

Agenda

Presented by James “Jay” A. McKelvey, III, D.GE, F.ASCE

Soil Mechanics Review, OSHA Requirements and Slope Stability

Soil mechanics review
OSHA requirements for excavations
Safe vs. stable excavations
Slope stability for excavations

Shoring Options and Earth Pressure Theories and Influences

Shoring options
Earth pressure theories
Influence of surcharges
Influence of overlying slopes and seepage

Vertical Excavation Design

Modes of Failure
ASD and LRFD design methodologies
Cantilever wall analysis
Influence of movement
Lateral earth pressures for braced walls
Braced walls
Anchored walls
Cofferdams
Basal heave
Horizontal deformation
Vertical deformation
Structural design

Case Histories

Open cuts
Vertical shoring
Cofferdams
Tie Backs

Deep Excavations
Natick, MA - Monday, May 14, 2018

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Learning Objectives

You'll be able to:

Review OSHA requirements for excavations and maintain safe excavation conditions.

Understand earth pressure theories and explore shoring options.

Discuss ASD and LRFD design methodologies.

Explore applications for braced walls, anchored walls, and cofferdams.

Consider the possibility of vertical or horizontal deformation and discuss excavation case histories.



Deep Excavations

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Review soil mechanics and earth pressure theory

Explore OSHA requirements for excavations, and get tips on maintaining safe excavations

Explore shoring options

Review ASD and LRFD design methodologies

Discuss applications for braced walls, anchored walls and cofferdams

Learn from deep excavation case studies

Continuing Education Credits

Architects

6.5 HSW Continuing Ed. Hours
6.5 AIA HSW Learning Units

Professional Engineers

6.5 PDHs

Contractors

Non-Credit Continuing Ed.



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Faculty

James “Jay” A. McKelvey, III, D.GE, F.ASCE *Director- Geotechnical Design Division at Earth Engineering Inc.*
Mr. McKelvey is the director of the Geotechnical Design Division at Earth Engineering Inc. He is a registered professional engineer (P.E.) in California, Delaware, Maryland, New Jersey, Pennsylvania, and Virginia. Mr. McKelvey is also a diplomate (D.GE) of the Academy of Geo-Professionals and a fellow of the American Society of Civil Engineers (F.ASCE).

Mr. McKelvey has extensive experience in geotechnical engineering including site assessment and field investigations; deep and shallow foundation design for buildings, bridges and other structures; retaining wall design; embankment stability; mechanically-stabilized soil structure; and subsurface hydrology.

He also has significant experience in heavy construction claim mitigation and in litigation support pertaining to impacted heavy construction projects. Mr. McKelvey has also handled construction support and construction quality assurance projects.

His environmental engineering experience includes technical contributions to the remediation of many Superfund sites and over 50 landfill design projects.

Mr. McKelvey has published over 25 technical papers in journals, conference proceedings and trade magazines. He is currently the treasurer for the Delaware Valley Geo-Institute (DVGI), serves on the GeoInstitute committees for Earth Structures and Geosynthetics, and is a voting member in ASTM committees Soil and Rock (D18), and Geosynthetics (D35).

Seminar Information

Courtyard by Marriott Natick
342 Speen Street
Natick, MA 01760
(508) 655-6100

Tuition

\$279 for individual registration
\$259 for three or more registrations.

Each registration includes a complimentary continental breakfast and printed seminar manual.

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

Continuing Education Credit Information

This seminar is open to the public and offers up to 6.5 HSW continuing education hours to architects and 6.5 PDHs to engineers in all states, except Florida architects. Educators and courses for Massachusetts architects are not subject to pre-approval.

This seminar is approved by the American Institute of Architects for 6.5 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

HalfMoon Education is deemed an approved architect continuing education sponsor in New York. HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Louisiana, Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota.

This seminar offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any state with a construction contractor continuing education requirement.

Attendance 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.

Additional Learning

Webinar Series

Shallow Foundations

- **Evaluating Building Sites**
Thurs., April 19, 2018, 11:00 AM - 12:30 PM CDT
- **Shallow Foundation Design**
Thurs., April 19, 2018, 1:00 - 2:30 PM CDT
- **Special Considerations in Foundation Design and Construction**
Fri., April 20, 2018, 11:00 AM - 1:00 PM CDT
- **Soil Improvement and Foundation Diagnosis and Repair**
Friday, April 20, 2018, 1:00 - 2:30 PM CDT

Erosion and Sediment Control

- **Basics of Site Stormwater Regulations and Requirements**
Wed., April 25, 2018, 11:00 AM - 12:00 PM CDT
- **Structural and Non-Structural Erosion and Sediment Control Best Practices**
Wed., April 25, 2018, 12:30 PM - 2:30 CDT
- **Site Planning**
Thurs., April 26, 2018, 11:00 AM - 1:00 PM CDT

Community Solar and Rooftop Solar

- **Community Solar**
Wed., May 2, 2018, 11:00 AM - 2:15 PM CDT
- **Design Your Solar Roof**
Thurs., May 3, 2018, 11:00 AM - 2:15 PM CDT

Complying with Fire and Building Codes

- **Introduction to Fire Protection and Life Safety Design**
Thurs., May 3, 2018, 11:00 AM - 12:30 PM CDT
- **Occupancy Classifications**
Thurs., May 3, 2018, 1:00 - 2:30 PM CDT
- **Means of Egress**
Fri., May 4,, 2018, 11:00 AM - 1:00 PM CDT
- **Fire Protection Features and Occupancy Exercises**
Fri., May 4, 2018, 1:30 PM - 3:30 PM CDT

Pavement Design

- **Principles of Pavement Design**
Thurs., May 10, 2018, 11:00 AM - 12:30 PM CDT
- **Flexible Pavement Design**
Thurs., May 10, 2018, 1:00 - 2:30 PM CDT
- **Rigid Pavement Design**
Fri., May 11, 2018, 11:00 AM - 12:30 PM CDT
- **Pavement Drainage and Maintenance**
Fri., May 11, 2018, 1:00 PM - 2:30 PM CDT

Can’t Attend? Order the CD/Manual Package:

An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration

Deep Excavations

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How to Register		Registrant Information
Online: www.halfmoonseminars.org		Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip _____ Occupation: _____ Email: _____ Phone: _____
Phone: 715-835-5900		Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____
Fax: 715-835-6066		
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		
Complete the entire form. Attach duplicates if necessary.		
		Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.

()  I need special accommodations. Please contact me.

Tuition

() **I will be attending the live seminar.** Single Registrant - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.

() **I am not attending.** Please send me the CD manual package for **\$289.00**. (S&H included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.

Credit Card: *Mastercard, Visa, American Express, or Discover*

Credit Card Number: _____

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