Credit Information

Slope Stabilization and Landslide Prevention

This webinar offers 7.5 PDHs to professional engineers and 7.5 HSW continuing education hours to architects in all states. It offers 7.5 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 lersey (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) and §69.6(i)(2), §79-1.5(i)(2)). Courses approved by the AIA/CES qualify for Florida and New Jersey architects. Other states do not preapprove continuing education providers or courses.

This course has been approved by the American Institute of Architects Continuing Education System 7.5 LU | HSW (Sponsor No. 1885) and the Landscape Architect Continuing Education System for 7.5 HSW PDHs. Only full participation is reportable to the AIA/CES and LA CES.

This course is approved by the International Code Council for .75 CEUs in the specialty are of Sitework (Preferred Provider No. 1232).

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

Soils Engineering

This webinar offers 6.0 PDHs to professional engineers and 6.0 HSW continuing education hours to architects licensed in all states.

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 and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 6.0 LU | HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .6 CEUs in the specialty area of Sitewodrk (Preferred Provider No. 1232).

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

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Plus

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Live, Interactive Webinars

Slope Stabilization and Landslide Prevention

- Monday, June 7, 2021 | 8:30 am - 5:00 pm CDT

Soils Engineering

- Tuesday, June 8 2021 | 11:00 am 2:15 pm CDT
- Wednesday, June 9, 2021 | 11:00 am 2:15 pm CDT

To register, view detailed presenter biographies, and see other learning opportunities, please visit:

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Slope Stabilization and Landslide Prevention

Monday, June 7, 2021 | 8:30 am - 5:00 pm CDT

Credits: Professional Engineers: 7.5 PDHs Architects: 7.5 HSW CE Hours AIA: 7.5 LU | HSW Landscape Architects: 7.5 HSW CE Hours LA CES: 7.5 HSW PDHs Floodplain Managers: 7.5 ASFPM CECs International Code Council: .75 CEUs (Sitework)

Soils Engineering

Tuesday, June 8 2021 | 11:00 am - 2:15 pm CDT Wednesday, June 9, 2021 | 11:00 am - 2:15 pm CDT

Credits: Professional Engineers: 6.0 PDHs Architects: 6.0 HSW CE Hours AIA: 6.0 LU | HSW International Code Council: .6 CEUs (Sitework)

To register, visit us online at www.halfmoonseminars.org

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Slope Stabilization and Landslide Prevention

Monday, June 7, 2021 | 8:30 am - 5:00 pm CDT (incl. a 30-min break)

Tuition: \$289 per registrant, \$199 per registrant for three or more

Credits: Professional Engineers: 7.5 PDHs Architects: 7.5 HSW CE Hours AIA: 7.5 HSW CE Hours Landscape Architects: 7.5 HSW CE Hours LA CES: 7.5 HSW PDHs Floodplain Managers: 7.5 ASFPM CECs

International Code Council: .75 CEUs (Sitework)

Presented by Curren E. Mohney

Slope Movement and Mechanisms

Types of slope movement and instability

- Rock fall and rockslides • Translational and rotational failures
- Debris flows and rapidly moving landslides

Analyzing the stability of slopes

Slope stability concepts

- Reviewing geologic conditions
- Examining soils and topography
- Evaluating surface and groundwater conditions

A brief discussion of soil and rock mechanics

The influence of water

Evaluating types of slopes

 Natural slopes · Engineered slopes

Methods of slope stability analysis

Slope Stabilization Methods

Use of vegetation (bioengineering)

Surface protection Unloading Buttressing Buttressing for streambank stabilization and environmental considerations

Drainage Reinforcement

Installing earth retention structures

Rock slope stabilization Combining methods

Landslide Hazard and Risk Assessment

Definitions and elements of landslide hazard risk

Risk-reduction strategies (objectives for landslide mitigation)

Lifestyle cost analysis **Applications**

Case Histories in Landslide Mitigation

Slope stabilization using retaining walls

Slope stabilization using combinations of methods

Rockfall mitigation

Slope stabilization using earthworks

- Shear keys and buttresses
- Unloading

Slope stabilization using drainage

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To register, and to see other learning opportunities, please visit:

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or call our Customer Service Department at (715) 835-5900

Soils Engineering

Tuesday, June 8 and Wednesday, June 9, 2021

Tuition: \$289 per registrant, \$199 per registrant for three or more

Credits: Professional Engineers: 6.0 PDHs Architects: 6.0 HSW CE Hours AIA: 6.0 LU | HSW International Code Council: .6 CEUs (Sitework)

Presented by Liiban A. Affi

Day One: Tuesday, June 8 2021

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

Introduction to Soils Engineering

Practical soil mechanics Footings and mat foundations

Driven piles and drilled pier foundations

Lateral earth pressures (static, seismic and surcharges)

Hillside slopes and repair methods Cantilever retaining walls

Restrained basement walls Segmental (geogrid) retaining walls

Design Excavation Support Systems

Geo technical parameters and loading diagrams

Cantilever soldier beams Gross pressure vs net pressure Fixed earth method Tied-back soldier beams Sheet piles – cantilever and tied back Tangent and secant piles Soil nail walls

Day Two: Wednesday, June 9, 2021

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

Slope Repair Techniques

Drilled shafts- downward and uplift loads

Lateral and bending moments

Torsional moments

Anchored tiebacks

- Strands Threaded bars
- Helical piles

Repairing failing retaining walls

Avoiding over-conservative designs

Soil Engineering after College: Practical Approaches to Foundations and Retaining Structures

Typical soil strength values

Strength and comprehensibility parameters of granular soils

 Cohesive soils Bedrock

Geotechnical aspects of shallow foundations

- Bearing capacity Soil consolidation
- Vertical subgrade modulus values

Geotechnical criteria for deep foundations

- Skin friction End bearing
- Lateral subgrade modulus values

Earth pressures and stability of retaining structures

- Critical height of vertical cut
- Active pressure table At rest pressure table

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• Passive resistance table

Faculty

Slope Stabilization and Landslide Prevention

Curren E. Mohney Engineering Geologist

Mr. Mohney is the Engineering Geology Program leader for the Oregon Department of Transportation (ODOT). The Engineering Geology Program at ODOT encompasses site characterization, subsurface exploration, slopes and embankments, geologic hazards, groundwater, geotechnical instrumentation, and planning and research activities. In this role, he also oversees the Unstable Slopes (landslide/rockfall) Program for ODOT. He is a registered geologist and a certified engineering geologist in Oregon with over 25 years of experience in Oregon and the western states. Mr. Mohney has been the Engineering Geology Program leader since 2004. Prior to this, he had been a staff and project-level geologist for consulting firms and the mining industry as well as for ODOT. He is a graduate of the Geology Program at Portland State University. During his professional career, Mr. Mohney has been involved in the investigation, design, and mitigation of hundreds of landslides and rockfalls.

Soils Engineering

Liiban A. Affi Foundation Engineering Consultants

Mr. Affi is the founder of Foundation Engineering Consultants in the state of California. He specializes in excavation support analysis, driller pier foundation and sub-structural engineering software. Mr. Affi is a licensed civil engineer in California and has authored three books. He was recently awarded a U.S. Patent in a new method of supporting lightly loaded foundations and pavements on highly expansive soils. He is very interested in filling the practice gap between geotechnical and structural engineers when it comes to foundations and earth retaining structures.

Additional Learning

Deep Dive Webinar Series

Nine short webinars that each take a look at a single subject in May 2021

Deep Dive into **Building Classification and Occupancy**

- Tues, May 4, 2021 | 11:00 am - 2:00 pm CDT

Deep Dive into Protecting Your Openings Using Fire Door and Fire Window Assemblies

- Thurs, May 6, 2021 | 1:00 - 4:20 pm CDT

Historic Preservation for Designers

- Fri, May 7, 2021 | 1:30 - 3:30 pm CDT

Deep Dive into Real-Life **Construction Failures**

- Mon, May 10, 2021 | 2:00 - 4:00 pm CDT

Deep Dive into Invasive Landscape Plants

Deep Dive into the Important Changes of the 2021 International Building **Code and 2021 International Energy Conservation Code**

- Thurs, May 20, 2021 | 10:00 am - 1:30 pm CDT

Deep Dive into Water Infiltration in Soil

- Fri, May 21, 2021 | 11:00 am - 1:00 pm CDT

Carbon Credits and **Carbon Markets Defined**

- Mon, May 24, 2021 | 10:00 am - 12:00 pm CDT

Deep Dive Into Retaining Wall Layout for Site Designers

- Thurs, May 27, 2021 | 11:00 am - 1:00 pm CDT

- Thurs, May 20, 2021 | 11:00 am - 12:30 pm CDT For more information and other online learning opportunities visit: www.halfmoonseminars.org

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