

Agenda

Presented by *Ibraheem Shunnar*

Retaining Wall Design and Slope Stabilization Techniques Day One

Tuesday, July 13, 2021 | 11:00 am - 2:15 pm CDT (including a 15-min. break)

Introduction to Soil Mechanics

An overview of soil mechanics

Retaining Walls – Stability & Types

Loads and forces

- Lateral earth pressure
- Water pressure
- Surcharge and traffic loading
- Seismic loading

External Stability of retaining walls

- Sliding
- Overturning
- Bearing capacity
- Global stability
- Settlement

LRFD vs ASD

Types of stability of retaining walls

- Conventional gravity walls
- Segmental retaining walls
- MSE
- Cellular confinement wall
- Gabions
- Cantilevered walls
- Sheet pile wall

Selection of wall type

Internal Stability of Retaining Walls

Cantilevered retaining walls MSE walls
Cellular confinement walls

Retaining Wall Design and Slope Stabilization Techniques Day Two

Wednesday, July 14, 2021 | 11:00 am - 2:15 pm CDT (including a 15-min. break)

Slope Stability and Stabilization

Slope stability analysis

Evaluation of slope failures

Stabilization techniques and monitoring

- Unloading
- Drainage
- Buttrressing
- Reinforcement
- Monitoring methods and criteria

Biotechnical Slope Stabilization

Introduction

Principles of biotechnical stabilization

Case studies

Retaining Wall Design and Slope Stabilization Techniques

Online - Tuesday, July 13 and Wednesday, July 14, 2021

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Learning Objectives

You'll be able to:

Discuss the principles of soil mechanics and learn how they impact slope and retaining wall stability.

Examine the loads and forces that act on retaining walls, and design for stability against sliding, settlement and overturning.

Explore the stability of conventional gravity walls, MSE walls, gabions, cellular confinement walls and more.

Apply slope stabilization techniques, including unloading, buttrressing and reinforcement.

Discuss principles of biotechnical slope stabilization, and review successful case studies.



HalfMoon Education Online Learning Retaining Wall Design and Slope Stabilization Techniques

Live, Interactive Webinar Series
Tuesday, July 13 and Wednesday, July 14, 2021



Consider the impact of soil mechanics on slope and retaining wall stability

Examine loads and forces on retaining walls

Explore internal, external and global stability

Discuss the stability of gravity, MSE, segmental and cantilevered walls

Apply stabilization techniques to slopes

Consider biotechnical slope stabilization and review case studies

Continuing Education Credits

Professional Engineers
6.0 PDHs

Architects
6.0 HSW CE Hours

AIA
6.0 LU | HSW

Landscape Architects
6.0 HSW CE Hours

LA CES
6.0 HSW PDHs

Floodplain Managers
6.0 ASFPM CECS

International Code Council
.6 CEUs (Sitework)



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Faculty

Ibraheem Shunnar *Director of Engineering at The Mannik & Smith Group*
Mr. Shunnar has more than 25 years of experience in geotechnical engineering with expertise in specialty foundations, ground improvement, slope stability, instrumentation and waste management. He has a master's degree in Geotechnical Engineering from the University of Michigan, and he is a registered professional engineer. He is the author of many articles and papers on geotechnical engineering. He was the project manager for the Fairlane Green redevelopment project, winner of the 2008 National Phoenix Award. He is also the recipient of the distinguished achievement award from the University of Michigan.

Webinar Information

Day One: Tuesday, July 13, 2021

11:00 am - 2:15 pm CDT (including a 15-min. break)

Day Two: Wednesday, July 14, 2021

11:00 am - 2:15 pm CDT (including a 15-min. break)

(please log into the webinar 15 - 30 minutes before start time)

Tuition

\$289 for individual registration

\$199 for three or more registrants from the same company at the same time.

Included with your registration: PDF seminar manual.

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

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Additional Learning

Stream Restoration for Design Professionals

- Wed, May 26, 2021 | 9:00 am - 4:30 pm CDT

Introduction to HEC-HMS Modeling

- Thurs, May 27, 2021 | 8:30 am - 3:50 pm CDT

AIA Contract Document Workshop

- Tues, June 1, 2021 | 8:30 am - 4:30 pm CDT

Commercial Site Pavement Design, Installation and Maintenance

- Wed, June 2, 2021 | 8:30 am - 4:30 pm CDT

How to Design and Construct MSE Walls

- Wed, June 2, 2021 | 10:00 am - 1:30 pm CDT

Basics of Structural Steel Design

- Fri, June 4, 2021 | 8:30 am - 3:45 pm CDT

National Electrical Code 2020: Grounding and Bonding

- Fri, June 4, 2021 | 8:30 am - 5:00 pm CDT

Soils Engineering

- Tues, June 8 2021 | 11:00 am - 2:15 pm CDT

- Wed, June 9, 2021 | 11:00 am - 2:15 pm CDT

Deep Dive into

Integrated Stormwater Management

- Tues, June 8, 2021 | 2:00 - 5:15 pm CDT

Practical Site Engineering: Science & Techniques

- Thurs, June 10, 2021 | 11:00 am - 3:15 pm CDT

- Fri, June 11, 2021 | 11:00 am - 2:15 pm CDT

The Tree Course

for the Mid-Atlantic Region

- Fri, June 11, 2021 | 8:00 am - 3:30 pm CDT

Deep Dive into Slope Stability

- Mon, June 14, 2021 | 10:00 am - 2:30 pm CDT

Stormwater Basins and Underground Systems

- Tues, June 15, 2021 | 9:00 am - 4:30 pm CDT

For more information

and other online learning opportunities visit:

www.halfmoonseminars.org

Continuing Education Credit Information

This webinar offers 6.0 PDHs to professional engineers and 6.0 HSW continuing education hours to architects in all states. It offers 6.0 HSW continuing education to landscape architects licensed in all states, except Florida, New Jersey, or North Carolina.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers, architects, and landscape architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2), §69.6(i)(2), and §79-1.5(i)(2)). Courses approved by the AIA/CES qualify for Florida and New Jersey architects.

This course has been approved by the American Institute of Architects Continuing Education System for 6.0 LU | HSW (Sponsor No. J885) and the Landscape Architecture Continuing Education System for 6.0 HSW PDHs. Only full participation is reportable to the AIA/CES and LA CES.

The Association of State Floodplain Managers has approved this course for 6.0 CECs.

This course is approved by the International Code Council for .6 CEUs in the specialty area of Sitework (Preferred Provider No. 1232).

Completion certificates will be awarded to participants who complete this event, respond to prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Registration

Retaining Wall Design and Slope Stabilization Techniques

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How to Register		Registrant Information
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Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		Name: _____ Occupation: _____ Email: _____ Phone: _____
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 webinar.** Single Registrant - **\$289.00**. Three or more registrants from the same company registering at the same time - **\$199.00** each.

() **I am not attending.** Please send me the webinar recording:

Streamable MP4 Video/PDF Manual for **\$299.00**.

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