

Additional Requirements for a Palaeoenvironmental Assessment (updated October 2018)

An outline specification, which defines certain minimum criteria, is set out below. These requirements accompany, and should be used in conjunction with, the project brief.

- 1.1. The assessment will establish the potential for the survival and significance of geoarchaeological and palaeoenvironmental evidence with reference to adjacent and regional sequences, and to national frameworks. The project will need to consider the following objectives:
 - 1.1.1. The characterisation of the sequence, and patterns of the accumulation of palaeoenvironmental/ geoarchaeological deposits across the development area, including the depth and lateral extent of major stratigraphic units, and the character of any potential land surfaces/buried soils within or pre-dating these sediments.
 - 1.1.2. Identify significant variations in the deposition sequences indicative of localised features, particularly in relation topographic variation and the presence of features such as palaeochannels.
 - 1.1.3. Identify the location and extent of any waterlogged organic deposits and where appropriate and practical, to retrieve suitable samples in order to assess the potential for the preservation of environmental remains and material for scientific dating.
 - 1.1.4. Clarify the relationship between sediment sequences and other deposit types, including periods of 'soil', peat growth, and archaeological remains.
 - 1.1.5. To provide for the absolute dating of critical contacts.
 - 1.1.6. To focus academically upon the high potential for this site to produce palaeoenvironmental evidence, with the potential to inform on our understanding of past environments, palaeoclimates, sea-level changes and human interaction.
 - 1.1.7. To make the results of the investigation available through suitable reportage.

- 1.2. Archaeological contexts should be sampled for palaeoenvironmental remains and if suitable deposits are identified a number of cores/column samples should be taken and retained to assess the potential of the site. Best practice should allow for sampling of interpretable and datable archaeological deposits and provision should be made for this. The contractor shall show what provision has been made for specialist environmental assessment of the site and must provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. This will follow the English Heritage guidance *Environmental Archaeology, A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post excavation* (2011). If required, advice on the appropriateness of the proposed strategies should be sought from the Historic England Regional Advisor for Archaeological Science (East of England). It may be necessary to discuss the sampling strategy on site, depending on the deposits.
- 1.3. The cores/sections should be assessed for pollen and plant macrofossils. In addition, the samples may be assessed for diatoms, foraminifera, insect, and molluscs. Provision should be made for the dating of suitable deposits and requirements for any AMS and OSL dating and samples may be submitted to the contractor's preferred dating laboratory.
- 1.4. The palaeoenvironmental assessment must be undertaken by an environmental archaeologist of recognised competence, fully experienced in work of this character and formally acknowledged by the SCCAS. Details, including the name, qualifications and experience, of the site director and all other key project personnel (including specialist staff) will be communicated to SCCAS as part of a specification of works that conforms to the guidelines contained in English Heritage's MoRPHE publication.