

CASE STUDY



THE SHARD

Client: Sellar Property

The iconic Shard, sitting 310 metres high, is the tallest building in Western Europe. A complex project located adjacent to London Bridge station and above the Northern and Jubilee tube lines, it was clear from the outset that innovation, accuracy and collaboration would be key components in the project's success.

A Building Information Modelling (BIM) driven process to include architecture, structure and MEP was required to deal with the complexity of the site. Plowman Craven was involved in various aspects of the scheme and provided a variety of measurement and modelling services.



PLANNING AND DESIGN STAGE

- 3D topographical surveys and 3D scanning of surrounding environment
- View verifications and Rights of Light
- High accuracy positioning of underground tunnels and ventilation shafts
- 3D modelling of the below ground infrastructure

MAIN CONSTRUCTION STAGE

Continued deformation monitoring of below ground infrastructure and surrounding buildings, automated and manual.

High accuracy 3D laser scanning of floor plates and ceilings for:

- Slab variation analysis
- Offsite manufacture for fit out
- Risk mitigation and clash detection
- Design against as-built
- MEP recording prior to fit-out

High Dynamic Range Photography (TruView™) for:

- Enhancement of laser scan point cloud and BIM model
- 'Point in time' condition and location recording
- Offsite decision making

Area referencing at pre-completion for:

- Due diligence
- Leasing and rent



POST COMPLETION STAGE

The information gathered on site with 3D laser scanning technology created a critical data legacy for the BIM model going forward, both for asset management and maintenance operations.

This information and future measurement data will continually enhance the parametric model through the life cycle of the building.

ABOUT US

Consult. Trust. Innovate.

Combining technical expertise with the latest equipment, Plowman Craven is one of the largest surveying companies in the UK, serving a broad client base that includes developers, architects, contractors, engineers, project managers, commercial agents, estate management, investors and government bodies. Our access to skilled and specialist resource allows us to respond effectively, no matter the size of the project or how challenging.

PC Monitoring is fully integrated into Plowman Craven's broader surveying and measurement services and is at the forefront of many major tunnelling and construction developments in the UK, working with clients to advise on and manage all structural, monitoring and engineering services requirements through a project lifecycle.

Plowman Craven

PC Monitoring

Part of the **Plowman Craven** group



Contact our expert today!

FOR QUESTIONS, QUOTATIONS, AND MORE

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