

Chalk Earthworks For High Speed One

Alan Phear

Associate Director
ARUP

Seminar overview:

High Speed One (HS1) was probably the largest chalk engineering project in the UK so far this century. It was fully opened in 2007. About 40 km of its length was built through chalk geology. There was much innovation in regard to chalk earthworks for the project. With the recent start of the detailed design of High Speed Two, it is timely to revisit the design and construction of the chalk earthworks on HS1 and to consider how they have performed over the last decade.

The presentation will include approaches to design, classification, specification and construction of chalk railway embankments; and approaches to dealing with deneholes and solution features under trackbeds and in cutting side slopes, etc.

Biography:

Alan is an Associate Director in Arup's geotechnical group in the Midlands. He is one of Arup leading technical specialists in earthworks. He has worked for many years in the geotechnical design and construction of major infrastructure projects in the UK and overseas, including High Speed One, High Speed Two, widening of the M1 and M25 motorways, Autoroute 30 in Canada and Melbourne Airport in Australia. He has published numerous papers and co-authored two books. He was one of the UK's experts for the preparation of the recently published European Standard for Earthworks (BS EN 16907). He is currently geotechnical lead for the HS2 Phase 2a (Lichfield to Crewe) project and is also the geotechnical specialist in Highways England's technical assurance team for the construction of the A14 Cambridge to Huntingdon scheme.



When and where:

Wednesday, 6th of February, 19:00-20:00
Harrods Room, Emmanuel College

Queries:

Jad Boksmati
jib29@cam.ac.uk