

Requirements for Archaeological Excavation (updated July 2024)

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. If in doubt, clarification should be sought from SCCAS.

1. General Management Requirements

- 1.1 The project manager must consult the Suffolk HER Officer to obtain a parish code for the work before commencement. These numbers will be unique for each project or site and must be clearly marked on all documentation relating to the work. The parish code must be used as the site code.
- 1.2 A timetable for fieldwork and post excavation stages of the project must be presented in the WSI and agreed with SCCAS before the fieldwork commences.
- 1.3 A detailed risk assessment and management strategy must be presented for this project in the WSI.
- 1.4 A data management plan should be included in the WSI. Details on creating a digital management plan can be found in SCCAS [Guidelines for Archive Preparation and Deposition](#).
- 1.5 The WSI must state the security measures to protect the site from vandalism and theft, and to secure deep any holes.
- 1.6 The composition of the project staff must be detailed and agreed (this is to include any subcontractors). For the site director and other staff likely to have a major responsibility for the fieldwork and post-excavation processing of this excavation there must also be a statement of their responsibilities or a CV for post-excavation work on other archaeological sites and publication record. Ceramic specialists, in particular, must have relevant experience from this region, including knowledge of local ceramic sequences.
- 1.7 Monitoring of the archaeological work will be undertaken by SCCAS. A decision on the level of monitoring required for the fieldwork will be made by SCCAS, in consultation with the project manager and once the fieldwork has commenced. Any unexpected discoveries, or on-site complications, should be communicated to, and discussed with, SCCAS.
- 1.8 The WSI should be approved before costs are agreed with the commissioning client, in line with the Chartered Institute for Archaeologists' guidance. Failure to do so could result in additional and unanticipated costs. It is the archaeological contractor's responsibility to ensure that adequate resources are available to fulfil the Brief.

- 1.9 A physical copy of the approved WSI must be available on site for the Project Officer/Supervisor.
- 1.10 Provision should be included in the WSI for public benefit in the form of outreach activities, for example (and where appropriate), open days/guided tours for the general public, local schools, local councillors, local archaeological and historical societies and for local public lectures and/or activities within local schools. Provision should be included for local press releases (newspapers/radio/TV). Where appropriate, information boards should be also provided during the fieldwork stage of investigation. The archaeological contractor should ascertain whether their client will seek to impose restrictions on public access to the site and for what reasons and these should be detailed in the WSI.
- 1.11 Suitable arrangements should be made with the client, and stated in the WSI, to ensure the site is appropriately closed after the completion of the excavation (and provision for infilling of dangerous holes during fieldwork) to comply with health and safety regulations. The site, and any deep and dangerous holes, should be only backfilled with the prior approval of SCCAS.
- 1.12 Following satisfactory completion of the fieldwork, SCCAS will advise the LPA that the fieldwork has been completed and that no further on-site work is required. Full construction work must not begin until archaeological excavation has been completed and formally confirmed in writing by the LPA.

2. Fieldwork Requirements

- 2.1 The method of overburden removal will be detailed in the archaeological contractors Written Scheme of Investigation (WSI), which will include:
 - 2.1.1 Topsoil, subsoil and/or overburden of recent origin will be mechanically removed (unless otherwise agreed) using a machine of an appropriate size, with a back acting arm and fitted with a toothless ditching bucket, operated by a driver with suitable qualifications and experience. The machine strip will be to the top of the first archaeological horizon or surface geology (commonly described as 'natural'). All machine excavation is to be under the direct control and supervision of an experienced archaeologist. The topsoil, subsoil and/or overburden should be examined for archaeological material.
 - 2.1.2 Topsoil, subsoil and archaeological deposits should be kept separate during removal to allow sequential backfilling of excavations, unless otherwise agreed with the developer.
 - 2.1.3 All machinery is to be kept off stripped areas until the archaeological excavations have been completed and the area has been signed off in writing by the relevant SCCAS.
 - 2.1.4 The WSI should contain provision for the investigation and excavation of colluvial and alluvial deposits.
 - 2.1.5 The WSI will contain a detailed spoil management strategy including locations of topsoil and subsoil storage areas.

- 2.1.6 Any natural subsoil surface revealed should be hand cleaned and examined for archaeological deposits and artefacts. Sample excavation of any archaeological features revealed may be necessary in order to gauge their date and character.
- 2.2 There is a presumption that excavation of all archaeological deposits will be undertaken by hand (including stratified layers; see below) unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
- 2.3 The archaeological contractors WSI will set out a detailed methodology for the identification of archaeology and excavation of archaeological features, deposits and stratified sequences, which will include:
- 2.3.1 All features, including presumed natural and geological features are to be investigated and recorded unless otherwise agreed with the SCCAS.
- 2.3.2 All archaeological features will be excavated by hand to establish date, function, and depth, for guidance:
- 2.3.2a A minimum of 50% of the fills of general features is to be excavated. In some instances, 100% may be requested depending on the significance of the feature/deposit.
- 2.3.2b A minimum of 10% of the fills of linear features (ditches, etc) are to be excavated. The interventions must be representative of the available length of the feature and must consider any variations of size, depth, fills and any concentration of artefacts. For linear features 1.00m wide slots should be excavated across their width. Depending on the significance of the feature a higher percentage sample may be requested, increasing in 10% increments until the SCCAS are satisfied that research aims/objectives can be answered.
- 2.3.2c For discrete features, such as pits, 50% of their fills should be excavated and sampled for environmental evidence. In some instances, 100% may be requested depending on the significance of the feature.
- 2.3.2d All features which are, or could be interpreted as, structural must be fully excavated. Post-holes and pits must be examined in section and then fully excavated. Fabricated surfaces within the excavation area (e.g. yards and floors) must be fully exposed and cleaned. Any variation from this process can only be made by agreement with SCCAS, and must be confirmed in writing.
- 2.3.2e Large or deep features may be excavated in opposing quadrants in the first instance unless otherwise agreed with SCCAS, or in other such gridded or systematic excavation as may be appropriate to the feature type in agreement with SCCAS.
- 2.3.2f Provision should be made for hand excavation of any stratified layers (e.g. dark earth) in 2.50m or 1.00m systematic and gridded squares, to be agreed on the basis of the complexity/extent of such layers with SCCAS. This should be accompanied by an appropriate finds recovery strategy which must include metal detector survey and on-site sieving to recover smaller artefacts/ecofacts.

- 2.3.2g Provision should be made to fully investigate the depth of sequences and the depth of archaeological features. This may involve the use of stepping or shoring.
- 2.3.2h Appropriate provision should be made for extracting water from sites and features.
- 2.3.2i Hand auger or a power auger (where appropriate) is recommended to gain information from very deep features so a safe excavation strategy can be designed and implemented in discussion with the SCCAS.
- 2.3.2j Machine/mechanical assistance may only be used for very large/deep features, following agreement with SCCAS.

Any variation from this process can only be made by agreement [if necessary, on site] with a member of SCCAS, and must be confirmed in writing.

- 2.4. Metal detector searches must take place at all stages of the excavation, including the scanning of excavation areas before they are stripped, by a named and experienced metal detector user, including reference either to their contributions to the PAS database or to other published archaeological projects they have worked on.
- 2.5. All finds will be collected, bagged by context and processed, unless variations in this principle are agreed with SCCAS during the course of the excavation. The finds recovery policy should be addressed in the WSI, there should be no onsite discard policy unless otherwise agreed with SCCAS. Sieving of occupation levels and building fills will be expected. All ceramic finds should be processed concurrently with the excavation to allow immediate assessment and input into decision making.
- 2.6. The WSI should include provision for the immediate processing and initial stabilisation of finds removed from site.
- 2.5 Environmental Sampling techniques should follow guidance outlined in [Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation](#) (2011 Historic England) and other relevant guidance.
 - 2.5.1 The WSI must provide details of a comprehensive sampling strategy for flotation, assessment and analysis of biological remains by a named environmental specialist (for palaeoenvironmental and paleoeconomic investigations and also for absolute dating), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analysis).
 - 2.5.2 Bulk samples must be a minimum of 40 litres. If a feature is too small to produce this size of sample (e.g. a post hole) then 100% of the feature should be retained for processing.
 - 2.5.3 All samples should be retained until their potential has been assessed and until a retention strategy has been agreed with SCCAS. Where necessary, advice on the appropriateness of the proposed strategy should be sought from the Historic England Regional Advisor the Archaeological Science (East of England).

2.5.4 Samples of burnt flint retained for lipid analysis should not be washed.

2.6 If human remains are encountered, SCCAS must be contacted immediately in order to agree an excavation strategy. Human remains will need to be fully excavated and recorded in accordance with [Historic England](#) and [ClfA](#) guidance. The archaeological contractor should make provision for encountering human remains in the WSI and ensure compliance with the provisions of Section 25 of the [Burial Act 1857](#). The archaeological contractor's WSI will contain a detailed methodology for the excavation, recording and sampling of any human remains, this should include:

2.6.1 In the event human remains are discovered the archaeological contractor will notify the SCCAS immediately. Remains are to be left in situ, covered and protected in the first instance and the SCCAS and archaeological contractor's human remains specialist will need to assess the condition of the human remains and agree an excavation methodology.

2.6.2 Prior to excavation, the archaeological contractor will ensure that a licence to excavate the human remains has been obtained from the Ministry of Justice. Where the presence of human remains has been confirmed during the evaluation stage a licence must be obtained from the Ministry of Justice prior to commencement of excavation and a copy must be included in the WSI.

2.6.3 Human remains are to be treated at all stages with care and respect and are to be dealt with in accordance with the law. They must be recorded in situ and subsequently lifted, packed and marked to the standards compatible with those described in current guidance from [ClfA](#), [Historic England](#), [Advisory Panel on the Archaeology of Burials in England](#) (APABE) and the [British Association of Biological Anthropology and Osteoarchaeology \(BABA0\)](#). Proposals for the final deposition of remains following the study and analysis will be required in the WSI.

2.6.4 Where inhumations are encountered, provision should be made for the following:

2.6.4a Sites where furnished burials are known, anticipated, or identified, should comply with SCCAS (2023) Guidance on [Excavating Inhumations for Mineral Preserved Organics \(2023\)](#). SCCAS should be consulted with regards to the most appropriate mitigation approach and amendments to the existing WSI may be necessary.

2.6.4b A sampling strategy which should include provision for retrieval of small bones in the head area (e.g. inner ear bones), torso/pelvic area (foetal remains, gall/bladder stones, hand bones depending on position), and the feet.

2.6.4c A sampling strategy for evidence of intestinal parasites in accordance with [Historic England](#) and [ClfA](#) guidance and in discussion with appropriate specialists.

2.6.4d A sampling strategy for pollen in accordance with [Historic England](#) guidance and in discussion with appropriate specialists. Grid sampling over the whole

body zone should be employed to sample for stomach and intestinal contents, votive flowers and other sources such as textiles.

- 2.6.4e Destructive sampling of human remains for scientific analysis including stable isotopes, radiocarbon dating, and aDNA in accordance with APABE guidance [Science and the Dead: Destructive Sampling of archaeological human remains for scientific analysis \(2023\)](#).
- 2.6.5 Where cremations are encountered, provision should be made for the following:
 - 2.6.5b Where un-urned cremations are suspected or discovered, these will be 100% excavated, with 100% retention of all contents with spits taken from every 5cm interval until the entire cremation has been excavated.
 - 2.6.5c Urned cremations will be block lifted to allow for X-radiography and excavation under laboratory conditions.
 - 2.6.5a Following the recovery of human bone, cremation deposits should be subject to sampling and assessment for charcoal, charred plant remains, artefacts, molluscs and pollen.
- 2.7 Scientific dating will be utilised to provide spot dates to inform the excavation strategy, contribute to the understanding of stratigraphic sequences, or provide precision/resolution for statistical modelling. The archaeological contractors scientific dating specialist will provide advice and guidance throughout the project and should consult the Historic England Regional Science advisor. Scientific dating techniques - As a baseline the WSI will include provision for the following:
 - 2.7.1 Radiocarbon (C-14) dating and Bayesian chronological modelling in accordance with Historic England guidance [Radiocarbon Dating and Chronological Modelling: Guidelines and Best Practice \(2022\)](#).
 - 2.7.2 Luminescence dating (optically stimulated luminescence or OSL) ([Historic England guidance forthcoming](#))
 - 2.7.3 Archaeomagnetic dating for in situ fired material such as kilns or ovens and waterlogged deposits ([contact Historic England](#)).
 - 2.7.4 Dendrochronology, see Historic England guidance [Dendrochronology: Guidelines on producing and interpreting dendrochronological dates \(1998\)](#).

3. Recording Requirements

- 3.1 The archaeological contractors WSI will contain detailed methodologies for the production of hand-written and drawn records and photography in accordance with professional guidance and good practice.

- 3.2 Proposals to use digital plan and section drawing must be discussed and agreed with SCCAS prior to its inclusion in a Written Scheme of Investigation. If digital recording is used, the WSI must state the digital recording methodology and details on storage of the site records and backups.
- 3.3 Excavation recording is to be consistent with the requirements of the Suffolk Historic Environment Record (HER) and compatible with the archive for deposition. Methods must be specified in the WSI and agreed with the SCCAS.
- 3.4 Plans of archaeological features on the site are to be drawn at 1:20 or 1:50, depending on the complexity of the feature/s being recorded.
- 3.5 Sections of features are to be drawn at 1:10 or 1:20, depending on the complexity of the feature/s being recorded.
- 3.6 A sufficient number of levels will be taken across the excavation are to gain an understanding of subsurface topography, all levels should relate to Ordinance datum.
- 3.7 All features should be recorded using RTK GPS survey equipment or Total Station (as appropriate) and site plans should be provided to the SCCAS on a regular basis.
- 3.8 A photographic record of the work is to be made, consisting of high-resolution digital images. All cameras must have sensors of APS-C (or larger) and all images must be at least 10 megapixels in size. This rules out most compact, bridge and mobile phone cameras.
- 3.9 All digital images for archiving purposes must be high quality non-altered RAW files (.DNG) or TIFF images. JPG images must not be used for archiving.
- 3.10 Scale bars should be of an appropriate size and placed in an appropriate position relative to the subject and not obscure any significant element of the subject.
- 3.11 Provision should be made for the use of photogrammetry for 3-dimensional recording of features such as burials, structures, and industrial features. See Historic England guidance [Photogrammetric Applications for Cultural Heritage Guidance for Good Practice](#) (2017).
- 3.12 Provision should be made for artefact distribution modelling on industrial production sites and of flint assemblages.
- 3.13 Provision should be made for drone aerial photography and video on sites where aviation rules allow. See Historic England guidance [Managing Lithic Sites: Archaeological guidance for commercial and research projects, planning authorities, land management agencies and developers](#) (2024).

4. Artefact Requirements

- 4.1 The retrieval, conservation and analysis of archaeological artefacts will be detailed in the archaeological contractors WSI.
- 4.2 All artefacts will be collected and bagged by context.

- 4.3 All small finds will be GPS plotted so the find can be 3-Dimensionally located within its context and the site.
- 4.4 Treasure will be reported to the SCCAS immediately and the county Finds Liaison Officer (FLO). The Archaeological Contractor will comply with the provisions of the [Treasure Act](#). Findings will be reported to the Coroner within 14 days.
- 4.5 Finds that are suspected to contain preserved organic residues will not be cleaned in accordance with [Historic England](#) Guidance.
- 4.6 In accordance with NPPF, the contractor must get the agreement of the landowner to the deposition of the site archive, and transfer of title, with SCCAS County Archaeology Store. The intended depository should be clearly stated within the archaeological contractors WSI.

5. Post-Excavation Assessment and Archival Requirements

- 5.1 Within four weeks of the end of fieldwork a written timetable for post-excavation assessment, updated project design and/or reporting must be produced, which must be approved by SCCAS. Following this, a written statement of progress on post-excavation work – whether assessment, analysis, report writing and publication or archiving – will be required at six monthly intervals.
- 5.2 A post-excavation assessment report (PXA) on the fieldwork should be prepared in accordance with the principles of [Management of Research Projects in the Historic Environment \(MoRPHE\)](#) (Historic England 2015). It is expected that the PXA will be produced within 6 months, and any variation to this must be discussed with SCCAS. The PXA will act as a critically assessed audit of the archaeological evidence from the site; see ALGAO Advice Note for [Post-Excavation Assessment](#) (2015).
- 5.3 The Prehistoric Ceramics Research Group/Study Group for Roman Pottery/Medieval Pottery Research Group [A Standard for Pottery Studies in Archaeology](#) (2016) should be adhered to, and ceramics should be assessed with regard to the Suffolk fabric series for post-Roman pottery.
- 5.4 In certain instances, a full PXA might be unnecessary. The need for a full PXA or otherwise should be discussed and formally agreed with SCCAS within four weeks of the end of fieldwork.
- 5.5 The PXA must present a clear and concise assessment of the archaeological value and significance of the results, and identifies the research potential, in the context of the [Regional Research Framework](#) (see also East Anglian Archaeology, Occasional Papers [3](#), [8](#) and [24](#)). It must present an Updated Project Design, with a timetable, for analysis, dissemination, and archive deposition. The PXA will provide the basis for measurable standards for SCCAS to monitor this work.
- 5.6 An archive of all records and finds is to be prepared, consistent with the principles of [Management of Research Projects in the Historic Environment \(MoRPHE\)](#). It must be

adequate to perform the function of a final archive for deposition in the SCCAS County Archaeology Store (see [Archaeological Archives Forum: a guide to best practice](#) 2007).

- 5.7 Finds must be appropriately conserved and stored in accordance with guidelines from [The Institute of Conservation \(ICON\)](#).
- 5.8 It is expected that the entire archive will be deposited as a whole with the SCCAS County Archaeology Store. Where finds of treasure (as defined by the Treasury Act 1996) will not form parts of the finds archive then provision must be made for additional recording (e.g. photography, photogrammetry, illustration, scientific analysis) as appropriate. The project manager should consult the SCCAS County Archaeology Store before the archive is prepared regarding the specific requirements for the archive deposition and curation, and regarding any specific cost implications of deposition. A clear statement of the form, intended content, and standards of the archive is to be submitted for approval as an essential requirement of the WSI.
- 5.9 The PXA should offer a statement of significance for retention, based on specialist advice, and - where it is justified – the UPD should propose a discard strategy. This should be agreed with SCCAS.
- 5.10 For deposition in the SCCAS County Archaeology Store, the archive should comply with SCCAS Archive Guidelines.
- 5.11 Archive deposition charges will be charged at the Post Excavation Assessment (PXA) stage of work, prior to the planning conditions for the site being discharged. If a site does not require a PXA, then SCCAS expects the charge to be paid at the final excavation reporting stage prior to the planning conditions for the site being discharged. In accordance with NPPF paragraph 211, transfer of ownership must be completed at this stage prior to discharge of condition.
- 5.12 The UPD (or excavation report if a UPD is not required) should state proposals for the deposition of the digital archive relating to this project with the Archaeology Data Service (ADS), or similar digital archive repository, and allowance should be made for costs incurred to ensure proper deposition (<http://ads.ahds.ac.uk/project/policy.html>).
- 5.13 An unbound hardcopy of the PXA and UPD, clearly marked DRAFT, must be presented to SCCAS for approval within six months of the completion of fieldwork unless other arrangements are negotiated. The report should clearly state the author(s) and archaeological contracting unit who produced the document. Following acceptance, a digital copy of the approved final report should be submitted to the Suffolk HER. Provision should also be made for a hard copy report to be submitted, however, the need for this should be discussed and agreed with SCCAS who will advise on a case-by-case basis.
- 5.14 Digital vector plans of mitigation areas, recorded archaeological features and excavated sections, should be provided as georeferenced (EPSG: 27700) ESRI shape or QGIS GPK files. These files should have the relevant attributes attached to them including; HER Parish Code, Primary Reference Number e.g. (Section Number; Context Number; Sample Number; Small Find number; etc); Group or Feature Number; Archaeological Periods and Phases. These GIS files should be provided to the Suffolk HER following approval of the final report.

- 5.15 On approval of an adequate PXA, UPD and a letter submitted to SCCAS and the LPA that funds are in place to complete outstanding requirements of the PXA and UPD, SCCAS will advise the LPA that the scheme of investigation for post-excavation analysis, dissemination and archive deposition has been agreed, and the outstanding archaeological conditions can be discharged.
- 5.16 Where appropriate, a copy of the approved PXA should be sent to the local archaeological museum, whether or not it is the intended archive depository. A list of local museums can be obtained from SCCAS.
- 5.17 SCCAS supports the [OASIS](#) project, to provide an online index to archaeological reports. At the start of work (immediately before fieldwork commences) an OASIS online record must be initiated and key fields completed on Details, Location and Creators forms. When the project is completed, all parts of the OASIS online form must be completed and a copy must be included in the final report and also with the site archive. A .pdf version of the entire report should be uploaded to the OASIS website.
- 5.18 Where positive results are drawn from a project, a summary report must be prepared, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the Proceedings of the Suffolk Institute of Archaeology and History. It should be included in the project report, or submitted to SCCAS, by the end of the calendar year in which the work takes place, whichever is the sooner.
- 5.19 Where a Scheduled Monument is involved, a copy of the approved report should be sent to Historic England.