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Use of Geosynthetics to optimise track renewals

Tuesday 11 February 2014, 18.30 (tea and sandwiches from 17.30)

University of Leeds, Lecture Theatre A, School of Civil Engineering, LS2 9JT

Presented by Phil Sharpe, URS Ltd

Most of the UK main line rail network is over 150 years old and the earthworks and trackbed are now carrying significantly more traffic at much higher speeds than it was designed for. This poses serious problems for the trackbed engineer when the time comes to renew the track. Railway operators are reluctant to close the line for long periods, which limits the scope of reconstruction works, yet the trackbed is required to support good durable track geometry with minimal maintenance. Improved understanding of trackbed geotechnology and the introduction of new investigation techniques, together with the rationalisation of use of geosynthetics, has facilitated an all-round improvement in the management of trackbed. The talk summarises the major problems encountered with railway trackbeds which sets the scene for describing how existing trackbeds are assessed and remedial treatments are designed.

Phil Sharpe

Phil Sharpe spent 19 Years with British Rail, starting in the Soil Mechanics Section at the BR Research Department in Derby, then as Geotechnical Engineer on the Channel Tunnel Rail Link. He joined Scott Wilson in 1997, founding the Trackbed Technology Group, then left to form Phil Sharpe Limited in 2001, returning to Scott Wilson (now URS) in 2009. Phil has pioneered various novel techniques for the investigation of trackbed and optimisation of remedial treatments. During his 35 years in the railway industry he has been involved in the development and trialling of geosynthetics since they were first introduced. He has recently drafted the new version of Network Rail Trackbed Standard (currently subject to consultation) including a new section on synthetic products for use in trackbed.

A joint meeting of the International Geosynthetic Society (igs-uk.org) and the Yorkshire Geotechnical Group. All are welcome, no need to register or book.

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ice.org.uk/yorkshireandhumber/YGG

Map: http://www.leeds.ac.uk/site/custom_scripts/campus_map.php

Parking: The Department of Civil Engineering is located near the junction of Woodhouse Lane and Clarendon Road. Parking is available (after 5pm) behind the Department entered via a security barrier along Clarendon Road. Press the button and request access from security. There is then a 5 minute walk around to the front of the Dept. of Civil Eng. On street parking on is also available on Clarendon Road and in the roads opposite the school.

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CPD: This event may be considered for contributing to a recognised Continuing Professional Development (CPD) scheme as part of personal development. Delegates should check their individual scheme requirements.

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