, I invite you to stay alert for any bills that may be near and dear to your interests using the [NH Bill Status System](#).

Jeffrey Trexler, PE serves as the PE Board’s Structural Engineering Representative on the NH Building Code Review Board. With Jeff’s help, I will attempt to keep abreast of the content and dockets for the various bills. Having been through this process before, I can forewarn you to the many number of twists, turns and potential blindsides that could occur as the various pieces of legislation wind through committee hearings and the two legislative houses, before one or more get to the Governor’s office to be signed.

SENH Committee Updates

Excellence in Structural Engineering Awards Committee

submitted by Robert Durfee, P.E., SECB

Structural Engineers of New Hampshire (SENH) announces the Call for Entries for the 2019 SENH Excellence in Structural Engineering Awards Program. The purpose of the program is to recognize creative achievement and innovation in structural engineering by SENH Members.

ELIGIBILITY

Entry must be submitted by a licensed Professional Engineer (P.E.) and Member of SENH whose practice or activity is primarily in the field of structural engineering. Projects must have majority of the structural design performed by SENH Members (50%). Project entry must have been completed, constructed and achieved substantial completion after December 31, 2016.

The submittals will be judged based on the quality of the structural “design” portion of the project. Within the context of this awards program, “design” refers to the overall concept of any structure or structural system within a project. New projects, renovation and rehabilitation projects are eligible. Projects may be located anywhere in the world, with judging preference to projects constructed in New Hampshire.

CATEGORIES OF AWARDS

Awards will be presented in four project categories:

Buildings: Commercial, industrial, institutional, public, or residential building.

Bridge and Transportation Structures: Vehicle, Railroad, or Pedestrian Bridge. Other transportation Structures.

Special Structures: Towers, dams, parking garages, marine structures, signs, specialty structures, unique structures.

A Small firm Project Award may also be presented for an eligible project at the discretion of the Jury.

One entry in each category will be chosen to receive the SENH Excellence in Structural Engineering Award. Non-winning projects from last year’s program may be re-submitted (one time resubmittal only), if all eligibility requirements are met.

JURY OF AWARDS

The selection of award recipients will be made by a distinguished Jury of Awards. There will be a minimum of three jurors. All jurors shall be structural engineers licensed as P.E.’s and Members of SENH. Jurors will have no connection or conflict of interest to projects submitted.

SUBMISSION OF ENTRIES

Visit the SENH website (<https://www.senh.org/excellence>) for program information, entry form, entry requirements, project eligibility requirements, and other criteria.

DEADLINE FOR ENTRIES

All entries must be either emailed (limit file size to 20 MB), or mailed to the SENH office by 6:00 p.m. EST on Friday, March 1, 2019 to:

Email: admin@senh.org

Mail: SENH

PO Box 226

Manchester, NH 03105-0226

PRESENTATION OF AWARDS

The awards winners will be announced and the awards will be presented at a ceremony during the SENH May, 2019 meeting. A Design Firm representative must be present at the ceremony in order to win and accept the award, be featured in the next issue of the SENH newsletter and be posted on the website.

Excellence in Structural Engineering Awards *(continued)*

JUDGING CRITERIA:

Jurors

A minimum of three jurors are selected to make up the Jury of Awards. The Board of Directors will appoint a Chairman/Juror and two other jurors to the Jury. Jurors should be well respected and qualified structural engineers, and be licensed P.E.'s in New Hampshire. A juror should not have a conflict of interest with any of the Projects entered.

Tabulation of Entries

After the awards submission deadline the SENH Administrator will tabulate and organize the entries into their respective categories. In each category, the entries will be numbered. The entries will be listed on a spreadsheet showing the key information about each entry. This is just for record keeping and has no role in the judging process. The Administrator will forward the summary spreadsheet, project submissions, and scoring forms to each Juror.

Judging

The Chairman of the Jury will call for, schedule and arrange a meeting of the Jury. Time, place and means to hold the meeting (face to face, skype, teleconference, etc.) is at the discretion of the Chairman.

The judging process takes place in one day, as soon as practical after the entry closing date, and after each Juror has been given the summary spreadsheet, project submissions, and scoring forms. The goal is to have the judging process completed in one meeting.

Jurors will judge the submittals on the merits of their conformance to the required judging attributes, and avoid high marks for submittals based on the "glamour factor", or the quality of their photographs. Jurors will avoid awarding mediocre project submissions. Jurors will judge excellence in structural engineering, not architecture, or spectacle.

The entries should be judged on the following criteria:

- Creativity of structural design
- Complexity of criteria or unique problems
- Innovative application of new or existing materials or techniques
- Ingenuity of design for efficient use of materials and labor
- Suitability of the structure for its environment

Scoring forms will be provided to the jurors. The forms will show the entry Project Name and have a place for the jurors to enter their score and comments for each of the criteria. Each juror will review each submittal and determine their score for each project. It is suggested that the jurors read several of the submittals before starting to score them. It takes a review of a few submittals to develop a feel for how to score them. If the jurors have a different relative score for the same quality level but are consistent, the difference between jurors should be irrelevant. Jurors should complete scoring forms in advance of the Jury Meeting.

The Chairman will go over each project in the category with the Jury. Each juror shares their scoring form and will rank their selections for each category. The jurors will then discuss their rankings and decide as a group which projects should be selected for awards.

There is normally one award given in each of the three (3) categories. Jurors have the discretion to:

- Award more awards or no awards in a specific category based on the strength of the submissions.
- Not be required or obligated to make an award in any category based on only having one submission in a category
- Not be required or obligated to make an award in a category based on having no submissions in that category
- Not be required or obligated to make an award for "mediocre" projects submitted.
- Consider a project entered in one category for judging and award in another category.
- Consider making a fourth (4) award for Small Firm Project Award but not be obligated to make this award.

Jurors tally sheets and scoring forms will be kept until the awards are presented in case there is some need to refer to them.

Excellence in Structural Engineering Awards *(continued)*

Awards Presentation

The Chairman of the Jury will inform the SENH President and SENH Administrator of the winners/awards to be presented.

The SENH Administrator will arrange for appropriate plaques for the winners. Awards are announced and presented at the SENH annual meeting in May. Awards are presented by the SENH President. A brief summary of each project is included in the presentation. Photos are taken of each award winner receiving the award from the SENH President. Award winners are posted on the SENH Website and the August SENH Newsletter.

SCHEDULE OF EVENTS:

<i>Awards Program Announced (In November Newsletter)</i>	<i>November 2018</i>
<i>Awards Program Announced (At January Meeting)</i>	<i>January 18 +/-</i>
<i>Project Award Entry Form Due</i>	<i>March 1st</i>
<i>Board of Directors Appoints Jury</i>	<i>March 15th</i>
<i>Jury Meets, completes award selection</i>	<i>March 21st to April 15th</i>
<i>Awards (plaques) ordered from Trophy Firm</i>	<i>April 16th</i>
<i>Poster Board and Project Description (in May Newsletter)</i>	<i>April 19th +/-</i>
<i>Awards Ceremony (held during regular meeting)</i>	<i>May 15th +/-</i>
<i>Awards, Award Winner posted on website</i>	<i>June 3rd</i>

ENTRY REQUIREMENTS:

Project entries must meet the following eligibility requirements:

- Designed by a SENH member firm with the majority of the structural design performed by SENH members/ associate member (50% minimum).
- Applicant must be an SENH member and NH registered Professional Engineer (P.E.) with practice primarily in the field of structural engineering
- Projects may be constructed anywhere in the world, however, preference in judging will be given to projects constructed in New Hampshire
- Eligible projects must be substantially complete between December 31, 2016 and March 1, 2019
- Non-winning submittals from previous year awards program may be resubmitted (one-time resubmittal only) assuming all project eligibility requirements are still met
- SENH member firms may submit in any or all categories (Buildings, Bridges and Transportation Structures or Special Structures). Limited to one project submission per category.
- On-time submittal of project entry form required and fee. Late submissions will not be accepted
- Small Firm eligibility criteria: Firm with Ten (10) or less full-time employees, all disciplines, firm wide.

Submit each project in one of three categories:

- Buildings: Commercial, industrial, institutional, public, or residential building.
- Bridge and Transportation Structures: Vehicle, Railroad or Pedestrian Bridge. Other transportation Structures
- Special Structures: Towers, dams, parking garages, marine structures, signs, specialty structures, unique structures.

Project entries must include the following material:

- Completed SENH entry form with the \$50 entry fee. Make check payable to SENH
- A description of the entry outlining the significant aspects of the entry and their relationship to the relevant judging criteria (800 words maximum, provide an electronic pdf file).
- Photographs during construction and of the completed structure (minimum of 4 and not more than 8, 8 in. by 10 in. maximum, provide .jpg files)
- Plans or sketches may be included (not more than two pages total, 11 in. by 17 in. maximum)

Once the judging is complete, the winners of each category will be announced at the May annual meeting. All firms that have submitted entries must bring one poster (24"x36") of the project entry with easel for display at the awards ceremony. Credits must be noted for all photographs. Representatives of the firms submitting entries must be present in order to receive the award.



2019 SENH EXCELLENCE IN STRUCTURAL ENGINEERING AWARDS

ENTRY FORM

Project Category (check one):

- Buildings
 Bridge and Transportation Structures
 Special Structures

Small Firm Project Award Eligible Yes No (see entry requirements)

Is this Project a Re-entry from the 2018 Awards Program Yes No

Approximate construction cost of project submitted: _____

Name of Project: _____

Location of Project: _____

Date construction substantially completed (Month/Year): _____

Structural Design Firm: _____

General Contractor: _____

By signing, signatory agrees to the following and represents that he or she is authorized to sign for the structural design firm of record:

All entries become the property of SENH and will not be returned. The signatory certifies that SENH members have completed 50% or more of the structural design of the project. A firm representative must be present at the awards ceremony in order to win the award.

Submitted by: _____

Name

PE Number

Signature

Date

Submitting Firm: _____

Mailing address: _____

E-mail: _____ Telephone: _____

Entry Fee is \$50. Please make check payable to SENH and send to: SENH Administrator, P.O. Box 226, Manchester, NH 03105-0226.

SENH January Meeting Announcement

NEXT MEETING: Thursday, January 17, 2019

PRESENTATION #1: **NHDOT Bridge Program Update**, by *Robert Landry, PE* – Find out what has been going on at NHDOT and what is on the horizon.

SPEAKER: **Robert Landry, PE** – NHDOT Bureau of Bridge Design Administrator

PRESENTATION #2: **North Washington Street Bridge Replacement**. This presentation describes the design and construction of a signature bridge project located in the center of Boston that carries North Washington Street over the Boston Inner Harbor. The 1400' long multi-span bridge structure links the Boston North End to Charlestown and is located near the TD Garden and the Zakim Bridge. The proposed bridge is owned by the City of Boston and will carry four lanes of vehicular traffic, a designated bus rapid transit lane, separated bike lanes, full length curbside plantings with irrigation, 10'-6" wide sidewalks on both sides with observational sidewalk build-outs over the navigation channel, architectural trellises and accent lighting above and below the bridge. This \$177 million project also includes a 1000' long temporary vehicular/pedestrian bridge extending across the harbor to maintain traffic, a separate 800' long temporary utility bridge, and a 300' long multi-span walkway bridge under the main structure. The project is now under construction and is scheduled to be completed in the fall of 2023.



SPEAKERS: **Matt Card** is a Vice President and Division Manager with Alfred Benesch & Company and has specialized in the design of bridge replacements, rehabilitations and repairs throughout his 38-year career at Benesch. He is currently the project manager for the North Washington Street Bridge as well as several other bridge design projects in Massachusetts. Mr. Card has a B.S. in Civil Engineering from UMass Dartmouth and a M.S. in Structural Engineering from Northeastern University. He is a registered structural engineer in MA and RI. He is a member of ASCE/BSCES (Boston Society of Civil Engineers Section) and is on the Board of Directors for ACEC/MA (American Council of Engineering Companies of Massachusetts).

Edward Baumann is a Senior Engineer at Alfred Benesch & Company and has over 24 years of experience in the transportation engineering industry. His focus has been on the design of bridge replacements, bridge rehabilitations, construction engineering, bridge load rating and bridge inspection for structures throughout Massachusetts. He is the lead structural engineer for the North Washington Street Bridge Project. Mr. Baumann has a B.S. in Civil Engineering from the University of Massachusetts Lowell and is a Registered Professional Engineer. He is also a member of BSCES and serves as a Co-Chair for the Leadership Education Committee of ACEC/MA.



PLACE: Grappone Conference Center, 70 Constitution Ave, Concord, NH 03301 (603) 225-0303

DIRECTIONS: Take I-93 to Exit 15W onto I-393 West. In ¼ mile, turn right onto Commercial St. Turn right to stay on Commercial St. Constitution Ave. and the Grappone Conference Center is 250 yards ahead on the right.

AGENDA: 5:30 pm – 6:30 pm Registration/Social Hour
6:30 pm – 7:15 pm Dinner
7:15 pm – 7:30 pm Business Meeting
7:30 pm – 9:00 pm Presentations

DINNER: Buffet with choice of: breast of chicken roulade or peppered tenderloin of beef. Served with a house salad, country breads, and the chef's seasonal selection potato or rice and vegetable.
Please include any food allergies or dietary restrictions to be accommodated.

COST: Member: \$60.00 - Non-Member: \$65.00 - Student: \$15.00
"No-shows" will be billed at full amount. Refunds will not be issued.

RSVP: By Thursday, January 10, 2019. There will be a \$5.00 late fee for anyone wishing to RSVP past this date. Pay on line using PayPal at <http://www.senh.org/meeting-calendar> or send check payable to "Structural Engineers of New Hampshire" with list of attendees to:

SENH January Meeting Announcement *(Continued)*

TFMoran Inc.
Attn: Cassi Beroney
48 Constitution Drive
Bedford, NH 03110
cberoney@tfmoran.com

NOTE: 2.0 PDHs have been assigned for attendance. Attendees are responsible for ensuring their check-in on the attendance list upon arrival at the meeting.

November Meeting Attendance List & Meeting Minutes

Unfortunate Confluence of Design & Construction Deficiencies (2.0 PDH's)
Murphy's Taproom and Carriage House, 393 Route 101, Bedford, NH
November 15, 2018

Name	Firm		
<i>Charles Russo</i>	<i>Simpson, Gumpertz & Heger</i>	Joe Ripley, P. E.	Hoyle, Tanner & Associates
Aaron Lachance, P.E.	Hoyle, Tanner & Associates	John Ingwersen, P.E.	MIT/ Lincoln Lab
Andrew Griffin, E.I.T	TFMoran Inc.	JJ Sproul, P.E.	ProCon
Bob Durfee, P.E.	Dubois & King	Joseph O'Neill	Summit Engineering, Inc.
Chris Fournier, P.E.	HEB Engineers	Josif Bicija, P.E.	Hoyle, Tanner & Associates
Daniel Bard	Summit Engineering, Inc.	Katie Welch, E.I.T.	Hoyle, Tanner & Associates
Daniel Gelinas, P.E.	Gelinas Structural Engineering, LLC	Kayla Hampe, P.E.	Hoyle, Tanner & Associates
Daniel Martel, P.E.	Team Engineering	Lily Beyer	Summit Engineering, Inc.
Eric Caron	Student - University of NH	Linda McNair-Perry	Summit Engineering, Inc.
Fred Emanuel, P.E.	Emanuel Engineering, Inc.	Normand Cote, P.E.	NGC Structural, LLC
Geoff Aleva, P.E.	Civil Consultants	Robert Champagne, P.E.	Summit Engineering, Inc.
Greg Clauson	AISC	Ross Wood, P.E.	Hoyle, Tanner & Associates
James Hall		Ryan McMullen	Hoyle, Tanner & Associates
Jay Brown, P.E.	Structural Systems	Stephen Langevin, P.E.	GPI
Jeffrey Karam, P.E.	Evergreen Structural Engineering, PLLC	Thomas Kilrain, P.E.	
Jeffrey Tirey, P.E.	Tirey & Associates	Thomas Lamb, P.E.	TFMoran Inc.
Jill Semprini, P.E.	Hoyle, Tanner & Associates	Tim Foy, P.E.	Summit Engineering, Inc.
Joanthon Longchamp, P.E.	Daigle Engineers, Inc.	Timothy Polson, P.E.	WSP USA
Joaquin Denoya, P.E.	Tripi Engineering	Zachary Zavalinos, P.E.	Dubois & King

Business Portion of the Meeting *(continued)*

President Chris Fournier made a few announcements

- SENH is looking for a volunteer to work with the website
- Nominations can be submitted for engineer and young engineer of the year award
- Younger members are encouraged to apply for SEI scholarships to attend The Structures Congress this spring

Treasurer Josif Bicja provided an update

- SENH plans to award scholarships to University of New Hampshire Student
- 3 new members have joined SENH

Dan Martel Provided a Code Advisory Committee update

- The committee is discussing several topics they feel need to be addressed including
 - ◊ Special Inspections Enforcement
 - ◊ Snow loads and roof insulations values
- Members are encouraged to contact Dan on other topics they feel need to be addressed by the committee

The younger Member group provided an update

- The younger member group plans to have a panel discussion with UNH students, members volunteers for the panel are needed. The group hopes to have a good breadth of experience on the panel
- The younger member group participated in a trivia night with the ASCE younger members

Bob Durfee Presented the call for entries for the SENH awards

- Categories include
 - ◊ Buildings
 - ◊ Bridge
 - ◊ Special structure
 - ◊ Small firm
- More information can be found on the SENH website

Presentation

Charles J. Russo -Simpson Gumpertz and Heger presented on an Unfortunate Confluence of Design and Construction Deficiencies on a project in West Virginia.

The forensic investigation project was for a residential building at a ski mountain in West Virginia. The building was a podium structure with a cast in place concrete first floor framing and wood framed/ load bearing steel stud upper floors. Cracks were discovered in the concrete slab during and after construction. Mr. Russo's firm was hired to investigate the cracks. Cracks were found on the top and underside of the slab. Crack mapping indicated that the concrete slab was over stressed. Shoring and further investigation and repair were recommended.

A full review of the design and construction was conducted. Ground penetrating radar was used to determine in place concrete reinforcing. Construction documents and shop drawings were also reviewed.

The investigation uncovered an unfortunate confluence of design and construction deficiencies. In one area significantly more soil weight was bearing on the slab than planned on in design. In other areas slab reinforcing and bearing wall location coordination issues were discovered. A misunderstanding of a reinforcing detail on the structural drawings also contributed to the cracking problem.

Simpson Gumpertz and Heger engineers worked with a specialty concrete repair engineering firm to reinforce the deficient concrete slab. Repairs included adding concrete beams and girders to the underside of the slab to strengthen it. The members were cast with self consolidating concrete. Plexiglas forms were used to ensure consolidation. In addition, many trial mixes and deliveries were conducted to account for the long trip from the nearest ready-mix concrete plant. Once the repairs were complete the framing was monitored biannually for 5 years to ensure repairs were effective.

A Note from your Admin

Membership renewal form is attached to this newsletter. Please fill out the form and return to me through e-mail: CBeroney@TFMoran.com, or via snail mail:

TFMoran Inc.

Attn: Cassi

48 Constitution Drive

Bedford, NH 03110.

*Checks can be mailed to this address, too!

Don't want to deal with printing, filling out by hand, then scanning?! Then head over to the SENH website and complete the form online and pay via PayPal! <https://www.senh.org/membership-renewal-form>

Know someone who wants to become a member? Pass on this link! <https://www.senh.org/membership-application-form>

If your company would like to be a Corporate Sponsor, please attached form on how to do so.

Don't forget that you can also post Employment Ads on our website: <https://www.senh.org/awpcp>

As always, if you have any questions or comments, please feel free to contact me any-time at cberoney@tfmoran.com or admin@senh.com

Thank you!! And I look forward to seeing all of your renewal forms soon :)
~Cassi

Employment Opportunities

Structural Engineer

Harriman

Harriman's growing multi-disciplinary practice is seeking a **Structural Engineer** to join our team. With various locations throughout New England, our ideal candidate can select the best location for them: Auburn or Portland, Maine; Boston, Massachusetts; or Portsmouth, New Hampshire. With a holistic, ground-up approach to design, our structural team works closely with the firm's internal practice groups - coordinating with architects and engineers throughout the firm - as well as directly with prime engineering clients, on a diverse group of project types. Our work is challenging and creative, with a focus on thoughtful, environmentally-conscious solutions for the future. If you're a collaborative and detail-oriented engineer who is passionate about the built environment and can tackle technical reports, calcs, and specifications with ease, we want to meet you!

What you'll do here:

- Design and manage structural engineering projects for all aspects of building structures and components on a variety of project types including schools, municipal facilities, retail and mixed-use developments, and more
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Position Requirements:

- Bachelor's degree in Civil/Structural Engineering from an ABET-accredited program
- Professional licensure in Maine, Massachusetts or New Hampshire
- Minimum 5 years of related structural engineering experience in the design and construction of new and existing buildings
- Knowledge of both current and historic building materials, along with field investigation methods as it relates to the evaluation and design of existing and new structures
- Ability to design steel, wood, concrete and masonry structures
- Proficient with structural design software such as Ram, Risa, Woodworks, etc. and knowledge of producing bid documents in Revit.
- Experience managing multiple projects with minimal supervision
- Familiar with all governing State and National building codes and standards
- Active in professional engineering organizations such as SEAM, BASE, SENH, ASCE, ACEC, etc.
- Excellent interpersonal and communications skills and the ability to establish and maintain relationships with clients, coworkers, and consultant teams

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SENH 2019 Dues Renewal Notice



Member of

Renewal dues are as follows:

Member: \$ 65.00 Associate Member: \$65.00 Student Member: \$0.00 Retired Member: \$20.00

Please make check payable to SENH, and send with completed form to:

SENH
P.O. Box 226
Manchester, NH 03105-0226

BY February 15th, 2019

**If sending one check for more than one person, please fill out a renewal form for each person.*

PLEASE FILL OUT COMPLETELY, THIS FORM IS USED FOR CONFIRMING AND UPDATING LISTS!

Please check one:

Member Associate Member Student Member Retired Member

NAME _____ FIRM _____

ADDRESS _____

PHONE _____ FAX _____ **E-MAIL _____

P.E. YES NO WHICH STATE(S) _____

If you are under 35 years of age, are you interested in participating in the Young Members Group? YES NO

Does the information provided represent a change in registration data from the previous year? YES NO

Do you wish to be listed on the website to accept calls from the public? YES NO

If yes - check all categories that apply : Bridges Buildings Residential Buildings Commercial

Do you hold any additional certifications such as SECB LEED Other _____

Do you wish for SENH to share your e-mail address with NCSEA to receive their announcements? YES NO

Do you wish to have your member information (except e-mail) included on the SENH Website? YES NO

Do you wish to have your name in the Member Directory on the SENH Website? YES NO

Voluntary SENH scholarship contribution: \$10 _____ \$20 _____ \$50 _____ OTHER \$ _____

Check # _____ Check Amount \$ _____

If you wish to have your "Linked In" profile shown on the SENH Website with your member directory listing, please provide the link here:

****Our newsletters are delivered via e-mail. In order to receive your newsletter via US Postal Service you must check the box below.**



Please send my newsletter via regular mail.



Structural Engineers of New Hampshire

P.O. Box 226
Manchester, NH 03105-0226

www.senh.org



Member of

Corporate Advertising

Introduction:

SENH accepts corporate advertisement for posting on its website and for inclusion in five (5) newsletters delivered electronically to its members. The postings will include a hyperlink to the firms website if desired.

Advertisement Format:

All advertisements shall be in the form a 1.3" x 2.3" business card and shall be submitted electronically in a .jpg or .pdf format.

Advertisement Fee:

An annual fee of \$100 is required for structural engineering related firms who employ at least one (1) Member or Associate Member of SENH. An annual fee of \$150 is required for structural engineering related firms who do not employ a Member or Associate Member of SENH. An annual fee of \$300 is required for non-structural engineering related advertisements. Advertisement Fees are for the Period of January 1st to December 31st. Advertisements received outside of the annual renewal cycle will be assessed a fee of \$10/month, \$15/month and \$30/month respectively.

For purposes of SENH advertisements structural engineering related firms shall include the following:

- Structural Engineering Design Companies
- Architectural / HVAC Design Companies
- Survey Companies
- Geotechnical Engineering Companies
- Manufacturers whose products are utilized in building or bridge construction
- Architectural Historians / Archaeologists
- Companies providing professional services to structural engineering companies (Accountants, Lawyers, etc.)
- Software companies providing structural analysis, CADD, estimating or scheduling software
- Other companies approved at the discretion of the SENH Board of Directors

The SENH Board of Directors reserves the right to limit the type of advertising accepted for use.



Structural Engineers of New Hampshire

P.O. Box 226
Manchester, NH 03105-0226

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Member of

Corporate Advertising Form

CONTACT INFORMATION:

Company Name: _____

Company Address: _____

Phone & Fax Numbers: _____

Website Address: _____

Contact Name: _____

Contact Phone Number: _____

Contact E-mail Address: _____

BUSINESS DESCRIPTION:

- Company employs at least one (1) SENH Member or Associate Member.
 - Company does not employ at least one (1) SENH Member or Associate Member.
- If second box is checked, please provide a brief description of business and how it relates to structural engineering:

ADVERTISING FEE:

- \$100 – Structural Engineering Related Company employing at least one (1) SENH Member or Associate Member.
- \$150 – Structural Engineering Related Company that does not employ at least one (1) SENH Member or Associate Member.
- \$300 – All other companies.

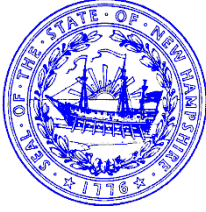
SUBMIT COMPLETED APPLICATION WITH FEE TO:

Structural Engineers of New Hampshire
P.O. Box 226
Manchester, NH 03105-0226

SUBMIT ELECTRONIC ADVERTISEMENT

TO: admin@senh.org

Please Note: Electronic files may be submitted prior to applications and fees however the advertisement will not be posted until SENH has received the application and application fee.



State of New Hampshire

GENERAL COURT

CONCORD

MEMORANDUM

DATE: November 1, 2018

TO: Honorable Christopher Sununu, Governor
Honorable Gene G. Chandler, Speaker of the House
Honorable Chuck W. Morse, President of the Senate
Honorable Paul C. Smith, House Clerk
Honorable Tammy L. Wright, Senate Clerk
Michael York, State Librarian

FROM: Representative Steven P. Beaudoin, Chairman

SUBJECT: Final Report on HB 1254; Chapter 294:1, Laws of 2018

Pursuant to HB 1254, Chapter 294:1, Laws of 2018, enclosed please find the Final Report of the Committee to Study Procedures for Adoption of National Codes by the State of New Hampshire.

If you have any questions or comments regarding this report, please do not hesitate to contact me.

Enclosure

cc. committee members

FINAL REPORT

Committee to Study Procedures for Adoption of National Codes by the State of New Hampshire

HB 1254, Chapter 294, Laws of 2018

November 1, 2018

MEMBERS:

Rep. Steven P. Beaudoin, Chairman
Rep. Raymond G. Gagnon, Clerk
Rep. Carol M. McGuire
Sen. Sharon M. Carson
Sen. Robert J. Giuda

CHARGE OF THE STUDY:

The committee was charged to study the procedures for adoption of national codes as part of the state building code and state fire code, including the Life Safety Code, the Uniform Fire Code, the International Building Code, the International Existing Building Code, the International Plumbing Code, the International Mechanical Code, the International Energy Conservation Code, the International Residential Code, and the National Electric Code.

PROCESS AND PROCEDURES:

The committee met 6 times between August 28 and October 19. The State Fire Marshal's Office and members of the Building Code Review Board provided detailed information on the current processes used to adopt and amend the State Fire Code and the State Building Code. Testimony was also given by representatives of the NH Building Officials Association, and members of the general public with experience in the building trades.

FINDINGS:

Prior to 2002, NH had no unified codes. Some municipalities had no codes or even code enforcement personnel. HB 285 was introduced in 2002 to address this problem and create a statewide model building code. Clearly, the intent was to eliminate the multitude of codes that existed across NH, remove the ambiguity in code compliance from town to town, and ensure that buildings are constructed to a safe minimum standard. HB 285 (2002) allowed for municipalities to amend the code to suit the particular needs of their community. Since then, many other bills have been filed to further amend our building and fire safety codes.

It is apparent that the ability to amend the code has been misinterpreted by our municipalities and in fact, many communities have adopted entire new codes. To address this problem, HB 137 was filed in 2011. After extensive work in subcommittee and a number of amendments, the bill was signed into law and took effect in June, 2012. The preamble to the law states that one of its purposes is to "... reserve the authority for code adoption and changes to code editions to the general court,...". Clearly, the intent of the bill was to prohibit the adoption of entire codes by municipalities. Apparently, this intent was not translated into statute clearly enough and we have now reverted back to the pre-2002 situation with a multitude of codes being in place across the state. This situation makes it difficult for contractors, tradespeople, and developers in that there is uncertainty in knowing what the demands of a particular municipality might be. It also unnecessarily increases costs for development for our constituents.

The governing bodies of our municipalities, like our legislature, is made up of laypeople that oftentimes lack a full understanding of the trades and life safety issues. When considering amendments to the codes, they rely upon the recommendations of their code compliance personnel to ratify local amendments to the building and life safety codes. Sometimes, these amendments are unwarranted and are simply adopted on the whim of the code compliance official. On the other hand, the state of NH has boards such as the Building Code Review Board and the Board of Fire Control that are comprised of experts. These boards possess the experience and knowledge necessary when considering any changes to our codes and, in compliance with NH law, including the costs of such changes. While there is agreement that these boards should be taking the lead in approving code amendments, the operations of these boards should be improved. Notice of public hearings should be more accessible and the Building Code Review Board should post code amendments in a timely manner. The boards should also have more members, particularly public members, along with some alternates in order to make it easier to achieve a quorum.

When a person or organization is cited for a code compliance violation, in order to determine the remedy for the violation, it is essential that that person knows which particular section of code has been violated. They should also have the right to access, read, copy, and duplicate the particular section of code has been violated. RSA 47:22 states in part "...there shall be filed 3 copies of such codes, rules and regulations in the main office of the municipal department or agency administering the same and 3 copies in the office of the city clerk. All copies of any code, rules and regulations filed as provided herein, shall be for use and examination by the public." It has come to the committee's attention that this section of statute is not being followed by most municipalities. Our constituents are being forced to use on line "read only" access to codes or alternatively hire code compliance experts to achieve compliance.

In past applications to the legislature for ratification of new codes, there has been a distinct shortage of information provided to permit a full understanding of the implications, need, and cost of adopting the new codes. This has led to uncertainty and reluctance on the part of the legislature to adopt new codes. As a result, new technologies and techniques are not approved for use in NH. In some cases, this has increased the cost of buildings. Conversely, some of the newest codes, such as the International Energy Conservation Code, in the opinion of some legislators, go too far and should be elective as opposed to mandatory. Vetting new codes is a long and exhaustive process. In order to fully consider the implications of any new codes, it has been suggested that the state stay one full code cycle behind the national codes.

Based on a written submittal provided by the NH Building Officials Association and other testimony, there is some confusion concerning the application of the term “change of use”. In at least some instances it is apparent that the term change of use is being applied when there is a change of tenancy. It is clear in the codes that this does necessarily apply, that the term change of use refers to a change of occupancy classification.

Many municipalities lack qualified code enforcement personnel. In some cases, the persons charged with code enforcement don’t even possess a basic knowledge of the trade and workmanship they are inspecting. The entire intent of building inspections is to ensure compliance with codes to prevent poor or even dangerous workmanship. Qualified personnel are essential in meeting this goal. Some municipalities charge a fee for an appeal of a code compliance violation.

Many towns and cities have e mail notification of upcoming board meetings. Public and trade person input is essential in the code amending and adopting process. Unlike changes to the building codes, fire and life safety code changes don’t require public hearings at the municipal level.

RECOMMENDATIONS:

The committee developed legislative remedies to address problems identified in their findings. These remedies were grouped into four general topic areas and should serve as the basis for legislation filed in the 2019 legislative session.

The four bills should address:

- A. Adoption of Local Amendments to the State Building Code and State Fire CodeCode adoption
- B. Establishing a standard procedure and timeline for the adoption of new editions of codes
- C. Adoption of the 2015 suite of building codes as amended by the BCRB
- D. Code enforcement officials, citations and fees

A. Adoption of Local Amendments to the State Building Code and State Fire CodeCode adoption

- Require municipalities to adhere to the State Building Code and the Fire Code with any amendments adopted at the state level.
- Prohibit municipalities from adopting complete code updates.
- Prohibit the adoption or enforcement of local amendments to any state adopted codes without the prior approval of the Building Code Review Board or the Board of Fire Control.

- Require all approved local amendments to be prominently posted on the website of either the Building Code Review Board or the Board of Fire Control.
- Permit an amendment approved by the Building Code Review Board or the Board of Fire Control to be approved for one municipality or for the entire state. If approved for one municipality, other municipalities may adopt it by proper vote and notification of the appropriate board.
- Amend RSA 47:22, which currently requires that municipalities make 6 copies of *all* codes available to the public, to require that they keep 1 copy of each of the 10 major codes (the Fire Safety Code, the Life Safety Code, the International Building Code, the International Residential Code, the International Existing Building Code, the International Energy Conservation Code, the International Mechanical Code, the International Plumbing Code, the International Pool and Spa Code, and the International Electrical Code). Codes must be available free of charge and easily accessible.
- Require the Department of Safety to establish a simple sign up site whereby an interested person can provide his/her email address and indicate the public hearing he is interested in attending. This applies to the BCRB, the board of fire control, and legislative hearings on code updates and amendments.

B. Establishing a standard procedure and timeline for the adoption of new editions of codes by the Legislature

- Define the principle of adopting codes one cycle behind, i.e., 2015 now, 2018 effective 2021
- Specify what is expected from code review boards to bring a code update to the legislature: cost estimates, summary of all significant changes, and need for change.
- Clarify that the code amendment process would require legislative approval before becoming effective in the form of a standard bill every year to incorporate amendments.
- Require all state-adopted amendments to be published on BCRB and/or BFC websites (state-approved local amendments are required to be posted in Bill A)
- Provide additional funding for IT support to accomplish those goals.
- Establish a variance process to allow the BCRB to waive requirements of the code in special circumstances.
- Allow the BFC to adopt emergency amendments following JLCAR rules which will ultimately need legislative approval after the fact.

C. Adoption of the 2015 suite of building codes as amended by the BCRB.

- Amend RSA 155-A:1, IV (definition of state building code) to update the 2009 codes to the 2015 edition
 - the International Building Code 2009,
 - the International Existing Building Code 2009,
 - the International Plumbing Code 2009,
 - the International Mechanical Code 2009,
 - the International Energy Conservation Code 2009, and
 - the International Residential Code 2009, as published by the International Code Council
- Ensure that any amendments that have been adopted by the Building Code Review Board are incorporated

D. Code enforcement officials, citations and fees

- Require code enforcement officials to be IRC certified, at a minimum.
- Clarify that the State Fire Marshal's Office or that certified third party inspectors are available for inspections when a municipality has no code enforcement officials.
- Prohibit building permit fees over \$25 if there will not be an inspection of the work performed.
- Require all citations resulting from a building inspection to identify the specific code and code section(s) that has been violated.
- Prohibit charging a fee for the appeal of a decision made by a code compliance officer.
- Add statutory definitions clarifying the terms 'change of use', 'change of occupancy', and 'change of occupancy classification'.

Respectfully submitted on behalf of the committee,

Rep. Steven P. Beaudoin, Chairman



**P.O. BOX 226
MANCHESTER, NH 03105-0226**

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