Volume 15 | Issue 4

# **ASCE Richmond Branch Newsletter**



Visit our Website

### **Upcoming Events**

May 18: Technical Lunch Meeting (1.0 PDH)

June 22: Annual Flying Squirrels Outing

## **President's Message**

Dear ASCE Richmond Branch Members,

# Hope everyone is doing well, summer is just around the corner. Yea!

We again have many activities to highlight on over the last month. We had a successful roadside clean up on April 23<sup>rd</sup> along Lakeside Drive followed by a Younger Member sponsored event at Final Gravity Brewing Company. Wonder what the beverage of choice was?

April's Technical meeting was presented by Bill Davidge, PE, M.ASCE on a Unique Design Solutions for a Mountain



Highway which highlighted one project with five slope stability remediations. The geotechs in the room were glued to the screen. Thirty-two people attended of which seven were first time attendees. Hopefully a few will become future members.

Members of our branch attended the Engineering & Public Works Roadshow at Main Street Station downtown and Paige rocked the internet with a presentation at an ASCE Best Practices Webinar. See articles on these in the newsletter.

Thanks for Niko Ambrose who stepped into the Membership Committee Chair position, but that created an opening for a Chair of the Government Relations Committee. If anyone is interested in filling this position, contact anyone on the board. If you would like to know more about what is involved in this position, contact Niko Ambrose.

As always, look for other upcoming events in the newsletter or on our website. We have a few fun outing on the horizon. I hope to see you at one of our activities. Bring a co-worker to grow our membership.

Jeff

Jeffrey T. Huffman, MS, PE, F.ASCE

## **Upcoming Events**

#### <u>May Technical Meeting</u> 2023 Virginia Stormwater Handbook and Regulatory/Policy Update

Join us for our May lunch and learn where *Scott Morris, P.E.* will be providing a presentation focused on the 2023 Virginia Stormwater Handbook and Regulatory/Policy updates.

When: Thursday, May 18th 11:45 AM -12:00 PM Sign in and Networking 12:00 PM - 1:00 PM Presentation

**Where:** <u>2810 W Cary St, Richmond, VA 23221</u> (Reserved parking spaces on both sides of building and in gravel lot located through gate)

> **Registration Price:** \$30 members and \$35 non-members, (price increases after May 18th)

Lunch is included (Local Carytown Favorites)

**PDH:** 1.0 HR

**Click Here To Register Before Price Increase On 05/18** 

#### **Annual Flying Squirrels Outing**

Date: June 22, 2023

Time: 6:35PM; Gates open at 5:30PM

Where: The Diamond - 3001 North Boulevard, Richmond VA 23230

Price: FREE for ASCE Members and 1 Guest

**Event Details:** Richmond ASCE Squirrels Game Outing will be held Thursday, June 22 at 6:35PM. Tickets will be General Admission this year and we will be meeting in a preselected section of the stadium for seating. Thursday night is also fireworks night, so attendees can enjoy fireworks following the game! The event will be FREE for members and 1 guest. Tickets will be available at the group ticket pick-up at the game for registered attendees. We will follow up via email prior to the event with additional seating information. We look forward to seeing everyone at the game, go nuts!



# **Project Spotlight**

### **Apex Plaza**

**Project**: Apex Plana **Location**: Charlottesville, VA

Development Team - Hourigan Group & Riverbend Development Strategic Partners – Apex Clean Energy & acac Fitness & Wellness Centers Structural Engineer - Simpson Gumpertz & Heger Building Enclosure Consultant – Simpson Gumpertz & Heger Code Consulting – Simpson Gumpertz & Heger MEP Engineer – Staengl Engineering Architect - William McDonough + Partners Timber Supplier - Nordic Structures General Contractor - Hourigan Construction Corp.

**Project Scope and Solutions:** The new mixed-use building on Garrett Street provides innovative office spaces in the heart of downtown Charlottesville. The project team implemented renewable design approaches—sustainably harvested mass timber, solar energy, and green roofs—aligned with the mission of the anchor tenant, Apex Clean Energy. When it opens, the building will be the tallest timber-framed structure in Virginia and is expected to produce more energy than it consumes. SGH provided structural,

building enclosure, and fire life safety consulting services for the project. As the structural engineer of record, SGH designed the structure and collaborated with the fabricator to create concealed connections for the timber. The structure features:

- Four-story concrete podium with post-tensioned concrete transfer beams
- Six-story, 187,000 sq ft mass timber superstructure, including mass timber braced-frames and cross-laminated timber floors
- Steel-framed rooftop canopy structure supporting a large solar panel array
- SGH assisted with the building enclosure design, including roofing, fenestration, façade systems, and below-grade waterproofing. Highlights include:
- Helping select window and curtain wall systems for specific applications
- Defining curtain wall performance and testing requirements and outlining building enclosure criteria for the specifications
- Comparing single-ply roofing assemblies and advising on concrete coatings
- Developing details, including transitions between adjacent systems
- We consulted on fire life safety requirements and compliance. Highlights include:
- Helping obtain variances for the occupied rooftop terrace and high-rise mass timber application
- Preparing a compliance approach report, including a smoke control rational analysis for a proposed atrium
- Developing fire life safety drawings documenting means-of-egress and the location of fire-rated walls

Project Spotlight Courtesy of Simpson Gumpertz & Heger (<u>SGH</u>).

#### Have you worked on a challenging and interesting project this year? Share the challenges, obstacles, and solutions that were encountered with your industry peers!

ASCE Richmond wants to highlight your projects in our monthly newsletter. If you have a project you want to share, email a blurb to Paige Lazar at Paige.Lazar@Timmons.com and we will feature you in our future newsletter. There is no specific format or word count requirement, and photos are encouraged.

## **Past Events**

### **Bi-Annual Roadway Cleanup and Social**

On Earth Day, members of the Richmond ASCE branch had an exceptionally successful 'Adopt-A-Highway' cleanup along Lakeside Avenue! Not only did the event draw an impressive turnout, but the pleasant weather made the day even easier. After the cleanup, participants celebrated their success at Final Gravity Brewery, conveniently located at the end of the cleanup route. We hope you'll join us in the Fall for our next cleanup!



### **ASCE Members Attend the Engineering & Public Works Roadshow**

Local ASCE members attended the Engineering & Public Roadshow on March 24 <sup>th</sup> at the Main Street Station Shed in downtown Richmond. The Main Street Station Shed was recognized by APWA as a top project winner in historic preservation in the \$25 million to \$75 million category and serves as a beacon for the greater Richmond community and as a spark for future generations of engineering and public works professionals.

Presentations were made by those involved in the successfully revitalizing the station. Additionally, presentations were made on the importance of engineers to meet the countries infrastructure needs and on the current shortage of engineers.

Attendees included Senator Tim Kaine, Tom Smith, Executive Director of ASCE, as well as Virginia Section & Richmond Branch members.



### <u>The 2023 Virginias Region Student Chapter Symposium</u> (Conference) was Held at Marshall University

All ten ASCE student chapters in the Commonwealth of Virginia and State of West Virginia participated in the 2023 Virginias Region Student Chapter Symposium (Conference) April 13, 14, and 15 with approximately 250 students in attendance. Competitions this year included Concrete Canoe, Steel Bridge, UESI Survey, and Construction Institute Competition that have national finals as well as regional competitions including Engineering Jeopardy, Innovation Contest, and Concrete Frisbee.

Steel bridge was won by Virginia Tech, Fairmont State University took first in the Canoe (again), VMI was first in Surveying, Construction Institute, and Innovation Competitions (Way to go VMI), and West Virginia University took the trophy in the Frisbee Competition.

This was the first time Marshall hosted the event and they did an outstanding job – Everyone had a great time – Congratulation Marshall. JD Dishner attended as a judge and Jeff Huffman attended as the Society representative.

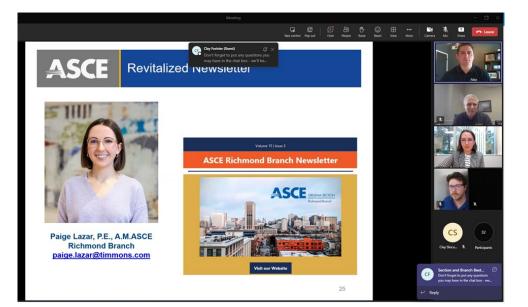
### **April Technical Meeting**

Our April Technical Meeting "Unique Design Solutions for a Mountain Highway – Powell Valley, Route 23" was a great presentation on an FHWA award winning project designed and constructed in the mid-1980's. Bill Davidge gave a great overview of the project, the challenges, and the solutions employed. He also brought along the original design report and plan set (Paper!!) and a hat he's hung onto from a site contractor! Bob Gladstone also presented a brief overview and history on Mechanically Stabilized Earth (MSE) walls and their employment on this project. It was wonderful seeing such a large crowd of familiar and new faces. Thanks again to our presenters and all those in attendance!



#### Paige Lazar Presents at ASCE Society Best Practices Webinar

Paige presented at the recent ASCE's Best Practices for Branches and Sections Webinar on April 6.h Paige presented on the success our branch has had on revitalizing our newsletter. She discussed how the newsletter has changed visually and what type of articles have been added. There were three presenters at this session and Paige dominated the Q&A session following the presentation. Everyone in attendance was very interested in her thoughts and she was the only presenter that had questions. You can watch Paige's presentation here: <u>ASCE Best Practices Presentation | April 6 (Recording)</u>



Kudos to Paige for being asked to present and for a successful presentation.

## Featured Technical Resources (NEW !!)

Welcome to the Featured Technical Resources section of our newsletter! Here, we'll be sharing the latest news, innovations, and best practices in the civil engineering industry. Our goal is to keep you up-to-date and informed about industry technology, social justice, and sustainability initiatives.

#### Is the future a 4-day workweek?

This article explores the possibility of a 4-day workweek and its potential benefits, including improved productivity, reduced stress levels, and increased worker satisfaction.

#### How Pittsburgh's Fern Hollow Bridge was replaced in less than a year

This article details the impressive feat of replacing Pittsburgh's Fern Hollow Bridge within one year, a complex endeavor due to the bridge's importance to the community, its challenging terrain, and the need to maintain traffic.

#### Proposed 'white lights' would assist self-driving traffic

This article discusses a proposed system of white lights that would be installed on the roads to help self-driving cars navigate roads more safely, by providing visual cues to differentiate lanes.

#### When can vacant office buildings be converted to residences?

This article explores how vacant office buildings can be converted into residential dwellings and the challenges that come with this process, such as changing the building's structure and meeting local regulations.

(Articles sourced from https://www.asce.org/topics.)

# **Job Posting**

