COURSE NUMBER
FHWA-NHI-132085

COURSE TITLE
Soil Nail Walls

Soil Nail Walls is a practical training course that provides civil engineers with the knowledge and ability to utilize design tools and construction methods for the safe and cost effective design of soil nail walls. The lessons present information on the analysis, design, and construction of permanent soil nail walls in highway applications, and introduces a framework that takes into account factors of safety in ASD while integrating LRFD principles. The goal of the course is to provide participants with state of the practice methods and guidelines to expand implementation of safe and cost effective soil nail technology and to help Owners identify and manage the risks associated with soil nail wall projects. The course provides technical guidance on applications and feasibility, construction materials and methods, information required for design, analysis and design of soil nail walls, corrosion protection, and contracting and specifications. Instruction is interactive, with participants actively involved in the learning experience.

OUTCOMES
Upon completion of the course, participants will be able to:

• Identify potential applications for Soil Nail Walls (SNWs) for use in transportation facilities.
• Describe the load transfer mechanisms for SNWs.
• Select appropriate material properties and nail bond strength parameters used in design.
• Apply LRFD concepts to design of SNWs.
• Prepare conceptual and basic (i.e., simple geometries) designs.
• Compare and contrast state SNW application to the standard of practice.
• Define major components of construction quality assurance (QA), requirements for SNWs, to confirm compliance with design and confirm performance.

TARGET AUDIENCE
The primary target audience is agency and consultant bridge/structures, geotechnical, and roadway design engineers; engineering geologists; and consultant review specialists. Additionally, management, specification and contracting specialists, and construction engineers interested in design and contracting of Soil Nail Walls are encouraged to attend. All attendees should have a basic knowledge of soil mechanics and structural engineering.

TRAINING LEVEL: Intermediate

FEE: 2020: $255 Per Person; 2021: N/A

LENGTH: 2 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

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