BUILDING BILLIONS IN THE GLOUDS



Tate Consulting is an established building services engineering company that provides strategic, flexible, experienced and innovative approach in delivering engineering and management consultancy services for its clients. Tate Consulting ranked as number four Top 20 Engineering Consultants in Construction News* for their proven track record in delivering client projects to the most demanding of timescales, within budget and with the lowest possible client risk. Tate's key point of difference is identifying ways in which a project can be achieved more economically and efficiently by designing out systems

rather than designing in complex and expensive facilities. Tate's successful reputation has been built on master planning and managing the utility infrastructure requirements for development sites and their experience spans across every market sector; including logistics and industrial, residential and mixed use, commercial, education, retail and leisure.

Cloud based project management

Having built up an impressive billion pound plus portfolio of work, Tate Consulting was selected by joint venture development partners, Ballymore and Oxley for their multi-billion-pound development in Royal Wharf Docks, which aims to build a new town within London. The development includes 3,385 residential units to this prime riverside location and incorporates a high street, side streets, and the occasional mews, taking inspiration from the great estates that emerged in London, throughout its history which gave its reputation as 'the city of villages'. Districts like Belgravia, Fitzrovia, Mayfair and Bloomsbury have unmistakable characters of their own, and Royal Wharf will now too become a local neighbourhood within a thriving part of the capital.

Tate Consulting were instructed to provide a detailed MEP design service in BIM and worked closely with architects Whittam Cox, structural engineers OCSC and contrac-



BIM TATE CONSULTING



tor Roundstone in coordinating the design of Phase 2 of the Royal Wharf development to include 958 apartments, 12 town houses, retail and leisure space. All part of the larger development of 3,385 properties on the 40-acre site due to house around 10,000 new residents. The Royal Wharf development will be almost 45% public open space and includes a riverfront promenade, leisure facilities and retail space.

During Phase 3 of this development, Tate Consulting is working closely with architects Todd, structural engineers OCSC and contractor Roundstone towards a planned completion date of December 2020. Phase 3 of the development includes 960 apartments, office, retail and restaurant space.

The benefits of cloud based software

Integral to Tate's projects is their use of the cloud based 3D Revit software which involves sharing live building models between architect, structural and MEP engineers which are then coordinated and shared in a single cloud based environment several times per day.

Jeff Bearcroft, Managing Director of Tate Consulting discusses its cloud based BIM design approach and how this has facilitated the design of the Royal Wharf and Quarry Hill projects.

"Cloud based Revit design has changed the whole way of working at Tate as we are now able to design more quickly and coordinate our work with the architects and structural engineers to a much higher level of precision than is the case in a 2D design environment.

"Using the Revit cloud based system has become integral to our day-today work"

"The key benefits are that it allows the whole design team to work more collaboratively and across multiple offices, allowing the design to be coordinated quickly and securely between the MEP, architectural and structural engineering models.

"The cloud based Revit environment makes

it easier for us to maintain an overview of all incoming steams of project information and enables us to cut out errors whilst working to very tight project deadlines. Previously we had to use FTP sites and Dropbox to share models, with the risk that design changes were not up to date and information could be lost between various people and their different systems."

Another ongoing project for 2018 is a new mixed use development at Quarry Hill in Leeds that Tate's were appointed for by Developers ModaLiving to provide MEP and Sustainability services. The project incorporates a variety of uses including 705 high-spec, fully serviced apartments and over 160,000 sq ft of mixed use commercial space that will provide strong connections to the City and Victoria Gate, a shopping and entertainment complex.

Mark Brunette, BIM Manager at Tate's, whose experience spans 30 years working on multi-million pound projects in South Africa, Australia and the UK, has been working on the Quarry Hill for a year and Royal Wharf for the past two years.

"Using the Revit cloud based system has become integral to our day-to-day work, allowing us to provide seamless coordination during the building design process, from the initial concept right through to completion.





"The Royal Wharf project has involved extensive collaboration between ourselves, the project architects and structural engineers and off-site building pre-fabrication specialists, Hurks, based in the Netherlands. Coordinating designs for architects, structural engineers and building services engineers is a challenge and without regular online collaboration, there can be significant delays in detecting any issues which in turn can result in considerable problems for the contractor further down the line.

"Revit software has allowed us to overcome many problems more quickly, including in the case of the Leisure Centre at Royal Wharf which involved a highly challenging coordinated design of large ventilation ducts associated with the full sized swimming pool and gym which would inevitably have caused major problems with the rest of the development had this not been resolved quickly.

"Cloud-based systems are a necessity for us because the projects we undertake are reliant on us being able to work with many different partners and teams throughout the UK and internationally, without them it would not only hinder our ability to deliver on time and within budget, but also restrict the scope of projects that we could work on at the same time."

Tate Consulting Services saves time and money using software solutions for projects of all sizes and budgets;

- >> £100 million Asda, Fully Automated Distribution Centre in Warrington
- >> £20 million B&M Stores, Distribution Centre in Liverpool
- >> £15 million Rolls Royce Technology & Logistics Centre in Bognor Regis
- >> £13 million Asda Automated Home Shopping Distribution Centre in Dartford
- >> £50 million Euro Car Parts, Automated Distribution Centre in Tamworth
- >> £30 million Bericote Properties Ltd, Four Ashes in Wolverhampton
- >> £90 million Moda Living, Quarry Hill in Leeds
- >> £85 million Moda Living, Angel Gardens in Manchester
- >> £330 million Ballymore Developments in Royal Wharf, London Docklands
- >> £12 million Adelaide Exchange in Belfast
- >> £17.5 million, Citibank, Titanic Quarter in Belfast
- >> £3 million The Core in Aberdeen
- >> £26.6 million Public Records Office in Northern Ireland
- >> £5 million Adobe Headquarters in Maidenhead
- >> £1 million Oldham 6th Form College, Oldham
- >> £2.2 million Swinton High School in Manchester
- >> £1.2 million Wychall Primary School in Birmingham

>> £18 million Parliament Hill, William Ellis Schools in Camden

- >> £11.2 million Centre for Innovation and Enterprise, Begbroke Science Park in Oxford
- >> £200 million Royal Elm Park in Reading
- >> £1 million Princes Quay in Hull
- >> £10 million Rushbond plc, Bretton Hall Estate in Wakefield
- >> £10 million Asda Superstore Pwllheli in Wales
- >> £1 million B&M Stores in Grimsby