



NEW HAMPSHIRE SOCIETY OF
PROFESSIONAL ENGINEERS



70th Annual Engineers Week Conference

February 23rd thru February 25th

Virtual Presentations and Award Announcements

Attendees Registration

Registration is for all three sessions at a cost of \$40. A portion of the proceeds will go to the NSPE-NH Scholarship and Educational funds. Please click the below to register!

[2021 Eweek Conference - Attendees](#)

Sponsorship Registration

Sponsorship registration will for 1 session at a cost of \$200. Sponsors can sponsor multiple sessions if they would like. Each presentation is limited to 5 sponsors, so sign up before they fill up!

[2021 Eweek Conference - Sponsorship](#)

Presentations:

February 23rd 12pm to 1pm

UV Disinfection to Combat COVID-19 (1 PDH)

Presented by James P. Malley, Jr., Ph.D. from the University of New Hampshire

Jim's research group has worked on applications of Ultraviolet (UV) disinfection and/or ozone systems to reduce healthcare acquired infections (HAIs) for the past 10 years. Since March 2020, Jim and his students have been working on testing and improving UV devices that treat PPE and disinfect surfaces in response to the COVID-19 pandemic. They have tested numerous commercial and consumer UV devices for effectiveness at inactivating virus finding that the vast majority cannot achieve the claims they make in the sales literature. The presentation will focus on the selection, design, operation and monitoring of UV disinfection devices to protect public health.

February 24th 12pm to 1pm

Replacement of Bridge NO. 8 On US Route 2 | North Hero – Grand Isle, Vermont (1 PDH)

Presented by Thomas French, PE from HDR, Inc.

HDR provided scoping report, design phase, and procurement services until the construction contract was awarded in 2018. HDR is now providing Design Services During Construction to the Vermont Agency of Transportation (VTrans) on this CMGC project. The project consists of replacing an existing twin-leaf bascule drawbridge; the only working drawbridge in the state of Vermont. Bridge Number 8 provides the only vehicular connection between North Hero and Grand Isle and the only unrestricted height passage for marine traffic traveling into the "Gut" on Lake Champlain. The existing movable bridge, built in 1953 and rehabilitated in 1996 with additional repairs performed in 2007, required an increasing amount of maintenance to continue safe and reliable operation. HDR has been the engineer of record on the \$84.6 million project since 2014, responsible for the complete design of the replacement bridge and the associated approach work. In addition to bridge and roadway design, HDR led a team responsible for seismic analysis, geotechnical evaluation, hydraulic and scour analysis, environmental permitting, public relations, and traffic control. Construction started in 2018 and is

scheduled for completion in 2023. This presentation will provide an overview of the need for the project, design considerations, the CMGC process, and an update on construction activities.

February 25th 12pm to 1pm

Central Core Landscape Improvements Project at the University of Massachusetts Amherst (1 PDH)

Presented by Bill Davidson, PE from Hoyle Tanner & Associates, Inc.

UMass-Amherst needed to evaluate infrastructure within approximately 10 acres of the heart of the campus prior to a final landscaping plan. Relying on our proven expert team to deliver data-driven recommendations and designs, UMass hired Hoyle, Tanner as Prime for engineering services: schematic, preliminary/final design, and construction administration for landscaping, area lighting, electrical upgrades, steam upgrades, water upgrades, pedestrian improvements, parking garage membrane replacement and ADA accessibility review within the project area.

Thank you and we look forward to providing you with these great presentations! If you have questions about the event or want to become a sponsor, please contact Corey Dietrich at (603) 315-7524 or corey.dietrich@hdrinc.com