

## BHR GROUP WELCOMES MOTT MACDONALD'S YOUNG ENGINEERS

**BHR Group is committed to supporting the development of young engineers both within our business and through our associated network.**

We have been working closely with Mott MacDonald on a number of projects over the last few years, currently on the physical modelling of two interception chambers and associated vortex dropshafts for the Thames Tideway Tunnel.

Some of our Environmental team, namely Richard Brewis, Project Engineer; Sajid Rafique, Senior Consultant and Sarah Fairhurst, Operations Manager, were therefore delighted to welcome a group of young engineers from Mott MacDonald's Cambridge and Croydon offices to the BHR lab.

### Introduction to physical model studies

These individuals have not been directly involved in our work, and so were interested to hear an introduction to physical model studies, discuss the relative merits of computational fluid dynamics (CFD) and physical modelling, and to closely observe the models in operation.

**Andrew Shimmin**, Senior Civil Engineer from Mott MacDonald's Pipelines & Hydraulics team said:

"It's been a very useful and interesting visit to BHR; the physical models really help our designers understand the hydraulic performance of the Tideway structures, seeing the models in operation is invaluable. Our engineers were able to ask the BHR team their questions first hand. This will give our designers a better appreciation of hydraulics in real systems and improve their future designs."

**Sarah Fairhurst** said:

"It's always great to welcome the Mott MacDonald team to our lab. We really enjoy demonstrating the models and debating the merits of physical vs computational models – along with where they complement each other!"

### About Thames Tideway

The Thames Tideway Tunnel is a circa £4.2 bn, 7-year project which is upgrading London's sewerage system to cope with the demands of the city well into the 22nd century.

The new 25 kilometre interception, storage and transfer tunnel, will capture sewage from the 35 most polluting combined sewer overflows built by the Victorians. Running up to 65 metres below one of the world's iconic rivers, it will connect to the combined sewer overflows located along the river banks and collect nearly all of the 18 million tonnes of sewage that pollutes the tidal River Thames in a typical year.

Starting in west London, the main tunnel generally follows the route of the River Thames to Limehouse, where it then continues north-east to Abbey Mills Pumping Station near Stratford. There it will be connected to the Lee Tunnel, which will transfer the sewage to Beckton Sewage Treatment Works.

Working with members of the wider Tideway team, BHR Group has played a key role in this major infrastructure project, providing physical model studies of a variety of structures within the Tideway Tunnels system.

