WRITTEN SCHEME OF INVESTIGATION FOR OPEN AREA EXCAVATION

Land south and east of Adastral Park, Martlesham, Suffolk

Site Code: XSFADP21

Planning Ref: DC/17/1435/OUT

JAC26045
July 2021

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CONTENTS

1 GENERAL BACKGROUND

1.1.1 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* (2015) and *Project Planning Note 3: Archaeological Excavation.*

1.1.2 All work will be conducted in accordance with the Chartered Institute for Archaeologists *Code of Conduct* and *Standard and Guidance for Archaeological Excavation* (2014).

1.1.3 This document represents a Written Scheme of Investigation (WSI) for the archaeological evaluation only. This document alone will not result in the discharge of any archaeological condition.

1.1.4 This WSI also incorporates the requirements of the EAA *Standards for Field Archaeology in the East of England* (Gurney 2003) and conforms to the Suffolk County Council's *Requirements for Trenched Archaeological Evaluation* (2021) document.

1.2 Circumstances of the project

1.2.1 Oxford Archaeology East (OA East) have been commissioned by RPS Consulting Ltd to undertake a programme of open area excavation on land proposed for the construction of a residential development at Adastral Park, Martlesham, East Suffolk.

1.2.2 Archaeological investigation on the site has been required by the Local Planning Authority, East Suffolk District Council, in condition(s) number 10 to planning application DC/17/1435/OUT.

1.2.3 This WSI details the initial stages of open area excavation required within the proposed development area. An additional WSI has been prepared to detail the requirements of additional archaeological trial trench evaluation identified. Areas are referred to by their coding used throughout previous phases of archaeological fieldwork, taken from the original SCCAS evaluation report (2008) – Areas are labelled from A to J, with set piece excavation currently required in areas C, D, H, G & J.

1.2.4 This Written Scheme of Investigation (WSI) has been prepared on behalf of the Client to detail the required works to allow for discharge of the condition. Consultation between RPS and Suffolk County Council's Historic Environment Services (SCCHES) identified that a significant portion of the development had previously been quarried.

1.2.5 Multiple phases of archaeological evaluation and mitigation have taken place across the proposed development area previously. Please see *Land south and east of Adastral Park, Martlesham, Suffolk: Archaeological Mitigation Strategy* (Orion Heritage 2018) for further detail.

1.3 The proposed archaeological strategy

1.3.1 A total of 6 areas have currently been identified as requiring excavation. These areas are:

- Area C: 0.48ha
- Area D: 0.24ha
- Area H: 0.3ha
- Area G: 1.4ha
- Area J: 0.5ha

1.3.2 These areas have been identified for mitigation due to the results of the SCCAS evaluation (2008), which revealed the presence of low-density prehistoric activity. A plan showing these excavation areas is appended to this WSI.

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 – SCCHES 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.

1.5 Liaison with the SCCHES

1.5.1 SCCHES will be informed at least 1 week in advance of the start of fieldwork. and will be kept informed during the site work and following report writing.

1.5.2 Trenches will not be backfilled without the approval of the Archaeological Planning Advisor. Further trenching or deposit testing may be a requirement of the site monitoring visit if unclear archaeological remains or geomorphological features present difficulties of interpretation, or to assist with the formulation of a mitigation strategy.

2 THE GEOLOGY, TOPOGRAPHY AND OTHER FEATURES OF THE SITE

2.1.1 The site is situated on a bedrock of Crag Formation sands, overlain by superficial deposits of Kesgrave subgroup sand and gravels. (British Geological Survey 2014, (British Geological Survey online map viewer viewer http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html).

2.1.2 Situated directly south-east of Martlesham Heath, much the site was previously utilised for mineral extraction over the past 15 years. The site is bounded by Ipswich road to the south, Newbourne Road to the east, the A12 to the west and Adastral Park to the north-west.

2.1.3 Much of the site is situated on a level plateau of approximately 25mOD, which begins dropping off eastwards towards the flood plain of the River Deben, located 2km east of the site.

3 ARCHAEOLOGICAL BACKGROUND

3.1.1 The following section is referenced from L*and south and east of Adastral Park, Martlesham, Suffolk: Archaeological Mitigation Strategy* (Orion Heritage 2018) document. It provides a brief summary of the archaeological background for the area surrounding the site, including previous archaeological works undertaken to date. The Suffolk Historic Environment Record (SHER) has been consulted and a record search has been commissioned for the area immediately around the site.

3.2 Previous archaeological works

3.2.1 A number of phases of work have been undertaken across the development area, as part of the evaluation and mitigation strategy for the previous mineral extraction works on site. This includes monitoring works (MRM 139) and a large scale trial trench evaluation in 2008 (MRM 140). The investigation revealed, in relation to the size of the area under investigation, scant archaeological deposits and features. Two areas of archaeological interest were identified in the north of the site. This included a series of ditches and occasional pit and post hole dated to the late Iron Age to early Romano-British by associated material culture in the north-west part of the site.

3.3 Prehistoric

3.3.1 The study site lies in a well-documented archaeological landscape with prehistoric finds and features forming much of the search results recorded on SHER. The site contains two scheduled areas: two bowl barrows in Spratt's Plantation in the north of the study site (NHLE 1008731), and Bowl Barrow and Pill Box 450m north-west of Sheep Drift Farm (NHLE 1008730). The bowl barrow and pill box in the western part of the site was archaeologically investigated in 2008 by Suffolk County Council's Archaeological Services (now part of Cotswold Archaeology).

3.3.2 The site of two round barrows at junction of Martlesham, Brightwell are also recorded in the SHER (SHER MSF3720 and MSF3718). These fall within an area which has been archaeologically investigated in a number of phases, including the 2008 SCCAS evaluation. No trace of either barrows remain, due to ploughing and quarrying (SCAAS 2008). A similar crop mark site south of the Spratt's plantation yielded a concentration of artefacts, hence the requirement for further works in this area.Iron Age to Roman

3.3.3 Evidence of Later Neolithic or earlier Bronze Age pottery weighing 68g were recovered from the lower fills of a pit in Trench 337 of Area G in the 2008 evaluation. The sherds are sand and grog tempered and include a rim and a base which may be from the same vessel. Environmental analysis identified the presence of large quantities of charred remains and burnt stone, which has suggested that the pit is part of the wider ritual landscape, including the barrows.

3.4 Iron Age to Roman

3.4.1 Evidence for Late Iron Age to Early Roman activity was identified during the 2008 evaluation in Area D, with postholes containing Iron Age pottery recorded, alongside some ditches which were mostly undated but interpreted as a Roman field system, though it could just as probably be prehistoric in date.

3.5 Post-medieval to modern

3.5.1 RAF Martlesham Heath (SHER MSF22020), a military airfield, was used in both World Wars and post-war to 1963. The airfield was initially opened in 1917 as the base for the Aeroplane Experimental Unit. In 1922 a fire damaged part of the technical buildings and the airfield was subsequently enlarged to become the Aeroplane and Armament Experimental Establishment (AAEE). From 1939 the first fighter squadron was stationed on the airfield with a permanent squadron from 1940 and throughout the Second World War, being used by the RAF and from 1943 by elements of the US air force. The airfield reverted to RAF use after the war and was finally closed in 1973 (Smith, 1995 and Kinsey, 1983).

3.5.2 The study site falls partially within the 20th-century airfield (SHER MSF22020), and a number of SHER entries within the study site relate to associated built heritage features. This includes field boundaries and footpaths in the eastern edge of the heath (SHER 17775), a WWI practice trench recorded in the eastern part of the site (SHER MXS22580; Orion 9) and a WWII bomb crater (MXS22590). A possible light air-craft machine gun (SHER MXS22554), a Type 23 Pillbox associated with the gun emplacement (SHER MXS22553) and an eight sided built brick base to the radio mast (SHER MSF25705) are extant in the western part of the site. The possible light air-craft machine gun (SHER MXS22554; Orion 3) is in poor condition. The WWII features have been subject to RCHME Level III as part of mineral consent C/10/1441 (SCCAS 2009).

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:

- Provide further dating evidence for the field systems on site (Area G)
- Identify any potential settlement activity associated with the field systems (area G)
- Identify the presence or absence of the round barrow (Area D)

4.1.3 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.

4.2 Research frameworks

4.2.1 This excavation takes place within, and will contribute to the goals of Regional Research Frameworks relevant to this area:

- Glazebrook J. (1997). *Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment*. East Anglian Archaeology Occasional Papers 3.
- Brown, N. & Glazebrook, J. (2000). *Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy.* East Anglian Archaeology Occasional Papers 8.
- Medlycott, M. (2011). *Research and Archaeology Revisited: A Revised Framework for the East of England*. East Anglian Archaeology Occasional Papers 24.
- The East of England Research Framework online resource (https://researchframeworks.org/eoe/).

5 METHODS

5.1 Background research

5.1.1 A suitable level of background research will be undertaken before work on site commences. This research will draw on information in the Suffolk Historic Environment Record, and will include historical sources, maps, previous archaeological finds, and past archaeological investigations in the vicinity. The results will not be presented separately, but will be incorporated into the final evaluation report.

5.2 Event number

5.2.1 Before work commences on site, an event number will be obtained from the 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* (2021).

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

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. This may include shoring or stepping the sides of trenches, as appropriate to the soil and site conditions. If trenches become flooded, pumps may be used to remove excess water, and they will be assessed for stability and safety before staff enter them.

5.3.11 Spoil will be stored in bunds adjacent to each excavation area, or at the location identified by the Principal Contractor/Client.

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 SCCHES 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	50%

Domestic ring-ditches or roundhouse gullies	50%
Pits associated with agricultural & other activities	50%
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 SCCHES, 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, SCCHES 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 SCCHES 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 licence.

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 who is approved by SCCAS. In this case, Trevor Southgate is expected to undertake metal detecting for the project alongside the OA team. 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 Finds Liaison Officer within 14 days, in accordance with the Act.

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 connected to Leica Smartnet providing 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 Metashape (Professional Edition) software, and will be referenced using ground control points measured using a dGPS or total station.

Photographs

5.6.12 The photographic record will comprise high resolution digital photographs (at least 10 megapixel) and taken with camera which has an APS-C or larger sensor. Digital photographs will consist of JPEGs and RAW versions of each shot.

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 (as detailed in Archaeological Archives in Suffolk: Guidelines for Preparation and Deposition, 2019).

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 SCCHES.

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

Standard methodology – summary

5.9.1 Sampling methods will follow guidelines produced by Historic England and Oxford Archaeology. The project team will consult Historic England's Scientific Advisor on environmental sampling and dating where necessary. Where possible an environmental specialist(s) will visit the site to advise on sampling strategies which will be reviewed periodically during the length of the excavation. Specialists will be consulted where non-standard sampling is required (e.g. TL, OSL or archaeomagnetic dating) and if appropriate will be invited to visit the site and take the samples.

Standards for environmental sampling and processing

Paleoenvironmental remains will be sampled and processed in accordance to the OA Sampling Policy (2005) with reference to the relevant guidelines produced by Historic England:

- Oxford Archaeology 2005. *Environmental Sampling Guidelines*, 2nd ed.
- Historic England 2011. *Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation*, (2nd ed)
- Historic England 2008. *Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains*.
- Historic England 2010. *Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood*.

- Historic England 2012. *Waterlogged organic artefacts. Guidelines on their recovery, analysis and conservation*.
- Historic England 2008. *Investigative conservation. Guidance on how detailed examination of artefacts from archaeological sites can shed light on their manufacture and use.*
- Historic England 2014. *Animal Bones and Archaeology. Guidelines for Best Practice*.
- Historic England 2004. *Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates*.
- Historic England 2006. *Archaeomagnetic Dating. Guidelines for Producing and Interpreting Archaeomagnetic Dates*.
- Historic England 2008. *Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology*.
- Historic England 2015. *Archaeometallurgy. Guidelines for Best Practice.*
- Historic England 2015 *Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record*.

Procedures for sampling and processing

5.9.2 Environmental samples (up to 40 litres or 100% of context if less is available) will be taken from a range of potentially datable features and well-stratified deposits to target the recovery of plant remains, fish, bird, small mammal and amphibian bone and small artefacts. Samples will be labelled with the site code, context number, and sample number and a register will be kept.

5.9.3 Larger soil samples (up to 100L) may be taken for the complete recovery of animal bones, marine shell and small artefacts from appropriate contexts. Smaller bulk samples (general biological samples) of 20 litres will be taken from any waterlogged deposits present for the recovery of macroscopic plant remains and insects. Series of incremental 2L samples may be taken through buried soils and deep feature fills for the recovery of snails and/or waterlogged plant remains, depending on the nature of the stratigraphy and of the soils and sediments.

5.9.4 Columns will be taken from buried soils, peats and waterlogged feature fills for pollen and/or phytoliths, diatoms, ostracods if appropriate. Soil samples will be taken for soil investigations (particle size, organic matter, bulk chemistry, soil micromorphology etc.) in consultation with the appropriate specialists. Where features containing very small artefacts such as micro-debitage and hammerscale are identified, 1L grid sampling may be employed.

5.9.5 Early feedback on selected samples taken during the excavation will result in a dynamic sampling strategy according the results of rapid assessment of typically 10L sub-samples.

5.9.6 Typically, 20 litres of each bulk sample will be processed standard water flotation using a modified Siraf-style machine and meshes of 0.3mm (flot) and 0.5 or 1mm depending on sediment type and like modes of preservation (residue). The remaining soil from a sample will be subsequently processed if appropriate based on the results of an initial assessment. Normally, early prehistoric samples will be fully processed and samples containing human remains will always be fully processed. Heavy residues will be wet sieved, air

dried and selectively sorted. Samples taken exclusively for the recovery of bones, marine shell or artefacts will be wet sieved to 2mm. Waterlogged samples will have a sub-sample (approximately 10L) processed as above and the flot will assessed whilst wet and again once dried. Snail samples (2L) will be processed by hand flotation with flots and residues collected to 0.5mm; these flots and residues will be sorted by the specialist.

5.9.7 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).

6 OUTREACH ACTIVITIES

6.1.1 OA East will also progress on the site to the public via regular updates on the OA website and social media (Facebook, Instagram), once approved by the Client. Interviews will be given to local radio and newspapers as requested, and with the agreement of the Client. Current COVID-19 H&S requirements and Government guidance mean open days on-site are not currently viable. If this changes during the excavation work, opportunities for site open days will be discussed with SCCHES and Client.

6.1.2 ific issues.

7 REPORTING

7.1 Post-excavation Assessment Report

7.1.1 Post-excavation analysis and reporting will follow guidance in Historic England's *Management of Research Projects in the Historic Environment* (2006, reissued 2015).

7.1.2 A site summary will be provided to SCCHES two weeks after completing each phase of excavation.

7.1.3 A post-excavation assessment (PXA) report and updated research design (UPD) will be delivered within 9 months of the completion of fieldwork. The PXA report will include a timetable and programme of work for this aspect of the project. In the event that the site is of limited complexity and significance, a UPD and PXA report may not be necessary. Such cases will be discussed with SCCHES, and a decision about production of will be made following guidance set out in the ALGAO *Advice Note for Post-Excavation Assessment* (2015).

7.2 Contents of the Assessment Report

7.2.1 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.

7.2.2 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 and appropriate acknowledgements
- 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 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.

7.3 Analysis Report and Publication

7.3.1 Where appropriate (in consultation with SCCHES), and following the production of the post-excavation assessment report, a post-excavation analysis report and/or publication will be produced.

7.3.2 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 18 months of the completion of fieldwork.

7.3.3 The scope, format and venue of any publication will be proportionate to the significance of the results.

7.3.4 If SCCHES requires no further excavation on the site, a summary report will be prepared for the Proceedings of the Suffolk Institute of Archaeology & History. Publication of results will follow. The scope, format and venue of publication will be proportionate to the excavated significance of the archaeology, and may comprise a monograph, or an article in the local archaeology journal or some other appropriate journal.

7.4 Draft and final reports

7.4.1 A draft copy of the report will be supplied to the County Archaeologist for comment.

7.4.2 Following approval of the report, one printed copy and one digital copy (PDF) and GIS shapefiles of the project will be presented to the Suffolk Historic Environment Record.

7.4.3 If SCCHES requires no further excavation on the site, a summary report will be prepared for the *Proceedings of the Suffolk Institute of Archaeology & History.*

7.5 Digital Data

7.5.1 The site's digital archive will be deposited with the Archaeological Data Service (ADS) on completion of the archaeological programme of works. Digital data will include all data captured by OA East but will not include OS copyright data. A digital security copy of all documentary parts of the archive will also be made and retained by OA.

7.6 OASIS

7.6.1 A digital copy of the approved report will be uploaded to the OASIS database.

7.6.2 A copy of the OASIS Data Collection Form will be included in the report.

8 ARCHIVING

Archive standards

8.1.1 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 Store (as described in *Archaeological Archives in Suffolk: Guidelines for Preparation and Deposition*, SCCAS 2019). Finds will be stored and conserved in accordance with guidelines from *The Institute of Conservation* (ICON).

8.1.2 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), and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation (*Brown 2007*).*

Archive contents

8.1.3 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.

8.1.4 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

8.1.5 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.

8.1.6 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.

8.1.7 A written transfer of ownership document will be forwarded to SCCHES before the archive is deposited.

8.1.8 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.

9 TIMETABLE

9.1.1 Fieldwork is expected to take 11 weeks to complete, based on a five-day week, working Monday to Friday. This does not allow for delays caused by bad weather.

9.1.2 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.

9.1.3 Post-excavation tasks will take a maximum of 9 months following the end of fieldwork, unless there are exceptional discoveries requiring lengthier analysis.

9.1.4 Final publication of the site (whether in a monograph, journal article or some other form agreed with SCCHES) will be completed within 2 years of completing fieldwork.

9.1.5 The project archive will be deposited within 12 months of delivering the final report, unless SCCHES requires further excavation on the site.

10 STAFFING AND SUPPORT

10.1 Fieldwork

10.1.1 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)
- 4 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)

10.1.2 The Project Manager will be Pat Moan. Site work will be directed by one of OAE's Project Officers or Supervisors.

10.1.3 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.

10.2 Post-excavation processing

10.2.1 We anticipate that the site may produce prehistoric remains. Environmental remains will also be sampled.

10.2.2 Pottery will be assessed by Nick Gilmour (prehistoric), Alice Lyons (Roman) and Carole Fletcher or Sue Anderson (Anglo-Saxon and medieval).

10.2.3 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).

10.2.4 Faunal remains will be examined by Hayley Foster.

10.2.5 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).

10.2.6 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.

11 OTHER MATTERS

11.1 Monitoring

11.1.1 SCCHES will be informed appropriately of dates and arrangements to allow for adequate monitoring of the works.

11.1.2 During the excavation, representatives of the client, Oxford Archaeology East and SCCHES will meet on site to monitor the excavations, discuss progress and findings to date, and excavation strategies to be followed.

11.2 Insurance

11.2.1 Oxford Archaeology is covered by Public and Employer's Liability Insurance. The underwriting company is CNA / Hardy, policy number 10347803. Details of the policy can be supplied on request to the Oxford Archaeology (East) office.

11.3 Chartered Institute for Archaeologists

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

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

11.4.1 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.

11.4.2 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.

11.4.3 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.

11.5 Site Security

11.5.1 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.

11.6 Access

11.6.1 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.

11.7 Site Preparation

11.7.1 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.

11.8 Site offices and welfare

11.8.1 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).

11.9 Health and Safety, Risk Assessments

11.9.1 A risk assessment and method statement (RAMS) covering all activities to be carried out during the lifetime of the project will be prepared before work commences.

11.9.2 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.

11.9.3 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.

12 EXCAVATION AREA PLAN

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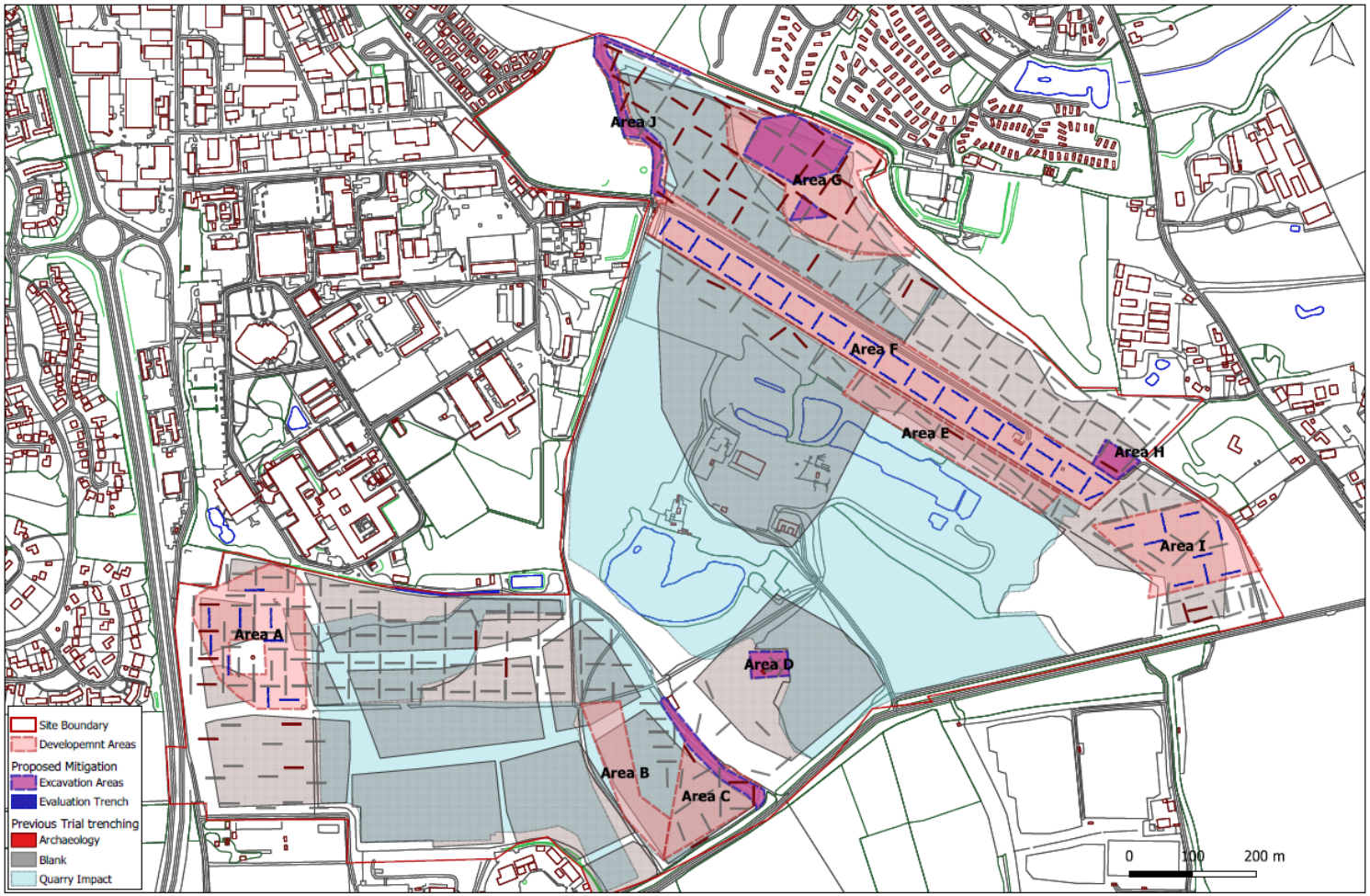

13 APPENDIX: CONSULTANT SPECIALISTS

NAME	SPECIALISM	ORGANISATION
Allen, Leigh	Worked bone, CBM, medieval metalwork	Oxford Archaeology
Allen, Martin	Medieval coins	Fitzwilliam Museum
Allen, Martyn	Zooarchaeology	Oxford Archaeology
Anderson, Katie	Roman pottery	Freelance
Anderson, Sue	Medieval & post-medieval pottery (specifically from Norfolk & Suffolk), CBM and human remains	Freelance
Bamforth, Mike	Woodworking	York University
Barker, Karen	Small find conservation & X-Ray	Freelance
Bayliss, Alex	C14 advice	Historic England
Biddulph, Edward	Roman pottery	Oxford Archaeology
Billington, Lawrence	Lithics	Oxford Archaeology
Bishop, Barry	Lithics	Freelance
Blinkhorn, Paul	Iron Age, Anglo-Saxon and medieval pottery	Freelance
Booth, Paul	Roman pottery and coins	Oxford Archaeology
Boreham, Steve	Pollen and soils/ geology	Cambridge University
Broderick, Lee	Zooarchaeology	Oxford Archaeology
Brown, Lisa	Prehistoric pottery	Oxford Archaeology
Brudenell, Matt	Prehistoric pottery	Oxford Archaeology
Cane, Jon	Display & reconstruction artist	Freelance
Champness, Carl	Molluscs, geoarchaeology	Oxford Archaeology
Cotter, John	Medieval/post-medieval finds, pottery, CBM	Oxford Archaeology
Crummy, Nina	Small finds	Freelance
Cowgill, Jane	Slag/metalworking residues	Freelance
Dickson, Anthony	Worked Flint	Oxford Archaeology
Dodwell, Natasha	Osteology, including cremations	Oxford Archaeologist
Donelly, Mike	Lithics	Oxford Archaeology
Doonan, Roger	Slags, metallurgy	Freelance
Druce, Denise	Pollen, charred plants, charcoal/wood identification, sediment coring and interpretation	Oxford Archaeology
Drury, Paul	CBM (specialised)	Freelance
Fletcher, Carole	Medieval & post-medieval pottery, glass, shell & small finds	Oxford Archaeology
Fosberry, Rachel	Charred waterlogged and mineralised plant remains	Oxford Archaeology
Foster, Hayley	Zooarchaeologist	Oxford Archaeology
Fryer, Val	Molluscs/environmental	Freelance

NAME	SPECIALISM	ORGANISATION
Mark Gibson	Osteology	Oxford Archaeology
Gleed-Owen, Chris	Herpetologist (amphibians & reptiles)	CGO Ecology Ltd
Goffin, Richenda	Post-Roman pottery, building materials, painted wall plaster	Suffolk CC
Howard-Davis, Chris	Small finds, Mesolithic flint, leather, wooden objects and wood technology	Freelance
Locker, Alison	Fish bone	Freelance
Loe, Louise	Osteology	Oxford Archaeology
Lyons, Alice	Late Iron Age/Roman pottery	Oxford Archaeology
Martin, Toby	Anglo-Saxon metalwork and artefacts	Oxford University
Masters, Pete	Geophysics	Cranfield University
McIntyre, Lauren	Osteology	Oxford Archaeology
Middleton, Paul	Phosphates/garden history	Peterborough Regional College
Mould, Quita	Ironwork, leather	freelance
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 and later coins	Fitzwilliam Museum
Quinn, Patrick	Pottery thin section, ceramic petrology	UCL
Riddler, Ian	Worked bone objects & related artefact types	Freelance
Robinson, Mark	Insects	Oxford University
Rowland, Steve	Zooarchaeology & osteology	Oxford Archaeology
Rutherford, Mairead	Pollen, diatoms, *etc*	Oxford Archaeology
Samuels, Mark	Architectural stonework	Freelance
Scott, Ian	Roman, medieval, post-medieval finds, metalwork, glass	Oxford Archaeology
Shaffrey, Ruth	Worked stone and Roman CBM	Oxford Archaeology
Smith, David	Insects	University of Birmingham
Smith, Ian	Zooarchaeology	Oxford Archaeology
Spoerry, Paul	Medieval pottery	Oxford Archaeology
Stafford, Liz	Molluscs and geoarchaeology	Oxford Archaeology
Timberlake, Simon	Archaeometallurgy & geoarchaeology	Freelance
Tyers, Ian	Dendrochronology	Sheffield University
Ui Choileain, Zoe	Osteology & zooarchaeology	Oxford Archaeology
Vickers, Kim	Insects	Sheffield University
Wadeson, Stephen	Samian pottery, Roman glass	Oxford Archaeology
Walker, Helen	Medieval pottery (Essex)	Essex CC

NAME	SPECIALISM	ORGANISATION
Way, Twigs	Medieval landscape and garden history	Freelance
Webb, Helen	Osteology	Oxford Archaeology
Young, Jane	Medieval Pottery (Lincolnshire)	Freelance
Zant, John	Roman 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.

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