



2018 ASCE Wisconsin Section Spring Technical Conference

Meeting Schedule and Program

Friday, March 16, 2018



Featured Speakers:

Craig Thompson, Executive Director
Transportation Development Association of Wisconsin

Brett Wallace, Foxconn Project Director
Wisconsin Department of Transportation



Country Springs Hotel and
Conference Center

2810 Golf Road
Pewaukee, WI 53072

Welcome

The Southeast Branch welcomes you to the 2018 American Society of Civil Engineers Wisconsin Section Spring Technical Conference!

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

The Plenary Session will be led by Craig Thompson, Executive Director of the Transportation Development Association of Wisconsin. This presentation will cover an update on the status of the transportation funding situation in Wisconsin as it pertains both to the revenue side and the outstanding needs or expenditure side.

The lunch presentation will be provided by Brett Wallace, Foxconn Project Director of the Wisconsin Department of Transportation, and will cover the many infrastructure modifications necessary for the development of the large manufacturing facility for this famous multinational electronics company.

An afternoon Ethics Presentation, "The ASCE Canons and Case Histories," will be led by John Frauenhoffer, P.E., S.E., and will explore the ASCE Canons of Ethics through case histories of imperfect ethical behavior.

There are three technical sessions separated by our Lunch presentation and an awards presentation.

Thank you for joining us!



2018 SPRING TECHNICAL CONFERENCE COMMITTEE

Committee Chairs

Kyle Bareither and Tony Castle

Committee Members

Mike Arnold, Jake Brunoehler, Larry Buechel, Dave Jaromin, Aaron Schramm, Jared Wendt, Sarah Branta

SPRING TECHNICAL CONFERENCE SCHEDULE

Time		
Begin	End	Event
7:00 AM	8:00 AM	Registration
8:00 AM	8:25 AM	Opening Remarks
8:25 AM	9:25 AM	Plenary Session
9:25 AM	9:40 AM	Break/Exhibitor Exhibits
9:40 AM	10:30 AM	Technical Session #1
10:30 AM	10:45 AM	Break/Vendor Exhibits
10:45 AM	11:35 AM	Technical Session #2
11:35 AM	11:50 AM	Break/Exhibitor Exhibits
11:50 AM	1:10 PM	Lunch Presentation
1:10 PM	1:40 PM	Awards/Remarks from ASCE WI Section President
1:40 PM	2:00 PM	Break/Exhibitor Exhibits
2:00 PM	2:50 PM	Spotlight Ethics Presentation
2:50 PM	3:10 PM	Break/Exhibitor Exhibits
3:10 PM	4:00 PM	Technical Session #3

Opening General Session

8:25 AM to 9:25 AM

Grand Ballroom South



Speaker: Craig Thompson, Executive Director of the Transportation Development Association of Wisconsin

Topic: Status of Transportation Funding in Wisconsin and the Just Fix It Campaign

Like other states, Wisconsin has been grappling for more than a decade with transportation revenue insufficient to meet state and local needs. The issue has been studied. Reports have been issued, and recommendations have been put forth. However, no progress has been made toward a long-term funding solution, while Wisconsin falls further behind.

Opening General Session (Continued)

8:25 AM to 9:25 AM

Some problems are truly perplexing to solve – like eradicating poverty or reining in the cost of health care. Fixing our state and local roads and bus systems is not one of those. Craig Thompson, Director of the Transportation Development Association of Wisconsin will talk us through the campaign and how Wisconsin plans to bridge the gap between infrastructures needs and the available revenue to address them.

We know what needs to be done. JUST FIX IT.

Technical Session #1

9:40 AM to 10:30 AM

GEOTECHNICAL—LOCATION: WOODFIELD AB

Speaker: Rich Weber, P.E., O'Brien & Gere Engineers, Inc.

Topic: Fountain Lake Restoration Project in the City of Albert Lea, Minnesota

Fountain Lake is central to the identity and tourism industry of the City of Albert Lea, MN. The 555-acre lake is a popular destination for boating, swimming, and fishing. However, for years, Fountain Lake has suffered from poor water quality, and the lake was added to the Minnesota Pollution Control Agency's list of impaired waters in 2008. Specifically, Fountain Lake suffers from high phosphorus concentrations, overabundant algae, and low clarity. The Shell Rock River Watershed District (SRRWD) was established in 2003 at the request of local citizen's petition with the purpose of improving the quality of water resources within the district boundaries.

Results of several studies have determined that there is significant internal phosphorus loading from bottom sediments. Fountain Lake is controlled by an outlet dam and has a tributary watershed of approximately 63,000 acres of largely agricultural land. SRRWD has implemented many upstream improvements to decrease future sedimentation into the lake, and now plans to remove the source of internal phosphorus loading through a multi-year hydraulic dredging project.

An upland site within two miles of the lake was selected for the construction of a multi-cell confined disposal facility to place the dredged sediment. Construction of the first CDF cell was completed in 2017 and dredging is scheduled to begin in spring 2018. The planned sediment removal is estimated at approximately 1,275,000 cubic yards.

The presentation will discuss project background and goals; permitting; CDF site selection and design including subsurface investigation, geotechnical laboratory testing and design analyses; CDF construction; dredging design; and the extensive public outreach and government agency coordination necessary to implement the project.

Technical Session #1 (Continued)

9:40 AM to 10:30 AM

CONSTRUCTION—LOCATION: WOODFIELD CD

Speaker: Carolynn Gellings, P.E., DAAR Engineering

Topic: Construction of the Milwaukee Street Car

The intent of the Milwaukee Streetcar Project is to implement a starter streetcar system with modern vehicle technology that circulates people around downtown, links downtown destinations, activity centers and neighborhoods and supports planned development. Currently the city lacks a high-quality transit system that meets these needs. The initial 2-mile starter system (Phase 1) shall connect the Milwaukee Intermodal Station and the dense housing on the lower East Side, providing service to many residential, commercial, employment, parking, and hotel destinations. Construction began on the Milwaukee Streetcar project (Phase 1) in March 2017.

This presentation will provide a brief background of what the streetcar is, it's purpose and need and where it's located. The construction phase of the streetcar will be discussed in detail, including the planning and coordination needed to implement major construction work zones on eight key roadways downtown, challenges encountered during construction, an update on progress and what can be expected when the streetcar opens for service.

STRUCTURAL—LOCATION: MEADOWBROOK EAST

Speakers: Chad O'Donnell, Jeff Millman, and Mitch Hansen, HGA Architects and Engineers

Topic: Gathering Spaces with a View

This presentation will focus on two different conference/community centers; one constructed for the Village of Egg Harbor and another for Uline Corporation. The uniqueness of the projects varies from a bedrock foundation to a basement cast into a retention pond, along with many other features. Each project yields plenty of elevated outdoor spaces with views for guests to enjoy along with interior spaces with limited structural interruptions. Structural elements have prominence whether you're inside or outside the buildings. The Uline Conference Center opened in the Fall of 2016 and the Egg Harbor Community Center will be officially open in Spring 2018.

ENVIRONMENTAL & WATER—LOCATION: MEADOWBROOK WEST

Speaker: Ned W. Paschke, P.E., DEE, F. ASCE, University of Wisconsin - Madison

Topic: Public Water Supply Trends in the U.S.

Public water use in the United States, in terms of volume per person per day, has been significantly decreasing in recent decades. This trend is generally beneficial with respect to sustainability and resource management, but it also results in some unintended consequences. Water use volumes per person also vary significantly between different states. Using data sourced from the USGS, this paper explores the decreasing water use trends across the U.S. and the differences between different regions of the country and discusses the various causes and implications of these trends.

Technical Session #2

10:45 AM to 11:35 AM

GEOTECHNICAL—LOCATION: WOODFIELD AB

Speaker: Matthew Glisson, Braun Intertec Corporation

Topic: Financial and Schedule Benefits of Project-Specific Load Testing

The presentation will illustrate two, distinct examples of how load testing can save significant time and money on a project. This is a highly-relevant topic with the continuing reductions in budgets and increases in construction costs.

Load testing of deep foundations is commonly limited to verification. The design and construction industry generally view the monetary cost and time of performing design-phase load testing as too expensive. Similarly, it views the costs of altering the design based on load tests at the start of construction as too high. Large or complex projects tend to be the exceptions. Using load tests to guide foundation design, a project can realize money and time savings. Two design-build, transportation projects in the Minneapolis-St. Paul metropolitan area demonstrate the potential for monetary and time savings from load testing.

The Interstate 35W Bridge in downtown Minneapolis was a momentous collapse. Equally impressive was the design and construction of a replacement bridge supported primarily on drilled shafts. The shaft design included an axial-compressive static, load-test shaft to validate design parameters and construction methods. The test results allowed a significant reduction in shaft length with a direct cost and time savings.

Representative of a more-common transportation project, the TH 610 Completion project created a new, trunk highway alignment with multiple bridges and retaining walls, as well as an embankment load-transfer platform. Driven, closed-end, steel-pipe piles support most structures. The project utilized high-strain dynamic load testing during initial drive and restrikes of test piles to refine design parameters and establish driving criteria. The test program and the adjustments to the pile design resulted in a costs savings of approximately \$98,000 in pile material, plus reducing the duration of pile driving.

TRANSPORTATION—LOCATION: MEADOWBROOK EAST

Speakers: Luke Holman, P.E., Strand Associates, Inc.

Elizabeth Schneider, P.E., PTOE, Wisconsin Department of Transportation

Topic: I-39/90 Reconstruction Project, Use of Probe Data on Alternate Routes

As part of the I-39/90 Reconstruction project from Madison to Beloit, congestion concerns along I-39/90 during construction and the resulting diversion to adjacent alternate routes was a primary focus early on in the project. The need to monitor alternate route travel times became important to communicate alternative travel options during recurring congestion and/or incidents. Probe data was identified as an efficient means to collect this real-time data. This session will focus on the planning, integration, and deployment of probe data as a source of travel times and how it is being utilized on the I-39/90 Project.

Technical Session #2 (Continued)

10:45 AM to 11:35 AM

Learning Objectives:

- Learn about the I39/90 Reconstruction project and its importance to the state of Wisconsin.
- Understand the process used to procure the probe data subscription and how the vendor was selected.
- Learn how the State Traffic Operations Center (STOC) currently provides travel time information and how real-time probe data is integrated and used to supplement STOC's current statewide system.

STRUCTURAL—LOCATION: WOODFIELD CD

Speakers: Snehal Kadam, P.E., S.E., LEEDAP, HNTB Corporation

Bart Miller, P.E., Walter P Moore

Topic: Structural Design of the New Milwaukee Bucks Arena

The new Milwaukee Bucks arena, tentatively named the Wisconsin Entertainment and Sports Center, is an 18,000-seat, multi-purpose arena located in the heart of downtown Milwaukee, WI. Scheduled to open in the fall of 2018, the 714,000 square-foot facility features an iconic curving roof structure and dynamic façade that will position the arena among the most prominent and recognizable buildings in the city. Envisioned to be truly multi-purpose, the arena will host basketball, hockey, end stage and center stage concerts, circuses and ice events, and open-floor exhibitions.

Arena architects included Populous, HNTB and EUA. HNTB served as the Structural Engineer of Record for the arena superstructure, while Walter P Moore provided design and consulting services for the long-span roof and façade systems. ZS Engineering served as the Structural Engineer of Record for the foundations and provided full-time site representation. The project utilized an accelerated, fast-track project delivery approach and is in pursuit of LEED Gold certification.

MANAGEMENT—LOCATION: MEADOWBROOK WEST

Speaker: Kevin L. Shafer, P.E., Milwaukee Metropolitan Sewerage District

Topic: Managing Change to Protect Public Health and the Environment

The Milwaukee Metropolitan Sewerage District (MMSD) is the regional sewer system for the metropolitan Milwaukee area. MMSD employs 232 public employees and manages a private operator that employs an additional 220 private employees. These dedicated people serve 1.1 million customers by providing wastewater reclamation and flood management. Providing leadership for these individuals and the multiple initiatives is a unique privilege that goes beyond staff management, it has evolved into providing integrated watershed leadership which is sometimes referred to as One Water. Rallying the region's efforts around a One Water approach has many hurdles, requires dedicated individuals, and needs constant nurturing. This presentation will explore this ongoing collaboration.

Lunch Presentation

11:50 AM to 1:10 PM

Grand Ballroom North

Speaker: Brett Wallace, Foxconn Project Director, Wisconsin Department of Transportation

Topic: Wisconsin DOT's Foxconn Opportunity

Foxconn is building North America's first state-of-the-art advanced display manufacturing campus in Mount Pleasant in Racine County. The Wisconsin Department of Transportation (WisDOT) will give an update on the public infrastructure development in and around the campus. The 20 million square foot campus, equivalent to the size of 13 Lambeau Fields, is the largest economic development project in Wisconsin history and the largest greenfield investment by a foreign-based company in U.S. History.



Infrastructure in development around the campus includes completing the IH 94 North South Corridor between southern Milwaukee County and the state line, 15 miles of multi-lane divided urban arterial, 42 miles of water main, 18 miles of sanitary sewer, 26 miles of gas main, 21 miles of electric lines and 28 miles of telecom lines. WisDOT has taken temporary jurisdiction of several local roads so as to oversee and coordinate this entire effort. The presentation will highlight the design and fast track project delivery process including resource planning, program management, project management, construction management, public involvement, traffic mitigation planning and environmental permitting.

Awards/Remarks from ASCE Wisconsin Section President

1:10 PM to 1:40 PM
Grand Ballroom North

NEW LIFE MEMBERS

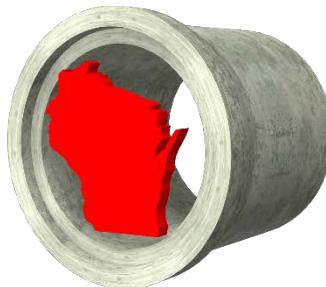
Gary Amel
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Robert Grefe
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Michael Kelley
Curtis Madsen
William McCutcheon
Robert Montgomery
Taryn Nall
Mark Oleinik
Richard Pierce
Gary Raasch
David Trainor

OUTSTANDING SENIOR CIVIL ENGINEERING AWARDS

Brian Schafer – University of Wisconsin-Milwaukee
Joseph Tschida – Marquette University

Congratulations!

ASCE Wisconsin Section 2018 Spring Technical Conference Exhibitors

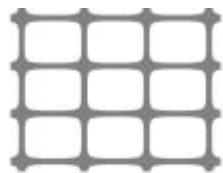


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Spotlight Ethics Presentation

2:00 PM to 2:50 PM
Grand Ballroom South

Speaker: John Frauenhoffer, P.E., S.E., Past ASCE Region 3
Director, Frauenhoffer & Associates

Topic: The ASCE Canons and Case Histories

First adopted in 1914, the ASCE Code of Ethics is the model for professional conduct for ASCE members. The Code of Ethics was most recently updated on July 29, 2017.



Under ASCE bylaws, all ASCE members are required to comply with the Code of Ethics and to report any observed violations. The Committee on Professional Conduct (CPC) reviews and investigates complaints in accordance with its rules of procedure. If the CPC finds that an ethics violation has occurred and that disciplinary actions are appropriate, it will forward its recommendations to ASCE's Executive Committee or Board of Direction for a formal hearing on the matter.

Mr. Frauenhoffer's presentation will explore the ASCE Canons of Ethics through case histories of imperfect ethical behavior. Attendees will be invited to offer their own observations, experiences, and questions.

Technical Session #3

3:10 PM to 4:00 PM

ENGINEERS WITHOUT BORDERS—LOCATION: WOODFIELD CD

Speakers: David Westfallen, University of Wisconsin – Milwaukee

Zach Tichelaar, University of Wisconsin - Milwaukee

Topic: Gravity-Fed Potable Water Distribution System in Ocop'xoo Nueva Jerusalen, Guatemala

In January of 2018, the University of Wisconsin-Milwaukee student chapter of Engineers Without Borders traveled to Ocop'xoo Nueva Jerusalen, Guatemala and constructed a water distribution system for which the potential had been assessed a year earlier and designed over the course of 2017. This project was a collaborative effort between EWB@UWM, the village of Ocop'xoo Nueva Jerusalen, and a local Guatemalan-run NGO, La Asociacion de Comites Comunitarios Medio Ambiental de la Region Ixil (ACCMARI). During the two-day assessment in January of 2017, the team conducted many activities to obtain as much data and information as possible. Working with the village, the team came up with a hand drawn map showing locations of each of the 39 houses in the village. Using this hand-drawn map of the village and guidance from village members, a survey of the land was done for an anticipated gravity-fed water system. Another group collected water samples from a nearby natural spring that would serve as the source for the proposed system. The water samples were used to collect water quality data about the current and future health of their water system. Each family was visited and communicated their needs and wants for their village in the future.

Technical Session #3 (Continued)

3:10 PM to 4:00 PM

With this data and information, the team began to design the system based off the village's needs, available resources, and feasibility of the project. It was confirmed that a gravity-fed water system would indeed be the most efficient and effective way to bring water to the village. To complete a full hydraulic analysis of the system, the Hazen-Williams formula was applied to the land survey data. The topography of Ocote'xoo Nueva Jerusalen was very steep, losing almost 500 m of altitude from the spring box to the distribution tank. Furthermore, it was determined through the hydraulic analysis that the residual and static head within some areas of the water line exceeded PVC pipe capacities. Therefore, break pressure tanks (BPTs) were implemented in strategic locations to release the pressure build up in the system. Based off the team's economic analysis, the design called for 5 BPTs in the system (4 in the conveyance line 1 in the distribution line).

The village maintains an agrarian lifestyle with many animals living in close proximity to homes and sources of water. A spring-box was built to contain the spring and to mitigate the potential for contaminants to enter the water source. In order to minimize environmental disruptions, the system was designed for most of the overflow to occur at the spring-box. This ensures all excess water will be returned to as close to the flow of the natural spring as possible. During implementation, further water quality analysis was performed throughout the system using WHO metrics for potable drinking water.

Water from the spring travels through the 4.3 kilometer conveyance line to the chlorinator and ultimately the distribution tank. The tank acts as a storage container and mixer and was sized based on current and future demand and verified with the chlorine-contact-time equations to ensure healthy amounts of chlorine. Each home throughout the village received a tap-stand connected to the distribution lines installed throughout the village.

ENVIRONMENTAL & WATER—LOCATION: WOODFIELD AB

Speaker: Donald P. Gallo, P.E., JD, Husch Blackwell, LLP

Topic: Emerging Issues in Environmental Law

Abstract: This presentation will list emerging issues in environmental law at the federal and state level including proposed laws and regulations and specifically new guidance documents in development by WDNR. The presentation will discuss the effect these issues may have on our communities and various industry sectors. The listing will help EHS staff and engineers that serve those industries and commercial businesses become aware of new laws and guidance documents. Anticipate audience participation with questions and discussion on these emerging issues and we will drill down on certain issues to better understand the basis for these new laws and guidance.

GEOTECHNICAL—LOCATION: MEADOWBROOK EAST

Speaker: Jeff A. Segar, P.E., S.E., Braun Intertec

Topic: Causeway and Working Platform Design, Construction, and Instrumentation for Minnesota STH 53

This presentation will discuss the design and safety aspects of a causeway constructed to serve as a working platform for a new bridge, that is now the tallest bridge in Minnesota. The causeway is 500 feet long and varies up to 120 feet deep, with 5 feet above the water line. The design of the causeway and the working platform had to be able to support varied surface loading from heavy construction equipment, shoring towers, drill rigs for the pier construction, and the and a 1375 ton crawler crane heavy-lift crawler crane as it lifts bridge girders some 200 feet in the air.

The causeway crosses the massive Rouchleau Pit, an abandoned open-pit iron mine, which now provides the source water for a nearby city. Approximately 19,000 square feet of impervious membrane was used in the reinforced platform section, in addition to the geogrid layers, to contain possible spills and maintain the quality of the city's water. The design of the causeway required aggregate that provided sufficient permeability to prevent the causeway from acting as a dam. Once constructed the permeability was verified by field tests and multiple types of instrumentation were used to monitor the performance of the platform and the causeway, providing confidence to the city, state, and contractors.

STRUCTURAL—LOCATION: MEADOWBROOK WEST

Speaker: Jennifer Traut-Todaro, S.E., LEED AP, American Institute of Steel Construction

Topic: Healthcare Success with Steel

Healthcare project teams strive to design and build facilities that will not only handle the challenges of today's budget, schedule, and planning constraints successfully, but also handle future upgrades including equipment changes, facility expansions, and changing patient care standards, with ease. Structural steel has continued to be the material of choice for healthcare projects nationwide. By learning about various ways to overcome unique healthcare project challenges with structural steel framing, you can realize similar success.

The American Institute of Steel Construction tracks the healthcare construction market closely and monitors successful projects nationwide to investigate how project teams overcame various challenges through the use of structural steel. Such challenges include tight urban site constraints, vibration sensitive equipment, budget and schedule requirements, future adaptability concerns, working in an IPD/BIM environment, and sustainability. We will not only demonstrate specific lessons learned and successful innovations that you can use on your next project but also illustrate how to achieve healthcare project success and reduce your risk by working in a collaborative environment with the structural steel fabricator (and other members of the steel team) involved early in the design phase. Attendees will walk away with specific solutions to challenges that owners, architects, engineers, and general contractors face every day in the healthcare construction sector.

2017-2018 ASCE WISCONSIN SECTION SOUTHEAST BRANCH BOARD OF DIRECTORS

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Construction:	Brian M. Udovich, P.E.
Geotechnical:	Mark S. Meyers, P.E. and 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 2018 SPRING TECHNICAL CONFERENCE
PEWAUKEE, WISCONSIN - FRIDAY, MARCH 16, 2018**

PLENARY SESSION 8:25 – 9:25 A.M.

LOCATION	TOPIC	PDH
GRAND BALLROOM SOUTH	Craig Thompson, Executive Director of the Transportation Development Association of Wisconsin: Status of Transportation Funding in Wisconsin and the Just Fix it Campaign	1.0 PDH <input type="checkbox"/>

TECHNICAL SESSION #1 9:40 – 10:30 A.M.

LOCATION	TOPIC	PDH
WOODFIELD AB	Geotechnical: Rich Weber, P.E., O'Brien & Gere Engineers, Inc.: Fountain Lake Restoration Project in the City of Albert Lea, Minnesota	1.0 PDH <input type="checkbox"/>
WOODFIELD CD	Construction: Carolynn Gellings, P.E., DAAR Engineering: Construction of the Milwaukee Street Car	1.0 PDH <input type="checkbox"/>
MEADOWBROOK EAST	Structural: Chad O'Donnell, Jeff Millman, and Mitch Hansen, HGA Architects and Engineers: Gathering Spaces with a View	1.0 PDH <input type="checkbox"/>
MEADOWBROOK WEST	Environmental & Water: Ned W. Paschke, P.E., DEE, F. ASCE, University of Wisconsin – Madison: Public Water Supply Trends in the U.S.	1.0 PDH <input type="checkbox"/>

TECHNICAL SESSION #2 10:45 – 11:35 A.M.

LOCATION	TOPIC	PDH
WOODFIELD AB	Geotechnical: Matthew Glisson, Braun Intertec Corporation: Financial and Schedule Benefits of Project-Specific Load Testing	1.0 PDH <input type="checkbox"/>
MEADOWBROOK EAST	Transportation: Luke Holman, P.E., Strand Associates, Inc. and Elizabeth Schneider, P.E., PTOE, Wisconsin Department of Transportation: I-39/90 Reconstruction Project, Use of Probe Data on Alternate Routes	1.0 PDH <input type="checkbox"/>
WOODFIELD CD	Structural: Snehal Kadam, P.E., S.E., LEEDAP, HNTB Corporation and Bart Miller, P.E., Walter P Moore: Structural Design of the New Milwaukee Bucks Arena	1.0 PDH <input type="checkbox"/>
MEADOWBROOK WEST	Management: Kevin L. Shafer, P.E., Milwaukee Metropolitan Sewerage District: Managing Change to Protect Public Health and the Environment	1.0 PDH <input type="checkbox"/>

LUNCH PLENARY SESSION 11:50 A.M.– 1:10 P.M.

LOCATION	TOPIC	PDH
GRAND BALLROOM NORTH	Brett Wallace, Foxconn Project Director, Wisconsin Department of Transportation: Wisconsin DOT's Foxconn Opportunity	1.0 PDH <input type="checkbox"/>

SPOTLIGHT ETHICS SESSION 2:00 – 2:50 P.M.

LOCATION	TOPIC	PDH
GRAND BALLROOM SOUTH	John Frauenhoffer, P.E., S.E., Past ASCE Region 3 Director, Frauenhoffer & Associates: The ASCE Canons and Case Histories	1.0 PDH <input type="checkbox"/> ETHICS

TECHNICAL SESSION #3 3:10 – 4:00 P.M.

LOCATION	TOPIC	PDH
WOODFIELD CD	EWB: David Westfallen and Zach Tichelaar, University of Wisconsin – Milwaukee: Gravity-Fed Potable Water Distribution System in Ocop'xoo Nueva Jerusalen, Guatemala	1.0 PDH <input type="checkbox"/>
WOODFIELD AB	Environment & Water: Donald P. Gallo, P.E., JD, Husch Blackwell, LLP: Emerging Issues in Environmental Law	1.0 PDH <input type="checkbox"/>
MEADOWBROOK EAST	Geotechnical: Jeff A. Segar, P.E., S.E., Braun Intertec: Causeway and Working Platform Design, Construction, and Instrumentation for Minnesota STH 53	1.0 PDH <input type="checkbox"/>
MEADOWBROOK WEST	Structural: Jennifer Traut-Todaro, S.E., LEED AP, American Institute of Steel Construction: Healthcare Success with Steel	1.0 PDH <input type="checkbox"/>

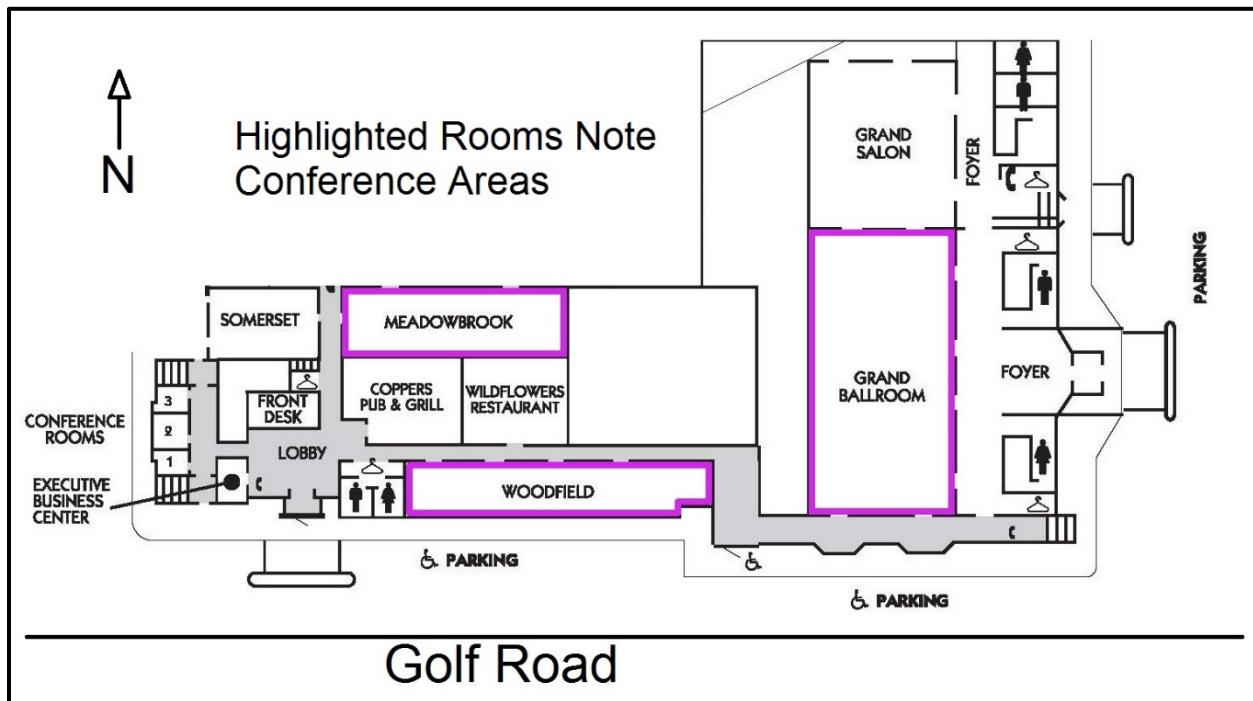
Printed Name: _____

Signature: _____

Date: _____

Retain this copy for your records

2018 Spring Technical Conference – Conference Areas Map:



Thank You for Attending the 2018 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 a Spring Technical Conference Committee member for more information. ASCE provides great networking opportunities!