# Agenda

***Presented by E. Allen Dunn, III, P.E.***

**Soil Investigation and Classification**
- Properties of soil
  - Importance of recognizing soil properties
  - Formation of soils
  - Types of soils
- Soil investigation
  - Site reconnaissance
  - Geology and visual observations
  - Drilling and boring
  - Test pits
  - Establishing appropriate investigational methods
  - Obtaining and reviewing geotechnical reports

**Reviewing Hydraulic and Mechanical Properties of Soils**
- Soil permeability
- Compressibility of soil
- Soil hydraulics
  - Saturation, hydraulic gradient, and conductivity
- Drained and undrained shear strength
  - Vertical and lateral earth pressure
- Stress and failure in soils

**Determining and Increasing Bearing Capacity**
- Calculating bearing capacity
- Bearing capacity of shallow foundations
- Bearing capacity of piers and piles
- Increasing bearing capacity
  - Draining and compaction
  - Soil improvement

**Determining and Increasing Slope Stability**
- Natural and engineered slopes
- Reviewing basic concepts of slope stability
- Understanding slope failures
- Impact of surface water and groundwater
- Examining slope stabilization methods
  - Unloading
  - Draining and compaction
  - Reinforcement
  - Soil improvement

**Soil Mechanics, Bearing Capacity and Slope Stabilization**
San Antonio, TX - Friday, February 15, 2019

Halfmoon Education Inc.
PO Box 278
Altoona, WI 54720-0278



# Learning Objectives

***You'll be able to:***

***Recognize*** the properties of soils that impact bearing capacity and slope stability.

***Learn*** about methods of soil investigation, including site reconnaissance, boring and test pits.

***Understand*** soil hydraulics, and discuss drained and undrained shear strength.

***Get*** tips on calculating bearing capacity of soils.

***Review*** soil improvement methods.

***Increase*** slope stability by unloading, draining and reinforcing.

# Soil Mechanics, Bearing Capacity and Slope Stabilization

*San Antonio, TX - Friday, February 15, 2019*

***Discuss*** soil characteristics

***Learn*** soil investigation techniques

***Understand*** the importance of soil permeability and compressibility

***Talk*** about stress and failure in soils

***Increase*** bearing capacity of soils

***Examine*** slope stabilization techniques

**Continuing Education Credits**

***Professional Engineers***
6.5 PDHs

***Architects & Landscape Architects***
6.5 HSW CEPHs/CE Hours
6.5 AIA HSW Learning Units
6.5 LA CES HSW PDHs

***Contractors***
Non-Credit Continuing Ed.

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# Faculty

**E. Allen Dunn, III, P.E.** *Lead Foundation Engineer, M&S Engineering LLC*

Mr. Dunn is a licensed professional engineer with over 18 years of civil engineering and related experience specializing in geotechnical engineering, pavement engineering, forensic and structural engineering, construction materials engineering and testing, and electrical transmission engineering. His professional experience includes projects throughout Texas, Louisiana, Oklahoma, Arkansas, New Mexico, and Colorado. Mr. Dunn has worked for commercial, governmental, military, and private clients. He earned a B.S. degree in Civil Engineering from Texas A&M University, and an M.S. degree in Civil Engineering and an M.B.A. degree both from the University of Texas at San Antonio.

# Seminar Information

**Norris Conference Center**
618 NW Loop 410 Suite 207
San Antonio, TX 78216
(210) 738-0040

Registration
8:00 - 8:30 am
Morning Session
8:30 am - 12:15 pm
Lunch (on your own)
12:15 - 1:15 pm
Afternoon Session
1:15 - 4:30 pm

## 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 self-study package. You may also send another person to take your place.

## Continuing Education Credit Information

This seminar is open to the public. It offers 6.5 PDHs to professional engineers in all states. Educators and courses are not subject to preapproval in Texas.

This course offers 6.5 HSW CEPHs to Texas architects and landscape architects. The American Institute of Architects has approved this course for 6.5 HSW Learning Units, and the Landscape Architecture Continuing Education System has approved it for 6.5 HSW PDHs. Only full attendance can be reported to the AIA/CES and LA/CES. Educators and courses are not subject to preapproval in Texas.

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

This course offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any state contractor licensing entity.

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

**Commercial Solar Peaker Batteries**
- **Commercial Solar Peaker Batteries, Part I**
  Wed., Jan. 9, 2019, 11:00 AM - 3:15 PM CST
- **Commercial Solar Peaker Batteries, Part II**
  Thurs., Jan. 10, 2019, 11:00 AM - 2:15 PM CST

**Proposal Writing**
Fri., Jan. 11, 2019, 11:00 AM - 3:30 PM CDT

**Technical Writing**
- **Technical Writing Basics**
  Mon., Jan. 14, 2019, 11:00 AM - 1:00 PM CST
- **Planning Documents**
  Mon., Jan. 14, 2019, 1:30 - 3:30 PM CST
- **Writing Documents**
  Tues., Jan. 15, 2019, 11:00 AM - 1:00 PM CST
- **Revising and Editing Documents**
  Tues., Jan. 15, 2019, 1:30 - 3:30 PM CST

**Fiber-Reinforced Composites**
- **Portland Cement and Masonry**
  Thurs., Jan. 17, 2019, 11:00 AM - 1:00 PM CST
- **Fiber-Reinforced Composites**
  Thurs., Jan. 17, 2019, 1:30 - 3:30 PM CST
- **Fiber-Reinforced Polymer (FRP) Composites Reinforcement**
  Fri., Jan. 18, 2019, 11:00 AM - 1:00 PM CST
- **Overview of Sandwich Materials and Structures**
  Fri., Jan. 18, 2019, 1:30 - 3:30 PM CST

**Pumping and Piping Systems**
- **Introduction to Pumps: Operation, Principles and Calculations**
  Thurs., Jan. 24, 2019, 12:00 - 2:00 PM CST
- **Design Standards and Codes**
  Thurs., Jan. 24, 2019, 2:30 - 3:30 PM CST
- **Piping System Components, Materials and Calculations**
  Fri., Jan. 25, 2019, 12:00 - 2:00 PM CST
- **Handling Pump and Piping System Problems**
  Fri., Jan. 25, 2019, 2:30 - 3:30 PM CST

For more information visit:
**www.halfmoonseminars.org/webinars/**

**Can't Attend? Order the Manual and the Audio from the Live Seminar as a Self-Study Package!**
An audio recording of this seminar is available for $289. Allow four 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

## Soil Mechanics, Bearing Capacity and Slope Stabilization

San Antonio, TX - Friday, February 15, 2019

### How to Register

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54720-0278

**Complete the entire form.** Attach duplicates if necessary.

### Registrant Information

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**Additional Registrants:**

Name: _____
Occupation: _____
Email: _____
Phone: _____

Name: _____
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Email: _____
Phone: _____

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 self-study package for **$289.00**.

☐ Downloadable MP3 Audio/PDF Manual
☐ CD/Manual Package
(Please allow four weeks from seminar date for delivery)

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