

**Bletchington**  
**Bletchington Park**

**Archaeological Evaluation**

**DATA MANAGEMENT PLAN**

**September 2020**

<b>Document Information</b>	
<b>Title</b>	Data Management Plan
<b>Author</b>	Simona Denis
<b>Description</b>	This document describes the type of data that will be acquired and/or generated during the archaeological project, the way the data will be managed and stored, and the mechanisms to preserve and share the data.

<b>Document History</b>				
<b>Version</b>	<b>Status</b>	<b>Date</b>	<b>Author</b>	<b>Changes from the previous version</b>
1.0	Draft	16/05/2019	Simona Denis	Not applicable
2.0	Final Template	17/05/2019	Simona Denis	Minor edits
3.0	Final	14/01/2020	Simona Denis	File migration
4.0	Final	19/08/2020	Simona Denis	File migration
4.1	Final	01/09/2020	Simona Denis	Project-specific edits

<b>Document Control Grid</b>					
<b>Revision</b>	<b>Status</b>	<b>Date</b>	<b>Author</b>	<b>Checked by</b>	<b>Reason for revision</b>
1.1	Draft	17/05/2019	Sarah Doherty	Simona Denis	Minor edits
3.1	Draft	16/01/2020	Simona Denis		Minor edits
3.2	Draft	14/08/2020	Simona Denis		GPS metadata section edits
3.3	Draft	18/08/2020	Simona Denis		Minor edits

Section 1 – Administrative Data
<b>Data Set ID</b>
Site code: BLBP 19 JMHS project no: 4060 OASIS ID: johnmoor1-363553 Accession No.: OXCMS: 2019.91
<b>Project Name</b>
Bletchingdon, Bletchingdon Park
<b>Data set Description</b>
Nature of project: Archaeological Evaluation Aims of investigation: to determine whether any medieval and post-medieval remains exist in the areas of impact and their extent, condition, nature, character and quality Investigation techniques: mechanical excavation of 39no. trenches 30m long and 1.85m wide, 3no. trenches 0m long and 1.85m wide, and 2no. trenches 10m long and 1.85m wide; contingency for additional trenching of up to 30m in the Estate Yard Purpose: various works to the parkland, which include improvements to the landscaping, repair of existing structures and new interventions within the landscape. Erection of new buildings to form new Estate Yard and associated buildings (18/01945/F) and Alterations to the form of the north west steps to the house, formation of underground spa and car parking facilities and a reformed swimming pool and associated enclosure adjacent to the main house
<b>Project Funder</b>
Perdix Partnership
<b>Project Manager</b>
John Moore (Director), John Moore Heritage Services
<b>Principal Investigator</b>
Stephanie Duensing (Project Officer), John Moore Heritage Services
<b>Data Contact Person</b>
Simona Denis (Head of Archive), John Moore Heritage Services
<b>Data Management Policies and Guidance</b>
<ul style="list-style-type: none"> <li>• Archaeology Data Service, 2015 <i>Guidelines for Depositors</i></li> <li>• Australian National Data Service, 2017 <i>ANDS Guide. Data Management Plans</i></li> <li>• Chartered Institute for Archaeologists, Historic England 2019 <i>Toolkit for Selecting Archaeological Archives</i></li> <li>• Digital Curation Centre, 2013 <i>Checklist for Data Management Plan v.4.0</i> Edinburgh</li> <li>• Digital Preservation Coalition 2015 <i>Digital Preservation Handbook</i>, 2<sup>nd</sup> Edition. Technical Solutions and Tools</li> <li>• Duranti, L., Suderman, J. and Todd, M., 2005 <i>A Framework of Principles for the Development of Policies, Strategies and Standards for the Long-term Preservation of Digital Records</i>. The InterPARES 2 Project</li> <li>• Foster, M. 2019 <i>Work digital/think archive. A guide to managing digital data generated from archaeological investigations</i>. DigVentures</li> <li>• International Standards Organization (2003) standards: <i>Reference Model (ISO 14721:2003)</i></li> <li>• John Moore Heritage Services, 2019 <i>POL0006: Quality Control Policy Statement</i></li> <li>• John Moore Heritage Services, 2019 <i>POL0010: Digital Archives Preservation Policy Statement</i></li> <li>• John Moore Heritage Services, 2019 <i>POL0014: Data Protection Policy Statement</i></li> <li>• John Moore Heritage Services, 2019 <i>Archive Guidelines</i></li> <li>• John Moore Heritage Services, 2019 <i>18/01945/F &amp; 18/01969/F – Bletchingdon Park House, Spring Hill, Bletchingdon, Kirlington OX5 3DW Archaeological Evaluation Written Scheme of Investigation</i></li> </ul>

- Oxfordshire County Museum Service 2020, *Requirements for Transferring Archaeological Archives 2020-2021*
- The National Archives, 2011 *Digital Preservation Policies: Guidance for archives*
- Thomas, S. 2009 *A Guide to Archival and Related Standards*. Society of Archivists Data Standard Group
- Whyte, A., Wilson, A. 2010, *How to Appraise and Select Research Data for Curation*. DCC How-to Guides. Edinburgh: Digital Curation Centre

## Section 2 – Data Collection

### Assessment of Existing Data

Existing quantitative and qualitative data provided by third parties as well as non-proprietary data will be accessed/re-used/re-evaluated and the generated information will supplement the data collected during the project. Selected generated data will be incorporated in the final report text included in the project archive.

### Created Data

This table summarises the data types, formats and estimated archive volume for this project.

File Type	File Format	Data Archive Estimated Volume
Text	.odt	1 file, 60,203 bytes
	.docx	1 file, 74,507 bytes
	.pdf/a	2 files, 69,403,152 bytes
Spreadsheet	.xlsx	3 files, 87,901 bytes
Raster Image	.jpg	112 files, 457,191,109 bytes
Vector Graphic	.dxf	3 files, 50,877,162 bytes
Geospatial Vector Data	shp/.shx/.dbf	6 files, 10,811 bytes

### Data Collection Standards and Methodologies

- Analogue data sets

Acquisition standards are defined against the following, and will be updated as required:  
Chartered Institute for Archaeologists 2014, *Standards and Guidance for the collection, documentation, conservation and research of archaeological materials*

English Heritage 2011, *Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation*. 2<sup>nd</sup> Edition

English Heritage 2015, *Digital Image Capture and File Storage*

John Moore Heritage Services 2019, *Field Manual*

Museum of London Archaeology Service 1994, *Archaeological Site Manual*. Third Edition

- Digitised data sets

Acquisition standards are defined against the following, and will be updated as required:

The National Archives, 2016 *Digitisation at The National Archives*

Thomas, S. 2009 *A Guide to Archival and Related Standards*. Society of Archivists Data Standard Group

- Born-Digital data sets

Creation standards are defined against the following, and will be updated as required:

Archaeological Data Services, 2011 *Guides to Good Practice*

English Heritage, 2015 *Digital Image Capture and File Storage. Guidelines for Best Practice*

Where appropriate, external specialists will be required to include data standards and metadata with individual reports.

### Data Storage and File Naming System

- The working project archive will be stored in a dedicated project folder in the 'Projects' partition of the company's server

<ul style="list-style-type: none"> <li>• All files will be renamed following the company's file naming format, based on ADS standard and including version control, as laid out in JMHS' <i>Archive Guidelines</i></li> <li>• All files included in the working project archive will include <ul style="list-style-type: none"> <li>○ Company's project identifier</li> <li>○ Repository accession number</li> <li>○ Site code</li> <li>○ File descriptor</li> <li>○ Version number</li> </ul> </li> <li>• All files will be organised following the company's project folder structure laid out in JMHS' <i>Archive Guidelines</i></li> </ul>
<b>Quality Control</b>
<ul style="list-style-type: none"> <li>• All mechanical and electronic equipment used in the collection of data are calibrated prior to use and are periodically checked</li> <li>• All collected data will be checked during project delivery</li> </ul>

### Section 3 – Documentation and Metadata

#### Data Documentation

Data documentation will be compliant with the Project WSI, Oxfordshire county Museum Service and Archaeology Data Service requirements and will be provided via

- Collection-level metadata providing a detailed overview of the collection
- File-level metadata providing details of each data group and individual files

All data included in the project archive will be migrated to

- widely supported open international standards
- most recent format version

#### Metadata

All metadata will be created in compliance with relevant ADS standards, and will specify for all file types:

- File name
- File path
- File format
- File size (bytes)
- Creation/conversion software
- Creation/conversion hardware
- Creation/conversion operating system
- Last file update date
- If the file is source or derived
- In addition, metadata for spreadsheet files will indicate:
  - Worksheet name
  - Worksheet purpose
  - Number of rows in each worksheet
  - Field name
  - Description of field contents
- In addition, metadata for raster image files will indicate:
  - Subject pictured in the image
  - Date of the capture of the image
  - Description of any alterations
- In addition, metadata for vector graphic files will indicate:
  - Type of illustration
  - Features and/or contexts represented
  - Name of the illustrator



- Copyright holder
- Conventions used in the illustration
- In addition, metadata for geospatial vector data files will indicate:
  - Type of element captured
  - Type of features and/or contexts represented
  - Purpose of data collection
  - Data source and type
  - Data accuracy level
  - Coordinate system used
  - Method of capture
  - Name of surveyor

## Section 4 – Ethics and Intellectual Property

### Legal and Regulatory Framework

The following acts and directives will be taken into consideration:

- Copyright, Designs and Patents Act 1988
- General Data Protection Regulation (GDPR) 2018
- EU Copyright Directive 2001
- Data Protection Act 1998
- Current best practice

### Personal Data

Personal data will be collected in the form of:

- Donor(s)
  - Name
  - Address
- Project Team Members
  - Name
- External Specialist(s)
  - Name

### Personal Data Management

Management of personal data will be carried out in compliance with John Moore Heritage Services' Data Protection Policy Statement.

- Written consent to process and share with the repository personal data will be secured for the use specified below:
  - Donor(s): Names and addresses will be included in the transfer of ownership documentation
  - Project Team Members: Names will be included in the project archive
  - External Specialist(s): Names will be included in the project archive and in the licence of copyright documentation
- Files containing personal data will be:
  - Password-protected
  - Securely stored on a server partition with restricted access
  - Kept only as long as necessary for the relevant, valid purposes

### Intellectual Property Rights (IPR)

- Copyright Holder: John Moore Heritage Services will be the copyright holder of any collected and created data included in the project archive in all forms of records and media
- Permission to Reuse Third-Party Data: formal consent to include, reuse and share data generated by external specialists will be secured

- Licence of Copyright: John Moore Heritage Services will grant to the Oxfordshire County Museum Service and Archaeology Data Service perpetual and royalty-free licence throughout the world to:
  - reproduce all or any part of the project archive for the purposes of research, study, conservation or publicity relating to the Oxfordshire County Museum Service and Archaeology Data Service
  - display copies of all or part of the project archive in any medium
  - publish any part of the project archive in any form or medium
  - permit third parties to do any of the above

## Section 5 – Storage and Backup

### Storage System Details

- Long-term preservation of electronic records is ensured by storage on magnetic media on a Synology NAS server device with a storage capacity of 5.4TB
- The device is part of a network based on the client-server model with servers situated in separate geographical locations (JMHS's main office in Wheatley and the Director's office in Boarstall, Aylesbury)
- The system is managed via Lightweight Directory Access Protocol (LDAP)
- The system is set as a Redundant Array of Independent Disks (RAID) and failover

### Security Copies

- Back-up of raw digital data generated during fieldwork is provided by secure remote access to the company's server. Where internet access for data backup is not available, a security copy of the raw data will be transferred onto a portable device
- Digital copies of the primary records will be made at the earliest opportunity and stored on the company's server
- Security copies of all archive records and born-digital files will be made in digital format and stored on the company's server

### Data Storage and Access

#### Data storage

- Main and secondary servers are set up to constantly synchronise, effectively creating two copies of each file at any time
- Two additional copies of all files are created via backups:
  - The main server backs up to the Synology C2 Cloud Backup Server daily, starting at 17:30
  - The secondary server backs up to a local drive daily, starting at 17:30
- Versioning of files and backups is available for 30 days
- Multiple recovery methods are used, depending on the nature of the failure

#### Data access

- The company's server is accessible through a secure log-in by authorised staff on and off-site, via any web browser
- Secure access to the server is granted by a two-factor authentication method. Access to server's partitions containing sensitive data is restricted to authorised users through role-based access control

## Section 6 – Selection and Preservation

### Appraisal and Selection of Data

All data generated by all stages of the project will be stored on the company's server. An appraisal of the digital data will be carried out prior to the completion of the project, in order to select data for long-term curation.

The assessment of each dataset's value will be carried out by the Post-Excavation Project Team and will be based on the following criteria:

- Relevance
- Scientific/Historic value
- Uniqueness
- Non-Replicability
- Potential for redistribution

The selection of data will be agreed with all relevant stakeholders (Project Team Members, Repository, Local Authority, External Specialists, and Landowner).

#### **Data Reuse**

The project results are likely to provide new research data regarding the medieval and post-medieval occupation in the Cherwell District.

The results might be:

- included in the Historic Environment Record
- reused to conduct new studies
- used to validate research findings
- used to aid the future management of the archaeological site

#### **Selection Review Points**

Selection Strategy and Data Management Plan will be revised in consultation with the relevant stakeholders and updated at the following stages:

- Project Design
- Post-Excavation Assessment
- Project Reporting

Prior to the transfer, the Selection Strategy and Data Management Plan will be finalised in agreement with all stakeholders.

#### **Selected Data Preparation**

Selected data will be normalised and organised in standardised folders, to guarantee consistency and retrievability, and to prevent data loss.

Normalisation will include:

- Format migration to widely supported open international standards
- Version migration to most recent format version
- File naming normalisation to ADS standards
- Organisation in the predefined file structure

Metadata compliant with ADS standards will be generated for all selected data.

#### **Long-Term Preservation of Selected Data**

Selected data will be transferred to the appropriate repository:

- Physical archive: documentary and material project archives will be transferred to the Oxfordshire County Museum Service. The documentary archive will include hard copies of all the digital-born data selected for long-term curation
- Digital data: selected data will be prepared for long-term curation and transferred to the CoreTrustSeal certified Archaeology Data Service

Contact was made with the repository regarding the deposition of the project archive.

#### **Long-Term Preservation of Deselected Data**

- Long-term preservation of electronic records will be ensured by storage on magnetic media on a server device. The device is part of a network based on the client-server model, available online and securely accessible remotely via any web browser.
- The digital archives preservation strategy ensures that two copies of all born-digital items as well as digital surrogates of primary records are made available on two different server devices (server and backup) situated in separate locations (JMHS's main office in Wheatley and the Director's office in Boarstall).

## Section 7 – Data Sharing

### Data Accessibility

Final Results will be made available within X months from the completion of fieldwork

- Project final results for all types of recording actions will be made publicly available in digital format via the OASIS Index of Archaeological Investigations
- Complete final reports for recording actions yielding notable results will be made available in digital format via the company's website
- Summaries will be made publicly available via submission to relevant local, regional or period journals, to be included in the 'round-up' sections. Where significant discoveries are made, notes will also be sent to national journals

Primary and Digital Data will be made available after the completion of the documentation process

- All selected data will be made available upon direct request for reuse, re-analysis, re-interpretation, and re-publication by secondary researchers

### Intellectual Property

- John Moore Heritage Services will hold the copyright of any collected and created data included in the project archive in all forms of records and media
- Digital elements of the project archive disseminated via ADS will be licenced under a creative commons licence
- A data sharing agreement will regulate the access and use of data by secondary researchers as appropriate

### Long-Term Access

Long-term access to data will be granted via deposition with Oxfordshire County Museum Service and Archaeology Data Service

## Section 8 – Responsibilities and Resources

### Responsibilities

Roles and responsibilities will be as follows:

- Project Team Members (Fieldwork): Collection and storage of analogue data sets
- Project Team Members (Post-Excavation): Storage and backup of analogue data sets, creation of digitised and born-digital data sets, data quality, data archiving and metadata production for all data sets
- Project Manager (Name): Implementation, review and revision of the Data Management Plan (DMP), supervision of collection, production, storage, backup and management of all data sets
- External company (Oxford Mac Solutions Ltd): Data storage and backup management
- Head of Archive (Simona Denis): Implementation of relevant policies, implementation, review and revision of the DMP, management of data selection, archiving and metadata production for all data sets, data sharing, project archive transfer

### Resources

Resources required to prepare selected data and implement the DMP were to be covered by standard John Moore Heritage Services resources and project budget.

Repository charges were estimated using the Oxfordshire County Museum Service charges list and included in the project budget.

Digital Repository charges were estimated using the ADS Costing Calculator and included in the project budget.

**Bletchington**  
**Bletchington Park**

**Archaeological Evaluation**

**SELECTION STRATEGY**

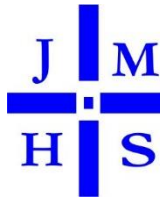
**September 2020**

<b>Project Information</b>		
<b>Project Management</b>		
<b>Project Manager</b>	John Moore	
<b>Archaeological Archive Manager</b>	Simona Denis	
<b>Organisation</b>	John Moore Heritage Services	
<b>Stakeholders</b>		<b>Date Contacted</b>
<b>Collecting Institution(s)</b>	Oxfordshire County Museum Service	July 2019
<b>Project Lead</b>	Stephanie Duensing	June 2019
<b>Landowner / Developer</b>	Perdix Partnership	September 2019
<b>Specialists</b>	Claire Ingre Rebecca Devaney Paul Blinkhorn	September 2019
<b>Resources</b>		
No unusual resources required in addition to JMHS normal operating equipment and staff		
<b>Context</b>		
<p>The full aims and objectives of the project are detailed in the attached WSI.</p> <p>The aims of the projects are to investigate determine whether any medieval and post-medieval remains exist in the areas of impact and their extent, condition, nature, character and quality. Modern materials are unlikely to be selected for inclusions in the Archaeological Archive subject to alterations in the aims of the project.</p> <p>Selection of the working project archive will be guided by the aims and objectives of the project as outlined in the WSI, the Solent-Thames research framework and the Oxfordshire County Museum Service guidelines, and material-specific guidance.</p>		

Section 1 - Digital Data	
<b>Stakeholders</b>	
<b>Project Manager</b>	John Moore
<b>Archaeological Archive Manager</b>	Simona Denis
<b>Digital Repository</b>	Archaeology Data Service
<b>Selection</b>	
<b>Location of Data Management Plan (DMP)</b>	The DMP (in attachment) is accessible upon request and located as outlined in Sections 5 and 6 All relevant standards, policies and guidelines are listed in Section 1
<b>De-Selected Digital Data</b>	The procedure is outlined in the DMP (in attachment) Section 6 and JMHS POL0010 Digital Archives (in attachment)

Section 2 - Documents	
<b>Stakeholders</b>	
<b>Project Manager</b>	John Moore
<b>Archaeological Archive Manager</b>	Simona Denis
<b>Repository Representative</b>	Oxfordshire County Museum Service
<b>Selection</b>	
<b>Selected Documents</b>	The procedure is outlined in the DMP (in attachment) Section 6 and JMHS POL0010 Digital Archives (in attachment)
<b>De-Selected Documents</b>	The procedure is outlined in the DMP (in attachment) Section 6 and JMHS POL0009 Archives (in attachment)

Section 3 - Materials	
<b>Stakeholders</b>	
<b>Project Manager</b>	John Moore
<b>Archaeological Archive Manager</b>	Simona Denis
<b>Repository Representative</b>	Angie Bolton
<b>Specialist(s)</b>	Claire Ingrem Rebecca Devaney Paul Blinkhorn
<b>Material Type</b>	
Bulk Finds	
<b>Selection</b>	
<b>Selected Materials</b> All materials recovered during fieldwork will be returned to JMHS offices for cleaning and assessment. Unstratified and Modern materials will be assessed and recorded, and not selected for retention. The material archive will be reviewed and selected based on the results and recommendations of the specialists, the Oxfordshire County Museum Service collection policy and the Solent-Thames Research Framework recommendations. The selection will take place during the archive completion.	
<b>Uncollected Material</b>	Unstratified modern materials will not be collected. The presence of the materials will be noted in the primary records.
<b>De-Selected Materials</b>	All bulk finds will be assessed and recorded to appropriate standards. Materials not selected for retention will be reburied in a geo-located position to prevent re-entering the archaeological record.



JOHN MOORE HERITAGE SERVICES

**18/01945/F & 18/01969/F – BLETCHINGDON PARK HOUSE,  
SPRING HILL, BLETCHINGDON, KIRLINGTON OX5 3DW**

**ARCHAEOLOGICAL EVALUATION**

**WRITTEN SCHEME OF INVESTIGATION**

**Project No. 4060  
Site code: BLBP 19**

**JUNE 2019**



# 1 Introduction

- 1.1 Two applications have been submitted to Cherwell District Council for **Various works to the parkland, which include improvements to the landscaping, repair of existing structures and new interventions within the landscape. Erection of new buildings to form new Estate Yard and associated buildings (18/01945/F) and Alterations to the form of the north west steps to the house, formation of underground spa and car parking facilities and a reformed swimming pool and associated enclosure adjacent to the main house (18/01969).** Due to the potential of the site to contain archaeological remains a pre-determination archaeological evaluation is required.
- 1.2 This Written Scheme of Investigation (WSI) outlines the method by which the evaluation would be carried out in order to identify whether archaeological remains of significance survive on the site. The first part of the document is site specific while the appendices detail John Moore Heritage Services' standards and general procedures.
- 1.3 The site is located on the north-western side of Bletchingdon village (Bletchingdon Park House at NGR SP 50533 18026). The southern boundary of the site is defined by Weston Road and New Road, which run east from Bletchingdon village green. To the west the site is bounded by Springwell Hill Road, which runs between Bletchingdon and Kirtlington. To the north and east the site borders arable land, and to the south east the boundary is formed by the land attached to the former stable block of Bletchingdon Park, which was annexed from the park in the late 20th century, and the churchyard of St Giles' Church.
- 1.4 The site lies at the north-eastern end of a raised plateau at approximately 100m AOD, upon which the village of Bletchingdon also sits. The park occupies a north-facing slope, falling approximately 20m to the bottom of the valley between Bletchingdon and Kirtlington. The site is in domestic use and the underlying geology is Peterborough Member, a mudstone bedrock formed up to 166 million years ago in the Jurassic period ([mapapps.bgs.ac.uk/geologyofbritain/home.html](http://mapapps.bgs.ac.uk/geologyofbritain/home.html)). Overlying this is the superficial deposits of the Hanborough Gravel Member, a sand and gravel river terrace deposit formed up to 3 million years ago in the Quarternary period. It is the boundary between these two deposits that forms the spring line that in turn allows the central water features of the park to be created.
- 1.5 A Heritage (Archaeological) Impact Assessment (JMHS 2018) has been carried out. The conclusions are summarised below; in general in 1.7 - 1.11, and with reference to particular impacts in 1.12 – 1.19.
- 1.6 There is a general lack of evidence for any prehistoric activity within the search area. The topography of the site is such that one might expect to find settlement within the area, and the potential enclosure located to the west of the proposal site may be evidence of this, however, given the lack of evidence the potential for remains of prehistoric date is considered to be low.
- 1.7 Although the Roman period is more highly represented within the search area, remains dating to this period are still relatively sparse. The recorded activity is located to the north of the proposal site on the southern edges of Kirtlington. As such the potential for remains of Roman date is considered to be low.
- 1.8 The available evidence for early medieval activity is also located to the north of the site at Kirtlington; it is likely, however, that the settlement of Bletchingdon was established



during this period. The plan of Kirtlington with the church being at the centre of a large elliptical shape formed by roads and boundaries is indicative of this being one of the earliest centres of the large Kirtlington-Islip estate. If this is so then it is the later early medieval period that activity may commence at Bletchingdon. Any remains are more likely to be located near the historic core of the village, adjacent to the church. As such the proposal site is less likely to contain remains dating to this period and the potential is considered to be low.

- 1.9 There is a large amount of evidence for high and late medieval activity within the search area; the village of Bletchingdon was established by the high medieval period, as was Bletchingdon Park. Cartographic evidence indicates that a medieval hall may have been located near to the church, potentially within the bounds of the current park. A road is shown on the map of 1735 running between the village green and St Giles' Church; this was diverted due to expansion of the park in the early 19th century. It is likely that this road is associated with the early layout of the village and as such remains of medieval occupation may be present to either side, within the present boundary of the park. The northern side of the park shows evidence for ridge and furrow cultivation which is also likely to be medieval in origin. As such the potential for remains of medieval date is considered moderate to high.
- 1.10 The post-medieval period is well represented within the search area, however, this mostly relates to listed buildings found in the village. The first phase of the current house dates to this period, and was associated with a series of ancillary buildings and enclosures; presumably those shown on the map of 1735 to the north and south west of St Giles' Church. The former road running from the village green to St Giles' Church may be associated with archaeological remains of post-medieval date or earlier. The potential for remains of post-medieval date is, therefore, considered moderate to high.
- 1.11 The current landscape of the park was created during the Imperial and early Industrial Period, while the house was also remodelled substantially. Any remains dating to these periods are likely to be related to these works. The potential for remains of this date is considered to be moderate.
- 1.12 Subterranean Garage, Pool and Access. This forms the largest area of impact within the proposals and its location adjacent to the current house means that there is a relatively high potential for archaeological remains. The potential for medieval and post-medieval remains is considered to be high; the proposed access road runs parallel to the former village street that was incorporated into the park in the early 19th century. Boreholes sunk in this area showed evidence of thick made ground deposits, including cobbled and gravelled surfaces; these are likely to be evidence of earlier activity either within the park boundary or related to houses fronting the street that backed onto the park. Boreholes sunk in the main area of the proposed garage/pool also showed thick deposits of made ground with layers of cobbles; while some of the made ground may be associated with later landscaping, it is likely that the cobble layers are associated with earlier phases of the house, potentially the early to mid-17th century house built by Thomas Coghill. The potential for remains of Imperial and Industrial date are considered to be high, and are likely to comprise of the aforementioned landscaping works. This may be seen as layers of soil or gravel laid down in order to create a level surface for the south east lawn.
- 1.13 Grading Works. Grading works are proposed in Hall Close and the northwest lawn of the Inner Park in order to provide better views of the ponds from the house. There is a moderate potential for remains of medieval, post-medieval and Imperial date in Hall

Close. Ridge and furrow is seen in mid-20th century aerial photos of this area. Grading on the northwest lawn may also encounter archaeological remains as there is a possible platform here surrounded by ditches, otherwise landscaping deposits dating to the late 17th or early 18th century are likely to be present.

- 1.14 Pavilion. The erection of a small pavilion is proposed to the south of the crescent pool. The potential for remains dating to most periods is considered to be low. It is unlikely that the proposal area was farmed during the period because of the wet ground conditions; with the ridge and furrow located further to the north of the proposed site. Potential for remains of a later date is also considered to be low; spoil derived from the excavation of the crescent pool may be present.
- 1.15 Inner Park Pool. The excavation of a small pool is proposed to the south west of the house in the Inner Park. The potential for remains dating to early periods is considered to be low. The proposal site is likely to have been within the boundary of the park from the medieval period onwards and is located too far from the Church and likely focus of settlement that remains from this date are considered unlikely. The same is considered true for the post-medieval and Imperial periods. The potential for remains of 19th century date is moderate; a pool is shown near this location on the tithe map of 1839. This has subsequently silted up and may be encountered during excavation.
- 1.16 Ha-ha Reconstruction. Reconstruction of a 37m portion of the ha-ha located north of the existing swimming pool is proposed. The ha-ha is thought to date to the early 19th century, and forms part of the alterations undertaken in order to remodel the grounds in a naturalistic landscape style. The potential for remains of all periods other than those pertaining to the ha-ha itself is considered low.
- 1.17 South East Park – Estate Yard development. The construction of a new estate office, stables, two barns and a workshop is proposed in the area of the current Estate Yard, located in the South East Park. Some of the proposed buildings, in particular the Estate Office, Barn and Stables, are located close to the route of the former village street that was incorporated into the park in the early 19th century. Therefore the proposed development has the potential to encounter remains associated with any medieval or post medieval activity in this area. A borehole sunk in this area showed a sequence of made ground deposits that are likely to be of some archaeological interest, whether they represent early 19th century levelling or earlier post-medieval cultivation or other activity prior to the creation of the South East Park. The potential for remains of post-medieval date is therefore considered moderate, while the potential for remains of a later date relating to the 19th century landscaping is considered moderate to high.
- 1.18 The proposed location of the workshop is further from the route of the former street. A borehole sunk in this area demonstrated a simple deposit sequence, with a shallow topsoil directly overlying the natural gravels. As such the potential for archaeological remains in this area is considered to be lower.
- 1.19 South East Park - Repositioned Entrance. Also proposed for the South East Park is the repositioning of the current southern entrance to a position further north along the western wall of the park. This wall forms a portion of the boundary of the South East Park and is likely to have been built in the early 19th century when this area of the park was created. As such the potential for remains other than those pertaining to the wall itself is considered low.

## **2 Aims of the Investigation**

- 2.1 To undertake an archaeological evaluation of the site.
- 2.2 To establish the presence or absence of archaeological remains in the areas of impact and the depth of soil deposits that overlie these remains.
- 2.3 To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
- 2.4 To determine the degree of complexity of any horizontal and/or vertical stratigraphy present.
- 2.5 To determine the impact of the proposed development on any remains present.
- 2.6 In particular to determine whether any medieval and post-medieval remains exist in the areas of impact and their extent, condition, nature, character and quality.
- 2.7 To inform the need for, and scope of, further phases of work to mitigate the impact of the development under consideration.
- 2.8 The following regional resource assessment and research agenda will be taken into account:

### *Regional*

<http://oxfordarchaeology.com/aboutus/our-archive/news-archive/301-solent-thames-research-framework-for-the-historic-environment>

## **3 Excavation Strategy**

- 3.1 The investigation will involve the mechanical excavation of 39no. trenches 30m long and 1.85m wide, 3no. trenches (Tr. 5, Tr. 28 & Tr. 36) 20m long and 1.85m wide, and 2no. trenches (Tr. 3 and Tr. 6) 10m long and 1.85m wide (see Figs. 1). There is a contingency for additional trenching of up to 30m in the Estate Yard area if it can be fitted in amongst the existing trees, hard surfaces currently in use and location of services. Some trenches may have to be stepped in places due to health and safety reasons. The integrity of any archaeological features or deposits will not be compromised.
- 3.2 Excavation will be taken down to the top of “natural” deposits or any higher archaeological horizon by a 13t mechanical excavator using a toothless bucket. See Appendix 1.
- 3.3 Site procedures will be as defined in Appendix 1 and below.
- 3.4 The trenches will be excavated using a standard toothless ditching bucket fitted to an appropriate hydraulic tracked or wheeled machine, such as a JCB or 360° excavator. The machine used will be powerful enough for a clean job of work and will be able to mound spoil neatly at a safe distance from the trench and excavation area edges. Spoil is to be stored on-site. All machine work will be under archaeological supervision and will cease immediately if significant archaeological remains are revealed. In the event of significant archaeological deposits being encountered the local planning authority’s archaeological advisor will be informed immediately.

- 3.5 If the machine has to re-enter the trench, care will be taken to ensure that it does not damage underlying remains, particularly in soft ground conditions. The machine will not be used to cut arbitrary trial trenches down to natural deposits, without regard to the archaeological stratification and leaving a section record only.
- 3.6 Particular care will be taken not to damage any areas containing significant remains which might merit preservation *in situ*. Such evidence would normally include deep or complex stratification, settlement evidence and structures. Such areas will be protected and not left open to the weather, or other forms of deterioration. Whilst investigation will not be at the expense of any structures, features or finds which might reasonably be considered to merit preservation, it is important that a sufficient sample is studied.
- 3.7 Stripped material will be visually examined for archaeological material.
- 3.8 Those trenches where visual inspection suggests the presence of features or possible features will, if necessary, be hand-cleaned to ensure features are properly defined and sufficient to produce a base plan.
- 3.9 During the evaluation trenching sufficient features will be sampled by hand excavation to achieve the objectives. For discrete features such as pits and postholes this will normally involve half-sectioning a representative sample. Linear features will be sectioned. The intersections of features will be investigated so that their stratigraphic relationships may be recorded and understood unless the integrity of the stratigraphy will be compromised within the trench. If deeply stratified deposits are encountered then it may be appropriate to hand excavate sample boxes and/or examine stratigraphy revealed in the sections of excavated cut features.
- 3.10 For palaeoenvironmental research different sampling strategies will be employed according to established research targets and the perceived importance of the strata under investigation. See Historic England 2011. For carbonised remains, bulk samples of a minimum of 40 litres will be collected. Bulk samples of at least 40 litres will be taken from waterlogged deposits for analysis of macroscopic plant remains. Columns for pollen analysis will be taken where appropriate. Mollusc samples will be gathered when required. Other bulk samples for small animal bones and other small artefacts may be taken from appropriate deposits depending on the aims of the project.
- 3.11 Any finds of human remains will be left *in situ*, covered and protected.
- 3.12 Treatment of treasure - Finds, discovered by the Archaeological Contractor, falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the landowner and the local planning authority's archaeological advisor. A Treasure receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find. 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.
- 3.13 Following recording, the trenches will be backfilled with top and sub-soils reinstated in their appropriate sequence. This will only be undertaken with the agreement of OCAS, either after a monitoring visit or via email.

- 3.14 All structures, deposits and finds will be recorded according to accepted professional standards. The stratigraphy in any sections is to be recorded, even where no archaeological deposits have been identified.
- 3.15 The site archive will be so organised as to be compatible with other archaeological archives produced in Oxford and Oxfordshire. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used. This requirement for archival compatibility extends to the use of computerised databases.
- 3.16 A plan to indicate the location of the boundaries of the excavated area and the site grid is to be drawn at a scale of 1:1250. Plans to indicate the locations of archaeological features are to be drawn at a scale of 1:100, with more detailed plans and sections as necessary. Detailed plans shall normally be drawn at a scale of 1:20 or 1:50 and sections at a scale of 1:10 or 1:20 depending on the complexity of the feature. All detailed plans and sections are to be related to the 1:100 plans. All plans are to be related to the site grid.
- 3.17 All archaeological sections will be on drawing film and will include context numbers and OD spot heights for all principal strata and features.
- 3.18 All archaeological contexts are to be recorded individually on context record sheets. A further more general record of the work comprising a description and discussion of the archaeology is to be maintained as appropriate.
- 3.19 A full black and white and colour (35mm transparency) photographic record of the work is to be kept. All digital photography will be high resolution uncompressed TIFF format with a minimum 20 megapixel image capture. Image capture, storage and metadata standards as set out in the English Heritage Guidance note on Digital Image Capture and File Storage (Draft) are to be followed. The photographic record is to be regarded as part of the site archive and will also include working shots to illustrate more generally the nature of the archaeological operation mounted.
- 3.20 The archaeological contractor shall allow project records to be inspected and examined at any reasonable time, during or after the excavation work by the local planning authority's archaeological advisor.
- 3.21 Archive (including finds) - all artefacts recovered during the excavations on the site are the property of the landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, Conservation Guidelines nos. 2 (1990).
- 3.22 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained. No finds will, however, be discarded without the prior approval of the local planning authority's archaeological advisor.
- 3.23 Assessments of artefacts will be made by appropriately qualified named specialists.
- 3.24 All finds and samples will be treated in a proper manner and to the standards of the UK Institute of Conservators Guidelines. They will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in the UK Institute

for Conservation (1990). Appropriate guidelines set out in the Museums and Galleries Commissions *Standards in the Museum Care of Archaeological Collections* (1992) will also be followed.

- 3.25 On completion of the project, it is anticipated that the landowner will consent the deposition of artefacts and archive in a suitable repository agreed with the local planning authority's archaeological advisor.
- 3.26 Site procedures carried out will follow CIfA guidelines and the requirements of the Oxfordshire County Archaeological Services.
- 3.27 Two weeks notification will be given to Richard Oram (County Planning Archaeologist – advisor to Cherwell District Council) prior to the start of work to allow monitoring to take place.
- 3.28 It is envisaged that a Project Officer and four experienced archaeologists will undertake the excavation and recording in 13 days under the overall direction of John Moore MCIfA.

#### **4 Report an Archive Preparation**

- 4.1 The draft report will be completed within three weeks of the end of on-site work and submitted to OCAS for comments before a final report is issued. The content and style of report will be in accordance with CIfA guidelines and the general requirements of the Oxfordshire County Archaeological Services.
- 4.2 On completion of the on-site works the site archive will be compiled. This will contain all the data collected during the on-site work, including records and finds. It will be quantified, ordered, indexed and made internally consistent. See Appendix 2.
- 4.3 All retained finds after cleaning, conserving, marking and packaging will be assessed and recorded using *pro forma* recording sheets. Initial artefact dating will be integrated with the site matrix.
- 4.4 All retained environmental samples will be processed and assessed by experienced and qualified staff and recorded using *pro forma* recording sheets.
- 4.5 Relevant specialists (See Appendix 4) will be contracted to undertake any necessary post excavation analysis.
- 4.6 The site archive will be assembled in accordance with the guidelines set out in English Heritage's Management of Archaeological Projects 2 and Management of Research Projects in the Historic Environment as well as in accordance with the guidelines published in Guidelines for the preparation of Excavation Archives for Long-term Storage (United Kingdom Institute for Conservation, 1990) and the standards in the Museum Care of Archaeological Collections (Museums and Galleries Commission, 1994). In addition to the items referred to in section 4.2 the archive will also contain:
  - Site matrices
  - A summary report synthesising the context records
  - A summary of artefact records
  - A summary of the environmental record

- 4.7 Security copies of the paper record of the archive will be made digitally.
- 4.8 A summary report (including illustrations where appropriate) will be sent to the editors of South Midlands Archaeology not later than three months after the end of the calendar year in which the work is undertaken.
- 4.9 A form will also be completed for the online OASIS project.
- 4.10 The site archive, including the finds (subject to the owners consent), will be deposited with the Oxfordshire County Museum Service.

## **5 General**

- 5.1 Work will conform to CifA Guidelines (CifA 2014).
- 5.2 The project will be conducted in accordance with procedures laid out in MoRPHE (English Heritage 2006)
- 5.2 Appendix 3 is relevant.

## **6 Bibliography**

- Brickley, M, & McKinley, J I, 2004 *Guidelines to the Standard for Recording Human Remains*, Institute of Field Archaeologists Technical Paper 7, BABAO University of Southampton
- Chartered Institute for Archaeologists. 2014 *Standard and Guidance for Archaeological Watching Brief*.
- Chartered Institute for Archaeologists. 2014 *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives*
- English Heritage (now Historic England), 2001 *Centre for Archaeology Guidelines Archaeometallurgy*
- English Heritage, 2006a *Management of Research Projects in the Historic Environment*
- English Heritage, 2006b *Science for Historic Industries: Guidelines for the investigation of 17<sup>th</sup>- to 19<sup>th</sup> century industries*
- English Heritage, 2007 *Geoarchaeology: Using earth sciences to understand the archaeological record*
- English Heritage, 2008 *Management of Research Projects in the Historic Environment: PPN 3: Archaeological Excavation*
- English Heritage, 2011 *Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation (Second Edition)*.
- John Moore Heritage Services 2018 *Heritage (Archaeological) Impact Assessment on Bletchington Park, Bletchington, Oxfordshire*. Unpublished client report

McKinley, J, & Roberts, C, 1993 *Excavation and post-excavation treatment of cremated and inhumed human remains*. Institute of Field Archaeologists Technical Paper 13

Museums and Galleries Commission 1992 *Standards in the Museum Care of Archaeological Collections*

Society of Museum Archaeologists 1993 *Selection, Retention and Dispersal of Archaeological Collections*

United Kingdom Institute for Conservation 1990 Archaeology Section Guidelines for the Preparation and Storage of Excavation Archives for Log-Term Storage

John Moore Heritage Services

28<sup>th</sup> June 2019

Revised 11<sup>th</sup> July 2019







## Appendix 1

### *Machine Excavated Trenches*

#### *Excavation*

- 1.1 The entire site will be visually inspected before the commencement of any machine excavation. This will include the examination of any available exposures (e.g. recently cut ditches and geotechnical test pits).
- 1.2 Normally trench positions will be accurately surveyed prior to excavation and related to the National Grid. It may be necessary to survey the positions after excavation in some instances.
- 1.3 All machining will be carried out by appropriate sized plant. This will normally be a JCB 3CX or similar or 360 degree tracked excavator with a 5' or 6' wide toothless bucket. Where access or working space is restricted a mini excavator such as a Kubota KH 90 will be used.
- 1.4 All machining will be carried out under direct control of an experienced archaeologist.
- 1.5 Undifferentiated topsoil or overburden of recent origin will be removed in successive level spits down to the first significant archaeological horizon.
- 1.6 Excavated material will be examined in order to retrieve artefacts to assist in the analysis of the spatial distribution of artefacts.
- 1.7 On completion of machine excavation, all faces of the trench that require examination or recording will be cleaned using appropriate hand tools.
- 1.8 All investigation of archaeological horizons will be by hand, with cleaning, inspection, and recording both in plan and section.
- 1.9 A minimum number of features, within each significant archaeological horizon, required to meet the aims will be hand excavated. Pits and postholes normally will be sampled by half-sectioning although some features may require complete excavation. Linear features will be sectioned as appropriate. Features not suited to excavation within the confines of narrow trenches will not be sampled. No deposits will be entirely removed unless this is unavoidable. As the objective is to define remains it will not necessarily be the intention that all trenches will be fully excavated to natural stratigraphy. However the full depth of archaeological deposits across the entire site will be assessed. Even in the case where no remains have been located the stratigraphy of all evaluation trenches will be recorded.
- 1.10 Any excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits which appear to be demonstrably worthy of preservation *in situ*.
- 1.11 For palaeoenvironmental research different sampling strategies will be employed according to established research targets and the perceived importance of the strata under investigation. For carbonised remains, bulk samples of a minimum of 40 litres will be collected. Bulk samples of at least 40 litres will be taken from waterlogged deposits for analysis of macroscopic plant remains. Columns for pollen analysis will be taken where appropriate. Mollusc samples will be gathered when required. Other bulk samples for small animal bones and other small artefacts may be taken from appropriate deposits depending on the aims of the project.
- 1.12 Any finds of human remains will be left *in situ*, covered and protected. The coroner's office will be informed. If removal is essential it will only take place under the relevant Home Office license and local authority environmental health regulations.
- 1.13 All finds of gold and silver will be moved to a safe place and reported to the coroner's office according to the procedures relating to Treasure Trove. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the artefacts from theft or damage.
- 1.14 After recording, the trenches will be backfilled with excavated material.

#### *Recording*

- 1.15 For each trench, a block of numbers in a continuous sequence will be allocated.
- 1.16 Written descriptions, comprising both factual data and interpretative elements, will be recorded on standardised sheets.
- 1.17 Where stratified deposits are encountered a 'Harris'-type matrix will be compiled during the course of the excavation.
- 1.18 The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
- 1.19 Plans will normally be drawn at a scale of 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Burials will be drawn at 1:10. Other detailed plans will be drawn at an appropriate scale.
- 1.20 Long sections of trenches showing layers and any cut features will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.
- 1.21 Generally all sections will be accurately related to Ordnance Datum. There may on occasions be instances where this is unnecessary when it will be agreed with the local authority's archaeological representative in advance.
- 1.22 Registers of sections and plans will be kept.

- 1.23 A full black and white, and digital photographic record will be maintained. This will illustrate the principal features and finds both in detail and in a general context. The photographic record will also include working shots to represent more generally the nature of the fieldwork.
- 1.24 A register of all photographs taken will be kept on standardised forms.
- 1.25 All recording will be in accordance with the standards and requirements of the *Archaeological Field Manual* (Museum of London Archaeology Service 3rd edition 1994).

#### *Finds*

- 1.26 All identified finds and artefacts will be collected and retained. Certain classes of material i.e. post-medieval pottery and building material may on occasion be discarded after recording if a representative sample is kept. No finds will be discarded without the prior approval of the archaeological representative of the local authority and the receiving museum.
- 1.27 Finds will be scanned to assess the date range of the assemblage with particular reference to pottery. In addition the artefacts will be used to characterise the site, and to establish the potential for all categories of finds should further archaeological work be necessary.
- 1.28 All finds and samples will be treated in a proper manner and to standards agreed in advance with the recipient museum. Finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in United Kingdom Institute for Conservation's *Conservation Guidelines No. 2*.
- 1.29 At the beginning of the project (prior to commencement of fieldwork) the landowner and the relevant museum will be contacted regarding the preparation, ownership and deposition of the archive and finds.

## **Appendix 2**

### **2 Evaluation Reports**

- 2.1 The style and format of the evaluation report will be determined by John Moore Heritage Services. The report will include as a minimum the following:
  - 2.2 A location plan of the site.
  - 2.3 A location plan of the trenches and/or other type of fieldwork strategy employed.
  - 2.4 Plans and sections of features and/or extent of archaeology located. These will be at an appropriate scale.
  - 2.5 A summary statement of the results.
  - 2.6 A table summarising per trench the deposits, features, classes and numbers of artefacts encountered and spot dating of significant finds.
  - 2.7 Consideration to the methodology will be given along with a confidence rating for the results
  - 2.8 For more extensive and complicated evaluation projects, especially where they form part of large-scale programmes of work in historic urban centres, the procedures defined in English Heritage's *Management of Archaeological Projects* 2nd edition 1991 will be followed for immediate post-field archive preparation and initial assessment. It will then be agreed with the local authority's archaeological advisor which aspects will need to be taken forward to the report stage.

## **Appendix 3**

### **3 General**

- 3.1 The requirements of the Brief will be met in full where reasonably practicable.
- 3.2 Any significant variations to the proposed methodology will be discussed and agreed with the local authority's archaeological representative in advance of implementation.
- 3.3 The scope of fieldwork detailed in the main part of the Written Scheme of Investigation is aimed at meeting the aims of the project in a cost effective manner. John Moore Heritage Services (JMHS) attempts to foresee all possible site specific problems and make allowances for these. However there may on occasions be unusual circumstances which have not been included in the programme and costing. These can include:
  - unavoidable delays due to extreme bad weather, vandalism etc.
  - trenches requiring shoring or stepping, ground contamination, unknown services, poor ground conditions
  - extensions to specified trenches or feature excavation sample sizes requested by the local authority's archaeological advisor
  - complex structures or objects, including those in waterlogged conditions, requiring specialist removal

#### *Health and Safety*

- 3.4 All relevant health and safety legislation, regulations and codes of practice will be respected.

- 3.5 With the introduction of the Construction (Design and Management Regulations) 2007 JMHS works with Clients, Main Contractors, and Planning Supervisors to create a Health and Safety Plan. Each project will have its own unique plan.

*Insurances*

- 3.6 JMHS holds Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance. Details can be supplied on request.
- 3.7 JMHS will not be liable to indemnify the client against any compensation or damages for or with respect to:
- damage to crops being on the Area or Areas of Work (save in so far as possession has not been given to the Archaeological Contractor)
  - the use or occupation of land (which has been provided by the Client) by the Project or for the purposes of completing the Project (including consequent loss of crops) or interference whether temporary or permanent with any right of way light air or other easement or quasi easement which are the unavoidable result of the Project in accordance with the Agreement
  - any other damage which is the unavoidable result of the Project in accordance with the Agreement
  - injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by the client or his agents servants or their contractors (not being employed by John Moore Heritage Services) or for or in respect of any claims demands proceedings damages costs charges and expenses in respect thereof or in relation thereto
- 3.8 Where excavation has taken place evaluation trenches will be backfilled with excavated material but will otherwise not be reinstated unless other arrangements have previously been agreed. Open area excavations normally will not be backfilled but left in a secure manner unless otherwise agreed.

*Copyright and Confidentiality*

- 3.9 John Moore Heritage Services 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 an exclusive licence to the Client in all matters directly relating to the project as described in the Written Scheme of Investigation.
- 3.10 JMHS will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988.
- 3.11 JMHS will advise the Client of any such materials supplied in the course of projects which are not JMHS's copyright.
- 3.12 JMHS undertake to respect all requirements for confidentiality about the Client's proposals provided that these are clearly stated. In addition JMHS further undertakes to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that Clients respect JMHS's and the Institute of Field Archaeologists' general ethical obligations not to suppress significant archaeological data for an unreasonable period.

*Standards*

- 3.13 JMHS conforms to the standards of professional conduct outlined in the Institute of Field Archaeologists' Code of Conduct, the IFA Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, the IFA Standards and Guidance for Desk Based Assessments, Field Evaluations etc., and the British Archaeologists and Developers Liaison Group Code of Practice.
- 3.14 Project Directors normally will be recognised in an appropriate Area of Competence by the Institute of Field Archaeologists.
- 3.15 Where practicable JMHS will liaise with local archaeological bodies (both professional and amateur) in order that information about particular sites is disseminated both ways (subject to client confidentiality).

**Appendix 4**

Specialists that may be used for analysis of materials include:

Prehistoric pottery	David Mullin	University of Worcester
Roman and Romano-British pottery	Jane Timby	University of Reading
Lithics	Rebecca Devaney	Freelance specialist
Stone	Ann Clarke	Freelance specialist
Saxon, Medieval and Post-Medieval pottery	Paul Blinkhorn	Freelance specialist
Ceramic Building Material	Andrew Peachey	Archaeological Solutions

Environmental Analysis	Luke Parker	Archaeological Research Services
Plant macro remains and Insect remains	David Norcott	Wessex Archaeology
Marine molluscs	Jessica Winder	Freelance specialist
Human remains	Ceri Boston	Freelance specialist
Animal bone	Claire Ingrem	Freelance specialist
Clay tobacco pipes	John Moore	JMHS
Small finds	Nicola Rogers	Freelance specialist

The archaeological advisors to the local planning authority will be consulted on any changes to the specialists used on this list subsequent to the approval of the WSI.

Where it is considered appropriate, following consultation with the archaeological advisors to the local planning authority, experienced JMHS staff may be used for simple quantifications of small assemblages of material, unstratified finds and modern material.

**Archives Policy Statement and Deposition Strategy**

*Purpose and Scope*

Archaeological archives represent the only surviving record of a historic environment that has been damaged or destroyed by development or excavations. Curation of the archive in a recognised repository will ensure the survival of archaeological evidence for future use, including re-analysis, re-interpretation, and re-publication.

John Moore Heritage Services aims to deposit all project archives generated by fieldwork carried out by the Company at a Museum or other repository, as agreed with the curatorial archaeological body. However, as the volume of archaeological material entering repositories has rapidly increased during the past decades, many local and regional museums have been unable to accept archaeological archives. In these cases, JMHS aims to curate and store such archives until a repository becomes available.

*Standards*

- JMHS is committed to comply with recognised standards in relation to the creation, compilation and management of archaeological archives, as set out in the following source material:
- Archaeological Data Services, 2015 *Guidelines for Depositors*
- Brown, D. H. 2007 *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*
- Brown, D. H. 2011 *Safeguarding Archaeological Information. Procedures for minimizing risk to undeposited archaeological archives*. English Heritage
- Chartered Institute for Archaeologists, 2014 *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
- Chartered Institute for Archaeologists, Historic England 2019 *Toolkit for Selecting Archaeological Archives*
- Ferguson, L. M. and Murray, D. M. 1997 *Archaeological documentary archives: preparation, curation and storage*. IFA Paper No.1
- Handley, M. 1999 *Microfilming archaeological archives*. IFA Paper No.2
- Ministry of Housing, Communities and Local Government 2018, *National Planning Policy Framework*
- Museums and Galleries Commission, 1994 *Standards in the Museum Care of Archaeological Collections*

- United Kingdom Institute for Conservation, 1990 *Guidelines for the Preparation of Excavation Archives for Long-term Storage*
- Watkinson, D. and Neal, V. 1998 *First Aid for Finds*

### *Procedures*

#### *Security of Records*

Back-up of raw digital data generated during fieldwork is provided by secure remote access to the Company's server. Where internet access for data backup is not available, a security copy of the raw data will be made onto a portable device.

Security copies of all archive records and born-digital files will be made in digital format and stored on the Company's server. A digital copy will be deposited with the archive when required by specific Museums guidelines. Additional copies on microfiche will be made for depositing with the archive and with the NMR when required by specific Museums guidelines.

#### *Selection and Preparation*

- Content will be prioritised for archiving following consideration of planning requirements and deadlines.
- All primary records will be included in the documentary archive
- All data generated by all stages of archaeological work will be digitised:
  - All primary records (including registers, context recording forms, and drawings) will be digitised via scanning and uploaded to the Company's server
  - All registers data will be input in pro-forma digital registers (spreadsheets)
  - All final versions of digitised drawings will be included in the digital archive
  - All final versions of GIS data will be included in the archive
  - Raster images will be selected in order to exclude duplicates and poor quality shots
- Metadata will be created for all files selected for inclusion in the archive
- Materials for inclusion in the physical archive will be selected in accordance with recognised standards and guidelines, as well as assemblage-specific recommendation made by qualified specialists
  - All selected artefacts will be listed and stored appropriately
  - De-selected artefacts will be fully recorded prior dispersal

#### *Copyright*

All archives to be deposited with a Museum or other repository will include a Licence of Copyright for Archaeological Archives form granting a perpetual, royalty-free licence throughout the world to the institution to:

- reproduce all or any part of the Archive for the purposes of research, study, conservation or publicity relating to the Museum
- display copies of all or part of the Archive in any medium
- publish any part of the Archive in any form or medium
- permit third parties to do any of the above.
- 

#### *Artefact Ownership*

JMHS aims to arrange ownership of finds transfer for the receiving institution wherever possible. Should this not be possible due to lack of response from the landowner, the Company will maintain detail records of all correspondence with landowners and will pass them to the receiving institution.

The Treasure Act will be complied with at all times.

#### *Data Protection*

JMHS fully endorses and adheres to the principles of data protection as set out in the General Data Protection Regulation (GDPR) 2018. All personal data (including stakeholders' names and addresses) will be collected, stored and managed in compliance with the company's Data Protection Policy (POL0014).

#### *Storage*

Although John Moore Heritage Services only temporarily stores excavated material prior to deposition as part of an archive, it recognises the need to ensure the storage of all artefacts and environmental remains under appropriate conditions and security measures.

Requirements of individual museums and curatorial authorities will be respected and their standards will be conformed to.

### **Archives Deposition Strategy**

#### *Timescales*

John Moore Heritage Services aims to deposit all project archives at a Museum or other appropriate repository within 12 months of the date of completion of the project.

However, a longer timescale is normally considered if:

- No Museum or repository in the geographical area is accepting archives
- Local Museums do not have policies/guidelines for archaeological archives deposition
- Local Museums do not respond to enquiries regarding the deposition of archives
- Stakeholders do not respond to enquiries regarding the selection of artefacts



- Landowners do not respond to requests regarding the artefact ownership
- Landowners do not agree to transfer the artefact ownership to the repository
- Agents/Consultants do not disclose Landowners' details and do not forward artefact ownership transfer requests to Landowners

#### *Archives Status Records*

An updated record of the status of the archives is maintained at all times. The status of every archive is recorded on a spreadsheet, managed by the Archive department and accessible to all employees.

The spreadsheet records:

- Project identifiers (JMHS project ID number, Site Code, Accession Number, OASIS ID)
- Project Name
- Type of Fieldwork
- Project Status (Won/Progress/Complete/Ongoing)
- Documentary archive location
- Finds archive location (when applicable)
- Name of Finds Specialist, type of finds sent for analysis and date
- Size and number of documentary and finds archive boxes, and their location
- GDPR consent, ToT and Artefacts Selection details and progress
- Archives prepared for deposition (including Museums not accepting and contact dates)
- Deposited archives

#### *Prioritization*

The preparation of archives is prioritized in accordance with project-specific and/or Museum requirements.

#### *Procedure*

1. Identification of the archives to be prepared for deposition
2. Contact with relevant stakeholders
  - a. Landlord (GDPR, ToT, Artefacts Selection consent)
  - b. Museum/Other Recipient (Copyright, Artefacts Selection consent, Notification)
  - c. Finds Specialist (Artefacts Selection consent)
  - d. Planning Archaeologist (Artefacts Selection consent)

3. Preparation of the archive to meet Museum standards/guidelines
4. Microfilming (if required)
5. Contact with the Museum to arrange deposition

The overall responsibility for this policy lies with the Director, who gives delegated authority to the Head of Archive for implementation.

Signed

John Moore (Director)

POL0009

Last Revised: 16/05/2019

## Digital Archives Preservation Policy Statement

### *Purpose and Scope*

This policy defines the principles supporting data creation, management and preservation and references digital archiving standards and accepted best practice.

This policy aims to ensure preservation of all digital material held at John Moore Heritage Services, whether born-digital or surrogate, and aims to ensure that these data are made available both internally and externally, now and in the future. The policy applies to all digital material pertinent to archaeological archives, supplied by external individuals as well as produced in-house.

JMHS is in the process of developing a strategy to make all digital records accessible to the general public through the Company's website (currently under construction). Any online records will also be pre-monitored to ensure that they are compliant with Data Protection Act 1998, Copyright, Designs and Patents Act 1988 and GDPR Directive 95/46/EC 2018 so that any personal or sensitive data is not published online and that client confidentiality is maintained.

### *Standards*

- JMHS is committed to comply with recognised standards in relation to the creation, selection, management and curation of digital data, as set out in the following source material:
- Archaeological Data Services, 2015 *Guidelines for Depositors*
- Australian National Data Service, 2017 *ANDS Guide. Data Management Plans*
- Chartered Institute for Archaeologists, 2014 *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
- Chartered Institute for Archaeologists, Historic England 2019 *Toolkit for Selecting Archaeological Archives*
- Digital Curation Centre, 2013 *Checklist for Data Management Plan v.4.0* Edinburgh
- Digital Preservation Coalition 2015 *Digital Preservation Handbook, 2<sup>nd</sup> Edition. Technical Solutions and Tools*
- Duranti, L., Suderman, J. and Todd, M., 2005 *A Framework of Principles for the Development of Policies, Strategies and Standards for the Long-term Preservation of Digital Records*. The InterPARES 2 Project
- Foster, M. 2019 *Work digital/think archive. A guide to managing digital data generated from archaeological investigations*. DigVentures
- International Standards Organization (2003) standards: *Reference Model (ISO 14721:2003)*
- The National Archives, 2011 *Digital Preservation Policies: Guidance for archives*

- Whyte, A., Wilson, A. 2010, *How to Appraise and Select Research Data for Curation*. DCC How-to Guides. Edinburgh: Digital Curation Centre

#### *Procedure*

#### *Data Management Plan*

A project-specific Data Management Plan (DMP) will be generated for each Digital Archive. As a minimum, each DMP will indicate:

- Which data will be generated
- Data storage and management
- Metadata standards
- Copyright and intellectual property rights
- Data management roles and responsibilities

#### *Preservation of Records*

Back-up of raw digital data generated during fieldwork is provided by secure remote access to the Company's server. Where internet access for data backup is not available, a security copy of the raw data will be made onto a portable device.

Digital copies of the primary records will be made at the earliest opportunity and stored on the Company's server. Security copies of all archive records and born-digital files will be made in digital format and stored on the Company's server.

Every effort will be made to ensure that digital records are maintained in a readable format following the ISO: Open Archival Information System. This will include regular reviews of the digital archives (not to exceed 3 years) and updating and developing the archive as the repository grows and as technology and community practice evolve.

#### *Appraisal and Selection of Data*

All data generated by all stages of archaeological work will be stored on the Company's server. An appraisal of the digital data will be carried out prior to the completion of each project, in order to select data for long-term curation.

The assessment of each dataset's value will be carried out by the post-excavation team and will be based on the following criteria:

- Relevance
- Scientific/Historic value
- Uniqueness
- Non-Replicability
- Potential for redistribution

As a minimum, all historic building recording projects will have a dataset comprising:

- Final report in PDF/A format
- Final version of the report text in open document .odt format
- Selection of relevant raster images in .tiff and/or .jpg format
- Digital surrogate of the primary photographic register in PDF/A format
- Photographs location plans in vector graphic .dxf and/or .svg format
- Metadata of all files in open spreadsheet .ods format

As a minimum, all recording action projects will have a dataset comprising:

- Final report in PDF/A format
- Final version of the report text in open document .odt format
- Complete finds/environmental specialists' reports in open document and/or PDF/A format
- Digital surrogate of all primary records in PDF/A format
- All primary registers data migrated in pro-forma digital registers in open spreadsheet .ods format
- Selection of relevant raster images in .tiff and/or .jpg format
- Final versions of digitised drawings in vector graphic .dxf and/or .svg format
- Final version of GIS data in geospatial vector data .shp/.shx/.dbf format (when available)
- Metadata of all files in open spreadsheet .ods format

### *Preparation of Data*

Selected data will be normalised and organised in standardised folders, to guarantee consistency and retrievability, and to prevent data loss.

Normalisation will include:

- Format migration to widely supported open international standards
- Version migration to most recent format version
- File naming normalisation to ADS standards
- Organisation in predefined file structure

Metadata compliant with ADS standards will be generated for all selected data.

### *Data Storage*

Long-term preservation of electronic records is ensured by storage on magnetic media on a server device. The device is part of a network based on the client-server model, available online and securely accessible remotely via any web browser.

The digital archives preservation strategy ensures that two copies of all born-digital items as well as digital surrogates of primary records are made available on two different server devices (server and backup) situated in separate geographical locations (JMHS's main office in Wheatley and the Director's office in Boarstall, Aylesbury).

#### *Data Access*

The company's server is accessible by authorised staff on and off-site through a secure log-in.

Secure access to the server is granted by a two-factor authentication method. Access to server's partitions containing sensitive data is restricted to authorised users through role-based access control.

#### *Legal and Regulatory Framework*

The following acts and directives will be taken into consideration:

- Copyright, Designs and Patents Act 1988
- General Data Protection Regulation (GDPR) 2018
- EU Copyright Directive 2001
- Data Protection Act 1998
- Current best practice

#### *Roles and Responsibilities*

The Data Archive Preservation Policy will be championed by the Head of Archive who is responsible for the implementation and three year review of the digital preservation strategy.

John Moore Heritage Services will ensure that any digital records are regularly maintained and datasets preserved and backed up securely.

Signed

John Moore (Director)