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# Lichfield Science & Engineering Society

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LICHFIELD **GARRICK**  
*Theatre & Studio*

PRESIDENT

Professor Rex Harris

FREng., FIMMM, FInstP.

**8:00 pm on Wednesday 11<sup>th</sup> December 2013**

**in the Main Theatre of the Lichfield Garrick, Castle Dyke, Lichfield**

## **ENGINEERING SOLUTIONS FOR CROSSRAIL AT BOND STREET STATION**

**James Melvill MSc Eng CEng MICE.**

**Associate Structural Engineer at WSP**

**Christopher Dulake BSc (Hons) CEng, FICE.**

**Crossrail Chief Engineer**

Crossrail will be a 73-mile railway line serving the London area, providing a high-frequency passenger service to link parts of Berkshire and Buckinghamshire in the North, via central London, to Essex and South East London. The tunnel through Central London and the connections to existing lines that will become part of Crossrail are currently under construction. It is the largest railway and infrastructure construction project in Europe and is due for completion in 2018. Bond Street station is one of the seven new underground stations to be built in London for the new line and its situation in Mayfair creates many challenges associated with the design and construction of two 25m deep ticket halls in such a prestigious neighbourhood. The talk will discuss some of these problems along with the innovative and practical solutions WSP found to overcome them.

Chris Dulake is a Civil Engineer and a Fellow of the Institution of Civil Engineers. He has worked in the construction industry for 28 years and is currently Chief Engineer for Crossrail, leading the Engineering division. Previously Chris worked for Arup and AECOM where he was Project Director and provided specialist design and construction advice for the King's Cross Station Redevelopment, the Marmaray Crossing in Istanbul and the 2nd Avenue Subway in New York.

James Melvill was born and grew up in South Africa. He completed his BSc Eng Degree at the University of Natal in Durban. In 2005 he started his MSc Eng in Water Engineering at Stellenbosch University, completing in 2007 with an award for the best MSc in Water Engineering. James moved to London in 2007 and joined WSP as a structural engineer, starting on Crossrail in October 2009 when WSP were awarded the detailed design for Bond Street Station.

**For further information, please see our website at [www.LSES.org.uk](http://www.LSES.org.uk)**

**Admission: Visitors £5.00, Students and Members free but please sign in.  
Tickets are not issued in advance: visitors please pay at the auditorium door.  
This lecture is expected to finish by 10.00 pm.**