

Building Information Modelling Policy

Our approach to Building Information Modelling is understanding the process, not only the software and a clear perceptive of who does what, when and how.

We have found the most positive thing about BIM is its freedom, rather than its constraints. At the end of the day, it's just data, and it's how that data is organised that determines what it does, fundamentally, it's no different to what we have always done: solving problems by doing creative things with the tools available.

Building Information Modelling is embedded in everything we do, and in an ever increasingly digital world, we are taking BIM to the next level of digital engineering, leveraging the data created and using it to find solutions to our engineering needs. Our continuing objective is to support and develop our digitally enabled engineers, integrating their engineering skills with the BIM data for analysis, calculations and scheduling to explore options and make better decisions earlier in the design process.

Since 2011 we have now engineered over 170 building information models in the private & public sector, including: hospitals, schools, residential high rise, commercial buildings, Ministry of Justice, and Government buildings.

Our commitment is aimed at achieving:

+ Good relationships

BIM begins with the Exchange Information Requirements. Our starting point is always to listen to what our clients want and then develop a service that matches this.

Our experience guides our client through the BIM process and together with the design team, we help develop a BIM execution plan - seeing it not as a specification of compliance to which everyone else must conform but as an honest definition of how the project will actually be executed, explaining where any shortfalls will be addressed, how the teams will deliver the key models, data and documents as a collaborative plan, working together to produce the best project outcome for the client.

+ Collaboration

The fundamental requirement for producing information through collaborative working is to share trustworthy information.

Our process of collaborative working using the latest technology defines a fluid flow of data, available in the right order at the agreed time and brings to life the interactions between the whole project team. We believe collaboration encourages a process that allows for the right behaviours to create project information and a more integrated approach to project design and delivery with a unified and sensible approach that all parties are fully in agreement with.

+ Quality

Within our Integrated Management System, we work hard to provide our clients with a consistently high-quality service, delivered by our customer focussed management team and designers to achieve our purpose of being a socially responsible and ethical partnership that is the best at everything we do. Achieving quality and consistency is one of the three pillars of our Business Plan, identifying and improving technical quality and consistency of our offering, bringing out best practice, streamlining processes and harnessing our BIM Capability.

+ Data

One of our main work streams is the process of collecting and formatting asset data suitably for importing into a variety of proprietary CAFM systems. The process can include the assignment of maintenance tasks and frequencies followed by labour loading such that resources can be identified. The asset schedule produced as part of the BIM

process can also be used to develop 10 and 20 years forward maintenance plans which provide details and budgets for operating and maintaining the building over those longer time frames.

If required, TB+A can provide a service for mapping this data automatically with a bespoke Computer-Aided Facilities Management tool, tailored to specific requirements allowing for forecasts of expenditure and maintenance schedules.

TB+A can also offer life cycle assessments and life cycle cost, with our Strategic Asset Management team.

+ **Compliance with the UK Government BIM level 2 mandate**

Through the soft landings¹ framework, we align our design to those who are subsequently going to use our BIM model, considering their needs at the brief and design stages, and maintaining the quality and intent of the project, in preparation for handover to the user on completion.

The TB+A BIM task group have produced a suite of BIM protocols and modelling guidance notes covering a number of best practice key principles, demonstrating how we work with BIM in the office and how we deliver BIM according to ISO 19650, contributing to the successful outcome of the project.

We have a robust validation/sign-off processes and visual walk-through checks to validate the design and information before sharing through the project gateways.

These aims are underpinned by the TB+A BIM strategy team identifying the necessary resources and budget and setting out the framework and processes to achieving these objectives in the way in which our projects are managed; requirements identified; documents developed and controlled; risks identified and mitigated; and ultimately a consistent client experience achieved across all our offices.

We are committed to continually improving our product and processes bringing out best practice and learning from our experiences.

BIM Implementation

+ **Training**

We have an in-house training programme, initially addressing the transition from CAD to 3D modelling and workflow processes to using the BIM as a single source of truth for engineering solutions and data collection.

By identifying BIM roles and responsibilities, not just in defining new positions, but redefining some of the traditional key-project leadership positions we have created a fully integrated BIM environment to work within. The skills for each role are identified using the TB+A Training matrix which assesses each of our people's knowledge & training status.

+ **IT**

All our staff have access to the entire TB+A BIM software stack. This is delivered by our high performance VDI via Citrix. This platform is updated on a regular basis, to maintain above industry standards in terms of performance and cyber security to maintain this leading-edge capability.

We have invested heavily in our virtual desktop infrastructure (Citrix) in 2023 utilising an advanced DHCI hyper-visor with the latest in Hewlett Package enterprise hardware with NVIDIA tesla A40 graphics processing units and over 18 TB of RAM to deliver intense dedicated user graphical computational performance. This is available to all our people over dedicated resilient fibre and microwave high speed internet connections in each of our offices, allowing them to work at the same level out on client sites or from home. As well as supporting an agile working culture, Citrix allows our people to access BIM applications with high performance from any secure device.

We also leverage best of breed server virtualisation as well as private cloud and 'as a service' implementations to maintain not only high availability but also flexibility to adjust to business and industry demands quickly and smoothly with zero downtime.

Security of data and services is paramount to TB+A and as such we follow a defence in depth methodology using best of breed perimeter firewalls, anti-virus, spam filtering, EDR, MDR and intrusion prevention / detection systems. Both internal and external continuous and regular audits and penetration tests are carried out, security related processes and procedures with the view to remaining aligned with industry leading standards such as ISO27001 and Cyber Essentials Plus accreditations.

To provide robustness we have two cyber security companies perform continuous scans and audits. Our systems are patched on a rolling 10-day basis. with zero-day vulnerabilities patched as soon as a fix becomes available.

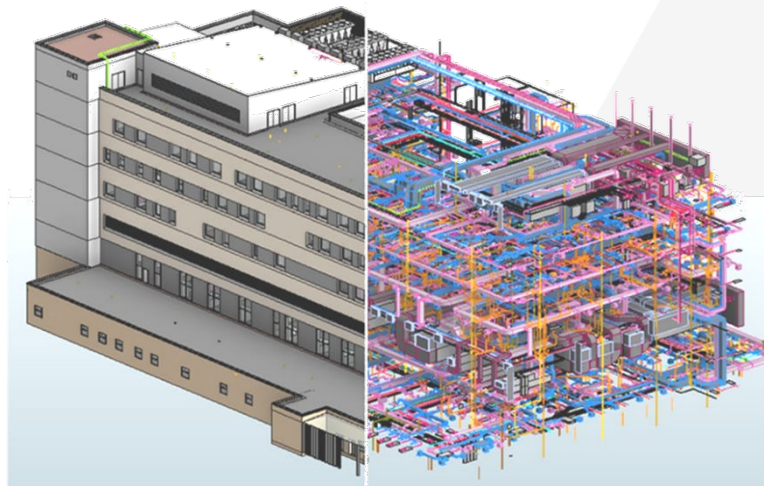
Our future

Our BIM Task Force Coordinators group made up of experienced BIM/Revit users per office, are continually testing and reviewing updates and procedure changes proving continuity and best practices for all project teams across our partnership. BIM champions have been identified in each team to mentor and support members of staff, and taking lessons learned from project to project, we are continually incorporating new processes into our training programme.



SignedTerry Canty - Partner

Date 1st March 2023



Poole & Bournemouth Hospital