# **FINAL PROGRAM**



# CI & CRC Joint Conference 2022

Arlington, Virginia | March 9-12



**Next Generation Construction** 





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# **Committee and Board Meeting Schedule**

# Wednesday, March 9

3:00-5:00 p.m.

(CRC) Computing in Civil Engineering for All Taskforce Networking Event | *Tidewater 2* 

3:30-5:00 p.m.

(CRC) CIT-E Workshop (sponsored by NSF) | Roosevelt

6:00-7:00 p.m.

(CI) Construction Engineering Education Committee | Lincoln

7:00-9:00 p.m.

(CRC) JCEM Editorial Board Meeting | Jefferson

# Thursday, March 10

8:00-9:00 a.m.

(CRC) JCEM Sustainable Practices & Special Issue Workshop | Roosevelt

8:30-11:00 a.m.

(CI) Temporary Works Committee | Lincoln

9:00-11:00 a.m.

(CI) Claims Avoidance and Resolution Committee (CAR)

| Jefferson

(CI) Construction Safety Committee | Kennedy

CRC Business Meeting | Washington AB

6:30-8:30 p.m.

(CI) Construction Specifications Committee | Lincoln

# Saturday, March 12

1:45-4:00 p.m.

(CI) Bituminous Materials Committee (BMC) | Jefferson

(CI) Management Practice in Construction Committee (MPI-C) | Lincoln

2:00-4:00 p.m.

(CI) LADR Editorial Board | Kennedy

# **SCHEDULE-AT-A-GLANCE**

# Wednesday, March 9

3:00–9:00 p.m. Committee Meetings and CRC Workshops

# Thursday, March 10

7:30 a.m.-6:00 p.m. Registration

8:00-11:00 a.m. CRC and CI Technical Committee Meetings

9:00–11:00 a.m. CRC Business Meeting

11:00 a.m.-1:00 p.m. Awards Luncheon

1:00–2:00 p.m. Cl and CRC Concurrent Sessions 1

2:00-2:30 p.m. Networking Break

2:30–3:30 p.m. Cl and CRC Concurrent Sessions 2

3:30-4:00 p.m. Networking Break

4:00–5:00 p.m. CRC Concurrent Sessions 3 4:00–5:30 p.m. CI Young Professionals Forum

5:30-7:00 p.m. Welcome Reception

7:00–9:00 p.m. CI Board & Invited Guests Dinner

# Friday, March 11

7:00 a.m.-5:00 p.m. Registration

7:30–9:15 a.m. Opening Plenary Session Breakfast 9:30–10:30 a.m. CI and CRC Concurrent Sessions 4

10:30–11:00 a.m. Networking Break

11:00 a.m.-12:00 p.m. Cl and CRC Concurrent Sessions 5

12:00-1:30 p.m. Buffet Lunch

1:30–2:30 p.m. Cl and CRC Concurrent Sessions 6

2:30-2:45 p.m. Networking Break

2:45–3:45 p.m. Cl and CRC Concurrent Sessions 7

3:45-4:15 p.m. Networking Break

4:15–5:15 p.m. Cl and CRC Concurrent Sessions 8

5:15-6:45 p.m. Reception

# Saturday, March 12

7:30 a.m.-12:00 p.m. Registration

7:30-8:15 a.m. Continental Breakfast

8:15–9:15 a.m. Cl and CRC Concurrent Sessions 9

9:15–9:30 a.m. Networking Break

9:30–10:30 a.m. Cl and CRC Concurrent Sessions 10

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

11:00 a.m.-12:00 p.m. Cl and CRC Concurrent Sessions 11

12:00-1:30 p.m. Closing Plenary Luncheon

1:45-4:00 p.m. Cl Technical Committee Meetings

# Welcome to CI & CRC Joint Conference 2022

On behalf of the Construction Institute (CI) of the American Society of Civil Engineers, we would like to welcome you to the first CI and Construction Research Council (CRC) Joint Conference! With the help of many in the CRC community, we are proud and excited to bring both industry and academic construction programs together in 2022.

The theme of this year's joint conference is the **Next** Generation Construction, and in both the academia and industry sessions, we will address some of the challenging issues and explore innovative strategies in the engineering and construction industries. The technical program includes sessions on temporary works, project delivery, safety, design, and engineering education, as well as new technologies. Concurrent tracks will also be offered, including a track devoted to showcasing Cl's Journal of Legal Affairs and Dispute Resolution in Engineering and Construction. The joint conference program with the technical committee and editorial board meetings begin on Wednesday, March 9. These meetings will continue on the morning of Thursday, March 10 and the afternoon of Saturday, March 12. If you are interested in attending, please see page 2 for dates, times, and locations for each meeting. The academia and industry technical presentations will begin on Thursday afternoon and continue through Saturday morning, exploring a wide range of topics. Additionally, our YP Forum is scheduled for Thursday afternoon.

We would like to thank the many people that helped make this year's Joint Conference a success, starting with our CRC Organizing partners: Michael J. Garvin, Ph.D., P.E., M.ASCE, Vecellio Construction Engineering and Management Program, Virginia Tech; Farrokh Jazizadeh, Ph.D., Virginia Tech; Tripp Shealy, Ph.D., Virginia Tech, and all CRC Track Editors. Many thanks to Amarjit Singh, P.E., Ph.D., F.ASCE, the University of Hawaii at Manoa, Department of Civil Engineering; and all LADR Track Editors.

We would like to say a special thank you to Susan Bogus Halter, Ph.D., P.E., F.ASCE, Jesus M. de la Garza; Ph.D., F.CMAA, NAC, Dist.M.ASCE; Baabak Ashuri, Ph.D., M.ASCE and Past CI Presidents: Dan Becker, M.ASCE, CCM, PMP, CCP, ENV SP; Travis Mohr; A.M.ASCE; Robert M. D'Onofrio, P.E., F.ASCE; and Daniel R. Cook; P.E., P.Eng, S.E., M.ASCE for their continued efforts in calls for collaboration between CI academic and industry communities.

Sincerely,

**ASCE-CI Board of Governors ASCE-CI Staff Team** 

**Conference Steering Committee** 

Co-Chair: Dan Becker, M.ASCE, CCM, PMP, CCP, ENV SP, D.

Becker Consulting, LLC

Co-Chair: Michael J. Garvin, Ph.D., P.E., M.ASCE, Vecellio Construction Engineering & Management Program, Virginia Tech

### **CI Technical Committee:**

Technical Committee Member: Hossein Ataei, Ph.D., M.C.M., M.B.A., P.E., P.Eng., F.ASCE, University of Illinois at Chicago, Department of Civil, Materials, and Environmental Engineering

### **CRC Technical Committee:**

Technical Program Co-Chair: Farrokh Jazizadeh, Ph.D., Virginia

Technical Program Co-Chair: Tripp Shealy, Ph.D., Virginia Tech

### **Track Editors:**

Alex Albert, Ph.D., NC State University Ingrid Arocho, Ph.D., Oregon State University Kristen Cetin, Ph.D., Michigan State University Soowon Chang, Ph.D., Purdue University Islam El-Adaway, Ph.D., Missouri University Science & Technology Mohamed Elzomor, Ph.D., Florida International University Diana Franco Duran, Ph.D., University of Virginia Bryan Franz, Ph.D., University of Florida Xinghua Gao, Ph.D., Virginia Tech Jose Guevara, Ph.D., University of the Andes, Columbia Youngib Ham, Ph.D., Texas A&M University Farook Hamzeh, Ph.D., University of Alberta **Kevin Han, Ph.D.,** North Carolina State University Yilong Han, Ph.D., Tongji University Christofer Harper, Ph.D., Colorado State University Sogand Hasanzadeh, Ph.D., Purdue University Arsalan Heydarian, Ph.D., University of Virginia Javier Irizarry, Ph.D., Georgia Institute of Technology David Jeong, Ph.D., Texas A&M University Sharareh Kermanshachi, Ph.D., University of Texas at Arlington Katherine Madson, Ph.D., lowa State University Ali Mostafavi, Ph.D., Texas A&M University Cristina Poleacovschi, Ph.D., Iowa State University Anthony Sparkling, Ph.D., Purdue University Cheng Zhang, Ph.D., Purdue University Northwest Jiansong Zhang, Ph.D., Purdue University

### **LADR Track:**

Chair: Amarjit Singh, P.E., Ph.D., F.ASCE, University of Hawaii at Manoa, Department of Civil Engineering

Track Editor: Leah A. Rochwarg, Esq., LEED AP, Seyfarth Shaw LLP Track Editor: Brian J. O'Rourke Jr., P.E., Esq., LEED AP, Verrill

Track Editor: Mohammed-Asem Abdul Malak, Ph.D., R.Eng,

A.M.ASCE, University of Beirut

Track Editor: Wendy Wendrowski, Esq, A.M.ASCE, Seyfarth Shaw LLP

# **ASCE Staff**

Katerina Lachinova, Cl Director Rachel Settle, CMP, CI Manager Monica Bradford, CI Senior Coordinator, Conferences &

**Trevor Williams,** Manager, Sponsorship, and Exhibit Sales

# Conference Agenda

# Thursday | March 10

# **Registration Hours**

7:30 a.m.-6:00 p.m. | Independence Foyer

### **ASCE-CI Research Awards Luncheon**

11:00 a.m. — 1:00 p.m. | Regency Ballroom

**Welcome Remarks: Michael J. Garvin, Ph.D., P.E., M.ASCE,** Vecellio Construction Engineering & Management Program, Virginia Tech

Awards Presentations for Halpin Award, Peurifoy Award, and Rowland Prize

### Technical Session 1: Tracks 1-12

1:00-2:00 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—Post-pandemic Construction Engineering Education | Conference Theater

The impact of experiences of the past two years on post-pandemic construction engineering education will be explored. Panelists from academia, government agencies, and the construction industry will discuss such topics as virtual learning and teaching; internship/co-op programs; diversity, equity, and inclusion; emerging technologies; new skills required for early career engineers; and changes for new hires

**Moderator: Susan Bogus Halter, Ph.D., P.E., F.ASCE,** University of New Mexico

Speakers: James Rowings, Ph.D., P.E., F.ASCE, Kiewit University; John Gambatese, Ph.D., P.E., F.ASCE, Oregon State University; Denise Simmons, Ph.D., P.E., M.ASCE, University of Florida; Hani Alzraiee, P.Eng, M.ASCE, Cal Poly

# Track 11—Rebar Cage: Analysis, Design, and Innovation | Washington A

Large rebar cages are temporary structures commonly used in reinforced concrete constructions. They are made of longitudinal and transverse reinforcing bars that are usually connected by tie-wires, and have resulted in numerous incidents of rebar cage failure and collapse. This session will collect and present state-of-the-art research and innovation in detailing, analysis, and design of rebar cages to ensure their safety during various construction processes.

Moderator: Vincent Arthur Siefert, P.E., M.ASCE, Siefert Associates LLC

**Speakers: Hamed Ebrahimian, P.E., M.ASCE,** University of Nevada, Reno; **Masood Vahedi, S.M.ASCE,** University of Nevada, Reno

# Track 12—SuperSpec: A New Frontier for Next Generation | Washington B

The ASCE CI Specifications Committee will demonstrate how to envision final specifications at the start of a project, focusing on two key solutions for managing specifications: (1) collaboration among stakeholders and within firms fostered by centralized and modern document management systems, and (2) communication of clear definitions of specification deliverables through all project phases to all stakeholders. Fundamental best practices and case examples will be shared and discussed.

Moderator: Rusty Sprouse, P.E., CFM, M.ASCE, Jefferson Lab Speakers: David M. Siegler, P.E., M.ASCE, New Jersey Turnpike Authority; Theresa Jablonski, P.E., M.ASCE, Nova Consulting; Lawrence Eckersley, M.ASCE, Freese and Nichols, Inc.

# **Networking Break**

2:00-2:30 p.m. | Regency Foyer

### **Technical Session 2: Tracks 1-12**

2:30-3:30 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—Exploring EJCDC's new Alternative Delivery Contracts | Conference Theater

EJCDC publishes contract documents used widely throughout the construction industry. This session presents the different EJCDC contract documents and benefits associated with them in an interactive game show format, focusing on alternative delivery methods, design-build, progressive design-build, and the soon to be released Construction Manager at Risk documents, as well as the recently released Agency Construction Management family of documents.

**Speaker: Dan Becker, M.ASCE, CCM, PMP, CCP, ENV SP.,** D. Becker Consulting, LLC

# Track 11 – Bridge Demolition with Explosives | Washington A

For nearly all projects involving bridge repair, safe and controlled demolition of the existing structure is critical. Use of explosives for removal of bridge structures will be the focus of this presentation, which will include typical scenarios in which explosive demolition is the best method of removal. Engineering and community outreach preparation will be discussed, along with several case studies.

Speakers: David Byers, P.E., M.ASCE, Genesis Structures; Joshua Crain, P.E., S.E., M.ASCE, Genesis Structures; Matthew Tebo, Kiewit Corporation

# Track 12—Leading Indicators of Design Defects on Building Projects | Washington B

The CI Specifications committee members will discuss the necessary action items during the design phase to avoid design defects on building projects. The presentation will be followed by a discussion of how to effectively support these items.

Moderator: Rusty Sprouse, P.E., CFM, M.ASCE, Jefferson Lab Speaker: Hyun Koo, A.M.ASCE; Wayne State University

# **Networking Break**

3:30-4:00 p.m. | Regency Foyer

# **Technical Session 3: Track 1-10**

4:00 - 5:30 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

## Track 10: YP Forum | Regency Ballroom

4:00–5:30 p.m. | (1.5 PDHs)

The Young Professionals Forum is a gathering of ASCE-Cl younger members on a mission to impact their community. Participants will discuss various topics of importance to members such as transitioning from student to full-time employee, self-advocacy, managing generational differences. There will also be an interactive presentation introducing ASCE's Future World Vision software, at which members will discuss potential solutions and problems for the future of construction and research.

Speakers: CI YPC

# **Welcome Reception**

5:30–7:00 p.m. | *Regency Foyer* 

Kick off your conference experience by enjoying hors d'oeuvres and meeting new friends while reconnecting with former colleagues.

# Friday | March 11

# **Registration Hours**

7:00 a.m.-5:00 p.m. | Independence Foyer

# Opening Plenary Session and Breakfast | Regency Ballroom

7:30-9:15 a.m. (1.5 PDHs)

**Call to Order: Dan Becker, M.ASCE, CCM, PMP, CCP, ENV SP,** CI Summit 2022 Chair, Technical Region Director, ASCE Board of Direction

**Welcome Remarks: James (Jim) Starling, P.E., M.ASCE,** CI President, Denver International Airport

**Thomas W. Smith III, ENV SP, CAE, F.ASCE,** Executive Director, American Society of Civil Engineers

**Amarjit Singh, P.E., Ph.D., F.ASCE,** University of Hawaii at Manoa, Department of Civil Engineering, LADR Track Chair

**Dennis D. Truax, Ph.D., P.E., DEE, D.WRE, F.ASCE,** ASCE, 2021-22 ASCE President, Mississippi State University

# Plenary Panel: The Long Island Rail Road (LIRR) East Side Access Project

East Side Access has the objective of providing new, direct LIRR service into a new concourse below Grand Central Terminal to reduce commutes into Manhattan by up to 40 minutes via more than eight miles of new tunneling. This session will review work on East Side Access in multiple locations in Manhattan and Queens,

**Speaker: Arthur R. "Rob" Troup**, the New York Metropolitan Transportation Authority (MTA); **Eileen McCabe**, Deputy Construction Manager, AECOM; **Garth Lawrence**, Area Manager Force Account, AECOM; **Sam Dogini**, Senior Project Engineer, AECOM

### **Session Break**

9:15-9:30 a.m.

### Technical Session 4: Tracks 1-12

9:30-10:30 a.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—Delaware Memorial Bridge Tower Pin and Link Replacement | Conference Theater

The Delaware Memorial Bridge (DMB) carries over 80,000 vehicles across the Delaware River daily, resulting in significant deterioration at pin holes in the existing tower links that support the suspended spans. This presentation will describe the development and implementation of a solution utilizing uplift bearings to provide the necessary vertical restraint while allowing for the significant movements of the flexible suspended spans.

Moderator: Jeffrey Sawyer, P.E., M.ASCE

Speaker: Dan Millman, P.E., SE, HNTB Corporation

# Track 11—Proper Rebar Detailing including Constructability Concerns, Concrete Reinforcing Steel Institute's (CRSI) perspective | Washington A

This session will offer CRSI's insights and discuss some of the DOs and DON'Ts in rebar detailing. The speakers will address the constructability concerns that arise when details have been overlooked "on paper" as opposed to those that arise when the fresh concrete hits the rebar and formwork in construction.

**Speakers: Brett R. Lord. CRSI; Robbie Hall,** Headed Reinforcement Corporation

### Track 12 - LADR Workshop | Washington B

LADR-786 – Construction Claims and Payment Disputes Analysis: Is Alternative Dispute Resolution Worth It?

**Speaker: Krishna Kisi**, Texas State University

# LADR-765 - Differing Site Conditions: Clarifying Misunderstandings to Reduce Costly Litigation

**Speaker: Hossein Ataei,** University of Illinois at Chicago

# **Networking Break**

10:30-11:00 a.m. | Regency Foyer

### Technical Session 5: Tracks 1-12

11:00 a.m.-12:00 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—Automation and Robotics in Construction | Conference Theater

This session will explore the history and recent advances in collaborative human–robot work in construction teams to improve safety, efficiency, and productivity. A technical presentation will be followed by an interactive panel discussion to identify current challenges and knowledge gaps in collaborative human–robot construction work, as well as recommendations for future research.

Speaker: Vineet Kamat, Ph.D., M.ASCE., University of Michigan, Travis Mohr, A.M.ASCE, Kiewit Infrastructure Co; Craig Ruyle, P.E., M.ASCE, NYSDOT; Jordan Henshaw, A.M.ASCE, Kiewit Infrastructure Co; Carol Menassa, Ph.D., A.M.ASCE, University of Michigan

# Track 11—Choosing Equipment for Bridge Demolition | Washington A

This presentation will provide a high-level guideline, based on best available tools and equipment utilized for bridge demolitions, with the objective of providing further understanding on tool and equipment capabilities. Focus will be on selecting equipment in the context of minimizing disruption to surrounding structures and land and compliance with safety regulations.

Moderator: Reuben Zylstra, P.E., PEng, M. ASCE, Foothills Bridge Co.

**Speaker: Jericho Tumanguil, P. Eng, M. ASCE,** *Priestly Demolition Inc;* **Martin Reed,** *Steamboat Structures.* 

### Track 12-LADR Workshop | Washington B

LADR-519—Post-Construction Evaluation of Fill Compaction

**Speaker: Timothy D. Stark,** University of Illinois, Urbana Champagne

LADR-663—The Legitimacy of The General Duty Clause

**Citations: Court Cases Review** 

Speaker: Ahmed Jalil Al-Bayati, Ph.D., P.E., CHST, M.ASCE,

Lawrence Technological University

## **Buffet Lunch**

12:00-1:30 p.m. | Regency Foyer and Ballroom

### **Technical Session 6: Tracks 1-12**

1:30-2:30 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9\*

# Track 10—Developing your Moral (or is it "Ethical"?) Vocabulary | Conference Theater

An engineer-turned-philosopher will cover some nontechnical questions regarding continuing professional development: What is the difference between ethical and moral? What distinguishes a bribe from extortion? What does standard of care mean? Some of the vocabulary associated with moral choices for engineers will be reviewed, as well as some theoretical language used in engineering ethics.

Speaker: Carlos Bertha, Ph.D., COL (Ret., USAR), A.M.ASCE

# Track 11—Identifying Safety Issues When Reviewing Lift Plans Using Alternative Lifting Methods | Washington A

Lifts made using alternative lifting methods typically involve the preparation of a detailed lift plan. This session will be a discussion of safety issues that arise during the review of these lift plans. Topics covered will include hydraulic gantry systems, jacking systems, slide systems, and hydraulic modular transports.

**Speaker: Timothy Parker, P.E., M. ASCE, SCDOT,** Parker Consulting Engineers LLC

### Track 12-LADR Workshop | Washington B

LADR-667 — Environmental Review of Highway Projects Using Planning and Environmental Linkages

Speaker: Timothy R. Wyatt, Conner Gwyn, Schenck PLLC LADR-675 – Financial Remedies for Personal Property Damage in Water Main Breaks

**Speaker: Karen Gupta LEED AP, EIT, A.M.ASCE,** Colorado State University

# **Networking Break**

2:30–2:45 p.m. | *Regency Foyer* 

### Technical Session 7: Track Tracks 1-12

2:45 -3:45 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—COVID-19 Pandemic Impact on Construction and Project Delivery | Conference Theater

Focusing on the impact of the COVID-19 pandemic on project delivery in construction, the panel will present the opportunities, threats, and concerns that the pandemic has brought to their pursuits and delivery of projects. They will discuss the threats, concerns, and opportunities that arose from the pandemic, its future impact, and their own adaptation.

Moderator: Melissa C. Rohland, PMP, P.E., M.ASCE, Digital Construction Works

**Speakers: Travis Mohr, A.M.ASCE,** Kiewit Infrastructure Co; **Lisa B. Choplin,** Whitman, Requardt & Associates, LLP; **Chuck Hixon,** Digital Construction Works

# Track 11—Risk-Based Approach to Temporary Works Management | Washington A

This session will present a systematic and scalable risk-based approach to Temporary Works management over the life cycle of a project. Examples of contract language, risk mitigation plans, design tracking, inspections, and approval systems will be provided. Targeted guidance is given for implementing this approach from the initial project development phase through contract execution.

Moderator: Angie Hunter, P.E., M.ASCE, Kiewit Speaker: Owen Berg, P.E., S.E., P. Eng., Kiewit

# Track 12-LADR Workshop | Washington B

LADR-754—Leveraging the Value of Project Scope Growth Through Construction Manager-At-Risk Delivery of Public University Capital Improvement Projects

**Speaker: Nils J. Gransberg**, *University of Oklahoma* **LADR-763**—**Bim-Specific Pregualification Criteria in** 

Construction Projects: Exploring the Nature and Timeline of

**Their Inclusion** 

Speaker: Vijayeta Malla, NICMAR, India

# **Networking Break**

3:45-4:15 p.m. | Regency Foyer

### **Technical Session 8: Tracks 1-12**

4:15-5:15 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—Model-Based Contracting—NYSDOT Case Study for 138th Street Bridge over the Major Deegan Expressway in the Bronx | Conference Theater

Model-Based Contracting is an innovative approach in which contractual work can legally be specified with 3D CADD models or other electronic information, eliminating the need for 2D plan sheets. This presentation will discuss what Model-Based Contracting is and how it has been implemented on NYSDOT bridge projects. These were minimal plans and most of the project is detailed in the BIM Model for the 138th Street Bridge, which carries about 160,000 vehicles every day.

Moderator: Craig Ruyle, P.E., M.ASCE., NYSDOT

**Speaker: Brenda Crudele, P.E.,** Office of Structures, NYSDOT

# Track 11—Structural Steel Building Erection: Understanding, Communicating, and Mitigating Risks | Washington A

The construction industry lacks guidance in a key factor in mitigating risks for structural steel building erection: effective communication between the erector and the engineer. This session will present, with real-life examples, the main design considerations for erectors and engineers during development of erection plans, as well as ways to communicate design risks.

Moderator: Angie Hunter, P.E., M.ASCE, Kiewit

Speakers: Brian Ruegge, P.E., M.ASCE, Kiewit; Jon Richter, P.E.,

M.ASCE, Kiewit

### Track 12-LADR Workshop | Washington B

LADR-764 — Municipal GHG Emission Reduction Targets: The Role of Building Energy Regulations and Laws

**Speaker: Hossein Ataei,** University of Illinois at Chicago

LADR-778 — Cost Control of Arbitration in Construction Projects

**Speaker: Mohammed Mehany,** Colorado State University

### Reception

5:15-6:45 p.m. | Independence Center A

Join us for cocktails and appetizers, while mingling with colleagues.

# Saturday | March 12

# **Registration Hours**

7:30 a.m.-12:00 p.m. | Independence Foyer

### **Continental Breakfast**

7:30-8:15 a.m. | Regency Foyer

### Technical Session 9: Tracks 1-12

8:15-9:15 a.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—Lessons Learned—Reducing the Chance of a Claim and Improving Public Safety | Conference

rneater

Two ASCE committees—the Committee on Claims Reduction and Management (CCRM) and the Committee on Collaborative Reporting for Safer Structures US (CROSS-US)—are now actively working to address engineering mistakes, prevent them, and reduce claims in the future. This session will include a presentation on the activities of CCRM and CROSS-US, along with examples of lessons learned and details on participation and using information produced by the committees.

Speakers: Glenn R Bell, P.E., S.E., CP, F.SEI,

Dist.M.ASCE, CROSS-US; James Robert Harris, Ph.D., P.E.,

NAE, F.SEI, Dist.M.ASCE; J R Harris & Company

### Track 11-Session Canceled

# Track 12—Advances in Asphalt Pavement Design, Construction, and Assessment | Washington B

This session will present recent developments in pavement design, construction, and performance assessment. Topics covered will include integrating quality assurance in balance mix designs for durable asphalt mixtures, multiscale discrete element modeling of asphalt materials, wireless sensors for in situ pavement characterization, and asphalt pavement recycling. New prospects, opportunities, and challenges in the field will also be highlighted.

**Moderator: Louay Mohammad, Ph.D., P.E., F.ASCE,** Louisiana State University

**Speakers: Shihui Shen, Ph.D., P.E., F.ASCE**, Pennsylvania State University, **Louay Mohammad, Ph.D., P.E., F.ASCE**, Louisiana State University, **Haifang Wen, Ph.D., P.E., F.ASCE**, Washington

State University; Jenny Liu, Ph.D., P.E., Missouri S&T

# **Networking Break**

9:15-9:30 a.m. | Regency Foyer

### Technical Session 10: Tracks 1-12

9:30-10:30 a.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10-Claims Avoidance & Resolution-Dialogue | Conference Theater

A panel of attorneys and consultants will discuss effective and equitable dialogue techniques for resolving disputes between contractors and owners. Frequently disputed matters will be explored, as well as processes and methods for resolution such as proper notice, differences between delay and disruption claims, and issues surrounding documenting and quantifying claims.

Speakers: Joseph R. Hellenbrand, P.E., PSP, M.ASCE, Capital Project Management, Inc.; Thomas Mitchell, P.E., M.ASCE; MBP

# Track 11-Session Canceled

# Track 12 - Use of Waste Plastics in Asphalt Pavements | Washington A

Interest in using recycled plastics in asphalt pavements is increasing due to their potential to improve the performance of pavements without increasing the amount of waste plastics being landfilled or polluting the environment through litter. This session will present latest findings in methods development and performance evaluations, as well as associated challenges and issues.

Moderator: Jenny Liu. Ph.D., P.E., M.ASCE, Missouri S&T Speakers: Baoshan Huang, Ph.D., P.E., M.ASCE, University of Tennessee, Fan Yin, Ph.D., Auburn University; Jenny Liu. Ph.D., P.E., M.ASCE, Missouri S&T; Zhanping You, Ph.D., P.E., F.EMI, F.ASCE, Michigan Tech

# **Networking Break**

10:30-11:00 a.m. | Regency Foyer

### Technical Session 11: Tracks 10-12

11:00 a.m.-12:00 p.m. (1 PDH)

See CRC Technical Program for Tracks 1-9

# Track 10—Design Change Control Boards | Conference Theater

The session focuses on the development and use of Control Boards (DCCBs) to prevent and resolve potential disputes between engineers and contractors or concessionaires before incurring major cost increases. A panel of DCCB users will offer insights, answer questions, and seek audience input on the process.

Moderator: Wilburt (Bill) Hinton, II, P.E., F.ASCE

# Track 11—Engineer Tomorrow, Starting Today | Washington A

Participants will learn about the Engineer Tomorrow initiative, the Civil Engineering Body of Knowledge 3, and discuss future challenges, opportunities, and threats to the profession. Participants will leave the session with an understanding of the knowledge, skills, and attitudes essential to the practice and information to empower them to take responsibility for the future of the civil engineering profession.

Speaker: Norma Jean Mattei, Ph.D., P.E., F.SEI, F.ASCE, 2017 ASCE President

### Track 12-Session Canceled

# Closing Plenary Luncheon | Regency Ballroom

12:00-1:30 p.m. (1.5 PDH)

**Call to Order: James (Jim) Starling, P.E., M.ASCE,** CI President, Denver International Airport

Closing Remarks: Dennis D. Truax, Ph.D., P.E., DEE, D.WRE, F.ASCE, ASCE, 2021-22 ASCE President, Mississippi State University

Introduction for the 2022 Construction Management Award – CI Management Practice in Construction Committee:

**2022** Construction Management Award Vineet R. Kamat, Ph.D., M.ASCE, University of Michigan

**Keynote Project Presentation: Fredrick Douglass,** Memorial Bridge

One of several projects under the umbrella of the Anacostia Waterfront Initiative (AWI) Program has the specific objectives of replacing the 70-year-old, functionally obsolete Frederick Douglass Memorial Bridge in Washington, DC and reconstructing the Suitland Parkway/I-295 interchange. This session details planned improvements: making the structure safer for cars and pedestrians, enhancing options for multimodal transportation, increasing access for the community, and supporting economic development on both sides of the Anacostia River.

**Speaker: Dennis Howland, II, P.E.,** Program Manager, District Department of Transportation (DDOT)



### Age

Attendees under the age of 18 are prohibited.

# **Assumption of Risk and Hold Harmless**

All ASCE/Construction Institute events and activities are purely voluntary activities, and attendees are fully responsible for their own conduct and well-being, including, and without limitation, determining their level of fitness to take part in any such event or activity. In participating in any event or activity, attendees shall be deemed to understand and accept all risk of possible physical injury that might occur as a result of such participation. Attendees agree to release and hold harmless ASCE and its affiliates, employees, officers, directors, representatives, and agents from any and all alleged and/or actual liability, claims, actions, lawsuits, damages, or losses, of any kind which arise out of or result from attendance at, and participation, in the conference.

# **Badge Policy and Ribbons**

Your conference registration name badge is your admission to the educational sessions. Please wear your badge at all times. Ribbons will be available at the registration desk. ASCE recommends you remove your badge when leaving the hotel.

### \*\* Recycle Your Badge Holder\*\*

Please help ASCE stay "green" and reduce extra costs by returning your badge holder at the end of the conference in the receptacles provided by the registration desk.

# Distribution of Literature or Promotional Information

Distribution of literature, samples, or other promotional material by attendees is prohibited without prior permission by ASCE. Any attendee found to be distributing literature without prior approval may be asked to leave the show. Exhibitors may distribute literature, samples, and materials only within the confines of their rented booth space, except with prior permission from ASCE.

# **Health and Safety**

To mitigate the risk of spread, all participants will be required to provide proof of vaccination against COVID-19. The only exemption to this policy will be religious or medical reasons. All individuals claiming a religious or medical exemption must provide documentation of a negative PCR or antigen test taken 72 hours prior to arrival. Attendees who do not provide documentation as per this requirement will not be admitted.

Masks will be required at all times during the event, except during meal service. Masks must be well-fitting and properly positioned to cover both the nose and the mouth.

Attendees are encouraged to practice social distancing and limit physical contact such as hand shaking or hugging to maintain a safe environment.

# **Medical Emergencies**

We hope that your visit to the CI & CRC Joint Conference will be free from illness or injury, but in case you or a family member needs medical attention during your time at the event, please contact the hotel's front desk. For life-threatening emergencies, call 911.

# **Meeting Room Overcrowding**

ASCE/CI will make every effort to schedule popular events in rooms large enough to accommodate anticipated attendance. Because many events are extremely popular, it is wise to select alternative events as you plan your conference schedule. ASCE/CI and the host facilities are REQUIRED to follow local fire regulations and may ask participants in rooms at capacity to choose another event.

# **No Smoking Policy**

ASCE/CI supports a "No Smoking" policy. Smoking is prohibited in all venues hosting ASCE events.

### **Nondiscrimination Statement**

As outlined in ASCE's governing documents, ASCE functions and activities are intended to foster the expression and exchange of engineering ideas by all members, regardless of gender, race, ethnic origin, religion, age, marital status, sexual orientation, disabilities, or any other reason not related to scientific or technical merit. It is the responsibility of all participants and guests to conduct themselves in a professional manner in which all persons are treated with dignity and respect.

### Photo and Video Release/Waiver

Photograph and Video Release: By submitting the registration form, I hereby release any photographs or videos that may be incidentally taken of me during these events by ASCE/CI to be used for any purpose.

# Professional Development Hours (PDHs)

You may earn PDHs, which are nationally recognized units of record, by attending conference concurrent sessions. ASCE follows NCEES guidelines on continuing professional competency. Since continuing education requirements for P.E. license renewal vary from state to state, ASCE strongly recommends that individuals regularly check with their state registration boards on their specific continuing education requirements that affect P.E. licensure and the ability to renew licensure. For details on your state's requirements, please go to www.ncees.org.

### **Program and Session Cancellation**

ASCE/CI reserves the right to cancel programs and/or sessions. In the unlikely event of a cancellation, all registrants will be notified. Programs and sessions are subject to change, and ASCE/CI reserves the right to substitute a program, session, and/or speaker of equal caliber to fulfill the educational requirements.

# **Recording Policy**

Photographic, video, or audio recording of any education session is strictly prohibited without prior written permission from both ASCE and the session presenter(s).



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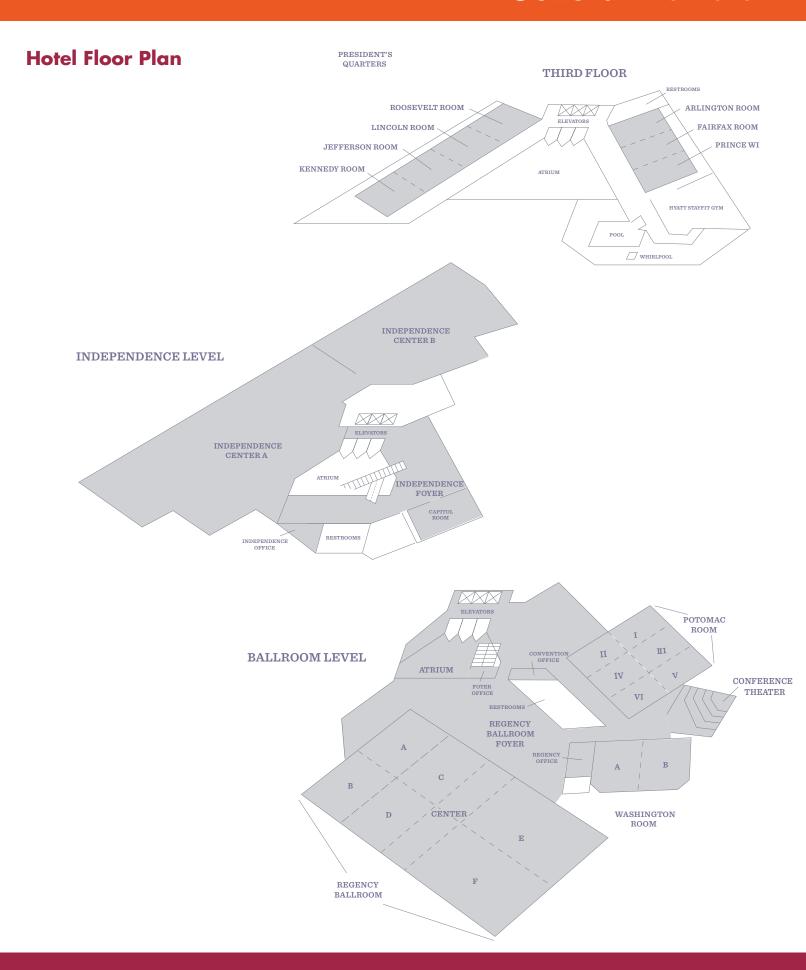
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