

Plowman Craven



Providing survey services to the construction and property industries



Andy Molloy, Managing Director

As one of the largest surveying companies in the UK, Plowman Craven has spent more than 50 years providing a range of measurement and surveying services to the property, rail and infrastructure markets. With offices at Harpenden in Hertfordshire and Central London, we work in both the private and public sector, playing a key role on some of the most prestigious development projects in the UK and overseas.

Not Just a Survey Company

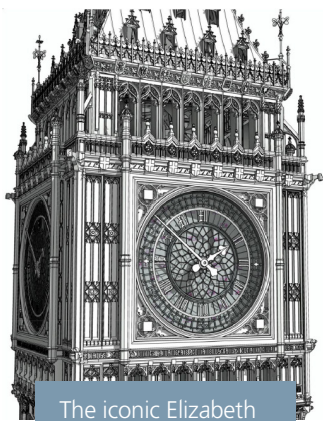
We provide the data that helps inform and underpin our clients' plans. We measure and scan. We survey and record. We model and monitor. We interpret and advise. Combining our technical expertise with the latest equipment, we serve a broad client base that includes developers, architects, contractors, engineers, project managers, commercial agents, estate managers, investors and government bodies... not to mention Hollywood studios.

Although scanning and surveying services remain a core offering, the modern-day Plowman Craven has become a multi-disciplinary firm with a turnover of £16million and a highly-skilled workforce of more than 200 people. It's all a far cry from the garage in Barnet where two surveyors – Frank Plowman and Ron Craven – started out back in 1964.

In a typical week, we could be consulting on a commercial property development, supplying Network Rail with track alignment surveys, laser-scanning and 3D modelling a heritage building, surveying using an unmanned drone, or body scanning the cast of the latest blockbuster film for special effects purposes.

FACTS ABOUT PLOWMAN CRAVEN

- » Global provider of measurement & consultancy services
- » Annual turnover of £16m, 100% increase since 2010
- » New offices in Hertfordshire & Central London
- » 200 employees from 30 countries
- » Over 50+ years' industry experience
- » Key clients include Network Rail, Land Securities, NHS, British Land, Royal Household, Parliamentary Estate, Transport for London



The iconic Elizabeth Tower, better known as Big Ben, was laser-scanned and modelled in the highest possible level of detail

“New technology and first-class service are underpinned by our core values – Accuracy, Reliability, Integrity”

» CASE STUDY

The Houses of Parliament – the world’s greatest surveying project

Having been the surveyor of choice for the Houses of Parliament since the 1970s, Plowman Craven has a rich history of scanning, measuring and documenting this UNESCO World Heritage Site. In 2016, we were awarded the coveted five-year framework contract to survey the entire Parliamentary Estate, as part of the Restoration and Renewal Programme. With more than 2,000 rooms in the main Parliament building alone, this was a mammoth task. We also provided a range of additional services including sewer surveys, asbestos tests and structural monitoring.

The measurement data captured was used to produce a comprehensive 3D model that enables interested parties to ‘virtually’ explore every inch of the Parliamentary Estate, extracting measurements and viewing all elements in fine detail. The 3D model was supported by thousands of high-resolution panoramic photographs that provide a full visual record of the condition of the Estate, enabling the planning, design and construction phases to proceed.

A History of Innovation

The sheer diversity of our clients and the markets in which they operate demands a continual investment in the very latest technology. The basic measuring equipment that our founders relied on has now been replaced by drones, laser scanners and advanced Building Information Modelling (or BIM) software that can turn complex survey data into interactive 3D computer models, giving users a perfect visual representation of a structure, as well as providing useful data such as measurements, materials used and the location of hidden pipes and cables.

This technological expertise is the reason why clients trust us to support them on their most significant ventures. Recent high-profile projects include more than 10 years at London’s King’s Cross on one of the world’s biggest urban regeneration schemes; delivering a full range of survey services for the largest infrastructure project ever undertaken by the UK water industry – the Thames Tideway ‘Super Sewer’; providing Crossrail with a world-first solution that enabled their automated tunnel drilling machine to operate;

and – arguably the most prestigious surveying project in the world – scanning and modelling the entire Palace of Westminster (see below).

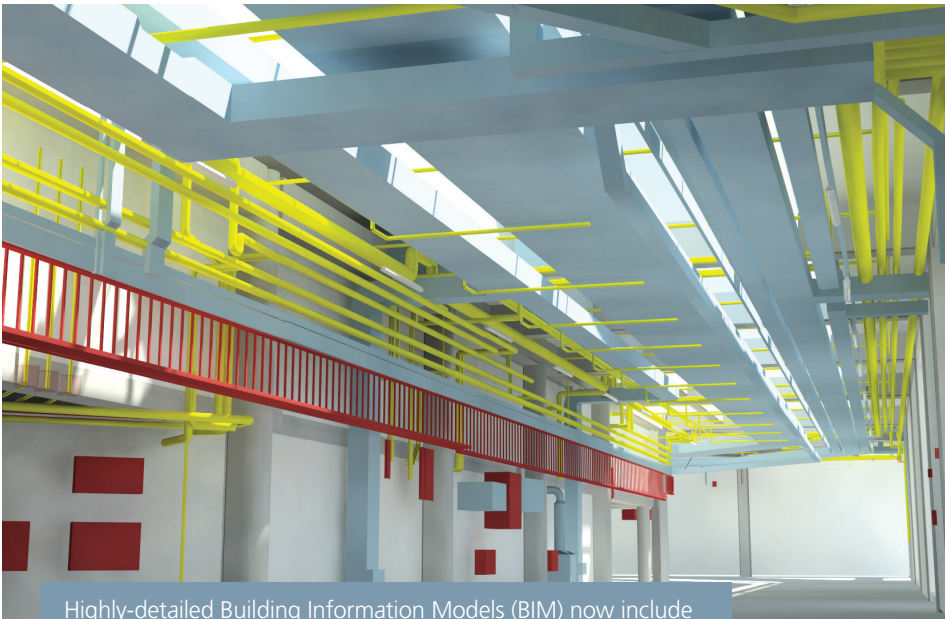
We’re proud of our people and their expertise. By investing heavily in our industry-leading training and development programmes, and providing excellent career-progression opportunities for our staff, we are ensuring that we can deliver on projects of such magnitude. Central to this commitment is our new head office in Harpenden – opened in 2016 – that will provide the platform for the future strength of the business and enable us to continue to grow.

New Technology, Traditional Values

Where once our greatest challenge – and biggest strength – was an ability to capture survey data accurately, we now place just as much importance on processing and securely managing that data for clients. As the first company in our sector to attain the coveted ISO27001 accreditation from the British Standards Institution, which governs the security of client data, we appreciate the responsibility that comes with the move into digital working practices and the early adoption of Building Information Modelling.

New technology and techniques certainly help us to deliver a first-class service, but it’s underpinned by a retention of the customer-centric values that forged our reputation in the first place – Accuracy, Reliability, Integrity. Following a 2012 management buy-out by our long-serving team of directors – led by Managing Director, Andy Molloy – we are once again an owner-led business, ensuring that those three core values are at the heart of everything we do.

Our business relies on strong investment coming into the UK – whether private or government funded – to fuel



Highly-detailed Building Information Models (BIM) now include the location of utilities such as gas, electricity and water



Plowman Craven has pioneered the use of drones for surveying

development in areas such as property and rail. Although we have delivered revenues above our budget every year since the 2009 downturn, we are now facing challenging political and macro-economic conditions again, so we are consciously diversifying the business to avoid over-reliance on the property and construction markets.

In its broadest sense, it's about delivering an extended range of complementary services at every stage of the project lifecycle – including those provided by Plowman Craven's dedicated environmental and structural monitoring divisions, PC Enviro and PC Monitoring. That could mean anything from an ecological assessment of a potential development site through to monitoring a construction site to ensure surrounding buildings aren't affected. This provision of extra services is complemented by a clear objective to transfer our existing technologies into new markets.

New Growth

One of the best examples of this is the new Vogel R3D system that is used to survey railway infrastructure. Traditionally, this was a time-consuming, hazardous and costly

exercise requiring line closures so that surveyors could manually measure the tracks and the surrounding areas: our new system safely captures data from the air instead. Combining our expertise in drone surveys with our long history of rail track measurement, Vogel R3D is able to capture every minute detail of a live railway track to a 2mm level of accuracy – which is better than a traditional survey – in a fraction of the time without any of the risks. Network Rail has approved the survey accuracy results, declaring Vogel R3D a 'game-changer'.

Our 3D scanning and modelling expertise also sees us travel to film sets the world over to scan actors, props and sets for use in special effects on blockbuster movies ranging from James Bond and Harry Potter to the latest superhero films. We are currently exploring ways to apply the same techniques to leisure and retail markets.

With such wide-ranging expertise, a commitment to innovation and a diverse client base, Plowman Craven is now perfectly placed to continue its progression.

» PLOWMAN CRAVEN PROJECT HIGHLIGHTS

- » Infrastructure: Crossrail, London Underground, Network Rail, Trans-Pennine Express, West Coast Mainline, London Bridge, Euston, Thames Tideway, Bristol Temple Meads
- » Urban Regeneration: King's Cross, Croydon Town Centre, Brent Cross, Earls Court, Bracknell
- » Heritage: Vatican, Buckingham Palace, St Paul's, Stonehenge, Hadrian's Wall, Houses of Parliament (see case study), Leicester Cathedral, McEwan Hall Edinburgh
- » Property Developments: Shard, Gherkin, Centre Point, Cheesegrater, Spinningfields Manchester
- » Landmark Buildings: V&A, Science Museum, Natural History Museum, Royal Albert Hall, Royal Opera House, Leinster House Dublin
- » Sports: Wimbledon, Wembley, Manchester Velodrome, Twickenham, Silverstone, Lord's, Wentworth