

Case Study

Technical and Analytical Services: Environmental archaeology

Key Facts

- Planning permission legislation insists that an assessment of the impact of a proposed development on the historic environment should take place before permission can be granted.
- Pre-Construct Archaeology Limited is an independent archaeological company employed to conduct archaeological surveys.
- Quaternary Scientific (QUEST) at the University of Reading provides expert environmental archaeological services to government organisations, environmental consultancies and societies and archaeological companies.
- Environmental archaeology focuses on the long-term relationship between humans and their environment and how each has impacted on the other.
- Developers building a new housing estate on the site of an old golf driving range required an archaeological survey.
- QUEST, with 12 years of experience in environmental archaeology, was sub-contracted to carry out the scientific components of the survey.

The Client

Pre-Construct Archaeology Limited (PCA) is a well-established independent archaeological company specialising in providing appropriate solutions to archaeological problems encountered by developers in both green and brown-field sites. Projects range from housing developments to industrial facilities.

Typically PCA are contracted by a consultancy company working for the developers of a site.

The Challenge

A key principle of UK planning guidance is that an assessment, measuring the impact of a proposed development on the historic environment, should take place before planning permission is granted.

In this case developers had submitted plans to build a new housing estate on the site of an old golf driving range. The local planning authorities requested an archaeological survey before any decision on planning applications would be made.

Solution

PCA were employed to conduct an archaeological survey of the site. A specification for the job was drawn up and the scientific components were sub-contracted to Quaternary Scientific (QUEST) at the University of Reading.

QUEST always looks for the environmental story of a site: how environmental change relates to what people were doing in the landscape at that time, how they were changing their environment and how they were responding to environmental change.

The existence of a 3,000 year old alder and brush wood track way and timber platform were discovered by PCA early on in the survey. QUEST used a variety of techniques to analyse fossilised remains, including pollen grains and insects, sedimentary deposits and soil stratigraphy. These techniques enabled QUEST to date and reconstruct an ecological, social and economic picture of the track way, the people that used it and the surrounding environment.



Benefits to the Client

Based within the University of Reading, QUEST offers its clients expertise drawn from an extensive range of fields. QUEST acted as a 'one stop shop' for PCA, providing access to a wide variety of specialists in areas including geophysics, geochemistry, palynology, human ecology and human biology,

PCA benefitted from QUEST's comprehensive and competitively priced services.

PCA gained access to specialist facilities both on-site and laboratory based.

Benefits to the University

Interaction with the client has provided QUEST with opportunities for future research and further collaborations with PCA.

The contract has raised QUEST's profile as well as generated income for the University and the School.

Involvement with industry allowed academics to incorporate real-life case study examples into their teaching materials.



'Working with QUEST works well for us, both on a business level and as the 'value added' in the process. In the case of the Beckton site, QUEST was able to recognise and interpret unexpected signatures in the peat sequences, providing significant dating evidence.

Frank Meddens
Director Post-excavation Projects,
Pre-Construct Archaeology Ltd

University of Reading

The University of Reading is a world-class research-intensive university covering a broad spectrum of disciplines across the Life and Physical Sciences, Arts and Humanities, Social Sciences and Henley Business School. Areas of particular strength include: Climate Systems Science, Preventative and Therapeutic Health Sciences, Sustainable Construction and Environments and Computational Science and Informatics.

The University works with businesses providing support for research and development, as well as access to expertise and equipment to solve business challenges. To find out how you can access the leading minds at the University of Reading please contact our Knowledge Transfer Centre.