

Heritage

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Plowman Craven

Heritage

Time was when today was all-important; yesterday and tomorrow were of minor concern. Survival rather than conservation was what drove our forebears. In contrast, our modern society is deeply concerned at what we will hand down to future generations and fascinated by what went before.

Recording the present and unearthing the truth about the past have assumed immense relevance in our lives. It is even said that a country without a past has no future.

Accurate measurement of sites, artefacts and human and animal remains now plays an important role in enabling us to discover the true depth of our heritage and helps ensure its preservation for the future. 3D modelling, as undertaken by the 3D team at Hertfordshire-based surveying experts Plowman Craven helps enormously in furthering this understanding.

“3D injects realism. Just as our eyes

see the world in colour, not black and white, so our natural way of looking at things is in 3D rather than the simple two-dimensional view that earlier technology limited us to,” enthuses Plowman Craven 3D team leader Duncan Lees.

“We’ve measured Prehistoric hill forts, Dark Age castles, Medieval cathedrals and royal palaces up and down the country – featuring in the recent Channel 4 ‘Time Team Live’ programme – and also a multitude of more modern heritage sites. Listed London Underground stations, Parliamentary buildings and iconic landmarks such as the Ark, have all been surveyed by us,” adds Duncan, **“Now the latest in 3D modelling technology really does bring a new dimension** to what we can offer – and that is especially exciting to anyone working in the field of heritage.”

Forbidding, dusty museums with their static displays are rapidly giving way to

more user-friendly, hands-on, virtual reality experiences.

The 3D modelling skills which have seen Plowman Craven 3D involved in such major movies as ‘Batman Begins’, ‘The Phantom of the Opera’, ‘Pirates of the Caribbean’, Warner Brothers’ ‘Harry Potter’ series and ‘The Da Vinci Code’, as well as the hit TV series ‘Rome’ are now available to those working in the field of heritage.

Projects undertaken are as diverse as they are numerous. Egypt’s more than 3,000 year old statue of Ramesses II, one of that ancient civilisation’s greatest kings, was in 1955 discovered in eight pieces and carried down the Nile to Cairo, where it was re-erected at a busy crossroads, hemmed in by bridges, an underground railway and a mosque. Concerns over the effects of pollution on this 83 tonne monolith led to a timely decision to move it to a new museum in Giza in 2006.

That’s where Plowman Craven came into the picture, minutely surveying the statue using a **sophisticated laser-scanning programme** to help facilitate the safe transfer of the statue, this time in one piece.

Tens of thousands flocked to see Ramesses pass by on his two-kilometre journey and millions more sat fascinated by their TVs as the move was completed without hitch.

Tasks now routinely carried out for heritage organisations includes the 3D recording of historic sites and ancient buildings using GPS technology, terrestrial LIDAR laser scanners and photogrammetry; the close-range scanning of priceless artefacts; aerial photogrammetric surveys to capture large-scale DTMs (Digital Terrain Models) for ancient landscape analysis and interpretation.

Heritage measurement data has to be delivered in a number of ways, to satisfy a wide spectrum of stakeholders. So Plowman Craven offer the full range of presentation styles and formats to suit any client, from **2D and 3D CAD data** right up to **fully textured 3D models and virtual reality immersive environments.**

“We usually work on site in teams of two or three before processing the survey data back at the office.” Explains Plowman Craven 3D’s Duncan Lees, adding, “We have a multi-disciplinary methodology for recording heritage sites, structures and objects, utilising the full range of our skills as professional surveyors, photographers and

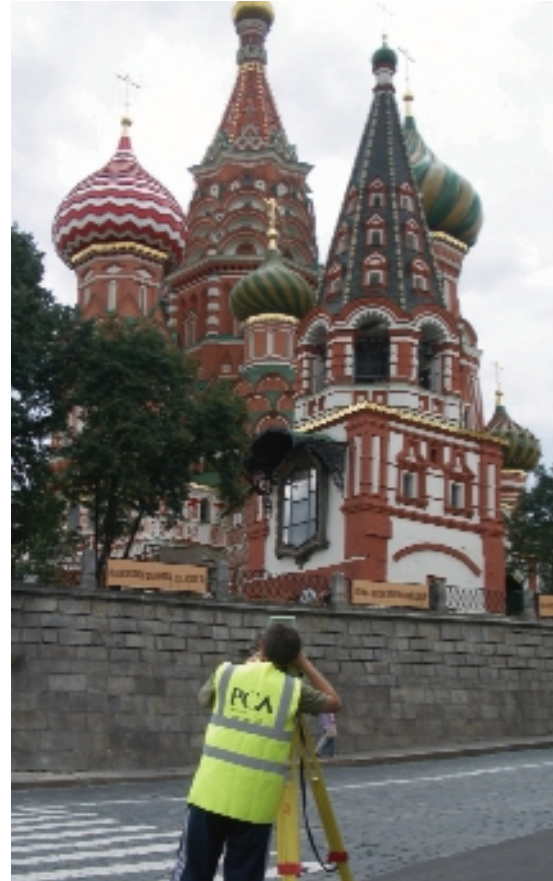


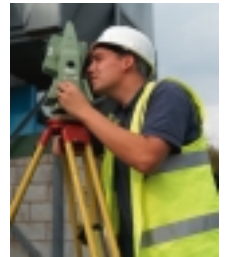
archaeologists. This allows us to offer **bespoke geomatic solutions** in a **time and cost effective** manner. We have measured and modelled fragile museum objects in a matter of hours whilst, at the other extreme, the laser scanning of the haunting deserted ancient city of Ani on the Turkish and Armenian border took many weeks of dedicated hard work in difficult and exhausting circumstances.”

Conservation is a costly business, usually carried out under very tight budget constraints. But there’s a valuable bonus when using Plowman

Craven 3D’s services. The company’s extensive experience of the heritage field means it is adept at using an integrated approach that **keep costs down** – a benefit that is passed on to the client. Time and cost implications are always discussed with clients in depth to optimise value for money without compromising results. **Accuracy, speed and efficiency are bywords.**

“We are proud that we can provide the expertise and experience to help preserve the world’s heritage,” says Duncan Lees.





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