

Yorkshire Geotechnical Group

Ground engineering in Jurassic Mudstones



Tuesday, 12th January 2021, 18.00 - 19.30 – Online meeting

Speakers: Simon Butler, HS2 Ltd. & Dr Kevin Briggs, HS2 / University of Bath

ABSTRACT

The ground investigation undertaken for the HS2 Programme has been designed to respond to the particular engineering needs of the programme which include high-performance earthworks for high-speed rail applications, conventional earthworks for highway and other infrastructure associated with the project, and foundations for many bridges and viaducts.



For about 60km of the route between Aylesbury in Buckinghamshire and Southam in Warwickshire the prevailing geologies are the Jurassic Mudstones which are interesting and challenging engineering materials that have not been studied historically to the same extent as, for example, the London Basin geologies or the Triassic Mudstones further North. This presentation will describe the geology and engineering properties of these materials in the context of the design requirements for HS2. It will go on to present emerging findings from the GI and associated research at the University of Bath into these materials which will be of interest to the wider engineering community.

Kevin is an HS2 Ltd/RAEng Senior Research Fellow in Geotechnical Engineering at the University of Bath (2020-2025). His research is being used to assess the ageing and degradation of infrastructure earthworks (embankments & cuttings) supporting the railway and highway networks. This includes field and laboratory investigations into the behaviour of natural soils and engineered fills.

Simon is a Chartered Engineering Geologist and the HS2 Senior Project Engineer responsible for the earthworks design and construction in the central section of the Phase 1 route of HS2

This meeting will be held via Microsoft Teams – links to the meeting are given on the ICE and BGA websites.

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ice.org.uk/yorkshireandhumber