

# Bicester Arc Bicester, Oxfordshire

Written Scheme of Investigation for Archaeological Trench Evaluation

Planning Ref.: 17/02534/OUT Document Ref.: 270280.01 September 2023

wessexarchaeology



© Wessex Archaeology Ltd 2023, all rights reserved

Portway House Old Sarum Park Salisbury SP4 6EB

#### www.wessexarch.co.uk

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales number 287786, and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB

#### Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage

# **Document Information**

Document title Document subtitle	Bicester Arc, Bicester, Oxfordshire		
Document reference	Written Scheme of Investigation for Archaeological Evaluation 270280.01		
Client name	Peveril Securities Ltd		
Address	c/o Maisie House 8 Maisies Way The Village South Normanton DE55 2DS		
Site location	Land north of Bicester Avenue Garden Centre, Oxford Road, Bicester		
County	Oxfordshire		
National grid reference	457850, 221584 (SP 57850 21584)		
Planning authority	Cherwell District Council, North Oxfordshire		
Planning reference	17/02534/OUT		
Museum name	Oxfordshire Museums Service		
Museum accession code	n code TBA		
WA project code	270280		
Project management by	Bianca Williams-San Martin		
Document compiled by	Jon Kaines / Rachael Capps		
Graphics by	Eilis Weldon		
Document edited by	Bianca Williams-San Martin		
Document ealled by			

## **Quality Assurance**

Issue	Date		Author	Approved by
1	14/09/2023	Draft submitted to client	JK / RLC	
2	25/09/2023	Amended draft	BWSM	-
3	06/10/2023	Final, endorsed by CA	BWSM	-



#### Contents

	1.2 Scope of document	
	1.3 Location, topography and geology	
2	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	
	2.1 Introduction	3
	2.2 Previous investigations related to the proposed development	
	2.3 Archaeological and historical context	
3	AIMS AND OBJECTIVES	
	3.1 General aims	
	<ul><li>3.2 General objectives</li></ul>	
4	FIELDWORK METHODS	
	<ul><li>4.1 Introduction</li><li>4.2 Setting out of the trenches</li></ul>	
	<ul><li>4.2 Setting out of the trenches</li></ul>	
	4.4 Excavation methods	
	4.5 Recording	
	4.6 Survey	
	4.7 Monitoring	
	4.8 Reinstatement	
	4.9 Finds	
	4.10 Environmental sampling	
5	POST-EXCAVATION METHODS AND REPORTING	
	5.1 Stratigraphic evidence	
	<ul><li>5.2 Finds evidence</li><li>5.3 Environmental evidence</li></ul>	
	5.4 Reporting	
-		
6	ARCHIVE STORAGE AND CURATION	-
	<ul><li>6.1 Museum</li><li>6.2 Transfer of title</li></ul>	
	6.3 Preparation of archive	
	6.4 Selection strategy	
	6.5 Security copy	
7	OUTREACH AND SOCIAL MEDIA	12
-		
8	COPYRIGHT	
	<ul><li>8.1 Archive and report copyright</li><li>8.2 Third party data copyright</li></ul>	
-		
9	WESSEX ARCHAEOLOGY PROCEDURES	
	<ul><li>9.1 External quality standards</li><li>9.2 Personnel</li></ul>	
	9.2 Personner	
	9.4 Health and safety	
	9.5 Insurance	
DEE	ERENCES	
APP		
	Appendix 1 Finds and environmental specialists	1/

Π

## List of Figures

Figure 1 Site location and trench plan

# Bicester Arc Bicester, Oxfordshire

# Written Scheme of Investigation for Archaeological Evaluation

#### 1 INTRODUCTION

#### 1.1 **Project and planning background**

- 1.1.1 Wessex Archaeology has been commissioned by Peveril Securities Ltd ('the client') to produce a written scheme of investigation (WSI) for a proposed archaeological evaluation of a parcel of land located on land north of Bicester Avenue Garden Centre, Oxford Road, Bicester, Oxfordshire. The evaluation area is centred on NGR 457850, 221584 (Fig. 1).
- 1.1.2 The proposed development comprises the erection of a business park of up to 60,000 m<sup>2</sup> (GEA) of flexible Class B1(a) office / Class B1(b) research & development floorspace; associated vehicle parking, landscaping, highways, infrastructure and earthworks.
- 1.1.3 This investigation will evaluate Plot 3 and the pond situated within the proposed ecopark area to the east (Fig. 1). Within the proposed ecopark there will be a mixture of breedon stone rolled paths to the west and mown paths surrounding the pond. The area to the west has previously been investigated (AOC 2018).
- 1.1.4 Plot 3 constitutes the final area of archaeological investigation within the development. Sufficient archaeological investigation has previously been carried out across the rest of the development area (Fig. 1). Following the satisfactory completion of the archaeological mitigation work within Plot 3 according to the Planning Archaeologist at Oxfordshire County Council, the conditions relating to archaeology will be then discharged across the whole development area.
- 1.1.5 A planning application (17/02534/OUT) submitted to Cherwell District Council, North Oxfordshire, was granted 06 May 2020, subject to conditions. The following conditions relate to archaeology:

**Condition 22** Prior to any demolition and the commencement of the development a professional archaeological organisation acceptable to the Local Planning Authority shall prepare an Archaeological Written Scheme of Investigation, relating to the application site area, which shall be submitted to and approved in writing by the Local Planning Authority.

**Reason** – To safeguard the recording of archaeological matters within the site in accordance with Government guidance contained within the National Planning Policy Framework (2019). This information is required prior to commencement of any development on the appropriate phase as it is fundamental to the acceptability of the scheme.

**Condition 23** Following the approval of the Written Scheme of Investigation referred to in condition 22, and prior to any demolition on the site and the commencement of the development (other than in accordance with the agreed Written Scheme of Investigation), a staged programme of archaeological mitigation shall be carried out by the commissioned archaeological organisation in accordance with the approved Written Scheme of Investigation. The programme of work shall include all processing, research, and analysis



necessary to produce an accessible and useable archive and a full report for publication which shall be submitted to the Local Planning Authority.

**Reason** – To safeguard the identification, recording, analysis and archiving of heritage assets before they are lost and to advance understanding of the heritage assets in their wider context through publication and dissemination of the evidence in accordance with Government guidance contained within the National Planning Policy Framework (2019). This information is required prior to commencement of any development on the appropriate phase as it is fundamental to the acceptability of the scheme.

1.1.6 The Planning Archaeologist at Oxfordshire County Council was consulted and initially required pre-application investigation. This was amended on receipt of an evaluation report (AOC 2018) that demonstrated that the areas of archaeological interest did not extend into the site:

The archaeological evaluation did not record any significant archaeological deposits.

There remain archaeological deposits within this application site and across the wider Bicester 4 site. Should planning permission be granted, a staged programme of archaeological investigation will need to be undertaken across the site during the period of construction. This will need to be secured though appropriately worded conditions.

1.1.7 The evaluation will comprise the excavation, investigation and recording of nine trial trenches (each measuring 50 m x 1.8 m) equating to a 4% sample of Plot 3 together with a further trench (also measuring 50 m x 1.8 m) targeting the location of the proposed pond.

#### 1.2 Scope of document

- 1.2.1 This WSI sets out the aims of the evaluation, and the methods and standards that will be employed. In format and content, it conforms to current best practice, as well as to the guidance in *Management of Research Projects in the Historic Environment* (MoRPHE, Historic England 2015a) and the Chartered Institute for Archaeologists' (CIfA) *Standard and guidance for archaeological field evaluation* (CIfA 2014a).
- 1.2.2 This document will be submitted to the Planning Archaeologist at Oxfordshire County Council, archaeological advisor to the Local Planning Authority (LPA), for approval, prior to the start of the evaluation.

#### 1.3 Location, topography and geology

- 1.3.1 The development is located within the fold of the A41 as it turns from north-west to southeast on the outskirts of the town of Bicester in Oxfordshire. The parcel of land is an irregular shape, incorporating a number of agricultural fields, and bounded to the south by a retail park and sewage plant, and partially to the south by a Tesco Supermarket. A railway line forms the south-east boundary.
- 1.3.2 The proposed evaluation area is forms a 2 ha rectangle within a field to the south of the Tesco supermarket. A trench in the footprint of a planned pond is also proposed in the 5.78 ha landscaped area, to the south-east of the red line planning boundary. The site is flat at 66 m above Ordnance Datum (aOD)
- 1.3.3 The bedrock geology is mapped as Kellaways Clay Member Mudstone sedimentary bedrock formed during the Jurassic period. There is a narrow band of Cornbrash Formation Limestone sedimentary bedrock to the south-east that may just be into the site. A clay,



silt, sand and gravel alluvium formed during the Quaternary period, underlies part of the landscape area (British Geological Survey).

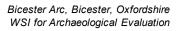
#### 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

#### 2.1 Introduction

2.1.1 The archaeological and historical background was assessed in a prior heritage impact assessment (HIA, Trium 2017), which considered the recorded historic environment resource within a 1 km study area of the proposed development. A summary of the results is presented below, with relevant entry numbers from the Oxfordshire Historic Environment Record (HER) and the National Heritage List for England (NHLE) included. Additional sources of information are referenced, as appropriate.

#### 2.2 Previous investigations related to the proposed development

- 2.2.1 The Site is part of a larger development area (Planning Ref: 07/01106-OUT) that has been subject to previous archaeological investigations by Network Archaeology in 2007 and AOC Archaeology in 2014 and 2018. These investigations were carried out to the north (the Tesco plot), to the west, and across this site.
- 2.2.2 Thirty-two evaluation trenches were excavated across the wider site, including the Tesco plot, this site, and an area immediately to the east of this site (Network Archaeology 2007). The most significant finding was a quantity of exceptionally well-preserved Mesolithic flint, to the immediate south-east of the site. Possible evidence of late prehistoric and Roman settlement was indicated by the presence of postholes and two possible drip gulleys, indicative of circular buildings. Fragments of Romano-British pottery were recovered from the subsoil of one of the trenches. The evaluation also revealed numerous ditches, which indicate several phases of agricultural land management. Some of these ditches could be attributed to known post-medieval boundaries, whilst the remainder could be late prehistoric or later in date. Overall, very few finds were recovered, apart from the Mesolithic flint.
- 2.2.3 AOC undertook detailed archaeological investigations on the Tesco site between November 2013 and January 2014 (AOC 2014). The excavations revealed a sequence of at least seven Bronze Age buildings and activities either side of a relict watercourse. The buildings were represented by postholes forming two roundhouses which were kept in good repair and rebuilt, probably across generations and are likely to represent buildings of a farmstead. The settlement is also represented by the presence of three cremation burials at the top of the hill above the farmstead. Other postholes represented fences, which may have enclosed stock enclosures or settlement boundaries on flat ground either side of a river. Roman and post-medieval features were also identified on the site.
- 2.2.4 An evaluation to the west of the current site (AOC 2018) found that on the eastern side of the site, the natural substrate indicates a braided river channel was present, as seen in earlier excavations (AOC 2014). An undulating deposit of clayey peat was also visible in the south-eastern limit of the site overlying archaeology. The earliest archaeological evidence comprised a single abraded flint collected from the topsoil. The only dated feature was a ditch located in Trench 10, which contained a single sherd of Roman pottery. Another ditch sealed by alluvium and peat was observed in trenches 19, 20 and 21, but is undated. Several shallow irregular pits were also identified along with a single posthole observed in Trench 22, which also are undated.



#### 2.3 Archaeological and historical context

- 2.3.1 Oxfordshire is towards the northern limits of Palaeolithic occupation, due to climatic conditions, and human presence was likely to be to have been intermittent. The variation in the availability of lithic resources and the distribution of artefacts is probably the most interesting feature of this period in the area. There were no Palaeolithic artefacts in the study area.
- 2.3.2 A Mesolithic flint scatter was recorded during a previous evaluation within the site (, Network Archaeology 2007, Trench 30). Whilst located within two linear features and alongside a sherd of Romano-British pottery, the flint was in very good condition and, while likely to have been residual, had probably not moved far. A further flint assemblage contained within tree throw holes is situated to the north-east of the site.
- 2.3.3 The HER records four heritage assets of Neolithic date within 1km of the site, including a small assemblage of artefacts dating to the Neolithic recovered during an excavation of middle Iron Age to Roman Settlement and a Neolithic axehead found 270 m west of the site.
- 2.3.4 And an area of Bronze Age settlement was identified through archaeological evaluation immediately to the north, which included seven Bronze Age buildings and three cremation burials at the top of the hill above the settlement. The buildings were represented by postholes forming two roundhouses which were kept in good repair and regularly rebuilt. Two Bronze Age barrows are recorded 280 m north-east of the site, a Bronze Age ditch enclosure was recorded to the north-east and a burial recorded during extensive investigations to the south of the site during the Wendlebury-Bicester A421 Dualling works.
- 2.3.5 Iron Age activity is recorded within the study area, mostly together with Romano-British activity.
- 2.3.6 The site is located 650 m north of the Roman Town of Alchester (NHLE 1006365) and is located along the line of the Roman Road heading north/south from this town (NHLE 1015169). Iron Age and Romano-British settlement evidence has been recorded along the route of this road in the vicinity of this site including 300 m south and 260 m north-east of the proposed site. A further Iron Age and Roman settlement has also been recorded 280 m north of the site. The evaluation to the west of the site found a north-west / south-east aligned ditch that contained Romano-British pottery.
- 2.3.7 The modern settlement of Bicester evolved with the Anglo-Saxon farmers who settled on the Cornbrash, a flaggy type of limestone, either side of a ford over the River Bure and close to the existing Saxon Minster of St Edburg's. And there are assets on the HER relating to Anglo-Saxon and medieval Bicester town to the north of the site.
- 2.3.8 The first reference to Brewer Street is from 1608, when it was named Brewhouse Street. Brewerstreet Farmhouse, directly south of the site dates to the 15th century, with 16th and 19th century alterations. It is Grade 1 listed (List Entry No. 1281258) and is a half-timbered two-storey house. The site itself is depicted on the first edition Ordnance Survey Map with one northern field and five southern fields. During the 20th century, the divisions were gradually removed, leaving just two fields, divided by a footpath aligned east-west.

#### 3 AIMS AND OBJECTIVES

#### 3.1 General aims

- 3.1.1 The general aims (or purpose) of the evaluation, in compliance with the ClfA *Standard and guidance for archaeological field evaluation* (ClfA 2014a), are to:
  - provide information about the archaeological potential of the site; and
  - inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

#### 3.2 General objectives

- 3.2.1 In order to achieve the above aims, the general objectives of the evaluation are to:
  - determine the presence or absence of archaeological features, deposits, structures, artefacts or ecofacts within the specified area;
  - establish, within the constraints of the evaluation, the extent, character, date, condition and quality of any surviving archaeological remains;
  - place any identified archaeological remains within a wider historical and archaeological context in order to assess their significance; and
  - make available information about the archaeological resource within the site by reporting on the results of the evaluation.

#### 3.3 Site-specific objectives

- 3.3.1 Following consideration of the archaeological potential of the site and the Solent-Thames Research Framework regional research framework (REF.), the site-specific objectives of the evaluation are to:
  - test the results of the previous evaluations of the site survey (Network Archaeology 2007);
  - examine evidence for remains of a Roman road that may exist within the site (one is known from the HER and projected to cross the east of the evaluation area);
  - test whether Bronze Age activity to the north-west of the site continues into the site
  - test whether the Mesolithic potential extends beyond the flint scatter.
  - determine the depth of the alluvial sequence and examine the archaeological and paleoenvironmental potential of alluvial deposits;
  - examine the artefactual and ecofactual potential of archaeological deposits, some of which may be waterlogged; and
  - assess the potential for the recovery of artefacts to assist in the development of type series within the region.

#### 4 FIELDWORK METHODS

#### 4.1 Introduction

4.1.1 Health and safety will override archaeological considerations in all works since, as stated in CIfA guidance, *Health and Safety regulations and requirements cannot be ignored no* 

matter how imperative the need to record archaeological information; hence Health and Safety will take priority over archaeological matters (CIfA 2014a, 11)

- 4.1.2 All works will be undertaken in accordance with the detailed methods set out within this WSI. Any significant variations to these methods will be agreed in writing with the Planning Archaeologist and the client prior to being implemented.
- 4.1.3 The evaluation will comprise the excavation, investigation and recording of nine trial trenches (each measuring 50 m x 1.8 m) equating to a 4% sample of Plot 3 together with a further trench (also measuring 50 m x 1.8 m) targeting the location of the proposed pond.

#### 4.2 Setting out of the trenches

4.2.1 All trenches will be set out using a Global Navigation Satellite System (GNSS) in the approximate positions shown in Figure 1. Minor adjustments to the layout may be required to take account of constraints such as vegetation or located services, and to allow for machine manoeuvring. The trench locations will be tied into the Ordnance Survey (OS) National Grid and Ordnance Datum (OD) (Newlyn), as defined by OSTN15 and OSGM15.

#### 4.3 Service location and other constraints

- 4.3.1 The client will provide information regarding the presence of any below/above-ground services, and any ecological, environmental or other constraints.
- 4.3.2 Before excavation begins, the evaluation area will be walked over and visually inspected to identify, where possible, the location of any below/above-ground services. All trial trench locations will be scanned before and during excavation with a Cable Avoidance Tool (CAT) to verify the absence of any live underground services.

#### 4.4 Excavation methods

- 4.4.1 The trenches will be excavated using a 360° tracked excavator equipped with a toothless bucket. Machine excavation will be under the constant supervision and instruction of the monitoring archaeologist. Machine excavation will proceed in level spits of approximately 50–200 mm until either the archaeological horizon or the natural geology is exposed. Where necessary, the base of the trench/surface of archaeological deposits will be cleaned by hand.
- 4.4.2 A sample of the archaeological features and deposits identified will be hand-excavated, sufficient to address the aims of the evaluation. Spoil derived from machine stripping and hand-excavation will be visually scanned for the purposes of finds retrieval, and where appropriate will also be metal-detected by trained archaeologists. Artefacts and other finds will be collected and bagged by context.
- 4.4.3 If an exceptional number and/or complexity of archaeological deposits are identified, sample excavation will aim to be minimally intrusive, but sufficient to resolve the principal aims of the evaluation, to a level agreed with the Planning Archaeologist and the client.
- 4.4.4 If human remains are uncovered, the specific methods outlined below (section 4.9.2) will be followed.
- 4.4.5 Where complex archaeological stratification is encountered, deposits will be left *in situ* and alternative measures taken to assess their depth, as agreed with the Planning Archaeologist. Where modern features are seen to truncate the archaeological stratification,



these may be removed, where practicable, in a manner that does not damage the surrounding deposits to enable the depth of stratification to be assessed.

#### 4.5 Recording

- 4.5.1 All exposed archaeological deposits and features will be recorded using Wessex Archaeology's pro forma recording system.
- 4.5.2 A complete stratigraphic record will be provided for all trial trenches, including archaeologically sterile trenches.
- 4.5.3 A complete record of all excavated archaeological features, and deposits will be made. This will include plans and sections, drawn to appropriate scales (generally 1:20 or 1:50 for plans, 1:10 for sections) and tied to the OS National Grid.
- 4.5.4 A full photographic record will be made using digital cameras equipped with an image sensor of not less than 16 megapixels. This will record both the detail and the general context of the principal features and the site. Digital images will be subject to managed quality control and curation processes, which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Photographs will also be taken of all areas, including access routes, to provide a record of conditions prior to and on completion of the evaluation.

#### 4.6 Survey

4.6.1 The real time kinematic (RTK) survey of all trenches and features will be carried out using a Leica GNSS connected to Leica's SmartNet service. All survey data will be recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.

#### 4.7 Monitoring

- 4.7.1 The client will inform the Planning Archaeologist of the start of the evaluation with two weeks notice and keep the Planning Archaeologist informed of its progress. Reasonable access will be arranged for the Planning Archaeologist to make site visits to inspect and monitor the progress of the evaluation. Any variations to the WSI, if required to better address the project aims, will be agreed in advance with the client and the Planning Archaeologist.
- 4.7.2 A charge will be made per monitoring visit. This will be charged to the archaeological consultant who arranges the site meeting. A purchase order to this amount will be provided in advance of the agreement of any site visit.

#### 4.8 Reinstatement

4.8.1 Trenches completed to the satisfaction of the client and the Planning Archaeologist will be backfilled using excavated materials in the order in which they were excavated, and left level on completion. No other reinstatement or surface treatment will be undertaken.

#### 4.9 Finds

#### General

4.9.1 All archaeological finds will be retained, although those of clearly very recent origin with negligible potential to provide information relevant to the project aims and objectives may be recorded on site and not retained. Where appropriate, soil samples may be taken and sieved to aid in finds recovery. Any finds requiring conservation or specific storage



conditions will be dealt with immediately in line with *First Aid for Finds* (Watkinson and Neal 1998).

#### Human remains

- 4.9.2 In the event of discovery of any human remains (articulated or disarticulated, cremated or unburnt), all excavation of the deposit(s) will cease pending Wessex Archaeology obtaining a Ministry of Justice licence (this includes cases where remains are to be left *in situ*).
- 4.9.3 Initially the remains will be left *in situ*, covered and protected, pending discussions between the client, Wessex Archaeology's osteoarchaeologist and the Planning Archaeologist regarding the need for excavation/removal or sampling. Where this is deemed appropriate, the human remains will be fully recorded, excavated and removed from site in compliance with the Ministry of Justice licence.
- 4.9.4 Excavation and post-excavation processing of human remains will be in accordance with Wessex Archaeology protocols and in-line with current guidance documents (e.g., McKinley 2013) and the standards set out in ClfA Technical Paper 13 (McKinley and Roberts 2013). Appropriate specialist guidance/site visits will be undertaken if required.
- 4.9.5 The final deposition of human remains subsequent to the appropriate level of osteological analysis and other specialist sampling/examinations will follow the requirements set out in the Ministry of Justice licence.

#### Treasure

4.9.6 Wessex Archaeology will immediately notify the client and the Planning Archaeologist on discovery of any material covered, or potentially covered, by the *Treasure Act 1996*. All information required by the Treasure Act (i.e., finder, location, material, date, associated items etc.) will be reported to the Coroner within 14 days.

#### 4.10 Environmental sampling

- 4.10.1 All sampling will be undertaken following Wessex Archaeology's in-house guidance, which adheres to the principles outlined in Historic England's guidance (English Heritage 2011 and Historic England 2015b).
- 4.10.2 Bulk environmental soil samples, for the recovery of plant macrofossils, wood charcoal, small animal bones and other small artefacts, will be taken as appropriate from well-sealed and dateable contexts. In general, features directly associated with particular activities (e.g., pits, latrines, cesspits, hearths, ovens, kilns, and corn driers) should be prioritised for sampling over features, such as ditches or postholes, which are likely to contain reworked and residual material.
- 4.10.3 If waterlogged or mineralised deposits are encountered, an environmental sampling strategy will be devised and agreed with the Planning Archaeologist as appropriate. Specialist guidance will be provided by a member of Wessex Archaeology's geoarchaeological and environmental team, with site visits undertaken if required.
- 4.10.4 Any samples will be of an appropriate size typically 40 litres for the recovery of environmental evidence from dry contexts, and 10 litres from waterlogged deposits.
- 4.10.5 Following specialist advice, other sampling methods such as monolith, Kubiena or contiguous small bulk (column) samples may be employed to enable investigation of



deposits with regard to microfossils (e.g., pollen, diatoms) and macrofossils (e.g., molluscs, insects), soil micromorphological or soil chemical analyses.

#### 5 POST-EXCAVATION METHODS AND REPORTING

#### 5.1 Stratigraphic evidence

- 5.1.1 All written and drawn records from the evaluation will be collated, checked for consistency and stratigraphic relationships. Key data will be transcribed into a database, which can be updated during any future analyses. The preliminary phasing of archaeological features and deposits will be undertaken using stratigraphic relationships and the spot dating from finds, particularly pottery.
- 5.1.2 A written description will be made of all archaeologically significant features and deposits that were exposed and excavated, ordered either by trench or by period as appropriate. Detail of all contexts will be provided in trench tables in the appendix of the report.

#### 5.2 Finds evidence

- 5.2.1 All retained finds will, as a minimum, be washed, weighed, counted and identified. They will then be recorded to a level appropriate to the aims and objectives of the evaluation. Recording and reporting will conform to the Type 2 (Appraisal) level according to ClfA's *Toolkit for Specialist Reporting*, to include appropriate quantification, characterisation and assessment of significance and potential. The report will include a table of finds by feature/context or trench.
- 5.2.2 Metalwork from stratified contexts will be X-rayed and, along with other fragile and delicate materials, stored in a stable environment. The X-raying of objects and other conservation needs will be undertaken by Wessex Archaeology in-house conservation staff, or by another approved conservation centre.
- 5.2.3 Finds will be suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with the standards of the ClfA (2014b).

#### 5.3 Environmental evidence

- 5.3.1 Bulk environmental soil samples will be processed by standard flotation methods. The residues will be fractionated into 5.6/4 mm and 1/0.5 mm and dried if necessary. The coarse residue fraction (>5.6/4 mm), and the fine fraction when appropriate, will be sorted and discarded, with any finds recovered given to the appropriate specialist. The flot will be retained on a 0.25 mm mesh and scanned to assess the range of environmental remains present and their preservation. Unsorted fine residues will be retained until after any analyses and discarded following final reporting (in accordance with the Selection policy, below).
- 5.3.2 In the case of samples from cremation-related deposits the flots will be retained on a 0.25 mm mesh, with residues fractionated into 4 mm, 2 mm and 1 mm. In the case of samples from inhumation burial deposits, the sample will be wet-sieved through 9.5 mm and 1 mm mesh sizes. The coarse fractions (9.5 mm) will be sorted with any finds recovered given to the appropriate specialist together with the finer residues.
- 5.3.3 Any waterlogged samples will be processed by standard waterlogged flotation methods.



5.3.4 Recording and reporting will conform to the Type 2 (Appraisal) level according to ClfA's *Toolkit for Specialist Reporting*, to include appropriate quantification, characterisation and assessment of significance and potential.

#### 5.4 Reporting

#### General

- 5.4.1 Following completion of the fieldwork and the evaluation of the stratigraphic, artefactual and ecofactual evidence, a draft report will be submitted for approval to the client and the Planning Archaeologist, for comment. Once approved, a final version will be submitted.
- 5.4.2 The report will include the following elements:
  - Non-technical summary;
  - Project background;
  - Archaeological and historical context;
  - Aims and objectives;
  - Methods;
  - Results stratigraphic, finds and environmental;
  - Conclusions in relation to the project aims and objectives, and discussion in relation to the wider local, regional or other archaeological contexts and research frameworks etc;
  - Archive preparation and deposition arrangements;
  - Appendices, including trench summary tables;
  - Illustrations; and
  - References.
- 5.4.3 A copy of the final report will be deposited with the HER, along with surveyed spatial digital data (.dxf or shapefile format) relating to evaluation.

#### Publication

5.4.4 If no further mitigation works are undertaken, a short report on the results of the evaluation will be prepared for publication in a suitable journal, if considered appropriate and agreed with the client and the Planning Archaeologist.

#### OASIS

5.4.5 An OASIS (online access to the index of archaeological investigation) record (http://oasis.ac.uk) will be created, with key fields completed, and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.

### 6 ARCHIVE STORAGE AND CURATION

#### 6.1 Museum

6.1.1 It is recommended that the project archive resulting from the evaluation be deposited with Oxfordshire Museums Service. Provision has been made for the cost of long-term storage



in the post-fieldwork costs. The museum will receive notification of the project prior to fieldwork commencing, and an accession number will be obtained.

#### 6.2 Transfer of title

- 6.2.1 On completion of the evaluation (or extended fieldwork programme), every effort will be made to persuade the legal owner of any finds recovered (i.e., the landowner), with the exception of human remains and any objects covered by the *Treasure Act 1996*, to transfer their ownership to the museum in a written agreement.
- 6.2.2 The final report will detail whether the transfer of title has been signed, and arrangements made for the storage of the archive.

#### 6.3 **Preparation of archive**

#### Physical archive

6.3.1 The complete physical archive, which may include paper records, graphics, artefacts, and ecofacts, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Oxfordshire Museums Service, and in general following nationally recommended guidelines (Brown 2011; ClfA 2014c; SMA 1995). The archive will usually be deposited within one year of the completion of the project, with the agreement of the client.

#### Digital archive

6.3.2 The digital archive generated by the project will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata.

#### 6.4 Selection strategy

- 6.4.1 It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during the course of an archaeological project require preservation in perpetuity. These records and materials will be subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, i.e., the retained archive should fulfil the requirements of future researchers and the receiving Museum.
- 6.4.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993; Wessex Archaeology's internal selection policy) and follows ClfA's *Toolkit for Selecting Archaeological Archives*. It should be agreed by all stakeholders (Wessex Archaeology's internal specialists, external specialists, local authority, museum) and fully documented in the project archive.
- 6.4.3 In this instance, given that the level of finds recovery is expected to be relatively low, decisions on selection will be deferred until after the fieldwork stage, and no detailed strategy is presented here. Any material not selected for retention may be used for teaching or reference collections by the museum, or by Wessex Archaeology.

#### 6.5 Security copy

6.5.1 In line with current best practice (e.g., Brown 2011), on completion of the project a security copy of the written records will be prepared in the form of a digital PDF/A file. PDF/A is an



ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

#### 7 OUTREACH AND SOCIAL MEDIA

7.1.1 In line with its charitable aims, Wessex Archaeology will, where possible and in consultation with the client, seek opportunities to disseminate the results of the evaluation and engage with the local community through social media, press releases, open days and volunteer involvement, while taking into account issues such as health and safety, confidentiality and vandalism.

#### 8 COPYRIGHT

#### 8.1 Archive and report copyright

- 8.1.1 The archive will be prepared to the acceptable standard defined in English Heritage's Management of Research Projects in the Historic Environment (MoRPHE).
- 8.1.2 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*.
- 8.1.3 Information relating to the project will be deposited with the Historic Environment Record (HER) in accordance with the *Guidance for the Submission of Data to the Welsh Historic Environment Records* (Welsh Archaeological Trusts 2018), where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research, or development control within the planning process.

#### 8.2 Third party data copyright

8.2.1 This document, the evaluation report and the project archive may contain material that is non-Wessex Archaeology copyright (e.g., Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.

#### 9 WESSEX ARCHAEOLOGY PROCEDURES

#### 9.1 External quality standards

9.1.1 Wessex Archaeology is registered as an archaeological organisation with the Chartered Institute for Archaeologists (CIfA) and fully endorses its *Code of Conduct* (CIfA 2014d) and *Regulations for Professional Conduct* (CIfA 2019). All staff directly employed or subcontracted by Wessex Archaeology will be of a standard approved by Wessex Archaeology, and archaeological staff will be employed in line with the CIfA codes of practice and will normally be members of the CIfA.

#### 9.2 Personnel

- 9.2.1 The fieldwork will be directed and supervised by an experienced archaeologist from Wessex Archaeology's core staff. The overall responsibility for the conduct and management of the project will be held by one of Wessex Archaeology's project managers, who will visit the fieldwork as appropriate to monitor progress and to ensure that the scope of works is adhered to. Where required, monitoring visits may also be undertaken by Wessex Archaeology's Health and Safety manager. The appointed project manager will be involved in all phases of the investigation through to its completion.
- 9.2.2 The analysis of any finds and environmental data will be undertaken by Wessex Archaeology core staff or external specialists, using Wessex Archaeology's standard methods, under the supervision of the departmental managers and the overall direction of the project manager. A complete list of specialists is provided in Appendix 1.
- 9.2.3 The following key staff are proposed:
  - Project Manager Bianca Williams-San Martin
- 9.2.4 Wessex Archaeology reserves the right, where necessary due to unforeseen circumstances, to replace nominated personnel with alternative members of staff of comparable expertise and experience.

#### 9.3 Internal quality standards

- 9.3.1 Wessex Archaeology is an ISO 9001 accredited organisation (certificate number FS 606559), confirming the operation of a Quality Management System which complies with the requirements of ISO 9001:2015 covering professional archaeological and heritage advice and services. The award of the ISO 9001 certificate, independently audited by the British Standards Institution (BSI), demonstrates Wessex Archaeology's commitment to providing quality heritage services to our clients.
- 9.3.2 Wessex Archaeology assigns responsibility to individual managers for the successful completion of all aspects of a project including reporting. This includes monitoring progress and quality; controlling the budget from inception to completion; and all aspects of health and safety for the project. At all stages, the project manager will carefully assess and monitor performance of staff and adherence to objectives, timetables and budgets, while the manager's own performance is monitored by the team leader or regional director. The technical managers in the Graphics, Research, GeoServices and IT sections provide additional assistance and advice.
- 9.3.3 All staff are responsible for following Wessex Archaeology's quality standards but the overall adherence to and setting of these standards is the responsibility of the senior management team who, in consultation with the team leaders/regional directors, also ensure projects are adequately programmed and resourced within Wessex Archaeology's portfolio of project commitments.

#### 9.4 Health and safety

- 9.4.1 All works will be undertaken in accordance with the *Health and Safety at Work Act 1974*; the *Management of Health and Safety at Work Regulations 1999* and all other applicable health and safety legislation.
- 9.4.2 Wessex Archaeology is an ISO 45001 accredited organisation (certificate number OHS 744383), confirming the operation of an Occupational Health and Safety Management

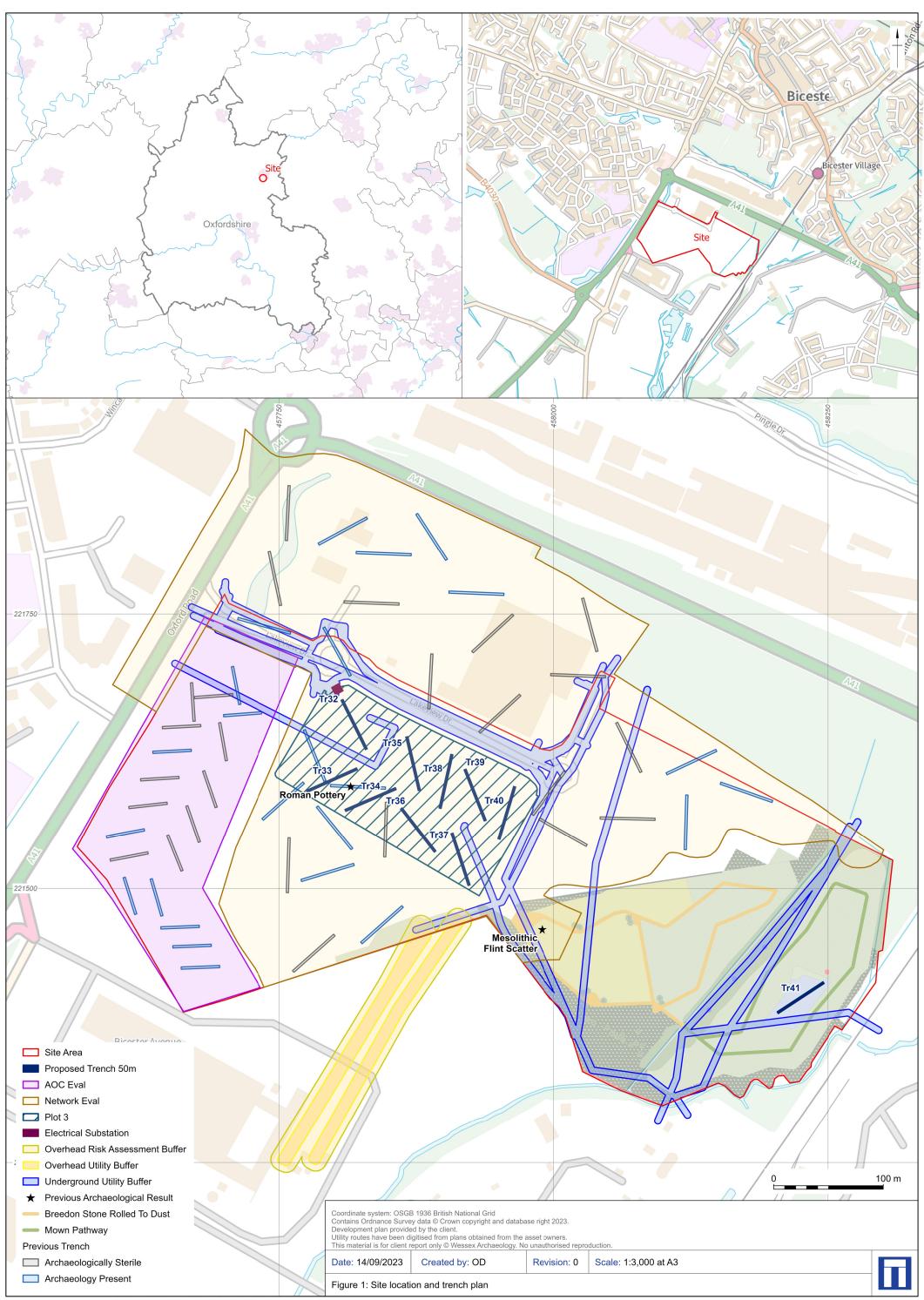


System that complies with the requirements of ISO 45001:2018. The award of the ISO 45001 certificate, independently audited by the British Standards Institution (BSI), demonstrates Wessex Archaeology's commitment to delivering effective risk management across all its activities.

- 9.4.3 Wessex Archaeology will, for all projects, produce one or more task and site-specific risk assessments and method statements (RAMS), which will ensure our staff can work safely on the site. A copy of the RAMS and our Health and Safety Policy can be provided to the client. All staff on our sites will be made fully familiar with the RAMS before work commences.
- 9.4.4 We aim to work collaboratively on health and safety with clients and, where separately appointed, with principal contractors. We expect clients to provide in good time all the necessary risk information about a site that may affect the archaeological work, such as locations of utilities or any known ground contamination. We will comply with the project specific Personal Protective Equipment (PPE) requirements, and any other specific additional requirements of the Principal Contractor.
- 9.4.5 All fieldwork staff are certified through the Construction Skills Certification Scheme (CSCS) and have undergone UKATA Asbestos Awareness Training. Staff who carry out specific tasks are suitably trained and competent to do so through training accredited by the Construction Industry Training Board (CITB), Institution of Occupational Safety & Health (IOSH) and the National Plant Operators Recognitions Scheme (NPORS).

#### 9.5 Insurance

9.5.1 Wessex Archaeology holds Employers Liability (£15,000,000), Public Liability (£15,000,000) and Professional Indemnity (£10,000,000) policies.



X:\Projects\270280\Geomatics\Setup\270280\_setup.aprx



#### REFERENCES

- ADS 2013. Caring for Digital Data in Archaeology: a guide to good practice. Archaeology Data Service & Digital Antiquity Guides to Good Practice.
- AOC Archaeology Group 2014. Bicester Office Park, Oxford Road, Bicester, Oxfordshire: Data Structure Report for an Archaeological Evaluation. Unpublished client report.
- AOC Archaeology Group 2018. Bicester Office Park, Oxford Road, Bicester Oxfordshire: An Archaeological Evaluation Report. Unpublished client report ref 23757
- British Geological Survey 2022. *BGS Geology Viewer* https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/ (accessed 30/05/2023).
- Brown, D. H. 2011. Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (revised edition). Archaeological Archives Forum.
- Chartered Institute for Archaeologists [CIfA] 2014a. *Standard and Guidance for Archaeological Field Evaluation* (revised edition October 2020). Reading: CIfA.
- ClfA 2014b. Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (revised edition October 2020). Reading: ClfA.
- ClfA 2014c. Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (revised edition October 2020). Reading: ClfA.
- ClfA 2014d. Code of Conduct (revised edition October 2022). Reading: ClfA.
- ClfA 2019. Regulations for Professional Conduct (revised edition July 2021). Reading: ClfA.
- ClfA 2022a. *Toolkit for Specialist Reporting* https://www.archaeologists.net/reporting-toolkit (accessed 24/05/2023).
- ClfA 2022b. *Toolkit for Selecting Archaeological Archives* https://www.archaeologists.net/selection-toolkit (accessed 24/05/2023).
- English Heritage 2011. Environmental Archaeology. A Guide to the Theory, Practice of Methods, from Sampling and Recovery to Post-excavation (2nd edition). Portsmouth: English Heritage.
- Hey, G. and Hind, J. 2014 Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas. Project Report. Oxford Wessex. (https://library.thehumanjourney.net/2597/)
- Historic England 2015a. *Management of Research Projects in the Historic Environment: the MoRPHE project managers' guide*. Swindon: Historic England.
- Historic England 2015b. *Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record*. Swindon: Historic England.
- Network Archaeology 2007. *Bicester Office Village: Archaeological Trench Evaluation.* Unpublished client report

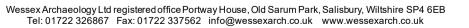
- McKinley, J. I. 2013. 'Cremation: excavation, analysis and interpretation of material from cremation-related contexts', in Tarlow, S. and Nilsson Stutz, L. (eds), *The Oxford Handbook of the Archaeology of Death and Burial*, 147 71. Oxford: Oxford University Press.
- McKinley, J. I. and Roberts, C. 1993. *Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains.* Reading: ClfA Technical Paper 13.
- Network Archaeology 2007. *Bicester Office Village: Archaeological Trench Evaluation*. Unpublished client report.
- SMA 1993. *Selection, Retention and Dispersal of Archaeological Collections*. London: Society of Museum Archaeologists.
- SMA 1995. *Towards an Accessible Archaeological Archive*. London: Society of Museum Archaeologists.
- Trium (2017) Chapter 10 'Buried Heritage (Archaeology) & Built Heritage' in The Bicester Office Park: Environmental Impact Assessment Volume 1. Environmental Statement. Unpublished client report.
- Watkinson, D. and Neal, V. 1998. *First Aid for Finds: practical guide for archaeologists*. United Kingdom Institute for Conservation of Historic & Artistic Works.

# APPENDICES

## Appendix 1 Finds and environmental specialists

Name	Qualifications	Specialism	
Sander Aerts	BA, MSc	Archaeoentomological remains, animal bone, marine shell and archaeobotanical remains (carbonised)	
Phil Andrews	BSc; FSA; MCIfA	Slag and metal working debris	
Richard Bradley	BA; MA; MCIfA	Battlefield artefacts, particularly Civil War period lead shot	
Ceridwen Boston	BSocSc; MA; MSc; DPhil	Osteoarchaeology; funerary archaeology	
Elina Brook	BA; MA; PCIfA	Later prehistoric and Romano-British pottery, and small finds	
Alex Brown	BA; MSc; PhD	Geoarchaeology, palynology	
Liz Chambers	BA; MSc	Geoarchaeology	
Fiona Eaglesham	BSc; MSc	Archaeobotanical remains	
Kirsten Egging Dinwiddy	BA; MA; MCIfA	Human remains (inhumations)	
Erica Gittins	BA; MA; PhD	Prehistoric flint	
Phil Harding	PhD	Prehistoric flint, particularly Palaeolithic flint	
Lorrain Higbee	BSc; MSc; MCIfA	Animal bone	
Jessica Irwin	BSc	Post-medieval finds	
Matt Leivers	BA; PhD; ACIfA	Prehistoric pottery and flint	
Inés López-Dóriga	BA; MA; PhD	Archaeobotanical remains	
Erica Macey-Bracken	BA; ACIfA	Post-medieval finds, ceramic building material and worked wood	
Katie Marsden	BSc	Pottery from prehistoric to post-medieval/modern. Metalwork of all periods, including coins. Small and bulk finds including fired clay, ceramic building material, worked bone	
Jacqueline McKinley	BTech; FSA	Human remains (inhumations and cremations)	
Nicki Mulhall		Geoarchaeology and archaeobotanical remains	
Emma Robertson	BA; MSc	Human remains (inhumations)	
Megan Scantlebury	BA, MSc	Archaeobotanical remains	
Rachael Seager Smith	BA; MCIfA	Pottery with particular emphasis on Roman ceramics; and metalwork, fired clay, ceramic building material, stone, worked bone, shale, glass, and wall plaster	
Andrew Shaw	BA; MA; PhD	Palaeolithic lithic artefacts and Pleistocene geoarchaeology	
Mark Stewart	BA; MPhil	Prehistoric flint. Worked stone, ceramic building material, glass, fired clay	
Amy Thorp	BA; MA	Pottery with emphasis on Roman ceramics, small finds	
Ed Treasure	BSc; MRes; PhD	Archaeobotanical remains, including plant remains and charcoal/wood	
Kevin Trott	BA	Pottery from the Iron Age to early modern period, with emphasis on later Iron Age/Romano-British and medieval to post-medieval periods. Ceramic building material, fired clay/briquetage, metalwork/small finds, clay tobacco pipes, worked bone, stone artefacts, shale, glass, wall plaster, leather, marine shell	
Thomas Wicks	BA; MA	Conservation of objects	







Wessex Archaeology Ltd is a company limited by guarantee registered in England, No. 1712772 and is a Registered Charity in England and Wales, No. 287786; and in Scotland, Scottish Charity No. SC042630. Registered Office: Portway House, Old Sarum Park, Salisbury, Wilts SP4 6EB.