

# Case Study

**Client** HETCo JV Laing O'Rourke/Ferrovial

**Project date** 2011 - 2013

**Project Value** £40.2 M

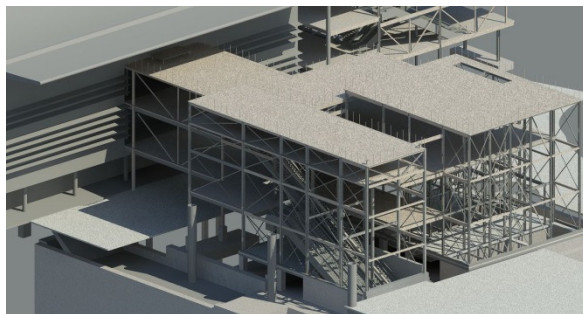
**Project:** Vertical Passenger Movement (VPM Building), Heathrow Airport

### Services provided

- Civil & Structural Analysis and Design
- Drainage Design
- BIM Modelling
- Fit-Out Design and M&E Co-ordination
- Construction Support
- Building Control Self-Assessment

### Description of project

The new vertical passenger movement building (VPM) at Heathrow T2A provides the PAX link between departures and arrivals in the new terminal with those in the newly constructed Terminal 2B pier and houses the lifts and escalators to the PAX tunnel running beneath the apron between the two buildings.



Merebrook designed the sub-structure to incorporate 30m deep diaphragm walls with two passenger floors and a roof below apron level. The roof is designed to support a Code G aircraft (A380+) with

loads transferred down steel plunge columns into 50m deep piles within the London Clay.



Merebrook also designed and detailed the steel superstructure which is constructed off the sub-structure frame and bridges across the terminal access road linking into the terminal floor levels. The floor plates comprised of composite concrete/steel construction.



The structure also houses the longest internal escalator installed in a privately funded building in the UK.