



Archaeological Excavation on land at Hecadeck Lane, Nether Broughton, Leicestershire June - August 2021

Report No. 22/033

Author: Adam Reid

Illustrators: Carla Ardis and Sofia Turk



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Project Managers: Ant Maull and Camilla Collins
Site Code: X.A120.2021
NGR: SK 69321 25959

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Radiocarbon Dating:	Beta Analytic

OASIS REPORT FORM

Project: Hecadeck Lane, Nether Broughton		OASIS No: molanort1-506345	
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Development type	Residential		
Planning reference ID	15/01019/OUT		
PROJECT LOCATION			
National grid ref	SK 69321 25959		
Site name	Hecadeck Lane, Nether Broughton		
REVIEWERS/ ADMIN			
HER for project	Leicestershire		
National organisation	Historic England (MoRPHE)		
WORK UNDERTAKEN			
Methodological summary	MOLA (Museum of London Archaeology) carried out a programme of archaeological excavation at Hecadeck Lane, Nether Broughton from June to August 2021 in advance of a housing development.		
Previous works?	Yes	Future works?	Unknown
Dates - Start date:	15/06/2021	End date:	20/08/2021
Scientific dating done?	Yes	Type:	Radiocarbon dating
Enviro sampling done?	Yes		
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Project manager	Camilla Collins		
Project officer/ supervisor	Adam Reid		
Funding body	Grace Homes		
KEYWORDS			
Monuments found/ date	Early medieval enclosures and post structures		
Finds types found/ date	Medieval pottery, small finds, fired clay and animal bone		
RESULTS			
Description of outcomes/ summary of research framework contribution	The excavation uncovered the remains of multi-phase settlement activity dating to the early medieval period, which comprised three timber structures and a series of at least six agricultural enclosures. The site was later subdivided into four linear tenement plots in the medieval period, which likely fronted onto Hecadeck Lane. Other medieval activity comprised at least four large pits of uncertain function, one of which may have acted as a well. The site went out of use in the late 13th or 14th century, at which point it was utilised as part of the local open-field agricultural system.		
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Archaeological Excavation On land at Hecadeck Lane Nether Broughton, Leicestershire June-August 2021

ABSTRACT

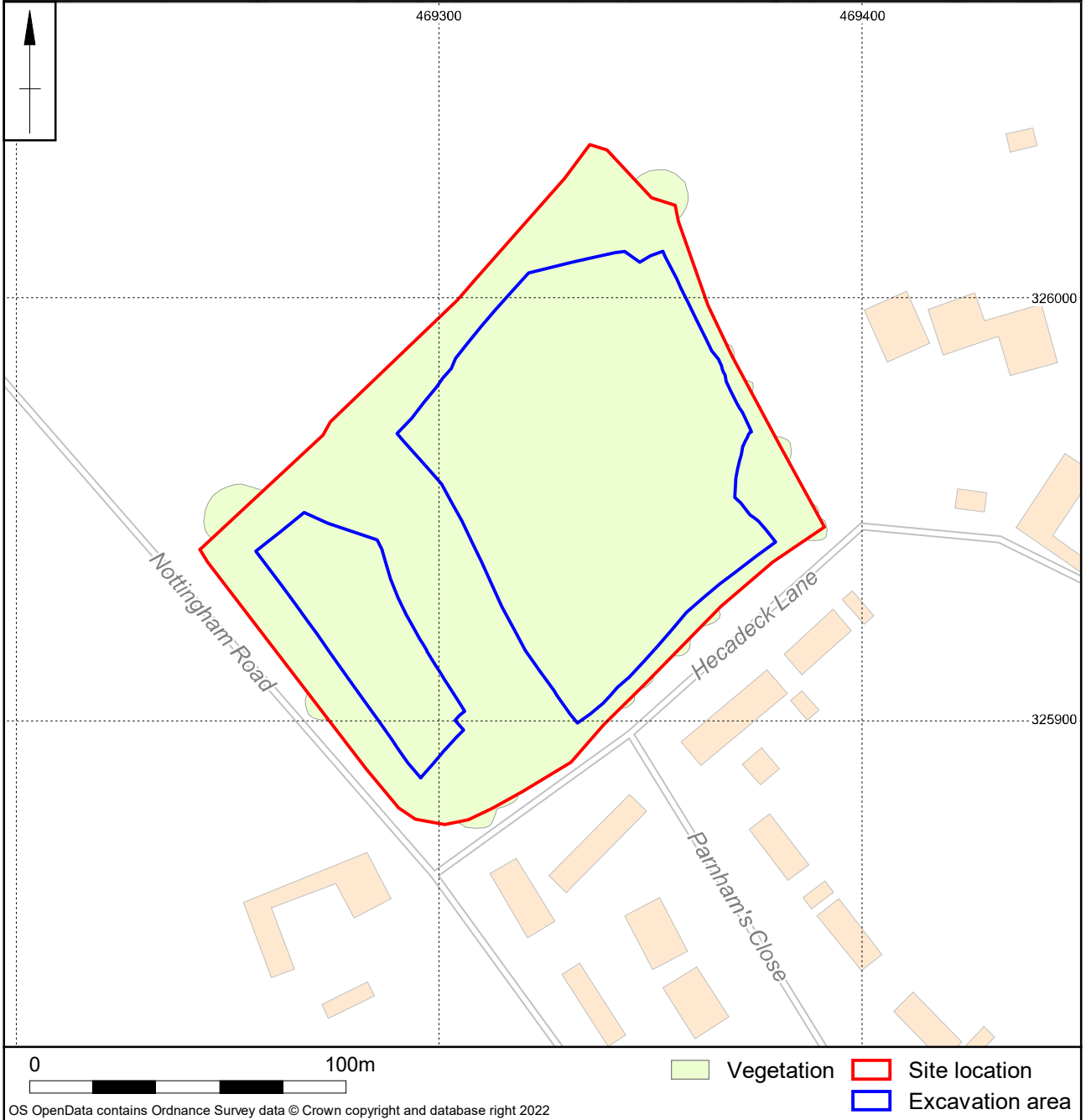
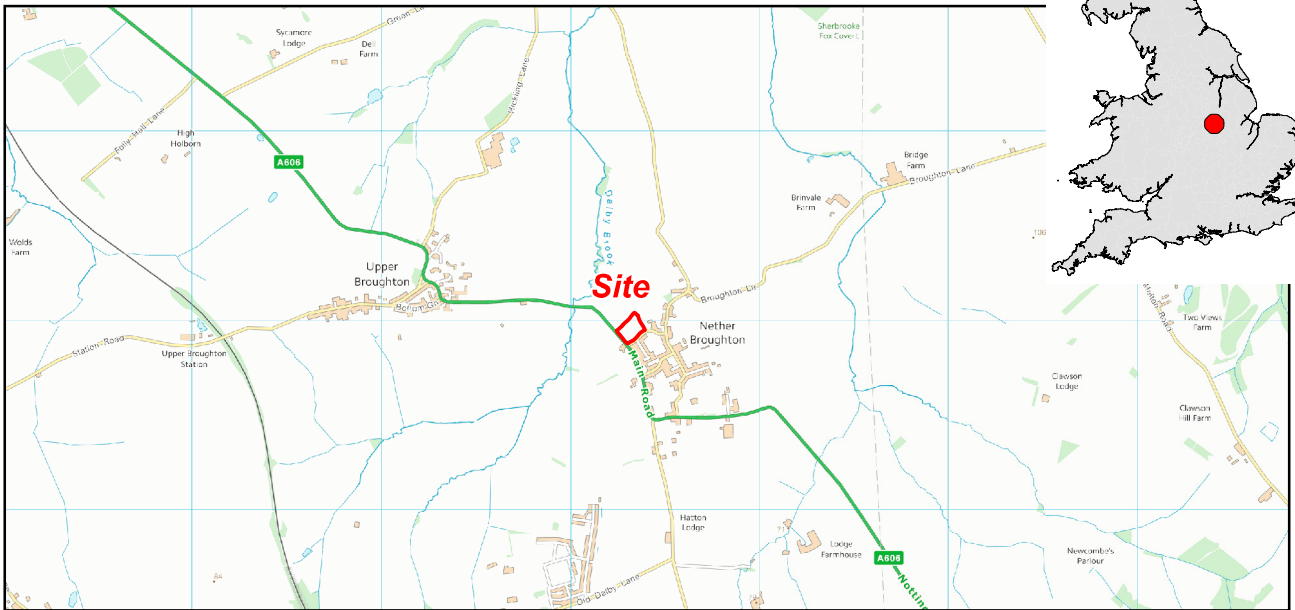
Excavations were undertaken by MOLA at Hecadeck Lane, Nether Broughton from June to August 2021 in advance of a housing development. The excavations uncovered the remains of multi-phase settlement activity dating to the early medieval period, which comprised three timber structures and a series of at least six agricultural enclosures. The site was later subdivided into four linear tenement plots in the medieval period, which likely fronted onto Hecadeck Lane. Other medieval activity comprised at least four large pits of uncertain function, one of which may have acted as a well. The site went out of use in the late 13th or 14th century, at which point it was utilised as part of the open-field agricultural system.

1 INTRODUCTION

MOLA (Museum of London Archaeology) was commissioned by RPS Consulting Ltd, on behalf of Grace Homes, to carry out a programme of archaeological mitigation on land off Hecadeck Lane, Nether Broughton, Leicestershire (NGR SK 69321 25959). The works were required to fulfil conditions attached to planning consent for residential development (15/01019/OUT) and were designed following consultation between RPS Consulting Ltd and the Principal Planning Archaeologist of Leicestershire County Council (LCCPPA) to mitigate potential development impacts on the site's archaeological resource, in accordance with the National Planning Policy Framework (MHCLG 2021).

The archaeological mitigation comprised the excavation of approximately 1.25ha to the north of Hecadeck Lane (Fig 1), and was preceded by a desk-based assessment (DBA, PCA 2015) and archaeological trial trench evaluation (Morgan-Shelbourne 2016), which identified a dense complex of early Saxon to medieval settlement-related features widespread across the site.

The methodology employed by MOLA was set out in the Written Scheme of Investigation (WSI, MOLA 2020). MOLA is a Chartered Institute for Archaeologists (CIfA) registered organisation. As such, all work was carried out in accordance with current best practice as defined within the CIfA *Code of Conduct* (CIfA 2019), and *Standard and guidance for archaeological excavation* (CIfA 2020). All works also complied with the Historic England procedural document Management of Research Projects in the Historic Environment (MoRPHE) (HE 2015).



Scale 1:1500

Site location and excavation area Fig 1

2 BACKGROUND

2.1 Location, geology and topography

The development is located on the northern periphery of Nether Broughton village, directly north of the junction formed by Hecadeck Lane and Nottingham Road. The area comprises a roughly sub-rectangular area of grass/heathland measuring 1.25ha. Bounded by hedgerows, the site is surrounded by arable/pasture land to the north and residential housing to the east and south. Nottingham Road lies parallel to the site's western edge. The underlying natural geology was recorded at levels between 79m to 80m aOD and overlain by c0.3m of topsoil.

Note on geology by Steve Critchley

According to the BGS Geoviewer (BGS 2022), the site is mapped as laying on beds belonging to the Lower Jurassic Charmouth Mudstone Formation, Brandon Sandstone Member. This is a thin (2-3 m) unit of shelly calcareous fine-grained sandstone which caps the ridge heading north-east from the site. However, once the site was stripped it was clearly underlain by stiff grey-brown clays. These were well weathered and contained fragments and nodules of ferruginous sandstone.

The marine Charmouth Mudstones that are mapped in this area are variable in composition and contain several distinct mappable but lithologically distinct units, one of which is the Brandon Sandstone, which represents a change in depositional environments.

Fragments of Brandon Sandstones were relatively common in the excavation area and within the upcast from the deeper excavated features, so its rock head lies close to the surface. It is possible to suggest that within this area, the Brandon Sandstone is covered with a thin layer of unmapped clays belonging to the Charmouth Mudstones which have seen some periglacial ground ice modification.

2.2 Historical and archaeological background

The site's archaeological potential and background was discussed in the DBA undertaken by PCA (2015) and the proceeding evaluation report (Morgan-Shelbourne 2016). Below is a summary of that information.

Prehistoric

Prehistoric activity recorded within the vicinity of the development site comprises a fragment of a Bronze Age palstave axe reported to the Portable Antiquities Scheme (PAS) in the general area of the village (LEIC-807154) and a single chance find of an Iron Age quernstone, found c200m to the east of the site within the vicarage garden (MLE MLE6582).

Roman

A findspot of a single copper alloy zoomorphic plate brooch reported to the PAS is the only known evidence of Roman activity within a kilometre of the development site (LEIC-D26F13). However, within the wider area the Fosse Way, c4.8km west of Nether Broughton and the associated site of *Vernemetum*, are the most significant. *Vernemetum* was a possible temple or shrine and the first stop from Leicester to Lincoln along the road. The Fosse Way, a Roman road, was identified in two separate archaeological excavations prior to roadworks. The first uncovered evidence of a

cobble surface while the second found a possible watch or signal post, five inhumation burials, Roman coins, mosaic and pottery.

Saxon

Evidence dating to the Saxon period in the surrounding area comprises a carved stone within the fabric of St Mary's Church at Church End (LEIC-CA85D8), and the presence of a small assemblage of Saxon ceramics along with a boundary feature. These were recorded during archaeological investigation at Church End, c100m east of the site, in 2010 (MLE20073 site 2) and the assemblage comprised Ipswich and Stamford ware. Evaluation works on the current site (Morgan-Shelbourne 2016) recorded a dense complex of ditches, pits and postholes, with the ceramic assemblage suggesting the activity mainly occurred from the late Saxon to early medieval period. Features, finds, and environmental evidence suggest a relatively densely occupied rural settlement.

Medieval

Further medieval settlement evidence was identified by aerial photography and earthworks survey in areas south of St Mary's Church. These included a moated site and earthworks representative of a shrunken medieval village dating to the 13th to 14th century (MLE12605 site 4). The moated enclosure was approximately 20m square and situated c250m to the east of the site (MLE3438 site 5). Settlement appears to have originally been focused around Church End and St Mary's Church, later shifting to the south along Middle Lane.

Investigations at the Staymore site, Church End c100m to the east, identified long-lived settlement evidence, including boundary features, rubbish pitting, and masonry walls, ranging in date from the 11th - 13th and 15th century or later (MLE20074 & 20068 site 8). Several finds have been reported to the PAS from Nether Broughton, which have included silver pennies and a spindle whorl. The coins from the reigns of Henry II, Henry III, Edward I, Henry VI and Edward IV give further indication of the extent, wealth and longevity of settlement activity in this period.

Nether Broughton is recorded in the Domesday Book as 'Broctone' from the old English 'Broc and 'tun' meaning 'village by the brook'. This refers to the Dalby Brook which is to the west of the village forming the county boundary with Nottinghamshire. In 1342 the village is first recorded as 'Nethyr Broughton', 'Nether' meaning 'lower' referencing the villages topographic relationship with Upper Broughton, c30m higher in elevation.

Post-medieval

The earliest available mapping, first edition Ordnance Survey dating to 1877, shows Nether Broughton as a dispersed village with the site itself depicted as agricultural land. Later editions show the site's continued use in this capacity as well as being much the same in size, layout and character as survives today. Within Nether Broughton, historic buildings form most of the post-medieval record. These include a demolished timber-framed building at Chapel Lane (MLE3441 site 9), which was late medieval or early post-medieval in date; and a windmill (MLE3440 site 10), c150m west of site, that was constructed some time before 1675. The other listed buildings in the area, excluding the church, mainly date to the later 18th century. An archaeological watching brief was undertaken at 8 Church Lane, which identified modern refuse pits but no earlier activity (Leigh 2010).

3 AIMS AND OBJECTIVES

The aims of the mitigation works were:

- to determine, the location, extent, date, character, condition and significance of the surviving archaeological remains identified;
- to examine the site's relationships and significance to the environment, economy and wider development in a local, regional and national context;
- and to assess the potential impact of the proposed development.

This was to be achieved by the:

- recovery of data to inform analysis of the regional context within which the archaeological evidence is situated;
- recovery of artefactual and economic evidence to inform and advance study, as well as establishing dating and a site chronology;
- and the recovery of spatial data to inform and contribute to a greater understanding of the agrarian economy, settlement type and social practice.

The results of the evaluation works suggested that the site had the potential to address some of the research objectives, relating to the early Saxon through to the medieval period, identified in the East Midlands Archaeological Research Framework (Cooper 2006, Knight *et al* 2012), which is now available online at: <https://researchframeworks.org/emherf/> (EMHERF 2022). Relevant key objectives identified for these periods were:

Saxon

- to clarify the chronology of the Roman to Anglo-Saxon transition period;
- to review evidence for settlement morphology, hierarchies, and nucleation;
- to identify cultural boundaries;
- to update and expand the East Midlands Anglo-Saxon Pottery Project.

Medieval

- to investigate the morphology of rural settlements;
- to investigate the development of the open-field system and medieval woodland management;
- to understand diet and living conditions in rural communities.

The extent to which the mitigation results can contribute to the regional research agenda is discussed below (see Section 7.5).

4 METHODOLOGY

Archaeological investigation was undertaken in an area agreed upon by RPS Consulting Ltd and the LCC PPA. The topsoil, subsoil and overburden were mechanically stripped, and stored separately, using a 360° tracked excavator fitted with a toothless ditching bucket. This was undertaken in strips across the site under constant supervision by a qualified and suitably experienced archaeologist. Machine excavation was undertaken to the level of the latest archaeological horizon or undisturbed natural geology, whichever was reached first. Machinery was not permitted to track across these areas once stripped unless approval was given.

Areas containing archaeological features were cleaned by hand where required to enhance definition. An initial base plan was then produced of features and limits of excavation using Leica Viva (GPS) survey equipment with SMARTNET real-time corrections to a 3D tolerance of $\pm 0.05\text{m}$. The base plan was prepared at an appropriate scale and made available to the Client and LCCPPA. A site grid was then set out by GPS set to the same tolerance and based on Ordnance Survey coordinates to allow hand planning of the features as required.

Archaeological features were hand excavated to sufficiently characterise them and address the aims of the works. Sections were excavated to determine the stratigraphic relationships between features where not visible in plan. The excavation strategy was informed by the research aims of the works and liaising with RPS and LCCPPA. Standard sampling levels were as follows, with interventions targeted to maximise the retrieval of material and information:

- **Linear features (ditches/gullies) associated with settlement, industrial structures or areas of specific activity:** 25% excavation away from intersections with other features with slots being a minimum of 1m width. Where deposits of particular interest or importance were encountered up to an additional 25% may have been excavated. Such deposits may have included areas of structured deposition; assemblages of important or unusual artefactual material; or where unusual methods of construction were apparent. Total excavation was required in the case of structural remains (drip gullies, beam slots and post-holes that are part of a buildings construction), industrial features (domestic ovens and hearths).
- **Linear features not associated with settlement:** sufficient proportion to inform interpretation, at appropriate intervals. Excavated sections were at least 1m in width away from intersections with other features.
- **Linear features forming part of field boundaries:** 5% away from intersections.
- **Discrete features (pits and postholes):** 50%, except where they were shown to form part of recognisable structures or contain deposits of value or significance, in which case they were fully excavated.
- **Deep features such as wells:** were fully investigated to their full depth as far as Health and Safety measures allowed.

Archaeological features were plotted on an overall plan at a scale of either 1:100 or 1:50 as appropriate. Buildings, other significant remains or areas of complex stratigraphy would have been planned in greater detail at 1:20 or 1:10 scale as appropriate. Sections or profiles through features and areas of complex stratigraphy were drawn at a scale of 1:10 or 1:20. The heights of all deposits were established relative to Ordnance Datum.

A photographic record was kept of the excavation, comprising high-resolution digital photographs. The field data was compiled into a site archive with appropriate cross-referencing. Photographs of the overall site were taken prior to excavation and on completion of excavation.

Finds were collected from the individual deposits and appropriately packed and stored in stable conditions, by context and in accordance with recognised best practise (Watkinson and Neal 2001, Walker 1990).

The MOLA Project Managers, RPS Consulting Ltd and the LCCPPA reviewed the site's palaeo-environmental potential. A minimum of 40 litres, or the entirety of the excavated portion of the feature where this is less than 40 litres, was taken for flotation from secure dateable contexts with a potential for the recovery of industrial residues,

charcoal and carbonised plant remains. The sampling strategy conformed to Historic England guidelines (Campbell *et al* 2011) and was undertaken with advice from a geo-archaeological specialist. Any necessary variations were discussed in advance with the LCCPPA.

All samples were processed at MOLA Northampton, using the flotation technique to retrieve seed, charcoal and mollusc remains. All the resultant residues were then hand sorted to retrieve bones and other finds.

The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval.

There was no provision for reinstatement of any of the removed topsoil or subsoil.

Provision was made for public engagement. This included a display of recovered material, talks and a site visit and was discussed and agreed with the LCCPPA beforehand.

5 EXCAVATION RESULTS

5.1 General stratigraphy and summary of results

The general stratigraphy varied little across the site, with the bedrock geology comprising firm grey-brown clay. This was overlain in most places by a subsoil deposit of firm mid grey-brown silty clay that was up to 0.15m thick and then by a topsoil deposit of friable dark grey-brown clayey silt, which measured up to 0.65m thick.

Archaeological remains dating to five principal phases of occupation were encountered during the investigations, presented in Table 1 below (Fig 2, Fig 3). The chronology of site phasing has been based on the order of stratigraphic relationships, clarified where possible by artefactual evidence. These remains have provided insight into activities carried out across the landscape from the Neolithic to post-medieval periods, with the most intensive period of site usage concerning the early medieval and medieval agricultural economy.

Table 1: Summary of archaeological remains

Phase	Approximate Date Range	Feature types
Phase 1 – Neolithic to Early Bronze Age	4000-1500 BC	Flint artefacts in glacial feature and residual flints in later features
Phase 2 – Iron Age to Roman	800 BC – AD 410	Residual pottery finds in later features
Phase 3.1 – Early medieval 1	AD 410 – 850	Enclosure ditches E1-E5, pits and timber structure S1
Phase 3.2 – Early medieval 2	AD 850 – 1066	Enclosure ditch E6, pits and timber structures S2 and S3
Phase 4 – Medieval	AD 1066 – 1350	Linear plots 1-4 and boundary ditches B1 and B2, large pits
Phase 5 – Medieval to post-medieval	AD 1350 - 1800	Furrows

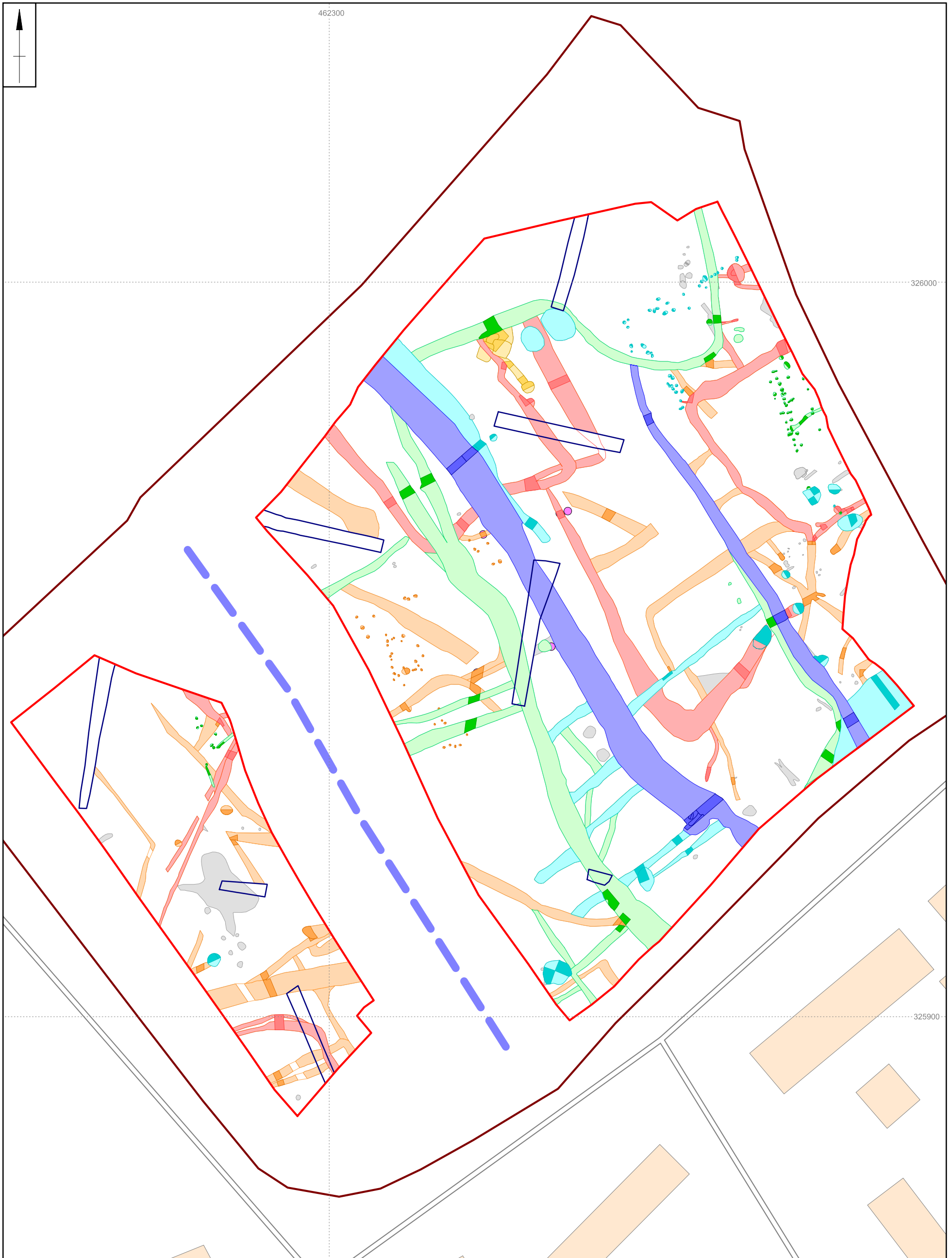
The results outlined herein are organised by chronological phase sub-divided into stratigraphic groups to enable a more in-depth discussion of site development.



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Sections	Furrows	Trenches	Rooting	Site location
Features	Land drain	Test pit	LOE	



- | | | |
|--|-----------------------------------|---------------|
| Phase 1: Neolithic to early Bronze Age | Phase 3.2: 10th - 11th century AD | Site location |
| Phase 2: Iron Age to Roman | Phase 4: 11th - 12th century AD | LOE |
| Phase 3.1.1: 5th - 9th century AD | Phase 4: Boundary | Trenches |
| Phase 3.1.2: 5th - 9th century AD | Unphased | |

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5.2 Phase 1: Prehistoric – Neolithic to early Bronze Age

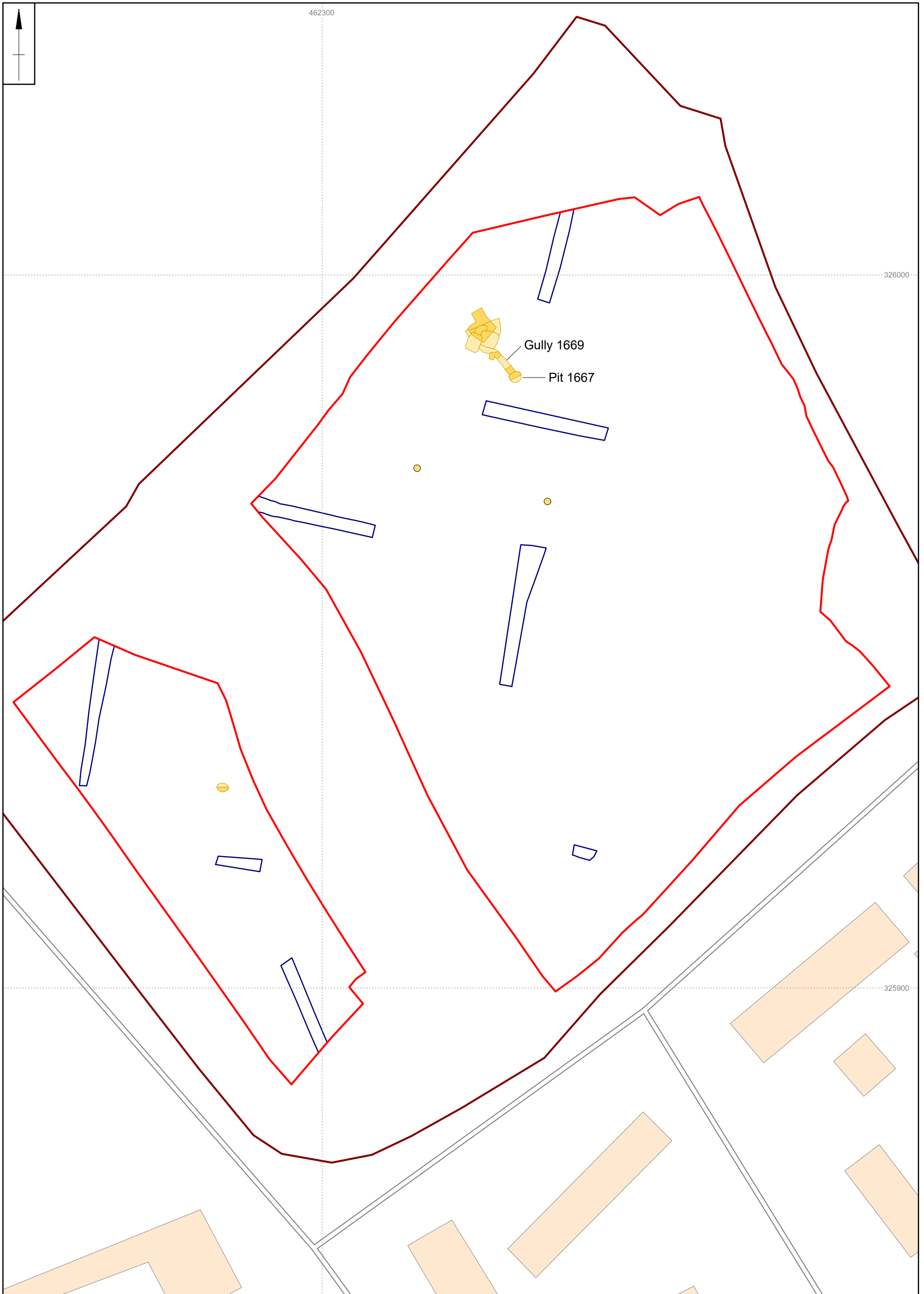
A small amount of evidence dating to the late Neolithic period was identified across the site in the form of worked flints, including manufactured tools and debitage (Fig 5). The main concentration of flints from this period was recovered from a circular pit [1667] and a shallow gully or glacial feature [1669] located in the northern central part of the site. Initially thought to be a variation in the natural geology due to the pale colour of its fill (Fig 4), when tested a total of nine fragments of struck flint were recovered from the pit, which measured 1.92m in diameter and was 0.13m deep. The entirety of the feature was excavated and a further 69 fragments of struck flint were recovered from the north to south aligned gully, which extended northwards from pit [1667]. Smaller quantities of flint were recovered from the fills of features across the site, which are thought to be residual finds and representative of background activity that took place in the vicinity of the site prior to its establishment in Phase 3.



View of pit [1667] and feature [1669], looking north, 0.5m scale Fig 4

5.3 Phase 2: Iron Age and Roman activity

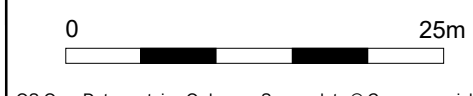
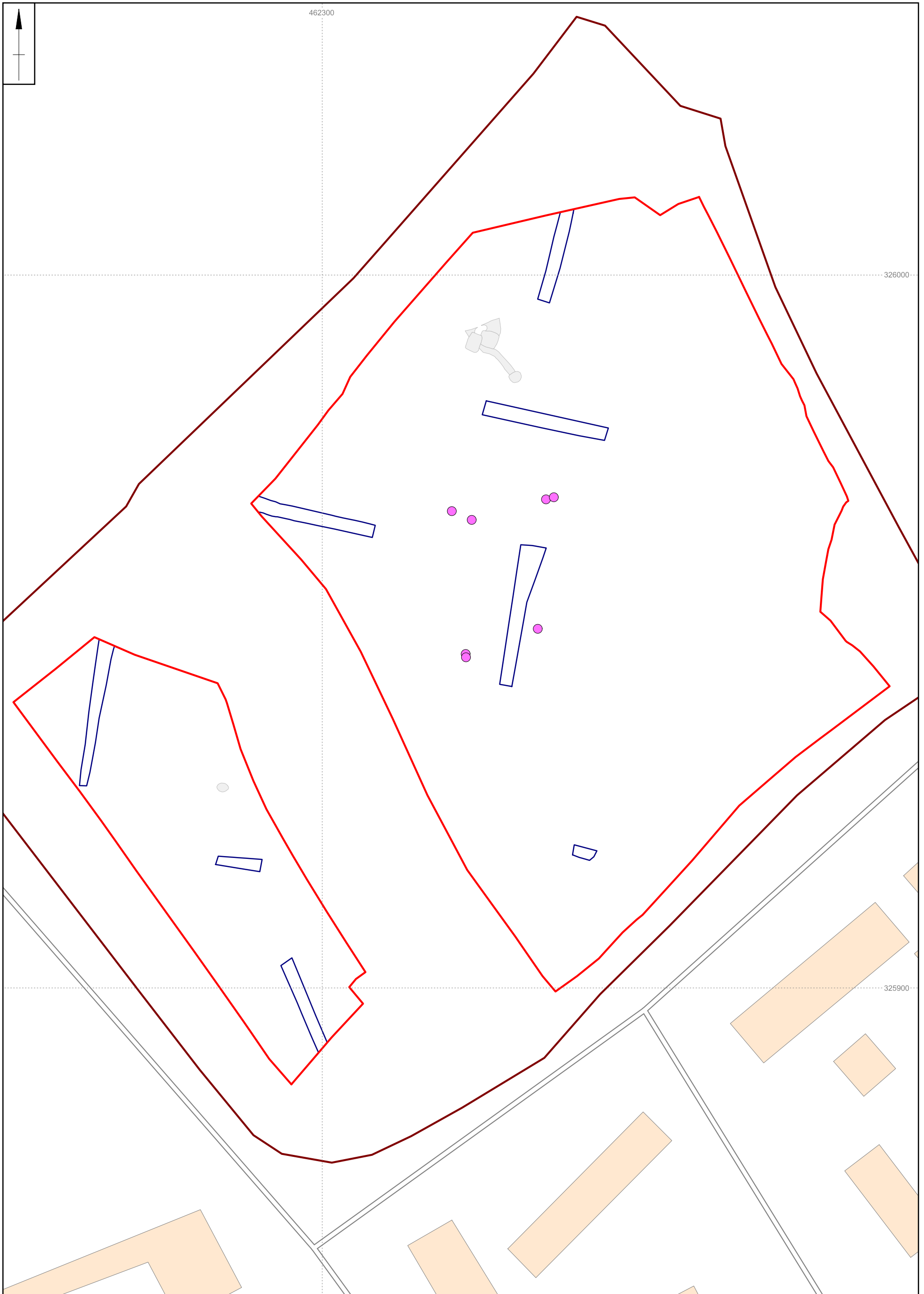
A small quantity of pottery from both the Iron Age (15 sherds) and Roman period (nine sherds) was recovered from fifteen contexts across the excavation area (Fig 6). In four cases the pottery was clearly residual as it was identified in association with fragments dating to the mid to late Saxon period and, in one case, with modern pottery. There was no clear focus of activity dating to this period but nonetheless this background scatter of finds provides an indication that contemporary activity may have taken place in the vicinity of the site.



- Phase 1 residual finds
- Trenches
- Site location
- Phase 1
- LOE

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- Phase 2 residual finds
- ▭ Trenches
- ▭ Site location
- ▭ Previous phase
- ▭ LOE

5.4 Phase 3: Early medieval activity

5.4.1 Phase 3.1: 5th to 9th-century enclosures and structures

Phase 3.1.1: Earlier ditches and enclosures

The preliminary stage of early medieval activity on the site concerned the creation of multiple intersecting rectilinear and curvilinear enclosures, some of which also had internal elements (Fig 7). These early features had been significantly truncated by much larger enclosures, boundary ditches and furrows, and in most cases their form could not be fully discerned due to this later obscuration. The artefactual assemblage suggests a tentative broad date range of 5th to 9th centuries for Phase 3.1 due to the poor condition of much of the pottery, providing little clarification for the sub-phase durations. The remains of the ditches were shallow and may represent short lived ephemeral features or subdivisions that varied between seasons. This early stage of activity may represent small scale activity over a relatively short period of time, which would coalesce into more organised activity in the form of more substantial enclosures slightly later, but within the broad 5th to 9th-century date range that is indicated by the pottery.

Phase 3.1.2: Early medieval enclosures and structures

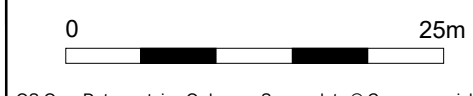
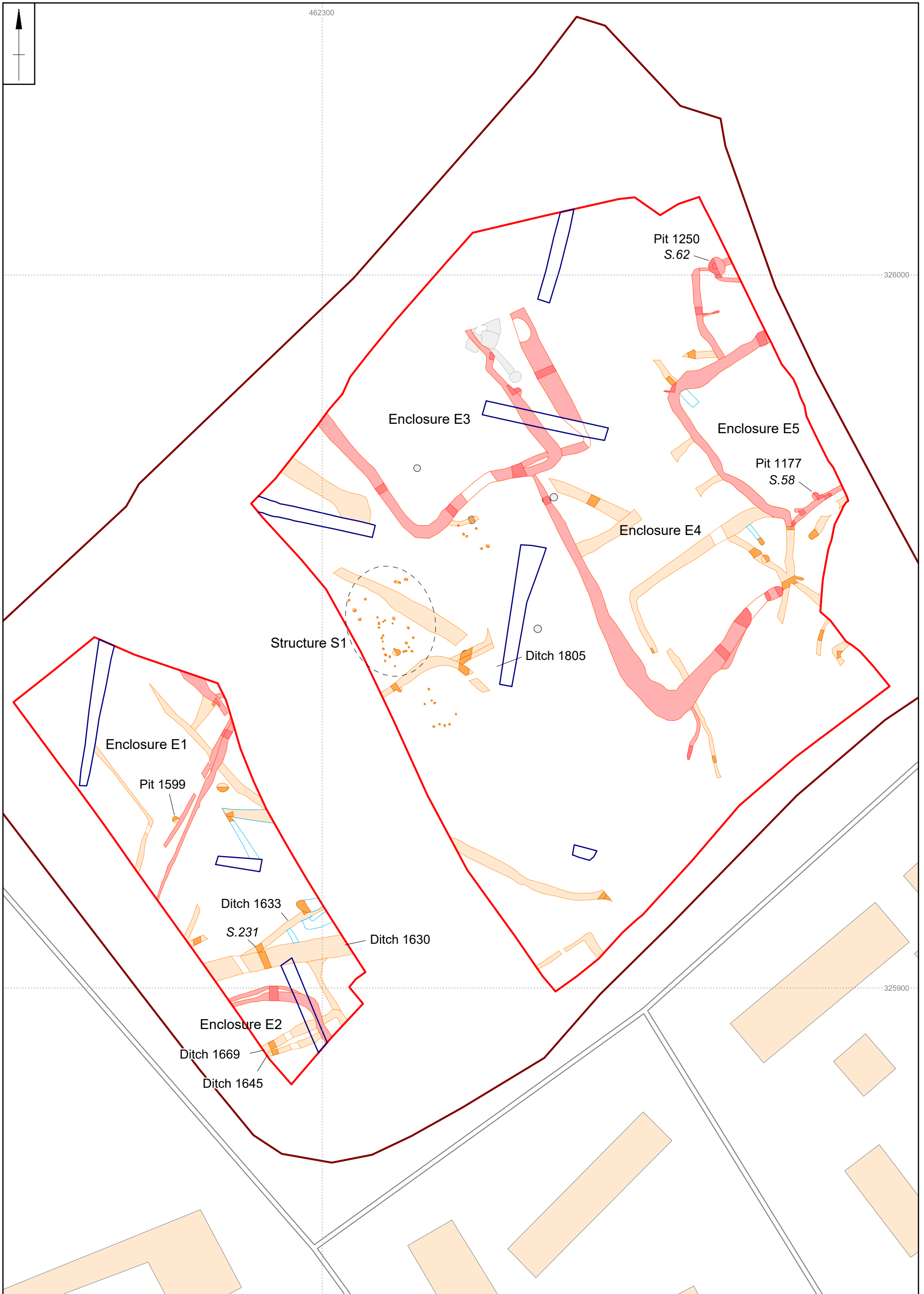
5.4.1.1 Enclosure E1

Enclosure E1 was located in the north-western part of the site and was sub-rectangular in shape, measuring approximately 25m wide from north to south and at least 18m from east to west, although the western edge of the enclosure extended beyond the excavated area (Fig 7). The enclosure likely had multiple iterations as the southern edge of the feature comprised two parallel ditches, spaced around 0.4m apart. The enclosure ditches measured between 0.66m and 1.66m wide and varied in depth from 0.2m to 0.39m. They had moderately steep sided profiles with flat bases and filled by deposits of firm mid brown-grey silty clay that contained occasional small stones. Four sherds of early to middle Saxon pottery were recovered from one of the excavated slots.

The inner of the two ditches that comprised the southern edge of the enclosure was truncated by a circular pit [1599], which measured 0.81m wide, 0.42m deep and had a steep sided concave profile. A deposit (1598) of firm dark brown-grey clay silty clay had accumulated in the feature that contained animal bone fragments but no dating evidence. An environmental sample that was taken from the feature contained charred cereal chaff from oats, wheat and spelt, from which a radiocarbon date of 770-892 cal AD was obtained (see Section 6.10; Table 13).

5.4.1.2 Enclosure E2

A curvilinear enclosure E2 was located in the south-western corner of the site and had a visible length of 12m (north-west to south-east) and width of 10m (north-east to south-west) (Fig 7). Most of the enclosed area extended beyond the south-western limit of excavation. As with Enclosure E1, the ditch had multiple iterations within this phase of activity as evidenced by a recut. The enclosure ditches measured between 0.4m and 1.21m wide and between 0.1m and 0.29m deep with a wide shallow concave profile and a concave base (Fig 9). Deposits of firm mid brown-grey silty clay had accumulated in the feature, which contained occasional pebbles and small ironstone fragments.



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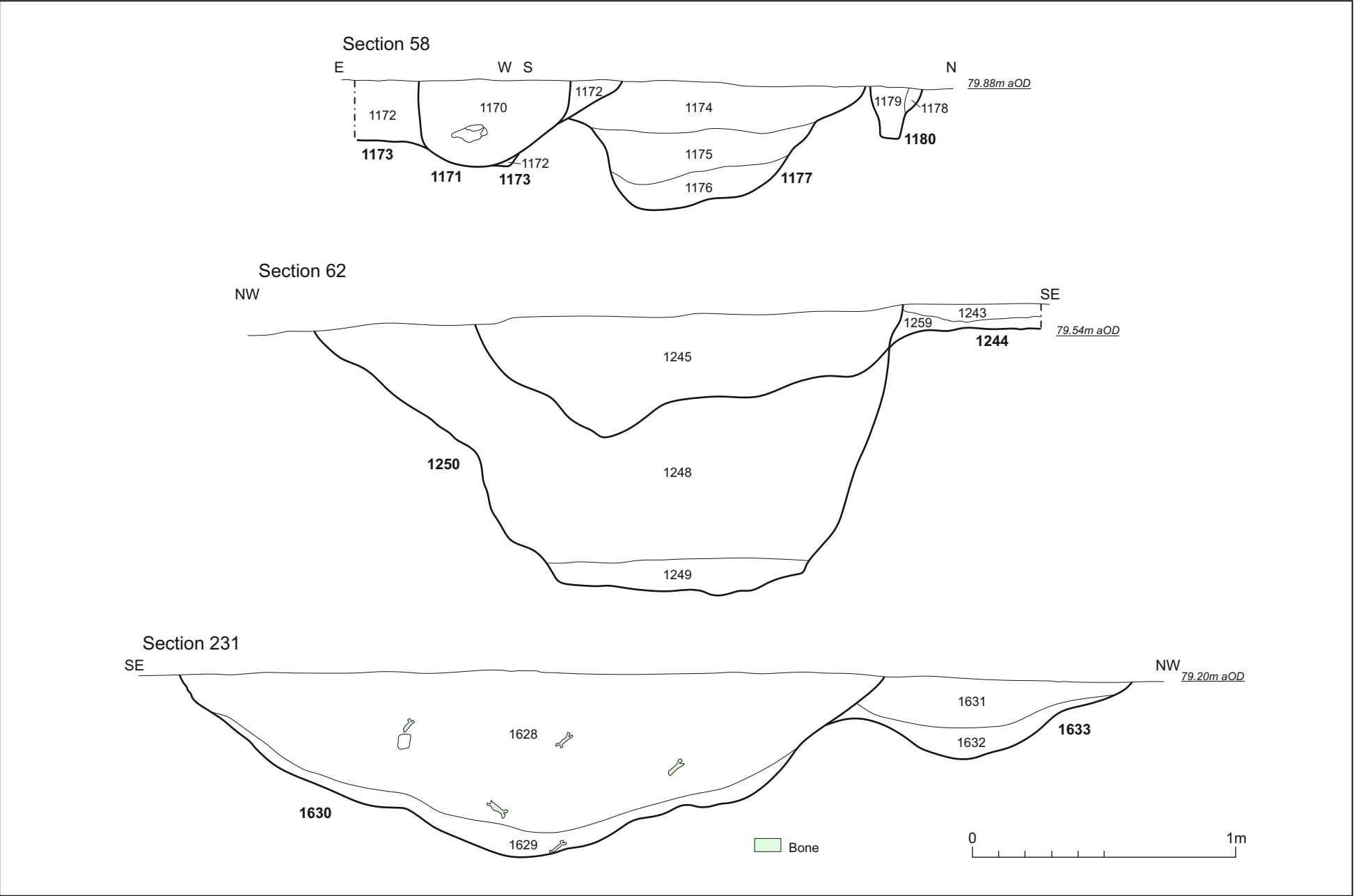
- Phase 3.1.1
- Phase 3.1.2
- Trenches
- Previous phase
- Site location
- LOE

Scale 1:500 (A3)

Phase 3.1: 5th to 9th century AD Fig 7

Scale 1:20

Phase 3.1 - Sections 58, 62 and 231 Fig 8



X.A120.2021



Section of enclosure ditch E2, looking north-west, 1m scale Fig 9

The enclosure ditch truncated two parallel ditches [1639] and [1645], which were aligned north-east to south-west and may have been part of an earlier enclosure (Fig 7). Ditch [1639] was the northernmost of the two and it measured 1.2m wide and 0.3m deep with a steep concave profile. A deposit of firm dark brown-grey silty clay had accumulated in the feature, from which five pieces of struck flint of uncertain date, and a small sherd of pottery dating to the 12th century was recovered; this is likely intrusive and probably derives from root action that took place after the feature had silted. Ditch [1645] was smaller and measured 0.58m wide and 0.16m deep. It had a gently sloping concave profile and was filled by a deposit of mid brown-grey silty clay that did not contain any finds.

There was another ditch [1633] that was located 5m to the north of E2 that was on a similar north-east to south-west alignment. It measured 0.9m wide and was 0.24m deep with a gently sloping concave profile (Fig 8, Section 231). Two deposits of firm grey-brown and brown-grey silty clay had accumulated in the feature, the lowermost of which contained animal bone fragments that included a cattle astragalus with evidence of butchery activity. It was truncated to the south by an east-north-east to west-south-west aligned ditch [1630], which was larger and measured 2.5m wide and 0.56m deep with a moderately steep concave profile (Fig 8, Section 231). Two silting deposits had accumulated in the feature, which did not contain any finds.

5.4.1.3 Enclosure E3

Square enclosure E3 was located in the northern central part of the site (Fig 7). It was aligned north-west to south-east, measuring approximately 22m wide from north-east to south-east. The north-western edge of the enclosure was not visible and was truncated by later or agricultural activity, owing to the topography of the slope. The feature measured up to 1m wide and was 0.34m deep at its deepest point. It had a gently sloping concave profile and was filled by deposits of firm light grey silty clay. A sherd of early to middle Saxon pottery was recovered from the feature.

5.4.1.5 Enclosure E4

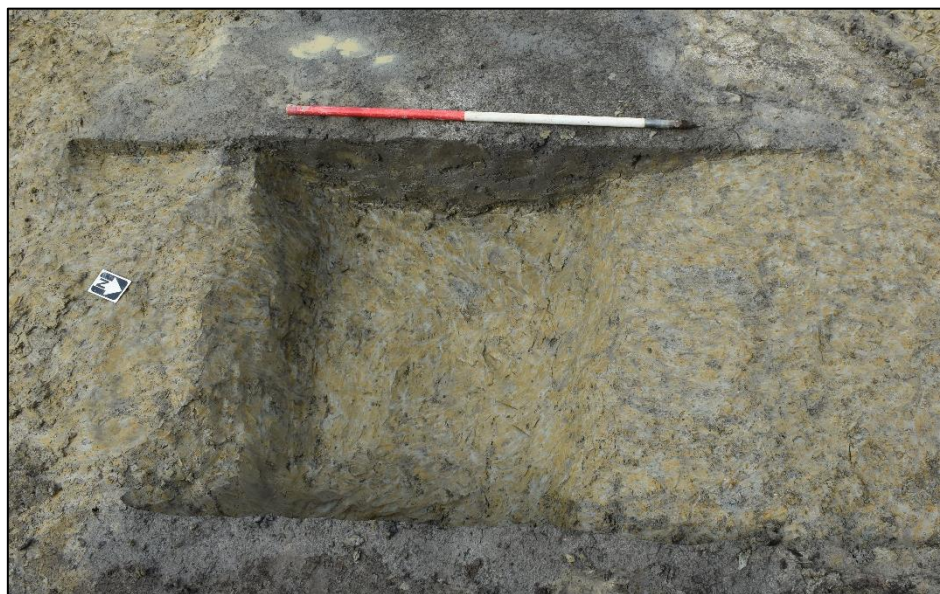
There was another straight-sided enclosure E4 that was truncated by enclosure E3 but is still thought to belong to the same overall phase of activity (Fig 7). It enclosed an area measuring approximately 30m from north-east to south-west and 40m from north-west to south-east. At its widest point the ditch measured 0.91m wide and was 0.33m deep. It had a regular concave profile and was filled by deposits of firm dark grey silty clay. No pottery was recovered from the feature, but it was stratigraphically later than other ditches that dated to earlier phases.

5.4.1.6 Enclosure E5

A rectilinear enclosure E5 was located against the eastern edge of the site and was aligned north-west to south-east (Fig 7). It comprised two rectilinear cells that both extended beyond the eastern limit of excavation. The northern of the two cells measured 10m from north-west to south-east and a minimum of 7m from north-east to south-west. It measured 1.65m wide and was 0.45m deep with a steep sided U-shaped profile. A flake of flint was recovered from the dark brown-grey silty clay deposit that had accumulated in the feature.

The northern arm of this part of the enclosure was truncated by a sub-circular pit [1250], which measured 2.35m wide and was 0.80m deep, with a steep sided profile (Fig 8, Section 62). Two deposits had accumulated in the feature: first a lower deposit of firm dark grey silty clay that contained two small fragments of early to middle Saxon pottery. This was overlain by a deposit of firm grey-green clay that contained charcoal flecks. An environmental sample was taken from the lower fill of the feature, which contained a small quantity of cereal grains including oats, barley and wheat.

The southern cell of E5 was the later of the two and measured 22m from north-east to south-west and a minimum of 15m from north-east to south-west, as the enclosure continued to the north-east beyond the limit of excavation (Fig 7). The enclosure ditch varied in width from 0.24m to 2.5m and measured between 0.17m and 0.40m deep (Fig 10). It had a steep-sided U-shaped profile with a base that varied from flat to concave and was filled by a deposit of firm mid grey silty clay with occasional charcoal flecks and frequent pebbles.



View of enclosure E5, looking west, 1m scale Fig 10

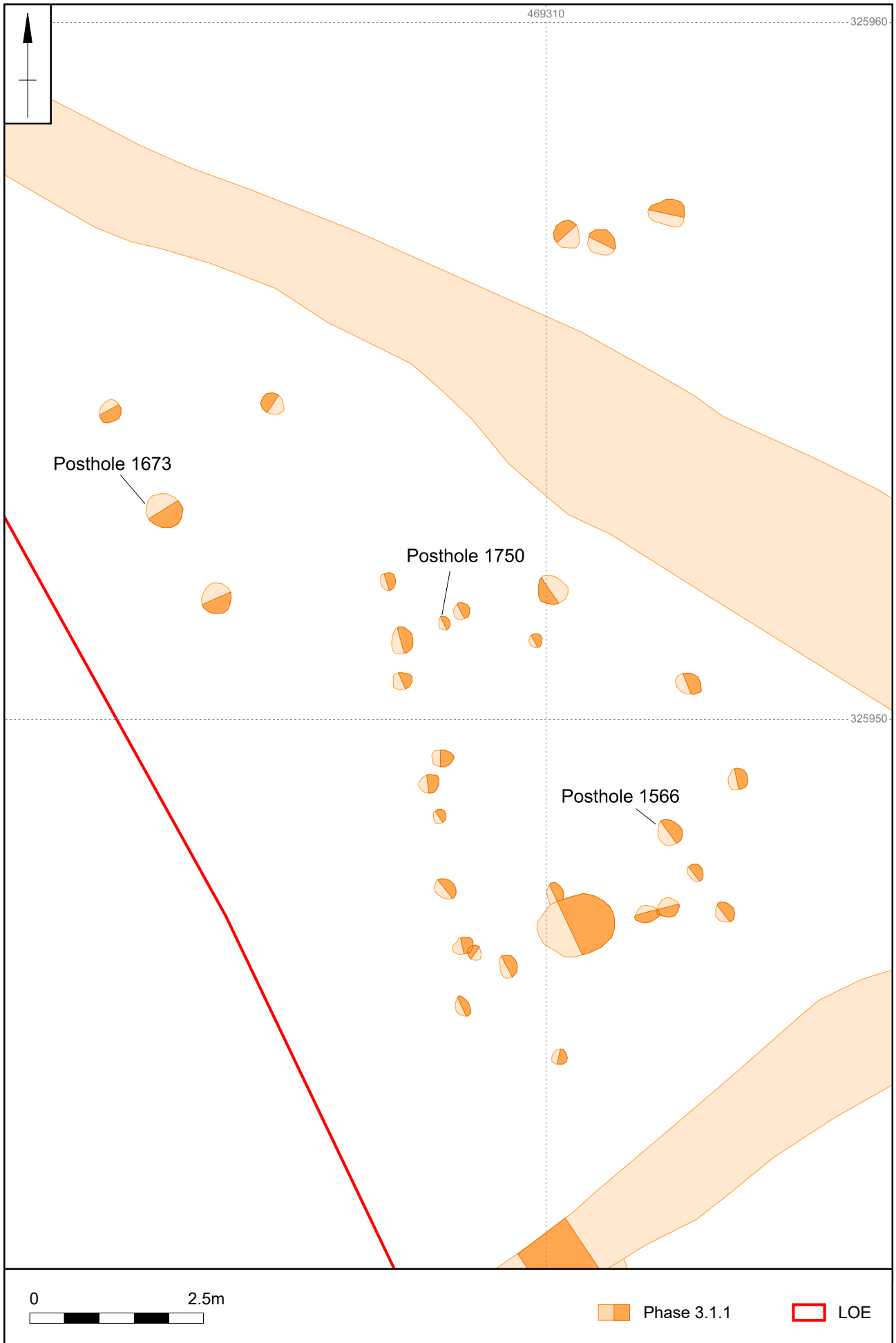
The southern part of E5 truncated a north-west to south-east aligned elliptical pit [1177], which had a steep sided profile that measured 1.11m wide and 0.49m deep (Fig 8, Section 58). A deposit of dark brown-grey clayey silt had accumulated in the base of feature, which was overlain by a further two deposits of firm light brown-orange sandy clay. None of the three fills contained finds.

5.4.1.4 Structure S1

There was a post-built structure located between enclosures E1 and E3 (Fig 7). The remains of the structure comprised a series of at least 25 pits and postholes that were roughly arranged in parallel lines, that were aligned north-east to south-west. Truncation and poor survival of features makes it unclear exactly how the structure was built but a haphazard rectangular structure could be discerned (Fig 11), possibly indicating a makeshift animal pen or similar. It is also possible that the posthole represent the remains of more than one structure. The concentration of postholes covered an area measuring 6m from north-east to south-west and 7m from north-west to south-east. The straightest alignment of postholes was located near the centre of the cluster and comprised a north-east to south-west aligned sequence of eight postholes that were spaced an average of 0.4m apart. The postholes were mostly circular in shape and varied between 0.18m to 0.46m in width and were between 0.06m and 0.28m deep. They generally had steep sided concave profiles and were filled by deposits of firm mid brown-grey silty clay. Three of the postholes contained finds, with a total of four sherds of early to middle Saxon pottery recovered from the features. An environmental sample was taken from one of the postholes [1673], which yielded minimal organic remains in the form of four charred bread wheat grains. One posthole contained a fragment of lava quernstone, which likely derived from the Eifel region of Germany.

Smaller clusters of undated postholes were identified to the south-east and north-east of S1 but did not form clearly discernible structures and may have been related to activity within the earlier enclosures (Fig 7). The cluster to the north-east was located 15m away from S1 and comprised six postholes, spaced between 0.65m and 2.25m apart.

The cluster to the south-east comprised nine postholes located approximately 11m from S1, with four of the postholes forming a tightly spaced line, oriented north-east to south-west and measuring approximately 4m long. The other five postholes were located in a loose array to the north, measuring between 2m and 10m from the north-east to south-west-oriented line.



Scale 1:75

Plan of structure S1 Fig 11

5.4.2 Phase 3.2: 10th to 11th-century AD enclosure and structures

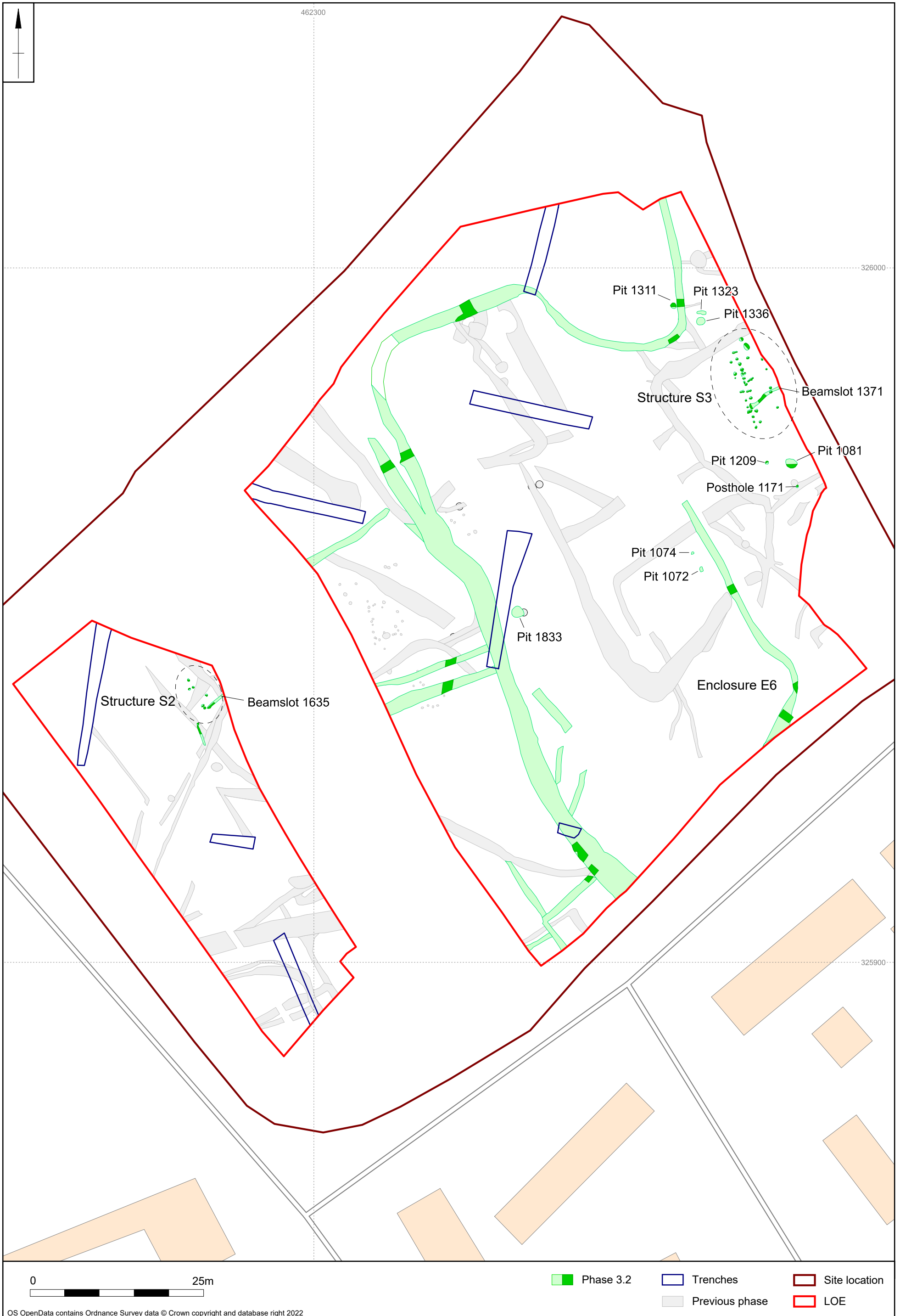
Activity during the 10th and 11th centuries comprised a further two timber structures S2 and S3, and a north-west to south-east aligned enclosure E6 (Fig 13). Several pits have also been dated to this phase.

5.4.2.2 Enclosure E6

Enclosure E6 was located in the centre of the site and it truncated several Phase 3.1 features (Fig 13). It was aligned north-west to south-east and measured more than 70m from north-west to south-east and approximately 30m from north-east to south-west (Fig 13). The enclosures that were identified in the previous phase may have been early attempts to divide the land up into subrectangular plots but Enclosure 6 was larger and may have been the first plot that was aligned to front directly onto Hecadeck Lane, and likely acted as a precursor to plots that followed in Phase 4. The southern edge of the enclosure was not present within the excavated area, but its south-eastern corner was truncated by a Phase 3.2 feature. At this point the ditch curved around to a north-east to south-west alignment and may indicate that the southern edge of the enclosed area lay immediately beyond the limit of excavation. The northern arm of the enclosure extended beyond the northern limit of the site but curved inwards close to a posthole structure S3, which was sited in the east of the enclosure. The enclosure ditch measured between 0.93m and 1m wide and was up to 0.9m deep; it had a U-shaped profile with moderately steep sides and a concave base (Fig 14, Section 294, Fig 12). The ditch was filled by a naturally accumulated deposit of firm light grey-brown silty clay with occasional charcoal flecks. Three sherds of 11th-century pottery were recovered from the feature in the northern part of the site. An additional sherd of residual early to middle Saxon pottery was also recovered. There were additional ditches located to the south-west of enclosure E6, which followed the topography of the slope on a roughly north-east to south-west alignment and may have been intended to drain water away from the enclosure.



View of enclosure ditch E6, looking east, 2m scale Fig 12

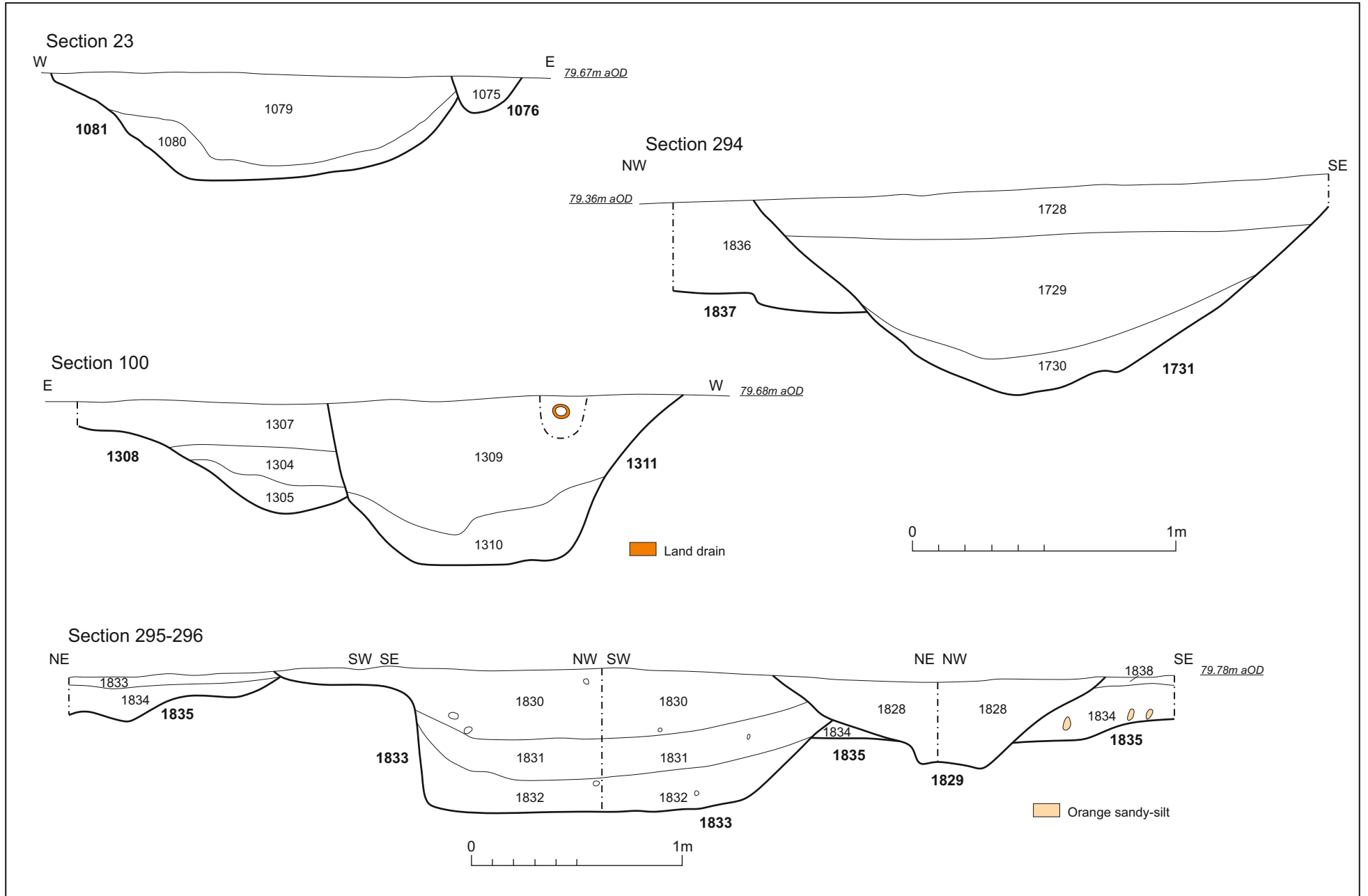


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Scale 1:20 / 1:25 (S.295-296)

Phase 3.2 - Sections 23, 294, 100 and 295-296

Fig 14



X.A120.2021

Pit [1311]

There was a circular pit [1311] that truncated the northern curvilinear part of enclosure E6, which measured 1.38m in diameter and was 0.63m deep with irregular sides and a flat base (Fig 13 and Fig 14, Section 100). Two deposits had accumulated in the feature; firstly a layer of firm mid yellow-grey silty clay that contained a sherd of early to middle Saxon pottery. This was overlain by a deposit of friable dark grey clayey silt that contained a sherd of early to middle Saxon pottery and a sherd of 11th-century pottery.

Pit [1336]

Approximately 4m to the south-east of [1311] there was another circular pit [1336], which measured 1.50m in diameter and was 0.30m deep. It had a U-shaped profile with a flat base. A sherd of 11th-century pottery was recovered from its compact mid brown-grey silt fill, which also contained a large proportion of charcoal.

Pit [1323]

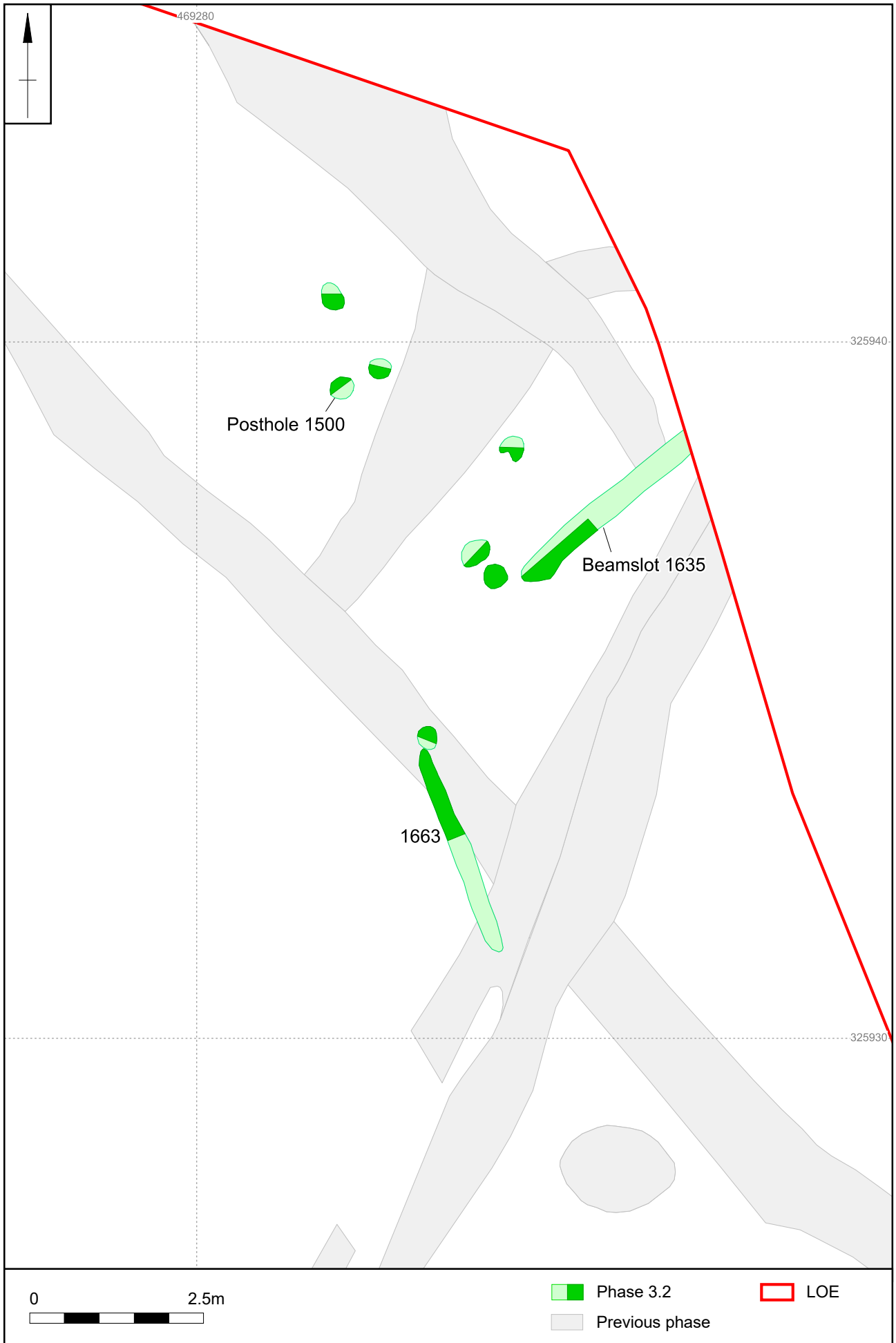
Another shallow circular pit [1323] was located directly to the north-east of pit [1336], which had a gently sloping concave profile that measured 0.6m wide and 0.08m deep. No finds were recovered from its compact brown-grey silty clay fill.

5.4.2.1 Structure S2

A cluster of six postholes and a linear beamslot located in the north-western corner of the site comprised the partial remains of a post-built timber structure S2 (Fig 13 and Fig 15). It lay in the north-east corner of the north-western part of the excavation area and extended underneath the north to south aligned treeline that separated the two parts of the excavation area. The structure was probably aligned north-west to south-east, based on the alignment of subdividing features within the building. The excavated remains comprised a 6m long arrangement of six postholes and a narrow linear feature [1635] that was recorded as a beamslot located approximately 4m from the central baulk that measured 6m long from north-west to south-east. Deposits of firm mid brown-grey silty clay had accumulated in the postholes, which included occasional small stones. Only posthole [1614] yielded dating evidence in the form of pottery, which comprised two sherds of pottery dating to the 11th century and a single sherd of residual early to middle Saxon pottery. An environmental sample was taken from posthole [1500], which yielded a large quantity of cereal chaff, including oat, wheat and spelt. Some of the material recovered from posthole [1500] was submitted for radiocarbon dating, which provided an estimated date range of 882-995 cal AD (see Section 6.10; Table 13).

The beamslot [1635] was located between the two southern most postholes and was on a perpendicular north-east to south-west alignment. It had a visible length of 3.2m on site but continued beyond the central baulk. It measured 0.4m and 0.09m deep and had a moderately steep concave profile with a flat base. It was filled by a deposit of friable mid brown-grey silty clay that contained six sherds of pottery dating to the 11th century and a piece of fuel ash slag. An environmental sample was taken from the beamslot, which yielded a small quantity of charred cereal grains, including oats and wheat.

It seems likely that all the postholes that were encountered in this part of the site comprised a single side of the structure and that the other side lay underneath the central baulk in similar fashion to Structure 3, which was identified against the eastern edge of the excavation area.



Scale 1:75

Plan of structure S2 Fig 15

5.4.2.3 Structure S3

The partial remains of a north-west to south-east aligned timber structure S3 were located against the eastern edge of the site (Fig 13 and Fig 15). The remains comprised 37 postholes and a linear beamslot, with the majority of the postholes forming two parallel north-west to south-east aligned lines of posts that would have comprised the western wall of a structure. They encompassed an area of the site that measured approximately 15m from north-west to south-east and at least 5m from north-east to south-west. The two parallel arrangements of postholes were spaced less than 0.5m apart and may represent the enlargement or re-siting of a single structure. The postholes varied in width from 0.1m to 0.64m and measured between 0.05m and 0.35m deep. They were either elliptical or circular in shape with steep sided profiles and most of them had concave bases. They were filled by deposits of firm mid brown-grey or grey-brown silty clay and only one posthole [1090] yielded finds in the form of one sherd of late Saxon pottery. Environmental samples were taken from two postholes: [1377] from the eastern line and [1379] from the western line. Neither of the samples yielded much organic material with a single charred barley grain recovered from [1379] and a single charred spelt grain recovered from [1377].

The beamslot [1371] was aligned north-east to south-west and was located approximately in the centre of the structure so may have supported a subdivision of the structure. It extended beyond the eastern limit of excavation but had a visible length of 5.5m. The excavated section measured 0.41m wide and 0.09m deep and had a moderately steep sided profile and a flat base. It was filled by a deposit of light yellow-grey sandy clay that did not contain any finds.

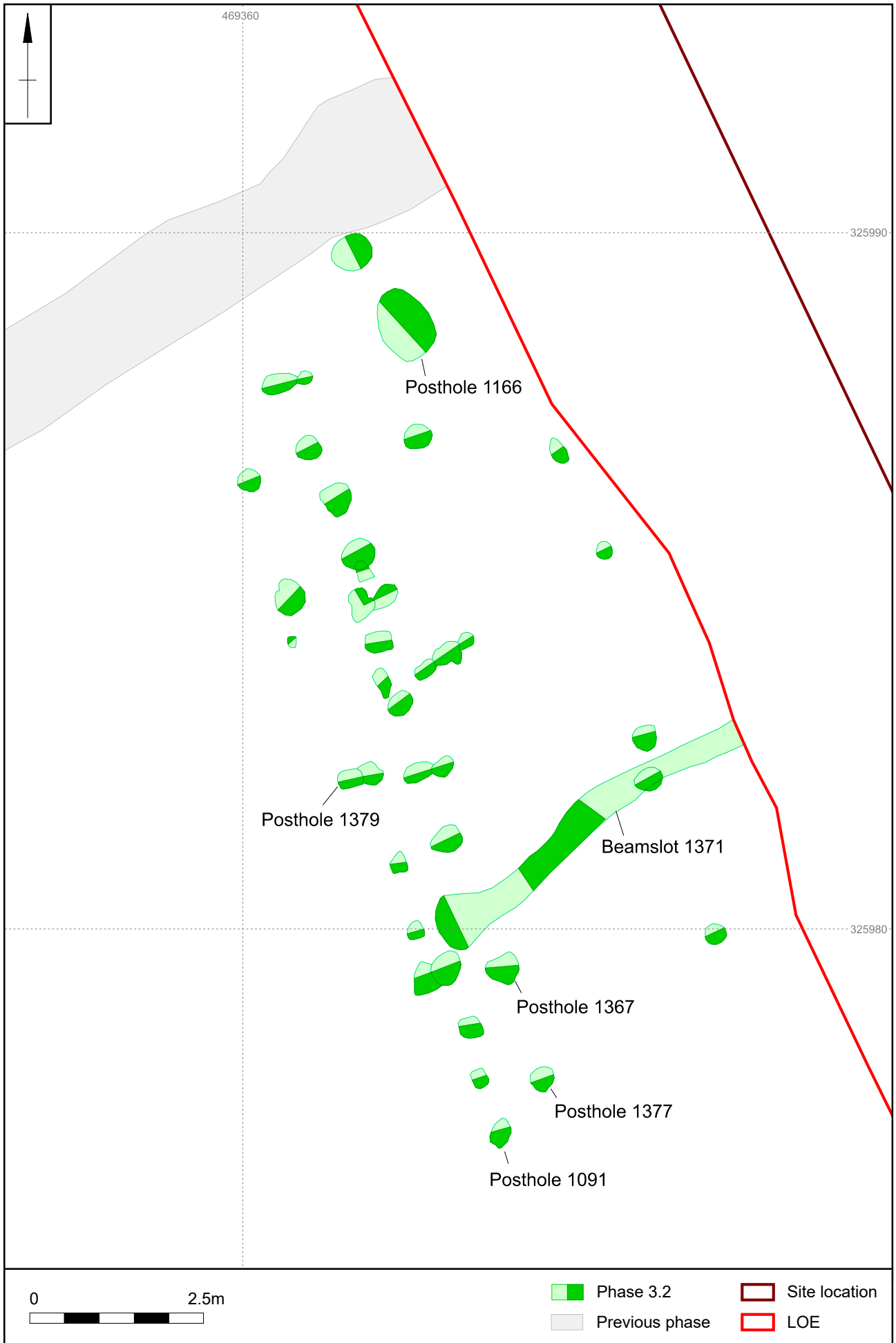
Pit [1209]

There was sub-rectangular pit [1209] located slightly to the south of structure S3 (Fig 11). It had a steep sided profile with a flat base and measured 1.8m wide and 0.36m deep. A deposit of friable dark brown-grey silty clay had accumulated in the feature, which contained two sherds of 11th-century pottery, three undiagnostic fragments of ceramic building material and small piece of slag that may represent that iron working was taking place in the vicinity.

Pit [1081]

Circular pit [1081] was located 3m to the south-east of pit [1209] and measured 1.55m in diameter and 0.76m deep (Fig 11). It had steep irregular sides and a flat base (Fig 14, Section 23). It was filled by two deposits of light grey-green silty clay, the uppermost of which contained a sherd of 11th-century pottery.

It was truncated on its eastern edge by a small circular pit or posthole [1076], which measured 0.25m in diameter and was 0.16m deep. It was filled by a deposit of firm light grey clayey silt, which did not contain any finds. It is unclear if the posthole was related to the function of the pit, but it was cut into the feature after it had fully silted so may relate to a later phase.



Scale 1:75

Plan of structure S3 Fig 16

Posthole [1171]

There was another circular posthole [1171], located south-east of pit [1081] (Fig 13). It measured 0.34m in diameter and was 0.31m deep with a steep sided profile and a concave base. It was filled by a deposit of firm mid grey-brown sandy silt, which contained a sherd of early to middle Saxon pottery and a sherd of St Neots ware that date the feature to Phase 3.2.

Pits [1072] and [1074]

There were two circular pits [1072] and [1074] located in the central southern part of the site close to the eastern edge of enclosure E6 (Fig 13). Pit [1072] was the larger of the two and measured 0.69m in diameter and 0.23m deep with a U-shaped profile and a concave base. Two sherds of 11th-century pottery were recovered from its compact dark grey clay fill.

Pit [1074] was located 1.8m to the north of pit [1072] (Fig 13). It measured 0.3m in diameter and was 0.12m deep with a gently sloping concave profile. It was filled by a deposit of dark grey clay that did not contain any finds.

Pit [1833]

Another circular pit [1833] was located in the western part of the area that was enclosed by E6 (Fig 13). It measured 1.1m in diameter and 0.68m deep with near vertical sides and a flat base (Fig 14, Section 295-296). A sherd of late Saxon pottery was recovered from its lower fill of soft mid red-grey ashy silt, suggesting that silting of the feature began in this period. A further six sherds of pottery dating to the 11th century were recovered from the dark deposit of black silt that was next in the sequence and no finds were recovered from its upper fill, which comprised firm dark grey silty clay. An environmental sample was taken from the feature, which yielded a large assemblage of charred cereal grains that included oats, barley and wheat.

5.5 Phase 4: Medieval (12th-13th century AD) tenement plots

In the medieval period the site was subdivided into four linear plots, which were aligned north-west to south-east and extended across the entire length of the site). The plots were perpendicular to the current alignment of Hecadeck Lane on the southern edge of the site and it is likely that they fronted an earlier version of this route from the main road (now the A606) into the historic core of the village to the east. The extant treeline/hedgerow that separates the eastern and western excavation areas appears on all available historic maps and may also have originated as a plot boundary in the medieval period. It is on the same alignment as two boundary ditches B1 and B2 that were identified near the centre of the eastern excavation area, which subdivided the site into four plots that each measured approximately 22m wide and at least 80m long. These plots will be described in numerical order, from Plot 1 in the west of the area to Plot 4 in the east.

5.5.1 Plot 1

Pit [1588]

A circular pit [1588] was located in the central part of Plot 1 (Fig 18), which measured 1.6m in diameter and was 0.45m deep (Fig 19, Section 221). It had a steep sided profile with a flat base and was filled by a deposit of loose dark grey clay that contained a large quantity of charcoal and two sherds of pottery that dated the feature to the 12th century. An environmental sample was taken from the feature due to the presence of charcoal, which yielded a large assemblage of cereal grains that included oats, rye, wheat and barley. The pit truncated two earlier postholes [1590] and [1592], neither of which contained finds.

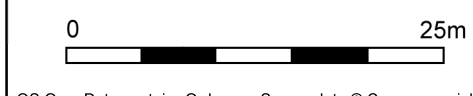
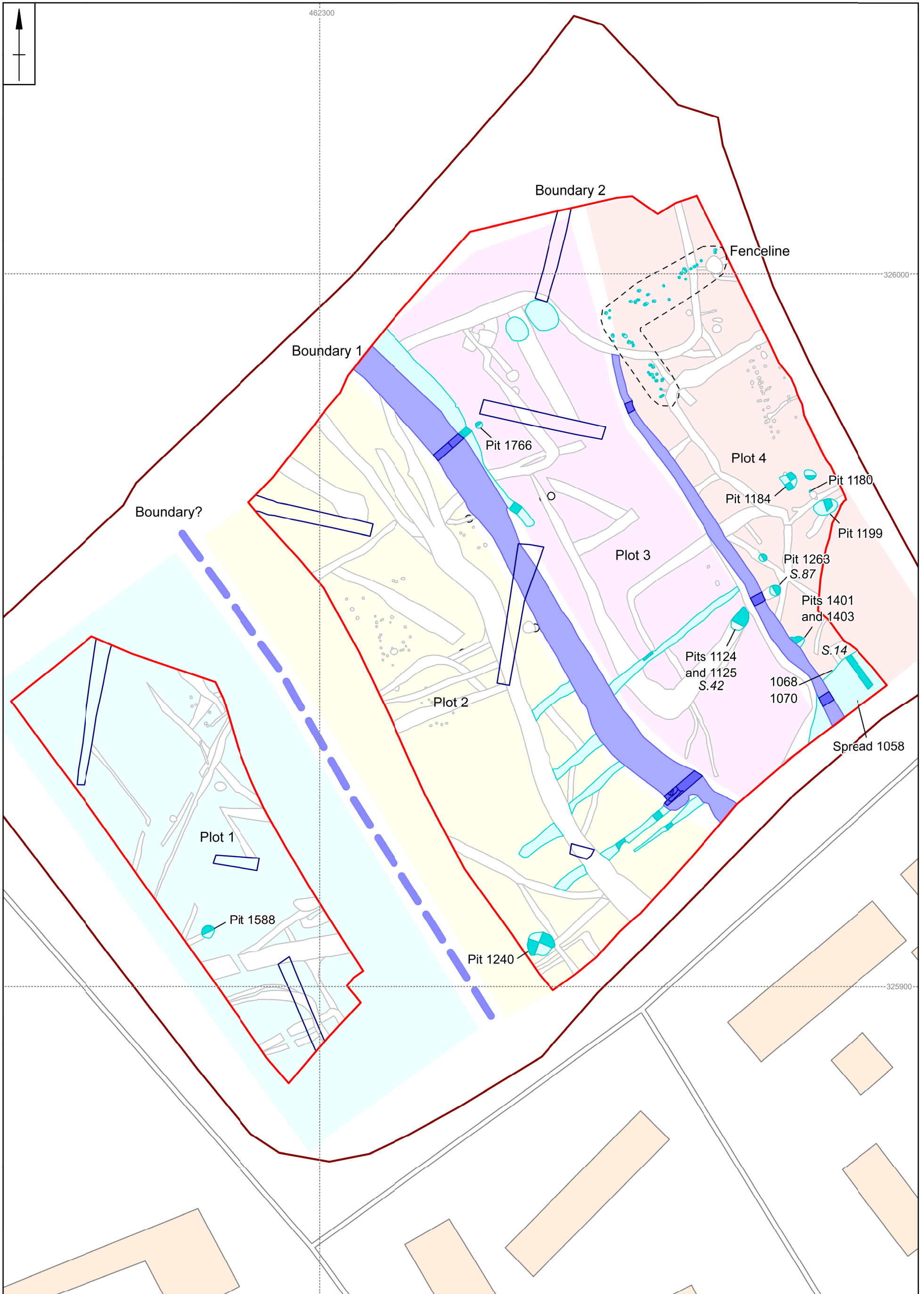
5.5.2 Plot 2

Pit [1240]

There was a large circular pit [1240] located in the south-west corner of Plot 2, which measured 3.5m in diameter and was 0.60m deep (Fig 17, Fig 18). It had a steep sided concave profile and was filled by a deposit of friable dark grey silty clay that contained ten sherds of 11th-century pottery and nine sherds of 12th-century pottery. An environmental sample was taken from the feature, which yielded charred cereal grains comprising oats, barley and wheat.



View of pit [1240], looking south, 1m scale Fig 17



- Plot
- Phase 4
- Boundary
- Trenches
- Previous phase
- Site location
- LOE

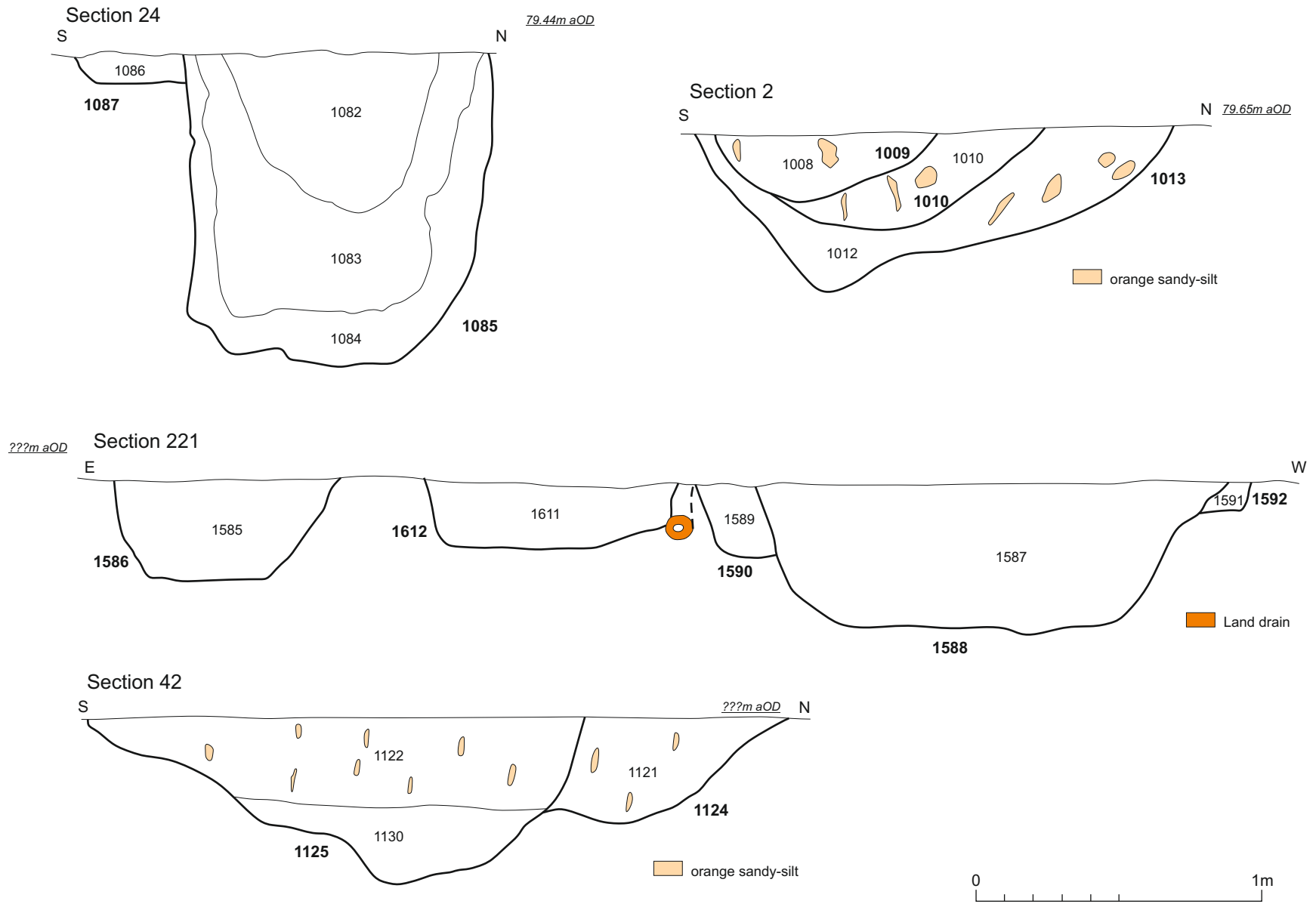
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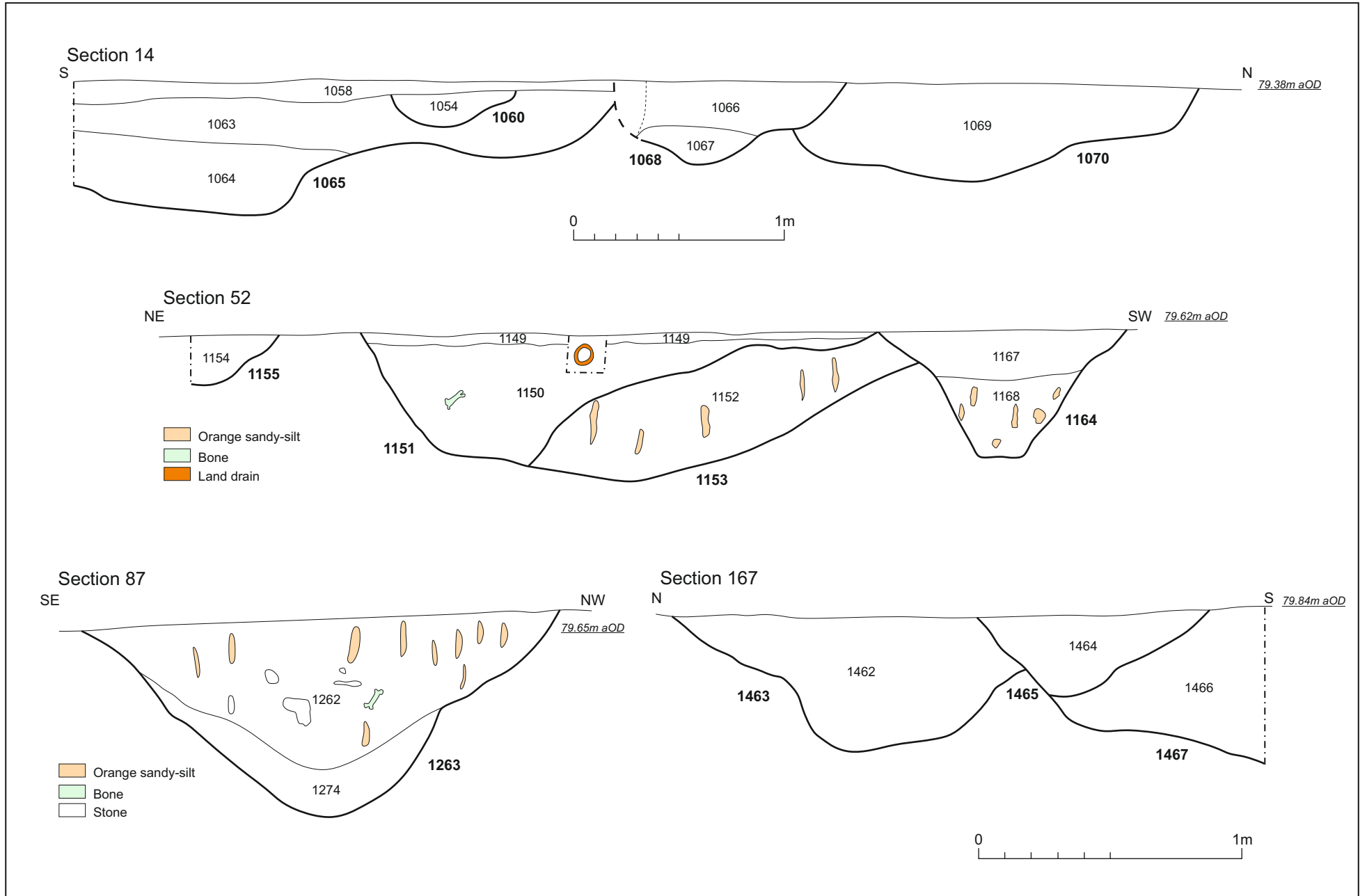
Phase 4: 12th to 13th century AD Fig 18

Scale 1:20

Phase 4 - Sections 24, 2, 221, and 42 Fig 19



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5.5.3 *Boundary B1*

Boundary ditch B1 was aligned north-west to south-east and extended for the whole length of the excavation area, approximately 80m. It measured up to 2.6m wide and 0.7m deep and had an irregular wide concave profile with a rounded base (Fig 20, Section 52 and Fig 21). A deposit of firm dark brown-grey clay had accumulated in the feature from which a large quantity (74 sherds) of 13th-century pottery was recovered from two of the excavated sections. Residual pottery from earlier phases was found in small quantities (14 sherds of 12th-century pottery and nine sherds of 11th-century pottery), perhaps indicating that the boundary ditch truncated earlier features. The feature was recut in several of the excavated sections suggesting that it was a long-lived boundary and may have originated in one of the earlier phases. An environmental sample was taken from one of the excavated sections in the northern part of the feature, which yielded a small quantity of charred wheat grains.

Additional ditches extended away from B1 on a north-east to south-west alignment and may have aided with the drainage of the adjacent plots, or further subdivided them.



View of boundary B1, looking south, 1m scales Fig 21

5.5.4 *Plot 3*

Pit [1766]

There was a shallow circular pit [1766] located in the northern part of Plot 3, slightly to the east of B1, which measured 0.96m wide and was 0.08m deep (Fig 18). It had a gently sloping concave profile with a flat base. No finds were recovered from the fill of the feature, which comprised firm dark brown-grey silty clay.

Pits [1124] and [1125]

Pit [1124] was located in the southern part of the site, close to B2 (Fig 18). It had a steep sided concave profile and was 0.35m deep. A deposit of firm light orange-grey clayey silt had accumulated in the pit, which contained fragments of animal bone and 24 sherds of pottery, including nine sherds of 13th-century pottery. The pit was recut [1125] on its southern edge, at which point it measured 1.7m wide and 0.6m deep (Fig 19, Section 42). It had a steep edge on its northern side and was stepped on its

southern edge, with an uneven base. A deposit of soft dark grey silty clay had accumulated in the base of the feature, which contained nine sherds of pottery, including one sherd that dated to the 13th century. This was overlain by a deposit of firm mid green-grey silty clay from which diagnostic fragment of ceramic building material and 29 sherds of pottery were recovered. They included a residual sherd of early to middle Saxon pottery and eight sherds of 13th-century pottery.

5.5.5 *Boundary B2*

There was another north-west to south-east aligned boundary ditch B2 that separated Plots 3 and 4 (Fig 18). It extended for the full length of the site and measured between 0.46m and 1.68m wide and was between 0.17m and 0.54m deep (Fig 22). It had a steep U-shaped profile with a wide flat base and was filled by a deposit of compact mid brown-grey silty clay. No finds were recovered from any of the excavated sections, but it truncated several earlier features and this boundary had been recut multiple times, suggesting that it was a long-lived feature (Fig 19, Section 2).



View of boundary ditch B2, looking west, 1m scale

Fig 22

5.5.6 *Plot 4*

Fenceline

There was a fenceline located in the northern part of Plot 4 that has been assigned to this phase of activity since it truncated features from the earlier phase and as 12th-century pottery that was recovered from the fills of two of the postholes. The fenceline comprised two alignments of postholes: a north-east to south-west-oriented line of 17 postholes that extended from the north-eastern limit of excavation for a distance of approximately 20m, and a perpendicular line of 13 postholes that extended to the south-east for a distance of 12m (Fig 18). The postholes were spaced between 0.5m and 2m apart, with some of the larger gaps representing posts that were not cut deep enough into the natural substrate to leave identifiable features. In some cases, postholes were very closely spaced or they were intercutting, which may have represented the replacement of posts in order to maintain the fenceline. The postholes were mostly circular and measured between 0.07m and 0.5m in diameter and were

between 0.05 and 0.3m deep. They had straight sided profiles and were filled by deposits of firm dark grey silty clay. Postholes [1413] and [1441] contained a combined three sherds of 12th-century pottery. Residual sherds of Iron Age (one sherd) and early to middle Saxon pottery (two sherds) were recovered from postholes [1270], [1571] and [1579].

Pit [1184]

There was a circular pit [1184] located near the centre of Plot 4, (Fig 18). It measured 1.2m in diameter and 1.1m deep (Fig 23). A deposit of soft yellow-grey sandy silt had accumulated in the base of feature, which was overlain by a deposit of firm mid brown-grey silty clay. The two fills combined contained eighteen pottery sherds dating to the 13th century.



View of pit [1184], looking south, 1m scale Fig 23

Pit [1199]

An irregularly shaped pit [1199] was located approximately 8m to the south of pit [1184], which truncated several earlier ditches (Fig 18). It had a steep-sided concave profile that measured 2.4m wide and 0.51m deep. A deposit of loose mid brown-grey clayey silt had accumulated in the feature, which contained a combined fourteen pottery sherds that date the feature to the 12th century. A small fragment of ceramic building material was also recovered.

Pits [1401] and [1403]

There was a small circular pit [1401] located in the southern part of Plot 4 (Fig 18). It measured 0.45m in diameter and was 0.23m deep. It had steep, near vertical, sides and a flat base. A deposit of firm dark grey silty had accumulated in the feature, which contained a high degree of organic content and contained three sherds of 12th-century pottery. An environmental sample was taken from the feature owing to the large quantity of organic material, which yielded charred cereal grains including oats, barley and wheat.

Pit [1401] was truncated on its southern edge by another elliptical pit [1403], which measured 2m wide and 0.3m deep. It also had a steep sided profile and a flat base. It was filled by a deposit of friable mid orange-grey silty, which contained ten sherds of 12th-century pottery.

Pit [1263]

There was an elliptical pit [1263] located in the southern part of Plot 4, immediately to the east of ditch B2, which measured 1.98m wide and was 0.78m deep (Fig 20, Section 87, Fig 24). It had a steep sided concave profile with a concave base and was filled by a deposit of firm light grey clayey silt that contained three sherds of 12th-century pottery.



View of pit [1263], looking south-west Fig 24

Activity at the southern edge of Plot 4

There was a build-up of material at the convergence of several features located in the south-east corner of the site that obscured the remains of activity that took place in the southern part of Plot 4, close to Hecadeck Lane (Fig 18 and Fig 20, Section 14). A 1m wide slot excavated across the feature, which was approximately 7m long, identified a sequence of activity spanning phases 3.2 to 4 of site usage.

At the northern end of the section, a ditch [1070] was identified, which was aligned east to west and measured 0.87m wide and 0.4m deep with a moderately concave profile incorporating a wide flat base. A deposit of firm mid grey silty clay formed in the feature, which contained four sherds of pottery that date the feature to the 12th century. It was truncated to the south by another ditch [1068], which was aligned north-east to south-west and measured 0.94m wide and 0.36m deep. It had a gently sloping concave profile and was filled by two deposits: a lower deposit of firm mid brown-grey silty clay and an upper deposit of firm yellow-grey clayey silt. Nine sherds of pottery were recovered from the upper fill, which date the silting of the feature to the 12th century.

Against the southern edge of site there was an irregularly shaped pit [1065] located in the southern part of Plot 4, close to the south-eastern limit of excavation. It had an irregular concave profile that measured 3m wide and 0.55m deep. A deposit of soft

yellow-grey sandy silt had accumulated in the base of feature, which was overlain by a deposit of firm mid brown-grey silty clay. The two fills contained a combined eighteen pottery sherds dating to the 13th century. After the pit had silted it was truncated by a circular pit [1060], which measured 0.57m in diameter and was 0.16m deep. A deposit of dark brown-grey clay accumulated in the feature, which did not contain any finds. A spread of grey-brown clayey silt (1058) then accumulated over both features, which contained two sherds of 12th-century pottery. The spread also potentially sealed ditches [1068] and [1070] but it was difficult to be certain due to root disturbance along the south-eastern edge of the site.

5.6 Phase 5: Late medieval to post-medieval agricultural activity

Evidence of ridge and furrow cultivation was noted across the site and in several cases the furrows truncated features from all the previous phases (see Fig 2). The furrows were aligned north-west to south-east and were spaced approximately 10m apart. Excavated slots determined the furrows to be an average of 0.8m wide and 0.2m deep with shallow concave profiles and flat bases. They were filled by deposits of firm mid orange-brown clayey silt. No furrows were identified in the southern portion of the site as it dropped down towards Hecadeck Lane, and it is possible that the site lay at the southernmost edge of the agricultural system.

5.7 Unphased features

The features described below could not be directly attributed to a phase on the basis of stratigraphical or finds evidence (Fig 25). In many cases they are pits that bear similarities to Phase 4 features and are likely to also belong to this phase. As a result of this they, are described in relation to the Phase 4 plots in order to better place them into context.

Pits [1586] and [1622]

There were two undated pits [1586] and [1622] that were located in the centre of Plot 1 which possibly relate to the same undefined phase of activity (Fig 25). Pit [1586] was circular and measured 0.65m in diameter and 0.28m deep (Fig 19, Section 221). It had a steep sided profile with a flat base and was filled by a deposit of dark grey clay that did not contain any finds.

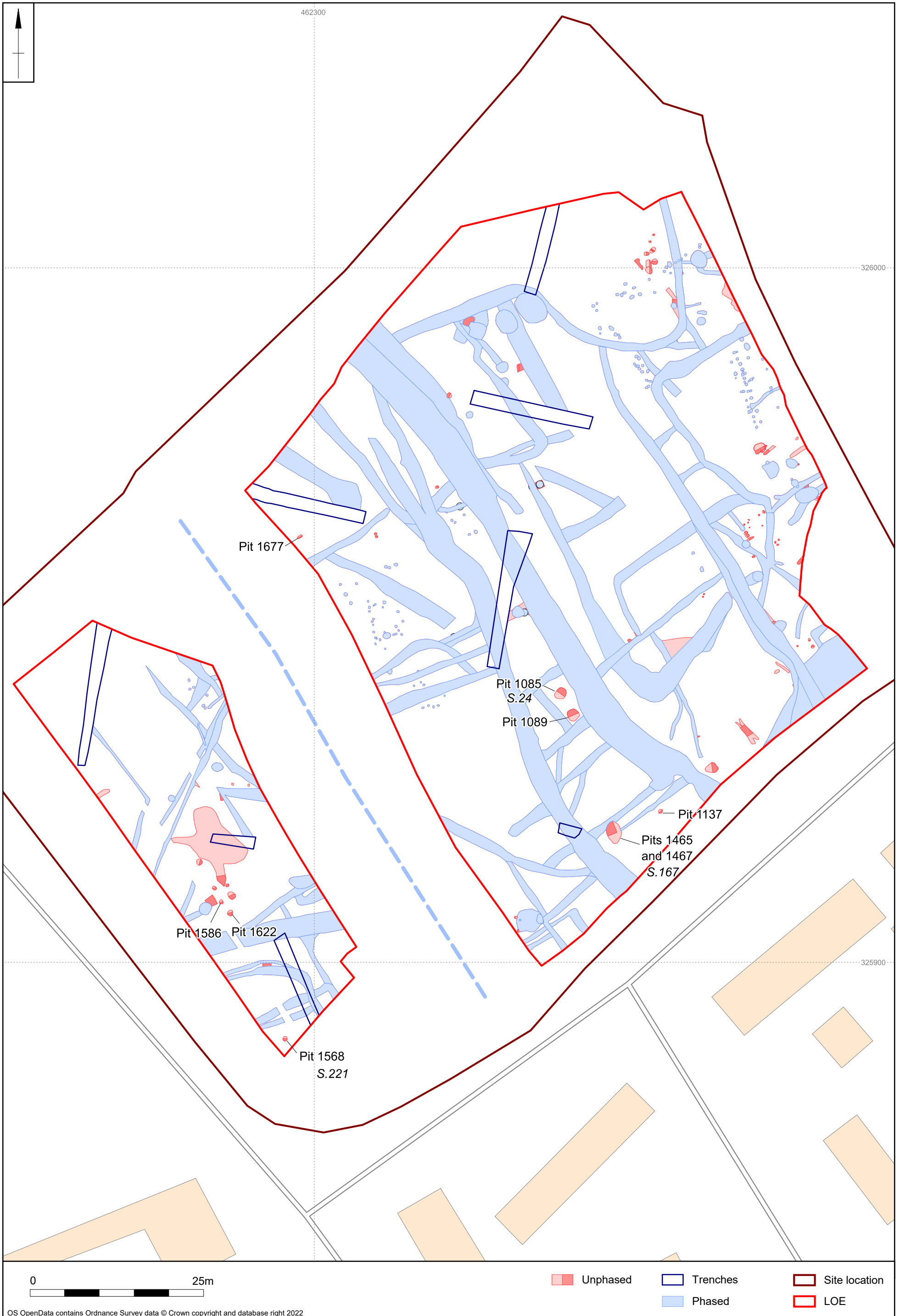
Circular pit [1622] was located 1.7m to the south of [1586], measured 0.6m in diameter and was 0.2m deep. It had a shallow U-shaped profile with a flat base and was filled by a deposit firm dark grey silty clay that did not contain any finds.

Pit [1568]

A circular pit [1568] was located in the south-western corner of the western excavation area (Fig 25). It measured 0.66m in diameter and was 0.17m deep. It had a U-shaped profile with a concave base. A deposit of firm mid grey-brown silty clay had accumulated in the feature, which contained animal bone fragments but no datable finds. The feature is unphased but would have been located within the area enclosed by E2 or in the southern part of Plot 4.

Pits [1465] and [1467]

A circular pit [1467] was located in the southern part of Plot 2, which measured 1.25m wide and was 0.66m deep (Fig 20, Section 167 and Fig 25). It had a gently sloping concave profile with a flat base and was filled by a deposit of firm orange-grey clay that did not contain finds. It truncated a Phase 3.1 ditch [1463] to the north and was



truncated on its northern edge by another circular pit [1465], which measured 0.8m wide and was 0.3m deep. It had a gently sloping concave profile and was filled by a deposit of firm light brown silty clay that did not contain finds.

Pit [1137]

There was a shallow elliptical pit [1137] located approximately 6m to the north-east of pit [1465], which had a gently sloping profile with a flat base (Fig 25). It measured 0.5m wide and was 0.06m deep. No finds were recovered from the firm mid brown-grey silty clay that had accumulated in the feature.

Pit [1089]

A shallow elliptical feature [1089] was located approximately 15m to the north of pit [1465] that was aligned roughly north to south (Fig 25). It measured 1.5m wide and was 0.11m deep with a gently sloping profile and irregular base. No finds were recovered from the feature and the irregularity of its base suggested that it may have been the remains of a tree throw. It was not possible to date the feature but it would have been situated within the southern part of Plot 2.

Pit [1085]

There was a deep circular pit [1085] located approximately 2m to the north of pit [1089], which measured 1.08m in diameter and was 1.1m deep (Fig 19, Section 24, Fig 25 and Fig 26). It had steep sides and a flat base and was cut into the water table so may have been a crude well or watering hole. A layer of friable black silty clay lined the sides and base of the feature and possibly related to the function of the feature as a watering hole. It contained a high proportion of organic material, including animal bone fragments, and was sampled for environmental analysis, which identified the presence of cereal grains including oats, barley, rye and wheat. After the creation of the lining the feature saw two further episodes of deposition starting with a deposit of friable mid orange-grey silty that contained occasional charcoal flecks and a small quantity of animal bone. There was then a final episode of silting that formed a deposit of friable light grey silty clay with very fragmented animal remains. It was not possible to date the feature due to the lack of artefactual evidence, but it would have been situated in the eastern part of Plot 2. The pit was cut into an earlier small pit or posthole [1087], which did not contain any finds.



View of pit [1085], looking west, 1m scale Fig 26

Pit [1677]

There was an east to west aligned elliptical pit [1677] located baulking the north-western corner of the eastern excavation area that would have been situated in the northern part of Plot 2 (Fig 25). It measured 0.77m wide and was 0.06m deep and it had gently sloping sides and a flat base. No finds were recovered from the deposit of firm light blue grey silty clay that had accumulated in the feature.

6 THE FINDS

6.1 The flint by Yvonne Wolframm-Murray

Introduction

A total of 106 pieces (385.14g) of worked flints were presented for assessment and is summarised below in Table 2 and catalogued in Table 14 (Appendix 1). All were visually assessed by artefact or debitage type, tools were classified by commonly used descriptions.

Table 2: Summary of worked flint

Item	Quantity
Core	1
Core fragment	2
Miscellaneous retouched flake	6
Miscellaneous retouched blade	1
Waste flake	57
Waste blade	24
Nodule	1
Shatter	14
Total	106

Raw material and condition

The condition of the flint was good with artefacts displaying occasional to moderate post-depositional edge damage with only occasional present nicks to the edges. Only a small portion of the flint was patinated, noted by a range of slight to fully white discolouration of the surface. Evidence of burning is evident on 14 pieces in the form of thermal crazing and fracturing, and pot-lids.

The raw material comprises of mid to dark brown to grey- brown, occasionally grey, vitreous, and occasional opaque flints. Light to mid brown Cortex is present in approximately half of the assemblage. The raw material was likely to have originated from local gravel deposits, one flake was likely to have been collected from river gravel deposit, or outcrops of clay-with-flint.

Assemblage composition

The majority of the flint was recovered from two features, nine from (1666) pit [1667] and 69 from (1668) gully [1669]. The assemblage comprises 57 waste flakes, of which 20 are broken, 24 waste blades, of which ten are broken, 14 pieces of shatter, one core, two core fragments, one nodule, one miscellaneous retouched blade and six miscellaneous retouched flakes.

Blade SF26 (1668) has possibly been utilised, one edge has some small flaking. One flake (1668) was also utilised showing as small removal on lateral edge. There is one primary blade from context (1668). The flakes and blades have frequent overshot terminations and hinge terminations, there are also cortical striking platforms present.

There is one flake core (1668), which has two striking platforms of which one is prepared. Additionally, there are two core fragments of which one is a piece of shatter and the other blade with overshot termination and small preparation removals around the striking platform.

There are no formal tool forms, however there are six miscellaneous retouched flakes and one miscellaneous retouch blade.

Technological characteristics

The technological characteristic of the assemblage is not directly dateable but are likely to be broadly Neolithic to early Bronze in date. Flake SF22 has retouch on the proximal end on one side of the striking platform, flake SF25 as a small area on one lateral edge. One flake from (1668) is a primary flake retouched on the lateral edge and may have been a scraper. The remaining flakes and blade each of small areas of retouch.

Discussion

The technological characteristics of the assemblage indicate a broad Neolithic to early Bronze Age date range. The core and one of the core fragments suggest a Neolithic date. The frequent presence of overshoot and hinge terminations with the presence of cortical striking platforms are more typical of late Neolithic or early Bronze Age assemblages.

A portion of the assemblage, 69 pieces in total, came from a single fill (1668) of gully [1669]. It is possibly knapping debris from two main cores, the flakes and blades from each have similar looking raw materials. There are a few individual flakes of different cores. Nothing could be refitted. The assemblage is near pits, possible tree bowls, of which one [1667] has the second largest number of worked flint.

6.2 The pottery by Paul Blinkhorn

The pottery assemblage comprised 751 sherds with a total weight of 7,258g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 4.19. It consisted of a mixture of Iron Age, Roman, Anglo-Saxon, medieval and later wares. The occurrence by context is shown in Tables 15 and 16 (Appendix 1).

6.2.1 Iron Age

The Iron Age pottery assemblage comprised 15 sherds with a total weight of 244g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 0.04. The following fabric types were noted:

F1002: Charnwood Grano-Diorite type. 14 sherds, 227g, EVE = 0.04.

F1003: Fine Shell. 1 sherd, 17g, EVE = 0.

The range of fabric types is typical of sites in the region (Marsden 1998). Nine contexts were of Iron Age date, with a mean sherd weight of 16.9g, and an average of 1.6 sherds per context. All the groups consisted of ten sherds or fewer. A further sherd was residual in a Roman context. Most of the material comprised plain bodysherds, although a single fairly large fragment of a rim was also noted (Fig 27, NB1), as were five sherds with incised outer surfaces typical of the Scored Ware tradition of the Middle Iron Age in the region (Elsdon 1992). They were all from large jars, in Charnwood-type fabrics (Fig 27, NB2 and NB3).

Illustrations

Fig 27, NB1: Context (1028), PH [1029], fabric F1002. Jar rim. Black fabric with variegated orange and grey surfaces.

Fig 27, NB2: Context (1736), pit [1737], fabric F1002. Scored bodysherd. Grey fabric with grey-brown outer surface.

Fig 27, NB3: Context (1738), ditch [1740], fabric F1002. Scored bodysherd. Grey fabric with orange outer surface

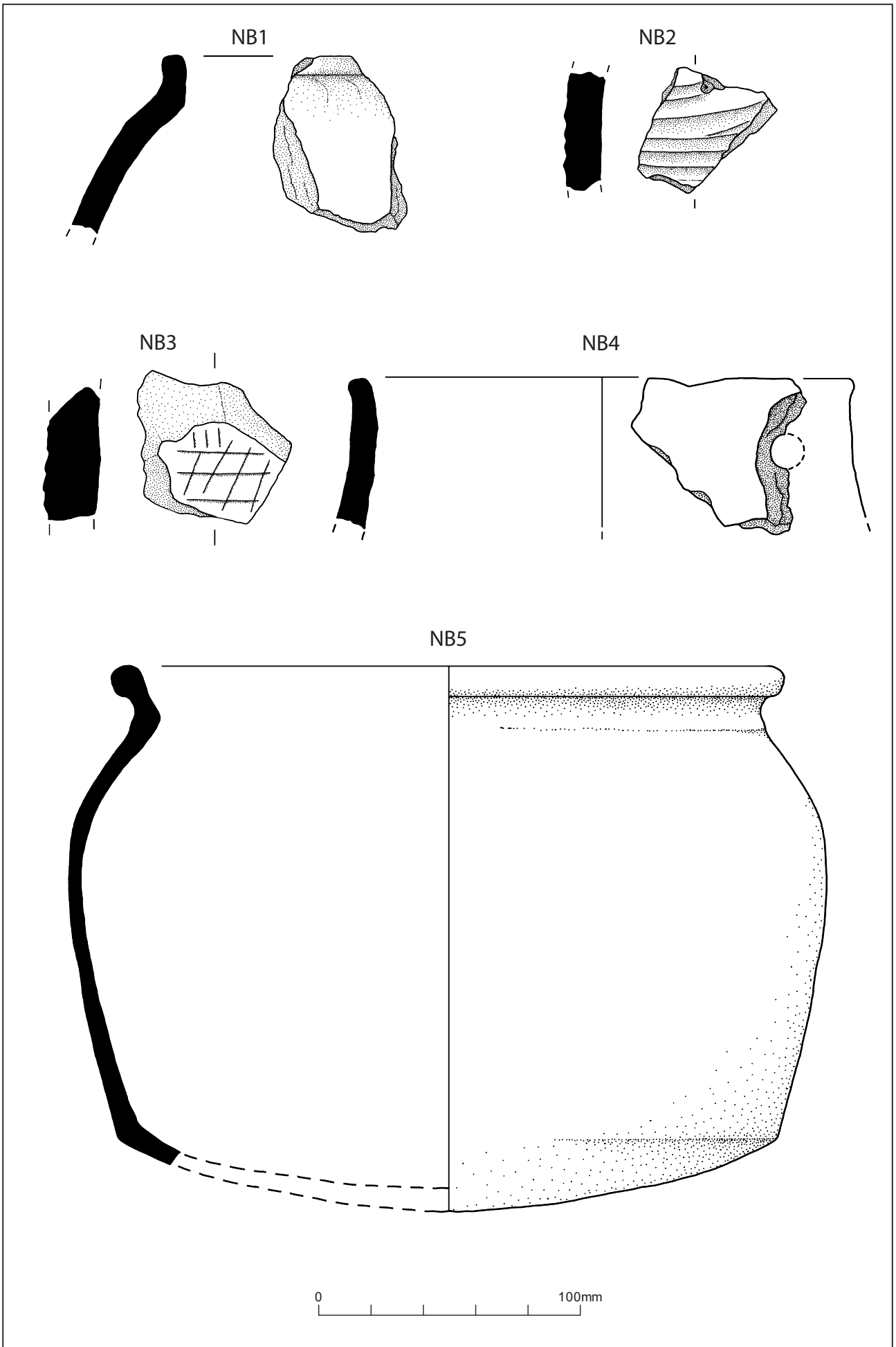
6.2.2 Roman

Nine sherds of Roman pottery weighing 58g were noted. They were all shelly wares or grey wares, and mostly residual.

6.2.3 Post-Roman

The post-Roman pottery assemblage comprised 727 sherds with a total weight of 6,956g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 4.15. It was recorded using the conventions of the Leicestershire County type-series (Sawday 1994), as follows

- BO:** Bourne 'A' Ware, 12th – 14th century. 1 sherd, 5g, EVE = 0.
CC1: Chilvers Coton 'A' Ware, 1200-1400. 74 sherds, 966g, EVE = 0.18.
CC2: Chilvers Coton 'C' Ware, 1300-1475. 40 sherds, 1087g, EVE = 0.
CC5: Chilvers Coton 'B' Ware, 1150-1300. 4 sherds, 28g, EVE = 0.
CS: Coarse Shelly Ware, 1100-1400. 129 sherds, 668g, EVE = 0.33.
EA6: Post-medieval Blackwares, late 17th century +. 1 sherd, 7g.
EA7: Staffordshire Slipware, 1650-1780. 1 sherd, 9g.
EA10: Modern Earthenwares, 1800+. 2 sherds, 16g.
LY1: Lyveden/Stanion 'B' Ware, 1200-1400. 1 sherd, 10g, EVE = 0.
NO: Nottingham Coarse Sandy Wares, 12th – 15th century. 79 sherds, 1408g, EVE = 0.50.
NO1: Nottingham Glazed Ware, 1250 – 1300. 9 sherds, 61g, EVE = 0.
NO3: Reduced Nottingham Glazed Ware, 1230 – 1350. 6 sherds, 50g, EVE = 0.
OL: Oolitic Ware, 975 – 1300. 3 sherds, 13g, EVE = 0.05.
PM: Potter's Marston Ware, 1100-1300. 58 sherds, 643g, EVE = 0.39.
SN: St Neots Ware, 900 – 1150. 22 sherds, 96g, EVE = 0.32.
SP2: Nottingham Splash-Glazed Ware, 1100-1250. 21 sherds, 282g, EVE = 0.16.
ST: Stamford Ware, 900-1150. 201 sherds, 1078g, EVE = 1.90.
SX: Early/middle Anglo-Saxon Hand-built Ware, 450-850. 67 sherds, 460g, EVE = 0.32.
TO: Torksey Ware, 10th – 12th century. 8 sherds, 69 g, EVE = 0.



The range of post-Roman fabric types is fairly typical of contemporary sites in the region and indicates that there was activity at the site during the early/middle Anglo-Saxon period, and then, more or less unbroken, from the late Anglo-Saxon period until the 14th century, after which time pottery deposition largely stopped. Certainly, Midland Purple Ware (Leicestershire fabric MP) and other wares which are usually common on late medieval sites in the region from the late 14th century onwards are entirely absent. The pottery occurrence in the Saxon and medieval contexts by fabric type is shown in Table 4.

The early/middle Anglo-Saxon wares are largely Charnwood grano-diorite types, with just a single sherd (10g) in an organic fabric. This is typical of sites in the region (Blinkhorn 2000, 98). In the case of the former, small featureless sherds were very difficult to identify with confidence, so their dating should be regarded as tentative due to their similarity with Iron Age pottery with similar fabrics when in poor condition. All of the calcitic/shelly wares had had their inclusions leached out meaning that in many cases, their identification is also tentative. The St Neots Ware assemblage appears to consist entirely of Denham's (1985) T1(2) type and is thus dateable to AD 1000-1200 (*ibid* 1985).

Chronology and Quantification

A total of 109 post-Roman contexts produced pottery. Overall, the mean sherd weight was 9.6g, and the average number of sherds per context was 6.7. Slightly over 84% of the contexts produced just ten or fewer sherds of pottery, with only two groups having more than fifty sherds.

Each stratified, context-specific pottery assemblage was given a ceramic phase ('CP') date based on the range of ware and vessel types present and adjusted according to the stratigraphic matrix. The chronology, defining wares and the amount of pottery per phase is shown in Table 3. The occurrence of the major fabrics per ceramic phase is shown in Table 16 (Appendix 1). The data in Table 3 confirms the picture presented by the fabric occurrence with regards to the chronology of pottery deposition at the site.

Table 3: Ceramic Phase Chronology, Occurrence and Defining Wares

Phase	Defining wares	Date	No Sherds	Wt. Sherds	Mean Sherd Wt
E/MSAX	SX	AD450-850	46	273	5.9g
LSAX	SN, ST, TO	10th C	10	44	4.4g
SN	SN, ST, TO	11th C	87	357	4.1g
M1	CS, PM, SP2	12th	229	2638	11.5g
M2	CC1, NO1	13th C	267	2165	8.1g
M3	CC2	E-L 14th C	40	1087	27.2g
M4	MP	L 14th – M 16th C	0	0	0
PM1	MB, MY	M 16th - L 17th C	0	0	0
PM2	EA3, SW5	18th C	2	9	4.5g
MOD	EA10	19th C+	42	346	8.2g
U/S	-	Unstratified	4	37	9.3g
Total*			727	6956	

Table 4: Pottery occurrence per ceramic phase by fabric type, (expressed as a percentage of the total wt per phase, major fabrics only)

Fabric	LSAX	SN	M1	M2	M3	MOD
SX	22.7%	6.7%	2.1%	0.2%	0	21.7%
OL	0	0	0.4%	0	0	0.9%
SN	15.9%	14.3%	1.4%	0	0	0
ST	47.7%	75.4%	22.4%	5.6%	0	16.5%
TO	13.6%	3.6%	0.1%	0	0	13.9%
PM	-	-	5.5%	23.0%	0	0.3%
CS	-	-	10.4%	14.1%	0	24.9%
NO	-	-	46.8%	1.2%	0	9.8%
SP2	-	-	9.6%	6.5%	0	9.8%
CC1	-	-	-	43.8%	0	4.9%
NO1	-	-	-	2.8%	0	0
NO3	-	-	-	2.3%	0	0
CC2	-	-	-	-	100%	0
EA	-	-	-	-	-	0
EA10	-	-	-	-	-	4.6%
Total	44	357	2638	2165	2165	346

Shaded cells = residual material

The data in Table 4 is distorted in the number of the CP by the presence of one or two very well-represented vessels. In the case of CP M1, it is a single NO jar (Fig 27, NB5). It survives as a full profile and there is also a large, non-joining piece of the base-pad. For CP M2, there are two near-complete bases from CC1 glazed jugs, and the data for CP M3 is skewed by the fact that all but one sherd of that date is from a single vessel (see below). Otherwise, the range of wares and their occurrence over time is fairly typical of sites in the county (Davies and Sawday 1999).

Residuality is generally fairly low, other than in the MOD contexts which produced just two contemporary sherds (see below). This suggests that the medieval material, despite being in poor condition, is generally reliably stratified.

Early/middle Anglo-Saxon Hand-built Wares, 5th – 9th century

A total of 67 sherds (460g, EVE = 0.32) of early/middle Anglo-Saxon pottery hand-built pottery (fabric SX) were noted. Forty-six of the sherds (273g) appear to be stratified. All the contexts produced ten or fewer sherds other than fill (1779) of pit [1981], which produced eleven. Twenty-two contexts produced pottery of this date and no later material, with an average of 2.1 sherds per context and a mean sherd weight of 5.9g, showing that it is all the result of secondary deposition. Certainly, the mean sherd weight of the apparently stratified material is lower than that of the residual early/middle Anglo-Saxon sherds, which is 8.9g.

All the pottery of this type from here is undecorated. The dating of Anglo-Saxon hand-built pottery is mainly reliant on the presence of decoration, which is usually of 5th and/or 6th century date, with 7th century and later pottery being mostly plain (Myres 1977, 1). However, it cannot be said with certainty that an assemblage which produces only plain sherds is of 7th century or later date, as decorated hand-built pottery generally comprises just 5% or less of domestic assemblages (Hamerow 1993, 51). Thus, small assemblages consisting of only undecorated pottery such as this one can only be given a date of the broad early/middle Anglo-Saxon (5th – 9th century). It is worthy of note however that a single decorated sherd, probably of 5th century date, occurred amongst the Anglo-Saxon hand-built wares from the evaluation excavations here (Rowlandson and Young 2016, 45), so at least some of this assemblage may be of a similar date.

Five rimsherds were noted, one of which had a fragment of an upright pierced suspension lug (Fig 27, NB4). It was redeposited in a medieval (CP M1) context. The others were all simple upright and slightly everted types, and all from jars other than one small bowl.

Illustrations

Fig 27, NB4: Context 1028, posthole [1029], fabric SX. Lugged rimsherd. Dark grey fabric with orange surfaces.

Ceramic Phase LSAX, 10th century. 10 sherds, 44g, EVE = 0.

Seven contexts produced pottery of this date, with an average of 1.4 sherds per context with a mean sherd weight of 6.3g, showing that all the material is probably the result of secondary deposition. Two of the contexts produced two sherds of pottery and the rest only one, so it is highly likely that some of the features are later than the bare pottery date suggests. The entire CP assemblage consisted of plain bodysherds.

Ceramic Phase SN, 11th century. 87 sherds, 357g, EVE = 0.43.

Twenty-three contexts produced pottery of this date, with an average of 3.8 sherds per context and a mean sherd weight of 4.1g, showing that all the material is probably the result of secondary deposition. The assemblage is somewhat scattered and fragmented, with over 91% of the contexts producing ten or fewer sherds, and just two producing eleven or more.

Stamford Ware was the main pottery type (fabric ST; 72.3% of the CP assemblage by weight), with the rest of the contemporary material being St Neots Ware (fabric SN; 14.3%) and Torksey Ware (TO; 3.6%). A single sherd of residual early/middle Anglo-Saxon hand-built ware was also noted.

Five rimsherds were noted, four from jars (EVE = 0.34; 79.1% of the CP assemblage) and one from a Stamford Ware pitcher (EVE = 0.09; 20.9%). Two of the jars are St Neots types (EVE = 0.19) and the other two are Stamford Ware (EVE = 0.15). All the Stamford Ware is in the fine white fabric typical of the 11th – 12th century output of the industry (Kilmurry 1980). One of the SN rims is from a cylindrical jar, a cooking vessel which was a speciality of the shelly ware industries of the east and south midlands (Blinkhorn 2010). The rest of the assemblage consisted of plain bodysherds.

Ceramic Phase M1, 12th century. 229 sherds, 2638g, EVE = 2.29

Thirty-six contexts produced pottery of this date, with an average of 6.4 sherds per context and a mean sherd weight of 11.5g, showing that all the material is probably the result of secondary deposition. The assemblage is somewhat scattered and fragmented, with over 83% of the contexts producing ten or fewer sherds and just two producing 20 or more.

The two most common fabrics were Nottingham-type Sandy Ware (fabric NO; 46.8% of the CP assemblage by weight) and ST (22.4%). As noted above, the data for the former is distorted by the presence of one of the very few well-represented vessels from the site, a jar (Fig 27, NB5). It survives to a full profile and there is also a large fragment of the base-pad. The outer surface of the body has a large patch of sooting which suggests that the vessel was placed next to a fire rather than directly on it or above it. This is further suggested by the fact that the outer surface of the base-pad is not scorched

The rest of the contemporary material consisted of Shelly Ware (fabric CS; 10.4%), Nottingham Splash-glazed Ware (fabric SP2; 9.6%), Potters Marston Ware (PM; 5.5%), SN (1.4%) and TO (0.1%), along with two sherds of Oolitic Ware (OL; weight = 10g) and a single sherd of unglazed Bourne 'A' Ware (fabric BO; 5g). Four residual sherds of SX were also noted (55g), including the rimsherd with the upright lug noted above (Fig 27, NB4). This aside, 22 other rimsherds were noted, of which 16 were from jars (EVE = 1.57; 72.0% of the CP assemblage), two were from bowls (EVE = 0.09; 4.1%) and four from jugs/pitchers (EVE = 0.52; 23.9%). This is a fairly typical vessel consumption pattern for assemblages of the period. Of the jars, eight were ST types (EVE = 0.68), three were NO types (EVE = 0.35), two were CS (EVE = 0.25), and one each of PM (EVE = 0.11), OL (EVE = 0.05) and SN (EVE = 0.13). The bowl rims comprised one each of ST (EVE = 0.02) and CS (EVE = 0.04), while two of the jugs/pitchers were ST types (EVE = 0.29) with the others being one each of NO (EVE = 0.07) and SP2 (EVE = 0.16). The only decorated fragments noted were single bodysherds in CS and SP2 with incised wavy lines.

Illustrations

Fig 27, NB5: Context (1168), gully [1169], fabric NO. Full profile of jar with large, non-joining fragment of the base-pad. Dark grey fabric with light brown outer surface, large patch of sooting on one area of the outer surface.

Ceramic Phase M2, 13th century. 267 sherds, 2165g, EVE = 4.11

Fourteen contexts produced pottery of this date, with an average of 19.1 sherds per context and a mean sherd weight of 8.1g, showing that all the material is probably the result of secondary deposition. Over 57% of the contexts produced fewer than ten sherds with five producing 20 or more.

The make-up of the assemblage is fairly typical of sites in the region. It is dominated by Chilvers Coton 'A' Ware (fabric CC1; 43.8% of the CP assemblage by weight), with Potters Marston Ware also very common (23.0%), and Shelly Ware (14.1%) also well-represented. The rest of the contemporary material comprised small quantities of Nottingham Wares (NO, 1.2%; NO1, 2.8%; NO3, 2.3%; SP2, 6.5%) and the single sherd of Lyveden/Stanion 'B' Ware (fabric LY1) from the site, from a glazed jug typical of the tradition (Blinkhorn 2008). The rest of the assemblage consisted of residual SX (0.2%) and ST (5.6%).

The data is partially skewed by the presence of two large fragments of bases from CC1 jugs from context (1425), ditch [1424] (part of B1). These have a combined weight of 519g, which represents nearly a quarter of the whole of the CP assemblage. Almost all the pottery from this CP came from gullies and ditches, suggesting that there was a fairly substantial re-organization of the landscape at this time, with material from domestic middens or the like incorporated into the backfill. A total of 195 sherds (1581g, or 73.0% of the pottery from the CP) came from four of the ditches/gullies: [1124], [1125], [1169], and [1424]. If the two CC1 jug bases from context (1425) are left out of the data, the rest of the material from these features has a mean sherd weight of 5.6g, which is very low for medieval settlements sites, and shows that most of the pottery is highly fragmented and very much the product of secondary deposition.

In total, twelve rimsherds were noted, of which nine were from jars (EVE = 0.89; 73.0% of the CP assemblage), one from a CS bowl (EVE = 0.04; 3.3%) and two from jugs/pitchers (EVE = 0.29; 23.8%). This is a not untypical vessel consumption pattern for the high medieval period, although half the rims were residual Stamford Ware examples. Of the jars, five were ST types (EVE = 0.53), three were PM (EVE = 0.28) and one NO (EVE = 0.08). One of the jugs/pitchers was an ST type (EVE = 0.11) and

the other CC1 (EVE = 0.18). A single, large fragment of a PM jug handle was also noted. It was a strap type with thumbled edges, a very typical type in this fabric (. Davies and Sawday 1999, fig. 94 no. 119). No other decorated sherds were noted.

Ceramic Phase M3, early-late 14th century. 40 sherds, 1087 g, EVE = 0.

Just two contexts produced pottery of this date. One, fill (1141) of ditch [1142], yielded only a single sherd weighing 6g while all the rest came from layer (1753), and all from the complete base of a single internally-glazed CC2 vessel. Evidence from the production centre indicates that both jars and bowls were glazed in this way (Mayes and Scott 1984, 51), with the angle of the walls on this vessel suggesting that it was from a jar. It is certainly a large example, with the base diameter being 300mm. The layer in which the sherd occurred rested on the natural and was sealed by the subsoil and has no relationship with any of the other features on the site. Given the date, it may represent activity at the time when the site consolidation and backfilling of the features took place.

Ceramic Phase PM2, 18th century. 2 sherds, 9g.

The two sherds of this date came from a single context, ditch fill (1801), ditch [1803]. One sherd (weight = 2g) was a residual sherd of CS while the other was a fragment of EA6.

Ceramic Phase MOD, 19th century+. 42 sherds, 346g.

Two contexts produced pottery of this date, (1658), ditch [1659] and layer (1843). Nearly all of it was medieval or earlier, and it is possible that the post-medieval material present, two small sherds of EA10 (16g) and one of EA7 (9g) may all be intrusive. If this is the case, then (1658) is otherwise of SN date and (1843) is from CP M2.

Overview and discussion

Overall, aside from a few well-represented vessels, most of the assemblage is of a fairly poor quality and is highly fragmented, with the context-specific assemblages being in the main quite small and the product of secondary deposition, probably as a result of material from domestic middens being used to back-fill ditches and the like during site clearance and consolidation. There is no evidence from the pottery to suggest that it came from anything other than an ordinary domestic site.

The range of medieval fabric types is fairly typical of site in the region, although, Stamford and Chilvers Coton Wares aside, pottery from the Nottingham area appears to be much more common in the 12th century (CP M1) groups than it usually is in Leicester (Davies and Sawday 1999). However, the data is somewhat skewed by the fact that one of the very few well-represented vessels from the site is a jar in fabric NO, and it alone makes up over 21% (by weight) of the pottery from the CP. Certainly, by CP M2, the proportions are more like those usually noted at sites in Leicester, although the data is probably once again somewhat skewed, this time in favour of CC1, by the presence of two largely-complete glazed jug bases which make up nearly a quarter of the whole CP assemblage by weight.

The highly fragmented state of much of the rest of the CP M2 material, and the fact that the whole of the CP M3 assemblage is represented by just two vessels suggests quite strongly that the site was completely reorganized in the second half of the 13th century or the early part of 14th century, with the cut features, especially ditches and gullies, all back-filled, presumably because the associated settlement had been

abandoned or the land given over to pasture, or perhaps, given the events of the time, both. There is certainly no evidence of medieval activity in the form of pottery deposition after the later part of the 14th century, as common late medieval wares such as Midland Purple Ware (Leicestershire fabric MP) are completely absent, and the more “developed” vessels associated with the storage, preparation, transportation and consumption of food and drink which are generally very rare before the mid – late 14th/15th century (McCarthy and Brooks 1988, 107-115) were entirely absent here, with the only forms noted being jars, bowls and jugs/pitchers.

6.3 Quernstones by Andy Chapman

There are four fragments from different rotary querns, two stratified and two unstratified.

From the fill (1462) of ditch [1463] there is a roughly rectangular fragment, up to 160mm long by 130mm wide from the circumference of rotary quern upper stone, 40mm thick, probably in Millstone Grit (SF19). The stone would have been c500-600mm in diameter, with c15% of the circumference surviving. The upper surface is slightly domed and retains dimpled tooled marks. The inner part of the surviving grinding surface is slightly concave, but around the circumference it is slightly convex, a not uncommon feature of rotary querns. On the inner part of the grinding surface shows shallow radial grooves, while the outer part retains dimpled tool marks. The inner part of the grinding surface is also blackened, perhaps through reuse as a hearth stone although deliberate heating prior to rapid cooling with water to shatter an unwanted stone may be an alternative explanation. The central part of the stone has been lost. While little has survived, this appears to be from a typical Roman flat rotary quern.

From the fill (1537) of structure S1 posthole [1538] dated by pottery as early-middle Saxon, there are two non-joining fragments from a rotary quern in lava stone (SF21). Both are fresh with sharp breaks, suggesting primary deposition soon after destruction, as lava stone will degrade quickly if left exposed to the elements. One fragment is from the circumference of a small upper stone 300mm in diameter, with 8% of the circumference surviving. The stone is 29mm thick at the circumference, tapering to 22mm thick at 90mm in from the circumference, indicating that it comes from a very heavily worn upper stone. The second fragment is 25-28mm thick, with no original edges, a smooth but undulating non-grinding surface and a flat grinding surface. It may have come from a partnering bottom stone. Lava querns from the Eifel region of modern Germany, near the Belgian border, were imported into Britain through the Roman and early medieval periods, becoming less common following the Norman Conquest when other stone sources became dominant.

One of the unstratified stones (SF42) comes from a small thin stone in fine-grained sandstone (possibly Millstone Grit), 30-33mm thick. The grinding surface is concave while the upper surface is smooth and gently undulating with sparse dimpled tool marks, and shallow near vertical grooves around the circumference at irregular intervals of c20-30mm. This fragment retains both a length of circumference, indicating a diameter of c.400mm, with c12% of the circumference surviving, and a fragment of the central hopper/feed 100mm in diameter. One radial fracture was through a handle slot in the upper surface, 60mm long by 10-12mm deep.

The other unstratified stone (SF43) is a medium Millstone Grit. The grinding surface is concave while the upper surface is smooth and gently undulating with sparse dimpled tool marks, similar to (SF42), but this stone is 50mm thick. It retains a length of circumference indicating a diameter of c400mm, with 15% of the circumference surviving.

The characteristics of the four stones suggest that these were all from flat rotary querns of Roman to early medieval date. All are too incomplete and/or lacking in diagnostic features to warrant illustration.

6.4 The slag by Andy Chapman

Four contexts produced a total of four pieces of slag weighing a total of 54g, a group that is far too small to provide any meaningful conclusions.

From contexts (1090) of posthole [1091] (part of structure S3) and (1634) of beamslot [1635], both dated to the early medieval period, there are individual small pieces of white to light grey and highly vesicular fuel ash slag, each weighing 4g. Fuel ash slag is a product of high temperature heating, but not necessarily from metalworking or other industrial processes.

From fill (1208) of pit [1209], dated to the 11th century AD, there is a further small piece of slag, weighing 6g, but dark grey to purple in colour, which may have come from ironworking. From fill (1537) of S1 posthole [1538] of early medieval date, there is a similar but larger fragment of dark coloured slag, weighing 40g, which might also derive from iron working.

6.5 The ceramic building material and fired clay by Rob Atkins

Medieval floor tiles

Two unglazed medieval floor tile fragments (415g) came from fill (1028) of pit [1029]. One fragment survives with a complete thickness (45mm). They are in a hard orange sandy fabric which has a small reduced dark grey surface. They are likely to date to the 13th-14th century. Floor tiles are high status objects and are normally found in manorial or religious buildings. It is therefore likely these tiles originally derived from outside the site.

Fired clay

A very small collection of 130 fired clay fragments and some unnumbered crumbs (538g) were recovered from hand collection and sieving. The vast majority were tiny undiagnostic scraps and were in a wide mixture of colours from orange to red to black colour.

Of interest were two fired clay fragments with withie impressions from pit [1050], which may suggest there had been wattle and daub construction associated with the structure? Possible secondary evidence for a nearby oven or kiln was found deposited in ditch [1827]. These consisted of 119g fragments and crumbs of fired clay with some having smoothed sides.

Catalogue

Four fragments (81g) from pit [1050] are in a hard orange sandy fabric with regular inclusions of orange sandstone pieces up to 6mm long. Three fragments have a smoothed surface surviving. Two have large withie impressions but diameters are uncertain but significantly more than 38mm and 29mm respectively. A third fragment has finger impression in its surface.

Two undiagnostic scraps (1g) from fill (1071) of pit [1072]

One small undiagnostic scrap (1g) from fill (1092) of posthole [1093]

One undiagnostic scrap (2g) from fill (1122) of ditch [1125]

Two undiagnostic scraps (10g) from fill (1168) of gully [1169]

Thirteen undiagnostic scraps (21g) from fill (1182) of pit [1184]

Five undiagnostic scraps (7g) from fill (1183) of pit [1184]

Two undiagnostic scraps (7g) from fill (1185) of pit [1184]
 One fragment (8g) from fill (1198) of pit [1199] has a smoothed surface
 Three undiagnostic scraps (9g) from fill (1208) of pit [1209]
 Three undiagnostic scraps (15g) from fill (1262) of pit [1263]
 One small undiagnostic scrap (2g) from fill (1305) of ditch [1306] E6
 Twelve small undiagnostic fragments (23g) from fill (1309) of pit [1311]
 Three undiagnostic scraps (4g) from fill (1310) of pit [1311]
 Two undiagnostic scraps (9g) from fill (1313) of pit [1312]
 Two undiagnostic scraps (2g) from fill (1400) of pit [1401]
 One small undiagnostic scrap (3g) from fill (1432) of gully [1431]
 One small undiagnostic scrap (5g) from fill (1497) of posthole [1498]
 Three undiagnostic scraps (6g) from fill (1587) of pit [1588]
 One fragment (19g) from fill (1597) of ditch [1596] has a smoothed surface
 Nine undiagnostic scraps (15g) from fill (1660) of beamslot [1661]
 One small undiagnostic scrap (4g) from fill (1703) of posthole [1704]
 One undiagnostic fragment (40g) fill (1725) of pit [1727]
 One undiagnostic scrap (8g) fill (1764) of ditch [1765]
 Twenty+ very small fragments and crumbs (53g) from cut [1671] of posthole [1671]
 Nineteen fragments to crumbs (119g) from fill (1822) of ditch [1827]. There are likely to have been from a kiln or oven. The surface was orange sandy fabric with a reduced grey black interior. Five fragments with a smoothed/relative smoothed surface. The largest fragment had a smoothed surface survived 58mm x 52mm x 19mm in size.
 Sixteen (64g) undiagnostic scraps from fill (1831) of pit [1833]

6.6 The glass by Claire Finn

One fragment of glass was recovered from fill (1625) of posthole [1626]. This comprised a 1.21g piece of modern colourless rolled window glass, 4mm thick, with plain narrow ribs on one face. It has no research utility and discard is recommended.

6.7 Small finds by Tora Hylton

Introduction

The excavations produced a small group of 20 medieval and post-medieval finds (Table 5). Eight of the finds are stratified and they were retrieved from medieval features, they include an iron knife and two fragments of molten lead alloy, the latter presumably relating to some form of metal working. The majority of finds (x12) are unstratified and they were recovered from topsoil and subsoil deposits overlying the area of excavation. Although these are dominated by fragmentary off cuts of lead alloy sheeting, they also include a small group of artefacts related to trade.

Table 5: Summary of small finds by material

Material	Stratified finds	Unstratified finds	Total
Copper alloy	1	3	4
Iron objects	4	-	4
Lead	3	9	12
Total	8	12	20

The small finds have been examined and identified with the aid of x-radiographs undertaken by staff at MOLA's London Office and they not only provide a permanent record, but they also revealed technical details.

Medieval finds

The only identifiable find stylistically datable to the medieval period is a whittle-tang knife <SF 6> which was recovered from the fill of a pit [1144] situated in the eastern part of the site. Whittle-tang knives terminate in a tapered prong on to which a handle of perforated wood, bone or horn would have been hafted. The knife is completely covered in corrosion deposits/soil, making it impossible to identify, however, the x-ray reveals that although incomplete (only a vestige of the tang survives), it represents a medieval form. The tang is set just below the blade with a sloping shoulder, the back of the blade is horizontal for much of its length then curves to the tip and the cutting-edge is horizontal. Knives of this type are common (Margeson 1993, 124); they were in use for much of the medieval period and were probably for general-purpose use.

Other iron finds from medieval contexts include two undiagnostic fragments <SF 36> from ditch [1783] E3, two joining fragments of sheet metal <SF 46> from ditch [1435], and a small point made from a rolled tapered sheet <SF 8> from posthole [1367] of structure S3. In addition, scrap lead alloy in the form of sheet fragments (offcuts) <SF 7> and molten fragments <SF 9> <SF 20> were also recovered, the former from gully [1169] and the latter from ditches [1772] and [1382] respectively; their presence alluding to the fabrication and the melting of lead alloy.

Unidentified finds

An unidentified copper alloy object <SF 11> was recovered from ditch [1435]. It is in a poor condition and incomplete, no patina survives, the surface is heavily pitted and all surface detail (if there was any) appears to have been lost. The object resembles part of a tapered hoop, it is cast with a D-shaped cross-section which expands and broadens out towards a 'flat' surface with a small protruding knob. The object is difficult to identify with certainty, but it may be part of a ?finger ring.

Post-medieval finds

Finds of post-medieval date were recovered from the topsoil and subsoil, however since most of the assemblage comprises fragments of lead alloy sheeting, it is possible that some of these are residual from an earlier period. Other finds recovered include a pierced jetton <SF 12>, a half penny <SF 44>, two lead weights <SF 1> <SF 10>, lead shot <SF 13> and a possible repair patch <SF16>.

The jetton <SF 12> is in a poor condition and covered in compact corrosion deposits. The x-ray reveals an image of the reverse (a *Reichsapfel* within a double 'trefoil' of three curves and three angles set alternatively all within an inner circle of rope-pattern) and this identifies it as a Nuremburg 'stock' jetton. It is not possible to decipher the legend. Jettons of this type were issued by Hans Krauwinckel and other Nuremburg makers, and they date from the late 16th to early 17th century. <SF44> is a half penny of William III (1694-1702), although exceedingly worn, a date of 1700 is legible (Spink 2021, 3556).

The lead shot <SF13> has a single (flat) facet on one side, a possible impact mark, suggesting that it may have been fired (or dropped), its small size (Dia: 14mm) suggests that it would have been for use with a pistol (Egan 2005, 202) and its weight (16g) suggests that it is 17th century (<https://finds.org.uk/counties/findsrecordingguides/shot/>). There are two lead weights, <SF1> is discoid with a large centrally placed perforation and it weighs 60g (equivalent

to 2.1 ounces). <SF10> is a ?pendant/fixed weight, it is conical in shape with a small central perforation and it weighs 23g (equivalent to 0.81 ounces). Finally, there is a lead alloy repair patch <SF 16>, it is sub-oval in shape, one side has a centrally placed outline of a rectangle in relief, together with possible ? textile impressions and the other side is furnished with surface ripples created when the metal was hot.

6.8 The animal bone by Adam Reid

Introduction

A total of 1817 animal bone fragments were hand collected from 99 different contexts during the evaluation and a further 131 fragments were recovered from eleven environmental samples. This material was assessed to determine the level of preservation, the taxa present and to inform on the potential for further work.

All material was washed prior to analysis. Identifiable bones were noted and were examined for signs of butchery and the state of epiphyseal fusion. The state of preservation of each bone fragment was rated on a scale of 1 to 5, where 1 is equivalent to excellent preservation and 5 very poor (Lyman 1994). Identifications took place with the aid of the MOLA Northampton reference collection. Tooth wear data was collected using a revised version of Grant's (1982) methodology (Greenfield and Arnold 2008) and the state of epiphyseal fusion was used to estimate age at death following guidelines set out by Silver (1969). Measurements of specimens with complete epiphyses were recorded using the criteria set out by von den Driesch (1976).

Due to the anatomical similarities between the two species, all ovicaprid specimens were grouped as sheep/goat, unless possible to differentiate between the two using Boessneck *et al.* (1964) and Payne's (1985) criteria. Specimens that could not be positively identified were attributed, where possible, to categories including Large Mammal (Cattle, Horse), Medium Mammal (Sheep/Goat, Pig, Large Dog), and Small Mammal (Small Dog, Cat, Rabbit). The Historic England guidelines for Animal Bones and Archaeology (Baker and Worley 2019) were followed, where possible.

Identification and quantification

Identification was possible for 145 of the hand-collected fragments (Table 6) and none of the fragments recovered from wet-sieved samples (Table 7). Approximately 92% of the identifiable assemblage comprised domestic, food bearing mammals (cattle, sheep/goats, and pigs), with one example of dog remains and ten examples of horse remains identified. No bird or fish remains were identified but a single amphibian bone was recovered from an environmental sample taken from pit [1401].

Table 6: Quantification of taxa – hand-collected fragments

	Cattle	Sheep	Pig	Horse	Dog	Large Mammal	Medium Mammal	Small Mammal	Indet	Total
Iron Age to Roman	2	-	-	-	-	-	-	-	-	2
Middle to Late Saxon	39	14	4	4	1	24	5	2	697	790
Medieval	24	13	-	5	-	22	3	-	380	447
Unphased	24	11	3	1	-	17	7	-	515	578
Total	89	38	7	10	1	63	15	2	1592	1817

Table 7: Quantification of taxa – fragments recovered via sieving

Context	Sample	Cattle	Sheep	Pig	Amphibian	M Mam	Indet	Total
1400/ Pit [1401]	2	-	3	-	1	-	13	17
1249/ Pit [1250]	3	-	-	-	-	1	1	2
1378/ PH [1379] S3	4	-	-	-	-	-	6	6
1165/ PH [1166] S3	6	-	1	1	-	-	6	8
1182/ Pit [1184] PG1	7	-	-	-	-	-	4	4
1507/ Ditch [1508]	8	-	-	-	-	-	18	18
1084/ Pit [1085]	9	-	-	-	-	-	13	13
1634/ PH [1635] S2	11	-	-	-	-	-	4	4
1587/ Pit [1588]	12	2	-	-	-	1	23	26
1598/ Pit [1599]	15	-	3	-	-	-	6	9
1831/ Pit [1833]	17	-	1	-	-	2	21	24
Total		2	8	1	1	4	115	131

Preservation and taphonomy

The assemblage was highly fragmented, and the state of preservation varied from good to very poor, with the majority of the material rated as poor (Table 8). Some of the material demonstrated evidence of weathering and surface abrasion, which would suggest that the specimens may have remained exposed, or partially exposed, for some time prior to burial. Butchery marks were noted on fragments from two contexts: a cattle radius fragment from pit [1588] and a cattle astragalus fragment from gully [1633]. In total nine fragments displayed evidence of mild charring and there were 17 small fragments of calcined bone (indicative of high temperature burning). A fragment of cattle calcaneus from pit [1250] displayed evidence of carnivore gnaw marks.

Table 8: Preservation rating for hand-collected specimens

	Excellent	Good	Moderate	Poor	Very poor
Total	-	1	56	1704	261

Conclusions

The small nature of the assemblage makes it difficult to draw any firm conclusions, other than to say that the main domestic taxa were utilised at the site, and the material appears to derive from general waste, with no suggestions of any specialised or industrial activity.

6.9 The archaeobotanical remains by Lisa Gray

Introduction

Seventeen samples were taken and fully processed by MOLA in Northampton (Table 9).

Identification and Recording

Identification of these plant macro-remains were made using modern reference material, author's own and the seed reference collection at the Institute of Archaeology, University College London, and reference manuals such as Beijerinck 1947 and Cappers *et al* 2006. Plant nomenclature for non-cereal plant macro-remains comes from Stace (2010), for cereals from Jacomet (2006) and botanical terms from Cappers (Cappers *et al* 2006). The correct botanical terms for each item are given in the table but seeds, fruits, nutlets will be referred to as 'seeds' in the text. Each flot was examined under a low-powered stereo-microscope with magnification of 10 to 45x. Sample <15> contained an unusually high density of chaff fragments so was sub-sampled using a riffle box. Charred plant-remains and the embryo ends of cereal grains were counted and charcoal flecks, charred grain fragments and uncharred anaerobically preserved and modern plant remains were given estimated quantities using the DAFOR Scale:

D – Dominant - >200

A – Abundant – 51-200

F – Frequent - 16-50

O – Occasional – 6-15

R -Rare – 5 or fewer

Charcoal fragments larger than 4mm Ø in size were picked out for identification. It is difficult to make identifications of charcoal fragments that are smaller than 4mm Ø in size because the diagnostic features necessary for identification may not be visible in such small fragments (Asouti 2006, 31; Smart and Hoffman 1988, 178-179). Fragments smaller than this size were scanned to find any twigs or smaller roundwood fragments. When fragments have been broken to reveal anatomical features, they have been wrapped in foil to keep those fragments intact so they can be counted. Charcoal identifications were made using modern reference material (author's own) and anatomical guides (Hather 2000 and Schoch *et al* 2004). Identifications were made using epi-luminating microscopy.

Table 9: Summary of environmental samples submitted for analysis

Sample No	Context No	Cut	Feature type	Feature date	Sample volume (Litres)	Processed volume (Litres)
1	1239	1240	Pit	12th C	40	40
2	1400	1401	Pit	12th C	40	40
3	1249	1250	Pit	AD450-850	40	40
4	1378	1379	Posthole	AD450-850	10	10
5	1376	1377	Posthole	AD450-850	10	10
6	1165	1166	Pit	AD450-850	20	20
7	1182	1184	Pit	12th C	40	40
8	1507	1508	Ditch	Undated	40	40
9	1084	1085	Pit	Undated	40	40
10	1425	1424	Ditch	13th C	40	40
11	1634	1635	Beamslot	11th C	20	20
12	1587	1588	Pit	12th C	40	40
13	1672	1673	Posthole	AD450-850	10	10
14	1499	1500	Posthole	AD450-850	10	10
15	1598	1599	Pit	Undated	10	10
16	1701	1702	Posthole	Undated	10	10
17	1831	1833	Pit	11th C	40	40

Results

A catalogue of the contents of the flots can be found as an appendix to this report (Table 17, Appendix 1). Plant macro-remains in these samples were preserved by being charred, anaerobically preserved (waterlogged then dried) or silicified.

Most of the plant macro-remains were anaerobically preserved. These items consisted of the testas and endocarps of seeds and modern rootlets. No evidence of waterlogging was given for any of these samples, so it is possible that many of these seeds are intrusive and entered the sampled contexts via faunal and floral bioturbation. A small number of earthworm cocoons were present. Earthworms can carry small items such as seeds and small stones up to a metre down into the soil (Canti 2003, 143). No contamination or bioturbation was reported as having been seen during sampling, but the presence of roots and earthworm cocoons in these flots do indicate that the uncharred seeds might be intrusive as may be the small, charred plant-macro remain assemblages in these samples. Seeds with internal tissue surviving were found in samples from pit [1166], associated with Structure S3 (sample 6), 12th-century pits [1184] and [1240] (samples 7 and 1) and in 11th-century pit [1833] (sample 17). These modern seeds were present in low numbers, and most were the same type as those found with only testas and endocarps surviving, which supports the theory that many of the uncharred plant macro-remains are intrusive. These seeds were mainly from plants of ruderal, hedge/scrub environments.

Charring was the next most frequent type of preservation of these plant macro-remains. Charring of plant-macrofossils occurs when plant material is heated under reducing conditions where oxygen is largely excluded leaving a carbon skeleton resistant to decay (Boardman and Jones 1990, 2; Campbell *et al* 2011, 17). These conditions can occur in a charcoal clamp, the centre of a bonfire or pit or in an oven or when a building burns down with the roof excluding the oxygen from the fire (Reynolds 1979, 57).

Charred plant macro-remains consisted of charcoal, cereal grains, cereal chaff, seeds, a fragment of rush (*Juncus* sp.) stem and a fragment of stone pine nutshell (*Pinus*

pinea L.). The rush stem fragment was found in AD450-850 posthole [1673] (sample 13) and the stone pine nutshell fragment was found in 12th-century pit [1240] (sample 1).

Cereal grains were found in each sample apart from undated pit [1599] (sample 15) and undated posthole [1702] (sample 1). These grains were very vacuolated, abraded and often fragmentary. The most frequently occurring grain type had the step embryos and rounded shape of free-threshing type wheat (*Triticum aestivum/durum/turgidum*). It is not possible to identify naked wheat to species based on grain morphology alone (Raus 1992, 240). More than a hundred grains of this type were found in 12th-century pit [1240] (sample 1), undated pit [1085] (sample 9), 12th-century pit [1588] (sample 12) and 11th-century pit [1833] (sample 17). Most free-threshing type wheat grains were found in sample 12. The next most frequent grain type were grains of barley (*Hordeum* sp.). These were straight grains but too badly preserved to determine if they were hulled or naked grains. One grain had a germinated sprout surviving. This was found in 12th-century pit [1588] (sample 12). Present in lower numbers were grains of oat (*Avena* sp.) and rye (*Secale cereale* L.). Two spelt (*T.spelta* L.) grains were recovered, one in undated posthole [1377] (sample 5) and one in undated pit [1085] (sample 9). These grains differed from those identified as free-threshing type wheat by having shallower embryo ends and being longer and wider below the width of the grain.

Cereal chaff was found in nine samples with most found in undated pit [1599] (sample 15) that had such a high quantity of chaff it had to be sub-sampled. The best preserved and most frequently occurring chaff types were those of spelt with fragments of glume, glume, and spikelet base present. Most of these were found in pit [1599] (sample 15). Four barley rachis fragments were found in undated pit [1085] (sample 9) but these were too poorly preserved to help identify the type of barley recovered.

Charred seeds from plants common in ruderal, segetal, scrub/hedge and damp ground were present in thirteen samples with most seeds found in 12th-century pit [1588] (sample 12) and 11th-century pit [1833] (sample 17). Some of these seeds might have been cultivated pulses. These were found in 12th-century pit [1239] (sample 1) and 12th-century pit [1588] (sample 12) and consisted of low numbers of horse/Celtic bean (*Vicia faba* L.), cultivated pea (*Pisum sativum* L.) and a possible grass pea (*Lathyrus sativus*) seed fragment. Most of the seeds came from plants preferring general segetal environments. Also present were seeds from plants preferring clayey soils such as stinking mayweed (*Anthemis cotula* L.), damp ground such as sedges (*Carex* sp.) and scrub or woodland such as elder (*Sambucus nigra* L.). The most abundant seeds came from stinking mayweed and most of these were found in 12th-century pit [1588] (sample 12) and 11th-century pit [1833] (sample 17). Next in abundance were seeds of grasses, mostly too poorly preserved to be identified but several identified to possible genus as ryegrass/brome (*Lolium/Bromus* sp.).

One unusual, charred item was a sheep/goat pellet found in 11th-century pit [1833] (sample 17).

Three fragments of silicified wheat awn were found in undated pit [1599] (sample 15). Silicification occurs when oxidising conditions occur, such as in a slow-burning aerated fire (Robinson and Straker, 1990, 4).

Charcoal of identifiable size was found in seven samples (see Tables 10 and 11): undated pit [1085] (sample 9), undated ditch [1508] (sample 8), 12th-century pit [1588] (sample 12), 11th-century beamslot [1635] (sample 11), undated posthole [1702] (sample 16) and 11th-century pit [1833] (sample 17). It was not possible to distinguish between stem or branch wood in these fragments because they were too small. The most frequently occurring taxa type was oak (*Quercus* sp.) stem/branch wood. Next in frequency were fragments of hazel (*Corylus avellana* L). Most of these were fragments of small roundwood or twig. Present, in lower numbers, were fragments of cherry/plum

(*Prunus* sp.), ash (*Fraxinus excelsior* L.) and alder (*Alnus glutinosa* L.). It should also be noted that some charcoal taxa cannot be identified to species based on microscopic wood anatomy alone. This the case for Oak (*Quercus* sp.) and cherry/plum/blackthorn (*Prunus* sp.) (Hather 2000 11; Schoch *et al* 2004).

Table 10: Quantification of charcoal taxa

Sample	Taxa type	Roundwood or Stem	Number of fragments	Weight (g.)
8	<i>Corylus avellana</i>	roundwood - twig	2	0.21
8	<i>Corylus avellana</i>	stem/branch	4	0.226
9	<i>Alnus glutinosa</i>	stem/branch	3	0.313
9	<i>Quercus</i> sp.	stem/branch	19	3.054
11	<i>Quercus</i> sp.	stem/branch	1	0.336
12	<i>Prunus</i> sp.	stem/branch	3	0.215
16	<i>Quercus</i> sp.	stem/branch	2	0.049
17	<i>Fraxinus excelsior</i>	stem/branch	2	0.172
17	<i>Quercus</i> sp.	stem/branch	2	1.222
17	<i>Corylus avellana</i>	roundwood fragment	4	0.689
17	<i>Corylus avellana</i>	stem/branch	4	0.1335

These charcoal fragments have also been examined using criteria explored by Dominique Marguerie and Jean-Yves Hunot (Marguerie and Hunot 2007). Their work examined the 'charcoal state' (*ibid* 1418-1424) meaning the examination of the following features:-

- bark and pith,
- reaction wood
- tyloses
- fungal hyphae
- insect degradation,
- radial cracks,
- vitrification
- growth ring curvature
- growth ring width.

None of the fragments had bark or pith surviving. These fragments were too small to see reaction wood so it is not possible to tell if they came from stem or branch wood. Tyloses were seen in most of the oak fragments, which means that these fragments came from heartwood (Marguarie and Hunot 2007, 1419). No fungal or insect activity was evident in these fragments. No fragments were radially cracked. The level of vitrification in all of these fragments was 'low brilliance -refractiveness' (*ibid* 1421), meaning that the anatomy of the wood was clear and unfused. Vitrification has been considered to be evidence of burning at high temperatures, but experimental work has concluded that this is not always the case and that more work needs to be done (McParland *et al* 2010).

Table 11: Qualitative analysis of charcoal fragments

Sample <...> & fragment number	Identification	Stem/Branch or Roundwood?	Roundwood - Visible growth rings	Tyloses (Yes/No)	Ring Curvature
(1012) 2	Corylus avellana L.	Stem	NA	No	Strong
<9> 2	Quercus sp.	Stem	NA	Yes	Weak
<9> 3	Quercus sp.	stem	NA	Yes	weak
<9> 4	Quercus sp.	Stem	NA	Yes	Weak
<9> 5	Corylus avellana L.	stem	NA	no	weak
<9> 6	Corylus avellana L.	stem	NA	no	Weak
<9> 7	Quercus sp.	stem	NA	yes	weak
<9> 8	Quercus sp.	stem	NA	Yes	Weak
<9> 9	Quercus sp.	stem	NA	yes	Weak
<9>10	Alnus glutinosa L.	stem	NA	Yes	weak
<9> 11	Quercus sp.	stem	NA	Yes	weak
<9> 12	Quercus sp.	stem	NA	Yes	weak
<9> 13	Corylus avellana L.	stem	NA	no	weak
<9> 14	Quercus sp.	stem	NA	no	Weak
<9> 15	Corylus avellana L.	stem	NA	no	weak
<9> 16	Corylus avellana L.	roundwood/twig	1	no	Strong
<9> 17	Corylus avellana L.	stem	NA	no	weak
<9> 18	Corylus avellana L.	stem	NA	no	weak
<9>19	Alnus glutinosa L.	stem	NA	no	weak
<9> 20	Quercus sp.	stem	NA	yes	weak
<9> 21	Quercus sp.	stem	NA	no	Weak
<9> 22	Quercus sp.	stem	NA	no	Weak
<9> 23	Quercus sp.	stem	NA	no	Weak
<9> 24	Quercus sp.	stem	NA	no	Weak
<9> 25	Quercus sp.	stem	NA	no	Weak
<9> 26	Quercus sp.	stem	NA	no	Weak
<9> 27	Quercus sp.	stem	NA	no	Weak
<9> 28	Alnus glutinosa L.	stem	NA	no	Weak
<9> 29	Quercus sp.	stem	NA	yes	Weak
<8> 30	Corylus avellana L.	stem	NA	no	Weak
<8> 31	Corylus avellana L.	stem	NA	no	Weak
<8> 32	Corylus avellana L.	part roundwood	rings unclear	no	strong
<8> 33	Corylus avellana L.	stem	NA	no	Weak
<8> 34	Corylus avellana L.	stem	NA	no	Weak
<8> 35	Corylus avellana L.	stem/branch	NA	no	Weak

<17> 36	Corylus avellana L.	part roundwood	c8	no	strong
<17>37	Corylus avellana L.	part roundwood	rings unclear	no	Strong
<17>38	Corylus avellana L.	part roundwood	rings unclear	no	Strong
<17>39	Corylus avellana L.	stem/branch	NA	no	moderate
<17>40	Quercus sp. Corylus	stem/branch	NA	Yes	moderate
<17>41	Corylus avellana L.	stem/branch	NA	no	moderate
<17>42	Corylus avellana L.	stem/branch	NA	No	Weak
<17>43	Fraxinus excelsior	stem/branch	NA	no	Weak
<17>44	Fraxinus excelsior	stem/branch	NA	no	Weak
<17>45	Corylus avellana L.	stem/branch	NA	no	Weak
<17>46	Corylus avellana L.	stem/branch	NA	no	Weak
<17>47	Corylus avellana L.	stem/branch	NA	no	Weak
<17>48	Quercus sp.	stem/branch	NA	no	Weak
<17>49	Quercus sp.	stem/branch	NA	Yes	Weak
<16>50	Quercus sp.	stem/branch	NA	no	Weak
<16>51	Quercus sp.	stem/branch	NA	no	Weak
<12>52	Prunus sp.	stem/branch	NA	no	Weak
<12>53	Prunus sp.	stem/branch	NA	no	Weak
<12>54	Prunus sp.	stem/branch	NA	no	Weak

The growth ring curvature in most of these fragments was weak meaning that ‘...the rings seem ‘straight’ and the rays parallel...’ (Marguarie and Hunot 2007, 1421). This means that the wood chosen is likely to have come from ‘...large calibre wood such as trunks or large branches...’ (*ibid* 1422).

Unfortunately, it was not possible to measure the width of the growth rings for these fragments. This may not be too great a loss due to this measurement being problematic:

‘Palaeo-environmental interpretations based on the measurement of growth-ring width in charred and fragmented material are only valid only when applied to large charcoals (with weak ring curvature) belonging to the same taxon in the same geographical are and ecological setting, while also coming from the same archaeological context (i.e. domestic fire places) and size of wood’
(Marguarie and Hunot 2007,1431)

Discussion

Stratigraphic integrity and bioturbation

At the time of writing the author is not aware of any problems with regards the stratigraphic integrity of these samples. Evidence of bioturbation is present in the flots in the form of rootlets, modern seeds and earthworm cocoons.

Interpretation of these plant macro-remain assemblages

Overview – Density, Preservation and Residuality

Given that the uncharred plant macro-remains are likely to be intrusive, analysis has focussed on the charred plant remains.

The densities of charred plant macro-remains per litre of sampled soil has been calculated for each sample. The interpretation of the densities of charred plant macro-remains in these samples is based on studies made on charred assemblages in England by Marike van der Veen and Glynis Jones (van der Veen and Jones 2006, 223). Low densities can be the result of 'slow/repeated deposition (usually day to day activity)' and high densities can be the result of 'rapid/single deposition (usually result of accident) (*ibid*)'. For the samples examined in this report thirteen had less than five charred plant remains per litre of sampled soil so this low density, accompanied by the observation that many of these items were abraded and fragmentary, means that they are unlikely to be related to the sampled context or feature. Problems of interpreting low numbers of charred plant macro-remains from samples like these have been discussed in a study of intrusion and residuality in the archaeobotanical record for southern England (Pelling *et al* 2015). This article highlighted the problem of assigning charred plant remains such as these to the dated contexts they were taken from because it is possible that these durable charred plant remains survived being moved between contexts by human action and bioturbation so cannot be properly interpreted unless radiocarbon dates are gained from the plant macro-remains themselves. That is the only way to secure a genuine date for charred plant macro-remains like these (Pelling *et al* 2015, 96). The remaining samples produced densities that are moderately high so possibly relating to activities taking place at the site. These assemblages are not like the huge number of charred plant remains found as the result of accidental fires or waste accumulated in the bases of kilns or hearths. The samples selected for full analysis are the best ones recovered and, as will be commented on later here, may not have originated in the time period given by the pot dates for the sampled contexts.

The charred assemblages analysed fully for this report came from samples with densities greater than ten: 5th to 9th century posthole [1500], part of S1, (sample 14), 12th-century pit [1588] (sample 12), undated pit [1599] (sample 15) and 11th-century pit [1833]. They could be remnants of activities that had taken place nearby but one would prefer higher densities than those found in these samples to be completely sure that they represented activities associated with the features and the dates given the sampled contexts.

Due to the fact that these are the best charred assemblages recovered from this site they will be analysed as they can add useful information that could answer the research aims.

Table 12: Summary of different ratios that were present in the assemblage

Feature Date	12th C	AD450-850	Undated	11th C
Feature	Pit	Posthole	Pit	Pit
Context Number	1587	1499	1598	1831
Cut	1588	1500	1599	1833
Sample	12	14	15	17
Bulk volume (L.)	40	10	10	40
Flot volume (L.)	0.05	0.02	0.075	0.2
100% examined	100%	100%	25%	100%
Density of counted charred items per litre of sampled soil	14	21	21(84)	13
Ratio A - Straw nodes: Cereal grains	1:206	0:23	NA	1:191
Ratio B- Free-threshing wheat rachis: Free-threshing wheat	0:350	0:23	NA	0:121
Ratio C -glumes bases:glume wheat grains	NA	64:0	70:0	NA

Ratio D - weed seeds: cereal grains	1:7	1:23	NA	4:3
Ratio E - large weed seeds:small weed seeds	1:2.3	0:1	NA	1:1

Possible modes of arrival of the components of these charred assemblages

When examining cereal and seed assemblages it is useful to examine the ratios of the different types of items in these assemblages. These can all help to suggest what activity created the assemblage. The ratios used here are based on the work of Gordon Hillman, Marike van der Veen and Glynis Jones (Hillman 1981; van der Veen and Jones 2006).

The ratios examined here are as follows (see Table 12):

- A. Cereal straw nodes/grains
- B. Free-threshing rachis internodes / grains
- C. Glume wheat glume bases / grains
- D. Weed seed/ cereal grains
- E. Small/ large weed seeds

(van der Veen and Jones 2006, 223)

Ratio A could be calculated for pit [1588], posthole [1500] and pit [1833]. For each sample there are more cereal grains than straw nodes meaning that these assemblages could be cleaned grain products. Ratio B could be calculated for the same three samples, with the sample conclusion of these assemblages being a cleaned grain product. Ratio C was calculated for posthole [1500] and pit [1599]. As the only two clear glume wheat grains found in these samples came from low density samples not included in the analysis the results indicate that the charred assemblages from these two samples are likely to be the remains of by-products from early cereal processing. Ratio D could be calculated for pit [1588], posthole [1500] and pit [1833]. For pit [1588] and posthole [1500] the grains outnumber the weed seeds meaning that these charred assemblages are likely to be a cleaned grain product. For pit [1833] weeds, very slightly, outnumber grains so the final interpretation of this assemblage will have to be based on the overall implications of the other ratios. Ratio E could be calculated for pit [1588], posthole [1500] and pit [1833]. Small seeds outnumber large seeds for pit [1588] and posthole [1500] so these assemblages could be by products from sieving. For pit [1833] the ratio of large and small seeds is the same so this could indicate sieving by product form hand cleaning or fine sieving.

From these ratios an interpretation of the charred assemblage for pit [1588], posthole [1500] and pit [1833] is of cleaned grain with some sieving waste, for posthole. Pit [1599] differs in containing no grains or seeds and abundant chaff meaning it is sieving waste.

How typical are these crop plants for the dates currently given for these sampled contexts?

Clearly, some form of cereal processing or use of processing waste as fuel was taking place at this site. How typical the cereals in these samples are of the Saxon and medieval periods in Leicestershire is difficult to say because, spelt, free-threshing type wheat and oats have been found in samples from the Midlands dating from the mid to late Bronze Age (Carruthers and Hunter-Dowse 2019, 42).

Two of these samples (pit [1250] sample 3 and posthole [1673] sample 13) have been dated as Anglo-Saxon. The regional review for the Midlands states that crops

commonly found in Anglo- Saxon period were mainly free-threshing type wheat, rye, oat, hulled barley, peas and horse/Celtic beans (Carruthers and Hunter-Dowse 2019, 105-106). Neither sample was very productive, and both contained cereals one would expect for this period in this area of England. The density of charred plant remains in both samples was very low so the items in the samples could have entered the sampled contexts through re-working of soil and be from an area of the site or time period.

Seven of these samples (beamslot [1334] sample 11, pit [1833] sample 17, pit [1240] sample 1, pit [1401] sample 2, pit [1184] sample 7, pit [1588] sample 12 and ditch [1424] sample 10) were dated as medieval. The crops common in this period consist of free-threshing type wheat, hulled, barley, oat, rye, spelt wheat, Celtic beans, cultivated vetch and peas (Carruthers and Hunter-Dowse 2019, 124-125). The contents of these samples do contain the crops typical for this period. Only three fragments of spelt chaff were found from samples given medieval dates. The undated samples from posthole [1500] sample 14 and pit [1599] sample 15 are the samples that contain many fragments of spelt chaff. Glume wheats in medieval samples have been interpreted as tolerated residual crops (*ibid* 124) but routine radiocarbon dating of glume wheat chaff has been recommended to help us understand the presence of glume wheats in samples from this period (*ibid* 124-5). This would help us learn more about the ways people attempted to create resilient food resources in difficult environmental conditions, as asserted in the following quote:

“Both emmer and spelt wheats have their own specific places in the rather diverse cropping regimes of the Saxon and medieval periods, at a time when diversity was probably seen as insurance against total crop failure, poverty and starvation.” (Carruthers and Hunter-Dowse 2019, 125).

One fragment of stone pine nutshell was found in medieval pit [1240] sample 1. This is a plant normally associated with the Roman period but has been found in medieval contexts (Carruthers and Hunter-Dowse 2019, 284). In this instance though, one charred nutshell fragment could easily be residual due to its durability.

What can these plant macro-remains reveal about Saxon and medieval agrarian economy and diet?

The cereals and pulses found in samples dated as Saxon and medieval are typical for this region. The frequency of stinking mayweed seeds in the medieval samples could be indicative of the cultivation of clay soils (Carruthers and Hunter-Dowse 2019, 105).

The one sheep/goat pellet in medieval pit [1833] sample 17 is a scant indicator of animal husbandry at this site but might not be unexpected on a site with other evidence for farming activities.

What can these plant macro-remains reveal about Saxon and medieval living conditions?

There is little that these plant remains can reveal about living conditions. No waterlogged plant remains were present and there are limits to what the charred seeds can reveal about the types of field in which the crops were grown. It is possible that some areas were damp but the charred damp ground plant seeds could have come in from fields many miles from and settlement at the site and the uncharred damp ground seeds could be intrusive. Any comment in this section needs to acknowledge the fact that charred seeds found among cereal remains where successive crops may have been processed or stored cannot be directly linked to any crop (Moffett 1994, 57-58). It is also difficult to determine a local ecology from a charcoal assemblage because charcoal is very durable and could have been transported into the site.

What can these plant macro-remains reveal about medieval woodland management?

The charcoal all comes from taxa native to the region but charcoal is very durable could have been transported in from many miles away. With regards possible uses at the site the burning qualities of the main charcoal type, oak, could be indicative of its use in a kiln or corn drier because it provides long-lasting fuel (Gale and Cutler 2000, 205). Ash wood is a good fuel burning well when green (Taylor 1981, 46). It is also possible that bundles of wood and woody stems from trees and shrubs, such as hazel, alder, apple/pear were gathered to produce extreme heat and high flames over a short time (Marguerie and Hunot 2007, 1425). The fragment of a dogwood seed in sample 12 could also be a remnant of wood gathered from nearby scrub for kindling

6.10 Radiocarbon dating by Beta Analytic

Radiocarbon analysis was undertaken on two samples in order to further add to our understanding of the environmental assemblages that yielded glume wheats, in keeping with the Historic England guidelines for environmental archaeology (Carruthers & Hunter-Dowse 2019, 125). The results are displayed in Table 13.

Table 13: Summary of radiocarbon samples

Sample	Beta Analytic reference	Conventional radiocarbon age	95.4% probability	68.2% probability
1499/ PH [1500] S2 (charcoal)	Beta - 621586	1110 ± 30 BP	882-995 cal AD 1068-955 cal BP	949-990 cal AD 1001-960 cal BP
1598/ pit [1599] (charcoal)	Beta - 621587	1210 ± 30 BP	770-892 cal AD 1180-1058 cal BP	784-834 cal AD 1166-1116 cal BP

7 DISCUSSION

7.1 Summary

Although small, the excavation at Hecadeck Lane has uncovered evidence of activity spanning five millennia, with the most intensive phase of site usage occurring between the fifth and 13th centuries AD.

7.2 Pre-early medieval activity

The scatter of struck flint artefacts that were recovered in the northern part of the site suggests that there may have been a phase of Neolithic or early Bronze Age activity that did not leave any traces in other parts of the site, other than a handful of residual flints. The flint assemblage from features [1667] and [1669] may be the remains of a single episode of knapping activity and do not appear to have accumulated in a cut feature, but rather in a natural hollow or tree throw, perhaps washed in by the adjacent gully.

Activity in the Iron Age and Roman periods is equally sporadic and can only be recognised in the form of residual finds that were encountered across the excavation area. Roman activity would not be unexpected given the site's proximity to the *Fosse Way*, which connected the Roman towns at Leicester and Lincoln via the site at *Vernemetum* (Willoughby-on-the-Wolds) located approximately 5.5km to the west of Nether Broughton. However, it does not appear that any settlement or other activity took place within the site until the early medieval period.

7.3 Early medieval structures and enclosures

The pottery chronology of the early medieval (or Anglo-Saxon) period made it difficult to separate out the phases of activity that took place at Hecadeck Lane during the fifth to ninth centuries. What we can say though is that it seems to have resulted in a relatively long-lived series of presumably agricultural enclosures with small scale settlement activity, as evidenced by the timber structure S1. The structure itself was potentially long-lived and may have existed in more than one iteration given the complexity and apparent disarray of the postholes that formed the structure.

It is common for early medieval sites to be divided into "tofts", or rectangular farmyards with associated gardens or orchards ("crofts"), and it is likely that the earlier phase of activity at Nether Broughton comprised several iterations of such activity. This occurred until towards the end of the early medieval period (the tenth and eleventh centuries AD) when the central portion of site came to be dominated by the ditched enclosure E6, which may also have been the first to front onto the routeway which is presently known as Hecadeck Lane. Ditches and pits containing pottery dating to this period was also found during a previous evaluation that took place at the Church of St Mary, located approximately 100m to the east of the site (Foard-Colby 2010) and it is likely that the routeway carried people further into the village that was presumably centred around this church.

A further two additional timber structures S2 and S3 have been dated to this period, both of which lay outside of the central enclosure to the west and east respectively. The late ninth to eleventh centuries AD (late Saxon period) are the point at which we start to see widespread evidence of nucleation in central and eastern England: the coalescence of organised towns and villages out of more sporadic clusters of farmsteads. It is likely that the two later structures at Hecadeck Lane were located in individual plots, but it is unclear if they were established as part of a planned settlement.

John Thomas of the University of Leicester Archaeological Services (ULAS) has recently synthesised the results of other developer lead excavations that have taken place in villages in Leicestershire since the 1990s, which helps to place the results into

a wider local context (Thomas 2015). This synthesis recognised that residual finds of fifth to ninth century pottery were relatively common at village sites that flourished in the tenth to eleventh or twelfth to thirteenth centuries and in many cases hinted at a possible continuity of activity in some form all the way through from the early Saxon period (fifth to seventh centuries) to the medieval period. The results from the excavation at Hecadeck Lane provide relatively detailed proof of this, with features that can be decisively dated to the earlier period clearly being overlain or truncated by later Saxon or medieval activity. The nature of this continuity has been variable across the county, with evidence from villages such as Glaston (Cooper and Thomas 2001) and Saxby (Thomas 2001a and 2001b) demonstrating that the tofts from earlier periods may have been maintained into the twelfth and thirteenth centuries, whereas other villages, such as Manton, saw a complete reorientation of the overall village alignment at this time (Tate 2007). The results from Nether Broughton seem to be more in line with Whissendine in Rutland, which saw a more extensive and regularly arranged pattern of boundaries established in the twelfth and thirteenth centuries that replaced an earlier system of smaller enclosures (Thomas 2015, Browning 2004).

7.4 Medieval tenement plots

Although clearly defined, the 12th to 13th century plots at Hecadeck Lane did not provide clear indications of structures dated to the period, despite the pottery assemblage indicating that the site may have functioned as an area of domestic occupation. The large pits that were located in the southern and eastern parts of the site and these did not contain dense concentrations of finds or food waste in the form of animal bones. The orientation of the plots suggests that they fronted onto Hecadeck Lane, although direct evidence of this was not uncovered by the excavation owing to the need to maintain a standoff between the southern edge of the site and the road.

One of the villages with the best understood 12th to 13th century activity is Anstey, approximately 20km to the south-west of Nether Broughton, which saw two phases of excavation at Cropston Road (Browning and Higgins 2003). The site at Cropston Road bears some interesting parallels to Hecadeck Lane as the excavation there uncovered evidence of occupation on the top of a raised toft, which was defined by a boundary ditch on one side and by a holloway (or sunken lane) to the rear. Several post-built structures were located within the toft, which was also subdivided by ditches and fencelines in a similar manner to Plot 4 at Nether Broughton. It was similarly difficult to determine a form and function for the structures at Cropston Road owing to the lack of direct evidence of domestic use. It has been suggested that the main focus of occupation for the plot at Anstey lay outside of the area excavation, closer to front of the plot, but this does not seem to have been the case for the plots that fronted Hecadeck Lane. Both Hecadeck Lane and the A606, which formed the western boundary of the site, were noticeably lower than the excavation area, and it is possible that either or both operated as a holloway into the historic core of Nether Broughton.

It is not uncommon for villages in the East Midlands to develop in a polyfocal manner, with several “ends” forming that eventually nucleate into one more clearly discernible settlement. It is possible that this was the case for Nether Broughton, with the oldest part of the village thought to be located in the area around the Church of St Mary to the north-east of Hecadeck Lane that is still known today as Church End. Recent excavation at Whitworth Way (Clare 2018) uncovered part of a lost medieval “end” of Wilstead located to the south of the village core, which was constructed in the 12th century and comprised two partial plots that contained three timber structures, at least two of which are thought to have been agricultural barns. This translates well to the Nether Broughton results as it is possible that structure S1 at Hecadeck Lane was also an agricultural building, owing to the irregular nature of its floorplan. The way in which the division of land varied over time was also very similar.

The metrics of Saxon and medieval plots is topic that has been discussed at length (Blair 2013, 2018), with medieval tenement plots being measured in “rods, roods and perches”. A quarter of an acre is equivalent to one rood or 40 perches, with each perch measuring one rod squared. Plots of this period appeared in many sizes but typically measured:

- Quarter-acre: equivalent to one rood, or 40 perches, made up of four rods wide (c20m) and 10 rods long (c50m); or two rods wide and 20 rods long
- Half-acre: equivalent to two roods, 80 perches, made up of eight rods (40m) wide and 10 rods (50m) long; or four rods wide and 20 rods long
- One acre: equivalent to four roods, 160 perches, made up of four roods, eight rods wide and 20 rods long; or four rods wide and 40 rods long.

At Nether Broughton the most complete plot from north-east to south-west (Plot 3) measured roughly 20m wide, or approximately four rods. None of the plots were complete from north-west to south-east but a measurement taken from the hedgeline that comprised the north-western boundary of the site down to Hecadeck Lane would give a length of approximately 90m or around 18 rods, enclosing areas of roughly one half of an acre each, or two acres of enclosed area for all four plots combined.

This subdivision of land at Nether Broughton into smaller, narrow plots in the 12th century is not unusual, as the plots that were encountered at Wilstead initially measured one acre, but they were later subdivided into smaller quarter-acre plots. Similarly, tenement plots that were encountered at Houghton Conquest (Walker 2011) seem to have been redeveloped in the 12th century, reducing in size from one-acre plots measuring up to 8 rods wide (40m) and 20 rods long (100m) into much narrower plots measuring 2 rods wide (10m) and up to 10 rods long (50m). The reasons for this pattern of plot sub-division are uncertain but may relate to a change of ownership or a change in land use (Clare 2018).

Given their date it is likely that the plots at Hecadeck Lane were burgage plots, meaning that the landowner subdivided their land into a series of plots to standardised measurements in order to rent them to “burgesses” (freemen). The intention behind this process was to maximise the income of the manor to which the land was attached and marked a move away from feudal society towards free holding towards a form of post-feudal town planning (White 2012, 127). Burgage plots were usually an extension of existing settlements away from the centres of towns or villages, which were usually ecclesiastical in nature, and created a suburban area for farming, trade and housing. In many cases burgesses were able to derive a degree of self-autonomy as a result of their contribution to the village economy and may have been able to contribute to collective decision making within the community.

The site went out of use in the second half of the 13th or early 14th century. The shrinking of villages in the 14th century is a phenomenon that has been identified across England and was previously often considered to be due to population loss through periods of plague or warfare from the mid-14th century onwards. However, it is now often discussed as a result of a variety of complex local and regional factors and the decline has been seen to have started earlier than this, as identified at Nether Broughton (Taylor 1983, Dyer and Jones 2010). The agrarian crises of the first half of the 14th century were probably one of the factors that contributed to abandonment of the site, either through a reduction in population or a desire to move elsewhere. The excavation at Wilstead determined that one part of the village was abandoned in the search for better agricultural land with more favourable geology (Clare 2018, 52) and the site bore topographic similarities with Hecadeck Lane as it was also located on clay geology at the top of a hill. This was likely only one factor that contributed to the abandonment of this part of Nether Broughton with another relevant factor being possible changes in land ownership. A shrinkage of the population in some areas enabled wealthier freemen to buy up unused plots of land. This often resulted in an

imbalance within the social hierarchy within the village and may have encouraged groups within the settlement to move elsewhere, which may have been easier than in previous periods owing to the greater availability of land and people may have chosen to live on prime plots located closer to the village core. The evidence from the excavation that took place at 5 Church Lane appears to support this, as features there were recut in the 14th and 15th centuries and ironstone walls were built at the site in the 15th century or later (Foard-Colby 2011).

After it was abandoned as a domestic settlement this part of the village was incorporated into the open-field farming system and likely operated in this manner until the early modern period.

7.5 Research framework

The following period-specific research aims were highlighted at the outset of the project, based on the regional research framework for the East Midlands (Knight *et al* 2012; EMHERF 2022):

Saxon

- to clarify the chronology of the Roman to Anglo-Saxon transition period;
- to review evidence for settlement morphology, hierarchies, and nucleation;
- to identify cultural boundaries;
- to update and expand the East Midlands Anglo-Saxon Pottery Project.

Medieval

- to investigate the morphology of rural settlements;
- to investigate the development of the open-field system and medieval woodland management;
- to understand diet and living conditions in rural communities.

The results of the excavation have the capacity to add to several of these research objectives and will be discussed in turn below.

For the Anglo-Saxon period, the results of the mitigation work at Hecadeck Lane provide a rare example of a site that demonstrates continuity of activity from the early/middle Saxon period through to the medieval period with re-development of the site taking place throughout. However, despite finding very limited evidence that activity was taking place during the Roman period, it does not seem to have seen Roman settlement activity at any scale so it is not possible to further clarify the Roman to Anglo-Saxon transition based on these results. If anything, it would appear to suggest that a new settlement was established at Nether Broughton away from earlier centres of activity.

As discussed, the site is particularly interesting in relation to explorations of the nature of settlement morphology during the Anglo-Saxon period through to the Medieval period. In the early to middle Saxon period, it appears to have been divided into relatively small enclosures, and then later developed into linear plots in the later Saxon and medieval periods. This phenomenon has been seen elsewhere in central and eastern England but rarely with such clear evidence of direct continuity throughout. It is during the late Saxon period that we begin to see widespread evidence of settlement nucleation, as smaller settlements started to coalesce into the towns and villages, most of which survived into the present day.

The site has generated a sizable, if utilitarian, pottery assemblage dating to the Anglo-Saxon and medieval periods, which may help to further expand the East Midlands Anglo-Saxon Pottery Project.

BIBLIOGRAPHY

- Asouti, E, 2006 *Factors affecting the formation of an archaeological wood charcoal assemblage*, available online at: http://pcwww.liv.ac.uk/~easouti/methodology_application.htm (last accessed: 28th April 2022)
- Baker, P, and Worley, F, 2019 *Animal Bones and Archaeology: Recovery to Archive, Historic England Handbooks for Archaeology*, accessible at: <https://historicengland.org.uk/images-books/publications/animal-bones-and-archaeology/animal-bones-archaeology-handbook/> (accessed 22nd January 2022)
- Beijerinck, W, 1947 *Zadenatlas der Nederlandsche Flora*. Wageningen: Veenman and Zonen
- Blair, J, 2013 Grid-planning in Anglo-Saxon settlements: the short perch and four-perch module, in H Hamerow 2013 *Anglo-Saxon Studies in Archaeology and History* 18, Oxbow
- Blair, J, 2018 *Building Anglo-Saxon England*, Princeton University Press
- Blinkhorn, P, 2000 The Early Anglo-Saxon Pottery in N J Cooper *The Archaeology of Rutland Water* Leicestershire Archaeology Monograph 6, 98-104
- Blinkhorn, P, 2008 The Pottery in P Chapman, P Blinkhorn and A Chapman, A Medieval Potters' Tenement at Corby Road, Stanion, Northamptonshire, *Northamptonshire Archaeology* 35, 215 – 71
- Blinkhorn, P, 2010 The Saxon and medieval pottery, in A Chapman *West Cotton, Raunds. A study of medieval settlement dynamics: AD450-1450. Excavation of a deserted medieval hamlet in Northamptonshire, 1985-89*, Oxbow, Oxford, 259-333
- BGS 2022 *The British Geological Survey GeoViewer*, available online at <http://www.bgs.ac.uk/geoindex/home.html> (last accessed 6th April 2022)
- Boardman, S, and Jones, G, 1990 Experiments on the Effect of Charring on Cereal plant Components. In: *Journal of Archaeological Science* 17, pp. 1-11
- Boessneck, J, Müller, H H, and Teichert, M 1964 Osteologische Unterscheidungsmerkmale zwischen Schaf (*Ovis aries* Linné) und Ziege (*Capra hircus* Linné), *Kühn-Archiv*, Bd. 78, H.1-2.
- Browning, J, 2004 Whissendine, Stapleford Road, *Transactions of the Leicestershire Archaeological and Historical Society*, 78, 156
- Browning, J, and Higgins, T, 2003 Excavations of a Medieval Toft and Croft at Cropston Road, Anstey, Leicestershire, *Transactions of the Leicestershire Archaeological and Historical Society*, 77, 65-81
- Campbell, G, Moffett, L, and Straker, V, 2011 *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)*. Portsmouth: English Heritage
- Canti M G, 2003 Earthworm Activity and Archaeological Stratigraphy: A Review of Products and Processes, *Journal of Archaeological Science*, 30, 135-148
- Cappers, R, Bekker, R and Jans, J, 2006 *Digitale Zadenatlas*. Groningen: Barkuis Publishing and Groningen University Library
- Carruthers W J, and Hunter-Dowse K L, 2019 *A Review of Macroscopic Plant Remains from the Midland Counties. Research Report Series no. 47/2019*, Historic England
- CIfA 2019 *Code of Conduct*, Chartered Institute for Archaeologists
- CIfA 2020 *Standards and Guidance for Archaeological Excavation*, Chartered Institute

for Archaeologists

Clare, R, 2018 *Archaeological excavation at Whitworth Way, Wilstead, Bedfordshire, July-September 2018*, MOLA Northampton report No. **19/2**

Cooper, L, and Thomas, J, 2001 Glaston, Grange Farm, *Transactions of the Leicestershire Archaeological and Historical Society*, **75**, 158-9

Davies, S, and Sawday, D, 1999 The Post Roman Pottery and Tile in A Connor and R Buckley 1999, *Roman and Medieval Occupation in Causeway Lane, Leicester* Leicester Archaeology Monograph **5**, 165-213

Denham, V, 1985 The Pottery in J H Williams, M Shaw and V Denham *Middle Saxon Palaces at Northampton*, Northampton Development Corporation Monograph Ser **4**, 46-64

Dyer, C, and Jones, R, *Deserted Villages Revisited*, University of Hertfordshire Press

Egan, G E, 2005 *Material culture in London in an age of transition: Tudor and Stuart period finds c1450-c1700 from excavations at riverside sites in Southwark*, MoLAS Monograph 19

Elsdon, S M, 1992 East Midlands Scored Ware, *Trans Leicestershire Archaeology Hist Soc* **66**, 83-91

EMHERF 2022 East Midlands Historic Environment Research Framework, available online at: <https://researchframeworks.org/emherf/> (last accessed: 28th April 2022)

Foard-Colby, A, 2010, *Archaeological investigation at Staymore, 5 Church End, Nether Broughton, Leicestershire X.A45.2010*, Northamptonshire Archaeology report **10/74**

Foard-Colby, A, 2011 *Archaeological investigation at Staymore, 5 Church End, Nether Broughton, Leicestershire June-July 2010*, Northamptonshire Archaeology report **10/114**

Gale, R, and Cutler, D, 2000 *Plants in Archaeology*. Otley: Westbury Publishing

Grant, A, 1982 The use of toothwear as a guide to the age of domestic ungulates In B Wilson, C Grigson, and S Payne 1982 (eds) *Aging and sexing animal bones from archaeological sites*, BAR British Series **109**, 91-108

Greenfield, H J, and Arnold, E R, 2008. Absolute age and tooth eruption and wear sequences in sheep and goat: determining age-at-death in zooarchaeology using a modern control sample, *Journal of Archaeological Science*, **35**, 836-849

Hamerow, H F, 1993 *Excavations at Mucking Volume 2: The Anglo-Saxon Settlement* English Heritage Archaeol Rep **22**

Hather, J, 2000 *The Identification of the Northern European Woods: A guide for archaeologists and conservators*. London: Archetype Publications Ltd

Hillman, G, 1981 Reconstructing Crop Husbandry Practices from Charred Remains of Crops. In: Mercer R (eds) *Farming Practice in Prehistory*. Edinburgh: Edinburgh University Press, pp.123-192

HE 2015 *Management of Research Projects in the Historic Environment (MoRPHE)*, Historic England

Jacomet, S, 2006 *Identification of cereal remains from archaeological sites - second edition*, Basel: Basel University Archaeobotany Lab IPAS

Kilmurry, K, 1980 *The Pottery Industry of Stamford, Lincs. C. AD850-1250*, British Archaeology Report British Ser **84**

- Knight, D, Vyner, B, and Allen, C, 2012 *East Midlands Heritage: An updated Research Agenda and Strategy for the Historic Environment of the East Midlands*, University of Nottingham and York Archaeological Trust
- Leigh, D, 2010 *An archaeological watching brief on land at 8 Church End, Nether Broughton, Leicestershire, August 2010*, Northamptonshire Archaeology Report No. **10/166**
- Lyman, R L, 1994 *Vertebrate Taphonomy*, Cambridge University Press
- Margeson, S, 1993 *Norwich Households: The Medieval and Post-medieval finds from Norwich Survey Excavations*, EAA 58
- Marguerie, D, and Hunot, J-Y, 2007 Charcoal analysis and dendrology: data from archaeological sites in north-western France. *Journal of Archaeological Science* **34**, pp. 1417-1433
- Marsden, P, 1998 Prehistoric Pottery in M Beamish, A middle Iron Age site at Wanlip, Leicestershire *Transactions of the Leicestershire Archaeological and Historical Society* **72**, 44-63
- Mayes, P, and Scott, K, 1984 *Pottery Kilns at Chilvers Coton, Nuneaton*, Soc Medieval Archaeology Monograph Ser **10**
- McCarthy, M R, and Brooks, C M, 1988 *Medieval Pottery in Britain AD900-1600*, Leicester University Press
- McParland, L, Collinson, M E, Scott, A C, Campbell, G & Veal, R, 2010 Is vitrification in charcoal a result of high temperature burning of wood? *Journal of Archaeological Science* **37**, pp. 2679 – 2687
- Moffett, L, 1994 'Charred cereals from some ovens/kilns in late Saxon Stafford and the botanical evidence for the pre-burh economy.' In Rackham, J. ed. *Environment and Economy in Anglo-Saxon England: a Review of Recent work on the Environmental Archaeology of Rural and Urban Anglo-Saxon Settlements in Southern England. Proceedings of a Conference held at the Museum of London, 9-10 April 1990 (York, 1994)* C.B.A. Research Report No. 89, 55-64
- MOLA 2014 *Archaeological Fieldwork Manual*, MOLA Northampton
- MOLA 2020 *Written Scheme of Investigation for archaeological mitigation at Hecadeck Lane, Nether Broughton, Leicestershire, March 2020*, MOLA Northampton
- Morgan-Shelbourne, L, 2016 *Land off Hecadeck Lane, Nether Broughton, Leicestershire: Archaeological Trial Trench Evaluation*, PCA Report Number **R12520**
- Myres, J N L, 1977 *A Corpus of Anglo-Saxon Pottery of the Pagan Period* 2 vols, Cambridge
- Payne, S, 1985 Morphological distinctions between the mandibular teeth of young sheep, Ovis, and goats, Capra, *Journal of Archaeological Science*, **12**, 139-147
- PCA 2015 *Land off Hecadeck Lane, Nether Broughton, Leicestershire, An Historic Environment Desk-Based Assessment*, PCA Report Number **12090**
- Pelling, R, Campbell, G, Carruthers, W, Hunter, K and Marshall, P, 2015 Exploring contamination (intrusion and residuality) in the archaeobotanical record: case studies from central and southern England, *Vegetation History and Archaeobotany*, **24**, 85-99
- Raus, M P, 1992 The Archaeobotanical record of cultivated and collected plants of economic importance from Medieval sites in France. *Review of Palaeobotany and Palynology*, **73**, pp. 301-314
- Reynolds, P, 1979 *The Iron Age Farm: The Butser Experiment*, London: British Museum Press

- Robinson, M, and Straker, V, 1990 'Silica skeletons of macroscopic plant remains from ash' in Renfrew, J,M, *New light on early farming. Recent Developments in Palaeoethnobotany*. Edinburgh: Edinburgh University Press, 3-13, Edinburgh University Press
- Rowlandson, I, and Young, J, 2016 The Pottery in L Morgan-Shelbourne, *Land off Hecadeck Lane, Nether Broughton, Leicestershire, LE14 3EZ: Archaeological Trial Trench Evaluation* PCA Report Number: **R12520**, 42-51
- Sawday, D, 1994 The post-Roman pottery in P Clay and R Pollard *Iron Age and Roman Occupation in the West Bridge Area, Leicester. Excavations 1962-71* Leics. Museums
- Schoch, W, Heller, I, Schweingruber, FH, Kienast F, 2004 'Wood Anatomy of Central European Species.' available online at: <http://www.woodanatomy.ch/> (last accessed: 7th January 2022)
- Silver, I, 1969 The ageing of domestic animals, In: D Brothwell and E Higgs 1969, *Science in archaeology: a survey of progress and research*, 2nd ed, Thames and Hudson, 283-302
- Smart T L, and Hoffman, E S, 1988 'Environmental Interpretation of Archaeological Charcoal.' In Hastorf, C A and Popper, V S, *Current Palaeobotany*. Chicago and London. University of Chicago Press
- Spink 2021 *Coins of England and the United Kingdom – pre-decimal issue*
- Stace, C, 2010 *New flora of the British Isles- 3rd Edition*. Cambridge: Cambridge University Press
- Taylor, M, 1981 *Wood in Archaeology*, Aylesbury: Shire Publications
- Taylor, C, 1983 *Village and Farmstead: A History of Rural Settlement in England*, George Phillip
- Tate, J, 2007 *An Archaeological Excavation and Watching Brief on land at Dairy Farm, Lyndon Road, Manton, Rutland*, ULAS Report No. **2007-101**
- Thomas, J, 2001a Saxby, Saxby Village Drain, *Transactions of the Leicestershire Archaeological and Historical Society*, **75**, 152-3
- Thomas, J, 2001b *An Archaeological Watching Brief and Salvage Recording during Construction of Saxby Village Drain, Saxby, Leicestershire*, ULAS Report No. 2001-27
- Thomas, J, 2015 Infilling the Blanks: modern development and the archaeology of currently occupied medieval rural settlement in Leicestershire and Rutland. *Medieval Leicestershire: Recent research on the Medieval archaeology of Leicestershire*, 41-64
- van der Veen, M, and Jones, G, 2006 A re-analysis of agricultural production and consumption: implications for understanding the British Iron Age, *Vegetation History and Archaeobotany* **15**, 217-228
- von den Driesch, A, 1976 *A guide to the measurement of animal bones from archaeological sites*, Harvard University, Peabody Museum Bulletin 1
- Walker, K, 1990 *Guidelines for the preparation of excavation archives for long-term storage*, United Kingdom Institute for Conservation
- Walker, C, 2011 *Medieval settlement at Houghton Conquest, Bedfordshire*, Northamptonshire Archaeology report No. **11/17**
- Watkinson, D, and Neal, V, 2001 *First Aid for Finds*, UK Institute for Conservation
- White, G, J, 2012 *The Medieval English Landscape, 1000-1540*, Bloomsbury Academic Press

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APPENDIX 1: FINDS AND ENVIRONMENTAL TABLES

Table 14: Catalogue of flint artefacts

Context/ feature	small find	sample no	Flake/ Blade	Portion	Raw Material	Cortex	Quant ity	Tool	Period	Burnt	Patina ted	length	width	weight	Comments
1245/ ditch [1247]	-	-	Flake	Whole	dark brown vitreous flint	light brown	1	-	-	-	-	28	24	3	cortical striking platform; cortex 1mm thick
1274/ ditch [1273]	-	-	Shatter	-	dark brown vitreous flint	-	0	core, fragment	-	-	-	25	41	21.23	possible core fragment
1438/ pit [1439]	17	-	Flake	Whole	dark grey-brown vitreous flint	white	3	-	-	-	-	29	26	4.08	hinge termination
1450/ pit [1451]	18	-	Blade	Distal	dark grey-brown vitreous flint	light brown	3	-	-	-	-	34	18	7.64	overshot termination
1450/ pit [1451]	18	-	Flake	Whole	dark grey-brown vitreous flint	light brown	3	-	-	-	-	36	19	5.36	primary flake
1486/ PH [1488]	-	-	Shatter	-	mid grey-brown vitreous flint	-	0	-	-	yes	-	34	19	5.22	thermal crazing
1634/ beamslot [1635]	22	-	Flake	Proximal	mid grey-brown vitreous flint	-	0	misc. retouch	-	-	-	24	18	1.95	retouch on proximal end on one side of the striking platform
1638/ ditch [1639]	-	-	Flake	Distal	dark brown-grey vitreous flint	-	0	-	-	-	-	21	12	2.21	-
1638/ ditch [1639]	-	-	Flake	Distal	dark grey-brown vitreous flint	-	0	-	-	-	-	17	12	0.52	-
1638/ ditch [1639]	-	-	Flake	Proximal	dark grey-brown vitreous flint	-	0	-	-	-	-	20	16	1.3	-

1638/ ditch [1639]	-	-	Flake	Whole	light grey opaque flint	-	0	-	-	-	-	30	16	1.41	-
1638/ ditch [1639]	-	-	Shatter	-	mid brown vitreous flint	-	0	-	-	-	-	19	9	0.67	-
1666/ feature [1667]	-	-	Blade	Distal	mid brown vitreous flint	light brown	1	-	-	-	-	20	9	0.33	-
1666/ feature [1667]	33	-	Blade	Whole	dark grey-brown vitreous flint	light grey	3	-	-	-	-	28	8	0.8	-
1666/ feature [1667]	34	-	Blade	whole	dark brown vitreous flint	light brown	1	-	-	-	-	26	6	0.56	spall; overshot termination
1666/ feature [1667]	-	-	Flake	Distal	light grey opaque flint	-	0	-	-	-	-	12	10	0.42	-
1666/ feature [1667]	25	-	Flake	Whole	mid grey-brown vitreous flint	-	0	misc. retouch	-	-	-	32	25	4.13	very small area of miscellaneous retouch on lateral edge; also some edge damage
1666/ feature [1667]	-	-	Flake	Whole	dark grey-brown vitreous flint	light brown	1	-	-	-	-	24	17	2.16	slight post-depositional edge damage
1666/ feature [1667]	-	-	Flake	Whole	light grey opaque flint	-	0	-	-	-	-	20	29	4.01	-

1666/ feature [1667]	32	-	Flake	Whole	dark grey-brown vitreous flint	light grey	2	-	-	-	-	28	16	5.16	-
1666/ feature [1667]	24	-	Flake	Whole	flint	light brown	1	-	-	-	white	16	11	0.31	debitage
1668/ gully [1669]	-	-	Blade	Distal	mid brown vitreous flint	-	0	retouch/ut ilisation	-	-	-	22	11	0.83	possible areas of retouch and utilisation on both lateral edges
1668/ gully [1669]	-	-	Blade	Distal	dark grey-brown vitreous flint	light brown	1	-	-	-	-	22	20	1.4	overshot termination
1668/ gully [1669]	-	-	Blade	Medial	light grey-brown vitreous flint	light brown	3	-	-	-	-	21	10	0.81	-
1668/ gully [1669]	-	-	Blade	Medial	mid brown vitreous flint	light brown	2	-	-	-	-	15	8	0.15	debitage
1668/ gully [1669]	-	-	Blade	Medial	mid brown vitreous flint	-	0	-	-	yes	slight	17	14	0.93	thermal fracturing
1668/ gully [1669]	26	-	Blade	Proximal	mid brown vitreous flint	-	0	utilisation	-	-	-	46	11	1.78	possible utilisation on one lateral edge - edge damage; from a blade core
1668/ gully [1669]	-	-	Blade	Proximal	dark grey-brown vitreous flint	light brown	2	-	-	-	-	21	8	0.64	debitage
1668/ gully [1669]	30	-	Blade	Proximal	dark grey-brown vitreous flint	-	0	-	-	-	-	29	11	1.05	-
1668/ gully [1669]	-	-	Blade	Whole	mid brown vitreous flint	light grey	3	-	-	-	-	30	18	3.94	primary

1668/ gully [1669]	-	-	Blade	Whole	mid grey-brown vitreous flint	-	0	-	-	-	-	31	10	2.04	removal of an edge
1668/ gully [1669]	-	-	Blade	Whole	dark grey-brown vitreous flint	light brown	1	-	-	-	-	35	12	1.53	-
1668/ gully [1669]	-	-	Blade	Whole	mid brown vitreous flint	mid	0	-	-	-	-	16	8	0.17	debitage
1668/ gully [1669]	-	-	Blade	Whole	dark grey-brown vitreous flint	light brown	1	-	-	-	-	31	10	2.63	spall, overshot termination
1668/ gully [1669]	-	-	Blade	Whole	dark grey-brown vitreous flint	light brown	1	-	-	-	-	21	10	0.55	-
1668/ gully [1669]	-	-	Blade	Whole	mid brown vitreous flint	-	0	-	-	-	-	25	9	0.87	edge damage - post- depositional?
1668/ gully [1669]	40	-	Blade	Whole	mid brown vitreous flint	-	0	-	-	-	-	25	9	0.79	notched?
1668/ gully [1669]	29	-	Blade	Whole	light brown vitreous flint	-	0	-	-	-	-	18	6	0.37	debitage
1668/ gully [1669]	23	-	Blade	Whole	mid brown vitreous flint	light brown	1	-	-	-	-	26	13	1.28	hinge termination
1668/ gully [1669]	-	-	Flake	Distal	dark grey-brown vitreous flint	light brown	1	utilisation	-	-	-	26	33	6.56	utilisation on lateral edge- distal end curve
1668/ gully [1669]	-	-	Flake	Distal	light grey opaque flint	-	0	-	-	-	-	9	16	0.57	-
1668/ gully [1669]	-	-	Flake	Distal	dark brown-grey vitreous flint	light brown	1	-	-	-	-	26	20	3.93	overshot termination; possible striking platform

1668/ gully [1669]	-	-	Flake	Distal	dark grey flint	-	0	-	-	yes	white	9	21	0.72	thermal fracturing
1668/ gully [1669]	-	-	Flake	Medial	mid grey vitreous flint	light brown	1	-	-	-	-	19	28	4.49	-
1668/ gully [1669]	-	-	Flake	Medial	mid grey-brown vitreous flint	-	0	-	-	-	-	20	13	0.58	-
1668/ gully [1669]	-	-	Flake	Medial	light grey granular flint	-	0	-	-	-	-	28	24	3.86	-
1668/ gully [1669]	-	-	Flake	Medial	mid grey-brown vitreous flint	-	0	-	-	yes	slight	11	10	0.25	debitage; thermal crazing
1668/ gully [1669]	27	-	Flake	Medial	mid brown vitreous flint	-	0	-	-	-	-	16	12	0.53	possible medial section of a blade
1668/ gully [1669]	-	-	Flake	Proximal	mid grey-brown vitreous flint	-	0	-	-	-	-	10	15	0.85	-
1668/ gully [1669]	-	-	Flake	Proximal	dark grey-brown vitreous flint	light brown	1	-	-	-	-	8	13	0.23	debitage
1668/ gully [1669]	41	-	Flake	Proximal	mid brown and grey vitreous flint	light brown	1	-	-	-	-	30	17	3.97	-
1668/ gully [1669]	31	-	Flake	Proximal	dark grey-brown vitreous flint	-	0	-	-	-	-	15	14	1.72	-
1668/ gully [1669]	-	-	Flake	Whole	dark grey vitreous flint	light brown	3	retouch	-	-	-	29	35	13.12	primary; scraper? Retouch on lateral edge
1668/ gully [1669]	-	-	Flake	Whole	dark grey vitreous flint	light brown	3	-	-	-	-	45	22	14.78	knapping of outer surface

1668/ gully [1669]	-	-	Flake	Whole	mid brown vitreous flint	light brown	2	-	-	-	-	21	28	2.82	overshot termination
1668/ gully [1669]	-	-	Flake	Whole	mid grey-brown vitreous flint	light brown	1	-	-	-	-	21	18	3.68	-
1668/ gully [1669]	-	-	Flake	Whole	mid grey-brown vitreous flint	-	0	-	-	-	-	14	11	0.68	debitage
1668/ gully [1669]	-	-	Flake	Whole	dark grey-brown vitreous flint	light brown	3	-	-	-	-	30	19	2.93	-
1668/ gully [1669]	-	-	Flake	Whole	dark grey-brown vitreous flint	-	0	-	-	-	-	14	11	0.49	probable proximal end of a blade
1668/ gully [1669]	-	-	Flake	Whole	mid brown opaque flint	light brown	1	-	-	-	-	18	21	1.69	crystal inclusions
1668/ gully [1669]	-	-	Flake	Whole	mid brown vitreous flint	light brown	1	-	-	-	-	20	12	1.12	-
1668/ gully [1669]	-	-	Flake	Whole	mid brown vitreous flint	-	0	-	-	-	-	14	10	0.18	debitage
1668/ gully [1669]	-	-	Flake	Whole	mid grey opaque flint	-	0	-	-	-	-	6	15	0.31	debitage
1668/ gully [1669]	-	-	Flake	Whole	dark grey-brown vitreous flint	light brown	1	-	-	-	slight	11	18	0.35	debitage
1668/ gully [1669]	-	-	Flake	Whole	dark grey-brown vitreous flint	light brown	1	-	-	-	-	11	10	0.47	debitage
1668/ gully [1669]	-	-	Flake	Whole	light grey opaque flint	-	0	-	-	-	-	12	8	0.36	debitage

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1668/ gully [1669]	-	-	Flake	Whole	dark brown-grey vitreous flint	light brown	2	-	-	-	-	20	15	1.02	hinge termination
1668/ gully [1669]	-	-	Flake	Whole	dark grey-brown vitreous flint	-	0	-	-	-	-	17	15	0.69	-
1668/ gully [1669]	-	-	Flake	Whole	light brown-grey opaque flint	-	0	-	-	-	-	18	17	0.59	-
1668/ gully [1669]	-	-	Flake	Whole	dark grey-brown vitreous flint	-	0	-	-	-	-	15	30	2.07	dorsal surface on striking platform has many previous removals - some step terminations
1668/ gully [1669]	-	-	Flake	Whole	mid brown vitreous flint	light brown	1	-	-	yes	mediu m	16	11	0.56	debitage; thermal crazing
1668/ gully [1669]	-	-	Flake	Whole	mid brown vitreous flint	light brown	2	-	-	yes	-	16	17	1.5	thermal crazing
1668/ gully [1669]	-	-	Flake	Whole	dark grey-brown vitreous flint	-	0	-	-	yes	-	40	37	11.56	thermal crazing, shiny surface - heat treatment
1668/ gully [1669]	39	-	Flake	Whole	mid brown vitreous flint	-	0	-	-	-	-	23	11	1.12	hinge termination;
1668/ gully [1669]	38	-	Flake	Whole	dark brown vitreous flint	-	0	-	-	-	-	20	10	0.48	hinge termination
1668/ gully [1669]	37	-	Flake	Whole	dark grey-brown vitreous flint	-	0	-	-	-	-	29	18	1.8	thin flake; cortical striking platform
1668/ gully [1669]	28	-	Flake	Whole	dark grey-brown vitreous flint	-	0	-	-	-	-	29	18	1.25	-
1668/ gully [1669]	-	-	Shatter	-	dark grey-brown vitreous flint	light brown	1	-	-	-	-	35	44	19.58	crushing on one edge

1668/ gully [1669]	-	-	Shatter	-	mid brown vitreous flint	light brown	1	-	-	-	-	21	25	4.19	-
1668/ gully [1669]	-	-	Shatter	-	dark grey-brown vitreous flint	light brown	2	-	-	-	-	26	17	2.75	-
1668/ gully [1669]	-	-	Shatter	-	mid grey-brown vitreous flint	light brown	1	-	-	-	-	18	9	1.2	debitage
1668/ gully [1669]	-	-	Shatter	-	dark grey-brown vitreous flint	light brown	1	-	-	-	-	21	6	0.48	debitage
1668/ gully [1669]	-	-	Shatter	-	dark brown vitreous flint	-	0	-	-	-	-	15	18	0.78	-
1668/ gully [1669]	-	-	Shatter	-	dark grey-brown vitreous flint	light brown	1	-	-	-	-	15	15	2.02	-
1668/ gully [1669]	-	-	Shatter	-	flint	-	0	-	-	yes	white	30	12	2.49	thermal crazing
1668/ gully [1669]	-	-	Shatter	-	flint	light brown	1	-	-	yes	white	20	16	2.39	pot lidding
1668/ gully [1669]	-	-	Shatter	-	brown vitreous flint	light brown	1	-	-	yes	white	19	4	0.39	debitage; thermal fracturing
1668/ gully [1669]	-	-	Shatter	-	mid grey vitreous flint	red	1	-	-	yes	-	11	14	0.33	debitage; thermal fracturing
1668/ gully [1669]	-	-	Shatter	-	flint	-	0	-	-	yes	white	15	14	0.35	pot lid
1668/ gully [1669]	-	-	-	-	mid grey opaque and mid brown vitreous flint	light brown	-	core, flake	Neolithi c	-	-	34	31	20.96	flake core; two striking platforms; prepared striking platform

1683/ gully [1684]	-	-	Flake	Distal	dark grey-brown vitreous flint	light brown	1	-	-	yes	slight	9	8	0.21	thermal fracturing and patination
1685/ gully [1685]	45	-	Blade	Whole	dark brown vitreous flint	-	0	-	-	-	-	32	14	1.92	-
1734/ gully [1735]	-	-	Blade	Whole	mid brown vitreous flint	light brown	1	-	-	-	-	29	11	1.47	overshot termination
1734/ gully [1735]	-	-	Flake	Whole	dark brown vitreous flint	light brown	2	retouch	-	-	-	26	41	19.61	pebble; retouch on one lateral edge - scraper?
1734/ gully [1735]	-	-	Flake	Whole	dark red-brown vitreous flint	-	0	-	-	-	-	17	9	0.55	-
1736/ pit [1737]	-	-	Blade	Whole	dark brown vitreous flint	light brown	1	core, fragment	Neolithi c	-	-	56	26	19.82	possible core fragment - blade; overshot termination; small removals on dorsal surface of striking platform - preparation
1736/ pit [1737]	-	-	Flake	Medial	mid grey-brown vitreous flint	mid brown	1	-	-	-	-	20	19	1.74	-
1738/ ditch [1740]	-	-	Flake	Proximal	mid grey-brown vitreous flint	-	0	-	-	-	-	20	34	2.66	-
1738/ ditch [1740]	-	-	Flake	Whole	dark brown vitreous flint	white	2	-	-	-	-	34	46	21.29	pebble - river?; cortical striking platform
1779/ pit [1781]	-	-	Flake	Whole	light grey vitreous flint	-	0	-	-	-	-	11	14	0.46	debitage
1784/ ditch [1785]	-	-	Blade	Medial	dark grey-brown vitreous flint	light brown	1	-	-	-	-	30	12	2.1	-

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1784/ ditch [1785]	-	-	Flake	Whole	mid grey and brown vitreous flint	-	0	-	-	-	-	13	20	1.03	-
1791/ ditch [1790] E6	-	-	nodule	-	dark grey vitreous flint	mid brown	-	-	-	-	-	60	27	51.99	nodule of flint with areas of crushing, removals - check context
1826/ ditch [1827]	-	-	Flake	Proximal	mid brown vitreous flint	light brown	1	retouch	-	-	-	29	28	6.16	retouch on distal end, but also some possible damage
1826/ ditch [1827]	-	-	Flake	Whole	dark brown vitreous flint	light brown	2	retouch	-	-	-	33	17	5.14	small area of retouch near proximal end; overshoot termination
1831/ pit [1833]	-	17	Flake	Distal	mid brown vitreous flint	light brown	2	-	-	-	-	25	17	2.97	-
1831/ pit [1833]	-	17	Natural	-	-	-	-	-	-	yes	-	-	-	0.51	-

Table 15: Pottery occurrence, Iron Age and Roman pottery only

Context/ Feature	IA		RB		Date
	No	Wt	No	Wt	
1132/ Ditch [1133]	-	-	1	2	E/MSAX
1304/ Enclosure E6	-	-	1	2	RB
1560/ layer	1	23	-	-	MIA
1580/ PH [1579]	1	44	-	-	IA
1725/ pit [1727]	-	-	3	15	SN
1736/ pit [1737]	2	44	-	-	MIA
1738/ ditch [1740]	1	57	-	-	MIA
1743/ ditch [1744]	2	10	-	-	MIA
1750/ PH S1	1	9	-	-	IA
1767/ pit [1766]	1	8	1	5	RB

1786/ ditch [1787]	2	13	-	-	IA
1809/ ditch [1810]	2	26	-	-	IA
1826/ ditch [1827]	2	10	-	-	IA
1836/ ditch [1837]	-	-	1	7	E/MSAX
1839/ ditch [1840]	-	-	1	12	RB
1843/ layer	-	-	1	15	MOD
Total	15	244	9	58	

Table 16: Pottery occurrence, Saxon and medieval pottery only

Context	EMS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date	
	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t		
1001/top soil	1	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U/S
1002/subsoil	-	-	-	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U/S
1004/gully [1005]	-	-	7	5	9	5	-	-	-	-	-	-	2	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1006/ditch [1007]	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN	
1008/ditch [1009]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1	
1012/ditch B2	-	-	-	-	2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN	
1024/PH [1025]	-	-	-	-	1	1	-	-	-	-	-	-	1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1	
1028/PH [1029]	1	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1	

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Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	
1032/ ditch [1033]	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1034/ ditch [1036]	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1035/ ditch [1036]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1037/ ditch [1038]	-	-	-	-	-	-	-	-	-	-	1	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1043/ PH [1044]	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LSAX
1058 layer	-	-	-	-	1	4	-	-	1	3	-	-	-	-	2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1063/ pit [1065]	-	-	-	-	-	-	-	-	-	-	-	-	8	19 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M2
1064/ pit [1065]	-	-	-	-	-	-	-	-	-	-	4	33	-	-	-	-	2	13	-	-	4	2 8	-	-	-	-	-	-	-	-	-	-	M2
1066/ ditch [1068]	-	-	-	-	2	2 5	1	2	1	7	5	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	
1069/ ditch [1070]	-	-	-	-	1	6 1	-	-	-	-	-	-	2	6	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1071/ pit [1072]	-	-	-	-	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1079/ pit [1081]	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1090/ PH S3	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LSAX
1113/ PH [1114]	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LSAX
1117/ ditch [1118]	-	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LSAX
1121/ ditch [1124]	-	-	-	-	1	1 0	-	-	-	-	7	34	7	22	-	-	-	-	-	-	-	-	-	2	24	4	2 7	3	2 4	-	-	M2	
1122/ ditch [1125]	1	5	-	-	-	-	-	-	-	-	17	10 0	-	-	3	46	-	-	-	-	-	-	2	58	4	2 0	2	1 0	-	-	M2		
1130/ ditch [1125]	-	-	-	-	1	1 4	-	-	-	-	-	-	3	14	2	5	2	13	-	-	-	-	-	-	-	-	-	-	1	1 6	-	-	M2

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	
1132/ ditch [1133]	4	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	E/MS AX
1141/ ditch [1142]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M3
1143/ pit [1144]	1	2	-	-	1	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1145/ ditch [1146]	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1150/ ditch B1	-	-	-	-	1	6	-	-	-	-	-	-	-	-	2	3	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1152/ ditch B2	-	-	-	-	1	7	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1154/ gully [1155]	-	-	-	-	5	1 6	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1167/ gully [1169]	-	-	-	-	3	4	-	-	-	-	59	10 4	4	13	3	30	-	-	-	-	-	-	-	-	1	16	-	-	-	-	-	-	M2
1168/ gully [1169]	-	-	-	-	5	1 9	-	-	-	-	8	36	6	25	1 9	10 44	9	21 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1

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Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	
1170/ PH [1171]	1	10	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LSAX
1172/ ditch E5	-	-	1	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LSAX
1178/ PH [1180]	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1182/ Pit [1184]	-	-	-	-	4	2	-	-	-	-	1	5	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1183/ pit [1184]	-	-	-	-	2	3	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1185/ pit [1184]	1	4	1	4	5	3	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1198/ pit [1199]	-	-	-	-	6	2	-	-	-	-	1	3	-	-	1	1	4	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1208/ pit [1209]	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1220/ ditch E5	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1239/ pit [1240]	-	-	-	-	1	3	-	-	-	-	-	-	4	14	5	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1249/ pit [1250]	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX

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Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	
1262/ pit [1263]	-	-	-	-	1	7	-	-	-	-	1	22	1	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1269/ pit [1270]	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1274/ ditch [1273]	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1309/ pit [1311]	1	7	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1310/ pit [1311]	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1314/ ditch [1315]	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1335/ pit [1336]	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1384/ ditch [1382]	-	-	-	-	1	7	-	-	-	-	2	4	-	-	8	51	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	M1
1385/ ditch [1382]	-	-	-	-	7	6	-	-	-	-	1	3	-	-	2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	
1400/ [1401]	-	-	-	-	2	7	-	-	-	-	-	-	-	-	1	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1402/ pit [1403]	-	-	-	-	7	4 3	-	-	-	-	-	-	-	-	1	12	2	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1412/ PH [1413]	-	-	-	-	-	-	-	-	-	-	-	-	1	6	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1421/ pit [1420]	-	-	-	-	-	-	-	-	-	-	-	-	1	3	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1425/ ditch B1	-	-	-	-	8	5 5	-	-	-	-	2	5	8	20 2	-	-	-	-	-	-	-	-	-	-	4 3	69 7	-	-	-	-	-	-	M2
1426 layer	-	-	-	-	3	2 1	-	-	-	-	-	-	1	8	2	17	-	-	-	-	-	-	-	-	2	6	-	-	-	-	-	-	M2
1428/ ditch [1427]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	12	-	-	-	-	-	-	-	M2
1432/ ditch B1	-	-	-	-	1	1	-	-	-	-	1	2	3	28	1 4	42	-	-	-	-	-	-	1	1 0	1 6	61	-	-	-	-	-	-	M2
1433/ ditch [1435] E4	-	-	-	-	1	4	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	2	42	-	-	-	-	-	-	-	M2
1440/ PH [1441]	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	
1537/ PH [1538]	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1545/ ditch [1547]	-	-	-	-	-	-	-	-	-	-	2	72	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1550/ gully [1551]	-	-	-	-	3	16	-	-	-	-	2	6	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1553/ pit [1554]	2	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1565/ PH S1	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1572/ PH [1571]	1	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1587/ pit [1588]	1	3	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1595/ ditch [1596]	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1602/ ditch [1575]			-	-	-	-	-	-	-	-	1	9	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	
1611/ furrow [1612]	2	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1613/ PH S2	1	4	1	2	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1634/ beamslot S2	-	-	1	2	3	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1634/ Beamslot S2	-	-	-	-	2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1638/ ditch E2	-	-	-	-	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1642/ ditch [1643]	3	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1660/ beamslot [1661]	-	-	2	5	1 1	2 0	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1662/ PH S2	-	-	-	-	3	1 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1672/ PH S1	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	
1672/ PH S1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1719/ ditch [1721]	-	-	-	-	2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1720/ ditch [1721]	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1725/ pit [1727]	-	-	-	-	3	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1741/ ditch [1742]	4	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1753 layer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	1081	M3
1754/ PH [1755]	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1764/ ditch [1765]	-	-	-	-	-	-	-	-	-	-	-	-	1	22	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	M2

HECADECK LANE, NETHER BROUGHTON

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	
1769/ ditch [1770]	-	-	2	27	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1774/ ditch [1772]	4	13	-	-	5	3 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1779/ pit [1780]	1 1	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1782/ ditch [1783]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	29	-	-	-	-	-	-	M2
1788/ gully [1789]	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1791/ ditch B1	1	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1802/ ditch [1803]	1	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1804/ ditch [1805]	2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX

Context	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2		Date
	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	
1815/ ditch [1816]	-	-	1	24	-	-	-	-	-	-	1	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1
1820/ ditch [1819] E6.0	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1822/ ditch [1827]	-	-	1	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1831/ pit [1833]	-	-	1	2	4	1 1	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SN
1832/ pit [1833]	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LSAX
1834/ gully [1835]	-	-	-	-	3	1 2	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	1	1 4	-	-	-	-	M2
1836/ ditch [1837]	2	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E/MS AX
1839/ ditch [1840]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M1

	E/MS AX		SN		ST		TO		OL		CS		PM		NO		SP2		BO		CC5		LY1		CC1		NO1		NO3		CC2				
Context	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	Wt	Date
Total	67	460	22	96	201	1078	8	69	3	13	124	641	63	666	79	1408	21	282	1	5	4	28	1	10	74	966	9	61	6	50	40	1087			

Table 17: Catalogue of material recovered from environmental samples

Feature Date		12th C	12th C	AD450-850	UNDATED	UNDATED	UNDATED	12th C	UNDATED	UNDATED	13th C
Feature		Pit	Pit	Pit	Post hole	Post hole	Pit	Pit	Ditch	Pit	Ditch
Context Number		1239	1400	1249	1378	1376	1165	1182	1507	1084	1425
Cut		1240	1401	1250	1379	1377	1166	1184	1508	1085	1424
Sample		1	2	3	4	5	6	7	8	9	10
Bulk volume (L.)		40	40	40	10	10	20	40	40	40	40
Flot volume (L.)		0.075	0.05	0.03	0.025	0.005	0.03	0.05	0.05	0.1	0.1
100% examined (adjusted count in brackets)		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Density of counted charred items per litre of sampled soil		5	3	<1	<1	1	3	2	1	5	<1
Charred Cereal Grains											
<i>Avena</i> sp.	Oat	18	23	1	-	-	7	10	-	4	-
<i>Hordeum/Triticum</i> sp.	Barley/Wheat	-	-	-	-	-	-	-	1	-	-
<i>Hordeum</i> sp. (straight grain)	Barley - poorly preserved	4	3	1	1	-	5	-	7	11	-
<i>Hordeum</i> sp. (sprouted straight grain)	Barley - poorly preserved	-	-	-	-	-	-	-	-	-	-
<i>Secale cereale</i> L.	Rye	-	-	-	-	-	-	-	-	2	-
<i>Secale cereale/Triticum</i> sp.	Rye/Wheat	-	-	-	-	-	-	-	-	6	-
<i>Triticum spelta</i> L.	Spelt	-	-	-	-	1	-	-	-	1	-
<i>Triticum</i> sp.	Wheat	2	-	-	-	-	-	-	-	-	-
<i>Triticum aestivum/durum/turgidum</i>	Bread/Club/Rivet Wheat	123	62	1	6	9	45	67	39	134	7
Indeterminate cereal		-	-	-	-	-	-	-	-	-	-
Indeterminate grain tissue fragments		A	F	O	O	-	F	F	F	F	O
Charred Cereal Chaff		-	-	-	-	R	-	-	-	-	-
<i>Avena</i> sp. (awn fragment)	Oat	-	1	-	-	-	-	-	-	-	-
<i>Hordeum</i> sp. (rachis segment)	Barley	-	-	-	-	-	-	-	-	4	-
<i>Triticum</i> sp. (awn fragment)	Wheat	-	-	-	-	-	-	-	-	-	-

<i>Triticum spelta</i> L. (spikelet base)	Spelt	-	-	-	-	-	-	-	-	-	-
<i>Triticum spelta</i> L. (glume base)	Spelt	-	-	-	-	-	-	-	-	-	-
<i>Triticum spelta</i> L. (glume fragments)	Spelt	-	-	-	-	-	-	-	-	-	-
<i>Triticum-spelta</i> (spikelet base)	Spelt	-	-	-	-	-	-	-	-	-	-
<i>Triticum spelta</i> (glume fragments)	Spelt	-	-	-	-	-	-	-	-	-	-
<i>Triticum</i> sp. (glume base)	Wheat	-	-	-	-	-	-	-	-	-	-
<i>Triticum</i> sp. (spikelet base)	Wheat	-	-	-	-	-	-	-	-	-	-
<i>Triticum aestivum/durum/turgidum</i> (rachis segment)	Bread/Club/Rivet Wheat	-	-	-	-	-	-	-	-	1	-
Poaceae (stem fragments)	Grass	-	-	-	-	-	-	-	-	9	2
Indeterminate cereal (culm node)		2	-	-	-	-	-	-	-	1	-
Charred Seeds		-	-	-	-	-	-	-	-	-	-
Possibly cultivated pulses											
<i>Vicia</i> sp. (seed)	Vetch	-	-	-	-	-	-	-	-	-	-
<i>Vicia faba</i> L. (seed)	Celtic/Horse bean	3	-	-	-	-	-	-	-	-	-
<i>Vicia faba/Pisum</i> sp.	Celtic/Horse bean/Cultivated Pea	-	-	-	-	-	-	-	-	-	-
<i>Vicia/Pisum</i> sp. (seed)	Vetch/Pea	1	-	-	-	-	-	-	-	-	-
cf. <i>Lathyrus sativus</i> L. (seed)	Grass pea	-	-	-	-	-	-	-	-	-	-
cf. <i>Pisum sativum</i> L. (seed)	Cultivated pea	-	-	-	-	-	-	-	-	-	-
Plants Preferring Clay Soils											
<i>Lapsana communis</i> L.	inpplewort	-	-	-	-	-	-	-	-	-	-
<i>Anthemis cotula</i> L. (fruit)	Stinking mayweed	3	5	-	-	-	-	-	-	-	-
<i>Anthemis cotula</i> L. (fruit fragment)	Stinking mayweed	-	-	-	-	-	-	-	-	-	-
Plants of winter and summer cereals and root crops											
<i>Raphanus raphanistrum</i> L. (fruit)	Wild radish	-	-	-	-	-	-	-	-	-	-
Plants of winter cereals											

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<i>Fallopia convolvulus</i> (L.) Å.Löve (fruit)	Black bindweed	-	-	-	-	-	-	-	-	-	-
<i>Rumex acetosa/crispus/obtusifolius</i> (fruit)	Common/Curled/Broad-leaved dock	2	-	-	-	-	-	-	-	2	1
<i>Rumex acetosa/crispus/obtusifolius</i> (fruit fragments)	Common/Curled/Broad-leaved dock	-	-	-	-	-	-	-	-	-	-
Plants of summer cereals and root crops											
<i>Chenopodium album</i> L. (seed)	Fat hen	-	-	-	-	-	-	-	4	-	-
Plants preferring general segetal environments											
<i>Galium aparine</i> L. (fruit)	Cleavers	1	-	-	-	-	-	-	-	2	-
<i>Plantago</i> sp. (seed)	Plantain	-	-	-	-	-	-	-	-	1	-
<i>Triplurospermum</i> sp. (fruit)	Mayweed	-	1	-	-	-	-	-	-	-	-
Poaceae	Grass	9	-	-	-	-	-	1	-	2	-
<i>Lolium/Bromus</i> sp. (seed)	Lolium/Brome	5	-	-	-	-	-	3	-	-	-
cf. <i>Panicum miliaceum</i> L. (fruit)	Millet	2	-	-	-	-	-	-	-	-	-
<i>Ranunculus acris/repens/bulbosus</i> (fruit with seed)	Meadow/Creeping/Bulbous buttercup	-	-	-	-	-	-	-	-	1	-
<i>Lathyrus/Vicia/Pisum</i> sp. (seed)	Tare/Vetchling/Pea	-	-	-	-	-	-	-	-	-	1
<i>Lathyrus/Vicia/Pisum</i> sp. (seed cotyledon)	Tare/Vetchling/Pea	4	5	-	-	1	-	-	1	-	-
<i>Trifolium</i> sp. (seed)	Clover	2	1	-	-	-	-	-	-	-	-
<i>Persicaria</i> sp. (fruit)	Knotweed	-	-	-	1	-	-	-	-	-	-
<i>Polygonum aviculare</i> L. (fruit)	Knotgrass	-	-	-	-	-	-	-	-	-	-
<i>Stellaria graminea</i> L. (seed)	Lesser stitchwort	-	-	-	-	-	-	-	-	-	-
<i>Prunella vulgaris</i> L. (fruit)	Self-heal	-	-	-	-	-	-	-	-	-	-
Plants preferring damp ground											
<i>Apium</i> sp.	Marshworts	-	-	-	-	-	-	-	-	-	-
<i>Sparganium erectum</i> L.	Branched bur-reed	-	-	-	-	-	-	-	-	-	-
<i>Carex</i> sp. (fruit - trigonous)	Sedges	-	-	-	-	-	-	-	-	-	-

<i>Carex</i> sp. (fruit fragment-triangular)	Sedges	-	-	-	-	-	-	-	-	-	-
Plants of Scrub and Woodland											
<i>Sambucus nigra</i> L. (fruit endocarp)	Elderberry	-	-	-	-	-	-	-	-	-	-
<i>Prunus domestica</i> L. (fruit endocarp)	Wild plum	-	-	-	-	-	-	-	-	-	-
<i>Cornus sanguinea</i> L. (fruit endocarp)	Dogwood	-	-	-	-	-	-	-	-	-	-
Charcoal and miscellaneous		-	-	-	-	-	-	-	-	-	-
<i>Fraxinus excelsior</i> L.		-	-	-	-	-	-	-	-	-	-
<i>Prunus</i> sp.		-	-	-	-	-	-	-	-	-	-
<i>Quercus</i> sp.		-	-	-	-	-	-	-	-	19	-
<i>Alnus glutinosa</i> L.		-	-	-	-	-	-	-	-	3	-
<i>Corylus avellans</i> L.		-	-	-	-	-	-	-	6	-	-
<4mm Ø flecks		F	O	-	O	O	F	F	F	F	F
<i>Juncus</i> sp. (stem fragment)	Rush	-	-	-	-	-	-	-	-	-	-
<i>Pinus pinea</i> L. (shell fragment)	Stone pine	1	-	-	-	-	-	-	-	-	-
Sheep/Goat pellet		-	-	-	-	-	-	-	-	-	-
Indeterminate plant tissue fragment		-	-	-	-	-	A	-	-	-	-
Silicified		-	-	-	-	-	-	-	-	-	-
<i>Triticum</i> sp. (awn fragment)	Wheat	-	-	-	-	-	-	-	-	-	-
Uncharred (dried anaerobically preserved)		-	-	-	-	-	-	-	-	-	-
Plants preferring general segetal or ruderal environments											
<i>Solanum nigrum</i> L. (seed)	Black nightshade	-	-	-	-	-	-	-	-	-	-
<i>Lamium</i> sp.	Dead-nettle	-	-	-	-	-	-	-	-	-	-
<i>Ranunculus acris/repens/bulbosus</i> (fruit with seed)	Meadow/Creeping/Bulbous buttercup	-	-	-	-	-	-	-	-	R	-
<i>Urtica dioica</i> L. (fruit)	Stinging nettle	R	-	-	-	-	-	F	-	R	R
<i>Polygonum/Persicaria</i> sp. (fruit)	Knotgrass/knotweed	R	R	-	-	-	R	-	R	-	-

<i>Chenopodium album</i> L. (seed)	Fat hen	-	-	R	-	-	-	F	-	-	-
<i>Atriplex prostrata/patula</i>	Spear-leaved/common orache	-	-	-	-	-	-	-	-	-	R
Plants of Scrub and Woodland											
<i>Sambucus nigra</i> L. (fruit endocarp fragments)	Elderberry	R	-	-	-	-	-	-	-	-	O
<i>Sambucus nigra</i> L. (fruit endocarp)	Elderberry	R	R	-	-	-	-	-	-	-	R
<i>Rosa</i> sp. (thorn)	Rose	-	-	-	-	-	-	-	-	-	-
<i>Malus/Pyrus</i> sp. (seed)	Apple/Pear	-	-	-	-	-	-	-	-	-	-
<i>Rubus</i> sect. 2 <i>Glandulosus</i> Wimm. & Grab. (fruit fragment)	bramble	R	R	-	-	-	-	-	-	-	-
<i>Rubus</i> sect. 2 <i>Glandulosus</i> Wimm. & Grab. (fruit)	bramble	R	-	-	-	-	-	-	-	R	-
Plants preferring damp ground											
<i>Lemna</i> sp.(fruit)	Duckweed	-	-	-	-	-	-	-	-	-	-
Modern plant material											
<i>Galium aparine</i> L. (fruit)	cleavers	R	-	-	-	-	R	R	-	-	-
<i>Medicago</i> sp. (seed)	Medick	-	-	-	-	-	-	-	-	-	-
<i>Trifolium repens</i> L. (seed)	White clover	-	-	-	-	-	-	-	-	-	-
<i>Urtica dioica</i> L.(fruit)	stinging nettle	-	-	-	-	-	-	R	-	-	-
<i>Polygonum/Persicaria</i> sp. (fruit)	knotgrass/knotweed	R	-	-	-	-	-	-	-	-	-
Modern rootlet fragments		A	A	A	A	F	-	A	A	A	A
Fauna											
Earthworm cocoon		-	-	R	-	-	R	R	-	-	-

Feature Date		11th C	12th C	AD450-850	UNDATED	UNDATED	UNDATED	SN
Feature		Beamslot	Pit	Posthole	Posthole	Pit	Posthole	Pit
Context Number		1634	1587	1672	1499	1598	1701	1831

Cut		1635	1588	1673	1500	1599	1702	1833
Sample		11	12	13	14	15	16	17
Bulk volume (L.)		20	40	10	10	10	10	40
Flot volume (L.)		0.05	0.05	0.075	0.02	0.075	0.015	0.2
100% examined (adjusted count in brackets)		100%	100%	100%	100%	25%	100%	100%
Density of counted charred items per litre of sampled soil		1	14	<1	21	21(84)	4	13
Charred Cereal Grains								
<i>Avena</i> sp.	Oat	5	13	-	-	-	-	44
<i>Hordeum/Triticum</i> sp.	Barley/Wheat	-	-	-	-	-	-	-
<i>Hordeum</i> sp. (straight grain)	Barley - poorly preserved	-	31	-	-	-	-	24
<i>Hordeum</i> sp. (sprouted straight grain)	Barley - poorly preserved	-	1	-	-	-	-	-
<i>Secale cereale</i> L.	Rye	-	2	-	-	-	-	-
<i>Secale cereale/Triticum</i> sp.	Rye/Wheat	-	15	-	-	-	-	2
<i>Triticum spelta</i> L.	Spelt	-	-	-	-	-	-	-
<i>Triticum</i> sp.	Wheat	-	-	-	-	-	-	-
<i>Triticum aestivum/durum/turgidum</i>	Bread/Club/Rivet Wheat	14	350	4	23	-	-	121
Indeterminate cereal		-	10	-	-	-	-	64
Indeterminate grain tissue fragments		R	F	F	F	F	-	F
Charred Cereal Chaff		-	-	-	-	-	-	-
<i>Avena</i> sp. (awn fragment)	Oat	-	1	-	18	10 (40)	-	2
<i>Hordeum</i> sp. (rachis segment)	Barley	-	-	-	-	-	-	-
<i>Triticum</i> sp. (awn fragment)	Wheat	-	-	-	36	17(68)	6	-
<i>Triticum spelta</i> L. (spikelet base)	Spelt	-	-	-	3	2(8)	2	1
<i>Triticum spelta</i> L. (glume base)	Spelt	-	-	-	64	70(280)	-	-
<i>Triticum spelta</i> L. (glume fragments)	Spelt	-	-	-	62	-	19	-
<i>Triticum-spelta</i> (spikelet base)	Spelt	-	-	-	-	-	-	2
<i>Triticum spelta</i> (glume fragments)	Spelt	-	-	-	-	104(416)	-	-
<i>Triticum</i> sp. (glume base)	Wheat	-	-	-	-	-	10	-
<i>Triticum</i> sp. (spikelet base)	Wheat	-	-	-	1	-	-	2
<i>Triticum aestivum/durum/turgidum</i> (rachis segment)	Bread/Club/Rivet Wheat	-	-	-	-	-	-	-
Poaceae (stem fragments)	Grass	-	-	-	-	-	-	10
Indeterminate cereal (culm node)		-	2	-	-	-	-	1
Charred Seeds		-	-	-	-	-	-	-

Possibly cultivated pulses								
<i>Vicia</i> sp. (seed)	Vetch	-	2	-	-	-	-	-
<i>Vicia faba</i> L. (seed)	Celtic/Horse bean	-	-	-	-	-	-	-
<i>Vicia faba/Pisum</i> sp.	Celtic/Horse bean/Cultivated Pea	-	1	-	-	-	-	-
<i>Vicia/Pisum</i> sp. (seed)	Vetch/Pea	-	-	-	-	-	-	-
cf. <i>Lathyrus sativus</i> L. (seed)	Grass pea	-	1	-	-	-	-	-
cf. <i>Pisum sativum</i> L. (seed)	Cultivated pea	-	1	-	-	-	-	-
Plants Preferring Clay Soils								
<i>Lapsana communis</i> L.	inpplewort	-	1	-	-	-	-	1
<i>Anthemis cotula</i> L. (fruit)	Stinking mayweed	-	32	-	1	-	-	66
<i>Anthemis cotula</i> L. (fruit fragment)	Stinking mayweed	-	-	-	-	-	-	14
Plants of winter and summer cereals and root crops								
<i>Raphanus raphanistrum</i> L. (fruit)	Wild radish	-	1	-	-	-	-	-
Plants of winter cereals								
<i>Fallopia convolvulus</i> (L.) Á.Löve (fruit)	Black bindweed	-	-	-	-	-	-	2
<i>Rumex acetosa/crispus/obtusifolius</i> (fruit)	Common/Curled/Broad-leaved dock	-	6	1	-	-	-	72
<i>Rumex acetosa/crispus/obtusifolius</i> (fruit fragments)	Common/Curled/Broad-leaved dock	-	-	-	-	-	-	4
Plants of summer cereals and root crops								
<i>Chenopodium album</i> L. (seed)	Fat hen	-	9	-	-	-	-	7
Plants preferring general segetal environments								
<i>Galium aparine</i> L. (fruit)	Cleavers	-	-	-	-	-	-	-
<i>Plantago</i> sp. (seed)	Plantain	-	-	1	-	-	-	1
<i>Triplurospermum</i> sp. (fruit)	Mayweed	-	1	-	-	-	-	-
Poaceae	Grass	-	28	-	-	-	-	3
<i>Lolium/Bromus</i> sp. (seed)	Lolium/Brome	1	13	-	-	-	-	16
cf. <i>Panicum miliaceum</i> L. (fruit)	Millet	-	-	-	-	-	-	-
<i>Ranunculus acris/repens/bulbosus</i> (fruit with seed)	Meadow/Creeping/Bulbous buttercup	-	2	-	-	-	-	1
<i>Lathyrus/Vicia/Pisum</i> sp. (seed)	Tare/Vetchling/Pea	-	1	-	-	-	-	9
<i>Lathyrus/Vicia/Pisum</i> sp. (seed cotyledon)	Tare/Vetchling/Pea	-	2	-	-	-	-	19
<i>Trifolium</i> sp. (seed)	Clover	-	-	-	-	-	-	-
<i>Persicaria</i> sp. (fruit)	Knotweed	-	-	-	-	-	-	19

<i>Polygonum aviculare</i> L. (fruit)	Knotgrass	-	-	-	-	-	-	-
<i>Stellaria graminea</i> L. (seed)	Lesser stitchwort	-	1	-	-	-	-	-
<i>Prunella vulgaris</i> L. (fruit)	Self-heal	-	-	-	-	-	-	1
Plants preferring damp ground								
<i>Apium</i> sp.	Marshworts	-	1	-	-	-	-	-
<i>Sparganium erectum</i> L.	Branched bur-reed	-	1	-	-	-	-	-
<i>Carex</i> sp. (fruit - trigonous)	Sedges	-	7	-	-	-	-	-
<i>Carex</i> sp. (fruit fragment- trigonous)	Sedges	-	1	-	-	-	-	-
Plants of Scrub and Woodland								
<i>Sambucus nigra</i> L. (fruit endocarp)	Elderberry	-	1	-	-	-	-	-
<i>Prunus domestica</i> L. (fruit endocarp)	Wild plum	-	-	-	-	-	-	1
<i>Cornus sanguinea</i> L. (fruit endocarp)	Dogwood	-	1	-	-	-	-	-
Charcoal and miscellaneous								
<i>Fraxinus excelsior</i> L.		-	-	-	-	-	-	2
<i>Prunus</i> sp.		-	3	-	-	-	-	-
<i>Quercus</i> sp.		1	-	-	-	-	2	2
<i>Alnus glutinosa</i> L.		-	-	-	-	-	-	-
<i>Corylus avellans</i> L.		-	-	-	-	-	-	8
<4mm Ø flecks		O	F	O	F	A	A	A
<i>Juncus</i> sp. (stem fragment)	Rush	-	-	1	-	-	-	-
<i>Pinus pinea</i> L. (shell fragment)	Stone pine	-	-	-	-	-	-	-
Sheep/Goat pellet		-	-	-	-	-	-	1
Indeterminate plant tissue fragment		-	-	-	-	-	-	-
Silicified								
<i>Triticum</i> sp. (awn fragment)	Wheat	-	-	-	-	3(12)	-	-
Uncharred (dried anaerobically preserved)								
Plants preferring general segetal or ruderal environments								
<i>Solanum nigrum</i> L. (seed)	Black nightshade	-	-	-	-	-	-	-
<i>Lamium</i> sp.	Dead-nettle	-	R	-	-	-	-	-
<i>Ranunculus acris/repens/bulbosus</i> (fruit with seed)	Meadow/Creeping/Bulbous buttercup	-	-	-	-	-	R	-
<i>Urtica dioica</i> L.(fruit)	Stinging nettle	-	F	R	O	R	R	F
<i>Polygonum/Persicaria</i> sp. (fruit)	Knotgrass/knotweed	R	R	-	-	R	-	-

<i>Chenopodium album</i> L. (seed)	Fat hen	-	-	-	-	-	R	-
<i>Atriplex prostrata/patula</i>	Spear-leaved/common orache	-	-	-	-	-	-	R
Plants of Scrub and Woodland								
<i>Sambucus nigra</i> L. (fruit endocarp fragments)	Elderberry	-	8	-	-	-	R	-
<i>Sambucus nigra</i> L. (fruit endocarp)	Elderberry	-	-	-	-	-	-	R
<i>Rosa</i> sp. (thorn)	Rose	-	-	-	-	-	-	-
<i>Malus/Pyrus</i> sp. (seed)	Apple/Pear	-	-	-	-	-	-	R
<i>Rubus</i> sect. 2 <i>Glandulosus</i> Wimm. & Grab. (fruit fragment)	bramble	-	-	-	-	-	-	-
<i>Rubus</i> sect. 2 <i>Glandulosus</i> Wimm. & Grab. (fruit)	bramble	-	-	-	-	-	-	R
Plants preferring damp ground								
<i>Lemna</i> sp.(fruit)	Duckweed	-	-	-	R	R	-	R
Modern plant material								
<i>Galium aparine</i> L. (fruit)	cleavers	-	-	-	-	-	-	-
<i>Medicago</i> sp. (seed)	Medick	-	-	-	-	-	-	R
<i>Trifolium repens</i> L. (seed)	White clover	-	-	-	-	-	-	R
<i>Urtica dioica</i> L.(fruit)	stinging nettle	-	-	-	-	-	-	-
<i>Polygonum/Persicaria</i> sp. (fruit)	knotgrass/knotweed	-	-	-	-	-	-	F
Modern rootlet fragments		A	A	A	A	A	A	A
Fauna								
Earthworm cocoon		-	-	-	R	-	R	R



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