Asphalt Pavement
Columbus, OH - Tuesday, February 11, 2020

Learn about the history of pavements, set design goals, and improve sustainability
Learn from the results of the Strategic Highway Research Program (SHARPS)
Explore the use of recycled asphalt pavement

Consider methods of pavement inspection
Review an actual pavement management budget
Learn about preventative maintenance as well as repair techniques

Continuing Education Credits
Professional Engineers
6.5 CPD Hours

Agenda
Presented by Joe Kindler, Sr., P.E.

Design
History of pavements, design goals, improving sustainability
Factors that influence design and necessary data

SHARPS (Strategic Highway Research Program)
Before SHARPS
- Pavement problems (rutting, cracking), material testing
Superpave
- Performance testing, design, using PWEXPRESS
RAP (recycled asphalt pavement)
- HMA (hot mix asphalt) production vs increased RAP challenges
- Increased RAP vs HMA design challenges
- Semi-circular bending (SCB) Fracture energy test

Pavement Management
Inventory
- Branches, sections, wards, ranks organized your way
Inspection
- PCR (pavement condition rating), PCI (pavement condition index), automated
- ASTM D6433
Document production
- Actual budget related to average condition, justification for decisions, documentation for additional funding

Preventive Maintenance
Rejuvenators, seals, chip, slurry, micro, cape
- Thin-lays and micro-mill

Pavement Maintenance
Mill and fill, rehabilitate, new materials or repairs that work

You’ll be able to:
Identify pavement design goals and improve sustainability.
Discuss the results of the Strategic Highway Research Program, and learn how the program has improved performance, durability and safety.
Explore Superpave and recycled asphalt pavement.
Learn about pavement management, including inspections and budgeting.
Apply new techniques in preventive maintenance.
Discuss new materials and repairs that work.

Can’t Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!
A full recording of this seminar is starting at $269, which includes shipping and handling. This learning method does not qualify for the continuing education credit in Ohio or for the AIA/CES and LA/CES. Please allow five weeks from the seminar date for delivery.
Mr. Kindler graduated with a BS degree in Civil Engineering from Case Institute of Technology, after which he spent six years with ODOT as a maintenance engineer in District Six. He went on to spend eight years with the City of Columbus as a street maintenance engineer, and 14 years as a partner in a preventative maintenance construction company, introducing Ralumac (micro surfacing) to Ohio and surrounding states. Since then he has been a consultant providing pavement management and pavement preservation techniques to clients in Ohio and Florida and various states in between. He has participated in two national PAVER workshops and numerous state and local workshops pertaining to pavement management and pavement preservation. Presently, Mr. Kindler is teaching a course in pavement design at The Ohio State University.

Joe Kindler, Sr., P.E.

### Seminar Information
Crowne Plaza
Columbus North - Worthington
6500 Downtown Avenue
Columbus, OH 43229
(614) 865-1885

**Tuition**
$269 for individual registration
$289 for three or more simultaneous registrations.

*Included with your registration:*
Complimentary continental breakfast and printed seminar manual.

**How to Register**
Visit us online at www.halfmoonseminars.org

**Continuing Education Credit Information**
This seminar is open to the public and offers 6.5 CPD (PDHs) to professional engineers in all states. Educators and courses are not subject to preapproval in Ohio.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey (Approval No. 246/PO00007070), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects.

Attention will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

**Aerial Mapping Technologies and Procedures**
Overview of Aerial Mapping Technologies and Platforms
Thurs., Jan. 23, 2020, 11:00 AM - 12:30 PM PST
Mapping Using UAS and Photogrammetry
Thurs., Jan. 23, 2020, 10:00 - 11:00 PM PST
Post Processing Software Applications and Photogrammetry Demonstration
Fri., Jan. 24, 2020, 11:00 AM - 1:00 PM PST
FAA Commercial UAS Regulations and FAA Part 107
Fri., Jan. 24, 2020, 1:30 - 3:00 PM PST

Introduction to the World of BIM and the Revit Basics
BIM and Revit Overview
Wed., Jan. 29, 2020, 11:00 AM - 12:30 PM PST
Revit Model Building and Elements
Wed., Jan. 29, 2020, 10:00 - 12:00 PM PST
Creating Sheets in Revit
Thurs., Jan. 30, 2020, 11:00 AM - 12:30 PM PST
Revit Drafting and 3D Model Management
Thurs., Jan. 30, 2020, 11:30 - 1:00 PM PST

**Additional Learning**

**Webinar Series**
Demolition and Deconstruction
Wed., Jan. 15, 2020, 11:00 AM - 1:00 PM PST

• Purposes and Benefits of Demolition and Deconstruction
Wed., Jan. 15, 2020, 11:30 - 1:00 PM CST

• Markets/Uses for Deconstructed Materials
Wed., Jan. 15, 2020, 10:00 - 11:00 PM CST

• Material-Specific Deconstruction Methods
Thurs., Jan. 16, 2020, 11:00 AM - 12:30 PM CST

• Planning and Conducting a Deconstruction
Thurs., Jan. 16, 2020, 1:00 - 3:00 PM CST

**Ethical Issues for Engineers**
• Handling Ethical Issues in Professional Engineering Practice
Fri., Jan. 17, 2020, 12:00 - 2:00 PM CST

• Resolving Disputes and Handling Ethical Issues in Government Projects
Fri., Jan. 31, 2020, 12:00 - 1:00 PM CST

• Complying with Rules of Professional Conduct
Fri., Feb. 14, 2020, 12:00 - 1:00 PM CST
For more information and other online learning opportunities visit: www.halfmoonseminars.org/webinars/

**Registration Information**
Columbus, OH - Tuesday, February 11, 2020

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**Tuition**
|  | Single Registrant - $289.00 |
|  | Three or more registrants from the same company registering at the same time - $269.00 each |

| Checks: Make payable to HalfMoon Education Inc. |
| Credit Card: Mastercard, Visa, American Express, or Discover |

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