

Longhedge Solar Farm, Nottinghamshire:

Archaeological Evaluation

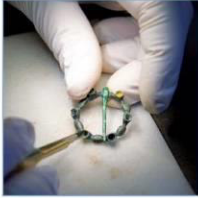
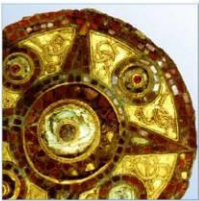
Written Scheme of Investigation

Easting: 476129 Northing: 343467

AOC Project No: 53135

Planning Ref: 22/02241/FUL

Date: March 2023



ARCHAEOLOGY

HERITAGE

CONSERVATION

Longhedge Solar Farm, Nottinghamshire:

Archaeological Evaluation

Written Scheme of Investigation

On Behalf of:	Neo Environmental Ltd Wright Business Centre, 1 Lonmay Road, Glasgow G33 4EL
AOC Project No:	53135
Planning Ref:	22/02241/FUL
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Date:	March 2023

This document has been prepared in accordance with AOC standard operating procedures.

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Contents

Contents.....	ii
1 Introduction.....	1
2 Site Description	1
3 Geological, Archaeological and Historical Background	1
4 Scope of Works	3
5 Aims.....	4
6 Methodology	5
7 Capability Statement	10
8 Quality Assurance and Standards	11
9 Health and Safety	11
10 Insurance.....	12
11 Copyright and Confidentiality	12
12 Archaeological Risk Register	13
13 Bibliography.....	13

Figure 1: Site location plan

Figure 2: Trench plan

1 Introduction

- 1.1 This Written Scheme of Investigation (WSI) has been prepared by AOC Archaeology Group for Neo Environmental Ltd ('the client'). It details the methodology for undertaking an archaeological evaluation by trial trenching at the site of a proposed solar farm, located on land between Hawksworth and Thoroton, Nottinghamshire. Two phases of archaeological evaluation have been proposed: Pre-determination (Phase 1), Post-consent (Phase 2).
- 1.2 The archaeological work will be undertaken in accordance with this WSI and the requirements of nationally recognised archaeological guidance, including the professional standards issued by the Chartered Institute for Archaeologists (CIfA) (specifically the *Standard and Guidance for Archaeological Field Evaluation* (2014a)).
- 1.3 The archaeological works will be managed in accordance with the Historic England publications *Management of Research Projects in the Historic Environment (MoRPHE): Project Managers Guide* (2006), and the *MoRPHE Project Planning Note 3: Archaeological Excavation (PPN3)* (2008). It will also meet the requirements of the National Planning Policy Framework (NPPF; Chapter 16: 'Conserving and enhancing the historic environment'; MHCLG 2021).

2 Site Description

- 2.1 The proposed Solar Farm (henceforth "the site") centres on Easting 476129 Northing 343467, in a semi-rural setting on lands between the settlements of Hawksworth and Thoroton, c. 15.5km east of Nottingham, Nottinghamshire. The site comprises nine fields covering a total area of c. 94.24 hectares, with an elevation range of c. 20m to 25m AOD.
- 2.2 The site boundaries largely consist of mature to lower hedgerows with individual trees and some evident gaps. There are internal field boundaries present on the site comprising of hedgerows, tree lines and strips of woodland shelter belt. Existing infrastructure consists of electricity pylons extending both north to south and northwest to southwest through some of the fields.

3 Geological, Archaeological and Historical Background

- 3.1 The character and distribution of past human activity can be better understood through the consideration of the past landscape or environmental context.
- 3.2 The British Geological Survey (BGS) GeoIndex (2023) shows that much of the site consists of Branscombe Mudstone Formation, a sedimentary bedrock formed between 228.4 and 201.3 million years ago during the Triassic period. Sedimentary superficial River Terrace deposits formed between 2.588 million years ago and the present during the Quaternary period are present in the western portion of site. Sedimentary superficial Whatton Sand and Gravel deposits, formed 2.588 million years ago and the present during the Quaternary period, may be present in the southern part of site. The north-western part of site consists of a Arden Sandstone Formation, a sedimentary bedrock formed between 237 and 228.4 million years ago during the Triassic period.
- 3.3 Analysis of heritage assets recorded in the local Historic Environment Record (HER) for a Cultural Heritage Impact Assessment (Neo Environmental 2022) indicates significance evidence for prehistoric activity. Within the study area of the impact assessment there are five identified sites possibly dating to the prehistoric period. Cropmarks identified an enclosure in the vicinity of Thoroton and an enclosure complex west of Thoroton, Shelton Road, containing five small enclosures and linear features. Sherds of Iron Age pottery have been found adjacent to these enclosures, along with a flint scatter of 53 implements discovered whilst walking around the cropmark. A series of pit alignments, trackway and other features have also been identified in the vicinity of the site through aerial imagery and National

Mapping Programme Data. The closest prehistoric scheduled monument is a timber circle located c.4.65km to the north of site.

- 3.4 Evidence of Romano-British activity on site is possible. Although this period appears underrepresented within the local Historic Environment Record (HER) data, there is evidence of Roman pottery scatters and monuments within the landscape of the site. Located c.3.4km to the west of the site is a Scheduled Monument denoting a Romano-British villa. Within the wider landscape there is the presence of the Fosse Way Roman Road, to the west and northwest of site.
- 3.5 The majority of scheduled monuments identified within the 5km study are associated with the medieval period. The records represent the medieval fabric of the region and particularly the development of the villages in the landscape surrounding the site. Thoroton, Hawksworth, Sibthorpe and Orston each appear in the 1086 Domesday Book, with medieval ecclesiastical architecture remaining today. The surrounding landscape includes the remains of churches, moats, dovecotes, deserted medieval settlements, motte castles and various other structural remains dating to this period. The location of the site between two medieval villages suggest that the land was likely farmed during this period and may have limited potential for medieval remains.
- 3.6 There is substantial evidence of post-medieval and modern activity within the 5km study area. Evidence of agricultural farmsteads, land use features and residency developments show the predominate land use of the landscape over the last few hundred years. No post-medieval features are recorded inside the area of the site, but the land is assumed to have been in relatively consistent agricultural usage during this period.
- 3.7 The 1820 Henry Stevens map shows that the site was largely within agricultural usage at that time, divided into fields. A footpath is depicted running west-southwest to east-northeast through the site connecting the village of Hawksworth to the road junction at the northeast corner of the site. Geophysical anomalies adjacent to a probable crossing point of a watercourse is indicative of a possible settlement at this location. However, no structures are depicted here on the 1820 map so any settlement here would have predated this time.
- 3.8 Both the 1883 and 1912 Ordnance Survey (OS) maps show that land with the site remained in consistent agricultural use. The internal boundaries appear to have been altered in the mid-19th century to create a much larger number of fields, which were more regular in shape and size. The position of the waterway and footpath appear to be depicted along the same trajectory, with the only change being the alteration of the footpath to mirror field boundaries in the 1912 map in some locations.

Previous Works

- 3.9 There have been no archaeological excavations at the site, however, non-intrusive archaeological surveys have been conducted.
- 3.10 A LiDAR survey (Neo Environmental 2022) of the site yielded no clear features of archaeological potential. Most of the visible features were derived from internal field boundaries and natural characteristics. Some faint linear patterns were visible, which may indicate former field systems that predate 19th century mapping.
- 3.11 A magnetometry survey of the site was conducted between 14th – 23rd March 2022 by Headland Archaeology. The results of the survey provided significantly greater detail about the cropmark enclosures and trackways identified in the HER. The subsequent results of the survey meant a large area to the east of the proposed development site has been removed so it no longer lies within the boundary of possible significant archaeological activities. Within the current site boundary there is still

potentially significant sub-surface archaeological activity, with a potential for further undetected features due to the presence of paleochannel and associated alluvial deposits and their masking display in the geophysical data.

4 Scope of Works

- 4.1 A total of 290 trenches, which represent 3.5% of the area available for trenching, will be excavated over two phases. Each phase will comprise the excavation of 145 trenches. The first phase will be undertaken pre-determination of the planning application. All trenches measure 50m x 2m. It may be necessary to relocate some of the trenches to avoid constraints identified on site. The site contains nine separate fields (Figure 2).
- 4.2 *Phase 1 Pre-determination:* This phase aims to target the geophysical anomalies identified in the magnetometry survey (Headland 2022). Some of the trenches have been positioned in areas of geophysical anomalies, whilst others are positioned randomly.
- 4.3 *Phase 2 Post-consent:* This phase will target the remaining areas not investigated during Phase 1. The trenches assigned to this phase on Figure 2 are indicative. The final plan will be determined by the results of Phase 1.
- 4.4 The archaeological works and subsequent post-excavation work will conform to current best archaeological practice and local and national standards and guidelines:
- ALGAO – Advice Note for Post-excavation Assessment (ALGAO 2015)
 - Chartered Institute for Archaeologists – Standard and Guidance for Archaeological Field Evaluation (CIfA 2014a, updated 2020).
 - Chartered Institute for Archaeologists – Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (CIfA 2014b, updated 2020).
 - Chartered Institute for Archaeologists – Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (CIfA 2014c, updated 2020).
 - Chartered Institute for Archaeologists – Code of Conduct (CIfA 2019, updated 2022).
 - English Heritage – Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (English Heritage 2011).
 - Historic England – Waterlogged Wood: Guidelines on the Recovery, Sampling, Conservation and Curation of Waterlogged Wood (HE 2010).
 - Historic England – Management of Archaeological Projects (HE 2015).
 - Historic England – The Role of the Human Osteologist in an Archaeological Fieldwork Project (HE 2018a).
 - Historic England – Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis and Conservation (HE 2018b).
 - Historic England – Animal Bones and Archaeology: Recovery to archive (HE 2019).
 - Museum of London – Archaeological Site Manual (MoLAS 1994)
 - Portable Antiquities Scheme. Code of Practice for Responsible Metal Detecting in England and Wales (2017)
 - RESCUE & ICON – First Aid for Finds (RESCUE & ICON 2001).
 - United Kingdom Institute for Conservation – Conservation Guidelines No.2 (UKIC 1983).

- United Kingdom Institute for Conservation – Guidance for Archaeological Conservation Practice (UKIC 1990).

- 4.5 A unique site code will be assigned for the project and will be used as the site identifier for all records produced.
- 4.6 A copy of the approved WSI will be held on site along with a detailed site risk assessment/method statement. All site staff will be made aware of and will have reviewed all documents.
- 4.7 The Nottinghamshire County Council Senior Practitioner in Archaeology (NCCSPA) will be advised in writing two weeks in advance of the proposed start date of the works and will be invited to monitor the works.

Unexpectedly significant or complex discoveries

- 4.8 Should there be, in the professional judgement of the senior archaeologist on site, unexpectedly significant or complex discoveries during the evaluation which warrant more detailed recording, AOC Archaeology will contact the client immediately with the relevant information. Work on any unexpectedly significant or complex discoveries will cease until a suitable additional mitigation strategy is agreed. This strategy will be agreed between the NCCSPA, the client and AOC Archaeology.

Further archaeological mitigation

- 4.9 The results of the evaluation will be used to formulate an appropriate archaeological mitigation strategy for the proposed development site, if one is required. This might involve additional excavation at the site following the production of an updated archaeological WSI. The mitigation strategy would need to be discussed with and approved by the NCCSPA. Following any additional excavation, further stages of assessment, analysis and publication may be required.

5 Aims

- 5.1 The main aim of the archaeological evaluation is to gather sufficient information to establish the presence/absence, character, extent, state of preservation, date and significance of any archaeological remains within the proposed development area, and to inform further archaeological mitigation strategies should they be necessary.
- 5.2 The specific aims are to:
- Locate, record, characterise, and determine the extent of any surviving sub-surface archaeological remains;
 - Excavate and record identified archaeological features and deposits to a level appropriate to their extent and significance;
 - Report the results of the fieldwork and place them within their local and national context; and
 - Produce a comprehensive site archive and a descriptive and interpretive report.
- 5.3 The specific research objectives of the archaeological evaluation are to:
- To establish if alluvial deposits from the potential paleochannel have masked archaeological features and/or deposits;
 - establish the presence of prehistoric activity within the site, and if present, if this activity relates to the cropmarks recorded to the west of Thoroton;

- To establish the presence of Romano-British activity within the site, and if present, if this activity relates to the Roman villa situated c.3.4km west of site;
- To establish the presence of medieval activity within the site;
- To establish the presence of post-medieval and modern activity within the site, and if present, establish a chronology of activity to show the development and use of the land during this period; and
- To assess the impact of the proposed development on any surviving archaeological remains at the site.

5.4 The results of the evaluation may also inform broader research initiatives outlined in *The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda* (Cooper 2006):

- There is scope for the comparison of spatial differences between different archaeological periods (p.42).
- Palaeochannels of the main rivers have great potential for the study of environmental change and the beginnings of modern river systems; coordination and publication are required (p.264).

6 Methodology

- 6.1 A Project Officer or Project Supervisor will manage the on-site day-to-day operations and will update the Project Manager on a daily basis regarding results and programme. This information will be fed back to the client. Field staff will be suitably trained and experienced archaeologists who are CSCS certified. Site inductions and tool box talks will be provided to all staff working on the site.
- 6.2 Prior to commencing fieldwork the client will furnish AOC Archaeology with up-to-date service and utilities information for the area of investigation. AOC Archaeology will then arrange GS6/HG47 applications (where required), liaise with utilities and service providers and undertake any relevant site visits.
- 6.3 A detailed Risk Assessment Method Statement (RAMS) will then be prepared and approved by our external Health and Safety consultant. The RAMS will be submitted to the client for review before the commencement of the site works. A qualified First Aider will be present on site at all times.
- 6.4 It is assumed that the client will have addressed all significant programme constraints prior to the start of fieldwork, including ecological and environmental constraints and landowner access issues. Once on site, AOC Archaeology staff will visually inspect the site prior to the commencement of any machine excavation, including the examination of any available exposures. A photographic record will be made of the evaluation area prior to its excavation as a record of existing ground conditions. All areas of excavation will be scanned with a Cable Avoidance Tool (CAT) before excavation; this work will be undertaken by a qualified and competent person.
- 6.5 Static welfare facilities will be provided for the duration of the evaluation which will include canteens, toilets, washing facilities, drinking water supplies and anti-bacterial hand sanitiser. These facilities will be available for all staff, subcontractors, consultants and visitors.
- 6.6 The evaluation trenches will be accurately located using survey-grade GPS (Trimble R8/R10) equipment. All surveys will be accurately tied into the Ordnance Survey National Grid and Ordnance Datum Newlyn heights.

- 6.7 The trenches will then be excavated using a tracked mechanical excavator fitted with wide toothless ditching bucket down to the first archaeological horizon or to the natural substrate, whichever is encountered first. All machining will be conducted under the direct supervision of an appropriately qualified and experienced archaeologist.
- 6.8 Overburden and subsoil will be kept separate and will be stored in separate spoil heaps either side of the trenches.
- 6.9 The maximum safe working depth of all excavation areas will be determined by the on-site Project Officer in consultation with the relevant AOC Archaeology Project Manager, and will be based on an assessment of: the depth of the excavation; the type of soils / fill material; the weather conditions; the proximity to highways or buildings; and the distance from plant and other construction works. Where appropriate and practicable, trench edges will be stepped to ensure safe access and egress.
- 6.10 Following completion of the initial machine excavation, further excavation will be undertaken by hand, although mechanical equipment may be used to remove some deposits or structural elements if required and with the agreement of the NCCSPA.
- 6.11 Exposed surfaces will be cleaned in order to assist the identification of any features. Exposed archaeological deposits and features will then be excavated in an archaeologically controlled manner.
- 6.12 The excavation sampling policy will be as follows, unless otherwise agreed with the NCCSPA:
- a 100% sample will be taken of all stake-holes;
 - a 50% sample will be taken of all post-holes;
 - a 50% sample will be taken of all pits with a diameter of up to 1m;
 - a minimum 25% sample will be taken of pits with a diameter of over 1.5m; this should include a complete section across the pit to recover its full profile;
 - a minimum 20% sample will be taken of all linear and curvilinear features less than 5m in length, each excavated section to be 1m in length;
 - a minimum 10% sample will be taken of all linear and curvilinear features greater than 5m in length, each excavated section to be 1m in length;
 - Deposits at junctions (and interruptions) in linear features will be excavated to determine the relationships between the different components;
 - All linear terminal ends will be excavated;
 - Any in situ building remains will be fully recorded for the extent that they are exposed; brick and stone samples may be taken if potentially diagnostic of date or function; and
 - Significant features will be 100% excavated, if required by the NCCSPA.
- 6.13 Trenches in Areas 3, 4, 5, 6, 7 and 8 may need to be further investigated to assess the impact the potential paleochannel, identified through geophysical anomalies, may have on archaeological features and deposits. Trenches located within a close proximity of the potential paleochannel, in Phase 1 (pre-determination) and Phase 2 (post-consent), will need to investigate alluvial deposits and assess if they are masking archaeological features or deposits. Additional support will be available from AOC Archaeology's Geoarchaeology Project Manager, Virgil Yendell.
- 6.14 A full written, drawn and photographic record will be made of all features revealed during the course of the archaeological evaluation, including representative sample sections at an appropriate scale. A record of the full sequence of all archaeological deposits as revealed in the trenches will be produced.

Plans will be completed at a scale of 1:50 or 1:20 (as appropriate), with section drawings at a scale of 1:10 or 1:20 (as appropriate). All recording will be undertaken to meet the standards and requirements of the Archaeological Field Manual (MOLAS 1994). Records will be produced either using pro-forma context sheets compatible with those published by the Museum of London (MOLAS 1994) or AOC Archaeology's cloud-based digital recording system. Written descriptions, comprising both factual and interpretive elements, will be recorded.

- 6.15 All site drawings will be accurately tied into the Ordnance Survey National Grid and Ordnance Datum Newlyn heights using survey-grade GPS equipment.
- 6.16 A full photographic record will be maintained using a digital SLR camera capturing data in RAW and JPEG formats. This will illustrate archaeological features, deposits and finds in detail and in a broader context. In addition, appropriate record photographs will be taken to illustrate work in progress.
- 6.17 All identified finds and artefacts will be collected and retained. A discard policy will be agreed with the NCCSPA following the post-excavation assessment stage of the project. Where required, suitable specialists will be employed during fieldwork to advise, date or excavate significant finds or features.
- 6.18 All finds will be bagged according to their context, and significant finds will be allocated a recorded finds number and their positions surveyed individually. Finds requiring further analysis, excavation or conservation will be lifted and packed using suitable archival standard storage materials, and assessed in a relevant conservation laboratory.
- 6.19 Finds will be exposed, lifted, cleaned, conserved, marked, bagged and stored in accordance with the guidelines set out in United Kingdom Institute for Conservation's *Conservation Guidelines No. 2* and the ClfA guidelines *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2014b).
- 6.20 If required, conservation will be undertaken by approved conservators in line with the *First Aid for Finds* guidelines (Watkinson and Neal 1998). In accordance with the procedures outlined in Historic England's *MoRPHE PPN3* (2008), all iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy will be X-radiographed before assessment.
- 6.21 All finds of gold and silver will be moved to a safe place. 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. All finds of gold and silver, and associated objects, will be reported to the coroner according to the procedures relating to the Treasure Act 1996 (and the act's amendment of 2003), after discussion with the client and the NCCSPA.
- 6.22 The client, the coroner and the NCCSPA will be informed if human remains are found. Disturbance of human skeletal remains will be kept to a minimum. Any human remains encountered will be accurately recorded in plan and, where appropriate, will be examined in situ by a palaeopathologist, but no further investigation will occur and the remains will be covered and protected.
- 6.23 Removal of human remains will only take place under appropriate government and environmental health regulations, in compliance with the Burial Act 1857 and after obtaining a Section 25 exhumation licence from the Ministry of Justice.
- 6.24 The palaeoenvironmental sampling strategy will comprise the removal of bulk samples from securely sealed and hand-excavated contexts, excepting those with excessive levels of residuality or those with minimal 'soil' content (such as building rubble). Bulk samples will comprise a representative 40 litre sample. However, where a context does not yield 40 litres of material, smaller samples will be taken (generally the maximum amount of material that it is practicable to collect). Bulk samples will be used

to recover a sub-sample of charred macroplant material, faunal remains and artefacts. Suitable deposits will also be sampled for industrial residues. If buried soils or other deposits are encountered, column samples may be taken for micromorphological and pollen analysis. Environmental material will be stored in controlled environments and environmental and soil specialists will be consulted during the course of the work if necessary.

- 6.25 Waterlogged organic materials will be dealt with in line with Historic England's guidance documents *Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis and Conservation* (2018) and *Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood* (2010).
- 6.26 The recovery of material suitable for radiocarbon, archaeomagnetic and/or dendrochronological dating will be sought, as appropriate. Sampling of this nature will be agreed in discussion with the client, the NCCSPA and the appropriate Environmental Specialists. If sufficient dates are obtainable the use of Bayesian analysis will be considered for a suite of dates during the post-excavation assessment.
- 6.27 On completion of all archaeological excavation and recording, and following approval from the NCCSPA and the client, the trenches will be backfilled. Overburden and subsoil will be reinstated separately but no engineered re-instatement will be undertaken. A photographic record of the backfilled trenches will be made.

Reporting

- 6.28 An assessment report outlining the results of the archaeological evaluation will be produced. The report will assess the stratigraphic sequence and the significance and extent of any archaeological features identified. The potential of any retrieved artefacts and soil samples for further analysis will also be considered.
- 6.29 The report will be prepared in accordance with the 2015 ALGAO guidance for post-excavation assessment (ALGAO 2015), and will contain the following:
- A concise non-technical summary of the results of the work, and its aims and objectives;
 - A frontispiece including the site code/project number, planning reference number, dates when the fieldwork took place and a full National Grid Reference;
 - An introduction, including a site description, background on the development, details of the local topography and geology, and the reasons for the archaeological work;
 - An account of the aims and objectives of the work;
 - An account of the methodology and equipment used;
 - A clear exposition of the results of the work, the structural sequence and the dates, forms and functions of the features identified; specialist assessment reports will be reproduced as Appendices to the report and the results of the assessments will be considered and incorporated into the main body of the results;
 - A discussion which places the results of the work into the broader historical, regional and national context, and which assesses site phasing and the quality and significance of the remains encountered;
 - Specialist assessments of the artefacts recovered including an assessment of their potential for further analysis and study, and recommendations for retention / discard and illustration (where appropriate), in line with national guidelines;
 - Specialist assessments of the environmental and industrial samples taken, with a view to their potential for subsequent study;

- Recommendations for further analysis;
- An integrated concordance table that details every context and correlates them to group, number, finds, samples taken and the potential for palaeoenvironmental analysis and radiocarbon dating;
- All text will be cross-referenced with plans, photographs and other illustrative material;
- Illustrations will include: a site location plan; an overall site plan accurately identifying the location of the trenches; individual trench plans at a suitable scale, as excavated, indicating the location of all archaeological features; plans and sections at an appropriate scale showing features, deposits and the extent of the identified archaeology;
- Photographic records of selected archaeological features and finds;
- A description of the site archive and the name of the institution with which it will be deposited;
- References and bibliography of all sources used; and
- Archiving arrangements.

6.30 A draft copy of the final report will be provided to the client and the NCCSPA for comment within a timescale provisional on the extent and character of the finds and samples recovered. The final version of the report will be provided to the client and the NCCSPA within three weeks of receiving any comments.

6.31 Digital copies of the final report will be submitted to OASIS to allow the results of the work to be accessible on-line to the wider archaeological community and general public. The OASIS form will be appended to the post-excavation assessment report.

6.32 AOC Archaeology will use the following specialists to assess archaeological finds and ecofacts:

Palaeobotany	Ciara Clake PhD (AOC)
Metalwork / Vitrified Material	Dawn McLaren PhD (AOC)
Coarse Stone	Dawn McLaren PhD (AOC)
Environmental	Jackaline Robertson (AOC)
Wood	Anne Crone PhD (AOC)
Glass	Andrew Morrison (AOC)
Ceramic Building Material	Sandra Garside-Neville (External)
Human Bone	Alex Johnson (AOC)
Soil Micromorphology	Lynne Roy MSc (AOC)
Conservation	Gretel Evans ACR (AOC)
Lithics	Rob Engl (AOC)
Ceramics	Peter Didsbury MPhil (external)
Ceramics	Chris Cumberpatch (external)
Ceramics	Ruth Leary (external)

Archiving

- 6.33 AOC Archaeology will contact the recipient museum in advance of commencing any fieldwork to determine the preparation, ownership and deposition of the archive and finds, and obtain a museum accession number.
- 6.34 The Chartered Institute of Archaeologists (ClfA 2015d) and the Society of Museum Archaeologists (SMA 1993) recommend that finds are publicly accessible and that landowners donate archaeological finds to a local museum. The landowner will be encouraged to transfer ownership of the finds to the receiving museum. A Deed of Transfer will be drawn up by the recipient museum which the landowner will be asked to sign.
- 6.35 The archive will contain all the data collected during the archaeological evaluation, including all digital and paper records, finds and environmental samples. It will be quantified, ordered, indexed and internally consistent. Adequate resources will be provided during fieldwork to ensure that all records are checked and internally consistent. Irrespective of a post-excavation assessment recommendation to proceed to analysis and publication, the evaluation will require the compilation of a site archive report (as required by ALGAO 2015). As a minimum this will comprise copies of the WSI, the relevant section of the post-excavation assessment report and any specialist reports for the site, as well as quantifications of all records and materials for the site and a site specific post-excavation concordance table.
- 6.36 Archive consolidation will be undertaken immediately following the conclusion of fieldwork and will include the following work:
- the site record will be checked, cross-referenced and indexed as necessary;
 - all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of the recipient museum;
 - all retained finds will be assessed and recorded using pro-forma recording sheets, by suitably qualified and experienced staff. Initial artefact dating will be integrated within the site matrix ;
 - all retained environmental samples will be processed by suitably experienced and qualified staff.
- 6.37 The ClfA Archive Selection Toolkit, or similar process, will be used in the compilation of the archive and explicitly documented.
- 6.38 The archive will be assembled and prepared in line with the recommendations provided in Historic England's MoRPHE *Project Planning Note 3: Archaeological Excavation (PPN3)* (2008), ALGAO's *Advice Note for Post-excavation Assessment* (2015) and in accordance with the *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). Provision will be made for the stable storage of paper records and their long-term storage.

7 Capability Statement

- 7.1 AOC Archaeology was established in 1991 and is a Chartered Institute for Archaeologists (ClfA) Registered Organisation offering a full range of archaeological expertise, advice and services, from a network of offices across the UK.
- 7.2 We offer an exceptional portfolio of services that makes the most effective use of the company's skills, specialised knowledge and experience and is based on key expert services including archaeological survey and excavation, consultancy and heritage management, buildings recording,

geophysical survey and geomatics, laser scanning, post-excavation analysis and conservation, and community archaeological services.

- 7.3 Our in-house expertise also includes sedimentology, soil micromorphology, soil chemistry, dendrochronology, palaeobotany, palynology, faunal analysis, osteoarchaeology, artefact conservation and analysis, building materials and lithics.
- 7.4 AOC Archaeology have a strong association with other highly regarded organisations and individuals and we can cover the entire spectrum of artefact and ecofactual analysis. AOC Archaeology has a well-equipped conservation laboratory that offers practical conservation and artefact care for archaeological material.

8 Quality Assurance and Standards

- 8.1 AOC Archaeology is an accredited ISO 9001:2015 organisation and a Registered Archaeological Organisation with the ClfA, operating to nationally agreed guidelines, processes and procedures. These are set within a framework that endeavours to carry out the required work and submit the final report in a manner that meets the client's specific needs, providing quality assurance throughout the project and for the end product.
- 8.2 AOC Archaeology conforms to the standards of professional conduct outlined in the ClfA *Code of Conduct*, the ClfA *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*, the ClfA *Standard and Guidance for Desk Based Assessments, Field Evaluations etc.*, as well as the British Archaeologists and Developers Liaison Group *Code of Practice*.

9 Health and Safety

- 9.1 AOC Archaeology maintains the highest standards of health and safety, both on-site and in our premises, and a copy of our Health and Safety Policy can be supplied on request. The project outlined in this WSI will be carried out in accordance with safe working practices and under the defined Health and Safety Policy. A site specific RAMS will be prepared prior to the commencement of the fieldwork.
- 9.2 Health and Safety will take priority over all other requirements. A conditional aspect of all archaeological work is both safe access to the area of work and a safe working environment.
- 9.3 The Construction (Design and Management) Regulations 2015 (CDM) may apply to the archaeological work depending on whether contractors other than the archaeological team are present on the site.
- 9.4 Where AOC Archaeology is not the main contractor on site, the main contractor's Risk Assessment will have primacy over the AOC Archaeology document given that:
- The main contractors' risk assessment takes account of AOC Archaeology's working practices and does not compromise normal and safe archaeological procedure as set out in the WSI and Risk Assessment.
 - AOC Archaeology is notified of the full suite of hazards present prior to arriving on site.
 - There is a proper induction and monitoring process in place and AOC Archaeology staff have been through this process.
 - There is no significant conflict between AOC Archaeology health and safety procedures and those proposed by the main contractor.

- AOC Archaeology is made aware of new threats or hazards as they arise.

- 9.5 Where archaeological work is carried out at the same time as the work of other contractors, regard will be taken of any reasonable additional constraints that these contractors may impose.
- 9.6 The client will provide any available service plans for the site prior to the commencement of fieldwork. AOC Archaeology will use CAT to identify any services in the specific locations being excavated.
- 9.7 Staff present on site will be required to wear the appropriate Personal Protective Equipment (PPE), which will be issued as necessary.
- 9.8 Where previous works have identified the presence of contaminated ground, AOC Archaeology must be notified of the nature and extent of the contamination in advance of the fieldwork and given guidance as to the appropriate Health and Safety precautions required.
- 9.9 Specific Covid-19 working practices will be outlined in the RAMS (and adhered to on site) which will be based on current government, ClfA, Prospect and FAME guidance.

10 Insurance

- 10.1 AOC Archaeology holds Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance to the following amounts. Copies of certificates for the following insurance can be provided on request.

- Public Liability £20,000,000
- Employer's Liability £20,000,000
- Professional indemnity (for any single claim) £5,000,000

- 10.2 Full details of AOC Archaeology's insurance policies can be provided on request.

11 Copyright and Confidentiality

- 11.1 AOC Archaeology will retain full copyright of any commissioned reports, tender documents or other project documents under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive licence to the client and to the Nottinghamshire County Council Historic Environment Record in all matters directly relating to the project as described in the WSI.
- 11.2 AOC Archaeology 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.
- 11.3 AOC Archaeology will advise the client of any such materials supplied in the course of projects which are not AOC Archaeology's copyright.
- 11.4 AOC Archaeology will respect all requirements for confidentiality regarding the client's proposals, provided that these are clearly stated. In addition AOC Archaeology undertakes to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that the client respects AOC Archaeology's and the ClfA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

12 Archaeological Risk Register

- 12.1 The methodology outlined in this method statement will be met in full where reasonably practicable.
- 12.2 Any significant variations to the proposed methodology will be discussed with, and approved by, the NCCSPA.
- 12.3 The methodology has been designed to meet the aims of the project in a professional and cost effective manner. AOC Archaeology attempts to foresee all possible site-specific problems and to make allowances for these. However, there may on occasion be unusual circumstances which have the potential to affect the programme. These can include:
- unavoidable delays due to extreme bad weather, vandalism etc.;
 - extensions to trenches or revised methodologies requested by the NCCSPA;
 - complex structures or objects, including those in waterlogged conditions, requiring specialist removal;
 - unforeseen Health and Safety issues;
 - Covid-19 Health and Safety and working restrictions.

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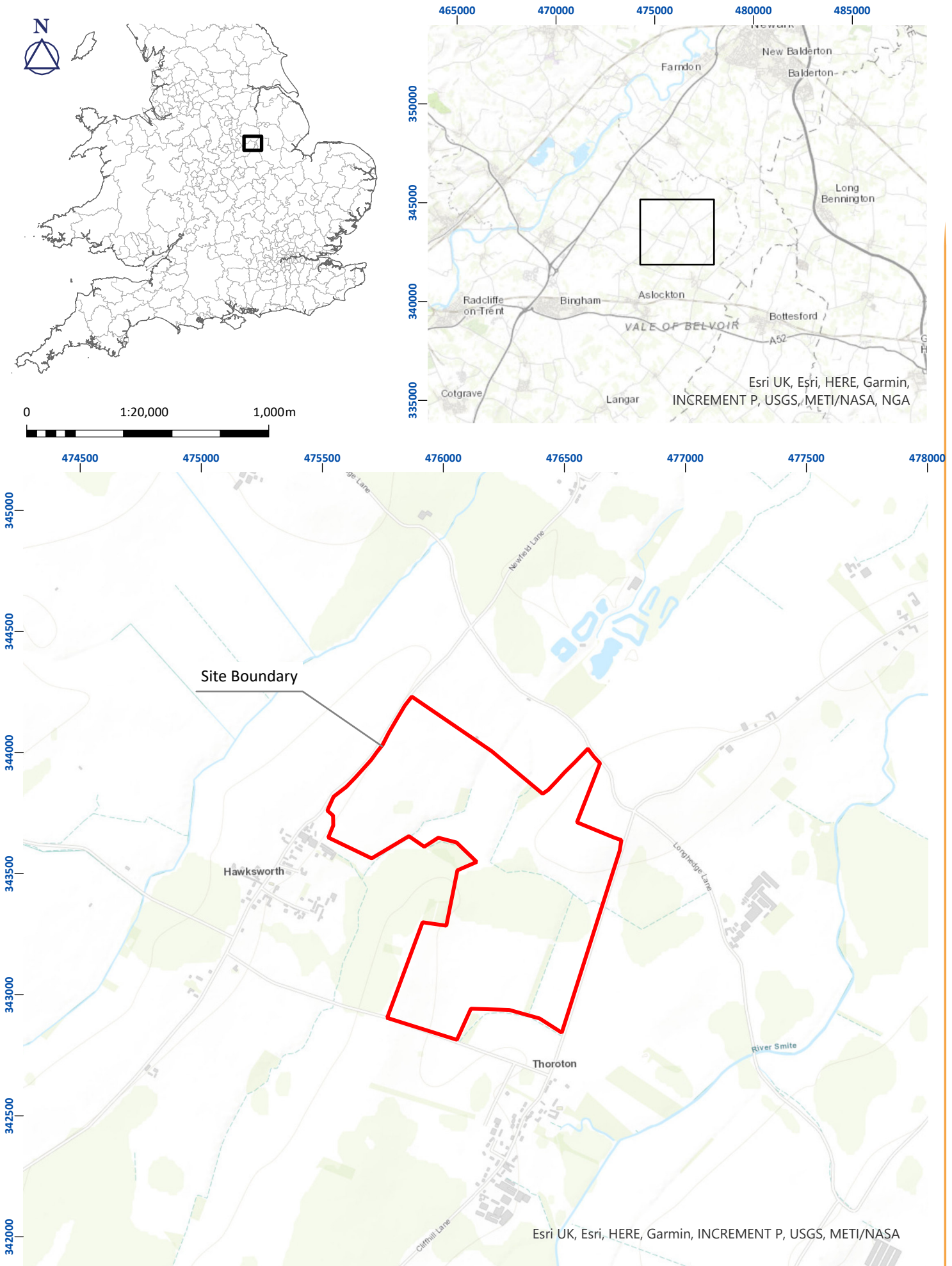


Figure 1: Site location plan

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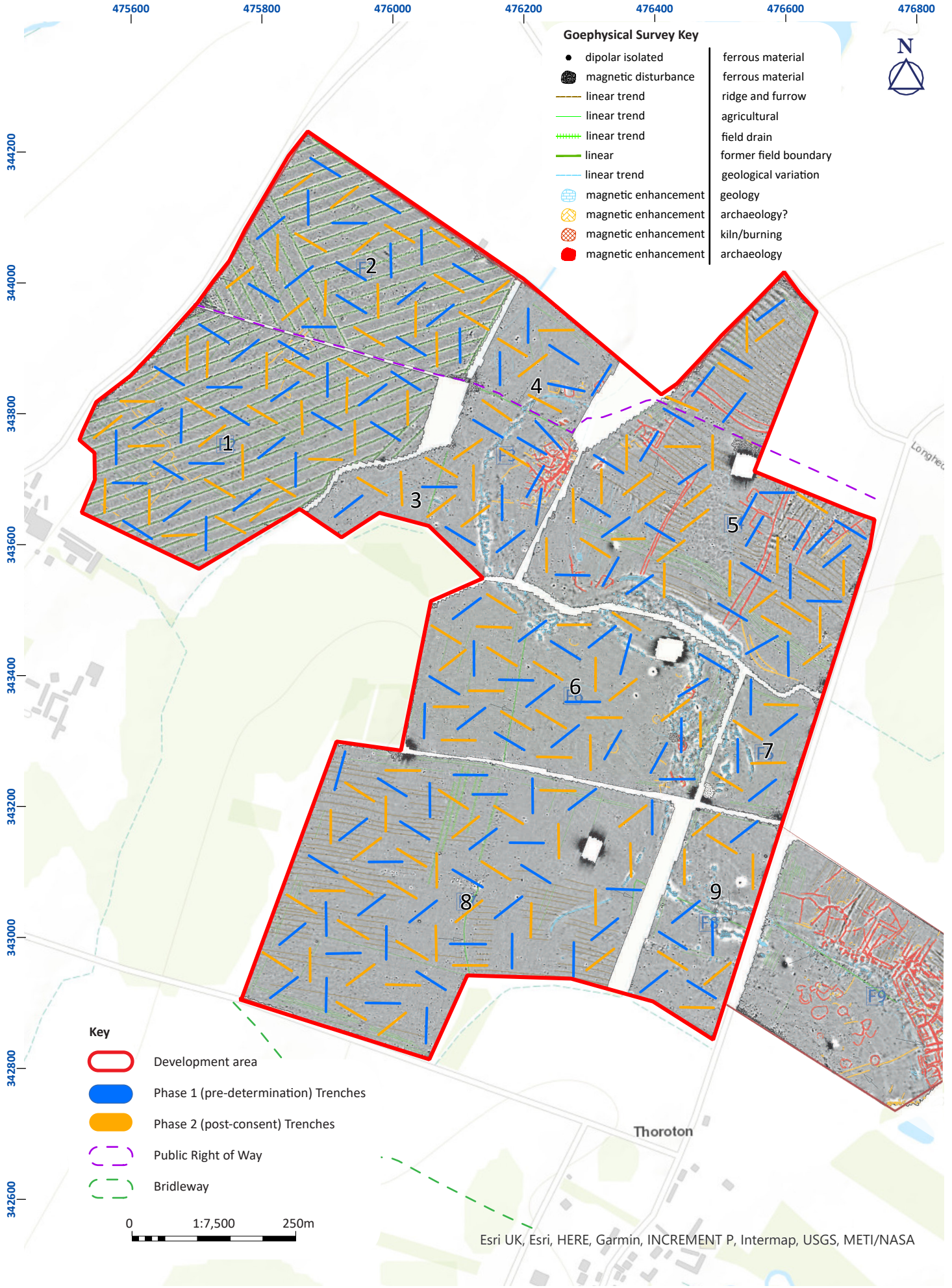


Figure 2: Trench plan

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