# **SCESNEWS**

A MONTHLY PUBLICATION OF THE BOSTON SOCIETY OF CIVIL ENGINEERS SECTION/ASCE

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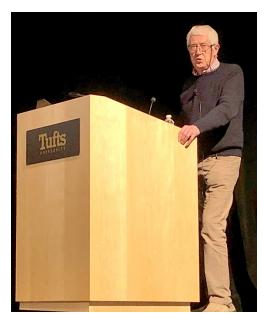
**Geo-Institute Boston Chapter** 

## Third Charles C. Ladd Memorial Lecture

by Laurie Gibeau, PE, Project Manager, GZA GeoEnvironmental, Inc.

On November 21, 2019, the Geo-Institute, along with Tufts University Department of Civil and Environmental Engineers and the Friends of Tufts, hosted the 3rd Charles C. Ladd Memorial Lecture. Over 200 people attended the lecture, representing students, academics, and practicing engineers.

Professor Charles C. Ladd was renowned as a gifted teacher (with a style emulated by many former students who became faculty members) and innovative researcher on advanced technical topics. He was internationally sought after as a consultant working on large, complex and difficult civil projects. Among his numerous professional achievements, Professor Ladd was elected in 1983 to the US National Academy of Engineering and was the recipient of many research awards from the American Society of Civil Engineers (ASCE) including the Walter L. Huber Civil Engineering Research Prize, the Croes Medal, the Norman Medal and the Terzaghi Lecture Award. In 1995, he was elected as a distinguished member of ASCE and received



Featured speaker Dr. David Hight presented at the third Charles C. Ladd Memorial Lecture

#### **UPCOMING EVENTS**

YMG Kickoff Meetina / **Rosie's Place Drive** January 14, 2020

**Greater Boston Food Bank** Sorting Event January 15, 2020

Autodesk Technology Center Tour January 30, 2020

Annual Networking & Billiards Tournament February 19, 2020

**Further Details Inside** 



### 2019-20 Society Sponsors:



**KELLER** 





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## **President's Report**

by Richard Maher, PE, Managing Associate, Perry Associates, LLC



Happy Holidays! The calendar year is ending and BSCES was very busy during 2019. Reflecting on the past year reveals numerous member benefits supported by BSCES volunteers. Member benefits such as

professional and leadership activities, awards and recognitions, scholarships and mentoring were provided to more than 3,000 people. The longevity of BSCES is a testament of the passion of the engineering community in Massachusetts.

During this past year, BSCES received numerous contributions to support its programming and its ability to award scholarships. BSCES has named scholarships for individuals that have made significant influences on our profession and BSCES: Bertram Berger, Leo Casagrande, Desmond Fitzgerald, Jonathan Golden, Edward Howe, Francis Keville, William Morse, and Frank Walker. The remembrance of these individuals should remind us all that it takes the village of owners, engineers, and contractors to accomplish complex infrastructure projects.

Recently, a member of our civil engineering community passed away, Francis A. "Frank" DePaola. His career crossed paths with many of us and he left an impact at every position he was called upon to fill. Please take a moment to reflect on his contributions in keeping Massachusetts infrastructure intact and how he led projects to success.

Our forefathers recognized the necessity for individual excellence and project team success. BSCES is planning for an exciting 2020 year filled with technical education and team building events. Please check the BSCES events page website for upcoming opportunities.

As we reach the end of one year and look forward to the next. I would also like to thank our numerous sponsors and individual donors for their financial support, which helps BSCES to meet the professional development need of its members. I would especially like to recognize and thank Keller, which is a Society Sponsor and sponsor of this issue of BSCESNews.

Happy Holidays! from BSCES, since 1848!

The featured group of this month's newsletter is the ASCE Geo-Institute Boston Chapter. Be sure and read the two articles written by Laurie Gibeau from GZA GeoEnvironmental, Inc. who is the chair of the GI Institute Boston Chapter. They can be found above and on page 3.

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# **BSCES**NEWS

#### **Third Charles C. Ladd Memorial Lecture**

continued from page 1

the Hogentogler Award from the American Society for Testing and Materials. In 2012, Professor Ladd was awarded the ASCE Outstanding Project and Leaders lifetime achievement award for his contributions to engineering education. Professor Ladd leaves a lasting legacy and tribute to his life's work with his commitment to his students at M.I.T. and significant contributions to geotechnical engineering.

The lecture featured Dr. David Hight, describing a focused and closely supervised ground investigation, at the site of the extension to Hong Kong International Airport, a large land reclamation project founded on marine clays. A re-examination of the site was proposed because of anomalies in the performance of adjacent and ongoing reclamations. The investigation revealed that the marine clays supporting the reclaimed land are microstructured, like many natural clays around the world, so that observed settlement behavior deviated significantly from predictions that did not account for this structural phenomenon. The implications of this finding on the predicted performance of the reclamation were discussed. The reasons why the extensive earlier ground investigations missed this key finding were identified and presented as lessons relearnt, and guidance provided on avoiding such oversights was presented.

The Charles C. Ladd Memorial Fund was established in 2015 to support a lecture presented biennially by an eminent academic or practitioner on a topic related to soil behavior and construction on soft ground. Donations to the fund can be made with check payable to BSCES with Charles C. Ladd Fund noted in the memo line. Check should be mailed to BSCES, Charles C. Ladd Fund, One Walnut Street, Boston, MA 02108-3616.



Charles C. Ladd—renowned professor, engineer, consultant

Speaker Dr. David Hight is a senior consultant and founding director of the Geotechnical Consulting Group in London. He has vast experience in both industry and academia. He was a lecturer at Imperial College London (1975-1983), visiting professor at Imperial College (1993-2012), the National University of Singapore (2000) and Massachusetts Institute of Technology (1983). He has published widely on the subjects of soil behavior, offshore geotechnics, soil sampling, laboratory testing, stability problems, earthworks and foundations. He delivered the 38th Rankine Lecture in 1998. In 2001, he delivered the theme lecture on soil characterization at the 15th International Conference on Soil Mechanics and Geotechnical Engineering in Istanbul. He was elected to the Royal Academy of Engineering in 2001 and he was recently elected as a Fellow of the Royal Society of London. Dr. Hight has published and presented 68 papers on the subjects of soil behavior, offshore geotechnics, soil sampling, stability problems, and foundations. He won the British Geotechnical Society Prize in 1993 for work on sampling and testing of soft clay.

# The Aldrich Center—where history and technology meet on Beacon Hill...



Two blocks from the State House and overlooking Boston Common, the Aldrich Center is the perfect venue for your next event. This historic building accommodates private functions and business meetings. BSCES members receive a 20% discount off our room rental rates.

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# **BSCES**NEWS

# Featured Group

#### **Geo-Institute Boston Chapter**

by Laurie Gibeau, PE, Project Manager, GZA GeoEnvironmental, Inc. and Chair, Geo-Institute Boston Chapter

BSCES established the Geotechnical Group, a technical committee made up of local geotechnical engineering professionals, in 1969 for the purpose of "promoting and coordinating technical and professional activities in order to disseminate information" for the benefit of its members. The committee name was changed in 1999 to the BSCES GeoInstitute and later to the Geo-Institute Boston Chapter to better align with ASCE's national geotechnical committee, but our basic mission remains the same: to foster continuing education and to provide a venue for the sharing of knowledge between engineers, geologists, and contractors in the geotechnical community.

As part of the Geo-Institute Boston Chapter's commitment to promote technical and professional activities and the dissemination of information, the chapter held the 3rd Charles C Ladd Memorial Lecture on November 21, 2019. An article discussing this program is included in this issue of the *BSCESNews*. The chapter also held a social on Friday, September 27th at Slumbrew Brewery in Somerville.

Upcoming events sponsored by the Geo-Institute Boston Chapter include:

- A one-day seminar focusing on lessons learned scheduled for early March 2020. Additional details will be forthcoming.
- A dinner lecture to be held in April 2020. Additional details will be forthcoming.
- A social event will be held in May 2020. Additional details will be forthcoming.

The Geo-Institute Boston Chapter also helps organize a memorial lecture held every other year to honor the work and memory of Arthur



Beaming Geo-Institute group members at the recent brewery social

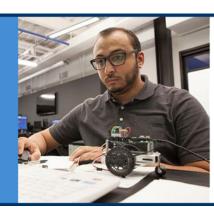
Casagrande. Professor Casagrande, of Harvard University, focused on the relatively new field of soil mechanics by developing testing procedures and apparatuses. He also completed fundamental research on seepage and slope stability. The 18th Arthur Casagrande Memorial Lecture will be held in late fall of 2020. Please check future editions of BSCESNews for details.

We would like to thank all past and present committee members, their employers, our presenters, and everybody that attends the GeoInstitute Boston Chapter's events for your support. Currently, the Geo-Institute Boston Chapter Committee consists of sixteen geotechnical professionals from local consulting firms, specialty construction companies, and academic institutions, who proudly volunteer their time to serve the BSCES and the engineering community in the manner originally set forth in 1969. We are always looking for additional members geotechnical practitioners in the public or private sector or educators who are interested in getting involved in the committee's activities and promoting our mission. For more information, please contact me at geo.institute@BSCES.org.

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#### **Recognize Your Peers by Nominating Recipients for the 2020 BSCES Annual Awards**

by Richard F. Keenan, BSCES Association Manager

Each year, BSCES presents Section Awards to members and other individuals who have made significant contributions to the profession and their communities. BSCES also presents Large and Small Employer Recognition Awards annually to employers that encourage their engineers to participate in ASCE and BSCES. Recipients are chosen by members of the BSCES Board of Government from among a group of deserving individuals in the Section or community who are nominated by their peers in recognition of their service. There are a wide variety of awards including those that recognize individuals for their technical expertise, community involvement and government service. Award recipients will be acknowledged and presented their awards during the 171st BSCES Annual Awards Dinner in June.

BSCES members are encouraged to review the list of annual awards below and to nominate a colleague, friend or organization that deserves special recognition by downloading, completing and submitting a 2020 Section or Employer Recognition Award Nomination Form on or before the Friday, March 6, 2020 submission deadline. Both nomination forms are posted here. You may contact BSCES Vice President and Awards Committee Chair Christopher Hersey at vice.president2@BSCES.org or 617/590-5546 if you would like to discuss a nomination or have any questions.

The following is a summary of the BSCES Annual Awards:

1. The **Citizen Engineer Award** is presented to a BSCES member or registered professional engineer for outstanding public involvement in local or national legislation, education (at any level), nonprofit volunteer organizations, community activities, or similar activities improving the image of ASCE, BSCES and the civil engineering profession.

- 2. The **Horne/Gaynor Public Service Award** is presented to a BSCES member or registered professional engineer for unpaid public service in a municipal, state or federal-elected or appointed post for philanthropic activities in the public interest.
- 3. The **Government Civil Engineer Award** is presented to a BSCES member who is serving as a paid public-sector engineer at a federal, state, or municipal agency, department, or authority in Massachusetts.
- 4. The **Clemens Herschel Award** recognizes an individual who has published a paper that "has been useful, commendable, and worthy of grateful acknowledgment."
- 5. The **Journalism Award** is presented to a journalist or other author who has published one or more articles, papers, books, blogs, or films for a non-technical audience that raises awareness of the contributions of the civil engineering profession.
- 6. The **Pre-College Educator Award** is presented to a member of the K–12 educational community who integrates engineering topics, particularly civil engineering, in a manner that benefits the profession and may promote students to pursue an engineering career.
- 7. The **College Educator Award** is presented to a member of the academic community who inspires and encourages civil engineering students through exceptional teaching and mentorship. Candidates shall be actively teaching in a classroom setting at a college or university in New England.
- 8. The **Younger Member Award** is intended to recognize a BSCES member, 35 years of age or younger on February 1 in the year of the award, who has made an outstanding contribution to BSCES and/or the civil engineering profession.

- 9. The Engineer of the Year Award is presented to a BSCES member, with 15 years or more professional experience, who has exhibited extraordinary leadership in the form of managerial leadership, technical excellence, professional integrity, and mentorship of other engineers.
- 10. The **Project of the Year Award** is presented to a BSCES member and her/his project team who has served in a major role on an innovative, challenging, unique, and/or complex project located in the Commonwealth of Massachusetts.
- 11. The Employer Recognition Awards were created by the BSCES Board of Government to recognize those employers who commit to providing exceptional opportunities to their engineers. Special recognition will go those organizations who exhibit to exemplary support as evidenced by: encouraging technical and professional growth through continuing education, training, mentoring, project experience, participation in development of technical papers or presentations, and other means; tackling staff quality-of-life issues in the modern workplace; contributing to the community to make a positive impact; encouraging active participation in professional societies such as ASCE/BSCES. There are two types of employer recognition awards-the Small Employer Recognition Award is given to deserving organizations with less than 50 employees and the Large Employer Recognition Award is given to organizations with more than 50 employees.

#### **Become a BSCESNews Contributor**

Would you like to contribute to the newsletter of the oldest civil engineering society in the country? The BSCES Newsletter Editorial Board is seeking members who are willing to write articles for publication in *BSCESNews* or to join the Editorial Board.

Typically 400 to 900 words, BSCESNews featured articles are about technical topics or professional matters of interest to civil engineers. The February 2020 issue of the newsletter for example, will highlight the ASCE Environmental & Water Resources Institute Boston Chapter and feature one or more articles on the theme of Water & Environmental Solutions.

Editorial Board members meet monthly via conference call to plan upcoming issues of the newsletter. They also solicit, write and/or review newsletter articles.

For more information on how you can become a *BSCESNews* contributor contact BSCES Newsletter Editorial Board Chair Sean Horan at Sean.Horan@gza.com or BSCES Association Manager Rich Keenan at rkeenan@engineers.org or at 617/305-4110.

## **Recent News and Updates**

#### ASCE Swears in New Leadership at Annual Convention

BSCES would like to congratulate new ASCE President Kancheepuram "Guna" Gunalan who was sworn into office during the ASCE 2019 Convention in Miami, Florida. He ascended to the 2020 presidency in a touching way, with expressions of love and support from his adult children, before speaking himself about his "incredible journey" to president and the one ahead for his leadership year.

#### Renew Your 2020 ASCE and BSCES Membership Today!

By acting now to ensure your ASCE membership continues through 2020, you will be able to enjoy all your Society benefits and resources uninterrupted. Early renewal will enter you into drawings for Amazon.com gift cards. The earlier you renew, the more chances to win. <u>Click here</u> to renew and enter now. When renewing your ASCE membership, please don't forget to also renew your BSCES membership to continue to receive the numerous member benefits that BSCES has to offer.

# Encourage Others to Join ASCE and See the Rewards

Do you have colleagues that have not yet joined ASCE? Participate in ASCE's Member Referral Program and receive a \$50 Amazon gift card for each new member that you recruit. <u>Click here to</u> learn more about ASCE's Member Get a Member Program.

#### **Take Advantage of ASCE's Mentor Match**

<u>Mentor Match</u> is a tool that brings together mentors and mentees to develop workplace and technical abilities, find a proper work/life balance, resolve dilemmas and in the process perhaps even become friends.

#### Loss of G. Jeffrey "Jeff" Ashworth and Francis "Frank" DePaola

BSCES regrets to report the death of BSCES member G. Jeffrey Ashworth on Saturday, December 7, 2019. Jeff joined Stone & Webster Engineering Corporation in Boston in 1973 and spent most of his career with the company, through several acquisitions. He worked on structural and civil aspects of major industrial facilities, primarily electric generation stations, including nuclear, hydroelectric, and fossilfueled plants. For two years, he was the New England regional manager for Vollmer Associates, an engineering firm specializing in engineering and landscape architecture. Jeff's wife of 45 years Bonnie Ashworth was a longtime member of the BSCES Newsletter Editorial Committee. Gifts in his memory may be made to the Rutland Railroad Historical Society, care of Bill Badger, 99 Sleepy Hollow Drive, Manchester, VT 05255, and the Friends of the Thomas Crane Public Library, 40 Washington Street, Quincy, MA 02169.

BSCES is saddened to report the loss of Francis DePaola on December 7, 2019. Frank had a storied career in service to Massachusetts, particularly the infrastructure maintaining the state's sewers, waters, railways and roads. Starting at the MWRA and culminating in becoming the Secretary of Transportation for the State of Massachusetts and general manager of the MBTA, Frank retired to private industry, choosing to work for AECOM. In her December 9th note to MassDOT employees informing them of Frank's passing, Massachusetts Secretary of Transportation and MassDOT CEO Stephanie Pollack wrote "Frank was an engineer's engineer who could take a seemingly complicated situation, break it down, explain it simply, and make the work seem more manageable and less daunting." In lieu of flowers, donations in Frank's memory may be given to research at "BIDMC" via "Prostate Cancer Research Fund", in care of Dr. Glenn Bubley at 330 Brookline Avenue, CLS 449, Boston, MA 02215.

#### **Suggest a Seminar Topic**

Is there an engineering topic that you would like BSCES to feature in an upcoming seminar? If so, members of the BSCES Program Committee would like to hear from you. Charged with developing technical training programs that address members' professional development needs, the Program Committee oversees the Society's National Highway Institute training, spring and fall Professional Engineer Refresher Courses and other topical workshops. If you have a technical topic that you would the like the Program Committee to consider, send your suggestion to BSCES Program Committee Chair Jeff Lewis at jlewis@garofaloassociates. com or BSCES Association Manager Rich Keenan at rkeenan@engineers.org.

#### **Call for Abstracts**

The 2020 ASCE-EWRI International Low Impact Development (LID) Conference Steering Committee is looking for dynamic speakers to deliver innovative and informative educational talks to the EWRI membership and special guests attending the conference. Are you involved in a LID research effort that incorporates green infrastructure, sustainability, engineering or a related field, and want to share your ideas with your fellow engineers and academia? Your ideas may help with "Setting the Vision for the Next 20 Years!" <u>Click here</u> for more information including how to submit an abstract.

#### TECET Career Fair for Juniors and Seniors!

The Engineering Center Education Trust (TECET) would like to invite juniors and seniors who are majoring in engineering or land surveying to attend the 2020 TECET Career Fair, which takes place from 3:00 to 6:00 PM on Thursday, February 13th. This event attracts over 20 employers with engineering and land surveying-related job openings and internships. The Career Fair also attracts several institutions of higher education offering graduate programs of interest to students with engineering degrees. The Career Fair is free for all students! There will also be also be a drawing every half hour for fun gift cards and a special prize! Light refreshments will be provided.

**SEND US YOUR NEWS!** Looking to strengthen the community that is BSCES, the BSCES Executive Committee and Newsletter Editorial Board has decided to expand the content of this *BSCESNews* Recent News and Updates column by including more member news. Have you recently been recognized for a professional accomplishment, passed the Professional Engineer Exam, received a promotion, or changed employers? If so, send your news items to BSCES Association Manager, Rich Keenan, rkeenan@bsces.org.

# **BSCES**NEWS

#### Update on Transportation Issues, The View from Beacon Hill

by Heather M. Ford, 2019–2020 BSCES Legislative Fellow



The ASCE Mass State Report Card states that while the nation's infrastructure earned a "D+" in the 2017 Infrastructure Report Card, Massachusetts also faces infrastructure challenges of its own. For example, driving on

roads in need of repair in Massachusetts costs each driver \$539 per year and 9.3% of bridges are rated structurally deficient. This deteriorating infrastructure impedes Massachusetts's ability to compete economically. Success in a 21st century economy requires serious sustained leadership on maintaining existing infrastructure and addressing all infrastructure issues.

Today the Commonwealth appears to be united in that we need to fix our transportation systems. However, two things are in discussion: 1) what exactly should our technical priorities be? Possibilities include new or improved roads and highway interchanges, bridge replacements, new tracks on existing rail and transit lines, or improved waterways. Or do technical priorities include some other transportation delivery method that we have not dreamed of yet. How do we react to changing power systems, retail delivery of our goods, driverless options, and internet implications; and 2) how do we pay (and who pays) for any transportation system changes, assuming we can figure out future needs and costs?

This past month, A Better City, a group of unofficially tasked business individuals asked by state government to suggest transportation solutions, recommended \$50 Billion to solve our transportation problems. Earlier this year, Legislators proposed transportation plans at \$32 Billion (including a 25-cent gas tax) with \$18 Billion from Governor Baker. All big numbers, all big ideas.

The American Council of Engineering Companies of Massachusetts (ACEC/MA) testified at a hearing held by the Joint Committee on Transportation on October 8th. Recently, an event reflecting on the Future of Transportation Commission's report from a year ago was held. Yes, there has been some progress in making our transportation stronger, but is it enough? To date BSCES/ASCE has not stepped up to offer engineering expertise as a group and I realize many are involved in contracts prohibiting this involvement, but isn't that a shame? The topics of Congestion Pricing implementation and the use of the ASCE sponsored Envision Process were presented in a November 1st workshop on innovative infrastructure funding headed by the BSCES Government Affairs and Professional Practice Committee, the Construction Institute, the Transportation and Development Institute, and The Boston Society of Architects (BSA). Good discussions ensued on the value of implementing congestion pricing and using Envision to reduce energy consumption in the construction process.

As professionals involved in public works, construction, finance, and administration, should BSCES engineers strive to be a louder voice in the conversations around those big transportation solutions? Certainly, we have the technical skills to implement and construct, but do we have the innovative gene to think outside the box to "fix" our transportation problems? Our involvement means going beyond our professional expertise. My sense is that the voice of the engineer is less represented in the thoughtful articulation of strategic direction. As the Legislative Fellow, I review reports that focus on the funding, but is funding going to the strongest and most innovative technical solution? I would strongly encourage Massachusetts civil engineers to step up, be heard, and become a voice in the strategic thinking stage. It is important because businesses and academic institutions will go elsewhere with their projects if our transportation network is not adequate.

# Classifieds



# **BSCES**NEWS

# **Upcoming Events**

#### For more information and to register for events, please visit www.bsces.org

To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your BSCES member login information, call 617/227-5551.

#### YMG Kick Off Meeting / Rosie's Place Drive

Sponsored by the Younger Member Group

Tuesday, January 14, 2020 5:30 PM - 7:30 PM

#### The Fours, Boston MA

Come learn about YMG at our kickoff meeting of 2020. Learn about how to be involved, committee positions opening next year, and future events. We will also be collecting items for Rosie's Place volunteer drive. Appetizers will be provided!

Please see the Insert at the end of this month's newsletter for further details.

#### **Greater Boston Food Bank Sorting Event**

Sponsored by the Younger Member Group

Wednesday, January 15, 2020 5:30 PM - 8:00 PM

Greater Boston Food Bank, Boston MA

Come help YMG fight hunger with the Greater Boston Food! Volunteers will be working on teams to sort and package donated products that will go to families in need in the Boston area.

Please see the Insert at the end of this month's newsletter for further details.

#### Autodesk Technology Center Tour

Sponsored by the Construction Institute **Boston Chapter** 

Thursday, January 30, 2020 Autodesk Boston, Boston, MA

3:00 PM with Social to Follow

Presenter: Sophia Zelov, AIA, Industry Engagement Manager, Autodesk Technology Centers

The Autodesk Technology Center at the BUILD Space in Boston is a research and development workspace where Autodesk invites startups, colleges and universities, and industry experts to explore ways to advance the building industry. The center focuses on industrialized construction, digital fabrication, automation and robotics in construction, and other ideas that are transforming the built world including architecture and engineering. This tour will not only give attendees the chance to see the space, but learn about the projects of the current residents. Some of those projects include topics such as 3d printed concrete, robotic integration & automation, laser scanning, logistics/supply chain, and IoT systems on construction sites.

Please see the Insert at the end of this month's newsletter for further details.

#### **Annual Networking & Billiards** Tournament

Sponsored by the Younger Member Group

Wednesday, February 19, 2020 Scholars Boston Bistro, Boston, MA

#### 6:00 PM - 9:00 PM

Join the Younger Member Group for the annual billiards tournament and networking event at Scholars! Participants will compete in teams and prizes will be awarded to 1st, 2nd, and 3rd place winners.

Please see the Insert at the end of this month's newsletter for further details.

#### **Upcoming ASCE and Technical** Institute Conferences

Register for one of these upcoming ASCE and Technical Institute Conferences today!

**2020 Construction Institute Summit** 

February 19-22, 2020, Los Angeles, CA

G-I Geo-Congress 2020

February 25-29, 2020, Minneapolis, MN

**ASCE Week Orlando 2020** 

March 22-27, 2020, Orlando, FL

Structures Congress 2020

April 5-8, 2020, St. Louis, MO

**World Environmental & Water Resources** Congress 2020

May 17-21, 2020, Henderson, NV

#### **ASCE** Webinars

#### ASCE WEBINARS

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For a full listing of ASCE Webinars, click here.

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## **KELLER** CANADA



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# 2020 Employer Recognition Awards

The Boston Society of Civil Engineers Section of the American Society of Civil Engineers Awards Committee invites you to nominate an organization to receive the Small Employer Recognition Award or the Large Employer Recognition Award. Please see the following awards description for nomination instructions. To be eligible to receive this award your award nomination must be received by the BSCES Awards Committee no later than **Friday**, **March 6**, **2020**.

As a means of fostering the members of the civil engineering profession, the Boston Society of Civil Engineers Section/ASCE has established an award to recognize those employers who commit to providing exceptional opportunities to their engineers. Special recognition will go to those organizations who exhibit exemplary support as evidenced by:

- 1. Encouraging technical and professional growth through continuing education, training, mentoring, project experience, participation in development of technical papers or presentations, and other means.
- 2. Tackling staff quality-of-life issues in the modern workplace.
- 3. Contributing to the community to make a positive impact.
- 4. Encouraging active participation in professional societies such as ASCE/BSCES.

Members who want an organization to be considered for recognition should provide a letter demonstrating the firm's commitment to its engineers. Firms nominated shall be actively participating in BSCES via sponsorship, employee membership, contributions to the newsletter, etc. Letters shall include the total number of employees in the firm, number of BSCES members, and cite specific examples of its employees being actively involved in BSCES.

The awards committee will review the nominations and select an exemplary small employer and a large employer in the Section. Organizations with less than 50 employees are eligible for the Small Employer Award. Awards will be presented at the 171th BSCES Annual Awards Dinner. Successful recipients will be considered for endorsement as potential (future) applicants for the ASCE Employer Recognition Award. No organization will be eligible to receive the award in consecutive years.

Complete and return this nomination form and attachment to the BSCES Awards Committee no later than Monday, March 6, 2020 to be eligible for the award.

Name of Organization:

Nominator/Title: Address: Telephone: Signature:	Email: Date:
Organization: Contact Person: Title:	
Office Address: Telephone:	Website: Email:

Please attach a brief (no more than two pages) narrative describing why the organization meets the criteria described in this nomination form.

Please complete this form and the additional pages and return it via email, fax, or mail to <u>bsces@engineers.org</u>, 617/227-6783, or BSCES Awards Committee, Boston Society of Civil Engineers Section/ASCE, The Engineering Center, One Walnut Street, Boston, MA 02108-3616, respectively. For questions, contact BSCES Awards Committee Chair Christopher Hersey at 617/590-5546 or <u>Vice.President2@BSCES.org</u>.

Thank you for your continued support of ASCE and BSCES.



Your Name:

# 2020 Individual Section Awards

Each year, BSCES presents awards to deserving individuals in the Section or in the community who are nominated by their peers in recognition of their service. Here is your opportunity to nominate a co-worker, friend, or someone who you think deserves special recognition. Please see the following awards descriptions and nomination instructions.

The Nominations Deadline is Friday, March 6, 2020. The Awards Committee will review all nominations and present a list of candidates for selection by the Board of Government. Awards will be presented at the 171st BSCES Annual Awards Dinner in June.

I would like to nominate	For the:	
	to a BSCES member or registered professional engineer for outstanding on (at any level), non-profit volunteer organizations, community activities, S and the civil engineering profession.	
	vard is presented to a BSCES member or registered professional federal-elected or appointed post for philanthropic activities in the public	
GOVERNMENT CIVIL ENGINEER AWARD: This award sector engineer at a federal, state, or municipal agency, or	t is presented to a BSCES member who is serving as a paid public department, or authority in Massachusetts.	
	s an individual who has published a paper, not necessarily ommendable, and worthy of grateful acknowledgment. If nominating for the paper and names of all authors, if co-authored.	
	ournalist or other author who has published one or more articles, nical audience that raises awareness of the contributions of the civil	
integrates engineering topics, particularly civil engineerir	resented to a member of the K-12 educational community who ng, in a manner that benefits the profession and may promote students & Outreach Committee reviews these nominations and recommends	
encourages civil engineering students through exception	ted to a member of the academic community who inspires and nal teaching and mentorship. Educators empower students to realize full n. Candidates shall be actively teaching in a classroom setting at a	
	to recognize a BSCES member, 35 years of age or younger on February contribution to BSCES and/or the civil engineering profession.	
	sented to a BSCES member, with 15 years or more professional n the form of managerial leadership, technical excellence, professional	
	ented to a BSCES member and her/his project team who unique, and/or complex project located in the Commonwealth of en completed by engineers located within Massachusetts.	
To submit a nomination, complete this form and return it by the nom 617/227-6783, or BSCES Awards Committee, Boston Society of 6 Street, Boston, MA 02108-3616, respectively.	nination deadline via email, fax, or mail to <u>bsces@engineers.org</u> , Civil Engineers Section/ASCE, The Engineering Center, One Walnut	
Name and Company Address of Nominee(s)*:		
Is this a rangemination? Vac Na		
Is this a re-nomination? Yes No *Please attach a brief (no more than one page) explanation of the candidate's qualifications for nomination.		
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 NOTE:
 If you nominated someone last year who was not selected, you may re-nominate the individual(s).

 QUESTIONS:
 Contact BSCES Awards Committee Chair Christopher Hersey at 617/590-5546 or <u>Vice.President2@BSCES.org.</u>

Daytime Telephone: Email:



BSCES Younger Member Group is hosting...

# **Kick Off Meeting / Rosie's Place Drive**

Tuesday, January 14<sup>th</sup>, 2020 5:30 PM – 7:30 PM The Fours, 166 Canal Street, Boston MA

YOUNGER MEMBER GROUP



Rosie's Place is the first women's shelter in the United States founded in 1974. Their mission is to provide a safe and nurturing environment that helps poor and homeless women. The place not only provides meals and shelter but also creates answers for 12,00 women a year through wide-ranging supporting, housing and education services.

#### Cost:

Free to attend. Please RSVP to <u>YMG@BSCES.ORG</u>

**RSVP Deadline:** Friday, January 10<sup>th</sup>, 2020

Come learn about YMG at our kick off meeting of 2020. Learn about how to be involved, committee positions opening next year, and future events. We will also be collecting items for Rosie's Place volunteer drive. Appetizers will be provided! Please consider bringing with you an item from the Donation list below!

#### **Donation Items:**

- Shampoo & Conditioner (Full Size and Travel Size)
- Toothpaste & Toothbrushes (Full Size and Travel Size)
- Deodorant & Lotion / Soap / Lip Balm (Full Size and Travel Size)
- Brushes & Combs
- Maxi Pads
- New Towels
- New Clothes- Sunglasses, Yoga Pants, T-Shirts, Jeans, Other Spring Attire
- Books

#### 2019-2020 Society Sponsors: AECOM | EarthSoft | Perry Associates LLC | Shea Concrete Products

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Please join us! Greater Boston Food Bank Sorting Event @ GBFB - 70 South Bay Ave, Boston

January 15, 2020 5:30 – 8:00 pm Location: 70 South Bay Ave Boston, MA 02118

Come help YMG fight hunger with the Greater Boston Food Bank! Volunteers will be working on teams to sort and package donated products that will go to families in need in the Boston area.

**To Register:** Please email:

YMG@BSCES.ORG

\*\*\*\*Note\*\*\*\*

**Attire**: We recommend layers as the warehouse can be chilly! **Arrival:** Enter through the main lobby and be directed to the second floor waiting area.

**Parking:** Parking cannot be guaranteed, we encourage using public transit! The facility is located approximately 1 mile from Andrew Station (Red Line).





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Wentworth Institute of Technology B.S. and M. Eng. in Civil Engineering Programs Weston & Sampson WSP

# Autodesk Technology Center Tour

**Sophia Zelov, AIA** Industry Engagement Manager, Autodesk Technology Centers

Thursday, January 30, 2020 Autodesk Boston 23 Drydock Ave Boston, MA 02210 3:00pm Tour with Social to follow



The Autodesk Technology Center at the BUILD Space in Boston is a research and development workspace where Autodesk invites startups, colleges and universities, and industry experts to explore ways to advance the building industry. The center focuses on industrialized construction, digital fabrication, automation and robotics in construction, and other ideas that are transforming the built world including architecture and engineering.

Located in Boston's Seaport Innovation District, the workspace offers teams access to large format fabrication equipment and project space, as well as training and expertise from Autodesk personnel. Resident teams test and develop solutions that will improve how we build the places where we live and work and the infrastructure we rely upon. More than just a workspace, the center fosters an open community where industry thought leaders can collaborate on a shared vision of the future of construction.



This tour will not only give us chance to see the space, but learn about the projects of the current residents. Some of those projects include topics such as 3d printed concrete, robotic integration & automation, laser scanning, logistics/supply chain, and IoT systems on construction sites.

**Registration:** Space is limited and will be first come first serve. Registration Fee: \$25 BSCES Members and \$30 Non-Members Please see BSCES website for additional information on attire and parking.

Register to attend this meeting and pay by credit card online at <u>http://bit.ly/BSCESAutodeskTour</u>. To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your BSCES member login information call 617/227-5551. You can also register for this event by mail or email. To do so, download and complete a <u>BSCES Event Registration Form</u> and follow the submission instructions. Cancellations received after Thursday, January 23, 2019 and no-shows will be billed.





## Please join us!

# Annual Networking & Billiards Tournament

Wednesday, February 19<sup>th</sup>, 2020 6:00 PM – 9:00 PM (Registration: 5:30pm-6:00pm)

Join the Younger Member Group for the annual billiards tournament and networking event at Scholars! Participants will compete in teams and prizes will be awarded to 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place winners.

Cost:

Students \$25, Members \$30, Non-Members \$35 \*Registration includes tournament entry and appetizers.

## **Online Registration Deadline:**

February 12, 2020

# Scholars Boston Bistro 25 School Street, Boston, MA 02108

Register online: http://bit.lv/YMGBilliards202

#### Information/Registration:

To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your BSCES member login information call 617-227-5551. You can also register for this event by mail or email. To do so, download and complete a BSCES Event Registration Form and follow the submission instructions. Cancellations received after Wednesday, February 12, 2020 and no-shows will be billed.

### For more information, please contact YMG@BSCF5.0

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# **Anticipating The Future Built Environment**



## Gerald E. Buckwalter

Chief Operating and Strategy Officer, American Society of Civil Engineers (ASCE)

## Thursday February 20, 2020

102 ISEC 3PM - 4PM

A reception will follow this event from 4pm-5pm in 655 ISEC

Brought to you in partnership with BSCES and SEAMass **ABSTRACT:** From climate change to vehicles, engineers autonomous are confronting a variety of environmental challenges, demographic shifts and technological changes that will require a drastic rethinking of how we build, operate, and maintain our infrastructure systems. Planning for the future is difficult for nearly every organization. ASCE decided to launch the Future World Vision project to help meet this challenge. We compiled and winnowed more than 100 global macrotrends to examine six sociopolitical, important economic, environmental, and technological trends as key drivers of change for future built infrastructure. Our desire is that the Future World Vision project will establish ASCE and civil engineers as bold thought leaders, provide a platform to envision the future built environment and ultimately optimize future system performance and the benefit to society, and be a nextgeneration tool that interacts and resonates with those who will create the built environment-the future next generation of civil engineers. The Future World Vision platform is an immersive computer model, using gaming engines, that will create virtual future worlds with evocative visuals, multiple characters and rich narratives that explore holistic city, community and neighborhood systems, including the cultural, social, economic, political, ethical and environmental aspects at different scales. This platform will enable engineers to ask the right questions about

a future built environment that doesn't exist yet, contemplate solutions, postulate the resulting benefit to society – well in advance of starting to design those solutions. This will enable us to better prepare engineers today for possible future needs and challenges.

BIO: Gerald (Jerry) E. Buckwalter has more years of varied than 35 executive leadership general in management, business development, strategy and innovation, program operations and policy development spanning military, government, international, and commercial domains. He is the Chief Operating and Strategy Officer of ASCE, overseeing all aspects of internal operations including Finance, Administration, Engineering, Lifelong Learning and Human Resources. Prior to joining ASCE, Mr. Buckwalter was a Northrop Grumman Corporate Director of His responsibilities included Strategy. reshaping company's business the portfolio, mergers and acquisitions, longterm strategies, innovation initiatives and professional development. Among many distinguished service positions, Mr. Buckwalter was a member for the National Infrastructure Advisory Council reporting to the White House from 2008 to 2012. Mr. Buckwalter earned a degree in Physics from Monmouth University and has extensive continuing education at George Washington University and the Massachusetts Institute of Technology.



Northeastern University Civil and Environmental Engineering



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ISEC Building Northeastern University 805 Columbus Avenue Boston, MA 02120