



2019 ASCE Wisconsin Section Spring Technical Conference

Meeting Schedule and Program
Thursday, March 14, 2019



Keynote Speaker:

Karrie Landsverk

“Open Your Silos and Feed Your Organization”



University of Wisconsin – Eau Claire

W.R. Davies Student Center – Ojibwe Ballroom

77 Roosevelt Avenue

Eau Claire, WI 54701

Welcome!

The Northwest Branch welcomes you to the 2019 American Society of Civil Engineers Wisconsin Section Spring Technical Conference!

The Technical Committee and Northwest Branch have provided a fine selection of technical presentations in a variety of civil engineering disciplines.

The Spring Technical Conference Planning Committee is pleased to introduce Karrie Landsverk to deliver the day's Keynote Presentation, "Open Your Silos and Feed Your Organization." In Karrie's program, she will explain how to open the silos within your organization and create a free-flowing information system that feeds your entire organization. This message is not about smashing down silos. Rather, it's about keeping them intact while developing a culture to freely share what is housed within each silo; increasing collaboration and connections across the organization!

An afternoon Ethics Presentation, "What? Me Worry? Engineering and other Professions in Light of Information Technology" will be presented by Dr. Robert Green of University of Wisconsin – Eau Claire, and will consider professional and ethical standards in information technology while drawing comparisons with the rest of engineering and other professions.

Three technical session options are presented, and an afternoon awards presentation will be provided by ASCE Wisconsin Section President Jared Wendt.

Thank you for joining us!



2019 SPRING TECHNICAL CONFERENCE PLANNING COMMITTEE

Chair

Evan Berglund

Committee Members

Corona Woychik, Andrew Walters, Daniel Borchardt, Dylan Musgjerd,
Kris Roppe, Mike Binsfield

SPRING TECHNICAL CONFERENCE SCHEDULE

2019 ASCE Wisconsin Section Spring Technical Conference Schedule at a Glance			
Time			
Begin	End	Event	Location
7:30 AM	8:20 AM	Registration & Continental Breakfast	Lobby
8:20 AM	8:30 AM	Welcome & Opening Remarks	OJIBWE GRAND BALLROOM
8:30 AM	9:30 AM	Keynote Address	OJIBWE GRAND BALLROOM
9:30 AM	9:50 AM	Break/Exhibitor Exhibits	Lobby
9:50 AM	10:40 AM	Technical Session #1	Breakout Rooms
10:40 AM	10:55 AM	Break/Vendor Exhibits	Lobby
10:55 AM	11:45 AM	Technical Session #2	Breakout Rooms
11:45 AM	12:00 PM	Break/Exhibitor Exhibits	Lobby
12:00 PM	1:00 PM	Luncheon	OJIBWE GRAND BALLROOM
1:00 PM	1:50 PM	Ethics Presentation	OJIBWE GRAND BALLROOM
1:50 PM	2:10 PM	Break/Exhibitor Exhibits	Lobby
2:10 PM	2:50 PM	Awards Presentation	OJIBWE GRAND BALLROOM
2:50 PM	3:10 PM	Break/Exhibitor Exhibits	Lobby
3:10 PM	4:00 PM	Technical Session #3	Breakout Rooms

Opening Keynote Program

8:30 AM to 9:30 AM

Ojibwe Ballroom

Speaker: Karrie Landsverk

Topic: Open Your Silos and Feed Your Organization



Having silos isn't a bad or negative aspect to a corporation in and of itself; they serve a distinct purpose to separate and refine key functions in the company just as silos in the agriculture world serve an important purpose to keep grain dry and away from the elements outside. The problems only arise when the silos are never opened and valuable information isn't shared across the functional areas-creating the commonly known phrase "silo mentality".

In the workplace, especially larger organizations -there are distinct responsibilities and job functions that are separate from one another on purpose. Your organization needs each of these groups focusing on their key area, they need their unique structure to help them best function and achieve their goals for that area. However, much like the actual silo that is eventually opened to share what is housed within, so must each area be open to sharing key information and ideas across all functional areas. The goal would be to open the silos within your organization and create a free-flowing information system that feeds your entire organization.

In Karrie's program she will discuss the negative effects with having silos not openly sharing, and what happens in that type of culture. This message is not about smashing down silos. Rather, it's about keeping them in tact while developing a culture to freely share what is housed within each silo; increasing collaboration and connections across the organization!

Technical Session #1

9:50 AM to 10:40 AM

GEOTECHNICAL—LOCATION: Room 330B

Speaker: Chad Underwood, P.E., Engineering Partners International

Topic: Use of Soil Nail Walls for Temporary Excavation Support of a 60-foot Deep Excavation, Anchor Bank (now Old National Bank) Expansion, Madison, WI

In 2016/2017, Anchor Bank (now Old National Bank) underwent a major expansion of its corporate office facility in downtown Madison, Wisconsin, about two city blocks away from the State Capitol building. Excavations of up to 60 feet below grade were required for the new below grade parking structure, and soil nail walls were selected as the temporary earth retention system for this project. The proximity of adjacent buildings supported by spread footings with relatively high footing surcharge loads, as well as high construction surcharge loading close to the soil nail walls, required special design considerations, including a heavily reinforced shotcrete facing and pre-stressed soil nails to reduce wall deflections and settlement behind the earth retention walls. Contributing to the challenges of the project, the geometry of the site did not allow for the use of foundation underpinning where the earth retention system was closest to existing buildings.

STRUCTURES—LOCATION: Room 311

Speaker: Mike Manor, L.P.E., FORSE Consulting

Topic: HSS Truss Connections for the Engineer of Record

When designing a truss comprised of HSS members, it is common practice for an EOR to specify the truss member sizes and delegate the design of the connections between members to either a specialty engineer or the fabricator's engineer. Depending on the connection type and magnitude of the loads, the member sizes with the minimum amount of steel may not always lead to the most cost-effective connection solutions. To help minimize the fabrication costs, there are rules of thumb and tools available that the EOR can follow. This presentation will discuss how to size the truss chord and branch members for efficient connection design without actually designing the connections.

Technical Session #1 (Continued)

9:50 AM to 10:40 AM

LEADERSHIP AND MANAGEMENT—LOCATION: Room 320E

Speaker: Karrie Landsverk, Professional Speaker

Topic: “Why Won’t You Listen to Me?” Communicate to Ensure Your Message is Heard as You Intended

“Why can’t people just understand what I’m saying? I am speaking as clear as day, what is their problem?” Sound familiar? The reality is, we don’t all think alike and we often misunderstand one another because of our delivery. There are varying communication styles, and Karrie will have your audiences laughing at themselves as they learn why they act and think the way they do. She will also share practical techniques to adapt their style to others so they can develop more meaningful connections, communicate with greater impact, and ensure their message is heard as they intend it to be.

Learning Objectives to Compromise Your Style:

- Identify primary communication style and related characteristics
- Gain techniques to adapt style to better connect with other styles
- Reduce and prevent conflict due to miscommunication
- Build stronger, more trusting relationships
- Empower teams to fully utilize their strengths according to their style

TRANSPORTATION—LOCATION: Room 320F

Speakers: Dan Sydow P.E., Ayres Associates and Dave Solberg P.E., City of Eau Claire

Topic: City of Eau Claire, Half Moon Lake Bridge and Causeway

An unsafe 1930’s vintage bridge at the entrance to iconic Carson Park in the heart of downtown Eau Claire is just a memory now that its stately replacement structure is complete. The award-winning \$2.9 million project involved a tri-lingual website, animated fly-through renderings, contaminated lakebed sediment removal, and unique collaboration between regulatory agencies and the City of Eau Claire. Learn how the project more than tripled the footprint of the causeway – making room for bike lanes, trails, ADA fishing accommodations, and much more – making this no ordinary bridge replacement.

Technical Session #2

10:55 AM to 11:45 AM

CONSTRUCTION—LOCATION: Room 330A

Speakers: Jon Winch, J.H. Findorff & Son, Inc. and Hanna Winch, J.H. Findorff & Son, Inc.

Topic: Sentry Insurance Corporate Headquarters in Stevens Point

Nearly five decades ago, Sentry Insurance and Findorff began a long-term partnership in the heart of Central Wisconsin. Findorff completed the Company's headquarters in 1974. Since that time, Findorff has worked on dozens of projects for Sentry. Currently, Findorff is completing the 1501 Claims Building adjacent to Sentry's main office. The new seven-story, 285,000-square-foot office building is designed to reflect the company's progressive attitude toward the nature of the work and the character of the workplace.

GEOTECHNICAL—LOCATION: Room 330B

Speaker: Wayne Wambold, Short Elliott Hendrickson

Topic: Investigation and Repair of a Wharf Wall Failure

On January 15, 2014 a wharf wall adjacent to the South Menomonie Canal in Milwaukee, Wisconsin had shifted outward. A 6-inch gap between the sidewalk and wall had formed. The wharf wall, originally constructed in 1984, consists of steel sheet pile with tie backs. The tie back system consists of 1 1/4" Dywidag Grade 150 thread bar connected to a deadman. The deadman consists of a 3-foot by 4-foot continuous concrete mass supported on compression and tension pile. An investigation was performed to determine the root cause of failure. The investigation methods and results of the investigation will be presented along with the repair of the wall.

STRUCTURAL—LOCATION: Room 311

Speakers: Luke Johnson P.E., The American Institute of Steel Construction

Topic: Framing Solutions for Steel-Framed Office Buildings

Attendees will understand how structural steel framing system design techniques can help an office project be completed faster, cost-effectively, and with benefit to prospective tenants. The program will demonstrate how the flexibility of a steel frame system can increase an office owner's competitive advantage in the marketplace through easier, cost-effective tenant improvements and changes. Attendees will discover the design benefits steel brings to the office projects by allowing column-free spaces, which provides more freedom for office layout. Attendees will gain knowledge as to how an integrated, collaborative steel team can employ interoperable design software to reduce project schedule, realize significant cost-savings, improve quality control, and increase productivity.

Technical Session #2 (Continued)

10:55 AM to 11:45 AM

ENVIRONMENTAL AND WATER RESOURCES—LOCATION: Room 320E

Speaker: David Soll Ph. D, University of Wisconsin - Eau Claire

Topic: The Challenge of Change: Urban Water Systems in a Dynamic World

Urban water supply managers confront a complex set of challenges. Many cities must contend with legacy problems such as lead water pipes while also addressing emerging risks such as new chemicals and the need to manage development in distant watersheds. Drawing on examples from Wisconsin, New York, and other states, this talk will explore these diverse challenges. Soll will provide a historical perspective that situates the work of water management in the larger context of environmental change in the United States. He argues that viewing water supply experts as environmental managers clarifies the many ways in which water provision shapes the physical and social environment in the United States.

TRANSPORTATION—LOCATION: Room 320F

Speakers: Beth Cunningham, WisDOT and Kevin Meyer, CORRE Inc.

Topic: Trenchless Technology and the USH 53 Culvert Project

Learn about a unique project on USH 53 that included rehabilitation of a large culvert utilizing geopolymer culvert lining technology. This session will explain the constraints of the site, coordination regarding preferred alternative and lessons learned during construction.

Ethics Presentation

1:00 PM to 1:50 PM
OJIBWE GRAND BALLROOM

Speaker: Dr. Robert Greene, University Wisconsin – Eau Claire

Topic: WHAT? ME WORRY? Engineering and other professions in light of information technology

For the past three-quarters of a century information technology has been developing at an ever-increasing pace and there is no sign of a let-up. This talk will consider professional and ethical standards in information technology and will draw comparisons with the rest of engineering and other professions. It will also take a look at the effects on human society in the twenty-first century. All these developments imply a broader role for the engineering profession than hitherto and we hope and trust that the profession will rise to meet the challenge.



Awards/Remarks from ASCE
Wisconsin Section President, Jared Wendt

2:10 PM to 2:50 PM
OJIBWE GRAND BALLROOM

NEW LIFE MEMBERS

Robert Bryson, P.E., M.ASCE
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Jerry A. Foellmi, P.E., M.ASCE
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Kristine M. Krause, P.E., M.ASCE
Richard G. LeMahieu, P.E., M.ASCE
Jeffrey J. Mantes, P.E., M.ASCE
William J. Mc Williams, P.E., M.ASCE
Lavern L. Nall, P.E., S.E., M.ASCE
Bruce W. Ramme, P.E., M.ASCE
Kevin W. Richardson, P.E., M.ASCE

OUTSTANDING SENIOR CIVIL ENGINEERING AWARDS

Sam Hovde, University of Wisconsin - Platteville
Blake Neuman, Marquette University

Congratulations!

Technical Session #3

3:10 PM to 4:00 PM

CONSTRUCTION—LOCATION: Room 330A

Speakers: Lisa Fleming Ayres Associates and Mike Golat City Administrator of Altoona

Topic: City of Altoona's River Prairie Project

The City of Altoona's River Prairie project encompasses the remarkable transformation of a largely undeveloped highway interchange area in 2014 to a bustling center of commerce and recreation four years later. River Prairie is a new 40-acre "front porch" for the City of Altoona, providing new streets, utilities, and public spaces that have attracted extensive commercial development. The \$20 million development has combined visions of recreation, a market square, retail, eateries, lodging, and a place for the arts to thrive.

GEOTECHNICAL—LOCATION: Room 330B

Speakers: Stephen Weyda, P.E.

Topic: Redevelopment of the Confluence District in Downtown Eau Claire

Geopier® ground improvement was used to reinforce the poor soils at both the Haymarket Landing building and the Pablo Center at the Confluence building that opened in 2018. The highly variable soil conditions under the Pablo Center required the use of a Geopier rigid inclusion technology under a portion of the building. The case study will focus on the role that Ground Improvement Engineering played assisting the design team during design development, continuing all the way through ground improvement installations at both projects.

LEADERSHIP AND MANAGEMENT —LOCATION: Room 311

Speakers: Jeff Gebhard, P.E.

Topic: Engineering Ethics in a Low Bid Environment – Can they coexist?

We will review the results of a large participant survey conducted by the Deep Foundations Institute that addresses the role of the Geotechnical Engineer. Using this as a backdrop, we will consider the ethical responsibilities of engineers and how to use our ethical responsibilities to combat the selection of engineers based upon price comparison. The presentation is a GBA presentation in cooperation with a working agreement with the Geo Institute.

Technical Session #3 (Continued)

3:10 PM to 4:00 PM

ENVIRONMENT AND WATER RESOURCES—LOCATION: Room 320E

Speakers: Yiying Xiong P.E., RTI

Topic: Rivertrak - A Novel and Reliable Real-time Two-Dimensional Flood Mapping Tool

Continuous real-time inundation maps require extensive modelling which may be affected by instabilities and long modelling times. In addition, systems to execute real-mapping require expert operators, who may be unavailable in critical emergency situations. Under a partnership between RTI, Riverside Technology, inc. and the University of Kansas, Rivertrak was developed to rapidly and reliably generate real-time two-dimensional flood extents and depths for use in emergency management and impact mitigation. Rivertrak utilizes real-time stage observations or forecasts to create fast, scalable and accurate flood maps that can be scaled to any region or basin within practical financials. This system is designed to run on-premise or in-cloud with expert monitoring. This presentation demonstrates applications of Rivertrak at multiple sites in the U.S., including several locations in the Midwest.

TRANSPORTATION—LOCATION: Room 320F

Speakers: Jason Roselle, P.E., WisDOT, Aaron Bubb P.E., Kapur & Associates, Bill Koutnik P.E., HNTB

Topic: Delivering WisDOT's \$1.7B Zoo Interchange Program

Attendees will learn how the Wisconsin Department of Transportation (WisDOT) broke traditional processes to successfully deliver a \$1.7 Billion design-bid-build infrastructure project on time and under budget. This ground-breaking project implemented a fully integrated 3D (BIM for Infrastructure) model, created a cloud based collaborative plan review process, and integrated a dedicated design liaison into the Construction Management team. The plan review process "Project PS&E C-Rev" has been nationally recognized and adopted as a current AASHTO Innovation Initiative (AII).

The collaborative team of Owners, Designers, and Construction Managers will engage the audience on the challenges and benefits of utilizing nontraditional delivery processes. The 3D model and enhanced PS&E review process improved the bid-ability, constructability, and overall plan let quality. Integration of a design liaison into the construction team provided the platform for timely decision making and collaborative issue resolution. The team will demonstrate that WisDOT's experience with the implementation of these processes resulted in tangible benefits (cost, schedule, quality).

ASCE Wisconsin Section 2019 Spring Technical
Conference Exhibitors



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2018-2019 ASCE WISCONSIN SECTION TECHNICAL COMMITTEE CHAIRS

Structural:	Robert Schumacher, P.E.
Construction:	Brian M. Udovich, P.E.
Geo-Institute:	Emil Bautista, Ph.D.
Management:	Harold J. Farchmin, P.E.
Transportation & Development:	Ken Swanson, P.E.
Environmental & Water Resources:	Laura A. Gerold, P.E. and Mark D. Augustine, P.E.

ASCE WISCONSIN SECTION 2019 SPRING TECHNICAL CONFERENCE EAU CLAIRE, WISCONSIN - Thursday, March 14, 2019		
KEYNOTE PRESENTATION 8:30 AM to 9:30 AM		
LOCATION	TOPIC	PDH
OJIBWE GRAND BALLROOM	Keynote:: Karrie Landsverk - Open Your Silos and Feed Your Organization	1.0 PDH <input type="checkbox"/>
TECHNICAL SESSION #1 9:50 AM to 10:40 AM		
LOCATION	TOPIC	PDH
330B	Geotechnical: Chad Underwood, P.E.: Use of Soil Nail Walls for Temporary Excavation Support of a 60-foot Deep Excavation, Anchor Bank (now Old National Bank) Expansion, Madison, WI	1.0 PDH <input type="checkbox"/>
311	Structural: Mike Manor, L.P.E., FORSE Consulting: HSS Truss Connections for the Engineer of Record	1.0 PDH <input type="checkbox"/>
320E	Leadership and Management: Karrie Landsverk, Professional Speaker: "Why Won't You Listen to Me?" Communicate to Ensure Your Message is Heard as You Intended	1.0 PDH <input type="checkbox"/>
320F	Transportation: Dan Sydow, Ayres Associates and Dave Solberg, City of Eau Claire: City of Eau Claire at Half Moon Lake Bridge near Carson Park	1.0 PDH <input type="checkbox"/>
TECHNICAL SESSION #2 10:55 AM to 11:45 AM		
LOCATION	TOPIC	PDH
330A	Construction: Jon Winch and Hannah Winch: Sentry Insurance Corporate Headquarters in Stevens Point	1.0 PDH <input type="checkbox"/>
330B	Geotechnical: Wayne Wambold, Short Elliott Hendrickson: Investigation and Repair of a Wharf Wall Failure	1.0 PDH <input type="checkbox"/>
311	Structural: Luke Johnson P.E. from the American Institute of Steel Construction: Framing Solutions for Steel-Framed Office Buildings	1.0 PDH <input type="checkbox"/>
320E	Environment and Water Resources: David Soll Ph.D UW Eau Claire: The Challenge of Change: Urban Water Systems in a Dynamic World	1.0 PDH <input type="checkbox"/>
320F	Transportation: Beth Cunningham, WisDOT and Kevin Meyer, CORRE Inc., Trenchless Technology and the USH 53 Culvert Project	1.0 PDH <input type="checkbox"/>
ETHICS PRESENTATION 1:00 PM to 1:50 PM		
LOCATION	TOPIC	PDH
OJIBWE GRAND BALLROOM	Dr. Robert Greene, University Wisconsin – Eau Claire: Ethics for the Information Age	1.0 PDH <input type="checkbox"/> ETHICS
TECHNICAL SESSION #3 3:10 PM to 4:00 PM		
LOCATION	TOPIC	PDH
330A	Construction: Lisa Fleming Ayres Associates and Mike Golat City Administrator of Altoona: City of Altoona's River Prairie Project	1.0 PDH <input type="checkbox"/>
330B	Geotechnical: Stephen Weyda, P.E.: Redevelopment of the Confluence District in Downtown Eau Claire	1.0 PDH <input type="checkbox"/>
311	Leadership and Management: Jeff Gebhard, P.E. : Engineering Ethics in a Low Bid Environment – Can they coexist?	1.0 PDH <input type="checkbox"/>
320E	Environment & Water Resources: Yiyong Xiong P.E., RTI: Rivertrak - A Novel and Reliable Real-time Two-Dimensional Flood Mapping Tool	1.0 PDH <input type="checkbox"/>
320F	Transportation: Jason Roselle P.E., WisDOT, Aaron Bubb P.E., Kapur & Associates, Bill Koutnik P.E., HNTB Delivering WisDOT's \$1.7B Zoo Interchange Program	1.0 PDH <input type="checkbox"/>

Printed Name: _____

Signature: _____

Date: _____

Retain this copy for your records

2019 Spring Technical Conference – Conference Areas Map:



DAVIES



CENTER



University of Wisconsin
Eau Claire

Thank You for Attending the 2019 Wisconsin Section Spring Technical Conference!



How can we make this meeting and ASCE better? Please provide any suggestions or feedback to members of the planning committee or any of the board members mentioned in the program.

Interested in becoming involved in ASCE? We are always seeking people interested in becoming involved with ASCE. Positions are available for various time commitments—a few hours a month up to a few hours a week. Please contact a board member or an Spring Technical Conference Committee member for more information. ASCE provides great networking opportunities!

