SHORT COURSE ANNOUNCEMENT

DESIGN / CONSTRUCTION OF REINFORCED SEGMENTAL RETAINING WALLS (SRW)

Instructors:
Michael Bernardi, P.E., John Paulson, P.E.

and

Sam Allen, V.P. of TRI's Testing and Research Facility

Thursday, February 16, 2006

Office Suites Plus at North Gwinnett
3235 Satellite Blvd.
Bldg. 400, Suite 300
Duluth, GA 30096 USA

Attend and learn about ....

- **Soil reinforcement principles**
- **MSE wall systems: Block facia, reinforcement, SRW applications and system descriptions**
- **Site and project evaluations**
- **Basics of SRW design**
- **Design methods available: AASHTO, NCMA - Similarities, differences**
- **Drainage principles**
- **Designing for complex geometries**
- **Relevant property measurements and associated test methods**
- **How to evaluate test results to protect your project**
- **Material acceptance and storage**
- **Construction methods**
- **Field inspection and monitoring**
- **Wall failures and lessons learned**
- **What's new**

Why This Course?

The explosion is mechanically stabilized earth (MSE) soil retaining walls installed in the last 15 years has revolutionalized the grade separation solutions currently being used in site development construction. Despite this growth design engineers, contractors and inspection/regulatory agencies are not knowledgable regarding appropriate design and construction methods. This course will uniquely cover design, materials, installation and construction quality control of soil retaining walls (SRWs).

The course focuses on the design and construction of reinforced SRW's. A brief background of the application of this technology will be presented including the advantages, economic considerations, and limitations of these types of systems as compared to other conventional practices. Details concerning the design, selection of facing and reinforcing materials, specifications and wall construction will be covered. Current design codes/standards and software will be referenced and summarized. An overview of several recent innovations such as the combination of reinforcement with lightweight fill and newly developed alternative design procedures will also be presented. Each attendee will be given course notes to support the lecture, as well as references for facing, reinforcement products and systems.

This course has been specifically targeted to those persons who have a need for a detailed understanding of SRWs. It is intended to aid those who are designing, constructing and inspecting these structures. These people include

- Design Engineers
- Specifying/Certifying Engineers
- Construction/QA Project Managers
- Installers/Contractors
- Third Party Inspectors
- Regulators

This course is presented in two parts, each complementing the other to provide maximum benefit. The first will focus on design, layout and specifications with guidance on material properties and selection, differences in design methods and available software. The second part will focus on the installation and quality control / quality assurance during construction. Finally, a summary of relevant current events and resources will be presented.

Why you should attend ....

- Design and construction quality assurance of SRWs can be a valued addition to your Engineering Consulting and Design Practice.
- Available guidance is primarily manufacturer driven and limited in context. This course presents the technology in an independent, non-biased approach.
- You will understand the advantages and limitations of various SRW systems.
- Construction QA expertise will set you apart as an SRW Contractor.

- Each attendee will be provided a certificate of course completion, suitable for use in proposals and statements of qualifications for SRW work.
- SRW course materials and notes are provided for future reference.

Where to stay for the course : Office Suites Plus – 3235 Satellite Blvd. Duluth, GA (right across from the Gwinnett Mall I85 and Pleasant Hill Road), phone: 770 291 2222

Cost/Tuition (see registration form)

1 registrant per company	**$275.00/person**
2 registrants per company	**$225.00/person**
3 + registrants per company	**$1.75/person**
government employees and students	**$95.00/person**

ABOUT TRI

TRI/Environmental, Inc. (TRI) has been active in materials testing, inspection and research and development for over twenty years. TRI is an independent, third party laboratory and consulting firm unaffiliated with any manufacturing, engineering/consulting, or construction management firm. TRI's geosynthetics testing laboratories provide a variety of services. Learn more at

www.GeosyntheticTesting.com

ABOUT YOUR INSTRUCTORS

Michael Bernardi - Partner – REDI Engineering, Inc.

Mike is a partner with REDI Engineering, a small design and consulting firm in the Atlanta Area. For the past 20 + years Mike has been involved in the design of geosynthetically reinforced retaining structures as either a technical representative of a geogrid manufacturer or as a designer. Over his career he has participated in the design of thousands of retaining structures. In the last three years alone he has designed well over a million square feet of modular block retaining walls. He served as Chairman of the SRW Design Manual Task Group for the National Concrete Masonry Association (NCMA) from 2000-2002, as well as being a long standing member of the ASCE. His experience and know-how in this field are extensive.

John Paulson - Partner with REDI Engineering, Inc.

John, also a partner with REDI Engineering, Inc, has been involved in the geosynthetic community since the early 1980's having worked for designers, geosynthetic manufacturers and block licensors in his more than 20 years practice. John has also served as a past chairman of the board for the geosynthetics Institute in Philadelphia, a member of ASTM and ASCE for over 20 years. He brings a wealth of practical industry experience to this seminar.

Sam Allen - Vice President and Division Manager - TRI

Mr. Allen is the Vice President of the Texas Research International (TRI) Geosynthetics Services Division. Sam is the Chairman of ASTM Committee D35 on Geosynthetics and the Convenor of ISO Committee 221 of Geosynthetic Durability. Sam also serves on the Technical Advisory Board of Geotechnical Fabrics Report, and is special advisor to the *In the Lab* column presenting testing issues. Sam currently serves on the Board of Directors of the Geosynthetics Institute in Folsom, PA.

SRWs
SHORT COURSE OUTLINE

Thursday, February 16, 2006

8:00-8:30am	Registration
8:30-10:00	Introduction
	(History, engineering principles, economics, material providers, etc.)
10:00-10:30	Break
10:30-12:00 pm	Design / Layout / Specifications
	(Design methods, comparison of the two predominant design procedures in practice today, drainage considerations, software review, building and material specifications and practical step by step example.)
12:00-1:00	**Lunch (provided)**
1:00-2:30	Materials and Testing
	(Materials characterization: block, soil, reinforcement; relevant test methods, demonstration of test procedures and generated test results; interpretation and use of provided test results)
2:30-3:00	Break
3:00-4:00	Installation Guidelines
	(Materials checks, basic steps in the construction of an SRW, shipping/receiving, unloading, storage, etc.)
4:00-4:30	Quality Control and Construction Quality Assurance (Responsibilities defined and discussed. Guidance on constructing a quality structure.
4:30-5:00	Current Industry Events and Available Technical Resources (Test walls, upcoming proposed design method modifications)
5:00-5:30pm	Open discussion

REGISTRATION FORM

Registration Fees:

Feb. 16, 1 registrant per company	$275.00/person
Feb. 16, 2 registrants per company	$225.00/person
Feb. 16, 3 + registrants per company	$175.00/person
Feb. 16, government employee and students	$95.00/person

Registrations must be received by 5:00 pm CST, Wednesday, February 08, 2006 - $50.00 /person late fee thereafter. Fee includes course notes and handouts, lunch and AM & PM breaks. $50.00 cancellation fee for refunds requested before February 08, 2006 -- no refund thereafter. Course notes are NOT sold separately.

Method of Payment: Payment may be made by check, money order, American Express, Visa or MasterCard.

Check Money Order Purchase Order

Make check or purchase order payable to TRI/Environmental, Inc., and mail to TRI, 9063 Bee Caves Rd., Austin, Texas 78733.

Credit Card: American Express Visa MasterCard

Credit Card # _____ Expiration Date:

Please direct questions to Ms. Melissa Hunter or Mr. Sam Allen, phone: (800) 880-8378, fax: (512) 263 2558.

PLEASE TYPE OR PRINT CAREFULLY

Name	
Position	
Company	
Address	
City	
State	
Zip	
phone number	
fax number	
e-mail	
amount paid ($'s)	

PLEASE RETURN REGISTRATION TO
ATTN: MELISSA HUNTER, FAX NUMBER: 512 263 2558