



# Iron Age and Romano-British Remains Land off A1-A17 Junction Newark Archaeological Evaluation Report

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# Iron Age and Romano-British Remains. Land off A1-A17 Junction, Newark

## *Archaeological Evaluation Report*

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## Summary

Between 21st and 30th September 2020, Oxford Archaeology East undertook a programme of trial trench evaluation at land off A1/A17 junction, Newark, centred SK 824 556. This was conducted in advance of a proposed development on the site of a distribution facility and associated infrastructure. The works were undertaken under the auspices of RPS on behalf of Simons Developments Newark Ltd, assisted by Delta Planning.

The agreed WSI was for the excavation of nine trenches across the area of identified archaeological interest, covering c.2.7ha, which would provide a 3% representative sample. The presence of an established crop of *miscanthus* (elephant grass) across the study area however, inhibited appropriate and safe cutting of the crop to enable the full programme of works to be undertaken without potential damage to the archaeology. It was agreed with the Archaeological Advisor for Newark and Sherwood DC that initially one trench would be excavated to assess the anticipated impact from the *miscanthus* root system on the archaeology. Following an initial site visit to view the results of the first trench, it was agreed with the Archaeological Advisor that another two trenches would be excavated and the results reviewed to assess if further works would be required at this stage. Following the excavation of these trenches and a second site visit with the Archaeological Advisor, it was agreed that the current works were sufficient for the Advisor to make an informed decision on the planning application.

The evaluation uncovered extensive and complex archaeological remains across all three trenches, predominantly comprised of enclosure and boundary ditches. A total of 142 sherds (3.024kg) of pottery dated from the Late Iron Age to the later Romano-British periods were recovered from a range of features across all three trenches. Peak occupation of the site is suggested by the ceramic data of dating to the Later Roman period that perhaps may be tentatively linked to the Roman urban development of *Crocolana*, located c.3km to the north-east of the site. However, the interpretation of the site is tentative at this stage based on the small-excavated sample.

Overall the preliminary investigation has confirmed the presence of an extensive and complex network of features which are indicative of an exploited and managed landscape. The results expand on the knowledge of the local historic landscape, notably of the Late Iron Age and Roman periods.

## Acknowledgements

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The project was managed for Oxford Archaeology by Louise Moan. The fieldwork was undertaken by Paddy Lambert. Survey and digitizing was carried out by Tom Houghton and Emily Abrehart. Thanks are also due to the various finds processors, specialists, illustrator and editor.

## 1 INTRODUCTION

### 1.1 Scope of work

- 1.1.1 Oxford Archaeology East (OA East) was commissioned by RPS on behalf of Simons Developments Newark Ltd to undertake a trial trench evaluation at the site of land off A17/A1 junction, Newark-on-Trent, Nottinghamshire (centred SK 824 556). Initially this was planned to consist of the excavation of nine 50m long trenches in an area of c. 2.7ha within the wider development area where geophysical survey had indicated the presence of significant archaeological remains, but this was subsequently reduced to a smaller sample of three trenches following agreement with the Archaeological Advisor to Newark and Sherwood DC (see Section 2.2, below).
- 1.1.2 The work was undertaken in support of an Outline planning application (planning ref. PREAPP/00069/20) in advance of proposed development of a distribution facility and associated infrastructure. A written scheme of investigation (WSI) was produced by RPS (Thornton 2020) detailing the methods proposed for work necessary to inform the planning process.

### 1.2 Location, topography and geology

- 1.2.1 The site lies to the southern side of the A17 directly to the east of an existing warehouse, to the north-eastern edge of Newark-on-Trent, centred SK 824 556. The wider development area covers an area of approximately 13ha, whilst the area earmarked for further archaeological investigation on the basis of the geophysical survey covered an area of approximately 2.7ha.
- 1.2.2 The main part of the development area, and the specific area with which this report is primarily concerned, lies to the south of the A17 and comprises two arable fields separated by a track; this is part of the perimeter track associated with the former use of the site as the airfield for RAF Winthorpe.
- 1.2.3 The area of proposed development on which the site is located consists of a mature crop of *miscanthus* (elephant grass).
- 1.2.4 The geology of the area is mapped as mudstone belonging to the Mercia Mudstone Formation and as mudstone of the Penarth Group in the southern third of the site. Superficial deposits overlaying the mudstone are sand and gravel of the Balderton Sand in the north and central extent of the site. No superficial deposits are recorded for the southern part of the site.
- 1.2.5 The ground rises gently from c.18m OD at its north-eastern boundary to c.23m OD towards the south-western corner of the site. A small stream flows c.700m to the east of the site in a southerly direction. The River Trent is located c.1.5km to the west, flowing in a northerly direction.

### 1.3 Archaeological and historical background

- 1.3.1 The archaeological and historical background of the site and heritage assets within a 1km radius have been comprehensively discussed in a desk-based assessment (Behrendt 2020). Therefore, only a brief summary is provided by period below.



- 1.3.2 Generally, evidence for archaeological remains within the 1km vicinity is very limited. However, due to the high volume of archaeological remains dated to the Iron Age and Romano-British periods encountered during the investigation, it is deemed necessary to include pertinent supplementary data associated with these periods from further outside the immediate study area. This information is taken from the desk-based assessment and from pertinent records from the Nottinghamshire Historic Environment Record (NHER) within a 1km radius of the site, the locations of which are plotted in Fig. 2.

### ***Prehistoric***

- 1.3.3 Evidence for the prehistoric periods within the vicinity of the site is limited. A Neolithic stone axe head and an Early Bronze Age stone hammer head (NHER L3624) were recovered as casual finds (NHER ENT2037) c.250 north of the study site.

### ***Iron Age and Romano-British***

- 1.3.4 Only two assets belonging to these periods are recorded from within the search area. These comprised an artefact scatter (MNT27015) including a piece of Romano-British grey ware (among objects from other periods) recorded c.250m to the south of the site. Furthermore, a sherd of Roman pottery (L11272) was found c.950m to the south-west of the study site.
- 1.3.5 Beyond the immediate search area, the scheduled monument of the Romano-British town, known as *Crocolana*, is located approximately 3km to the north-east of the site (HE 1003479). The modern village of 'Brough' marks its location.
- 1.3.6 An evaluation undertaken in 2001 approximately 1.4km to the north-east of the site by Trent and Peak Archaeology uncovered traces of the *Fosse Way* Roman road, sealing earlier prehistoric features (Holt, Jones and Knight 2001)

### ***Saxon and Medieval***

- 1.3.7 There are no recorded heritage assets recorded within 1km of the site dated to the Saxon or medieval periods. The modern settlements of Winthorpe, c.1km to the north-west, and Coddington, c.1.2km to the south-east, are recorded in Domesday Book (1086; *Wimuntorp* and *Cotintone*), suggesting they were established before this date.

### ***Post medieval and modern***

- 1.3.8 Available post-medieval to modern mapping shows the site as agricultural fields and a wooded area until the construction of Winthorpe Airfield in the early 20th century. RAF Station Winthorpe (MNT27025) opened in 1940 and was active until 1959. The present showground site was established in 1965 (Behrendt 2020).
- 1.3.9 OS mapping from 1971 illustrates the extent of the airfield and shows the loop and pan dispersals and part of a runway in the north-west. Most of these features are no longer extant on the site, except for parts of the perimeter track, which survive as a path.

## ***Undated***

1.3.10 The HER recorded seven undated assets within the search area, only one of which is relevant to the study site, consisting of the cropmarks of an enclosure and a trackway recorded c.300m south-east of the study site (L0427). These are not visible on Google Earth imagery and their origin is uncertain.

## **1.4 Geophysical Survey**

1.4.1 On the 22nd April 2020, a geophysical survey was undertaken (Beck 2020). The survey highlighted anomalies that were interpreted as a scheme of enclosure systems and potential trackways (Fig. 3). These were deemed likely to be of Iron Age/Roman date and covered an area of c.2.7ha (Behrendt 2020).

1.4.2 Archaeological activity appeared to drop off toward the eastern and western parts of the survey area. Very little magnetic variation was recorded within these areas and notably known former field boundaries from historic mapping did not produce a magnetic anomaly. This may be based on changes in the underlying geology and changes to the magnetic susceptibility of the soil. It is unclear, therefore, whether the visible extent of the archaeological activity in the geophysical data represents the actual limits of the remains underground (Behrendt 2020).

## 2 EVALUATION AIMS AND METHODOLOGY

### 2.1 Aims

- 2.1.1 The project aims and objectives, as set out in the WSI (Thornton 2020) were as follows:
- i. To complete the trial trench evaluation to determine the location, extent, date, character, condition, significance and quality of any archaeological remains within the agreed area of the development site.
  - ii. To verify the results of the geophysical survey
  - iii. To assess the artefactual and environmental potential of the archaeological deposits encountered
  - iv. To provide further information on the archaeological potential of the site to enable the archaeological implications of the proposed development to be assessed
  - v. To assess the impact of previous land use on the site
  - vi. To inform the formulation of a strategy to mitigate the impacts of the proposed development on surviving significant archaeological remains, if they are present
  - vii. To produce a site archive for deposition with an appropriate museum and to provide information for accession to the Nottinghamshire HER.

### 2.2 Methodology

- 2.2.1 The presence of an established crop of elephant grass on the site inhibited the excavation of all nine proposed trenches during this stage of fieldwork. After discussion between representatives of RPS (Alexandra Thornton), Lincolnshire County Council Historic Environment Officer (Matt Adams) and Oxford Archaeology East (Louise Moan) it was decided that initially a single trench (Trench 1, Fig. 3) be opened to establish the nature of the preservation of archaeological deposits and to inform excavation strategies.
- 2.2.2 Based on the results of the excavation of Trench 1, it was agreed that subsequent excavation of Trenches 6 and 7 would be undertaken. These trenches were targeted over anomalies identified in the geophysical survey (Beck 2020). Overall, three trenches out of the proposed seven were excavated during this stage of works, each measured 50x2.1m.
- 2.2.3 Due to the crop initially inhibiting access to locate the trench via GPS, Trench 1 was set-out by hand-measurement from known boundaries from an accessible easement cut by a prior clearance event. Consequently, the trench had been moved approximately 15m to the south-east and 6m to the north from its original planned location. This trench was subsequently located via GPS. All subsequent trenches were subjected to a clearance event by the mechanical excavator to facilitate the positioning of the trench via GPS to their accurate locations.
- 2.2.4 All trenches were excavated under constant archaeological supervision using a rubber-tracked 360° excavator fitted with a 2.1m wide ditching bucket. Where possible, to facilitate sequential backfilling, topsoil and subsoil were stored separately upon excavation.

- 2.2.5 The subsoil level and the spoil heaps of all trenches were subjected to a metal detector survey whilst stripping was carried out.
- 2.2.6 All stripping was monitored by an appropriately trained Unexploded Ordnance (UXO) specialist, who scanned all topsoil and subsoil deposits.
- 2.2.7 The site survey was carried out with a Leica GS08 GPS with SmartNET.
- 2.2.8 All archaeological features and deposits were recorded using OA East's pro-forma sheets and the Digital Recording System (DRS). Trench locations, features and sections were recorded at appropriate scales. Digital photographs were taken of all relevant features and deposits.
- 2.2.9 A total of 10 bulk environmental samples were taken from the fills of ditches and a pit from across the three trenches.

## 3 RESULTS

### 3.1 Introduction

- 3.1.1 The results of the evaluation are presented below and include stratigraphic descriptions of the trenches which contained archaeological remains. An overall plan of the trenches is provided in Fig. 3, supplemented by more detailed plans in Figs 4 and 5. Selected section drawings are provided in Fig. 6 and photographs in Plates 1-8. Cut numbers are rendered in **bold** type throughout the text. Context and Section numbers were prefixed with the number of the relevant trench for which they were assigned, e.g. Ditch **103** is a feature within Trench 1, while ditch **703** is a feature within Trench 7. Environmental Sample numbers are numbered 1 to 10.
- 3.1.2 All trenches were targeted over geophysical anomalies identified in the survey (see Fig. 3). The archaeological features are related to these anomalies where possible.
- 3.1.3 All three trenches exposed extensive archaeological remains which clearly represented relatively complex sequences of intercutting features. In light of this, and in an attempt to avoid comprising the results of any further excavation at the site, only features that were discrete or could be isolated in plan were excavated during the investigation, avoiding the investigation of relationship between intercutting features, as agreed with the Archaeological Advisor.
- 3.1.4 Although some features were undated, the recovery of datable pottery and the similarity of the features in terms of fills and their alignment, suggest that the vast proportion of archaeological remains uncovered during the investigation are broadly Iron Age or Romano-British in date.

### 3.2 General soils and ground conditions

- 3.2.1 The soil sequence between all trenches was not uniform, with subsoil coverage only observable in patches. Where encountered, the subsoil comprised a light grey sandy silt and varied in thickness between 0.05m and 0.14m. The natural geology was consistent across all trenches, comprised of a dark orangey brown clayey gravelly sand with amorphous patches of manganese rich silts.
- 3.2.2 All trenches were overlain by the same dark brown sandy silt topsoil/ploughsoil which ranged between 0.32 and 0.50m thick.
- 3.2.3 At the north-western end of Trench 6, the subsoil was overlain by a thick stone layer (602), extending to 1.8m into the trench and measuring 0.15m thick. This is believed to be the remains of rubble/hard standing relating to part of the nearby airfield, and was identified as a large anomaly on the geophysics.
- 3.2.4 Ground conditions throughout the evaluation were generally good. The established crop and occasional heavy rain did not impede the investigation to any great extent, although the initial machine stripping took more time due to the extensive roots of the elephant grass. Archaeological features, where present, were easy to identify by their dark brownish grey silts against the underlying natural geology and the roots had no observable effect on underlying deposits.

### 3.3 Results

#### *Trench 1 (Fig. 4)*

- 3.3.1 Trench 1 (Fig. 4, Plate 1) was located at the northern boundary of the site and was aligned north north-east to south south-west. In plan, the remains of at least sixteen linear features were exposed, which were aligned either north-east to south-west or north-west to south-east and several possible discrete features were partially exposed against the edges of the trench. Four of the linear ditches appear to correspond to anomalies identified by the geophysics (see Fig. 4). In total, six of the exposed linear features were excavated, including two of the features probably corresponding to geophysical anomalies.
- 3.3.2 Linear ditch **103** was located at the south-western end of the trench and was aligned north-east to south-west. It was exposed for a length of 5m along the trench before it turned 90 degrees north-west and passed beyond the baulk. Where excavated, it measured 0.75m wide and 0.32m deep and had steep sides and a concave base (Fig. 6, Section 100). Its single fill (104) comprised a dark brownish grey sandy silt. A single Romano-British (AD 50-400) pot base (147g) was recovered from the fill and an environmental sample yielded only a single rodent dropping.
- 3.3.3 Ditch **105** was linear in plan and aligned south-east to north-west and it may correspond with an anomaly identified by the geophysics. It ran across the trench and in plan appeared to be truncated by ditch **103**. It measured 0.90m wide and 0.34m deep and had gently sloping sides and a concave base. Its single fill (106) was a dark greyish brown clayey silt. Two sherds (12g) of Romano-British (AD 50-400) pottery were recovered from this fill.
- 3.3.4 Ditch **107** was located toward the middle of trench and probably corresponds with a linear anomaly identified by the geophysics. It was slightly curvilinear in plan and aligned north-west to south-east. It measured 1.24m wide and 0.24m deep and had gently sloping sides and a flat base. Its single fill (108) comprised a dark greyish brown clayey silt which contained eight sherds (59g) of Early Roman pottery (AD 40-100). An environmental sample recovered from this fill contained a single charred wheat grain.
- 3.3.5 Ditch **109** and ditch **111** were located c. 2m to the north-east of ditch **107**. These interventions were placed on an oblique angle over a dark patch of fill to identify the nature of the underlying features, and it is likely that ditch **111** was the same as ditch **107**. The intervention placed along the ditch on a south-east to north-west alignment, it measured 1.2m wide and 0.26m deep, with gentle sloping sides and an irregular base. Its single fill (112) was a dark greyish brown clayey silt.
- 3.3.6 Ditch **111** appeared to truncate ditch **109** on its north-western edge. Ditch **109** was aligned north-west to south-east. Similarly, it was excavated along its length which rendered identification difficult. The intervention measured 1.13m wide and 0.17m deep with gentle sloping sides and an irregular base. Its single fill (110) comprised a mid-greyish brown sandy silt.
- 3.3.7 Ditch **113** (Plate 2) was curvilinear in plan. It was aligned north-east to south-west before it turned at a 90-degree angle into the south-eastern baulk. It measured 0.76m

wide and 0.22m deep and had moderately steep sides and a flat base. Its single fill (114) was a mid-greyish brown sandy silt. A total of four sherds (45g) of Early Roman (AD 50-100) pottery was recovered from this fill.

### *Trench 6 (Fig. 5)*

- 3.3.8 Trench 6 (Plate 3) was located toward the middle of the site and was aligned north-west to south-east. It revealed a total of fourteen ditches and five possible pits. Of these, four ditches and a pit were excavated. Four ditches in the trench appear to correspond with geophysical anomalies.
- 3.3.9 Pit **603** (Fig. 6, Sec. 600, Plate 4) was located at the north-western end of the trench and was sub-circular in plan. It measured 1m wide and 0.41m deep and had steeply sloping sides on its south-western edge and was stepped on its north-eastern edge. The pit contained two fills that are likely to represent backfilling events. Basal fill 604 was a mid-yellowish grey sand that measured 0.18m wide along the bottom edge and 0.10m thick. This fill yielded eight sherds (117g) of Late Iron Age (50 BC–AD 50) pottery, which although heavily fragmented, appeared to represent a single vessel. Though heavily fragmented it appeared to represent a single vessel. The environmental sample extracted from the surrounding fill contained no preserved remains. This was overlain by fill 605, which comprised a light grey sand, 0.34m thick from which a total of one sherd (3g) of Roman (AD 150-400) pottery was recovered. An environmental sample of this fill contained no preserved remains.
- 3.3.10 Pit **603** was truncated on its north-eastern edge by Ditch **607** (Fig. 6, Sec.600, Plate 4). The ditch was observed on the geophysical survey as two ditches but only one was identified here. It was linear in plan and measured 1.34m wide and 0.30m deep with gradually stepped sides and a concave base. The ditch contained two fills. Primary fill 608 was a homogeneous mid-yellowish grey silty clay sand, 0.11m thick. It was located along the south-western edge of the ditch and is likely disturbance from the truncation of Pit **603**. Overlaying this was fill 609 which comprised a homogenous dark brownish grey sandy clayey silt which measured 0.23m thick. A large quantity of Romano-British pottery, which totalled fifty-one sherds (1.372kg), and eleven fragments of dog and sheep/goat bone (93g) were recovered. An environmental sample extracted from the fill contained a small volume of charred wheat grain, glume base and a legume.
- 3.3.11 Located in the middle of the trench, ditch terminus **617** appeared linear in plan with a sub-circular terminal but its length partially obscured. It was aligned north-east to south-west and measured 0.80m wide and 0.20m deep with gently sloping sides and a concave base. Its single fill (618) comprised a dark orangey grey silty sand with rare stone inclusions.
- 3.3.12 Ditch **610** was located at the south-eastern end of the trench and was slightly curvilinear in plan, aligned north-west to south-east. It measured 0.70m wide and 0.23m deep and it had steep sides and a concave base. It contained two fills. Basal fill 612 comprised a dark orangey grey sandy silt with abundant poorly sorted small stones throughout. This fill measured 0.06m thick. This was overlain by fill 611, which was a mid-brownish grey sandy silt that measured 0.16m thick. An environmental sample

recovered from this fill contained no preserved remains but yielded a single sheep/goat tooth (App. C.2).

- 3.3.13 Linear ditch **619** (Fig. 6, Sec. 602, Plate 5) was located c.1m directly south-west of ditch **610** and ran broadly parallel on a north-west to south-east alignment. It measured 0.60m wide and 0.58m deep with almost all its profile truncated by a later recut **613** on its north-eastern edge. Its observable south-western edge had a steep side and a partial concave base. Its single fill (620) comprised a mid-brownish grey sandy silt.
- 3.3.14 Recut ditch **613** measured 2.2m wide and 0.60m deep with gradually stepped sides and a flat base (Fig. 6, Sec. 602, Plate 5). The ditch contained three fills. Basal fill 614 comprised a dark yellowish grey silty clay that measured 1.09m wide and 0.46m thick. It was overlain by a mid orangey-brow grey sandy silt (615) representing a slumping event entering the feature from its north-eastern edge; this deposit was 0.10m thick, with abundant poorly sorted stones and gravel throughout. This was overlain by fill 616, a light brownish grey sandy silt that was 2.2m wide and 0.54m thick with common poorly sorted rounded stones throughout.
- 3.3.15 Aside from these archaeological features, a single test pit was excavated to test a possible linear feature in this trench. This feature/deposit was clearly natural; perhaps the result of glacial activity and was a mid-grey silt with abundant manganese.

### *Trench 7 (Fig. 5)*

- 3.3.16 Trench 7 (Plate 6) was located approximately 8m to the south-west of Trench 6 and was aligned north-east to south-west. It contained approximately ten linear ditches, two small circular features (one with two associated small gullies) and a recut enclosure ditch. Several more amorphous features which were not clear in plan were also exposed. Of these features, six were excavated - including one of the small circular features.
- 3.3.17 Ditch **710** was located at the north-eastern end of the trench. It was linear in plan and aligned north-west to south east and may have either turned 90 degrees to the north-east or have intercut with another ditch as tis eastern end, although this is unclear if due to the narrow aperture of the trench. It was 0.76m wide and 0.22m deep with gentle sides and a concave base. Its single fill (711) comprised a mid-brownish grey clayey silt.
- 3.3.18 Located immediately south-west was a small circular feature **707** (Plate 7). Sub-circular in plan, approximately 50% of this feature appears to have been exposed against the eastern baulk of the trench. It measured a maximum of 2m in observable diameter. It comprised a single curvilinear ditch that measured 0.60m wide and 0.24m deep with steep sides and a concave base. The ditch contained two fills. Its basal fill (708) measured 0.08m thick and comprised a light orangey grey clayey silt with abundant sub-rounded natural stones throughout. This was overlain by a dark grey clayey sandy silt (709) that measured 0.20m thick. An environmental sample from this fill contained no preserved remains but yielded three sherds (22g) of Romano-British (AD 50-400) pottery.



- 3.3.19 Within the interior of **707** was a mid-orangey grey deposit (718) (Plate 7) that although unexcavated at this stage is likely to represent a tree throw. It was sub-circular in plan with irregular edges that measured 1m wide. It was inconsistent in its thickness, with a range between 0.04m and 0.10m visible in the section of the trench. It is unclear what the stratigraphic relationship is between the deposit and the circular feature, but it is likely the circular feature had truncated this deposit.
- 3.3.20 At the other, south-western, end of the trench, was a linear ditch terminus (**700**), aligned north-east to south-west. An opposing terminus, c.1m to the north-east, suggests a possible entrance. This feature was linear in plan with a rounded terminal end and measured 0.57m wide and 0.17m deep with gently sloping sides and a concave base. Its single fill (701) was a mid-brownish grey sandy silt that yielded two sherds (7g) of Romano-British (AD 50-400) pottery.
- 3.3.21 At the south-western end of the trench, enclosure ditch **702** and recut **705** (Fig., Sec. 701, Plate 8) corresponded with a slightly curvilinear anomaly identified by the geophysics which appears to form part of well-defined oval/sub-rectangular enclosure. Ditch **702** was linear in plan and measured 1.2m wide and 0.36m deep, with a slightly stepped north-eastern edge and a wide concave base. Its basal fill 703 was 0.08m thick and comprised a light orangey grey silty clayey sand with common stone throughout that yielded two sherds (3g) of abraded Late Iron Age (50BC-AD50) pottery. The heavily abraded nature of this pottery may suggest it is residual. This was overlain by fill 704, which was a mid-brownish grey clayey sand silt, 0.27m thick. An environmental sample of this deposit contained no preserved remains.
- 3.3.22 Ditch **702** was recut on its southwestern edge by ditch **705**, which measured 0.96m wide and 0.40m deep. It had steep sides and a flat base. Its single fill (706) comprised a dark brownish grey clayey sandy silt that yielded three sherds (88g) Later Roman (AD 150-400) pottery.
- 3.3.23 Located towards the middle of the trench were linear ditches **712** and **715** (Fig.6, Sec. 704). These correspond to a linear anomaly on the geophysical survey and were aligned north-west to south-east across the trench.
- 3.3.24 The smaller ditch, **715**, measured 0.44m wide and 0.20m deep with steep sides and a concave base. Its single fill (716) comprised a light grey sandy silt. It was truncated by ditch **712** on its south-western edge. Ditch **712** measured 2.22m wide and 0.44m deep. It had gently sloping sides and a concave base. The ditch contained two fills. Its basal fill (713) appeared to slump from the south-western edge of the feature and measured 1.5m wide and 0.10m thick. It was a light orangey grey sandy silt with frequent sub rounded small stones throughout and yielded one sherd (7g) of Later Roman (AD 150-400) pottery. An environmental sample from this fill contained a single charred cereal grain. This was overlain by fill 714, a mid-brownish grey sandy silt that measured 0.36m thick. From this fill, a large quantity of Late Roman (AD 200-400) pottery, which totalled fifty-six sherds (1.142kg), was recovered. Furthermore, a total of thirty-six fragments (122g) of animal bone was recovered and an environmental sample from the fill contained no preserved remains.

### 3.4 Finds summary

#### *Iron Age and Roman Pottery (Appendix B.1)*

- 3.4.1 In total, 142 sherds (3.024kg) of pottery were recovered from the investigation and three distinctive chronological groups were identified from within the assemblage. These were: Late Iron Age (c.50BC-AD50), early Roman (c.AD40-100) and late Roman (AD150-400), as well as a Romano-British category, which encompassed sherds which could only be broadly dated to the Roman period.
- 3.4.2 All pottery was recovered from stratified deposits, primarily ditches, across all three trenches. The pottery suggests a peak in activity in the later Roman period (AD 150 – 400) represented by 65% of the total assemblage.
- 3.4.3 The overall total is dominated by fifty-one sherds (1.372kg) of later Roman pottery (AD 150- 400) recovered from ditch **607** in Trench 6 and fifty-six sherds (1.142kg) of later Roman pottery (AD 200–400) from ditch **712** in Trench 7.

#### *Stone (Appendix B.2)*

- 3.4.4 A single fragment of burnt Roman quernstone (348g), reused as a whetstone was recovered from ditch **712** in Trench 7. A small assemblage of natural un-worked stone (1254g) was recovered from ditches **607** and **712** in Trenches 6 and 7, respectively – these show no traces of working or use as building stone and are of no archaeological significance.

#### *Ceramic Building Material (Appendix B.3)*

- 3.4.5 A small assemblage consisting of four pieces of Roman tile was recovered from ditches **607** and **712** in Trenches 6 and 7, respectively. Two pieces are re-fitting and un-abraded (combined weight 224g).

### 3.5 Environmental Summary

#### *Environmental Samples (Appendix C.1)*

- 3.5.1 A total of ten bulk samples were taken from features across the site, predominantly ditches. Preservation of plant remains across all deposits is generally poor and is through carbonisation (charring) only.
- 3.5.2 A small quantity of wheat (*Triticum* sp.) grains was recovered from three of the samples. Specifically, Sample 8, fill (609) of ditch **607** (Trench 6), also contains a single wheat (*Triticum spelta/dicoccum*) glume base and a legume (*Pisum/Lathyrus/Vicia* sp.). An animal dropping, probably from a rodent, was recovered from Sample 1, fill (104) of ditch **103** (Trench 1). The samples from this site were either devoid of plant remains or contain only very small quantities of charcoal.
- 3.5.3 The plant remains, due to their low density and diversity, are likely to represent a background scatter of domestic waste.

### ***Faunal Remains (Appendix C.2)***

- 3.5.4 A total of seven fragments of animal bone (220g) were recovered from the investigation. These were retrieved from hand collection and environmental samples. Bone was recovered from ditches in Trenches 6 and 7.
- 3.5.5 The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*) and dog (*Canis familiaris*).

## 4 DISCUSSION

### 4.1 Reliability of field investigation

- 4.1.1 Broadly, the results of the investigation augment and enhance the results of the geophysical survey undertaken on the site (Beck 2020), which had identified likely multi-phase remains including trackways, boundaries and enclosures. It has also been clearly demonstrated that a significant number of ditches across the site and more discrete features such as pits were also uncovered which had not been identified by the geophysical survey and would be unlikely to be detectable due to their size. A sizable majority of the anomalies identified by the geophysics appear to be represented by features exposed in the trenches, accompanied by a relatively large number of additional features.
- 4.1.2 The broad location/distribution, dating, preservation and general character of the archaeological features has been adequately assessed during this stage of the investigation.

### 4.2 Interpretation

- 4.2.1 The investigation at the site revealed a complex set of archaeological remains spanning the Latest Iron Age and Romano-British periods of between 50 BC – AD 400. This phase of trenching represents an initial phase of works and as such all interpretation is tentative. A possible focus on the later Roman period (AD 100 – 400) has preliminarily been identified based on the pottery assemblage.
- 4.2.2 Earlier inhabitation of the site appears to be generally localised towards the north-west around Trench 1. The general alignment of these earlier features is generally north-west to south-east. This is evidenced by the total of fourteen sherds (62g) of Early Roman pottery (AD 40 – 100) being recovered from all features excavated. However, activity dated to the Late Iron Age can be glimpsed partially across the site, notably demonstrated by the recovery of eight sherds (117g) of pottery from pit **603** in Trench 6.
- 4.2.3 Furthermore, a total of four sub-circular anomalies highlighted by the geophysical survey (Beck 2020) can be interpreted as enclosures, the majority of which are similarly aligned south-east to north-west (Fig. 3). Morphologically, these enclosures hint at a broad date range of Late Iron Age to Early Romano-British and suggest a concerted Late Iron Age exploitation. Although not necessarily from a localised study area at this stage, similar enclosures to these in terms of size and morphology, have been investigated at similar sites in at Wimpole Hall, Wintringham Park (Ladd pers.comm) and Love's Farm in Cambridgeshire. These enclosures were dated via ceramics to the pre-Roman Iron Age into the Romano-British period (Lambert 2018) and these broadly fit the pattern suggested by this investigation.
- 4.2.4 The largest and most complete of the enclosures identified by the geophysical survey was investigated in Trench 7, notably ditches **702** and **705** (Fig.5, Plate 8). Although only one intervention was placed on its south-eastern arm, it is likely that at least one re-establishment of the feature took place, in the form of a recut **705**. Three sherds (80g) of pottery recovered from its fill were dated to the Later Roman period.

The original ditch **702** may have had an Iron Age origin. Although heavily abraded and likely to be residual, the two sherds (3g) of Late Iron Age pottery may support this hypothesis.

### *Circular Features*

- 4.2.5 Two small circular feature ditches of the same size were identified during the investigation in Trench 6 (Fig. 5). One of these, **707** (Figs. 4 & 6, Sec: 702, Plate 7) was investigated. Although only around half of this feature was exposed, it is likely to have measured approximately 2m in total interior diameter. Although three sherds (22g) of pottery recovered from the upper fill of **707** are dated to the broad Romano-British period, it is possible it may date to the earlier Romano-British period. However, it is unknown at present if the circular features are the same phase, and thus within and associated with the large enclosure. A similar circular feature was observed at Willingham, Cambridgeshire. It was dated to the Late Iron Age to Early Roman period and measured slightly larger, at 2.8m in total diameter. The circular feature displayed a similar size and profile, and it was interpreted as having an unknown industrial function (Lambert 2017). However, these sub-circular features can often be interpreted as hay ricks (Henley, Lions and Pickstone 2012). Due to the full extent of the feature not being fully exposed in the trench, it is difficult to suggest their function with any certainty at this stage.
- 4.2.6 Although based on the small-excavated sample of the study area, the ceramic evidence suggests a hiatus in activity between the later 1st and later 2nd century AD. As a broad interpretation, this may represent complete abandonment, or may reflect a shift in site focus to another area, outside of the evaluation area (Appendix B.1). The site was subjected to a resurgence of sorts during the later 2nd to 4th centuries AD, evidenced by the large volume of Later Roman pottery, recovered from Trenches 6 and 7, which totalled one hundred and seven sherds (2.514kg) that comprised 89.4% of the overall assemblage.
- 4.2.7 Generally, these later ditches follow a pattern of slight realignment to the north-north-east to south-south-west, suggesting a reorganisation of the landscape, particularly notable with ditch **712** and a recut **705** in Trench 7. This is perhaps in line with urbanised developments to the north-west of the site, associated with the Roman settlement of *Crocolana*, located c.3km to the north-east. The principal Roman road known as the *Fosse Way* (now the modern A46), which ran from Exeter to Lincoln, is located c.1.5km to the west of the site and its status as an important routeway throughout the Roman period is likely to be linked to the exploitation on the site, particularly in the later Roman period.
- 4.2.8 However, the relative lack of fine ware within the pottery assemblage, which only amounted to 0.7% of the entire assemblage recovered from the site is intriguing, as is the low level (2.5%) of imported pottery in the assemblage (Appendix B.1). A higher level of fine ware pottery would perhaps usually be associated with a closer level of contact with urban and arterial developments and its relative absence from this site may suggest a more peripheral existence. The preserved environmental remains were relatively low (App. C.1) which may further enhance this hypothesis; however, the

generally medium to large sherd size from the pottery assemblage suggests this may not be a considerable distance.

- 4.2.9 The recovery of a small amount of Roman ceramic building material from ditches **607** in Trench 6 and ditch **712** in Trench 7 add to the corpus of later Roman dates provided by the pottery and possibly indicate the presence near-by of a Roman villa estate or bath house (Appendix B.3). However, the material is abraded and may have travelled from further afield from manuring.

### 4.3 Significance

- 4.3.1 The geophysical survey identified a multi-phased scheme of enclosures, boundaries and possible trackways and the intrusive investigation has provided preliminary datable frameworks for the activity and augments the knowledge of the historic landscape.
- 4.3.2 The site's proximal location to an arterial Roman road, the Fosse Way, cannot be ignored, and the site should be interpreted in its wider landscape context. It is located within 1.5km of the road to the south-east and the ditch alignments dated by ceramics to the Roman period suggest cultivation and occupation of the site did not exist in isolation. The system of enclosures and trackways associated with this period may form a hinterland landscape for the Roman town, along the arterial road but this is not clear at this stage.
- 4.3.3 Overall, this preliminary investigation has confirmed the presence of an extensive and complex network of features which are indicative of an exploited and managed landscape. Based on the ceramic data alone, this appeared to have reached a hiatus in activity between the later 1st century AD and the late 2nd century AD before a resurgence in cultivation or settlement during the Later Roman period. With further study this perhaps may be linked to the ruralised sub-urban hinterland of a small but prosperous Roman town.

## APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

| Trench 1  |       |           |           |                             |                |         |
|---|-------|-----------|-----------|-----------------------------|----------------|---------|
| General description   |       |           |           |                             | Orientation    | NE-SW   |
| Trench contained approximately sixteen observable ditches. Consists of topsoil and subsoil overlaying a silty gravelly sandy natural. |       |           |           |                             | Length (m)     | 50      |
|   |       |           |           |                             | Width (m)      | 2       |
|   |       |           |           |                             | Avg. depth (m) | 0.40    |
| Context No.   | Type  | Width (m) | Depth (m) | Description                 | Finds          | Date    |
| 100   | Layer | -         | 0.30      | Topsoil                     | -              | -       |
| 101   | Layer | -         | 0.05      | Subsoil (south-western end) | -              | -       |
| 102   | Layer | -         | -         | Natural                     | -              | -       |
| 103   | Cut   | 0.75      | 0.32      | Ditch                       | -              | -       |
| 104   | Fill  | -         | 0.32      | Ditch Fill                  | Pottery        | LIA-ERB |
| 105   | Cut   | 0.90      | 0.34      | Ditch                       | -              | -       |
| 106   | Fill  | -         | 0.34      | Ditch Fill                  | Pottery        | LIA-ERB |
| 107   | Cut   | 1.24      | 0.23      | Ditch                       | -              | -       |
| 108   | Fill  | -         | 0.23      | Ditch Fill                  | Pottery        | LIA-ERB |
| 109   | Cut   | 1.03      | 0.16      | Ditch                       | -              | -       |
| 110   | Fill  | -         | 0.16      | Ditch Fill                  | -              | -       |
| 111   | Cut   | 1.2       | 0.26      | Ditch                       | -              | -       |
| 112   | Fill  | -         | 0.26      | Ditch Fill                  | -              | -       |
| 113   | Cut   | 0.76      | 0.22      | Ditch                       | -              | -       |
| 114   | Fill  | -         | 0.22      | Ditch Fill                  | Pottery        | LIA-ERB |

| Trench 6  |       |           |           |                      |  |         |
|---|-------|-----------|-----------|----------------------|--|---------|
| General description   |       |           |           |                      | Orientation                                  | NNW-SSE |
| Contained a total of fourteen ditches and five possible pits. Consists of topsoil and subsoil overlying natural geology of gravelly silty sand. A made ground deposit located at NNW end. |       |           |           |                      | Length (m)                                   | 50      |
|   |       |           |           |                      | Width (m)                                    | 2       |
|   |       |           |           |                      | Avg. depth (m)                               | 0.63    |
| Context No.   | Type  | Width (m) | Depth (m) | Description          | Finds  | Date    |
| 600   | Layer | -         | 0.60      | Topsoil              | -  | -       |
| 601   | Layer | -         | 0.09      | Subsoil              | -  | -       |
| 602   | Layer | 1.8       | 0.15      | Made Ground          | -  | -       |
| 603   | Cut   | -         | -         | Pit                  | -  | -       |
| 604   | Fill  | 0.18      | 0.10      | Basal Pit Fill       | Pottery                                      | LIA     |
| 605   | Fill  | 1.00      | 0.34      | Pit Fill             | Pottery                                      | RB      |
| 606   | VOID  | -         | -         | VOID                 | -  | -       |
| 607   | Cut   | 1.34      | 0.30      | Ditch                | -  | -       |
| 608   | Fill  | 0.74      | 0.11      | Primary Ditch Fill   | -  | -       |
| 609   | Fill  | 1.04      | 0.30      | Secondary Fill       | Pottery<br>Unworked Stone<br>CBM Animal Bone | LRB     |
| 610   | Cut   | 0.70      | 0.23      | Ditch                | -  | -       |
| 611   | Fill  | 0.70      | 0.16      | Secondary Ditch Fill | -  | -       |
| 612   | Fill  | 0.30      | 0.06      | Primary Ditch Fill   | -  | -       |

|     |      |      |      |                      |   |   |
|-----|------|------|------|----------------------|---|---|
| 613 | Cut  | 2.2  | 0.6  | Ditch Cut            | - | - |
| 614 | Fill | -    | 0.46 | Ditch Fill           | - | - |
| 615 | Fill | 0.38 | 0.10 | Primary Ditch Fill   | - | - |
| 616 | Fill | 2.2  | 0.54 | Secondary Ditch Fill | - | - |
| 617 | Cut  | 0.80 | 0.20 | Ditch Terminus Cut   | - | - |
| 618 | Fill | -    | 0.20 | Ditch Fill           | - | - |
| 619 | Cut  | 0.60 | 0.58 | Ditch Cut            | - | - |
| 620 | Fill | -    | 0.58 | Ditch Fill           | - | - |

| Trench 7   |       |           |           |                      |                      |       |
|--|-------|-----------|-----------|----------------------|----------------------|-------|
| General description  |       |           |           |                      | Orientation          | NE-SW |
| Contained approximately ten linear ditches, two small ring ditches (one with two associated small gullies) and an enclosure ditch that had been recut. Two or more amorphous features which were not clear in plan were also identified. |       |           |           |                      | Length (m)           | 50    |
|  |       |           |           |                      | Width (m)            | 2     |
|  |       |           |           |                      | Avg. depth (m)       | 0.48  |
| Context No.  | Type  | Width (m) | Depth (m) | Description          | Finds                | Date  |
| 700  | Cut   | 0.57      | 0.17      | Ditch Terminus       | -                    | -     |
| 701  | Fill  | -         | 0.17      | Ditch fill           | Pottery              | RB    |
| 702  | Cut   | 1.2       | 0.36      | Enclosure Ditch      | -                    | -     |
| 703  | Fill  | -         | 0.36      | Ditch Fill           | Pottery              | LIA   |
| 704  | Fill  | 1.20      | 0.27      | Ditch Fill           | -                    | -     |
| 705  | Cut   | 0.96      | 0.40      | Ditch Cut            | -                    | -     |
| 706  | Fill  | -         | 0.40      | Ditch Fill           | Pottery              | LRB   |
| 707  | Cut   | 0.60      | 0.24      | Ring Ditch Cut       | -                    | -     |
| 708  | Fill  | 0.30      | 0.08      | Primary Fill         | -                    | -     |
| 709  | Fill  | 0.60      | 0.20      | Secondary Fill       | Pottery              | RB    |
| 710  | Cut   | 0.76      | 0.22      | Ditch Cut            | -                    | -     |
| 711  | Fill  | -         | 0.22      | Ditch Fill           | -                    | -     |
| 712  | Cut   | 2.44      | 0.44      | Ditch Cut            | -                    | -     |
| 713  | Fill  | 1.5       | 0.10      | Primary Ditch Fill   | Pottery              | LRB   |
| 714  | Fill  | 2.44      | 0.36      | Secondary Ditch Fill | Pottery, Animal Bone | LRB   |
| 715  | Cut   | 0.44      | 0.20      | Ditch Cut            | -                    | -     |
| 716  | Fill  | 0.44      | 0.20      | Ditch Fill           | -                    | -     |
| 717  | Layer | -         | 0.06      | Subsoil              | -                    | -     |
| 718  | Layer | 1.00      | 0.08      | Tree throw/Unknown   | -                    | -     |



## APPENDIX B FINDS REPORTS

### B.1 Iron Age and Roman Pottery

*By Katie Anderson*

#### *Introduction*

B.1.1 The evaluation recovered an assemblage of Late Iron Age and Roman pottery totalling 142 sherds, weighing 3024g and representing 5.03 EVEs (estimated vessel equivalent) and a minimum of sixteen vessels (MNV).

#### *Methodology*

B.1.2 All of the pottery was analysed and recorded in accordance with the Study Group for Roman Pottery guidelines (Perrin 2011) and the Prehistoric Ceramic Research Group guidelines (2009).

#### *Assemblage Chronology and Character*

B.1.3 The assemblage can be divided into three chronological groups; Late Iron Age (c.50BC-AD50), early Roman (c.AD40-100) and late Roman (AD150-400), as well as a Romano-British category, which encompasses sherds which could only be broadly dated to the Roman period. The pottery suggests a peak in activity in the later Roman period (Table 1), representing 65% of the total assemblage. There appears to have been a hiatus in activity between the later 1st century AD and the late 2nd century AD, although it is possible that some of the material which can only be broadly dated may represent this period.

| Sherd date                  | No.        | Wt(g)       | MNV       | EVE         |
|-----------------------------|------------|-------------|-----------|-------------|
| Late Iron Age (c.50BC-AD50) | 10         | 120         | 1         | 0           |
| Early Roman (c.AD40-100)    | 11         | 96          | 1         | 0           |
| Later Roman (c.AD150-400)   | 92         | 2488        | 13        | 4.03        |
| Romano-British (AD40-400)   | 29         | 320         | 1         | 1           |
| <b>TOTAL</b>                | <b>142</b> | <b>3024</b> | <b>16</b> | <b>5.03</b> |

Table 1: *Quantification of pottery by sherd date*

B.1.4 The pottery comprises primarily medium-sized sherds, with a small number of large sherds, which is reflected in the relatively high assemblage mean weight of 21g. There were also a number of refitting sherds and/or sherds which are clearly from the same vessel, even if they do not refit. However, this occurs exclusively within contexts and there are no examples of cross-context refits.

B.1.5 The Late Iron Age pottery comprises ten grog-tempered sherds (120g), of which eight sherds (117g) derive from a single vessel; a convex wall jar with plain rounded rim, from context (604) Trench 6. Two further grog-tempered sherds (3g) were recovered from context (703), Trench 7, although these are very small, abraded fragments and are likely to be residual.

B.1.6 Coarseware fabrics dominate the assemblage, representing 96.5% by count and 92.1% by weight. Within this category sandy wares are the most commonly occurring fabric,

accounting for 78.2% of the total assemblage (by count, 111 sherds, 2501g). Unsourced sandy greywares (79 sherds, 1031g), reduced wares (12 sherds, 930g), black-slipped/surface wares (ten sherds, 172g) and oxidised wares (three sherds, 13g) are the most common fabrics. Sourced sandy coarsewares comprise five Nene Valley whiteware mortaria sherds (342g) and one Nene Valley greyware body sherd. Shell-tempered wares represent a further 4.2% of the assemblage, including five sherds (60g) of Dales shelly ware. Grog-tempered wares, including the Late Iron Age material total 20 sherds (210g).

B.1.7 The fineware fabrics represent 0.7% of the assemblage by count (1.5% by weight), comprising a single Nene Valley colour-coated sherd from a closed vessel, recovered from context (609), Trench 6. Imported wares account for the remaining 2.8% (by count, 6.4% by weight), totalling four sherds (194g) comprising one body sherd from a Late Baetican amphora from context (609), Trench 6, most likely used in the transportation of olive oil. The remaining three imported sherds comprise samian, with all three production centres represented. Only one form was identifiable, consisting of a base sherd from an East Gaulish Dragendorff 31 dish from context (714), Trench 7.

| Fabric Code | Fabric   | No. | Wt(g) | MNV | EVE  |
|-------------|--|-----|-------|-----|------|
| BAETL       | Baetican amphora (late)  | 1   | 157   | 0   | 0    |
| BLKSL       | Black-slipped ware (unsourced)   | 6   | 160   | 3   | 0.2  |
| BLKSLM      | Black-slipped ware - micaceous (unsourced)   | 3   | 6     | 0   | 0    |
| CSGW        | Coarse sandy greyware (unsourced)  | 65  | 773   | 3   | 1.75 |
| CSGW2       | Coarse sandy ware with common small quartz and occasional to moderate large quartz up to 0.1mm | 1   | 26    | 0   | 0    |
| CSMGW       | Coarse sandy micaceous greyware (unsourced)  | 6   | 149   | 3   | 0.05 |
| CSMGW2      | CSGW with dark core and light surfaces   | 6   | 76    | 1   | 0.2  |
| CSMRDU      | Coarse sandy micaceous reduced ware (unsourced)  | 4   | 815   | 1   | 1.65 |
| CSOX        | Coarse sandy oxidised ware (unsourced)   | 3   | 13    | 0   | 0    |
| CSRDU       | Coarse sandy reduced ware (unsourced)  | 6   | 47    | 0   | 0    |
| CSRDUV      | Coarse sandy ware with moderate to common linear voids from shell?                             | 2   | 68    | 0   | 0    |
| DALSH       | Dales shelly ware  | 5   | 60    | 1   | 0.5  |
| FSGW        | Fine sandy greyware (unsourced)  | 1   | 2     | 0   | 0    |
| FSMGW       | Fine sandy micaceous oxidised ware (unsourced)   | 1   | 7     | 0   | 0    |
| GROG        | Grog-tempered ware   | 16  | 165   | 2   | 0    |
| IMITBB      | Imitation black-burnished ware (unsourced)   | 1   | 6     | 1   | 0    |
| NVCC        | Nene Valley Colour Coated ware   | 1   | 45    | 0   | 0    |
| NVGW        | Nene Valley Greyware   | 1   | 11    | 0   | 0    |
| NVWW        | Nene Valley whiteware  | 5   | 342   | 1   | 0.43 |
| QGM1        | Sparsely sandy ware with occasional to moderate small grog (up to 0.2mm) and mica              | 3   | 24    | 0   | 0    |
| QMG2        | Moderately sandy ware with occasional to moderate medium grog (up to 0.5mm) and mica           | 1   | 21    | 0   | 0    |
| SAMCG       | Samian Central Gaulish   | 1   | 3     | 0   | 0    |
| SAMEG       | Samian East Gaulish  | 1   | 28    | 0   | 0.25 |
| SAMSG       | Samian South Gaulish   | 1   | 6     | 0   | 0    |
| SHELL       | Shell-tempered ware  | 1   | 14    | 0   | 0    |

Table 2: Quantification of Roman pottery by fabric type

- B.1.8 The majority of the assemblage comprises undiagnostic body sherds (56%), with only a small number of rim and base sherds present. Jars are the most common forms representing a minimum of seven vessels, with everted and beaded rims the most common type. Jars range from medium-sized vessels with rim diameters between 16cm-18cm, to large, wide mouth storage jars with rims measuring up to 38cm in diameter. Seven sherds from a small greyware beaker, with a flattened triangular beaded rim and no neck was recovered from context (714), Trench 7. A minimum of three dishes were identified, including the samian vessel, as well as two coarseware dishes, one with a flanged rim and one with a plain rim with groove under, both from (609), Trench 6. The Nene Valley whiteware mortaria represent a minimum of two different vessels, of which only one included a rim sherd, from a redded flanged vessel (form M40, Perrin, 1999, 131). The final vessel forms comprise two coarseware bowls; one flanged rim (609), Trench 9 and one with a triangular flanged rim (713), Trench 7.
- B.1.9 Only two vessels within the assemblage were decorated, comprising one sandy greyware body sherd with an applied cordon and one sandy reduced ware sherd with tooled line decoration. Usewear evidence was also limited to two sherds with sooting on the rim, indicative of being used over a fire and one vessel with limescale on the interior, suggesting it was used to hold or boil water (714), Trench 7.

### *Distribution of Pottery*

- B.1.10 Pottery was recovered from three of the evaluation trenches in varying quantities (Table 3), representing thirteen contexts, eleven all of which comprise small assemblage of fewer than 30 sherds, with the remaining two comprising medium-sized assemblages of 31-99 sherds. Context (609), Trench 6 contained 51 sherds weighing 1372g, with a context date of AD150-400, which included a very large sherd (565g) from a wide mouth, reduced sandy ware storage jar. Two of the samian sherds were also recovered from this context as well as the Baetican amphora sherd. A total of 56 sherds (1142g) derived from context (714), Trench 7, including the five Nene Valley mortaria sherds and the East Gaulish samian sherd. The pottery from this context suggests it is one of the latest dating Roman features, with a date of AD 200-400.

| Context | Cut | Trench | No. | Wt(g) | MNV | EVE  | Context spotdate |
|---------|-----|--------|-----|-------|-----|------|------------------|
| 104     | 103 | 1      | 1   | 147   | 0   | 1    | AD50-400         |
| 106     | 105 | 1      | 2   | 12    | 0   | 0    | AD50-400         |
| 108     | 107 | 1      | 8   | 59    | 1   | 0    | AD40-100         |
| 114     | 113 | 1      | 4   | 45    | 0   | 0    | AD50-100         |
| 605     | 603 | 6      | 1   | 3     | 0   | 0    | AD150-400        |
| 604     | 603 | 6      | 8   | 117   | 1   | 0    | 50BC-AD50        |
| 609     | 607 | 6      | 51  | 1372  | 8   | 1.25 | AD150-400        |
| 701     | 700 | 7      | 2   | 7     | 0   | 0    | AD50-400         |
| 703     | 702 | 7      | 2   | 3     | 0   | 0    | 50BC-AD50        |
| 706     | 705 | 7      | 3   | 88    | 1   | 0.6  | AD150-400        |
| 709     | 707 | 7      | 3   | 22    | 0   | 0    | AD50-400         |
| 713     | 712 | 7      | 1   | 7     | 1   | 0    | AD150-400        |
| 714     | 712 | 7      | 56  | 1142  | 4   | 2.18 | AD200-400        |

Table 3: *Quantification Roman pottery by context and Trench*

B.1.11 The majority of the pottery was derived from Trenches 6 and 7, which combined account for 89.4% of the total assemblage. Pottery from features within Trench 6 totals 60 sherds (1492g), with a further 67 sherds (1269g) from Trench 7, indicating this area as a focus for activity. The remaining 15 sherds (263) were collected from four contexts within Trench 1. Three of these contained material which could only be broadly dated as Romano-British, while the final context (108), contained eight sherds (59g) with an early Roman date. The Late Iron Age material derived from contexts within Trenches 6 and 7, while the definite early Roman material was recovered from Trench 1 and the later Roman pottery from Trenches 6 and 7.

### ***Discussion***

B.1.12 Overall, the pottery demonstrates that activity occurred between the Late Iron Age and later Roman period, albeit in varying quantities, suggesting a peak in the later Roman period. The pottery is indicative of a hiatus in activity between the later 1st and later 2nd century AD, which may represent complete abandonment, or may reflect a shift in site focus to another area, outside of the evaluation area. The focus of activity appears to have been around features within Trenches 6 and 7, with a smaller number of sherds recovered from features within Trench 1.

B.1.13 The fabric and forms are dominated by coarsewares which is typical of a rural assemblage. The presence of imported wares and the Nene Valley whitewares and colour-coated sherd indicates the site had access to goods from outside of the local area, although the quantity of sherds within these categories indicates that these only formed a very small component of the assemblage.

## **B.2 Stone**

*By Simon Timberlake*

### ***Introduction***

B.2.1 A small assemblage of natural un-worked stone (1254g) and a single re-used fragment of burnt Roman quernstone (348g) was recovered from the investigation.

### ***Methodology***

B.2.2 The stone was weighed and viewed under a x10 illuminated magnifying lens and tested with dilute HCL to confirm the presence/ absence of limestone or a carbonate cement. This was then compared with an archaeological stone reference collection and with a regional guide of building stone sources.

### ***Results***

B.2.3 A single worked stone was recovered from fill (714) of ditch 712 in Trench 7 which comprised of a fragment from a burnt Millstone Grit rotary quernstone re-used as a whetstone for sharpening knives, and showing at least three different directions of linear sharpening of the flat face and blade edge(s) of these iron knives. Reused on both sides as a whetstone, but mostly upon the original grind surface (underside) of this fragment of upper quernstone. Little can be made out now of the original

dimensions of the flat discoid rotary quern type, but it seems likely this would have been in the range of 450-500mm diameter. Fragment weight 348g; size 95x80x43-23mm

- B.2.4 Three natural stones were collected from the fill (609) of an enclosure ditch **607** in Trench 6 (total weight 520g; 110x90x10mm + 130x90x20mm). These are thinly-bedded fragments of grey-green dolomitic siltstone, some with surface dissolution of their carbonate content. Geological mudcracks can be seen upon the surface of one example. These rocks come from the mudstone units of the 'Skerry Sandstone', otherwise known as the Sidmouth Mudstone Formation of the Mercia Mudstone Group (Trias). There is no evidence for these particular pieces being worked or used as here as building material.
- B.2.5 Three natural stones present within the fill (714) of a ditch **712** in Trench 7 (total weight 734g; 100x90x20mm + 95x70x45mm + 65x40x15mm). These are thinly-bedded fragments of grey-green dolomitic siltstone, some with surface dissolution of their carbonate content. One of them shows carbonate-rich laminated varves. These rocks come from the mudstone units of the 'Skerry Sandstone', otherwise known as the Sidmouth Mudstone Formation of the Mercia Mudstone Group (Trias). There is no evidence here for these rocks having been worked or used.

### *Discussion*

- B.2.6 There appears to be no evidence for the use of the local geology amongst the range of stones collected. These 'Skerry sandstone' dolomitic mudstone beds collected from Trenches 6 and 7 represent the broken-up talus of local outcrops, yet hereabouts these rocks were also commonly used as vernacular building stones from the Roman period onwards (BGS/ Historic England 2017, 8).
- B.2.7 More interesting perhaps is the survival of a small fragment of burnt Millstone Grit rotary quernstone which would have been imported into the area from the Southern Pennines, probab (but not certainly) from the Sheffield region, perhaps from Wharnecliffe Crag where very similar types of gritstones were quarried from the Late Iron Age into the Roman Period. Roman production probably took place from the late 1st century AD, but certainly from the 2nd century AD once beehive quern production there had ceased (Butcher 1952; Wright 1988, 74; Pearson & Oswald 2000, 4). Further south there were other smaller extraction sites in South Derbyshire at Blackbrook near Ashover (Palfreyman & Ebbins 2007), on Stanton Moor (Hart 1985, 84-85, 95 & 109), and perhaps also in the Melbourn/ Duffield area (K.Haywayd in Evans et al. 2013, 110; Peacock 1980). However, there is little in the way of specific information on the manufacture and trade of these handmill querns and millstones during the Roman period, though it is possible that some of these querns were finished on-site at actual the quarry/ extraction sites, whilst others were finished-off in workshops closer to the main consumption areas of these products. Suffice it to say, from the end of the 1st – beginning of the 2nd century AD Millstone Grit became one of the commonest quern sources to be exploited in Roman Britain.
- B.2.8 The re-use of burnt and broken-up quern pieces as opportunistic whetstone has now been encountered at a number of sites in Eastern England, particularly in

Cambridgeshire where we see large numbers of Millstone Grit querns ending up being buried in pieces within refuse dumps following their wear and over-use. At some Romano-British settlements with little other sign of wealth we then find these querns being re-used as whetstones for the sharpening of iron knives, almost to the exclusion of better quality whetstone material. For example, at Roman Northstowe near Bar Hill in Cambridgeshire we see up to 31% of the discarded querns being re-used as whetstone.

### *Future Work and Disposal*

- B.2.9 Some further investigation of the trade of Millstone Grit quern into Nottinghamshire, a much closer area to the source of this industry would be useful, particularly in respect of the evidence for the use of this as an apparently limited material.
- B.2.10 This small assemblage of local stone (except for the quern) may be safely disposed of, as it is not archaeological.

## **B.3 Ceramic Building Material**

*By Simon Timberlake*

### *Introduction*

- B.3.1 A small assemblage consisting of four pieces of Roman tile were recovered, two pieces of which are re-fitting and un-abraded (combined weight 224g).

### *Methodology*

- B.3.2 The tile was weighed and viewed under a x10 illuminated magnifying lens and tested with dilute HCL to confirm the presence/ absence of a carbonate cement. This was then compared with an archaeological reference collection.

### *Results*

- B.3.3 Three re-fitting fragments from the corner of a square Roman tile (the original tile perhaps between 170 and 200mm square) were recovered from fill (609) of ditch **607** in Trench 6. The re-fitting pieces are 70x50x35mm thick and 50x40x35mm plus a small interior flake (with a combined weight of 212 g). This was possibly manufactured as a pilae/pila tile, but it was evidently used as a floor tile, given the presence of wear and abrasion upon its top surface. The fabric is oxidised red with a greyish reduced top and a rough sand-textured reddish base. The fabric inclusions include burnt flint and quartz grit.
- B.3.4 A single fragment of a somewhat more abraded and smaller fragment of a 25mm thick Roman tile was recovered from fill (714) of ditch **712** in Trench 7. Weight 12g (33x20x25mm). It is of a red oxidised fabric with a thin reduced interior, softer and with a more sandy texture with rare grog inclusions.

### *Discussion*

B.3.5 The presence of recognisably Roman tile fragments within both of these context/features provides a reasonable indication of Roman date. Context (609) contains re-fitting tile pieces which are un-abraded, whilst context (714) contains both Roman tile and a fragment of Roman quernstone/ whetstone. The appearance of un-weathered pila type tile might indicate the presence near-by of a Roman villa estate or bath house.

### *Further Work and Disposal*

B.3.6 The exact type of tile could be looked at in a little more detail, but otherwise there is unlikely to be any more work to do on this assemblage.

## APPENDIX C ENVIRONMENTAL REPORTS

### C.1 Environmental Samples

*By Martha Craven*

#### *Introduction*

C.1.1 Ten bulk samples were taken from features within the evaluated area at A1-A17 Junction, Newark, Nottinghamshire in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. Samples were taken from features encountered within Trenches 1, 6 and 7 from deposits that are thought to be Iron Age to Roman in date.

#### *Methodology*

C.1.2 The total volume (up to 18L) of each of the samples was processed by tank flotation using modified Sīraf-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve.

C.1.3 The dried flots were scanned using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 4. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers et al. 2006) and the OAE's own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

#### *Quantification*

C.1.4 For the purpose of this initial assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

# = 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens

C.1.5 Preservation of plant remains is poor and is through carbonisation (charring) only.

C.1.6 A small quantity of wheat (*Triticum sp.*) grains were recovered from three of the samples from this site. Sample 8, fill 609 of ditch **607** (Trench 6), also contains a single wheat (*Triticum spelta/dicoccum*) glume base and a legume (*Pisum/Lathyrus/Vicia sp.*). An animal dropping, likely from a rodent, was recovered from Sample 1, fill 104 of ditch **103** (Trench 1). The samples from this site were either devoid or contain only small quantities of charcoal.

C.1.7 The samples from this site do not contain any molluscs.

C.1.8 Several of the samples contain pottery fragments that may be suitable for dating.



| Trench No. | Sample No. | Context No. | Cut No. | Feature Type       | Volume Processed (L) | Flot Volume (ml) | Cereals | Chaff | Legumes | Animal Droppings | Charcoal Volume (ml) | Pottery | Large Mammal Bones |
|------------|------------|-------------|---------|--------------------|----------------------|------------------|---------|-------|---------|------------------|----------------------|---------|--------------------|
| 1          | 1          | 104         | 103     | Ditch              | 17                   | 10               | 0       | 0     | 0       | #                | 0                    | 0       | 0                  |
| 1          | 6          | 108         | 107     | Ditch              | 16                   | 30               | #       | 0     | 0       | 0                | 0                    | 0       | 0                  |
| 6          | 7          | 605         | 603     | Pit                | 14                   | 2                | 0       | 0     | 0       | 0                | <1                   | 0       | 0                  |
| 6          | 8          | 609         | 607     | Ditch              | 16                   | 40               | #       | #     | #       | 0                | <1                   | #       | 0                  |
| 6          | 9          | 611         | 610     | Ditch              | 14                   | 10               | 0       | 0     | 0       | 0                | <1                   | 0       | #                  |
| 6          | 10         | 604         | 603     | Pit                | 2                    | 1                | 0       | 0     | 0       |                  | 0                    | 0       | 0                  |
| 7          | 2          | 709         | 707     | Curvi-linear ditch | 16                   | 20               | 0       | 0     | 0       | 0                | 0                    | #       | 0                  |
| 7          | 3          | 704         | 702     | Enclosure ditch    | 17                   | 20               | 0       | 0     | 0       | 0                | 0                    | 0       | 0                  |
| 7          | 4          | 714         | 712     | Ditch              | 18                   | 10               | 0       | 0     | 0       | 0                | 0                    | #       | 0                  |
| 7          | 5          | 713         | 712     | Ditch              | 16                   | 20               | #       | 0     | 0       | 0                | 0                    | 0       | 0                  |

Table 4: Environmental samples from A1-A17 Junction

## Discussion

- C.1.9 The recovery of a small quantity of charred grain, chaff, legumes, and charcoal indicates that there is limited potential for the preservation of plant remains at this site.
- C.1.10 The plant remains, due to their low density and diversity, are likely to represent a background scatter of domestic waste. The scarcity of plant remains at this site is notable as it is thought that this site was a settlement in the Iron Age to Roman period and so a larger plant assemblage would typically be expected. This could suggest that the inhabitants were disposing of their domestic waste further away. Alternatively, the scarcity of plant remains could be due to the poor preservation conditions at the site.
- C.1.11 If further excavation is planned for this area, it is recommended that environmental sampling is carried out in accordance with Historic England guidelines (2011).

## C.2 Animal Bone

*By Hayley Foster*

### *Introduction*

C.2.1 The animal bone from Newark represents faunal remains weighing 220g. There were seven bones recorded that were retrieved from hand collection and environmental samples. Bone was recovered from ditches in Trenches 6 and 7. The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*) and dog (*Canis familiaris*). The material probably dates to the Late Iron age and Early-Roman periods.

### *Methodology*

C.2.2 The method used to quantify this assemblage was based on that used for Knowth by McCormick and Murray (2007) which is modified from Albarella and Davis (1996). Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972), von den Driesch (1976) were used where necessary.

### *Results*

C.2.3 The assemblage was heavily dominated by sheep/goat remains, making up 71.4% of the identifiable remains retrieved. The condition of the bone is fair, yet fragmentation is high, with no complete bones retrieved.

C.2.4 Ageing data is limited, though a partial sheep/goat mandible, third molar and fused dog tibia are present.

C.2.5 There is an element bias, in that the majority of the assemblage is made up of cranial fragments. They were disposed of in ditches and are likely to be primary butchery waste.

C.2.6 The dog tibia from ditch **607** exhibited signs of pathological change. The proximal epiphyses had signs of exostosis around the proximal border, a possible sign of an arthritic condition.

C.2.7 While the volume of bone recovered was not abundant, the remains do indicate that there were signs of domestic activity in those features where bone was recovered.

| Species    | NISP | NISP% |
|------------|------|-------|
| Sheep/Goat | 5    | 71.4  |
| Cattle     | 1    | 14.3  |
| Dog        | 1    | 14.3  |
| Total      | 7    | 100.0 |

Table 5: Total number of identifiable fragments (NISP) by species for hand-collected material.

### *Recommendations for further work*

C.2.8 The assemblage is of a small size and cannot provide any further significant interpretations. Should further faunal remains be recovered from the site, a broader

understanding of trends in husbandry practices and spatial distribution would be more viable.

| Context | Cut | Feature | Trench | Species    | Element                | Sample |
|---------|-----|---------|--------|------------|------------------------|--------|
| 609     | 607 | ditch   | 6      | Sheep/Goat | Loose Mandibular Tooth |        |
| 609     | 607 | ditch   | 6      | Sheep/Goat | Mandible               |        |
| 609     | 607 | ditch   | 6      | Dog        | Tibia                  |        |
| 611     | 610 | ditch   | 6      | Sheep/Goat | Loose Mandibular Tooth | <9>    |
| 714     | 712 | ditch   | 7      | Sheep/Goat | Loose Mandibular Tooth |        |
| 714     | 712 | ditch   | 7      | Sheep/Goat | Loose Mandibular Tooth |        |
| 714     | 712 | ditch   | 7      | Cattle     | Mandible               |        |

*Table 6: List of identifiable fragments*

## APPENDIX D      BIBLIOGRAPHY

Albarella, U. and Davis, S.J. 1996. 'Mammals and birds from Launceston Castle, Cornwall: decline in status and the rise of agriculture', *Circaea* 12 (1), 1-156.

Cappers, R.T.J, Bekker R.M, and Jans, J.E.A. 2006 Digital Seed Atlas of the Netherlands Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. [www.seedatlas.nl](http://www.seedatlas.nl)

British Geological Survey/ Historic England 2017 Strategic Stone Study: A Building Stone Atlas for Nottinghamshire

Butcher, L.H. 1952 Archaeological remains on the Wharfedale-Gretna uplands, South Yorkshire, *Transactions of the Hunter Archaeological Society* 7, 38-39

Beck, 2020 Geophysical Survey Report of Land off A1/A17 Junction, Newark, Magnitude Surveys, rep MSSK660

Davis, S.J. 1992. A rapid method for recording information about mammal bones from archaeological site (AML report 19/92), London: English Heritage.

Evans, C. with Appleby, G., Lucy, S. & Regan, R. 2013 *Process and History: Romano-British Communities at Colne Fen, Earith*, CAU Landscape Archives Series 2, Cambridge Archaeological Unit, University of Cambridge

Hart, C.R. 1985 *Stanton Moor, Derbyshire: Burial and Ceremonial Monuments IN: Upland Settlement in Britain – The 2nd millennium BC and after* (eds. D.Spratt & C.Burgess), *British Archaeological Reports (British Series)* 143, Oxford, 77-110

Henley, S., Lyons.,A and Pickstone.,A, 2012, 'A Romano-British Villa Complex at Itter Crescent, Peterborough, Post-Excavation Assessment and Updated Project Design', Oxford Archaeology Report 1329

Hillson, S. 1992. *Mammal Bones and Teeth: An Introductory Guide to Methods and Identification*. London Institute of Archaeology: University College London.

Historic England 2011 Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (2nd edition), Centre for Archaeology Guidelines

Jacomet, S. 2006 Identification of cereal remains from archaeological sites. (2nd edition, 2006) IPNA, Universität Basel / Published by the IPAS, Basel University.

Stace, C., 1997 *New Flora of the British Isles*. Second edition. Cambridge University Press

Holt R, Jones H & Knight D/2001/Evaluation excavations on the Fosse Way, Langford. Trent & Peak Archaeological Trust [assessment & evaluation reports] 106/2002, 154-155

Lambert, P, 2017 'Late Iron Age Settlement and Roman Fields at Rockmill End, Willingham Post-Excavation Assessment and Updated Project Design', p.7. Oxford Archaeology East Report 2206.

Lambert, P, 2018 'A Late Iron Age to Early Roman Settlement at Wimpole Hall, Cambridgeshire, Post-Excavation Assessment and Updated Project Design' Oxford Archaeology East Report 2314

McCormick, F. and Murray E. 2007. Knowth and the Zooarchaeology of Early Christian Ireland. Dublin: Royal Irish Academy.

Palfreyman, A. & Ebbins, S. 2007 *A Romano-British quern-manufacturing site at Blackbrook, Derbyshire*, Derbyshire Archaeological Journal Volume 127, 33-38

PCRG 2009. The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. Oxford: Prehistoric Ceramics Research Group occasional Papers 1 and 2 (third edition)

Peacock, D.P.S. 1980 The Roman Millstone Trade: A Petrological Sketch, World Archaeology Volume 12 no.1 (Classical Archaeology), 43-53

Pearson, T. & Oswald, T.A. 2000 Quern Manufacturing at Wharnecliffe Rocks, Sheffield, South Yorkshire, English Heritage Research Report AI/20/2000

Perrin, J, R. 1999. Roman Pottery from Excavations at and near to the Roman Small Town of Durobrivae, Water Newton, Cambridgeshire, 1985-94. Journal of Roman Pottery Studies, 8.

Perrin, J, R. 2011. Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery.

Schmid, E. 1972. Atlas of Animal Bones for Prehistorians, Archaeologists and Quaternary Geologists. Amsterdam-London-New York: Elsevier Publishing Company

Zohary, D., Hopf, M. 2000 Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley. 3rd edition. Oxford University Press

PCRG 2009. The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. Oxford: Prehistoric Ceramics Research Group occasional Papers 1 and 2 (third edition)

Perrin, J, R. 1999. Roman Pottery from Excavations at and near to the Roman Small Town of Durobrivae, Water Newton, Cambridgeshire, 1985-94. Journal of Roman Pottery Studies, 8.

Perrin, J, R. 2011. Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery.

Wright, A. 1988 Beehive Quern Manufacture in the South-East Pennines, Scottish Archaeological Review Volume 5, Parts 1&2, 65-77

#### Online Resources

[https://www.heritagegateway.org.uk/Gateway/Results\\_Single.aspx?uid=1868114&resourceID=304](https://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=1868114&resourceID=304) – accessed 02/10/202.

## APPENDIX E OASIS REPORT FORM

### Project Details

|              |  |  |  |
|--------------|--|--|--|
| OASIS Number | oxfordar3-406566   |  |  |
| Project Name | Prehistoric, Iron Age and Romano-British Settlement – Land off A1-A17 Junction- Newark |  |  |

|                    |            |                  |            |
|--------------------|------------|------------------|------------|
| Start of Fieldwork | 21/09/2020 | End of Fieldwork | 30/09/2020 |
| Previous Work      | No         | Future Work      | Unknown    |

### Project Reference Codes

|            |          |                   |                 |
|------------|----------|-------------------|-----------------|
| Site Code  | XNONOT20 | Planning App. No. | PREAPP/00069/20 |
| HER Number |          | Related Numbers   |                 |

|                           |                          |
|---------------------------|--------------------------|
| Prompt                    | NPPF                     |
| Development Type          | Development – Warehouses |
| Place in Planning Process | Pre-application          |

### Techniques used (tick all that apply)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Aerial Photography – interpretation | <input type="checkbox"/> Grab-sampling              | <input type="checkbox"/> Remote Operated Vehicle Survey                    |
| <input type="checkbox"/> Aerial Photography - new            | <input type="checkbox"/> Gravity-core               | <input checked="" type="checkbox"/> Sample Trenches                        |
| <input type="checkbox"/> Annotated Sketch                    | <input type="checkbox"/> Laser Scanning             | <input type="checkbox"/> Survey/Recording of Fabric/Structure              |
| <input type="checkbox"/> Augering                            | <input type="checkbox"/> Measured Survey            | <input checked="" type="checkbox"/> Targeted Trenches                      |
| <input type="checkbox"/> Dendrochronological Survey          | <input checked="" type="checkbox"/> Metal Detectors | <input checked="" type="checkbox"/> Test Pits                              |
| <input type="checkbox"/> Documentary Search                  | <input type="checkbox"/> Phosphate Survey           | <input type="checkbox"/> Topographic Survey                                |
| <input checked="" type="checkbox"/> Environmental Sampling   | <input type="checkbox"/> Photogrammetric Survey     | <input type="checkbox"/> Vibro-core  |
| <input type="checkbox"/> Fieldwalking                        | <input type="checkbox"/> Photographic Survey        | <input checked="" type="checkbox"/> Visual Inspection (Initial Site Visit) |
| <input checked="" type="checkbox"/> Geophysical Survey       | <input type="checkbox"/> Rectified Photography      |  |

| Monument | Period                       | Object      | Period                       |
|----------|------------------------------|-------------|------------------------------|
| Ditch    | Roman (43 to 410)            | Pottery     | Late Iron Age ( - 100 to 43) |
| Ditch    | Late Iron Age ( - 100 to 43) | Pottery     | Roman (43 to 410)            |
| Pit      | Late Iron Age ( - 100 to 43) | Animal Bone | Roman (43 to 410)            |

### Project Location

|                    |   |   |
|--------------------|---|---|
| County             | Nottinghamshire                           | Address (including Postcode)<br>Land off A1-A17 Junction,<br>Winthorpe CP,<br>Coddington<br>Newark and Sherwood,<br>Nottinghamshire<br>NG24 2RA |
| District           | Newark and Sherwood                       |   |
| Parish             | Coddington                                |   |
| HER office         | Nottinghamshire Historic Environment Team |   |
| Size of Study Area | 2.7ha                                     |   |
| National Grid Ref  | NGR SK 824 556                            |   |

### Project Originators

|                           |                    |
|---------------------------|--------------------|
| Organisation              | OA East            |
| Project Brief Originator  | Matt Adams         |
| Project Design Originator | Alexandra Thornton |

|                    |               |
|--------------------|---------------|
| Project Manager    | Louise Moan   |
| Project Supervisor | Paddy Lambert |

### Project Archives

|                          | Location                  | ID       |
|--------------------------|---------------------------|----------|
| Physical Archive (Finds) | Nottingham Museum Service |          |
| Digital Archive          | OA East                   | XNTNOT20 |
| Paper Archive            | Nottingham Museum Service |          |

| Physical Contents   | Present?                            | Digital files associated with Finds | Paperwork associated with Finds     |
|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Animal Bones        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Ceramics            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Environmental       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Glass               | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Human Remains       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Industrial          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Leather             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Metal               | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Stratigraphic       |                                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Survey              |                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Textiles            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Wood                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Worked Bone         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Worked Stone/Lithic | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| None                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Other               | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |

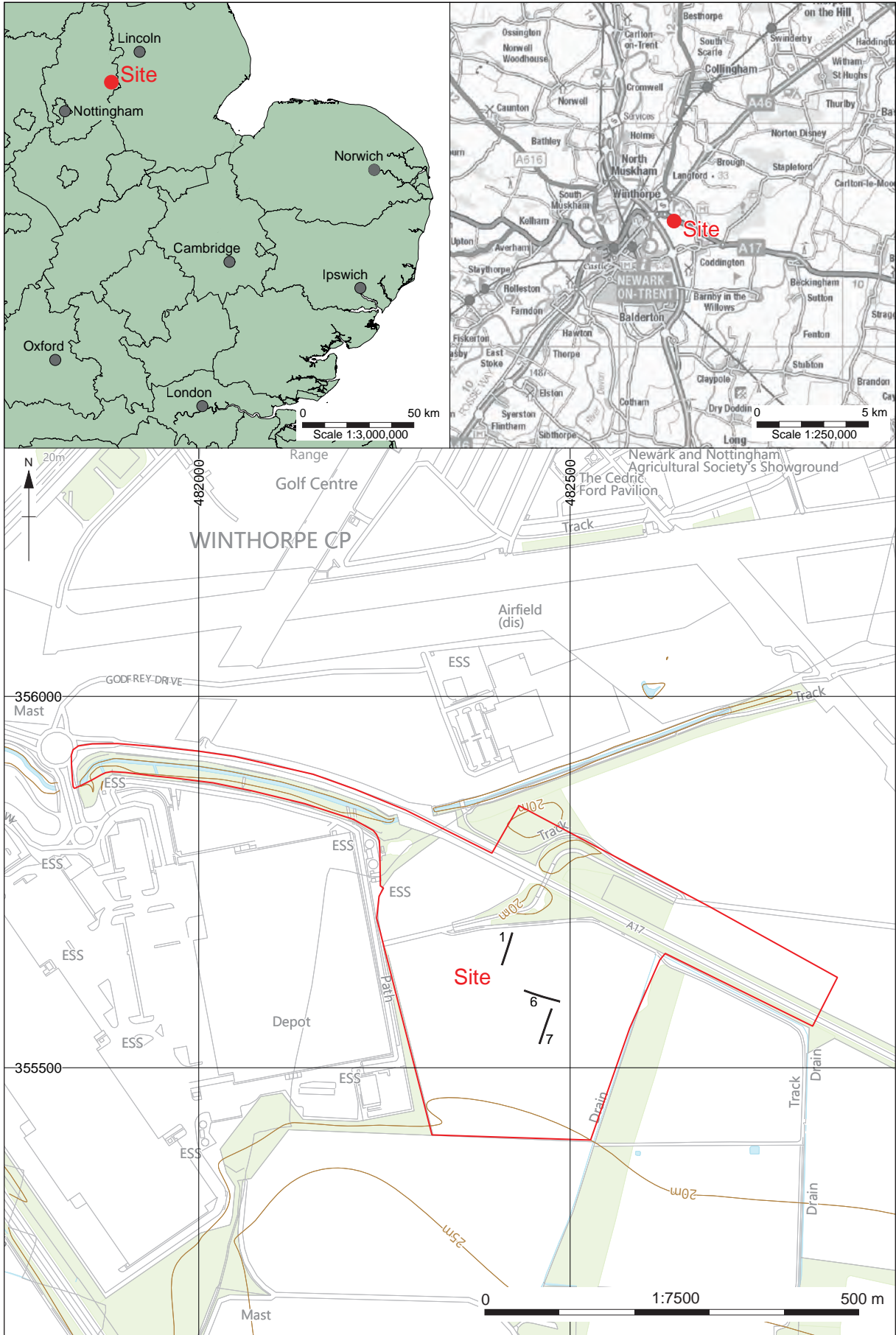
### Digital Media

|                                |                                     |
|--------------------------------|-------------------------------------|
| Database                       | <input checked="" type="checkbox"/> |
| GIS                            | <input checked="" type="checkbox"/> |
| Geophysics                     | <input checked="" type="checkbox"/> |
| Images (Digital photos)        | <input checked="" type="checkbox"/> |
| Illustrations (Figures/Plates) | <input checked="" type="checkbox"/> |
| Moving Image                   | <input type="checkbox"/>            |
| Spreadsheets                   | <input type="checkbox"/>            |
| Survey                         | <input checked="" type="checkbox"/> |
| Text                           | <input checked="" type="checkbox"/> |
| Virtual Reality                | <input type="checkbox"/>            |

### Paper Media

|                                  |                                     |
|----------------------------------|-------------------------------------|
| Aerial Photos                    | <input type="checkbox"/>            |
| Context Sheets                   | <input checked="" type="checkbox"/> |
| Correspondence                   | <input checked="" type="checkbox"/> |
| Diary                            | <input type="checkbox"/>            |
| Drawing                          | <input checked="" type="checkbox"/> |
| Manuscript                       | <input type="checkbox"/>            |
| Map                              | <input type="checkbox"/>            |
| Matrices                         | <input checked="" type="checkbox"/> |
| Microfiche                       | <input type="checkbox"/>            |
| Miscellaneous                    | <input type="checkbox"/>            |
| Research/Notes                   | <input checked="" type="checkbox"/> |
| Photos (negatives/prints/slides) | <input type="checkbox"/>            |
| Plans                            | <input checked="" type="checkbox"/> |
| Report                           | <input checked="" type="checkbox"/> |
| Sections                         | <input checked="" type="checkbox"/> |
| Survey                           | <input checked="" type="checkbox"/> |

### Further Comments



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Figure 1: Site location showing evaluation trenches (black) in development area (red)



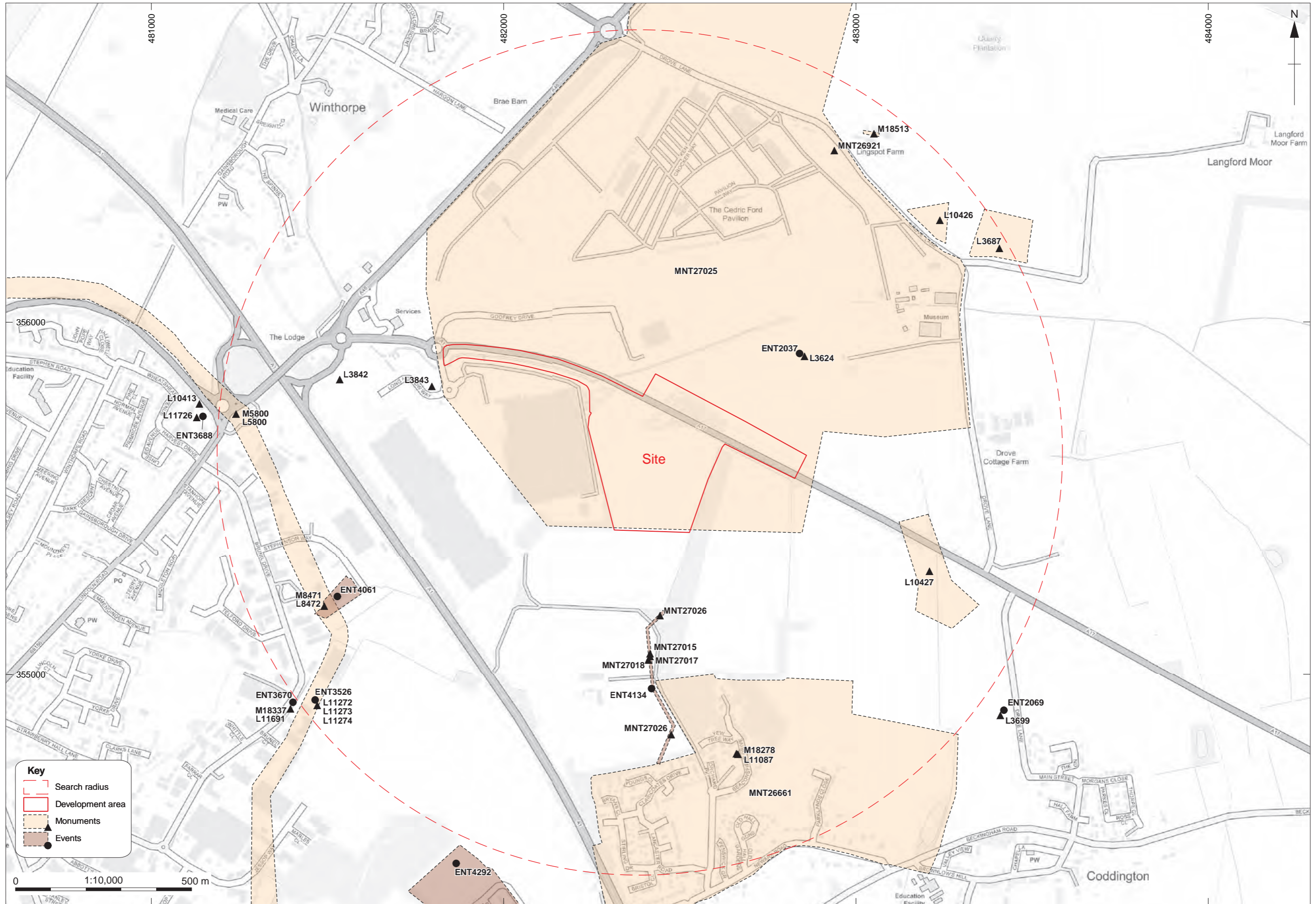


Figure 2: HER data (taken from Behrendt 2020, Figs. 3-4)

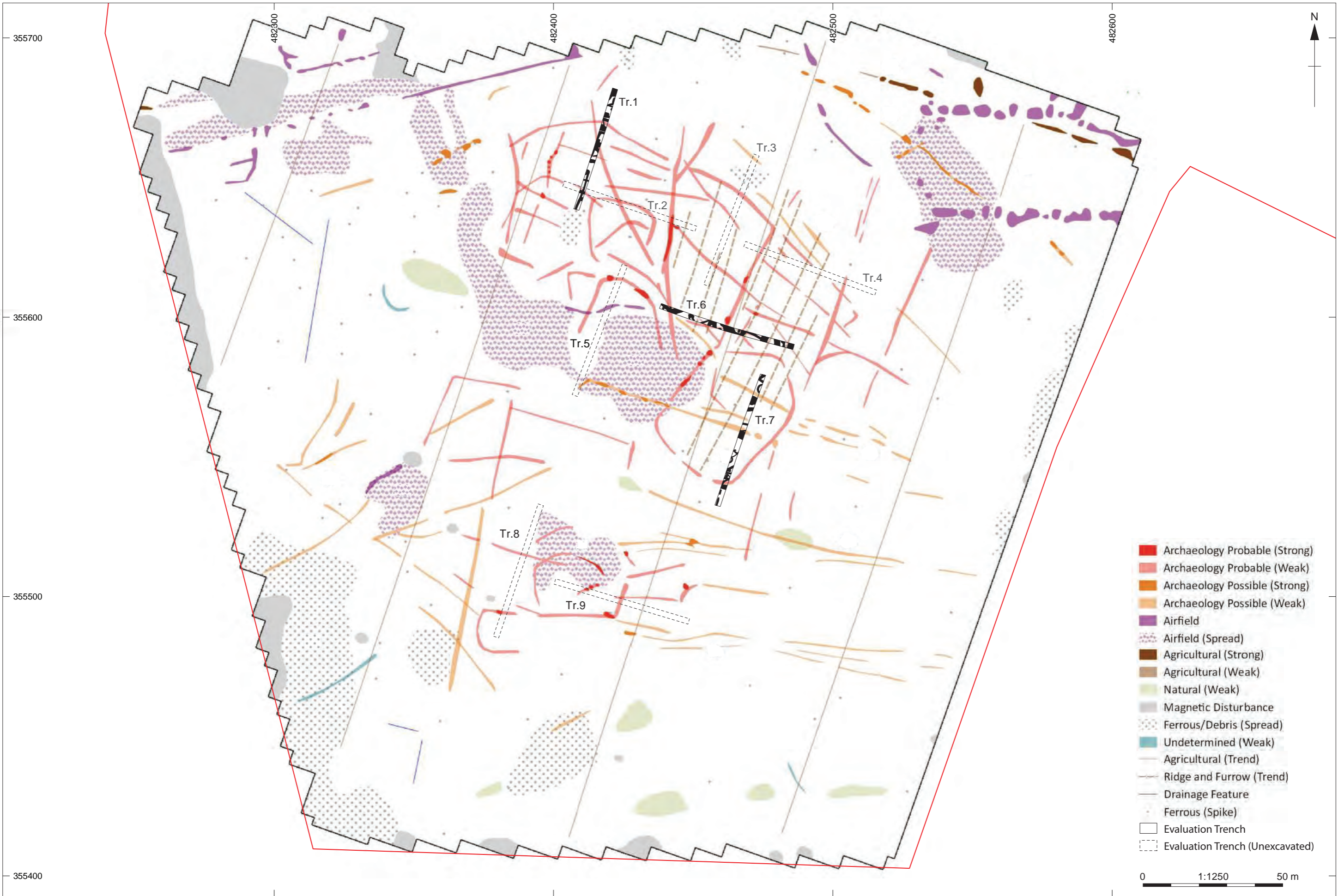


Figure 3: Trench plan overlain on Geophysical Survey Magnetic Interpretation (after Beck 2020)



Figure 4: Trench 1 detailed plan, overlain on Geophysical Survey archaeological features interpretation (after Beck 2020)



Figure 5: Trench 6 and 7 detailed plan, overlain on Geophysical Survey archaeological features interpretation (after Beck 2020)

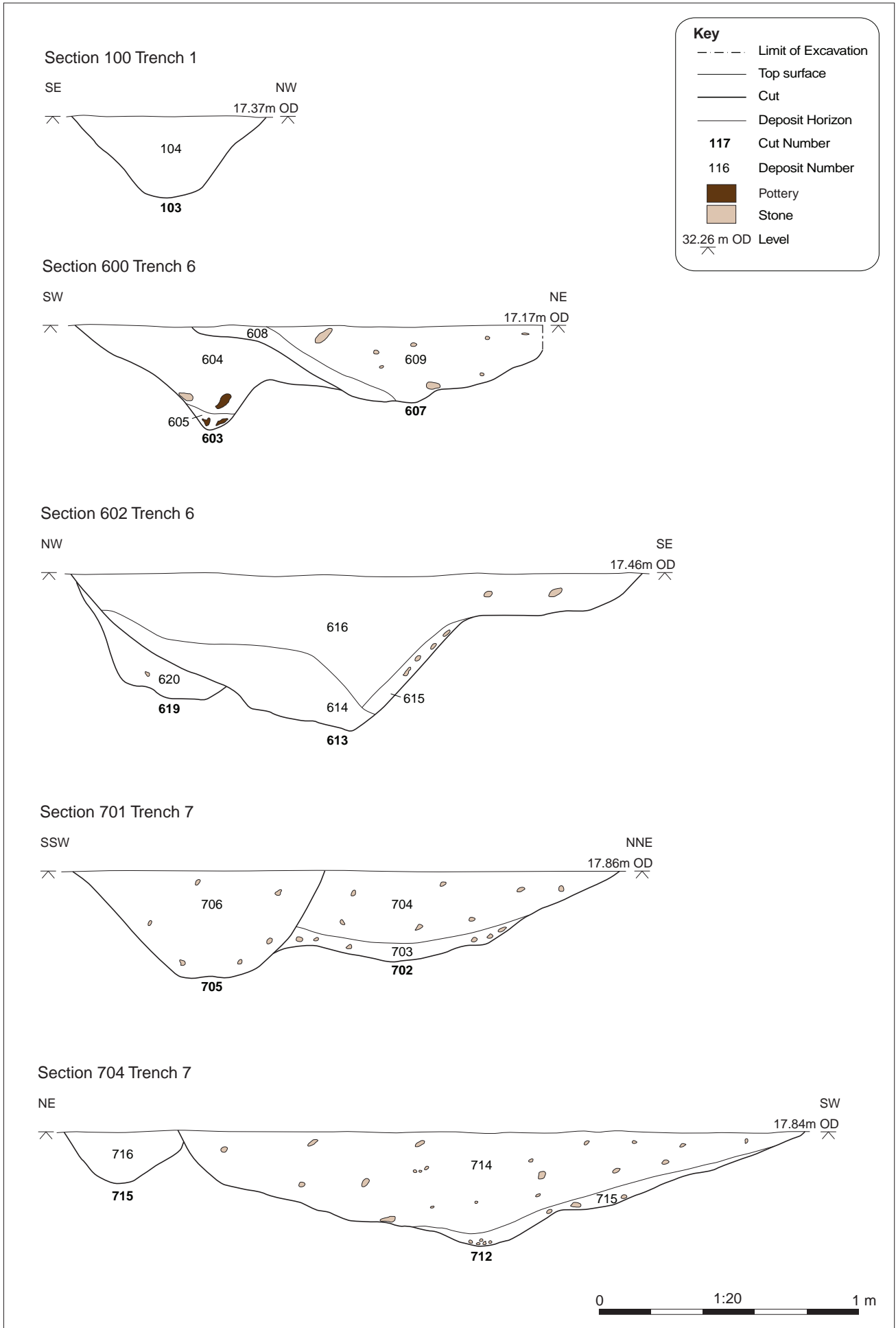


Figure 6: Selected sections



Plate 1: Trench 1 looking south-west



Plate 2: Ditch 113 Trench 1, looking north



Plate 3: Trench 6 looking north-northwest



Plate 4: Pit 603 and Ditch 607 Trench 6, looking north-west



Plate 5: Ditches 619 and recut 613 Trench 6, looking north-west



Plate 6: Trench 7 looking south-west





Plate 7: Ring ditch **707** and possible tree throw/natural feature (718) Trench 7, looking south-east



Plate 8: Enclosure Ditches **702** and **705** Trench 7, looking south-east



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