

# Designing SUDS

Limerick: 24/25 February 2009



Training from CIRIA – leading provider of performance improvement products and services in the construction and related industries



## Tutors

**Anthony McCloy, McCloy Consulting** Anthony is a civil engineer with extensive experience in the design of urban drainage systems and SUDS, and has used a variety of modelling software packages. He has worked in a wide range of organisations, including sewerage undertakers, contractors and consulting engineers.

**Bob Bray, Robert Bray Associates -** Bob is a landscape architect, who has been prominent in the design, management and promotion of sustainable drainage since 1996, he has designed SUDS for housing, schools, wildlife sites, commercial development and public parks.



## CPD

Each course has a value of 12 hours towards your CPD

## Course fees

CIRIA Core members/SME's/Local Authority Member €760  
Non members €910

## How to book

Complete and fax the form overleaf to CIRIA on +44(0)20 7253 0523

or

call the events team on +44(0)20 7549 3300

or

visit [www.ciriatraining.com](http://www.ciriatraining.com)

## Background

Sustainable drainage systems (SUDS) are arguably one of the most significant developments in urban drainage in many years. Awareness by practitioners and their implementation in developments is steadily increasing. Practical experience has led to a re-definition of best practice and a greater understanding of basic principles. It is important that practitioners not only have access to the best possible information, but also have the confidence to implement guidance and use SUDS within developments.

These training modules have been developed in partnership with EPG and Robert Bray Associates to complement current regulations and the latest SUDS guidance (The SUDS manual). The training programme will enable practitioners to efficiently plan, design, construct and manage SUDS schemes in accordance with best practice guidance and the relevant legal and regulatory framework.

## Who should attend?

The training modules are designed for all levels of knowledge from less experienced professionals fairly new to SUDS through to professionals who have extensive knowledge and experience of sustainable drainage concepts. The training will be relevant to:

- ♦ clients ♦ highway authorities ♦ landscape architects ♦ architects
- ♦ consulting engineers ♦ developers ♦ contractors ♦ environmental regulators
- ♦ local authorities ♦ sewerage undertakers ♦ planners ♦ manufacturers and suppliers

## Content and format of training

This module introduces basic design information to reinforce current SUDS guidance and regulatory framework. The first day of the module will cover elementary design principles and the second day will develop these concepts to an advanced level and discuss the construction process. Delegates should have a basic understanding of hydrology and basic drainage design theory. A handout on this will be provided. Delegates should also be familiar with the SUDS approach and basic drainage design theory.

## Programme (09:00-17:00 both days)

### Day 1 - SUDS Design

- Introduction to SUDS and design guidance
- Setting the design criteria and the design process
- Designing for amenity and safety
- Designing for construction and maintenance
- Information required for SUDS design
- Worked example

### Day 2 - SUDS design worked example

- The SUDS design process
- Worked example
  - Stage 1 - outline drainage proposals
  - Stage 2 - SUDS component design
- Comparison of what was actually done and also what was modelled



sharing knowledge  
building best practice

## Further information

If you are a registered CITB construction skills employer you may be able to claim a CITB grant for attendees on this course. Please contact your local Company Development Advisor for further information.



Two day training event with optional evening meal on Day 1 (see over)\*

# Booking form **Designing SUDS Limerick: 24/25 February 2009 (E9605)**

Contact name: \_\_\_\_\_

Email address: \_\_\_\_\_

**Confirmation details will be sent by email.**

Company name: \_\_\_\_\_

Position: \_\_\_\_\_

Address: \_\_\_\_\_

Post code \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

## Payment method

I am a CIRIA Core Member/SME/Local Authority   
€760

For CIRIA Core members only, invoice company.

Please provide a purchase order number \_\_\_\_\_

I am NOT a CIRIA Core member\*   
€910

\*I would like to attend the optional evening meal

I enclose a cheque for \_\_\_\_\_ payable to CIRIA.

I do not wish to attend the optional evening meal

Please charge my  Mastercard  Visa  Amex

Card No.

Security code:

The last 3 digits (Amex 4) of the number printed on the signature strip.

Expiry date:

Cardholder's name and address if different from above: \_\_\_\_\_

Date: \_\_\_\_\_ Cardholder's signature: \_\_\_\_\_

**Please photocopy this form and fax it to our Events team on +44 (0)20 7253 0523  
or mail it to CIRIA, Classic House, 174-180 Old Street, London EC1V 9BP  
or visit our website at [www.ciriatraining.com](http://www.ciriatraining.com)**

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All our courses can be run in-house at your company. Please contact our events team on 0207 549 3300 for more information

## Terms and Conditions

Registration for paying delegates will be secured on receipt of payment (CIRIA members may register using a company purchase order reference). A VAT invoice/receipt will be issued on receipt of payment.

Any registration fee paid will not be refunded unless written confirmation of cancellation is received at least five working days before the workshop. Substitute delegates are welcome.

Non-paying delegates are asked to let CIRIA's events team know if they are unable to attend as soon as possible so that their place may be offered to an alternative delegate. Substitute delegates are welcome.

Email confirmation of registrations will be sent out by CIRIA two weeks before the workshop.

CIRIA reserves the right to vary the programme and cancel the event in case of insufficient registrations.

Personal data is gathered in accordance with the Data Protection Act 1998. CIRIA will only contact you about products and services relevant to you and your organisation.



## CIRIA – benefits of membership

CIRIA offers several membership routes to help improve the performance of all concerned with construction and the environment. Your company benefits as a whole, and staff at all levels of your organisation can get involved in our activities – from attending conferences and purchasing books, keeping up to date on key issues by networking with industry players – to influencing CIRIA's research programme.

## Core membership

The Core membership programme includes collaborative projects, development and access to best practice guidance, formal networks, facilitation, training, conferences and workshops.

## CPN

The mission of the Construction Productivity Network is to deliver leading-edge thinking and improvement opportunities in the construction industry.

## CIEF

The Construction Industry Environmental Forum is the leading network for sustainable construction issues in the UK. It aims to improve the environmental and sustainability performance of all those interested in construction.

## CIRIA Books Club

Membership offers most of CIRIA's publications at half price plus other benefits.

## LACL

The Local Authority Contaminated Land Network helps local authorities address responsibilities under Part IIA of the Environmental Protection Act 1990.

For further information contact CIRIA:

Tel: 020 7549 3300  
Fax: 020 7253 0523  
Email: [enquiries@ciria.org](mailto:enquiries@ciria.org)  
Web: [www.ciriatraining.com](http://www.ciriatraining.com)



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building best practice