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Land Northwest of Haverhill Written Scheme of Investigation for Archaeological Excavation



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1 GENERAL BACKGROUND

- 1.1.1 This document represents a Written Scheme of Investigation (WSI) for archaeological mitigation at Land North West of Haverhill, Little Wratting, Suffolk.
- 1.1.2 This WSI conforms to the principles identified in Historic England's guidance documents *Management of Research Projects in the Historic Environment (MoRPHE)*, specifically the *MoRPHE Project Manager's Guide* and *Project Planning Note 3: Archaeological Excavation*.
- 1.1.3 All work will be conducted in accordance with the Chartered Institute for Archaeologists Code of Conduct and Standard and Guidance for Archaeological Excavation.
- 1.1.4 This WSI also incorporates the requirements of the *EAA Standards for Field Archaeology in the East of England* (Gurney 2003) and Suffolk CC's *Requirements for Archaeological Excavation* (2017).
- 1.1.5 This WSI covers Phase 1 and the relief road only, and that work in relation to further development phases would need to be subject to additional WSIs

1.2 Circumstances of the project

- 1.2.1 St. Edmundsbury Borough Council have granted a hybrid planning permission (SE/09/1283 & RM DC/16/2836) consisting of :
1. (i) Construction of relief Road and associated works (ii) landscape buffer.
 2. Outline Planning Application – (i) Residential Development (ii) primary School (iii) local centre including retail and community uses (iv) public open space (v) landscaping (vi) infrastructure, servicing and other associated works.
- 1.2.2 Permission was granted subject to a suite of planning conditions of which the following relate to archaeology:

Relief Road

A8

(1) No works on site involving any ground disturbance shall commence until the developer has first carried out a programme of archaeological work in accordance with a Written Scheme of Investigation which first shall have been submitted to and approved in writing by the Local Planning Authority. The Written Scheme of Investigation shall include an assessment of significance and research questions; and:

- a. The programme and methodology of site investigation and recording
- b. The programme for post investigation assessment
- c. Provision to be made for analysis of the site investigation and recording
- d. Provision to be made for publication and dissemination of the analysis and records of the site investigation

- e. Provision to be made for archive deposition of the analysis and records of the site investigation
- f. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.
- g. The site investigation shall be completed prior to development, or in such other phased arrangement, as agreed and approved in writing by the Local Planning Authority.

(2)The road shall not be brought into use until the site investigation and post investigation assessment has been completed, submitted to and approved by the Local Planning Authority, in accordance with the programme set out in the Written Scheme of Investigation approved under part 1 of this condition and the provision made for analysis, publication and dissemination of results and archive deposition.

Reason: To enable any remains of archaeological significance to be investigated and recorded.

Wider Development

B20

(1) Within any phase, no works on site involving any ground disturbance shall commence until the developer has first carried out a programme of archaeological work in accordance with a Written Scheme of Investigation for that particular phase which first shall have been submitted to and approved in writing by the Local Planning Authority.

The Written Scheme of Investigation shall include an assessment of significance and research questions; and:

- a. The programme and methodology of site investigation and recording
- b. The programme for post investigation assessment
- c. Provision to be made for analysis of the site investigation and recording
- d. Provision to be made for publication and dissemination of the analysis and records of the site investigation
- e. Provision to be made for archive deposition of the analysis and records of the site investigation
- f. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.
- g. The site investigation shall be completed prior to development.

(2) No building shall be occupied until the site investigation and post investigation assessment has been completed, submitted to and approved by the Local Planning Authority, in accordance with the programme set out in the Written Scheme of Investigation approved under part 1 of this condition and the provision made for analysis, publication and dissemination of results and archive deposition.

Reason: To enable any remains of archaeological significance to be investigated and recorded.

- 1.2.3 An Archaeological evaluation was conducted by SCCAS (Craven 2007). This evaluation revealed an archaeological interest across a number of areas of the site including c 1.5ha of medieval settlement dating from the 12th-14th Centuries.
- 1.2.4 These deposits have the potential to be impacted by the development and accordingly consultations have been undertaken with the Senior Archaeological Officer at Suffolk CC, who advises the LPA on archaeological matters, to formulate the archaeological mitigation strategy detailed in this document.

1.3 The proposed archaeological strategy (Fig. 1 and 2)

Relief Road

- 1.3.1 The previous archaeological evaluation at the site did not cover the entire route of the relief road. Accordingly, a further 10 x 50m archaeological trenches are proposed to fully evaluate the route in the first instance.
- 1.3.2 A decision on the most appropriate mitigation strategy for the section of the relief road still to be trenched will need to be made on the basis of the trenching results. Provision should be made for full excavation.
- 1.3.3 The remaining areas of the relief road already evaluated are not proposed for further mitigation.

Wider Development

- 1.3.4 Five areas totaling c.2.16ha will be subject to archaeological excavation. These areas have been requested by the Senior Archaeological Officer as the areas of interest at the site to be excavated.
- 1.3.5 A further two areas, totaling c.0.48ha, at the eastern extent of the site are marked as contingency excavation areas to be used, following on-site consultation and, if archaeological remains are found to extend within these areas. The area of the attenuation pond will also be included due to the one cremation identified during the evaluation and the fact that this area will be heavily disturbed.
- 1.3.6 Four 30m (in length) evaluation trenches are proposed to further define the archaeological interest of an area approximately of former evaluation trench 184. A decision of the most appropriate mitigation strategy will need to be made on the basis of the trenching results. Provision should be made for expanding the area should significant remains be encountered and may include full excavation.

1.4 Changes to this method statement

- 1.4.1 If changes need to be made to the methods outlined below – either before or during works on site – the County Archaeologist will be informed and asked to consider changes before they are made. Changes will be agreed in writing before work on site commences, or else at the earliest available opportunity.

2 THE GEOLOGY, TOPOGRAPHY AND OTHER FEATURES OF THE SITE

- 2.1.1 The site geology consists of Boulder Clay (<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>). (Dec 2017). On the areas of high ground or upper slopes this natural soil was frequently plough damaged, as it directly underlaid a thin ploughsoil. Towards the base of slopes the natural was generally sealed below colluvial deposits of mid brown clay/silt reaching up to 1m thick.
- 2.1.2 The site lies across the upper slopes and top of a plateau forming the northern side of the Stour Brook valley (Fig. 2). The generally south-west facing slope was cut by the valleys of two drainage channels which meant that the various fields actually lay on a mixture of south-west or south-east facing slopes. Ground levels ranged from c.108m OD on the plateau in the north-east corner of the site, to c.100m OD on the upper slopes in the western fields and c.82m in the southwestern part of the site.
- 2.1.3 The site consists of arable farmland , interspersed with hedges and drainage ditches.

3 ARCHAEOLOGICAL BACKGROUND

- 3.1.1 The following is taken from the evaluation report (Craven 2007): Although the site, at 45ha, was of a substantial size there were no known sites or find spots within its extent recorded on the County HER (Historic Environment Record) which, as a general comparison, records an average of one site per c.5ha. A desk-based assessment of the site and wider area previously carried out by CgMs Consulting (Gailey 2007) indicated that the site had low-moderate potential for multi-period archaeological deposits.
- 3.1.2 Two areas of particular interest lay close to the vicinity to the site. Firstly, 500m to the west, a metal-detected Bronze Age hoard (WTH 011), was later followed by evaluation and excavation in advance of housing development (WTH 012), which identified evidence of Bronze Age settlement consisting of a ditched enclosure and associated pits. A Bronze Age axehead fragment has also been found at WTH 023, 350m to the south-east of the site. There was some potential therefore for identifying prehistoric activity throughout the evaluation area. Secondly the site surrounds, on three sides, an area of land now occupied by Chapel Cottage and Boyton Hall, but formerly believed to be the site of the medieval Alderton Chapel (HVH 046).
- 3.1.3 The chapel, which is marked on the 1783 Hodkinson map of Suffolk and its lands later became a post-medieval farmstead known as Chapel Farm, as shown on the 1st Edition Ordnance Survey. Fields belonging to Chapel Farm form part of the current site and the complex was linked, on the eastern side, by a trackway to the main Haverhill – Bury St Edmunds road. Chapel Cottage, a Grade II Listed Building (LBS 466432), is an amalgamation of two 19th century cottages which are believed to have reused material from the former Chapel. Boyton Hall is marked on the 2nd Edition Ordnance Survey, which shows only the southern half of the site, and so was built between 1886 and 1904.
- 3.1.4 An up to date HER search will be undertaken for the project.

4 AIMS AND OBJECTIVES

4.1 Aims of the excavation

- 4.1.1 The overall aim of the investigation is to preserve by record the archaeological evidence contained within the footprint of the development area, prior to damage by development, and investigate the origins, date, development, phasing, spatial organisation, character, function, status, and significance of the remains revealed, and place these in their local, regional and national archaeological context.
- 4.1.2 Based on the results of the evaluation, more specific aims and research questions can be formulated:
- 4.1.3 Prehistoric:
- Examine the area around the cremation in Trench 184 to see if the cremation is an isolated occurrence or part of a cemetery
 - Is the cremation related to an area of wider activity and/or settlement
- 4.1.4 Saxon/Medieval:
- Is there a Saxon origin to the site?
 - Is there any evidence for the Alderton Chapel?
 - Establish the nature and extent of any settlement
 - Are there structures related to settlement?
 - Can the status of any settlement be established?
 - How the settlement relates to the wider medieval settlement of Haverhill
 - Examine the imbalance between pottery and other finds
 - Can the evidence be used to draw wider inferences eg with regard to trade, production & consumption.
 - What date was settlement abandoned on site and why?
 - Can environmental evidence further elucidate activity on site?
- 4.1.5 Following the completion of the fieldwork, these research aims will be revised and redefined or expanded as necessary, ensuring that they contribute to the goals of the Regional Research Frameworks relevant to this area.
- 4.1.6 The findings of the excavation will be disseminated at a suitable level and a project archive will be produced.

4.2 Research frameworks

- 4.2.1 This excavation takes place within, and will contribute to the goals of Regional Research Frameworks relevant to this area:
- Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment (Glazebrook 1997, East Anglian Archaeology Occasional Papers 3);

- Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy (Brown & Glazebrook 2000, East Anglian Archaeology Occasional Papers 8)
- Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott 2011, East Anglian Archaeology Occasional Papers 24)

5 METHODS

5.1 Background research

5.1.1 The following is taken from the evaluation report (Craven 2007):

5.1.2 Prehistoric evidence:

A single cremation was identified in Trench 184 and a scattering of prehistoric pits were recorded.

Medieval evidence:

The main area of activity identified in the evaluation is concentrated on either side of the trackway leading to the site of Alderton Chapel/Chapel Farm. The archaeological deposits relate to a phase of medieval occupation, mainly from the late 12th to the 14th century. A few finds indicated a possible earlier origin for the settlement in the Late Saxon/Early medieval period of the 10th-11th centuries. The archaeological deposits were relatively well preserved, there was only occasional disturbance caused by modern drainage pipes and features were generally sealed beneath a layer of silt/clay subsoil which had protected them from plough damage.

The medieval activity lies in a 35m wide strip on the north side of the trackway for a distance of c.120m. The northern limit of this strip appears to broadly align with the boundary of the field to west. The area of occupation also extends through this latter field, which was simultaneously evaluated as WTL 009, continuing along the north edge of the track. Activity on the south side of the trackway was limited to two distinct but contemporary clusters of features. The areas of activity appear to be well defined, with a sharp drop in the number of features being identified in trenches immediately beyond these limits.

Identified features consisted of a mixture of linear ditches, postholes and a range of pits of varying sizes. Linear ditches generally respect the alignment of the trackway, being either on a parallel or 90° alignment, which demonstrates that the track is at least of a contemporary date. These ditches probably had mixed functions, for drainage of the heavy clay soils and as boundaries between a series of plots along the track. In some cases these ditches appear to have become silted up and subsequently recut several times, implying that these boundaries were probably in use throughout the period of occupation.

Possible evidence for structures consists of features such as the group of postholes in Trench 209 or the pairs of small pits in Trench 197. The linear cobbled feature, 0134, does not appear to be solid enough for either a foundation or the base of a wall and is perhaps more likely to be a cobbled track or yard surface. The stray piece of carved sandstone in pit 1224 may be

architectural in origin, and perhaps has come from the nearby chapel. No defined layout of any structure was identified.

5.2 Event number

- 5.2.1 Before work commences on site, an event number will be obtained from the County HER, and a unique site code assigned to the project.

5.3 Excavation method

Excavation standards

- 5.3.1 The proposed archaeological excavation and analysis will be conducted in accordance with current best archaeological practice and the appropriate national and regional standards and guidelines.
- 5.3.2 All work will be conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Excavation*.
- 5.3.3 All fieldwork will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992), and the revised OA fieldwork manual (publication forthcoming). Further guidance is provided to all excavators in the form of the *OA Fieldwork Crib Sheets – a companion guide to the Fieldwork Manual*. These have been issued ahead of formal publication of the revised Fieldwork Manual.
- 5.3.4 The excavation will also adhere to the *SCCAS Requirements for Excavation* (2017).

Pre-commencement

- 5.3.5 Before work on site commences, service plans will be checked to ensure that access and groundworks can be conducted safely.
- 5.3.6 In order to minimise damage to the site and disruption to site users, Oxford Archaeology will agree the following with the client/landowner before work on site commences:
- the location of entrance ways
 - sites for welfare units
 - soil storage areas
 - refuelling points for plant (if necessary), and the extent of any bunding required around fuel dumps
 - access routes for plant and vehicles across the site
 - no plant to cross stripped areas
 - suitable demarcation between excavation and construction zones

Soil stripping

- 5.3.7 Service plans will be checked before work commences on site. Before excavation areas are stripped, they will be scanned by a qualified and

experienced operator, using a CAT and Genny with a valid calibration certificate.

- 5.3.8 All machine excavation will take place under the supervision of a suitably qualified and experienced archaeologist.
- 5.3.9 The excavation areas will be stripped by a mechanical excavator to the depth of geological horizons, or to the upper interface of archaeological features or deposits, whichever is encountered first. A toothless ditching bucket will be used to strip topsoil. Overburden will be excavated in spits not greater than 0.1m thick.
- 5.3.10 Where the archaeological levels are particularly deep, safe excavation procedures will be followed to ensure that trenches are safe to enter.
- 5.3.11 South of the track spoil will be stored between the two areas of excavation. North of the track spoil will be stored to the north-west of the site.

Hand excavation

- 5.3.12 The top of the first archaeological deposit will be cleared by machine, then cleaned off by hand. Exposed surfaces will be cleaned by trowel and hoe as necessary, in order to clarify located features and deposits.
- 5.3.13 All features will be investigated and recorded to provide an accurate assessment of their character and contents. All relationships between features or deposits will be investigated and recorded. Any natural subsoil surface revealed will be hand cleaned and examined for archaeological deposits and artefacts. Excavation will characterise the full archaeological sequence down to undisturbed natural deposits. Apparently natural features (such as tree throws) will be sampled sufficiently to establish their character.
- 5.3.14 All excavation of all archaeological deposits will be done by hand, unless agreed with the Senior Archaeological Officer that there will be no loss of evidence using a machine. The method of excavation will be decided by the senior project archaeologist.
- 5.3.15 There will be sufficient excavation to give clear evidence for the period, depth, and nature of each archaeological deposit. We will use the following levels for excavating features, unless others are agreed during the project.

Feature Class	Proportion
Layers/deposits/horizontal stratigraphy relating to domestic/industrial activity (e.g. hearths, floor surfaces)	100%
Post-built structures of pre-modern date	100%
Domestic ring-ditches or roundhouse gullies	50%
Pits associated with agricultural & other activities	50% (100% where appropriate)
Linear features (ditches & gullies) associated with structural remains (minimum 1m slot excavated across width)	20%
Pre-modern linear features not associated with structural remains (minimum 1m slot excavated across width)	10%
Human burials, cremations & other deposits relating to funerary activity	100%

- 5.3.16 Where deep features cannot be excavated safely, they will be sampled using a hand augur or boreholes, in order to assess their depth and structure.
- 5.3.17 Significant archaeological features (e.g. solid or bonded structural remains, building slots or post-holes) will be preserved intact, even if fills are sampled.
- 5.3.18 If preservation *in situ* is required by the Senior Archaeological Officer, all exposed surfaces will be cleaned and prepared for reburial beneath construction materials. If appropriate, the areas will be protected with geotextile or other buffering materials.
- 5.3.19 If exceptional or unexpected feature are uncovered, the Senior Archaeological Officer will be informed, and their advice sought on further excavation or preservation.

5.4 Human remains

- 5.4.1 If human remains are encountered during excavation, the Client, County Coroner, and the Senior Archaeological Officer will be informed immediately.
- 5.4.2 Human remains will be excavated in accordance with all appropriate legislation and Environmental Health regulations. Excavation will only take place after Oxford Archaeology has obtained a Ministry of Justice exhumation license.

5.5 Metal detecting and the Treasure Act

- 5.5.1 Metal detector searches will take place at all stages of the excavation by an experienced metal detector user (Steve Critchley). Excavated areas will be detected immediately before and after mechanical stripping. Both excavated areas and spoil heaps will be checked. To prevent losses from night-hawking, features will be metal detected immediately after stripping.
- 5.5.2 Metal detectors will not be set to discriminate against iron.

- 5.5.3 Artefacts will be removed and given a small find number. Labels will be placed on the location of each 'small find' and surveyed in with a GPS.
- 5.5.4 If finds are made that might constitute 'Treasure' under the definition of the Treasure Act (1996), they will, if possible, be excavated and removed to a safe place. Should it not be possible to remove the finds on the day they are found, suitable security will be arranged. Finds that are 'Treasure' will be reported to the landowner and County FLO who will advise the County Coroner within 14 days, in accordance with the Act. The County Finds Liaison Officer from the Portable Antiquities Scheme will also be informed.

5.6 Recording of archaeological deposits and features

- 5.6.1 Records will comprise survey, drawn, written, and photographic data.

Survey

- 5.6.2 Surveying will be done using a survey-grade differential GPS (Leica CS10/GS08 or Leica 1200) fitted with "smartnet" technology with an accuracy of 5mm horizontal and 10mm vertical.
- 5.6.3 The site grid will be accurately tied into the Ordnance Survey National Grid and located on the 1:2500 or 1:1250 map of the area. Elevations will be levelled to the Ordnance Datum.

Written records

- 5.6.4 A register of all trenches, features, photographs, survey levels, small finds, and human remains will be kept.
- 5.6.5 All features, layers and deposits will be issued with unique context numbers. Each feature will be individually documented on context sheets, and hand-drawn in section and plan. Written descriptions will be recorded on pro-forma sheets comprising factual data and interpretative elements.
- 5.6.6 Where stratified deposits are encountered, a Harris Matrix will be compiled during the course of the excavation.

Plans and sections

- 5.6.7 Pre-excavation plans will be prepared using either GPS-based survey equipment or photogrammetry.
- 5.6.8 Site excavation plans will normally be drawn at 1:50, but on deeply-stratified sites a scale of 1:20 will be used. Detailed plans of individual features or groups will be at an appropriate scale (1:10 or 1:20).
- 5.6.9 Long sections showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20. All section levels will be tied in to Ordnance Datum.
- 5.6.10 All site drawings will include the following information: site name, site code, scale, plan or section number, orientation, date and the name or initials of the archaeologist who prepared the drawing.

Photogrammetric recording

- 5.6.11 Plans and sections may be supplemented with photogrammetric recording of the excavation areas. Photogrammetric models will be based on high-resolution digital photographs with a minimum file size of 5 MB. Photogrammetric processing will be conducted using the Agisoft Photosoft (Professional Edition) software, and will incorporate reference points taken by GPS-based survey equipment.

Photographs

- 5.6.12 The photographic record will comprise high resolution digital photographs.
- 5.6.13 Photographs will include both general site shots and photographs of specific features. Every feature will be photographed at least once. Photographs will include a scale, north arrow, site code, and feature number (where relevant), unless they are to be used in publications. The photograph register will record these details, and photograph numbers will be listed on corresponding context sheets.

5.7 Post-excavation processing

- 5.7.1 Processing will take place in tandem with excavation, and advice will be sought from relevant specialists on key artefact types. The Project Manager and fieldwork project officer will be given feedback to enable them to develop excavation strategies during fieldwork.
- 5.7.2 Any finds requiring specialist treatment and conservation will be sent for appropriate treatment.
- 5.7.3 Finds will be marked with context numbers, site code or accession number, as detailed in the requirements of the County Store.

5.8 Finds recovery

Standards for finds handling

- 5.8.1 Finds will be exposed, lifted, cleaned, conserved, marked, bagged, and boxed in line with the standards in:
- United Kingdom Institute for Conservators (2012) *Conservation Guidelines No. 2*
 - Watkinson & Neal (1988) *First Aid for Finds*
 - Chartered Institute for Archaeologists (2014) *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*
 - English Heritage (1995) *A Strategy for the Care and Investigation of Finds*.
- 5.8.2 Where finds require conservation, this will be done in accordance with the guidelines of the Institute for Conservation (ICON),

Procedures for finds handling

- 5.8.3 At the start of work, a finds supervisor will be appointed to oversee the collection, processing, cataloguing, and specialist advice on all artefacts collected.
- 5.8.4 Artefacts will be collected by hand and metal detector. Excavation areas and spoil will be scanned visually and with a metal detector to aid recovery of artefacts. All finds will be bagged and labelled according to the individual deposit from which they were recovered, ready for later cleaning and analysis. 'Special/small finds' may be located more accurately by GPS if appropriate.
- 5.8.5 Processing will take place in tandem with excavation, and advice will be sought from relevant specialists on key artefact types. (See the Appendix for a list of specialists.)
- 5.8.6 All artefacts recovered from excavated features will be retained for post-excavation processing and assessment, except:
- those which are obviously modern in date
 - where very large volumes are recovered (typically ceramic building material)
 - where directed to discard on site by the Senior Archaeological Officer
- 5.8.7 Where artefacts are not removed from site, a strategy will be employed to ensure a sufficient sample is retained, in order to characterise the date and function of the features they were excavated from. A record will be kept of the quantity and nature of artefacts which are not removed from site.
- 5.8.8 Any finds requiring specialist treatment and conservation will be sent for appropriate treatment.

5.9 Sampling for environmental remains and small artefact retrieval

Standards for environmental sampling and processing

- 5.9.1 Paleoenvironmental remains will be sampled and processed in accordance with the guidelines set out in:
- English Heritage (2011, 2nd edition) *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*.
 - Association for Environmental Archaeology (1995) *Environmental archaeology and archaeological evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England*. Working Papers of the Association for Environmental Archaeology 2. York: Association for Environmental Archaeology.
 - Dobney, K., Hall, A., Kenward, H. & Milles, A. (1992) *A working classification of sample types for environmental archaeology*. Circaea 9.1: 24-26
 - Murphy, P.L. & Wiltshire, P.E.J. (1994) *A guide to sampling archaeological deposits for environmental analysis*.

Procedures for sampling and processing

- 5.9.2 Bulk samples (up to 40 litres or 100% of context) will be taken from a range of site features and deposits to target the recovery of plant remains (charcoal and macrobotanicals) fish, bird, small mammal and amphibian bone and small artefacts. Environmental samples will be taken from well-stratified, datable deposits and any others showing environmental potential. Samples will be labelled with the site code, context number, and sample number.
- 5.9.3 If appropriate, monolith samples of waterlogged deposits and buried soils will be taken for pollen analysis, soil micro-morphological, or sedimentological analysis. Where consistent with the aims of the excavation, samples will be taken from deposits, artefacts, and ecofacts for scientific (absolute) dating including radiocarbon dating.
- 5.9.4 Where features containing very small artefacts – such as micro-debitage and hammerscale – are identified, bulk samples will be taken (up to 40 litres or 100% of context).
- 5.9.5 Typically, 10 litres of each bulk sample will be processed using tank flotation, with the remaining sub-sample processed where appropriate or necessary. Normally, early prehistoric samples will be fully processed. Waterlogged samples will be wet sieved and stored in cool or wet conditions as appropriate.
- 5.9.6 Where practical, waterlogged wood specimens will be recorded in detail on site, in situ. When removed, they will be cleaned and photographed, and stored in wet cool conditions for assessment by a suitably qualified specialist (see the Appendix).
- 5.9.7 The project team will consult Historic England's Scientific Advisor on environmental sampling and dating where necessary.

6 REPORTING AND ARCHIVING

6.1 Post-excavation Assessment Report

- 6.1.1 Post-excavation analysis and reporting will follow guidance in English Heritage's (2009) *Management of Research Projects in the Historic Environment*.
- 6.1.2 A site summary will be provided to the Senior Archaeological Officer two weeks after completing the excavation.
- 6.1.3 A post-excavation assessment report and updated research design will be delivered within six months of the completion of fieldwork.
- 6.1.4 If substantial remains are recorded during the project, it may be necessary to undertake a full programme of analysis and publication in accordance with the guidelines contained in English Heritage's *Management of Archaeological Projects 2*. If this is the case, then a timetable and programme of work for this aspect of the project will be included in the post-excavation assessment report.

6.2 Contents of the Assessment Report

- 6.2.1 The post-excavation assessment report will provide an objective account of the archaeological investigation and its findings. It will contain a comprehensive, illustrated assessment of the results and consider the potential for further analysis and publication in light of relevant research issues within regional and national research agendas.
- 6.2.2 The report will include:
 - a title page detailing site address, site code and accession number, NGR, author/originating body, client's name and address
 - full list of contents
 - a non-technical summary of the findings
 - a description of the geology and topography of the area
 - a description of the methodologies used
 - a description of the findings and assessment of the stratigraphic evidence
 - tables summarising features and artefacts
 - site location plans, and plans of each area excavated showing the archaeological features found
 - selected sections of excavated features
 - specialist assessment reports on artefacts and environmental finds
 - relevant photographs of features and the site
 - a discussion of the findings and their significance
 - a discussion of the relationship between findings on the site and other archaeological information held in the Suffolk Historic Environment Record

- an updated project design linked to relevant local and regional research issues, including a programme of work and timetable for further analysis and publication (where appropriate)
- a bibliography of all reference material
- the OASIS reference and summary form.

6.3 Analysis Report and Publication

- 6.3.1 Where appropriate (in consultation with the Senior Archaeological Officer), and following the production of the post-excavation assessment report, a post-excavation analysis report and/or publication will be produced.
- 6.3.2 The content of the post-excavation analysis report will be detailed in the updated project design contained within the post-excavation assessment report. Where required, this will be delivered within 24 months of the completion of fieldwork.
- 6.3.3 The scope, format and venue of any publication will be proportionate to the significance of the results.
- 6.3.4 If the Senior Archaeological Officer requires no further excavation on the site, a summary report will be prepared for the County Archaeological Journal. If the evidence contained within the archive report is of significance, the Senior Archaeological Officer may require publication of the site in local journals or an academic monograph.
- Proceedings of the Suffolk Institute of Archaeology & History

6.4 Draft and final reports

- 6.4.1 A draft copy of all post-excavation reports will be supplied to the Senior Archaeological Officer for comment.
- 6.4.2 Following approval of the report, one printed copy and one digital copy (PDF) will be presented to the Suffolk Historic Environment Record.

6.5 OASIS

- 6.5.1 A digital copy of the approved report will be uploaded to the OASIS database.
- 6.5.2 A copy of the OASIS Data Collection Form will be included in the report.

Archive standards

7.1.1 The site archive will conform to the requirements Appendix 1 of the Historic England's (2015) *Management of Research Projects in the Historic Environment* (MoRPHE), and the requirements of the Suffolk County Council Stores.

7.1.2 The preparation of the archive will follow the guidelines contained in *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (United Kingdom Institute for Conservation, 1990), *Standards in the Museum care of Archaeological Collections* (Museums and Galleries Commission 1992), *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (Brown 2007) and *SCCAS Archaeological Archives in Suffolk* (2017).

Archive contents

7.1.3 The archive will be quantified, ordered, and indexed. It will include:

- artefacts
- ecofacts
- project documentation – including plans, section drawings, context sheets, registers, and specialist reports
- photographs (digital photographs will be stored on CD-ROM, and colour printouts made of key features)
- a printed copy of the Written Brief
- a printed copy of the WSI
- a printed copy of all reports
- a printed copy of the OASIS form.

7.1.4 It is Oxford Archaeology Ltd's policy, in line with accepted practice, to keep site archives (paper and artefactual) together wherever possible.

Transfer of ownership

7.1.5 The archaeological material and paper archive produced from this investigation will be held in storage by OA East who will seek to transfer the complete project archive to the County Store, in order to facilitate future study and ensure long-term public access to the archive. Where the landowner wishes to retain items recovered during excavation, all selected artefacts will be fully drawn and photographed, identified, analysed, documented and conserved in order to create a comprehensive catalogue of items to be kept by the landowner before the remainder of the archive can be deposited in the County Store. A written transfer of ownership document will be forwarded to the Senior Archaeological Officer before the archive is deposited. In the unlikely event that artefacts of significant monetary value are discovered, and if they are not subject to Treasure Act legislation, separate ownership arrangements may be negotiated following the creation of a comprehensive illustrated catalogue, as described above.

8 TIMETABLE

- 8.1.1 Fieldwork is expected to take a minimum of 10 weeks to complete, based on a five-day week, working Monday to Friday. This does not allow for delays caused by bad weather. Work will start to the south of the access trackway on the two areas located there before moving to the north of the trackway.
- 8.1.2 Post-excavation processing and assessment tasks will commence shortly after excavation commences, to inform the excavation strategy and minimise time required to prepare the final report after excavation is completed.
- 8.1.3 A pre-excavation plan will be provided as soon as possible. A site summary, including a site plan, will be provided to the Senior Archaeological Officer two weeks after completing the excavation.
- 8.1.4 The Post-excavation Assessment will take 6 months following the end of fieldwork, unless there are exceptional discoveries requiring lengthier analysis. Publication of the archive report will be completed within a further 2 years.
- 8.1.5 The project archive will be deposited after delivering the final report, unless the Senior Archaeological Officer requires further excavation on the site.

9 STAFFING AND SUPPORT

9.1 Fieldwork

- 9.1.1 The fieldwork team will be made up of the following staff:
- 1 x Project Manager (supervisory only, not based on site)
 - 1 x Project Officer/Supervisor (full-time)
 - 5 x Site Assistants (as required)
 - 1 x Archaeological Surveyor
 - 1 x Finds Assistant (part-time, as required)
 - 1 x Environmental Assistant (part-time, as required)
- 9.1.2 The Oxford Project Manager will be James Drummond-Murray and the Project Officer responsible for work on site will be [tbc]. Site work will be directed by one of OAE's Project Officers or Supervisors.
- 9.1.3 All Site Assistants will be drawn from a pool of qualified and experienced staff. Oxford Archaeology East will not employ volunteer, amateur, or student staff, whether paid or unpaid, except as an addition to the team stated above.

9.2 Post-excavation processing

- 9.2.1 We anticipate that the site may produce prehistoric and medieval remains. Environmental remains will also be sampled.
- 9.2.2 Pottery will be assessed by Sarah Percival, Carole Fletcher or Sue Anderson
- 9.2.3 Environmental analysis will be carried out by OA East staff, in consultation with the OA Environmental Department in Oxford. The results will be reported to Historic England's Regional Scientific Advisor. Environmental analysis will be undertaken by Rachel Fosberry (charred plant macrofossils, plant macrofossils), Liz Stafford (land molluscs), and Denise Druce and Mairead Rutherford (pollen analysis).
- 9.2.4 Faunal remains will be examined by Hayley Foster.
- 9.2.5 Conservation will be undertaken by Ipswich and Colchester Museums / Karen Barker (Antiquities Conservator), and will be undertaken in accordance with guidelines issued by the Institute for Conservation (ICON).
- 9.2.6 In the event that OA's in-house specialists are unable to undertake the work within the time constraints of the project, or if other remains are found, specialists from the list in the Appendix will be approached to carry out analysis.

10 OTHER MATTERS

10.1 Monitoring and outreach

- 10.1.1 The Senior Archaeological Officer will be informed appropriately of dates and arrangements to allow for adequate monitoring of the works.
- 10.1.2 During the excavation, representatives of the client (Matt Smith of CgMs), Oxford Archaeology East (James Drummond-Murray) and the Senior Archaeological Officer (Rachael Abraham) will meet on site to monitor the excavations, discuss progress and findings to date, and excavation strategies to be followed. No areas will be signed off without SCCAS approval.
- 10.1.3 Subject to client approval and the constraints of the construction programme, Open Days and School visits will be arranged as appropriate.
- 10.1.4 Lectures and exhibitions will be given to Local Societies as and when.

10.2 Insurance

- 10.2.1 OA East is covered by Public and Employer's Liability Insurance. The underwriting company is Lloyds Underwriters, policy number CC004337. Details of the policy can be supplied on request to the Oxford Archaeology East office.

10.3 Chartered Institute for Archaeologists

- 10.3.1 Oxford Archaeology is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA), and is bound by CIfA By-Laws, Standards, and Policy.

10.4 Services, Public Rights of Way, Tree Preservation Orders etc.

- 10.4.1 The client will inform the project manager of any live or disused cables, gas pipes, water pipes or other services that may be affected by the proposed excavations before the commencement of fieldwork. Hidden cables/services should be clearly identified and marked where necessary. If there are overhead cables on the site or in the approachways, a survey must be completed by the relevant authority before plant is taken onto site.
- 10.4.2 The client will likewise inform the project manager of any public rights of way or permissive paths on or near the land which might affect or be affected by the work.
- 10.4.3 The client will inform the Project Manager if the site is a Scheduled Ancient Monument, Site of Special Scientific Interest (SSSI), or any other type of designated site. The client will also inform the project manager of any trees subject to Tree Preservation Orders, protected hedgerows, protected wildlife, nesting birds, or areas of ecological significance within the site or on its boundaries.

10.5 Site Security

- 10.5.1 Unless previously agreed with the Project Manager in writing, this specification and any associated statement of costs is based on the assumption that the site will be sufficiently secure for archaeological work to commence. All security requirements, including fencing, padlocks for gates etc. are the responsibility of the client.

10.6 Access

- 10.6.1 The client will secure access to the site for archaeological personnel and plant, and obtain the necessary permissions from owners and tenants to place a mobile office and portable toilet on or near to the site. Any costs incurred to secure access, or incurred as a result of withholding of access will not be Oxford Archaeology East's responsibility. The costs of any delays as a result of withheld access will be passed on to the client in addition to the project costs already specified.

10.7 Site Preparation

- 10.7.1 The client is responsible for clearing the site and preparing it so as to allow archaeological work to take place without further preparatory works, and any cost statement accompanying or associated with this specification is offered on this basis. Unless previously agreed in writing, the costs of any preparatory work required, including tree felling and removal, scrub or undergrowth clearance, removal of concrete or hard standing, demolition of buildings or sheds, or removal of excessive overburden, refuse or dumped material, will be charged to the client, in addition to any costs for archaeological evaluation already agreed.

10.8 Site offices and welfare

- 10.8.1 All site facilities – including welfare facilities, tool stores, mess huts, and site offices – will be positioned to minimise disruption to other site users, and to minimise impact on the environment (including buried archaeology).

10.9 Health and Safety, Risk Assessments

- 10.9.1 A risk assessment covering all activities to be carried out during the lifetime of the project will be prepared before work commences. The risk assessment will conform to the requirements of health and safety legislation and regulations, and will draw on OA East's activity-specific risk assessment literature.
- 10.9.2 All aspects of the project, both in the field and in the office will be conducted according to OA East's Health and Safety Policy, Oxford Archaeology Ltd's Health and Safety Policy, and *Health and Safety in Field Archaeology* (J.L. Allen and A. St John-Holt, 1997). A copy of Oxford Archaeology's Health and Safety Policy can be supplied on request.

11 APPENDIX: CONSULTANT SPECIALISTS

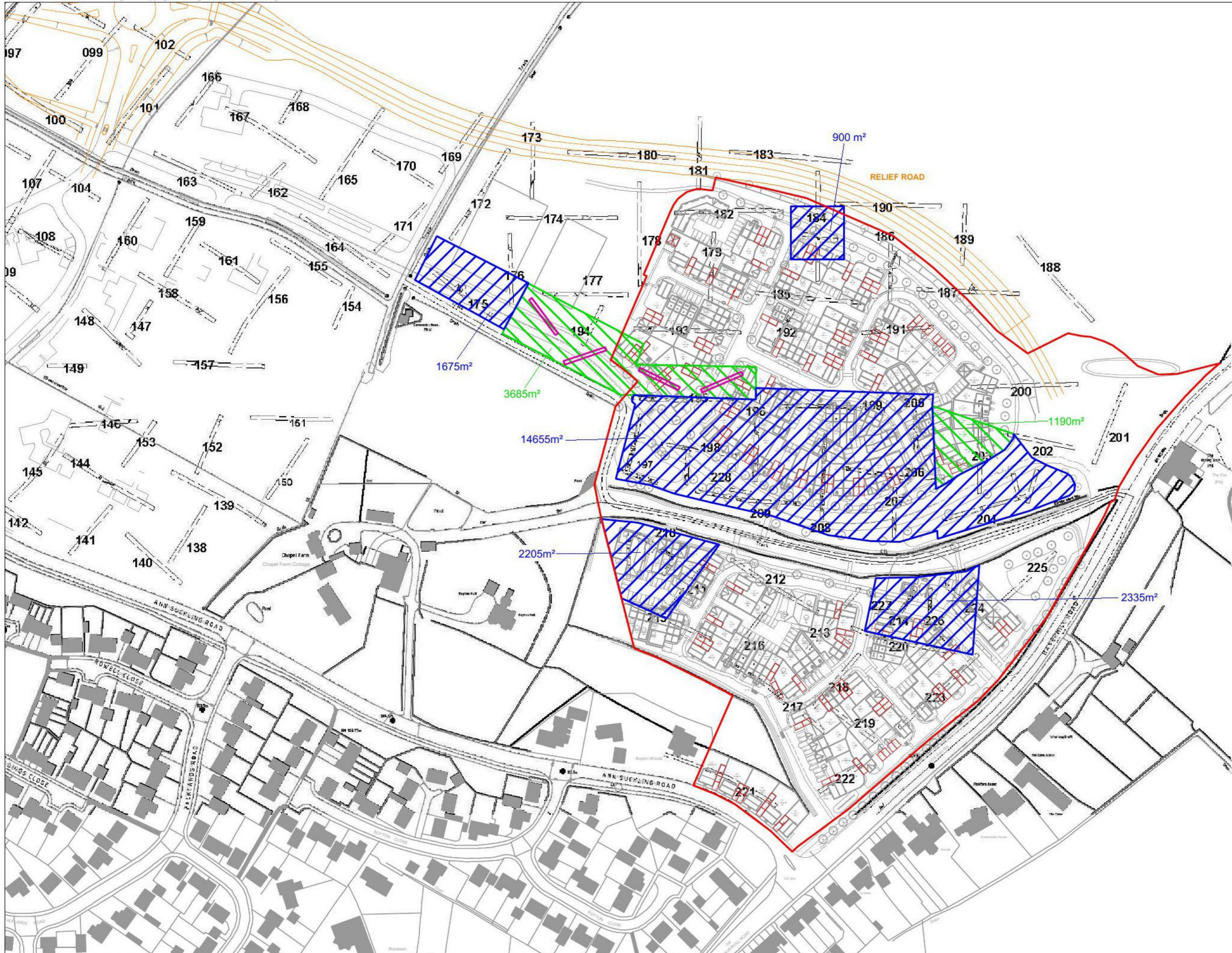
NAME	SPECIALISM	ORGANISATION
Allen, Leigh	Worked bone, CBM, medieval metalwork	Oxford Archaeology
Allen, Martin	Medieval coins	Fitzwilliam Museum
Anderson, Sue	HSR, pottery and CBM	Suffolk County Council
Bayliss, Alex	C14	English Heritage
Biddulph, Edward	Roman pottery	Oxford Archaeology
Billington, Laurence	Lithics	Oxford Archaeology
Bishop, Barry	Lithics	Freelance
Blinkhorn, Paul	Iron Age, Anglo-Saxon and medieval pottery	Freelance
Boardman, Sheila	Plant macrofossils, charcoal	Oxford Archaeology
Bonsall, Sandra	Plant macrofossils; pollen preparations	Oxford Archaeology
Booth, Paul	Roman pottery and coins	Oxford Archaeology
Boreham, Steve	Pollen and soils/ geology	Cambridge University
Brown, Lisa	Prehistoric pottery	Oxford Archaeology
Cane, Jon	illustration & reconstruction artist	Freelance
Champness, Carl	Snails, geoarchaeology	Oxford Archaeology
Cotter, John	Medieval/post-Medieval finds, pottery, CBM	Oxford Archaeology
Crummy, Nina	Small Find Assemblages	Freelance
Cowgill, Jane	Slag/metalworking residues	Freelance
Darraah, Richard	Wood technology	Freelance
Dickson, Anthony	Worked Flint	Oxford Archaeology
Dodwell, Natasha	Osteologist	Oxford Archaeologist
Donnelly, Mike	Flint	Oxford Archaeology
Doonan, Roger	Slags, metallurgy	
Druce, Denise	Pollen, charred plants, charcoal/wood identification, sediment coring and interpretation	Oxford Archaeology
Drury, Paul	CBM (specialised)	Freelance
Evans, Jerry	Roman pottery	Freelance
Fletcher, Carole	Medieval pot, glass, small finds	Oxford Archaeology
Fosberry, Rachel	Charred plant remains	Oxford Archaeology
Foster, Hayley	Zooarchaeologist	Oxford Archaeology
Fryer, Val	Molluscs/environmental	Freelance
Gale, Rowena	Charcoal ID	Freelance
Geake, Helen	Small finds	Freelance
Gleed-Owen, Chris	Herpetologist	
Goffin, Richenda	Post-Roman pottery, building materials, painted wall plaster	Suffolk CC
Hamilton-Dyer, Sheila	Fish and small animal bones	

NAME	SPECIALISM	ORGANISATION
Howard-Davis, Chris	Small finds, Mesolithic flint, RB coarse pottery, leather, wooden objects and wood technology;	Oxford Archaeology
Hunter, Kath	Archaeobotany (charred, waterlogged and mineralised plant remains)	Oxford Archaeology
Jones, Jenny	Conservation	ASUD, Durham University
King, David	Window glass & lead	
Locker, Alison	Fishbone	
Loe, Louise	Osteologist	Oxford Archaeology
Lyons, Alice	Late Iron Age/Roman pottery	Oxford Archaeology
Macaulay, Stephen	Roman pottery	Oxford Archaeology
Masters, Pete	geophysics	Cranfield University
Middleton, Paul	Phosphates/garden history	Peterborough Regional College
Mould, Quita	Ironwork, leather	
Nicholson, Rebecca	Fish and small mammal and bird bones, shell	Oxford Archaeology
Palmer, Rog	Aerial photographs	Air Photo Services
Percival, Sarah	Prehistoric pottery, quern stones	Freelance
Poole, Cynthia	Multi-period finds, CBM, fired clay	Oxford Archaeology
Popescu, Adrian	Roman coins	Fitzwilliam Museum
Rackham, James	Faunal and plant remains, can arrange pollen analysis	
Riddler, Ian	Anglo-Saxon bone objects & related artefact types	Freelance
Robinson, Mark	Insects	
Rowland, Steve	Faunal and human bone	Oxford Archaeology
Rutherford, Mairead	Pollen, non-pollen palynomorphs, dinoflagellate cysts, diatoms	Oxford Archaeology
Samuels, Mark	Architectural stonework	Freelance
Scaife, Rob	Pollen	
Scott, Ian	Roman, Medieval, post-medieval finds, metalwork, glass	Oxford Archaeology
Sealey, Paul	Iron Age pottery	Freelance
Shafrey, Ruth	Worked stone, cbm	Oxford Archaeology
Smith, Ian	Animal Bone	Oxford Archaeology
Spoerry, Paul	Medieval pottery	Oxford Archaeology
Stafford, Liz	Snails	Oxford Archaeology
Strid, Lena	Animal bone	Oxford Archaeology
Tyers, Ian	Dendrochronology	
Ui Choileain, Zoe	Human bone	Oxford Archaeology
Vickers, Kim	Insects	Sheffield University
Wadson, Stephen	Samian, Roman glass	Oxford Archaeology

NAME	SPECIALISM	ORGANISATION
Walker, Helen	Medieval Pottery in the Essex area	
Way, Twigs	Medieval landscape and garden history	Freelance
Webb, Helen	Osteologist	Oxford Archaeology
Willis, Steve	Iron Age pottery	
Young, Jane	Medieval Pottery in the Lincolnshire area	
Zant, John	Coins	Oxford Archaeology

Radiocarbon dating is normally undertaken for Oxford Archaeology East by SUERC and by the Oxford University Accelerator Laboratory.

Geophysical prospection is normally undertaken by Magnitude Surveys Ltd.



-  Site Boundary
-  Undated Features
-  Medieval Features
-  Proposed Excavation Area
Total 21770m² (2.18ha)
-  Proposed Contingency Excavation Area
Total 4875m² (0.49ha)
-  Proposed Additional Trench Location (25m x 1.8m)



Scale at A3: 1:2000
0 50 m

Land at North West Haverhill, Suffolk
Mitigation Plan



- Site Boundary
- Relief Road Layout
- Relief Road Proposed Trench Location (50m x 1.8m)



Scale at A3: 1:5000
0 100 m

Land at North West
Haverhill, Suffolk

Mitigation Plan
(Wider Site)