



ARCHAEOLOGICAL TRIAL-
TRENCHING
POST-EXCAVATION ASSESSMENT
REPORT

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BURTREE LANE SOLAR FARM
DARLINGTON

prepared for
Aura Power

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Summary

This document presents an assessment of the results of archaeological trial trenching undertaken on land proposed for a solar farm at Burtree Lane near Whessoe to the north of Darlington (NGR: NZ 275 190). This report has been prepared by Northern Archaeological Associates Ltd (NAA) for Aura Power. It is informed by a scoping document prepared by Peter Cardwell (2021) and a programme of geophysical survey (ASDU 2021). Trial trenching was undertaken to inform the planning process by determining the presence or absence of any archaeological remains within the proposed development area and to ascertain the extent, condition, character, significance and date of any such remains.

In total, 79 trenches were excavated; nine were positioned to test the results of geophysical survey and 10 trenches were positioned to investigate remains associated with six former (post-medieval) field boundaries. Subsurface features and deposits were recorded in 64 of the trenches, the majority of these were plough furrows, tree throw holes, root boles or were related to recent land drainage. The features identified by the geophysical survey were shown to be either agricultural, resulting from ploughing or land drainage, geological, or could not be identified. Shallow ditches associated with historic field boundaries were present in Trenches 12, 13 and 16. Other known field boundaries had no corresponding features or deposits, although shallow earthworks were recorded in Trenches 49 and 72. A post-medieval ditch, not recorded by historic mapping or geophysical survey was recorded in Trench 54, and a pit containing post-medieval artefacts was recorded in Trench 70.

Sixteen trenches contained archaeological remains of potential significance, although only one of these contained dateable artefacts. Three undated ditches were recorded in Trenches 9 (and 74), 24, 71 (and 78), which had an alignment that was oblique to the current or historic field layout. None of these ditches had been recorded by the geophysical survey. The ditch in Trench 71 (and 78) was associated with a gully and two possible pits, all of which contained charcoal, perhaps suggesting contemporaneity. Undated gullies were present in Trenches 13 and 70. Possible pits (or root boles), some of which contained charcoal, were also recorded in Trenches 15, 33, 42, 43, 44 and 62.

Two pits were present in Trench 16, one of which contained pottery dating from the Roman period, including a sherd of imported samian ware and numerous fragments from a coarseware vessel. A distinct dump of hearth waste was recorded within a tree throw hole in Trench 7, which comprised charcoal, heat-fractured stones and possible fragments of charred hazelnut shell and has the potential to represent early prehistoric activity. A layer of ancient soil (a palaeosol) was sealed beneath a layer of hillwash and two ploughsoils in Trench 6.

Layers of modern made ground, perhaps resulting from use of the area for landfill, were recorded in Trenches 1, 20, 22, 48, 63, 68, 70 and 79, suggesting such disturbance was more extensive than indicated by historic mapping and geophysical survey. It was also apparent that at least some of this dumping was undertaken above the previous ground level.

Assessment of the results of the trial trenching has demonstrated the potential for Roman period settlement within, or in the vicinity of the development area and also suggests that early prehistoric remains may be present. In addition, the undated features exposed in Trenches 71, 78 and 79 in Field 9 have the potential to be of significance considering their alignments.

Due to the potential significance of some of the features further analysis of the results is warranted, including specialist analysis and radiocarbon dating of the palaeobotanical remains from contexts 114, 118, and potentially 198. This work should be undertaken as part of the combined analysis and possible publication associated with all stages of archaeological mitigation undertaken as part of the current development. Upon completion of the project, the associated archive will be deposited within the County Durham Archaeological Archives (CoDAA) at Sevenhills are recommended.

1.0 INTRODUCTION

- 1.1 This document presents an assessment of the results of archaeological trial trenching undertaken on land proposed for a solar farm at Burtree Lane near Whessoe to the north of Darlington (NGR: NZ 275 190; Fig. 1).
- 1.2 This report has been prepared by Northern Archaeological Associates Ltd (NAA) for Aura Power (the Client) and is informed by a scoping document prepared by Peter Cardwell (2021), archaeological advisor to the Client.
- 1.3 Paragraph 205 within the National Planning Policy Framework states that ‘Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible (MHCLG 2021, 58). In light of this, archaeological evaluation was undertaken which included a programme of geophysical survey (ASDU 2021) and trial-trenching. The evaluation served to inform the planning process by determining the presence or absence of any archaeological remains within the site and ascertain the extent, condition, character, significance and date of any such remains.
- 1.4 All archaeological groundworks were undertaken in accordance with relevant standards and guidance published by Historic England (Historic England 2015a), the Chartered Institute for Archaeologists (ClfA 2019; 2020a–c) and Durham County Council Archaeology Section (DCCAS 2021). All work was also carried out in compliance with the Regional Statement of Good Practice (SYAS 2018).

2.0 LOCATION, TOPOGRAPHY, GEOLOGY

Location, topography and previous disturbance

- 2.1 The proposed development area (PDA) lies on the northern outskirts of Darlington, mostly within the civil parish of Whessoe, although the northern tip of the area lies within the parish of Coatham Mundeville. It is located c.4.5km north-west of the centre of Darlington (Fig. 1). The PDA extends for some 66.5ha (including 5.2ha of biodiversity areas), centred on NGR NZ 275 190, and it comprises a roughly triangular parcel of undeveloped farmland. It is bounded to the south by Burtree Lane,

to the south-west by land associated with Whessoe Farm Cottage and Burtree House, to the north-west by the A1(M), to the north-east by a railway line and to the south-east by Whessoeville. The PDA is crossed by an open drain flowing from north-east to south-west. The land is slightly undulating but mostly lies at a level of c.70–75m above Ordnance Datum (aOD), rising to c.80m aOD at its southern edge adjacent to Burtree Lane.

- 2.2 An area of historic landfill that was operating within the PDA between 1977 and 1989 and extending to some 5.5ha is located within the south-eastern part of the site (Fig. 2). Records suggest that within this area the land was raised with demolition rubble by up to 2m, and while geophysical survey was therefore not undertaken here, the results suggest that this made ground extends to surrounding areas and particularly to the north and south (some 3.3ha). Further landfill is also recorded within the northern part of the site, with a refuse tip mapped by the Ordnance Survey in this area in 1966–1968 and ponds to the south, while at the northern point of the site a former sand pit has been infilled. The extent of disturbance and made ground within this area as identified by the geophysical survey is extensive (some 13.6ha).

Geology and soils

- 2.3 The solid geology of the site comprises sedimentary Dolostone of the Ford Formation. Across most of the PDA this is covered by superficial deposits of Devensian Diamicton till, although there are areas of Quaternary lacustrine deposits of clay and silt, particularly in the northern part of the site and along its north-eastern edge (BGS 2021).

3.0 SCOPE OF WORKS

- 3.1 As stated in the Written Scheme of Investigation (WSI) (NAA 2021a, 2), no trial trenching was undertaken in the areas of former landfill, areas of known disturbance or made ground due to uncertainties around ground contamination and depths of overburden with respect to the depth of impact of the proposed development. Any trenching that might be required, based on the results of future ground investigations and the design proposals, would be undertaken as a second phase of evaluation.

- 3.2 The trial trenching was undertaken across some 26.7ha and trenches were positioned where potential archaeological remains would be physically affected by groundworks associated with the proposed development (Fig. 2). In particular, trenches were located in areas where solar arrays, roads or buildings were planned and avoided zones adjacent to drains and hedgerows which are proposed to be utilised for ecological mitigation. In addition, no trenches were excavated within a horizontal distance of 10m from overhead lines (HSE 2012).
- 3.3 The trial trenching was based upon a 4% sample of this area in accordance with the *Standards for all Archaeological Work in County Durham and Darlington* (2021). In addition, a contingency of up to an additional 1% was allowed for, should archaeological finds be recovered, or features identified that were considered of significance and require further evaluation. This sample was considered to be a comprehensive evaluation of the archaeological potential of the proposed development based on the results of a geophysical survey (Fig. 2; ASDU 2021). After assessment the evaluation is considered adequate to establish the predicted impacts of the development upon both recorded and potential heritage assets of archaeological interest (DCCAS 2021, 3).
- 3.4 Most of the trenches were nominally either 50m or 75m in length by 2m or 4m wide and were located to evaluate all the potential archaeological or other features identified from cartographic sources (the 1838 tithe maps or First Edition 1858 Ordnance Survey map) or by the geophysical survey. The trenches were also located to systematically evaluate apparently 'blank' areas as well as being based upon the local topography, including areas of higher ground.
- 3.5 During the groundworks some refinement of the PDA was undertaken (see section 6.0 Methodology below) which resulted in trenches additional to those detailed in the WSI being excavated. Some of the planned 4m wide trenches were excavated as pairs of 2m wide trenches, and other trenches were expanded to further investigate potential archaeological features. All these variations from the programme of works detailed in the WSI were agreed in advance with DCCAS. All trenches were resurveyed following excavation.
- 3.6 Figure 2 shows a plan of all trenches as excavated. Details of each trench are presented as a gazetteer in Appendix A.

4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 The desk-based assessment is currently being prepared. The following section therefore summarises ongoing research.

The proposed development area

4.2 No heritage assets of either archaeological or historic interest were previously recorded on the information obtained from the Durham County Council Historic Environment Record (HER) within the boundaries of the proposed development with the exception of a former sand pit at the northern extremity of the site.

4.3 The development area is located on the margins of the former townships of Coatham Mundeville and Whessoe (with part of the boundary between the townships transecting the site).

4.4 Former ridge-and-furrow cultivation survives as earthworks within two fields (Fields 2 and 4; Fig. 2) in the south-western part of the area. An extant field boundary within the southern part of the area is shown on an estate map of 1601 (not illustrated) with a former boundary to the north. The remainder of the site appears to have been unenclosed at this date. Extant and former field boundaries of 19th-century date are recorded from the 1838 tithe plans and Ordnance Survey maps of 1858 and 1897 (not illustrated). The associated tithe awards indicate that most of the fields were under arable cultivation in the early 19th century.

4.5 The eastern boundary of the site is defined by a railway line, which formed part of the Stockton and Darlington Railway opened in 1825 (Fig. 1). The sand pit at the northern end of the site was first mapped in 1858. The only building extant recorded within the site is a field barn first mapped in the early 20th century.

4.6 A landfill site is recorded within the northern part of the site, with a refuse tip mapped by the Ordnance Survey in this area in 1966–1968 together with ponds to the south. At the northern end of the site the former sand pit had been infilled by this date. A separate area of landfill was operating between 1977 and 1989 and extended to some 5.5ha within the south-eastern part of the site. Records suggest that within this area the land was raised with demolition rubble by up to 2m.

- 4.7 The geophysical survey undertaken as part of the current work (ASDU 2021; Fig. 2) identified a number of the former field boundaries as well as the extant ridge and furrow and also more widespread evidence of earlier cultivation, which are probably post-medieval in date. The only additional features recorded were five possible soil-filled features, one of which appears to pre-date the ridge and furrow (Fig. 2, no. 7) while another may be geological in origin (Fig. 2, no. 4).
- 4.8 The southern two fields (Fields 4 and 8) within the site are included within an Area of High Archaeological Potential in the emerging Darlington Borough Local Plan 2016–2036.

The wider locality

- 4.9 References provided within this section refer to the Durham County Council Historic Environment Record Heritage Features (H) or Events (E) records.

Prehistoric and Roman period

- 4.10 The earliest evidence for occupation within the area surrounding the site consists of Mesolithic struck flints found during excavations at Faverdale Business Park c.1km south of the PDA (NZ 274 176), and further Mesolithic finds have been recovered along the course of the River Skerne c.1.5km east of the PDA. Evidence from pollen cores taken from peat deposits in the Skerne valley indicates small-scale tree clearance during the Neolithic (4th millennium BC) with more extensive deforestation in the Bronze Age (2nd millennium BC), and cereal pollen occurred shortly after (Bartley *et al.* 1976). The excavations at Faverdale Business Park found three stone-lined cist burials of possible Bronze Age date (Proctor 2012).
- 4.11 Trial trench evaluation was undertaken by Pre-Construct Archaeology in the vicinity of Whessoe Grange Farm c.400m to the south of the PDA (Fig. 1) in 2010 (E60516; PCA 2010). This identified a number of probable boundary ditches or drainage gullies. Three of these were undated but possibly pre-medieval in origin (two of which were to the south of Burtree Lane).
- 4.12 More extensive evidence for Late Iron Age and Roman-period occupation was found at Faverdale East Business Park c.1.5km to the south of the PDA (NZ 274 176; E9756;

Proctor 2012). At this site, Pre-Construct Archaeology undertook open area excavation in 2004 and a Late Iron Age unenclosed settlement including at least nine roundhouses and an associated field system was recorded. This field system gradually evolved and by the 2nd century AD a rectilinear enclosure system had been established associated with multiple structures. These included stone buildings possibly representing a villa, a bathhouse with underfloor hypocaust and a possible shrine. A cobbled road surface and an inhumation cemetery were also found.

- 4.13 To the south of this, and c.1.8km south-west of the PDA (at NZ 282 168), excavations at Rise Carr revealed evidence for a Middle-Late Iron Age enclosed settlement, typical of a number of small 'farmstead' sites recently identified across County Durham, although no evidence for continuous occupation into the Roman period could be identified (CFA Archaeology 2013).
- 4.14 An evaluation undertaken by NAA to the south of Burtree Lane 0.8km south-east of the PDA (at NZ 286 179) identified intercutting ditches containing hand-built pottery of Iron Age or Roman date together with several curving gullies probably representing roundhouses (E63812; NAA 2016).

Medieval

- 4.15 No physical evidence for the early medieval period has been found within the immediate vicinity of the site, although place-name evidence does suggest the wider area was extensively occupied at that time.
- 4.16 The former medieval village of Whessoe (H1529), believed to date from the 11th century, is located c.250m to the south of Whessoe Grange Farm and c.1km south of the PDA (Fig. 1). All that survives of the site today are heavily truncated cropmarks, suggestive of a regular plan settlement and associated field system.
- 4.17 Whessoe is thought to have been referred to in medieval documents as 'Wessou' in 1200 and as 'Wessehou' then 'Whessowe' in 1304 and 1307 respectively (Ekwall 1960, 512). The name is possibly derived from 'Hwessa's hoh' meaning 'a spur on a hill' or alternatively 'steep hill' in Old English (*ibid.*).
- 4.18 Two ditches of medieval date were recorded to the south of Whessoe Grange Farm during the 2010 trial trenching undertaken by Pre-Construct Archaeology (E60516).

Evidence for former ridge-and-furrow cultivation of probable post-medieval date was also identified.

- 4.19 A trial trench evaluation in the vicinity of Humbleton Farm c.1km west of the PDA revealed evidence of former field boundaries and plough furrows thought to be of late post-medieval date (E60541). A possible undated enclosure was identified by geophysical survey (E65704).

5.0 AIMS AND OBJECTIVES

- 5.1 The proposed development could have an adverse impact on any surviving archaeological remains within the PDA. The main aim of the trial trenching was to assess the archaeological potential of the site, with the trenching sampling features recorded by both cartographic sources and by the geophysical survey, as well as systematically evaluating the whole of the site area. As archaeological remains were present, an additional aim was to confirm their location, extent, nature, date and importance in order that an informed assessment of the impact of the development can be undertaken, and a suitable mitigation strategy agreed.

- 5.2 The objectives of the evaluation were to:

- establish the presence, nature, extent, preservation and significance of any archaeological remains within the site;
- provide a detailed record of any such archaeological remains;
- recover and assess any associated structural, artefactual and environmental evidence;
- determine which areas within the footprint of the proposed scheme require archaeological mitigation in the form of preservation *in situ*, open area investigation in advance of construction, or monitoring of soil stripping during construction works;
- prepare an illustrated report on the results of the excavation to be deposited with the Historic Environment Record (HER) held by Durham County Council

Archaeology Section, the County Durham Archaeological Archives (CoDAA) and the Archaeology Data Service; and

- undertake a scheme of work that meets national and regional standards (Historic England 2015a; South Yorkshire Archaeology Service 2018; DCCAS 2021).

5.3 Upon completion of the evaluation, the requirement for further mitigation will be agreed through consultation between the Client and DCCAS.

6.0 METHODOLOGY

6.1 Archaeological trial trenching was undertaken as stipulated in a Written Scheme of Investigation (WSI) (NAA 2021a) that had been agreed with the Client and DCCAS prior to commencement. This WSI was compiled in accordance with the *Standards for all Archaeological Work in County Durham and Darlington* (2021) (hereafter the *Standards*), therefore both documents detail the methodology followed during the current phase of trial trenching. A summary of the relevant details is presented below.

Trench excavation

6.2 Mechanical stripping of topsoil and subsoil from the trenches (Plate 1) was carried out in accordance with the guidelines laid out in the *Standards*. The WSI specified the excavation of 71 trenches, including nine that were 4m wide, comprising a total area of 10160m² (NAA 2021a, fig. 2). During the groundworks, however, additional trenches were excavated and some of the original trench positions, lengths and widths were amended in agreement with the Client and DCCAS. These amendments in part reflected changes in the proposed development design, as well as being in response to practical constraints as discussed below. All the trenches were resurveyed after excavation and are shown on Figure 2; the excavated areas of each trench are detailed in Appendix A. The sequence of excavation of the trenches was dictated by the need to maintain access for stock to parts of the site.



Plate 1: Mechanical stripping of topsoil and subsoil

- 6.3 A total of 79 trenches were excavated during the groundworks (Fig. 2). These included two new trenches (76 and 77) located close to the railway line in Field 10, and two short trenches (78 and 79) situated to either side of Trench 71 (Field 9) that served to further investigate a ditch. Trench 56 (in Field 1) was positioned close to a tree, so an additional short trench (72) was excavated to the south-west to investigate an earthwork boundary.
- 6.4 Some of the planned 4m-wide trenches were excavated as two 2m-wide trenches for expediency or to better evaluate the immediate area. These included the north-northwest to south-southeast arm of Trench 23, which was split between a 2m wide trench in its designated position and a new 2m-wide trench (Trench 73) to the east. This variation served to better investigate a flat-topped hill in the corner of this field. To the east, in Field 3, Trench 24 was shortened due to the position of an overhead line. In addition, this trench included a series of localised extensions to the west to better investigate several potential features whilst avoiding numerous land drains.
- 6.5 Within Field 4, Trench 74 represented the second half of Trench 9, repositioned to trace the extent of a ditch. Similarly, half of Trench 4 was shifted to the north and east

(as Trench 75) to avoid a boggy area and better investigate a flatter part of the field. Trench 17 was initially planned to be a 4m-wide trench, but due to time constraints associated with stock rotation, it was excavated to a width of 2m with an extension around the only potential feature encountered. On investigation this feature was found to be of natural origin and therefore an additional 2m-wide trench was not excavated to the north.

- 6.6 In addition to Trenches 24 and 17, a further four trenches (Trenches 7, 13, 16 and 38 – in Field 6) were expanded to investigate apparent archaeological features. As agreed with the Client and DCCAS, Trench 12 was excavated as a 2m wide trench (not 4m wide) as the main feature it was located to investigate was proven to be a natural gravel terrace.
- 6.7 Other minor amendments to the position and/or lengths of a further six trenches were unavoidable due to the presence of overhead lines (Trenches 21 and 19) and problems relating to the loss of survey flags due to the presence of livestock during the groundworks (Trenches 68, 69, 70 and 71). All changes were agreed in advance with DCCAS and all trenches were resurveyed after excavation.

Hand excavation and recording

- 6.8 Hand excavation of selected archaeological features was undertaken to fulfil the aims and objectives of the trial trenching. Due to the nature of the archaeological remains encountered, and in agreement with the Client and DCCAS, minor deviations from the excavation strategy detailed in the WSI were required. The levels of sample excavation (as a percentage of the feature exposed within each trench) were:
- all upstanding earthworks visible in trench sections were recorded, including the eroded remnants of post-medieval boundaries in Field 1 and an example of the upstanding ridge and furrows in Field 4;
 - the extent and depths of all areas of made ground were recorded;
 - the majority of discrete features (including pits and postholes) were 100% excavated to confirm function or for ease of excavation (in the case of small features). Post-medieval discrete features were 50% excavated. Natural features (such as tree throw holes and root boles) were test excavated but these were only

recorded where concentrations of charcoal, hearth waste and/or artefacts were encountered;

- up to a 50% sample of linear features, including medieval or earlier field boundaries was excavated; and
- where ditches associated with the post-medieval boundaries were present in multiple trenches (e.g. Trenches 4, 5 and 6), between 20% and 50% sample of the total exposed length in all trenches was excavated.

6.9 In addition:

- no features of a ritual and ceremonial nature (including burials) were encountered; and
- no definitively domestic or settlement related linear features were identified.

6.10 Site recording and recovery of finds followed the guidelines set out in the *Standards*.

Scientific sampling

Environmental sampling

6.11 The few deposits suitable for environmental sampling were c.100% sampled as they were too small in volume to recover 40-litre bulk soil samples. These have been processed and assessed in-house at NAA (Appendix D). Recovery and sampling of environmental remains, as well as assessment, were undertaken in accordance with published guidelines (Campbell *et al.* 2011).

6.12 No faunal remains were discovered.

Date sampling

6.13 Suitable deposits of charcoal and charred plant remains (CPR) for radiocarbon dating were recovered from some contexts (see Appendix D). No remains or samples appropriate for other dating techniques were encountered.

7.0 RESULTS

7.1 Within the PDA, a total of 79 trenches were investigated (Fig. 2). For ease of narrative, the site has been organised into four areas, which have been sub-divided into 10 fields. The trenches containing archaeological remains are discussed below by area and field order, generally from west to east and/or south to north; within these sections the trenches are discussed in trench number order. The 17 trenches that did not contain archaeological features or significant deposits are not discussed below. The details of all trenches, including accurate areas (m²) for each trench, are presented in Appendix A.

Area 1

Field 1

7.2 The northern half of Field 1 was broadly flat but sloped upwards towards its south-western corner. The truncated remnants of plough furrows were recorded in five of the trenches (48, 49, 50, 51 and 53) within this field. These furrows were all aligned west-southwest to east-northeast and, as suggested by the geophysical survey (ASDU 2021), did not respect the field boundaries recorded on historic mapping. The furrows were spaced c.2m to 5m apart and were sealed by the undated hillwash and a post-medieval buried topsoil. A furrow recorded in Trench 49 pre-dated a post-medieval boundary as it continued without interruption beneath the associated earthwork.

Trench 47

7.3 Trench 47 was excavated close to the western limit of the PDA in the south-western corner of Field 1. It was between 0.3m and 0.4m deep and the only feature of note was a ditch (19; Plate 2), measuring c.1.1m wide by up to 0.15m deep, which ran across the trench from approximately east to west (not illustrated). The fill (18) of this ditch produced post-medieval pottery and glass, however, the feature did not correspond with the alignment of the current field boundaries, or those recorded by historic mapping. In addition, ditch 19 had a slightly different alignment to the plough furrows recorded in this field.

7.4 Ditch 19 was overlain by up to 0.1m of hillwash (172) which in turn was sealed by up to 0.1m of buried topsoil. This was overlain by c.0.2m of topsoil (16), which contained

post-medieval finds including ceramic building material (CBM), pottery and a copper-alloy nail.



Plate 2: Ditch 19

Trench 48

- 7.5 To the north and east of Trench 47, Trench 48 was excavated across the position of a geophysical anomaly which proved to be of geological origin. In general, this trench was excavated to a depth of between 0.3m and 0.5m along its length, however, its northern end was excavated through modern made ground to a depth of 0.95m (Fig. 3).
- 7.6 A natural hollow, which was most likely the source of the geophysical response, spanned the northern 37m of this trench. In its base were putative Quaternary lake deposits (lacustrine clays and silts; BGS 2021) (deposit 24). This hollow was up to c.0.8m below ground level (bgl) at its northern extent but shallowed to the south. It

had been infilled with three distinct layers of made ground (23, 22 and 257), which contained modern and post-medieval finds (not recovered). The made ground was overlain by a 0.15m thick layer of hillwash (21) in the southern half of the trench; this was overlain by up to 0.1m of buried topsoil and 0.15m of later topsoil and turf.

Trench 49

- 7.7 A former field boundary recorded on historic mapping, visible as an eroded earthwork, was investigated in Trench 49 c.40m to the east of Trench 48 (Fig. 3). This trench was excavated to a depth of c.0.3m at its western end and 0.2m to the east. The central section (across the earthwork) was up to 0.6m deep (Plate 3).
- 7.8 The earliest feature cut into the glacial till in this trench was a furrow (40) that extended some 55m along the trench on a west-southwest to east-northeast alignment. The fill (41) of this feature produced three small fragments of medieval pottery, though this has only provided a *terminus post quem* (TPQ) for its infilling. The furrow did not respect the north to south boundary on historic mapping and was overlain by the soils that formed the earthwork.



Plate 3: Earthwork in Trench 49 (facing south-west)

- 7.9 This earthwork ran perpendicular to the trench extending in both directions. It was eroded and became less distinct to the north (see Trench 52 below). Within Trench 49 the earthwork was up to 0.7m high (Fig. 3, section 10; Plate 3) with a shallow profile extending over c.6m (east to west) and was formed by a varying depth of agricultural subsoil (39). This subsoil was overlain by c.0.15m of buried ploughsoil, which in turn was sealed by up to 0.15m of later topsoil and turf (38).

Trench 50

- 7.10 Trench 50 was located c.26m to the north of Trench 49. It was excavated to a depth of 0.24m at its west end, and 0.32m centrally. The only features present were two plough furrows that cut across the trench on a west-northwest to east-southeast alignment. These were overlain by up to 0.1m of subsoil/hillwash, which was sealed by a discontinuous layer of material that probably represented a former ploughsoil; this was in turn sealed by a later topsoil.

Trench 51

- 7.11 Trench 51 was situated c.25m to the east of Trench 50. Natural geology was encountered at a depth of between 0.22m (at the south end) and 0.36m (to the north). Four furrows were exposed that adhered to the same alignment as those within Trench 50. These were sealed by up to 0.15m of subsoil/hillwash which was overlain by a discontinuous layer of former ploughsoil; this was in turn sealed by a later topsoil.

Trench 52

- 7.12 Trench 52 was located across a continuation of the same post-medieval field boundary recorded within Trench 49 (Fig. 3). The upstanding remains of the boundary recorded in Trench 49 were no longer extant at this point; however, an earlier natural hollow (256) running in the same direction was present. This hollow, and variations in the depths of soils, resulted in Trench 52 being 0.21m deep at its south-west end, 0.7m deep centrally and c.0.5m deep at its north-west end.
- 7.13 The natural hollow (256) extended beyond the trench to the south-east and north-west and was c.11m wide by up to 0.3m deep. It was investigated within two sondages located either side of the position of the post-medieval boundary. To the south-west,

hollow 256 was filled by a dark silty layer (15), which was overlain by a leached pale white sandy deposit (10). To the north-east, the hollow was filled with two light sandy deposits (12 and 13) that were overlain by a dark silty deposit (11).

- 7.14 This hollow (256) pre-dated the post-medieval boundary, which had no corresponding earthwork or ditch at this point. The hollow, however, may have helped form the boundary as a deposit of stones (14; Plate 4) situated within a 0.35m thick layer of hillwash (8) in the south-western sondage seemed to represent deliberately dumped material (possibly to improve traction). This hillwash was overlain by up to 0.15m of buried ploughsoil (9) which was sealed by up to 0.15m of topsoil and turf (6).



Plate 4: Stone deposit 14

Trench 53

- 7.15 Trench 53 was excavated c.26m to the east of Trench 52 located across a geophysical survey response and the site of a south-west to north-east aligned boundary recorded by historic mapping (Fig. 3). The trench was excavated to a depth of 0.35m at its southern end, c.0.5m at its centre and 0.4m at its northern end.

- 7.16 No archaeological or geological feature was present within the trench which corresponded with the response recorded by the geophysical survey. Two natural features, a tree throw hole (47) and a possible glacial channel (or ice wedge; 51), were recorded in this trench. In addition, the remnants of five very truncated furrows (aligned west-southwest to east-northeast) were recorded either side of the former boundary. A post-medieval stone-filled 'French' drain (43) was also recorded close to the southern end of the trench (Plate 5). No earthwork or ditch was present where the boundary marked on historic mapping would have crossed the trench.



Plate 5: 'French' drain 43

- 7.17 All features were sealed by up to 0.25m of hillwash (49), which was overlain by up to 0.15m of buried ploughsoil and a 0.10m thick layer of later topsoil and turf (48). These soils were deepest in the central area of the trench.

Trenches 56 and 72

- 7.18 The central section of Trench 56 was not excavated to avoid damage to the roots of a tree. To compensate this, an additional trench (Trench 72) was excavated c.7.5m to the south-west across the position of a former boundary marked on historic mapping (Fig. 2). Trench 56 was excavated to a depth of between 0.4m and 0.5m; Trench 72

was 0.18m deep at its north-western end and 0.46m at its south-eastern (Plate 6). This disparity in depths was due to a build up of soils to the south that also formed an earthwork associated with the former boundary.

- 7.19 The earthwork recorded in Trench 72 was eroded but measured up to 0.4m high and was c.3m wide (Fig. 4, section 15). It was formed by a subsoil (251) which increased in depth to the south-east. This was overlain by up to 0.2m of buried topsoil which was sealed by up to 0.10m of later topsoil and turf (250).



Plate 6: Earthwork in Trench 72

Field 2

- 7.20 Field 2 was located to the south-west of Field 1 and sloped downwards towards the south and east. Two separate alignments of ploughing were recorded in this field. The shallow remnants of three north-northwest to south-southeast aligned plough furrows were recorded in Trench 20. A more pronounced set of furrows running west-southwest to east-northeast was recorded in the other four trenches (21, 22, 23 and 24), which were also visible as extant earthworks. These two different ploughing regimes had been recorded by geophysical results (ASDU 2021). A geophysical survey

response that had determined the location of Trench 23 represented one of these furrows.

Trench 20

- 7.21 Trench 20 was excavated to a depth of between 0.2m and 0.4m. It contained the remnants of three furrows (aligned north-northwest to south-southeast) and a deposit of lacustrine clay at its south-western end (not illustrated). This was overlain by up to c.0.1m of made ground that contained large amounts of post-medieval and modern artefacts (not retained). This layer extended for c.10m and was sealed by up to 0.1m of hillwash, which was overlain by up to 0.1m of buried ploughsoil. A 0.1m thick layer of later topsoil and turf sealed the deposits in this trench.

Trench 21

- 7.22 Trench 21 was located c.27m to the north-west of Trench 20 and was situated between two sets of overhead lines. Trench 21 was located on the lower slopes of the hill in this field and was 34m long by up to 0.48m deep. Two west-southwest to east-northeast plough furrows were recorded in the northern half of the trench, which were overlain by up to 0.15m of subsoil, and 0.2m layer of former ploughsoil. A later layer of topsoil and turf (c.0.15m thick) sealed the former ploughsoil.

Trench 22

- 7.23 To the west of Trench 21, Trench 22 was excavated across a south-facing slope to a depth of between 0.3m to 0.45m (Fig. 4). Lacustrine deposits overlain by modern made ground were recorded at the southern end of this trench. A series of five west-southwest to east-northeast aligned furrows was recorded to the north. These were approximately 3m wide by up to 0.25m deep and were spaced up to 2m apart. A stone-filled 'French' drain (145) was recorded c.15m from the southern end of the trench (Plate 7). These features were all sealed by up to 0.3m of buried topsoil (143), which was sealed by up to 0.2m of topsoil and turf (142).



Plate 7: 'French' drain 145

Trench 23

- 7.24 Trench 23 was L-shaped and was excavated close to the summit of the hill that spanned Fields 1, 2 and 3 (Fig. 2). The trench was excavated to a depth of between 0.4m and 0.5m and contained three west-southwest to east-northeast aligned plough furrows. The furrows were sealed by up to 0.2m of subsoil, which was in turn overlain by a 0.15m thick layer of former ploughsoil. A later layer of topsoil and turf (c.0.15m thick) sealed the trench.

Trench 73

- 7.25 An additional 2m-wide trench (Trench 73) was excavated to the east of Trench 23 to compensate for the north-west to south-east arm of Trench 23 not being excavated to a width of 4m. Natural geology was encountered at a depth of 0.24m on the hill summit at the northern end of Trench 73. Down slope, at the southern end of the trench, it was excavated to a depth of 0.37m due to the presence of a layer of hillwash. Three west-southwest to east-northeast aligned plough furrows were present; these were overlain by up to 0.2m of hillwash. The hillwash petered out before the summit at the northern end of the trench and was overlain by a former ploughsoil which was up to 0.1m thick. A later layer of topsoil and turf (c.0.15m thick) sealed the trench.

Field 3

- 7.26 To the east of Field 2, Field 3 sloped downwards to the south-east. A series of west-southwest to east-northeast furrows spaced between 2m and 4m apart were present in Trenches 24, 25, 26 and 27. The furrows had been recorded by geophysical survey.

Trench 24

- 7.27 Trench 24 was positioned to test a response recorded during the geophysical survey and ran north-west to south-east close to the eastern edge of Field 3. It was excavated as a 2m wide trench with a dog-leg at its northern end (to avoid a land drain) and three areas of interest were expanded to investigate potential features (Fig. 4). A c.13m wide linear natural hollow (249) extended across the trench from south-west to north-east corresponding with the position of the geophysical anomaly. As a result, Trench 24 was excavated to a depth of 0.35m at its south-eastern end, up to 0.95m in the hollow (Plate 8) and 0.3m at its north-western end.



Plate 8: Recording hollow 249 within Trench 24

- 7.28 A north-east to south-west ditch (147) ran across the trench for some 4m, extending beyond the investigated area in both directions. It varied in profile and was

approximately 0.8m wide by up to 0.35m deep (Plate 9); its fill (148) produced no finds or charcoal. The shallow remnants of four furrows (aligned west-southwest to east-northeast) were recorded close to the north-western end of the trench. Ditch 147 and the natural hollow were sealed by a layer of hillwash (149 and 152) which was up to 0.5m thick. This layer did not extend beyond the hollow to the north-west. A layer of buried topsoil (151) that was up to 0.3m thick (in the hollow) overlay the whole trench. This was sealed by a later layer of topsoil and turf (150) that produced post-medieval pottery and a copper-alloy ring.



Plate 9: Ditch 147, Section 48 (facing north-east)

Trench 25

- 7.29 The natural hollow recorded in Trench 24 (249) was also encountered to the north-east in Trench 25 (as context 248). Trench 25 was excavated to a depth of between 0.22m (northern end) and 0.65m (within the hollow). A series of 11 west-southwest to east-northeast aligned furrows were recorded in the trench. These features were approximately 1m wide and were spaced up to 4m apart. The lower fill of the hollow (247) overlay the fill of a furrow. Layer 247 was overlain by up to 0.2m of hillwash (or subsoil) which was sealed by a c.0.15m thick layer of former ploughsoil. The trench was sealed by a later layer of topsoil and turf that was up to 0.2m thick.

Trench 26

- 7.30 Trench 26 was located on the hill slope to the west of Trench 25. It was excavated to a depth of between 0.25m (northern, upslope end) and 0.6m (southern, downslope end). Eight west-southwest to east-northeast aligned furrows were present. These were overlain by up to 0.15m of hillwash which was sealed by a c.0.1m thick layer of former ploughsoil. The trench was sealed by a later layer of topsoil and turf that was up to 0.15m thick

Trench 27

- 7.31 Trench 27 was located to the west of Trench 26 and was excavated across the slope in this field. Natural geology was encountered at a depth of 0.35m at its north-western end and 0.25m to the south-east. Six furrows on a west-southwest to east-northeast alignment were present, which were sealed by up to 0.15m of subsoil. This was overlain by between 0.1m and 0.2m of former ploughsoil which, in turn, was sealed by a later layer of topsoil and turf (c.0.15m thick).

Area 2

Field 4

- 7.32 This field was the largest that was evaluated, and historic mapping indicated that it was once four separate fields. The topography was variable, with a flat area extending from the west encompassing the northern ends of Trenches 12, 13 and 7 and the southern ends of Trenches 14 and 15. The ground rose slightly to the north and north-east (in the area of Trenches 16, 17, 18 and 19), but rose more steeply to the south. A natural gravel ridge formed the lower portion of this steeper southern slope in the areas of Trenches 12, 13, 7 and 6.
- 7.33 Evidence of former agriculture was visible in this field as extant ridge and furrow earthworks, within the results of the geophysical and as exposed features in several of the trial trenches. These showed that the ploughing regimes somewhat respected the boundaries shown of historic mapping. The most pronounced furrows were located within the south-western quadrant of the field. These were aligned north-west to south-east and were approximately 5m apart. A sample profile was recorded in Trench

10 and the geophysical survey suggested that they had a slight curve close to their northern extent.

- 7.34 To the east, a set of west-southwest to east-northeast aligned furrows were recorded in Trench 4. In this trench, these furrows extended beyond the former boundary into the south-western quadrant but were not recorded within Trench 8 to the west. Within the north-east quadrant of Field 4 another set of furrows (aligned west-northwest to east-southeast) was recorded to the north of the historic boundary in Trench 19 by the geophysical survey. No furrows were encountered within the trenches excavated in the north-western quadrant and the geophysical results were inconclusive in this area.

Trench 4

- 7.35 Trench 4 was positioned to investigate one of the former boundaries marked on historic mapping and was excavated to a depth of between 0.3m to 0.36m (Fig. 5). The shallow remnants of two furrows on a west-southwest to east-northeast alignment were recorded within this trench. These were overlain by a 0.8m deep layer of buried ploughsoil. No earthwork or ditch associated with the former boundary was present within the trench. A very slight hollow that had been infilled with cinder noted in this position probably represented the final stages of landscaping when the boundary was removed (after c.1951). This had been cut by a large drain that may have removed any trace of the boundary. A 0.1m layer of later topsoil and turf sealed all of the deposits within the trench.

Trench 5

- 7.36 The cinder deposit and large field drain recorded in Trench 4 extended across Trench 5 (Fig. 5). This trench was excavated to c.0.3m deep and contained similar layers of buried ploughsoil that was overlain by a layer of topsoil and turf.

Trench 6

- 7.37 To the north of Trench 5, Trench 6 was also excavated across the former boundary to a depth of between 0.3m and 0.8m (Fig. 5). A natural c.7m wide linear hollow (254) extended down the slope to the west of the former boundary towards the flat ground to the north and east of the eastern extent of Trench 7. This hollow was potentially a

small former dry valley (or shallow palaeochannel) and was up to 0.3m deep. It was filled by a light sandy deposit (79) that was overlain by a grey silty former (ancient) soil horizon (palaeosol) (91) that was up to 0.24m thick and extended to the south-western end of the trench. Two fragments of heat-fractured stone were recovered from deposit 91 close to the south-western end of the trench.

- 7.38 Palaeosol 91 was overlain by up to 0.32m of hillwash (90), which was sealed by up to 0.2m of buried ploughsoil (89). Where the former boundary would have crossed the trench, a continuation of the cinder deposit recorded in Trenches 4 and 5 overlay this soil; a continuation of the large drain cut both deposits. All these deposits and features were sealed by up to 0.24m of topsoil and turf (88).

Trench 7

- 7.39 Trench 7 was excavated across a natural gravel ridge that extended from the west towards the natural hollow recorded in Trench 6 (Fig. 5). Following consultation with DCCAS, the position of Trench 7 was altered to better evaluate the ridge. The trench was between 0.37m (north-east end) and 0.9m (south-west end) deep and extended from a flat area of potential lacustrine clay (north-east end) across the gravel ridge (central area and box) to an area of modern quarrying (south-west end). The trench was expanded to the south-west to investigate the area around a tree throw hole containing hearth waste (feature 87) revealing a former soil containing stone (deposit 124).
- 7.40 The earliest features recorded within this trench were two tree throw holes (84 and 87), both of which contained charcoal. The westernmost of these features (87) also contained a c.0.1m thick dumped deposit of hearth waste (114) comprising heat-fractured stone and a concentration of charcoal (Fig. 5, section 23; Plate 10). Assessment of the charcoal (Appendix D) identified fragments of charred nutshell (potentially hazelnut shell).
- 7.41 An unusually smooth stone (RF 2) was recovered from the upper fill (115) of this feature. Additionally, an intermittent layer of grey silt and stone (124) extended into the central area of Trench 7 from the south-east. This layer was probably a continuation of the palaeosol recorded in Trench 6.



Plate 10: Tree throw hole 87 showing layer of dumped hearth waste

- 7.42 This deposit and the tree throw holes were overlain by a layer of pale hillwash that was up to 0.2m thick. Upslope, to the south-west this subsoil thinned and did not extend beyond the top of the ridge. A potentially modern quarry (86) was cut into the ridge close to the south-western end of the trench (Fig. 5, section 21). This quarry was also recorded in Trenches 11 and 12 and seemed to extend across much of the area between. The fills of this quarry and the hillwash to the south were sealed by a layer of buried topsoil (81) that was overlain by a layer of later topsoil and turf (80).

Trenches 9 and 74

- 7.43 Close to the south-western corner of Field 4, Trenches 9 and 74 were excavated to depths of between 0.3m and 0.6m (Fig. 6). A truncated ditch (111) was recorded in both trenches running approximately north-west to south-east. In Trench 9, this feature had a U-shaped profile, measuring c.1.1m wide by up to 0.35m deep (Fig. 6, section 37; Plate 11). The silty fill (128) of this feature produced no finds or charcoal; its alignment, however, suggested it pre-dated the post-medieval field system. The ditch was sealed by up to 0.3m of buried ploughsoil (130) which was sealed by up to 0.15m of later topsoil and turf (129).



Plate 11: Ditch 111

Trench 10

- 7.44 Trench 10 was positioned to record a sample profile across the upstanding ridge and furrow earthworks in this quadrant of the field (Fig. 6). The trench was excavated to a depth of 0.4m at its north-eastern end, 0.48m close to its centre and 0.38m at its south-western end. A single tree throw hole (98) was the only feature cut into the natural glacial geology (Fig. 6, section 25). This was sealed by up to 0.2m of hillwash (127), which was overlain by up to 0.2m of buried ploughsoil (126) and then a c.0.15m thick layer of later topsoil and turf (125). The extant earthworks had a shallow profile of up to 0.15m in height and the distance between the ridge peaks was c.5m (Fig. 6, section 32).

Trench 11

- 7.45 To the north, Trench 11 was excavated to a depth of between c.0.2m and 0.75m (Fig. 6). The only feature within this trench was a continuation of the quarry recorded in Trenches 7 and 12.

Trench 12

- 7.46 Trench 12 was positioned to investigate a prominent ridge as well as a former boundary recorded on historic mapping (Fig. 6). The north-western end of the trench was excavated to a depth of 0.23m where potential lacustrine clays were encountered. To the south-west the natural geology rapidly rose into a gravel terrace that formed the prominent ridge. At the base of this slope were several natural clay-filled features (including 70 and 73), which were overlain by a 0.1m thick layer of silty clay (75) which was potentially a lacustrine deposit. This was overlain by a subsoil (or buried former ploughsoil; 78) that was up to 0.2m thick.
- 7.47 To the north, where the boundary marked on historic mapping would have crossed the trench two shallow intercut ditches (103 and 105) were cut into subsoil 78 (Fig. 6, section 27; Plate 12).



Plate 12: Intercut ditches 103 and 105 and cinder-filled feature 100

- 7.48 These ditches also cut a shallow gully (109) of unknown date or function. Ditch 103 was over 0.9m wide by up to 0.3m deep and was mostly truncated away by ditch 105. The later recut (105) was c.1.9m wide by up to 0.3m deep and was cut by a deep trench (107) for a large land drain. A 4.6m wide hollow (100) overlay the fills of all three features up to a depth of 0.3m. This was infilled with a stony deposit (101) that

was overlain by a deposit of cinders (102). These deposits (101 and 102) were probably related to landscaping associated with the removal of the boundary (c.1923).

- 7.49 The edge of the quarry recorded in Trenches 7 and 11 was present close to the southern end of this trench. All of the features and deposits in Trench 12 were sealed by a 0.1m–0.2m thick layer of topsoil and turf (77).

Trench 13

- 7.50 To the north-east of Trench 12, a second trench was excavated across the same former boundary (Fig. 7). This trench extended from the flat area of Field 4 to the lower slope of the gravel ridge to the south-east. It was excavated to a depth of c.0.4m across most of its length but was c.0.7m deep on the lower slope of the ridge.



Plate 13: Gully 132 (foreground) and post-medieval boundary ditch (background)

- 7.51 A potential natural gully (134) similar to those recorded in Trench 12 was recorded in the flat area in the north-western half of the trench. An undated gully (132) was recorded close to the south-eastern end of the trench on the lower slope of the ridge (Plate 13). This gully was shallow, measuring c.0.3m wide by up to 0.05m deep, and was aligned approximately north-east to south-west (Fig. 7, section 35).
- 7.52 Approximately 7m to the north-west the trench was extended to investigate an area of potential features and the gravel ridge. The post-medieval boundary was recorded running across the trench from south-west to north-east. To the north and parallel to this was a shallow gully (116) that was up to 0.7m wide by up to 0.17m deep (Fig. 7, section 29). Both gullies (132 and 116) were sealed by a layer of hillwash (137) similar to that cut by the boundary ditches in Trench 12. This suggests that these features pre-dated the post-medieval boundary ditches and therefore could represent earlier field boundaries.
- 7.53 The hillwash (137) was overlain by up to 0.1m of buried ploughsoil which was, in turn, sealed by up to 0.1m of later topsoil and turf (138).

Trench 15

- 7.54 Trench 15 was excavated to the north of Trench 13. It was situated upon a flat area, and the lower portion of a gentle slope that extended northwards (Fig. 7). The trench was excavated to a depth of c.0.3m and potential lacustrine clays were encountered at its southern end. To the north the natural geology turned sandy as it rose. A single tree throw hole (54) that contained charcoal was recorded in this sandy area.

Trench 16

- 7.55 Approximately 29m to the east, Trench 16 was excavated on the same slightly higher ground as Trench 15. It was excavated to a depth of between 0.25m and 0.33m and was positioned to investigate a post-medieval boundary marked on historic mapping (Fig. 7). Part of this trench was extended as a 4.5m by 11m 'box' to reveal the extent of a potential pit (65).

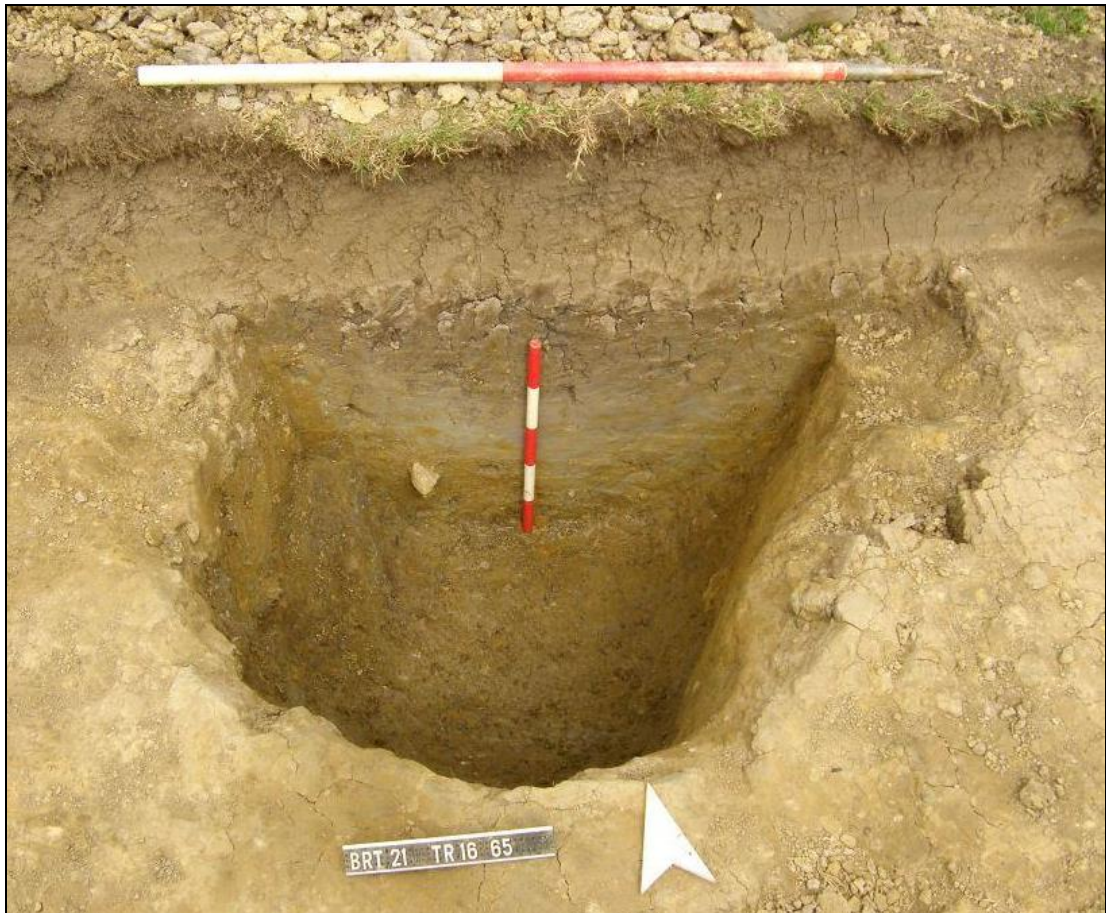


Plate 14: Section through pit 65 recorded in the initial trench edge

- 7.56 Pit (65) was sub-oval in plan and had a U-shaped profile with steep sides and a broadly flat base (Plates 14 and 15). It measured 1.4m by 0.95m by up to 0.6m deep (Fig. 7, sections 18 and 28).
- 7.57 The primary fill (68) of the pit was a mid-orange clay that was up to 0.2m thick. This was overlain by up to 0.3m of mid-blue silty clay (67). The upper fill (66) of the pit was darker and less clayey; this deposit contained 39 Roman-period pottery sherds (187.2g). These sherds included large unabraded fragments from a jar and a single fragment from a samian vessel.



Plate 15: Recording pit 65 after expanding the trench

- 7.58 A second pit (112), recorded 1.67m to the north-east, was also sub-oval with steep sides and a broadly flat base (Fig. 7, section 31; Plate 16). Pit 112 measured 1.05m by 0.8m by up to 0.33m deep; its single clayey fill (120) contained no finds.



Plate 16: Pit 112

7.59 Approximately 5.5m to the east, two intercut ditches (92 and 94) and a parallel shallow gully (58) extended across the trench on a north-northwest to south-southeast alignment (Fig. 7, section 19; Plate 17). These features corresponded with the position of the boundary marked on historic mapping. The earliest ditch (92) was over 1m wide by up to 0.56m deep. After this feature had silted up (93) it was recut by another ditch (94). The upper fill of feature 92 had clearly washed into ditch 94 (as fill 95) creating a shallow upper profile. The upper fill (57) of this later ditch contained six post-medieval glass fragments, a modern leather shoe (RF 1) and four post-medieval pottery sherds (91.4g). The gully (58) was undated but ran parallel to the boundary.



Plate 17: Intercut ditches 92 and 94

7.60 All features were overlain by a layer of buried ploughsoil (64) which was up to 0.15m thick. This was, in turn, sealed by a 0.15m thick layer of later topsoil and turf (63).

Trench 19

7.61 Trench 19 was located c.85m to the east of Trench 16; it was excavated to a depth of c.0.4m and a single west-northwest to east-northeast plough furrow was the only

feature present. This was overlain by a layer of former ploughsoil (c.0.2m thick) which was sealed by up to 0.2m of later topsoil and turf.

Area 3

Field 5

- 7.62 Field 5 was broadly flat, but the ground rose from a stream that bounded the western edge of the field towards a maximum height close to the centre of the eastern edge of the field. The geophysical survey indicated that this field contained ridge and furrow ploughing aligned west-northwest to east-southeast. This was confirmed within six of the trial trenches (Trenches 29, 31, 33, 34, 35 and 36).

Trench 29

- 7.63 Trench 29 was excavated close to the south-western corner of Field 5 (Fig. 2). It was dug to a depth of between 0.26m and 0.28m and a west-northwest to east-southeast aligned furrow was recorded close to the south end of trench. This was overlain by up to 0.1m of subsoil/hillwash, which was sealed by an intermittent layer of former ploughsoil (up to 0.1m thick). The trench was sealed by a 0.15m thick layer of later topsoil and turf.

Trench 31

- 7.64 Approximately 120m to the east, Trench 31 was excavated to a depth of between 0.29m (northern end) and 0.37m (southern end). Two plough furrows cut across the trench on a west-northwest to east-southeast alignment. These were sealed by an intermittent layer of hillwash (up to 0.05m thick) which was overlain by up to 0.1m of former ploughsoil and a layer of later topsoil and turf (c.0.15m thick).

Trench 33

- 7.65 Trench 33 was c.87m to the north-west of Trench 31 and contained a small pit (194); the only feature of note recorded within Field 5 (Fig. 8). The trench was excavated to c.0.3m deep and pit 194 was located c.32m from its southern end. Pit 194 was sub-oval with a V-shaped profile and measured 0.7m by 0.4m by up to 0.33m deep (Fig. 8,

section 56; Plate 18). Neither its lower clayey fill (195), nor its upper silty fill (196) contained any artefacts.



Plate 18: Pit 194

- 7.66 A single furrow remnant (aligned west-northwest to east-southeast) was also recorded within this trench. A 0.1m thick layer of buried ploughsoil (192) sealed both features. This was overlain by up to 0.2m of later topsoil (191).

Trench 34

- 7.67 Approximately 36m to the west, Trench 34 was excavated to a depth of between 0.23m (north end) and 0.29m (south end). The trench contained two plough furrows on a west-northwest to east-southeast alignment. These were sealed by an discontinuous layer of former ploughsoil (up to 0.05m thick) that was sealed by up to 0.25m of topsoil and turf.

Trench 35

- 7.68 Trench 35 was located c.38m to the east of Trench 33 and was excavated to a depth of 0.2m at its northern end and 0.54m to the south (overcut into the natural geology). Three west-northwest to east-southeast aligned furrows were present. These features were overlain by up to 0.1m of former ploughsoil and up to 0.3m of later topsoil and turf.

Trench 36

- 7.69 A trench (36) was excavated c.58m to the east of Trench 35 to a depth of between 0.39m (north end) and 0.23m (south end). Seven plough furrows (aligned west-northwest to east-southeast) were present. These were overlain by up to 0.1m of former ploughsoil and up to 0.3m of later topsoil and turf.

Field 6

- 7.70 Field 6 was located to the immediate east of Field 5; the ground in this field sloped gently downwards towards the south-east. Ridge and furrow ploughing aligned west-northwest to east-southeast was recorded by geophysical survey, and corresponding furrows were recorded in six of the trenches in this field (Trenches 38, 40, 41, 44, 45 and 46). It is possible that these represent a continuation of those recorded in Field 5.

Trench 38

- 7.71 Trench 38 was located close to the south-western corner of Field 6. It was excavated to a depth of between 0.21m (north end) and 0.39m (south end). A collection of flat stone slabs that seemed to form the end of a stone-lined feature was encountered in the eastern edge of the trench, close to its southern end. A 2.5m by 3m extension was excavated to investigate these stones; this investigation demonstrated that the stones were part of a natural outcrop. The only archaeological features present within the trench were eight plough furrows on a west-northwest to east-southeast alignment. These were overlain by up to 0.1m of former ploughsoil and up to 0.2m of later topsoil and turf.

Trench 40

- 7.72 Approximately 46m to the east of Trench 38, Trench 40 was excavated to a depth of between c.0.3m and c.0.4m. Two west-northwest to east-southeast aligned furrows were present within this trench. These were overlain by up to 0.2m of former ploughsoil and up to 0.15m of later topsoil and turf.

Trench 41

- 7.73 Trench 41 was excavated c.48m to the east of Trench 40. Natural geology was encountered at a depth of c.0.25m and the only archaeological features present were four plough furrows. These were aligned west-northwest to east-southeast and were overlain by up to 0.1m of former ploughsoil and up to 0.15m of later topsoil and turf.



Plate 19: Feature 161

Trench 42

- 7.74 Approximately 31m to the west of Trench 41, Trench 42 (Fig. 8) was excavated to a depth of between 0.3m (south-east end) and 0.45m (north-west end). Three small discrete features (161, 180 and 182) were cut into the glacial deposits. These features

were shallow and irregular and probably represent either truncated pits or natural root boles. Feature 161 was sub-circular in shape with an irregular profile (Fig. 8, section 44; Plate 19). It was located close to the south-eastern end of the trench and measured c.0.3m by 0.2m by up to 0.07m deep. Its fill (162) was a sterile silty clay.

7.75 Features 182 and 180 were located close to the north-western end of the trench and were both sub-circular in plan. Feature 182 had a U-shaped profile and was c.0.2m by 0.2m by up to 0.1m deep (Fig. 8, section 53). Pit 180 had an irregular profile and was c.0.25m by 0.2m by up to 0.14m deep (Fig. 8, section 52). The fills of both these potential pits were similar to the fill of feature 160 except the both contained charcoal.

7.76 All three features were sealed by up to 0.1m of buried ploughsoil (159) which was sealed by up to 0.2m of later topsoil and turf (158).

Trench 43

7.77 This trench was c.30m to the north of Trench 42 and was excavated to a depth of between 0.3m to 0.34m (Fig. 8). A shallow tree throw hole (187) and three possible root holes or truncated pits/postholes (190, 177 and 179) were recorded within this trench.

7.78 Feature 190 was sub-circular in plan with a rounded V-shaped profile. It was located c.14m from the eastern end of the trench and measured c.0.15m by 0.15m by up to 0.09m deep. The dark silty fill (189) of feature 190 contained charcoal. Approximately 8m to the east, features 177 and 179 also contained charcoal. These were both small and shallow (Fig. 8, section 50); feature 177 was sub-oval in plan whereas feature 179 extended beyond the investigated area. All three of these potential features could have been truncated pits or postholes, but equally they may have been natural in origin.

7.79 These features were overlain by up to 0.1m of buried ploughsoil (174), which was overlain by up to 0.2m of later topsoil (173).

Trench 44

7.80 Trench 44 (Fig. 8) was located to the north-west and was excavated to a depth of between 0.25m and 0.43m (at its south-western end). It contained two small discrete

features (163 and 157) and the edge of a possible feature (166) that extended beyond the trench to the south-east. All three of these features were shallow and none of them contained artefacts or charcoal.

- 7.81 Feature 163 (Plate 20) may have been a small truncated pit and was located c.25m from the north-eastern end of the trench. It was sub-circular in plan with a shallow U-shaped profile and measured 0.45m by 0.4m by up to 0.13m deep. Feature 157, located c.8m to the south-west of feature 163 measured c.0.2m by 0.2m by up to 0.05m deep. Approximately 8m to the south-west of feature 157, feature 166 was c.1.5m by more than 0.6m in plan by up to 0.15m deep.



Plate 20: Pit 163

- 7.82 The shallow remnants of six plough furrows extended across the trench from west-northwest to east-southeast at a spacing c.3m. The furrows were overlain by up to 0.1m of buried ploughsoil (155) that was overlain by up to 0.2m of later topsoil (154).

Trench 45

- 7.83 To the east of Trench 44, Trench 45 was excavated to a depth of between 0.25m (south-eastern end) and 0.4m (north-western end). The only features present were three furrows on a west-northwest to east-southeast alignment and an undated tree-throw hole (168; not illustrated). The upper fill (169) of feature 168 contained charcoal (Appendix D); however, this was not within a discrete dump of material. The features were overlain by up to 0.15m of buried ploughsoil that was overlain by up to 0.15m of later topsoil.

Trench 46

- 7.84 Trench 46 was excavated c.50m to the east of Trench 45. Natural geology was encountered at a depth of between 0.2m (northern and southern ends) and up to 0.4m (in the northern half). Six west-northwest to east-southeast aligned plough furrows were the only archaeological features present. These were overlain by up to 0.15m of buried ploughsoil that was overlain by up to 0.15m of later topsoil.

Field 7

- 7.85 Field 7 was located to the north-east of Fields 5 and 6 and the ground sloped gently downwards from its southern edge to the west, north and east. Evidence of former agriculture was recorded in the form of north-west to south-east aligned furrow remnants in seven of the trenches excavated in this field (Trenches 58, 60, 61, 63, 64, 65 and 66). A possible second regime of ploughing aligned north-east to south-west was recorded in Trenches 62 and 65. The results of the geophysical survey were inconclusive, however, faint traces of possible ridge and furrow ploughing on a north-west to south-east alignment was visible in places.

Trench 58

- 7.86 Trench 58 was excavated close to the western edge of Field 7. It was excavated to a depth of 0.32m at its south-western end and 0.5m at its north-eastern end. The trench contained a single north-west to south-east aligned furrow. This feature was overlain by up to 0.2m of former ploughsoil which was sealed by a 0.1m to 0.15m thick layer of later topsoil and turf.

Trench 59

- 7.87 This trench was positioned to test a linear geophysical anomaly that seemed to extend from the southern field boundary on a straight west-northwest to east-southeast alignment (Fig. 2). On excavation, however, no corresponding feature was present within the trench. Trench 59 was excavated to a depth of between c.0.3m and 0.42m (close to its centre). The only feature of note was a 10m wide palaeochannel (probably glacial) that ran across the trench on a north-east to south-west alignment approximately 15m from its southern end (Fig. 9). This channel was filled with a firm clay that was over 0.5m thick.

Trench 60

- 7.88 Trench 60 was located approximately 48m to the east of Trench 59. It was excavated to a depth of between 0.27m (eastern end) and 0.42m (western end). Faint traces of several north-west to south-east aligned plough furrows were apparent within this trench. This was overlain by up to 0.2m of former ploughsoil which was sealed by a 0.1m thick layer of later topsoil and turf.

Trench 61

- 7.89 Approximately 16m to the north-east of Trench 60, Trench 61 was excavated to a depth of c.0.3m. Seven plough furrows (aligned north-west to south-east) were present. These were overlain by up to 0.2m of former ploughsoil which was sealed by a 0.1m thick layer of later topsoil and turf.

Trench 62

- 7.90 Trench 62 was positioned on a shallow slope close to the summit of the high ground in Field 7, c.40m to the south-east of Trench 61. It was excavated to a depth of 0.37m at its western end and c.0.2m at its eastern limit (Fig. 9). Two possible pits (197 and 199) were recorded c.10m from the western end of the trench. Pit 197 was sub-oval in plan with a U-shaped profile and measured c.0.3m by 0.2m by up to 0.15m deep (Fig. 9, section 57). Approximately 1.4m to the east, pit 199 was sub-circular in plan with a more irregular profile, measuring c.0.4m by 0.4m by up to 0.15m deep (Fig. 9, section 58). Both of these features contained charcoal and possible flecks of burnt stone or fired clay.

- 7.91 A layer of buried ploughsoil (207) that was up to 0.2m thick overlay these features. This was, in turn, sealed by up to 0.1m of later topsoil and turf (206).

Trench 63

- 7.92 This trench was located to the north-east close to an area of disturbed ground identified during the geophysical survey. It was excavated to a depth of c.0.2m but deepened to 0.4m at its south-eastern end due to a layer of made ground. The truncated remnants of four plough furrows were recorded close to the northern end of trench. These were aligned north-west to south-east and were, spaced at between 2m-5m apart. A layer of clayey made ground was present in the southern 17m of the trench overlaying the natural glacial clay. This layer was up to 0.25m thick and contained post-medieval finds (discarded). The furrows and the northern portion of the trench were sealed by a buried ploughsoil (c.0.1m thick) which was overlain by c.0.1m of later topsoil. The made ground to the south was overlain by topsoil.

Trench 64

- 7.93 Trench 64 ran down the northern slope c.55m to the west of Trench 63 and was positioned to test a geophysical anomaly that appeared to run across the field from the south-west to north-east. The trench was excavated to a depth of between 0.2m and 0.36m (Fig. 9). A tree throw hole (214) and a stone-filled 'French' drain (219) were recorded in the central portion of this trench. The drain corresponded with the geophysical anomaly and was probably the same feature as those recorded in Trenches 65, 66 and 68.

- 7.94 Two furrows (aligned north-west to south-east) were recorded to the north of the drain and three furrows on a north-east to south-west alignment were recorded to the south. These features were overlain by a c.0.15m thick layer of buried ploughsoil (216), which was overlain by up to 0.15m of a later topsoil (215).

Trench 65

- 7.95 To the west, a parallel 4m wide trench (Trench 65) was excavated to further investigate the geophysical anomaly tested in Trench 64. Trench 65 was excavated to a depth of between c.0.3m to 0.4m (Fig. 9). It contained a plough furrow aligned north-west to

south-east as well as another aligned north-east to south-west. The continuation of the 'French' drain recorded in Trenches 64, 66 and 68 was present c.31m from the southern end of the trench. All features were overlain by up to 0.2m of buried ploughsoil which was overlain by up to 0.2m of a later topsoil.

Trench 66

- 7.96 Trench 66 was located c.50m to the west of Trench 65 and was excavated to a depth of between 0.38m and 0.52m. A north-west to south-east aligned furrow was recorded in this trench and a possible continuation of the 'French' drain recorded in Trenches 64, 65 and 68 was present close to the southern end of the trench. These features were overlain up to 0.1m of hillwash which was sealed by up to 0.2m of buried ploughsoil. A 0.2m thick layer of later topsoil sealed the trench.



Plate 21: Gully/drain 201

Trench 68

- 7.97 Trench 68 was parallel to Trenches 64 and 65 and was located c.50m to the north-east of Trench 64 (Fig. 9). It was excavated to a depth of between 0.2m and 0.26m and contained a tree throw hole (209) and a continuation of the French drain (201) recorded in Trenches 64 and 65 (Fig. 9, section 59; Plate 21). In addition, a c.0.2m layer of dark bluish brown clay (212) containing post-medieval finds (including a pewter button; RF 4) extended for c.5m from the north-west end of the trench. This layer overlay the glacial deposits and the entire trench was sealed by a c.0.1m thick layer of buried ploughsoil (204) and a c.0.1m thick layer of later topsoil (203).

Area 4

Field 8

- 7.98 Field 8 was identified as an area of modern disturbance. Two trenches (1 and 2) were excavated on slightly higher ground close to its southern extent, and in areas where the geophysical survey indicated no disturbance had occurred. No evidence of ridge and furrow ploughing was recorded within either of these trenches, nor was any apparent within the results of the geophysical survey.

Trench 1

- 7.99 Trench 1 was excavated close to the south-eastern corner of the field, between sets of overhead lines. It was excavated to a depth of c.0.4m along most of its length, although a natural dip at the northern end meant the northernmost 10m of this trench sloped downwards to a depth of up to 0.85m (Fig. 10). The natural glacial clay was sealed by c.0.2m of buried ploughsoil overlain by up to 0.2m of later topsoil and turf for the majority of the length of the trench. At the north end of the trench, however, these two soils were overlain by up to 0.42m of dumped stony clay which was sealed by up to 0.25m of topsoil and turf (Plate 22).



Plate 22: Layers of made ground in Trench 1

- 7.100 The presence of these deposits clearly demonstrates that modern dumping of material had been undertaken directly onto the earlier ground level in this area.

Field 9

- 7.101 This field was located to the north-east of Field 7 and included areas of potential historic disturbance identified by the geophysical survey. A single very shallow plough furrow that was aligned approximately east to west was recorded in Trench 69.

Trench 69

- 7.102 Trench 69 was excavated close to the south-western corner of Field 9 to a depth of c.0.3m. Two sterile tree throw holes and a single east to west aligned furrow were the only features present. These were overlain by a layer of clayey subsoil (c.0.1m thick), which was sealed by up to 0.3m of topsoil.

Trench 70

- 7.103 Trench 70 was located to the north-west of Trench 69 in a flat area to the west of a raised trackway. The trench (Fig. 10) was excavated to a depth of between 0.3m (south

end) and 0.4m (north end). Two tree throw holes were present in the southern half of the trench; an undated gully (222), a post-medieval pit or posthole (220) and the tip of a possibly modern post were recorded to the north.

- 7.104 Gully 222 extended into the trench from the south-west approximately 32m from the northern end of the trench. It was very shallow (up to 0.07m deep) and was c.0.5m wide (Fig. 10, section 63; Plate 23). This feature did not contain finds or charcoal. Approximately 7m to the north of gully 222, a small pit (220) (or posthole) was recorded that contained post-medieval artefacts. This sub-oval feature had steep sides with a flat base and measured c.0.35m by 0.4m by up to 0.2m deep (Fig. 10, section 62; Plate 24). The pointed tip of a post driven into the glacial clay c.9m to the north of pit 220 most likely represented a modern machine-cut timber. This post possibly marked the extent of historic dumping apparent as a layer of made ground to the north.



Plate 23: Gully 222



Plate 24: Pit 220

- 7.105 For the majority of the trench, the features and deposits were sealed by a 0.1m thick clayey subsoil which was overlain by up to 0.2m of topsoil and turf. Within the northern 15m of the trench (to the north of the post) this clayey subsoil seemed to have been disturbed as post-medieval and modern finds were visibly pressed into the surface. This was overlain by a 0.1m thick layer of made ground which was, in turn, sealed by up to 0.2m of topsoil.

Trench 71

- 7.106 Approximately 80m to the north-east of Trench 70, Trench 71 was excavated between areas of disturbance evident from the results of the geophysical survey. Due to the presence of a ditch and a collection of other potentially significant archaeological features, two short trenches (78 and 79) were excavated either side of Trench 71 (Fig. 10).

- 7.107 Trench 71 was excavated to a depth of c.0.3m and a collection of five features were excavated approximately 17m from the eastern end of the trench. These included a relatively substantial ditch (234), a gully (228), two possible pits (238 and 240) and a probable tree throw hole (242).
- 7.108 Feature 242 had diffuse edges and measured c.1.1m by 0.9m by up to 0.2m deep (Fig. 10, section 65). It was filled with a mixed yellow and blue grey silty clay (243) that contained charcoal. Feature 242 was cut by a straight gully (228) that extended into the trench from the north-west and terminated after 1.5m (Plate 25). Gully 228 had steep sides and a broadly flat base that formed a U-shaped profile c.0.4m wide by up to 0.2m deep. The primary fill (232) was similar to the fill of feature 242, being a mixed silty clay with occasional flecks of charcoal. This was overlain by a thick charcoal-rich deposit (230) that was banked up against the gully terminus. The final fill (229) of the gully was lighter than deposit 230 with less charcoal.



Plate 25: Gully 228 and feature 242

- 7.109 A shallow sub-circular pit (or tree throw hole) (240) was recorded to the immediate east of the terminus of gully 228. Pit 240 extended beyond the investigated area to the north and was 0.9m by over 0.7m by up to 0.15m deep. Its fill (241) was a dark grey

brown silty clay with yellow clayey streaks that contained a few sub-rounded stones that were up to 0.1m in size and a moderate amount of charcoal. A second similar feature (238) with an almost identical fill (239) was recorded c.0.5m to the east (Fig. 10, section 70).

- 7.110 To the west of this collection of features, a ditch (234) ran across the trench on a north-west to south-east alignment. It had a stepped profile with a steeper profile near its base (probably as a result of the erosion of its upper edges) and measured c.1.5m wide by up to 0.45m deep (Fig. 10, section 66; Plate 26). The primary fill (245) was a 0.14m thick mix of pale-yellow clay and grey silty clay with occasional flecks of charcoal. This was overlain by 0.12m thick dark silty deposit (244) that included thin laminations of charcoal and yellow clay. The upper fill (233) was a grey brown silty clay with yellow steaks that contained a few sub-rounded stones that were up to 0.15m in size and flecks of charcoal.



Plate 26: Ditch 234

- 7.111 These features were overlain by a 0.1m thick layer of clayey subsoil (236) that was similar to that recorded in the other trenches excavated in this field. The subsoil was overlain by up to 0.2m of topsoil (235).

Trench 78

- 7.112 This trench was excavated to the south of Trench 71 to a depth of between 0.25m and 0.34m. The continuation of ditch 234 was recorded cutting across this trench, which continued beyond the edge of Trench 78 to the south-east. The ditch was of similar proportions to that exposed in Trench 71, and it was overlain by a 0.15m-0.2m thick layer of clayey subsoil that was sealed by up to 0.15m of topsoil.

Trench 79

- 7.113 Trench 79 was excavated to the north of Trench 71 to a depth of between 0.38m (west end) and 0.29m (east end). No continuation of ditch 234 was visible within Trench 79. The glacial clay was overlain by a clayey layer of made ground which was up to 0.2m thick. This was sealed by up to 0.15m of topsoil.
- 7.114 As there was little difference in ground height between Trenches 71 and 79 (71.21m aOD and 70.86m aOD and the level of the natural deposits (0.3m bgl and up to 0.38m bgl, respectively), it is extremely unlikely that a continuation of ditch 234 had been truncated away by the dumping associated with the layer of made ground in Trench 79. It is more likely that the ditch turned before reaching Trench 79, or that it terminated.

Field 10

- 7.115 Two additional trenches (76 and 77) were excavated in the southern half of this field in response to changes to the proposed development. The geophysical survey did not extend into this area. A single plough furrow recorded in Trench 69 suggested that none of the ploughing regimes recorded in the fields to the south and west extended into this area.

Trench 76

- 7.116 Trench 76 was excavated close to the south-eastern corner of Field 10 to a depth of between 0.4m and 0.75m. A single west-southwest to east-northeast plough furrow (measuring 1.1m wide by up to 0.1m deep) was present. This feature was overlain by up to 0.1m of hillwash which was overlain by up to 0.35m of topsoil.

8.0 DISCUSSION

8.1 Four primary conclusions can be made from the results of the trial trenching:

- in reference to the regional research framework (Petts and Gerrard 2006), the majority of the excavated trenches did not contain significant archaeological remains;
- in reference to the regional research framework (*ibid.*), significant archaeological remains were recorded in Field 4 (Trenches 6, 7 and 16) and Field 9 (Trenches 71 and 78). In addition, potentially significant features were recorded in Field 3 (Trench 24), Field 4 (Trenches 9, 13, 15 and 74), Field 5 (Trench 33), Field 6 (Trenches 42, 43 and 44), Field 7 (Trench 62) and Field 9 (Trench 70);
- although most of the post-medieval and modern features and deposits identified within the trial trenches were apparent within the results of the geophysical survey, several features, including ditches that extended beyond the trench limits, were not. Therefore, it is conceivable that features are present within the PDA that have not been recorded by geophysical survey; and
- at least some of the historic landfill was undertaken above the previous ground level suggesting any archaeological features present in these areas may have survived beneath.

Areas of low archaeological potential

8.2 The archaeological trial trenching has not provided evidence that Fields 1, 2, 8 and 10 contain archaeological remains that would be considered as archaeologically significant within the regional research framework (*ibid.*). In addition, the majority of trenches excavated in Fields 3, 5 and 6 and 7 also did not contain significant archaeological remains.

8.3 The results of the trial trenching demonstrated that all of the evaluated fields (with the exception of Field 8) were agricultural fields during (at least) the post-medieval period. Few finds were recovered from the investigated furrows, however, an assessment of spacing, curvature and association with other features and boundaries has allowed a very broad characterisation. All of the furrows were likely to be of a post-medieval

date, however, the presence of medieval pottery and multiple regimes within the same field as well as furrows that pre-dated the boundaries marked on historic mapping indicated a long history of agriculture.

- 8.4 The furrows recorded in Field 1 appeared to span the entire area and pre-dated at least one of the boundaries marked on historic mapping. Additionally, three small sherds of medieval pottery were recovered from one of these furrows (Trench 49). It is therefore possible that these were medieval in origin. However, considering the spacing of the furrows and the small amount of pottery recovered they are more likely of an early post-medieval date.
- 8.5 Within Field 2 there were two regimes of ploughing on differing alignments, though these could not be dated or phased. Considering the geophysical results and the spacing of the furrows, the west-southwest to east-northeast aligned ploughing may have been earlier.
- 8.6 The furrows recorded in Field 4 corresponded with the historic boundaries to some degree and considering their spacing and straightness were likely of a post-medieval date. The evidence that some of the furrows pre-dated some of the boundaries was, however, suggestive of a more complex history of ploughing regimes. To the north, the furrows in Fields 5 and 6 seemed contemporary and possibly pre-dated the extant boundary that separated them. Interestingly, the two regimes of ploughing in Field 7 seemed to respect the stone-filled gully/drain that ran across Trenches 64, 65 and 68 suggesting that this may have marked an early boundary.
- 8.7 The post-medieval ditch (19) recorded in Trench 47 (Field 1) and the gully/drain in Field 7 suggested the presence of an early post-medieval arrangement of fields and boundaries that differed from that marked on the first edition Ordnance Survey map of 1858. In addition, the pit or posthole (220) recorded in Trench 70 (Field 9) suggested some level of activity in this area during that period.
- 8.8 The field boundaries marked on historic mapping and investigated as part of the trial trenching had few surviving associated cut features or earthworks. In places, these remains had been severely truncated by later activity, such as in Field 4.

- 8.9 The presence of a buried ploughsoil in most of the fields (all except Field 9), beneath a later topsoil and turf suggests that the fields were once ploughed and were likely converted to pasture during the post-medieval or modern period.

Areas of significant archaeology

- 8.10 Within Field 4, archaeological remains of potential significance were recorded in Trenches 6 and 7. Tree throw hole 87 was a natural feature, but it contained a deposit of charcoal and heat-fractured stone, which most likely represented hearth waste from nearby occupation. Such deliberate deposition of occupation waste within natural features was a common practice during early prehistoric periods (Lamdin-Whymark 2008, 73-100) and although the deposits in features 84 and 87 are as yet undated, it is considered likely that they are of an early prehistoric date.
- 8.11 Tree throw holes are formed when a tree falls through natural processes, usually either as a result of disease or wind (*ibid.* fig. 29). The hollow created by an uprooted root bole is usually infilled through a natural sequence of slumping, collapse and silting. This process can result in the incorporation of small amounts of material from the surrounding soil into the tree-throw, however, episodes of intentional infilling, like deposit 114 within feature 87, are distinctly different from naturally formed deposits (*ibid.* 73-100).
- 8.12 Tree throw holes can be of any date where trees are present in that location and therefore, without dating evidence, it could be argued that a dump of hearth waste like that discovered in tree throw hole 87 could be the result of nearby occupation of any date. Historic mapping suggests the area was agricultural fields in the 19th century and the presence of tree throw holes (and by inference woodland) indicates that the features 84 and 87 were at least earlier than the 19th-century.
- 8.13 Assessment of the recovered charcoal has identified charred nutshell derived from hazelnuts. Hazelnuts were a staple in early prehistoric periods and, although hazelnuts are occasionally recovered from features of all periods (Hall and Huntley 2007), charred nutshell fragments are most often recovered from Mesolithic to Bronze Age deposits that incorporate hearth waste and/or other midden material (for instance see Speed 2021). Indeed, post-excavation analysis of deposits within tree throw holes and clusters of nearby, potentially related pits recorded during upgrading of the A1(T)

between Dishforth and Barton demonstrated that the majority (c.95%) of those that were radiocarbon dated were of an early prehistoric date (*ibid.*, 133).

- 8.14 Features 84 and 87 recorded within Trench 7 were overlain by a 0.2m thick layer of hillwash (82), which was in turn sealed by two layers of soil (80 and 81; Plate 27). Based on the finds noted (but discarded) from the lower soil layer (80), these deposits were most likely related to post-medieval agriculture (c.19th century). The hillwash layer (82) produced no dating evidence but it was pale, stony and leached, suggesting it had not formed by an agricultural process. Features 84 and 87, and the activity that created the hearth waste, therefore can be placed before the post-medieval period. Considering the features were also overlain by hillwash, they were probably considerably earlier.



Plate 27: Extension to Trench 7 showing feature 87 prior to excavation (white arrow), the depth of hillwash 82 (blue arrow) and deposit 124 (red arrow)

- 8.15 If the material contained within the fill (114) of feature 87 is found to be of an early prehistoric date, it would represent a rare example of activity during this period. Few such remains have previously been recorded in the wider North-East region (Petts and

Gerrard 2006, figs. 13 and 14) and evidence of early prehistoric occupation is noticeably absent from County Durham (Hewitt *et al.* 2011, 48. 51).

- 8.16 The presence of an early soil (palaeosol; 124) in Trenches 6 and 7, sealed beneath post-medieval ploughsoils and earlier hillwash deposits, indicated unusually enhanced preservation of archaeological remains in this area. In addition, considering the local topography and presence of potential lacustrine deposits, it is likely that the gravel ridge present in Field 4, and occupied by Trenches 6 and 7, represented a dry area overlooking a lake or marsh. This would have made this area a favourable location for early prehistoric activity. Another tree throw hole containing charcoal recorded in Trench 15, on the other side of the potential former marsh, suggested that early prehistoric activity may also have extended to this area.
- 8.17 Conversely, the charcoal and potential charred seeds recovered from the upper fill (169) of tree throw hole 168 (Trench 45) in Field 6 to the north-east did not appear to represent a distinct dumping event and are therefore less likely to be early prehistoric in date.
- 8.18 The two pits (65 and 112) recorded in Trench 16 demonstrate activity in the PDA during the Roman period. Although these were the only features that could be dated to this period. The shape and form of the pits suggests that they were potential storage pits, a type of feature commonly found on or in the immediate vicinity of Romano-British settlement sites (see Heslop 1987; Fell and Robinson 2018, 13; Wood and Robinson 2015, fig. 9; Fell 2020, 94, 106-7). The presence of large unabraded sherds of pottery may indicate the presence of a settlement in the vicinity.
- 8.19 Alternatively, the pits may be part of an activity area within the wider landscape away from a settlement focus (sometimes termed 'off-site' activity). Previously excavated examples in the wider northern region (see Roberts *et al.* 2001) include field-corner enclosures where crop-processing and/or metalworking was carried out, stock control enclosures, or even religious or ritual sites. The presence of the pottery sherds, however, makes this the least likely of the two possibilities.
- 8.20 The pits had been backfilled and it is a common phenomenon that during earlier periods (see Stoertz 1997; Roberts *et al.* 2010; Abramson 1996), everyday settlement waste (including pottery sherds) did not travel far from its place of use prior to

deposition. In addition, when such waste was scattered through the landscape (such as during manuring of fields) pottery sherds within the waste become fragmented and abraded. It is therefore highly likely, especially when factoring in the limitations of the geophysical survey, that a Roman-period settlement is present within the immediate vicinity, potentially within the area to the north of Trench 16.

- 8.21 A second concentration of significant archaeological activity was recorded in Trenches 71 and 78 in Field 9. The ditch, gully and pits in Trench 71 though undated, all contained charcoal-rich deposits suggestive of intense activity in the vicinity. The pits and potentially the gully had been backfilled with waste containing charcoal. The laminations of similar material within ditch 234 indicated that it was 'open' at the same time. Considering the potential turn or interruption in the ditch to the north, it seems most likely that it formed an enclosure contemporary with the other features present in the trench. Ditch 234 was not recorded by the geophysical survey therefore its wider form remains unknown.

Areas of potentially significant archaeology

- 8.22 The presence of pits in Trench 33 in Field 5, Trenches 42, 43 and 44 in Field 6, and Trench 62 in Field 7 indicate potentially significant archaeological remains may be present in these areas. The features, however, are undated, and some could have been natural in nature.
- 8.23 In addition, the undated ditches recorded in Trenches 9 and 11 (Field 4) and Trench 24 (Field 24) indicated the potential presence of an early field system. Unfortunately, neither feature produced dating evidence. Also, as neither ditch was detected by the geophysical survey, their wider extent and form cannot be determined. The ditches have the potential to be part of an Iron Age or Romano-British field system, which are common in lowland Durham (Petts and Gerrard 2006, 46; Haselgrove and Moore 2016; Allen 2016). At the other end of the scale of significance, these ditches, along with ditch 19 (Trench 47), may be parts of an early post-medieval field system that varied only slightly from the extant boundaries.

Assessment of the geophysical survey results

- 8.24 The results of the trial trenching suggested that the previous geophysical survey had identified many of the post-medieval features present within the PDA to a greater or lesser degree. These features included land drains, ridge and furrow ploughing, historic field boundaries and general areas of dumping. However, four ditches identified during trial trenching, which have the potential to represent the remains of earlier activity within the PDA had not been recorded by the geophysical survey. These were present in Trenches 9, 24, 47, 71, 74 and 78. It is unclear to what extent these relate to isolated features or more extensive field systems present across the PDA.

Modern landfill

- 8.25 Areas of modern landfill were encountered in Field 1 (Trench 48), Field 2 (Trenches 20 and 22), Field 7 (Trenches 63 and 68), Field 8 (Trench 1) and Field 9 (Trenches 70 and 79). It was apparent that at least some of this dumping was undertaken above the previous ground level with buried topsoil (Trenches 1 and 48) or subsoils (Trenches 1, 63, 68 and 70) being recorded beneath the layers of made ground. Some of the made ground was deposited directly upon the glacial clays, however, little or no associated ground truncation was apparent in these areas (see Trench 79). It is therefore possible that archaeological remains could be present beneath these deposits.
- 8.26 The wider areas of landfill, however, were avoided during the trial trenching and hence were not substantially evaluated. The deposits encountered, therefore, may not reflect the methods of dumping across the entire site.

9.0 ASSESSMENT OF THE SITE ARCHIVE

Initial analysis

- 9.1 In line with national guidance (ALGAO 2015; Historic England 2015a; Brown 2011; ClfA 2020a), as part of the assessment of the site records and archive consolidation, an initial assessment of its significance has been undertaken. Matrices have been drawn up for elements of the excavation showing the stratigraphic relationships between the individual contexts.

9.2 Plans and sections have been checked against context record sheets to ensure full cross-referencing. The photographic record produced during the fieldwork has been catalogued by frame number in preparation for its deposition within the site archive. The drawings produced on site were scanned and digitised into AutoCAD software. Digital catalogues of context records (Appendix B), drawings, photographs, and a database of the artefacts and environmental samples have also been produced.

Quantification of site archive

9.3 Environmental samples recovered during the trial trenching were catalogued and processed prior to a brief specialist assessment (Campbell *et al.* 2011). The recovered finds assemblage was cleaned, identified, marked (where appropriate), catalogued and properly packed for long-term storage in accordance with national guidelines (English Heritage 1995; Watkinson and Neal 2001; ClfA 2020b). Quantification of each category of the site archive has been undertaken; these are listed in Tables 1 and 2.

Table 1: Quantification of record categories

Record category	No.
Context descriptions	257
Plans	66
Sections	70
Digital photographs	1241

Table 2: Quantification of finds categories

Finds category	No.
Lithics	3
Roman pottery	39 sherds (187.4g)
Medieval pottery	3 sherds (3.9g)
Post-medieval pottery	56 sherds (677.1g)
Ceramic Building Material	6 fragments (38g)
Possible worked/utilised stone	9
Shoe	1 (191.8g)
Clay pipe	7 (21.2g)
Copper alloy	4 (12.2g)
Glass	18 (519.7g)
Glass waste	2 (27.5g)
Plastic	2 (3.3g)
Environmental samples	23

Recommendations for further work

- 9.4 In line with the *Standards* (DCCAS 2021) and national guidelines (ALGAO 2015; Historic England 2015a; ClfA 2020a), the need for further work upon the site archive has been assessed.
- 9.5 Currently, the potential for further work is limited and would be best evaluated following, and in conjunction with, the results of any further archaeological works that may be undertaken as part of the proposed development. However, it may be suggested that this could include refinement of the dating of the Roman-period and earlier remains to provide a more comprehensive understanding of the archaeological activity. This should be performed in conjunction with detailed analysis of the stratigraphic and spatial interrelationships of the features and deposits which comprise the site record. In particular, more accurate dating of the activity will be achieved through further analysis of the archive in combination with detailed specialist analysis and radiocarbon dating.
- 9.6 Further analysis of the archaeological record and synthesis of specialist information will be directed towards establishing a more comprehensive interpretation of the whole site with evidence-led conclusions clearly stated within an analysis report. This analysis will include a comparison of the evidence gathered at similar sites recorded in the North-East region.

Publication

- 9.7 The importance of the archaeological evidence present on the site should be reassessed after any further mitigation works have been completed and the results analysed in combination. Based on the trial trenching results and in line with both national and regional guidelines (English Heritage 2010, 17; Historic England 2015a, 21; Petts and Gerrard 2006, 137) the combined results of all stages of archaeological mitigation have the potential to be of regional significance, and perhaps require publication in a regional archaeological journal.

Storage and curation

- 9.8 The written, drawn and photographic records and artefactual and environmental evidence are currently held by NAA. Subject to finalisation of discard policies

(particularly with respect to environmental material) and landowner permission, it is intended that the combined site archive of all stages of archaeological mitigation will be transferred to the recognised repository at the CoDDA at Sevenhills. All material collected during the trial trenching has been appropriately packaged for long-term storage in accordance with national guidelines (Brown 2011; ClfA 2020b).

- 9.9 Archiving work and preparation for deposition carried out to date was in accordance with local policy and national guidelines (Brown 2011; ClfA 2020c; SMA 1995). Furthermore, the archiving of any digital data arising from the project has been undertaken in a manner consistent with professional standards and guidance (Archaeology Data Service/Digital Antiquity 2011). Preparation of the digital archive will follow policy, guidance and procedures issued by the Archaeology Data Service (2020), Historic England (<https://historicengland.org.uk/research/methods/archaeology/archaeological-archives/adapt-toolkit/>) and DigVentures (<https://digventures.com/projects/digital-archives/>).
- 9.10 An online OASIS form has been initiated. Upon completion of the project, all parts of the OASIS online form will be completed for submission to the Durham HER. This will include an uploaded PDF version of the final report (a paper copy will also be included with the project archive). The OASIS form will be validated by DCCAS once they have received the report, which will become a public document upon submission.
- 9.11 A copy of all reports and the full site archive will be deposited with the receiving museum on completion of the project. Deposition shall be in accordance with written guidelines on archive standards and procedures (Brown 2011; SMA 1995). In addition to the deposition of the archive, copies of all relevant reports will be deposited with the Durham HER.

10.0 ASSESSMENT OF THE FINDS AND SCIENTIFIC ANALYSIS

Finds assessment (Charlotte Britton)

Archaeological potential

- 10.1 In total, 150 artefacts (3332.6g) that dated to between the Roman and modern periods were recovered during the trial trenching. Most of the assemblage was recovered from topsoil and subsoils, limiting their significance and usefulness in dating the activity recorded in the trenches. However, several small assemblages of artefacts were recovered from the fills of archaeological features.
- 10.2 These included 18th-20th century pottery and glass recovered from ditch fill 18 and pottery, glass and a leather shoe (19th to 20th century) recovered from ditch fill 57. In addition, clay pipe and glass dating to between the 17th and 20th century and undiagnostic CBM were recovered from the fill (221) of feature 220.
- 10.3 Of more significance were the Roman-period and medieval pottery assemblages recovered from pit fill 66 and furrow fill 41 respectively

Recommendations

- 10.4 The assessed material was generally in a good condition, but the majority was of limited significance and had no potential for further study. The undiagnostic materials such as the CBM, copper alloy, flint, plastic and stone are recommended for discard.
- 10.5 Additionally, most of the diagnostic material was recovered from topsoil and subsoil contexts and were generally typical for the periods and region. No further study is therefore recommended on this material and these assemblages are recommended for discard. Similarly, the medieval and post-medieval finds recovered from features is of limited significance and should be discarded.
- 10.6 The Roman-period pottery is more significant and is recommended for retention and deposition with the final project archive. If further archaeological fieldwork is undertaken as part of this project, the retained material should be reassessed in combination with any finds recovered during subsequent excavation.

Palaeoenvironmental assessment (Gav Robinson and Hannah Clay)

Archaeological potential

- 10.7 All of the assemblages of charcoal and charred plant remains (CPR) derived from undated features; the samples from the two potential Roman-period pits (65 and 112) contained no ecofacts.
- 10.8 Charcoal and charred nutshell and (potential) seeds were recovered from deposit 114, the fill of a tree throw hole (87). The excavator suggested that this deposit could represent a dump of early prehistoric hearth waste due to the presence of heat-fractured stone and charcoal. The identification of possible charred hazelnut shell fragments adds weight to this as these are often a common component of Mesolithic, Neolithic and Bronze Age palaeobotanical macrofossil assemblages (Hall and Huntley 2007, 23, 27, 32, 35). At the time of writing, Hall and Huntley (2007) indicated that such remains were extremely rare in the northern region (*ibid.*, figs 1, 2 and 3) with only a single Bronze Age site being recorded within County Durham. The study of such remains is therefore highlighted as a very high priority (*ibid.*, 35). This rarity is mirrored within the Regional Research Framework (Petts and Gerrard 2006, 14, 24) which highlights the recovery of Mesolithic, Neolithic and Bronze Age palaeoenvironmental material as research priorities (*ibid.*, 125, 130).
- 10.9 The assemblage from tree throw 87 is therefore a priority for radiocarbon dating as well as further analysis.
- 10.10 In addition, fills from gully 116 (deposit 118), tree throw hole 168 (deposit 169) and possible pit 197 (deposit 198) produced noteworthy assemblages of charcoal, and potential charred seeds were identified within contexts 118 and 169. If these features are deemed significant then analysis of the assemblages of palaeobotanical remains recovered from them would be of equal importance.
- 10.11 Material that could be radiocarbon dated via accelerator mass spectrometry (AMS) was recovered from most of the samples. However, the assemblages that comprised small amounts of small fragments are likely to be reworked or intrusive (see Bayliss 2015) and are not considered suitable. Therefore, only material from contexts 114, 118, 169 and 198 represent potential candidates for radiocarbon dating should this

been deemed appropriate. However, species identification and an assessment of archaeological suitability would need to be undertaken prior to submission (*ibid.*).

Recommendations

- 10.12 Potentially important assemblages of charred plant macrofossils were recovered from contexts 114, 118, 169 and 198. At present these are undated but have the potential to relate to regionally important prehistoric activity. It is therefore recommended that further analysis as well as radiocarbon dating of material from context 114 be undertaken. Additionally, dependant on the importance of features 116, 168 and 197, these should also be considered for radiocarbon dating. Prior to submission, species identification and charcoal analysis should be carried out by a palaeobotanical specialist on the material from the contexts chosen for dating.
- 10.13 However, as these assemblages may relate to wider areas of activity and considering that further archaeological mitigation may be undertaken, the analysis and radiocarbon dating should be carried out in combination with any analysis associated with later stages of archaeological fieldwork.

11.0 STATEMENT OF POTENTIAL

Introduction

- 11.1 The presence of archaeological features and deposits, some of which are, or have the potential to be of local/regional importance may result in further archaeological mitigation. However, this shall be determined in conjunction with knowledge of the impact of the proposed development upon sub-surface remains. Any requirement for additional archaeological mitigation must be supported by an evidence-based assessment of the potential importance of the archaeological remains recorded during the trial trenching to help inform the planning process (DCCAS 2021, 8).
- 11.2 A lack of dating evidence in combination with the limitations of the geophysical survey results suggests that the accuracy of this assessment with respect to the archaeological remains in areas beyond the trial trenches will be somewhat limited.

- 11.3 To mitigate this, the following assessment draws upon knowledge of similar sites undertaken within the North-East and the wider northern region as well as the national context. Where uncertainty exists, the most likely alternatives have been presented.

Potential early prehistoric remains

- 11.4 As detailed in the Discussion, there is a possibility that the hearth waste recovered from tree throw hole 87 relates to early prehistoric activity (Mesolithic to Bronze Age). Similar artefactual and ecofactual remains from natural features such as hollows and tree throw holes (like feature 87), once radiocarbon dated and analysed, have previously provided important evidence relating to the early prehistoric inhabitants of the UK (see Manby *et al.* 2003, 70-113; Petts and Gerrard 2006, 131; Lamdin-Whymark 2008; Hewitt *et al.* 2011, 48; Passmore and Waddington 2012; Robinson and Town 2021; Speed 2021).
- 11.5 Radiocarbon dating would, however, be required to confirm the importance of this feature.
- 11.6 Should the dumped hearth-waste be proven to be of an early prehistoric date, then there is the potential for further features and deposits relating to this activity to be present within the vicinity. Due to the often dispersed nature and small size of early prehistoric features they are difficult to detect via geophysical survey (Hey and Lacey 2001, fig. 14) and are unlikely to be detected via trial trenching at a density of 4% of the total area (*ibid.*, 43).
- 11.7 Previously recorded examples of early prehistoric artefacts and ecofacts (including hearth waste dumped within naturally formed hollows) have often been found in association with contemporary features such as pits and postholes which are sometimes termed 'pit sites' or 'pit clusters' (e.g. Lamdin-Whymark 2008; Passmore and Waddington 2012, 155-8; Robinson and Town 2021; Speed 2021). The features that make up these pit clusters are often organised in groups, and there is the potential that this is the case at Burtree Lane. In addition, the surrounding geological deposits and topography suggested the gravel ridge may have overlooked a marsh, making this area an ideal location for early prehistoric activity.

- 11.8 The presence of a palaeosol in Trenches 6 and 7 suggests that this area of Field 4 has experienced less ground truncation than is usual, possibly due to the overlying layer of hillwash. Therefore, if further associated remains are present within this area then any associated shallow features such as stakeholes or hearths are more likely to have survived later disturbance.
- 11.9 Alternatively, it is also conceivable that feature 87 relates to a single episode of activity and exists in isolation.
- 11.10 The use of pit sites is poorly understood, but they may represent the surviving remnants of early prehistoric occupation (Petts and Gerrard 2006, 24; Hewitt *et al.* 2011, 48-9). Within the wider North-East region, such sites previously appeared to have been clustered within the Milfield Basin where several associated structures have also been recorded (Waddington 1999, 134–6; Petts and Gerrard 2006, 24; Hewitt *et al.* 2011, 49; Passmore and Waddington 2012). However, recent evidence suggests that this is likely to be an artificial pattern produced by the intense level of research carried out in Northumberland. Prior to 2011 no early prehistoric pit sites had been recorded in County Durham (Petts and Gerrard 2006, 24; Hewitt *et al.* 2011, 48), however, two examples have recently been discovered. Bronze Age features were recorded at Winston Bridge Caravan Park (NAA 2020) and an Early Neolithic pit cluster with an associated structure and tree throw holes was discovered near Grassholme Reservoir (NAA 2021b).
- 11.11 In a national context, Neolithic and Bronze Age (and some Mesolithic) pit clusters have been recorded across much of the UK and are the subject of academic debate relating to subsistence, settlement and mobility. They have been attributed by some to the ephemeral activity of people on the move (see Pollard 1999 and 2000; Thomas 1999, 87; Cummings 2017, 87). This theory, however, has been challenged (Rowley-Conwy 2004) and the lack of substantive structural remains could be largely a product of high levels of truncation (see Gibson 2003, 137; Hewitt *et al.* 2011, 49) and a paucity of diagnostic material.
- 11.12 In light of their importance both regionally and nationally, the North-East regional research framework (Petts and Gerrard 2006, 131) states:

'The pit groups of the Milfield Basin are unique in the North-East, but it is not clear how far this is merely a function of more intensive work in the area. Because they are relatively ephemeral, they may not have been recognised elsewhere. It is important that pit groups are adequately characterised, including their chronological range, any possible variation in date according to their geographical location and size, as well as their relation to other evidence for Neolithic activity, such as lithic scatters.'

'Important settlement sites are likely to be recognised during the development-control process, and contractors should be made aware of their importance, so that they can be picked up as early as possible (i.e. at evaluation stage).'

- 11.13 The combined evidence, therefore, indicates a potential for the presence of regionally important early prehistoric remains in the vicinity of Trenches 6 and 7. This activity is likely to have been focused upon the gravel ridge but may have extended around the potential former marsh/lake surrounded by Trenches 6, 7, 12, 13, 14 and 15.

Roman period

- 11.14 Pit 65 has been dated to the Roman period by an assessment of the pottery recovered from its upper fill (Appendix C). Given its similarity, it is possible that pit 112 was of a similar date. These features, and the presence of large unabraded pottery sherds, suggest that a contemporary settlement may have been situated in the vicinity. Therefore, it is considered that there is a high potential for further Roman period features to be present within the PDA.
- 11.15 Previously recorded evidence in the Durham lowlands has highlighted that the area was intensively utilised and occupied during the Late Iron Age and Roman period (Petts and Gerrard 2006, fig. 24, 43-59, 146; Hewitt *et al.* 2011, 69-71; Proctor 2012; Allen 2016; Haselgrove 2016; Fell 2020). A combination of sites identified as cropmarks and evidence from other regions indicate that there was a variety of occupation sites in the Durham lowlands and a complex series of changes in settlement, subsistence and economy occurred during the Roman period (Petts and Gerrard 2006; Hewitt *et al.* 2011; Allen 2016; Haselgrove 2016; Fell 2020).
- 11.16 Unfortunately, a historical bias towards investigating sites associated with the military infrastructure in the North-East region has led to gaps in knowledge relating to the

local indigenous population (Petts and Gerrard 2006, 143-4). This has meant that the relationship between the indigenous peoples and the Roman administration is poorly understood (*ibid.*, 149). Also, away from the growing number of more agglomerated settlement sites such as Scotch Corner (Fell 2020), East Park near Sedgfield (Carne 2009) and *vici* associated with Roman forts, the 'rural' landscape of settlement and agriculture is poorly understood (Petts and Gerrard 2006, 52, 149; Hewitt *et al.* 2011, 71).

11.17 Within this rural landscape, some villa sites have been identified in the region and investigation of these has begun to provide important evidence (Petts and Gerrard 2006, 52). These include examples at Holme House, near Piercebridge (Cool and Mason 2008), Dalton on Tees (Harding 2004), Quarry Farm, Ingleby Barwick (Willis and Carne 2013) and possibly at Faverdale (Proctor 2012). Alongside these, fewer of the more numerous, smaller, less Romanised indigenous rural settlements have been investigated (Petts and Gerrard 2006, 52). Examples of the latter include research excavations at sites identified prior to their investigation at Thorpe Thewles (Heslop 1987) and Catcote (Long 1988).

11.18 It is, however, developer-funded archaeological excavation that has driven an increase in the discovery of previously unknown civilian settlements in south Durham and south Northumberland (Petts and Gerrard 2006, 145; Haselgrove and Moore 2016). Within the regional research framework, it is clearly stated that:

"...large-scale, open area, strip-and-record strategies, is doing much to plot the full extent of these sites and situate them within their wider landscapes" (Petts and Gerrard 2006, 145).

11.19 Examples of such sites discovered through the planning process include Faverdale, Darlington (Proctor 2012); Greatham, Hartlepool (Fell and Robinson 2018), Green Lane, Yarm (Wood and Robinson 2015), Mourie Farm, near Yarm (NAA 2002), Dixon's Bank and Bonny Grove Farm, Middlesbrough, Newton Bewley (Annis 1996) and at Amazon Park, Newton Aycliffe (Churchill 2014). Furthermore, the potential for further significant archaeological evidence to be discovered and recorded through the planning process has also been stated (Petts and Gerrard 2006, 149; Haselgrove and Moore 2016, 358-64).

- 11.20 If indeed, the pits investigated within the PDA relate to some form of Roman-period settlement, then considering the trial trenching results within the regional context, it is most likely that this would be a small indigenous rural settlement such as a farmstead. Alternatively, the pits may be part of an 'off-site' activity area associated with such a farmstead. It is therefore clear that there is a high potential for the presence of regionally important Roman-period remains within the vicinity of Trench 16.

Medieval and later remains

- 11.21 The majority of the archaeological remains recorded during the trial trenching related to (later) medieval or later agriculture or post-medieval or later boundaries and landfill. With reference to the regional research framework (Petts and Gerrard 2006, chapters 17, 18 and 19), none of these were archaeologically significant.

Undated features

Field 9

- 11.22 The features recorded in Trench 71, whilst undated, have the potential to form part of a wider complex of features. The ditch, gully and pits were probably broadly contemporary, due to the presence of similar charcoal-rich deposits within them. These fills are also indicative of substantial and/or repetitive burning in the vicinity. Considering that the geophysical survey did not locate these features, and the possibility that the ditch was part of an enclosure, it is probable that these features are part of a larger area of activity.
- 11.23 Without further evidence, it is difficult to be sure about the function and date of this activity. However, as these features were sealed by a subsoil that pre-dated the later topsoil and turf, it is unlikely that they post-date the medieval period. The features could be part of an enclosed farmstead, a form of settlement common in the Durham lowlands during the Iron Age or Roman period (Petts and Gerrard 2006, 33-5, 52-3; Hewitt *et al.* 2011, 71; Haselgrove and Moore 2016, 366-7). However, the lack of pottery and other domestic waste within the features suggested that this may not be the case. It should be stated, however, that investigations at previously excavated examples of such enclosed settlements have demonstrated that domestic waste was

not always present nor evenly spread across the site (Petts and Gerrard 2006, 40, 56-7).

- 11.24 Equally, the features recorded during the trial trenching could be of a medieval date or represent crop-processing or other 'off-site' activity area within a field system. With reference to the regional research framework (Petts and Gerrard 2006), all of these possibilities would mean that there is a high potential that archaeological remains of local or regional significance are present within the immediate vicinity of Trenches 71, 78 and 79.

Fields 5, 6 and 7

- 11.25 The potential pits recorded in Trenches 42, 43, 44, 33 and 62, and the material within tree throw hole 169 (Trench 45) could represent early prehistoric or later activity within Fields 5, 6 and 7. However, they could equally be natural features (root boles) that contained incidental inclusions of charcoal. The evidence is inconclusive with several of the features being shallow and irregular. The lack of artefacts or concentrations or distinctive dumps of charcoal, as well as a lack of other associated features, however, suggested that most of these features were indeed archaeologically insignificant. In particular, the charcoal and potential charred seeds recovered from the upper fill (169) of tree throw hole 169 (Trench 45) were not part of a distinct dumping event and therefore are not considered significant enough to warrant radiocarbon dating or further analysis.

Summary of the potential

- 11.26 In summary, the assessment of the trial trenching results has demonstrated that there is the potential for regionally important archaeological remains within the PDA. These remains are, however, likely to be limited to within Fields 4 and 9. In Field 4 these remains are probably within the vicinities of Trenches 6, 7, 13, 15 and 16 and to the north of Trench 16. To the north-east, in Field 9 another area of high potential is in the vicinity of Trenches 71, 78 and 79.
- 11.27 The archaeological potential of the current results would be increased if considered in conjunction with further evidence derived from any further archaeological mitigation that may be undertaken as part of the proposed development.

12.0 RESEARCH OBJECTIVES

Research themes

- 12.1 This assessment recommends that further analysis of the results of the trial trenching is warranted. However, this should be undertaken as part of the combined analysis associated with all stages of archaeological mitigation that may be undertaken as part of the proposed development. Therefore, although the research objectives can be updated at this stage, it is likely that these will be further refined during any potential subsequent stages of archaeological mitigation.
- 12.2 Significant archaeological features and deposits of a possible early prehistoric and Roman date were encountered within the PDA. In light of this, the following 'Key research themes' and 'Key research priorities' laid out in the North East Regional Research Agenda (Petts and Gerrard 2006) could potentially be addressed through further analysis of the combined results of all stages of archaeological work:

Mesolithic

Mii. Relationships between local geomorphological processes and site formation/preservation patterns

Miii. The apparent lack of Upper Palaeolithic and Early Mesolithic sites. Is the lacuna real?

Miv. The Mesolithic/Neolithic transition

Mvii. Activity and occupation sites in the wider landscape

Neolithic and Early Bronze Age

NBii: Settlement chronology

Later Bronze Age and Iron Age

Key research themes

I1. Chronology

12. Changing landscapes

13. Settlement function

Key research priorities

li. Chronology

lii. Settlement

liii. Landscapes

Roman

Ri. The Iron Age to Roman transition

Riv: Native and civilian life

Rv: Material culture

RiX: Landscape and environment

Rx. Roman-early medieval transition

13.0 CONCLUSION AND RECOMMENDATIONS

13.1 Although the majority of the trial trenches contained no significant archaeological features, important remains were encountered in 16 trenches. Assessment of the results has highlighted four overarching conclusions:

- in reference to the regional research framework (Petts and Gerrard 2006), the majority of the excavated trenches did not contain significant archaeological remains;
- in reference to the regional research framework (Petts and Gerrard 2006), significant archaeological remains were recorded in Field 4 (Trenches 6, 7 and 16) and Field 9 (Trenches 71 and 78). In addition, potentially significant features were recorded in Field 3 (Trench 24), Field 4 (Trenches 9, 13, 15 and 74), Field 5

(Trench 33), Field 6 (Trenches 42, 43 and 44), Field 7 (Trench 62) and Field 9 (Trench 70);

- the results of the geophysical survey do not fully reflect all archaeological features recorded during trial trenching; and
- at least some of the modern landfill and associated made ground was above the previous ground level.

13.2 More specifically, the assessment has demonstrated the potential for regionally important early prehistoric and Roman-period archaeological remains in Field 4. In addition, evidence of a probable local or regional importance is present within the vicinity of Trenches 71, 78 and 79 in Field 9. Due to the potential significance of these remains further analysis of the results is warranted including:

- specialist analysis of the palaeobotanical remains from contexts 114, 118 and potentially 198;
- radiocarbon dating of suitable material from contexts 114 and 118, and potentially 198;
- stratigraphical analysis incorporating the results of the above analysis;
- comparison of the results within their regional context;
- publication of the results in a local or regional journal; and
- deposition of the archive within the CoDDA at Sevenhills facility.

13.3 However, this work should be undertaken as part of the combined analysis, publication and archiving associated with any further stages of archaeological mitigation that may be carried out as part of the project.

13.4 No further work is warranted on the recovered artefacts. All but the Roman-period pottery can be discarded.

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APPENDIX A

EVALUATION TRENCH GAZETTEER

Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
1	4	8	194	N-S	0.85m at (north) 0.4m (south)	Topsoil and turf (0.2m), subsoil (0.2m). At north end: topsoil and turf (0.1m to 0.2m), made ground (0.40m), buried topsoil (0.2m), subsoil (0.2m)	Modern made ground at north end.	Modern finds including plastic in made ground (discarded)
2	4	8	190	E-W	c.0.6m	Topsoil and turf (0.3m), subsoil (0.3m)	Negative	Post-medieval pottery and glass in topsoil and subsoil (discarded)
3	2	4	81	N-S	0.32m (north), 0.27m (south)	Topsoil and turf (0.2m), subsoil (0.07m to 0.12m)	Negative	Post-medieval pottery and glass in topsoil (discarded)
4	2	4	130	E-W	0.29m (west), 0.36m (mid), 0.29m (east)	Topsoil and turf (0.1m), buried topsoil (up to 0.26m)	Furrows (aligned ESE-WNW). Post-medieval field boundary marked by presence of large field drain overlain by deposit of cinder	Post-medieval pottery and glass in topsoil (discarded)
5	2	4	153	E-W	0.29m to 0.22m (west to east)	Topsoil and turf (0.2m)	Post-medieval field boundary marked by presence of large field drain overlain by deposit of cinder	Post-medieval pottery and glass in topsoil (discarded)
6	2	4	154	ENE-WSW	0.31m, 0.51m, 0.53m, 0.81m, 0.54m, 0.61m, 0.59m (east to west)	At eastern end of trench: Topsoil and turf (0.2m), buried topsoil 0.1m. In hollow 254 (centre of trench): Topsoil and turf (0.2m to 0.24m), buried topsoil (0.2m), hillwash (up to 0.32m), palaeosol (up to 0.24m, silt (up to 0.08m). To west of hollow hillwash and palaeosol continue but both become more shallow	Post-medieval field boundary marked by presence of large field drain overlain by deposit of cinder. Large hollow (dry valley or palaeochannel) and palaeosol with heat-fractured stone to west	Post-medieval pottery and glass in topsoil (discarded) to east of boundary (none to west)
7	2	4	108	ENE-WSW	0.79m, 0.9m, 0.38m, 0.56m, 0.48m, 0.37m (west	Topsoil and turf (0.15m), buried topsoil (0.2m), hillwash (0.2m). Palaeosol and stone (up to 0.15m) along southern edge of 'box'	two tree throw holes, one with hearth waste. Edge of quarry at west end.	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)

Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Findings
					to east)			
8	2	4	103	NNW-SSE	0.25m, 0.2m, 0.45m, 0.3m (north to south)	Topsoil and turf (0.1m), buried topsoil (up to 0.2m)	Negative	Post-medieval pottery and glass in topsoil (discarded) to east of boundary (none to west)
9	2	4	176	ENE-WSW	0.4m, 0.5m, 0.3m, 0.35m (west to east)	Topsoil and turf (0.1m), buried topsoil (up to 0.2m), some hillwash	Ditch (NW-SE aligned) at western end	Post-medieval pottery and glass in topsoil (discarded)
10	2	4	151	ENE-WSW	0.4m, 0.48m, 0.38m (east to west)	Topsoil and turf (0.2m-0.3m), buried topsoil (up to 0.2m), subsoil (up to 0.2m)	Furrows recorded in section (NE-SW aligned), tree-throw hole	Very little post-medieval pottery and glass in topsoil (discarded)
11	2	4	160	NW-SE	0.17m, 0.74m, 0.42m, 0.67m (west to east)	Topsoil and turf (up to 0.3m), hillwash (up to 0.3m, quarry fill (over 0.3m)	Extensive modern quarry, continuation from that in Trenches 7 and 12	None
12	2	4	154	WNW-ESE	0.71m, 0.4m, 0.65m, 0.3m, 0.23m (south to north)	Topsoil and turf (0.1m-0.2m), buried topsoil (up to 0.2m), silty layer (up to 0.2m)	In southern half of trench a natural gravel ridge was encountered and the western extent of a quarry (in Trenches 7 and 11). Downslope was a silty layer (possible lake deposit) and a few natural features. In northern half of trench was a post-medieval boundary ditch running E-W comprising 2 intercutting ditches, cut by large field drain and overlain by a possible wider cinder trackway. Also a possible shallow gully.	Post-medieval pottery and glass in topsoil (discarded)
13	2	4	209	NW-SE	0.36m, 0.49m, 0.27m, 0.37m, 0.66m, 0.38m (west to east)	Topsoil and turf and buried topsoil (up to 0.2m), subsoil (up to 0.3m)	Field boundary ditch extends diagonally across trench, with parallel shallow gully. An additional shallow gully was recorded to the east and a possible natural gully to the east	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
14	2	4	87	NNE-SSW	c.0.4m	Topsoil and turf (0.1m) buried topsoil (up to 0.3m)	Negative. Possible lacustrine deposits at south end	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)

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Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
15	2	4	107	N-S	c.0.3m	Topsoil and turf (0.1m) buried topsoil (up to 0.2m)	Tree throw hole containing charcoal. Possible lacustrine deposits at south end	Post-medieval pottery and glass in topsoil (discarded)
16	2	4	144	WNW-ESE	0.25m, 0.33m, 0.22m (west to east)	Topsoil and turf (0.15m) buried topsoil (up to 0.2m)	Two intercut post-medieval field boundary ditches and 2 pits, one contained RB coarseware pottery	Post-medieval pottery and glass in topsoil (discarded). Post-medieval pottery and shoe from post-medieval boundary ditch. 13+ sherds of RB pottery and possible CBM from pit
17	2	4	117	E-W	0.25m to 0.27m	Topsoil and turf (0.10m) buried topsoil (up to 0.2m)	Tree throw hole containing stones	Post-medieval pottery and glass in topsoil (discarded)
18	2	4	98	N-S	0.35 to 0.45m deep	Topsoil and turf (up to 0.15m) buried topsoil (up to 0.2m)	Negative	Post-medieval pottery and glass in topsoil (discarded)
19	2	4	137	NNE-SSW	c.0.4m	Topsoil and turf (0.2m) buried topsoil (up to 0.2m)	One furrow aligned WNW-ENE	Post-medieval pottery and glass in topsoil (discarded)
20	1	2	158	NE-SW	0.29m, 0.56m, 0.21m (NE to SW)	Topsoil and turf and buried topsoil (up to 0.2m), subsoil (up to 0.1m). Layer of made ground (0.1m) at SW end	Three furrows (aligned NNW to SSE) c.6m apart. Area of made ground (c.0.1m deep) over possible lacustrine deposits at south-western end	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
21	1	2	72	NNW-SSE	0.25m (south) 0.48m (north)	Topsoil and turf (0.15m) buried topsoil (up to 0.2m), subsoil (up to 0.15m)	Furrows (aligned WSW-ENE) at north end of trench	Post-medieval pottery and glass in topsoil (discarded)
22	1	2	158	NNW-SSE	0.3m, 0.43m, 0.45m (south to north)	Topsoil and turf (up to 0.2m) buried topsoil (up to 0.2m)	Series of ridge and furrow approximately 3m wide by up to 0.25m deep and were up to 2m apart (aligned WSW-ENE). Cut of stone filled French drain thin layer of made ground (up to 0.1m thick) over possible lacustrine deposits at south end	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
23	1	2	205	ENE-WSW and NNW-SSE	c.0.4m to 0.5m	Topsoil and turf (0.15m), buried topsoil (0.15m) subsoil (up to 0.2m)	Three clear furrows averaging 1.1m in width aligned WSW-ENE	Post-medieval pottery and glass in topsoil (discarded)
24	1	3	239	NNW-SSE	0.35m, 0.95m,	Topsoil and turf (up to 0.1m), buried topsoil (up to 0.3m), subsoil/hillwash	Undated ditch (aligned NE-SW) at south end of trench. Large soil filled hollow to north, and	Larger concentrations of post-medieval pottery and

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Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
					0.9m, 0.25m, 0.3m (south to north)	(up to 0.5m)	furrows (WSW-ENE) at north end.	glass in topsoil (discarded)
25	1	3	147	NNE-SSW	0.22m, 0.65m, 0.32m (North to south)	Topsoil and turf (up to 0.2m), buried topsoil (up to 0.15m), subsoil/hillwash (up to 0.2m), hollow fill (up to 0.25m)	Series of furrows (aligned WSW-ENE) through the entirety of trench, averaging 1m in width and 4m in distance from each other. Two field drains exposed, one cutting natural and one cutting a furrow. Large linear hollow (continuation from Trench 24)	Post-medieval pottery and glass in topsoil (discarded)
26	1	3	99	NNW-SSE	0.25m (north), 0.6m (south)	Topsoil and turf (0.15m), buried topsoil (0.1m), subsoil/hillwash (up to 0.15m)	Series of 8 furrows (aligned WSW-ENE) averaging 1.5m in width and 4-6m in distance from each other	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
27	1	3	104	NW-SE	0.35m (NW), 0.25m (SE)	Topsoil and turf (0.15m), buried topsoil (0.1m – 0.2m), subsoil/hillwash (up to 0.15m)	Continuation of furrows (aligned WSW-ENE)	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
28	1	3	161	ENE-WSW	0.35m (SW), 0.5m (NE)	Topsoil and turf (0.15m), buried topsoil (0.1m – 0.2m), subsoil/hillwash (up to 0.25m)	Negative	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
29	3	5	97	NNE-SSW	0.28m (north), 0.26m (south)	Topsoil and turf and buried topsoil (0.2m), subsoil/hillwash (up to 0.1m)	A furrow was recorded at south end of trench aligned consistently with those in trench 31. 3 modern land drains	Very little post-medieval pottery and glass in topsoil (discarded)
30	3	5	147	WNW-ESE	0.25m (north), 0.24m (south)	Topsoil and turf and buried topsoil (0.25-0.3m), subsoil/hillwash (up to 0.05m)	Negative	Very little post-medieval pottery and glass in topsoil (discarded)
31	3	5	95	NNE-SSW	0.29m (north), 0.37m (south)	Topsoil and turf and buried topsoil (0.25-0.3m), subsoil/hillwash (up to 0.05m)	Two plough furrows (aligned WNW-ESE) present and spaced 8m apart, 1.1m in width and 0.1m in depth. 1 land drain	Very little post-medieval pottery and glass in topsoil (discarded)
32	3	5	139	E-W	0.27m (west), 0.35m (east)	Topsoil and turf and buried topsoil (0.3m), subsoil/hillwash (up to 0.05m)	Negative	Very little post-medieval pottery and glass in topsoil (discarded)
33	3	5	136	N-S	0.29m (north),	Topsoil and turf (0.25m), buried topsoil (0.1m)	Undated pit and furrows (aligned WNW-ESE)	Very little post-medieval pottery and glass in

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Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
					0.24m (mid), 0.32m (south)			topsoil (discarded)
34	3	5	147	N-S	0.23m (north), 0.29m (south)	Topsoil and turf (0.25m), buried topsoil (up to 0.05m)	Two plough furrows (aligned WNW-ESE) present and spaced 8m apart, 1m in width and 0.1m in depth	Very little post-medieval pottery and glass in topsoil (discarded)
35	3	5	151	N-S	0.2m (north), 0.54m (south)	Topsoil and turf (0.25m-0.3m), buried topsoil (up to 0.1m)	Trench contained 3 furrows (aligned WNW-ESE) averaging 1m wide and 0.1m in depth	Very little post-medieval pottery and glass in topsoil (discarded)
36	3	5	143	N-S	0.39m (north), 0.23m (south)	Topsoil and turf (0.25m-0.3m), buried topsoil (up to 0.1m)	Trench contained furrows (aligned WNW-ESE) averaging 1m wide and 0.1m in depth	Very little post-medieval pottery and glass in topsoil (discarded)
37	3	5	145	E-W	c.0.29m	Topsoil and turf (0.20m), buried topsoil (up to 0.1m)	Negative	Very little post-medieval pottery and glass in topsoil (discarded)
38	3	6	154	NNE-SSW	0.21m, 0.32m, 0.2m, 0.23m, 0.39m (north to south)	Topsoil and turf (0.20m), buried topsoil (up to 0.1m)	Trench contained 8 furrows (aligned WNW-ESE), all shallow and averaging 1m wide	Very little post-medieval pottery and glass in topsoil (discarded)
39	3	6	101	WNW-ESE	c.0.4m	Topsoil and turf (0.20m), buried topsoil (up to 0.1m)	Negative	Very little post-medieval pottery and glass in topsoil (discarded)
40	3	6	97	NNE-SSW	c.0.3m to 0.4m	Topsoil and turf (0.1m-0.15m), buried topsoil (up to 0.2m)	Trench contained furrows (aligned WNW-ESE)	Very little post-medieval pottery and glass in topsoil (discarded)
41	3	6	147	NNE-SSW	c.0.25m	Topsoil and turf (0.1m-0.15m), buried topsoil (up to 0.1m)	Trench contained furrows (aligned WNW-ESE) and a tree throw hole	Very little post-medieval pottery and glass in topsoil (discarded)
42	3	6	98	WNW-ESE	0.3m (east), 0.4m (west)	Topsoil and turf (0.2m), buried topsoil (up to 0.1m-0.2m)	Trench contained three small pits/root holes	Very little post-medieval pottery and glass in topsoil (discarded)
43	3	6	144	E-W	0.34m	Topsoil and turf (0.2m), buried	Trench contained a tree throw hole and two	Very little post-medieval

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Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
					(west), 0.3m (east)	topsoil (up to 0.1m)	small pits/root holes	pottery and glass in topsoil (discarded)
44	3	6	96	NNE-SSW	0.25m, 0.39m, 0.32m, 0.25m, 0.43m (north to south)	Topsoil and turf (0.2m), buried topsoil (up to 0.1m)	Trench contained 5 furrows (aligned WNW-ESE), all shallow and averaging 1m wide. Also two small pits/root holes and the edge of a shallow feature of unknown form	Very little post-medieval pottery and glass in topsoil (discarded)
45	3	6	98	NW-SE	0.25m (south), 0.4m (north)	Topsoil and turf (0.1m-0.15m), buried topsoil (up to 0.15m)	Trench contained 3 furrows (aligned WNW-ESE) and a tree throw hole	Very little post-medieval pottery and glass in topsoil (discarded)
46	3	6	98	NNW-SSE	0.2m, 0.4m, 0.3m, 0.2m (north to south)	Topsoil and turf (0.1m-0.15m), buried topsoil (up to 0.15m)	Trench contained 6 furrows (aligned WNW-ESE)	Very little post-medieval pottery and glass in topsoil (discarded)
47	1	1	102	N-S	0.3m, 0.3m, 0.4m (north to south)	Topsoil and turf and buried topsoil (0.25-0.3m), subsoil/hillwash (up to 0.1m)	Trench contained a ditch (aligned c.E-W)	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
48	1	1	153	NNW-SSE	0.85m, 0.73m, 0.65m, 0.5m, 0.23m (north to south)	Topsoil and turf and buried topsoil (0.15m-0.25m), subsoil/hillwash (up to 0.15m)	Large area of modern made ground deposits within north half of the trench (37m wide) over lacustrine deposits. Four evenly spaced plough furrows (aligned WSW to ENE) located in the south half of the trench.	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
49	1	1	155	ENE-WSW	0.23m, 0.28m, 0.57m, 0.19m (west to east)	Topsoil and turf and buried topsoil (0.1m-0.25m), subsoil/hillwash (up to 0.1m)	Positioned over former field boundary, which survives as a slight earthwork formed by subsoil. A furrow (aligned WSW to ENE) runs along trench beneath earthwork	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
50	1	1	153	E-W	0.24m, 0.32m, 0.25m (west to east)	Topsoil and turf and buried topsoil (0.1m-0.25m), subsoil/hillwash (up to 0.1m)	Trench contained 2 furrows (aligned WNW-ESE)	Post-medieval pottery and glass in topsoil (discarded)
51	1	1	146	NNW-SSE	0.36m, 0.32m, 0.22m (NW)	Topsoil and turf and buried topsoil (0.1m-0.20m), subsoil/hillwash (up to 0.15m)	Trench contained 4 furrows (aligned WNW-ESE)	Post-medieval pottery and glass in topsoil (discarded)

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Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
					to SE)			
52	1	1	104	ENE-WSW	0.21m, 0.27m, 0.69m, 0.42m, 0.77m, 0.58m, 0.53m (SW to NE)	Topsoil and turf (0.1m-0.15m) buried topsoil (up to 0.15m), subsoil/hillwash (up to 0.4m)	Trench contained a broad linear natural hollow under former field boundary. No features associated with boundary survived. Silty deposits and dump of stone within hollow	Post-medieval pottery and glass in topsoil (discarded)
53	1	1	144	NNW-SSE	0.4m, 0.47m, 0.35m (north to south)	Topsoil and turf and buried topsoil (0.25m), subsoil/hillwash (up to 0.25m)	Trench contained a tree throw hole at the northern end, a natural feature to the south of the former boundary and a French drain to the south. No features associated with the boundary existed. Also 5 very shallow furrow remnants (aligned WSW-ENE) spaced at between c.2m to 5m apart	Post-medieval pottery and glass in topsoil (discarded)
54	1	1	99	N-S	0.3m	Topsoil and turf and buried topsoil (0.3m)	Negative	Post-medieval pottery and glass in topsoil (discarded)
55	1	1	100	ENE-WSW	0.18m, 0.38m, 0.35m (west to east)	Topsoil and turf (0.1m-0.15m) buried topsoil (up to 0.1m), subsoil/hillwash (up to 0.1m)	Negative	Post-medieval pottery and glass in topsoil (discarded)
56	1	1	124	NNW-SSE	0.44m, 0.51m, 0.16m (due to roots), 0.39m (north to south)	Topsoil and turf and buried topsoil (up to 0.2m) in both sections of the trench. Subsoil/hillwash just in southern section (up to 0.3m)	Negative, see Trench 72 for field boundary	Post-medieval pottery and glass in topsoil (discarded)
57	1	1	143	ENE-WSW	0.3m	Topsoil and turf and buried topsoil (0.3m)	Negative	Post-medieval pottery and glass in topsoil (discarded)
58	3	7	100	NE-SW	0.32m, 0.33m, 0.5m (SW to NE)	Topsoil and turf (0.1m-0.15m), buried topsoil (up to 0.2m)	Trench contained a furrow (aligned NW-SE)	Very little post-medieval pottery and glass in topsoil (discarded)
59	3	7	95	N-S	0.20m, 0.42m,	Topsoil and turf (0.1m-0.15m), buried topsoil (up to 0.2m), hillwash	Trench contained a 10m wide hollow/palaeochannel (glacial) or lacustrine	Very little post-medieval pottery and glass in

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Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
					0.32m, 0.28m (south to north)	(up to 0.15m)	deposits c.0.5m deep	topsoil (discarded)
60	3	7	97	E-W	0.42m, 0.37m, 0.27m (west to east)	Topsoil and turf (0.1m), buried topsoil (up to 0.2m), hillwash (up to 0.1m)	Trench contained faint traces of furrows (aligned NW-SE) and a shallow root hole	Very little post-medieval pottery and glass in topsoil (discarded)
61	3	7	145	WNW-ESE	0.31m, 0.31m, 0.32m, 0.21m (west to east)	Topsoil and turf (0.1m), buried topsoil (up to 0.2m)	Trench contained faint traces of 7 furrows (aligned NW-SE)	Very little post-medieval pottery and glass in topsoil (discarded)
62	3	7	94	E-W	0.37m, 0.28m, 0.19m (west to east)	Topsoil and turf (0.1m), buried topsoil (up to 0.2m)	Trench contained two tree throw holes and two pits/root holes	Very little post-medieval pottery and glass in topsoil (discarded)
63	3	7	141	NNW-SSE	0.18m, 0.29m, 0.19m, 0.38m (NW-SE)	Topsoil and turf (0.1m), buried topsoil (up to 0.1m)	Trench contained 4 furrows at northern end of trench, spaced at 2m-5m apart, 0.4m-0.8m wide by up to 0.1m deep (aligned NW-SE). Layer of subsoil/made ground in southern 17m of trench (up to 0.2m) possibly indicative of post-medieval tipping	Very little post-medieval pottery and glass in topsoil (discarded)
64	3	7	146	NNW-SSE	0.28m, 0.36m, 0.18m (NW-SE)	Topsoil and turf (up to 0.15m), buried topsoil (up to 0.2m)	Trench contained 2 furrows (aligned NW-SE) at its northern end, a shallow tree throw hole and a stone filled French drain (see Trenches 65 and 68). Three furrows on a north-east to south-west alignment were recorded to the south of the drain	Very little post-medieval pottery and glass in topsoil (discarded)
65	3	7	369	NNW-SSE	0.33m, 0.35m, 0.31m, 0.4m (NW-SE)	Topsoil and turf (up to 0.15m), buried topsoil (up to 0.2m)	Trench contained a plough furrow aligned NW-SE (36m long up to 1m wide and 0.1m in depth) and another plough furrow aligned (NE-SW). Also the continuation of the French drain in trenches 64 and 68	Very little post-medieval pottery and glass in topsoil (discarded)
66	3	7	147	NNW-SSE	0.49m, 0.51m, 0.38m, 0.52m (NW-SE)	Topsoil and turf (up to 0.15m), buried topsoil (up to 0.2m), hillwash (up to 0.1m)	Trench contained a plough furrow aligned NW-SE and the possible continuation of the French drain in trenches 64, 65 and 68	Very little post-medieval pottery and glass in topsoil (discarded)
67	3	7	146	ENE-WSW	0.54m,	Topsoil and turf and, buried topsoil	Negative. Very variable natural deposits and	Very little post-medieval

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Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
					0.59m, 0.38m (NE-SW)	(up to 0.4m), hillwash (up to 0.1m)	colluvium.	pottery and glass in topsoil (discarded)
68	3	7	139	NNW-SSE	0.26m, 0.22m, 0.2m, 0.23m (NNE-SSW)	Topsoil and turf (up to 0.2m), buried topsoil (up to 0.1m)	Trench contained a tree throw hole c.20m from the NW end and a continuation of the French drain from Trenches 64 and 65 2.6m from the SE end. At the NW end of the trench was a 5m long dump of dark bluish brown clay (212) that contained a pewter button, RF04	Very little post-medieval pottery and glass in topsoil (discarded). Pewter button RF04
69	4	9	90	NNE-SSW	c.0.3m	Topsoil and turf (up to 0.3m), subsoil (up to 0.1m)	Trench contained 2 tree throw holes and a shallow furrow (aligned c.E-W)	Very little post-medieval pottery and glass in topsoil (discarded)
70	4	9	136	NNW-SSE	0.4m (north), 0.3m (south)	Topsoil and turf (up to 0.2m), subsoil (up to 0.1m)	Trench contained 2 tree throw holes, an undated gully (aligned NE-SW), a post-medieval pit/posthole and a possibly modern post base. Also a 0.1m thick layer of post-medieval/modern made ground extended c.5m into the trench from the north. This layer overlay the subsoil	Very little post-medieval pottery and glass in topsoil (discarded)
71	4	9	93	E-W	0.3m (west), 0.26m (mid), 0.3m (east)	Topsoil and turf (up to 0.2m), subsoil (up to 0.1m)	Trench contained a root bole in the western half. To the east was an undated ditch (aligned NW-SE), as well as a narrow gully and two possible pits/root holes all with charcoal-rich fills. Ditch mid-fill was similarly charcoal-rich	Very little post-medieval pottery and glass in topsoil (discarded)
72	1	1	30	NNW-SSE	0.46m (south), 0.18m (north)	Topsoil, turf and buried soil (up to 0.2m) to north of boundary. Topsoil, turf and buried soil (up to 0.3m) and subsoil (up to 0.20m) to south of boundary	Trench contained earthwork remnant of post-medieval boundary made of subsoil	Post-medieval pottery and glass in topsoil (discarded)
73	1	2	88	NNW-SSE	0.24m, 0.25m, 0.37m (NNW-SSE)	Topsoil and turf (up to 0.15m), buried topsoil (up to 0.1m), hillwash (up to 0.2m at SSE end)	Trench contained 3 furrows (aligned WSW-ENE)	Larger concentrations of post-medieval pottery and glass in topsoil (discarded)
74	2	4	172	ENE-WSW	0.4m, 0.5m, 0.35m, 0.4m (WSW-ENE)	Topsoil and turf (up to 0.15m), buried topsoil (up to 0.25m)	Possible continuation of ditch in Trench 4	Very little post-medieval pottery and glass in topsoil (discarded)
75	2	4	150	E-W	0.32m, 0.33m, 0.23m (west)	Topsoil and turf (up to 0.15m), buried topsoil (up to 0.1m), hillwash (up to 0.1m)	Negative	Larger concentrations of post-medieval pottery and glass in topsoil

Trench	Area	Field	Trench area (m ²)	Alignment	Depths	Soils (thickness)	Preliminary results	Finds
					to east)			(discarded)
76	4	10	94	NE-SW	c.0.4m to 0.75m	Topsoil and turf (up to 0.35m), hillwash (up to 0.1m)	Trench contained 2 furrows up to 1.1m wide, 0.1m deep and aligned c.WSW-ENE	None
77	4	10	139	NNW-SSE	c.0.4m	Topsoil and turf (up to 0.3m), hillwash (up to 0.1m)	Negative	None
78	4	9	33	E-W	0.23m, 0.34m, 0.21m (east to west)	Topsoil and turf (up to 0.15m), subsoil (up to 0.2m)	Trench contained continuation of ditch from Trench 71	Very little post-medieval pottery and glass in topsoil (discarded)
79	4	9	41	ESE-WNW	c.0.4m	Topsoil and turf (up to 0.15m), blue clay (up to 0.15m), stony clay (up to 0.1m)	Trench contained modern made ground	Very little post-medieval pottery and glass in topsoil (discarded)
		Total	10337					

**APPENDIX B
CONTEXT AND FINDS CATALOGUE**

Context	Interpretative description	Trench	Area	Field	Artefacts	Ecofacts
1	Topsoil	57	1	1		
2	Natural	57	1	1		
3	Subsoil	57	1	1	1 post-medieval glass fragment (29.2g)	
4	Topsoil	54	1	1		
5	Natural	54	1	1		
6	Topsoil and turf	52	1	1	1 post-medieval clay pipe fragment (2.6g), 1 copper-alloy object (0.8g), 1 post-medieval glass fragment (2.7g), 2 post-medieval pottery sherd (16.2g)	
7	Natural	52	1	1		
8	Hillwash	52	1	1		
9	Buried topsoil	52	1	1		
10	Fill of hollow 256	52	1	1	4 stone (natural) (3.6g)	
11	Upper fill of hollow 256	52	1	1		
12	Primary fill of hollow 256	52	1	1		
13	Fill of hollow 256	52	1	1		
14	Stones	52	1	1		
15	Primary fill of hollow 256	52	1	1		
16	Topsoil	47	1	1	2 CBM fragment (29g), 1 post-medieval copper-alloy nail (1.3g), 1 modern plastic fragment (tile?) (3.3g), 11 post-medieval pottery sherd (58.5g)	
17	Natural	47	1	1		
18	Fill of ditch 19	47	1	1	2 post-medieval glass fragment (4.6g), 3 post-medieval pottery sherd (11.4g)	
19	Ditch	47	1	1		
20	Topsoil	48	1	1		
21	Subsoil	48	1	1		
22	Levelling layer	48	1	1		
23	Levelling layer	48	1	1		
24	Natural	48	1	1		
25	Field drain	48	1	1		
26	Fill of field drain 25	48	1	1		
27	Field drain	25	1	3		
28	Fill of field drain 27	25	1	3		
29	Furrow	25	1	3		
30	Fill of furrow 29	25	1	3		
31	Field drain	25	1	3		
32	Fill of field drain 31	25	1	3		
33	Natural	48	1	1		
34	Topsoil and turf	25	1	3	2 post-medieval clay pipe fragment (3g), 7 post-medieval pottery sherd (63.6g), 1 fire-cracked flint (natural) (5.4g)	
35	Subsoil	25	1	3		
36	Natural	25	1	3		
37	Void	Void	Void	Void		
38	Topsoil	49	1	1		
39	Subsoil	49	1	1		
40	Furrow	49	1	1		
41	Fill of furrow 40	49	1	1	3 medieval pottery sherd (3.9g) (11th-13th)	

Context	Interpretative description	Trench	Area	Field	Artefacts	Ecofacts
42	Natural	49	1	1		
43	French drain	53	1	1		
44	Stones in French drain 43	53	1	1		
45	Fill of French drain 43	53	1	1		
46	Fill of tree throw hole 47	53	1	1	1 stone (possibly worked) (1432g), 3 stone (natural) (13.6g)	
47	Tree throw hole	53	1	1		
48	Topsoil	53	1	1		
49	Subsoil	53	1	1		
50	Natural	53	1	1		
51	Natural feature	53	1	1		
52	Upper fill of feature 51	53	1	1		
53	Primary fill of feature 51	53	1	1		
54	Tree throw hole	15	2	4		
55	Fill of tree throw hole 54	15	2	4	1 stone (8.5g) (natural)	1.9g charcoal
56	Void	Void	Void	Void		
57	Upper fill of ditch 94	16	2	4	6 post-medieval glass fragment (363.6g), 1 post-medieval? leather shoe (191.8g) (RF 1), 4 post-medieval pottery sherd (91.4g)	
58	Gully	16	2	4		
59	Fill of gully 58	16	2	4		
60	Tree throw hole	17	2	4		
61	Stone fill of tree throw hole 60	17	2	4		
62	Fill of tree throw hole 60	17	2	4		
63	Topsoil	16	2	4	2 post-medieval clay pipe fragment (9.3g), 1 flint (0.8g) (natural), 19 post-medieval pottery sherd (342.4g)	
64	Subsoil	16	2	4		
65	Pit	16	2	4		
66	Upper fill of pit 65	16	2	4	38 Roman pottery sherd (186.6g) (grey gritty ware jar), 1 Roman pottery sherd (samian?) (0.8g)	
67	Middle fill of pit 65	16	2	4		
68	Primary fill of pit 65	16	2	4		
69	Natural	16	2	4		
70	Natural gully	12	2	4		
71	Fill of natural gully 70	12	2	4		
72	Fill of natural gully 70	12	2	4		
73	Natural feature	12	2	4		
74	Fill of natural feature 73	12	2	4		
75	Dark silty layer	12	2	4		
76	Natural	12	2	4		
77	Topsoil	12	2	4		
78	Subsoil	12	2	4		
79	Fill of hollow 254	6	2	4		
80	Topsoil and turf	7	2	4		
81	Buried topsoil	7	2	4		
82	Hillwash	7	2	4		

Context	Interpretative description	Trench	Area	Field	Artefacts	Ecofacts
83	Natural	7	2	4		
84	Tree throw hole	7	2	4		
85	Fill of tree throw hole 84	7	2	4		
86	Quarry	7	2	4		
87	Tree throw hole	7	2	4		
88	Topsoil	6	2	4	1 post-medieval clay pipe fragment (0.9g), 2 post-medieval glass fragment (27.5g)	
89	Buried topsoil	6	2	4		
90	Hillwash	6	2	4		
91	Palaeosol	6	2	4		
92	Ditch	16	2	4		
93	Fill of ditch 92	16	2	4		
94	Ditch	16	2	4		
95	Primary fill of ditch 94	16	2	4		
96	Field drain	16	2	4		
97	Fill of field drain 96	16	2	4		
98	Tree throw hole	10	2	4		
99	Fill of tree throw hole 98	10	2	4		
100	Track	12	2	4		
101	Primary fill of track 100	12	2	4		
102	Upper fill of track 100	12	2	4		
103	Ditch	12	2	4		
104	Fill of ditch 103	12	2	4		
105	Ditch	12	2	4		
106	Fill of ditch 105	12	2	4		
107	Field drain	12	2	4		
108	Fill of field drain 107	12	2	4		
109	Gully	12	2	4		
110	Fill of gully 109	12	2	4		
111	Ditch	9	2	4		
112	Pit	16	2	4		
113	Primary fill of tree throw hole 87	7	2	4		
114	Middle fill of tree throw hole 87	7	2	4		16.8g charcoal, nutshell (hazelnut?) (0.2g)
115	Upper fill of tree throw hole 87	7	2	4	1 stone (possibly worked) (186.6g) (RF 2)	0.7g charcoal
116	Gully	13	2	4		
117	Fill of gully 116	13	2	4		
118	Fill of gully 116	13	2	4		1.3g charcoal, 0.1g CPR
119	Void	Void	Void	Void		
120	Fill of pit 112	16	2	4		
121	Upper fill of quarry 86	7	2	4		
122	Mid fill of quarry 86	7	2	4		
123	Mid fill of quarry 86	7	2	4		
124	Palaeosol	7	2	4		
125	Topsoil and turf	10	2	4		

Context	Interpretative description	Trench	Area	Field	Artefacts	Ecofacts
126	Buried topsoil	10	2	4		
127	Subsoil	10	2	4		
128	Fill of Ditch 111	9	2	4		
129	Topsoil	9	2	4		
130	Subsoil	9	2	4		
131	Natural	9	2	4		
132	Gully	13	2	4		
133	Fill of gully 132	13	2	4		
134	Gully	13	2	4		
135	Fill of gully 134	13	2	4		
136	Natural	13	2	4		
137	Subsoil	13	2	4		
138	Topsoil	13	2	4		
139	Primary fill of gully 70	12	2	4		
140	Furrow	22	1	2		
141	Fill of furrow 140	22	1	2		
142	Topsoil	22	1	2		
143	Buried topsoil	22	1	2		
144	Natural	22	1	2		
145	Field drain	22	1	2		
146	Fill of field drain 145	22	1	2		
147	Ditch	24	1	3		
148	Fill of ditch 147	24	1	3		
149	Hillwash / fill of hollow 249	24	1	3		
150	Topsoil and turf	24	1	3	1 post-medieval copper-alloy ring (3.8g), 3 post-medieval pottery sherd (6.6g), 1 post-medieval pottery vessel - stopper (28.8g)	
151	Buried topsoil	24	1	3		
152	Hillwash / fill of hollow 249	24	1	3		
153	Natural	24	1	3		
154	Topsoil	44	3	6		
155	Buried topsoil	44	3	6		
156	Natural	44	3	6		
157	Pit/root hole	44	3	6		
158	Topsoil	42	3	6		
159	Buried topsoil	42	3	6		
160	Natural	42	3	6		
161	Pit/root hole	42	3	6		
162	Fill of pit/root hole 161	42	3	6		
163	Pit/root hole	44	3	6		
164	Fill of pit/root hole 163	44	3	6		
165	Natural	48	3	6		
166	Feature	44	3	6		
167	Fill of feature 166	44	3	6		
168	Tree throw hole	45	3	6		
169	Upper fill of tree throw hole 168	45	3	6		2.9g charcoal
170	Lower fill of tree throw hole 168	45	3	6		
171	Fill of pit/root hole 157	44	3	6		
172	Subsoil	47	1	1		
173	Topsoil	43	3	6		
174	Buried topsoil	43	3	6		

Context	Interpretative description	Trench	Area	Field	Artefacts	Ecofacts
175	Natural	43	3	6		
176	Fill of pit/root hole 177	43	3	6		
177	Pit/root hole	43	3	6		
178	Fill of pit/root hole 179	43	3	6		
179	Pit/root hole	43	3	6		
180	Pit/root hole	42	3	6		
181	Fill of pit/root hole 180	42	3	6		
182	Pit/root hole	42	3	6		
183	Fill of pit/root hole 182	42	3	6		
184	Topsoil	45	3	6	6 post-medieval glass fragment (118.7g), 1 modern plastic lolly stick? (0g), 6 post-medieval pottery sherd (58.2g)	
185	Subsoil	45	3	6		
186	Natural	45	3	6		
187	Tree throw hole	43	3	6		
188	Fill of tree throw hole 187	43	3	6		
189	Fill of pit/root hole 190	43	3	6		
190	Pit/root hole	43	3	6		
191	Topsoil	33	3	5		
192	Buried topsoil	33	3	5		
193	Natural	33	3	5		
194	Pit/root hole	33	3	5		
195	Fill of pit/root hole 194	33	3	5		
196	Fill of pit/root hole 194	33	3	5		
197	Pit/root hole	62	3	7		
198	Fill of pit/root hole 197	62	3	7		13.2g charcoal
199	Pit/root hole	62	3	7		
200	Fill of pit/root hole 199	62	3	7		0.2g charcoal
201	Gully/drain	68	3	7		
202	Fill of gully/drain 201	68	3	7		
203	Topsoil	68	3	7		
204	Buried topsoil	68	3	7		
205	Natural	68	3	7		
206	Topsoil	62	3	7		
207	Buried topsoil	62	3	7		
208	Natural	62	3	7		
209	Tree throw hole	68	3	7		
210	Fill of tree throw hole 209	68	3	7		
211	Fill of tree throw hole 209	68	3	7		
212	Layer of made ground	68	3	7	1 post-medieval copper-alloy button (6.3g) (RF 3)	
213	Fill of tree throw hole 214	64	3	7		
214	Tree throw hole	64	3	7		
215	Topsoil	64	3	7		
216	Buried topsoil	64	3	7		
217	Natural	64	3	7		

Context	Interpretative description	Trench	Area	Field	Artefacts	Ecofacts
218	Fill of gully/drain 219	64	3	7		
219	Gully/drain	64	3	7		
220	Pit/posthole	70	4	9		
221	Fill of pit/posthole 220	70	4	9	4 CBM fragment (9g), 1 post-medieval clay pipe fragment (5.4g), 2 post-medieval glass fragment (0.9g)	
222	Gully	70	4	9		
223	Fill of gully 222	70	4	9		
224	Topsoil and turf	70	4	9		
225	Subsoil	70	4	9		
226	Layer of made ground	70	4	9		
227	Natural	70	4	9		
228	Gully	71	4	9		
229	Upper fill of gully 228	71	4	9		
230	Lower fill of gully 228	71	4	9		0.8g charcoal
231	Layer of made ground	70	4	9		
232	Natural	71	4	9		
233	Upper fill of ditch 234	71	4	9		0.2g charcoal
234	Ditch	71	4	9		
235	Topsoil	71	4	9		
236	Subsoil	71	4	9		
237	Void	Void	Void	Void		
238	Pit/root hole	71	4	9		
239	Fill of pit/root hole 238	71	4	9		0.1g charcoal
240	Pit/root hole	71	4	9		
241	Fill of pit/root hole 240	71	4	9		
242	Pit/root hole	71	4	9		
243	Fill of pit/root hole 242	71	4	9		
244	Mid fill of ditch 234	71	4	9		0.4g charcoal
245	Primary fill of ditch 234	71	4	9		
246	Buried topsoil	25	1	3		
247	Fill of natural hollow 248	25	1	3		
248	Natural hollow	25	1	3		
249	Natural hollow	24	1	3		
250	Topsoil	72	1	1		
251	Subsoil	72	1	1		
252	Natural	56 and 72	1	1		
253	Natural	10	2	4		
254	Natural hollow	6	2	4		
255	Natural	6	2	4		
256	Natural hollow	52	1	1		
257	Layer of made ground	48	1	1		

APPENDIX C
FINDS ASSESSMENT

Charlotte Britton

INTRODUCTION

This report discusses the finds recovered during the 2021 archaeological excavations at Burtree Lane, Whessoe (NGR: NZ 275 190). The assemblage consisted of 150 artefacts (3332.6g) that dated to between the Roman and modern periods (see Table C1).

METHOD

The assessment work was carried out between 13th-14th October 2021. The materials were assessed by eye and in line with the relevant standards and guidelines (Chartered Institute for Archaeologists (CIfA) 2020).

The clay pipe was examined in accordance with Higgins (2017) and the glass was recorded in line with both the national finds standards and find-type specific guidance (Chartered Institute for Archaeologists (CIfA) 2020; Historic England 2018). The pottery was examined in accordance with Barclay *et al.* (2016). The material was organised by stratified deposit (context) and quantified by count and weight. Form, ware and date were identified where possible and the Romano-British fabric was described as per the National Roman Fabric Reference Collection Handbook (Tomber and Dore 1998).

Table C1: all material by count and weight (g)

Material	Count	Weight (g)
CBM	6	38
Clay pipe	7	21.2
Copper alloy	4	12.2
Flint	3	14.7
Glass	18	519.7
Glass waste	2	27.5
Leather	1	191.8
Medieval pottery	3	3.9
Plastic	2	3.3
Post-medieval pottery	56	677.1
Roman pottery	39	187.4
Stone	9	1635.8
Total	150	3332.6

OUTLINE OF THE ASSEMBLAGE

Ceramic building material (CBM)

A total of six fragments (38g) of CBM was recovered that was essentially undiagnostic in date and form. The fragments probably derived from handmade objects but could not be identified further (C. Antink pers comm.).

Clay pipe

A total of seven fragments (21.2g) of clay pipe was recovered during the excavations at Burtree Lane. The assemblage dated to the post-medieval period (specifically the late 17th-19th century) and consisted of stem and bowl fragments. A maximum of six individual pipes were present, all of which were in poor to good condition. The pipes were British in origin and probably produced within the local region. The fragments had a fabric made from ball clay and where present burnishing was poorly applied. Although fragmentary, the stems were straight with bore hole diameters measuring 5/64-8/64 inches, indicating they were of a late 17th-19th century date (Higgins 2017, 8-9). One fragment recovered from the topsoil (63) had a partial bowl and a spur, and also displayed obvious longitudinal casting seams. This indicated that it was made from a two-piece mould, dating it firmly post 1600 AD (Ayto 1979,19). The stem also had a rectangle of clay applied to one side that may have either been intended to display a maker's mark or was a repair to the pipe stem, indicating it had been used on multiple occasions. Finally, one stem fragment (0.9g) also recovered from the topsoil (88) showed vitrification on the external surface and so may have constituted a waster.

Copper alloy

A total of four fragments (12.2g) of copper alloy were recovered during the excavations. A single circular post-medieval button was found within a layer of made ground (212); this object probably originated from clothing. The remaining three fragments were recovered from topsoil and included a fragment of sheet, a partial ring (that may have originated from a horse harness or similar) and a nail. All these items were undiagnostic in date (J. Shoemark, pers comm.).

Glass and glass waste

The glass and glass waste assemblage dated to the post-medieval period (specifically the 18th-20th century and modern period) and was in good condition. A total of 20 fragments (547.2g) was recovered which represented six separate vessels, two possible window shards and two fragments of glassmaking waste.

The vessels were British in origin, probably produced within the local region and comprised four separate beer/wine bottles, a possible water bottle and a medicine bottle. The beer/wine bottles were all green in colour and probably made from high-lime low-alkali (HLLA) glass typical of the 18th to early 20th century (Historic England 2018, 45-48). Six fragments (363.6g) recovered from ditch fill (57) originated from a single bottle that displayed a casting seam, indicating it was machine made. This vessel had 'H.G BER...N....DARLINGTON' embossed on its sidewall, suggesting it held beer produced within the local region. One shard (2.7g) from a

possible water bottle was recovered from the topsoil (6). This had 'T' embossed on its sidewall, although a definite product or producer could not be ascertained. In addition, six fragments (118.7g) from a transparent, rectangular-shaped medicine bottle were also recovered from the topsoil (184). This vessel had 'SUCCESSORS TO..CALIFORNIA FIG SYRUP CO.' and 'CALIFIG' embossed on its sidewalls, indicating that it originally held Califig; a liquid supplement in the form of fig syrup, that is still used today. This example probably dated to between the mid-19th-20th century.

Single shards of transparent plate soda-lime-silica glass were recovered from ditch fill 18 and pit fill 221. These two fragments probably originated from windows of a 20th-century to modern date (Historic England 2018, 45-48).

Finally, two fragments (27.5g) of glass waste were recovered from the topsoil (88). These were green to grey in colour, opaque and displayed vitrification on their outer surfaces. It is probable these constituted altered HLLA glass dating to the 18th-20th century and were by-products of the glass bottle making process (Historic England 2018, 28-29).

Leather

One fragment (191.8g) of a leather shoe sole was recovered from ditch fill (57). The shoe was probably of brass-riveted production and dated to the mid- 19th to 20th century. It displayed iron nailing at the tread and on the low heel, and so was intended to be used as an outdoor shoe; probably as heavy work wear (Q. Mould pers comm.).

Plastic

Two fragments (3.3g) of plastic were recovered including a plastic stick (a possible lollipop stick) and a small plastic tile. Both were modern in date.

The Pottery

The Roman pottery

A total of 39 fragments (187.4g) of Roman-period pottery was recovered from pit fill 66. The assemblage represented two separate vessels and the sherds recovered were in a good condition, although slightly abraded. The first vessel was represented by a single sherd (0.8g) of samian ware that displayed no slip or form. It probably represented an import, being produced in France.

The second vessel (38 sherds; 186.6g) was coarseware of British origin and was probably produced within the local region. It was highly typical of the period and encompassed a utilitarian gritty greyware. As the ware was a common indeterminate greyware, a fabric code from the National Roman Fabric Reference Collection, could not be attributed. The sherds displayed a grey core with buff to brown margins, was soft and had common ill-sorted angular fine to medium inclusions, such as quartz, iron and mica. Sparse voids were also evident in the fracture. The vessel was a wheel-thrown jar, probably used to store foodstuffs, although was not dateable beyond a general Roman-period date.

The medieval pottery

Three sherds (3.9g) from a single medieval ceramic vessel of an 11th to 13th century date were recovered from the fill (41) of a plough furrow. These were in good condition, British in origin and were probably produced within the local region. The fabric was a locally made oxidised gritty ware that displayed an oxidised core with buff margins, and had common quartz, mica, and sparse iron, inclusions. This was typical of the period and area, and encompassed a utilitarian ware, although a form could not be discerned.

The post-medieval pottery

A total of 56 sherds (677.1g) of post-medieval pottery dated to between 18th and 20th centuries was recovered. The assemblage represented a maximum of 37 separate vessels and the material recovered was in very good condition. All the pottery present was British in origin, and probably produced within the local region. The wares identified were highly typical of the period and encompassed utilitarian wares such as Blackware, yellow and brown glazed earthenwares, stoneware and horticultural ware (a plant pot) and table wares including, spongeware, transfer-printed ware, probable yellow ware and whiteware. The forms identified were also typical of the period and wares, including flatwares such as plates, and hollow wares such as bowls, bottles, dishes, a tea pot and a plant pot.

The decorations and surface treatments identified were typical of the periods and wares, and included black, brown and yellow glazes and blue transfer-printed patterns (including Willow Pattern). Of note within the assemblage was a stoneware bottle stopper that had 'HINDE BROS DARLINGTON' embossed on its top. This stopper derived from a beer bottle originating from the local Hinde Brothers brewery, dating between the late 19th to early 20th century (Bennison 1992, 24, 55, 245).

Stone and flint

A total of nine fragments (1635.8g) of stone and three fragments (14.7g) of flint, including one fire cracked example, was recovered from across the site. These items were primarily natural in origin. One large fragment (1432g) of stone recovered from a tree throw hole (fill 46) may have shown indications that it had been worked, although was more likely, water affected (J. Shoemark pers comm.).

PROVENANCE OF OBJECTS

Most of the assemblage was recovered from topsoil and subsoils, limiting their significance and usefulness in dating the activity recorded in the trenches. However, several small assemblages of artefacts were recovered from the fills of archaeological features (Table C2 – at the end of this appendix).

These included 18th-20th century pottery and glass recovered from ditch fill (18) and pottery, glass and a leather shoe (19th-20th century) recovered from ditch fill (57). In addition, clay pipe and glass dating to between the 17th and 20th century and undiagnostic CBM were recovered from the fill (221) of feature 220.

Of more significance were the Roman-period and medieval pottery assemblages recovered from pit fill (66) and furrow fill (41) respectively, with the former probably being recovered from its primary deposition context.

DISCUSSION

Ceramic building material

The CBM recovered from Burtree Lane was undiagnostic in date and form and therefore has limited potential for either dating the features or further study.

Clay pipe

Although the clay pipe was primarily recovered from topsoil and subsoil contexts, the material from the features had some potential to tell us about the people that inhabited the wider area during the post-medieval period. For instance, clay pipes were disposable items during this time, often only being used a few times before they were thrown away and therefore their potential for dating a context is high (Pearce 2015, 286). Accessing this potential relies on being able to date the pipe accurately. This is usually achieved through having complete bowls to compare the typology and/or through bore and stem size. The bowl form and bore-hole sizes suggested that the clay pipe recovered during the Burtree Lane project dated to the late 17th-19th centuries and intimated that leisure activities were undertaken in the vicinity of the site during this time. When present the burnishing was usually poorly applied suggesting that the pipes were cheaper or more common examples (Higgins 2017, 11,19-20) and so probably derived from a community that was of simple means; possibly originating from a local village. The one possible waster fragment recovered may indicate that a production centre was located close to the site, or it may have simply arrived with a batch of pipes.

Copper Alloy

The copper alloy assemblage was essentially undiagnostic and so has no potential to provide data about the site or those that inhabited or worked in the vicinity.

Glass and glass waste

The glass assemblage dated to the 18th-20th centuries and modern period and encompassed vessel and window glass as well as glass waste. Most of the assemblage was recovered from topsoil or subsoil contexts and so had limited potential for analysis. The vessel fragments were related to drink storage and consumption, as represented by the beer and water bottles, and medicinal practices as represented by the Calig bottle.

The two fragments of glass waste recovered could intimate that a glass working centre may have been situated in the vicinity of the site during the post-medieval period. However, as they were recovered from the topsoil the fragments may have also been intrusive and/or associated with landfill known to have been operating in the vicinity during the 20th century (NAA 2021, 2).

Leather

The leather shoe recovered dated to the mid- 19th to 20th century. Other than providing a broad date for the infilling of the ditch it was recovered from, this object is of limited significance.

The Pottery

The Roman pottery

The wares present in the Roman-period pottery assemblage encompassed a table and a utilitarian ware and were probably associated with a domestic or military settlement located on or around the site at Burtree Lane. The samian ware was probably produced in France, whereas the gritty greyware probably originated from a local production centre. Gritty greywares were common to the period and area and are thought to have been produced throughout the local region. Similar examples have, for instance, been recovered at Greta Bridge, only c.20miles away from the site at Burtree Lane, and have been described as local imitations of black-burnished ware (Croom and Bidwell 1998, 179). It is therefore probable that the gritty greyware recovered at Burtree Lane was a locally made product.

This assemblage was recovered from the fill (66) of a pit and provides a relatively accurate, if broad, date for this feature. Roman-period activity has previously been recorded in the wider area, specifically south of Whessoe Grange, and although a small assemblage, the pottery recovered at Burtree lane supports a hypothesis that there was Roman-period occupation in the vicinity.

The medieval pottery

The medieval pottery encompassed a single utilitarian vessel that was typical of a domestic medieval settlement in the north-east of England. The pottery dated to between the 11th and 13th centuries and probably derived from a utilitarian vessel that was used for the storage, preparation and/or cooking of foodstuffs. The pottery probably originated from a production site in the local region.

The post-medieval pottery

The wares and forms present within the post-medieval pottery assemblage encompassed table and utilitarian wares, including a plant pot, and were probably associated with a domestic settlement located on or around the site during the 18th-20th centuries. As the assemblage was primarily came from topsoil and turf layers it had little potential to tell us about the people inhabiting the site during this period. Most of the assemblage probably originated from local production centres, with the forms and decorations identified being common to the period and area.

Flint, plastic and stone

The flint and stone recovered was unworked and the plastic recovered was residual and modern in date, and so could tell us nothing about the history of the site.

CONCLUSION

The majority of the assessed artefacts were from topsoil or subsoil contexts and were of limited archaeological significance, although the assemblage as a whole was indicative of particular activities taking place around the site at Burtree Lane during the Roman, medieval and post-medieval periods. Buildings, domestic food and drink consumption, medicinal practices, leisure activities (smoking), personal adornment (the button) and working adornment (the shoe), can be inferred. These were probably associated with communities in the surrounding area of Burtree Lane, although would have probably been deposited at the site through dumping, manuring or similar activities.

A small number of the medieval and post-medieval items have provided limited dating evidence for some of the recorded features. The Roman-period pottery is of greater regional importance (Petts and Gerrard 2006) both for dating purposes as well as indicating occupation in the vicinity.

RECOMMENDATIONS

The assessed material was generally in a good condition, but the majority was of limited significance and had no potential for further study. The undiagnostic materials such as the CBM, copper alloy, flint, plastic and stone are recommended for discard as they did not advance our understanding of the site.

Additionally, most of the diagnostic material was recovered from topsoil and subsoil contexts and were generally typical for the periods and region. No further study is therefore recommended on this material and these assemblages are also recommended for discard.

The medieval and Roman pottery is more significant and is recommended for retention and deposition with the final project archive. If further archaeological fieldwork is undertaken as part of this project, the retained material should be reassessed in combination with any finds recovered during subsequent excavation.

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Table C2: material by context with count and weight (g)

material	3		6		10		16		18		34		41		46		55		57		63		66		88		115		150		184		212		221		Total count	Total weight (g)
	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)	count	weight (g)				
CBM						2	29																											4	9	6	38	
Clay Pipe			1	3							2	3							2	9.3			1	0.9									1	5.4	7	21.2		
Cu Alloy			1	1			1	1																	1	3.8				1	6.3			4	12.2			
Flint											1	5					1	8.5			1	0.8												3	14.7			
Glass	1	29	1	3					2	5										6	364						6	119			2	0.9	18	520				
Glass waste																							2	28									2	27.5				
Leather																				1	192												1	192				
Medieval Pottery													3	4																			3	3.9				
Plastic							1	3																				1	0				2	3.3				
Post-medieval pottery			2	16			11	59	3	11	7	64							2	16	4	91	19	342				4	35	6	58			56	677			
Roman Pottery																							39	187										39	187			
Stone					4	4									4	1446										1	187						9	1636				
Total	1	29	5	22	4	4	15	92	5	16	10	72	3	4	4	1446	1	8.5	11	647	22	353	39	187	3	28	1	187	5	39	13	177	1	6.3	7	15	150	3333

APPENDIX D
PALAEOENVIRONMENTAL ASSESSMENT

Gav Robinson and Hannah Clay

INTRODUCTION

A total of 23 bulk environmental samples (27 10-litre tubs) were taken during archaeological trial trenching associated with a proposed solar farm on land to the north of Burtree Lane, Darlington. After a brief re-assessment of the potential of the contexts, 18 tubs from 14 contexts were processed (Table D1).

This report presents the results of the assessment of the palaeobotanical and charcoal remains recovered in accordance with Campbell *et al.* (2011) and Historic England (2015).

METHODOLOGY

The 14 bulk environmental samples were processed at NAA. The colour, lithology, weight and volume of each sample were recorded using standard NAA pro forma recording sheets. The samples were processed with 500 micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). Once dried, the residues from the retention mesh were sieved to both <4mm and >4mm and the artefacts and ecofacts removed from the larger fraction. The smaller fraction was not examined and has been retained.

The flots (floated fractions) were scanned under a stereo-microscope (x 45 magnification) to note presence and absence of ecofacts; namely palaeobotanical remains, charcoal, insects, shell and animal bone. The results are presented in Table D2.

During recording, consideration was given to the suitability of the macrofossil remains for submission for radiocarbon dating by standard radiometric technique or accelerator mass spectrometry (AMS).

RESULTS

The majority of the flots consisted of very fine rootlets or grass and 12 contained charcoal or other charred plant remains (CPR). No waterlogged material, molluscs, insect remains, bone or artefacts were present.

Contexts 114, 118, 169 and 198 produced noteworthy assemblages of charcoal. A few fragments of charred nutshell (possibly hazelnut) were identified within the sample from context 114 and potential charred seeds were identified within contexts 114, 118 and 169.

The largest assemblage was recovered from the fill (114) of a tree throw hole (87) recorded in Trench 7. This comprised 16.8g of charcoal recovered from a small sample of six litres of soil. Considering the high density of ecofacts, the presence of larger fragments of charcoal as well as nutshell fragments and possible charred seeds, this assemblage has a moderately high potential for further analysis.

A nine-litre sample from the fill (118) of a shallow gully (116) recorded in Trench 71 produced a small assemblage (1.3g) of charcoal as well as a charred seed.

Context 169, the upper fill of a tree throw hole (168) recorded in Trench 45, contained a small assemblage of charcoal and possible charred seeds.

Within Trench 62 a 10-litre sample (198 AA) from a possible pit (197) contained 13.2g of charcoal, including some larger fragments.

The rest of the recovered material comprised small assemblages of small fragments of charcoal, although, a few larger fragments were identified within contexts 55, 115, 198 and 230.

STATEMENT OF POTENTIAL

All of the assemblages of charcoal and CPR derived from undated features; the samples from the two potential Roman-period pits (65 and 112) contained no ecofacts.

The excavator suggested that the material from tree-throw 87 could represent a dump of early prehistoric fire waste due to the presence of heat-fractured stone and charcoal. The identification of possible charred hazelnut shell fragments adds weight to this as these are often a common component of Mesolithic, Neolithic and Bronze Age palaeobotanical macrofossil assemblages (Hall and Huntley 2007, 23, 27, 32, 35). At the time of writing, Hall and Huntley (2007) indicated that such remains were extremely rare in the northern region (*ibid.*, figs 1, 2 and 3) with only a single Bronze Age site being recorded within County Durham. The study of such remains is therefore highlighted as a very high priority (*ibid.*, 35). This rarity is mirrored within the Regional Research Framework (Petts and Gerrard 2006, 14, 24) which highlights the recovery of Mesolithic, Neolithic and Bronze Age palaeoenvironmental material as research priorities (*ibid.*, 125, 130).

The assemblage from tree-throw 87 is therefore a priority for radiocarbon dating as well as further analysis. In addition, if the material from gully 116, tree throw hole 168 and pit 197 are also of an early prehistoric date than these would be of equal importance.

Material that could be radiocarbon dated via accelerator mass spectrometry (AMS) was recovered from most of the contexts. However, the assemblages that comprised small amounts of small fragments are likely to be reworked or intrusive (see Bayliss 2015) and are not considered suitable. Therefore, only material from contexts 114, 169 and 198 represent potential candidates for radiocarbon dating. However, species identification and an assessment of archaeological suitability would need to be undertaken prior to submission (*ibid.*).

RECOMMENDATIONS

Potentially important assemblages of charred plant macrofossils were recovered from contexts 114, 118, 169 and 198. At present these are undated but could relate to regionally important prehistoric activity. It is therefore recommended that further analysis as well as radiocarbon dating of material from context 114 be undertaken. Additionally, dependant on the importance of features 116, 168 and 197, these should also be considered for radiocarbon dating. Prior to submission, species identification and charcoal analysis should be carried out by a palaeobotanical specialist on the material from the contexts chosen for dating.

However, as these assemblages potentially relate to wider areas of activity and considering that further archaeological mitigation may be undertaken, the analysis and radiocarbon dating should be carried out in combination with any analysis associated with later stages of archaeological fieldwork.

RETENTION AND DISPOSAL

All of the current material should be retained as part of the physical site archive. Retention should then be reassessed in combination with the results from any further phases of archaeological work associated with the project.

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Table D1: Processing information

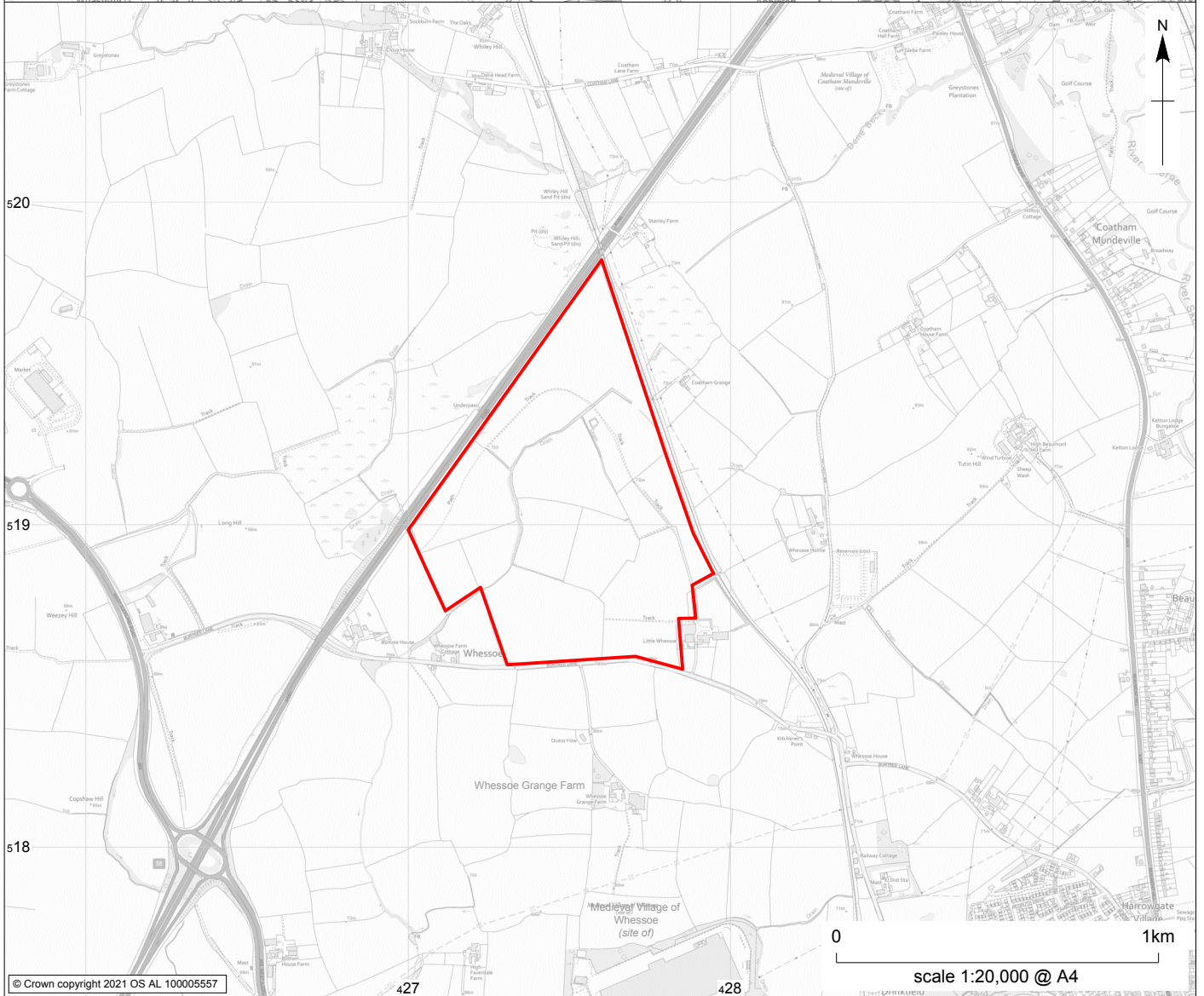
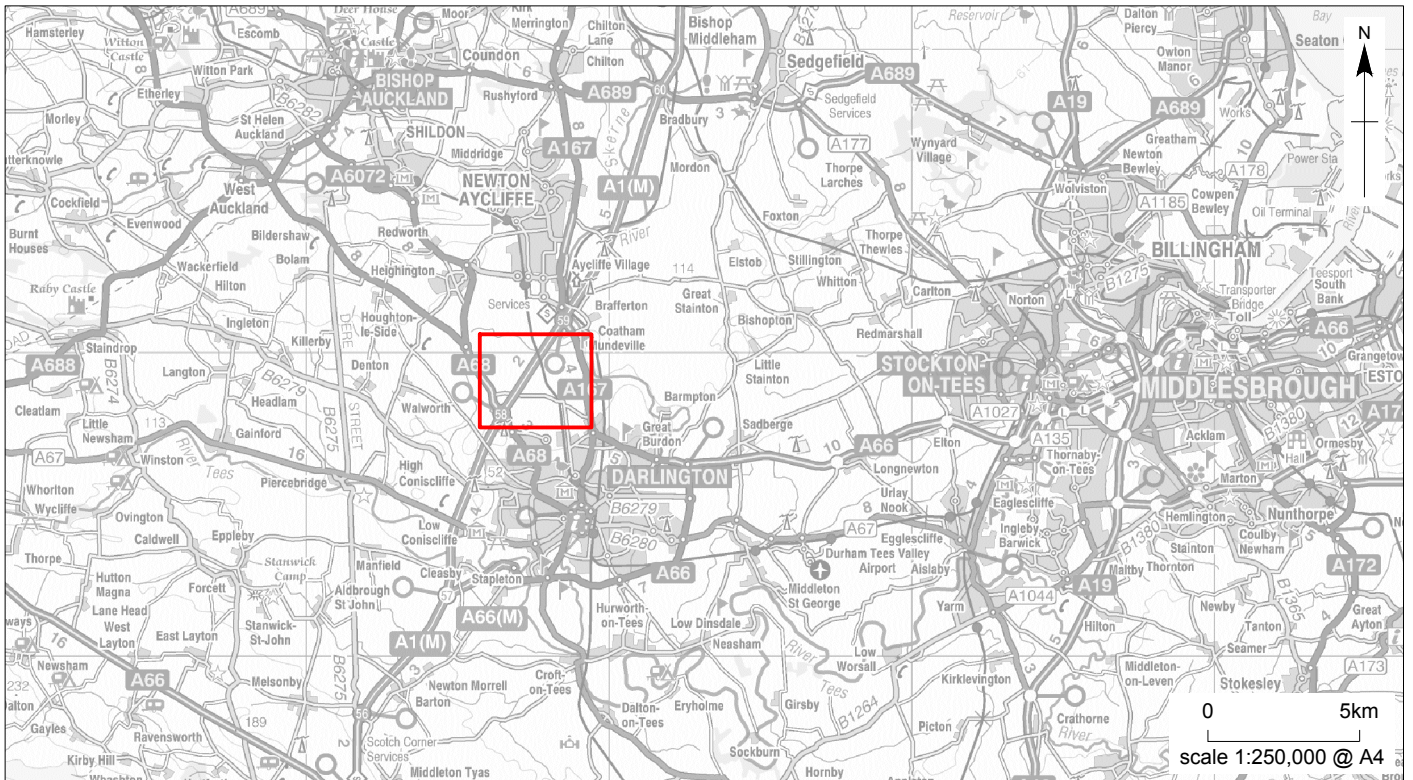
Context	Context description	Codes	No. of tubs taken	Process (Y/N)	No. of tubs processed	Feature assessment	Processed weight (g)	Processed volume (litres)
23	Soft organic layer under made ground and above glacial feature	AA	1	N	0	Potentially very limited significance. Could be made ground, no dating	n/a	n/a
55	Fill of tree throw hole 54 containing possible lithic and charcoal lens	AA	1	Y	1	Potential early prehistoric waste in tree-throw hole	8	8
66	Fill of pit 65 containing Roman-period pottery	AA	2	Y	2	Significant feature	16	14
71	Upper fill of possible natural water feature	AA	1	N	0	Potentially very limited significance. probably glacial feature	n/a	n/a
85	Fill of tree throw hole 84 containing charcoal	AA	1	Y	1	Potential early prehistoric waste in tree-throw hole	12	9
114	Fill of tree throw hole 87 containing charcoal and heat-fractured stone	AA	1	Y	1	Potential early prehistoric waste in tree-throw hole	6	6
115	Fill of tree throw hole 87 containing charcoal and heat-fractured stone	AA	1	Y	1	Potential early prehistoric waste in tree-throw hole	9	8
118	Fill of shallow gully 116	AA	1	Y	1	Undated feature of possible significance	10	9
120	Fill of pit 112 next to pit 65	AA	1	Y	1	Significant feature	9	8
169	Upper fill of tree throw hole 168 containing charcoal	AA	1	Y	1	Potential early prehistoric waste in tree-throw hole	8	8
170	Lower fill of tree throw hole 168 containing charcoal	AA	1	N	0	Upper fill and contained very little charcoal	n/a	n/a
176	Fill of possible pit 177	AA	1	N	0	Very shallow and probably root bole, possibly fairly recent	n/a	n/a
178	Fill of possible pit 179	AA	1	N	0	Very shallow and probably root bole, possibly fairly recent	n/a	n/a
181	Fill of possible posthole 180	AA	1	N	0	Very shallow and probably root bole, possibly fairly recent	n/a	n/a
183	Fill of possible posthole 182	AA	1	N	0	Very shallow and probably root bole, possibly fairly recent	n/a	n/a
188	Fill of tree-throw 187	AA	1	N	0	Very shallow and probably root bole, possibly fairly recent	n/a	n/a
189	Fill of possible posthole 190	AA	1	N	0	Very shallow and probably root bole, possibly fairly recent	n/a	n/a
198	Fill of pit 197	AA	2	Y	2	Potential early prehistoric pit	11	10
200	Fill of pit 199	AA	1	Y	1	Potential early prehistoric pit	8	9
230	Dark mid fill of gully 228	AA	1	Y	1	Significant feature	10	9

Context	Context description	Codes	No. of tubs taken	Process (Y/N)	No. of tubs processed	Feature assessment	Processed weight (g)	Processed volume (litres)
233	Upper fill of ditch 234	AA	2	Y	2	Significant feature	19	19
239	Fill of pit/tree bole 238	AA	1	Y	1	Significant feature	6	5
244	Dark mid-fill of ditch 234	AA	2	Y	2	Significant feature	15	16

Table D2: Palaeoenvironmental assessment

Context	Flot (g)	Flot Description	Charcoal (g)	CPR (g)	Other finds (g)	Assessment	Analysis potential? (Y/N)	AMS?*
55	1.6	Roots/ grass (modern) with possibly charcoal inside	1.9			Some charcoal, including larger pieces	N	N
66	9.7	Roots/ grass (modern)				Nothing	N	N
85	0.1	Roots/ grass (modern) with possible charcoal				A few small fragments of charcoal	N	N
114	0.2	Roots/ grass (modern) with possible seeds or charcoal	16.8		Nutshell (hazelnut?) (0.2g)	Moderate amount of charcoal, some larger pieces, some ?hazelnut shell fragments and possible seeds	Y	Y
115	0.3	Roots/ grass (modern) with possible charcoal	0.7			A few fragments of charcoal, some larger pieces	N	N
118	3.5	Roots/ grass (modern)	1.3	0.1		Some charcoal, including larger pieces; a few seeds?	Y	N
120	3.8	Roots/ grass (modern) with possible charcoal				Nothing	N	N
169	2.3	Roots/ grass (modern) with possible seeds or charcoal	2.9			Some charcoal, including larger pieces and possible seeds	Y	Y
198	3.9	Roots/ grass (modern) with possible charcoal	13.2			Moderate amount of charcoal, some larger pieces	Y	Y
200	0.5	Roots/ grass (modern)	0.2			A few small fragments of charcoal	N	N
230	1.4	Roots/ grass (modern) with possible charcoal	0.8			A few fragments of charcoal, some larger pieces	N	N
233	0.7	Roots/ grass (modern) with possible charcoal	0.2			A few small fragments of charcoal	N	N
239	0.7	Roots/ grass (modern)	0.1			A few small fragments of charcoal and coal	N	N
244	0.9	Roots/ grass (modern)	0.4			A few small fragments of charcoal	N	N

* potential suitability based on size of fragments and amount of material only. Species identification would be required

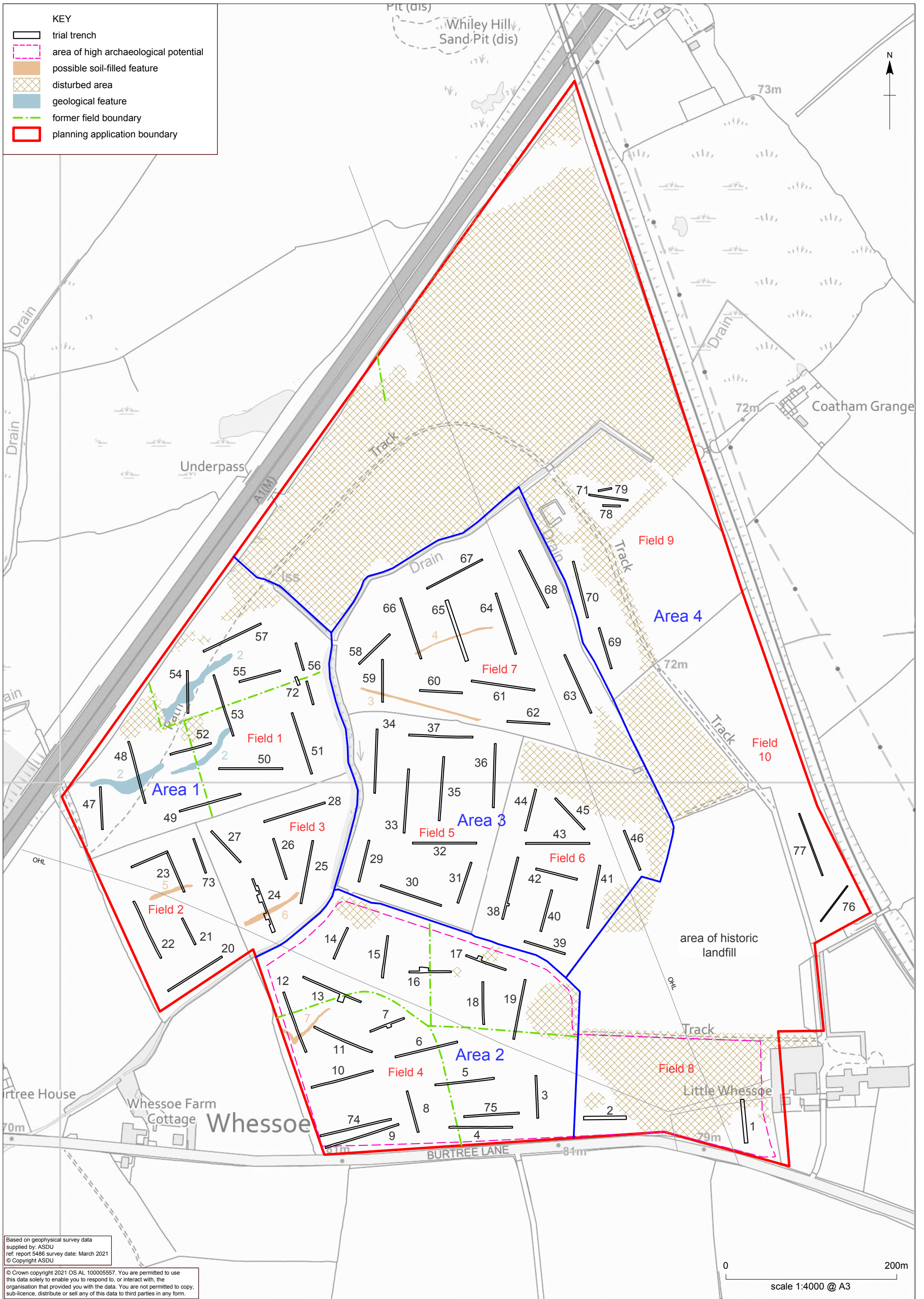


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Burtree Lane Solar Farm: site location

Figure 1



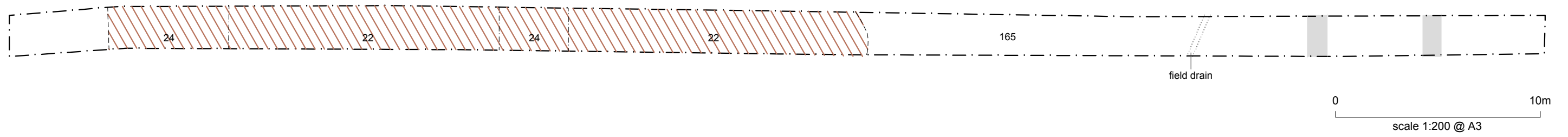
Based on geophysical survey data supplied by ASDU ref. report 5486 survey date: March 2021 © Copyright ASDU

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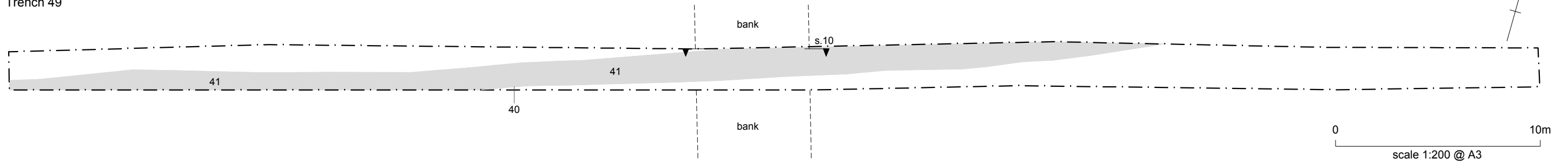
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Field 1

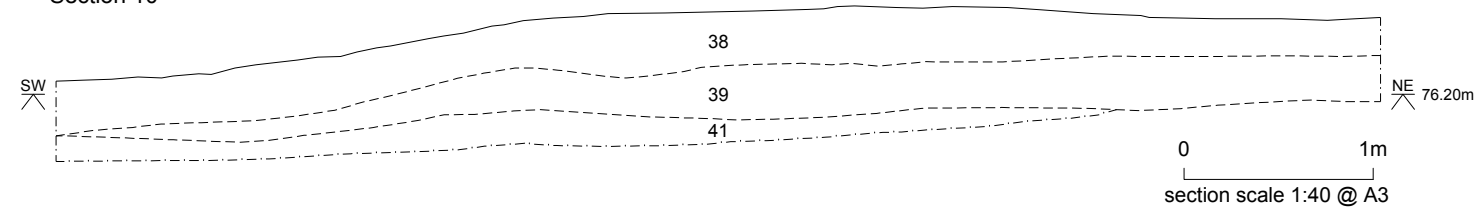
Trench 48



Trench 49



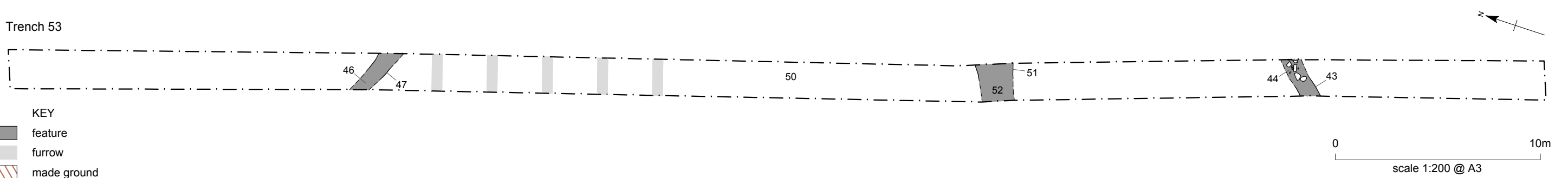
Section 10



Trench 52



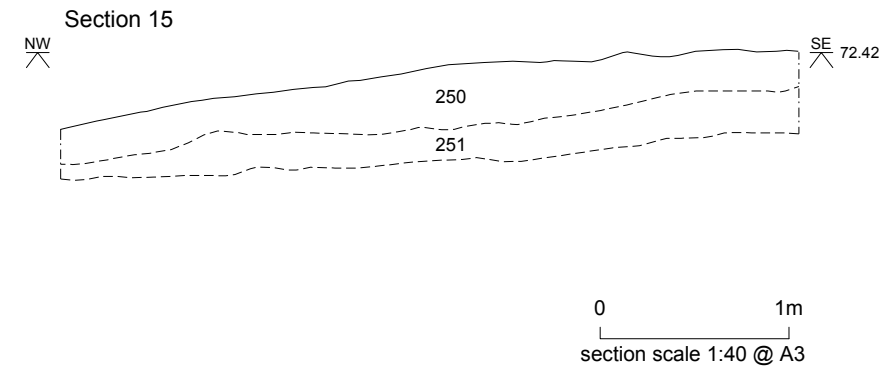
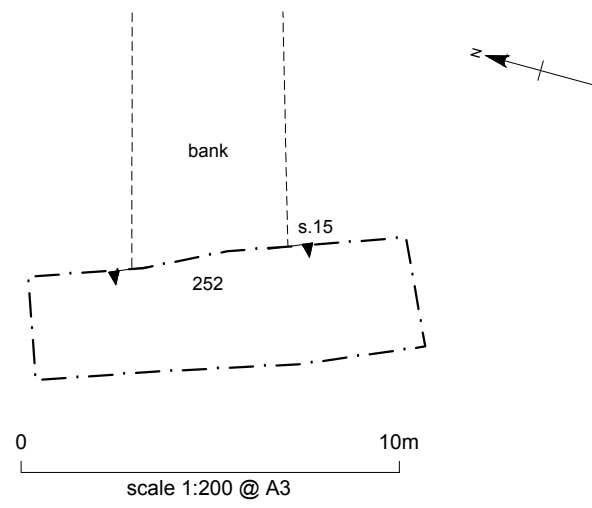
Trench 53



- KEY
- feature
 - furrow
 - made ground

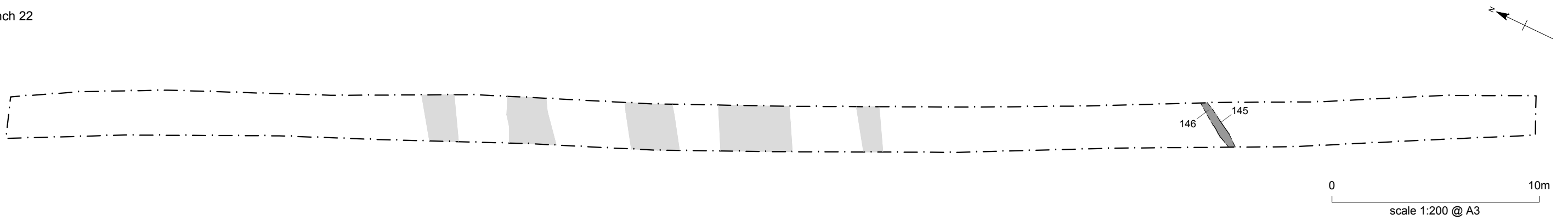
Field 1

Trench 72



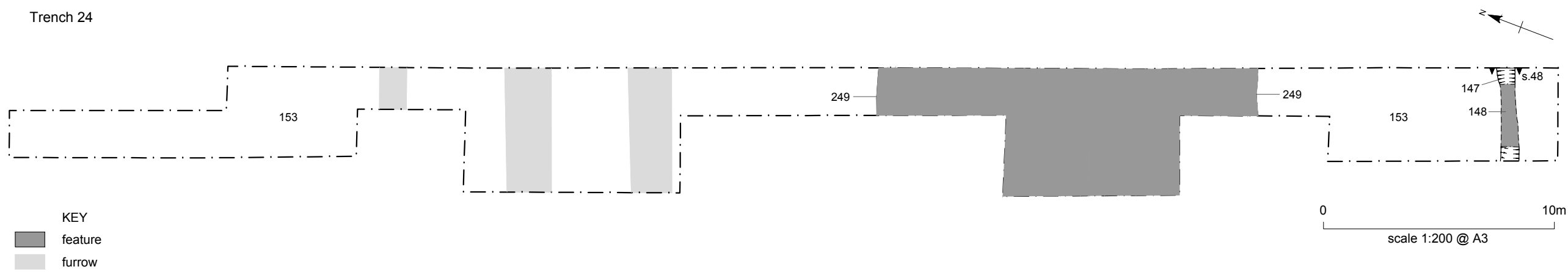
Field 2

Trench 22

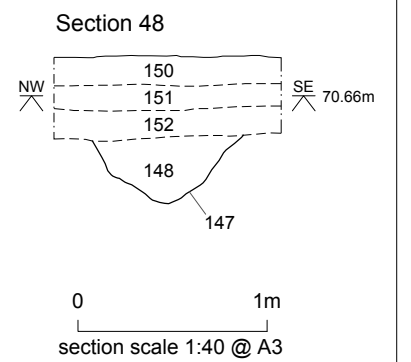


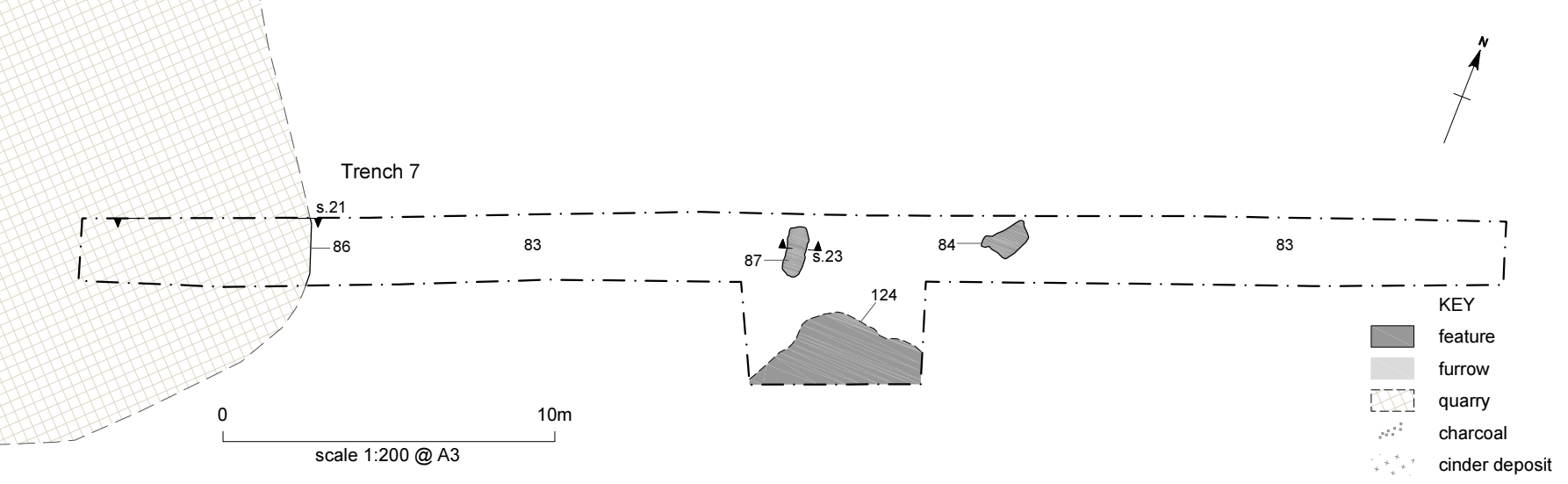
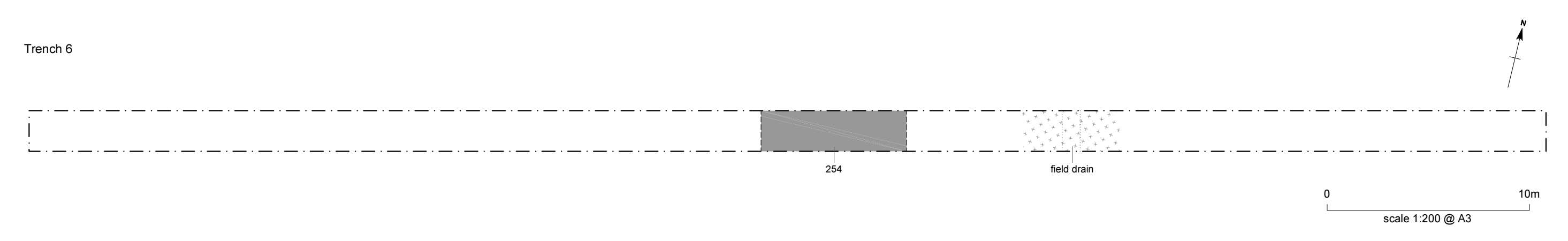
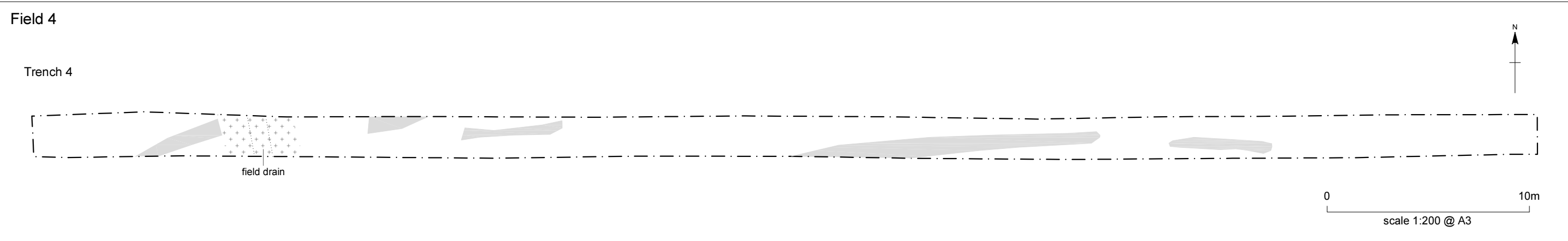
Field 3

Trench 24



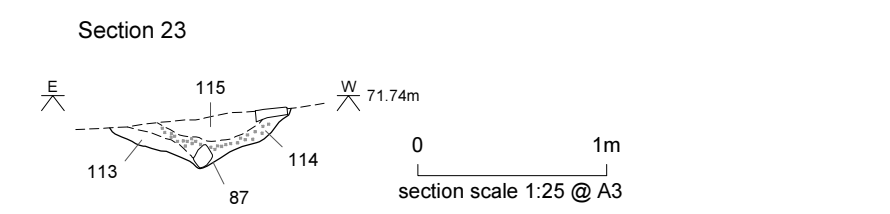
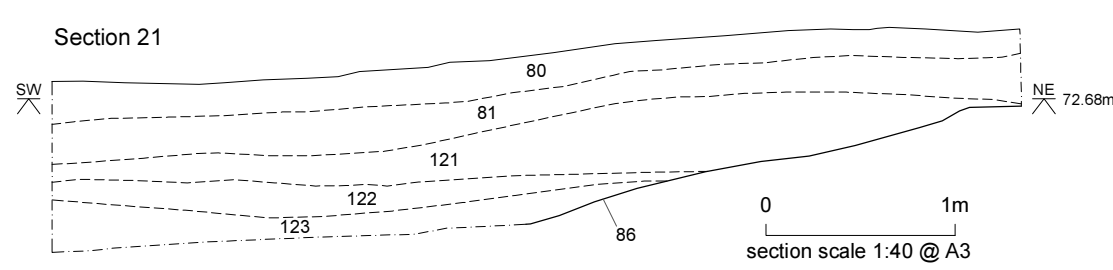
KEY
■ feature
■ furrow



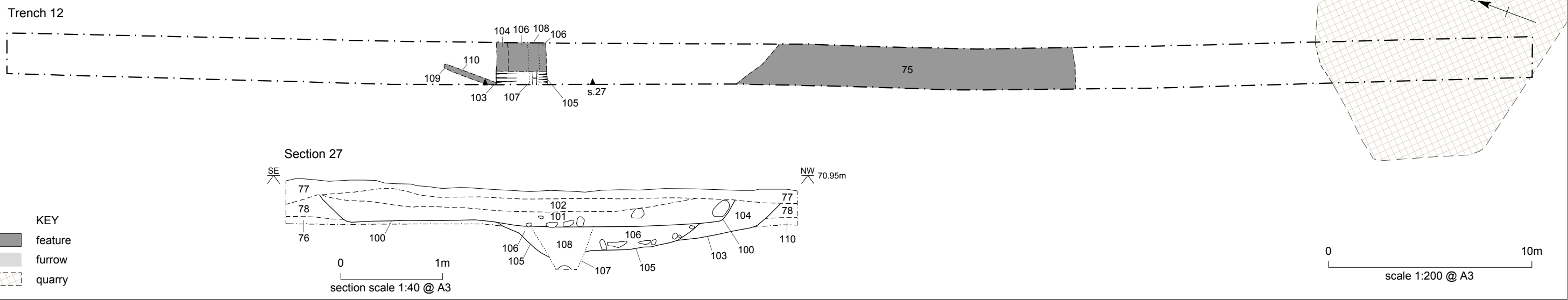
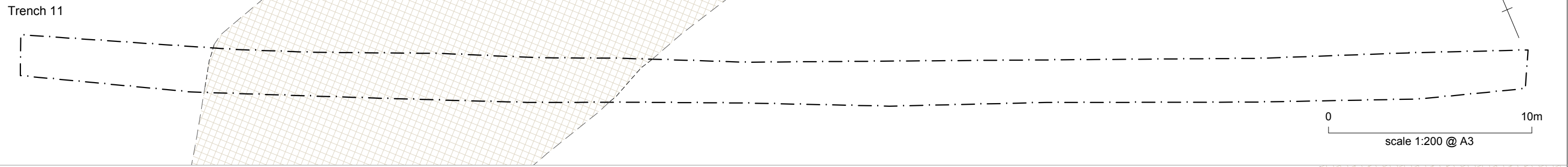
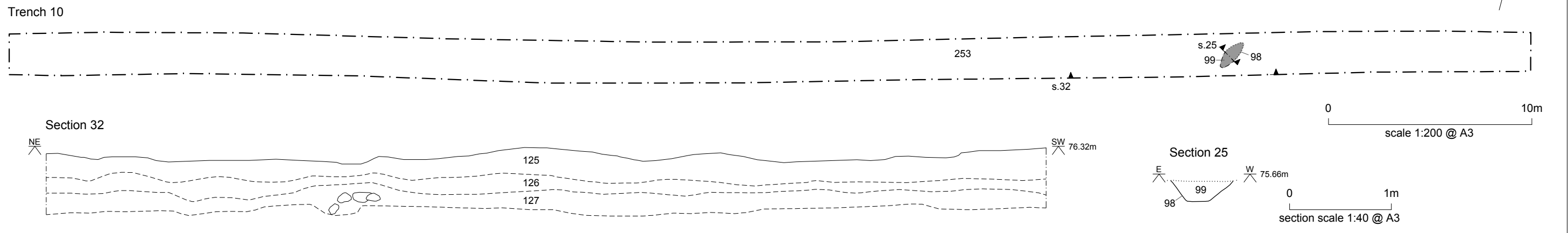
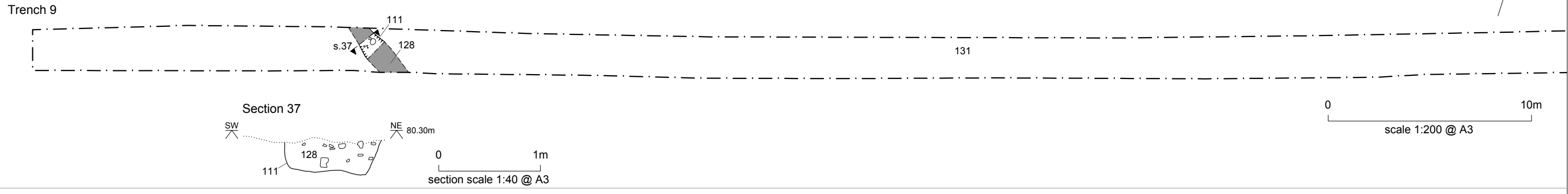


KEY

- feature
- furrow
- quarry
- charcoal
- cinder deposit



Field 4



- KEY
- feature
 - furrow
 - quarry

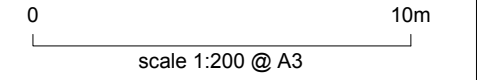
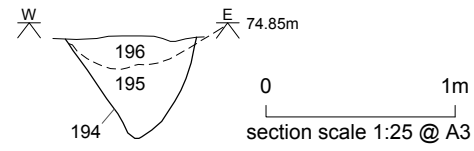
Burtree Lane Solar Farm: Field 4 trenches 9, 10, 11 and 12

Field 5

Trench 33

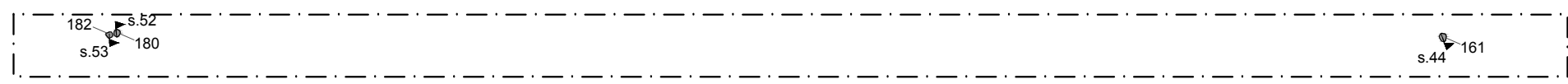


Section 56

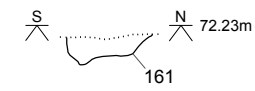


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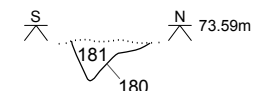
Trench 42



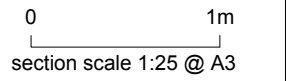
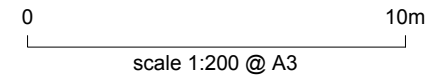
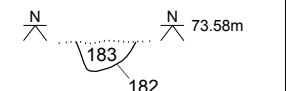
Section 44



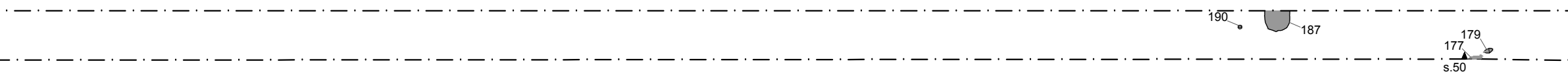
Section 52



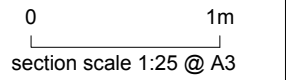
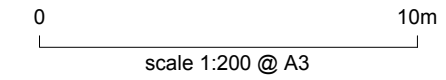
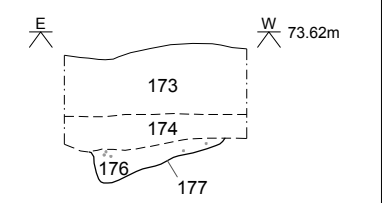
Section 53



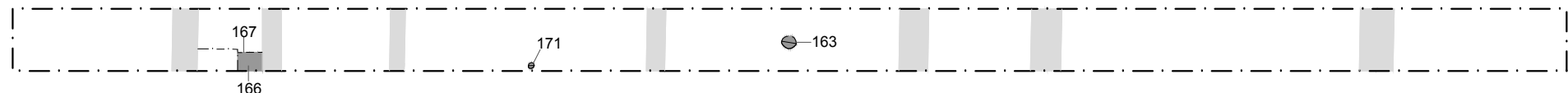
Trench 43



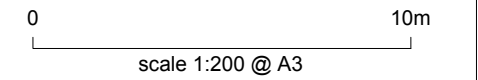
Section 50



Trench 44

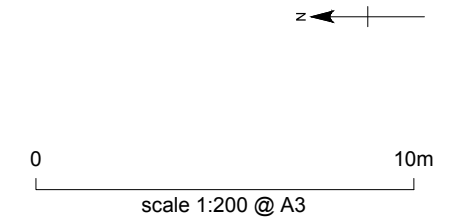
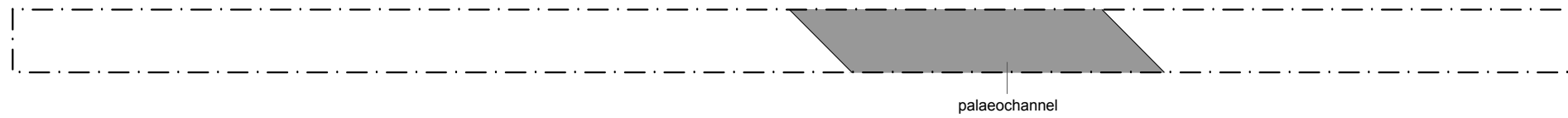


- KEY
- feature
 - furrow

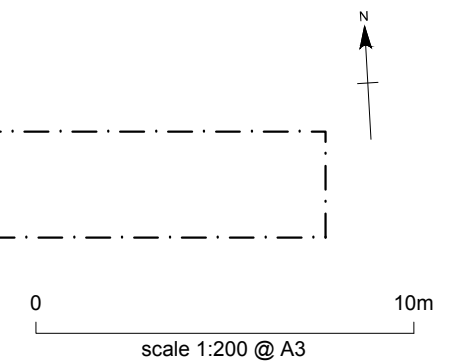
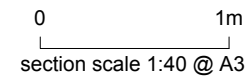


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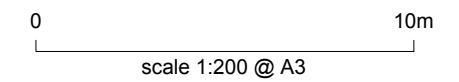
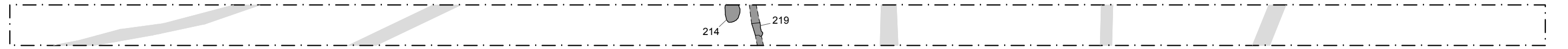
Trench 59



Trench 62



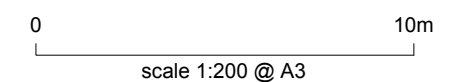
Trench 64



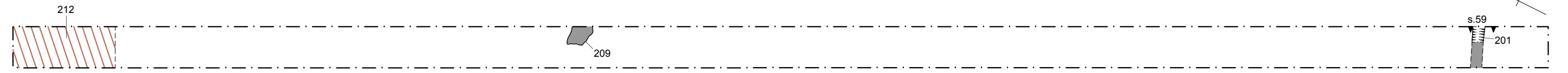
Trench 65



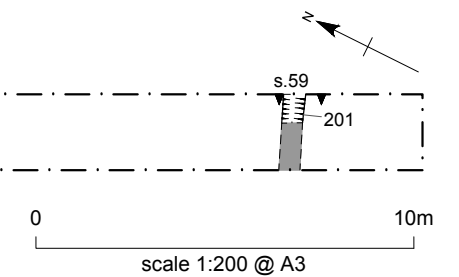
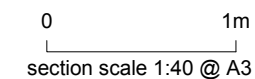
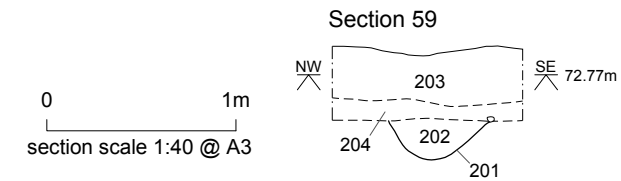
french drain

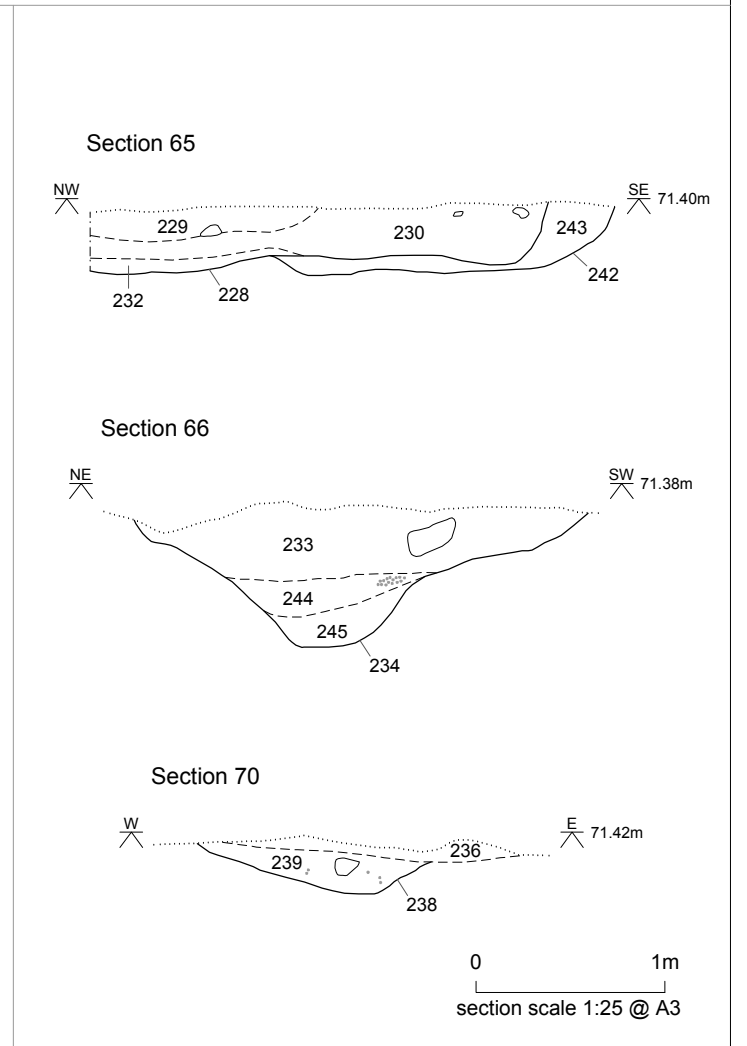
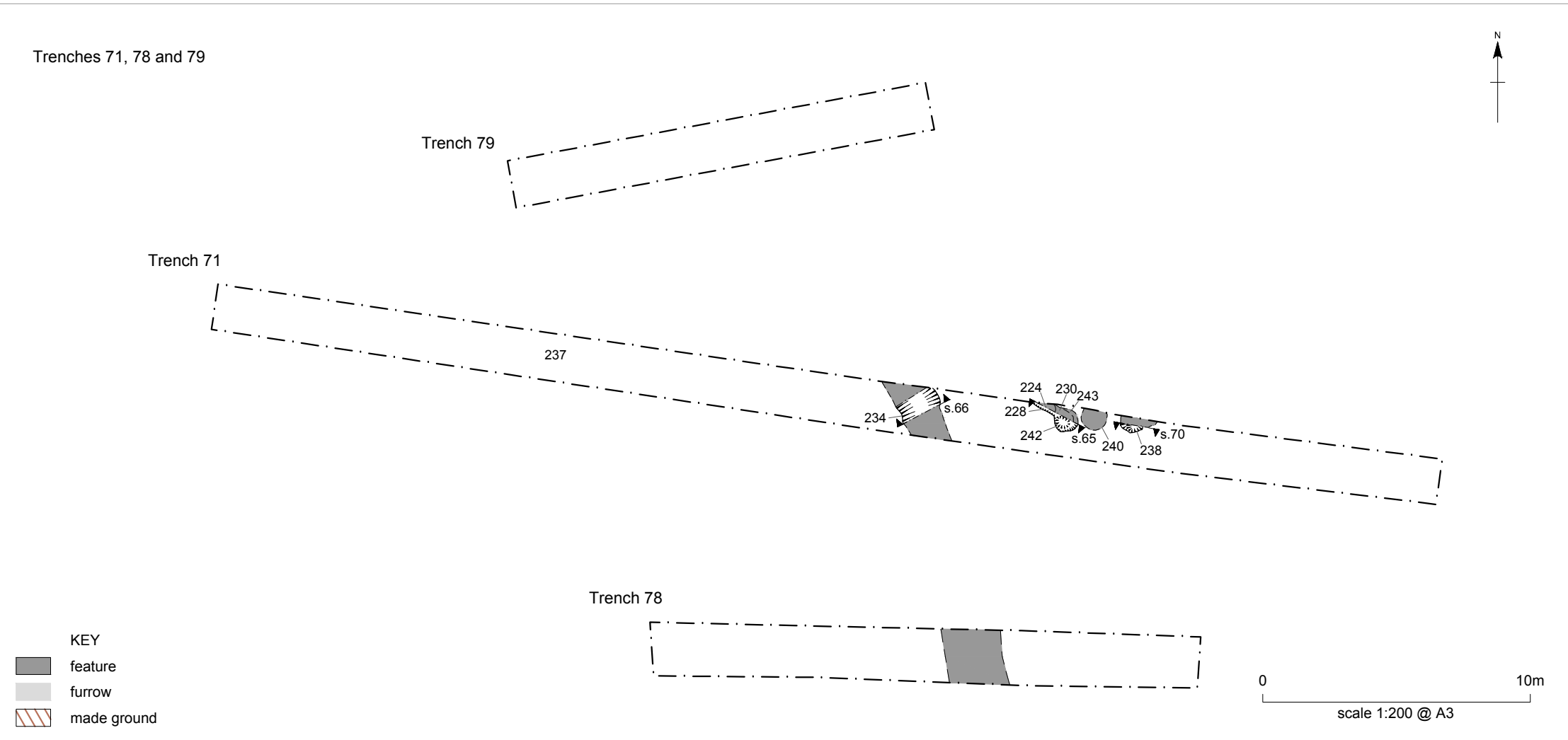
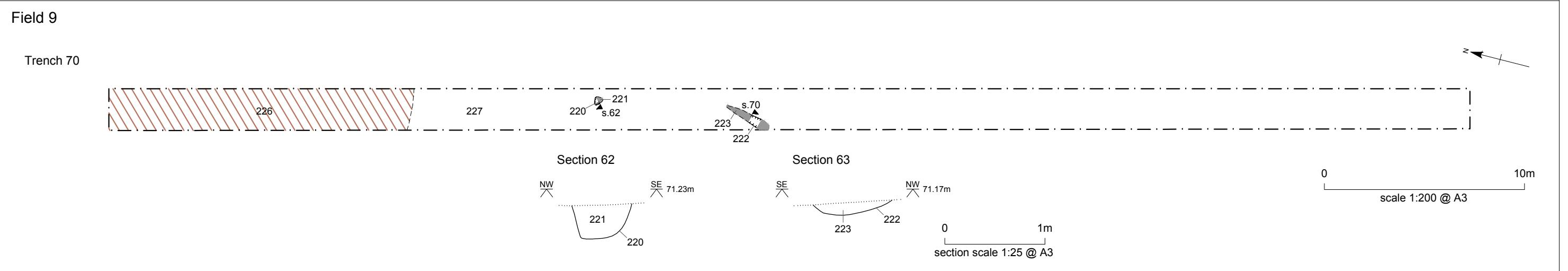
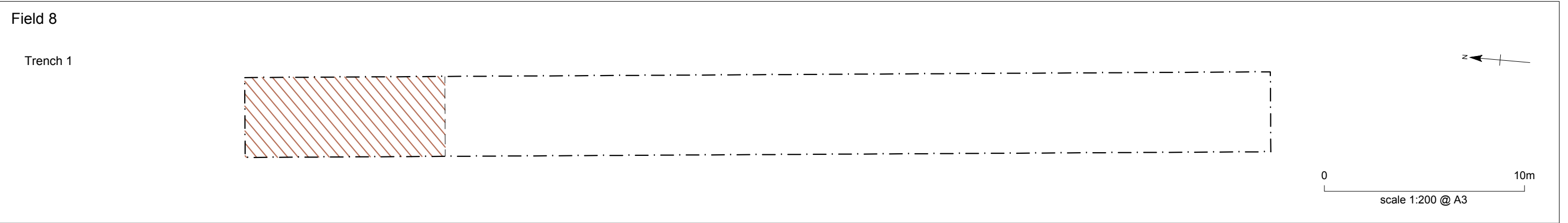


Trench 68



- KEY
- feature
 - furrow
 - made ground





- KEY**
- feature
 - made ground

Burtree Lane Solar Farm: Field 8 trench 1 and Field 9 trenches 70, 71, 78 and 79

Figure 10