



BRITISH TUNNELLING SOCIETY

Thursday 17th October 2019 at 6.00pm

At The

INSTITUTION OF CIVIL ENGINEERS
ONE GREAT GEORGE STREET, WESTMINSTER, LONDON SW1P 3AA

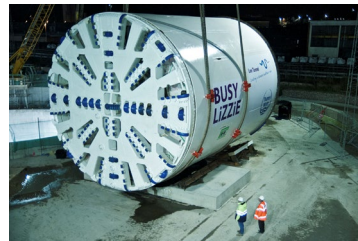
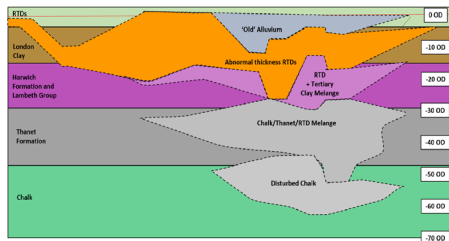
Lee Tunnel

Encountering an unexpected Drift Filled Hollow on the Slurry TBM drive

Dr Tim Newman – Geotechnical Engineer, Jacobs

John Corcoran – Site Manager, Morgan Sindall

Dr Jacqueline Skipper – Senior Partner, Geotechnical Consulting Group



Drift Filled Hollows ('scours', 'pingos') are small to very large Quaternary ground features. They can extend deep into bedrock geology and are infilled with disturbed, metastable, superficial deposits and highly weathered bedrock. They present major risks to tunnelling and construction projects, yet predicting their location is extremely difficult.

This presentation will explain the ground model and ground risk analysis developed for the 6.9km Lee Tunnel drive in east London. We will show how the Slurry TBM coped with a potentially catastrophic encounter with one of the largest of these features at over 50m below ground level. We will detail the urgent measures taken following this encounter, the behaviour of the crucial Northern Outfall Sewer, look at lessons learned, how DFH's are formed, and how these features may be predicted in the future.

Tea and biscuits will be available at 5:30pm

Advance booking not required

In case of any query please contact; The Secretary, BTS Tel: 020 7665 2229

or e-mail: bts@ice.org.uk

or visit: <http://www.britishtunnelling.org.uk>