

TIME	TUESDAY - January 23, 2018			
7:00 - 8:00	WEM Complimentary Continental Breakfast			
8:00 - 9:00	WEM Automation - Greeting, Introductions & Overview of Schedules & Tracks Brookfield 4 & 5			
Course	Troubleshooting 1	Batch Plant Operation & Set-up	Drum Plant Operation & Set-up	Advance System Information
Location	Moorland 1 & 2	Brookfield 5	Brookfield 4	Moorland 7
Track Leader	Gregory & Joe	Jeff & Kevin	Randy & Adam	Adam & Ken
9:00 - 10:00	Basic Electrical 101	Batch Overview	Drum Overview	System Overview
10:00 - 11:00	Basic Electrical 102	Data Manager Business	Drum Agg. & RAP Calibration	Network
11:00 - 12:00	PC Troubleshooting	Data Manager Configuration	Drum AC and Add. Calibration	Programmable Logic Controllers (PLCs)
12:00 - 1:00	Lunch - Brookfield 1 & 2			
1:00 - 2:00	PLC Basics & Layout	Data Manager Operation	Drum / Cold Feeder Operation	PC Hardware
2:00 - 3:00	PLC Troubleshooting	Reporting	Reporting	PC Software / BIS / JWS / WEMSpeak
3:00 - 4:00	WEM VMs, Simulation, etc	Common Issues, Resolution & Spares	Common Issues, Resolution & Spares	Virtualization
4:00 - 5:00	Customer Selected Topic & Q&A	Customer Selected Topic & Q&A	Customer Selected Topic & Q&A	Customer Selected Topic & Q&A

TIME	WEDNESDAY - January 24, 2018			
7:00 - 8:00	WEM Complimentary Continental Breakfast			
8:00 - 9:00	WEM Automation - Greeting, Introductions, Service Changes Brookfield 4 & 5			
Course	Troubleshooting 1	Batch Plant Operation & Set-up	Drum Plant Operation & Set-up	Advance System Information
Location	Moorland 1 & 2	Brookfield 5	Brookfield 4	Moorland 7
Track Leader	Gregory & Joe	Jeff & Kevin	Randy & Adam	Adam & Ken
9:00 - 10:00	Basic Electrical 101	Batch Overview	Drum Overview	System Overview
10:00 - 11:00	Basic Electrical 102	Data Manager Business	Drum Agg. & RAP Calibration	Network
11:00 - 12:00	PC Troubleshooting	Data Manager Configuration	Drum AC and Add. Calibration	Programmable Logic Controllers (PLCs)
12:00 - 1:00	Lunch - Brookfield 1 & 2			
1:00 - 2:00	PLC Basics & Layout	Data Manager Operation	Drum / Cold Feeder Operation	PC Hardware
2:00 - 3:00	PLC Troubleshooting	Reporting	Reporting	PC Software / BIS / JWS / WEMSpeak
3:00 - 4:00	WEM VMs, Simulation, etc	Common Issues, Resolution & Spares	Common Issues, Resolution & Spares	Virtualization
4:00 - 5:00	Customer Selected Topic & Q&A	Customer Selected Topic & Q&A	Customer Selected Topic & Q&A	Customer Selected Topic & Q&A
5:30 - ????	Casino Night - (WEM Bucks - No Cash Exchanged) - Brookfield 3			

TIME	THURSDAY - January 25, 2018			
7:00 - 8:00	WEM Complimentary Continental Breakfast			
8:00 - 9:00	WEM Automation - Q&A - Brookfield 4 & 5			
Course	Advanced Troubleshooting 2	Drives	Loadout	One on One With an Expert
Location	Moorland 1 & 2	Brookfield 5	Brookfield 4	Moorland 7
Track Leader	Gregory & Joe	John Doke	Jeff & Kevin	Randy & Adam
9:00 - 10:00	PowerFlex 525	WEM Offer, Set-up & Troubleshooting	Loadout Set-up	Work with Techs on questions, issues, etc. Sign-on to your Syst
10:00 - 11:00	Parameters & IP Configuration		Operation & Troubleshooting	
11:00 - 12:00	Close of Training - Group Session - Questions and Discussion - Review / Feedback / Comments			
12:00 - 1:00	Lunch - Brookfield 1 & 2			
	Close of Training - Travel Time			



WEM 4000 Series Asphalt / Concrete Conference

January 23 - 25, 2018

Incorporating your suggestions from our previous conference format, our 2018 Asphalt / Concrete Conference will provide focused training on the WEM Asphalt System covering individual subject (tracks). Each of the tracks represent a selection of training sessions that include hands on labs, multi-media presentations, open technical discussions and current job-aid handouts. Students can interact closely with a team of instructors in the sessions of their choice, enabling them to dig deep into those areas of their highest interest.

Participating in this conference provides students an opportunity to attend a variety of training tracks, WEM Question & Answer (Q&A) sessions and / or presentations conducted by key WEM partners who will be presenting targeted training on their components. This time may also be used to schedule a special session with a WEM Expert.

Each student has an opportunity to customize their conference experience by selecting any of the tracks that most closely match their learning interest. Each track is comprised of one hour sessions, separated by breaks and a lunch each day. As tracks may be repeated during the conference, students are given an opportunity to attend multiple tracks of training topics while optimizing the student to teacher ratio.

Due to the popularity of several of the training tracks, seating may be limited in some sessions. Registration will be on a first come first served basis so we suggest you register early to insure your selections for a quality learning experience.

This three day conference will be held at the Sheraton Milwaukee - Brookfield Hotel in Brookfield WI starting Tuesday January 23, 2018. *Hotel location map, room reservation and registration information, conference assigned classroom locations and registration forms are included toward the end of this document.*

A color-coded map of the conference facility will be provided upon arrival to help students navigate locations of events, lunch, break-out labs and content sessions.

Asphalt Conference Track Outline

Troubleshooting 1 / Troubleshooting 2
Batch Plant Configuration / Operation
Drum Plant Calibration / Operation
Information Technology / Systems Interface
WEM Loadout Operation

Track Outline

Troubleshooting 1

WEM 4000 Control System

Purpose

A WEM Conference favorite! Reduce your downtime! Pick up troubleshooting tips, techniques and best practices from the pros! Our **extensive hands on lab** will help you find solutions to reduce hardware and electrical issues! It is geared towards **plant staff responsible for installing, maintaining and servicing** the WEM Control System.

A **Troubleshooting Lab Manual** will be handed out and followed during the lab session/presentation.

Overview / Introduction:

✓ **Attention Wisconsin Electrical Professionals:** The *Wisconsin Department of Safety & Professional Services (DSPS)* has approved this course (*ID 18862*) and has assigned registered attendees 8 hours of continuing education credit toward the following credential types:

- **Industrial Journeyman Electrician License**
- **Journeyman Electrician License**
- **Master Electrician License**
- **Registered Electrician Registration**

This lab will present the layout of the WEM Control System components, what they control, how they communicate and contribute to the success of your production. Real time presentations will be made utilizing Allen Bradley SLC and Compact PLCs, Discrete and Analog I/O, Variable Frequency Drives, Rice Lake scale meters, and Wonderware.

Operational system control panels will be utilized to enable hands on troubleshooting lab work, right in the classroom!

Individual Sessions

Electrical Troubleshooting, covering:

- Component and device wiring.
- Reading schematics, wiring diagrams, and wire numbering schemes.
- Discrete and analog devices such as: circuit breakers, relays, thermocouples, potentiometers
- How to identify and resolve common circuit faults.

PC Troubleshooting, covering:

- Basic PC functions, hardware identification and troubleshooting.
- Preventative maintenance, corrective actions and best practices.

PLC Troubleshooting, covering:

- PLC hardware, I/O cards, Device Net, Ethernet.
- The function and purpose of WEM system components.
- How field devices are wired and communicate with the WEM Control System.
- Determining the operational states of field devices.
- Identifying how WEM system components are represented on schematics and wiring diagrams.

System Resources, covering:

- WEM support tools and resources available to customers.
- Technical WEM customer support Internet connection features and options.
- Using GoToAssist for real-time, on-line WEM technical support..

Track Outline

Troubleshooting 2

WEM 4000 Control System

Purpose

A requested extension to the popular WEM Conference favorite!

Pick up where you left off in the Troubleshooting 1 session.

Learn new troubleshooting tips, techniques and best practices from the pros!

Our **extensive hands on lab** will help you find solutions to reduce hardware and electrical issues! It is geared towards **plant staff responsible for installing, maintaining and servicing** the WEM Control System.

A **Troubleshooting Lab Manual** will be handed out and followed during the lab session/presentation.

Overview / Introduction:

Students identify electrical/system faults inserted into the training equipment by recognizing symptoms, creating and analyzing flow charts, and locating problems using test instruments.

You'll gain knowledge and skills related to electronics, pneumatics, hydraulics, mechanical devices, industrial computers, sensors, instrumentation equipment and automated systems. Instrument calibration, Programmed Logic Controller (PLC) programs. Tuning closed loop automated systems and product design may also be covered.

Students selecting this course should have a working knowledge of DC and AC circuits.

Individual Sessions

PowerFlex 525 Variable Frequency Drives covering:

Rockwell Automation Connected Components Workbench feature:

- Project creation.
- Start / Stop / Forward / Reverse / Speed reference commands.
- Troubleshooting.

Parameters and Configuration, covering:

- IP Address configuration.
- Parameter configuration.
- WonderWare troubleshooting exercises.

Track Outline

Batch Plant Production / Operations

WEM 4000 Control System

Purpose

Interested in learning proven operational guidelines your entire operations staff can use to insure smooth production runs? This presentation will cover system operation with an emphasis on best practices, being proactive to typical production issues and how to effectively manage and resolve them. Bring home production solutions you've been looking for!

Overview / Introduction,

With a strong focus on interacting with the WEM Control System, this track will cover recognizing and responding to system and operator communications, plus starting, stopping and recovery from unexpected conditions.

The Batch system utilizes extensive WEM Control schemes to prepare your final product. These schemes will be discussed and described as a basis for best practices discussions.

A WEM Control System will be running in demo mode for students to work with in the classroom.

Individual Sessions

Data Manager - Business, covering:

- Entry of Mixes, Customers, Trucks and Jobs.
- Ticket Voiding and Reprinting.
- Handling split loads.

Data Manager - Configuration, covering:

- Basic calibration needs of the Batch operation.
- Explore details of the calibration process.
- Identify signs that indicate incorrect calibration values.
- How the Batching system is configured and its basic operation.

Data Manager - Operation, covering:

- Batching plant operation.
- Recognizing and responding to system and operator communications.
- Starting, stopping and recovery from unexpected conditions.

Reporting, covering:

- How the Crystal Report Writer™ tool is used to provide system reporting of data activity.
- Types of reporting provided and available output sequencing and directive options.

Common Issues, Resolution and Critical Spares, covering:

- Identify common issues that hinder efficient system operation and how to resolve them.
- Document critical and recommended spare parts - get the most bang for your bucks.

Track Outline
Drum Plant Calibration / Operation
WEM 4000 Control System

Purpose

Insure your plant specification settings conform to state mandates! What are your freefall adjust options? Discover the details of bin parameter and bin configuration settings. Want to know how to set RAP AC percentages just once per ingredient? Collect the answers to these and other questions you may have directly from WEM technicians and **save production time by resolving issues locally!**

Overview / Introduction,

Tailored for those who not only run the WEM Control System, but may also be responsible for adjusting the system settings. Discussions will cover parameter settings for Bins, Liquids, Mixers and Scales. Additionally, the session has been formatted to cover analysis and deviations, manual operations and system reporting.

A **WEM Reporting / Ticketing** reference document will be provided to the attendees.

A WEM Control System will be running in demo mode for students to work with in the classroom.

Individual Sessions

Drum System Calibration, covering:

- Basic calibration needs of the Drum operation.
- Calibrate Agg belts, RAP belts, Ingredients; i:e: Asphalt, Lime, Additives, Mineral filler, etc.
- Identify signs that indicate incorrect calibration values.

Drum / Cold Feeder, covering:

- Drum / Cold Feed operational guidelines.
- Recognizing and responding to system and operator communications.
- Starting, stopping and recovery from unexpected conditions.

Reporting, covering:

- How the Crystal Report Writer™ tool is used to provide system reporting of data activity.
- Types of reporting provided and available output sequencing and directive options.

Common Issues, Resolution and Critical Spares, covering:

- Identify common issues that hinder efficient system operation and how to resolve them.
- Document critical and recommended spare parts - get the most bang for your bucks.

Track Outline

Information Technology / System Interface

WEM 4000 Control System

Purpose

Interested in the answers to questions typically asked by Information Technology / System Management staff! This session has been designed to cover the technical requirements of the WEM Control System, general IT topics plus how Technology Interconnect information, Networking, and Firewalls pertain to the WEM system.

A WEM handout provided to the attendees will be used in the presentations.

Overview / Introduction,

Join us to take the mystery out of this technical topic, plus discuss the management and control of production data being transferred between your Front Office automated system and the WEM Control System.

Individual Sessions

Networking, covering:

- Purpose of multiple network cards.
- Network topics including Domain, IP Addressing plus Virus scanning topics.
- Communication with PLC's and other devices.
- System security.

PC Hardware and Backup, covering:

- Purpose / features / functions of the Automatic Backup vs Manual Backup applications.
- Repurposing a PC to replace a critical, failed PC.
- SQL Backup and Restore.
- What is WEM Redundancy? What is RAID? What are they used for? Why are they important?

BIS / JWS, covering:

- The WEM Business Intelligence System communication process.
- The JWS application interface exchange and data currently supported.
- Implementing and managing the JWS application interface.

WEMSpeak, covering:

- Interface configuration and basic operation between WEMSpeak and Front Office systems.
- Transfer template formatting specifications, and where used.
- Communication pathway to and from the WEM Control System employed by WEMSpeak.

Virtualization, covering:

- Virtualization options.
- Future planning for virtualization.

Track Outline
WEM Loadout Operation
WEM 4000 Control System

Purpose

Automate your system loadout functions! Create detailed transactions that will interface with your front office data processing inventory management system. Print loading hard copy tickets locally!

Overview / Introduction,

Participate in taking the mystery out of the management and control of production data transferred between your Front Office automated system and the WEM Control System.

Individual Sessions

Configuration settings, covering,

- No Flow Amount / No Flow Time / Freefall / Settle Time / Jog Time.
- Scale / Silo Parameter and Configuration settings.
- Truck Bin.
- Truck scales, Negative Weigh scales, Batchers scales.

Vehicle definition / identification, covering,

- Interaction with Data Manager.

Product loading / Distribution / Truck queue / Returns, covering,

- Compartment distribution / Selection / Re-assignment.
- Loading options.
- Empty Bin / No Flow situations.

Ship / Receive

- Manual / Credit ticket processing.
- Ship / Receive Orders / Order queue.

Loadout Operations / Troubleshooting, covering:

- Recognizing and responding to system and operator communications.
- Typical plant situations that may affect normal operation will be discussed.



AUTOMATION LLC

Conference Registration

To Register: Fax, Mail or Email the following 2 pages to:

Regina Poledica, at WEM Automation LLC, P. O. Box 510767, New Berlin, WI 53151-0767
Email: Rpoledica@wemautomation.com Phone: 262-782-2340 Fax: 262-782-2653.

Customer Information

Company _____ Contact _____

Address _____ Phone _____

City, State, Zip _____ Fax No. _____

Conference Tuition

An early registration tuition fee of \$1,295.00 per student is available through Friday, November 24, 2017. After that date, the registration tuition fee will be \$1,495.00 per student. This tuition fee covers all conference sessions, session hand outs and mid-day lunches. Sessions start at 8:00 AM and will run to approximately 5:00 PM daily.

Make checks payable to WEM Automation LLC, or confirm via your company purchase order. Attendees are responsible for their own transportation to and from the training conference, as well as lodging and meal costs, other than the WEM sponsored lunches.

A fee of \$150.00 will apply if a registered student cancellation is received after Friday, December 15, 2017. If WEM is notified that an alternate student will fill the cancelled registration, the cancellation fee will be waived.

Payment Options:

Bill me using P.O. # _____

Name: _____

Visa/Master card # _____ Exp. date: _____

Security Code: _____

I am paying by check. (Make check payable to WEM Automation LLC)

Total Number of Students Registered: _____

Total from following page

Course Selection

For Each Student:

- Each of the one-day courses is repeated on Tuesday and Wednesday.
- Choose **ONE** all-day course for Tuesday,
- Choose another (**DIFFERENT**) all-day course for Wednesday.
- Choose another (**DIFFERENT**) course for Thursday.

Circle your selection for each day, for each student. For more than 8 students provide a second form.

			A - Tuesday	B - Wednesday	C - Thursday
Student			Select <u>one</u> all-day course per student	Select <u>one</u> all-day course per student	Select <u>one</u> course per student
1	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert
2	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert
3	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert
4	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert
5	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert
6	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert
7	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert
8	Name: (required)		Troubleshooting 1	Troubleshooting 1	Troubleshooting 2
			Batch Plant	Batch Plant	PowerFlex Drives
	email: (required)		Drum Plant	Drum Plant	WEM Loadout
			Info. Technology	Info. Technology	1 on 1 with Expert

Hotel And Room Reservation Details

WEM 4000 Series Asphalt / Concrete Conference

January 23 - 25 , 2018

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WEM Automation, LLC has set aside a block of rooms for this conference containing 1 king bed, at a rate of \$93 + taxes, per night. This "block rate" expires January 19, 2018. Rates may also vary for other room configurations that you may request at time of registration. Make your reservations by contacting the hotel at your convenience.

Sheraton Milwaukee - Brookfield Hotel, 375 S Moorland Rd., Brookfield WI 53005

The following link can be used to book, modify, or cancel a reservation from October 24, 2017 to January 27, 2018. [WEM Asphalt Customer Conference 2018](https://www.starwoodmeeting.com/events/start.action?id=1710240298&key=FC3B953)

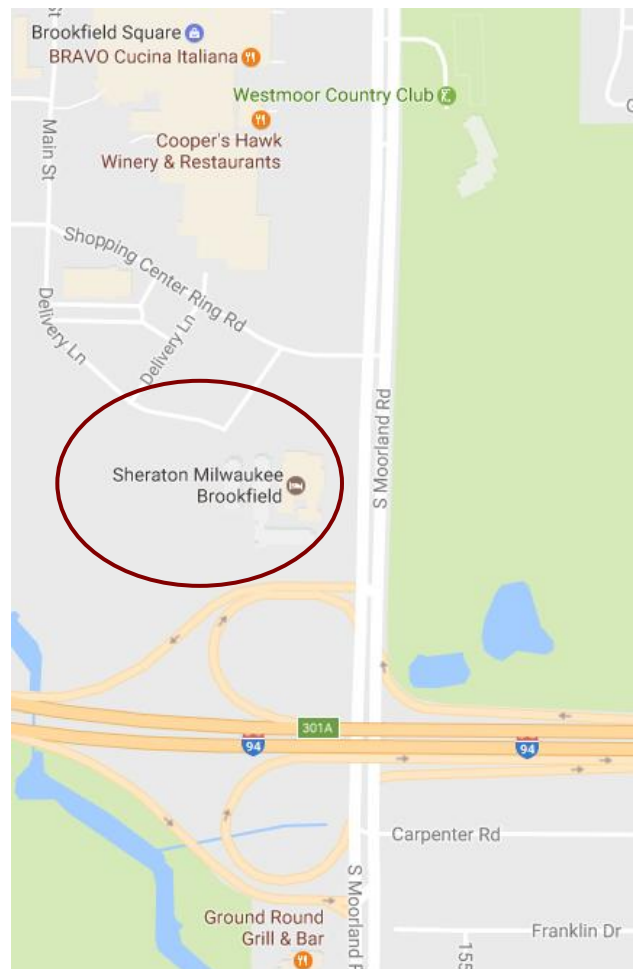
(OR copy and paste the following link into a web browser)

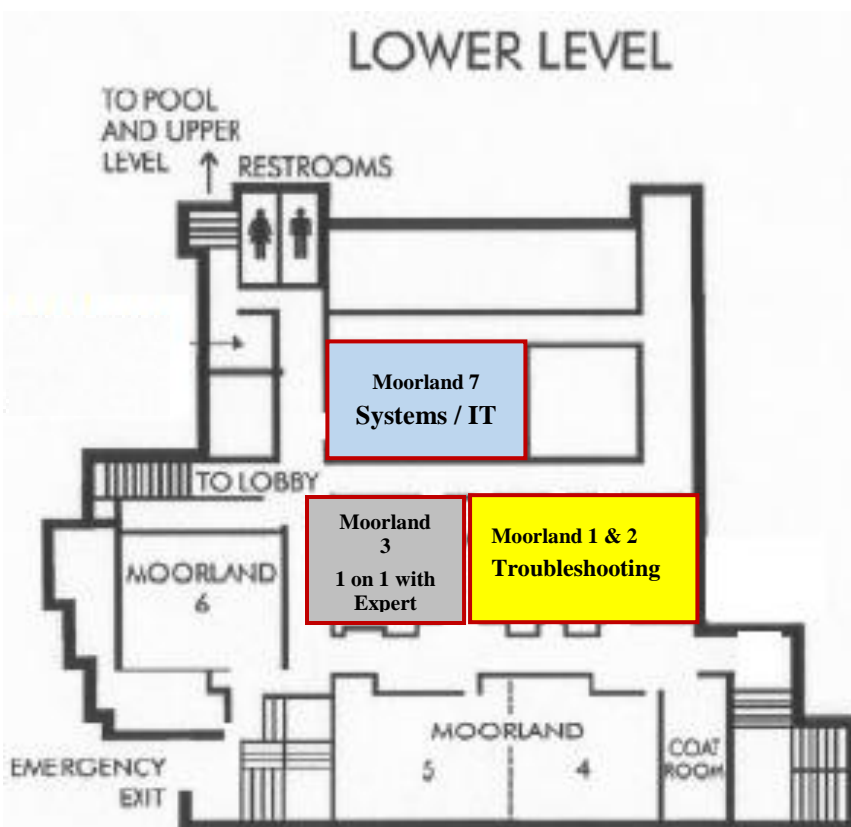
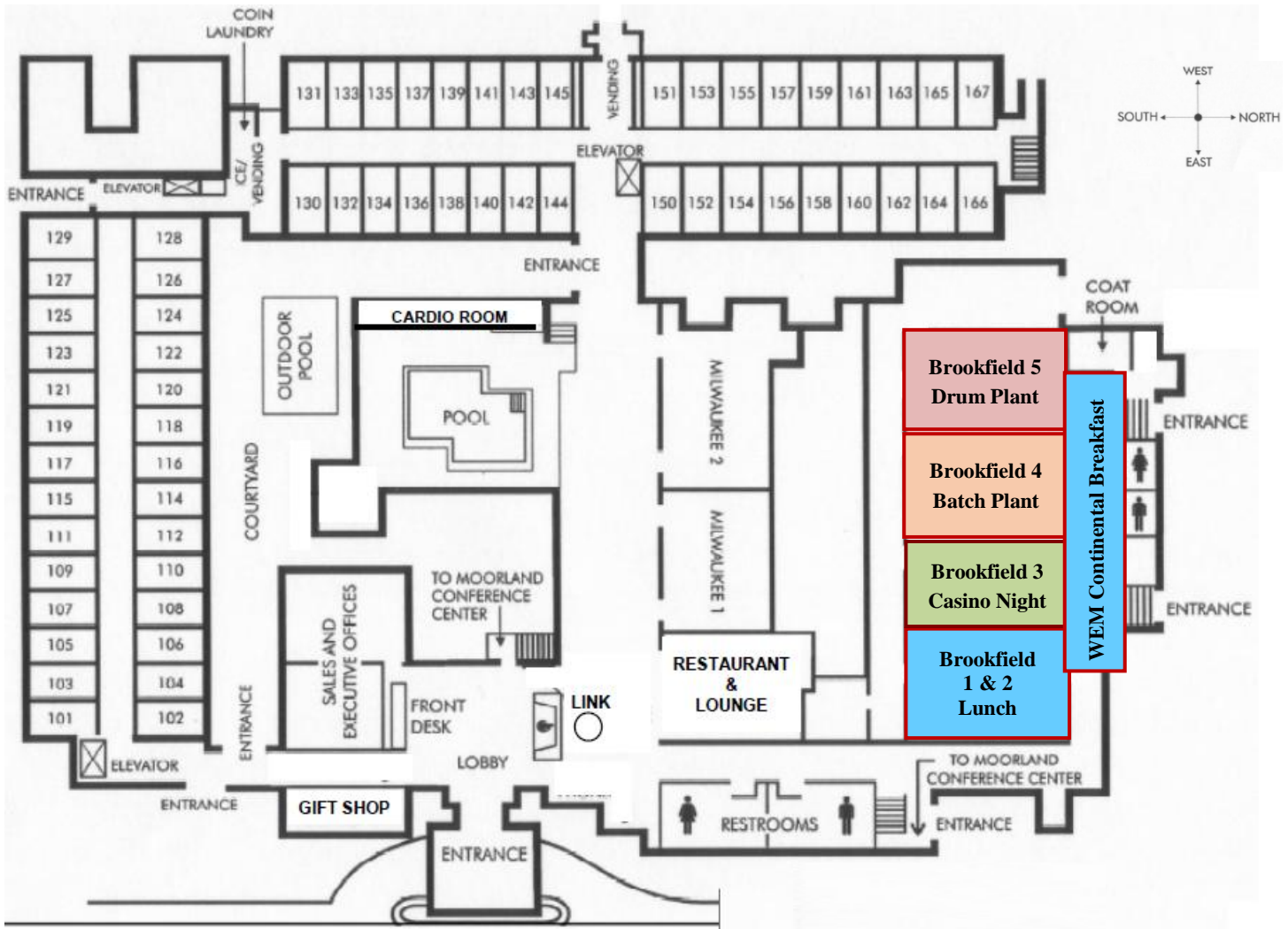
<https://www.starwoodmeeting.com/events/start.action?id=1710240298&key=FC3B953>

The Sheraton Milwaukee - Brookfield Hotel is located west of Milwaukee, approximately 30 minutes from the Milwaukee airport. The facility is immediately north of Interstate 94 / Exit 301B north on South Moorland Rd. (See map here). It is in the business district, immediately south of Brookfield Square Mall, close to numerous restaurants and retail outlets.

A partial list of hotel features includes: free airport transportation, an indoor pool, fitness center, refrigerators, flat-screen televisions and complimentary wireless Internet access.

A continental breakfast will be provided by WEM near the North entrance in the WEM class room area. (see class room map, next page).





Troubleshooting 1 and Troubleshooting 2
Batch Plant Configuration / Operation
Drum Plant Calibration / Operation
Information Technology / Systems Interface
WEM Loadout Operation