

ATTENTION:

Engineers, Contractors, Consultants, and Inspectors

In one day learn a simple, step-wise process for selecting and designing sedimentation control devices. Review innovative designs for erosion, sediment, and turbidity control for lineal and vertical construction applications. Pick up new technologies as a plan designer that you can incorporate into your next SWPPP that work towards meeting turbidity guidlines.

At the end of the course you will be able to...

- · Compute rainfall/runoff parameters for plan design
- · Design highly effective sediment containment devices
- · Discover Innovative sediment control design principles

The course will cover ...

- · Rainfall/Runoff Relationship
- · Estimating Soil Erosion
- · Channel Design Considerations & Lining Selection
- · Sediment Control Principles & Practices
- · Sediment Control Best Management Practices
- Designing for Turbidity Reduction With Active and Passive Treatment Systems

Your Instructor:

Ted M. Sherrod, PE, CPESC, CPSWQ

Ted Sherrod works as the State Roadside Environmental Field Operations Engineer with NCDOT in Raleigh. He has about 30 years of experience in erosion and sedimentation control for the planning, design, implementation, and maintenance phases of highway and bridge construction. He holds a B.S. and Masters in Biological and Agricultural Engineering from NCSU. Ted is a registered Professional Engineer, a Certified Professional in Erosion and Sediment Control (CPESC), and a Certified Professional in Storm Water Quality (CPSWQ). He currently serves as the North Carolina representative for IECA's Southeast Chapter. He has served as Past Chair of the Certified Professional's Executive Council representing environmental professionals worldwide







BMP Design for Linear Construction Projects

Thursday, March 3, 2011 Fetzer Center - Kalamazoo, MI

Completion of this course will provide 7 - PDH's. All classroom materials provided.

Presented by: The International Erosion Control Association

West Michigan Soil Erosion Control Network

WMSECN
425 36th Street SW
Wyoming, MI 49548
Phone: 616-530-8230 Fax: 616-530-2317
email: mark.cavanaugh@priceandcompany.com

A Simple Step-wise Process for Selecting and Designing BMP's for Linear Construution

Course Outline:

Rainfall-Runoff Relationship

Return Period, Exceedance Interval

Precipitation Data

Time of Concentration

Rational Method

Estimating Soil Erosion

Erosion Defined

Types of Erosion

Factors Influencing Erosion

RUSLE Soil Erosion Prediction

Basin/Trap Design w/RUSLE for Rural Linear Projects

MUSLE Sediment Delivery

Channel Design Considerations & Lining Selection

Bare Soil

Vegetation

Erosion Control Blankets

Turf Reinforcement Mats

Hard Armor

Sediment Control Principles and Practices

Design Principles to Maximize Sediment Removal

Controlling Discharge: The Principle Spillway

Rock Outlet

Skimmer

Perforated Riser (Orifice Equation)

Flashboard Riser (Weir Equation)

Controlling Discharge: The Emergency Spillway

Sediment Control Best Management Practice Design

BMP Selection

Design Requirements

Porous Baffles

Rock Sediment Basins

Skimmer Basins

Tiered Skimmer Basins

Infiltration Basins

Designing for Turbidity Reduction - Acitve & Passive

Passive Treatment Systems for Ditch Runoff

Fiber Check Dams with Polyacrylamide (PAM)

Wrapped Rock Dams with PAM

Treatment Systems for Borrow Pits

Passive Systems

Active Systems

Summary









International **Erosion Control** Association

Registration Form

BMP Design for Linear Construction

Thursday, March 3, 2011, 8:00 am-5:00 pm, Kalamazoo, MI

Last Name	First Name					<u> Title</u>		
<u>Organization</u>								
Mailing Address								
City	State			Zip				
Phone:	Fax:			Email:				
Professional Field of Practice - Select One								
☐ Academic	☐ Developer			Landscape Arch		Non-Profit Org.		Supplier
☐ Consultant		Engineer		Manufacturer		Builder		Utility Company
☐ Contractor		Gov't Agency		Mining		Stormwater		Other
Location: Fetzer Center @ Western Michigan University (Parking is Free)								
1903 W. Michigan Ave., Kalamazoo, MI 49008								
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Course Fees Please take advantage of discounted pricing (normally courses start at \$225 per							er day!)	
	\$165 W	/MSECN Member				\$200 Non-Member		
WMSECN Membership Join now and receive member rates for course fees plus a full year of regular meetings free.								
For more information on IECA membership visit www.ieca.org								
□ Professional \$35 □			Corpo	rate \$100	☐ Municipal \$50			
Payment Information Full payment MUST accompany this form								
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Credit Card #						Date		
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Authorized Signature								

Program Note: In an effort to be sensitive to the environment (not to mention your shelf space) we will be providing the course material in electronic format. We strongly suggest that every attendee bring a laptop to access the class material during the program. Power strips will be available for you to plug in. If it is not possible for you to bring a laptop please let us know when you register.

Mail to: WMSECN, 425 36th Street SW, Wyoming, MI 49548

Fax to: 616-530-2317 or **Call:** 616-530-8230

Cancellation Policy: Cancellations before February 18, 2011, will result in a \$50 cancellation fee. After February 25, 2011, no refunds will be given.