



# Granite Columns



# President's Letter



Dear Members, Colleagues and Sponsors,

I hope each of you took some time off this summer to unplug and have some much deserved time off. It has been quite a summer with record breaking temperatures. It looks like June and July had the warmest temperatures on record and record breaking heatwaves have swept across many parts of the world. This is likely one of the leading indicators of human-caused climate change. Many countries across the globe are taking steps to limit carbon pollution and move away from dirty fossil fuels toward cleaner power. In late August, California was the first State to ban

sale of new gas-powered cars by 2035. These are all great steps in the right direction but probably not enough. We as structural engineers can play an important role in reducing construction industry emissions through efficient and sustainable designs. A few years back Structure Magazine had a great article as to how we can do our part. I encourage you to read this article and take a proactive approach with your everyday designs and work. Here is the link to that article - <https://www.structuremag.org/?p=12613>

Our Administrative Assistant, Cassi Beroney and the Board of Directors have worked the past few months on updating our website and we are hopeful that just before our September meeting we will launch the new SENH website. We have held several meetings and training sessions with our website host and are really excited about unveiling the new website. Please keep an eye on the rollout of the new website and we welcome any feedback we receive and suggestions to add new material or to make it easier to navigate and find information.

Our next meeting is scheduled for September 29<sup>th</sup> and we are excited to have this annual combined meeting with ASCE-NH. Our speaker, Brian Nereson, PE will discuss how ground improvement in the form of Rammed Aggregate Piers and Rigid Inclusions have been used to eliminate the need for costly over-excavation and replacement or pile foundations for these challenging subsurface conditions. We hope to see a great attendance as we have had in the past pre-Covid. I encourage you to sign up and attend this meeting in-person.

NCSEA Summit is just around the corner and this year it will be held in Chicago on November 1 through 4, 2022. Robert Durfee, Tom Lamb, and Kayla Hampe will represent SENH and will also attend their committee meetings. This conference is a great way to interact and learn from leaders in our field and stay current on best practices in design codes and structural engineering.

If you would like to participate on any of our committees, please feel free to reach out to me directly at (603) 460-5147 or [President@senh.org](mailto:President@senh.org). Thank you and see you at the September meeting!

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### Special Points of Interest/ Reminders:

- *Mark your calendars! The next meeting is scheduled for September 29th — See inside for details!*
- *See page 7 for the Board of Director of the month!*

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## Code Advisory Committee

*submitted by Daniel Martel, P.E.*

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### 2018 Building Codes Bill Pass Legislature

On July 1, the Governor signed into law House Bill HB1681, which primarily adopts the 2018 ICC suite of codes in New Hampshire. It also requires that the Building Code Review Board have the opportunity to review any local amendments to the codes, and amendments cannot be less stringent than the code. You can read the full text of the bill here: [https://gencourt.state.nh.us/bill\\_status/legacy/bs2016/billText.aspx?sy=2022&id=2216&txtFormat=html](https://gencourt.state.nh.us/bill_status/legacy/bs2016/billText.aspx?sy=2022&id=2216&txtFormat=html).

The most significant structural change between the 2015 and 2018 IBC is the change from ASCE 7-10 to ASCE 7-16. And many major building material sections reference standards reference a newer version (AISC, NDS, TMS). Here is an ICC document summarizing changes in all sections between 2015 and 2018: <https://www.iccsafe.org/wp-content/uploads/2018-IBC-UPDATE-Handout-9-1-17.pdf>.

There is a 6-month grace period where the 2015 or 2018 codes can be used. Starting January 1, 2023, all building permit application documents must reference the 2018 codes.

You can find more information on the State's website, including state and local amendments to the codes: <https://www.nh.gov/safety/boardsandcommissions/bldgcode/nhstatebldgcode.html>

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## Structural Engineering (SE) Licensure Committee

*submitted by Kayla Hampe, P.E., Chair*

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Assistant Chair: Eric Caron

The SE Licensure Committee continues to meet about once a month to work on the Committee's goals (see May 2022 Newsletter for details). Over the last few meetings, the Committee has reviewed and discussed New Hampshire licensure rules and state requirements. We also investigated our neighboring states' licensure rules and state requirements, as well as researched and compared what other national societies positions are regarding SE licensure.

One meeting was dedicated to meeting with one of our members who helps to grade the SE Exam. The discussion was very constructive even though it was limited to publicly available information allowed by the NCEES confidentiality agreement. The discussion included how the grading committee is selected, testing not for "a grade" but for minimal competency, switch from paper to computer-based testing, and some of the differences between the SE and PE Civil exams.

Our August meeting will be focused on developing survey questions for our members. We want to understand our members opinions on SE licensure. We anticipate sending out the survey sometime in September, so keep an eye out for it! We appreciate your feedback!

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## Public Relations Committee

*submitted by Sean Brown, P.E., Chair*

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The SENH Public Relations Committee is proud to announce that two scholarships, in the amount of \$1000.00 each, will be offered to resident or non-resident UNH students and New Hampshire residents studying structural engineering at an ABET-accredited institution outside of New Hampshire.

We encourage SENH members to solicit applicants from their alma maters once the application forms are updated and uploaded to the SENH website. An announcement will be made to SENH members when that occurs, which is expected to be no later than November 12th. Should you have any questions, please reach out to Sean Brown, P.E. at [seanbrown@hardestyhanover.com](mailto:seanbrown@hardestyhanover.com) or Robert Durfee, P.E. at [rdurfee@dubois-king.com](mailto:rdurfee@dubois-king.com).

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# ASCE/ SENH Meeting Announcement

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NEXT MEETING: Thursday, September 29, 2022

PRESENTATION: **Ground Improvement – An Effective Alternative to Deep Foundations.** Geotechnical conditions that include urban fills, buried organics, weak sands, soft clays, and shallow groundwater underly our feet, and present challenges for reliable support of civil engineering structures. This presentation examines how ground improvement in the form of Rammed Aggregate Piers and Rigid Inclusions have been used to eliminate the need for costly over-excavation and replacement or pile foundations for these challenging subsurface conditions. An overview of Rammed Aggregate Piers and Rigid Inclusions will be discussed, as well as how these solutions are applied.



SPEAKER: **Brian Nereson, PE** graduated from UNH in 2007 and spent 15 years as a geotechnical consultant in New England, prior to joining Geopier as New England Region Engineer. At Geopier, Brian is responsible for client support, engineering, and project development. Brian is a Professional Engineer licensed in each of the New England states.

PLACE: The Derryfield Restaurant  
625 N. Mammoth Road  
Manchester, NH 03104  
(603) 623-2880

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–8:30 pm Presentation  
8:30 pm –8:45 pm Closing Remarks

DINNER: Buffet with choice of bistro steak and chicken marsala. Served with hearty minestrone soup, Caesar salad, and tomato, basil, and mozzarella salad.  
Please include any food allergies or dietary restrictions to be accommodated.

COST: Member: \$50.00  
Non-Members: \$75.00  
Government Employee: \$30.00  
Student: \$30.00

“No-shows” will be billed at full amount. Refunds will not be issued.

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# SENH Meeting Announcement *(Continued)*

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RSVP: By Thursday, September 22, 2022. There will be a \$5.00 late fee for anyone wishing to RSVP past this date.

Registration and payments can be completed using one of the following methods:

Pay online at <https://www.ascenh.org> using ASCE's Events calendar under "ASCE/SENH Joint Meeting"

Send a check with list of attendees to:

ASCE  
New Hampshire Section  
PO Box 4953  
Manchester, NH 03108

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.

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## May Meeting Attendance List & Meeting Minutes

ACI 562 Provisions for External Strengthening of Concrete Structures (2.0 PDH's)  
Puritan Conference & Event Center  
245 Hooksett Rd, Manchester, NH 03104  
May 18, 2022

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| Name                  | Company                      | Name                   | Company                     |
|-----------------------|------------------------------|------------------------|-----------------------------|
| Alex Azodi, P.E.      | Omega Structural Engineering | Kayla Hampe, P.E.      | Hoyle, Tanner & Assoc.      |
| Cassi Beroney         | SENH                         | Kenneth Marshall, P.E. | Foley Buhl Roberts & Assoc. |
| Derek Gilbert, P.E.   | Simpson Strong-Tie           | Mark Beroney           |                             |
| Ed Weingartner, P.E.  | Hoyle, Tanner & Assoc.       | * <b>Mark Jarvinen</b> | <b>Simpson Strong-Tie</b>   |
| Eric Caron, P.E.      | WSP USA                      | Paul Sbacchi, P.E.     | TFMoran, Inc.               |
| Grant Erickson        | WSP USA                      | Robert Champagne, P.E. | Summit Engineering, PLLC    |
| Jacob Pouliot, P.E.   | TFMoran, Inc.                | Robert Durfee, P.E.    | Dubois & King, Inc.         |
| Jeffrey Trexler, P.E. | Trexler Engineering          | Ryan McMullen, P.E.    | Hoyle, Tanner & Assoc.      |
| Josif Bicja, P.E.     | Hoyle, Tanner & Assoc.       | Thomas Lamb, P.E.      | TFMoran, Inc.               |
| Karie-An James, P.E.  | WSP USA                      | Timothy Polson, P.E.   | WSP USA                     |
| Katelyn Welch         | Hoyle, Tanner & Assoc.       | Torey Brooks           | Oakpoint Associates         |
|                       |                              | <b>*Speaker</b>        |                             |

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## Business Portion of the Meeting

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- Josif provided Website Update
  - ◇ Requested member firms send in project photos that they would like to have featured on the website.
  - ◇ We are continuing to work with StarChapter and hope to have the website go live this fall.
- Josif noted that SENH dues will be going up next year – NCSEA has increased what it charges SENH per member.
- Webinar scheduled for 6/21/22, 12:00 PM – 1:30 PM
- Eric Caron noted that the Younger Member Group will be hosting a social gathering at Throwback Brewery 5/25/22 at 5:30 PM.
- Jeff Trexler noted that NH Legislation has passed to move the State from the 2015 set of building codes to 2018. There will be a 6 month window where either code can be used, with 2018 becoming the requirement after that.
  - ◇ Expect the 2021 building codes to be applicable in 2024.
- Kayla gave an update on the SE Licensure Committee
  - ◇ Committee will be polling membership in the coming months.

### **Presentation:**

#### ***ACI 562 Provisions for External Strengthening of Concrete Structures:***

Mark Jarvinen from Simpson Strong-Tie provided a presentation for Structural Engineers and those engaged in the assessment, repair, and strengthening of reinforced concrete structures. The presentation focused on ACI 562 – 21 provisions for evaluating existing structures and its impact on component strengthening with externally-applied fiber-reinforced polymers. The presentation highlighted ACI 562's interaction with IEBC, unsafe structural conditions, substantial structural damage, basis of design, additional load combinations for structures rehabilitated with external reinforcing systems, and interface bond provisions.

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## SENH Board Member of the Month

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### Sean Brown, P.E.—SENH Treasurer

Sean is Lead Bridge Engineer for Hardesty & Hanover in Bedford, NH and works on bridge replacement, rehabilitation, inspection, and rating projects in New Hampshire and Vermont. He recently had the opportunity to participate in an inspection of a 1917 swing span truss bridge in Discovery Bay California, which included an emergency repair of the bearing mechanism that was damaged during the inspection. He has been a member of SENH since graduating from the University of New Hampshire with a B.S. in Civil Engineering in 2013 and currently serves on the SE Licensure Committee, and leads SENH's annual Scholarship Program. He has previously served as the chair of SENH's Younger Member



Group which organized events for reviewing UNH student resumes, volunteering at Habitat for Humanity and the New Horizons food pantry, and kickball games against our counterparts in the NH-ASCE Younger Member Group. Sean is participating in UNH's senior capstone project and will assist a group of college seniors in creating their own preliminary design of an active Hardesty & Hanover bridge replacement project in Orford, NH. He and his wife recently bought a house in Derry, NH and look forward to skiing as soon as the snow flies.

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# Employment Opportunities

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## Bridge Engineering Positions

Hoyle Tanner has immediate openings for a Mid-Level and Senior Project Engineer or Manager in our Ground Transportation Division. Become part of a team of transportation design professionals who are committed to building strong and lasting relationships with our clients by delivering creative, cost effective and quality solutions while enhancing the communities in which we work and live. Hoyle Tanner offers competitive salaries, a comprehensive benefits package, a generous signing bonus, and telework and flexible scheduling opportunities.

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