Partridge Hill Farm
Doncaster

Archaeological Evaluation

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wessexarchaeology

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Summary

Wessex Archaeology was commissioned by Corylus Planning & Environmental Ltd (and this instruction has been taken over by Gridserve, to undertake an archaeological evaluation of a 45 ha parcel of land located adjacent to Partridge Hill Farm, High Common Lane, Austerfield, Doncaster, South Yorkshire, centred on NGR 464806 396426. The evaluation was carried in association with a planning application for the proposed installation of a solar farm.

The initial evaluation strategy comprised the excavation, investigation and recording of 129 trenches in seven fields (Areas 1–7). However, the design of the proposed development was altered to exclude two fields (Area 1 and 4), reducing the number of trenches to 107. Furthermore, two additional trenches in Area 6 (90 and 94) were not excavated as they were, during the entire period of fieldwork, under standing water. Thus, the evaluation comprised the excavation of a total of 105 trenches.

The trenches targeted a series of cropmarks recorded by the National Mapping Programme (NMP) consulted as part of an archaeology and cultural heritage assessment (Wardell Armstrong 2015a), anomalies of potential archaeological origin, detected during a previous geophysical survey (Wardell Armstrong 2015b), and also tested 'blank' areas. The evaluation established that a total of 35 trenches revealed archaeological features and deposits, indicating infrequent archaeological remains present across most of the evaluation area, with a high concentration in the southernmost field (Area 7) and in isolation in other evaluated areas (Area 2, 3, 5 and 6).

The uncovered features, comprising ditches, gullies and pits, represent evidence of Iron Age/Romano-British agricultural practices and settlement although several features remain of uncertain date due to a lack of artefactual material. All but a small proportion of the finds assemblage came from the southernmost field (Area 7), and almost entirely comprises sherds of pottery dating to the Romano-British period. One residual flint artefact, of probable Neolithic/Bronze Age date, was found in a Middle Iron Age ditch. The only artefactual evidence of activity post-dating the Romano-British period is two pieces of post-medieval pottery found within the topsoil. However, radiocarbon dating of the environmental assemblages from two pits that exhibited in-situ burning, produced Anglo-Norman dates and further analysis has shown that they represent the remains of charcoal production pit kilns. Two ditches to the north were interpreted as the remains of post-medieval field boundaries matching historic cartographic records.

The archaeology will now be preserved *in situ* and this will form the final report for the project. The archive will be deposited at Doncaster Museum and Art Gallery in due course. In the interim, the project archive will be kept at Wessex Archaeology's offices in Sheffield under project code 227260. An OASIS form (OASIS ID wessexar1-350937) has been provisionally completed for this work.

Acknowledgements

Wessex Archaeology would like to thank Corylus Planning & Environmental Ltd and Gridserve for commissioning the archaeological evaluation, in particular Helen Donnelly for her assistance with the project. Wessex Archaeology is also grateful for the advice of Andrew Lines of the South Yorkshire Archaeology Service who monitored the project for the Local Planning Authority. The landowners are also thanked for their co-operation and help on site.

The fieldwork was carried out by Jasmine Porter, Karen Austin, Mike Moody, Gwen Naylor, Lewis Greenway and Amy Dunn. Alvaro Mora-Ottomano directed the fieldwork. Andy Valdez-Tullett produced this report. The illustrations were produced by Rob Goller. The finds were assessed by Lorraine Mepham, and sorted by Samantha Rogerson, Jenny Giddins and Nicki Mulhall. The Roman pottery was analysed by Ian Rowlandson. The samples were processed by Samantha Rogerson

and Jenny Giddins, assessed by Inés López-Dóriga. The charred plant remains were analysed by Inés López-Dóriga and the wood charcoal by Ed Treasure. The project was managed by Milica Rajic on behalf of Wessex Archaeology.

Partridge Hill Farm, Austerfield, evaluation

Final report

1 INTRODUCTION

1.1 Project and planning background

1.1.1 Wessex Archaeology was commissioned by Corylus Planning & Environmental Ltd ('the client'), to undertake an archaeological evaluation of a 45 ha parcel of land located adjacent to Partridge Hill Farm, High Common Lane, Austerfield, Doncaster, South Yorkshire, DN10 6DE ('the site'), centred on NGR 464806 396426 (**Fig. 1**).

1.1.2 The archaeological evaluation was undertaken in association with a planning application (Doncaster Metropolitan Borough Council planning reference: 17/01200/FULM) for the proposed installation of a solar farm.

1.1.3 The evaluation was to comprise the excavation, investigation and recording of 129 trial trenches of which 105 measured 50 x 1.8 m, three measured 10 x 5 m and the remainder measured between 25–35 x 1.8 m, located within seven arable fields (assigned as Areas 1–7, **Fig. 1**). However, the initial design of the proposed development was subsequently altered with the exclusion of two fields (Areas 1 and 4), meaning that 22 trenches were removed from the scope of works. Two trenches along the southern field boundary of Area 6 were not excavated due to the presence of standing water. Thus, the evaluation comprised the excavation of a total of 105 trenches. Their numbering was kept as initially assigned in the WSI. The variations to the WSI were agreed in advance with the client and SYAS.

1.1.4 The trial trenches targeted a series of cropmarks recorded by the National Mapping Programme (NMP) consulted as part of an archaeology and cultural heritage assessment (Wardell Armstrong 2015a), anomalies of potential archaeological origin, detected during a previous geophysical survey (Wardell Armstrong 2015b), and also tested 'blank' areas.

1.1.5 This evaluation was part of staged approach in determining the archaeological potential of the site, following on from the previous non-intrusive archaeological work described below, both carried out in April 2015.

1.1.6 All works were undertaken in accordance with a written scheme of investigation (WSI) that detailed the aims, methodologies and standards to be employed in order to undertake the evaluation (Wessex Archaeology 2019a). The South Yorkshire Archaeology Service (SYAS) archaeologist approved the WSI, on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing. The evaluation was undertaken between 2 March and 3 April 2020.

1.2 Scope of the report

1.2.1 The planned development has been amended to allow the archaeology to be preserved in-situ. Hence no further archaeological mitigation will take place and this document will form the final report. The purpose of this report is to provide the final results of the evaluation, detailing how it addresses the aims and objectives outlined in the WSI.

1.3 Location, topography and geology

1.3.1 The evaluation area is located between High Common Lane and Great North Road (A638), to the south-west of Robin Hood Airport, approximately 5 km south-east of Doncaster. It occupied a total of 45 ha.

1.3.2 The evaluation area is situated on high ground in relation to the surrounding landscape to the north and east. Whilst the majority of the land within the evaluation area lies at a height of 30 m OD, its eastern part slopes gently down to the east, to a height of 20 m OD.

1.3.3 The evaluated fields comprised arable land at the time of the fieldwork.

1.3.4 The evaluation area is underlain by Sandstone of the Nottingham Castle Formation. Superficial deposits comprise bands of till and glaciofluvial deposits of sand and gravel (British Geological Survey online viewer accessed June 2021).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

2.1.1 The archaeological and historical background was previously reviewed in an archaeology and cultural heritage assessment (Wardell Armstrong 2015a), which considered the recorded historic environment resource within a 1 km study area of the proposed development. A summary of the results is presented below, with relevant entry numbers from the South Yorkshire Sites and Monuments Record (SMR) and the National Heritage List for England (NHLE) included.

2.1.2 In addition, a geophysical survey was carried out within most of the evaluation area (Wardell Armstrong 2015b). A summary of the results is given below.

2.2 Previous works related to the development

2.2.1 A gradiometer survey was carried out on a plot of land at the Northern Racing School development, based at Rossington Hall, 330 m west of the evaluation area. The survey recorded anomalies indicative of ridge and furrow earthworks of potential medieval date. No other anomalies were recorded (Wardell Armstrong 2015a).

2.2.2 At Austerfield Quarry, 1 km south-east of the evaluation area, a watching brief was undertaken in the 1990s on a 0.5 ha area with a number of pits were subsequently recorded. These were generally circular and whilst some were devoid of finds, some of the fills included fragments of ceramics, burnt and fire-cracked pebbles, charcoal flecks, degraded animal bone and teeth (SYAS 1997). Later extraction, which was subject to an archaeological watching brief and targeted sample excavation, recorded two ditches which equated to a previously recorded cropmark thought to be part of an Iron Age/Romano-British field system. One sherd of Romano-British pottery was retrieved from one of the ditches.

2.2.3 An evaluation on land adjacent to Doncaster Sheffield Airport, immediately north of Partridge Hill Farm, produced evidence for a series of field ditches some of which were of early Roman date. A very early Romano-British enclosed settlement dated to the 1st century AD along with a second area that contained a pottery kiln indicating pottery production during the 2nd century AD were also discovered (Archaeological Services WYAS 2019).

2.3 Archaeological and historical context

Prehistoric

2.3.1 The SMR does not record any evidence for pre-Iron Age activity within the boundary of the evaluation area or within 1 km of it.

Iron Age/Romano-British

2.3.2 During the Iron Age, a series of enclosures appear to have developed on previously unoccupied land, through the laying out of fields. Whether this was incremental or as one phase of activity is uncertain, but it is apparent that the area was subject to substantial clearance in the preceding periods for it to have been available for enclosure in this way.

2.3.3 The National Mapping Project undertaken by English Heritage recorded cropmarks within the evaluation area that may be part of a wider coaxial pattern of fields, trackways and enclosures. Some of these may be associated with settlement activity. These include SMR reference 02682/01 which is located entirely within the evaluation area, SMR references 01794/0/1, 02477/0/1 and 02475/01 which are recorded as extending within the boundary of the evaluation area and SMR reference 02479/01 which may extend within the boundary of the evaluation area.

2.3.4 The presence of a Roman road to the immediate west of the evaluation area was probably a focus for activity in its vicinity (SMR reference 4915) and some sparse findspots in the area comprising pottery, coins and brooches, provide some indication that the field systems within and around the evaluation area were occupied during the Romano-British period (SMR references 01263/01, DM0192, DM0202, DM020 and DM0206).

Medieval (AD 410 to 1544)

2.3.5 The SMR does not record any evidence for early medieval activity within the boundary of the evaluation area or within the search area. However, English Heritage's National Mapping Programme recorded the former presence of ridge and furrow earthworks within part of the evaluation area. This location was therefore most probably cultivated during the medieval period, in association with nearby settlement.

Post-medieval (AD 1544 to 1900)

2.3.6 Rossington Hall (reference 1151517) was constructed 630 m west of the evaluation area during the 1770s on the site of an earlier mansion. The building was approached along a tree-lined avenue, which can be seen on the 1854 Ordnance Survey map. This showed the evaluation area within enclosed land around 'Partridge Hill'. Partridge Hill Farmstead was shown on this map to the east. Field boundaries were on the whole straight and bounded rectangular fields. The exception was an irregular boundary located to the north of 'Partridge Hill Holt' which was probably depicting the line of a drain. The 1893 Ordnance Survey map shows the removal of some field boundaries within the evaluation area.

2.3.7 A 1904 map accompanying sales particulars showed that the land within the evaluation area was entirely associated with Partridge Hill Farm. This confirmed the presence of field boundaries as shown on the preceding 1893 map. Since 1904 two field boundaries have been removed. These comprise the field boundary shown abutting the south-western corner of 'Partridge Hill Holt' in 1904 and the north–south boundary present to its south.

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 The general aims of the excavation, as stated in the WSI (Wessex Archaeology 2019a) and in compliance with the Chartered Institute for Archaeologists' *Standard and guidance for archaeological excavation* (CIfA 2014a), were to:

- provide information about the archaeological potential of the site; and
- inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

3.2 General objectives

3.2.1 In order to achieve the above aims, the general objectives of the evaluation were to:

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

3.3 Site-specific objectives

3.3.1 Following consideration of the archaeological potential of the site and draft documents outlining the significance and potential of the Iron Age and Roman archaeology of South Yorkshire, recently prepared as part of the South Yorkshire Archaeological Research Framework (Chadwick 2018; Ottaway 2018), the site-specific objectives of the evaluation were to:

- identify where groundworks relating to the development will affect archaeological remains;
- test the results of the geophysical survey (Wardell Armstrong 2015b) and investigate whether the positive linear magnetic anomalies in the central and western parts of the site represent archaeological features. It will also investigate whether positive linear magnetic anomalies located in the south-eastern part of the site represent part of an Iron Age/Roman British field system, as the cropmarks seem to indicate (Ref. 02477/01);
- explore any other below ground remains relating to the cropmarks within the site, recorded by the National Mapping Project (Refs: 02682/01, 01794/0/1, 02477/0/1 02475/01 and 02479/01) and to determine whether they are associated with settlement activity;
- determine the date, extent and character of landscape organisation during the Iron Age and the Roman-British period;

- examine evidence for remains of medieval/post-medieval ridge and furrow (known from English Heritage's National Mapping Programme) and assess if this has impacted on any earlier remains; and

- assess the potential for the recovery of artefacts to assist in the development of type series within the region.

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (Wessex Archaeology 2019a) and in general compliance with the standards outlined in CIfA guidance (CIfA 2014a). The post-excavation assessment and reporting followed advice issued by the Association of Local Government Archaeological Officers (ALGAO 2015). The methods employed are summarised below.

4.1.2 The initial evaluation strategy comprised the excavation, investigation and recording of 129 trenches in seven fields (Areas 1–7). However, the design of the proposed development was altered to exclude two fields (Area 1 and 4), reducing the number of trenches to 107. Furthermore, two additional trenches in Area 6 (90 and 94) were not excavated as they were, during the entire period of fieldwork, under standing water. Thus, the evaluation comprised the excavation of a total of 105 trenches in Areas 2, 3, 5, 6 and 7 (**Figs 2-7**).

4.2 Fieldwork methods

General

4.2.1 The trench locations were set out using a Global Navigation Satellite System (GNSS), in the locations proposed in the WSI, although trenches 42 and 101 had to be slightly moved to avoid trees and located services. Trenches 119 and 127 were extended in order to fully reveal archaeological features (**Fig. 7**).

4.2.2 A total of 105 trial trenches was excavated in level spits using a 360º excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist. Machine excavation proceeded until either the archaeological horizon or the natural geology was exposed.

4.2.3 The base of the trench/surface of archaeological deposits were cleaned by hand. A sample of archaeological features and deposits was hand-excavated, sufficient to address the aims of the evaluation.

4.2.4 Spoil from machine stripping and hand-excavated archaeological deposits was visually scanned for the purposes of finds retrieval. Artefacts were collected and bagged by context. All artefacts from excavated contexts were retained, although those from features of modern date (20th century or later) were recorded on site and not retained.

4.2.5 Trenches completed to the satisfaction of the client and the SYAS monitoring archaeologist were backfilled using excavated materials in the order in which they were excavated, and left level on completion. No other reinstatement or surface treatment was undertaken.

Recording

4.2.6 All exposed archaeological deposits and features were recorded using Wessex Archaeology's pro forma recording system. A complete drawn record of excavated features and deposits was made including both plans and sections drawn to appropriate scales

(generally 1:20 or 1:50 for plans and 1:10 for sections) and tied to the Ordnance Survey (OS) National Grid. The Ordnance Datum (OD: Newlyn) heights of all principal features were calculated, and levels added to plans and section drawings.

4.2.7 A Leica GNSS connected to Leica's SmartNet service surveyed the location of archaeological features. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.

4.2.8 A full photographic record was made using 35 mm black-and-white films using SLR manual cameras. Additional digital photography was undertaken with digital cameras equipped with an image sensor of not less than 16 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long term accessibility of the image set.

4.3 Artefactual and environmental strategies

4.3.1 Strategies for the recovery, processing and assessment of finds and environmental samples were in line with those detailed in the WSI (Wessex Archaeology 2019a). The treatment of artefacts and environmental remains was in general accordance with: *Guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b) and *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011).

4.4 Monitoring

4.4.1 Andrew Lines of SYAS monitored the evaluation on behalf of the LPA.

5 STRATIGRAPHIC EVIDENCE

5.1 Introduction

Summary of archaeological features and deposits

5.1.1 The evaluation area boundary contained seven arable fields (Areas 1– 7) of which Areas 2, 3, 5, 6 and 7 were subject to archaeological trial trenching evaluation after Areas 1 and 4 were subsequently excluded (**Fig. 1**). Trench numbers follow the original design as per the WSI. The fields within the evaluation area were typically large, rectangular parcels of land bounded with straight hedgerows with adjacent ditches. The evaluation area included access roads and tracks as well as two managed woodlands created as game (such as partridges) coverts. Such characteristics are generally considered to be of Parliamentary Enclosure origin (Historic England 2018, 10), which in the Doncaster area took place between *c*.1750–1850 (Marchant *et al*. 2008, 215).

5.1.2 A total of 35 of the 105 excavated trial trenches revealed archaeological features and deposits, indicating archaeological remains are present across the evaluation area, with an apparent concentration in Area 7 (**Figs 2–7**). The uncovered features comprise ditches, gullies and pits.

5.1.3 Romano-British pottery was retrieved from five ditches and three pits located within the southern section of Area 7 representing evidence of a Romano-British settlement. One flint artefact, of probable Neolithic/Bronze Age date, was found residually in an Iron Age ditch. Radiocarbon dating of environmental assemblage from pit 3303 (Area 3) produced an Anglo-Norman date. Two further pits in Area 7 shared similar characteristics to this pit and may also have an Anglo-Norman date. The only artefactual evidence post-dating the Romano-British period is two pieces of post-medieval pottery recovered from the topsoil.

Methods of stratigraphic assessment and quantity of data

5.1.4 All hand written and drawn records from the excavation have been collated, checked for consistency and stratigraphic relationships. Key data has been transcribed into a database, which can be updated during any further analysis. Preliminary phasing of archaeological features and deposits was principally undertaken using stratigraphic relationships and the spot dating from artefacts, particularly pottery.

5.2 Soil sequence and natural deposits

5.2.1 Top/ploughsoil mostly consisted of a mid-greyish-brown silty sand with frequent fairly sorted sub-round gravels and pebbles between 0.3-0.4 m thick. No subsoil was encountered within the evaluation area. The topsoil sealed the undisturbed natural substrate consisting of mixed deposits of clayey sand to silty sand with frequent gravels and pebbles as well as areas of clay. Several areas of potential archaeological features were also investigated across the trenches, although these were subsequently established to be geological variation within the undisturbed natural substrate. Numerous plough scars were identified intruding slightly into the natural horizon. The trial trenches also regularly encountered field drains which, where excavated (for example, in trench 20, Area 3), obtained a depth of 0.75 m bgl.

5.3 Period 1 - Iron Age–Romano-British (600 BC–AD 410)

5.3.1 The earliest evidence of activity in the evaluation area came from ditch 12103 in trench 121. Ditch 12103 ran north to south and contained a small broken flint flake of prehistoric manufacture. A radiocarbon date (UBA-45252; 2197±20 BP: 360–180 cal. BC) (see section 7.5.8) on an onion-couch (*Arrhenatherum elatius* subsp. *bulbosum*) tuber from the ditch however indicates evidence of Middle Iron Age activity in Area 7 suggesting that the worked flint was a residual find.

5.3.2 Evidence for Romano-British activity was more widespread, although Romano-British pottery was recovered from only eight features all of which were situated in the central southern part of Area 7, however, it is probable that all of the features excavated in this part of Area 7 had a Late Iron Age/Romano-British date with the exception of pits 12405 and 12203.

5.3.3 In the central southern part of Area 7, one boundary was recorded running north-south through the area starting as 11503 in trench 115, 12007/12009(=12014)/12012 in trench 120, 12903 in trench 129 and 12703 in trench 127, although there was little consistency in the ditch profiles between trenches (**Figs 8.1-4**). In trench 120 this boundary was encountered as a series of recut ditches of which the earliest seemed to be 12009/12014 which was recut by ditch 12007 and then ditch 12012. The only datable finds from these ditches were from 12703 which contained 36 sherds of a grey ware jar with burnished lattice decoration (with a date falling after AD120).

5.3.4 A ditch (12005) and gully (12003) ran east-west towards this ditch, but the possible junctions lay outside of the trenches. Ditch 12005 yielded 17 sherds from a jar with a triangular rim with cordoned decoration of probable 1st century AD transitional date whilst the gully was undated.

5.3.5 The eastern-most extent of activity was represented by a sequence of recut ditches was encountered in trench 116 where relatively modest ditch 11603 aligned north-east to south-west was recut by larger ditch 11605 (**Fig. 8.5**). No finds were recovered from either ditch.

5.3.6 Trench 119 revealed a shallow linear ditch 11903 running north-west to south-east with a 'U'-shaped profile, this yielded a grey ware sherd from a jar with burnished lattice decoration dated to post AD120. A larger and deeper ditch 11905 was also revealed towards the centre of the trench orientated north-east to south-west, with a 'U'-shaped base.

5.3.7 Towards the southern limits of evaluation Area 7 an east-west aligned ditch 12403 whose location and orientation may correlate with a positive magnetic anomaly identified in the previous geophysical survey was exposed in trench 124. To the east of this was north-south aligned ditch 12705 which was a shallow feature, that yielded eleven sherds of 2nd century grey ware jars. A radiocarbon date obtained from a grain of *Triticum spelta* from the rich charred plant assemblage recovered from ditch 12705 was *cal. AD 240–370* (UBA-45254: 1746±19 BP, cal. AD 250–380) (see section 7.5.9).

5.3.8 No archaeological features definitely pertaining to settlement structures were discovered although undated gully 11507 corresponded with an arcing feature on the geophysical survey. It is possible that this could have formed part of a roundhouse eaves drip gully, but its depth (0.32 m) and lack of artefactual material make it unlikely.

5.3.9 The largest pit in Area 7 was 11505 (2.4 x 0.8 x 0.28 m) which was situated close to gully 11507. Only partially revealed in the trench, it had a flat base, and was filled with deposit (11506), which yielded a single abraded sherd of pottery from a cordoned jar likely belong to the transitional period in the 1st century AD. This pit also produced the richest environmental assemblage of any of the sampled features, with evidence for wild plants and cereal chaff and grains, including emmer wheat and barley. A radiocarbon date of *cal. AD 10–210* (UBA-45251: 1944±23 BP, cal. AD 10–200) was obtained from a grain of Triticum dicoccum recovered as part of this assemblage (see section 7.5.9).

5.3.10 Irregular shaped pit 11907 (2.25 x 1 x 0.86 m) had a concave base and steep sides and was filled with deposit (11908), which also contained a broadly Roman dated sherd of grey ware pottery.

5.3.11 Small sub-circular pit 12503 (0.71 x 0.69 x 0.2 m) (**Fig. 8.6**) was revealed in trench 125. It had a concave profile, filled with a primary sandy clay deposit (12504) with evidence of possible in situ burning, and a silty sand deposit (12505) with frequent charcoal and a small group of sherds that could only be given a broad Late Iron Age-Roman date. Environmental samples from contexts 12504 and 12505 both contained mature roundwood charcoal and were exceptionally rich in coal/clinker and rich in slag/hammerscale raising the possibility that metalworking was taking place in the vicinity.

5.4 Period 2 - Anglo-Norman (AD 950–1204)

5.4.1 No finds pertaining to the Anglo-Norman period were recovered from any archaeological features and it was a surprise when the environmental assemblages from two archaeological features produced radiocarbon dates belonging to this period.

5.4.2 Oval pit 3303 (2 x 0.7 x 0.25 m) was situated in Area 3 (**Fig. 8.7; Pl. 1**). It had a flat base and straight sides, its primary fill (3304), included frequent charcoal and its base contained heat affected areas that suggested in situ burning. Radiocarbon dates obtained from wood charcoal from the upper and lower fills (upper fill 3305: UBA-45249 – failed; replacement UB45660, 1016±21 BP, cal. AD 990-1120 and lower fill 3304: UBA-45250: 1006±18 BP, cal. AD 990–1130) are consistent when modelled as a sequence and can be narrowed down to *cal. AD 990–1040/1050* (see section 7.5.11).

5.4.3 In Area 7, sub-circular pit 12405 (2 x 0.75 x 0.30) (**Fig. 8.8; Pl. 2**) cut ditch 12403. It had clear heat-affected areas on its flat base and was filled with a primary dark blackish brown deposit (12406), containing frequent charcoal lumps, with an upper deposit (12407). A radiocarbon date of *cal. AD 1020–1160* (UBA-45253: 934±21 BP, cal. AD 1040–1160) was obtained from a fragment of wood charcoal recovered from fill 12406 (see section 7.5.12).

5.4.4 Also in Area 7, was 12203 a circular pit (0.6m diameter x 0.33 m) with a flat base that was filled with two deposits (12204 and 12205) (**Fig. 8.9; Pl. 3**). The lower fill (12204) contained heat-affected clay and charcoal fragments indicative of in situ burning activity. Whilst no finds were recovered from this feature, its similarity in form to pits 3303 and 12405 may indicate that it shares an Anglo-Norman date.

5.5 Period 3 - Post-medieval–modern

5.5.1 In Area 3, a ditch was revealed within trenches 36, 30 and 38, that meandered from west to east, extending further towards the south-east. This feature was present on the 1854 Ordnance Survey, and which anecdotally appears to have been backfilled 20 years ago landowner's personal comment).

5.5.2 Also in Area 3, north to south oriented ditch 4003 (0.86 m wide by 0.46 m deep) (**Pl. 4**) was interpreted as a modern feature based upon the heterogeneous and mixed nature of the deposits it contained although no actual dating evidence was recovered.

5.5.3 The only features revealed in Area 6 were two ditches of post-medieval provenance. The first, a north to south ditch was identified within trenches 78, 85 and 92. Where excavated as ditch 7803 in trench 78, it produced modern plastic food wrapping from its base and mapping indicates it was backfilled in the late 20th century. A similar ditch was revealed in trench 72. This was orientated approximately east to west, and a continuation of its course appeared to form the present northern boundary of the adjacent Area 1.

5.6 Uncertain date

5.6.1 The only archaeological feature within Area 2 was shallow oval pit 203 (0.65 x 0.86 x 0.28 m) which had a concave base and sides, with a single fill (204). No finds were recovered.

5.6.2 Undated ditch 3306 was found in trench 33, Area 3. It was 1.8 m wide by 0.38 m deep, aligned north-east to south-west and was filled with three deposits (3307, 3308 and 3309) of similar composition comprising dark brownish grey sandy silt with occasional gravel and charcoal flecks. This ditch did not appear either on the geophysical survey or as a cropmark. Although essentially undated, the presence of charcoal in this ditch may indicate some contemporaneity with nearby charcoal production pit 3303 (dated to the Anglo-Norman period) or alternatively it may be part of a Late Iron Age/Romano-British field system.

5.6.3 Oval pit 5303 (1.4 x 2.8 x 0.64 m) (**Pl. 5**) was the only feature discovered in Area 5. It had a concave base with gradually sloping sides and was filled by a series of dark greyish brown silty clay deposits (5304, 5305, 5306 and 5307) of which the primary deposit (5304) comprised very compacted patches of gravel within a silty clay matrix. No finds were recovered, and it is undated.

5.6.4 In Area 7, outside of the main locus of activity in the central southern part of the area, eight ditches and three pits were located around the periphery. The ditches (9703, 10303, 10703, 10803, 10805, 11103 (**Pl. 6**), 11105 and 12206 (**Pl. 7**)) were typically orientated east to west, north to south or northwest to southeast contained a singled fill and no finds were

recovered from any of them as dating evidence. There was no consistency in their size or profile, and they ranged from 0.85–2.2 m wide and 0.16–1.06 m deep.

5.6.5 Some, such as 10703, relate to cropmarks identified by the NMP. Others, for instance 10803, correspond to positive magnetic anomalies from the geophysical survey. These ditches are missing the post-medieval/modern detritus that tends to fill post-medieval field boundaries or drainage ditches. This may reflect some antiquity, and accepting that they tally with elements of the hypothesised coaxial field system, it is tempting to phase them to the Iron Age/Romano-British period, but they are fundamentally undated.

5.6.6 Pit 10603, discovered in trench 106, was sub-circular (1.12 x 0.69 x 0.26 m) with concave base and gradual slopes, whilst 11203 was a circular pit (0.64 diameter x 0.09 m) found in trench 112. Both pits contained a single fill. No finds were recovered, and they are undated.

6 FINDS EVIDENCE

6.1 Introduction

6.1.1 The evaluation produced a very small assemblage of finds, consisting almost entirely of pottery, and ranging in date from prehistoric to post-medieval, with a definite focus in the Romano-British period. Finds came from contexts in just seven of the trenches excavated; contexts included topsoil as well as feature fills (pits and ditches)

6.1.2 All finds have been quantified (count and weight) by material type within each context, and the results are presented in **Table 1**.

Table 1 All finds by context (number / weight in grammes)

Tr	Context	Description	Flint	Pottery
102	10201	Topsoil		1/9
115	11506	Pit 11505		1/9
119	11901	Topsoil		1/1
119	11904	Ditch 11903		1/42
119	11908	Pit 11907		1/6
120	12006	Ditch 12005		17/87
121	12104	Ditch 12103	1/1	
125	12505	Pit 12503		10/25
127	12704	Ditch 12703		36/286
127	12706	Ditch 12705		11/72
		Total	**1/1**	**79/537**

6.2 Late Iron Age to Roman pottery by Ian Rowlandson

6.2.1 Seventy seven sherds (527 g, 0.16RE) of Iron Age or Roman pottery were presented to the author for report following an initial finds assessment. The sherds were small (mean sherd weight 6.9 g) with a number of the showing surface excoriation although some of this may be in part due to soil conditions.

6.2.2 The assemblage was similar to many from South and West Yorkshire as the sherds came from a restricted number of vessels, mostly grey ware jars, that had been recovered from a small number of locations on the evaluation area (see discussion in Chadwick 2008a,

2008b, and 2009). The co-axial field system that they were recovered from showed similarities with those cast by Derek Riley as 'Brick work landscapes' in northern Nottinghamshire and parts of South Yorkshire (Garton 2008; discussion in Chadwick 2018). It has been suggested that some of these field systems may have been established prior to the Roman conquest but it should be noted that groups of pre-Roman Iron Age pottery that might help to date such features are rare finds from South Yorkshire, especially north of the River Don. Evidence of pottery prior to the 1st century AD is very limited perhaps including small quantities from sites at Sutton Common, Balby Carr and Rossington (Van de Noort et al. 2007, Daniel 2016, Cumberpatch 1993, 2000, 2002, 2007, 2008 and 2016; Rowlandson 2013). Therefore ceramic dating evidence for the Iron Age development of these field systems is not commonly encountered. Groups of pottery dating to the 2nd century AD are typically more common, largely due to the prolific output of the Roman pottery industries near Doncaster during that period (Buckland et al. 1980 and 2001).

6.2.3 The pottery from this evaluation area included a small quantity of transitional sherds likely to date to the 1st century AD notably from context 12006. Sherds of this type have now been noted on a few sited in the Doncaster/ Rossington area (Roberts and Weston 2016; Rowlandson 2013 for discussion). Small sherds from a single vessel from context 12006 have similarities with some of the jars with cordoned decoration likely to date to the 1st century AD at the Rossington Grange site (Rowlandson 2013, No. 3-5 and 7). A single transitional sherd in a similar fabric was retrieved from context 11506.

6.2.4 The pottery present, unsurprisingly, appeared to be mostly composed of local grey wares, most probably produced in the Doncaster area. Amongst this small assemblage there was little that could be dated to the 3rd century AD with any certainty. The presence of jars with burnished lattice decoration from contexts 11904 and 12704 would suggest a date after AD120. A further group of grey ware from context 12706 could be dated to the 2nd century AD and individual grey ware sherds from contexts 11908 and 12505 could be attributed a broad Roman date. The shell-gritted body sherds from context 12505 appeared very similar to the fabric produced in northern Lincolnshire and used for Dales ware vessels in the 3rd century AD. However this fabric was used for a range of earlier fully handmade forms manufactured in the 2nd century AD considered to be 'proto-Dales ware' by Rigby and Stead (1976) and Gregory (1996; see also Darling 2009) and similar vessels have been recorded from other sites in South Yorkshire such as Hatfield Lane, Edenthorpe (Rowlandson 2014b). To further complicate the matter as these sherds are in poor condition it is difficult to be certain that they would not match some of the vessels dated to the late Iron Age at the Rossington Grange Farm site (Rowlandson 2013, IASH1). As such a broad late Iron Age to Roman date range would be safest for these sherds though they were found stratified with grey ware in context 12505.

6.2.5 The dating evidence offered by this small assemblage of fragmentary sherds should be viewed with some caution as it is likely that pottery was most easily acquired in this area during the mid to late 2nd century AD. By the middle of the 4th century AD little pottery reached rural settlements with a return to a pattern of aceramic occupation (Buckland and Magilton 2005, 52). The other potential issue is that sites like this often have discrete areas where pottery was dumped: it is possible that this trial trenching scheme did not encounter the discrete areas of the ditches that contained larger concentrations of domestic waste that might relate to specific settlement foci.

6.3 Methodology

6.3.1 An archive has been produced to comply with the requirements of the Study Group for Roman Pottery (Darling 2004) using the codes and system developed by the City of Lincoln Archaeological Unit, augmented with a local fabric series used to record recent

assemblages from Rossington and Hatfield Lane, Doncaster (Darling and Precious 2014; Rowlandson 2013a&b, 2014a&b, 2015, 2016a&b; Rowlandson and Fiske 2020). An attempt has been made to concord the forms used to the form series established by Buckland et al. (1980). A tabulated summary by context and a sherd archive are presented below. The dates provided represent the pottery recorded here: the main text of the report and other specialist contributions should be consulted to ascertain the overall date attributed to each context. It is recommended that this pottery should be deposited with the relevant local museum along with the rest of the archive. All of the diagnostic forms from this evaluation have been paralleled. A single transitional vessel, marked 'D?' in the archive, would be the only vessel that could feasibly illustrated but as it is in poor condition this is not recommended.

6.4 Fabrics

Table 2 Roman pottery fabric summary

Fabric code	Fabric group	Fabric details	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
GREY1	Reduced	Reduced fabric 1	46	59.74%	336	63.76%	0
GREY8	Reduced	Reduced fabric 8	4	5.19%	73	13.85%	0
IAGR2	Reduced	Iron Age tradition 'Gritty': Site fabric 2	18	23.38%	96	18.22%	16
SHEL	Calcareous	Miscellaneous undifferentiated shell-tempered	8	10.39%	19	3.61%	0
FCLAY?	Fired Clay	Fired Clay	1	1.30%	3	0.57%	0

GREY1 South Yorkshire grey ware with common to abundant sand c.0.3-0.5mm (Buckland and Magilton 2005, 43). Contexts 11908, 12505, 12704, a jar with burnished lattice decoration from 12704, and a scrap from a jar rim from 12706.

GREY8 A reduced mid grey wheelmade grey ware with: common poorly sorted sub-rounded quartz 0.2-0.7mm, rare black ?ferrous rich inclusions 0.2-0.5mm. Probably also produced in the Doncaster or northern Nottinghamshire area. Sherds from a jar with burnished lattice decoration and an out-curved rim from context 11904 and very abraded sherds from context 12706 were recorded.

IAGR2 A handmade or wheel finished 'pimply' fabric with surface colours varying from dark grey to dull orange: moderate fossil shell (0.5-5mm), moderate quartz (0.2-0.5mm) and moderate to sparse grog or mudrock. Sherds from single jar with a handmade triangular rim and a cordoned neck were recorded from context 12006 similar to examples from Rossington Grange, Dunstan's Clump and Rampton (Rowlandson 2013, 3-5 and 7; Elsdon 1996 B.5). This type of cordoned jar probably date to the 1st century AD. A further body sherd was recorded from context 11506.

SHEL Shell-gritted sherds from a single vessel of uncertain date probably late Iron Age to Roman. The sherds are in poor condition but found with grey ware. A 2nd or 3rd century AD date would perhaps appear likely, context 12505.

FCLAY A single formless fragment of fired clay in a fine fabric was retrieved from context 12505.

Table 3 Roman pottery dating summary

Area	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %
115	11506	1-E2	A single shell-gritted sherd.	1	9	0
119	11904	AD120+	A small group of grey ware including a sherd from a jar with burnished lattice decoration.	1	42	0
119	11908	Roman	A single grey ware sherd	1	6	0
120	12006	1C	Sherds from a jar with a triangular rim with cordoned decoration. This vessel had a shell-gritted fabric and was similar to examples retrieved from the Rossington Grange site (Rowlandson 2013, 3-5 and 7) and sites in Nottinghamshire such as Dunstan's Clump and Rampton (Elsdon 1996 B.5)	17	87	16
125	12505	Roman	A small group of shell-gritted sherds from a single vessel or Roman or possibly later Iron Age date and a grey ware sherd. A single small fragment of fired clay was also noted.	10	25	0
127	12704	AD120+	Excoriated sherds from a grey ware jar with burnished lattice decoration.	36	286	0
127	12706	2C+	A small group of grey ware sherds, most probably all from jars.	11	72	0

Table 4 Roman pottery sherd archive

Area	Context	Fabric	Form	Decoration	Vessels	Alt	Comments	Join	Sherd	Weight	Rim diam	Rim eve
115	11506	IAGR2	-	HM?	1	ABR	BS; OX/ R		1	9	0	0
119	11904	GREY8	JEVC	LA	1		BS SHLDR		1	42	0	0
119	11908	GREY1	-		1	ABR	BS		1	6	0	0
120	12006	IAGR2	J	WF?; CORD	1	ABR	RIM SHLDR		17	87	22	16
125	12505	GREY1	-		1	ABR	BS		1	3	0	0
125	12505	SHEL	-	HM	1	ABR	BS; IRF; IA-ROMAN		8	19	0	0
125	12505	FCLAY?	-			VAB	BS; FORMLESS FINE FABRIC		1	3	0	0
127	12704	GREY1	-	LA	1	VAB	BS		36	286	0	0
127	12706	GREY1	-		4	ABR	BS		4	32	0	0
127	12706	GREY1	-		1		BS		2	3	0	0
127	12706	GREY1	J		1	ABR	RIM SHLDR SCRAPS		2	6	0	0
127	12706	GREY8	-		1	VAB	BS; SURFACES LOST		3	31	0	0

6.5 Other finds by Lorraine Mepham

Post-medieval pottery

6.5.1 Two post-medieval sherds were recovered from topsoil contexts (trenches 102 and 119 respectively). Both are redwares. The sherd from trench 102 is unglazed, from the rim of a jar; this sherd can only be broadly dated as post-medieval (probably 17th-century or later). The sherd from trench 119 carries trailed slip decoration and is from the rim of a cup or porringer, with a date range of 17th-/18th-century.

Worked flint

6.5.2 The single piece of worked flint, which was the only find from ditch 12103, is a broken blade in a pale grey flint. Dating of single flint artefacts is difficult, but it may be noted that blade technology is characteristic of earlier prehistoric flintworking, ie Mesolithic or early Neolithic.

7 ENVIRONMENTAL EVIDENCE

7.1 Introduction

7.1.1 Thirty-four bulk samples were taken from a range of features of unknown, Iron Age/Romano-British and Anglo-Norman date. The samples were processed by standard flotation methods on a Siraf-type flotation tank; the flot retained on a 0.25 mm mesh, residues fractionated into 5.6/4 mm and 1 mm fractions and dried. The coarse residue fractions (>5.6/4 mm) were sorted by eye, weighed and discarded. Environmental material extracted from the residues was added to the flots.

7.1.2 For the assessment, preliminary identifications of dominant or important taxa were noted. Remains within flots and residues were recorded semi-quantitatively on an abundance scale. Environmental evidence preserved at site comprises charred plant remains and charcoal. This report presents updated results from the assessment (Wessex Archaeology 2020), together further analysis of charred plant remains and charcoal from selected features.

7.2 Charred plant remains

7.2.1 Charred plant remains were analysed from pit 11505 (Trench 115) radiocarbon dated to the early-mid Romano-British (cal. AD 10–200) and ditch 12705 (Trench 127) radiocarbon dated to the mid-late Romano-British period (cal. AD 250–380) (see section 7.5.9).

Methods

7.2.2 All identifiable charred plant remains were extracted from the flots and fine residue (<4 mm) residue fractions (or subsamples) using a Leica MS5 stereomicroscope at up to x40 magnification. Except when otherwise stated, quantifications are given as MNI (minimum number of individuals) and are based on anatomy (generally whole items or the highest type of anatomical fragments; e.g. cereals, based on Antolín and Buxó 2011; glume bases and legume cotyledons divided by two).

7.2.3 Identifications have been undertaken through comparison with modern reference material held by Wessex Archaeology and specialised literature where appropriate (eg Jacomet 2006). Nomenclature follows Stace (1997) for wild taxa and Zohary *et al.* (2012) for cereals and other cultivated crops (using traditional names). The analysis data has been recorded with the software Arbodat (Kreuz and Schäfer 2002) for the purpose of data sharing.

Results

7.2.4 The assessment indicated that the flots were generally small and had variable bioturbation indicators suggesting the possibility of some stratigraphic movement. Charred material was overall fairly sparse and poorly preserved, with the assessed samples having on average less than 10 items (a summary of the assessment results can be found on **Appendix 1**).

Table 5 Results of the analysis of charred plant remains from Romano-British features

C14 Date	cal. AD 10-200	cal. AD 250-380
Feature Type	Pit	Ditch
Feature	11505	12705
Context	11506	12706
Sample	11502	12702
Sample volume (l)	37	32
Flot volume (ml)	220	60
Bioturbation: Roots %, Uncharred seeds A** = > 100, A* = 30-99, A = >10, B = 9-5, C = <5 E = earthworm eggs, I = insects, F = mycorrhizal fungi sclerotia	1%, A, E	<1% A, E, I, F

C14 Date			cal. AD 10-200	cal. AD 250-380
Feature Type			**Pit**	**Ditch**
Feature			**11505**	**12705**
Context			**11506**	**12706**
Sample			**11502**	**12702**
Fragmentation index (MNI/NR)			**0.50**	**0.45**
Density (MNI/l)			**9.41**	**2.23**
Scientific name	**Common name**	**Plant part**		
Woodland/scrub				
Corylus avellana	Hazelnut	nutshell	1	1
Ruderal plants				-
Chenopodium sp.	Goosefoots	seed	-	6
Chenopodiaceae	Goosefoot family	seed	-	1
Spergula arvensis	Corn spurrey	seed	-	9
Persicaria lapathifolia	Pale persicaria	seed	1	3
Polygonum sp.	Knotgrasses	seed	2	22
Rumex sp.	Docks	seed	3	-
Polygonaceae	Knotgrass family	seed	1	1
Raphanus raphanistrum	Wild radish	capsule	1	-
Plantago sp.	Plantains	seed	1	-
Veronica hederifolia	Ivy-leaved speedwell	seed	1	-
Anthemis cotula	Stinking mayweed	seed	-	1
Cyperaceae	Sedge family	seed	6	-
Lolium/Festuca	Rye-grasses/Fescues	grain	-	3
Avena sp.	Oats	grain	-	2
Bromus hordeaceaus/secalinus	Soft-brome/Rye brome	grain	8	-
Poaceae	Grasses	grain frag.	74	16
Other crops				-
Pisum sativum	Garden pea	seed	-	1
Vicieae	Vetches	seed	1	5
Fabaceae	Pea family	seed frag.	-	6
Linum usitatissimum	Flax	seed	-	3
Cereals				
Hordeum vulgare	Barley	grain	3	6
Hordeum vulgare	Barley	rachis segment	19	-
Triticum spelta	Spelt	grain	4	1
Triticum spelta	Spelt	spikelet	37	5
Triticum dicoccum	Emmer	grain	4	-
Triticum dicoccum	Emmer	grain	15	1
Triticum dicoccum	Emmer	spikelet	103	-
Triticum sp.	Wheat	grain	28	-
Triticum sp.	Wheat	spikelet	80	2
Triticum sp.	Wheat	rachis segment frag.	3	-
Triticeae	Cereal	grain fragment	-	12
Triticeae	Cereal	chaff fragment	10	-
Other				
Indeterminata (charred)		fragment	2	2
Indeterminata (charred)		bud	-	1
Indeterminata (charred)		root	9	-
Indeterminata (charred)		seed	3	3
Indeterminata (charred)		stem	138	27
Indeterminata (charred)		thorn	-	1
Indeterminata (charred)		tuber	2	-
Indeterminata (charred)		insect faecal pellet	1	-
NR			**699**	**158**
MNI			**348**	**72**

7.2.5 The richest samples derive from Romano-British pit 11505 and ditch 12705 (**Table 5**), with almost 700 and 160 remains respectively (MNI 348 and 72). The sample from pit 11505,

directly dated to cal. AD 10-200 (section 7.5.9), was dominated by cereal chaff but also contained a moderate amount of charred grains and remains from wild plant taxa. The cereals included *Triticum* sp. (wheat) among which both *T. dicoccum* (emmer) and *T. spelta* (spelt) were identified, with grains and chaff (glume bases, spikelet forks, rachis internodes and rachises), and *Hordeum vulgare* (barley) grains and rachis segments. The sample from ditch 12705 was directly dated cal. AD 250-380 (section 7.5.9), and was characterised by high numbers of wild plant remains, small numbers of cereal remains and a few remains of other domesticated plants including *Linum usitatissimum* (flax) and large-seeded pulse fragments, one of which was identified as *Pisum sativum* (garden pea); the remainder probably belong to the same species (this could not be ascertained due to poor preservation and the absence of key anatomical parts such as the hilum).

7.2.6 Other remains present were in the samples were seeds of Poaceae (wild grasses, including *Avena* sp. – oats, and *Bromus hordeaceus/secalinus* – soft/rye brome, and *Lolium/Festuca* – rye-grasses/fescues), *Plantago* sp. (plantains), Polygonaceae (knotgrass family), *Polygonum* sp. (knotgrasses), *Rumex* sp. (docks), *Persicaria lapathifolia* (pale persicaria), *Chenopodium* sp. (goosefoots), Chenopodiaceae (goosefoot family), *Spergula arvensis* (corn spurrey), *Veronica hederifolia* (ivy-leaved speedwell), *Anthemis* tp. *cotula* (stinking mayweed), Cyperaceae (sedge family) Vicieae (vetches), *Raphanus raphanistrum* (wild radish), and *Corylus avellana* (hazel) nutshell fragments, amongst other remains of indeterminate taxa.

7.2.7 Plant remains recorded in the assessed samples comprised occasional cereal remains (including emmer wheat), a possible *Prunus* sp. (plum/cherry/sloe) endocarp and frequent tubers/swollen basal culm internodes of *Arrhenatherum elatius* var. *bulbosum* (onion-couch grass).

Discussion

7.2.8 The assessed samples originated in largely undated features, although some of these are possibly associated with Iron Age/Romano-British activity in the area. Their charred plant remains are broadly indicative of some plant exploitation activities, and some may date to earlier periods, but these remains are too sparse and poorly preserved to be able to contribute to a discussion of these plant exploitation practices or their possible age.

7.2.9 In contrast, the analysed samples have more interpretative potential, although this is still necessarily limited due to the restricted number of samples. The results are not necessarily representative of the whole spectrum of activities carried out and resources exploited in the site over time, and due to the preservation by carbonisation which favour certain types of products and activities (eg van der Veen 2007, 2014). Although they are very different in their composition, both samples are consistent with agricultural practices of the Romano-British period and probably represent the discard of domestic by-products from a mix of everyday practices (tertiary type assemblage, *sensu* Fuller *et al*. 2014) on account of their mixture of elements. Alternative explanations for the origin of the assemblage (charred fodder or dung, roofing or bedding material, etc…) are also possible for some of the elements in the samples but these are less likely on account of the overall sample compositions. The differences between the samples could correspond to chronological (the samples are dated to the early and late Romano-British periods respectively, see section 7.5) or functional (sets of different activities being responsible for each of the material) factors. Overall, the archaeobotanical and dating evidence from these samples point to the existence of an as yet-unidentified settlement nearby where domestic activities were carried out.

7.2.10 The earliest sample, from Romano-British pit 11505 dating to the 1st or 2nd century AD, comprised a diverse mix of charred plant remains. However, the main remains recorded in the sample (cereal chaff, grains) suggest that the bulk of these activities consisted of crop-processing. Chaff is less likely to preserve than cereal grains when charred and therefore would be underrepresented (Boardman and Jones 1990); its abundance (ratio of 0.2:1 grains to spikelet forks) suggests that chaff was the main element being discarded, with a small proportion of grain perhaps accidentally lost. This indicates the main activity was largely de-husking of cereal crops (van der Veen 2007), which can be facilitated by roasting or parching. In wet climates, hulled wheats such as emmer and spelt are best stored within the spikelet to prevent spoilage, with piecemeal processing prior to consumption undertaken at a later stage (Hillman 1981). The occurrence of wild plant seeds, particularly large-seeded grasses such as soft/rye brome (an archaeophyte) suggests their presence as a weed in crop fields and their accidental arrival to the settlement; these would have been removed from the harvested crop by hand picking. Other wild plant seeds present in the samples may also have arrived with the cereal crop, or could have been growing in the area of the settlement, either being accidentally carbonised or intentionally exploited (eg docks/sorrel have edible leaves, although they are best consumed before setting seed, Fern 1995-2019).

7.2.11 The later sample, from ditch 12705 dating to the 3rd-4th century AD, also has a mixture of remains from crop-processing activities. A notable characteristic of this sample is the relative rarity of cereal remains and the presence of other crops including garden pea and flax; both of which are thought to be underrepresented in charred archaeobotanical assemblages due to processing methods. Pulses are often eaten green or boiled rather than roasted, whilst the oil-rich seeds of flax can be quickly destroyed when exposed to fire or they are crushed during oil extraction. However, the most abundant remains in this sample are wild plant seeds, particularly knotgrasses, with each plant producing a large amount of seeds. Most of these wild plants are found in a variety of disturbed habitats and a number of them could have acted as weeds in crop fields (this is particularly the case of archaeophytes, absent in the previous sample, such as corn spurrey and stinking mayweed, see Preston *et al*. 2004). These arable weeds may be indicative of the cultivation of both heavy (stinking mayweed) and lighter acidic (corn spurrey) soils, suggesting the cultivation of the immediate environment of the site where both types of soils can be found, perhaps each dedicated for different crops. Other wild plants, such as goosefoots, may just ruderal vegetation, although they also have edible leaves and seeds which could have been used in cases of emergency (Fern 1995-2019).

7.2.12 Overall, the samples offer a glimpse into agricultural and other plant exploitation activities in the Romano-British period. Cereals were likely the staple foods, and comprised at least emmer, spelt and barley; oats may have been a crop too but the rarity of grains and the absence of any diagnostic chaff (lemma bases) that would allow identification to species level is not supportive of this hypothesis. Whilst in many parts of the country, spelt was the main cereal crop (eg Lodwick 2017), the evidence from the site points to the persistence of emmer cultivation into the 1st-2nd century. This is consistent with localised (eg Wessex Archaeology in prep) and wider trends that suggest that the cultivation of both emmer and spelt co-existed in the Romano-British period in certain areas of the country (eg Hall and Huntley 2007), but a clear pattern has not yet been demonstrated (van der Veen 2014). Emmer and spelt may have been grown together as a maslin (Jones and Halstead 1995). It is possible that these crops were grown together as a maslin; however, they could have also been grown separately and only become mixed afterwards. Although numbers of charred remains do not necessarily equate to a lesser or greater role in past subsistence (eg van der Veen 2007), it is possible that emmer was in the process of disappearing or having a minor importance on the site in the 3rd-4th century AD. Instead the cultivation of

spelt became dominant in the later Romano-British period, reflecting broader trends across the country (Lodwick 2017).

7.2.13 The abundance of barley chaff (outnumbering the grains) suggests human consumption for food at least in the 1st-2nd century (there is barley grain in the later sample too, but no chaff). Barley is sometimes interpreted as a low status indicator or perhaps suggests food scarcity due to bad wheat crops in a particular time, as barley was considered by the Romans as an inferior-quality food (soldiers who deserved punishment were fed on rations of barley instead of wheat, Watson 1969) and was mostly destined for fodder (eg Hall and Huntley 2007). However, the cultivation of barley is less demanding than wheat and it could have been better suited to the relatively nutrient poor acid soils in the surrounding area of the site. The information from other sites in Northern England suggests barley and emmer, could have been locally or regionally important crops (van der Veen 2014), with spelt having a minor role in this region, particularly in the earlier Romano-British (Lodwick 2017). The use of barley may have changed in the later Romano-British period, where there is no evidence of dehusking (only grains are preserved but no chaff), this could involve its use as fodder or for brewing. It is important to keep consistently in mind, however, that only two rich samples are available to represent each phase and their differences could be of a functional nature.

7.2.14 In addition to cereals, pea and flax were also cultivated and possibly relatively minor crops in the Iron Age and Romano-British periods (van der Veen 2014). Flax was probably used for its oil in cooking; there is no convincing evidence in the region for flax fibre exploitation by retting before the medieval period (Hall and Huntley 2007). None of these crops were Roman introductions, and there would appear to be a general pattern of continuity with the preceding Iron Age in the crop-spectrum across the wider area (eg Hall and Huntley 2007). The absence of exotic or luxury products, which in other sites is characteristic of Roman influence, is typical of a rural Romano-British settlement despite the location of the site near a Roman road and an important waterway, both of which were key in the inland distribution of introduced food plants and along whose course other imported foodstuffs have been recorded (Orengo and Livarda 2016). However, again it is impossible to tell if this absence may be due to the limited sample size that may fail to contain representative information of all the resources exploited at the site, since exotic products would be prepared in lower densities than every-day products. Even if exotic fruits were not consumed, it is suggested that Roman influence in rural settlements in Northern England seem to have produced an increase in the frequency of exploitation or wild foods (van der Veen 2014). Woodland resource exploitation at the site could be represented by the sparse hazel nutshell fragments (and possibly a fruitstone from an undated ditch), although these could also originate from shrubs and trees growing in hedges and within the settlement. Wild plant exploitation activities are likely to have played a complementary role to the cultivation of domestic resources in most agricultural societies in general, however they are less likely to be present in the charred archaeobotanical record since they are often processed without the use of fire (Mason and Hather 2002).

7.3 Charcoal

7.3.1 Charcoal analysis was undertaken on three samples from Anglo-Norman pits 3303 (Trench 33) and 12405 (Trench 124). Pit 3303 was a large oval feature, with straight sides, a flat base and evidence for *in-situ* burning; samples were taken from an upper fill (3305) and a charcoal-rich primary fill (3304). Located approximately 800 m to the south, pit 12405 was similarly sub-circular in shape with a flat base, concave sides and evidence for *in-situ* burning; a sample was taken from the charcoal-rich primary fill (12407). Pit 3303 is radiocarbon dated to cal. AD 990-1040, whilst pit 12405 is radiocarbon dated to cal. AD 1020-1160 (see section 7.5.11–12).

Methods

7.3.2 A riffle box was used to obtain subsamples for charcoal analysis, with up to about 200 fragments identified per sample/context. Identification focused on fragments in the ≥4 mm fractions, with up to 50 fragments from the 2-4 mm fractions analysed to identify wood from small shrubs and twiggy material (Asouti and Austin 2005).

7.3.3 The transverse (TS), tangential longitudinal (TLS) and radial longitudinal (RLS) sections were examined up to x400 magnification using a Kyowa ME-LUX2 microscope. Identifications were assisted by the descriptions of Gale and Cutler (2000), Hather (2000) and Schweingruber (1990), together with modern reference material held by Wessex Archaeology. Other features were recorded following Marguerie and Hunot (2007), including growth-ring curvature and the presence/absence of bark, pith and reaction wood alongside other features (eg tyloses, insect degradation, fungal hyphae, vitrification, radial cracking, woodworking marks). Growth ring widths were subjectively recorded as 'narrow', 'medium', 'wide' and 'mixed'. Nomenclature and habitat information follows Stace (1997).

Results

7.3.4 **Table 6** summarises the fragment counts of each taxon recorded and **Table 7** summarises the results of the detailed analysis.

Table 6 Summary results of the analysis of charcoal from Anglo-Norman features: fragment counts

C14 Date		cal. AD 990-1040		cal. AD 1020-1160
Feature type		Pit		Pit
Feature		3303		12405
Context		3305	3304	12406
Sample		3301	3302	12402
Sample volume (l)		32	32	36
Charcoal volume >2mm (ml)		800	8000	1600
Scientific name	**Common name**			
Fabaceae (*Ulex/Cytisus* tp.)	Gorse/Broom tp.	-	-	17
Ilex aquifolium	Holly	25	7	-
Quercus sp.	Oaks	252	255	159
Salicaceae	Willow/Poplar	8	2	-
Indet.	-	17	5	3

7.3.5 The two samples from pit 3303 contain varying quantities of charcoal. The primary fill (3304) produced an extremely large charcoal-rich flot (>2 mm, 8000 ml), whilst a smaller flot (>2 mm, 800 ml) was recovered from the upper fill (3305). It is highly likely that both deposits derive from the same event, with the upper deposit containing re-worked charcoal from the primary fill (section 7.5.11). The charcoal fragments are generally in a good state of preservation, although a few fragments are mineral-encrusted. Taxa identified include *Quercus* sp. (oaks), *Ilex aquifolium* (holly) and Salicaceae (willow/poplar). The assemblage is dominated by oak (92%), whilst holly and willow/poplar are present in trace quantities. The majority of the oak fragments present are radially fractured slivers. Where larger oak fragments were preserved, these overwhelmingly exhibited weak growth ring curvature, narrow growth rings and abundant tyloses indicating mature heartwood from trunks or branchwood. Slight evidence for radial cracking and low-level vitrification is noted. In comparison, the holly and willow/poplar fragments displayed strong or moderate ring curvature, with growth ring widths classified as either medium or wide, suggesting that these fragments include some small calibre roundwood. The only other remains noted within the

sample are a few small fragments of hazel (*Corylus avellana*) nutshell and cleavers (*Galium* sp.) seed.

Table 7 Summary results of the detailed charcoal analysis from Anglo-Norman features: fragment counts

Feature	3303				12405	
Context	**3304 + 3305**				**12406**	
Sample	**3301 + 3302**				**12402**	
Scientific name	***Ilex aquifolium***	***Quercus* sp.**	**Salicaceae**		***Ulex/ Cytisus* tp.**	***Quercus* sp.**
Common name	**Holly**	**Oaks**	**Willow/ Poplar**		**Gorse/ Broom tp.**	**Oaks**
Growth ring curvature[1]						
Weak	-	132	-		-	58
Moderate	6	-	-		3	-
Strong	3	-	3		13	-
Indet.	1	269	6		1	76
Growth ring width[2]						
Narrow	-	97	-		-	10
Medium	2	6	1		-	17
Wide	1	2	1		7	7
Mixed	-	14	-		3	2
Tyloses	-	133	-		-	45
Insect holes	-	-	-		-	1
Radial cracking	1	13	-		6	21
Vitrification[3]						
Level I	-	5	-		-	5
Level II	-	4	-		-	4
Level III	-	-	-		-	-

[1] Growth ring curvature only recorded for ≥4mm fragments, often indeterminate due to the presence of radially fractured slivers. [2] Growth ring width only recorded where ≥2 rings present. [3] Based on Marguerie and Hunot (2007).

7.3.6 Pit 12402 similarly produced a large charcoal-rich flot (>2 mm, 2000 ml). The charcoal is in an excellent state of preservation, with some very large fragments (>40 mm). The assemblage is similarly dominated by *Quercus* sp. (oaks), which forms 89% of the identified fragments. A high proportion of these oak fragments are radially fractured slivers. Where other features could be observed, the oak fragments display weak growth ring curvature and growth ring widths are classified as a mixture of wide, medium, narrow and variable (reflecting variable growing conditions). Tyloses are noted in some of the oak fragments and an insect hole is identified in one fragment. The remainder of the charcoal assemblage is composed *Ulex/Cytisus* tp. (gorse/broom tp.) fragments; these species within the Fabaceae family cannot be separated from one another. Pith and bark are preserved on some gorse/broom tp. fragments and these measured between 10–12 mm in diameter. No other charred plant remains are present in the sample.

Discussion

7.3.7 The evidence recovered from both features is highly characteristic of charcoal production pits (Deforce *et al.* 2021). Until recently, charcoal production was an important component

of rural economies, with charcoal providing a key fuel source in metal working (eg iron smelting, smithing), amongst other craft industries (Gale 2002). The production of charcoal was a specialised task undertaken within woodlands or close to wood sources given the difficulty of transporting large volumes of wood significant distances (Warren *et al.* 2012). Traditionally, charcoal was produced by stacking wood in an earth/turf sealed mound located either on a raised platform or within a pit kiln (Bond 2007). In this case, the form of the pits with clear evidence for *in-situ* burning is indicative of production in a pit kiln.

7.3.8 Ethnographic evidence indicates that the maximum size of the wood used for charcoal production was 25–30cm in diameter (although often less) and around 1m in length, with larger logs requiring splitting (Bond 2007; Paradis-Grenouillet *et al*. 2015). The size and age of the timbers used can be estimated through a combination of factors, including growth ring curvature and the presence of tyloses within vessels. In deciduous oaks, tyloses formation typically occurs in trees aged >20–25 years in both sapwood and heartwood, although a significantly higher proportion of tyloses can be observed within vessels in heartwood (Dufraise *et al.* 2018). Whilst the proportion of vessels containing tyloses has not been systematically counted, tyloses were very abundant in many of the oak fragments examined. This factor, coupled with the weak growth ring curvature of the fragments analysed, is indicative of the use of mature heartwood from either trunks or large branchwood (Marguerie and Hunot 2007). In this case, it is evident that offcuts, stumps or fallen branches from timber trees were used for charcoal production, as opposed to fast-grown coppiced wood. Oak produces excellent charcoal and its occurrence alongside other deciduous woodland species is paralleled at other sites (eg Challinor 2011; Druce 2019). Gorse/broom could have been used to light the wood stacks since it ignites easily and burns quickly at high temperatures (Gale and Cutler 2000). Ethnographic evidence suggests that gorse/broom branches may also have been used to create a seal around the wood stack (Foard 2001).

7.3.9 The timber sourced for charcoal production in pit 3301 derived from slow-grown oak, with holly existing as an understorey shrub since it is capable of tolerating shade (Stace 1997). In comparison, evidence for gorse/broom-type charcoal in pit 12402 is indicative of a heathland environment and more open growing conditions; the wider spacing of the oak growth rings within this sample probably also reflects these more open conditions. It is possible that the oak in pit 12402 reflects a timber tree growing within managed woodland since coppicing can encourage a ‘release’ of fast growth in oaks (Bridge *et al*. 1986). The wood species used for charcoal production would be expected to closely mirror their availability in the past environment (cf. Warren *et al.* 2012; Ludemann *et al*. 2017).

7.3.10 Woodlands were valuable economic resources and actively managed, often through a system of coppice-with-standards where underwood is felled to leave large timber trees (‘standards’) such as oak to mature for >100 years (Rackham 1990). Documentary sources suggest that coppicing was undertaken on cycles ranging between 5–25 years; in wood-pasture systems, pollarding may instead have been practiced where trees are cut higher above the ground to protect new growth from grazing. Coppicing or pollarding was required to maintain a sustainable source of wood for charcoal production, although it is difficult to identify specific references to woods being exclusively managed to produce charcoal (Bond 2007). Coppiced poles, deadwood, fallen branches, offcuts from timber and trunks were all used to produce charcoal (Bond 2007; Paradis-Grenouillet *et al.* 2015).

7.3.11 The method of charcoal production appears to vary depending on the date of the site. Research in the Low Countries (Netherlands, Belgium) indicates that charcoal was mainly produced in circular or oval pits during the earlier medieval period, whereas larger mound kilns were more commonly a feature of the later/post-medieval period (Deforce *et al.* 2021).

Closely comparable circular/sub-circular charcoal production pits have similarly been recorded in other earlier medieval sites in Britain (eg Challinor 2011; Druce 2019; Wessex Archaeology forthcoming). Rackham (1990) identifies a reference in an early medieval charter to the production of charcoal in pits. After the Norman conquest and throughout the later medieval period, documentary sources indicate that charcoal production was a well-established rural industry, often through use of an above ground dome or mound shaped stacks constructed on platforms (Bond 2007). This broad shift in technological practice from pit kilns to mound kilns probably relates to a change in the scale of manufacture, with charcoal being produced on a larger scale in later periods to reflect increasing market demand and use in industrial processes.

7.4 Summary

7.4.1 The charred plant remains retrieved offer a glimpse into routine agricultural and wild plant exploitation domestic activities in the Romano-British period and point to the existence of a domestic settlement that has not been yet identified. Barley, emmer, flax, garden pea and spelt were the main cultivated crops, while hazelnuts were gathered from the wild.

7.4.2 Charcoal evidence recovered from two Anglo-Norman pits provides strong evidence for charcoal production in pit kilns; an important rural industry. Charcoal was primarily produced using mature oak trunks or branch wood, and it is possible that some of the oak may have derived from managed woodland.

7.5 Radiocarbon dating

Introduction

7.5.1 Radiocarbon dating samples were submitted with the purpose of improving the understanding of the site phasing and providing a firm chronological background for the environmental analyses.

Materials and methods

7.5.2 A total of seven radiocarbon samples from short lived charred plant remains or wood charcoal were selected, one being a replacement on a failed sample.

7.5.3 The samples were selected taking into account stratigraphic and technical criteria, such as the nature of the available samples and their potential for carrying associated offsets, and the association between the samples and the event, which is aimed to be dated, following Waterbolk (1971). In the case of charred plant remains, considerations of residuality and intrusion are considered following Pelling et al (2015).

7.5.4 The samples were submitted to the 14CHRONO Centre, Queen's University, Belfast (UBA). Reporting of the radiocarbon dating (see Table x) results follows international conventions (Bayliss 2015; Millard 2014).

7.5.5 At UBA, the macrofossil samples and the bulk sediment sample were treated with AAA (Acid-Alkali-Acid) following de Vries and Barendsen (1958) and Fischer and Heinemeier (2003). All measurements were corrected using AMS δ13C values, further detail is given in 14Chrono (2019).

7.5.6 The calibrated age ranges were calculated according to the maximum intercept method (Stuiver and Reimer 1986) with OxCal 4.4 (Bronk-Ramsey 2009) using the IntCal20 curve (Reimer et al. 2020). All radiocarbon measurements are quoted as radiocarbon ages - uncalibrated years before present (BP), followed by the lab code and the calibrated date-range (cal. BC) at the 2σ (95.4%) confidence, according to the maximum intercept method

(Stuiver and Reimer 1986) and with the end points rounded out to the nearest 10 years. Posterior density estimates are given in italics (Bayliss 2015) and taken from the models given in Figures.

Results

7.5.7 Six of the samples were successfully measured, providing results from the Middle Iron Age to the Anglo-Norman period (Table 5).

Table 8 Radiocarbon dates from Partridge Farm

Lab. Ref	Feature/ deposit type	Sample reference	Material	Radiocarbon Age (BP)	Calibration	Posterior density estimates
					95.4%	
UBA-45252	Fill of ditch with possible Neolithic flint	227260_12104_12101	Charred plant remain: *Arrhenatherum elatius* subsp. *bulbosum* tuber	2197±20	360–180 cal. BC	-
UBA-45251	Fill of pit 11505 with a rich charred plant assemblage	227260_11506_11502	Charred plant remain: *Triticum dicoccum* grain	1944±23	cal. AD 10–200	*cal. AD 10–210*
UBA-45254	Fill of ditch 12705 with a rich charred plant assemblage	227260_12706_12702	Charred plant remain: *Triticum spelta* grain	1746±19	cal. AD 250–380	*cal. AD 240–370*
UBA-45250	Primary fill of pit 3303 with *in situ* burning	227260_3304_3302	Wood charcoal: Roundwood	1006±18	cal. AD 990–1130	*cal. AD 990–1040*
UBA-45249	Upper fill of pit 3303 with *in situ* burning	227260_3305_3301	Wood charcoal: Roundwood	Failed		
UBA-45660		227260_3305_3301	Wood charcoal: Holly (*Ilex aquifolium*), moderate ring curvature with 6 variable width growth rings (408mg).	1016±21	cal. AD 990–1120	*cal. AD 990–1050*
UBA-45253	Fill of pit 12405 with *in situ* burning	227260_12406_12402	Wood charcoal: Roundwood. Fabaceae (Gorse-type), 12mm diameter roundwood, 3 growth rings (widely spaced), excellent condition.	934±21	cal. AD 1030–1160	*cal. AD 1020–1160*

Discussion

7.5.8 The date on an onion-couch (*Arrhenatherum elatius* subsp. *bulbosum*) tuber aimed to date a deposit with what was initially interpreted as a possible Neolithic or Bronze Age flint. The deposit was a fill within a ditch in the edge of the possible Iron Age–Romano-British settlement in Area 7 and contained Romano-British pottery. The result was Middle Iron Age (UBA-45252; 2197±20 BP: 360–180 cal. BC) providing a probable TAQ for the formation of the fill but this does not necessarily reflect the date of the flint, which has been reinterpreted as redeposited.

7.5.9 Two measurements confirmed the chronology of deposits with rich charred plant remains and Romano-British pottery, from the fills of pit 11505 dated *cal. AD 10–210* (UBA-45251: 1944±23 BP, cal. AD 10–200) and ditch 12706 dated *cal. AD 240–370* (UBA-45254: 1746±19 BP, cal. AD 250–380) in Area 7 (**Fig. 9**).

7.5.10 The material evidence uncovered during the evaluation was interpreted as mostly dating to the Romano-British period, with only two fragments of post-medieval pottery being retrieved from the topsoil. However, two deposits (both with no artefacts) are confirmed as post Romano-British (Anglo-Norman), based on the radiocarbon measurements on wood charcoal from charcoal-rich deposits in pits with evidence of *in situ* burning in Area 3 and Area 7, which probably originate in the same phase of activity occurring early in the first half of the C11th (**Fig. 10**):

7.5.11 The upper (UBA-45249 – failed; replacement UB45660, 1016±21 BP, cal. AD 990-1120) and lower (UBA-45250: 1006±18 BP, cal. AD 990–1130) deposits of a pit (3303) with in situ burning in Trench 33; the measurements are consistent when modelled as a sequence and can be narrowed down to *cal. AD 990–1040/1050* and may even be contemporary and originating in the same activity, since they are consistently combined as having occurred sometime between *cal. AD 990–1040* (χ^2 v=1 T'=0.1, T'(5%)=3.8, **Fig. 10**).

7.5.12 Fill of pit 12405 with *in situ* burning in Trench 124 dated *cal. AD 1020–1160* (UBA-45253: 934±21 BP, cal. AD 1040–1160).

8 CONCLUSIONS

8.1 Summary

8.1.1 For Areas 2, 3, 5, 6 and 7, all of the ditches, with the exception of ditch 3306 in Area 3, appeared to be of demonstrably post-medieval or modern date and probably relate to the parliamentary enclosure of the area in the 18th–19th centuries. No traces of the coaxial field system hinted at by the cropmark evidence were revealed in any of the trenches. Although ditch 3306 was undated, it seemed to have a different character to those of the other ditches. The lack of post-medieval–modern material from the fills and absence from historic mapping may suggest an older date than its fellows.

8.1.2 In the northern half of Area 7, some of the ditches (9703, 10303, 10703) could possibly be matched to NMP cropmarks. However, trenches 98, 99, 102, 109, 130 which were specifically located to target cropmarks failed to identify these as cut features. A similar problem was encountered with the geophysical survey and only ditch 10803 was posited by the survey. None of the features in the northern half of Area 7 produced dateable material although none were obviously post-medieval or modern. It is possible therefore that many of the ditches encountered in this area are part of an Iron Age–Romano-British coaxial field system although this was not proven. Similarly the lack of finds from these features suggest that settlement activity did not extend this far north.

8.1.3 In the southern part of Area 7 similar problems were encountered and some of the ditches could be related to NMP cropmarks or responses on the geophysical survey. However, some of the ditches did not relate to either survey and some of the trenches that targeted specific cropmarks or responses failed to reveal any cut archaeological features.

8.1.4 The relatively early radiocarbon date from material sampled from ditch 12103 indicates the presence of Iron Age activity in the area and raises the possibility of a Middle Iron Age date for some elements of the field system.

8.1.5 No structures definitively associated with habitation were identified but the pottery and environmental assemblages recovered from the pits and ditches in the central southern part of Area 7, along with the possible evidence for metalworking recovered from pit 12503, suggest that by late in the 1st century AD, a settlement had been established in or near to this area.

8.1.6 All of the pottery recovered during the excavations was of local manufacture and suggests a modest scale of activity with a main period of occupation in the 2nd century AD. The radiocarbon dates however indicate that occupation continued into the 3rd century AD.

8.1.7 Although the sample size is small, the charred plant remains are indicative of crop processing waste from the nearby settlement with barley, emmer, flax, garden pea and spelt were the main cultivated crops, while hazelnuts were gathered from the wild. The evidence suggests that a range of different soil types were being exploited for arable production.

8.1.8 In summary, the evidence suggests that the archaeological remains uncovered in the southern part of Area 7 relate to a number of enclosures belonging to a nearby settlement. It is possible that the settlement was situated just outside of the excavated area and that these enclosures relate to animal paddocks.

8.1.9 The environmental evidence from pits 3303 (Area 3) and 12405 (Area 7) have provided us with exciting evidence for previously unsuspected activity during the Anglo-Norman period. The production of charcoal here not only points to local industrial activity, probably supplying blacksmithing, but indicates the presence of managed woodland in the immediate vicinity.

8.2 Discussion

8.2.1 The area of the Magnesian Limestone Belt and Sherwood Sandstones, within which the site of Partridge Hill Farm sits, was identified by the Rural Settlement of Roman Britain project as having a relatively high frequency of excavated Romano-British settlement for north-east England (Allen 2016, 243). Whilst components of this frequency are a product of the greater visibility of cropmarks on the underlying geology in this region and the scale of development leading to increased archaeological intervention, it does appear to have a relatively high density of Romano-British activity.

8.2.2 Partridge Hill Farm is situated in a region where a number of surveys have confirmed the presence of widespread field systems, enclosures and trackways which are typically considered to have a Late Iron Age–Romano-British date (Riley 1980; Roberts et al 2010; Stoertz 1997). During the Late Iron Age, the region is hypothesised as the northern landholding of the tribal grouping identified as the Corieltauvi who had a presumed boundary with their northern neighbours, the Brigantes, along the Don River (Buckland 1986, 1–4; Hartley and Fitts 1988, 5).

8.2.3 The first arrival of the Roman army in the region was in AD 48 and then again in AD 51-2 as they conducted campaigns in aid of their ally, Queen Cartimandua of the Brigantes, at which point the vexillation fort at Rossington Bridge 3.1 km to the north of Partridge Hill Farm, is thought to have been constructed (Hanson and Campbell 1986, 81-2) (Figure 4). A second fort, Scaftworth, was constructed at Bawtry 2.9 km to the south with both controlling river crossings. A Roman road, linking Rossington Bridge and Scaftworth forts runs 300 m to the west of Partridge Hill Farm. This forms a possible route of Ermine Street, connecting the Roman fort at Danum (Doncaster) with Lindum (Lincoln).

8.2.4 Elements of the extensive areas of co-axial field systems have been excavated around the local area and Late Iron Age dates were ascertained for parts of the system at Rossington Inland Port (Wessex Archaeology 2019b), Parrots Corner, Rossington (NAA 2010) and along the A6182 (‘The Great Yorkshire Way’) (Daniel 2019). Although it has been suggested that the Roman road running north from Rossington Bridge to Doncaster cuts across the earlier field systems thereby putting at least some of them out of use (Riley 1976), excavation has shown that the establishment of the Rossington Bridge fort appears to have had no impact upon the earlier field systems at Parrots Corner (NAA 2010) whilst along the

A6182 the system continued to expand into the first half of the Romano-British period (Daniel 2019).

8.2.5 On land adjacent to Doncaster Sheffield Airport, immediately to the north of the Partridge Hill evaluation area, elements of the field system were found to have an early Roman date. Some linear features that were not manifested as either cropmark or geophysical anomalies were also discovered, and some features suggested from cropmark and geophysical surveys could not be identified in the excavations (Archaeological Services WYAS 2019). This is similar to the experience at Partridge Hill Farm and could either result from disturbance caused by modern agricultural practice or misidentification of features of a superficial geological nature.

8.2.6 Iron Age settlement has also been excavated in the region including 4.4 km to the west at Rossington Grange Farm, where a Late Iron Age settlement situated within a 80 m by 60 m enclosure expanded incrementally over several centuries and which by the later Roman period focused on pottery production and crop processing (Roberts and Weston 2016).

8.2.7 At Manor Farm, Bessacar, 4.8 km to the north-west a pottery manufacturing site was established in the late 1st century AD over earlier Late Iron Age enclosures (MAP Archaeological Practice Ltd 2017) along with a significant area of Romano-British ironworking (MAP Archaeological Consultancy Ltd 2010).

8.2.8 The land adjacent to Doncaster Sheffield Airport produced evidence for a very early Romano-British enclosed settlement dated to the 1st century AD along with a second area that contained a pottery kiln indicating pottery production during the 2nd century AD (Archaeological Services WYAS 2019)

8.2.9 Two further nearby areas of Romano-British activity have been identified just over the border in Nottinghamshire near Misson. The first at Newington Quarry, where two episodes of fieldwalking recovered scatters of Romano-British pottery (NAA 2002; NAA 2007) although trial trenching failed to identify any Romano-British features (Greavey 2002). The second, to the north of Bawtry Lane, included a metal detecting survey which recovered three Romano-British bronze broaches (OAA 1993), whilst two ditches containing Romano-British pottery were revealed during stripping (WYAS 2002, 2009). Further afield 5.8 km to the west at Rossington Inland Port, evidence for settlement over the 2nd and 3rd century AD was revealed.

8.2.10 Pottery production was an activity at a number of sites along the banks of the river Torne 3km to the north of Partridge Hill Farm, but the economy of the region was probably dominated by exploitation of a mixed agricultural regime.

8.2.11 A lack of excavation at either Rossington Bridge or Scaftworth forts means that we do not know their exact periods of occupation, but it is possible that both were still occupied in some form during the lifetime of the settlement at Partridge Hill Farm. Located 300 m from a major Roman road and situated equidistance between two forts, the settlement was well placed to exploit these markets. However all the pottery recovered was of local manufacture and there is no evidence that the inhabitants obtained regional or imported material, either by choice or lack of access.

8.2.12 There is an increase in settlement numbers in north-east England over the Roman period from the Late Iron Age, reaching a peak in the second half of the 2nd century AD after which they decline (Allen 2016, 247). The chronological evidence from Partridge Hill Farm

matches this pattern with the site occupied at the peak of Romano-British settlement in the region and adds to the corpus of our knowledge for the region during this period.

8.2.13 The next archaeologically visible activity relates to the Anglo-Norman period. Material from pit 3303 in Area 3 produced modelled radiocarbon dates of *cal*. AD 990–1040/1050 and material from pit 12405 a date of *cal*. AD 1040–1160. Both of these pits contained significant evidence for in situ burning, something also apparent in pit 12203 and represent the process of charcoal production.

8.2.14 The nearest contemporary settlement at this time 1.6 km to the south-east at the village of Austerfield which was the location of the Council of Austerfield, convened by King Aldfrith of Northumbria in AD 702 to determine whether Saint Wilfrid should become Archbishop of York (Stenton 1971, 143-4).

8.2.15 In 1086, the Domesday book records that in 1086 Austerfield was held by Count Robert of Mortain (https://opendomesday.org/place/SK6694/austerfield/).

9 STORAGE AND CURATION

9.1 Museum

9.1.1 The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. Doncaster Museum has agreed in principle to accept the archive, under accession code DONMG:2021.16. Deposition of any finds with the museum will only be carried out with the full written agreement of the landowner to transfer title of all finds to the museum.

9.2 Preparation of the archive

Physical archive

9.2.1 The archive, which includes paper records, graphics, artefacts, ecofacts and digital data, is prepared following the standard conditions for the acceptance of excavated archaeological material by Doncaster Museum, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014c; Brown 2011; ADS 2013).

9.2.2 All archive elements are marked with the site/accession code, and a full index will be prepared prior to the actual deposition. The physical archive comprises the following:

- 2 cardboard boxes or airtight plastic boxes of artefacts and ecofacts, ordered by material type;
- 2 files/document cases of paper records and A3/A4 graphics.

Digital archive

9.2.3 The digital archive generated by the project, which comprises born-digital data (eg site records, survey data, databases and spreadsheets, photographs and reports), will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata. Full details of the collection, processing and documentation of digital data are given in the project Digital Management Plan (available on request).

9.3 Selection strategy

9.3.1 It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during the course of an archaeological project require preservation in perpetuity. These records and materials have been subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, ie the retained archive should fulfil the requirements of both future researchers and the receiving Museum.

9.3.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993) and follows CIfA's 'Archive Selection Toolkit'. It will be agreed by all stakeholders (Wessex Archaeology's internal specialists, SYAS, Doncaster Museum) and will be fully documented in the project archive.

9.3.3 The following section summarises the selection proposals made in the site-specific Selection Strategy and Data Management Plan (**Appendix 2**).

Finds

9.3.4 Small and fragmentary assemblage, mostly Romano-British; replicated by larger and better preserved assemblages from Doncaster/Rossington area; limited further potential, but nevertheless worth retaining as part of the wider Romano-British dataset from the area. Retain all Romano-British (77 sherds) but not post-medieval (2 sherds).

9.3.5 One item of worked flint waste only (broken blade), residual in ditch fill; little further potential. Do not retain.

Documentary records

9.3.6 Paper records comprise pro-forma site registers and record sheets, drawings and reports (Written Scheme of Investigation, client report). All will be retained and deposited with the project archive.

Digital data

9.3.7 The digital data comprise the context register in spreadsheet format, finds records in spreadsheet format, survey data, photographs and reports. A selection of data will be deposited, commensurate with the scale and significance of the archaeology encountered on the site including the final report and selected photographs.

9.4 Security copy

9.4.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

9.5 OASIS

9.5.1 An OASIS (online access to the index of archaeological investigations) record (http://oasis.ac.uk/pages/wiki/Main) has been initiated, with key fields completed (**Appendix 3**). A .pdf version of the final report will be submitted following approval by the SYAS archaeologist on behalf of the LPA. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and

national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.

10 COPYRIGHT

10.1 Archive and report copyright

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APPENDICES

Appendix 1: Summary of environmental assessment (excludes analysed and sterile samples).

Area	Phase	Feature Type	Feature	Context	Sample Code	Vol (l)	Flot (ml)	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Preservation: fragmentation and erosion
tr2	Uncertain	Pit	203	204	227260_201	5	20	60%, A*, E, F	-	-	-	C	Indet. roots	-
tr33	Uncertain	Ditch	3306	3308	227260_3303	28	500	<1%, C, F	-	-	-	C	Vicieae	-
tr53	Uncertain	Pit	5303	5306	227260_5301	32	30	15%, A, E, F	C	-	Triticeae	C	*Corylus avellana*	-
tr97	Uncertain	Ditch	9703	9704	227260_9701	37	25	20%, A*, E, I	C	-	Triticeae	C	*Corylus avellana,* Poaceae	Poor
tr107	Uncertain	Ditch	10703	10704	227260_10701	36	30	25%, A**, E, I, F	-	-	-	A	*Arrhenatherum elatius* var. *bulbosum* tubers, Lamiaceae, roots/stems	Heterogenous
tr108	Uncertain	Linear	10805	10806	227260_10802	30	40	60%, A*, E, I	C	-	*Triticum* sp.	C	*Corylus avellana*	Poor
tr116	Uncertain	Linear	11605	11606	227260_11601	32	10	10%, A*, E	C	-	*Triticum* sp., *Hordeum vulgare*, Triticeae	C	*Corylus avellana*	Poor
tr119	IA/RB	Linear	11903	11904	227260_11901	31	25	5%, A**, E	B	C	*Triticum dicoccum* grain and spikelet fork	C	*Arrhenatherum elatius var. bulbosum* tuber frags	Poor
tr119	IA/RB	Linear	11905	11906	227260_11902	35	25	15%, A*, E	C	-	*Triticum dicoccum*	B	*Arrhenatherum elatius var. bulbosum* tubers, *Raphanus raphanistrum* seed capsule frag, *Plantago lanceolata*	Heterogenous
tr119	IA/RB	Pit	11907	11908	227260_11903	16	20	2%, A*, E, F	C	-	*Triticum* sp.	C	*Arrhenatherum elatius var. bulbosum* tuber, *Bromus* sp.	Heterogenous
tr120	IA/RB	Linear	12003	12004	227260_12001	18	20	2%, A*, E	C	-	*Triticum sp.*	C	*Corylus avellana*	Poor
tr120	IA/RB	Ditch	12005	12006	227260_12002	30	10	2%, A*, E	C	-	Triticeae	C	Poaceae	Poor

Area	Phase	Feature Type	Feature	Context	Sample Code	Vol (l)	Flot (ml)	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Preservation: fragmentation and erosion
tr120	Uncertain	Linear	12012	12013	227260_12003	34	35	5%, A*, E	C	-	*Triticum sp.*	C	*Corylus avellana,* cf. *Prunus* sp. endocarp	Poor
tr121	Uncertain	Ditch	12103	12104	227260_12101	35	30	20%, A***, E, I	-	-	-	C	*Arrhenatherum elatius var. bulbosum* tuber	Poor
tr122	Uncertain	Pit	12203	12204	227260_12201	33	15	5%, A, E, I, F	-	-	-	C	*Arrhenatherum elatius* var. *bulbosum* tuber	Poor
tr122	Uncertain	Linear	12206	12207	227260_12202	36	10	80%, A, E, I	C	-	*Triticum* sp.	C	*Corylus avellana*	-
tr124	Uncertain	Ditch	12403	12405	227260_12401	34	40	80%, A*, E, I, F	-	-	-	C	*Corylus avellana*	-
tr127	IA/RB	Ditch	12703	12704	227260_12701	30	10	70%, B, E, I, F	-	-	-	C	Root/tuber	Poor
tr129	RB	Ditch	12903	12904	227260_12901	33	25	2%, A*, E	-	-	-	C	*Corylus avellana, Galium* sp.	Heterogenous

Key: Scale of abundance: A*** = exceptional, A** = 100+, A* = 30-99, A = 30-10, B = 9-5, C = <5; Bioturbation proxies: Roots (%), Uncharred seeds (scale of abundance), F = mycorrhizal fungi sclerotia, E = earthworm eggs, I = insects.

Appendix 2: Selection Strategy

227260_1
Partridge Hill Farm, Austerfield
Version 1.0 23.09.21

Selection Strategy

Project Information

Project Management		
Project Manager	Milica Rajic	
Archaeological Archive Manager	Lorraine Mepham	
Organisation	Wessex Archaeology (WA)	
Stakeholders		**Date Contacted**
Collecting Institution(s)	Doncaster Museum (Laura Trinogga) Archaeology Data Service	26.02.20
Project Lead / Project Assurance	Lead: Alvaro Mora-Ottomano; Andrew Valdez-Tullet Assurance: Milica Rajic	N/A
Landowner / Developer	Innova Renewables Ltd Carven House 16 Northumberland Avenue London WC2N 5AP	
Other (external)	External finds & environmental specialists (see WSI) SYAS County Officer (Andrew Lines)	
Other (internal)	WA Finds Officer (Jessica Irwin) WA Environmental Manager (Sander Aerts) WA BIM Manager (Chris Breeden) WA internal finds & environmental specialists (see WSI)	N/A; briefed as part of standard project process
Resources		

Resources required	WA Finds and Environmental specialists; external finds and environmental specialists; WA archives team

Context

This overarching selection strategy document is based on the CIfA Archives Selection Toolkit (2019) and relates to archaeological project work being undertaken by Wessex Archaeology as defined in the WSIs.

Relevant standards, policies and guidelines consulted include:
General
- *Selection, Retention and Dispersal of Archaeological Collections* (Society of Museum Archaeologists, 1993)
- *Archaeological archives: a guide to best practice in creation, compilation, transfer and curation* (AAF, revised edition 2011, section 4)
- *Doncaster Museum guidelines* (25.04.19)

Relevant research agendas
- *South Yorkshire Archaeological Research Framework (Chadwick 2018; Ottaway 2018)*

Finds
- *Standard Guidance for the collection, documentation, conservation & research of archaeological materials* (CIFA, 2014)
- *A Standard for Pottery Studies in Archaeology* (Prehistoric Ceramics Research Group, Study Group for Roman Pottery, Medieval Pottery Research Group 2016)

Environmental
- *Environmental Archaeology: A Guide to the Theory, Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011)
- *Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record* (Historic England 2015)
- *Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains* (English Heritage 2008)
- *Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood* (English Heritage 2010)
- *Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis and Conservation* (Historic England 2018)

Research objectives of the project
Following consideration of the archaeological potential of the site and draft documents outlining the significance and potential of the Iron Age and Roman archaeology of South Yorkshire, recently prepared as part of the South Yorkshire Archaeological Research Framework (Chadwick 2018; Ottaway 2018), the site-specific objectives of the evaluation are:
- To identify where groundworks relating to the development will affect archaeological remains;
- To test the results of the geophysical survey (Wardell Armstrong 2015b) and investigate whether the positive linear magnetic anomalies in the central and western parts of the site represent archaeological features. It will also investigate whether positive linear magnetic anomalies located in the south-eastern part of the site represent part of an Iron Age/Roman British field system, as the crop marks seem to indicate (Ref. 02477/01);
- To explore any other below ground remains relating to the crop-marks within the site, recorded by the National Mapping Project (Refs: 02682/01, 01794/0/1, 02477/0/1, 02475/01 and 02479/01) and to determine whether they are associated with settlement activity;

REVIEW POINTS

Consultation with all Stakeholders regarding project-specific selection decisions will be undertaken at a maximum of two project review points:

1. End of data gathering (assessment stage)
2. Archive compilation

1 – Digital Data

Stakeholders

WA Project Manager; WA Archives Manager; WA Geomatics & BIM Manager; Doncaster Museum; South Yorkshire Archaeological Service; ADS

Selection

Location of Data Management Plan (DMP)

This document is designed to link to the project Data Management Plan (DMP), which can be supplied on request.

To promote long-term future reuse deposition file formats will be of archival standard, open source and accessible in nature following national guidance from ADS 2013, CIfA 2014c and the requirements of the digital repository.

Any sensitive data to be handled according to Wessex Archaeology data policy to ensure it is stored and transferred securely. The identity of individuals will be protected in line with GDPR. If required, data will be anonymised and redacted. Selection and retention of sensitive data for archival purposes will occur in consultation with the client and relevant stakeholders. Confidential data will not be selected for archiving and will be handled as per contractual obligation.

Document type	Selection Strategy	Review Points
Site records	Most records will be completed digitally on site (with the exception of registers). All will be selected for deposition.	2
Reports	To include WSIs, Interim reports, post-excavation assessment reports, publication reports. Final versions only will be selected for deposition.	1, 2
Specialist reports	Specialist reports will generally be incorporated in other documents with only minimal editing (reformatting, etc), and will be selected only if the original differs significantly from the incorporated version.	1, 2
Photographic media (site recording)	Substandard and duplicate images will be eliminated; pre-excavation images may not be selected where duplicated by post-excavation shots; working shots will be very rigorously selected to include only good quality images with potential for reuse and those integral to understanding features, their inter-relationships and	1, 2

	location on site; site condition and reinstatement photos will not be selected.	
Survey data	Site survey data will be used to generate CAD/GIS files for use in post-excavation activities. Shapefiles of both the original tidied survey data, and the final phased drawings will be selected.	1, 2
Databases and spreadsheets	Context, finds and environmental data in linked databases. Final versions will be selected. Any specialist data submitted separately will also be selected.	1, 2
Administrative records	Includes invoices, receipts, timesheets, financial information, email correspondence. None will be selected, with the exception of any correspondence relating directly to the archaeology.	2

De-Selected Digital Data

De-selected data will be stored on WA secured servers on offsite storage locations. The WA IT department has a backup strategy and policies that involves daily, weekly and monthly and annual backups of data as stated in the DMP. This strategy is non-migratory, and original files will be held at WA under their unique project identifier, as long as they remain useful and usable in their final version format. This data may also be used for teaching or reference collections by the museum, or by WA unless otherwise required by contractual or copyright obligations.

Amendments

Date	Amendment	Rationale	Stakeholders

2 – Documents

Stakeholders

WA Project Manager; WA Archives Manager; Doncaster Museum; South Yorkshire Archaeological Service

Selection

A security copy of all paper/drawn records is a requirement of CIfA guidelines. This will be prepared on completion of the project, in the form of a digital PDF/A file. If the security copy is not required for deposition by Stakeholders, it will be retained on backed-up servers belonging to Wessex Archaeology.

Note that some information may be redacted to comply with GDPR legislation (personal data).

Document type	Selection Strategy	Review Points

Site records	Selected records only will be completed in hard copy on site (registers, some graphics). All will be selected for deposition.	2
Reports	Hard copies of all reports (SSWSIs, Interim reports, post-excavation assessment reports, publication reports). All will be selected for deposition, with the exception of earlier versions of reports which have been clearly superseded.	1, 2
Specialist reports & data	Specialist reports will generally be incorporated in other documents with no significant editing. Supporting data is more likely to be included in the digital archive, but if supplied in hard copy and not incorporated elsewhere, this will be selected.	1, 2
Secondary sources	Hard copies of secondary sources will not be selected.	2
Working notes	Rough working notes, annotated plans, preliminary versions of matrices etc, will not be selected.	2
Administrative records	Invoices, receipts, timesheets, financial information, hard copy correspondence. None will be selected, with the exception of any hard copy correspondence relating directly to the archaeology.	2

De-Selected Documents

De-selected sensitive analogue data will be destroyed (shredded) subject to final checking by the WA Archives team with the remainder recycled. Possible exceptions include records retained for business purposes, including promotional material, teaching and internal WA library copies of reports.

Amendments

Date	Amendment	Rationale	Stakeholders

3 – Materials

Material type	Artefacts (bulk and registered finds)	**Section 3.**	3.1

Stakeholders

WA Archives Manager; WA Finds Manager; WA internal specialists; external specialists; Doncaster Museum; South Yorkshire Archaeological Service; landowner

Selection

The following proposals are based on a detailed scan and basic record by specialists.

Find Type	Selection Strategy	Review Points
Pottery (79 sherds)	Small and fragmentary assemblage, mostly Romano-British; replicated by larger and better preserved assemblages from Doncaster/Rossington area; limited further potential, but nevertheless worth retaining as part of the wider Romano-British dataset from the area. Retain all Romano-British (77 sherds) but not post-medieval (2 sherds).	1, 2
Worked flint (1 piece)	One item of worked flint waste only (broken blade), residual in ditch fill; little further potential. Do not retain.	1, 2

De-Selected Material

Consideration will be given to the suitability for use for handling or teaching collections by the museum or Wessex Archaeology, or whether they are of particular interest to the local community. De-selected material will either be returned to the landowner or disposed of. All will be adequately recorded to the appropriate level before de-selection.

Amendments

Date	Amendment	Rationale	Stakeholders

3 – Materials

Material type	Palaeoenvironmental material	Section 3.	3.2

Stakeholders

WA Archives Manager; WA Environmental Officer; WA internal specialists; external specialists; Doncaster Museum; South Yorkshire Archaeological Service

Selection

All environmental sampling was undertaken following Wessex Archaeology's in-house guidance, which adheres to the principles outlined in Historic England's guidance (English Heritage 2011 and Historic England 2015a) and as stated in relevant WSI.

Env Material Type	Selection Strategy	Review Points
Unsorted residues	Residues from samples not proposed for further analysis will be de-selected	1, 2
Assessed flots with no extracted materials	Assessed flots with no extracted materials are considered to be devoid of any significant environmental evidence and will	1, 2

	be de-selected.	
Assessed or analysed flots with extracted materials	All analysed samples will be selected; assessed flots with extracted materials with no further research potential will be discarded	1, 2
Charred & waterlogged plant remains	All extracted plant remains will be selected	2
All other analysed material (eg insects, pollen, mollusca)	All material will be selected	2

De-Selected Material
De-selected material from samples will be disposed of after processing and post-excavation recording. All processed material will be adequately recorded to the appropriate level before de-selection.

Amendments			
Date	**Amendment**	**Rationale**	**Stakeholders**

Appendix 3: OASIS record

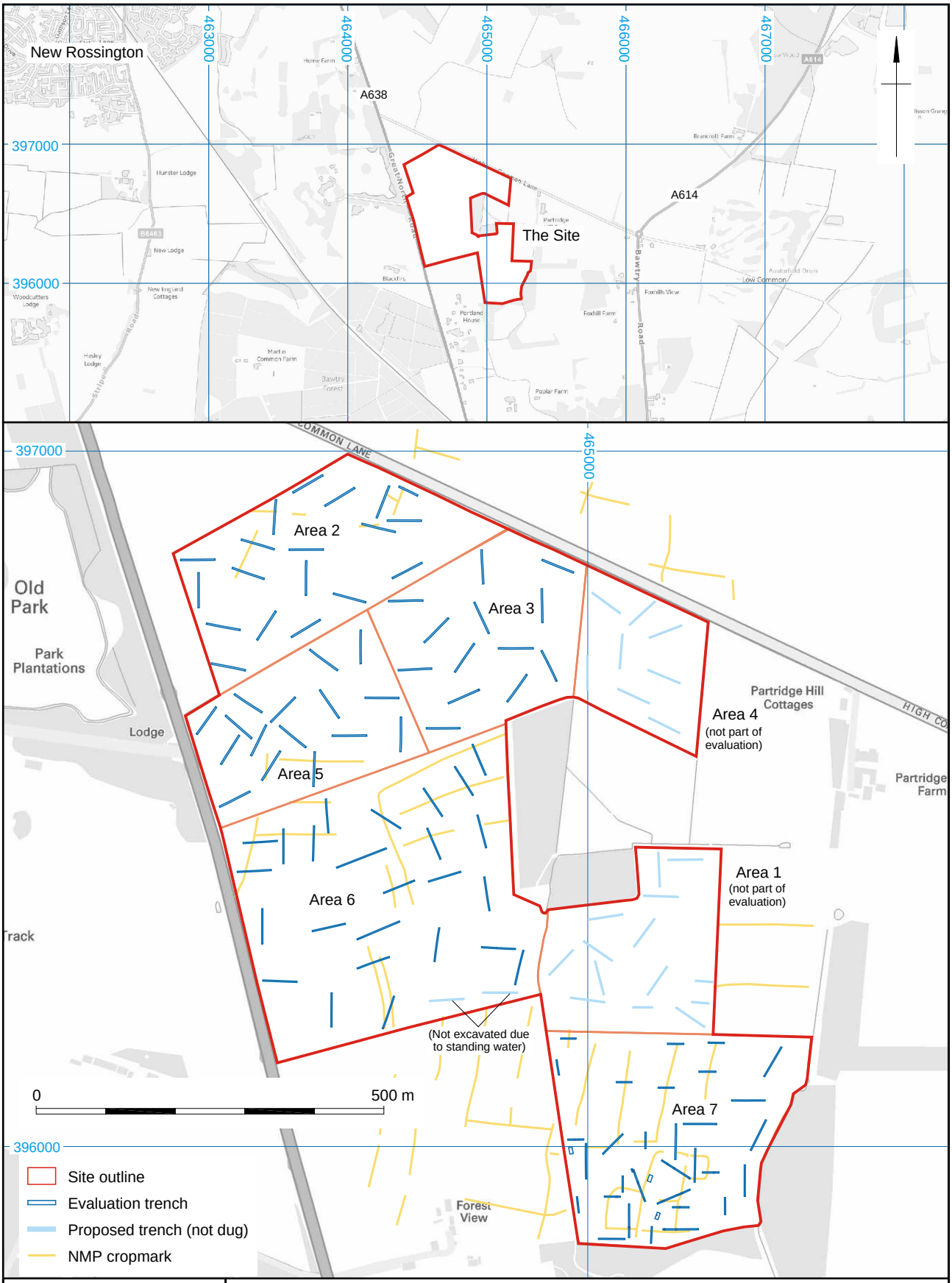
OASIS ID: wessexar1-350937

Project details

Project name	Land Adjacent to Partridge Hill Farm, High Common Lane, Austerfield, Doncaster
Short description of the project	Wessex Archaeology undertook the archaeological evaluation of a 45-ha parcel of land located adjacent to Partridge Hill Farm, High Common Lane, Austerfield, Doncaster, South Yorkshire in association with the proposed installation of a solar farm. The evaluation comprised the excavation of a total of 105 trenches. The trenches targeted a series of cropmarks, geophysical anomalies of potential archaeological origin, and also tested 'blank' areas. The evaluation established that 35 of the trenches revealed archaeological features and deposits, indicating a concentration of archaeological remains in the southernmost part of the evaluated area. The uncovered features, comprising ditches, gullies and pits, represent evidence of Romano-British agricultural practices and settlement, although several features remain of uncertain date due to a lack of artefactual material. All but a small proportion of the finds assemblage came from the southernmost field, and almost entirely comprises sherds of pottery dating to the Romano-British period. One residual flint artefact, of probable Neolithic/Bronze Age date, was found in a Romano-British feature. Two charcoal rich pits were radiocarbon dated to the Anglo-Norman period and probably represent activities associated with the production of charcoal. Two ditches to the north were interpreted as the remains of post-medieval field boundaries matching historic cartographic records. The only artefactual evidence of activity post-dating the Romano-British period is two pieces of post-medieval pottery found within the topsoil. The environmental evidence retrieved from the evaluation indicates the site has potential for the positive preservation of environmental evidence, namely charred plant remains (both wild plants and cultivated cereals) associated with subsistence and agricultural practices. This was recovered overwhelmingly from the southernmost part of the site.
Project dates	Start: 02-03-2020 End: 03-04-2020
Previous/future work	Yes / Not known
Any associated project reference codes	227260 - Sitecode
Any associated project reference codes	17/01200/FULM - Planning Application No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m

Monument type	DITCH Post Medieval
Monument type	DITCH Roman
Monument type	PIT Roman
Monument type	DITCH Uncertain
Monument type	PIT Early Medieval
Monument type	PIT Medieval
Significant Finds	POT Roman
Significant Finds	POT Post Medieval
Significant Finds	DEBITAGE Late Prehistoric
Methods & techniques	'"Targeted Trenches"'
Development type	Service infrastructure (e.g. sewage works, reservoir, pumping station, etc.)
Prompt	Planning condition
Position in the planning process	Between deposition of an application and determination
Project location	
Country	England
Site location	SOUTH YORKSHIRE DONCASTER AUSTERFIELD Land Adjacent to Partridge Hill Farm, High Common Lane, Austerfield
Postcode	DN11 0HN
Study area	45 Hectares
Site coordinates	SK 6480 9642 53.460281684151 -1.023907486789 53 27 37 N 001 01 26 W Point
Height OD / Depth	Min: 20m Max: 30m
Project creators	
Name of Organisation	Wessex Archaeology
Project brief originator	with advice from County Archaeologist
Project design originator	Wessex Archaeology
Project director/manager	Milica Rajic
Project supervisor	Alvaro Mora-Ottomano
Type of sponsor/funding body	Consultant

Name of sponsor/funding body	Corylus Planning & Environmental Ltd
Project archives	
Physical Archive recipient	Doncaster Museum and Art Gallery
Physical Contents	"Ceramics"
Digital Archive recipient	Archaeological Data Service
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Doncaster Museum and Art Gallery
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet","Drawing","Plan","Section"
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Partridge Hill Farm, High Common Lane, Austerfield, Doncaster, South Yorkshire: Archaeological Evaluation
Author(s)/Editor(s)	Mora-Ottomano, A
Other bibliographic details	227260.04
Date	2020
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield
Description	c. 80-page A4 comb-bound report with colour plates and figures.
Entered by	Andy Valdez-Tullett (a.valdez-tullett@wessexarch.co.uk)
Entered on	27 September 2021



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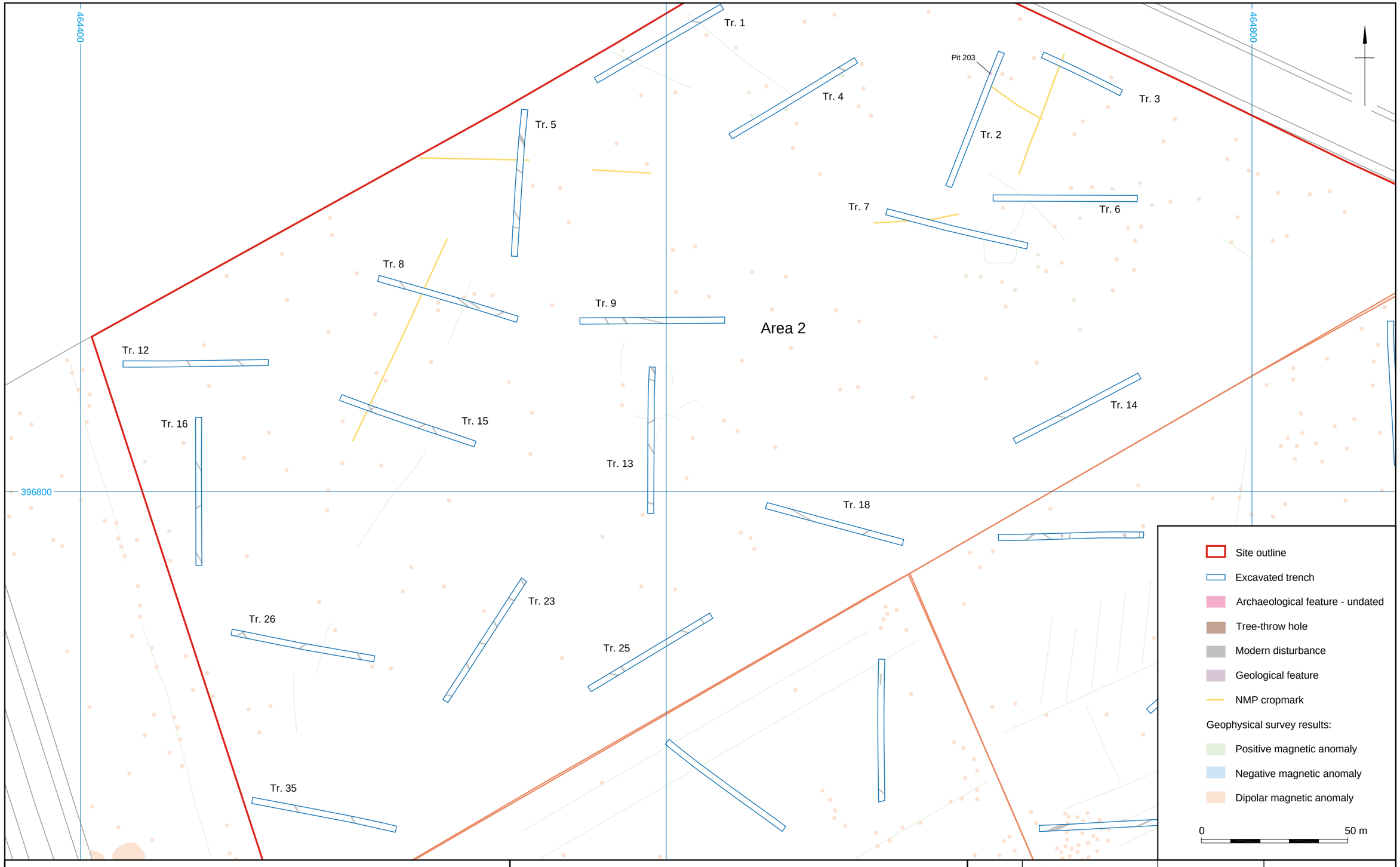
Site location

Figure 1



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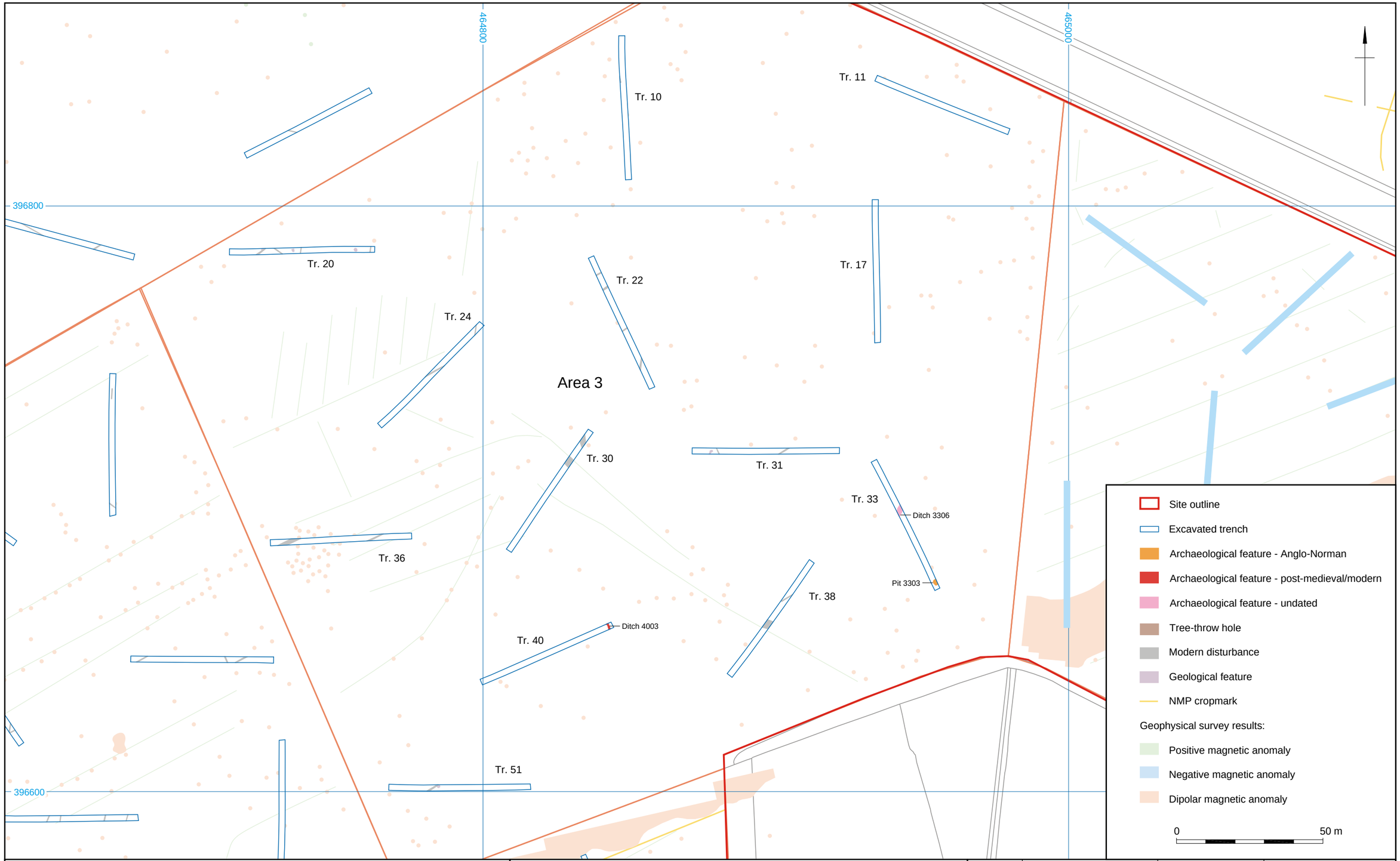
Area 2 with trial trenches 1-9, 12-16, 18, 23, 25, 26 and 35

Figure 2



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Area 3 with trial trenches 10, 11, 17, 20, 22, 24, 30, 31, 33, 36, 38, 40 and 51

Figure 3

464400
464600
464800
396600
Area 5
Tr. 28
Tr. 32
Tr. 41
Tr. 42
Tr. 43
Tr. 44
Tr. 45
Tr. 46
Tr. 47
Tr. 49
Tr. 50
Tr. 52
Tr. 53
Tr. 55
Tr. 56
Tr. 59
Plt 5303
Site outline
Excavated trench
Archaeological feature - Undated
Tree-throw hole
Modern disturbance
Geological feature
NMP cropmark
Geophysical survey results:
Positive magnetic anomaly
Negative magnetic anomaly
Dipolar magnetic anomaly
0
50 m

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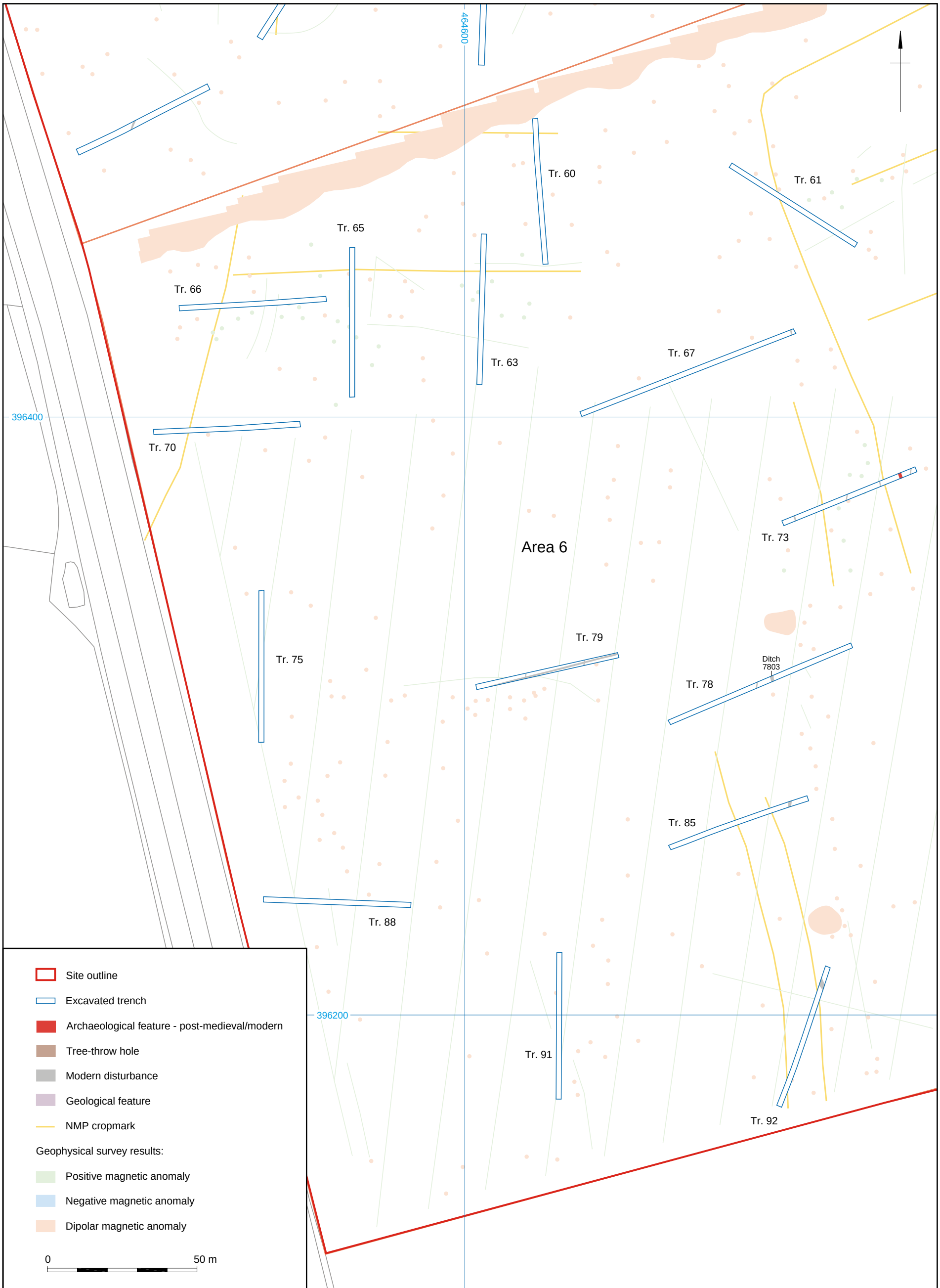
Area 5 with trial trenches 28, 32, 41-47, 49, 50, 52, 53, 55, 56 and 59

Figure 4



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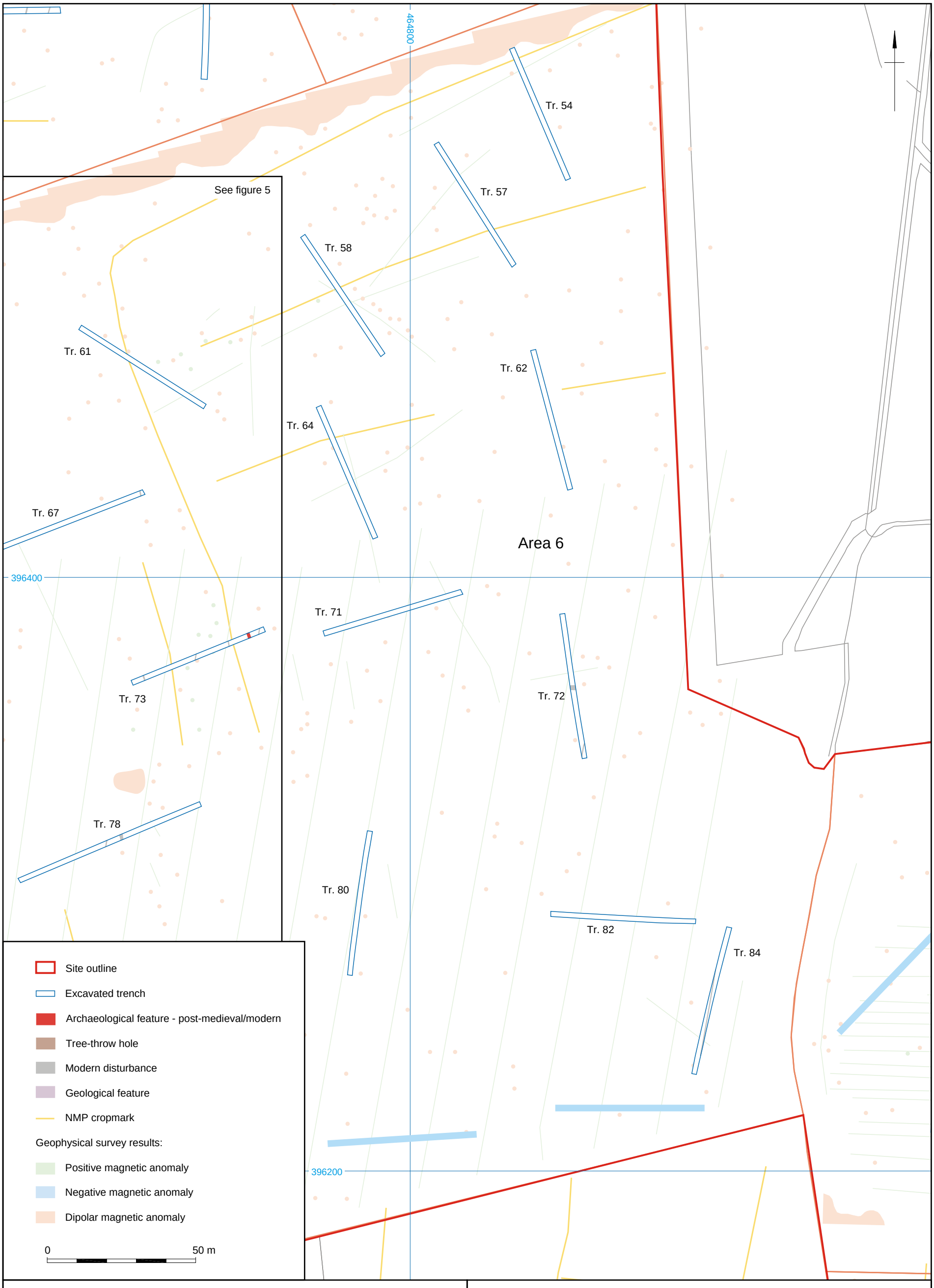
Area 6 (west) with trial trenches 60, 61, 63, 65-67, 70, 73, 75, 78, 79, 85, 88, 91 and 92

Figure 5



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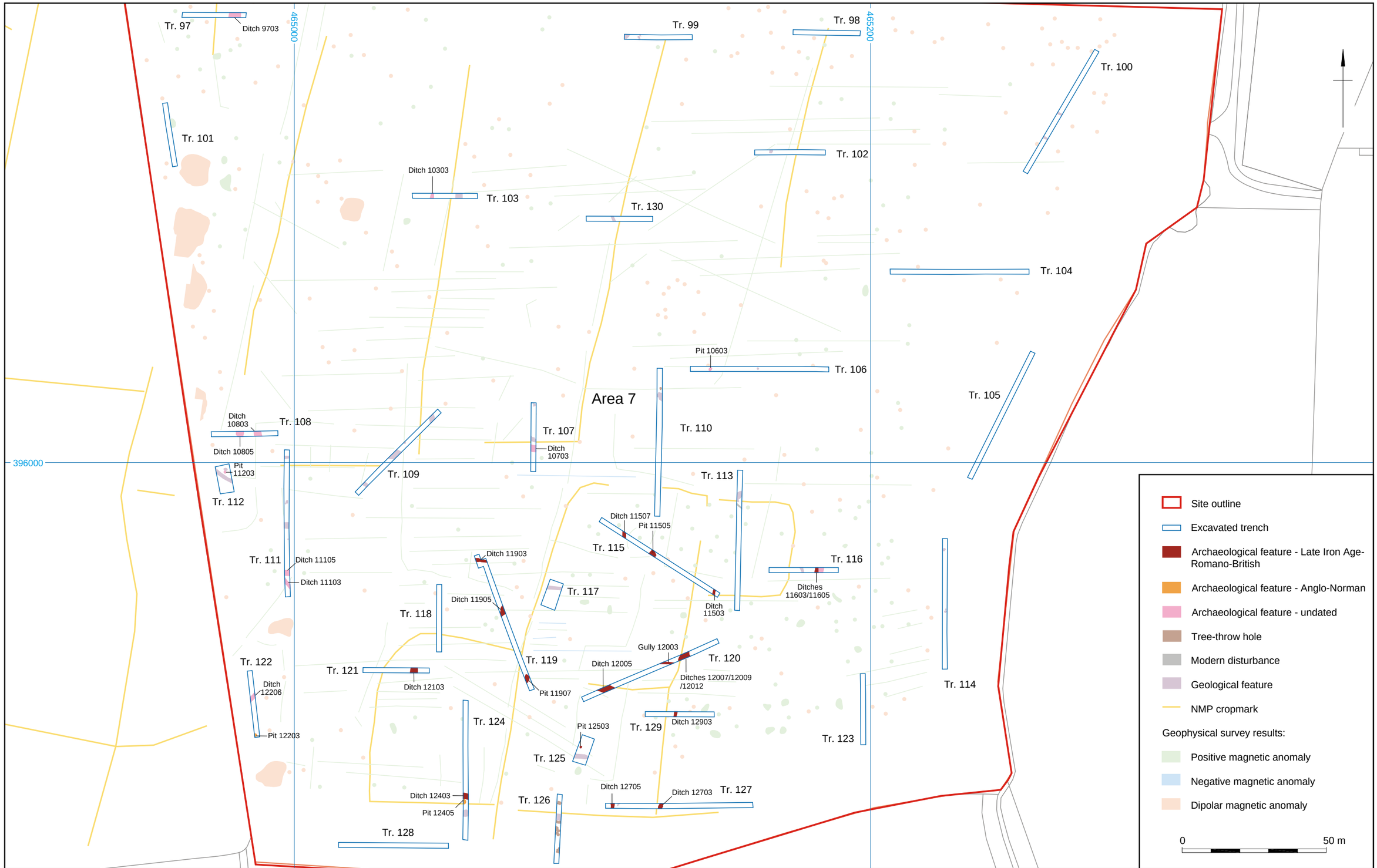
Area 6 (east) with trial trenches 54, 57, 58, 62, 64, 71, 72, 80, 82 and 84

Figure 6



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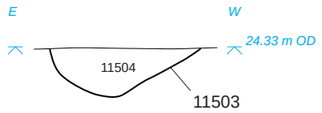
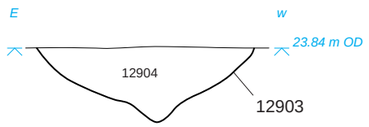
Area 7 with trial trenches 97-130

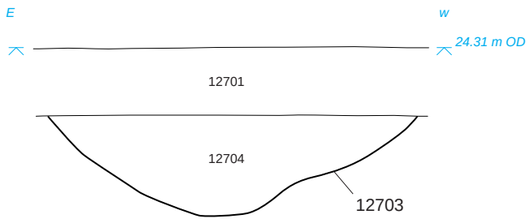
Figure 7



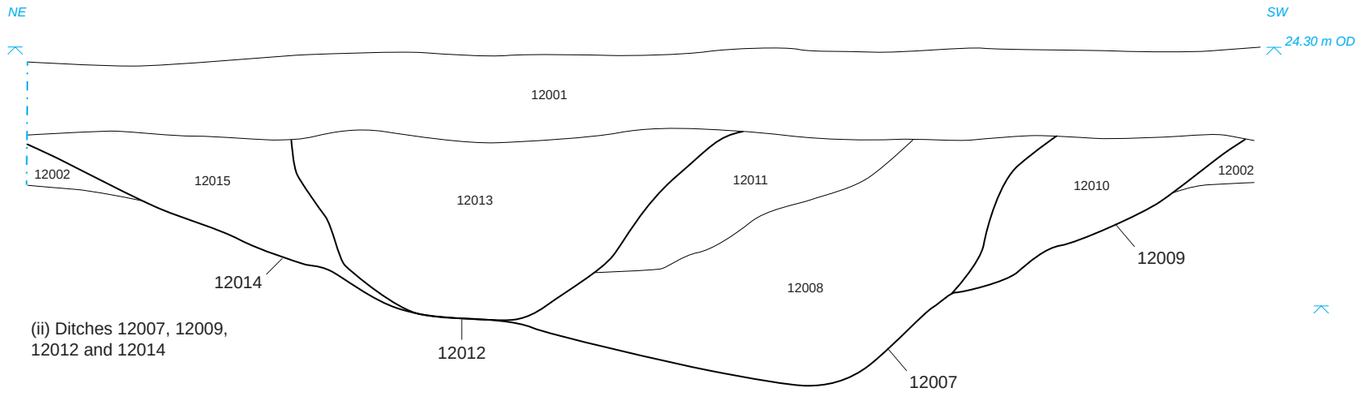
(i) Ditch 11503



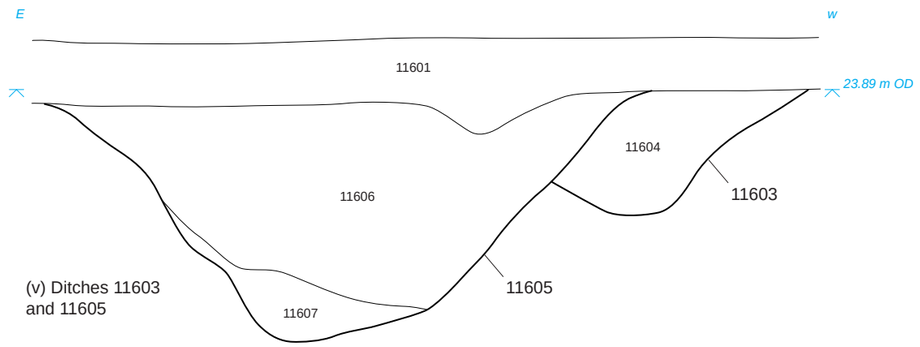
(iii) Ditch 12903



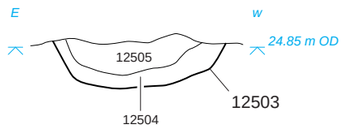
(iv) Ditch 12703



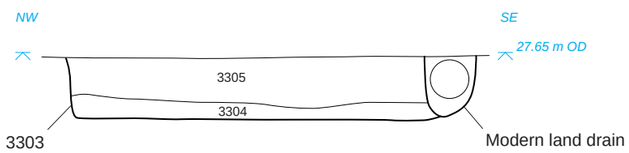
(ii) Ditches 12007, 12009, 12012 and 12014



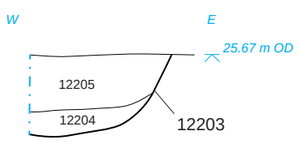
(v) Ditches 11603 and 11605



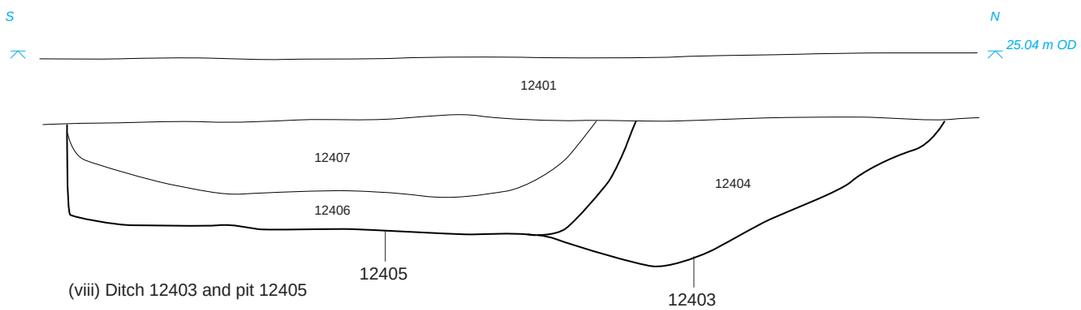
(vi) Pit 12503



(vii) Pit 3303



(ix) Pit 12203



(viii) Ditch 12403 and pit 12405

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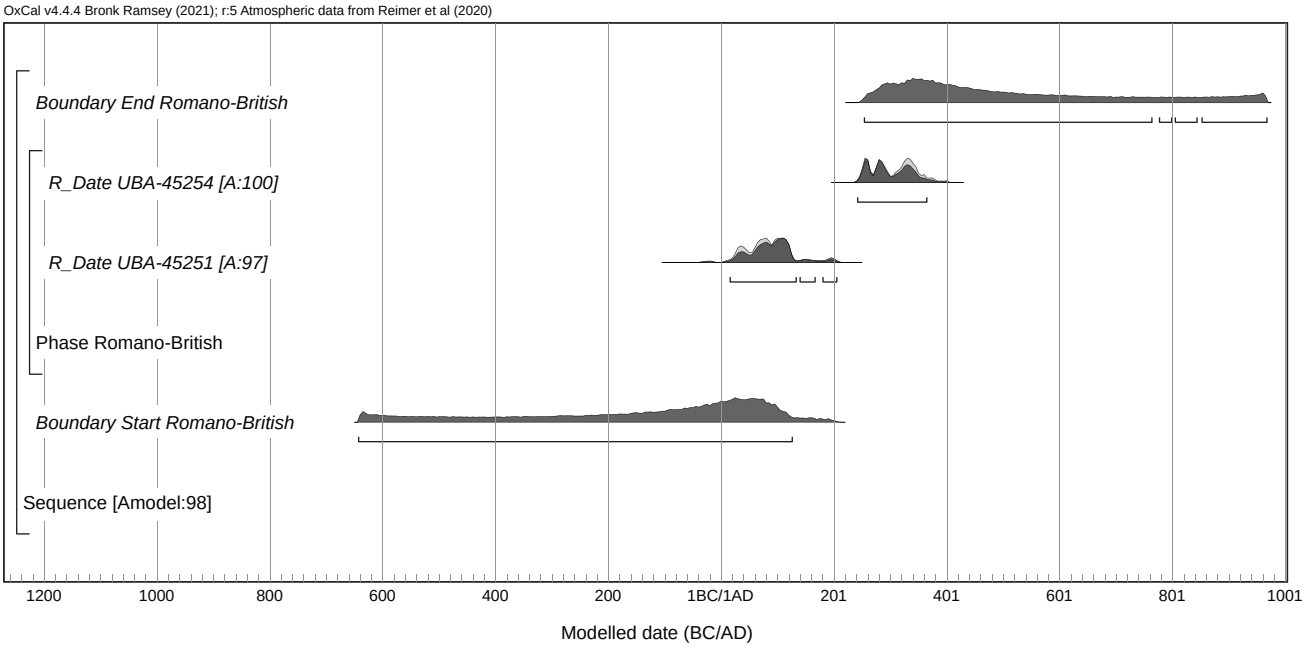
Sections

Figure 8



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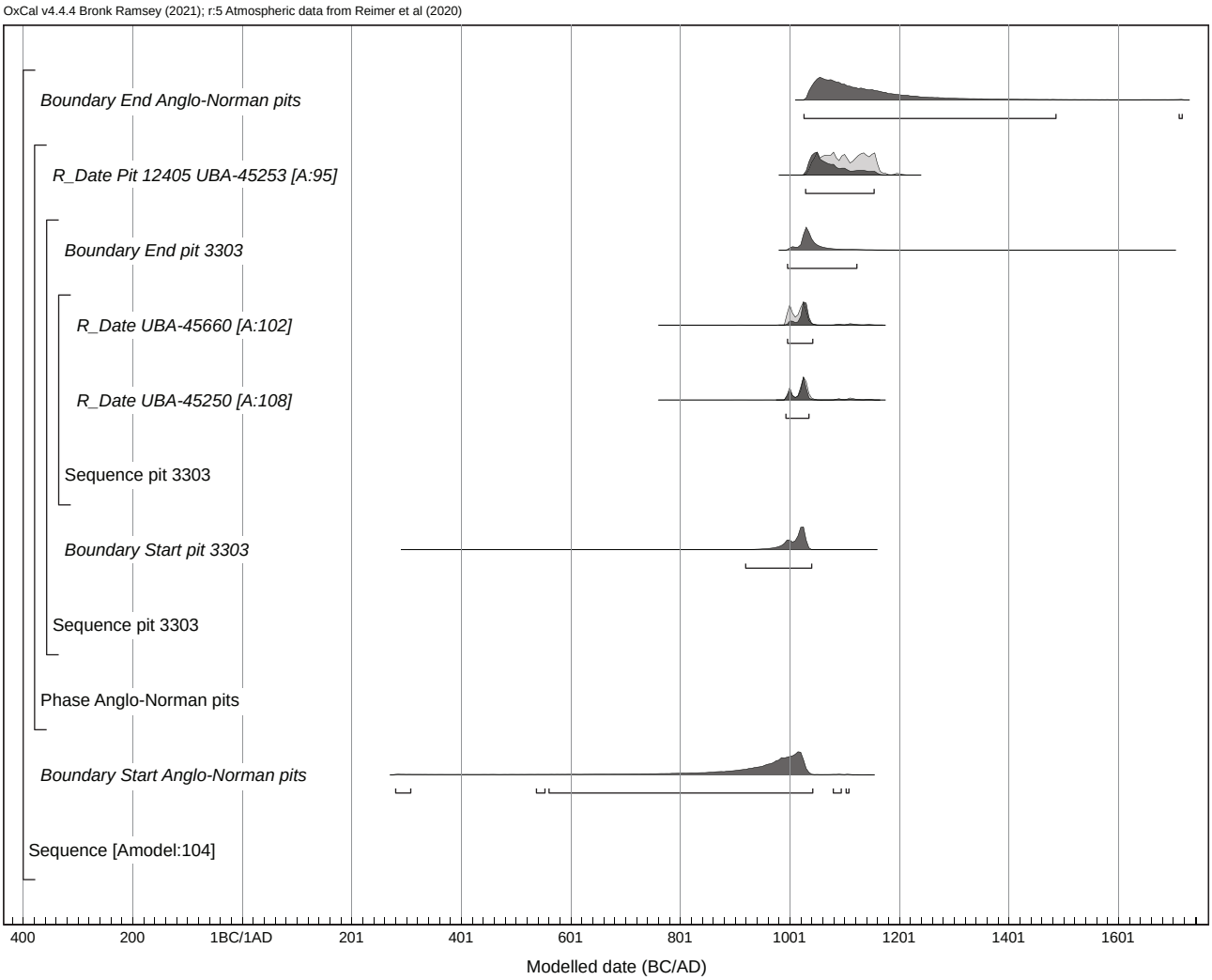
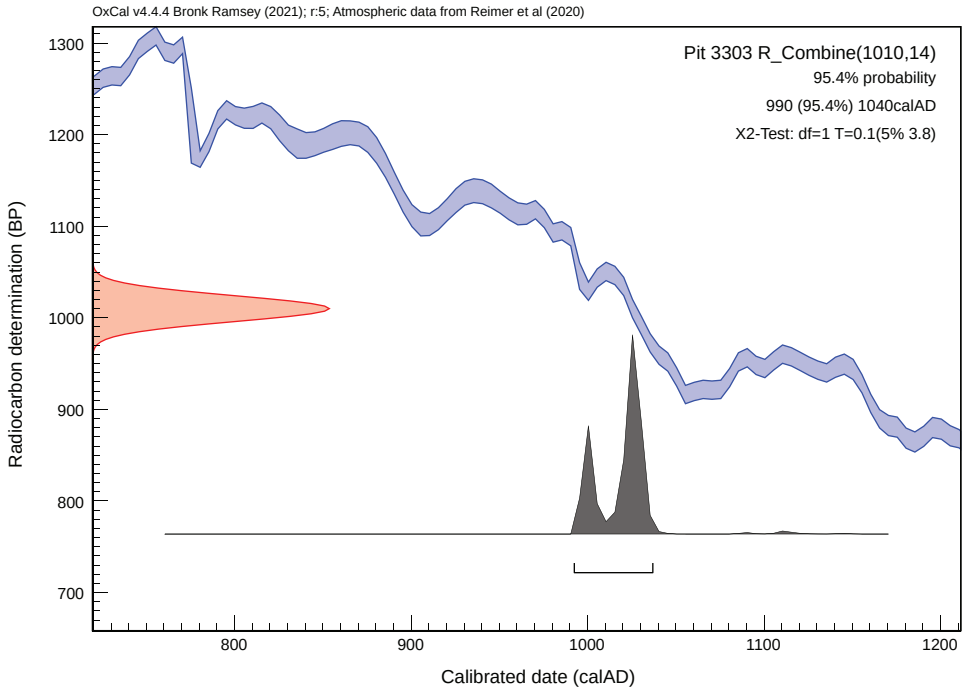
Posterior density estimates for measurements on charred plant remains from pits with Romano-British pottery in Area 7 modelled as a simple phase.

Figure 9





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Top: Posterior density estimates for Anglo-Norman measurements on wood charcoal from two pits with in situ burning in Area 7, modelled as a sequence (two fills in pit 3303) within a phase.
Bottom: combined results for measurements obtained in wood charcoal fragments from the two fills in pit 3303.

Figure 10

Plate 1: Tr 33, south-west facing section through pit 3303

Plate 2: Tr 124, east facing section through pit 12405

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Plate 3: Tr 122, east facing section through pit 12203

Plate 4: Tr 40, north facing section through ditch 4003

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Plate 5: Tr 53, south-west facing section through pit 5303

Plate 6: Tr 111, south-east facing section through ditch 11103

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Plate 7: Tr 122, north-east facing section through ditch 12206

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