

# Lupton Road, Wallingford, Oxfordshire

Written Scheme of Investigation Archaeological Evaluation

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# Lupton Road, Wallingford, Oxfordshire Written Scheme of Investigation for an Evaluation

# Centred on NGR SU 5993 8902

#### Contents

List of Fi	gures	vi
1	INTRODUCTION	. 1
1.1	Project details	1
1.2	Location, topography and geology	. 1
2	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND POTENTIAL	. 3
2.1	Archaeological and historical background	3
3	PROJECT AIMS	. 4
3.1	General	. 4
3.2	Specific aims and objectives	. 4
4	PROJECT SPECIFIC EXCAVATION AND RECORDING METHODOLOGY	. 5
4.1	Scope of works	. 5
4.2	Programme	5
4.3	Site specific methodology	. 5
5	PROJECT SPECIFIC REPORTING AND ARCHIVE METHODOLOGY	. 6
5.1	Programme	. 6
5.2	Content	. 6
5.3	Specialist input	. 6
5.4	Archive	.6
6	HEALTH AND SAFETY	. 7
6.1	Roles and responsibilities	. 7
6.2	Method statement and risk assessment	
6.3	Monitoring of works	. 7
7	BIBLIOGRAPHY	. 8
OA STA	ANDARD FIELDWORK METHODOLOGY APPENDICES	. 9
APPEN	DIX A GENERAL EXCAVATION AND RECORDING METHODOLOGY	9
A.1	Standard methodology – summary	9
A.2	Relevant industry standards and guidelines	10
A.3	Relevant OA manual and other supporting documentation	10
APPEN	DIX B GEOMATICS AND SURVEY	L1
B.1	Standard methodology - summary	11
B.2	Relevant industry standards and guidelines	13



B.3	Relevant O	A manual and other supporting documentation	13
APPEN	IDIX C	ENVIRONMENTAL EVIDENCE	14
C.1	Standard m	ethodology – summary	14
C.2	Relevant in	dustry standards and guidelines	14
C.3	Relevant O	A manual and other supporting documentation	15
APPEN	IDIX D	ARTEFACTUAL EVIDENCE	16
D.1	Standard m	ethodology - summary	16
D.2	Relevant in	dustry standards and guidelines	17
D.3	Relevant O	A manual and other supporting documentation	17
APPEN	IDIX E	HUMAN REMAINS	18
E.1	Standard m	ethodology - summary	18
E.2	Relevant in	dustry standards and guidelines	20
E.3	Relevant O	A manual and other supporting documentation	21
APPEN	IDIX F	REPORTING	22
F.1	Standard m	ethodology - summary	22
F.2	Relevant in	dustry standards and guidelines	23
APPEN	IDIX G	LIST OF SPECIALISTS REGULARLY USED BY OA	25
APPEN	IDIX H	DOCUMENTARY ARCHIVING	27
Standard	d methodolo	gy – summary	27
H.2	Relevant in	dustry standards and guidelines	28
H.3	Relevant O	A manual and other supporting documentation	29
APPEN	IDIX I	HEALTH AND SAFETY	30
l.1	Standard M	ethodology - summary	30
1.2	Relevant in	dustry standards and guidelines	30
OXFOF	RDSHIRE C	OUNTY COUNCIL EVALUATION BRIEF ANNEXES	31
APPEN	IDIX J	ANNEX 1	31
J.1	Project Met	hodology and Data Collection – Field Evaluation	31
APPEN	IDIX K	ANNEX 2	32
K.1	Monitoring	Arrangements	32
APPEN	IDIX L	ANNEX 3	32
L.1	Post Excava	tion and Reporting Requirements	32
APPEN	IDIX M	ANNEX 4	33
M.1	Archive Dep	position	33
APPEN	IDIX N	ANNEX 5	34
N.1	Publication	and Dissemination	34



# **List of Figures**

Figure 1 Site location

Figure 2 Proposed trench locations



#### 1 INTRODUCTION

#### 1.1 Project details

- 1.1.1 Oxford Archaeology (OA) has been commissioned by Location 3 Properties Limited (L3P) to undertake a trial trench evaluation on the site of a proposed redevelopment of land off Lupton Road, Wallingford. This represents the first part of a staged programme of archaeological investigation at this location.
- 1.1.2 The evaluation is being undertaken prior to the formal determination of the planning application (planning ref: P19/S2539/FUL). Richard Oram, planning archaeologist for Oxfordshire County Council (OCC), advising the Local Planning Authority (LPA) has recommended the inclusion of the following conditions for the planning permission:

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 the NPPF (2019).

Following the approval of the Written Scheme of Investigation referred to in condition 1, 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 evaluation and 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 the NPPF (2019).

- 1.1.3 The LPA has not set a brief for the work, although a scope of works to adequately evaluate the site has been agreed between Robert Masefield, RPS Group, acting as archaeological consultants to L3P and the planning archaeologist. This WSI outlines how OA will undertake the agreed scope of works to fulfil the requirements of the evaluation stage of this investigation. This document is specific to OA's methods and procedures.
- 1.1.4 All work will be undertaken in accordance with local and national planning policies, and regional and industry best practise guidelines.

#### 1.2 Location, topography and geology

1.2.1 The site boundary encloses approximately 0.64ha and is located off Lupton Road within the south-western industrial expansion of Wallingford (Fig. 1). The site is

02



bounded by Lupton Road to the west, industrial developments to the north and south and the Cholsey and Wallingford Railway line to the east and is centred on SU 5993 8902.

- 1.2.2 The topography of the site is level at approximately 47.5-47.7m aOD and currently comprises rough grassed areas and scrub.
- 1.2.3 The solid geology of the site is mapped as glauconitic sandstone (glauconitic marl member). This is overlain by sand and gravel (Northmoor sand and gravel member, upper facet) (BGS web data).



#### 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND POTENTIAL

#### 2.1 Archaeological and historical background

2.1.1 The following is a verbatim production of the advice and information provided by Mr Oram as part of the County Council's response to consultation on the development by South Oxfordshire District (OCC 2019). This provides background information and an assessment of the potential offered at this location.

"The site is located in an area of archaeological potential 480m SW of the Saxon defences of Wallingford (SM 234). Recent archaeological investigations, consisting of a trenched evaluation and geophysical survey, 180m SE of the site, recorded a Bronze and Iron Age settlement (PRN 26339). Further Iron Age and Roman settlement was recorded during a small excavation 400m north of the application site (PRN 26221). In addition, a Roman burial and pottery was recovered from a gas pipe trench within the fields to the south during the 1940s (PRN 2992). Three Roman lamps were also recovered from an allotment area 200m NW of the proposal area (PRN 7969).

A Neolithic or Bronze Age barrow was recorded, along with early Iron Age settlement 380m east of the site during the development of a housing estate (PRN D2227). Iron age settlement evidence has also been recorded from cropmarks 1km west of the site (PRN 15383) and 760m NW during recent archaeological evaluation (PRN 26344). Medieval and early post medieval settlement has been recorded 380m NE (PRN 10595) and 570m NE (PRN 12425) of the site and there are a number of findspots from the Bronze Age through to the medieval period recorded for the immediate vicinity (PRNs 15257, D2225, 2711, 2993 and 7920).

An archaeological evaluation has confirmed the presence of archaeological features on the wider site in the form of a number of undated linear features and pits. This evaluation was limited by the current use of the site. Further features can be expected to survive on the site which will be disturbed by this development.

It is therefore possible that further archaeological deposits related to the Iron Age and Roman settlement could survive on the site."

- 2.1.2 The site was partly evaluated in November 2012 (PCA 2012). This identified three linear ditches, three small pits and a posthole encountered across three trenches (Fig. 2). None of the features produced artefactual material or other dating evidence.
- 2.1.3 An area to the immediate north was also evaluated prior to recent redevelopment (Border Archaeology 2018). This produced few archaeological features, although Trench 2, positioned just to the north of the boundary, did identify curving and linear gullies of a similar appearance to those within the site. No dating evidence was recovered from these features and the authors assign a post-medieval date to the features based on the inclusion of minute fragments (<2mm) of probable post-medieval materials in the environmental samples.

02



#### 3 PROJECT AIMS

#### 3.1 General

- 3.1.1 The aim of the evaluation is to identify any archaeological deposits and the potential impacts upon these. To do this the aims are to:
  - i. establish the presence/absence of archaeological remains,
  - ii. determine and confirm the character of any remains present, without compromising any deposits that may merit detailed investigation or preservation,
  - iii. determine or estimate the date range of any remains from artefacts or otherwise,
  - iv. characterise any underlying archaeological strata down to undisturbed geology without significantly impacting upon younger (overlying) deposits where possible,
  - v. determine the geo-archaeological and palaeo-environmental potential of any archaeological deposits encountered where appropriate,
  - vi. recover suitable materials for scientific dating where appropriate,
  - vii. make available the results of the investigation to inform subsequent development designs, planning decisions or mitigation strategies,
  - viii. produce a factual report, full archive and HER data submission, and
  - ix. disseminate the results of the investigation at a level appropriate to their importance.

#### 3.2 Specific aims and objectives

- 3.2.1 The specific aims and objectives are:
  - x. to identify the continuation or other of the features recorded in the 2012 evaluation, and
  - xi. to provide additional levels of evaluation sample to adequately cover the area of the application boundary.



#### 4 PROJECT SPECIFIC EXCAVATION AND RECORDING METHODOLOGY

#### 4.1 Scope of works

4.1.1 The evaluation will comprise the excavation of 65m of linear trench measuring 1.8m wide to supplement the results of the 2012 evaluation. Combined, the trenches represent a 4% evaluation sample of the site by area. During this phase the 65m of linear trench will be excavated as 3no. trenches between 20-25m long to fit within the boundary and arranged to provide a good overall coverage of the site (Fig. 2). The trenches have been arranged taking the results of the previous evaluation into consideration and within the constraints of other hazards or existing features.

#### 4.2 Programme

- 4.2.1 It is anticipated that the fieldwork will be completed within a single week, by a team comprising a Project Supervisor directing up to 2 Project Archaeologists, under the management of Steve Lawrence, BA MCIfA, Senior Project Manager.
- 4.2.2 All fieldwork undertaken by Oxford Archaeology (South) is overseen by the Head of Fieldwork, David Score MCIfA.

#### 4.3 Site specific methodology

- 4.3.1 A summary of OA's general approach to evaluation and recording can be found in Appendix A. Standard methodologies for Geomatics and Survey, Environmental evidence, Artefactual evidence and Burials can also be found below (Appendices B, C, D and E respectively).
- 4.3.2 Oxfordshire County Council's standard Annexes for evaluation are included at the end of this document (Appendices J-N). Where the content differs between OA's standard and OCC's requirements, OCC's takes precedence and will be applied to this project.
- 4.3.3 A contingency for additional trench excavation or extension of individual trenches is held in reserve should this be needed to resolve specific queries raised by the initial trench excavation. Any requests for additional machine excavation will be agreed between the planning archaeologist and the client's archaeologist and based on data provided by OA.
- 4.3.4 Sample excavation of any identified features will be undertaken to achieve the aims set out above. Sufficient quantities of features and deposits will be investigated but limited to avoid impact up on any deposits that may merit more detailed investigation at a later mitigation stage.
- 4.3.5 The evaluation results will inform a discussion and decision with regards to any subsequent stage of mitigation ahead of the development. The timetable, scope and recording methods for this second phase will be agreed between the client's archaeologist and the planning archaeologist. A separate WSI will be produced to cover the requirements for the mitigation stage.



#### 5 PROJECT SPECIFIC REPORTING AND ARCHIVE METHODOLOGY

#### 5.1 Programme

- 5.1.1 The report will be completed within 4-6 weeks of the completion of the fieldwork depending on the quantity and type of data generated. If significant remains are encountered, these may require an extended reporting period. The Archaeological Officer and client will be informed of any timetable changes throughout the project.
- 5.1.2 The report will be sent to the planning archaeologist for comment prior to the submission of the final version for planning purposes.
- 5.1.3 The report will be issued in Adobe Acrobat (.pdf) format. Bound copies of the completed report will be available on request.

#### 5.2 Content

5.2.1 The content of this report will be as defined in Appendix F.

#### 5.3 Specialist input

5.3.1 OA has a large pool of internal specialists, as well as a network of external specialists with whom OA have well established working relationships. A general list of these specialists is presented in Appendix G; in the event that additional input should be required, an updated list of specialists can be supplied.

#### 5.4 Archive

- 5.4.1 The site archive will be deposited with the Oxfordshire County Museum Service following completion of the project.
- 5.4.2 A summary of OA's general approach to documentary archiving can be found in Appendix H.



#### 6 HEALTH AND SAFETY

#### 6.1 Roles and responsibilities

- 6.1.1 The Senior Project Manager has responsibility for ensuring that safe systems of work are adhered to on site. He delegates elements of this responsibility to the Project Supervisor who implements these on a day to day basis.
- 6.1.2 The Director with responsibility for Health and Safety at OA is Dan Poore Tech IOSH (Chief Business Officer).

#### 6.2 Method statement and risk assessment

- 6.2.1 A summary of OA's general approach to health and safety can be found in Appendix I. A risk assessment has also been undertaken and approved and will be kept on site, along with OA's standard Health and Safety file, which will contain all relevant health and safety documentation.
- 6.2.2 The Health and Safety file will be available to view at any time.

#### 6.3 Monitoring of works

- 6.3.1 At least 10 days' notice of the commencement of the fieldwork will be given to the planning archaeologist. The final notification of the start date and arrangements for a formal site monitoring meeting will be agreed between the client's archaeologist and the planning archaeologist.
- 6.3.2 The planning archaeologist will have free access to the site (subject to Health and Safety considerations) and all records to ensure the works are being carried out in accordance with this WSI and all other relevant standards.
- 6.3.3 Trenches will only be backfilled once the client's archaeologist has received 'sign off' confirmation from the planning archaeologist. Assuming that appropriate notification of the works has been given to the planning archaeologist and monitoring has been undertaken, sign off will not be unreasonably withheld such that it may delay the fieldwork.



#### **7** BIBLIOGRAPHY

Border Archaeology 2018 Land at Hithercroft Road/ Lupton Road, Wallingford, Archaeological Field Evaluation, Report reference BA1747LRW, Unpublished report issued May 2018

BGS <a href="http://mapapps.bgs.ac.uk/geologyofbritain/home.html">http://mapapps.bgs.ac.uk/geologyofbritain/home.html</a> accessed 23/12/19

Ministry of Housing, Communities and Local Government 2019 *National Planning Policy Framework* February 2019

OCC 2019 County Council's response to consultation on the following development proposal Application no: P19/S2539/FUL. Unpublished planning document dated 9th September 2019

PCA 2012 Hithercroft Estate, Lupton Road, Wallingford, OX10 9WA, An Archaeological Evaluation, PCA Report No. R11349, Unpublished report issued December 2012, revised January 013



#### OA STANDARD FIELDWORK METHODOLOGY APPENDICES

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by the accompanying detailed Written Scheme of Investigation.

Copies of all OA internal standards and guidelines referred to below are available on request.

#### APPENDIX A GENERAL EXCAVATION AND RECORDING METHODOLOGY

#### A.1 Standard methodology – summary

#### Mechanical excavation

- A.1.1 An appropriate mechanical excavator will be used for machine excavation. This will normally be a JCB or 360° tracked excavator with a 1.5 m to 2 m wide toothless ditching bucket. For work with restricted access or working room a mini excavator may be used.
- A.1.2 All mechanical excavation will be undertaken under direct archaeological supervision.
- A.1.3 All undifferentiated topsoil or overburden of recent origin will be removed down to the first significant archaeological horizon, in successive, level spits.
- A.1.4 Following mechanical excavation, all areas that require examination or recording will be cleaned using appropriate hand tools.
- A.1.5 Spoil heaps will be monitored in order to recover artefacts to assist in the analysis of the spatial distribution of artefacts. Modern artefacts will be noted but not retained.
- A.1.6 After recording, evaluation trenches and test pits will usually be backfilled with excavated material in reverse order of excavation, and compacted as far as is practicable with the mechanical excavator. Area excavations will not normally be backfilled.

#### Hand excavation

- A.1.7 All investigation of archaeological levels will usually be by hand, with cleaning, examination and recording both in plan and section.
- A.1.8 Within significant archaeological levels the minimum number and proportion of features required to meet the aims of the excavation will be hand excavated. Pits and postholes will usually be subject to a 50% sample by volume. Linear features will be sectioned as appropriate. More complex features such as those associated with funerary activity will usually be subject to 100% hand excavation.
- A.1.9 In the case of evaluations, it is not necessarily the intention that all trial trenches will be fully excavated to natural stratigraphy, but the depth of archaeological deposits across the site will be assessed. The stratigraphy of a representative sample of the evaluation trenches will be recorded even where no archaeological deposits have been identified. Any excavation, both by machine and by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits, which appear to be worthy of preservation in situ.



#### Recording

- A.1.10 Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.
- A.1.11 Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.
- A.1.12 Plans will normally be drawn at 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at scale 1:10 or recorded using geo-referenced digital photography.
- A.1.13 The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
- A.1.14 A register of plans will be kept.
- A.1.15 Long sections of showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.
- A.1.16 A register of sections will be kept.
- A.1.17 Generally, all sections will be tied in to Ordnance Datum.
- A.1.18 A full photographic record, illustrating in both detail and general context the principal features and finds discovered will be maintained. The photographic record will also include working shots to illustrate more generally the nature of the archaeological work.
- A.1.19 Photographs will be recorded on OA Photographic Record Sheets.

#### A.2 Relevant industry standards and guidelines

- A.2.1 The Chartered Institute for Archaeologists Standard and Guidance notes relevant to fieldwork are:
  - Standard and Guidance for Archaeological Field Evaluation
  - Standard and Guidance for Archaeological Excavation
  - Standard and Guidance for an Archaeological Watching Brief.
- A.2.2 These will be adhered to at all times.

#### A.3 Relevant OA manual and other supporting documentation

- A.3.1 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).
- A.3.2 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.



#### APPENDIX B GEOMATICS AND SURVEY

#### **B.1** Standard methodology - summary

- B.1.1 The aim of OA methodology is to provide comprehensive survey cover of all investigation areas. Additionally, it is designed to provide coverage for any areas, beyond the original scope of the project, which arise as a result of further work. It provides digital plans of all required elements of the project and locates them within an overall grid.
- B.1.2 It also maintains all necessary survey data and ensures that the relevant information is copied into the primary record, in order to ensure the integrity of the project archive. Furthermore, it ensures that all core data is securely stored and backed up. It establishes accurate project reference systems utilising a series of control stations and permanent base lines.
- B.1.3 The survey will be conducted using a combination of Total Station Theodolite (TST) survey utilising Reflectorless Electronic Distance Measurement (REDM) where appropriate, hand-measured elements and GPS (Global Positioning System), or photogrammetry.
- B.1.4 Before the main work commences, a network of control stations will be laid out encompassing the area. Control stations will be tied in to known points or existing features using rigorous metric observation. The control network will be set in using a TST to complete a traverse or using techniques as appropriate to ensure sufficient accuracy. A GPS, or other appropriate method, will be used to orientate the control network to National Grid or other recognised coordinate system.
- B.1.5 All control stations will be checked by closed traverse and/or GPS, as appropriate. The accuracy of these control stations will be accessed on a regular basis and reestablished accordingly. All stations will be recorded on Survey Control Station sheets.
- B.1.6 Each control station will be marked with a PGM (Permanent Ground Marker). Witness diagrams will include the full 3-D co-ordinates generated, a sketch diagram and measurements to at least three fixed details, written description of the mark and a photograph of the control point in its environs.
- B.1.7 Prior to entry into the field all equipment will be checked, and all pre-survey information will be logged onto the field computer and uploaded onto survey equipment as appropriate. The software in the field computer will be verified and all cabling between the GPS and/or TST and computer will be checked. Prior to conducting the survey, the site will be reconnoitred for locations for a viable control network and check the line of sight and any possible hindrance to survey. Daily record sheets will be kept to record daily tasks and conditions.
- B.1.8 All spatial data will be periodically downloaded onto a field computer, and backed up onto CD, or DVD. It will be cleaned, validated and inspected.
- B.1.9 All survey data will be documented on daily survey record sheets. Information entered on these sheets includes key set up information (Instrument height etc.) as well as daily variables and errors/comments. All survey data will be digitally recorded in a raw



format and translated during the download process this shall allow for any errors to be cross referenced with the daily survey record and corrected accordingly.

- B.1.10 A weekly summary of survey work will be produced to access development and highlight problems. This information also will be recorded on the weekly survey journal. Technical support for the survey equipment and download software shall be available at all times. In those instances, where sites are remotely operated, all digital data will be backed up regularly and a copy returned to Oxford on a weekly basis.
- B.1.11 A site plan will initially be created by a rapid survey of relevant archaeological features by mapping their extent using a combination of TST and GPS. This will form the basis for deciding excavation strategy and will be updated as the excavation clarifies the extent of, and relationships between, archaeological features.
- B.1.12 Excavated archaeological interventions and areas of complex stratigraphy will be hand drawn. At least two Drawing Points (DPs) will be set in as a baseline and measurements taken off this by tape and offset. The hand drawn plans will be referenced to the digitally captured pre-site plan by measuring in the DPs with a TST or GPS. These hand drawn elements will then be scanned in, geo-referenced using the DPs as reference points and digitised following OA's digitising protocols. For further details on hand planning procedure please refer to the fieldwork guidelines.
- B.1.13 Where appropriate photogrammetry or rectified photography may be used to record standing structures or burials. This will be carried out in line with Standard OA procedures for photogrammetry or rectified photography.
- B.1.14 Survey data recorded in the field will be downloaded using appropriate downloading software, and saved as an AutoCAD Map DWG file, or an ESRI Shapefile. These files will be regularly updated and backed up with originals being stored on an OA server in Oxford.
- B.1.15 All drawings will be composed of closed polygons, polylines or points in accordance with the requirements of GIS construction and OA Geomatics protocols. Once created, additional GIS/CAD work will normally be carried out at the local OA central office or at on-site remote locations when appropriate. Support for all GIS/CAD work will be available from OA's Oxford Office during normal office hours. The aim of the GIS/CAD work is to produce workable draft plans, which can be produced as stand-alone products, or can be readily converted to GIS format. Any hand-drawn plans will be scanned and digitised on site in the first instance. Subsequent plans will be added to the main drawing as it develops.
- B.1.16 All plan scans will be numbered according to their plan site number. Digital plans will be given a standard new plan number taken out from the site plan index.
- B.1.17 All digital data will be backed up incrementally on CD or DVD. On each Friday the entire data directory will be backed up and returned to Oxford where it will be copied onto the OA projects server. Each CAD drawing will contain an information layout which will include all the relevant details appertaining to that drawing. Information (metadata) on all other digital files will be created and stored as appropriate. At the end of the survey all raw measurements will be made available as hard copy for archiving purposes.



#### **B.2** Relevant industry standards and guidelines

- B.2.1 Historic England (2007) Understanding the Archaeology of Landscapes A Guide to Good Recording Practice.
- B.2.2 Historic England (2015), Metric Survey Specifications for Cultural Heritage.
- B.2.3 Historic England (2016), Understanding Historic Buildings A Guide to Good Recording Practice.
- B.2.4 Historic England (2017), Photogrammetric Applications for Cultural Heritage. Guidance for Good Practice.

#### **B.3** Relevant OA manual and other supporting documentation

- B.3.1 OA South Metric Survey, Data Capture and Download Procedures
- B.3.2 OA South Digitising Protocols
- B.3.3 OA South GIS Protocols
- B.3.4 These will be superseded by the OA South Geomatics Manual (in progress).



#### APPENDIX C ENVIRONMENTAL EVIDENCE

#### C.1 Standard methodology – summary

- C.1.1 Different environmental and geoarchaeological sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Where possible an environmental specialist(s) will visit the site to advise on sampling strategies. Sampling methods will follow guidelines produced by Historic England and Oxford Archaeology. A register of samples will be kept. 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.
- C.1.2 Geoarchaeological sampling methods are site specific, and methodologies will be designed in consultation with the geoarchaeological manager on a site by site basis.
- C.1.3 Bulk soil samples, where possible of 40 litres or 100% of a deposit if less is available, will be taken from potentially datable features and layers for flotation for charred plant remains and for the recovery of small bones and artefacts. 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 10-20 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. Columns will be taken from buried soils, peats and waterlogged feature fills for pollen and/or phytoliths, diatoms, ostracods and foraminifera if appropriate. Soil samples will be taken for soil investigations (particle size, organic matter, bulk chemistry, soil micromorphology etc.) and possibly for metallurgical analysis in consultation with the appropriate specialists.
- C.1.4 Bulk samples from dry deposits will be processed by standard water flotation using a modified Siraf-style machine and meshes of 0.25mm (flot) and 0.5 or 1mm depending on sediment type and like modes of preservation (residue). Heavy residues will be wet sieved, air dried and sorted. Samples taken exclusively for the recovery of bones, marine shell or artefacts will be wet sieved to 2mm. Waterlogged samples (1L subsample) and snail samples (2L) will be processed by hand flotation with flots and residues collected to 0.25mm (waterlogged plants) and 0.5mm (snails) respectively; these flots and residues will be sorted by the specialist. Samples specifically taken for insects, pollen, other microflora and microfauna, metallurgy and soil analysis will be submitted as whole earth to the appropriate specialists or processed following their instructions.

#### **C.2** Relevant industry standards and guidelines

- C.2.1 Historic England 2010. Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood.
- C.2.2 Historic England 2011. Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation, (2nd ed)



- C.2.3 Historic England 2004. Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates (revision due 2020).
- C.2.4 University of Bradford 2019 Archaeomagnetism: Magnetic Moments in the Past https://www.brad.ac.uk/archaeomagnetism/
- C.2.5 Historic England 2008. Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology (revision due 2020).
- C.2.6 Historic England 2008. Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains (currently being revised).
- C.2.7 Historic England 2015. Archaeometallurgy. Guidelines for Best Practice.
- C.2.8 Historic England 2015 Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record.
- C.2.9 Historic England 2017. Organic Residue Analysis and Archaeology.
- C.2.10 Baker, P and Worley, F 2019. Animal Bones and Archaeology: Recovery to Archive. Historic England
- **C.3** Relevant OA manual and other supporting documentation
- C.3.1 Oxford Archaeology 2017. Environmental Sampling Guidelines, 4th ed.



#### APPENDIX D ARTEFACTUAL EVIDENCE

#### D.1 Standard methodology - summary

- D.1.1 Before a site begins arrangements concerning the finds will be discussed with the Finds Team Leader. Information will be provided by the project manager about the nature of the site, the expected size and make-up of the finds assemblage and any site specific finds retrieval strategies. On-site requirements will be discussed and a conservator appointed who can be called on to make site visits if required. Special requirements regarding particular categories of material will be raised at this early stage for instance the likelihood of recovering assemblages of waterlogged material, large timbers, quantities of structural stone or ceramic building material. Specialists may be required to visit sites to discuss retrieval strategies.
- D.1.2 The project manager will supply the Finds Team Leader with contact details of the landowner of the site so that consent to deposit any finds resulting from the investigation can be sought.
- D.1.3 The on-site retrieval, lifting and short term packaging of bulk and small finds will follow the detailed guidelines set out in the OA Finds Manual (sections 2 and 3), First Aid for Finds and the UKIC conservation guidelines No.2.
- D.1.4 All finds recovered from site will be transported to an OA regional office for processing; local sites will return finds at the end of each day, away based sites at the end of each week. Special arrangements can be discussed for certain sites with the Team Leader before the start of a project. Larger long running sites may in some instances set up on-site processing units to deal with the material from a particular site.
- D.1.5 All finds qualifying as Treasure will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act (1996), and the Treasure (Designation) Order 2002. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.
- D.1.6 Each box of finds will be accompanied by a finds context checklist itemising the finds within each box. The number of bags of finds from each context and individual small find from each context will be recorded. A member of the processing team will check the list when it arrives in the department. There are separate forms for finds recovered from fieldwalking.
- D.1.7 The processing programme is reviewed on a weekly basis and priorities are worked out after discussions with the Fieldwork Team Leader and the Post-excavation Team Leader. Project managers will keep the Finds Team Leader informed of any pressing deadlines that they are aware of. All finds from evaluations are dealt with as a matter of priority.
- D.1.8 All bulk finds are washed (where appropriate), marked, bagged and boxed by the processing team according to the guidelines set out in section 4 and 5 of the OA Finds Manual, First-aid for finds and the UKIC guidelines No.2. They must also take into account the requirements of the receiving museum. Primary data recording count and weight of fragments by material from each context is recorded on the site database.



- D.1.9 Unstable and sensitive objects are recorded onto the database and then packaged and stored in controlled environments according to their individual requirements. The advice of a conservator will be sought for sensitive objects in need of urgent conservation. All metalwork will be x-rayed prior to assessment (and to meet the requirements of most receiving museums).
- D.1.10 Finds recovered from the environmental sample processing will be incorporated into the main assemblage and added to the database.
- D.1.11 On completion of the processing and data entry a finds file for each archaeological investigation will be produced, a summary of which is available for the project manager. The assemblage is allocated an OA number for storage purposes. Bulk finds are stored on a roller racking system, metals in a secure controlled storage and organic finds are refrigerated where possible.
- D.1.12 The movement of finds in and out of the storage areas is strictly monitored and recorded. Carbon copy transit forms exist to record this information. Finds will not be removed from storage without the prior knowledge of the Finds Team Leader.
- D.1.13 Finds information summarised in the finds compendium is used to assess the finds requirements for the post excavation stages of the project. The Team Leader holds a list of all specialists used by OA (see below) both internal and external.
- D.1.14 On completion of the post excavation stage of the project the team prepares the finds assemblage for deposition with the receiving museum. Discussions will be held with the museum, the excavator and the Finds Team Leader to finalise any selection, retention or discard policy. Most museums issue strict guidelines for the preparation of archives for deposition with their individual labelling, packaging and recording requirements.

#### D.2 Relevant industry standards and guidelines

- D.2.1 UKIC, 1983, Packaging and Storage of Freshly-Excavated Artefacts from Archaeological Sites. Conservation Guidelines No.2. Archaeology Section, United Kingdom Institute for Conservation.
- D.2.2 UKIC, 1988, Excavated Artefacts and Conservation: UK sites Revised Edition. Conservation Guidelines No.1. Archaeology Section, United Kingdom Institute for Conservation.
- D.2.3 Society of Museum Archaeologists, 1993, Selection, retention and dispersal of Archaeological Collections. Download available via http://www.socmusarch.org.uk/publica.htm)
- D.2.4 Watkinson, D E & Neal, V, 1998, First Aid for Finds (3rd edition). RESCUE & UKIC

#### D.3 Relevant OA manual and other supporting documentation

D.3.1 Allen, L, and Cropper, C (internal publication only) Oxford Archaeology Finds Manual.



#### APPENDIX E HUMAN REMAINS

#### **E.1** Standard methodology - summary

- E.1.1 Human remains will not be excavated without a relevant licence/faculty and, where applicable (for example, a post medieval cemetery), a risk assessment from the local environmental officer.
- E.1.2 All human remains will be treated with due care and regard to the sensitivities involved, and will be screened from the public throughout the course of the works.
- E.1.3 Excavation will be undertaken in accordance with CIFA (Roberts and McKinley 1993), Historic England (2018), the Advisory Panel on the Archaeology of Burials in England (APABE, 2015, 2017) and British Association of Biological Anthropology and Osteoarchaeology Code of Practice (2019) and Code of Ethics (2019). For crypts and post-medieval burials, the recommendations set out by the CIFA (Cox 2001) and by the Association of Diocesan and Cathedral Archaeologists and APABE (2010) are also relevant.
- E.1.4 In accordance with recommendations set out in the Historic England and Church of England (2005) and updated by the Advisory Panel on the Archaeology of Burials in England (2017), skeletons will not be excavated beyond the limits of the trench, unless they are deemed osteologically or archaeologically important.
- E.1.5 Where any soft tissue survives and/or materials (for example, inner coffins, mattresses and other paddings) soaked in body liquor, no excavation or handling of the remains will take place until an appropriate risk assessment has been undertaken. Relevant protocols (i.e. Cox 2001) for their excavation, recording and removal will be adhered to.
- E.1.6 OA does not excavate or remove modern burials (those less than 100 years old) and does not remove or open sealed lead coffins. Appropriate PPE (e.g. chemical suit, latex gloves) will be worn by all staff when working with lead coffins.
- E.1.7 Graves and their contents will be hand excavated in plan. Each component (for example, skeleton, grave cut, coffin (or remains of), grave fill) will be assigned a unique context number from a running sequence. A group number will also be assigned to all of these, and small finds numbers to features such as coffin nails, hobnails and other grave goods (as appropriate).
- E.1.8 Soil samples will be normally taken during the excavation of inhumations, usually from the region of the skull, chest, right hand, left hand, abdomen and pelvis, right foot and left foot. Infants (circa. less than 5 years) will normally be recovered as bulk samples. Soil samples will also be taken from graves that appear to contain no human bone.
- E.1.9 Burials (including the skeleton, cremation, coffin fittings, coffin, urn, grave goods / other) will be recorded by photographic and written record using specialised pro forma context sheets, although these records may only include schematic representations of the location and position of the skeletons, depending on the nature and circumstances of the burial.



- E.1.10 Where digital imaging is used it will be done in accordance with the British Association of Biological Anthropology and Osteoarchaeology Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (2019).
- E.1.11 Where necessary, hand drawn plans (usually at 1:10, sometimes 1:5) will be made, especially of contexts where required details cannot be adequately seen using photography (for example, urned cremations; undisturbed hob nails).
- E.1.12 Levels will be taken. For inhumations this will be on the skull, pelvis and feet as a minimum.
- E.1.13 Human remains that are exhumed will be bagged and labelled according to skeletal region and carefully packed into suitable containers (for example, acid free cardboard boxes) and transported to a suitable storage location. Any associated coffins and coffin fittings will be contained with the human remains wherever possible.
- E.1.14 Unurned cremations will not usually be half sectioned, but excavated in spits and/or quadrants (i.e. large deposits or spreads), or recovered as a bulk sample.
- E.1.15 Wherever possible, urned cremations will be carefully bandaged, recovered whole and will be excavated in spits in the laboratory, as per the recommendations of McKinley (2004, 2017).
- E.1.16 Unless deemed osteologically or archaeologically important disarticuled bone / charnel will be collected and reserved for re-burial if immediate re-internment as close to its original position is not practicable. In some instances, a rapid scan of this material may be undertaken by a qualified osteologist, if deemed relevant.
- E.1.17 If undisturbed, pyre sites will normally be excavated in quadrants, at the very least in 0.5 m blocks of 0.5 m spits.
- E.1.18 Pyre debris dumps will be half sectioned or quadranted and will be subject to 100% sampling.
- E.1.19 Wooden and lead coffins and any associated fittings, including fixing nails will be recorded on a pro forma coffin recording sheet. All surviving coffin fittings will be recorded by reference to Reeve and Adams (1993) and the unpublished master catalogue that is being compiled by OA. Where individual types cannot be paralleled, they will be drawn and/ or photographed and assigned a style number. Biographical details obtained from legible departum plate inscriptions will be recorded and further documentary research will be made.
- E.1.20 Funerary structures, such as brick shaft graves and/or vaults will be recorded by photogrammetry or hand-drawn at a scale of 1:10 or 1:20, as appropriate. Location, dimensions and method of construction will be noted, and the structure added to the overall trench plan.
- E.1.21 Memorials, including headstones, revealed within the areas of development will be recorded irrespective of whether they are believed to be in situ.
- E.1.22 Where required, memorials will be accorded an individual context number and will also be included as part of the grave group, if the association with a burial is clear.



- E.1.23 Memorials will be recorded on pro-forma context sheets, based on and following the guidelines set out by Mytum (2002), and will include details of:
  - Shape
  - Dimensions
  - Type of stone used
  - Condition, completeness and fragmentation of stones, no longer in original positions
  - Iconography (an illustration may best describe these features)
  - Inscription (verbatum record of inscription; font of the lettering)
  - Stylistic type

#### **E.2** Relevant industry standards and guidelines

- E.2.1 Advisory Panel on the Archaeology of Burials in England, 2013, Science and the Dead. A guideline for the destructive sampling of archaeological human remains for scientific analysis. English Heritage Publishing.
- E.2.2 Advisory Panel on the Archaeology of Burials in England, 2017 Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England
- E.2.3 Advisory Panel on the Archaeology of Burials in England, 2015 Large Burial Grounds. Guidance on sampling in archaeological fieldwork projects
- E.2.4 Association of Diocesan and Cathedral Archaeologists and APABE, 2010 Archaeology and Burial Vaults. A guidance note for churches. Guidance Note 2
- E.2.5 British Association of Biological Anthropology and Osteoarchaeology. 2019a Code of Practice (http://www.babao.org.uk/index/ethics-and-standards)
- E.2.6 British Association of Biological Anthropology and Osteoarchaeology. 2019b Code of Ethics (http://www.babao.org.uk/index/ethics-and-standards)
- E.2.7 British Association of Biological Anthropology and Osteoarchaeology, 2019c Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (<a href="http://www.babao.org.uk/index/ethics-and-standards">http://www.babao.org.uk/index/ethics-and-standards</a>)
- E.2.8 Cox, M, 2001 Crypt archaeology. An approach. ClfA Paper No. 3
- E.2.9 English Heritage, 2002 Human Bones from Archaeological Sites. Guidelines for producing assessment documents and analytical reports
- E.2.10 Historic England, 2018 The Role of the Human Osteologist in an Archaeological Fieldwork Project. Swindon, Historic England
- E.2.11 McKinley, J, and Roberts, C, 1993 Excavation and post-excavation treatment of cremated and inhumed human remains, CIfA Technical Paper No. 13



- E.2.12 McKinley, J, 2004 Compiling a skeletal inventory: cremated human bone. In Brickley, M, and McKinley, J (eds) Guidelines to the Standards for Recording Human Remains, ClfA Technical Paper No. 7. 9-13
- E.2.13 McKinley, J, 2017 Compiling a skeletal inventory: cremated human bone. In Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, ClfA 14-19
- E.2.14 Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, CIfA 2017
- E.2.15 Mytum, H, 2000 Recording and Analysing Graveyards. CBA Handbook No. 15
- E.2.16 Reeve, J, and Adams, M, 1993 The Spitalfields Project. Volume I The Archaeology Across the Styx. CBA Research Report No. 85
- E.2.17 The Human Tissue Act 2004
- **E.3** Relevant OA manual and other supporting documentation
- E.3.1 Loe, L, 2008 The Treatment of Human Remains in the Care of Oxford Archaeology. Oxford Archaeology internal policy document
- E.3.2 Oxford Archaeology 2018 Fieldwork Manual Human Remains unpublished



#### APPENDIX F REPORTING

#### F.1 Standard methodology - summary

- F.1.1 For Watching Briefs and Evaluations, the style and format of the report will be determined by OA, but will include as a minimum the following:
  - A location plan of trenches and/or other fieldwork in relation to the proposed development.
  - Plans and sections of features located at an appropriate scale.
  - A section drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
  - A summary statement of the results.
  - A table summarising the features, classes and numbers of artefacts contained within, spot dating of significant finds and an interpretation.
  - A reconsideration of the methodology used, and a confidence rating for the results.
  - An interpretation of the archaeological findings both within the site and within their wider landscape/townscape setting.
- F.1.2 For Excavations, a Post-Excavation Assessment and Project Design will generally be prepared, as prescribed by Historic England Management of Research Projects in the Historic Environment (MoRPHE) 2006, Section 2.3. This will include a Project Description containing:
  - A summary description and background of the project.
  - A summary of the quantities and assessment of potential for analysis of the information recovered for each category of site, finds, dating and environmental data. Detailed assessment reports will be contained within appendices.
  - An explicit statement of the scope of the project design and how the project relates to any other projects or work preceding, concurrent with or following on from it.
  - A statement of the research aims of the fieldwork and an illustrated summary of results to date indicating to what extent the aims were fulfilled.
  - A list of the project aims as revised in the light of the results of fieldwork and the current post-excavation assessment process.
- F.1.3 A section on Resources and Programming will also be produced, containing:
  - A list of the personnel involved indicating their qualifications for the tasks undertaken, along with an explanation of how the project team will communicate, both internally and externally.
  - A list of the methods which will be used to achieve the revised research aims.



- A list of all the tasks involved in using the stated methods to achieve the aims and produce a report and research archive in the stated format, indicating the personnel and time in days involved in each task. Allowance should be made for general project-related tasks such as monitoring, management and project meetings, editorial and revision time.
- A cascade or Gantt chart indicating tasks in the sequence and relationships required to complete the project. Due allowance will be made for leave and public holidays. Time will also be allowed for the report to be read by a named academic referee as agreed with the County Archaeological Officer, and by the County Archaeological Officer.
- A report synopsis indicating publisher and report format, broken down into chapters, section headings and subheadings, with approximate word lengths and numbers and titles of illustrations per chapter. The structure of the report synopsis should explicitly reflect the research aims of the project.
- F.1.4 The Project Design will be submitted to the County Archaeological Officer or equivalent for agreement.
- F.1.5 Under certain circumstances (e.g. with very small mitigations), and as agreed with the County Archaeological Officer or equivalent, a formal Assessment and Project Design may not be required and either the project will continue straight to full analysis, or a simple Project Proposal (MoRPHE 2006 Section 2.1) will be produced prior to full analysis. This proposal may include:
  - A summary of the background to the project
  - Research aims and objectives
  - Methods statement outlining how the aims and objectives will be achieved
  - An outline of the stages, products and tasks
  - Proposed project team
  - Estimated overall timetable and budget if appropriate.
- F.1.6 Once the post-excavation Project Design or Project Proposal has been accepted, the County Archaeological Officer or his appointed deputy will monitor the progress of the post-excavation project at agreed points. Any significant variation in the project design will be agreed with the County Archaeological Officer.
- F.1.7 The results of the project will be published in an appropriate archaeological journal or monograph. The appropriate level of publication will be dependent on the significance of the fieldwork results and will be agreed with the County Archaeological Officer. An OASIS (Online Access to the Index of Archaeological Investigations) form will be completed for each project as per Historic England guidelines.

#### F.2 Relevant industry standards and guidelines

F.2.1 Oxford Archaeology (OA) adheres to the national standards in post-excavation procedure as outlined in Historic England's Management of Research Projects in the Historic Environment (MoRPHE; EH 2006). Furthermore, all post-excavation projects



take into account the appropriate regional research frameworks as well as national research agendas such as the Framework for Historic Environment Activities & Programmes in Historic England (SHAPE; EH 2008).



#### APPENDIX G LIST OF SPECIALISTS REGULARLY USED BY OA

G.1.1 Below are two tables, one containing 'in-house' OA specialists, and the other containing a list of external specialists who are regularly used by OA.

### Internal archaeological specialists used by OA

Specialist	Specialism	Qualifications
John Cotter	Medieval and Post Medieval pottery, Clay Pipe and CBM	BA (Hons), MCIfA
Dr Alex Davies	Prehistoric Pottery	BA (Hons), MA, PhD, ACIfA
Edward Biddulph	Roman Pottery	BA (Hons), MA, MCIfA
Kate Brady	Roman Pottery	BA, ACIfA
Cynthia Poole	CBM and Fired Clay	BA (Hons), MSc
Ian Scott	Metalwork and Glass	BA (Hons)
Leigh Allen	Metalwork and worked bone	BA (Hons), PGDip
Dr Ruth Shaffrey	Worked stone artefacts	BA, PhD, MCIfA
Julian Munby	Architectural Stone	BA, FSA
Dr Rebecca Nicholson	Fish and Bird Bone	BA (Hons), MA, D.Phil, MCIfA, FSA Scot
Dr Lee Broderick	Animal bone	BA (Hons), MA, MSc, FZG, SAC Dip (ecology), PhD
Dr Mairead Rutherford	Pollen	BSc, MSc
Ian Smith	Animal Bone	BA (Hons), MSc, PCIfA
Dr Martyn Allen	Animal Bone	BA (Hons), MA, PhD
Dr Denise Druce	Charred plant remains, charcoal and pollen	BA (Hons), PhD, MCIfA
Sharon Cook	Charred plant remains	BSc, MSc, ACIfA
Elizabeth Stafford	Geoarchaeology and land snails	BA (Hons), MSc
Carl Champness	Geoarchaeology	BA (Hons), MSc, ACIfA
Nicola Scott	Archaeological archive deposition	BA (Hons Dunelm)
Mike Donnelly	Flint	BSc, MCIfA
Dr Louise Loe	Human Bone	D.Phil, BA, MCIfA
Helen Webb	Human Bone	MSc, BSc
Mark Gibson	Human Bone	MSc, BA
Dr Lauren McIntyre	Human Bone	D.Phil, MSc, BSc



# External archaeological specialists regularly used by OA

Specialist	Specialism	Qualifications
Lynne Keys	Slag	BA (Hons)
Quita Mould	Leather	BA, MA
Penelope Walton Rogers, The Anglo Saxon Laboratory	Identification of Medieval Textiles	FSA, Dip.Acc
Dana Goodburn-Brown	Conservation	BSc (Hons), BA, MSc
Steve Allen, York Archaeological Trust	Conservation	BA, MA, MAAIS
Dr Richard Macphail	Soils, especially Micromorphology	BA (Hons), MSc, PhD
Dana Challinor	Charcoal	MA, MSc
Dr Nigel Cameron	Diatoms	BSc, MSc, PhD
Dr David Smith	Insects	BA (Hons), MA, PhD
Professor Adrian Parker	Phytoliths and pollen	BSc (Hons), D.Phil
Dr David Starley	Metalworking Slag	BSc (Hons), PhD
Wendy Carruthers	Charred and waterlogged plant remains	BA (Hons)
Dr John Whittaker	Ostracods and Foraminifera	BA (Hons), PhD
Dr John Crowther	Soil Chemistry	MA, PhD
Dr Martin Bates	Geoarchaeology	BSc, PhD
Dr Dan Miles	Dendrochronology	D.Phil, FSA
Dr Jean-Luc Schwenninger	Optically Stimulated Luminescence Dating	PhD
Dr David Higgins	Clay Pipe	BA, PhD, MCIfA
Dr Hugo Anderson- Wymark	Flint	BSc, PhD, FSA Scot, MCIfA
Dr Damian Goodburn- Brown	Ancient Woodwork	BA, PhD



#### APPENDIX H DOCUMENTARY ARCHIVING

#### Standard methodology – summary

- H.1.1 The documentary archive constitutes all the written, drawn, photographic and digital records relating to the set up, fieldwork and post-excavation phases of the project. This documentary archive, together with the artefactual and environmental ecofact archive collectively forms the record of the site. The report is part of the documentary archive, and the archive must provide the evidence that supports the conclusions of the report, but the archive may also include data which exceeds the limitations of research parameters set down for the report and which could be of significant value to future researchers.
- H.1.2 At the outset of the project OA Archive manager will contact the relevant local receiving museum or archive repository to notify them of the imminent start of a new fieldwork project in their collecting area. Relevant local archiving guidelines will be observed and site codes, which integrate with the receiving repository, will be agreed for labelling of archives and finds.
- H.1.3 Where there is currently no receiving museum for the project archive, although responsibility for the archive ultimately lies with the client, OA will hold the archive on their behalf for a period of up to 3 years after completion of the report, after which time (in the event that a suitable depository has not been secured) provision for further storage of the archive will be made in agreement with Oxford Archaeology, the client and the relevant planning archaeologist.
- H.1.4 During the course of the project the Archive team will assist the Project Manager in the management of the archive including the cataloguing and development technique suitable for photographic archive requirements.
- H.1.5 The hard copy site archive will be security copied by scanning to PdFA and a copy of this will be housed on the OA Archive Server. A full digital copy of the archive, including scanned hard copy and born digital data, will be deposited with and made publicly available on-line through the ADS. A further copy will be maintained on the OA server and if requested a copy on disk will also be sent to the receiving museum with the hard copy. This will act as a safeguard against the accidental loss and the long-term degeneration of paper records and photographs.
- H.1.6 Born digital data will only be printed to hard copy for the receiving museum where practical. Archive elements that need maintaining in digital form will be sent to ADS in accordance with Arches Standard and ADS guidelines. A copy will be sent to the receiving museum by CD and back-up copies will be stored on the OA digital network. In most cases a digital copy of the report will be included in the OASIS project library hosted by ADS.
- H.1.7 Prior to deposition the Archive team will contact the museum regarding the size and content of the archive and discuss any retention and dispersal policies which may be applicable in line with local and SMA Guidelines 'Selection, Retention & Dispersal of Archaeological Collections' 1993.



- H.1.8 The site archive will then be deposited with the relevant receiving museum or repository at the earliest opportunity unless further archaeological work on the site is expected. The documentary archive will include correspondence detailing landowner consent to deposit the artefacts and any copyright licences in accordance with the receiving museum guidelines. Deposition charges will be required from the client as part of the project costs but the level of the fee is set by the receiving body, and may be subject to change during the lifespan of the project. Changes to archiving charges beyond OA's control will be passed across to the client.
- H.1.9 Oxford Archaeology will retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide the receiving repository or museum for the archive with a full licence for use to the client in all matters directly relating to the project as described in the Written Scheme of Investigation, and in line with the relevant receiving body guidelines.
- H.1.10 OA will advise the receiving repository or museum for the archive of 3<sup>rd</sup> party materials supplied in the course of projects which are not OA's copyright.
- H.1.11 OA undertakes to respect all requirements for confidentiality about the client's proposals provided that these are clearly stated. It is expected that such conditions shall not unreasonably impede the satisfactory performance of the services required. Archaeological findings and conclusions can be kept confidential for a limited period but will be made publicly available in line with the above procedure either after a specified time period agreed with the client at the outset of the project, or where no such period is agreed, after a reasonable period of time. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

#### H.2 Relevant industry standards and guidelines

- H.2.1 At the end of the project the site archive will be ordered, catalogued, labelled and conserved and stored according to the following national guidelines:
- H.2.2 The 2014 EAC Guidelines A Standard and Guide to the Best Practice for Archaeological Archiving in Europe (GB) Perrin K, Brown E et al.
- H.2.3 The 2014 CIFA Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives.
- H.2.4 The 2011 AAF guide Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation. Brown D.
- H.2.5 The UKIC's Guidelines for the preparation of excavation archives for long-term storage.
- H.2.6 The MGC's Standards in the museum care of archaeological collections.
- H.2.7 Local museum guidelines such as Museum of London Guidelines: (http://www.museumoflondonarchaeology.org.uk/English/ArchiveResearch/DeposRe source) will be adopted where appropriate to the archive collecting area.
- H.2.8 The site archive will be prepared to at least the minimum acceptable standard defined in Management of Archaeological Projects 2, Historic England 1991.





# **H.3** Relevant OA manual and other supporting documentation

H.3.1 The OA Archives Policy.



#### APPENDIX I HEALTH AND SAFETY

#### I.1 Standard Methodology - summary

- I.1.1 All work will be undertaken in accordance with the current OA Health and Safety Policy, the OA Site Safety Procedures Manual, a site-specific Risk Assessment and, if required, Safety Plan or Method Statement. Copies of the site-specific documents will be submitted to the client or their representative for approvals prior to mobilisation, and all relevant H and S documentation will be available on site at all times. The Health and Safety documentation will be read in conjunction with the project WSI.
- I.1.2 Where a project falls under the Construction (Design and Management) Regulations (2015), all work will be carried out in accordance with the Principal Contractor's Construction Phase Plan (CPP).

#### I.2 Relevant industry standards and guidelines

- I.2.1 All work will be carried out according to the requirements of all relevant legislation and guidance, including, but not exclusively:
- I.2.2 The Health and Safety at Work Act (1974).
- 1.2.3 Management of Health and Safety at Work Regulations (1999).
- 1.2.4 Manual Handling Operations Regulations 1992 (as amended).
- 1.2.5 The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (2013).
- 1.2.6 The Construction (Design and Management) Regulations (2015).
- 1.2.7 Relevant OA manual and other supporting documentation
- 1.2.8 The OA Health and Safety Policy.
- 1.2.9 The OA Site Safety Procedures Manual.
- I.2.10 The OA Risk Assessment templates.
- I.2.11 The OA Method Statement template.
- 1.2.12 The OA Construction Phase Plan template.



#### **OXFORDSHIRE COUNTY COUNCIL EVALUATION BRIEF ANNEXES**

#### APPENDIX J ANNEX 1

#### J.1 Project Methodology and Data Collection – Field Evaluation

- J.1.1 The project shall be under the control of a suitably qualified archaeologist who should preferably be a member of the Chartered Institute for Archaeologists.
- J.1.2 Include an agreed list of specialist consultants who might be required to conserve and/or report on finds and advise, or report on, other aspects of the investigation. An agreed allowance should be made for their fees.
- J.1.3 The whole range of investigative/recording techniques should be considered. These should be presented and, if discounted, a supporting statement should provide an explanation.
- J.1.4 A plan at an appropriate scale showing the proposed location and extent of survey works/trenches/test pits etc. should be supplied. An indication of whether trenches will be machine or hand dug should be given.
- J.1.5 When machine-opened trial trenches are employed:
  - a) An appropriate machine must be used, with an appropriate bucket, usually a wide toothless ditching blade. Choice should be influenced by prevailing site conditions, and the machine must be able to carry out a clean job.
  - b) All machine work must be carried out under the direct supervision of an archaeologist.
  - c)All topsoil or recent overburden must be removed down to the first significant archaeological horizon in successive level spits. The continued use of machinery beyond this point should only take place when specifically agreed with the planning archaeologist as necessary for the particular type of evaluation.
  - d)The top of the first significant archaeological horizon may be cleared by the machine, but must then be cleaned by hand and inspected for features.
- J.1.6 Sufficient of the archaeological features and deposits identified must be excavated by hand through a specified or agreed sampling procedure to enable their date, nature, extent and condition to be described. No archaeological deposits should be entirely removed unless this is unavoidable. It is not necessarily expected that all trial trenches will be fully excavated to natural subsoil, but the depth of archaeological deposits across the whole site must be assessed. The stratigraphy of all trial trenches should be recorded even where no archaeological deposits have been identified. Spoil heaps shall be monitored to allow analysis of the spatial distribution of artefacts.
- J.1.7 All excavation, either by machine and by hand, must be undertaken with a view to avoiding damage to any archaeological features or deposits, which appear to be worthy of preservation in situ.
- J.1.8 Any human remains, which are encountered, must initially be left in situ. If removal is necessary, this must comply with relevant Ministry of Justice licence regulations.



#### APPENDIX K ANNEX 2

#### **K.1** Monitoring Arrangements

- K.1.1 Oxfordshire County Council Archaeological Services will monitor progress and standards throughout the project. To facilitate this, the project design should include a projected timetable on site (indicating staff grades, members and machine hire time if appropriate etc.). The County Archaeological Officer shall be notified of the start date at least two weeks prior to commencement of work in order to arrange a date for the monitoring visit(s).
- K.1.2 A charge of £54 will be made per monitoring visit.

#### APPENDIX L ANNEX 3

#### L.1 Post Excavation and Reporting Requirements

- L.1.1 The post excavation work should include the processing and primary research, analysis and investigative conservation necessary to prepare the site archive for preservation in a usable form and to produce a full report for publication. Incorporate provision for the long-term storage of both finds and site archive with the County Museums Service. On completion of the fieldwork the site archive will be prepared in the format agreed with the Oxfordshire County Museum Service, who should be consulted at this stage concerning their requirements.
- L.1.2 For most evaluation projects the preparation of the report should be relatively simple following on directly from the fieldwork and achieved within a standard format. Details of styles and format are to be determined by the Unit. In any event, the report should include as a minimum:
  - a) a plan(s), at an appropriate scale, showing trench layout (as dug) and features located;
  - b) a table summarising any descriptive text showing, per trench, the features, classes and numbers of artefacts located and their interpretation;
  - c) a reconsideration of the methodology used, i.e. a confidence rating;
  - d) a plan, at an appropriate scale, showing both actual and, where possible, predicted archaeological deposits; and
  - e) a consideration of the archaeological evidence from within the site set in its broader landscape setting.
  - f) The report should not give an opinion on whether preservation or investigation is considered appropriate. (However, the client may wish to commission separately a Unit's opinion on an appropriate treatment of the archaeological resource.)
- L.1.3 For more extensive and complicated evaluation projects, especially where they are part of large-scale programmes of work in historic urban centres, the procedures outlined in English Heritage's Management of Research Projects in the Historic Environment (MoRPHE) should be followed for immediate post-field archive preparation and initial assessment. Agreement should then be reached, in collaboration with the CAO, about what aspects need to be taken forward to provide



a report in the required format containing the information needed for planning purposes.

#### APPENDIX M ANNEX 4

#### M.1 Archive Deposition

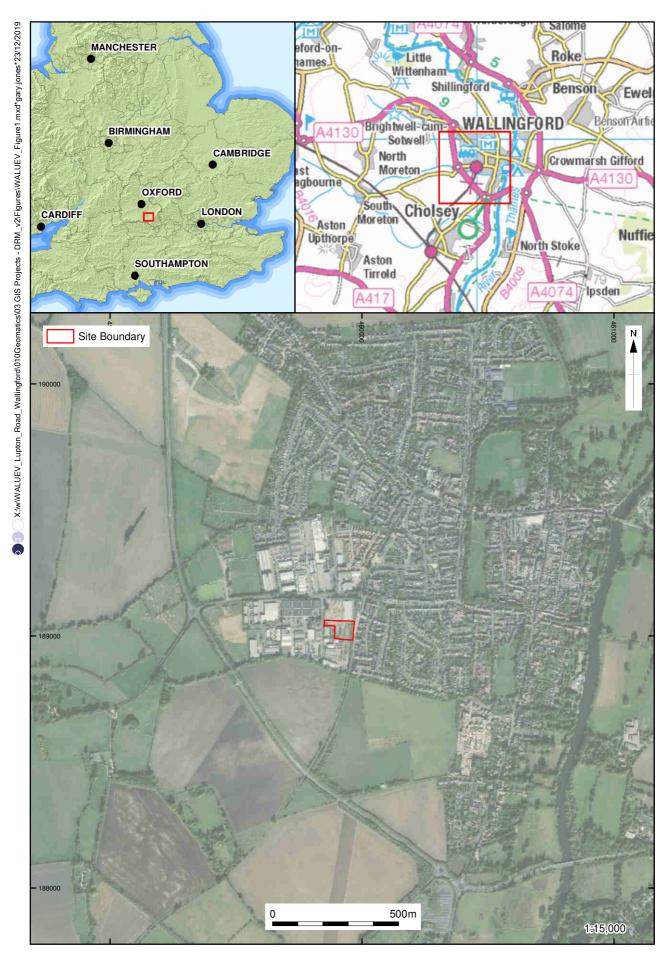
- M.1.1 The archive should be prepared to the minimum acceptable standard defined in MoRPHE. The integrity of the archive should be maintained.
- M.1.2 The contracted archaeological organisation will endeavour to ensure that the full integrated site archive including all finds shall, with the agreement of the owners, be deposited after completion of post-excavation work with the County Museums Service (Oxfordshire Museums) unless another repository is indicated. If, during the course of excavation, items are found that may be potentially defined as 'Treasure' under the Code of Practice of the Treasure Act 1996, the archaeological contractor will be responsible for ensuring that the County Coroner is informed.
- M.1.3 Oxfordshire Museums requires that deposited archives from developer-led archaeological work shall be accompanied by funding equivalent to the current HBMC Box Storage Grant. Archaeological organisations shall therefore include an estimate of the costs of deposition for this project in their tender. The estimated cost will be clearly shown and shall be calculated in accordance with the procedures set out in "Charge for Archaeological Archives Deposited with Oxfordshire Museums" Oxfordshire Museums 1995.
- M.1.4 In the event of the legal owner(s) resolving to retain all or part of the site archive, they shall be responsible for the future preservation and maintenance of any material element of that archive. That part of the site archive in question, shall be transferred to the legal owner only after; all necessary processing, research, analysis and investigative/stabilising conservation and correct packing necessary to prepare the archive for preservation and storage in a usable, accessible form, and to produce a full report for publication, has been completed. The owner shall ensure that all necessary provision is made for the long-term preservation of the archive in a satisfactory environment, and that it is accessible for future research. The contracted archaeological organisation will ensure that a proper record of material kept by the landowner shall be included in the written archive, and the location and ownership of the material shall be stated in the written archive and public record. The explicit (written) permission of the owner shall be obtained for the latter in order that the Data Protection Act 1984 is not contravened.
- M.1.5 A summary report and details of archive deposition shall be submitted to the County HER and NMR, and a limited selection of representative photographic slides from the site archive shall be duplicated and deposited with the HER.
- M.1.6 The County Museums Service shall be notified in advance, of the expected time limits for deposition of the archive.



#### APPENDIX N ANNEX 5

#### N.1 Publication and Dissemination

- N.1.1 A digital copy of the summary report (either in pdf or .doc format) shall be supplied to the office of the County Archaeological Officer; for verification and assessment by the CAO or his representative; when the report has been agreed a final digital copy will then be supplied to the County Historic Environment Record (HER) at archaeology@oxfordshire.gov.ukon the understanding that it will become a public document after an appropriate period of time (generally not exceeding six months).GIS (shape) files of the final phased excavated trench plan should be provided to the office of the County Archaeological Officer.
- N.1.2 All archaeological organisations should ensure that an abstract containing the essential elements of the results precedes the main body of the report.
- N.1.3 Publication of the results (even if limited to one line reports on work done with negative results) should be pursued, and should take place within a reasonable length of time (normally not more than five years after completion of the work). Style and format to be determined by the archaeological organisation, with regard to agreed standards of archaeological publication, and the house style of the appropriate local, regional or national publication.
- N.1.4 The report should state the location of the archive and acknowledge the curatorial role played in the project by Oxfordshire County Council Archaeological Services. It should also acknowledge any provision of information from the County Historic Environment Record, which is copyright of Oxfordshire County Council. Any secondary reports or articles generated by this project shall similarly acknowledge County Archaeological Services and the HER.
- N.1.5 With regard to publication; the level of the report should take into account the scale of the evaluation, the overall importance of the site based on English Heritage characterisation criteria, and its status within local and regional research strategies. We would suggest that, unless evidence of national or special local significance is revealed, a summary report conforming to the minimum requirements defined in MoRPHE, should be produced for publication.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 1: Site location

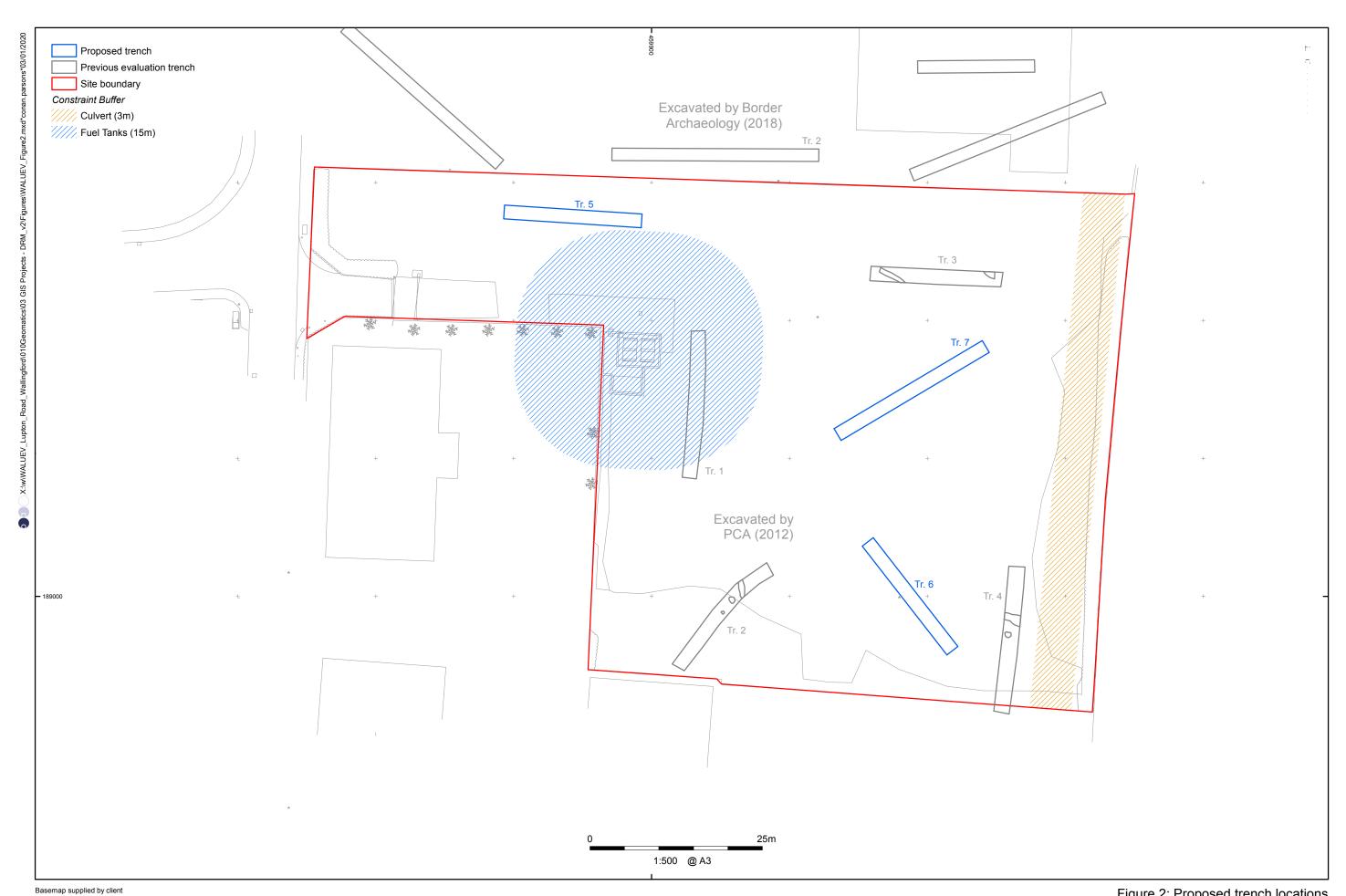


Figure 2: Proposed trench locations





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