



Land west of Ixworth Road Suffolk Archaeological Evaluation Report

December 2018

**Client: CgMs Heritage (Part of RPS Group PLC)
on behalf of Persimmon Homes**

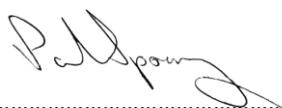
Issue No: 1
OAE Report No: 2247



Client Name: CgMs Heritage (Part of RPS Group PLC) on behalf of Persimmon Homes
Client Ref No:
Document Title: Land west of Ixworth Road, Thurston, Suffolk
Document Type: Evaluation Report
Report No: 2247
Grid Reference: TL 91716 65914
Planning Reference: 4963/16
Site Code: THS 030
Invoice Code: XSFIRT18
Receiving Body: Suffolk County Council
Accession No: THS030
OASIS No: oxfordar3-322782

OA Document File Location: Y:\Suffolk\XSFIRT18_Thurston\Project Reports
OA Graphics File Location: Y:\Suffolk\XSFIRT18_Thurston\Project Data\Graphics

Issue No: 1
Date: December 2018
Prepared by: Stuart Ladd (Project Officer)
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Land west of Ixworth Road, Thurston, Suffolk

Archaeological Evaluation Report

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Summary

Between 24th September and 3rd October 2018, a team from Oxford Archaeology East undertook an archaeological evaluation on land west of Ixworth Road, Thurston (TL 9171 6591). In total 67 trenches were opened, most of which were 30m in length, totalling 0.36ha (c. 4.4% of the 8.3ha study area).

Few archaeological features were found. An Early Neolithic pit containing 102 sherds of struck flints and a single sherd of pottery was uncovered in the north of the site. Adjacent to this was a second, undated but potentially related pit. Residual flints were found across the site.

A pair of road-side ditches marking Peddars Way, the Roman Road linking Chelmsford to Ixworth, were found in the south-west of the site. These were clearly visible, albeit intermittent, on the results of a geophysical survey of the area and appeared in two of the four trenches that were sited to intersect with them. A single iron nail was found in one of the ditches. There was no sign of nearby associated settlement.

Post-medieval quarry pits, some shown on 19th and 20th century Ordnance Survey maps, were present in the south of the field. One had been back-filled in the late 20th century. A field boundary ditch, probably filled in during the 20th century, was found in the north of the site.

Environmental preservation was poor and no bone was recovered.

Acknowledgements

Oxford Archaeology would like to thank Matthew Smith of CgMs Heritage (Part of RPS Group PLC) for commissioning this project. Thank you to Rachael Abraham who monitored the work on behalf of Suffolk County Council for advice and guidance.

The project was managed for Oxford Archaeology East by Louise Bush. The fieldwork was directed by Stuart Ladd, who was supported by Marlena Cygan and David Moger. Survey and digitizing was carried out by Sarita Louzolo. Thank you to the teams of OA staff that cleaned and packaged the finds under the management of Natasha Dodwell, processed the environmental remains under the management of Rachel Fosberry, and prepared the archive under the management of Katherine Hamilton.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) was commissioned by CgMs Heritage (Part of RPS Group PLC) on behalf of Persimmon Homes to undertake a trial trench evaluation at Land West of Ixworth Road, Thurston, Suffolk.

1.1.2 The work was undertaken as a condition of Planning Permission (planning ref. 4963/16). A brief was set by Rachael Abraham of Suffolk County Council outlining the Local Authority's requirements for work necessary to inform the planning process. A written scheme of investigation was produced by OA East (Bush 2018 / Appendix E) detailing the methods by which OA East proposed to meet the requirements of the brief.

1.2 Location, topography and geology

1.2.1 The site is located on the northern edge of Thurston, immediately west of Ixworth Road and east of Mill Lane (Fig. 1). The study area comprises 8.3ha, part of two arable fields. The surface height ranged between 42m OD (to the south-west), 51m in the centre (between the two fields) and 50m OD (to the north-east). The nearest watercourse to the site is a stream 500m to the east which flows north, joining the Black Bourn, a tributary of the Little Ouse.

1.2.2 The site is situated on a bedrock geology of Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation (undifferentiated), with superficial deposits of sand/Lowestoft Formation diamicton across the majority of the area (BGS 2018). Flint gravels were uncovered in the far south-east of the site.

1.3 Archaeological and historical background

Desk-based assessment

1.3.1 The site has been the subject of a full desk-based assessment in which the archaeological and historical background of the site is discussed in the desk-based assessment (Clarke 2016) and will not be repeated here. The distribution map is reproduced in Figure 2, with Suffolk HER numbers, and a summary is presented below. The desk-based assessment concluded there was moderate potential for remains of the late prehistoric and Roman periods and limited potential for other periods.

Summary

1.3.2 Mesolithic and Neolithic flints have been found in the area, with a hammerstone possibly found on the site itself (THS025). Finds associated with a possible Bronze Age or later lake village were found at Barton Mere c. 800m north-west of the site (PKM017, BRG007, BRG Misc/MSF 22915). The Roman Road known as Peddars Way between Chelmsford and Ixworth was thought to run close to the site's eastern boundary (PKM032/THS007; Margary No. 33a). The site lies between the centres of Thurston (around St Peter's Church, THS006) and Pakenham (PKM065) which were

established by the Late Saxon periods and the site was probably under cultivation or pasture during the medieval period.

Geophysical Survey

- 1.3.3 A geophysical survey was undertaken prior to this evaluation (Davies 2016; and see Figs. 3 and 4). This uncovered probable geological features (throughout) and post-medieval quarry pits (in the south of the site) in addition to parallel ditches probably marking the line of Peddars Way in the south-west and north-west of the site (*ibid.* fig. 4).

2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as follows:

- i. establish the presence or absence of archaeological remains on the site, characterise where they are found (location, depth and extent), and establish the quality of preservation of any archaeology and environmental remains
- ii. provide sufficient coverage to establish the character, condition, date and purpose of any archaeological deposits
- iii. provide sufficient coverage to evaluate the likely impact of past land uses, and the possible presence of masking deposits
- iv. provide - in the event that archaeological remains are found - sufficient information to construct an archaeological mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables, and orders of cost

2.2 Methodology

2.2.1 A total of 66 trenches measuring 30m by 1.8m and one measuring 45m x 1.8m were excavated. This exceeded a 4% sample of the study area. All machine excavation took place under the supervision of a suitably qualified and experienced archaeologist.

2.2.2 All trenches were excavated by a mechanical excavator to the depth of geological horizons, or to the upper interface of archaeological features or deposits, whichever was encountered first. A toothless ditching bucket with bucket width of 1.8m was used to excavate the trenches. Overburden was excavated in spits not greater than 0.1m thick.

2.2.3 Topsoil, subsoil, and archaeological deposits were kept separate during excavation, to allow for sequential backfilling of excavations.

2.2.4 Archaeological deposits present were excavated by context to the level of the geological horizon where safe to do so. Trench spoil was scanned visually and with a metal detector to aid recovery of artefacts. Features were recorded using OA pro-forma sheets. Sections were drawn by hand at 1:10 and plans recorded by RTK GPS.

3 RESULTS

3.1 Introduction and presentation of results

- 3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the trenches which contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits for the content of Appendix A. Finds data and spot dates are tabulated in Appendix B.
- 3.1.2 Context numbers were sequential, independent of trench number.

3.2 General soils and ground conditions

- 3.2.1 The soil sequence between all trenches was uniform. The underlying chalk bedrock was frequently visible, overlain to varying degrees by silty sand and gravel. Overlying this in most trenches was a clayey, silty sand subsoil up to 0.2m thick overlain by topsoil typically 0.2-0.3m thick.
- 3.2.2 Ground conditions throughout the evaluation were generally good, and the trenches remained dry throughout.

3.3 General distribution of archaeological deposits

- 3.3.1 A single Neolithic pit was found in Trench 13.
- 3.3.2 Roadside ditches, potentially of Roman date, were identified and excavated in Trenches 59 and 66. These also appeared intermittently on geophysics and were targeted by Trenches 1, 15, 16, 47 and 67, but were not visible in the ground.
- 3.3.3 Infilled post-medieval chalk/marl pits were present in Trenches 45 and 55 (the former only filled in during the 1980s). An in-filled modern field boundary was present in Trenches 2 and 3, but absent from Trench 4.

3.4 Trench 2

- 3.4.1 Trench 2 captured the southern side of a modern boundary ditch at least 1.2m wide which was still present in 1978 (Clarke 2016, fig. 9). Modern finds such as a bucket and horse shoe were retrieved by machine but not retained. This ditch was not excavated.

3.5 Trench 3

- 3.5.1 Trench 3 was moved south-westwards by c.5m to avoid overhead cables bordering the north of the site. The modern boundary ditch (Trench 2) was also uncovered at the north-eastern end of Trench 3. It was 2m in width but was not excavated.

3.6 Trench 4

- 3.6.1 Trench 4 was targeted on the line of the modern boundary found in Trenches 2 and 3. However, neither this nor any archaeological features were found.

3.7 Trench 13

- 3.7.1 Trench 13 was initially 30m long. However, following exposure of an Early Neolithic pit, it was extended to the east and west in search of associated features.

- 3.7.2 Pit **11** (Fig. 7; Section 5; Plate 1) lay in the north of the trench. This was 1m long (north-south), 0.8m wide (east-west) and 0.2m deep, although as much as 0.05-0.1m may have been lost in machining the soft sands into which the pit was cut. Its fill (12) was mid brown soft sand and contained a single sherd of Early Neolithic pottery in addition to 102 struck flints. The entire fill was sampled for environmental remains and debitage retrieval, producing a single charred grain of barley and 20ml of charcoal and 35 additional struck flints. After uncovering the pit, the adjacent part of the machined spoil heap was also hand-sorted for finds. From this 12 struck flints were recovered and assigned to context 15, but they are very likely to have come from the top fill of the pit.
- 3.7.3 Within the trench extension to the west, a second smaller pit (**13**) was uncovered (Fig. 7; Section 6; Plate 1). This was also fully excavated. It was sub-circular, 0.65m in diameter and 0.2m deep. Its fill (14), although comprised of sand, was much firmer than that of pit **11** and a small fragment of (possibly intrusive) slag was found on its upper surface (not retained). It produced two struck flints and no other finds. It is possible that the flints were residual and that the pit was modern, or it may have been a Neolithic pit of a different character from pit **11**.

3.8 Trenches 15 and 16

- 3.8.1 These trenches targeted the weak, intermittent geophysical signal of a ditch, probably the eastern side of Peddars Way (see Figs. 3 & 4). There was no sign of this feature or any other archaeological feature in either trench.

3.9 Trench 38

- 3.9.1 The level of the natural geology at Trench 38 dropped significantly in its southern third to a depth at least 1.2m below the modern ground surface. This gave the appearance of being a natural change, with the geology dropping to match the levels seen in the field to the south. However, the ground in surrounding Trenches 37, 39 and 41 did not have the same level of build-up. On this basis, it is possible this represented in-filling of an old quarry. It corresponded with a discrete pit-like feature on geophysics (Fig. 3) but not highlighted in the interpretive plan (Fig. 4).
- 3.9.2 The lower subsoil (0.28m thick) was overlain by old topsoil (perhaps 0.4m thick), followed by a sandy redeposited sub-soil (0.18-0.22m thick) and sealed by a loose modern topsoil (0.4m thick).

3.10 Trench 45

- 3.10.1 Half of Trench 45 lay over an in-filled quarry pit detected by geophysics (**17**; see Plate 2). This pit appeared on OS maps from 1905-1958, but not 1978 (Clarke 2016, figs. 5-8). The in-filled material was modern, containing plastics, hardcore and tarmac. Subsoil was not present overlying this pit.

3.11 Trench 55

- 3.11.1 This trench was adjacent two probable quarry pits/pond features on the geophysics, one of which (to the south-east) was shown on early OS Maps from 1905 to 1958, but was filled in by 1978 (Clarke 2016, figs. 5-8). This pit did not fall within the trench,

however the subsoil throughout the trench appeared to be up-cast from the quarry pit, comprising heavy mid brownish-grey chalky clay and was probably responsible for the enhanced magnetic signal on the geophysics for the area.

3.11.2 At the north-western end of the trench, the second quarry pit (**16**) was visible. There was no clear outer edge to the pit, but the natural chalk-marl sloped gradually down to the north-west. The same heavy subsoil found across the trench filled this depression. Only a small part of the pit lay within the trench, so its depth was only tested to 0.5m (below 0.3m overlying topsoil).

3.12 Trenches 47, 59, 66 and 67

3.12.1 These trenches were targeted across the geophysical signal of two parallel ditches, probably the remains of Peddars Way Roman Road (Fig. 6). Trenches 47 and 67, located where the signal was weakest, did not uncover any remains of either ditch nor any road surface, although such a surface could have been truncated.

3.12.2 Both Trenches 59 and 66 uncovered both ditches, corresponding closely with the geophysical survey (Fig. 6). There was no sign of a road surface in either, however the geology across this side of the field was sand and gravel with large rounded flints which would have provided a naturally robust surface.

3.12.3 Neither ditch was clearly visible, due to their pale, sterile fills (below). They were only initially identifiable by the absence of flints otherwise abundant in the underlying geology, although they became clearer after a week of weathering.

Trench 59

3.12.4 The western ditch (**3**) was 1.4m wide, and 0.36m deep. This had a symmetrical, wide U-shaped profile (Section 2; Plate 3). Its fill (**4**) was a light yellowish-brown firm silty sand, with frequent smaller gravels.

3.12.5 The eastern ditch (**1**) was located 15m south-east of ditch **3**. It was 1.64m wide and 0.39m. It was asymmetrical with a steeper eastern (inner) side, shallower on the outer side and with a concave base. Its fill (**2**) was the same as that of ditch **3** (fill **4**).

3.12.6 Ditch **1** contained residual struck flints and a single large iron nail (SF1), but otherwise no dateable finds. This ditch was also sampled for environmental remains but produced only a poorly preserved charred cereal grain.

Trench 66

3.12.7 Trench 66 was located c. 45m south-west of Trench 59. Here the western road ditch was less certain, and much weaker or absent on geophysics. A narrow linear area of silt/sand with less flint than the surrounding natural surface was excavated. This feature (**7**) corresponded with the interpreted line of the western ditch. It was 0.54m wide and 0.26m deep with an irregular U-shaped profile and steep sides (Section 4). It was filled (**8**) with light firm silty sand. It is not clear that this was genuinely a silted up ditch rather than a natural feature.

3.12.8 The eastern ditch was clear in Trench 66, with a profile similar to that in Trench 59. Ditch 5 was 1.76m wide and 0.45m deep (Section 3; Plate 4). It was filled (6) with similar silty sand to the other road ditch slots excavated.

3.13 Finds summary

3.13.1 One iron nail was retained from one of the roadside ditches, and two more (probably modern) from sub-soil. A single sherd of Early Neolithic pottery was recovered from a single pit, and a total of 132 struck flints and one burnt flint were found.

4 DISCUSSION

4.1 Geology

4.1.1 The underlying chalk bedrock was exposed in various trenches across the south and centre of the site. However, it was for the most part sealed by silty sand and gravels. The apparently geological features on the geophysics, particularly strong in the north-east of the site were not visible in the ground and presumably represent variations in the depth of the overlying sands and gravels cutting into the chalk bedrock.

4.2 Early Neolithic

4.2.1 Pit **11** (Trench 13) was Early Neolithic in date and appeared to be typical of such pits within the region, containing a selection of struck flints and pottery, probably from surface midden deposits. No animal bone survived.

4.2.2 During Duncan Garrow's study of Neolithic/Early Bronze Age pits sand/gravel was the most common geology on which Early Neolithic pits were found (Garrow 2006, Table 3.2), although the vast majority tend to be found in river valleys or near the coast (*ibid.*, 19). This pit then appears to be something of an exception. The proximity (at 800m to the north-east) of Barton Mere (Suffolk HER BRG 007), possibly the site of a Bronze Age lake village, may be relevant in terms of Neolithic exploitation of this landscape. It is also perhaps relevant that Trench 13 took in an area of particularly soft, fine sand. As suggested by Billington (Appendix B.3), the abundance of raw flint material at the site (see Plate 5) would have made the location attractive and working waste was over-represented in the assemblage.

4.2.3 Pit **13** (Trench 13) was less certainly dated and was potentially modern in date. It contained only two struck flints. However, Neolithic pits are frequently found in small groups or close clusters, so the two may relate to the same episode of activity.

4.2.4 The density of flint recovered in Roman ditch **1** (Trench 59) is suggestive of a surface scatter in that area. Other flints found residually across the site were consistent with a Neolithic date. These finds are not unusual for this landscape, with several other such finds recorded within 1km (see Clarke 2016, 9).

4.3 Roman

4.3.1 The Peddars Way Roman Road appeared to have been marked by two parallel roadside drainage ditches (Trenches 59 and 66), defining a roadway 15-16m wide. Unfortunately, there was no reliable dating evidence within these ditches, although the iron nail recovered (SF1) is consistent with, but not diagnostic of, a Roman date.

4.3.2 The possibility cannot be excluded that these formed a later (e.g. medieval or post-medieval) parallel to the original road. However, by 1783 century, the post-medieval/modern road layout had already deviated significantly from the probable Roman line (see Clarke 2016, fig. 3 for extract of Hodkinson's map). As discussed in the DBA (Clarke 2016, 10) other investigations close to the site have found no evidence for alternative lines or multiple versions of the road. The road was, however, observed during digging for foundations 400m to the southwest in the 1950s (THS004). It seems

there is only one pre-modern road on this line and therefore that the ditches identified in the geophysics and evaluation represented the Roman Road line.

- 4.3.3 The sterility and paleness of the ditch fills was most likely due to their distance from any contemporary settlement. The abundance of flint and gravel in this part of the field probably obviated the need for any augmented road surface, and no evidence of any such surface was found, although the level of truncation is not known.
- 4.3.4 The absence of these ditches in Trenches 1, 15, 16, 47, 67 remains unexplained. Their varying dimensions (particularly evident in the smaller ditch **7** in Trench 66) suggest they were constructed inconsistently. Additionally, plough truncation may have played a factor.

4.4 Post-medieval

- 4.4.1 The evaluation has corroborated the mapped evidence for quarrying at the site. These appear to have been dug to retrieve chalk-marl and gravel. Additional, unmapped pits were also found (e.g. Trench 55 and Trench 38).

Appendix A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

A.1 Trench details

A.1.1 Trenches are detailed below in Table 1. All were 30m long, with the exception of Trench 13 (which was extended by 5m eastwards and 7.5m westwards) and Trench 66, which was 45m in length.

| Trench | Soil depths | | | Soil depths (mid) | | Soil depths | | | Geology | Features |
|--------|-------------|------|----|-------------------|------|-------------|------|----|---------------------------|----------------|
| | Top | Sub | at | Top | Sub | Top | Sub | at | | |
| 1 | 0.2 | 0.15 | NW | 0.25 | 0.2 | 0.2 | 0.2 | SE | Sand | No archaeology |
| 2 | 0.2 | 0.2 | W | 0.2 | 0.2 | 0.2 | 0.2 | E | Sand & gravel | Modern ditch |
| 3 | 0.2 | 0.2 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Sand | No archaeology |
| 3 | 0.2 | 0.15 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Sand & gravel | Modern ditch |
| 4 | 0.25 | 0.2 | NW | 0.2 | 0.2 | 0.2 | 0.2 | SE | Sand/silt | No archaeology |
| 5 | 0.2 | 0.15 | NE | 0.25 | 0.2 | 0.25 | 0.2 | SW | Sand/gravel | No archaeology |
| 6 | 0.15 | 0.2 | NW | 0.2 | 0.2 | 0.2 | 0.15 | SE | Sand | No archaeology |
| 7 | 0.25 | 0.2 | NE | 0.3 | 0.2 | 0.25 | 0.2 | SW | Sand & chalk marl/clay | No archaeology |
| 8 | 0.25 | 0.2 | NW | 0.25 | 0.2 | 0.25 | 0.2 | SE | Sand/gravel | No archaeology |
| 9 | 0.2 | 0.2 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Sand/gravel & chalk | No archaeology |
| 10 | 0.2 | 0.2 | NW | 0.2 | 0.2 | 0.2 | 0.2 | SE | Sand | No archaeology |
| 11 | 0.2 | 0.15 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Sand & chalk | No archaeology |
| 12 | 0.2 | 0.2 | NW | 0.2 | 0.2 | 0.2 | 0.2 | SE | Sand & chalk | No archaeology |
| 13 | 0.25 | 0.2 | NE | 0.25 | 0.2 | 0.2 | 0.15 | SW | Sand & flint | Pits 11, 13 |
| 14 | 0.2 | 0.15 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Sand & chalk | No archaeology |
| 15 | 0.2 | 0.15 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Sand & gravel | No archaeology |
| 16 | 0.2 | 0.2 | NW | 0.2 | 0.2 | 0.2 | 0.2 | SE | Sand & gravel | No archaeology |
| 17 | 0.15 | 0.1 | NE | 0.2 | 0.2 | 0.25 | 0.2 | SW | Sand & chalk | No archaeology |
| 18 | 0.2 | 0.15 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Sand & chalk | No archaeology |
| 19 | 0.2 | 0.15 | NE | 0.2 | 0.15 | 0.2 | 0.15 | SW | Gravel & chalk | No archaeology |
| 20 | 0.2 | 0.2 | NW | 0.25 | 0.2 | 0.2 | 0.2 | SE | Sand | No archaeology |
| 21 | 0.25 | 0.2 | NE | 0.25 | 0.15 | 0.2 | 0.15 | SW | Sand/gravel | No archaeology |
| 22 | 0.3 | 0.2 | NW | 0.3 | 0.15 | 0.25 | 0.2 | SE | Silt/sand | No archaeology |
| 23 | 0.2 | 0.12 | NW | 0.2 | 0.18 | 0.25 | 0.2 | SE | Gravel, silt & clay | No archaeology |
| 24 | 0.25 | 0.12 | NE | 0.25 | 0.15 | 0.25 | 0.1 | SW | Chalk & silt | No archaeology |
| 25 | 0.25 | 0.2 | NW | 0.3 | 0.2 | 0.2 | 0.15 | SE | Silty sand | No archaeology |
| 26 | 0.2 | 0.2 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Chalk & sand | No archaeology |
| 27 | 0.25 | 0.2 | NW | 0.2 | 0.2 | 0.2 | 0.15 | SE | Sand & chalk | No archaeology |
| 28 | 0.2 | 0.15 | SW | 0.25 | 0.2 | 0.2 | 0.15 | NE | Sand & gravel | No archaeology |
| 29 | 0.2 | 0.2 | SE | 0.2 | 0.2 | 0.2 | 0.2 | NW | Sand & gravel | No archaeology |
| 30 | 0.2 | 0.2 | NE | 0.25 | 0.2 | 0.25 | 0.15 | SW | Chalk & sand | No archaeology |
| 31 | 0.2 | 0.15 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Sand | No archaeology |
| 32 | 0.25 | 0.15 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Silty sand | No archaeology |
| 33 | 0.2 | 0.15 | SE | 0.2 | 0.2 | 0.2 | 0.15 | NW | Silty sand | No archaeology |
| 34 | 0.2 | 0.15 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Sand & silt | No archaeology |
| 35 | 0.2 | 0.15 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Gravel & sand | No archaeology |
| 36 | 0.25 | 0.2 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Gravel, silt & sand | No archaeology |
| 37 | 0.2 | 0.2 | NW | 0.2 | 0.2 | 0.25 | 0 | SW | Sand & gravel | No archaeology |

| Trench | Soil depths | | | Soil depths (mid) | | Soil depths | | | Geology | Features |
|--------|-------------|------|----|-------------------|------|-------------|------|----|---------------------|-------------------|
| | Top | Sub | at | Top | Sub | Top | Sub | at | | |
| 38 | 0.2 | 0.15 | NE | 0.2 | 0.2 | * | * | | Sand, clay & gravel | Mod build up/pit? |
| 39 | 0.2 | 0.15 | NW | 0.2 | 0.1 | 0.2 | 0.1 | SE | Sand & gravel | No archaeology |
| 40 | 0.2 | 0.15 | NE | 0.2 | 0.15 | 0.15 | 0.15 | SW | Sand & gravel | No archaeology |
| 41 | 0.2 | 0.15 | NW | 0.2 | 0.1 | 0.2 | 0 | SE | Sand & gravel | No archaeology |
| 42 | 0.15 | 0.15 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Sand, clay & gravel | No archaeology |
| 43 | 0.2 | 0.2 | NW | 0.2 | 0.1 | 0.2 | 0.15 | SE | Sand & gravel | No archaeology |
| 44 | 0.2 | 0 | NE | 0.2 | 0.1 | 0.2 | 0.15 | SW | Gravel & chalk | No archaeology |
| 45 | 0.2 | 0 | NW | 0.2 | 0 | 0.2 | 0 | SE | Gravel & shingle | Quarry pit 17 |
| 46 | 0.2 | 0.2 | NW | 0.25 | 0.2 | 0.25 | 0.2 | SE | Sand | No archaeology |
| 47 | 0.25 | 0.2 | NW | 0.25 | 0.2 | 0.25 | 0.2 | SE | Sand | No archaeology |
| 48 | 0.25 | 0.1 | NE | 0.25 | 0.1 | 0.2 | 0.15 | SW | Gravel & sand | No archaeology |
| 49 | 0.3 | 0.2 | SW | 0.3 | 0.2 | 0.25 | 0.2 | NE | Chalk & sand | No archaeology |
| 50 | 0.2 | 0.2 | NW | 0.25 | 0.2 | 0.2 | 0.15 | SE | Chalk & silt | No archaeology |
| 51 | 0.2 | 0.15 | NE | 0.2 | 0.15 | 0.2 | 0.15 | SW | Chalk & gravel | No archaeology |
| 52 | 0.2 | 0.15 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Sand/silt | No archaeology |
| 53 | 0.2 | 0.1 | NE | 0.2 | 0.15 | 0.2 | 0.15 | SW | Chalk & gravel | No archaeology |
| 54 | 0.2 | 0.2 | SW | 0.2 | 0.2 | 0.2 | 0.2 | SE | Chalk & sand | No archaeology |
| 55 | 0.3 | 0.15 | NW | 0.2 | 0.15 | 0.3 | 0.25 | SE | Chalk | Quarry pit 14 |
| 56 | 0.2 | 0.15 | NE | 0.2 | 0.15 | 0.2 | 0.15 | SW | Chalk | No archaeology |
| 57 | 0.15 | 0.15 | NW | 0.2 | 0.15 | 0.15 | 0.15 | SE | Chalk & sand | No archaeology |
| 58 | 0.2 | 0.15 | NE | 0.25 | 0.15 | 0.25 | 0.15 | SE | Chalk & silt | No archaeology |
| 59 | 0.2 | 0.15 | NW | 0.18 | 0.12 | 0.21 | 0.17 | SE | Gravel & sand | Ditches 1, 3 |
| 60 | 0.25 | 0.15 | NE | 0.25 | 0.15 | 0.25 | 0.15 | SW | Gravel & sand | No archaeology |
| 61 | 0.2 | 0.1 | SW | 0.25 | 0.1 | 0.25 | 0.1 | NE | Gravel & sand | No archaeology |
| 62 | 0.22 | 0.18 | NW | 0.25 | 0.15 | 0.2 | 0.2 | SE | Silt & gravel | No archaeology |
| 63 | 0.2 | 0.15 | NE | 0.2 | 0.15 | 0.15 | 0.15 | SW | Chalk & sand | No archaeology |
| 64 | 0.2 | 0.15 | NW | 0.2 | 0.1 | 0.2 | 0.1 | SE | Chalk | No archaeology |
| 65 | 0.25 | 0.18 | NE | 0.2 | 0.2 | 0.2 | 0.2 | SW | Gravel | No archaeology |
| 66 | 0.16 | 0.17 | SE | 0.25 | 0.1 | 0.22 | 0.12 | SW | Gravel & sand | Ditches 5, 7 |
| 67 | 0.2 | 0.2 | NW | 0.2 | 0.15 | 0.2 | 0.15 | SE | Sand & gravel | No archaeology |

Table 1: Trench descriptions

A.2 Context inventory

A.1.2 Contexts are listed below in Table 2. Numbering is sequential, independent of trench number.

| Context | Cut | Trench | Category | Type | Function | l, w, d (m) | | Shape in Plan | Side | Break of Slope | Base | Orientation | Colour | Fine component | Coarse component | | Compaction |
|---------|-----|--------|----------|---------|----------------|-------------|------|---------------|----------|----------------|---------|-------------|-------------------|----------------|------------------|--------------|------------|
| | | | | | | | | | | | | | | | | | |
| 1 | 1 | 59 | cut | ditch | roadside ditch | | 1.64 | 0.39 | linear | gentle | gradual | concave | NE-SW | | | | |
| 2 | 1 | 59 | fill | ditch | roadside ditch | | | | | | | | yellowish brown | silty sand | occ | large flints | firm |
| 3 | 3 | 59 | cut | ditch | roadside ditch | | 1.42 | 0.36 | linear | gentle | gradual | concave | NE-SW | | | | |
| 4 | 3 | 59 | fill | ditch | roadside ditch | | | | | | | | yellowish brown | silty sand | occ | large flints | firm |
| 5 | 5 | 66 | cut | ditch | roadside ditch | | 1.76 | 0.45 | linear | gentle | gradual | concave | NE-SW | | | | |
| 6 | 5 | 66 | fill | ditch | roadside ditch | | | | | | | | yellowish brown | silty sand | occ | large flints | firm |
| 7 | 7 | 66 | cut | ditch | roadside ditch | | 0.54 | 0.26 | linear | gentle | gradual | concave | NE-SW | | | | |
| 8 | 7 | 66 | fill | ditch | roadside ditch | | | | | | | | yellowish brown | silty sand | occ | large flints | firm |
| 9 | | All | layer | topsoil | | | | | | | | | dark brown | sandy silt | freq | flints | firm |
| 10 | | All | layer | subsoil | | | | | | | | | mid greyish brown | clayey sand | freq | flints | firm |
| 11 | 11 | 13 | cut | pit | neolithic pit | 1 | 0.8 | 0.2 | sub-oval | gentle | gradual | concave | | | | | |
| 12 | 11 | 13 | fill | pit | neolithic pit | | | | | | | | mid brownish grey | sand | | | soft |

| Context | Cut | Trench | Category | Type | Function | l, w, d (m) | | | Shape in Plan | Side | Break of Slope | Base | Orientation | Colour | Fine component | Coarse component | Compaction |
|---------|-----|--------|------------|-------|-------------------------|-------------|------|-----|---------------|--------|----------------|---------|-------------|--------|----------------|------------------|------------|
| | | | | | | | | | | | | | | | | | |
| 13 | 13 | 13 | cut | pit | ?modern pit | 0.5 | 0.65 | 0.2 | sub-circular | gentle | sharp | concave | | | | | |
| 14 | 13 | 13 | fill | pit | ?modern pit | | | | | | | | | | | | |
| 15 | | 13 | finds unit | (pit) | Probable fill of pit 11 | | | | | | | | | | | | |
| 16 | 0 | 55 | cut | pit | quarry pit | | | | | | | | | | | | |
| 17 | 0 | 45 | cut | pit | quarry pit | | | | | | | | | | | | |

Table 2: Context inventory

Appendix B FINDS REPORTS

B.1 Metal work

By Denis Sami

Factual Data

B.1.1 A total of three iron nails were recovered from sub-soil and one nail from context 2. The artefacts are incomplete and heavily rusted

B.1.2 The nails from sub-soil appear to be modern in date and they were associated with an iron screw. The nail from fill 2 of roadside ditch **1**, is possibly a Manning type 2 of Roman date, given the context in which it was found. However, a later chronology cannot be excluded given that iron nails are notoriously difficult to date.

Statement of potential

B.1.3 The assemblage has a very low potential

Retention, dispersal and display

B.1.4 All finds can be discarded

Catalogue

| SF | Context | Feature | Description | Date |
|----|---------|----------------|---|-------|
| 1 | 2 | roadside ditch | Nail with tapering stem with square cross-section (8x8 mm) and incomplete bent sub-circular head. L: 91 mm; | Roman |

Table 3: Metalwork catalogue

B.2 Pottery

By Matt Brudenell

Introduction

B.2.1 A single sherd of Early Neolithic pottery (20g) was recovered from Pit **11**, pit 12. The sherd comprises the thick rim from a coarseware vessel with two tool impressions on the neck. The sherd is in a coarse, poorly-sorted flint tempered fabric with inclusions ranging from 1-4mm in size.

Discussion

B.2.2 The rim form and fabrics are entirely in keeping with earlier Neolithic pottery from Suffolk and the wider region, although the tool impressions are slightly unusual. To what extent this is deliberate decoration is hard to discern.

Retention, Dispersal and Display

B.2.3 The sherd should be retained as part of the project archive.

B.3 Flint

By Lawrence Billington

Introduction

B.3.1 A total of 132 worked flints (and a single unworked burnt flint weighing 10g) was recovered during the evaluation. Over 85 per cent of the assemblage (114 pieces) was derived from a single pit (**11**, Trench 13) and represents a coherent Early Neolithic assemblage consisting largely of flint working waste alongside a few utilised and retouched pieces. The remainder of the assemblage was derived in relatively small quantities from other contexts; either as a residual element from later features or from unstratified subsoil deposits. This residual/unstratified material is not strongly diagnostic but includes pieces comparable with the Early Neolithic material derived from pit **11**.

Methodology

B.3.2 The assemblage has been quantified and catalogued according to a simple technological/typological scheme. No detailed technological or metric attribute analysis has been undertaken at this stage. The assemblage is quantified by type and context in Table 4.

| Trench | Cut | Context | Sample | Context type | Chip | Irregular waste | Primary flake | Secondary flake | Tertiary flake | Tertiary blade-like | Secondary blade-like | Secondary blade | Tertiary blade | Retouched flake | Core | Total worked | unworked burnt | weight |
|---------------|-----|---------|------------------|--------------|-----------|-----------------|---------------|-----------------|----------------|---------------------|----------------------|-----------------|----------------|-----------------|----------|--------------|----------------|--------|
| 13 | 11 | 12 | | Pit | 11 | 2 | 3 | 25 | 11 | 3 | 6 | 1 | 1 | 1 | 3 | 67 | 1 | 10 |
| | | | 2 | Pit | 29 | | | 1 | 4 | | | | 1 | | | 35 | | |
| | | 15 | Finds Unit (Pit) | | | 2 | 5 | 3 | | | 1 | | | | 1 | 12 | | |
| | 13 | 14 | | Pit | | | 1 | | 1 | | | | | | | 2 | | |
| 59 | 1 | 2 | | Ditch | | | | 4 | 1 | | | | | | | 5 | | |
| | | | 1 | Ditch | 6 | | | | | 1 | | | 1 | | | | 8 | |
| 10, 46 & 52 | n/a | 10 | | Subsoil | | | 1 | 1 | | | | 1 | | | | 3 | | |
| Totals | | | | | 46 | 2 | 7 | 36 | 21 | 3 | 7 | 3 | 2 | 1 | 4 | 132 | | |

Table 4: Basic quantification of the flint assemblage

Raw materials and condition

B.3.3 The entire assemblage is made up of good quality fine grained flint. The majority of this material is semi-translucent dark grey with a smaller, but substantial, proportion of opaque white/light grey material. The morphology and character of cortical pieces clearly indicate that most of the assemblage derives from medium sized nodular pieces, usually with a relatively thick and unaltered cortex but with frequent recorticated/stained thermally fractured surfaces. This material is characteristic of flint derived from glacial outwash deposits or periglacial deposits closely associated with the parent chalk; comparable nodules seem to

have been available directly on-site within the underlying sands and gravels (see Section 1.2 and Plate 5).

B.3.4 The condition of the assemblage is varied and corresponds closely with its depositional context; the assemblage from pit 11 is in good condition with only occasional minor edge damage whilst the material derived from later features, and especially from the subsoil, is invariably edge damaged and sometimes lightly rolled. Recortication ('patination') is rare, with a light blue clouding affecting some pieces.

Pit 11

B.3.5 The 114 worked flints from pit 11 comprise 67 pieces collected during hand collection, 12 pieces recovered from the spoil heap but almost certainly deriving from this feature and a further 35 pieces (dominated by chips and small flake fragments) recovered from the residue of a bulk soil sample (sample 2).

B.3.6 The assemblage is coherent in terms of raw material and technology, and although no attempt at refitting was made during recording it is clear that several pieces derive from the same nodule of raw material. The assemblage is dominated by flint working waste. Large decortication flakes reflecting the initial testing and working of nodules are unusually well-represented, with almost two thirds of removals retaining partly cortical surfaces. Cores are also well-represented with four examples, three of which are minimally worked pieces, with one more extensive reduced single platform flake core.

B.3.7 Although pieces deriving from the early stages of core reduction dominate the assemblage, finer removals are also present, including a high proportion of blade-like flakes and a few true, prismatic blades. These pieces display traces of careful and systematic working, with prepared striking platforms and regular dorsal scars. Tool use is represented by a single retouched piece, a cortical flake with a small area of invasive retouch on one dorsal lateral edge, and by traces of use on several of the finer unretouched removals.

B.3.8 The technological traits of the assemblage, particularly the characteristics of the blade-based/blade-like removals, strongly suggest an Early Neolithic date (c. 4000-3300 cal BC).

Other contexts

B.3.9 A total of 18 worked flints were recovered from other contexts. Three of these came from subsoil deposits in Trenches 10, 46 and 52 and include a secondary blade similar to the examples from pit 11.

B.3.10 Two flints were recovered from pit 13, (Trench 13), located directly adjacent to pit 11. These two flints are not strongly diagnostic and although they may derive from the same episode of activity as the pit 11 assemblage, this remains uncertain.

B.3.11 The remaining 13 flints derive from the fill of ditch 1 (Trench 59) (including small chips and flake fragments derived from a bulk soil sample). These include some pieces closely comparable to the pit 11 assemblage. The relatively large number of residual flints from this feature suggest that it may have cut through the location of a fairly dense lithic scatter in this part of the site.

Discussion

B.3.12 The flint assemblage from pit **11** is of significance in representing a coherent, sealed and fairly substantial Early Neolithic assemblage. In very general terms this assemblage is similar to those derived from Neolithic pits across the region and appears to represent deliberate deposition of material generated during an episode of activity or settlement (see Garrow 2006). In its specifics, however, the assemblage is somewhat unusual in being so heavily dominated by working waste – and especially by pieces derived from the early stages of core reduction. This probably reflects the on-site availability of abundant good quality nodules of flint (see above). It is possible that this location was visited/occupied at least partly because of this source of flint and that flint procurement and working was an important activity here, but it should be emphasised that this probably took place alongside ‘normal’ ‘domestic-type’ activities (as represented by the few retouched/used pieces) rather than representing specialised visits to a raw material source.

B.3.13 Although few other contexts produced any flint the residual material from ditch **1** suggest that Neolithic activity may have been more widespread across the site – although much of the evidence for this may be taken the form of surface lithic scatters since incorporated in to the ploughzone.

Appendix C ENVIRONMENTAL REPORTS

C.1 Environmental Samples

By Rachel Fosberry

Introduction

C.1.1 Two bulk samples were taken from features within the evaluated area at Ixworth Road, Thurston, Suffolk to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. The samples were taken from a Roman roadside ditch (**1**) and a Neolithic pit (**11**).

Methodology

C.1.2 The total volume (up to 33L) of each of the samples was processed by tank flotation using modified Siraff-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 5. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers et al. 2006) and the authors' 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 this initial assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

= 1-5 specimens

C.1.5 Items that cannot be easily quantified such as molluscs have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Results

C.1.6 Preservation of plant remains is by carbonisation and is poor with only single cereal grains present within both samples. Sample 1, fill 2 of Roman roadside ditch **1** (Trench 59) contains a single charred cereal grain that is too poorly preserved to be identified. This sample also contains the burrowing snail (*Cecilioides acicula*) and occasional modern seeds and rootlets along with residual flint debitage; it is therefore possible that this cereal grain is not contemporary.

C.1.7 Sample 2, fill 12 of Neolithic pit **11** (Trench 13) also contains a charred cereal grain that is slightly better preserved and can be identified as barley (*Hordeum vulgare*), a cereal variety

that was cultivated in this period and may be contemporary. A charred tree/shrub bud was also noted. Flint debitage was recovered from the sample residue.

| Sample | Context | Cut | Trench | Feature type | Litres processed | Flot vol. (ml) | Cereals | Tree / Shrub Bud | Snails from flot | Charcoal vol. (ml) | Flint debitage |
|--------|---------|-----|--------|-----------------------|------------------|----------------|---------|------------------|------------------|--------------------|----------------|
| 1 | 2 | 1 | 59 | Roman road-side ditch | 33 | 40 | # | 0 | +/+ | <1 | ## |
| 2 | 12 | 11 | 13 | Neolithic pit | 33 | 80 | # | # | 0 | 20 | ## |

Table 5: Environmental samples

Discussion

C.1.8 The recovery of charred grain and charcoal indicates that there is the potential for the preservation of plant remains at this site within Trenches 13 and 59. Future excavation has the potential to recover larger, more meaningful assemblages that could contribute to the evidence of diet and economy at this site.

C.1.9 If further excavation is planned for this area, it is recommended that environmental sampling is carried out in accordance with Historic England guidelines (2011).

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Appendix E WRITTEN SCHEME OF INVESTIGATION



Land west of Ixworth Road, Thurston, Suffolk

Written Scheme of Investigation

Client: CgMs Consulting on behalf of Persimmon Homes

Prepared by Louise Bush
Date prepared 18 July 2018
Version 2

Planning application no.
Site code THS 030
Project number 21955
Project type Trial trench evaluation
NGR TL 91716 65914
OASIS number oxfordar3-322782



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1 GENERAL BACKGROUND

- 1.1.1 This Written Scheme of Investigation (WSI) conforms to the principles identified in Historic England's guidance documents *Management of Research Projects in the Historic Environment (MoRPHE)*, specifically the *MoRPHE Project Manager's Guide* (2015) and *Project Planning Note 3: Archaeological Excavation* (2008).
- 1.1.2 All work will be conducted in accordance with the Chartered Institute for Archaeologists *Code of Conduct* (2014) and *Standard and Guidance for Archaeological Excavation* (2014).
- 1.1.3 This WSI also incorporates the requirements of the *EAA Standards for Field Archaeology in the East of England* (Gurney 2003) and conforms to the Suffolk County Council's *Requirements for a Trenched Archaeological Evaluation* (2017).
- 1.1.4 The decision on the need for any further work/mitigation will be made by Suffolk County Council Archaeology Service (SCCAS) following the results of the evaluation. The scope of any further work (if required) will be specified in a separate SCCAS brief and require the submission and approval of a separate WSI.

1.2 Circumstances of the project

- 1.2.1 Oxford Archaeology East (OA East) have been commissioned by CgMs Consulting on behalf of Persimmon Homes to conduct an archaeological trial trench evaluation on 12.7ha of land west of Ixworth Road, Thurston, Suffolk (centred on TL 91716 65914).

1.3 The proposed archaeological strategy

- 1.3.1 A 4% sample of the site is proposed, which consists of 66 trenches (measuring 30x1.8m).
- 1.3.2 The trenching strategy is based on the results of the geophysical survey, with possible archaeological anomalies being targeted and a standard grid array to provide a representative sample of the entire development area.

1.4 Changes to this method statement

- 1.4.1 If changes need to be made to the methods outlined below – either before or during works on site – SCCAS will be informed and asked to consider changes before they are made. Changes will be formally agreed before work on site commences, or else at the earliest available opportunity.

2 THE GEOLOGY AND TOPOGRAPHY

- 2.1.1 The site is located on the northern edge of Thurston, on land to the immediate west of the Ixworth Road and east of Mill Lane.
- 2.1.2 The proposed site is situated on a bedrock geology of Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation (undifferentiated), with superficial deposits of sand across the majority of the area, with Lowestoft Formation diamicton present around the periphery. The site is currently under arable land and is situated at around a height of 42m OD (to the south-west) and 50m OD (to the north-east).

3 ARCHAEOLOGICAL BACKGROUND

- 3.1.1 A comprehensive Desk-based Assessment (DBA) has been undertaken on the site previously (Clarke 2016). Therefore, only pertinent records are reiterated here.

3.2 Prehistoric

- 3.2.1 A single findspot is recorded within the limits of the proposed site itself – a prehistoric flint hammer (MSF33810) recovered from the south-westernmost corner of the site. Beyond this, the closest archaeological remains have been discovered c.100m south-west of the site during archaeological monitoring at Red Marley, where a pit and ditch containing Neolithic pottery and struck flint was recorded (MSF20817/THS011). Other Neolithic and Bronze Age finds have been identified between 0.8km and 1.2km away from the site.
- 3.2.2 Observations made during gravel extraction at Sheep Lane (c.200m north-west of the site) recorded a possible Iron Age hearth (MSF6883/THS001) and Iron Age pottery has been recovered some 400m south of the site at Thurston Heath (MSF6886/THS004).

3.3 Roman

- 3.3.1 The course of Peddler's Way (MSF6888/THS007), the Roman road from Chelmsford to Ixworth is recorded as running immediately adjacent to the western limit of the site. A Roman road surface and associated pottery is purported to have been uncovered during the early 20th century (MSF6884/THS002), some 400m south-west of the site. However, more recent excavations closer to the current site had negative results (MSF21000 and MSF22935).

3.4 Anglo-Saxon and medieval

- 3.4.1 The historic settlement of Thurston is located around 1km south-east of the site and is recorded in the Domesday Book of 1086.
- 3.4.2 Medieval remains are minimal across this area, with a small number of later medieval coins being recovered from land approximately 700m west to the west of the site (MSF12106/BRG misc).

3.5 Post-medieval and modern

- 3.5.1 All post-medieval mapping (see DBA) shows the site to be under arable land. The 1887, 1905, 1950 and 1958 Ordnance Survey Maps shows a footpath bisecting the site from north-west to south-east. This has been removed however by the 1978 Ordnance Survey Map.

3.6 Undated

- 3.6.1 A geophysical survey (MSF35619/THS031) undertaken on land around 400m to the east of the site identified a series of anomalies including pits, ditches and a possible trackway.

4 AIMS AND OBJECTIVES

4.1 Aims of the evaluation

4.1.1 This evaluation will seek to establish the character, date, state of preservation of archaeological remains within the proposed development area. The scheme of works detailed below aims to:

- establish the presence or absence of archaeological remains on the site, characterise where they are found (location, depth and extent), and establish the quality of preservation of any archaeology and environmental remains
- provide sufficient coverage to establish the character, condition, date and purpose of any archaeological deposits
- provide sufficient coverage to evaluate the likely impact of past land uses, and the possible presence of masking deposits
- provide – in the event that archaeological remains are found – sufficient information to construct an archaeological mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables, and orders of cost.

4.2 Research frameworks

4.2.1 This excavation takes place within, and will contribute to the goals of Regional Research Frameworks relevant to this area:

- Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott 2011, East Anglian Archaeology Occasional Papers 24)
- Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment (Glazebrook 1997, East Anglian Archaeology Occasional Papers 3);
- Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy (Brown & Glazebrook 2000, East Anglian Archaeology Occasional Papers 8)

5 METHODS

5.1 Background research

- 5.1.1 A suitable level of documentary research will be undertaken before work on site commences. This research will draw on information in the Suffolk Historic Environment Record and County Records Office, and will include any relevant historical sources, maps, previous archaeological finds, and past archaeological investigations in the vicinity. The results will not be presented separately but will be incorporated into the final evaluation report.

5.2 Event number and site code

- 5.2.1 In consultation with the SHER, a parish code has been issued for the project: THS 030. OA East's unique site code for the project is XSFIRT18. An OASIS number has also been assigned for the project (oxfordar3-322782).

5.3 Trial Trenching

Excavation standards

- 5.3.1 The proposed archaeological evaluation and analysis will be conducted in accordance with current best archaeological practice and the appropriate national and regional standards and guidelines.
- 5.3.2 All work will be conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Field Evaluations*, and Suffolk County Council's *Requirements for a Trenched Archaeological Evaluation* (2017).
- 5.3.3 All fieldwork will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992), and the revised OA fieldwork manual (publication forthcoming). Further guidance is provided to all excavators in the form of the OA *Fieldwork Crib Sheets – a companion guide to the Fieldwork Manual*. These have been issued ahead of formal publication of the revised Fieldwork Manual.

Pre-commencement

- 5.3.4 Before work on site commences, service plans will be checked to ensure that access and groundworks can be conducted safely.
- 5.3.5 In order to minimise damage to the site and disruption to site users, OA East will agree the following with the client/landowner before work on site commences:
- the location of entrance ways
 - locations for welfare units
 - soil storage areas
 - refuelling points for plant (if necessary), and the extent of any bunding required around fuel dumps

- access routes for plant and vehicles across the site
- 5.3.6 Access routes to, from and between trenches will be agreed on site at the start of works. Where possible, access routes will use tramlines in the crop, in order to reduce crop damage.

Trenching methods

- 5.3.7 A total of 66 trenches measuring 30m by 1.8m will be excavated. This is equivalent to a 4% sample of the development area. During machine stripping, the location of trenches may be altered if there are site obstructions, services, or modern disturbance. If so, the location of affected trenches will be re-surveyed.
- 5.3.8 Service plans will be checked before work commences on site. All machine excavation will take place under the supervision of a suitably qualified and experienced archaeologist.
- 5.3.9 All trenches will be excavated by a mechanical excavator to the depth of geological horizons, or to the upper interface of archaeological features or deposits, whichever is encountered first. A toothless ditching bucket with a minimum bucket width of 1.8m will be used to excavate the trenches. Overburden will be excavated in spits not greater than 0.1m thick.
- 5.3.10 Topsoil, subsoil, and archaeological deposits will be kept separate during excavation, to allow for sequential backfilling of excavations. The trenches will not be backfilled without the approval of the SCCAS.
- 5.3.11 All machine excavation will take place under constant supervision of a suitably qualified and experienced archaeologist. The top of the first archaeological deposit will be cleared by machine, but will then be cleaned off by hand. Any archaeological deposits present will then be excavated by context to the level of the geological horizon where safe to do so. Trench spoil will be scanned visually and with a metal detector to aid recovery of artefacts.

5.4 Excavation of archaeological features and deposits

- 5.4.1 All features will be investigated and recorded to provide an accurate evaluation of archaeological potential, whilst at the same time minimising disturbance to archaeological structures, features, and deposits. All relationships between features or deposits will be investigated and recorded. Any natural subsoil surface revealed will be hand cleaned and examined for archaeological deposits and artefacts. Excavation will characterise the full archaeological sequence down to undisturbed natural deposits. Apparently natural features (such as tree throws) will be sampled sufficiently to establish their character.
- 5.4.2 Excavation of all archaeological deposits will be done by hand unless otherwise agreed by the SCCAS. Significant archaeological features (e.g. solid or bonded structural remains, building slots or post-holes) will be preserved intact, even if fills are sampled.
- 5.4.3 Exposed surfaces will be cleaned by trowel and hoe as necessary in order to clarify features and deposits. Unless otherwise agreed by the SCCAS all

features will be investigated and recorded to provide an accurate evaluation of archaeological potential, whilst at the same time minimising disturbance to archaeological structures, features and deposits.

- 5.4.4 There will be sufficient excavation to give clear evidence for the period, depth, and nature of any archaeological deposit. Investigation slots through all linear features will be a least 1m in width. Discrete features will be half-sectioned or excavated in quadrants where they are large or found to be deep. In necessary, an auger will be used to gain information from deep deposits below 1m in depth.

5.5 Recording of archaeological deposits and features

- 5.5.1 Records will comprise survey, drawn, written, and photographic data.

Survey

- 5.5.2 Surveying will be done using a survey-grade differential GPS (Leica CS10/GS08 or Leica 1200) fitted with "smartnet" technology with an accuracy of 5mm horizontal and 10mm vertical.

- 5.5.3 All trenches and any archaeological features located within them will be planned by GPS and accurately tied into the Ordnance Survey National Grid and located on the 1:2500 or 1:1250 map of the area. Elevations will be levelled to the Ordnance Datum.

Written records

- 5.5.4 A register of all trenches, features, photographs, survey levels, small finds, and human remains will be kept.
- 5.5.5 All features, layers and deposits will be issued with unique context numbers. Each feature will be individually documented on context sheets, and hand-drawn in section and plan. Written descriptions will be recorded on pro-forma sheets comprising factual data and interpretative elements.
- 5.5.6 Where stratified deposits are encountered, a Harris Matrix will be compiled during the course of the excavation.

Plans and sections

- 5.5.7 Localised site plans of complex features (if needed) will be drawn at 1:20.
- 5.5.8 Long sections showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:10 or 1:20. All section levels will be tied in to Ordnance Datum.
- 5.5.9 All site drawings will include the following information: site name, site code, scale, plan or section number, relevant context or feature numbers, orientation, date and the name or initials of the archaeologist who prepared the drawing.

Photographs

- 5.5.10 The photographic record will comprise high resolution digital photographs. Photographs will include both general site shots and photographs of specific

features. Every feature will be photographed at least once. Photographs will include a scale, north arrow, site code, and feature number (where relevant), unless they are to be used in publications. The photograph register will record these details, and photograph numbers will be listed on corresponding context sheets.

5.6 Exceptional remains, including human remains

Significant archaeological features

- 5.6.1 If exceptional or unexpected features are uncovered, the SCCAS will be informed, and their advice sought on further excavation or preservation.
- 5.6.2 Significant archaeological features (e.g. solid or bonded structural remains, building slots or post-holes) will be preserved intact, even if fills are sampled. The following features will normally be cleaned, recorded and preserved for future excavation, unless directed to by the SCCAS:
- layers relating to domestic or industrial activity (e.g. floor, middens)
 - discrete features relating to domestic or industrial activity (e.g. kilns, ovens, hearths)
 - artefact scatters (e.g. flint, metal-working debris).
- 5.6.3 If preservation *in situ* is required by the SCCAS, all exposed surfaces will be cleaned and prepared for reburial beneath construction materials. If appropriate, the areas will be protected with geotextile or other buffering materials.

Human remains

- 5.6.4 If human remains are encountered, the Client, County Coroner, and the SCCAS will be informed immediately.
- 5.6.5 Unless directed otherwise by the SCCAS human remains will be left *in situ* (covered and protected), until a full program of excavation is agreed by the SCCAS and Client. No further excavation will then take place in the vicinity of the remains until removal becomes necessary. If the remains are under imminent threat, or if the SCCAS requires information on date and preservation, we will excavate and remove them.
- 5.6.6 Human remains will be excavated in accordance with all appropriate legislation and Environmental Health regulations. Excavation will only take place after Oxford Archaeology has obtained a Ministry of Justice exhumation license.

5.7 Metal detecting and the Treasure Act

- 5.7.1 Metal detector searches will take place at all stages of the excavation by an experienced metal detector user (Tom Lucking). Trench footprints will be detected immediately before mechanical stripping. Trench spoil (topsoil and subsoil) and all archaeological features and deposits will also be detected. To prevent losses from night-hawking, features will be metal detected immediately after stripping.
- 5.7.2 Metal detectors will not be set to discriminate against iron.

- 5.7.3 Artefacts will be removed and given a small find number. Labels will be placed on the location of each 'small find' and surveyed in with a GPS.
- 5.7.4 If finds are made that might constitute 'Treasure' under the definition of the Treasure Act (1996), they will, if possible, be excavated and removed to a safe place. Should it not be possible to remove the finds on the day they are found, suitable security will be arranged. Finds constituting Treasure will be immediately reported to the Suffolk Finds Liaison Officer (FLO) who will then inform the coroner within 14 days.

5.8 Post-excavation processing

- 5.8.1 Processing will take place in tandem with excavation, and advice will be sought from relevant specialists on key artefact types. The Project Manager and fieldwork project officer will be given feedback to enable them to develop excavation strategies during fieldwork.
- 5.8.2 Any finds requiring specialist treatment and conservation will be sent for appropriate treatment.
- 5.8.3 Finds will be marked with context numbers and the Parish Code, as detailed in *Archaeological Archives in Suffolk, Guidelines for preparation and deposition* (Suffolk County Council Archaeological Service 2017).

5.9 Finds recovery and processing

Standards for finds handling

- 5.9.1 Finds will be exposed, lifted, cleaned, conserved, marked, bagged, and boxed in line with the standards in:
- United Kingdom Institute for Conservators (2012) *Conservation Guidelines No. 2*
 - Watkinson & Neal (1988) *First Aid for Finds*
 - Chartered Institute for Archaeologists (2014) *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*
 - English Heritage (1995) *A Strategy for the Care and Investigation of Finds*.
- 5.9.2 Where finds require conservation, this will be done in accordance with the guidelines of the Institute for Conservation (ICON),

Procedures for finds handling

- 5.9.3 At the start of work, a finds supervisor will be appointed to oversee the collection, processing, cataloguing, and specialist advice on all artefacts collected.
- 5.9.4 Artefacts will be collected by hand, sieving, and metal detector. Excavation areas and spoil will be scanned visually and with a metal detector to aid recovery of artefacts. All finds will be bagged and labelled according to the individual deposit from which they were recovered, ready for later cleaning

- and analysis. 'Special/small finds' may be located more accurately by GPS if appropriate.
- 5.9.5 Processing will take place in tandem with excavation, and advice will be sought from relevant specialists on key artefact types. (See the Appendix for a list of specialists.)
- 5.9.6 All artefacts recovered from excavated features will be retained for post-excavation processing and assessment, except:
- those which are obviously modern in date
 - where very large volumes are recovered (typically ceramic building material)
 - where directed to discard on site by the SCCAS.
- 5.9.7 Where artefacts are not removed from site, a strategy will be employed to ensure a sufficient sample is retained, in order to characterise the date and function of the features they were excavated from. A record will be kept of the quantity and nature of artefacts which are not removed from site.

5.10 Sampling for environmental remains and small artefact retrieval

Standards for sampling and processing

- 5.10.1 Features will be sampled and processed in accordance with the guidelines set out in:
- English Heritage (2011, 2nd edition) *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*.
 - Association for Environmental Archaeology (1995) *Environmental archaeology and archaeological evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England*. Working Papers of the Association for Environmental Archaeology 2. York: Association for Environmental Archaeology.
 - Dobney, K., Hall, A., Kenward, H. & Milles, A. (1992) A working classification of sample types for environmental archaeology. *Circaea* 9.1: 24-26
 - Murphy, P.L. & Wiltshire, P.E.J. (1994) *A guide to sampling archaeological deposits for environmental analysis*.

Procedures for sampling and processing

- 5.10.2 Bulk samples (40 litres or 100% of context) will be taken from a range of site features and deposits to target the recovery of plant remains (charcoal and macrobotanicals) fish, bird, small mammal and amphibian bone and small artefacts. Environmental samples will be taken from well-stratified, datable deposits. Samples will be labelled with the site code, context number, and sample number.
- 5.10.3 If appropriate, monolith samples of waterlogged deposits and buried soils will be taken for pollen analysis, soil micro-morphological, or sedimentological analysis. Where consistent with the aims of the evaluation, samples will be taken from deposits, artefacts, and ecofacts for scientific (absolute) dating.

- 5.10.4 Where features containing very small artefacts – such as micro-debitage and hammerscale – are identified, bulk samples will be taken (up to 40 litres or 100% of context).
- 5.10.5 Typically, 10 litres of each bulk sample will be processed using tank flotation, with the remaining sub-sample processed where appropriate or necessary. Waterlogged samples will be wet sieved and stored in cool or wet conditions as appropriate.
- 5.10.6 Where practical, waterlogged wood specimens will be recorded in detail on site, in situ. When removed, they will be cleaned and photographed, and stored in wet cool conditions for assessment by a suitably qualified specialist (see the Appendix).
- 5.10.7 The project team will consult Historic England's Scientific Advisor on environmental sampling and dating where necessary.

6 REPORTING

6.1 Evaluation Report

- 6.1.1 Post-excavation analysis and reporting will follow guidance in Historic England's (2015) *Management of Research Projects in the Historic Environment* (MoRPHE).

6.2 Contents of the evaluation report

- 6.2.1 The report will include:
- a title page detailing site address, site code and accession number, NGR, author/originating body, client's name and address
 - full list of contents
 - a non-technical summary of the findings
 - the aims of the evaluation
 - a description of the geology and topography of the area
 - a description of the methodologies used
 - a description of the findings
 - tables summarising features and artefacts
 - site and trench location plans, and plans of each area excavated showing the archaeological features found
 - sections of excavated features
 - interpretation of the archaeological features found
 - specialist reports on artefacts and environmental finds
 - relevant colour photographs of features and the site
 - a predictive model of surviving archaeological remains, where affected by development proposals, and assessment of their importance at local, regional and national level.
 - a bibliography of all reference material
 - the OASIS reference and summary form.

6.3 Draft and final reports

- 6.3.1 A draft digital copy of the report will be supplied to SCCAS for comment. Following approval of the draft report, a copy will be sent to the client for submission to the Local Planning Authority, and a hard copy will be supplied to the SCCAS/ for deposition with the Suffolk Historic Environment Record.
- 6.3.2 A copy of the approved report will be uploaded to the OASIS database.
- 6.3.3 Where positive results are drawn from the evaluation, a summary statement will be provided to the SCCAS suitable for inclusion in the *Proceedings of the Suffolk Institute of Archaeology and History* annual round up.

6.4 OASIS

- 6.4.1 A digital copy of the approved report will be uploaded to the OASIS database. A copy of the OASIS Data Collection Form will be included in the report.

7 ARCHIVING

Archive standards

- 7.1.1 The site archive will conform to the requirements of Appendix 1 of the Historic England's (2015) *Management of Research Projects in the Historic Environment* (MoRPHE) and the *Archaeological Archives in Suffolk, Guidelines for preparation and deposition* (Suffolk County Council Archaeological Service 2017).
- 7.1.2 The preparation of the archive will follow the guidelines contained in *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (United Kingdom Institute for Conservation, 1990), *Standards in the Museum care of Archaeological Collections* (Museums and Galleries Commission 1992), and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (Brown 2007).

Archive contents

- 7.1.3 The archive will be quantified, ordered, and indexed. It will include:
- artefacts
 - ecofacts
 - project documentation – including plans, section drawings, context sheets, registers, and specialist reports
 - photographs (digital photographs will be stored on CD-ROM, and colour printouts made of key features)
 - an archive-standard CD-ROM with electronic documentation (such as GIS and CAD files)
 - a printed copy of the Written Brief
 - a printed copy of the WSI
 - a printed copy of the final report
 - a printed copy of the OASIS form.
- 7.1.4 It is Oxford Archaeology Ltd's policy, in line with accepted practice, to keep site archives (paper and artefactual) together wherever possible.
- 7.1.5 A digital security copy of all documentary parts of the archive will also be made and retained by Oxford Archaeology.

Transfer of ownership

- 7.1.6 OA East will seek to transfer title of ownership of the complete project archive to Suffolk County Council or another registered local depository at the appropriate time. Until then, all artefactual and paper archive material relating to the project will be held in storage by OA East.

8 TIMETABLE

- 8.1.1 Trial trenching will take approximately three weeks (including backfilling). This does not allow for delays caused by bad weather.
- 8.1.2 Post-excavation processing and assessment tasks will commence shortly after the evaluation commences, to inform the strategy, and minimise time required to prepare the report after the fieldwork is completed.
- 8.1.3 Post-excavation tasks and report writing is anticipated to take 4 weeks following the end of fieldwork, unless there are exceptional discoveries requiring more lengthy analysis.

9 STAFFING AND SUPPORT

9.1 Fieldwork

- 9.1.1 The fieldwork team will be made up of the following staff:
- 1 x Project Manager (supervisory only, not based on site)
 - 1 x Project Officer/Supervisor (full-time)
 - 3 x Site Assistants (as required)
 - 1 x Archaeological Surveyor
 - 1 x Finds Assistant (part-time, as required)
 - 1 x Environmental Assistant (part-time, as required)
- 9.1.2 Site work will be directed by one of OAE's Project Officers or Supervisors.
- 9.1.3 All Site Assistants will be drawn from a pool of qualified and experienced staff. Oxford Archaeology East will not employ volunteer, amateur, or student staff, whether paid or unpaid, except as an addition to the team stated above.

9.2 Post-excavation processing

- 9.2.1 We anticipate that the site may produce later prehistoric to medieval remains. Environmental remains will also be sampled.
- 9.2.2 Pottery will be assessed by Matt Brudenell (prehistoric), Alice Lyons (Roman) and Dr Paul Spoerry (Saxon and medieval).
- 9.2.3 Environmental analysis will be carried out by OA East staff, in consultation with the OA Environmental Department in Oxford. The results will be reported to Historic England's Regional Scientific Advisor. Environmental analysis will be undertaken by Rachel Fosberry (charred plant macrofossils, plant macrofossils), Liz Stafford (land molluscs), and Denise Druce and Mairead Rutherford (pollen analysis).
- 9.2.4 Faunal remains will be examined by Hayley Foster.
- 9.2.5 Conservation will be undertaken by Ipswich and Colchester Museums / Karen Barker (Antiquities Conservator) and will be undertaken in accordance with guidelines issued by the Institute for Conservation (ICON).
- 9.2.6 In the event that OA's in-house specialists are unable to undertake the work within the time constraints of the project, or if other remains are found, specialists from the list in the Appendix will be approached to carry out analysis.

10 OTHER MATTERS

10.1 Monitoring

- 10.1.1 The SCCAS will be informed appropriately of dates and arrangements to allow for adequate monitoring of the works.
- 10.1.2 During the excavation, representatives of the client, OA East and the SCCAS will meet on site to monitor the excavations, discuss progress and findings to date, and excavation strategies to be followed

10.2 Insurance

- 10.2.1 OA East is covered by Public and Employer's Liability Insurance. The underwriting company is Lloyds Underwriters, policy number CC004337. Details of the policy can be supplied on request to the Oxford Archaeology East office.

10.3 Chartered Institute for Archaeologists

- 10.3.1 Oxford Archaeology is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA), and is bound by CIfA By-Laws, Standards, and Policy.

10.4 Services, Public Rights of Way, Tree Preservation Orders etc.

- 10.4.1 The client will inform the project manager of any live or disused cables, gas pipes, water pipes or other services that may be affected by the proposed excavations before the commencement of fieldwork. Hidden cables/services should be clearly identified and marked where necessary. If there are overhead cables on the site or in the approachways, a survey must be completed by the relevant authority before plant is taken onto site.
- 10.4.2 The client will likewise inform the project manager of any public rights of way or permissive paths on or near the land which might affect or be affected by the work.
- 10.4.3 The client will inform the Project Manager if the site is a Scheduled Ancient Monument, Site of Special Scientific Interest (SSSI), or any other type of designated site. The client will also inform the project manager of any trees subject to Tree Preservation Orders, protected hedgerows, protected wildlife, nesting birds, or areas of ecological significance within the site or on its boundaries.

10.5 Site Security

- 10.5.1 Unless previously agreed with the Project Manager in writing, this specification and any associated statement of costs is based on the assumption that the site will be sufficiently secure for archaeological work

to commence. All security requirements, including fencing, padlocks for gates etc. are the responsibility of the client.

10.6 Access

- 10.6.1 The client will secure access to the site for archaeological personnel and plant, and obtain the necessary permissions from owners and tenants to place a mobile office and portable toilet on or near to the site. Any costs incurred to secure access, or incurred as a result of withholding of access will not be Oxford Archaeology's responsibility. The costs of any delays as a result of withheld access will be passed on to the client in addition to the project costs already specified.

10.7 Site Preparation

- 10.7.1 The client is responsible for clearing the site and preparing it so as to allow archaeological work to take place without further preparatory works, and any cost statement accompanying or associated with this specification is offered on this basis. Unless previously agreed in writing, the costs of any preparatory work required, including tree felling and removal, scrub or undergrowth clearance, removal of concrete or hard standing, demolition of buildings or sheds, or removal of excessive overburden, refuse or dumped material, will be charged to the client, in addition to any costs for archaeological evaluation already agreed.

10.8 Site offices and welfare

- 10.8.1 All site facilities – including welfare facilities, tool stores, mess huts, and site offices – will be positioned to minimise disruption to other site users, and to minimise impact on the environment (including buried archaeology).

10.9 Backfilling/Reinstatement

- 10.9.1 Backfilling – but not specialist reinstatement – of trenches is included in the cost unless otherwise agreed with the client. Backfilling will only take place with the approval of the SCCAS.

10.10 Health and Safety, Risk Assessments

- 10.10.1 A risk assessment and method statement (RAMS) covering all activities to be carried out during the lifetime of the project will be prepared before work commences, and sent to the SCCAS. The risk assessment will conform to the requirements of health and safety legislation and regulations, and will draw on OA East's activity-specific risk assessment literature.
- 10.10.2 All aspects of the project, both in the field and in the office will be conducted according to OA East's Health and Safety Policy, Oxford Archaeology Ltd's Health and Safety Policy, and Health and Safety in Field Archaeology (J.L. Allen and A. St John-Holt, 1997). A copy of OA East's Health and Safety Policy can be supplied on request.

11 APPENDIX: CONSULTANT SPECIALISTS

| NAME | SPECIALISM | ORGANISATION |
|-----------------------|--|------------------------|
| Allen, Leigh | Worked bone, CBM, medieval metalwork | Oxford Archaeology |
| Allen, Martin | Medieval coins | Fitzwilliam Museum |
| Anderson, Sue | HSR, pottery and CBM | Suffolk County Council |
| Bayliss, Alex | C14 | English Heritage |
| Biddulph, Edward | Roman pottery | Oxford Archaeology |
| Billington, Laurence | Lithics | Oxford Archaeology |
| Bishop, Barry | Lithics | Freelance |
| Blinkhorn, Paul | Iron Age, Anglo-Saxon and medieval pottery | Freelance |
| Boardman, Sheila | Plant macrofossils, charcoal | Oxford Archaeology |
| Bonsall, Sandra | Plant macrofossils; pollen preparations | Oxford Archaeology |
| Booth, Paul | Roman pottery and coins | Oxford Archaeology |
| Boreham, Steve | Pollen and soils/ geology | Cambridge University |
| Brown, Lisa | Prehistoric pottery | Oxford Archaeology |
| Cane, Jon | illustration & reconstruction artist | Freelance |
| Champness, Carl | Snails, geoarchaeology | Oxford Archaeology |
| Cotter, John | Medieval/post-Medieval finds, pottery, CBM | Oxford Archaeology |
| Crummy, Nina | Small Find Assemblages | Freelance |
| Cowgill, Jane | Slag/metalworking residues | Freelance |
| Dickson, Anthony | Worked Flint | Oxford Archaeology |
| Dodwell, Natasha | Osteologist | Oxford Archaeologist |
| Donnelly, Mike | Flint | Oxford Archaeology |
| Doonan, Roger | Slags, metallurgy | |
| Druce, Denise | Pollen, charred plants, charcoal/wood identification, sediment coring and interpretation | Oxford Archaeology |
| Drury, Paul | CBM (specialised) | Freelance |
| Evans, Jerry | Roman pottery | Freelance |
| Fletcher, Carole | Medieval pot, glass, small finds | Oxford Archaeology |
| Fosberry, Rachel | Charred plant remains | Oxford Archaeology |
| Foster, Haley | Zooarchaeologist | Oxford Archaeology |
| Fryer, Val | Molluscs/environmental | Freelance |
| Gale, Rowena | Charcoal ID | Freelance |
| Geake, Helen | Small finds | Freelance |
| Gleed-Owen, Chris | Herpetologist | |
| Goffin, Richenda | Post-Roman pottery, building materials, painted wall plaster | Suffolk CC |
| Hamilton-Dyer, Sheila | Fish and small animal bones | |

| NAME | SPECIALISM | ORGANISATION |
|---------------------|--|-------------------------------|
| Howard-Davis, Chris | Small finds, Mesolithic flint, RB coarse pottery, leather, wooden objects and wood technology; | Oxford Archaeology |
| Hunter, Kath | Archaeobotany (charred, waterlogged and mineralised plant remains) | Oxford Archaeology |
| Jones, Jenny | Conservation | ASUD, Durham University |
| King, David | Window glass & lead | |
| Locker, Alison | Fishbone | |
| Loe, Louise | Osteologist | Oxford Archaeology |
| Lyons, Alice | Late Iron Age/Roman pottery | Oxford Archaeology |
| Macaulay, Stephen | Roman pottery | Oxford Archaeology |
| Masters, Pete | geophysics | Cranfield University |
| Middleton, Paul | Phosphates/garden history | Peterborough Regional College |
| Mould, Quita | Ironwork, leather | |
| Nicholson, Rebecca | Fish and small mammal and bird bones, shell | Oxford Archaeology |
| Palmer, Rog | Aerial photographs | Air Photo Services |
| Percival, Sarah | Prehistoric pottery, quern stones | Freelance |
| Poole, Cynthia | Multi-period finds, CBM, fired clay | Oxford Archaeology |
| Popescu, Adrian | Roman coins | Fitzwilliam Museum |
| Rackham, James | Faunal and plant remains, can arrange pollen analysis | |
| Riddler, Ian | Anglo-Saxon bone objects & related artefact types | Freelance |
| Robinson, Mark | Insects | |
| Rowland, Steve | Faunal and human bone | Oxford Archaeology |
| Rutherford, Mairead | Pollen, non-pollen palynomorphs, dinoflagellate cysts, diatoms | Oxford Archaeology |
| Samuels, Mark | Architectural stonework | Freelance |
| Scaife, Rob | Pollen | |
| Scott, Ian | Roman, Medieval, post-medieval finds, metalwork, glass | Oxford Archaeology |
| Sealey, Paul | Iron Age pottery | Freelance |
| Shafrey, Ruth | Worked stone, cbm | Oxford Archaeology |
| Smith, Ian | Animal Bone | Oxford Archaeology |
| Spoerry, Paul | Medieval pottery | Oxford Archaeology |
| Stafford, Liz | Snails | Oxford Archaeology |
| Strid, Lena | Animal bone | Oxford Archaeology |
| Tyers, Ian | Dendrochronology | |
| Ui Choileain, Zoe | Human bone | Oxford Archaeology |
| Vickers, Kim | Insects | Sheffield University |

| NAME | SPECIALISM | ORGANISATION |
|------------------|---|---------------------|
| Wadeson, Stephen | Samian, Roman glass | Oxford Archaeology |
| Walker, Helen | Medieval Pottery in the Essex area | |
| Way, Twigs | Medieval landscape and garden history | Freelance |
| Webb, Helen | Osteologist | Oxford Archaeology |
| Willis, Steve | Iron Age pottery | |
| Young, Jane | Medieval Pottery in the Lincolnshire area | |
| Zant, John | Coins | Oxford Archaeology |

Radiocarbon dating is normally undertaken for Oxford Archaeology East by SUERC and by the Oxford University Accelerator Laboratory.

Geophysical prospection is normally undertaken by Magnitude Surveys Ltd.



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Director: Gill Hey, BA PhD FSA MCIfA
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and a Registered Charity, N^o: 285627*

Appendix F OASIS REPORT FORM

Project Details

| | | | |
|--------------------|--|------------------|-----------|
| OASIS Number | oxfordar3-322782 | | |
| Project Name | Land West of Ixworth Road, Thurston, Suffolk | | |
| Start of Fieldwork | 24/09/2018 | End of Fieldwork | 3/10/2018 |
| Previous Work | no | Future Work | uncertain |

Project Reference Codes

| | | | |
|------------|---------|-------------------|---------|
| Site Code | THS 030 | Planning App. No. | 4963/16 |
| HER Number | THS 030 | Related Numbers | |

| | |
|---------------------------|---|
| Prompt | NPPF |
| Development Type | Residential & School |
| Place in Planning Process | After outline determination (eg. A a reserved matter) |

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 checked="" type="checkbox"/> Measured Survey | <input checked="" type="checkbox"/> Targeted Trenches |
| <input type="checkbox"/> Dendrochronological Survey | <input type="checkbox"/> Metal Detectors | <input 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 type="checkbox"/> Visual Inspection (Initial Site Visit) |
| <input type="checkbox"/> Geophysical Survey | <input type="checkbox"/> Rectified Photography | |

| Monument | Period | Object | Period |
|----------|-------------------------------|---------|-------------------------------|
| Ditch | Roman (43 to 410) | Flint | Neolithic (- 4000 to - 2200) |
| Pit | Neolithic (- 4000 to - 2200) | Pottery | Neolithic (- 4000 to - 2200) |
| Ditch | Modern (1901 to present) | Nails | Roman (43 to 410) |
| | | Nails | Modern (1901 to present) |

Project Location

| | | |
|--------------------|----------------|--|
| County | Suffolk | Address (including Postcode) Land west of Ixworth Road Thurston Suffolk IP31 3QE |
| District | Mid Suffolk | |
| Parish | Thurston CP | |
| HER office | Suffolk | |
| Size of Study Area | 8.3ha | |
| National Grid Ref | TL 91716 65914 | |

Project Originators

| | |
|---------------------------|----------------------------|
| Organisation | Oxford Archaeology East |
| Project Brief Originator | Rachal Abrams (Suffolk CC) |
| Project Design Originator | Louise Bush (OA East) |
| Project Manager | Louise Bush (OA East) |
| Project Supervisor | Stuart Ladd (OA East) |

Project Archives

| | Location | ID |
|--------------------------|------------|--------|
| Physical Archive (Finds) | SCC Stores | THS030 |
| Digital Archive | OA East | THS030 |
| Paper Archive | SCC Stores | THS030 |

| Physical Contents | Present? | Digital files associated with Finds | Paperwork associated with Finds |
|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Animal Bones | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ceramics | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Environmental | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" 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 checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Stratigraphic | | <input type="checkbox"/> | <input type="checkbox"/> |
| Survey | | <input 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"/> |

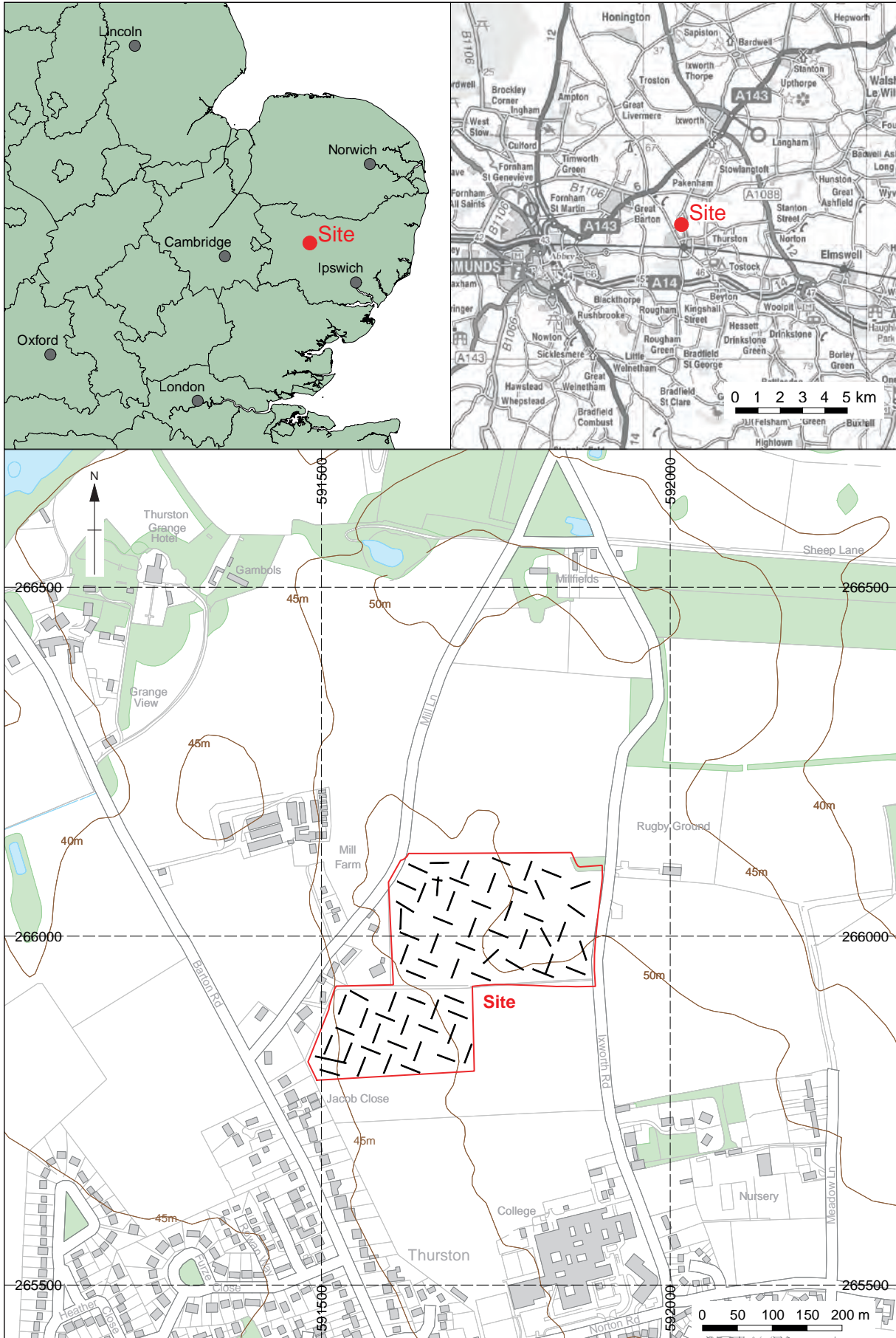
Digital Media

| | |
|--------------------------------|-------------------------------------|
| Database | <input checked="" type="checkbox"/> |
| GIS | <input type="checkbox"/> |
| Geophysics | <input checked="" type="checkbox"/> |
| Images (Digital photos) | <input checked="" type="checkbox"/> |
| Illustrations (Figures/Plates) | <input type="checkbox"/> |
| Moving Image | <input type="checkbox"/> |
| Spreadsheets | <input checked="" 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 type="checkbox"/> |
| Diary | <input type="checkbox"/> |
| Drawing | <input checked="" type="checkbox"/> |
| Manuscript | <input type="checkbox"/> |
| Map | <input type="checkbox"/> |
| Matrices | <input type="checkbox"/> |
| Microfiche | <input type="checkbox"/> |
| Miscellaneous | <input type="checkbox"/> |
| Research/Notes | <input type="checkbox"/> |
| Photos (negatives/prints/slides) | <input type="checkbox"/> |
| Plans | <input type="checkbox"/> |
| Report | <input checked="" type="checkbox"/> |
| Sections | <input checked="" type="checkbox"/> |
| Survey | <input type="checkbox"/> |

Further Comments



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Figure 1: Site location showing archaeological trenches (black) in study area (red)

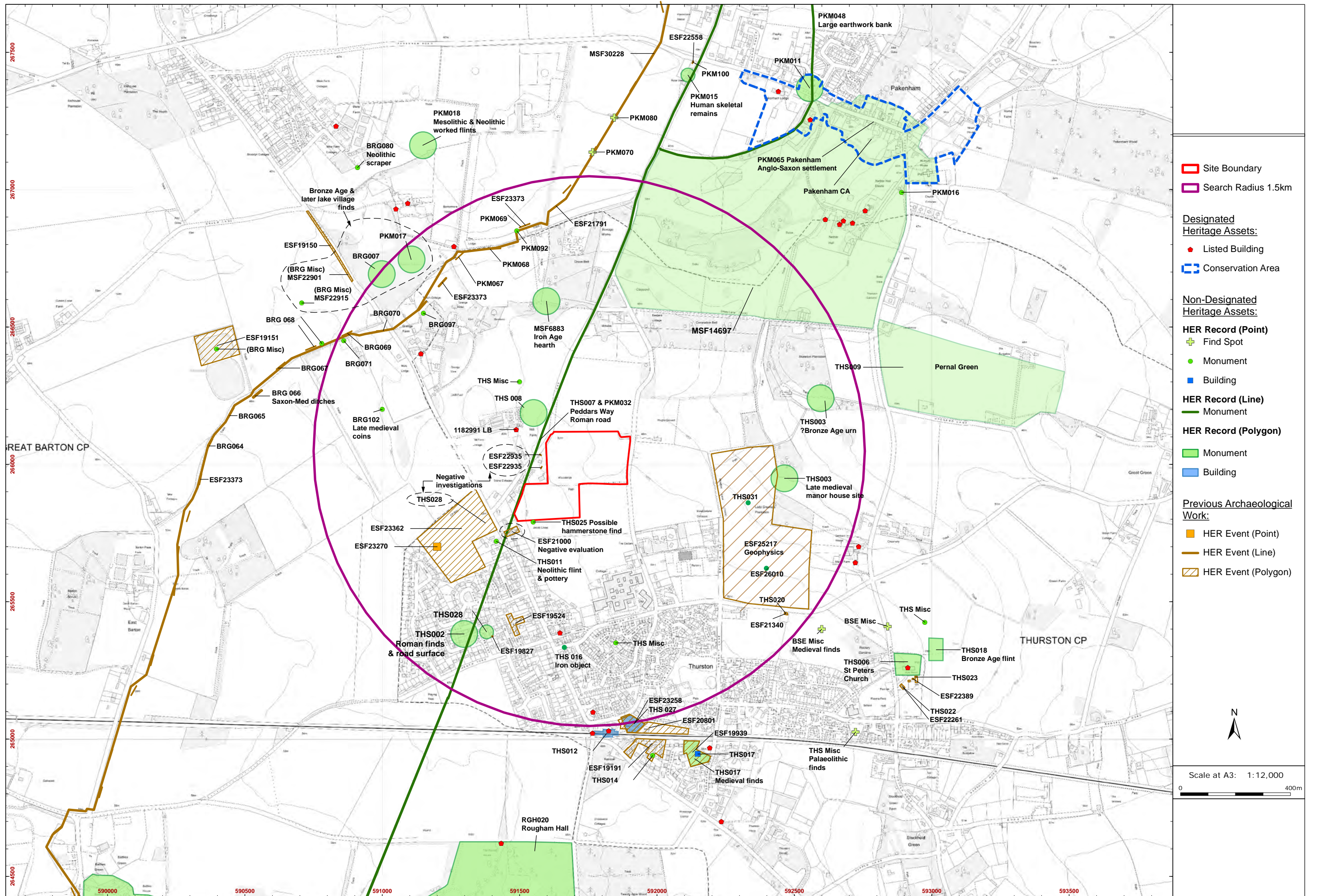


Figure 2: HER records (after Clarke 2016, fig. 2)

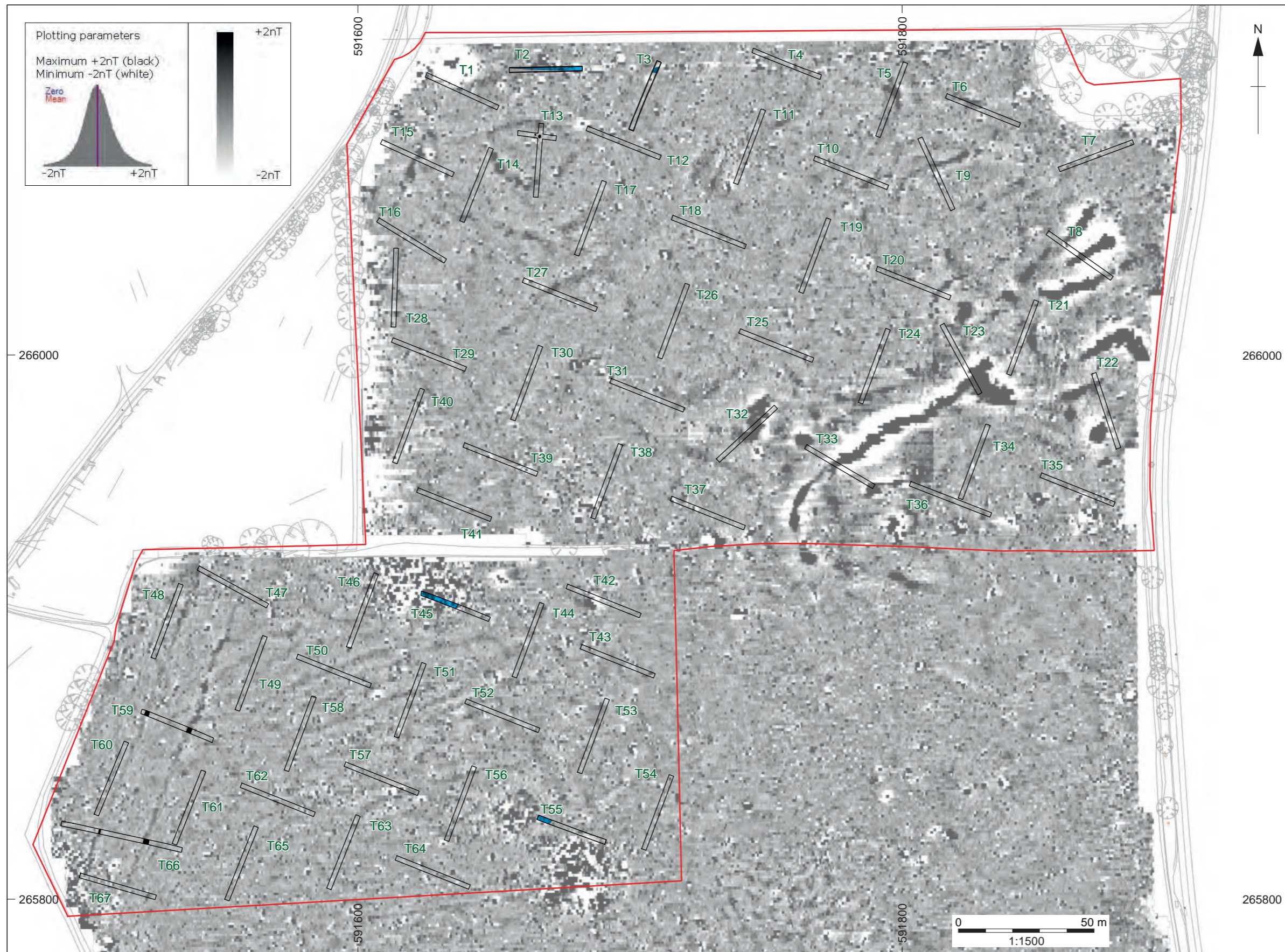


Figure 3: Trench plan with geophysics greyscale (after Davies 2016, fig. 3)

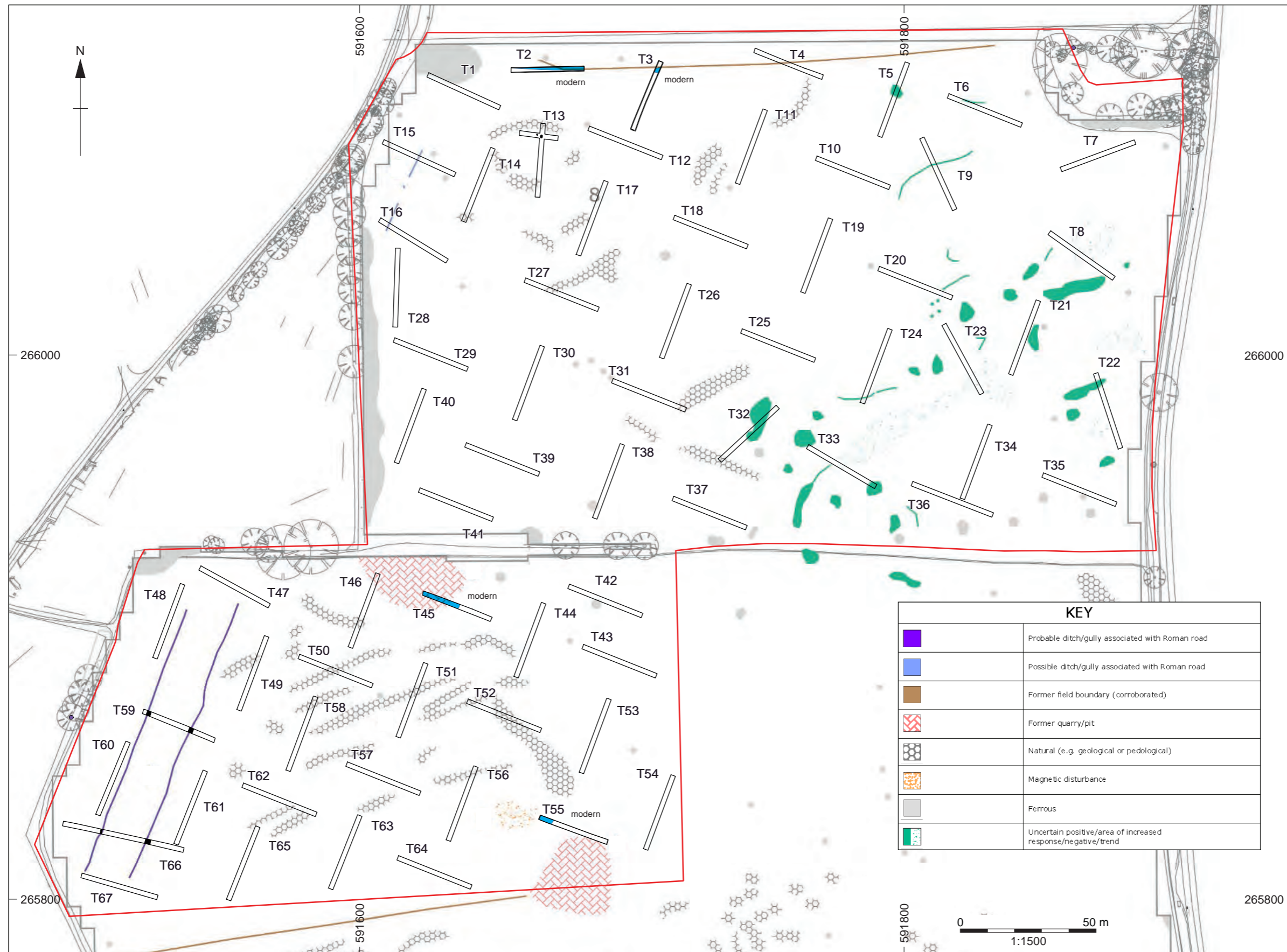


Figure 4: Trench plan with geophysics interpretation (after Davies 2016, fig. 4)

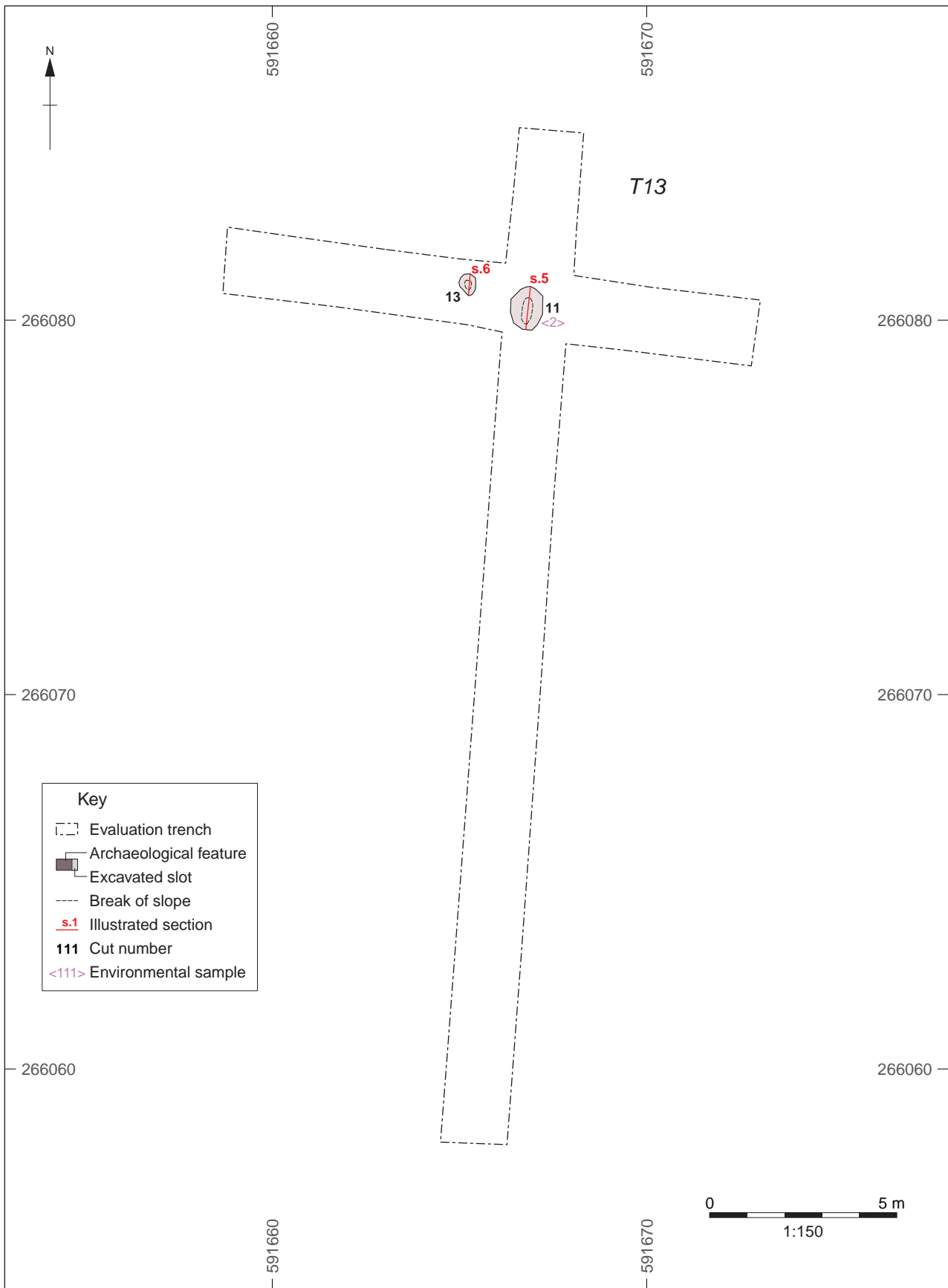


Figure 5: Trench 13 (scale 1:150)

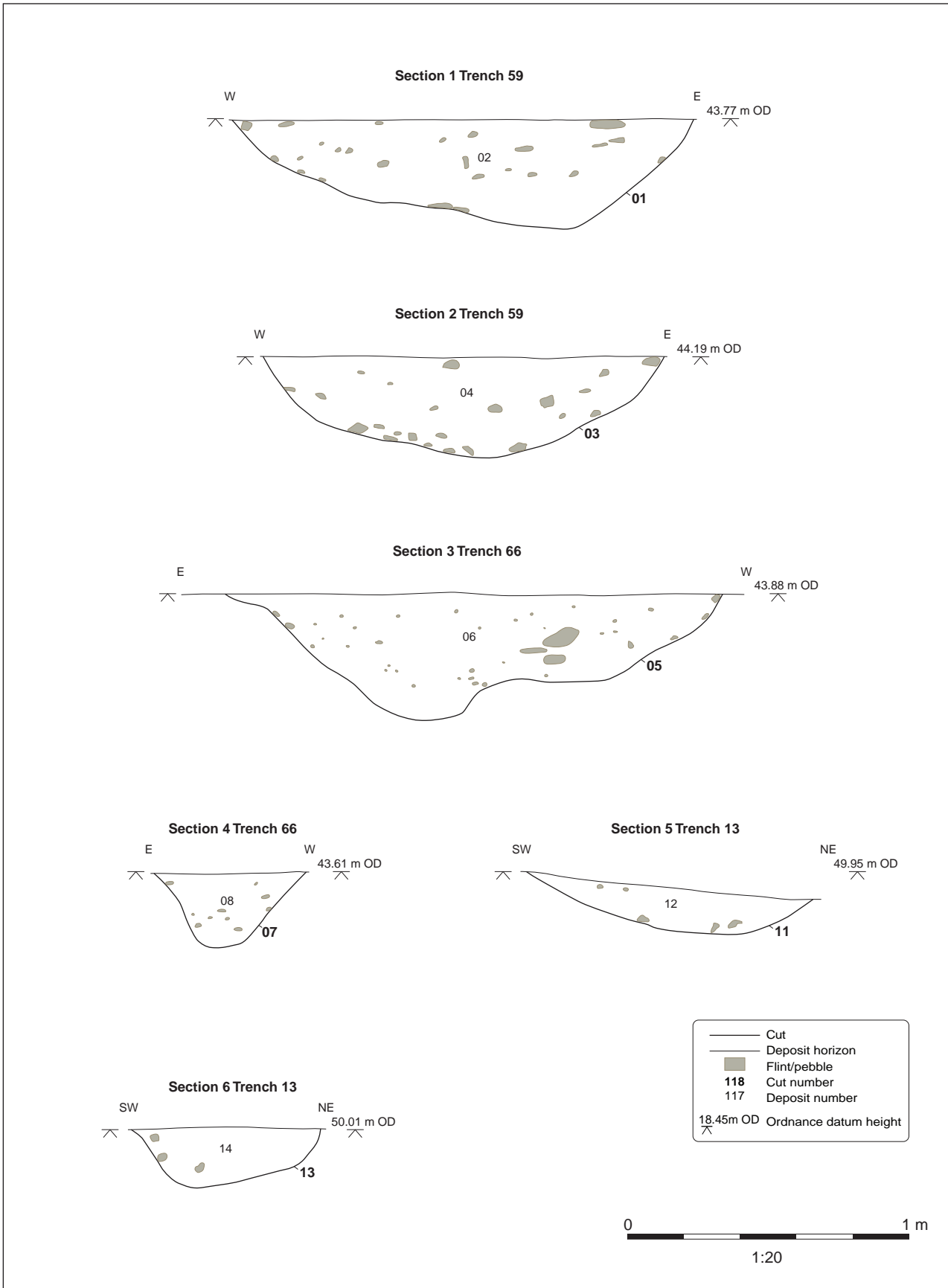


Figure 7: Section drawings



Plate 1: Pit 11 (foreground) and Pit 13 (background), Trench 13. Looking west.



Plate 2: Trench 45, showing modern infill (far end) as well as landscaping of the field. Looking north-west



Plate 3: Ditch 3, Trench 59. Looking north-east.



Plate 4: Ditch 5, Trench 66. Looking north-east.



Plate 5: Trench 59 showing natural flints and Peddars Way ditches (middle and far distance). Looking north-west.



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