



maparch

MAP Archaeological Practice

Land West of Thurnscoe Bridge Lane Thurnscoe Barnsley

MAP 05.44.24

Planning Reference 2024/1004

Written Scheme of Investigation-Archaeological Evaluation
by Trial Trenching



MAP Archaeological Practice Ltd ©

maparch

MAP Archaeological Practice

Client	Avant Homes Yorkshire
Work Type	Archaeological Evaluation by Trial Trenching
Address	Land west of Thurnscoe Bridge Lane
LPA Archaeologist	Andy Lines – South Yorkshire Archaeology Services
NGR	SE 45623 04990
Planning Ref	2024/1004
Oasis Ref	maparcha1- 529222
Site Code	05.44.24
Project Manager	Charlie Puntorno
Project Team	TBC

Version History	Edited/QA by
A011124	Max Stubbings
B70825	Max Stubbings

Land West of Thurnscoe Bridge Lane

Thurnscoe

Barnsley

05.44.24

Archaeological Evaluation by Trial Trenching

Contents	Page
Figure List	2
Appendices	2
1. Background	3
2. Site Information	5
3. Project Details	7
4. Fieldwork and Recording Methodology	10
5. Archive	10
6. Staffing	11
7. Bibliography	13

Figure List

Fig 1:	Site Location	3
Fig 2:	Trench Location Plan	8

Appendices

Appendix 1.	Selection Strategy	14
Appendix 2.	Digital Data Management Plan	20
Appendix 3.	Environmental Strategy	27
Appendix 4.	Conservation Strategy	29

[The South Yorkshire Archaeology Services Standards and Guidance for Archaeological Field Evaluation](#) will be adhered to throughout the project. If, during the project, it is deemed necessary to deviate from the standards, this will be discussed with the Archaeologist at SYAS where a rationale will be given and any deviations explicitly specified.

1. Background

- 1.1 The site, which measures approximately 9.9ha, is located immediately west of Thurnscoe Bridge Lane, to the south of Thurnscoe (centred at SE 45623 04990, Fig. 1).

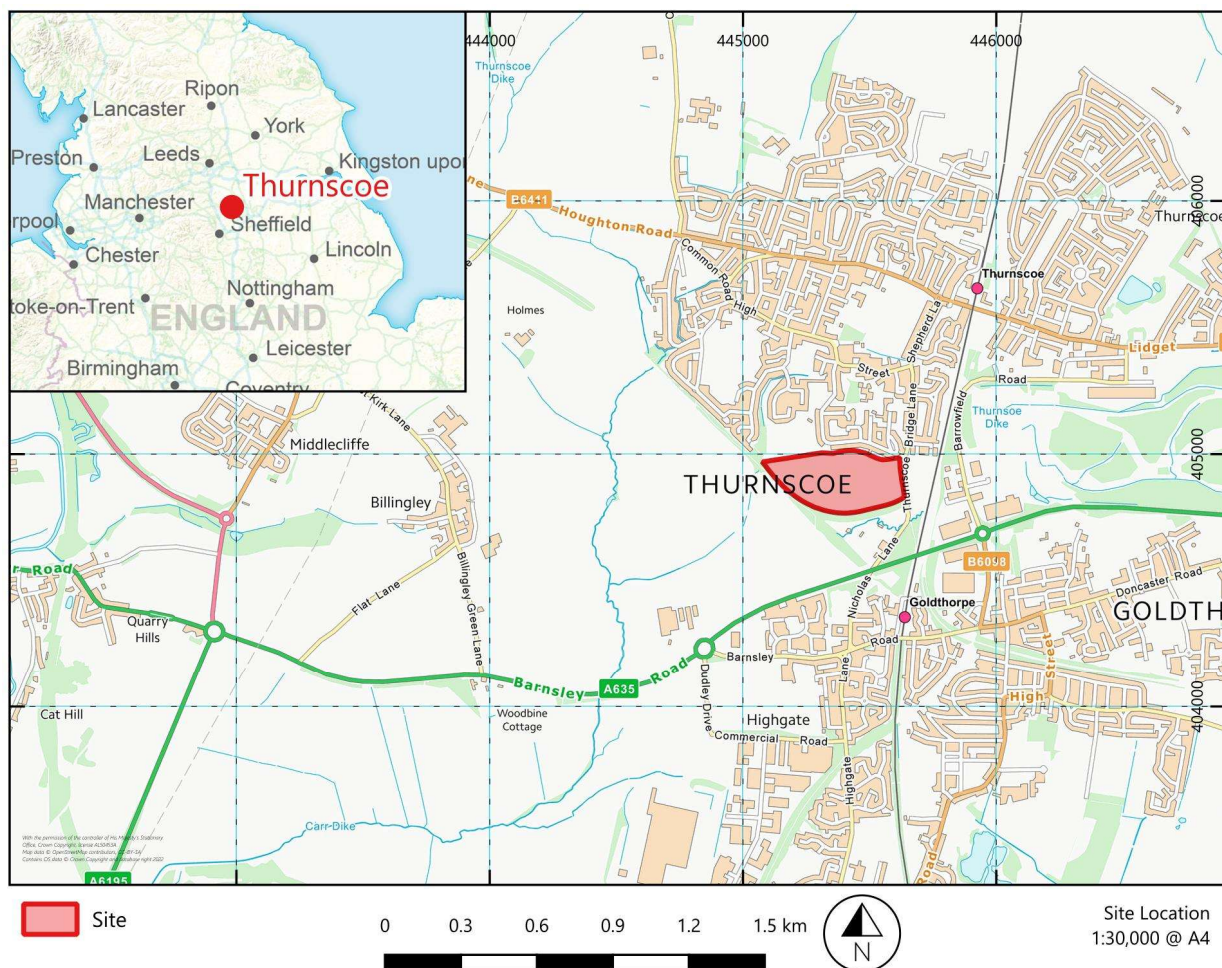


Fig 1: Site Location

- 1.2 An application has been made, to Barnsley Metropolitan Borough Council for the 'erection of 289no. dwellings including associated infrastructure, open space and landscaping' at the site. At the time of writing the application is under consideration although a programme of pre-determination Trial Trenching has been recommended in order to allow a reasoned decision to be made regarding the site's archaeological potential and to allow an appropriate scheme of mitigation to be developed, if deemed necessary.
- 1.3 A Desk Based Assessment (MAP. 2024) and Geophysical Survey (Magnitude Surveys. 2024), which support the planning application have highlighted the potential for features relating to late prehistoric and/or Romano-British features to be present across the application site. The Desk Based

Assessment indicated that an Evaluation by Trial Trenching be carried out across the site in order for a reasoned decision to be made regarding the need for any further archaeological work which may be deemed necessary. As such this Written Scheme of Investigation has been prepared in order to address an anticipated condition requiring archaeological work.

- 1.4 The work will be monitored under the auspices of South Yorkshire Archaeology Service who will be consulted at least one week before the commencement of site works. Where necessary, the Regional Science Advisor at Historic England may also be contacted about the work.
- 1.5 In addition to the SYAS Archaeological Field Evaluation Standards and Guidance (Appendix 5), MAP will adhere to the principles of the ClfA Code of Conduct (ClfA 2022) throughout the project and to the ClfA *'Standards and Universal Guidance for Archaeological Field Evaluations'* (ClfA 2023).
- 1.6 The project will be continuously reviewed in order to monitor the projects progress towards meeting its aims and objectives. As a minimum the results of the evaluation will be assessed during the fieldwork is taking place, to allow for any necessary changes to the agreed methodology. Any deviance from the methodology outlined in this document must be agreed by SYAS and an updated document will be produced. At the reporting stage of the project discussions will be held with SYAS regarding the need for additional field work, or post-excavation analysis.
- 1.7 Following the acceptance of this Written Scheme of Investigation it is considered that, subject to the developers own timetabling, MAP could carry out the evaluation with approximately 4 weeks' notice, with up to 6 weeks being allowed for the on-site work. Dependant on the availability and need of specialist input, it is anticipated that a report would be produced within twelve weeks following the completion of the on-site work.
- 1.8 Should the results of the trial trenching warrant further targeted excavation, this will be the subject of a new Written Scheme of Investigation which will need to be done in consultation with and agreed by SYAS.
- 1.9 Prior to the commencement of site work a site briefing will be given by the Attending Archaeologist (site lead) to appraise all archaeologists and other contractors of the scope of the trial trenching. The briefing will also outline the associated obligations and matters relating to health and safety. Once the site is established updates will be given to appropriate personnel. The site briefings will not

remove the need for all staff and appropriate visitors to sign up to this Written Scheme of Investigation and site specific RAMS.

- 1.10 MAP has an Environmental Policy which outlines our commitment to reducing the impact our work has on the environment. We are committed to reducing our carbon footprint as much as possible be it through the considered use of vehicles or reducing paper usage through digital recording.

2. Site Information

2.1 *Land Use, Topology and Geology*

- 2.1.1 Currently utilised as agricultural land, the site is bounded to north by residential development and to the west by further agricultural land. The line of a disused railway which is utilised as a public bridleway forms part of the southern boundary of the site, with a public footpath also present within the site boundary.

- 2.1.2 Bedrock geology within the site boundary consists of Ackworth Rock (sandstone) in the northern portion of the site, and deposits of Pennine Middle Coal Measures Formation to the south (BGS. 2024). The British Geological Survey records no superficial deposits for the site although Soilscales (Cranfield University. 2024) describes '*slowly permeable seasonally wet acid loamy and clayey soils*'.

- 2.1.3 The site is located within a Historic Landscape Characterisation zone (HSY7215) which refers to former strip fields. The legibility of this former land use is recorded as being fragmentary with '*significant boundary loss*' having occurred. The strip fields enclosed the Medieval town and the record states that '*there are Iron age/ Roman earthworks in the area*'.

2.2 *Archaeological Potential*

- 2.2.1 A full Archaeology and Heritage Desk Based Assessment supports the application and should be consulted for a wider archaeological and historical background.

- 2.2.2 Cropmarks have been identified within the north-western corner of the site, and to the immediate north by the Magnesian Limestone Aerial Investigation and Mapping Project. Recorded by Historic England Research Records as monument number 1431367 and by the South Yorkshire Historic Environment Record as 03032/01, the features are described as

'An Iron Age/ Roman curvilinear enclosure and field boundaries and a ditch of uncertain date are visible as cropmarks on air photographs. The enclosure has a complete circuit and is

embedded within a fragmentary system of parallel field boundaries on a north-north-east south-south-west alignment. Cross boundaries are also visible.... At SE 4524 0497 is a curvilinear enclosure measuring 8m by 5m. It has a complete circuit and is embedded within a fragmentary system of parallel field boundaries on a north-north-east south-south-west alignment. They lie between 47m and 80m apart and cross boundaries are also visible.'

- 2.2.3 A Geophysical Survey was carried out across the site in October 2024 (Magnitude Surveys. 2024, fig 2). The results of the survey highlighted features deemed to be of archaeological origin across the site. Although many of the anomalies were interpreted by Magnitude as being of medieval origin, this interpretation is tentative and it is possible that a continuation of the wider 'brickwork' landscape is represented. The northwestern corner of the site, where the aforementioned cropmarks are recorded, appears to contain multi-phased activity with potential realignment or reorganisation of enclosures. The curvilinear feature depicted in the cropmark data is not easily discernible in the results of the survey. The south-western corner of the site is dominated by a single, albeit large rectilinear enclosure which again appears to differ from features currently attributed to the 'brickwork' field system. The data is suggestive of an area of particularly high archaeological potential to the north of the former railway line, albeit truncated in places due to the insertion of the railway infrastructure.
- 2.2.4 Archaeological work was carried out to the north of the site in advance of residential development (HER ID's 03032/01 & ESY205). The site had been identified though the presence of cropmarks recognised by Riley as being suggestive of two conjoined enclosures, a trackway and a series of ditches (Philip, Neal & Fraser. 2004). A programme of trial trenching confirmed the presence of features, which were interpreted as being of Roman/Romano-British date (Ibid). Four phases of Roman/Romano-British period enclosure were identified during a wider excavation, with evidence of settlement and agricultural practices being noted. A number of rectangular pits which were excavated, although initially thought to be graves no evidence of internment was found during excavation, nor in soil samples taken from the pits. One pit however contained an intact Redware bowl which appeared to have been abraded at the time of deposition and so may have been an heirloom, the pit also had a posthole at its base which has been suggested as some kind of grave marker.

3. Project Details

3.1 *Aims and Objectives*

3.1.1 The aim of the Archaeological Trial Trenching is to determine the presence/absence, nature, date, quality of survival and importance of archaeological deposits to enable an assessment of the potential and significance of the archaeology to be made.

3.1.2 Based on known archaeological activity within the vicinity of the site, and the results of the Geophysical Survey, the evaluation has the potential to inform the following research questions outlined in the South Yorkshire Historic Environment Research Framework:

- QSY0029: Can we characterise different types of Iron Age and Romano-British field systems in different landscape zones and environments?
- QSY0030: What were the economic, social or political roles of Iron Age and Romano-British field systems?
- QSY0034: What were the reasons for variations in the form, shape, and size of Iron Age and Romano-British field systems and fields?
- QSY0040: What were the economic, social or political roles of linear trackways?
- QSY0041: What may we deduce from studies of trackways with respect to changes in the agrarian landscape? What can we say about any relationships or discontinuities between Iron Age and Romano-British routeways and roads?
- QSY0042: Can we identify more tangible physical traces of past human and animal movements through the landscape?
- QSY0043: Can any spatial patterning be identified within roundhouses in South Yorkshire?
- QSY0044: Can any clear traditions of the internal use of space within roundhouses and rectangular buildings be identified?
- QSY0045: Is it possible to distinguish between roundhouses occupied on a permanent basis, or examples inhabited seasonally?
- QSY0046: How can we better understand depositional patterns within and around roundhouses?
- What is the nature of medieval activity, if any, within the site.

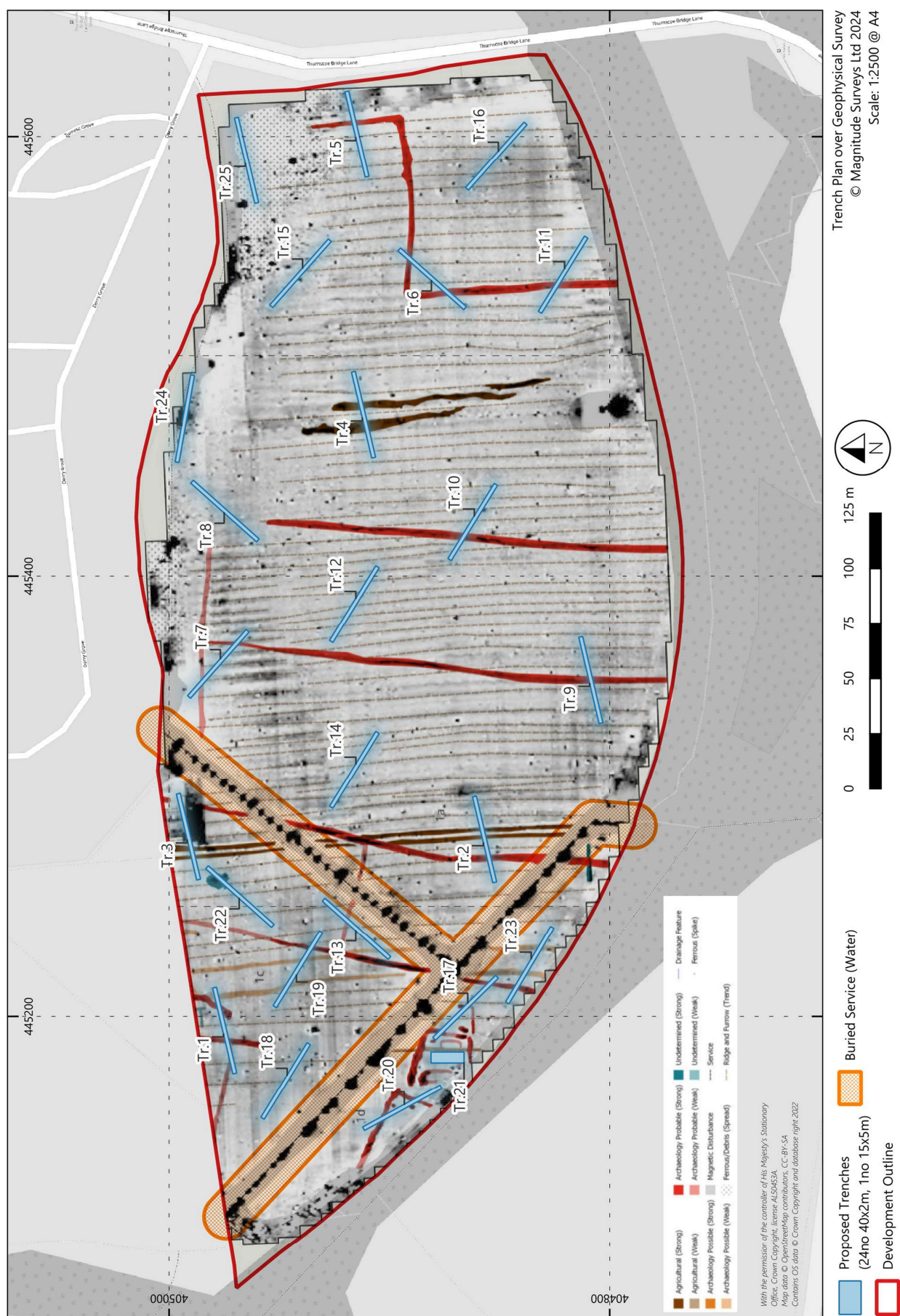


Fig 2: Trench Location Plan

3.1.3 It is anticipated that the evaluation will allow for sufficient information to be gained regarding the archaeological potential of the site. The results will allow for a reasoned decision to be made regarding the need for further archaeological work prior to development.

3.2 *Excavation Rationale*

3.2.1 Twenty five trenches are proposed, positioned in order to assess features highlighted in the results of the geophysical survey and also areas supposedly devoid of activity (Fig 2). Twenty four trenches measure 40m x 2m with the remainder measuring 15m x 5m.

3.2.2 The following contingencies should be considered at the inception of the project:

- Should significant archaeology be encountered, a contingency of up to 5% of the original sample area should be allowed for
- Specialist sampling and/or scientific dating may be required during the evaluation.
This should be discussed at a mid-point review
- Conservation of artefacts
- Full post-excavation analysis and/or publication should further fieldwork not be required

3.3 *Output and Dissemination*

3.3.1 It is anticipated that the project will produce the following output

Data type	Detail
Physical Archive	• Drawn plans and sections- permatrace • Site indices (context, photograph, drawing, samples) • Finds collected during the evaluation • Environmental material retained from samples collected during the evaluation
Digital Archive	• Diggitt derived data (PDF context sheets and indices. .xlsx indices) • GIS ESRI Shapefile (.shp & .shx & .dbf, plus associated files) • Photographs .jpg, .raw (to be deposited as .tiff). to include all photographs taken during the project • Reports (.docx & PDF). WSI, evaluation report and all associated specialist reports

Reports	Printed evaluation report
---------	---

3.3.2 All digital data will be curated in line with the attached Data Management Plan.

3.3.3 MAP undertake public engagement for all appropriate projects. This will be offered in numerous ways to reflect the nature of the archaeological works. It is likely that public engagement will be via site notices and discussions with the public during the duration of the fieldwork. A copy of the evaluation report will be submitted to the South Yorkshire Historic Environment Record for public access.

4. Fieldwork and Recording Methodology

4.1 All fieldwork and recording will be carried out in accordance with the South Yorkshire Archaeology Services Standards and Guidance for Archaeological Field Evaluation

4.2 All archaeological deposits and features will be recorded using DiggIt Archaeology, a digital recording system which is compatible with the MoLAS recording system. All indices will be produced using MAP's pro forma sheets. The MAP recording manual will be used on site where necessary.

5. Archive *Working Archive*

5.1.1 All material (whether digital or physical) recovered or generated through the duration of the field evaluation project will be appropriately and securely stored in a working project archive. This will be undertaken in accordance with the selection strategy and digital data management plan set out at the commencement of the project (Appendices 1 & 2).

5.1.2 All physical documents or drawings will be indexed, collated, and stored in a secure location when not in use.

5.1.3 Digital security copies will be made of physical and born digital records at regular intervals, to be stored and backed up in a secure location. Documents and drawings will be scanned at an appropriate resolution (see Appendix 2).

5.2 *Archive Deposition*

5.2.1 The requirements for archive preparation and deposition must be addressed and undertaken in a manner agreed with the recipient museum who will be contacted before commencement of fieldwork. In line with the 'Archaeological Archive Deposition Policy for Museums in Yorkshire and the

Humber', produced by Renaissance Yorkshire, the museum will also be contacted during a mid-point review of the project during which information will be passed to the museum regarding the archive and the proposed timescale for deposition, and following the completion of work.

- 5.2.2 Guidance set out in the ClfA Toolkit for Selecting Archives (2019) will be followed, prior to the commencement of fieldwork in order to establish project-specific strategies for the retention or discarding of material. The retention of material will also be discussed with the Experience Barnsley with regards to the significance and research potential of the archive.
- 5.2.3 Archive deposition will be arranged in consultation with the museum and SYAS, and in accordance with their deposition policy relating to the preparation and transfer of archives. The timetable for deposition shall be agreed on completion of the site archive and narrative. A copy of the archive receipt will be provided to SYAS.
- 5.2.4 The digital archive will be deposited with the Archaeology Data Service (ADS) at the University of York. A link to the final digital archive will be provided to SYAS.

6. Staffing

- 6.1 MAP is a ClfA Registered Organisation, through ClfA, MAP has undergone thorough scrutineering for its methods, policies and abilities. MAP also has several accredited members of staff who have equally progressed through ClfA robust scrutineering process. As a company we have undertaken and do undertake an extensive range of archaeological work across the UK, working on small to large scale sites, inclusive of heritage assessments, evaluations, excavations, and building recordings.
- 6.2 At the time of writing the field work team is to be confirmed however as a minimum the following contacts will be relevant for the duration of the project:
- Charlie Puntorno- MAP Project Manager
Telephone- 07879791369
Email- charlie@maparchltd.co.uk
 - Andy Lines- South Yorkshire Archaeology Service
Telephone- 0114 2736354
Email- andrew.lines@sheffield.gov.uk

- Andy Hammon- Historic England Science Advisor
Telephone- 07747486255
Email- andy.hammon@historicengland.org.uk
- Amy Downes- South and West Yorkshire Finds Liaison Officer
Telephone-0113 5350173
Email-amy.downes@wyjs.org.uk

6.3 The following Specialists have been contacted as are available to work on the project:

- Prehistoric pottery – M. Stephens (MAP)
- Medieval & Post-medieval pottery – M. Stephens (MAP)
- Roman pottery – P Ware (MAP)
- Flint – Dr Frederick Foulds
- Animal Bone – Jane Richardson
- Environmental Sampling – Diane Alldritt
- Conservation – York Archaeological Trust
- Human Remains – York Osteology
- Ceramic Building Material – Dr David Griffith
- Clay Tobacco Pipe – M R Stephens (MAP)

7. Bibliography

British Geological Survey. 2024. Geology Viewer. Available at <https://geologyviewer.bgs.ac.uk/> [accessed 17.10.24]

ClfA. 2022. Code of Conduct: Professional Ethics in Archaeology

ClfA. 2023. Standard for archaeological field evaluation

ClfA. 2023. Universal guidance for archaeological field evaluation

Lines, A. Marchant, J. and Ratcliffe, D., 2008. South Yorkshire Historic Environment Characterisation. Unpublished. South Yorkshire Archaeology Service, Sheffield; English Heritage, London.

Magnitude Surveys. 2024. Geophysical Survey Report, Land off Thurnscoe Bridge Lane, Thurnscoe, Barnsley, South Yorkshire

MAP. 2024. Land west of Thurnscoe Bridge Lane, Thurnscoe, South Yorkshire. Archaeology and Heritage Desk Based Assessment

South Yorkshire Archaeology Service & Historic England. South Yorkshire Historic Environment Research Framework. Web Resource. Available at <https://researchframeworks.org/syrf/> [Accessed 31.10.24]

Philip, G.E, E, Neal & R. Fraser. 2004. A Romano-British enclosed farmstead at Billingley Drive, Thurnscoe, South Yorkshire. In Yorkshire Archaeological Journal, Vol 76 pp 7-92

Appendix 1. Selection Strategy

Land West of Thurnscoe Bridge Lane, Thurnscoe, Barnsley Evaluation by Trial Trenching VA 01.11.24 Selection Strategy

Project Information

Project Management

Project Manager	Charlie Puntorno Charlie@maparchltd.co.uk	
Archaeological Archive Manager	Kelly Hunter kelly@maparchltd.co.uk	
Organisation	MAP Archaeological Practice	
Stakeholders		Date Contacted
Collecting Institution(s)	Experience Barnsley Archaeological Data Service	TBC
Project Lead / Project Assurance	Collections Team (Experience Barnsley) Collections Development Manager (ADS)	TBC
Landowner / Developer	Jon Tate, Avant Homes	
Other		

Resources

Resources required

Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.

No additional resources required by either party

Context

The full aims and objectives are outlined in the attached WSI. The primary aim of the project is to assess the archaeological potential of the site prior to development. The project will seek to assess the potential as indicated by cropmark and geophysical surveys within the site boundary and the immediate vicinity, all of which has the potential to inform South Yorkshire Historic Environment Research Framework

The selection strategy will be guided by the aims and objectives of the project as outlined in the WSI.

MAP. 2024. Land West of Thurnscoe Bridge Lane, Thurnscoe, South Yorkshire. Archaeology and Heritage Desk Based Assessment

South Yorkshire Historic Environment Research Framework. Available at
South Yorkshire Historic Environment Research Framework - South Yorkshire Historic Environment Research Framework
[accessed 31.10.24]

A full bibliography and details of best practice and guidance documents are provided in the WSI

1 – Digital Data

Stakeholders

Name the individual(s) responsible for the Digital Data Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Collections Curator).

Charlie Puntorno (MAP- Archaeology and Heritage Manager), Max Stubbings (MAP- Archaeology and Geomatics Manager), Kelly Hunter (MAP, Post Excavation Manager)

Selection

Location of Data Management Plan (DMP)

All digital data will be collected, stored and selected in lines with MAP's Data Management Plan (attached to the WSI), located on MAP's servers (available on request).

- 1.1 Strict version control will be applied throughout the project in line with the Data Management Plan (DMP). It is proposed that only the final version of all born digital documents (reports, databases, images-including those created by specialists) will be selected for inclusion in the Archive. Digital photographs will be assessed during post ex and selection based on the principles set out in the DMP and HE guidelines. All raw and processed survey data will be included in the archive.
- 1.2 The digital data will be reviewed following data gathering and analysis to check that data is being properly preserved and version control upheld in-line with the DMP. The final decision about selection for inclusion in the Archive will be made (by the Archaeology and Geomatics Manager) following the reporting stage of the project and enacted during archive completion. A metadata form consistent with ADS examples will be completed for each dataset and included within the final archive.
- 1.3 The following standards/ guidelines will guide the selection of digital data:
- 1.4 Map Archaeological Practice. 2002.. Data Management Plan.
ADS Guides to good practice. <https://guides.archaeologydataservice.ac.uk/g2gp/Main>
ADS Guidelines for Depositors <http://archaeologydataservice.ac.uk/advice/guidelinesForDepositors>
ADS Guidance for the selection of material for deposit and archive
Historic England (2015a) Digital Image Capture and File Storage

De-Selected Digital Data

The procedure for dealing with De-selected digital data and what specialist advice informed this process should be recorded in your DMP. Please copy this information here or attach your DMP as an appendix to

this document.

All stakeholders will be consulted on the fate of all de-selected material. It is envisaged that the de-selected material will be retained on the MAP and York Archaeology servers for 2 years following the completion of the project at which point they will be reviewed and deleted as necessary in line with the DMP.

Amendments

Date	Amendment	Rationale	Stakeholders

2 – Documents

Stakeholders

Name the individual(s) responsible for the Documents Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

Charlie Puntorno (MAP- Archaeology and Heritage Manager), Experience Barnsley Archives Team

Selection

- 2.1 All original documentary material created during data gathering (including those created by specialists) will be selected for inclusion in the archive. Duplicates, photocopies of originals and research materials will be discarded during archive completion in line with North Lincolnshire Museum's Deposition Standards.
- 2.2 The documentary archive will be reviewed following analysis an again at archive completion in order to select for the inclusion in the archive. The site derived archive will be reviewed and curated continuously by the on-site Project Offer.
- 2.3 The following standards/ guidelines will guide the selection of digital data:
MAP Archaeological Practice. 2022. Data Management Plan.
MAP. 2022. Post-excavation finds processing, retention and discard procedures

De-Selected Documents

It is envisaged that the material de-selected from inclusion in the preserved archive will be duplicates or re-productions created during the analysis phase of the project. De-selected material will therefore, either be retained to by MAP or York Archaeology, or recycled.

Amendments

Date	Amendment	Rationale	Stakeholders

--	--	--	--

3 – Materials

Note: This step should be completed for each material component of the archaeological archive. Copy this table for the various materials as required, providing the 'Material Type' and a section identifier (e.g. '3.1') for each.

Material type	Bulk finds (pottery, CBM, animal bone, metal working debris, flint etc) Small finds including: (Decorated/Stamped/Graffiti on pottery and CBM, Coins and Jettons, Metal jewellery, dress accessories (including buttons) and buckles personal objects, Metal tools and knives, Clay tools and work items, Decorated bone, worked bone and bone tools, Stone tools, querns, worked items and architectural fragments, Leather items). All finds regarded as treasure under the Treasure Act, will be reported and initially recorded as a small find.	Section 3.	1
----------------------	---	-------------------	----------

Stakeholders

Charlie Puntorno (MAP- Archaeology and Heritage Manager), Kelly Hunter (MAP-Post-Excavation Manager), Experience Barnsley Archives Team

The following Specialists have been contacted as are available to work on bulk finds

Pottery - T G Manby (Prehistoric),
M R Stephens (Medieval and Post-medieval)
P A Ware (Roman)
Flint - Dr Frederick Foulds
Animal Bone – Jane Richardson
CBM – Dr David Griffith

Selection

3.1.1 In line with MAPS Post-excavation finds processing, retention and discard procedures, all artefacts (items made or used by humans) will be retained in the first instance during excavation. Excavators, especially novices, are instructed to err on the side of caution by retaining everything they think may even possibly be of interest.

All material gathered during the evaluation will be returned to the MAP offices for cleaning and assessment, under the management and guidance of the Post Excavation Manager. Where immediate conservation is required, finds will be transported to York Archaeology's conservation department in York. All finds considered to be 'small finds' will be retained and, where appropriate, fully recorded on site.

Examples of 'small finds' include;

- Decorated/Stamped/Graffiti on pottery and CBM
- Coins and Jettons
- Metal jewellery, dress accessories (including buttons) and buckles personal objects
- Metal tools and knives
- Clay tools and work items
- Decorated bone, worked bone and bone tools
- Stone tools, querns, worked items and architectural fragments
- Composite Objects (organic/inorganic/metal)
- Medieval & Roman Glass
- Waterlogged wood, structures and objects: Structural wood and objects should be kept wet and advice sought immediately from a specialist.
- Leather items

3.1.2 Following analysis by relevant specialists, the entirety of the material archive will be returned to MAP. Following the analysis stage all stakeholders will assess the material and recommendations made by relevant specialists, including recommendations for retention or discard of material. no material will be discarded until all analysis and subsequent reporting (including publication where applicable) has been completed. The Heritage Manager at North Lincolnshire Museum will be kept informed of all decisions regarding the retention or discard of material, and the effect this will have on the final archive.

3.1.3 Advice will be sought by all relevant material specialists (listed above) prior to the archive completion stage of the project. A full list of relevant guidance and best practice documents are included within the WSI.

Map. 2022. Post-excavation finds processing, retention and discard procedures

De-Selected Material

All material will be analysed by a relevant specialist during the assessment and reporting stages of the project.

All de-selected material will, with the agreement of all stakeholders, including developers/landowners, will be reburied or, where appropriate, recycled. A small amount of material may be retained by MAP for use as a reference and/or educational collection.

Amendments

Date	Amendment	Rationale	Stakeholders

Material type

Environmental remains

Section 3.

2

Stakeholders

Kelly Hunter (MAP–Post-Excavation Manager), Tom Broomfield (MAP– Environmental Processing Supervisor), Experience Barnsley Archives Team

The following Specialists have been contacted as are available to work on environmental material

Carbonised Plant Macrofossils and Charcoal-Diane Alldritt

Geoarchaeology- Kristina Krawiec (York Archaeology)

Pollen Dr Tom Hill (independent)

Diatoms Dr Tom Hill (independent)

Ostracods Dr John Whittaker (independent)

OSL Dr Phil Toms (University of Gloucester)

Plant macrofossils Stacey Adams (York Archaeology)

Insects Dr David Smith (University of Birmingham)

Selection

3.2.1 All environmental samples will be processed by suitably experienced personnel, and all remains will be sent to relevant specialists (outlined above) for analysis. Specimens to be included in the working project archive may include: glass microscope slides (pollen samples, sediment thin sections), samples in vials (archaeobotanical remains e.g. seeds; pollen sample residues; insect remains; molluscs), resin-embedded sediment blocks and dendrochronology samples (dry wood blocks/cores).

3.2.2 The selection strategy for the retention of environmental material will be decided in collaboration with all relevant specialists throughout the duration of the project. No material will be discarded until the analysis and reporting stage of the project has been completed and any discarded material will be based on recommendations made by specialists. It is possible that material derived from environmental samples, or sub samples thereof, may be retained for future analysis, including scientific

3.2.3 A full list of relevant guidance and best practice documents are included within the WSI.

Dunne, J. (ed.) 2017 Organic residue analysis and Archaeology: guidance for good practice Swindon: Historic England

Dunne, J. (ed.) 2017 Organic residue analysis and Archaeology: supporting information Swindon: 8 Historic England

Historic England 2008 Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains Swindon: Historic England

Historic England (2011) Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation (second edition) Swindon: Historic England

Historic England (2014) Animal bones and archaeology: guidance for dealing with archaeological animal bones and teeth, from project planning through to post-excavation Swindon: Historic England

Historic England 2015 Geoarchaeology: Using earth sciences to understand the archaeological record Swindon: Historic England

De-Selected Material

All material will be analysed by a relevant specialist during the assessment and reporting stages of the project.

All de-selected material will, with the agreement of all stakeholders, will be discarded. material from samples will be retained by the specialists or by MAP or York Archaeology (for inclusion in their handling and teaching collections)

Amendments

Date	Amendment	Rationale	Stakeholders

Appendix 2. Digital Data Management Plan

Project Administration	
Project Name	Thurnscoe Bridge Lane
Site Code	05.44.24
Project Description (E.g., number of trenches, area of excavation)	Excavation twenty five archaeological trenches
OASIS ID	maparcha1-529222
Museum Name & Accession code (where applicable)	TBC
Client/ Landowner (where applicable)	Avant Homes Yorkshire
Project Lead	TBC
Project Manager	Charlie Puntorno
Date & Version	B 27.08.25

Geophysical survey has previously been undertaken at the site and will be used to inform the evaluation strategy. The data images including interpretation are likely to be included within the project report with permission, but the original data copyright resides with the original researchers (Magnitude Surveys) and will not be deposited with this project archive.

Data Collection

Data to be Collected/ Created (to be updated throughout duration of project)		
Type	Format	Volume
GIS	ESRI Shapefile (.shp & .shx & .dbf, plus associated files) (Metadata to be deposited as .csv)	WSI= 2 shapefiles
CAD	.dwg, .dxf (Metadata to be deposited as .csv)	
Spreadsheets & databases	Excel (.xlsx) Access (.accdb) (to be deposited as .csv)	
Images	.jpg, .raw (to be deposited as .tiff)	WSI=1 .jpg
Text/ Documents	Word (.docx) PDF (.pdf)	WSI = 3.docx & 5 pdf

- All data will be collected in line with the project specific Written Scheme of Investigation, *Guides to Good Practice* produced by the ADS and MAP's guidance on the *Creation and Treatment of Documentary, Digital and Material Archives*.
- The digital archive will be stored in an appropriately named project specific folder which will be regularly backed up. All data raw data will be stored in the appropriate folder. Version control will be maintained throughout the project.

Documentation and Metadata

- Data collected will include standard formats which maximise opportunities for use and reuse in the future
- Data documentation will meet the requirement of the Museum Deposition Guidelines, Digital Repository Guidelines and the methodology described in the Written Scheme of Investigation. Following the completion of the project all paper-based material will be digitised and included within the archive.
- A metadata form consistent with ADS examples will be completed for each dataset and included within the final archive. As a minimum the metadata will include a file name, keywords & dates, creator & date of creation, copyright holder, location (site address or coordinates as appropriate), software and version
- An archive catalogue documenting both physical and digital archive products will be maintained and submitted with both the Museum and Trusted Digital Repository (ADS).

Ethics and Legal Compliance

- MAP staff must only participate in work which conforms to accepted ethical standards and which they are able to competently preform. Where there is any doubt, which should be raised with management.
- MAP places an emphasis on internal peer review of documents and the discussion of results. All Written Schemes of Investigations are reviewed by the relevant Local Authority Archaeologists prior to submission. Where confidentiality is requested by a client, this is strictly upheld by MAP.
- The project archive will include the names of all individuals who contributed to the project unless it is requested otherwise. No personal data will be held within the project archive.

- MAP have a GDPR compliant Privacy Policy underpins the management of all personal data. Such data is not retained in project specific folders and is not accessible to unauthorised staff nor will it be shared with any third-party companies.
- Unless otherwise agreed at the inception of a project, the copyright of all data collected throughout the project belongs to MAP. The inclusion of data derived from external specialists and/or contractors is secured at the point of agreement of their participation on the project.
- By depositing an archive with an HER or museum MAP gives permission for the material presented to be used by the recipient, in perpetuity, although MAP retains the right to be identified as the author of all project documentation and reports as specified in the Copyright, Designs and Patents Act 1988 (Chapter IV, section 79).
- All relevant licences and permissions to reproduce external data are discussed in the site-specific Written Scheme of Investigation and all subsequent reporting, including Desk Based Assessment. Where site specific licences are required (i.e. for the removal of human remains), licence numbers and dates will also be included within site reports and a copy of the licence held within the archive.

Data Security: Storage and Backup

- MAP's current IT infrastructure is divided between SharePoint for documents and an NAS (Network Attached Storage) drive for larger data files (acting as back up of locally held files on work laptops). Both require username and password intrinsic to the individual users.
- Digital Recording is currently provided by DiggItArchaeology.com, who provide access to their mobile app and web app via email and password login. The backup of recorded material is provided by DiggIt's use of the three-point server system with automatic backups working in tandem. DiggIt's data is encrypted in transit and stored and backed up on a MongoDB Atlas server cluster of 3 replicate nodes in the Republic of Ireland (in the GDPR-compliant EEA). In the rare event that one server is down, a replicate node instantly replaces it with no perceptible change in behaviour or functionality. These servers are backed up daily, and the datacentres housing them are accredited to ISO 27001 (2005) or higher. In the very unlikely scenario that data must be restored from a backup, we estimate the Recovery Time Objective (RTO) for restoring this data to be approximately 10 minutes of downtime. At the close of the site material will be downloaded and stored using SharePoint.

- In regard to filing within the SharePoint and NAS, a folder template sets out the associated locations of files; these folders should be appropriately named and populated with file names for field data stored on the NAS. See section on "Naming Conventions"
- SharePoint is maintained/delivered under licence by Practical Networks with in-house maintenance by the Commercial Director. The NAS drive is a WD PR2100 and is maintained by the Archaeology and Geomatics Manager with weekly backups and checks of the data; field data such as photographs and survey data to be uploaded weekly by the Project Officer.
- Field and in-house access to the SharePoint and the NAS drive is limited/restricted by user email and password.
- Files such as databases, tables and documents required by the external specialists and in-house post-excavation team will be distributed using the SharePoint system. Any further data such as photographs, AutoCAD files, QGIS projects etc will be distributed via secure alternative means (WeTransfer or similar) to protect the integrity of the NAS Drive.

Selection and Preservation

- A selection strategy and the DMP for each project will be considered from the inception of the work. The process of selection should be devised in consultation with LPA frameworks, guidance and individual stakeholders, reviewed by the Appointed Project Manager at each milestone of a project's lifespan; inclusive a peer review and appropriate consultation with stakeholders to provide quality assurance.
- The strategy should dictate which parts of the archive, both digital and analogue, are relevant and would provide future generations with a soundly curated archive. Documents and Data should be quality assured prior to deposition, checking for consistency and following any deposition guidance of the eventual repository
- All costs relating to the digital archiving have been factored into the original quote and intended repository will be notified. At each milestone costing considerations must be undertaken to ensure that deposition is not out of pocket or unexpectedly above factored levels.

Data Sharing

- A summary of the site will be made available at the earliest opportunity, latterly curated and adapted at each major milestone to reflect most up to date information regarding the site.
- All reports relevant to the site will also be curated and added to the OASIS record, updated at pertinent milestones of the project; the final report must be lodged with the HER in the first instance.
- Any archive material must be authorised for dissemination by the relevant stakeholders, primarily this is likely to be the client; though any such action will only be temporary, and usually as a result of planning issues.

Responsibilities

- The appointed Project Manager shall ensure the DMP is correctly followed, reviewed and adapted (where appropriate) at each milestone. In the unlikely event that the project changes hands, the responsibility will ultimately rest with the Managing Director, who will ensure the needs of the DMP are addressed and properly handed over to the next Project Manager.
- Curation of the field data, data synthesis/analysis, quality assurance should be the responsibility of senior figures of the project team, usually the Project Officer/Supervisor. They will make sure that all data is stored correctly and backed up to minimise any loss of integrity of the archive.
- Reports both internal and external shall be subject to MAP's ideal naming preferences of project files. It is the responsibility of each department to ensure their curated report/work is correct, quality assured and seek clarification from the authors (external or otherwise) of any document which contains errors.
- All work will be latterly audited by the Project Manager working towards creating an archive and level of reporting which is both ethically sound, accurate and reliable for future use by anyone internal or external to the company.

Naming Conventions

- Files and Folders should be named consistently throughout the project folder. The use of an _ (underscore) should be used to separate words instead of spaces e.g. use Pott_Asmnt instead of Pottery Assessment. File names vary according to the content of the file, the _ rule still applies here.

- There should be no spaces in any file naming
 - No symbols (e.g. #?,) should be used as they are not ADS compliant
 - Full stops in file names are not accepted, except between file name and file type
 - Abbreviate where possible, losing extraneous vowels and consonants, as file paths are cumulative and cannot exceed a certain number of characters
 - Naming Examples.
- Reports and digitised registers
Should follow the structure of: Site Code, Type of Work (Adding excavation Phase if required), Component, Version. Varied slightly for digitised registers as per example:
e.g. 05-08-20-TT_FINALReport_A210622
05-26-19-EXC_PhB_App01_CtxtListing
 - Digital Photographs and Black & White Photographs
Should include the Site Code, Type of Work (Adding excavation Phase if required), and Frame No, varied slightly for B&W film:
e.g. 05-08-20-TT_Digi_001
05-26-19-EXC_PhB_BW_FLM01-001
NB be aware that jpegs and raw (as well as selected archive tiff's) should be in separate folders and be concurrent with each other
 - Scanned Site Registers
Should be scanned in pdf format and be formatted as: Site Code, Type of Work (Adding excavation Phase if required), Register Name.
e.g. 05-08-20-TT_CtxtReg
05-26-19-EXC_PhB_DrawReg
 - Scanned Context Sheets & other site sheets
Should be scanned in pdf format and be formatted as: Site Code, Type of Work (Adding excavation Phase if required), Type of Sheet, Sheet Nos.
e.g. 05-08-20-TT_Ctxt-0001-0050
05-26-19-EXC_PhB_Ctxt0001-0050
 - Site Drawings and Plans

Should be scanned as TIFF's and be formatted as: Site Code, Type of Work (Adding excavation phase if required), Drw, Sheet No

e.g. 05-08-20-TT_Drw_Sh-001

05-26-19-EXC_PhB_Drw_Sh-001

NB. The phase of work or field numbers may only be relevant at the time the work was undertaken, if work is part of a larger continuing outline, check where the next tranche of numbers will start and bare that in mind or check with PM prior to archiving reports.

List of Abbreviations

Registers

Ctxt

Drw

Digi

BW

Env

SF

Specialist Reports

Pott Pottery

ABn Animal Bone

FeR Iron Waste Residues

Crbn Carbonised Plant Remains

Cnsrv Conservation

Appendix 3. Environmental Strategy

By Diane Alldrit

The on-site environmental sampling strategy will systematically seek to recover a representative sample of botanical, molluscan (both terrestrial and aquatic), avian and mammalian evidence from the full range of contexts encountered during the excavation. This will enable, at the assessment stage, the possibility for radiocarbon dating material to be obtained, and for an initial analysis of the economic and environmental potential of the site. In order to achieve this, a bulk sample (BS, Dobney *et al* 1992) comprising an optimum size of 40litre of sediment (where possible) should be taken from **every stratigraphically secure and archaeologically significant context**. In practice it may not always be possible to obtain 28l of sediment from certain features during the assessment stage, for instance from partially excavated pits or post-holes, in which case a single bucket sample, c.10 to 14litre should be taken at the site supervisors' discretion. Deposits of mixed origin, for instance topsoil, wall fills and obvious areas of modern contamination, should be avoided where possible, as these will contain intrusive material and not provide secure radiocarbon dates.

All buckets and other sampling equipment must be clean and free of adherent soil in order to prevent cross-contamination between samples. If dry soil is to be stored for any length of time it should be kept in cool, dry conditions, and away from strong light sources. However, it is preferable to process samples as soon as possible after excavation.

Bulk soil samples shall be processed using an Ankara-type water flotation machine (French 1971) for the recovery of carbonised plant remains and charcoal. The flotation tank should contain a >1mm mesh for collection of the retent or 'residue' portion of the sample (which may contain pottery, lithics and animal / bird bone, in addition to the heavier fragments of charcoal which do not float). The 'flot' portion of the sample, which may include carbonised seeds, cereal grain, charcoal and sometimes mollusc shell, should be captured using a nest of >1mm and >300micron Endicot sieves. Flotation equipment, including sieves, meshes, brushes and so forth must be meticulously cleaned between samples in order to prevent contamination of potential radiocarbon dating material. All material resulting from flotation will be dried prior to microscopic examination. Flotation is not suitable for the recovery of pollen or for processing waterlogged samples, which shall be discussed below.

Where there is potential for waterlogged preservation, shown for instance by the presence of wood and other organic or wet material, then a 5 to 10litre size sample should be taken (GBA sample, Dobney *et al* 1992). This material is to be retained for later processing using laboratory methods to enable the recovery of waterlogged plant material and insects. For assessment purposes a 1litre sub-sample of the organic sediment from each potential waterlogged sample shall be processed using laboratory wash-over methods, and once processed **kept wet**. All waterlogged samples awaiting processing should be kept damp, preferably stored in plastic sealable tubs, and in cool conditions. Where large, waterlogged timbers are recovered these should be stored under refrigerated conditions and an appropriate conservator consulted.

There is the possibility that the waterlogged deposits may require parasite egg analysis. It is proposed that the 'squash' technique is adapted, this would require small lumps of raw sediment approximately 3mm in diameter taken from three separate points from within the sample and homogenised in a little water by shaking. After allowing coarse particles to settle for a few moments, a drop of the supernatant was removed. This work would be undertaken by either John Carrott or Harry Kenwood if necessary.

If sediment suitable for pollen analysis is encountered, for instance rich organic peaty deposits, or deep ditch sections with organic preservation, the archaeobotanical specialist is to be consulted prior to any sampling taking place. These deposits would require sampling with large kubiena tins and require the specialist to be on-site. Pollen analysis, even at assessment level, would subsequently impose a considerable cost implication should it be carried out.

The specialist is available to provide consultation and advice on the environmental sampling strategy throughout the course of the excavation and during post-excavation processing if required.

References

Dobney, K. D., Hall, A. R., Kenward, H. K. and Milles, A. 1992 A working classification of sample types for environmental archaeology. *Circaea* 9 24-26.

French, D. H. 1971 An Experiment in Water Sieving. *Anatolian Studies* 21 59-64.

Appendix 4. Conservation Strategy

By Ian Panter of York Archaeological Trust

Artefacts from all categories and all periods will be recovered as a matter of routine during the excavation. When retrieved from the ground finds will be kept in a finds tray or appropriate bags in accordance with **First Aid for Finds**. Where necessary, a conservator may be required to recover fragile finds from the ground depending upon circumstances.

If waterlogged conditions are encountered a wide range of organic materials may be recovered, including wood, leather and textiles. Advice will be sought from a conservator to discuss optimum storage requirements before any attempt is made to retrieve organic finds and structural timbers from the ground.

After the completion of the fieldwork stage, a conservation assessment will be undertaken which will include the X-radiography of all the ironwork (after initial screening to separate obviously modern debris), and a selection of the non-ferrous finds (including all coins). A sample of slag may also be X-rayed to assist with identification and interpretation. Wet-packed material, including glass, bone and leather will be stabilised and consolidated to ensure their long-term preservation. All finds will be stored in optimum conditions in accordance with **First Aid for Finds** and **Guidelines for the Preparation of Excavation Archives for Long-Term Storage** (Walker, 1990).

Waterlogged wood, including structural elements will be assessed following the English Heritage guidelines, **Waterlogged wood: sampling, conservation and curation of structural wood** (Brunning 1996). The assessment will include species identification, technological examination and potential for dating.

The conservation assessment report will include statements on condition, stability and potential for further investigation (with conservation costs) for all material groups. The conservation report will be included in the updated project design prepared for the analysis stage of the project.