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Post-Excavation Assessment and Updated Project Design

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Newfound Farm, Cringleford, Norfolk

Post-Excavation Assessment and Updated Project Design

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Summary

Between 29th October 2018 and 4th February 2019, Oxford Archaeology East (OA East) undertook an excavation on land at Newfound Farm, Cringleford, Norfolk ahead of a proposed residential development. The locations of the excavation areas (Areas 1 and 2) were based on the results of previous stages of evaluation including geophysical survey, fieldwalking and trial trenching.

The earliest evidence of activity comprised a scatter of pits (including numerous natural sinkholes) containing small quantities of Early Neolithic, Late Neolithic and Early Iron Age pottery alongside worked and burnt flint. This adds to the growing body of evidence for utilisation of the Yare valley during the prehistoric period.

However, the main phase of activity related to the production of brick/tile and pottery. The former is represented by the remains of at least four early post-medieval brick kilns which had survived to varying degrees, alongside numerous extraction pits and several ditched boundaries. Fragments of tile, brick and pottery had been backfilled into the extraction pits, with the pottery predominantly dating to the 16th-18th centuries. A notable cluster of six intercutting pits located in the far north-eastern corner of Area 1 (close to Newfound Farm and the road) produced large quantities of mid-17th to 18th-century pottery wasters, kiln furniture and tile wasters, in addition to fragments of clay tobacco-pipe (many datable to 1660-1680) and glass bottles.

The greater part of the pottery assemblage from the site comprises material from a pottery manufacturing waste dump (nearly 200kg) and has been classed as highly significant since few pottery production sites of this period have been identified in East Anglia so far. The pottery itself is largely glazed red earthenware with some iron-glazed blackware, slipware and speckle glazed ware – with a small but notable element of tin glazed earthenware. This important assemblage complements the documentary evidence that potters were working in this area from at least the mid-17th century onwards but had seemingly ceased production here by the early 19th century at the latest.

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1 INTRODUCTION

1.1 Background

- 1.1.1 Between 29th October 2018 and 4th February 2019 Oxford Archaeology East (OA East) carried out an archaeological excavation in advance of a residential development on land at Newfound Farm, on the north-western edge of Cringleford in Norfolk (Figure 1; TG 18658 06864). This followed a programme of desk-based research, geophysical survey, fieldwalking and trial trench evaluation which identified evidence of a previously-unknown area of early post-medieval brick and tile production in the northern part of the proposed development area, close to Colney Lane. Two areas were investigated: Area 1 to the east (0.5ha; centred on TG 18646 06855) and Area 2 to the west (1.2ha; centred on TG 18583 06923), separated by an extant hedgerow.
- 1.1.2 The excavation, commissioned by RPS (previously CgMs) on behalf of Barratt David Wilson Homes, was undertaken in accordance with the methodology and research design outlined in the Written Scheme of Investigation (WSI; Clark 2018) and approved by the Norfolk County Council (NCC) Planning Archaeologist on behalf of South Norfolk Council. This was in compliance with Condition 42 (relating to archaeology) of Planning Permission (2013/1793) for a development for up to 650 dwellings together with a small local centre, primary school with early years facility, two new vehicular accesses off Colney Lane, associated on-site highways, pedestrian and cycle routes, public recreational open space, allotments, landscape planting and community woodland.
- 1.1.3 Previous phases of work undertaken on the site are described in the WSI (Clark 2018), a summary of which is provided below, with an overview in Section 1.4:
- **Desk Based Assessment** (CgMs (Gajos 2010)) - the archaeological potential of the development area was initially evaluated through a document produced in support of the initial planning application, which highlighted the potential for post-medieval industrial remains.
 - **Geophysical survey** (Cranfield University (Masters 2011); Figure 3): a magnetic survey of c.53ha identified a number of kiln-like anomalies, linear and curvilinear anomalies and tree planting pits associated with a former (unknown) orchard.
 - **Fieldwalking and metal detecting survey** (Norfolk Archaeological Unit (NAU) (Barnett 2011); Report 2585): the majority of finds were discovered at the northern half of the site and predominantly dated from the post-medieval to the modern periods. A small concentration of flint recovered close to the north-west boundary is perhaps indicative of prehistoric activity. Single sherds of Roman and Middle Saxon pottery were also found.
 - **Trial trench evaluation** (NPS Archaeology (Crawley 2013); Report 2013/1135): Seven trenches were excavated to test the results of the geophysical survey. Features relating to a possible 16th/17th-century brick/tile kiln were located in the northern part of the proposed development area. In addition an 18th- to

20th-century cobbled surface was identified on the edge of a probable large extraction pit/pond, along with a number of undated pits and ditches.

- 1.1.4 This assessment has been conducted in accordance with the principles identified in Historic England's guidance documents Management of Research Projects in the Historic Environment, specifically The MoRPHE Project Manager's Guide (2015) and PPN3 Archaeological Excavation (2008). OA East currently retains the archive until formal deposition with Norfolk County Council / Museum Stores under the Site Code ENF145412 and Accession number NWHCM: 2019.59.

1.2 Geology and topography

- 1.2.1 The excavation areas were located immediately south of Colney Lane, with Newfound Farm and residential houses located to the north-east and Norfolk and Norwich University Hospital further to the north-west (Figure 1), with farmland extending to the west and south (Plates 1-2). The site is relatively flat (Plate 3), at around 21m-22m OD, with the River Yare located c.250m to the north-east.
- 1.2.2 The British Geological Survey (BGS) 1:50,000 records the solid geology of the site as cretaceous chalk, overlain by superficial deposits of sand and gravel (<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html> accessed 20th April 2020).

1.3 Archaeological background

- 1.3.1 The following section provides a brief summary of the archaeological background for the area surrounding the site. It is drawn from the DBA (Gajos 2010) and the WSI (Clark 2018). An updated HER search will be commissioned at the analysis and final report stage. Selected entries from the Norfolk Historic Environment Record (HER) are referenced in the text with the most pertinent in **bold** font and also shown on Figure 2; those in normal font originate from within the wider landscape.

Prehistoric

- 1.3.2 Within a 500m radius of the proposed development site, there have been 24 prehistoric (and part-prehistoric) NHER entries recorded. Most of these were represented by flint scatters and artefacts found during fieldwalking exercises, as well as possible ring ditches located with photography. The DBA stated that the potential for finding artefacts and features from this period across the whole development area was moderate.
- 1.3.3 A small number of worked flint finds from the Palaeolithic and Mesolithic periods have been found approximately to the south and north of the site respectively. The Neolithic period is better represented, with a selection of 12 flint flakes and a Neolithic pick (**NHER 25507**) being recovered to the south-west of Area 2. Construction of the John Innes centre in 2000, c.600m to the north of the site recovered 28000 pieces of worked flint in association with a Neolithic occupation layer (NHER 9332). An archaeological evaluation undertaken prior to the construction of the Norfolk and Norwich hospital site c.300m to the north of the current site, revealed a Late Neolithic/Early Bronze Age pit containing Beaker pottery, alongside undated pits and

ditches and small amounts of unstratified pottery and later prehistoric worked flint (**NHER 31871**).

- 1.3.4 The Bronze Age period is represented by a round barrow (NHER 9395) approximately 1km to the south-west of the excavation area close to the A47, with cropmarks of further possible Bronze Age ring ditches located nearby to the north-west (also adjacent to the A47), with the largest possibly being an earlier henge-type monument (NHER 36402). Two Bronze Age axe heads were also located c.400m to the east of the site during the 1920s in the garden of a property off Colney Lane (**NHER 9358**).

Romano-British

- 1.3.5 Roman finds and features recorded within a 1km radius of the excavation are numerous and consist of small quantities of pottery as well as coins recovered from metal detecting (see CgMs DBA: Gajos 2010). Of these, three Roman coins and a Roman finger ring (**NHER 41099**) were found closest to the site, being discovered c.200m from the northern extent of Area 2. The site itself lies approximately 5km to the north-west of the Roman town of *Venta Icenorum* in a landscape that was heavily utilised in the period. However, the emergence of the numerous finds in the area could be a result of the intense metal detecting, as opposed to intensive occupation. Features identified in the wider landscape included pits and ditches indicating an agricultural utilisation of the land during this period.

Anglo-Saxon and medieval

- 1.3.6 As with the preceding Roman period, finds and artefacts dating to the Anglo-Saxon period have emerged through the process of metal detecting and fieldwalking, presumably as a result of chance loss or the manuring of agricultural land. Six records of Saxon finds including brooches, strap ends and a bridle cheek piece were located within a 1km radius of the site (see Gajos 2010). Historical documents indicate the presence of Cringleford as a settlement, with an Anglo-Saxon charter of 1043 or 1044 referencing *Cringelforð* and the Domesday Book of 1086 documenting the settlement as *Kringelforda*, meaning 'ford by the round hill'.
- 1.3.7 There were 17 records of medieval finds from a 1km radius of the site, 14 of which were from within 500m of the study area investigated in the original DBA (Gajos 2010). A strap fitting, a medieval French jetton and a medieval coin were recovered approximately 200m to the south of the excavation areas (**NHER 41106**). To the immediate north of Area 2, a further strap end and belt buckle were also recovered (**NHER 41099**). Collectively, these finds appear as items casually lost during agricultural or travelling activities rather than directly deposited in areas of direct occupation.

Post-medieval to modern

- 1.3.8 Records pertaining to the post-medieval period are numerous. Some are significantly relevant since they refer to possible pottery and brick/tile manufacture. Newfound Farm (**NHER 9404**) was named due to the discovery of a particular type of clay in the area that was suitable for the pottery industry; so good that there were records of it being sent to Holland. A rough survey map from 1572 describes the area as "*being baraine ground and not built*" (see DBA, Gajos 2010). However, the surveyor admitted that he knew someone who would pay the equivalent price of the whole

village for each acre of the land, such was the desire for the newly discovered clay resource. John Balleston of Norwich was recorded to have bought the area and formed Balleston Newfound. One mortgage document from the 17th century describes the site and the surrounding fields as 'Potters Close, formerly Gravel Pit Close'. Two wills from potters Robert Coleman and Edward Vincent attested that they were the occupiers of the site in 1657 and 1679 respectively.

- 1.3.9 Examination of maps from the 17th century onwards (not illustrated; see Gajos 2010) shows little developmental change. A 1695 map by Robert Morden showed the site was located within the Humbleyard Hundred but the scale was too small to show relevant detail. The 1797 map by William Faden displays Newfound Farm and a neighbouring orchard. The 1842 Tithe map illustrates Newfound Farm but there is little difference between this and subsequent Ordnance Survey maps from 1882 onwards, apart from alterations to field boundaries and the addition of a quarry pit at the end of the track from Newfound Farm.
- 1.3.10 Apart from the documentary evidence, archaeological remains and metal detected finds have confirmed that the site was located in an area of post-medieval industry. Approximately 400m to the south-west of the excavation areas is a disused quarry, possibly a former clay pit (**NHER 9407**), along with a pottery kiln complex (**NHER 9406**) first identified in 1976 from surface scatterings of kiln debris and lead-glazed pottery wasters. Further to the south-west of the excavation, another possible kiln site was recorded (NHER 14272) where over 100 sherds of post-medieval pottery and kiln debris were located during a fieldwalking exercise. To the north-east of this, closer to the site, further pottery sherds have been found (**NHER 9403**), located approximately at the centre of the study area of the DBA (Gajos 2010); indicating the extant remains of a clay pit. The DBA also recorded a number of non-kiln related artefacts (41) that were found within the 1km radius of the study area (Gajos 2010). Finds from this period were significant enough to declare the site having a high potential for post-medieval archaeology, particularly related to tile/pottery kilns and associated activity. No archaeological or documentary evidence for the modern period was identified across the site and no upstanding remains were identified during the site walkover in 2010.

1.4 Previous work

- 1.4.1 Previous work undertaken for the project included a geophysical survey of the development area in 2011 (Masters 2011), a fieldwalking and metal detecting survey (Barnett 2011) and a programme of archaeological trial trenching (Crawley 2013). A brief overview of these is given below.

Geophysical survey

- 1.4.2 The geophysical survey from 2011 showed several anomalies pertaining to large burnt areas (outlined red on Figure 3). Particularly relevant were the results from Field H adjacent to Newfound Farm relating to excavation Area 1, and also Field G, pertaining to Area 2.

- 1.4.3 Results from Area 1 (Field H) showed dipolar anomalies indicating kiln-like structures or areas of burning (marked 'K' on Fig 3). No evidence for such structures is shown on the Tithe and OS maps, indicating they had disappeared in the 18th century.
- 1.4.4 Results from Area 2 (Field G; Fig 3A) revealed a series of uniformly-spaced individual discrete anomalies forming neat rows. These were interpreted as remains of tree pits collectively indicating the location of a former orchard, possibly that depicted on the 1797 map by William Faden (see post-medieval background above). Orchards were also shown on the OS maps of 1907 and 1928 (Gajos 2010) but these were in the fields directly to the south of Area 2 and not within, contrary to the geophysical survey results.
- 1.4.5 A number of other results from within the wider development area but outside the excavation Areas 1 and 2 are also of note (see Masters 2010). In Field F were another three dipolar anomalies located towards the southwestern edge (marked 'K' on Fig 3) indicating the presence of intense burning/possible kilns. Another of these anomalies in Field I (the area of land immediately to the east of excavation Area 1) is also present suggesting another kiln lay immediately to the east of excavation Area 1. An ephemeral curvilinear anomaly was also located running north-south to the immediate south suggesting the presence of a track created by animals or people. In Field A, another anomaly possibly indicating a kiln was located in the north-west corner, along with a quarry pit and frequent scatters of post-medieval pottery and tile fragments visible on the surface. Strong magnetic readings were located in the north-west area of Field B extending into Field C, forming a sub-rectangular swathe (not illustrated). This was interpreted as waste material dumped into a former clay pit and coincides with **NHER 9403** (see Fig 2), a concentration of surface finds containing Staffordshire comb-ware and salt-glazed pottery sherds.

Fieldwalking and metal detecting

- 1.4.6 Investigations undertaken by NAU Archaeology (Barnett 2011) uncovered a plethora of finds. However, while the field survey covered the area proposed for development, it did not in fact include the current areas of excavation (Areas 1 and 2 at the northwestern end of the development site). Maps included in the report show find spots in every space other than the excavation areas (see in Barnett 2011, figures 2-3). Notwithstanding this omission of land survey, the fieldwalking and metal detecting recovered 231 finds, the majority of which dated to the post-medieval period (161 finds comprising 79% of total). Twenty pieces of worked flint, including a barbed and tanged arrowhead were also recovered as well as a single sherd of Roman pottery and one of Middle Saxon date. Two sherds of pottery and a fragment of ceramic building material (CBM) of medieval date were also collected. Two modern finds and fourteen artefacts of unknown date were collected and recorded.
- 1.4.7 A brief examination of the finds (see Barnett 2011, figures 2-3) showed that the majority of the prehistoric finds were located towards the middle of the development area with rare find spots of Roman and Saxon date scattered indiscriminately throughout. A general overview of the post-medieval and modern finds showed that the majority of pottery originated from the middle and south of the development area with copper alloy metal work being prevalent towards the northeastern corner. Coins

from this period were recovered in the northeastern corner as well as the western edge, coincidentally around the areas where the geophysical survey indicated the possibility of kilns and/or areas of intense burning. Collectively this evidence indicated areas of human activity and industry.

Trial trench evaluation

- 1.4.8 Trial trenching by NPS in 2013 (Crawley 2013) comprised seven trenches of varying lengths that were targeted over the geophysical anomalies (see Figure 3), with the most relevant to the present excavations being Trench 5 (in Area 1) and Trench 6 (in Area 2).
- 1.4.9 Trench 5 located the presence of three extraction pits towards the northern end of the trench, along with an indication of the extant remains of a kiln to the south. Examination of the deposits found within these features as well as the surrounding immediate area indicated these were not coal-firing kilns, rather, they were small kilns used by landholders producing bricks during seasonal industrial periods. This activity became prevalent in the 17th century, especially in the Norfolk area where brickyards were common.
- 1.4.10 Trench 6 recorded the presence of two undated ditches at the northern end and three pits in the south, originally thought to be extraction features for sand and gravel. The ditches were thought to have been older field drainage/boundaries.
- 1.4.11 Discoveries within the trenches outside the zone of the current excavation Areas 1 and 2 are also of note (Figure 1). Trench 1, situated over the geophysical anomalies at the western edge of the development site, located three large pits backfilled with brick debris. Trenches 2 and 3 contained refuse pits filled with early 20th century waste. Trench 4, targeted over one of the dipolar anomalies found in the geophysical survey and situated immediately to the east of Area 1, contained remnants of a cobbled surface located at the edge of a large clay extraction pit. Trench 7 was devoid of all archaeological remains.

1.5 Original research aims and objectives

- 1.5.1 A series of project research aims and objectives were outlined in the Stage 3 Written Scheme of Investigation (Clark 2018, Section 3), based upon the results of the evaluation (Crawley 2013). The main aim of the mitigation works was to record and advance understanding of the significance of any archaeological remains within the site before development. The Research Design provided a framework for the excavation and has been used to inform the assessment of the results in this report. The objectives can be separated into a series of generic excavation aims common to most projects (which focus on defining the date and form of evidence) and a set of more specific Area/period-based research questions. These are outlined below.

General objectives

- To ascertain the nature and extent of the archaeology identified by the trial trenching.
- To determine the date, character, function and significance of any features encountered.

- To undertake a programme of post-excavation analysis assessing the potential of the remains to contribute to wider research agendas and the scope for dissemination of the project results to a wider audience.
- To produce a site archive for deposition with the Norfolk Museums and Archaeology Service and to provide information for Norfolk Historic Environment Record to ensure the long-term survival of the excavated data.

Project specific research aims and objectives

1. To investigate the technological aspects of tile/brick manufacture on the site.
2. To assess the range of brick and tile manufactured on the site, and to place this in its regional context.
3. To investigate the chronology and function of the currently undated features within the site.
4. To assess the role that the palaeoenvironmental evidence can play in enhancing our understanding of the activity undertaken on site.

1.5.2 The original research aims will be considered, evaluated and updated as part of the assessment process in this report (see Section 6). This will ensure that they contribute to the goals of the following Regional Research Frameworks relevant to this area:

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

1.6 Fieldwork methodology

- 1.6.1 The methodology followed that detailed in the WSI (Clark 2018), resulting in the soil stripping and excavation of an area totalling 1.7ha (Area 1 covering 0.5ha and Area 2 encompassing 1.2ha). The areas were machine excavated to the level of natural geology or the archaeological horizon; whichever was encountered first.
- 1.6.2 Machine excavation was carried out by a tracked 360 type excavator using a 2m wide flat bladed ditching bucket under constant supervision of a suitably qualified and experienced archaeologist.
- 1.6.3 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 1.6.4 All archaeological features and deposits were recorded using OA East's pro-forma sheets. Trench locations, plans and sections were recorded at appropriate scales. High resolution digital colour photographs were taken of all relevant features and deposits

in RAW and jpg format, taken on a camera conforming to the requirements set out in 'Standards for development-led archaeological projects in Norfolk' (Robertson *et al.* 2018).

- 1.6.5 Numerous natural features were scattered across Area 2 in particular, a sample of which were investigated (Figure 4). Although many of the solution hollows/sinkholes were investigated, most of the deeper examples could not be full-excavated for health and safety-reasons.
- 1.6.6 A total of 12 bulk samples were taken from the excavated features. The bulk samples each totalled between 10-40L and were processed by flotation at OA East's environmental processing facility at Bourn, Cambridgeshire.
- 1.6.7 Prior to December 2018, site work progressed in fairly dry conditions, punctuated by episodes of rain. By late 2018, weather conditions deteriorated with persistent heavy showers. The stripped ground surface became saturated, and large pools of water formed in the large excavated kilns and clay pits. Ground conditions remained poor especially in Area 1, a zone of site characterised by clay and silt. Even in the sandy area within Area 2, persistent rain enabled the further formation of solution hollows: a common feature in the archaeological horizon (Plates 1-3 and 8).

1.7 Project scope

- 1.7.1 This assessment deals solely with the excavation phase of fieldwork undertaken by OA East, although reference is made to previous stages of work where appropriate.

2 FACTUAL DATA: STRATIGRAPHY

2.1 Introduction

- 2.1.1 A range of features was uncovered across Areas 1 and 2, including natural solution hollows/sinkholes, pits/tree holes, ditches, quarry pits and the remains of kiln structures; the latter focussed in Area 1. An overview of the excavation results, including interventions, is given on Figure 4, which also shows the sinkholes that were investigated and which of the features produces prehistoric pottery and/or flint (see below). Figure 5 shows the preliminary phasing, with Figure 6 showing more detail of the kilns and associated features in Area 1. Selected sections are shown on Figures 7 and 8, followed by a selection of photographs showing the site conditions and working shots (Plates 1-3, 7 and 8), pertinent features (including the kilns: Plates 4-12) and examples of the pottery wasters and kiln furniture recovered from Phase 2 backfill deposits (Plates 13-15).
- 2.1.2 The preliminary phasing of the site is based on a combination of stratigraphy and spatial associations, with dating provided by stratified artefacts, primarily pottery, although these were by no means abundant. A very small amount (five sherds) of Roman and ?Anglo-Saxon pottery was recovered which is likely to represent residual finds/'background scatter'. The site appears to have witnessed intermittent and predominantly low-level activity from the Early Neolithic to the post-medieval periods, with the main focus relating to post-medieval ceramic (brick/tile and pottery) production.
- 2.1.3 Summary descriptions of the features identified, and artefacts recovered, are given in this section supplemented by a full context inventory in Appendix A and artefact and environmental assessments in Appendices B. and C. Full feature descriptions will be included in the analysis report; the aim here is to characterise the archaeological remains and provide an overview of the results.
- 2.1.4 In addition to natural and undated features, two main phases of activity have been identified:
- | | |
|---------|---|
| Phase 0 | Natural and unphased features |
| Phase 1 | Prehistoric (Early Neolithic to Early Iron Age) (c. 4000BC – c.350BC) |
| Phase 2 | Post-medieval (16th-18th century) |

2.2 Phase 0: Natural and unphased features

Natural features

- 2.2.1 Features interpreted as solution hollows (sinkholes) were abundant in Area 2, with just a single (unexcavated) example found in Area 1, located at the southern end. Only a sample number of sinkholes in Area 2 were excavated (Figure 4; coloured green) and those that contained prehistoric finds (flint/pottery) have been described under Phase 1 (see below).

2.2.2 Solution hollows and sinkholes were formed through the dissolution of the underlying chalk by downward-seeping ground water. This then caused the overlying sandy gravels and top/subsoils to collapse into the void created below. The sinkholes found on site were predominantly circular in plan with steep, almost vertical, sides which naturally undercut the top-surface edge. Where investigated, these features were excavated down to a 1m depth in line with the agreed excavation methodology and following Health and Safety regulations.

2.2.3 A total of 87 probable solution hollows/sinkholes were located but were not excavated (see Figures 4 and 5, unnumbered), with a further 22 sinkholes/natural features that were excavated but contained no datable finds (Table 1). The largest of the natural features containing no associated finds was sinkhole **61** (Figure 8, S. 18) located at the north-west corner of Area 2, which measured 4.38 x 3.94m and 2.8m deep. Other sinkholes were significantly smaller in diameter and in depth (Figure 8, S. 3 and Plate 4): most resembled small circular pits which upon inspection yielded nothing within other than silty sand, infill from the collapsed top and subsoils from above.

| Phase 0: natural features |
|---|
| Excavated sinkhole/solution hollows: 14, 61, 98, 105, 107, 115, 117, 119, 139, 155, 165, 179, 181, 183, 189, 191, 193, 195, 211, 223, 225, 227 |

Table 1: Undated natural features

Unphased features

2.2.4 Eight pits located in Area 2 were oval/sub-circular in plan and measured a maximum of 1.24m long and a maximum 0.48m deep (see Figures 4 and 5). A single post-hole located at the northern edge of the group measured 0.5m in diameter and was 0.09m deep. No archaeological finds were recovered from any of the features. Their proximity to features containing prehistoric pottery and flint suggests that they may conceivably belong to this broad phase (Phase 1, see below), although it is feasible that some may relate to the much more recent tree planting pits identified by the geophysical survey (Figure 3).

| Phase 0: Unphased features |
|---|
| Pits: 109, 147, 149, 153, 167, 173, 183, 213 |
| Post-hole/pit: 185 |

Table 2: Unphased features

2.2.5 Note: Samples from two of these features (**98** and **185**) were sent for radiocarbon dating (see S. 4.5 below) and consequently they will be rephased during the analysis stage.

2.3 Phase 1: Prehistoric (Early Neolithic to Early Iron Age)

2.3.1 Artefacts and features dated to the prehistoric era were entirely located in Area 2, with a notable concentration in the north-east corner where burnt flint, small fragments of pottery and worked flint were present in a small number of features (Figures 4 and 5). In general the features assigned to this phase were discrete pits, although a number of solution hollows also contained prehistoric material. The latter had presumably originated from top surface scatters which had inevitably become incorporated into

the sinkholes during their gradual formation, although this material and the nearby features are indicative of activity in this location during the Neolithic and Early Iron Age periods. The nearby River Yare c.250-300m to the north-east of the site could explain the attraction of this site to prehistoric communities. Two features also contained single sherds of prehistoric pottery (gully **151** and Phase 2 extraction pit **18**), both of which were probably residual. Gully **111** was investigated by two slots (**111** and **151**) showing it measured a maximum of 0.11m deep and 0.38m wide. This gully ran parallel to post-medieval ditch **103** immediately to the east, and it is likely that this feature will be rephased to Phase 2 during analysis.

- 2.3.2 There were four discrete features from this phase: pits **48**, **123**, **159** and post-hole **130**. The pits ranged in length from 0.76m to 0.92m, while the post-hole measured 0.34m in diameter. Collectively these contained small amounts of worked/burnt flint and prehistoric pottery (Tables 3 & 4), with pit **123** (Plate 5) producing 13 Early Iron Age sherds (App. B.5), alongside charcoal from an environmental sample (App. C.3).
- 2.3.3 Solution hollows and natural features that contained prehistoric material comprised features **121**, **128** (Figure 8, S. 36), **132**, **141**, **145**, **157**, **161**, **163** and **169**. These features ranged in length from 1.24m to 2m and were oval/sub-circular in plan, similar to the unexcavated natural features from Phase 0. Of these, feature **141** (Plate 6) is of note as it produced 16 sherds of Late Neolithic pottery alongside worked and burnt flint (see App. B.2 and 5). Also of note is sinkhole **132** (Figure 8, S. 38) which produced a single sherd of prehistoric pottery that is not closely datable alongside a large quantity of burnt flint (c. 5.5kg, App. B.2) from its lower (excavated) fill; charcoal was also recovered from an environmental sample. Two sherds from the upper fill of feature **132** have provisionally been identified as Anglo-Saxon but will require further analysis. Sinkhole **169** also produced three sherds of Roman pottery that are likely to have been introduced through subsequent agricultural activities.

| Phase 1 feature inventory | |
|-----------------------------------|---|
| Pits and post-hole: | 48, 123, 130 and 159 |
| Gully: | 111 |
| Natural/sinkhole features: | 121, 128, 132, 141, 145, 157, 161, 163 and 169 |

Table 3: Phase 1 features

| Context | Cut | Feature type | Object name | Count | Weight (g) |
|---------|-----|---------------------------|----------------|-------|------------|
| 49 | 48 | pit | Flint (struck) | 1 | 1 |
| 122 | 121 | Natural feature | Flint (struck) | 2 | 2 |
| 122 | 121 | Natural feature | Flint (burnt) | 1 | 132 |
| 125 | 123 | pit | pot | 12 | 55 |
| 125 | 123 | pit | Flint (struck) | 1 | 1 |
| 129 | 128 | Natural feature | Flint (struck) | 1 | 1 |
| 133 | 132 | Natural feature/ Sinkhole | pot | 2 | 7 |
| 134 | 132 | Natural feature/ Sinkhole | pot | 1 | 2 |
| 134 | 132 | Natural feature/ Sinkhole | Flint (struck) | 12 | 12 |
| 134 | 132 | Natural feature | Flint (burnt) | 235 | 4189 |
| 142 | 141 | natural feature | Pot | 6 | 42 |
| 142 | 141 | Natural feature | Flint (struck) | 11 | 11 |
| 142 | 141 | Natural feature | Flint (burnt) | 10 | 196 |
| 146 | 145 | Natural feature | Flint (struck) | 6 | 6 |
| 146 | 145 | Natural feature | Flint (burnt) | 6 | 83 |
| 152 | 151 | gully | Pot | 1 | 3 |
| 152 | 151 | Natural feature | Flint (struck) | 1 | 1 |

| Context | Cut | Feature type | Object name | Count | Weight (g) |
|---------|-----|-----------------|----------------|-------|------------|
| 158 | 157 | Natural feature | Flint (struck) | 1 | 1 |
| 160 | 159 | pit | Flint (struck) | 2 | 2 |
| 160 | 159 | pit | Flint (burnt) | 4 | 298 |
| 164 | 163 | Natural feature | Flint (struck) | 8 | 8 |
| 170 | 169 | Natural feature | Flint (struck) | 2 | 2 |
| 170 | 169 | Natural feature | Flint (burnt) | 2 | 53 |
| 170 | 169 | Natural feature | pot | 3 | 37 |

Table 4: Finds recovered from Phase 1 features

2.4 Phase 2: Post-medieval (16th-18th centuries)

2.4.1 Phase 2 included the remains of four brick kiln structures (Plates 1-2; 7-12); numerous clay extraction pits that had been backfilled with ceramic building material and other debris, as well as large spreads of dumped waste associated with the kiln structures (Figures 5 & 6). These features appeared exclusively in Area 1. Ditch systems associated with this phase were evident in both excavation areas (Plate 3). Associated artefacts indicated activity broadly in the 16th-18th centuries, with a focus on the 17th century.

Extraction pits

2.4.2 Several large pits were directly associated with (occasionally cut by) the kilns, which along with numerous other clay extraction cuts, had been backfilled with kiln waste.

2.4.3 The first group of pits associated with the kilns were generally situated at one end of the firing chamber. These appeared to be large irregular truncations which had been backfilled with material presumably cleared out from (other) kiln chambers. These features are provisionally interpreted as extraction pits for material to be used in the brick/pot manufacturing process. Associated with (and seemingly cut by) kiln **21**, pit **74** lay at the far south-eastern end and was backfilled with brick and tile waste along with silty clay containing quantities of ash and charcoal. This pit also cut a series of earlier pits (**90**, **92**, **95** (Figure 7, S. 21) and **318**). A further pit (**18**) appears to have been cut by the construction cut for kiln **21** at its western end. The dual chambered kiln **229** had a large circular shallow pit **232** (Figure 7, S. 88) at its northern end, again backfilled with brown silty clay mixed with brick fragments, with a layer of thin black charcoal at its base. The only kiln to not have direct pit cuts associated with it was square kiln **52**.

2.4.4 Further pits probably associated with clay extraction that had subsequently been backfilled were identified across Area 1. A cluster of six intercutting pits in the far north-eastern corner (close to Newfound Farm and the road) are significant as they were backfilled with large quantities of mid 17th to 18th-century pottery and tile wasters (see Plates 13-15).; notably pit **279** which contained examples of rare early tin glazed earthenware (App. B.5). Large quantities of pottery and tile wasters of similar date were also found in neighbouring/intercutting pits **283**, **317** and **42** (Figure 7, S. 19); with pit **42** producing 2542 sherds, weighing 89,509g, alongside clay tobacco pipe fragments and part of an iron vessel (SF 8). Pit **283** (Figure 7, S. 92) contained 2054 sherds (82,703g), alongside clay tobacco pipe (several examples datable to c.1660-1680; App. B.8), bottle glass fragments (App. B. 4) and animal bone (App. C.1).

2.4.5 A clay extraction pit (**297**) containing 16th-18th century pottery sherds was also located to the immediate south of kiln **21**, with one of the largest examples (**259**) being

found to the north of the kiln close to the edge of excavation. This measured 8.57m x 3.95m and was at least 1.8m deep. It had been backfilled with consecutive layers of dumped tile and mixed clay and brick (Figure 7, S. 89).

2.4.6 Other pits were scattered around Area 1, which included two smaller features containing dumped brick fragments (pits **300** and **308**) close to the north-eastern edge of excavation. Further to the south, a shallow pit **331** contained dumped charcoal-rich fills. In the southeastern corner of Area 1, two medium large pits (**302** and **271**) were situated south of kiln **229**. A post-hole containing small amounts of post-medieval glass and pottery (**177**) was also located to the north, in Area 2, but may not have been related to the industrial activity to the south.

| Phase 2: pit inventory |
|---|
| Clay extraction pits: 18, 42, 74, 90, 92, 95, 135, 232, 259, 279, 283, 288, 297, 317, 318 |
| Smaller pits: 271, 300, 302, 306, 308, 331 |
| Other: post-hole 177 |

Table 5: Phase 2 pits

| Context | Cut | Feature type | Object name | Count | Weight (in g) |
|---------|-----|--------------|-------------|-------|---------------|
| 43 | 42 | pit | pot | 2430 | 83892 |
| 63 | 317 | pit | pot | 18 | 654 |
| 64 | 317 | pit | pot | 157 | 5902 |
| 68 | 42 | pit | pot | 6 | 561 |
| 69 | 42 | pit | pot | 10 | 657 |
| 178 | 177 | post-hole | pot | 1 | 23 |
| 265 | 259 | pit fill | pot | 2 | 121 |
| 272 | 271 | pit fill | pot | 2 | 50 |
| 280 | 279 | pit fill | pot | 157 | 5615 |
| 281 | 279 | pit fill | pot | 98 | 5078 |
| 282 | 279 | pit fill | pot | 32 | 1128 |
| 284 | 283 | pit fill | pot | 114 | 2581 |
| 285 | 283 | pit fill | pot | 215 | 6640 |
| 286 | 283 | pit fill | pot | 1074 | 43555 |
| 287 | 283 | pit fill | pot | 651 | 29927 |
| 289 | 288 | pit fill | pot | 8 | 134 |
| 290 | 42 | pit fill | pot | 64 | 3511 |
| 291 | 42 | pit fill | pot | 32 | 888 |
| 298 | 297 | pit fill | pot | 1 | 229 |
| 299 | 297 | pit fill | pot | 9 | 1430 |
| 303 | 302 | pit fill | pot | 10 | 358 |
| 307 | 306 | pit fill | pot | 1 | 4 |

Table 6: Pottery recovered from Phase 2 pits

Kilns

2.4.7 The most northerly kiln structure was kiln **21** (Figure 6; Plates 2 and 9) which was situated towards the north-western corner of Area 1 and was aligned WNW/ESE. It consisted of a large narrow (red) brick chamber measuring 1.6m wide and 8.8m long, within a construction cut. At the western end were 10 surviving brick arches that spanned the 0.8m deep chamber below. These were formed to create a firing surface for materials placed above during the manufacturing process.

2.4.8 Kiln structure **34** (Figure 6; Plate 10) was located approximately in the middle of Area 1 to the south-east of Kiln **21** and was aligned north-west to south-east. It measured 7.42m x 1.57m and consisted of a narrow rectangular brick chamber 0.98m deep. This

kiln mirrored kiln **21** in shape and construction but did not have the surviving brick arches. Only the broken collapsed remains of one brick arch (**134**) lay on top of the curved western end of the chamber, showing that this feature shared similar structural properties with kiln **21** and kiln group **229** to the south-east.

2.4.9 Kiln group **229** (Figure 6, Plates 7 and 11) was situated at the eastern edge of Area 1 and was aligned north-east to south-west.). This kiln may have been double-chambered, with two narrow rectangular brick firing chambers situated side by side measuring between 13m-13.62m long and between 1.18-1.77m wide. However, the construction cuts and associated sequence (**231** and **230**) may indicate that kiln **241** was slightly earlier (Figure 7, S. 87). Both these structures were constructed with unfrogged red brick, similar to the other kilns in Area 1. Westernmost chamber **241** survived to a depth of 0.75m and was backfilled with a dense thick layer of collapsed brick and redeposited clay. Up to eight courses of brick formed the firing chamber wall of this kiln, on top of which were the clear remains of arch spring bases. This was the same for easternmost firing chamber **242** (0.6m deep) where arch springs were seen to be present on top of both walls. Again, this demonstrated a similarity in construction to kiln **34** where arches straddled the firing chamber to provide the basis of a kiln chamber for the production of brick/pottery above.

2.4.10 Kiln structure **52** (Figure 6; Plate 12) was originally revealed in Trench 5 during the evaluation programme (see Crawley 2013). Further excavation revealed the extant basal remains of a rectangular kiln measuring 4.71 x 3.06m and just 0.21m deep. Two courses of brick work remained at the south and south-west corner with a further course of brick marking an interior partition wall running parallel to the southern end. This brickwork encapsulated a burnt clay floor/surface.

2.4.11 Deposits and backfill layers directly overlying and infilling the kilns consisted of extensive dumps of silty clay mixed with abundant amounts of collapsed brick and kiln wall masonry, as well as tile wasters and pottery (see Table 8 and App. B.6 and B.7). They represented the general demolition and backfilling of the kiln structures after they were abandoned. The pottery includes large fragments and predominantly dates to the 16th-18th centuries (App B.6; see Plates 13-15).

| |
|---------------------------------|
| Phase 2 - kiln inventory |
| Kilns: 21, 34, 52, 229 |

Table 7: Phase 2 kilns

| Context | Feature type | Kiln | Object name | Count | Weight (in g) |
|---------|------------------------|----------------------------|-------------|-------|---------------|
| 19 | backfill over kiln | 21 | pot | 1 | 9 |
| 20 | demolition over kiln | 21 | pot | 47 | 1974 |
| 28 | backfill within kiln | 34 | pot | 1 | 34 |
| 58 | backfill within kiln | 52 | pot | 41 | 2403 |
| 238 | deposit from kiln base | 229 – 242, eastern chamber | pot | 1 | 3 |

Table 8: Pottery from Phase 2 kiln backfills

Ditches

2.4.12 Several ditches were discovered within the excavation areas and appeared to represent two alignments of post-medieval boundaries or field divisions, presumably associated with Newfound Farm and perhaps the industrial activity to the south.

- 2.4.13 In Area 1, NNE-SSW running ditch **16** extended for 73m from the southern excavation edge and produced two sherds of 16th-18th century pottery along with fragments of tile, animal bone, burnt stone and a fragmentary pair of iron shears (SF1). This ditch appeared to cut earlier ditch **36** which was aligned northwest-southeast and continued into Area 2 as ditch **96**. It was on a similar alignment to ditch **46** in Area 2 (see below).
- 2.4.14 In Area 2, ditch **96** was exposed for 10.5m and terminated close to the end of ditch **103**, which ran at a perpendicular angle to it for a distance of 33m. Collectively, these ditches appeared to form the corner of a field system or plot extending from the road to the north-east; adjacent ditch **103** probably also belongs to this phase (see Phase 1). This north-east to south-west alignment appears to have been mirrored by ditches **50** and **207** further to the west.
- 2.4.15 Located towards the centre of Area 2 was undated ditch **46** that was stratigraphically earlier than ditch **207** and was orientated NNE to SSW on a similar axis to ditch **16** in Area 1. This extended for 58m from the northern LOE of Area 2 and terminated within the area. Ditch **207** was exposed for 83m from the northern LOE and terminated in the southwestern corner of Area 2; it was cut by an unexcavated pit. Running parallel to this but positioned approximately 40m to the west, ditch **50** (Plate 3) was exposed for a distance of 78m and appeared to extend beyond both the southwestern and northern LOEs. None of the ditches contained any datable finds but they are not shown on the available historic maps, which suggests that they pre-date Parliamentary Enclosure in the 19th century.

| |
|---|
| Phase 2: ditch inventory |
| Ditches: 16, 36, 50, 46, 96, 103 |

Table 9: Phase 2 ditches

| Context | Feature type | Feature | Object name | Count | Weight (in g) |
|---------|--------------|---------|-------------|-------|---------------|
| 7 | Ditch fill | 6 | Pot | 2 | 4 |

Table 10: Pottery recovered from Phase 2 ditches

3 FACTUAL DATA: ARTEFACTS

3.1 General

3.1.1 All finds have been washed, quantified and bagged. The catalogue of all finds has been entered onto an MS Access database. Total quantities for each material type are listed below.

| Material | No. | Weight (kg) |
|--|------|-------------|
| Metal objects (iron) | 13 | - |
| Worked flint | 49 | - |
| Burnt flint | - | 6.459 |
| Fuel by products/stone | 7 | 3.08 |
| Glass | 97 | 4.449 |
| Prehistoric pottery | 32 | 0.114 |
| Roman & ?Anglo-Saxon pottery | 5 | 0.044 |
| Post-medieval pottery and kiln furniture | 5237 | 198.67 |
| CBM | 325 | 201.64 |
| Fired clay | | 0.877 |
| Clay tobacco pipe | 71 | 0.543 |

Table 11: Quantification of finds

3.2 Metal objects, by Denis Sami (App. B.1)

3.2.1 Thirteen iron artefacts were recovered from pits, ditches and a kiln dating to the post-medieval to modern periods. The small assemblage is in poor condition and is composed of incomplete hand-forged nails (eight in total), a fitting, the base of a large vessel and a pair of shears; all of probable post-medieval or modern date based on the associated ceramic material.

3.3 Lithics, by Lawrence Billington (App. B.2)

3.3.1 A total of 49 worked flints and almost 5kg of unworked burnt flint were hand-collected during the excavation, with a further 1459g of unworked burnt flint recovered from the residues of a bulk sample taken from sinkhole feature **132**. The flint assemblage derives exclusively from the fills of features, mostly from a series of natural sinkhole features and from discrete pits, with a single flint also coming from the fill of ditch **151**.

3.3.2 The small assemblage of worked flint from the excavations is made up almost exclusively of unretouched flake-based material and exhibited very few chronologically diagnostic features. Nonetheless, the technological traits of the material suggest the vast majority is of Neolithic to Early Bronze Age date. The small quantities of burnt flint recovered from several of the pits and sinkholes seems likely to represent residual material. However, in some cases flintwork may have been deliberately deposited into these features – as seems to be the case for the large assemblage of burnt flint from sinkhole **132**.

3.4 Burnt stone and fuel residues, by Simon Timberlake (App.B.3)

3.4.1 In total, some 2.86kg (x1 piece) of burnt stone and 226g (x6 pieces) of coal and burnt fuel (coal cinders and shale) were recovered from this excavation. It seems likely that the burnt slab-like glacial boulder of dolerite is quite unrelated to the probable post-medieval use of fossil fuel which is most likely to have been associated with the firing

of the kilns, but instead that it relates to an earlier prehistoric presence. The most likely explanation for the presence of coal is that this was brought in as a higher calorific fuel suitable for the efficient running of the kilns. The high-ranking grade of coal suggests that this fuel may have come into the ports of Kings Lynn, Cromer or Yarmouth by boat, perhaps from mines in the North of England (Tyneside).

3.5 *Glass, by Carole Fletcher (App. B.4)*

3.5.1 A moderate assemblage of vessel glass (97 shards, weighing 4.449kg) was recovered, with a minimum number of vessels (MNV) of 34, the majority of which are utility bottles of 17th to 18th-century date, many being dark olive green (natural black) glass bottles. A number of pharmaceutical bottles or phials were also recovered. Most of the material was recovered from pits and the assemblage is fragmented, the exception being a complete mid 18th-early 19th century bottle recovered from pit **18**, which may have been one of the latest deposits into the feature.

3.6 *Prehistoric pottery, by Nick Gilmour (App. B.5)*

3.6.1 The excavation yielded 32 sherds of prehistoric pottery (114g) with a mean sherd weight (MSW) of 3.6g. The pottery was recovered from five contexts (pits, a ditch and natural features) currently phased to Phase 1 and dates from the Early Neolithic, Late Neolithic and Early Iron Age. It includes a small assemblage of Grooved Ware, along with a small number of feature sherds characteristic of Early Iron Age ceramics, together with fabrics typically associated with these ceramic traditions in the region. The pottery is in moderate to poor condition. Most of sherds are small and abraded, while the Early Iron Age pottery is generally in better condition.

3.7 *Roman and ?Anglo-Saxon pottery, by Nick Gilmour*

3.7.1 Three sherds (37g) of pottery were recovered from deposit 170, within natural sinkhole feature **169**. These sherds are wheel-made, and their fabric suggests a Roman date. A further two sherds (7g) of possible Anglo-Saxon pottery were recovered from deposit 133, a fill of natural sinkhole feature **132**.

3.8 *Post-medieval pottery and kiln furniture, by Sue Anderson (App. B.6)*

3.8.1 A total of 5237 sherds of pottery and kiln furniture (198.666kg) was recovered from 32 contexts. A further c.110kg (including some CBM) was assessed and discarded on site (C. Fletcher, pers. comm.) The assemblage is dominated by post-medieval material which spans the 16th to 18th centuries, with a focus potentially on the 17th century. A few sherds of potentially later pottery were also recovered.

3.8.2 The greater part of this assemblage comprises material from a pottery manufacturing waste dump. The pottery itself is largely glazed red earthenware with some iron-glazed blackware, slipware, speckle glazed ware and tin glazed earthenware (Plates 13-15). One stoneware vessel may also be a waster, but there is no evidence for stoneware manufacture on the site so far. Redware kiln furniture comprised two main types: saggars and ring props. Small quantities of other pottery were also recovered that were not made directly on site, including Frechen and Westerwald; North Italian

marbled slipware; a late slipped redware bowl and fragments of English (?London) stoneware.

3.9 Ceramic building material, *by Sue Anderson (App. B.7)*

3.9.1 Fragmentary and complete bricks and tiles totalling 325 pieces (201,643g) were recovered from 55 contexts, the majority in Area 1 (20 pieces were collected from three contexts in Area 2).

3.9.2 Late bricks form the largest part of this assemblage, but they are only a small proportion of the brick which was present on the site. Complete bricks were recovered as samples from the structures of kilns, as well as the deposits inside them and other dump deposits around the site. Preliminary study of these data suggests that brick sizes and types in kilns **241** and **242** were similar, with all bricks in this group measuring over 240mm in length. The brick sizes in these kilns are comparable with those from later 15th- and 16th-century structures in the region, such as Breckles Hall, Stutton Hall and Hengrave Hall (Lloyd 1925, 89–95) and Gedding Hall (Anderson and Tester 2003). The bricks of kilns **34** and **52** were of similar size to the majority of those from kiln **21**, although those in **34** (including those recovered from its fill) were generally slightly shorter than the others.

3.9.3 Outside the kilns, CBM was recovered from pit and ditch fills, mostly in association with pottery kiln waste and included fragments of peg tile which had been used in the pottery kiln(s) as spacers. A few fragments of pantile were recovered from pits **9**, **279** and **283**, suggesting a date no earlier than the 17th century for these fills.

3.10 Fired clay, *by Sue Anderson (App. B.7)*

3.10.1 Thirty fragments (877g) of fired clay were collected from five contexts. Two small fairly flat pieces (18g) of orange fine sandy clay with flint and clay pellet inclusions came from natural sinkhole fill 164 (Phase 1 feature **163**) in Area 2. All other fragments came from contexts associated with the brick kilns in Area 1. Two pieces were probably fragments of the clay ‘mortar’ used to bond the kiln walls, with 20 fragments being hard slabs recovered from floor 237 of kiln **241**. Six fragments from fill 58 of kiln **52** included five hard rounded lumps containing coal chips, and one small abraded fragment which may be a piece of brick.

3.11 Clay tobacco-pipe, *by Carole Fletcher (App. B.8)*

3.11.1 A total of 71 fragments of white ball clay tobacco pipe, weighing 0.543kg was recovered, mostly from a Phase 2 post-medieval clay extraction pit (**42**), with the remainder found in pits and a sinkhole fill; a single fragment of clay tobacco pipe also came from one of the brick kilns. The assemblage has undergone a moderate degree of reworking; no complete pipes were recovered, although some complete bowls were found. Datable examples span the mid 17th to early 18th centuries, with most being datable to the period 1660-1680.

4 FACTUAL DATA: ENVIRONMENTAL EVIDENCE

4.1 General

- 4.1.1 Small assemblages of animal bone and shell were recovered, while environmental samples produce few preserved remains.

| Material | No. | Weight (kg) |
|----------------|-----|-------------|
| Faunal remains | - | 6.38 |
| Shell | - | 0.018 |
| Bulk samples | 13 | - |

Table 12: Quantification of environmental remains

4.2 Faunal remains, by Hayley Foster (App. C.1)

- 4.2.1 A small assemblage of animal bone was recovered (6.38kg) solely from features dating to the post-medieval (Phase 2) period. The assemblage is in a fair condition with moderate levels of fragmentation. Material was recovered from pits (**18, 42, 128, 259, 283, 286, 293**) and ditch **16** (section) in Area 1. Sheep/goat remains made up the highest percentage of the NISP followed by horse and cattle. It should be noted that the vast majority of sheep remains were retrieved from pits **18** and **259** and were partial skeletons of neonate lambs. Other mammals represented in the assemblage were pig, dog, bird and rabbit.

4.3 Marine mollusca, by Carole Fletcher (App. C.2)

- 4.3.1 A total of 0.018kg of shell was collected by hand from Phase 2 pit **311**; all oyster *Ostrea edulis*, from estuarine and shallow coastal waters. The shell is moderately well-preserved and does not appear to have been deliberately broken or crushed, however, it has suffered post-depositional damage.

4.4 Environmental bulk samples, by Rachel Fosberry (App. C.3)

- 4.4.1 Twelve bulk samples were taken from features across Areas 1 and 2. Those from the features in Area 1 mainly produced wood charcoal, frequently in abundance and probably largely associated with the brick/tile kilns. The only other plant remains preserved are a few fragments of charred hazelnut shell from undated pit **98** (see below) and untransformed elderberry seeds recovered from the basal fill of prehistoric (Phase 1) pit **123**.

4.5 Radiocarbon dating (App. C.4)

- 4.5.1 Two samples were submitted to SUERC for radiocarbon dating (hazelnut shell from the fill of undated pit **98** and charcoal from undated pit **185**). It was not considered to be worthwhile to submit samples from the kilns as their likely period of operation (16th-18th century) falls within a period of increased levels of atmospheric carbon during the industrial age, which affects the accuracy of radiocarbon dating. Any radiocarbon dates falling after the middle of the 17th century are likely to provide a very broad calibrated date range from roughly 1650 to the modern period (up to 1950). This is called the Suess effect, after the Austrian chemist Hans Suess, and refers to a change in the ratio of the atmospheric concentrations of heavy isotopes of carbon (¹³C and

¹⁴C) by the admixture of large amounts of fossil-fuel derived CO₂, which is depleted in ¹³CO₂ and contains no ¹⁴CO₂ (Source: https://en.wikipedia.org/wiki/Suess_effect).

- 4.5.2 The sample from pit **98** returned a date in the Late Neolithic to Early Bronze Age period (2338-2145 cal BC @95% SUERC-89927), while that from pit **185** returned a possibly erroneous date of 712-888 cal AD, placing it in the Middle Saxon period.

5 STATEMENT OF POTENTIAL

5.1 Stratigraphy

5.1.1 The following stratigraphic records were created:

| Record type | Excavation |
|-----------------------|------------|
| Context register | 8 |
| Context records | 319 |
| Sections register | 3 |
| Sections drawings | 101 |
| Sample register | 2 |
| Photographic register | 7 |
| Digital photographs | 121 |
| Small finds register | 1 |

Table 13: Quantity of written and drawn records

The excavation record

5.1.2 The written and drawn elements of the contextual record form the main components of the excavation data and are sufficient to form the basis of the site narrative. This record has good potential to further understand the archaeological remains dating to the Neolithic and post-medieval periods.

Condition of the primary excavation sources and documents

5.1.3 The records are complete and have been checked for internal accuracy. Written and drawn records have been completed on archival quality paper and are indexed. All paper archives have been digitised into the individual site Access database. Site drawings and/or photogrammetry have been digitised in AutoCAD.

5.1.4 The site data is of sufficient quality to address all of the project’s Research Objectives and form the basis of further analysis and targeted publication of the key features, finds and environmental assemblages. Further analysis will concentrate on the prehistoric (to a lesser extent) and post-medieval phases of activity, notably the evidence for brick/tile and pottery production.

Range and variety of features and deposits

5.1.5 Features on the site included sink holes, pits and post-holes; post-medieval boundary/drainage ditches along with post-medieval brick kilns and extraction/waste pits.

Condition of features and deposits

5.1.6 The survival of the archaeological features and deposits was generally good although there was some truncation of the upper deposits of features by plough scarring.

5.2 Artefacts

Metal objects (App. B.1)

- 5.2.1 The small assemblage of incomplete hand-forged nails, a fitting, the base of a large vessel and a pair of shears has been fully catalogued. It is not intrinsically datable and is not well-preserved. The items have limited potential to contribute to the project's research objectives.

Lithics (App. B.2)

- 5.2.2 The flint assemblage from the excavations should be seen in the context of the very rich record of prehistoric activity along this part of the Yare Valley. However, although the relatively small worked flint assemblage from the excavations provides evidence for prehistoric activity at the site it has very little potential to provide more detailed information on the date and nature of this activity. The large assemblage of burnt flint from sinkhole **132** is of some interest and if it could be dated (NB only a small amount of wood charcoal was recovered) would make a small but useful addition to the record of the use of heated flint in the region. The assemblage has been fully catalogued and classified and no further analytical work is required.

Burnt stone and fuel residues (App. B.3)

- 5.2.3 This very small assemblage has been fully-recorded and has little potential to further contribute to the project's research priorities. No further work is required.

Glass (App. B.4)

- 5.2.4 The fragmentation of the assemblage and its redeposited nature mean it has limited potential to further contribute to the project's research priorities, other than to provide additional dating of the post-medieval activity on the site. However, the bottle seal could be examined and compared with other Norwich assemblages, which may aid dating of the assemblage.

Prehistoric pottery (App. B.5)

- 5.2.5 This very small assemblage has been fully recorded has little potential to further contribute to the project's research priorities, other than to further demonstrate low-level activity during the later prehistoric period in this part of the Yare valley. This statement acts as a full record of the prehistoric pottery for the archive and no further work is required beyond integrating evidence from previous phases of work on the site and summarising the information for publication.

Roman and Saxon pottery

- 5.2.6 The Saxon and Roman pottery sherds should be identified by relevant specialists.

Post-medieval pottery (App. B.6)

- 5.2.7 The pottery retrieved from this excavation has been classed as highly significant since few pottery production sites of this period have been identified in East Anglia so far.

This is both true for the Glazed Red Earthenware (GRE) as well as the Tin Glazed Earthenware (TGE). Currently, all GRE from Norwich is given a broad date-range of 16th–18th century, based on Jennings' work which suggested that it was in use in the city from soon after the fire of 1507 (Jennings 1981, 157). The Cringleford assemblage allows for a deeper study of the local pottery produced here, to be added and compared to the relatively small corpus of work regarding the material from this location and this time period. Furthermore, the importance of the Cringleford site cannot be over stressed, since only a few production GRE sites of this period have been identified in East Anglia (Kings Lynn, Wroxham and Fulmodestone).

- 5.2.8 This is true also of the TGE sites in the region. The only other site responsible for tin glazed earthenware production was reported in documentary evidence placing production centre at Ber Street, Norwich. However, this was only documentary evidence and extant remains of any such kilns etc have yet to be uncovered. The revelation of tin glazed earthenware being produced at Cringleford is therefore highly significant since it will be actual physical evidence of a production site, the first of its type in the region and one that is not merely hinted at from documentary evidence. The Cringleford assemblage has the potential, therefore, to help phase and characterise future discoveries and provide comparable date on fabric, surface treatment, decoration and ceramic technology.
- 5.2.9 Further work is therefore needed to study the material in greater detail as an assemblage as a whole. Additionally, comparisons to other assemblages should be made to those production sites from the area (from Norfolk: Norfolk Street, Kings Lynn, Wroxham, Fulmodestone; from Suffolk: Mendham, Wattisfield, Hacheston, Sutton, Lawshall and Stowmarket; from Cambridgeshire: Ely). Further study of the Ber Street production is also required in regard to the discovery of the TGE (as well as the GRE) and if possible, it will be worth comparing samples from Ber Street with the Cringleford redwares and TGE to see if the fabrics are chemically distinct.

Ceramic building material (App. B.7)

- 5.2.10 The site is well stratified and most of the assemblage is derived from sealed contexts. These originate from the post-medieval period, namely between the 16th-18th centuries AD. Further work will be required to complete the CBM analysis once any radiocarbon and other artefact dating information is available (see S. 4.5 above). Its main potential is to provide information on the range of fabrics and forms being produced by the brick kilns, to provide evidence for the kiln technology used by the potters, and to aid in site taphonomy and dating.

Fired clay (App. B.7)

- 5.2.11 Apart from two pieces of fired clay from sinkhole **164**, all other fragments came from contexts associated with the brick kilns in Area 1 and adds little to their understanding. No further work is required, other than incorporation with the CBM report and catalogue where appropriate.

Clay tobacco-pipe (App. B.8)

- 5.2.12 The assemblage has some potential to aid the understanding of the post-medieval economy of the site, indicating the supply of clay tobacco pipes to the site, although only a single initialled pipe was recovered. However, the assemblage mainly provides additional dating evidence for the brick making and the longevity of the brick kilns and pottery manufacture indicated by the waster sherds (from unlocated kilns).

5.3 Environmental remains

Faunal remains (App. C.1)

- 5.3.1 The material is a good representation of a post-medieval domestic faunal assemblage and has some potential to shed light on activities being undertaken during the period of ceramic production associated with the kilns. The data represents a modest quantity of identifiable animal bone, composed of mixed domestic refuse and partial young skeletons. It is recommended that measurements and full recording be undertaken for the analytical/archive report and a summary included in any publication. The assemblage should also be retained as it could add to the regional picture of diet and husbandry practices in this area of Norfolk.

Marine mollusca (App. C.2)

- 5.3.2 This small assemblage has little potential to aid the project's research objectives and no further work is required.

Environmental bulk samples (App. C.3)

- 5.3.3 The small assemblage has limited potential for further study. Radiocarbon dating of the hazelnut shell in Sample 4 has been undertaken while the wood charcoal associated with the kilns is currently considered to be unlikely to produce an accurate date (see S. 4.5 above).

Overall potential

- 5.3.4 When considered together, the stratigraphic data along with the potential offered by some of the artefacts (notably post-medieval pottery, CBM and clay tobacco pipe) and ecofacts (faunal remains) is considered to be of sufficient quality to address the majority of the project's Research Objectives and provide a firm base on which to progress an archive report and targeted publication work.

6 UPDATED PROJECT DESIGN

6.1 Revised research aims

Introduction

- 6.1.1 The research aims and objectives identified for the prehistoric and post-medieval period revealed during the evaluation and subsequent excavation, listed in Section 1.5, are included below. Summary statements are given, outlining the potential for further analysis, as well as a discussion of the extant archaeological remains encountered on the site in relation to these objectives. New research aims will be detailed as appropriate.
- 6.1.2 In general terms the site will contribute to the over-arching research into early post-medieval rural industry in and around the Cringleford area and the environs of Norwich. Moreover, analysis and appropriate dissemination of the results will provide a firm foundation for the study of early post-medieval pottery and brick industries in this area, which are still poorly-understood.

Site specific research objectives

1: To investigate the chronology and function of the currently undated features within the site (Original R0 3)

- 6.1.3 There is a proportion of undated features which are currently assigned to Phase 0, although more detailed analysis may be able to refine this through any shared similarities in fill composition, feature morphology and spatial associations. Area 1 was characterised almost exclusively by features associated with the kilns and pottery/CBM production from the post-medieval period (16th-18th century) and it is likely that any currently unphased features may be attributed to this phase of activity. Area 2, conversely, was characterised by natural sinkhole features. Those that were examined were almost entirely devoid of archaeological finds with the exception of nine sinkholes that contained struck and burnt flint and small sherds of prehistoric and later pottery, indicative of general (predominantly prehistoric) background activity in the immediate area.
- 6.1.4 Subsequently most of the natural features cannot be phased, although some of the undated features which appeared more archaeological in character may have been related to the identified prehistoric activity (see below) or perhaps the series of planting pits identified by the geophysical survey (Figure 3). Samples from two of these features have been sent for radiocarbon dating (see S. 4.5). Further documentary and cartographic research into the kilns/Newfound Farm may also help to establish the date of the undated but presumed post-medieval ditches on the site, although examination of available early maps of the site (see Gajos 2010) show no boundaries in their locations or are too small a scale to be useful.

2: To investigate the chronology and nature of prehistoric activity on the site (new)

- 6.1.5 Five features (pits, a post-hole and a gully) contained small quantities of prehistoric finds, including struck and burnt flint alongside Neolithic and Early Iron Age pottery.

The very small quantities recovered (along with occasional sherds of Roman and ?Saxon pottery) suggests that this was low-level and intermittent activity, with any focus of contemporary settlement perhaps located nearby, possibly closer to the River Yare to the north-east. At least some of the finds are likely to be residual – notably those in gully **111** gully which was probably related to post-medieval land drainage. The largest sherds were recovered from a small pit (**123**) and have been dated to the Early Iron Age.

- 6.1.6 The flake-based flint assemblage (and occasional pottery sherds) also found in Area 2 suggests some activity occurring on the site during the Neolithic and/or Early Bronze Age but there is no clear evidence of any true blade-based material of Mesolithic/earlier Neolithic date, nor is there any clear evidence for the kind of expediently/crudely worked material associated with Middle/Late Bronze Age and Iron Age flint-working. Although no further analysis is required on these assemblages, it would be useful to place this new evidence (incorporating additional data from the previous phases of work on the site) in the wider context of the surrounding area, adding to the very rich record of prehistoric activity of this part of the Yare valley.

3: To assess the role that the palaeoenvironmental evidence can play in enhancing our understanding of the activity undertaken on site (Original RO 4)

- 6.1.7 Environmental sampling from features across the site produced very few preserved plant remains, mostly comprising wood charcoal from the post-medieval kilns, although Phase 1 pit **123** dated to the Early Iron Age produced a small quantity of untransformed elderberry seeds. As such there is little potential for any reconstruction of the palaeoenvironment at this site.

Charcoal recovered from the base of the post-medieval (Phase 2) kilns (from deposits 29 (kiln **34**), 58 (kiln **52**), 94 (kiln **21**), 238 (kiln **242**), 237 (kiln **241**)) could potentially be used to help refine the chronology of the industry at Cringleford (although see S. 4.5 above).

4: To investigate the technological aspects of tile/brick manufacture on the site. (Original RO 1)

- 6.1.8 Understanding the development and diversity of rural industry (including brick making) in addition to the study of post-medieval material culture (including pottery, brick and tile; see RO4 below) were highlighted in the Revised Framework for the East of England (Medlycott 2011, 78) as important areas of future research.
- 6.1.9 Analysis (combining stratigraphic, artefactual (notably the CBM) and documentary evidence) of the four kiln structures in Area 1 will enable a detailed understanding of their construction and use and any technological or chronological differences that might be apparent between the various kilns on the site and any contemporary regional parallels. Based on the evidence available (within the CBM assemblage), it appears that there were at least two phases of tile and brickmaking at the site, perhaps reflecting simply a sequence of kiln building and repair with one or two in use at any one time. Linked to this would be how the kilns related to the extraction pits, nearby infrastructure and sources of fuel, and would need to incorporate evidence from the previous phases of work (including the possible surface/track found during the

evaluation). Detailed orthographic plans (based on the photogrammetry) and possibly reconstructions, of the kilns will be produced and the evidence combined with any relevant dating of the brick materials used in their construction (see RO 5 below). Three-dimensional spatial distribution of CBM fabrics and forms in features and structures will be important in studying the construction and use of the kilns, especially when combined with pottery data (see RO 7).

- 6.1.10 Evidence from the fuel by-products recovered from the bases of the kilns revealed that high quality coal was the main fuel of choice necessary to produce the high temperatures needed to fire large quantities of pottery, tile and brick. Local brushwood may have been used to help light the fuel and this was presumably represented by the quantities of wood charcoal recovered from samples.

5: To assess the range of brick and tile manufactured on the site, and to place this in its regional context (Original RO 2)

- 6.1.11 The very large assemblage of ceramic building material from Cringleford (of which a sample of over 200kg was retained for analysis) included bricks sampled directly from the kiln structures. These bricks appear to be comparable to the later 15th- and 16th-century structures in the region, such as Breckles Hall, Stutton Hall and Hengrave Hall (Lloyd 1925, 89–95) and Gedding Hall (Anderson and Tester 2003), although associated pottery and tobacco pipes suggest the kilns were later (mid-17th -18th century).

- 6.1.12 Further analysis of the CBM will provide more information on the range of fabrics and forms being produced by the brick kilns, to provide evidence for the kiln technology used by the potters (see ROs 4 and 7), and to aid in site taphonomy and dating. Moreover, a synthesis of the other sites would be needed to place this assemblage in its wider regional context (see App. B.7). A comparison of the assemblage with other large groups of CBM from the region will be necessary, alongside the analysis of tiles and bricks associated with the pottery waste dumps and other potting kiln waste.

6. Can the brick kilns and pottery production be linked to Newfound Farm? (new)

- 6.1.13 Brickmaking was a seasonal activity and its schedule fitted well with the farming calendar, meaning that many farmers also became brickmakers. ‘Clay/brick earth was dug in the autumn and left in a heap to overwinter – the wind, rain and frost making it easier to handle when brickmaking began in the spring. When the danger of frost had passed, moulding began and the bricks were then left to dry in the open air. Kiln burning took place from mid-summer onwards until the first frosts’ (Quelch 2006, 2). Large areas of land were required not only for the clay extraction but also for weathering the clay and building the kilns. Much of the work could be undertaken by unskilled labour, with the skills of the brickmaker being needed for relatively short periods of time at the crucial stages of production, when the bricks were moulded and then fired (Broadway 2003, 234).

- 6.1.14 Analysis of the faunal remains (which included evidence for on-site breeding and slaughter) will provide additional evidence for contemporary activities on the site, potentially linking the brickmaking with farming. This land was presumably part of that owned (and possibly leased) by the occupants of Newfound Farm (Gajos 2010 and see 1.3.8 above), a relationship that may be illuminated by further documentary research.

This research will also incorporate information held in the NHER for the current study area to help ascertain the extent of pottery (and brick) production across the wider area around Newfound Farm. It would also be interesting to identify if the same clay sources were being used for both pottery and brick production, and if the clay extraction pits located within the site were related to one or both industries. This is one of two sites in the vicinity of Newfound Farm that have now revealed the remains of post-medieval kilns that were probably producing a mix of pottery, brick and tile (NHER 9406). Analysis of the pottery and associated clay tobacco-pipes and glass will assist in establishing a chronology for the pottery production to help focus the documentary research.

7: To assess the range and chronology of pottery being produced and place this in its regional context (new)

6.1.15 The pottery retrieved from this excavation has been classed as highly significant since few pottery production sites of this period have been identified in East Anglia so far. This is true both for the Glazed Red Earthenware (GRE) as well as the Tin Glazed Earthenware (TGE). The discovery of tin glazed earthenware production at Cringleford is particularly significant since it is the first site to produce physical (rather than documentary) evidence of its production in the region. Taken together, all the evidence from Cringleford appears to indicate a 17th-century date for the manufacturing waste assemblage; a date largely supported by the clay tobacco-pipe and glass evidence. It appears clear from documentary sources (including wills and mortgage agreements, in addition to Blomefield) that potters were working in this area from at least the mid 17th century onwards but had seemingly ceased production here by the early 19th century (NHER 9406). There is presently no direct evidence that the kilns were still operational when pottery manufacturing took place on the site (see App. B. 7). Analysis (including accessing documents held at the NHER) will help to refine this chronology and establish the range of fabrics and forms being produced and the technologies employed in the firing process. This in turn will help phase and characterise future discoveries and provide comparable date on fabric, surface treatment, decoration and ceramic technology.

6.2 Interfaces, communications and project review

6.2.1 The Post-Excavation Assessment has been undertaken principally by Tom Collie and edited / finalised by Rachel Clarke (Post-Excavation Editor) and quality assured by Elizabeth Popescu (Head of Post-excavation and Publications). It will be distributed to the Client (CgMs on behalf on Barratt David Wilson Homes) and Steve Hickling (Historic Environment Office, Norfolk County Council (NCC)) for comment and approval.

6.2.2 Following approval of the Post-Excavation Assessment, discussions will be had between Tom Collie, Nick Gilmour, Rachel Clarke/Elizabeth Popescu, the Client and Steve Hickling to progress the post-excavation analysis, analytical/archive report and publication, as outlined in the task table below. Meetings will be arranged at relevant points during the post-excavation analysis.

6.3 Methods statements

Stratigraphic analysis

- 6.3.1 Contexts, finds and environmental data will be analysed using an MS Access database in combination with AutoCAD and GIS applications. The specialist information will be integrated to aid dating and complete more detailed grouping and phasing of the site, as well as spatial distribution plots where required. A full stratigraphic narrative will be produced and integrated with the results of the specialist analysis and will form the basis of the archive report.

Illustration

- 6.3.2 The existing CAD plans and sections will be updated with any amended phasing and additional sections digitised if appropriate. Report/publication figures will be generated using Adobe Illustrator. Finds recommended for illustration will be drawn by hand and then digitised, or where appropriate photography of certain finds-types will be undertaken. Data from previous work, notably the trench evaluation and geophysical survey, will be incorporated. Detail plans of the features and kiln will be illustrated, supplemented by photographs and sections.

Documentary research

- 6.3.3 Primary and published sources will be consulted where appropriate using the Norfolk Historic Environment Record and other resources, and will also include reports on comparable sites locally and nationally in order to place the site within its landscape and archaeological context. Documentary research will focus on material (maps, accounts etc.) relating to Newfound Farm and evidence of brick and pottery production. An updated HER search will also be commissioned at the analysis and final report stage. This evidence will be collated and where relevant reproduced in the full analytical/archive report and any subsequent publication.

Artefactual and ecofactual analysis

- 6.3.4 All the artefacts have been assessed/analysed with detailed recommendations for any additional work given in the individual specialist reports (Appendices B.1-10). Further work is recommended as follows:

Metalwork:

- The objects have been catalogued and no further work, other than selected X-rays (shears SF 1 and vessel SF 8) and updating of the report with phasing for the analytical/archive report is required.
- No further analysis is needed, although the report should be shared with the pottery specialist and summarised for publication.

Lithics:

- No further work other than incorporation into archive report.

Fuel by-products:

- No further analysis is needed.
- The items should be considered for dispersal/discard.

Glass

- The bottle seals should be examined and if possible, parallels found.
- For the bulk of the assemblage, no further work is recommended, beyond preparing a statement for publication and the catalogue acts as a full archival record.
- The complete bottle and the bottle seal should be retained. The remainder of the glass may be deselected prior to archive deposition.

Prehistoric pottery:

- No further work other than incorporation into archive report alongside a comparison and brief synthesis of other prehistoric sites in the immediate area and any relevant finds from previous stages of work.

Roman and Anglo-Saxon pottery

- Identification and record for the archive.

Post-medieval pottery:

- Lay out pottery from contexts 43, 286 and 287 to look for further cross-matches, select vessels for illustration and samples for ICP-MS, and decide on discard of material
- Prepare a full archive report on the pottery and manufacturing waste which will include:
 - descriptions of the fabrics and form types identified
 - evidence for manufacturing methods
 - comparison to other assemblages in the region and neighbouring counties, in particular the Ber Street Norwich TGE production site including a visit NHER to look for information on other sites in the Cringleford area (sampling of Ber Street material may be possible at the same time)
 - Compare vessel forms with Norwich type series and prepare a form/rim typology for Cringleford – attempt to tighten dating of particular form types
- Prepare a publication report from the archive report.

- Make allowance for at least 100 drawings and 50 photographs for subsequent grey lit and publication
- Select samples for chemical analysis, and if possible, compare to samples from the Ber Street kiln redware group (GRE, IGBW, PMSW) and the TGE will be submitted for ICP-MS analysis, together with one sample each from Ber Street, a total of 10 samples
- Select 2 samples for chemical sampling of saggars

Ceramic building material:

- produce detailed description of the material recovered from the kilns and related waste dumps as well as discussion of the types of CBM being produced,
- Comparison of the assemblage with other large groups of CBM from the region
- Three-dimensional spatial distribution of CBM fabrics and forms in features and structures will be important in studying the construction and use of the kilns.
- Analysis of tiles and bricks associated with the pottery waste dumps in conjunction with other potting kiln waste.
- Produce a report suitable for archive and/or publication.
- Up to 5 fragments are worthy of illustration by line drawing or photography

Fired clay:

- No further work other than incorporation into archive report (with CBM).
- The material should be considered for discard.

Clay tobacco pipe:

- Research on the pipe maker IM. Pipes with this mark were also recovered from the excavation at Duke Street Norwich. (0.25 day)
- Examine the lead-filled clay tobacco pipe and look for parallels. (0.25 day)
- Report on the above. (0.5 day)
- Photograph/illustrate the initialled pipe bowl for inclusion in the report.
- Photograph/illustrate the lead filled pipe for inclusion in the report.

- No further work is recommended for the remainder of the assemblage.
- The plain, undecorated stems are recorded in the catalogue and may be discarded. The complete pipe bowls should be retained.

Faunal remains:

- Full recording and analysis to be undertaken of bone
- Incorporation of full analysis report into archive report and summarise for publication.

Marine mollusca:

- No further work other than incorporation into archive report.

Environmental bulk samples

- No further work (possible charcoal ID)

Radiocarbon dating

- Possible kiln charcoal?

Report writing

- 6.3.5 Tasks associated with report writing are identified in Table 15 (see Section 7.2 below). An archive report, incorporating the pertinent evaluation data, will be prepared that will include results of all analyses.
- 6.3.6 It is proposed that a publication article will be produced which summarises the results and focuses on the key aspects of the site (see below).

Publication

- 6.3.7 It is proposed that the results of the project should be published in Norfolk Archaeology and / or a more ceramic-based journal (see Section 7.2).

6.4 Retention and dispersal of finds and environmental evidence

- 6.4.1 Recommendations for the retention and/or dispersal of each artefactual or ecofactual assemblage have been made by the relevant specialists during this assessment stage (see Appendices B.1-10). On completion of full analysis, discussions will be had between the relevant parties (see Section 6.2 above) to oversee the disposal/dispersal of redundant material and preparation for archiving of material considered to hold continuing value for the archaeological record. The retained material will be deposited with the site archive in due course (see below). It has been noted that Norfolk CC Historic Environment have expressed interest in retaining a selection of the discarded ceramics for their reference and public archaeology collection.

6.5 Ownership and archive

- 6.5.1 All artefactual material recovered will be held in storage by OA East and ownership of all such archaeological finds will be given over to the relevant authority to facilitate future study and ensure proper preservation of all artefacts. During analysis and report preparation, OA East will hold all material and reserves the right to send material for specialist analysis. It is Oxford Archaeology Ltd's policy, in line with accepted practice, to keep site archives (paper and artefactual) together wherever possible.
- 6.5.2 The archive will be prepared in accordance with current OA East guidelines, which are based on current national guidelines.
- 6.5.3 Excavated material and records will be deposited with, and curated by, Norfolk County Council Museum Stores under the Site Code ENF145412 and Accession number NWHCM: 2019.59. A digital archive will be deposited with OA Library/ADS. Norfolk County Council requires transfer of ownership prior to deposition.

7 RESOURCES AND PROGRAMMING

7.1 Project team structure

7.1.1 The project team is set out in Table 14 below:

| Name | Initials | Organisation | Role |
|--------------------|----------|--------------|---|
| Nick Gilmour | NG | OAE | Project Manager and prehistoric pottery specialist |
| Elizabeth Popescu | EP | OAE | Head of Post-Excavation and Publication |
| Rachel Clarke | RC | OAE | Editor |
| Tom Collie | TC | OAE | Project Officer & author; documentary research |
| Denis Sami | DS | OAE | Metalwork specialist |
| Carole Fletcher | CF | OAE | Specialist (clay tobacco pipe, glass, CBM, pottery) |
| Sue Anderson | SA | Freelance | Pottery & CBM specialist and author |
| Hayley Foster | HF | OAE | Faunal remains specialist |
| Karen Barker | KB | OAN | Conservator and X-radiography |
| Illustrator | Ill | OAE | Illustrator (TBC) |
| James Fairbairn | JF | OAE | Finds photography |
| Katherine Hamilton | KH | OAE | Archive Supervisor |
| Ben Jervis | BJ | Freelance | Clay tobacco pipe specialist |

Table 14: Project team

7.2 Task list and programme

7.2.1 Compilation of a final archive report is normally completed within one year of the approval of the Post-Excavation Assessment and Updated Project Design (May 2021). A publication proposal will be submitted to the preferred journal (possibly Norfolk Archaeology and / or Medieval Ceramics; joint authorship Tom Collie and Sue Anderson), once this has been agreed by the relevant parties. NB Archiving tasks and costs will be calculated once a dispersal and retention policy has been agreed with NWHCM.

7.2.2 A task list is presented below.

| Task No. | Task | Staff | No. Days |
|--|--|------------------------|----------|
| Project Management | | | |
| 1 | Project management | NG EP/RC | 3 |
| 2 | Team meetings | NG EP/RC TC | 1 |
| 3 | Liaison with relevant staff and specialists, distribution of relevant information and materials | TC, RC, NG, SA, EP, HF | 1.5 |
| Stage 1: Stratigraphic analysis | | | |
| 4 | Integrate ceramic/artefact dating with site matrix | TC | 1 |
| 5 | Finalise site phasing | TC | 1 |
| 6 | Add final phasing and groups to database | TC | 1 |
| 7 | Compile group and phase text, incorporating evaluation data where appropriate | TC | 3 |
| 8 | Compile overall stratigraphic text and site narrative to form the basis of the full/archive report and incorporate evaluation data | TC | 3 |

| Task No. | Task | Staff | No. Days |
|--------------------------------|--|---------|----------|
| 9 | Review, collate and standardise results of all final specialist reports and integrate with stratigraphic text and project results | TC | 1.5 |
| Illustration | | | |
| 10 | Prepare draft phase plans, sections and other report figures | III | 2 |
| 11 | Select photographs for inclusion in the report | TC | 0.5 |
| 12 | Select sections for inclusion in the report | TC | 0.5 |
| 13 | Illustrate post-medieval pottery: max 100 sherds | III | 20 |
| 14a | Photograph post-medieval pottery and edit/archive: max 50 Photograph 2 x clay tobacco pipes | JF | 4 |
| 14b | Paste up photos (scales etc) | III | 4 |
| 15 | Illustrate 5 CBM fragments | ill | 1 |
| Documentary research | | | |
| 16 | Updated HER search in the surrounding 1km area and other research | TC/NHER | 2 |
| Artefact studies | | | |
| 17a | Metalwork: complete archive report following x-ray | DS | 0.2 |
| 17b | X-ray of 2 objects @£25 per plate | KB | 0.2 |
| 18 | Flint work: complete archive report with any additional information | LB/TC | 0.1 |
| 19 | Prehistoric pottery: complete archive report (integrate eval) | NG | 0.2 |
| 20a | Roman pottery: identification for archive, collate with any previous contemporary finds | KA | 0.2 |
| 20b | Saxon pottery: identification for archive, collate with any previous contemporary finds | SA | 0.2 |
| 21 | Lay out material and help with pottery discard | CF | 2 |
| 22 | Prepare archive report/publication summary of glass. ID bottle seal | TBC | 0.5 |
| 23a | Post-medieval pottery and manufacturing waste: X-fits, select sherds for illustration chemical analysis, comparison with Norwich type series; prepare form/rim typology; research, archive report and publication, | SA | 7 |
| 23b | ICP-MS analysis of up to 12 pottery samples @ £50 per sample | TBC | - |
| 23c | C14 x 2 max @£320 each (but see S. 4.5) | SUERC | - |
| 24 | CBM: research, report and publication synopsis along with comparisons with other sites etc | SA | 2 |
| 25 | Clay tobacco pipe: research IM, lead-filled pipe, report | CF/BJ | 1 |
| Ecofact studies | | | |
| 26 | Faunal remains: archive catalogue, further analysis, research, archive report and publication synopsis | HF | 2 |
| Stage 2: Report Writing | | | |
| 27 | Integrate documentary research | TC | 1 |

| Task No. | Task | Staff | No. Days |
|-----------------------------|--|-----------|----------|
| 28 | Write historical and archaeological background text | TC | 1 |
| 29 | Compile final list of illustrations/liaise with illustrators | TC | 0.5 |
| 30 | Write discussion and conclusions | TC/SA | 2 |
| 31 | Prepare final report figures | III | 5 |
| 32 | Collate/edit captions, bibliography, appendices etc. | TC/RC | 1 |
| 33 | Internal edit | RC/EP | 3 |
| 34 | Incorporate internal edits | TC | 1 |
| 35 | Final edit/check | RC / EP | 0.5 |
| 36 | Send to RPS/NCC for approval | NG TC | 0.1 |
| 37 | Approval revisions | TC/RC/III | 1.5 |
| Stage 3: Publication | | | |
| 38 | Produce draft publication(s) text (TBC) | TC/SA/RC | 10 |
| 39 | Compile list of illustrations/liaise with illustrators | TC RC III | 1 |
| 40 | Produce publication figures (TBC) | III | 5 |
| 41 | Internal edit | RC | 3 |
| 42 | Incorporate internal edits | TC | 0.5 |
| 43 | Final edit/check | RC | 1 |
| 44 | Send to publisher for refereeing | RC | 0.5 |
| 45 | Post-refereeing revisions | RC | 2 |
| 46 | Copy edit queries/proof reading | RC | 1 |
| 49 | Print costs (c. £50 per page) TBC | - | |
| Stage 4: Archiving | | | |
| 47 | Compile paper archive | TC/KH | 1 |
| 48 | Archive/delete digital photographs | TC/KH | 1 |
| 49 | Compile/check and deposit material archive (TBC) | KH | TBC |

Table 15: Task list

* See Appendix D for product details and Appendix E for the project risk log.

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APPENDIX A CONTEXT INVENTORY

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|-----------------|----------------------------|--------|---------|-------|---------------|--|---------------------------------------|
| 1 | 0 | | 0 | layer | topsoil | topsoil | | | | | dark brown | clay silt |
| 2 | 0 | | 0 | layer | subsoil | subsoil | | | | | mid grey brown | silty sandy clay |
| 3 | 0 | | 0 | layer | natural geology | natural geology | | | | | mid yellow brown | firm |
| 4 | 4 | 1 | 2 | cut | ditch | boundary | 2 | 0.8 | 0.18 | linear | | |
| 5 | 4 | 1 | 2 | fill | ditch fill | disuse | 2 | 0.8 | 0.18 | | mid brown grey | silty clay |
| 6 | 6 | 1 | 2 | cut | ditch | boundary | 2 | 0.76 | 0.22 | linear | | |
| 7 | 6 | 1 | 2 | fill | ditch fill | disuse | 2 | 0.76 | 0.22 | | light yellow brown | silty sand |
| 8 | 0 | 1 | 2 | layer | dumped deposit | discarded kiln debris | 3.7 | 3.22 | 0.2 | | light grey brown | silty clay |
| 9 | 9 | 1 | 2 | cut | pit | rubbish pit | 1 | 3.6 | 0.8 | sub-circular | | |
| 10 | 9 | 1 | 2 | fill | pit fill | dumped waste | 1 | 2.2 | 0.78 | | mid grey brown | silty sand |
| 11 | 9 | 1 | 2 | fill | pit | backfill/waste deposit | 1 | 0.8 | 0.3 | | mid greyish brown | silt sand |
| 12 | 9 | 1 | 2 | fill | pit | backfill/waste disposal | 1 | 2.1 | 0.5 | | mid grey brown | silt sand |
| 13 | 9 | 1 | 2 | fill | pit | backfill/waste disposal | 1 | 3.4 | 0.4 | | mid grey brown | silt sand |
| 14 | 14 | 1 | 0 | cut | natural | natural feature | 0.92 | 0.92 | 0.14 | circular | | |
| 15 | 14 | 1 | 0 | fill | natural | silting | 0.92 | 0.92 | 0.14 | | mid grey brown | silt sand |
| 16 | 16 | 1 | 2 | cut | ditch | boundary | 1 | 1.08 | 0.18 | linear | | |
| 17 | 16 | 1 | 2 | fill | ditch | silting/disuse | 1 | 1.08 | 0.18 | | mid grey brown | silt sand |
| 18 | 18 | 1 | 2 | cut | pit | extraction | 1 | 4.52 | 0.58 | sub-linear | | |
| 19 | 18 | 1 | 2 | fill | pit | backfill | 1 | 4.52 | 0.64 | | mid brown yellow | silt clay |
| 20 | 18 | 1 | 2 | fill | pit | demolition/rubble/backfill | 1 | 2.5 | 0.42 | | mid brown red | ashy silt |
| 21 | 18 | 1 | 2 | masonry | structure | kiln brick | 8.8 | 1.59 | 0.8 | | red brick | irregular mortar bonding flemish |
| 22 | 18 | 1 | 2 | masonry | structure | kiln | 2.1 | 0.42 | 0.23 | | red | irregular english mortar |
| 23 | 18 | 1 | 2 | masonry | structure | kiln | 2.1 | 0.42 | 0.23 | | red | english mortar |
| 24 | 18 | 1 | 2 | masonry | structure | brick kiln | 2.1 | 0.42 | 0.23 | | red | irregular header mainly header mortar |
| 25 | 18 | 1 | 2 | masonry | structure | kiln | 2.1 | 0.33 | 0.23 | | red | english bond mortar |
| 26 | 33 | 1 | 2 | masonry | structure | wall/kiln | 7.16 | 0.23 | 0.86 | | layer of blue overlay staining bricks blue | english garden mortar |
| 27 | 33 | 1 | 2 | masonry | structure | kiln | 7.16 | 0.23 | 0.86 | | blue | english garden mortar |
| 28 | 22 | 1 | 2 | fill | backfill | backfill | 1 | 1 | 0.75 | | pale yellow brown | silt sand |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|--------------------|----------------------------|--------|---------|-------|---------------|------------------------|---|
| 29 | 33 | 1 | 2 | fill | kiln deposit | disuse/firing ash | 1 | 0.9 | 0.23 | | dark grey | silt sand |
| 30 | 33 | 1 | 2 | fill | colluvium | natural silting/backfill | 1 | 2.14 | 0.22 | | mid grey brown | silt sand |
| 31 | 33 | 1 | 2 | fill | backfill | backfill | 1 | 2.14 | 0.2 | | dark grey brown | silt sand |
| 32 | 33 | 1 | 2 | fill | kiln | backfill | 1 | 1.7 | 0.22 | | mid grey brown | silt sand with clay lenses |
| 33 | 33 | 1 | 2 | cut | structure | kiln construction | 1 | 2.1 | 0.9 | linear | | |
| 34 | 0 | 1 | 2 | group | kiln | structure | 7.42 | 1.57 | 0.98 | | | |
| 35 | 33 | 1 | 2 | masonry | surface (internal) | kiln floor | 7.16 | 0.82 | 0.05 | | | irregular bond half broken brick and clay |
| 36 | 36 | 1 | 2 | cut | ditch | boundary/drainage | 1.05 | 0.8 | 0.38 | linear | | |
| 37 | 36 | 1 | 2 | fill | ditch | disuse | 1.05 | 0.8 | 0.38 | | mid yellow brown | sand clay |
| 38 | 38 | 1 | 2 | cut | ditch | boundary/drainage | 0.68 | 0.7 | 0.17 | linear | | |
| 39 | 38 | 1 | 2 | fill | ditch | disuse | 0.68 | 0.7 | 0.17 | | mid to dark grey brown | sand clay |
| 40 | | 1 | 0 | layer | colluvium | | 1 | 1.06 | 0.42 | | dirty brown yellow | sand clay |
| 41 | | 1 | 0 | layer | colluvium | quarry | 1 | 1.06 | 0.1 | | mid to dark grey brown | sand clay |
| 42 | 42 | 1 | 2 | cut | pit | extraction | 2.02 | 1.9 | 1.2 | indeterminate | | |
| 43 | 42 | 1 | 2 | fill | pit | backfill | 1 | 3.3 | 1.2 | | mid grey brown | silt clay |
| 44 | 44 | 2 | 0 | cut | pit | uncertain | 1.28 | 0.68 | 0.2 | sub-circular | | |
| 45 | 44 | 2 | 0 | fill | pit | silting | 1.28 | 0.68 | 0.2 | | mid grey brown | silt sand |
| 46 | 46 | 2 | 0 | cut | ditch | boundary | 1 | 0.8 | 0.14 | linear | | |
| 47 | 46 | 2 | 0 | fill | ditch | boundary | 1 | 0.8 | 0.14 | | mid brown grey | silt sand |
| 48 | 48 | 2 | 1 | cut | pit | uncertain | 0.92 | 0.92 | 0.2 | sub-circular | | |
| 49 | 48 | 2 | 1 | fill | Pit | silting | 0.92 | 0.92 | 0.2 | | mid brown | silt sand |
| 50 | 50 | 2 | 0 | cut | ditch | boundary | 1.46 | 0.73 | 0.2 | linear | | |
| 51 | 50 | 2 | 0 | fill | ditch | natural silting | 1.46 | 0.73 | 0.2 | | mid brown grey | silt sand |
| 52 | 0 | 1 | 2 | masonry | structure | kiln group | 4.71 | 3.06 | 0.22 | | | |
| 53 | 56 | 1 | 2 | masonry | structure | kiln wall | 2.6 | 0.11 | 0.21 | | red | clay and mortar |
| 54 | 56 | 1 | 2 | masonry | structure | kiln wall | 2.7 | 0.11 | 0.19 | | | mortar |
| 55 | 56 | 1 | 2 | fill | kiln | backfill/demolition layer | 2.98 | 0.7 | 0.17 | | pale red brown | silt sand |
| 56 | 56 | 1 | 2 | cut | kiln | construction | 4.3 | 2.98 | 0.22 | square | | |
| 57 | 56 | 1 | 2 | layer | surface (internal) | kiln floor | 3.2 | 2.6 | 0.05 | | dark reddish brown | silt clay |
| 58 | 56 | 1 | 2 | fill | kiln | demolition layer/ backfill | 2.74 | 0.7 | 0.22 | | pale red brown | silt sand |
| 59 | 59 | 2 | 0 | cut | ditch | field boundary | 1 | 1.1 | 0.44 | curvilinear | | |
| 60 | 59 | 2 | 0 | fill | ditch | natural infill/silting | 1 | 1.12 | 0.45 | | mid grey brown | silt sand |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|--------------------|-----------------------------|--------|---------|-------|-----------------|-------------------------|----------------|
| 61 | 61 | 2 | 0 | cut | pit | possible sinkhole | 4.38 | 2.94 | 2.8 | sub-circular | | |
| 62 | 61 | 2 | 0 | fill | pit | possible sink hole | 4.38 | 2.94 | 2.8 | | light to mid grey brown | silt sand |
| 63 | 317 | 1 | 2 | fill | pit | backfill | 1 | 1.33 | 0.22 | | mid yellow brown | silt clay |
| 64 | 317 | 1 | 2 | fill | pit | backfill | 1 | 1.47 | 0.87 | | mid red brown | silt clay |
| 65 | 42 | 1 | 2 | fill | pit | backfill | 1 | 1.44 | 0.46 | | mid yellow brown | silt clay |
| 66 | 42 | 1 | 2 | fill | pit | backfill | 1 | 2.08 | 0.66 | | mid red brown | silt clay |
| 67 | 42 | 1 | 2 | fill | pit | backfill | 1 | 1.02 | 0.08 | | dark brown grey | ashy clay |
| 68 | 42 | 1 | 2 | fill | pit | backfill | 1 | 1.6 | 0.46 | | mid grey brown | silt clay |
| 69 | 42 | 1 | 2 | fill | pit | backfill | 1 | 0.7 | 0.2 | | mid grey brown | silt clay |
| 70 | 56 | 1 | 2 | masonry | surface (internal) | kiln firing chamber floor | 1.67 | 0.5 | 0.11 | | | clay |
| 71 | 56 | 1 | 2 | masonry | kiln | storage | 0.68 | 0.25 | 0.22 | | | |
| 72 | 56 | 1 | 2 | masonry | structure | kiln wall | 3.03 | 0.11 | 0.18 | | | mortar |
| 73 | 56 | 1 | 2 | masonry | structure | kiln wall | 3.2 | 0.25 | 0.05 | | dark red | clay |
| 74 | 74 | 1 | 2 | cut | pit | kiln | 1 | 4.22 | 1.2 | sub-rectangular | | |
| 75 | 74 | 1 | 2 | fill | pit | demolition/backfill | 1 | 4.22 | 0.8 | | dark grey | silt clay |
| 76 | 90 | 1 | 2 | fill | pit | extraction | 1 | 2.58 | 0.78 | | dark brown grey | silt clay |
| 77 | 95 | 1 | 2 | fill | pit | extraction | 1 | 1.4 | 0.98 | | mid brown grey | silt clay |
| 78 | 18 | 1 | 2 | masonry | structure | kiln west outer wall | 2.2 | 1.75 | 0.4 | | red | mortar |
| 79 | 18 | 1 | 2 | masonry | structure | kiln north outer wall | 5 | 1.5 | 0.8 | | red | mortar |
| 80 | 18 | 1 | 2 | masonry | structure | kiln north wall of entrance | 2.8 | 1.3 | 0.3 | | red | mortar |
| 81 | 18 | 1 | 2 | masonry | structure | kiln south wall of entrance | 2.8 | 1.3 | 0.3 | | red | mortar |
| 82 | 18 | 1 | 2 | masonry | structure | kiln furnace arch | 2.1 | 0.23 | 0.4 | | red | mortar |
| 83 | 18 | 1 | 2 | masonry | structure | kiln furnace arch | 2.1 | 0.23 | 0.42 | | red | mortar |
| 84 | 18 | 1 | 2 | masonry | structure | kiln furnace arch | 2.1 | 0.23 | 0.42 | | red | mortar |
| 85 | 18 | 1 | 2 | masonry | structure | kiln furnace arch | 2.1 | 0.23 | 0.42 | | red | mortar |
| 86 | 18 | 1 | 2 | masonry | structure | kiln furnace arch | 2.1 | 0.23 | 0.4 | | red | mortar |
| 87 | 18 | 1 | 2 | masonry | structure | kiln furnace arch | 2.1 | 0.23 | 0.42 | | red | mortar |
| 88 | 18 | 1 | 2 | masonry | structure | kiln furnace arch | 2.1 | 0.23 | 0.42 | | red | mortar |
| 89 | 0 | | 0 | void | | | 0 | | | | | |
| 90 | 90 | 1 | 2 | cut | pit | extraction | 3.16 | 1.68 | 0.61 | indeterminate | | |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|--------------|---------------------|--------|---------|-------|---------------|-----------------------|----------------|
| 91 | 90 | 1 | 2 | fill | pit | extraction backfill | 1 | 1.01 | 0.49 | | mid brown grey | silt clay |
| 92 | 92 | 1 | 2 | cut | pit | extraction | 1 | 0.81 | 0.35 | indeterminate | | |
| 93 | 92 | 1 | 2 | fill | pit | backfill | 1 | 1.11 | 0.43 | | mid grey brown | silt clay |
| 94 | 21 | 1 | 2 | fill | kiln | firing waste | 8.14 | 1 | 0.3 | | mid red purple | ash |
| 95 | 95 | 1 | 2 | cut | pit | extraction | 1 | 0.91 | 0.71 | indeterminate | | |
| 96 | 96 | 2 | 2 | cut | ditch | boundary | 1 | 1.12 | 0.21 | linear | | |
| 97 | 96 | 2 | 2 | fill | ditch | silting | 1 | 1.12 | 0.21 | | mid brown grey | silt sand |
| 98 | 98 | 2 | 0 | cut | pit | sinkhole | 1.5 | 1.5 | 1.16 | circular | | |
| 99 | 98 | 2 | 0 | fill | Pit | | 1.5 | 1.5 | 0.92 | | mid brown | sand silt |
| 100 | 98 | 2 | 0 | fill | pit | | 0.62 | 0.62 | 0.36 | | light brown grey | silt sand |
| 101 | 98 | 2 | 0 | fill | pit | | 0.86 | 0.86 | 0.2 | | dark grey | sand silt |
| 102 | 98 | 2 | 0 | fill | pit | disuse | 0.98 | 0.98 | 0.14 | | light grey brown | silt sand |
| 103 | 103 | 2 | 0 | cut | ditch | boundary | 1 | 1.2 | 0.3 | linear | | |
| 104 | 103 | 2 | 0 | fill | ditch | natural infilling | 1 | 1.2 | 0.3 | | yellow grey brown | silt sand |
| 105 | 105 | 2 | 0 | cut | natural | natural | 1.9 | 1.9 | 1 | circular | | |
| 106 | 105 | 2 | 0 | fill | natural | natural | 1.9 | 1.9 | 1 | | mid brown grey | silt sand |
| 107 | 107 | 2 | 0 | cut | natural | natural | 1 | 0.95 | 0.36 | circular | | |
| 108 | 107 | 2 | 0 | fill | natural | natural | 1 | 0.95 | 0.36 | | mid yellow brown | sand silt |
| 109 | 109 | 2 | 0 | cut | pit | | 2 | 0.82 | 0.48 | curvilinear | | |
| 110 | 109 | 2 | 0 | fill | pit | silting | 2 | 0.82 | 0.48 | | mid brown grey | silt sand |
| 111 | 111 | 2 | 1 | cut | gully | | 1 | 0.3 | 0.02 | linear | | |
| 112 | 111 | 2 | 1 | fill | gully | natural infilling | 1 | 0.3 | 0.02 | | mid grey brown | silt sand |
| 113 | 113 | 2 | 0 | cut | ditch | boundary | 1 | 1.18 | 0.61 | curvilinear | | |
| 114 | 113 | 2 | 0 | fill | ditch | natural silting | 1 | 1.18 | 0.61 | | mid grey brown | silt clay |
| 115 | 115 | 2 | 0 | cut | natural | tree bowl | 1.3 | 1.26 | 0.24 | sub-circular | | |
| 116 | 115 | 2 | 0 | fill | natural | tree bowl | 1.3 | 1.26 | 0.24 | | mid brown grey | silt sand |
| 117 | 117 | 2 | 0 | cut | natural | tree bowl | 1.85 | 1.02 | 0.16 | sub-circular | | |
| 118 | 117 | 2 | 0 | fill | natural | silting | 1.85 | 1.02 | 0.16 | | mid yellow brown | silt sand |
| 119 | 119 | 2 | 0 | cut | natural | tree bowl | 1.5 | 0.9 | 0.43 | sub-circular | | |
| 120 | 119 | 2 | 0 | fill | natural | tree bowl | 1.5 | 0.9 | 0.43 | | mid yellow grey brown | silt sand |
| 121 | 121 | 2 | 1 | cut | natural | | 1.9 | 1.6 | 1 | sub-circular | | |
| 122 | 121 | 2 | 1 | fill | natural | | 1.9 | 1.6 | 1 | | mid brown | silt sand |
| 123 | 123 | 2 | 1 | cut | pit | possible post pad | 1.04 | 1 | 0.26 | sub-circular | | |
| 124 | 123 | 2 | 1 | fill | pit | silting | 1.04 | 1 | 0.26 | | mid grey brown | silt sand |
| 125 | 123 | 2 | 1 | fill | pit | backfill | 1.04 | 0.74 | 0.14 | | mid grey brown | silt sand |
| 128 | 128 | 2 | 1 | cut | natural | sinkhole | 1.35 | 1.3 | 1 | sub-circular | | |
| 129 | 128 | 2 | 1 | fill | natural | sinkhole | 1.35 | 1.3 | 1 | | mid grey brown | silt sand |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|--------------------|----------------------|--------|---------|-------|---------------|----------------------------|-----------------|
| 130 | 130 | 2 | 1 | cut | post-hole | structural | 0.34 | 0.34 | 0.33 | circular | | |
| 131 | 130 | 2 | 1 | fill | post-hole | natural silting | 0.34 | 0.34 | 0.33 | | mid grey brown | silt sand |
| 132 | 132 | 2 | 1 | cut | natural | sinkhole | 2.05 | 2.1 | 1.35 | circular | | |
| 133 | 132 | 2 | 1 | fill | natural | sinkhole | 2.05 | 2.1 | 0.75 | | mid grey brown | silt sand |
| 134 | 132 | 2 | 1 | fill | natural | sinkhole | 2.05 | 2.1 | 1.35 | | dark brown grey | silt sand |
| 135 | 135 | 1 | 2 | cut | pit | extraction then dump | 1 | 1.88 | 0.42 | sub-circular | | |
| 136 | 135 | 1 | 2 | fill | pit | dump | 1 | 1.88 | 0.42 | | mid grey brown | sand clay |
| 137 | | 1 | 2 | masonry | surface (external) | floor | 4.04 | 0.86 | | | dark grey brown | hard fired clay |
| 138 | 33 | 1 | 2 | masonry | structure | kiln arch | 0.83 | 0.29 | 0.36 | | | mortar |
| 139 | 139 | 2 | 0 | cut | natural | tree throw | 1.8 | 1.2 | 0.39 | amorphous | | |
| 140 | 139 | 2 | 0 | fill | natural | tree throw | 1.8 | 1.2 | 0.39 | | dark brown | silt sand |
| 141 | 141 | 2 | 1 | cut | natural | sink hole | 1.45 | 1.34 | 1.2 | sub-circular | | |
| 142 | 141 | 2 | 1 | fill | natural | silting | 1.45 | 1.34 | 1.2 | | mid grey brown | silt sand |
| 145 | 145 | 2 | 1 | cut | natural | sinkhole | 2.64 | 2.5 | 1.2 | sub-circular | | |
| 146 | 145 | 2 | 1 | fill | natural | sinkhole | 2.64 | 2.5 | 1.2 | | light mid grey brown | silt sand |
| 147 | 147 | 2 | 0 | cut | pit | | 1.5 | 0.65 | 0.22 | sub-circular | | |
| 148 | 147 | 2 | 0 | fill | pit | | 1.5 | 0.65 | 0.22 | | mid grey brown | silt sand |
| 149 | 149 | 2 | 0 | cut | pit | | 1 | 0.95 | 0.18 | sub-circular | | |
| 150 | 149 | 2 | 0 | fill | pit | silting | 1 | 0.95 | 0.18 | | mid grey brown | silt sand |
| 151 | 151 | 2 | 1 | cut | ditch | boundary | 2 | 0.38 | 0.11 | linear | | |
| 152 | 151 | 2 | 1 | fill | ditch | natural silting | 3 | 0.38 | 0.11 | | mid grey brown | silt sand |
| 153 | 153 | 2 | 0 | cut | pit | | 0.95 | 0.6 | 0.12 | sub-circular | | |
| 154 | 153 | 2 | 0 | fill | pit | | 0.95 | 0.6 | 0.12 | | mid grey brown | silt sand |
| 155 | 155 | 2 | 0 | cut | natural | | 0.5 | 1.12 | 0.22 | sub-circular | | |
| 156 | 155 | 2 | 0 | fill | natural | | 0.5 | 1.12 | 0.22 | | mid grey brown | silt sand |
| 157 | 157 | 2 | 1 | cut | natural | sinkhole | 1.6 | 1.6 | 1.1 | circular | | |
| 158 | 157 | 2 | 1 | fill | natural | sinkhole | 1.6 | 1.6 | 1.1 | | dark brown | silt sand |
| 159 | 159 | 2 | 1 | cut | pit | | 0.78 | 0.6 | 0.12 | sub-circular | | |
| 160 | 159 | 2 | 1 | fill | pit | silting | 0.78 | 0.6 | 0.12 | | mid grey brown | silt sand |
| 161 | 161 | 2 | 1 | cut | natural | sinkhole | 1.24 | 1.13 | 0.84 | sub-circular | | |
| 162 | 161 | 2 | 1 | fill | natural | silting | 1.24 | 1.13 | 0.84 | | mid grey brown | silt sand |
| 163 | 163 | 2 | 1 | cut | natural | sinkhole | 1.8 | 1.95 | 1 | sub-circular | | |
| 164 | 163 | 2 | 1 | fill | natural | sinkhole | 1.8 | 1.95 | 1 | | mid grey brown | silt sand |
| 165 | 165 | 2 | 0 | cut | pit | | 1.33 | 0.7 | 0.32 | sub-circular | | |
| 166 | 165 | 2 | 0 | fill | pit | | 1.33 | 0.7 | 0.32 | | light to medium grey brown | silt sand |
| 167 | 167 | 2 | 0 | cut | pit | | 0.85 | 0.64 | 0.45 | sub-circular | | |
| 168 | 167 | 2 | 0 | fill | pit | | 0.84 | 0.64 | 0.45 | | mid grey brown | silt sand |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|--------------|-----------------------------|--------|---------|-------|---------------|------------------|----------------|
| 169 | 169 | 2 | 1 | cut | natural | sinkhole | 1.4 | 0.86 | 0.76 | sub-circular | | |
| 170 | 169 | 2 | 1 | fill | natural | silting | 1.4 | 0.86 | 0.76 | | mid grey brown | silt clay |
| 171 | 171 | 2 | 0 | cut | natural | sinkhole | 0.8 | 0.8 | 0.16 | circular | | |
| 172 | 171 | 2 | 0 | fill | natural | sinkhole | 0.8 | 0.8 | 0.16 | | mid grey brown | silt clay |
| 173 | 173 | 2 | 0 | cut | pit | | 2 | 1.9 | 0.64 | sub-circular | | |
| 174 | 173 | 2 | 0 | fill | pit | | 0.62 | 0.62 | 0.4 | | mid brown | silt sand |
| 175 | 173 | 2 | 0 | fill | pit | | 0.86 | 0.86 | 0.6 | | light grey brown | silt sand |
| 176 | 173 | 2 | 0 | fill | pit | | 1.3 | 1.3 | 0.6 | | mid brown | silt sand |
| 177 | 177 | 2 | 2 | cut | post-hole | | 0.5 | 0.4 | 0.25 | sub-circular | | |
| 178 | 177 | 2 | 2 | fill | post-hole | | 0.5 | 0.4 | 0.25 | | dark grey brown | silt sand |
| 179 | 179 | 2 | 0 | cut | natural | treebowl | 0.8 | 0.8 | 0.25 | circular | | |
| 180 | 179 | 2 | 0 | fill | natural | silting | 0.8 | 0.8 | 0.25 | | mid grey brown | silt sand |
| 181 | 181 | 2 | 0 | cut | natural | tree bowl/ animal burrow | 0.95 | 0.8 | 0.62 | sub-circular | | |
| 182 | 181 | 2 | 0 | fill | natural | tree bowl/ animal burrow | 0.95 | 0.8 | 0.62 | | mid grey brown | silt sand |
| 183 | 183 | 2 | 0 | cut | pit | | 1.24 | 1 | 0.3 | sub-circular | | |
| 184 | 183 | 2 | 0 | fill | pit | silting | 1.24 | 1 | 0.3 | | mid grey brown | silt sand |
| 185 | 185 | 2 | 0 | cut | post-hole | | 0.5 | 0.5 | 0.09 | circular | | |
| 186 | 185 | 2 | 0 | fill | post-hole | | 0.5 | 0.5 | 0.09 | | dark grey | silt sand |
| 187 | 187 | 2 | 0 | cut | natural | sinkhole | 0.96 | 0.96 | 0.58 | circular | | |
| 188 | 187 | 2 | 0 | fill | natural | sinkhole | 0.96 | 0.96 | 0.58 | | dark brown | silt sand |
| 189 | 189 | 2 | 0 | cut | natural | sinkhole | 1.85 | 1.8 | 1.1 | sub-circular | | |
| 190 | 189 | 2 | 0 | fill | natural | natural infilling | 1.85 | 1.8 | 1.1 | | mid grey brown | silt sand |
| 191 | 191 | 2 | 0 | cut | natural | sinkhole | 0.73 | 2 | 0.58 | sub-circular | | |
| 192 | 191 | 2 | 0 | fill | natural | sinkhole | 0.73 | 2 | 0.58 | | mid brown grey | silt sand |
| 193 | 193 | 2 | 0 | cut | natural | sinkhole | 1 | 1 | 0.78 | circular | | |
| 194 | 193 | 2 | 0 | fill | natural | sinkhole | 1 | 1 | 0.78 | | dark brown | silt sand |
| 195 | 195 | 2 | 0 | cut | natural | sinkhole | 0.95 | 0.8 | 0.9 | sub-circular | | |
| 196 | 195 | 2 | 0 | fill | natural | sinkhole | 0.95 | 0.8 | 0.9 | | dark brown | silt sand |
| 197 | 197 | 2 | 0 | cut | ditch | terminus/bou ndary | 2.59 | 1.1 | 0.21 | linear | | |
| 198 | 197 | 2 | 0 | fill | ditch | natural silting | 2.59 | 1.1 | 0.21 | | mid grey brown | silt sand |
| 199 | 199 | 2 | 0 | cut | ditch | drainage/bou ndary | 2 | 0.45 | 0.11 | linear | | |
| 200 | 199 | 2 | 0 | fill | ditch fill | disuse | 2 | 0.45 | 0.11 | | mid yellow brown | silty sand |
| 201 | 201 | 2 | 0 | cut | ditch | drainage/bou ndary | 2 | 0.67 | 0.18 | linear | | |
| 202 | 201 | 2 | 0 | fill | ditch fill | disuse | 2 | 0.67 | 0.18 | | mid grey brown | silty sand |
| 203 | 203 | 2 | 0 | cut | ditch | field boundary/dra inage | 1 | 0.65 | 0.24 | linear | | |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|---------------------------|-----------------------------|--------|---------|-------|-----------------|------------------|----------------|
| 204 | 203 | 2 | 0 | fill | ditch fill | disuse/silting | 1 | 0.65 | 0.24 | | mid grey brown | silty sand |
| 205 | 205 | 2 | 0 | fill | ditch | drainage/boundary | 2 | 1.05 | 0.4 | linear | | |
| 206 | 205 | 2 | 0 | fill | ditch fill | disuse | 2 | 1.05 | 0.4 | | mid grey brown | silty sand |
| 207 | 207 | 2 | 0 | cut | ditch | boundary/drainage | 1 | 0.84 | 0.23 | linear | | |
| 208 | 207 | 2 | 0 | fill | ditch fill | natural silting | 1 | 0.84 | 0.21 | | mid yellow brown | silty sand |
| 209 | 209 | 2 | 0 | cut | ditch | drainage/boundary | 1 | 0.43 | 0.1 | linear | | |
| 210 | 209 | 2 | 0 | fill | ditch fill | drainage | 1 | 0.43 | 0.1 | | mid grey brown | silty sand |
| 211 | 211 | 2 | 0 | cut | sink hole | natural feature | 1 | 1 | 0.8 | sub-circular | | |
| 212 | 211 | 2 | 0 | fill | sinkhole fill | natural infilling | 1 | 1 | 0.8 | | mid grey brown | silty sand |
| 213 | 213 | 2 | 0 | cut | pit | unknown | 1.4 | 1.1 | 0.48 | sub-circular | | |
| 214 | 213 | 2 | 0 | fill | pit fill | disuse | 1.4 | 1.1 | 0.48 | | dark brown | silty sand |
| 215 | 33 | 1 | 2 | masonry | kiln | brick/tile production | 0.88 | 0.35 | 0.15 | | | |
| 216 | | 2 | | void | | | | | | | | |
| 217 | 217 | 2 | 0 | cut | sinkhole | natural feature | 1.05 | 1 | 0.6 | sub-circular | | |
| 218 | 217 | 2 | 0 | fill | sinkhole fill | natural infilling | 1.05 | 1 | 1 | | mid grey brown | silty sand |
| 219 | 219 | 2 | 0 | cut | sinkhole | natural feature | 1.44 | 1.23 | 0.53 | sub-circular | | |
| 220 | 219 | 2 | 0 | fill | sinkhole fill | natural infilling | 1.44 | 1.23 | 0.53 | | mid grey brown | silty sand |
| 221 | 221 | 2 | 0 | cut | sinkhole | natural feature | 0.9 | 0.9 | 0.6 | circular | | |
| 222 | 221 | 2 | 0 | fill | sinkhole fill | natural infilling | 0.9 | 0.9 | 0.6 | | mid grey brown | silty sand |
| 223 | 223 | 2 | 0 | cut | sinkhole | natural feature | 1.18 | 1.02 | 0.54 | circular | | |
| 224 | 223 | 2 | 0 | fill | sinkhole fill | natural infilling | 1.18 | 1.02 | 0.54 | | mid yellow brown | silty sand |
| 225 | 225 | 2 | 0 | cut | sinkhole | natural feature | 1.5 | 1.45 | 0.9 | sub-circular | | |
| 226 | 255 | 2 | 0 | fill | sinkhole fill | natural feature | 1.5 | 1.45 | 0.9 | | mid grey brown | silty sand |
| 227 | 227 | 2 | 0 | cut | sinkhole | natural feature | 2 | 1.2 | 0.7 | sub-oval | | |
| 228 | 227 | 2 | 0 | fill | sinkhole fill | natural feature | 2 | 1.2 | 0.7 | | mid grey brown | silty sand |
| 229 | | 1 | 2 | masonry | kiln | group number for kiln | 11.85 | 3.71 | 0.75 | | | |
| 230 | 230 | 1 | 2 | cut | construction cut for kiln | cut for brick kiln | 12.99 | 1.2 | 0.55 | sub-rectangular | | |
| 231 | 231 | 1 | 2 | cut | construction cut | kiln construction cut | 13.9 | 1.64 | 0.56 | sub-rectangular | | |
| 232 | 232 | 1 | 2 | cut | pit | refuse/waste pit at the end | 4.78 | 4.36 | 0.54 | sub-circular | | |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|---------------------|----------------------------|--------|---------|-------|---------------|-------------------|----------------|
| | | | | | | of kiln group 229 | | | | | | |
| 233 | 230 | 1 | 2 | masonry | wall | kiln wall | 5.35 | 0.12 | 0.54 | | | |
| 234 | 230 | 1 | 2 | masonry | wall | kiln wall | 6.7 | 0.12 | 0.75 | | | |
| 235 | 231 | 1 | 2 | masonry | wall | kiln wall | 6.8 | 0.15 | 0.56 | | | |
| 236 | 231 | 1 | 2 | masonry | wall | kiln wall | 6.95 | 0.14 | 0.6 | | | |
| 237 | 230 | 1 | 2 | layer | kiln chamber base | floor of kiln | 5.4 | 0.9 | 0.05 | | mid grey red | silty clay |
| 238 | 231 | 1 | 2 | fill | kiln chamber base | kiln floor remnant | 6.9 | 0.9 | 0.05 | | mid grey red | silty clay |
| 239 | 239 | 1 | 2 | cut | pit | extraction quarry pit | 9.27 | 2.1 | 0.5 | rectangular | | |
| 240 | 239 | 1 | 2 | fill | extraction pit fill | backfill | 9.27 | 2.1 | 0.5 | | mid grey brown | silty sand |
| 241 | 230 | 1 | 2 | masonry | brick kiln | industrial | 13.05 | 1.18 | 0.75 | | | |
| 242 | 231 | 1 | 2 | masonry | brick kiln | industrial | 13.62 | 1.77 | 0.6 | | | |
| 243 | 231 | 1 | 2 | fill | backfill | collapse and kiln backfill | 1 | 1.54 | 0.3 | | mid red grey | silty clay |
| 244 | 231 | 1 | 2 | fill | kiln fill | redeposited clay | 1 | 1.32 | 0.38 | | mid orange yellow | silty clay |
| 245 | 231 | 1 | 2 | fill | kiln fill | tread on top of kiln floor | 1 | 1.54 | 0.03 | | dark brown grey | silty clay |
| 246 | 231 | 1 | 2 | fill | kiln fill | dumped waste deposit | 1 | 1.52 | 0.12 | | mid grey yellow | silty clay |
| 247 | 231 | 1 | 2 | fill | kiln fill | waste deposit | 1 | 1.52 | 0.04 | | dark grey black | silty clay |
| 248 | 231 | 1 | 2 | fill | kiln fill | disuse | 1 | 1.52 | 0.03 | | mid grey yellow | silty clay |
| 249 | 231 | 1 | 2 | fill | kiln fill | backfill | 1 | 1.74 | 0.03 | | mid brown grey | silty clay |
| 250 | 230 | 1 | 2 | fill | kiln fill | backfill | 0.5 | 2.1 | 0.3 | | mid brown yellow | silty clay |
| 251 | 230 | 1 | 2 | fill | kiln fill | backfill | 0.5 | 1.16 | 0.32 | | mid brown red | silty clay |
| 252 | 230 | 1 | 2 | fill | kiln fill | backfill | 0.5 | 1.08 | 0.3 | | mid grey brown | silty clay |
| 253 | 232 | 1 | 2 | fill | pit fill | backfill | 1 | 2.84 | 0.2 | | mid brown red | silty clay |
| 254 | 232 | 1 | 2 | fill | pit fill | backfill | 1 | 2.56 | 0.32 | | light grey | silty clay |
| 255 | 232 | 1 | 2 | fill | pit fill | kiln waste | 0.5 | 3.4 | 0.1 | | dark grey black | silty clay |
| 256 | 232 | 1 | 2 | fill | pit fill | waste dump | 0.2 | 0.97 | 0.1 | | dark brown grey | silty clay |
| 257 | 242 | 1 | 2 | fill | kiln fill | backfill | 13.62 | 0.9 | 0.55 | | mid red brown | silty clay |
| 258 | 241 | 1 | 2 | fill | kiln fill | backfill | 13.05 | 0.9 | 0.55 | | mid red brown | silty clay |
| 259 | 259 | 1 | 2 | cut | pit | extraction/quarry | 9.11 | 5.26 | 1.8 | sub-circular | | |
| 260 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 1.5 | 0.2 | | mid grey brown | sandy clay |
| 261 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 2.15 | 0.3 | | dark grey black | coke |
| 263 | 259 | 1 | 2 | fill | pit fill | backfill | 12 | 5.02 | 1.52 | | mid grey brown | sandy clay |
| 264 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 1.5 | 0.1 | | mid grey brown | sandy clay |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|--------------|----------------------------|--------|---------|-------|---------------|--------------------------|----------------|
| 265 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 3.7 | 0.7 | | light brown grey | sandy clay |
| 266 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 2.8 | 0.6 | | mid red | brick dust |
| 267 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 1.5 | 0.14 | | light brown grey | sandy clay |
| 268 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 2.3 | 0.3 | | mid red | brick dust |
| 269 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 0.7 | 0.08 | | light grey brown | sandy clay |
| 270 | 259 | 1 | 2 | fill | pit fill | backfill | 2 | 1.4 | 0.3 | | mid red | brick dust |
| 271 | 271 | 1 | 2 | cut | pit | extraction | 8.45 | 3.7 | 0.54 | indeterminate | | |
| 272 | 271 | 1 | 2 | fill | pit fill | | 8.45 | 3.4 | 0.3 | | dark grey brown | sandy clay |
| 273 | 271 | 1 | 2 | fill | pit fill | | 8.45 | 3.7 | 0.42 | | light grey brown | clay |
| 274 | 271 | 1 | 2 | fill | pit fill | | 1.8 | 0.76 | 0.32 | | dark grey | clay |
| 275 | 275 | 1 | 2 | cut | pit fill | industrial | 1.8 | 1.3 | 0.4 | irregular | | |
| 276 | 275 | 1 | 2 | fill | pit fill | disuse | 1.8 | 1.32 | 0.26 | | dark brown grey | clay |
| 277 | 275 | 1 | 2 | fill | pit fill | disuse | 1.8 | 1.16 | 0.05 | | mid yellow brown | clay |
| 278 | 275 | 1 | 2 | fill | pit fill | disuse | 1.8 | 1.2 | 0.16 | | dark brown grey | clay |
| 279 | 279 | 1 | 2 | cut | pit | quarry | 2 | 3.9 | 0.98 | sub-circular | | |
| 280 | 279 | 1 | 2 | fill | pit fill | rubbish tip layer | 2 | 3.9 | 0.56 | | dark grey | silty clay |
| 281 | 279 | 1 | 2 | fill | pit fill | refuse layer | 2 | 1.4 | 0.51 | | light yellowish brown | silty sand |
| 282 | 279 | 1 | 2 | fill | pit fill | waster/refuse dump | 2 | 2.8 | 0.5 | | mid yellow brown | silty sand |
| 283 | 283 | 1 | 2 | cut | pit | extraction | 3.8 | 1.3 | 1.3 | sub-oval | | |
| 284 | 283 | 1 | 2 | fill | pit fill | dump layer | 3.8 | 1.3 | 0.23 | | mid brown yellow | sandy clay |
| 285 | 283 | 1 | 2 | fill | pit fill | dump | 3.8 | 1.3 | 0.2 | | mid to dark yellow brown | sand clay |
| 286 | 283 | 1 | 2 | fill | pit fill | dump | 3.8 | 1.3 | 0.3 | | mid dark brown | sand clay |
| 287 | 283 | 1 | 2 | fill | pit fill | dump | 3.8 | 1.3 | 0.6 | | mid yellow green | sand clay |
| 288 | 288 | 1 | 2 | cut | pit | extraction pit/waster dump | 0.3 | 0.6 | 0.3 | sub-circular | | |
| 289 | 288 | 1 | 2 | fill | pit fill | dump | 0.3 | 0.6 | 0.3 | | mid yellow brown | sand clay |
| 290 | 42 | 1 | 2 | fill | pit fill | backfill | 1.2 | 0.8 | 0.2 | | mid brown grey | silt sand |
| 291 | 42 | 1 | 2 | fill | pit fill | backfill | 0 | 1.58 | 0.48 | | mid red brown | sand silt |
| 292 | 42 | 1 | 2 | fill | pit fill | backfill | 0 | 1.62 | 1.09 | | mid yellow brown | sand silt |
| 293 | 293 | 1 | 2 | cut | pit | extraction | 1.55 | 1.2 | 0.8 | sub-circular | | |
| 294 | 293 | 1 | 2 | fill | pit fill | backfill | 1.55 | 1.2 | 0.8 | | mid grey brown | silt sand |
| 295 | 295 | 1 | 2 | cut | pit | extraction | 1.8 | 1.6 | 0.8 | rectangular | | |
| 296 | 295 | 1 | 2 | fill | pit fill | backfill | 1.8 | 1.6 | 0.8 | | mid grey | sandy clay |
| 297 | 297 | 1 | 2 | cut | pit | extraction | 1.7 | 1.5 | 1.2 | sub-circular | | |
| 298 | 297 | 1 | 2 | fill | pit fill | backfill | 1.7 | 1.5 | 0.5 | | mid grey brown | silt clay |

| Context | Cut | Area | Phase | Category | Feature Type | Function | Length | Breadth | Depth | Shape In Plan | Colour | Fine Component |
|---------|-----|------|-------|----------|--------------|------------|--------|---------|-------|-----------------|-------------------|----------------|
| 299 | 297 | 1 | 2 | fill | pit fill | backfill | 1.7 | 1.5 | 0.7 | | mid yellow brown | silt clay |
| 300 | 300 | 1 | 2 | cut | pit | waste pit | 2.85 | 1.26 | 0.24 | irregular | | |
| 301 | 300 | 1 | 2 | fill | pit fill | waste dump | 2.85 | 1.26 | 0.24 | | mid red | clay |
| 302 | 302 | 1 | 2 | cut | pit | extraction | 2.5 | 2.1 | 0.24 | sub-circular | | |
| 303 | 302 | 1 | 2 | fill | pit fill | disuse | 2.5 | 2.1 | 0.24 | | mid brown grey | sandy silt |
| 304 | 304 | 1 | 2 | cut | pit | extraction | 1.2 | 0.4 | 0.14 | sub-rectangular | | |
| 305 | 304 | 1 | 2 | fill | pit fill | disuse | 1.2 | 0.4 | 0.14 | | dark brown grey | sandy clay |
| 306 | 306 | 1 | 2 | cut | pit | extraction | 2 | 1.7 | 0.3 | irregular | | |
| 307 | 306 | 1 | 2 | fill | pit fill | disuse | 2 | 1.7 | 0.3 | | dark grey | silty clay |
| 308 | 308 | 1 | 2 | cut | pit | disuse | 2.15 | 1.36 | 0.28 | sub-circular | | |
| 309 | 308 | 1 | 2 | fill | pit fill | disuse | 1.06 | 1.06 | 0.16 | | mid grey brown | silty clay |
| 310 | 308 | 1 | 2 | fill | pit fill | disuse | 2.15 | 1.36 | 0.14 | | light grey yellow | clay silt |
| 311 | 311 | 1 | 2 | cut | pit | extraction | 5.18 | 4.21 | 0.5 | amorphous | | |
| 312 | 311 | 1 | 2 | cut | pit fill | backfill | 5.18 | 4.21 | 0.38 | | dark grey brown | sandy clay |
| 313 | 311 | 1 | 2 | fill | pit fill | disuse | 0.5 | 2.7 | 0.3 | | mid yellow brown | sandy clay |
| 314 | 311 | 1 | 2 | fill | pit fill | backfill | 0.5 | 0.9 | 0.25 | | mid yellow brown | sandy clay |
| 315 | 311 | 1 | 2 | fill | pit fill | backfill | 0.5 | 3.5 | 0.2 | | mid grey | sandy clay |
| 316 | 311 | 1 | 2 | fill | pit fill | backfill | 0.5 | 3.6 | 0.1 | | dark yellow brown | clay |
| 317 | 317 | 1 | 2 | cut | pit | extraction | 2 | 1.66 | 1.04 | sub-rectangular | | |
| 318 | 318 | 1 | 2 | cut | pit | extraction | 3.52 | 1.51 | 0.2 | sub-rectangular | | |
| 319 | 319 | 1 | 2 | fill | pit fill | disuse | 3.52 | 1.51 | 0.2 | | mid grey brown | silty clay |
| 331 | 331 | 1 | 2 | cut | pit | extraction | 5.3 | 4.2 | | oval | Charcoal lenses | |

APPENDIX B ARTEFACT ASSESSMENTS

B.1 Metal objects

By Denis Sami

Introduction

B.1.1 Thirteen iron artefacts were recovered from the archaeological excavation. The small assemblage is composed of incomplete hand-forged nails (eight in total), a fitting, the base of a large vessel and a pair of shears dating to the post-medieval or modern periods.

Methodology

B.1.2 The metalwork was assessed according to the Oxford Archaeology East metalwork finds standard, based guidance by the Historical Metallurgy Society (HMS, Datasheets 104 and 108), the *Archaeometallurgy Guidelines for best practice* (Historic England 2015) and the 2013, *Guidelines for the Storage and Display of Archaeological Metalwork* (English Heritage 2013).

B.1.3 The Portable Antiquities Scheme (PAS) database was used as reference in the description of the shears and Geoff Egan's volume about the medieval household (1998) was used as a main reference in the description of the metalwork generally.

B.1.4 All the metalwork excavated was quantified using an Access database. All artefacts were counted and classified on a context by context basis.

B.1.5 The catalogue is organised by small find (SF) number and feature, description and measurements are reported. Of the eight incomplete nails from SF 3 context **94**, only the average thickness of the shaft is reported in the catalogue.

B.1.6 Given its poor preservation and undiagnostic character, the chronology of the metalwork has been largely based on the date of the associated ceramic material.

Factual Data

B.1.7 Metal objects were recovered from pits, ditches and a kiln dating to the post-medieval periods (Phase 2).

B.1.8 The overall preservation of artefacts is poor, finds are incomplete, heavily encrusted and oxidised.

Statement of Potential

B.1.9 Given its size and preservation, this assemblage cannot offer a valid contribute to the discussion of the general site research objectives.

Recommendations

B.1.10 X-ray analysis is suggested for shears SF 1 and vessel SF 8, following it will be reviewed (with the pottery specialist initially) whether all metal finds can be dispersed.

Catalogue

| SF | Context | Cut | Feature | Artefact | Description | Length | Width | Thickness | Date |
|----|---------|-----|------------|----------|---|--------|-------|-----------|--------------|
| 1 | 17 | 16 | ditch | Shears | Incomplete shears, only the two blades and part of the connector stem survive. The blades have a straight back and slightly curved cutting edge. Between the blade and the connecting loop of each blade is placed a sub-rectangular blade stopper. | 92.4 | 13.2 | 3.3 | PMED/ MOD |
| 6 | 7 | 6 | ditch | nail | An incomplete and very encrusted tapering shaft of a nail with sub-square cross-section | 46.8 | 8.1 | | PMED/ MOD |
| 3 | 94 | 21 | kiln | nail | Eight incomplete hand-forged nails with sub-square tapering shaft and flat circular head | ND | ND | 4.8 | PMED/ MOD |
| 7 | 282 | 279 | Quarry pit | nail | A long and incomplete nail with sub-square cross-section tapering shaft and sub-square flat head | 70.1 | 18.1 | 6.2 | PMED/ MOD |
| 8 | 43 | 42 | Quarry pit | vessel | An incomplete large vessel heavily encrusted. Only part of the base and the wall are preserved | 188.4 | 81.6 | 6.8 | MOD |
| 9 | 287 | 283 | Quarry pit | fitting | An incomplete fitting with a tapering rectangular cross-section shaft | 45.8 | 19.8 | 7.2 | PMED/ MOD |

Table 16. Catalogue of iron objects (all from Phase 2)

B.2 Lithics

By Lawrence Billington

Introduction

- B.2.1 A total of 49 worked flints and almost 5kg of unworked burnt flint were hand-collected during the excavation, with a further 1459g of unworked burnt flint recovered from the residues of a bulk sample taken from Phase 1 sinkhole feature **132**. The hand-collected flint assemblage is quantified by type and context in Table 17 whilst the burnt flint derived from the sampling of feature **132** is quantified separately, by weight alone, in Table 18.
- B.2.2 The flint assemblage derives exclusively from the fills of features, mostly from a series of natural sinkhole features and from discrete pits, with a single flint also coming from the fill of ditch **151**. All are provisionally phased to Phase 1, although this will be reviewed during analysis.

| Context type | Pit | | | | Sinkhole | | | | | | | | Ditch | Totals |
|----------------------------|----------|----------|----------|----------|----------|----------|-----------|-----------|----------|----------|----------|----------|----------|-----------|
| Cut | 48 | 123 | 159 | 295 | 121 | 128 | 132 | 141 | 145 | 157 | 163 | 169 | 151 | |
| Context | 49 | 125 | 160 | 296 | 122 | 129 | 134 | 142 | 146 | 158 | 164 | 170 | 152 | |
| Irregular waste | - | - | - | - | - | - | - | 1 | - | - | - | 1 | - | 2 |
| Secondary flake | - | 1 | 1 | 1 | 2 | 1 | 10 | 7 | 4 | 1 | 5 | - | 1 | 34 |
| Tertiary flake | - | - | - | - | - | - | 1 | 2 | 1 | - | 1 | 1 | - | 6 |
| Secondary blade-like flake | - | - | 1 | - | - | - | - | 1 | - | - | 1 | - | - | 3 |
| Tertiary blade-like flake | 1 | - | - | - | - | - | - | - | - | - | 1 | - | - | 2 |
| Core | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 |
| Scraper | - | - | - | - | - | - | - | - | 1 | - | - | - | - | 1 |
| Total worked | 1 | 1 | 2 | 1 | 2 | 1 | 12 | 11 | 6 | 1 | 8 | 2 | 1 | 49 |
| Unworked burnt count | - | - | 4 | - | 1 | - | 235 | 10 | 6 | - | - | 2 | - | 258 |
| Unworked burnt weight (g) | - | - | 298 | - | 132 | - | 4189 | 196 | 83 | - | - | 53 | - | 4951 |

Table 17. Quantification of worked and hand-collected unworked burnt flint by context

| | | | |
|---------------------------------|------------|------|-------|
| Cut | 132 | | |
| Context | 134 | | |
| Sample | <6> | | |
| Fraction size | >5mm | <5mm | Total |
| Unworked burnt flint weight (g) | 1073 | 386 | 1459 |

Table 18. Quantification (by weight) of unworked burnt flint recovered from bulk sampling of fill of sinkhole 132

Sinkhole features

- B.2.3 Seven of the sinkholes investigated during the excavation produced flint assemblages; all of these produced small quantities of worked flint (between 1 and 12 pieces per feature) and in three cases (features **141**, **145** and **169**) this worked flint was accompanied by small quantities of heavily burnt flint. Feature **132** was exceptional in producing a much larger assemblage of unworked burnt flint – with over 4kg recovered during hand-collection and almost 1.5kg more deriving from wet sieving of a bulk sample of its fill (Tables 17 and 18).
- B.2.4 The worked flint from these features (total 41) was overwhelmingly dominated by unretouched flakes, with only one retouched piece identified and a single core. The

flint was generally in good, fresh condition – unrecorticated and with little edge damage or rounding. There was however, a degree of variability in the condition of the assemblages from individual features – most notably in the case of the flintwork from sinkhole **163**, which displayed somewhat more edge damage and breakage and which had a less coherent character to the other assemblages.

- B.2.5 Judging by the character and morphology of surviving cortical surfaces, all of the flint appears to derive from sub-rounded fluvial flint cobbles/nodules which would have been readily available in the extensive glacio-fluvial gravels of the local area. There was no evidence for the exploitation of flint derived directly from (or from sources closely related to) the parent chalk – which does outcrop at some points on the side of the Yare valley a short distance to the north.
- B.2.6 Most of the flint appears to be the product of a relatively simple flake-based technology employing direct hard-hammer percussion to remove flakes from unspecialised single or multiple platform cores. Although simple, the majority of the removals are well-struck and include some pieces with regular dorsal scar patterns and/or blade-like morphologies. Amongst the unretouched removals is one possible axe-thinning/finishing flake (a fine tertiary removal possibly removed during the latter stages of axehead production, from feature **169**), and the proximal end of a regular tertiary flake which may have been deliberately broken (feature **141**). The only core recovered is a minimally worked piece with some a mixture of flake and narrow flake/blade-like scars (feature **132**). The only obviously retouched or utilised piece is an end scraper, made on a regular, relatively narrow flake with minimal abrupt retouch on its the hinged distal end (feature **145**).
- B.2.7 None of the worked flint is strongly diagnostic and the assemblage as a whole is likely to be chronologically mixed, but the presence of relatively systematically produced flake-based material suggests that it largely dates to the Neolithic and/or Early Bronze Age, whilst the possible axe-thinning flake is likely to be of Neolithic date. There is no clear evidence for any true blade-based material of Mesolithic/earlier Neolithic date, nor is there any clear evidence for the kind of expediently/crudely worked material associated with Middle/Late Bronze Age and Iron Age flintworking.
- B.2.8 The burnt flint is made up heavily fractured and crazed fragments of flint which seems to derive from the same kind of flint cobbles/nodules as the worked flint. This material was highly fragmented, with few pieces measuring in excess of 50mm in maximum dimension and the sieved sample from sinkhole **134** yielding many very small fragments and spalls.

Pits

- B.2.9 Five pits produced small quantities of flint; one or two pieces of worked flint were recovered from all five of these features, with two also producing small quantities of unworked burnt flint (Table 17). In terms of raw material and condition the worked flint is closely comparable from the material derived from the sinkholes, although one flake from pit **295** is heavily worn and edge-damaged. The flint from these features consists entirely of unretouched flakes/blade-like flakes and is closely comparable to the material from the sinkholes.

Ditches

B.2.10 A single secondary flake was recovered from ditch **151**.

Discussion

B.2.11 The small assemblage of worked flint from the excavations is made up almost exclusively of unretouched flake-based material and exhibited very few chronologically diagnostic features. Nonetheless, the technological traits of the material suggest the vast majority is of Neolithic to Early Bronze Age date. The flint was fairly thinly distributed, recovered largely from the fills of natural features and pits, and the precise circumstances of its deposition remain unclear. In the case of the sinkholes, it seems possible that these natural features could simply have acted as ‘traps’ for flintwork originally deposited in surface scatters across the site – although in some cases flintwork may have been deliberately deposited into these features – as seems to be the case for the large assemblage of burnt flint from sinkhole **132** (see below). In the case of the pits, whilst some of the flintwork may be broadly contemporary with the features from which it derived, it occurred in very low densities and is likely to largely represent residual material incidentally caught up in the fills of later cut features.

B.2.12 The small quantities of burnt flint recovered from several of the pits and sinkholes also seems likely to represent residual material, and at least some of this flint may represent pieces accidentally caught up in fire settings rather than having been deliberately heated. The large assemblage from sinkhole **132**, however, appears to represent a deliberate deposit of a relatively large accumulation of burnt flint that can only have derived from the deliberate heating of flint. Similar burnt flint assemblages are a persistent feature of most periods of prehistory in the region, with deposits containing large accumulations of unworked burnt flint and stone known from many Neolithic, Bronze Age and Iron Age sites. The large-scale use and deposition of heated flint is not, however, restricted to prehistory and there are a growing number of sites in the region where pits containing large quantities of burnt flint have been dated to the Early Saxon period (e.g. Garrow et al 2006; Andrews 1995; Caruth and Goffin 2012). There are many potential uses for deliberately heated flint and stone, including in cooking, brewing, textile/hide processing and bathing (see Hodder and Barfield 1991), but it is rarely possible to determine the precise function of the burnt flint assemblages from individual sites.

B.2.13 The flint assemblage from the excavations should be seen in the context of the very rich record of prehistoric activity along this part of the Yare Valley, which includes a very high density of ploughsoil lithic scatters of Mesolithic to Early Bronze Age date and major lithic assemblages derived from excavations of Neolithic-Early Bronze Age sites such as those at Eaton Heath (Wainwright 1973), the John Innes Centre (Whitmore 2004) and the Harford Park and Ride (Trimble 2004; Bishop 2012, 146-52).

Statement of potential

B.2.14 The relatively small worked flint assemblage from the excavations provides evidence for prehistoric activity at the site but has very little potential to provide more detailed

information on the date and nature of this activity. The large assemblage of burnt flint from sinkhole **132** is of some interest and if it could be dated would make a small but useful addition to the record of the use of heated flint in the region.

Recommendations

B.2.15 The assemblage has been fully catalogued and classified and no further analytical work is required. This report provides a full record of the assemblage and further work should be restricted to minor updating of the catalogue/report in light of the final dating/phasing of features; it would be especially useful if the likely date of the accumulation of burnt flint from sinkhole **132** could be established.

B.3 Burnt stone and fuel residues

By Simon Timberlake

Introduction and methodology

B.3.1 A small assemblage of coal and burnt fuel (coal cinders and shale) (226g, six pieces) and a large burnt stone (2.85kg) were recovered from contexts associated with the post-medieval (Phase 2) brick kilns in Area 1.

B.3.2 All the stone was identified visually using an illuminated x10 magnifying lens, and compared where necessary with an archaeological stone reference collection. A dropper bottle containing dilute hydrochloric acid was used to confirm the presence or absence of calcite.

| Context no. | Cut | Feature type | No pieces | Size (mm) | Wt. (g) | Geology | Source | NOTES |
|-------------|-----|--|-----------|--------------|---------|--------------------|---------------------------------------|-------------------------------|
| 5 | 4 | fill of boundary ditch | 1 | 170x170x45 | 2857 | dolerite | glacial erratic | lightly burnt + cracked |
| 7 | 6 | ditch | 1 | 30 | 9 | coal (anthracite?) | imported Carboniferous coalfield from | unburnt |
| 20 | 18 | pit with demolition rubble incl kiln brick | 3 | 30 + 55 + 65 | 31 | coal | imported Carboniferous coalfield from | fully burnt cinders |
| 39 | 38 | plough scar (gully) | 1 | 32 | 9 | coal shale | imported Carboniferous coalfield from | accomp coal + burnt with fuel |
| 287 | 283 | pit assoc with extraction pit dump | 1 | 75x60x55 | 177 | coal (anthracite?) | imported Carboniferous coalfield from | unburnt – only slightly worn |

Table 19: Catalogue of stone and fuel residues (all from Phase 2 features)

Discussion and statement of potential

B.3.3 There is little that can be said of this very small assemblage. It seems likely that the burnt slab-like glacial boulder of far-travelled dolerite is quite unrelated to the probable post-medieval use of fossil fuel which is most likely associated with the firing of the kilns, but instead that it relates to an earlier prehistoric presence, which as in Area 2, may well be Iron Age.

B.3.4 The most likely explanation for the presence of coal is that this was brought in as a higher calorific fuel suitable for the efficient running of the kiln. The high-ranking grade of coal suggests that this fuel may have come into the ports of Kings Lynn, Cromer or Yarmouth by boat, perhaps from mines in the North of England (Tyneside), the nearest other coalfield accessible by the land route being in Nottinghamshire, although this was barely developed at the time. Turner (1921,2) in referring to the 17th-century coal trade mentions that this business was chiefly being carried on from Hull, Yarmouth and 'Larpool' in Lancashire – almost all of it being brought in from the Tyneside (Newcastle) and Durham coalfields (see Commons Journal I, 685 for 1637). Coal from Newcastle was being used in London in 1662 to make bricks (Pepys 1662), whilst by 1696 Norfolk 'officials' had declared that the fuel of their county was then 'almost entirely of coal' (Commons Journal XI, 421). Whilst the latter seems to be an exaggeration, considering the very high dependence still upon peat, it does at least suggest that coal would have been the fuel chosen for any sort of industrial activity at the time (potteries, brickworks and iron smelting), and that the source for this would probably still exclusively have been the Newcastle and Durham mines.

Recommendations for further work

B.3.5 No further work is required on this assemblage.

Retention, dispersal and display

B.3.6 All this material can be discarded.

B.4 Glass

By Carole Fletcher

Introduction

B.4.1 Archaeological works produced a moderate assemblage of glass, 97 shards, weighing 4.449kg. The assemblage is entirely vessel glass, with a minimum number of vessels (MNV) of 34, the majority of which are utility bottles, many of them dark olive green (natural black) glass bottles. A number of pharmaceutical bottles or phials were also recovered.

Methodology

B.4.2 The glass was scanned and catalogued, weighed and recorded, as individual vessels where possible. The glass that is not closely datable may be dated by association with the pottery and other material with which it was often found. All dates given for the phase are those assigned by the excavator. The terminology used in the report and the catalogue, for the various glass forms, is taken from *Glass Through The Ages* (Barrington Haynes 1969), *Antique Glass Bottles Their History and Evolution (1500-1850)* (Van den Bossche 2001), *A Guide to Artifacts of Colonial America* (Hume 1969), *The Parks Canada Glass Glossary* (Jones and Sullivan et al 1989) and *Early post-*

medieval vessel glass in England c.1500-1670 (Willmott 2002). The glass is catalogued in Table 20.

Factual data

- B.4.3 Archaeological works produced a moderate assemblage of glass, 97 shards weighing 4.449kg. The vessel glass was recovered mainly from a small number of post-medieval clay extraction pits in Area 1 and a single post-hole in Area 2. By weight, pit **18** produced the largest assemblage (1.897kg of glass), including a complete mid 18th-early 19th century bottle. Pit **283**, which also produced a large assemblage of post-medieval pottery, contained 1.470kg of glass, 32 shards, representing a minimum of 21 vessels. Pit **279** produced 1.061kg, 35 shards, representing a minimum number of seven vessels.
- B.4.4 The bulk of the assemblage from all features is mostly dark olive green utility bottles, most probably for wine, dating from the 17th to early to mid 19th century, with most bottles falling into the period from the late 17th to early 18th century.
- B.4.5 Pits **279** and **283** each produced a bottle seal. From **283**, a complete oval bottle seal (SF4) of pale olive green glass (now completely opaque) was recovered. Embossed I (crossed) H, either side of an ornate 4 or key with trefoil loops at the base (or top); the initials represent JH (J was written as I). The heavy patination suggests an early bottle, however, not enough of the glass bottle itself survives to suggest a form. The bottle seal (SF5) recovered from pit **279** is incomplete, formed from pale olive green glass, which is heavily iridised and flaking, with resultant surface loss. The circular seal is impressed onto a slightly sub-circular blob on the bottle. The upper right quadrant of the seal is mostly absent, it is embossed FOOR[D], and below which is a 6-pointed star (made up of lines); the curvature of the surviving glass suggests the bottle may not have been cylindrical. If parallels for these seals can be found, a date may be established.

| Phase | Area | Cut | Glass Type | Shard Count | MNV | Weight (kg) | % of Total Assemblage |
|------------------------|--|-----|--|-------------|-----------|--------------|-----------------------|
| Period 2 Post-medieval | 1 | 4 | Utility bottle | 1 | 1 | 0.019 | 0.4 |
| | | 18 | Utility bottle | 27 | 3 | 1.884 | 42.3 |
| | | | Utility bottle or pharmaceutical bottle (Short-necked bottle or phial) | 1 | 1 | 0.013 | 0.3 |
| | | 279 | Utility bottle | 35 | 7 | 1.061 | 23.8 |
| | | 283 | Utility bottle | 31 | 20 | 1.457 | 37.2 |
| | Utility bottle or pharmaceutical bottle (Short-necked bottle or phial) | | 1 | 1 | 0.013 | 0.3 | |
| | 2 | 177 | Utility bottle | 1 | 1 | 0.002 | <0.1 |
| Total | | | | 97 | 34 | 4.449 | 100 |

Table 20: Assemblage by Phase and Area

Discussion

- B.4.6 The majority of the material was recovered from pits and the assemblage is fragmented, the exception being the complete mid 18th-early 19th century bottle recovered from pit **18**, which may have been one of the latest deposits into the feature.
- B.4.7 Some of the glass may be redeposited, for example in post-hole **177** and ditch **4**, and thus may not accurately represent the glass usage on site. However, the bulk of the glass assemblage dating fits with the pottery recovered from the site (See Anderson App. B.6) and also with the clay tobacco pipe dating (See Fletcher App. B.9). The presence of the 17th-18th century glass utility vessels may relate to the drinking habits of the potters or the brickmakers who subsequently used the clay extraction pits for deposition of ceramic materials and small amounts of domestic rubbish, possibly the remains of meals eaten at the site. It is possible that the pits were used for rubbish deposition by the occupants of Newfound Farm in the later part of the 18th century, although if this was the case, larger amounts of domestic rubbish might have been expected.
- B.4.8 Consumption is the main focus of the glass assemblage. The mostly dark olive green (natural black) or green glass utility (wine) bottles are the most common form recovered.

Statement of potential

- B.4.9 The fragmentation of the assemblage and its redeposited nature mean it has limited potential to aid local, regional and national research priorities. However, the bottle seal could be examined and compared with other Norwich assemblages to enable more refined dating.

Recommendations for further work

- The bottle seals should be examined and if possible, parallels found.
- For the bulk of the assemblage, no further work is recommended, beyond preparing a statement for publication and the catalogue acts as a full archival record.

Retention, dispersal and display

- B.4.10 The complete bottle and the bottle seal should be retained. The remainder of the glass may be deselected prior to archive deposition.

Task list

| | | |
|--|---------------------------------|------|
| The bottle seal should be looked at and if possible, parallels found, and report written | Glass Specialist | 0.25 |
| Prepare a statement for publication for the rest of the glass, with the catalogue acting as a full archival record | Glass specialist or main author | 0.25 |

B.5 Prehistoric pottery

By Nick Gilmour

Introduction

- B.5.1 The excavation yielded 32 sherds of prehistoric pottery (114g) with a mean sherd weight (MSW) of 3.6g. The pottery was recovered from five contexts relating to pits, a ditch and natural features (Table 21).
- B.5.2 The pottery dates from the Early Neolithic, Late Neolithic and Early Late Iron Age. It includes a small assemblage of Grooved Ware, along with a small number of feature sherds characteristic of Early Iron Age ceramics, together with fabrics typically associated with these ceramic traditions in the region.
- B.5.3 The pottery is in moderate to poor condition. Most of the sherds are small and abraded, while the Early Iron Age pottery is generally in better condition.

| Cut | Context | No sherds | Wt (g) | Feature Type | Spot Date |
|-------|---------|-----------|--------|--------------|-----------|
| 18 | 19 | 1 | 12 | pit | ENEO |
| 123 | 125 | 13 | 55 | pit | EIA |
| 132 | 134 | 1 | 2 | sinkhole | prehist |
| 142 | 141 | 16 | 42 | sinkhole | LNEO |
| 151 | 152 | 1 | 3 | ditch | Prehist |
| Total | | 32 | 114 | | |

Table 21: Quantification of prehistoric pottery

Methodology

- B.5.4 All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2011). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group. Sherd type was recorded, along with evidence for surface treatment, decoration, and the presence of soot and/or residue. Rim and base forms were described using a codified system recorded in the catalogue and were assigned vessel numbers. Where possible, rim and base diameters were measured, and surviving percentages noted. In cases where a sherd or groups of refitting sherds retained portions of the rim, shoulder and/or other diagnostic features, the vessel was categorised by ceramic tradition (Grooved Ware, Collared Urn etc.)
- B.5.5 All pottery was subject to sherd size analysis. Sherds less than 4cm in diameter were classified as 'small' (29 sherds); sherds measuring 4-8cm were classified as 'medium' (three sherds), any sherds over 8cm in diameter would have been classified as 'large', but none were present. The quantified data is presented on an Excel data sheet held with the site archive.

Factual data

B.5.6 Four different fabrics were identified within the pottery assemblage and some diagnostic feature sherds are also present. This allows the majority of the pottery to be assigned a date. However, two sherds (5g) could not be closely dated.

Prehistoric pottery fabrics

B.5.7 The four fabrics identified are listed below and the quantification of the pottery by fabric is given in Table 22.

F1: frequent medium flint, slightly sandy matrix

F2: moderate fine flint

F3: sparse fine flint

G1: frequent medium grog

| Fabric | No sherds | Weight (g) | Date |
|--------|-----------|------------|-------------|
| F1 | 1 | 3 | Prehistoric |
| F1 | 1 | 12 | ENE0 |
| F2 | 12 | 52 | EIA |
| F3 | 1 | 2 | prehistoric |
| F3 | 1 | 3 | EIA |
| G1 | 16 | 42 | LNE0 |

Table 22: Quantification of prehistoric pottery by fabric

Early Neolithic pottery

B.5.8 A single sherd (12g) of Early Neolithic pottery was recovered from deposit 19, within post-medieval (Phase 2) pit **18**. This sherd is in fabric F1 and is from the rim of a vessel. The rim is a diagnostic Early Neolithic form; rounded and slightly thickened externally, with the clay having been folded back on itself. The fabric this sherd is in is also typical of pottery from the Early Neolithic in this region. The sherd does not preserve enough of the profile for the form to be reliably defined. However, there is no evidence of a shoulder and so this sherd it likely to be from a simple rounded bowl. This sherd was recovered from a feature containing post-medieval material and so is likely to be residual.

Late Neolithic pottery

B.5.9 A total of 16 sherds (42g) of Late Neolithic pottery was recovered. All of this was found within natural (Phase 1) feature **141**. All the Late Neolithic sheds are body sherds and in the same fabric; G1 (frequent medium grog). Three of the sherds are decorated externally with incised lines, which are typical of Grooved Ware pottery.

B.5.10 None of the decorated sherds are large enough to allow for any conclusion to be drawn about the overall decorative scheme of the vessel they came from. However, on two sherds more than one parallel groove is present. One sherd is decorated with three quite narrow grooves, suggesting it may be from a different vessel than the other two decorated sherds. The small number of sherds, together with a lack of any rim

fragments, makes it impossible to attribute this material to any of the sub-styles of the Grooved Ware ceramic tradition (Longworth 1971).

Early Iron Age pottery

B.5.11 A total of 13 sherds (55g) of pottery is of Early Iron Age date. All of this pottery was recovered from deposit 125, within Phase 1 pit **123**. Most of the Early Iron Age pottery (12 sherds, 52g) is in fabric F2, with a single sherd (3g) in fabric F3. All of the fragments are body sherds. A single sherd (10g) is decorated with a deep finger-tip impression. Decoration of this type is typical on Late Bronze Age and Early Iron Age ceramics from this region. The single sherd in fabric F3 (3g) is burnished on the exterior surface. This surface treatment, along with the fabric it is in, are typical of Early Iron Age finewares across this region.

Discussion

B.5.12 This is too small an assemblage to draw any but the broadest conclusions. However, it does show that activity was happening in this area during the Neolithic and Early Iron Age periods. As such, it does add to wider knowledge of the Yare valley in these periods.

Statement of Potential

B.5.13 The assemblage has little potential to aid the regional or local research objectives.

Recommendations for further work

B.5.14 This statement acts as a full record of the prehistoric pottery for the archive and no further work is required beyond summarising the information for publication and incorporating any evaluation data or that from nearby relevant sites.

Task list

| Description | Performed by | Days |
|---|-----------------------|------|
| No further work is required on the prehistoric pottery, unless the site is published, then the information should be summarised for the publication | Author of publication | 0.2 |

Retention, dispersal and display

B.5.15 The prehistoric pottery should be retained and deposited with the archive.

B.6 Post-medieval pottery

By Sue Anderson

Introduction

B.6.1 A total of 5237 sherds of pottery and kiln furniture (198.666kg) was recovered from 32 contexts. A further c.110kg (including some CBM) was discarded on site (C. Fletcher, pers. comm.). Table 23 provides a quantification by fabric. A summary catalogue is included in this appendix.

| Fabric | Code | Date range | No | Wt/g | eve | MNV |
|--------------------------------|--------|----------------|-------------|---------------|---------------|-------------|
| Glazed red earthenware | GRE | 16th-18th c. | 3359 | 128627 | 104.45 | 2548 |
| Iron glazed blackware | IGBW | 16th-18th c. | 200 | 8591 | 3.65 | 146 |
| Post-medieval redware | PMRW | 16th-18th c. | 1 | 124 | 0.15 | 1 |
| Post-medieval slipware | PMSW | 17th-18th c. | 154 | 5363 | 5.38 | 81 |
| Speckle glazed ware | SPEC | 17th-18th c. | 88 | 2663 | 1.02 | 62 |
| Tin glazed earthenware | TGE | 16th-18th c. | 86 | 1035 | 1.67 | 68 |
| Frechen stoneware | GSW4 | 16th-17th c. | 2 | 26 | | 2 |
| Westerwald stoneware | GSW5 | L.17th-19th c. | 2 | 26 | | 2 |
| North Italian marbled slipware | NIMS | E-M.17th c. | 4 | 43 | 0.11 | 1 |
| English stoneware | ESW | 17th-20th c. | 15 | 779 | 0.90 | 2 |
| Late slipped redware | LSRW | L.18th-19th c. | 14 | 308 | 0.58 | 2 |
| <i>Total pottery</i> | | | <i>3925</i> | <i>147585</i> | <i>117.91</i> | <i>2915</i> |
| Kiln furniture (redwares) | KF | 16th-18th c. | 1187 | 43791 | 16.70 | 554 |
| Kiln furniture (whiteware) | KF TGE | 16th-18th c. | 125 | 7290 | 1.24 | 98 |
| <i>Total kiln furniture</i> | | | <i>1312</i> | <i>51081</i> | <i>17.94</i> | <i>652</i> |
| Total | | | 5237 | 198666 | 135.85 | 3567 |

Table 23. Pottery quantification by fabric.

B.6.2 The assemblage is dominated by post-medieval material which spans the 16th to 18th centuries. A few sherds of potentially later pottery were also recovered.

Methodology

B.6.3 The pottery was sampled on site prior to recording, carried out by Carole Fletcher and based on strategy agreed between the present author, the OAE project manager (Nick Gilmour) and a Norfolk County Council archaeologist (Steve Hickling). The retained material from this initial sort included all sherds larger than c.2–3cm, all slip-decorated sherds, and most of the kiln props. Unfortunately the presence of tin glazed earthenware wasters and kiln furniture was not recognised until after the site had been returned to the developer, so the quantity is small and all sherds of this material were retained as a result.

B.6.4 The assemblage has been fully catalogued following MPRG guidelines (MPRG 2001) and terminology (MPRG 1998). Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). The minimum number of vessels (MNV) within each context was also recorded, but cross-fitting was not attempted unless particularly distinctive vessels were observed in more than one context. Unfortunately it was not possible to lay out the two largest contexts (43 and 286) in their entirety, and it is likely that the MNVs recorded for these two contexts are too high. A full

quantification by fabric, context and feature is available in archive. All fabrics were identified based on the Norwich post-Roman fabric series (Jennings 1981). The results were inputted directly onto an MS Access database.

Summary of the assemblage

B.6.5 The greater part of this assemblage comprises material from a pottery manufacturing waste dump. The pottery itself is largely glazed red earthenware with some iron-glazed blackware, slipware, speckle glazed ware and tin glazed earthenware. One stoneware vessel may also be a waster, but there is no evidence for stoneware manufacture on the site so far.

Redwares and related kiln furniture

B.6.6 The redwares include a variety of forms which can be paralleled in the Norwich corpus (Jennings 1981). Bowls, handled bowls/porrings, jars, large storage vessels, platters, dishes, pipkins and chamber pots were the most frequent types, but other forms such as dripping pans, chafing dishes, colanders, jugs, lids, mugs, pancheons and skillets were also found. Most were glazed, although a few unglazed fragments may provide evidence for biscuit-firing. A large unglazed vessel (recorded as PMRW) may be a horticultural pot. Colours of glaze varied from pale yellowish orange, through orange, reddish-brown, darker brown and black. Occasional examples were olive green in colour, usually due to underlying reduction, but a very small quantity of sherds with deliberate copper-toned green glaze were also found. It is not clear whether these represent residual late medieval and transitional wares, or whether they were a minor product of the Cringleford GRE industry. Decoration, other than glazing, was rare, a few vessels having incised wavy lines or thumbing of rims or lug handles, with a few applied thumbed strips at the necks of large storage vessels.

B.6.7 The most common blackware vessels were mugs (including both tall and short cylindrical types and large globular types), tygs and tankards, with a few jugs and jars also identified. Speckle glazed wares were also dominated by drinking vessels but also included jars, a jug and at least two puzzle jugs.

B.6.8 Slipwares were generally plates or dishes, but two possible mugs were also present. The range of decoration on the slipwares is comparable with the group published by Jennings as Metropolitan slipwares. Only a few of those were confirmed as products of the Harlow kilns by Davey (Jennings 1981, 97), comprising three candlesticks, two dishes and a mug. Based on the finds in the Cringleford assemblage, it is almost certain that the Norwich examples were made here, not at Harlow, and are therefore local rather than 'Metropolitan' slipware. However, the designs were variable and although they contained similar elements to those illustrated in the corpus, several will require illustration.

B.6.9 A high proportion of the redware sherds were over- or under-fired, the former reduced and hard with their glaze largely burnt off, and the latter oxidised, soft and with unfused glaze in the form of a white deposit. Many sherds were cracked, had glaze on the broken edges, or were warped and deformed.

- B.6.10 The redware kiln furniture comprised two main types: saggars and ring props. Two main characteristics enabled the identification of saggars, these being untrimmed flat bases and the presence of an angled 'corner' (appearing like a large lip at the rim and continuing down to the base). The rim forms themselves were not specific to saggars, being mainly beaded or flat-beaded types which were also found on jars and large storage vessels. Body sherds, separated on the basis of overfiring and warping, were recorded as possible saggars only when they were not completely glazed internally, but it is likely that some overfired sherds have been wrongly ascribed. Only two saggars were complete and full-height in profile, although a few very warped examples with iron-glazed blackware or speckle-glazed mugs still inside were also recovered. A few examples of bases had three large pulled 'stilts' internally. Many of the saggars bases, and a few vessel bases too, contained thick deposits of sandy mortar-like material. One base had a central hole, and one wall had a partial cut-out vent hole.
- B.6.11 A large number of ring stilts were found, all between c.45–80mm in diameter, although the majority were around 55–60mm. These were made of a rod of clay looped to form a roughly circular ring, and pinched to form small 'prongs' in three equidistant points on both sides with those on one side being in between pairs on the other side. The rings thus provided six small areas of support. They were used within larger jars and sometimes tripod-based pipkins to support smaller vessels, which were protected by the larger vessels instead of saggars. Traces of these occurred inside several large vessel bases, either as a complete or partial ring scar, or in the form of three small stilt scars in the form of an equilateral triangle.
- B.6.12 In addition to these purpose-made items, plain roof tiles were also used as expedient props and these are summarised in the CBM report. Also in the assemblage were a few sherds which appeared to have rubbed curving edges, and had possibly been used as tools.

Tin glazed earthenwares and related kiln furniture

- B.6.13 Only a small quantity of tin glazed earthenware vessels was recovered, all of which were wasters. Sherds included examples of biscuit-firing, unfused glaze, drips on broken edges and warped fragments. Identifiable forms included drug jars, plates, jugs, jars, a dish, a mug and a porringer. A few had traces of handpainted decoration, mostly blue, but occasionally black or brown. Sherds were generally small and decorative schemes were not identifiable.
- B.6.14 The larger proportion of the evidence for TGE production at this site was in the form of saggars. These comprised two main types. One form was short (93–98mm high) with a flat base, thin walls, thickened flat-topped rim and 'corner' lip similar to the redware saggars. The other was taller with thicker walls, flat base, a knife-cut flat-topped rim, and was less well-finished with a rough outer surface and striations internally. Both types had triangular cut-outs in the walls, probably for triangular clay props used to support plates. Two examples of these props were also found. At least three saggars bases had central circular holes. There were also white-firing flat tiles (see CBM).

Other pottery

- B.6.15 Only a few sherds were certainly not made at the site. Small body and base fragments of Frechen and Westerwald stoneware were found in contexts 19, 43 and 284. Four sherds of a North Italian marbled slipware vessel with a cavetto rim were found in context 43. Three sherds of a late slipped redware bowl came from context 280, and there were 11 fragments of a small plate with two slip lines at the rim which were in a LSRW fabric; these latter came from 280 and 285.
- B.6.16 Fragments of English (?London) stoneware representing two vessels were found. Five sherds of a bottle with a collared rim and part of a Bellarmine face mask on the neck were found in 286. Ten sherds of a ?jug in a grey fabric were found in 281, 282, 284 and 285. This latter appeared to be a waster because it was unglazed. It had applied wavy line decoration either side of the handle attachment, with a vertical line running below. Scratched initials 'I P' were placed either side of the handle attachment.

Pottery by context

- B.6.17 A summary of the pottery by feature is provided in Table 24. Spotdates are based on the date ranges for the fabrics, as GRE in particular is currently not closely dateable. However the presence of other fabrics in some contexts suggests a 17th- or possibly 18th-century date for much of the waste. Disturbance with intrusive late 18th-century pottery occurred in at least two contexts.
- B.6.18 The majority of pottery was recovered from the fills of two Phase 2 pits: pit **42** (2542 sherds, 89,509g) and pit **283** (2054 sherds, 82,703g), with a relatively large group also recovered from Phase 2 pit **279** (287 sherds, 11,821g). Perhaps of note, given that all slipwares and tin glazed earthenwares were retained, is that pit **42** contained noticeably more of the former and pits **279** and **283** almost all of the latter.

Significance

- B.6.19 Pottery wasters have been identified previously at Newfound Farm (Anderson 2013), and in a field to the south-west of the present site (site NHER 9406; Cherry 1977, 98), where fieldwalking in 1976 produced a scatter of post-medieval pottery wasters and kiln furniture, and a geophysical survey in 1977 indicated the presence of three possible kilns. There is documentary evidence for potters working in the area in the 17th century (held at the NHER), and this will need to be reviewed during the analysis stage. None of the pottery from the fieldwalked area has been studied in detail.
- B.6.20 Currently, all GRE from Norwich is given a broad date-range of 16th–18th century, based on Jennings' work which suggested that it was in use in the city from soon after the fire of 1507 (Jennings 1981, 157). The present author's work on an assemblage from Dragon Hall (Anderson 2005) suggested that it might be possible to see some changes in forms from the earliest to the latest deposits, but the assemblage there was too small to be certain. Comparison of the Cringleford assemblage suggests that certain forms in the Norwich corpus were not made here, perhaps indicating either a date or a source difference. Taken together, all the evidence from Cringleford appears to indicate a 17th-century date for the manufacturing waste assemblage. This includes the documentary evidence noted above, the use of saggars and ring stilts (the latter

are dated to the 17th century at Brill, Bucks, and Ash, Surrey; Cocroft 1985, 78), and the presence of a North Italian marbled slipware vessel in one context. Preliminary dates from the clay tobacco pipe assemblage appear to concur (C. Fletcher, pers. comm.).

- B.6.21 Few pottery production sites of this period have been identified in East Anglia so far. In Norfolk, wasters are known from Norfolk Street, Kings Lynn (Clarke and Carter 1977, 238-40), Wroxham (Jennings 1981, blackwares) and Fulmodestone (Wade Martins 1983). In Suffolk, kiln waste has been identified in the north of the county, particularly at Mendham and around Wattisfield, in the east at Hacheston (Owles and Smedley 1968, 77), to the south-east at Sutton (Anderson 2003) and centrally at Lawshall (Martin *et al.* 1990) and Stowmarket (Anderson 2015). Redwares, blackwares and slipwares were made in Ely (Cessford *et al.* 2006). All of these sites, together with others outside the region, will provide comparisons for the Cringleford assemblage at analysis.
- B.6.22 Tin-glazed earthenware production sites are also rare in the region. Norwich has the distinction of being the first town in England to have such a centre, based on documentary evidence which dates the original production to 1567, although this appears to have been short-lived (Goffin 2012). The documentary evidence does not provide a location for the 16th-century kiln, but it has been tied to waste found in Ber Street (*ibid*, 74). Of immediate interest in comparison with the Cringleford assemblage are two plate rims which show motifs (albeit in paint on a white background; *ibid*, figure 8) which are similar to those used on some of the Cringleford slipwares. Further study of the evidence for Ber Street production (which may also include redwares) in comparison with this site will be carried out at the analysis stage. If possible, it will be worth comparing samples from Ber Street with the Cringleford redwares and TGE to see if the fabrics are chemically distinct.

| Context | Feature | Phase | Type | GRE | IGBW | PMRW | PMSW | SPEC | TGE | NIMS | GSW4 | GSW5 | LSRW | ESW | KF | KF TGE | Spotdate |
|---------|---------|-------|------------|------|------|------|------|------|-----|------|------|------|------|-----|-----|--------|-----------|
| 7 | 6 | 2 | ditch fill | 2 | | | | | | | | | | | | | 16-18 |
| 8 | - | 2 | dump | 4 | | | | | | | | | | | 1 | | 16-18 |
| 19 | 18 | 2 | pit fill | | | | | | | | 1 | | | | | | 16-17 |
| 20 | 18 | 2 | pit fill | 41 | | | | | | | | | | | 6 | | 16-18 |
| 28 | 34 | 2 | backfill | 1 | | | | | | | | | | | | | 16-18 |
| 43 | 42 | 2 | pit | 1371 | 57 | 1 | 97 | 33 | | 4 | 1 | | | | 866 | | 17 |
| 58 | 56 | 2 | kiln | 40 | 1 | | | | | | | | | | | | 16-18 |
| 63 | 317 | 2 | pit | 9 | | | | | | | | | | | 9 | | 16-18 |
| 64 | 317 | 2 | pit | 118 | 1 | | 1 | 1 | | | | | | | 36 | | 17 |
| 68 | 42 | 2 | pit | 5 | 1 | | | | | | | | | | | | 16-18 |
| 69 | 42 | 2 | pit | 3 | | | 6 | | | | | | | | 1 | | 17 |
| 178 | 177 | 2 | post-hole | 1 | | | | | | | | | | | | | 16-18 |
| 238 | 231 | 2 | kiln | 1 | | | | | | | | | | | | | 16-18 |
| 265 | 259 | 2 | pit fill | 1 | | | | | | | | | | | 1 | | 16-18 |
| 272 | 271 | 2 | pit fill | 2 | | | | | | | | | | | | | 16-18 |
| 280 | 279 | 2 | pit fill | 102 | 19 | | 12 | 4 | 2 | | | | 1 | | 10 | 7 | 17 (L.18) |
| 281 | 279 | 2 | pit fill | | | | | | 27 | | | | | 6 | | 65 | M.17-18? |
| 282 | 279 | 2 | pit fill | 18 | | | | | 5 | | | | | 1 | 2 | 6 | 17-18? |
| 284 | 283 | 2 | pit fill | 53 | 9 | | 7 | 7 | 9 | | | 2 | 3 | 2 | 11 | 11 | L.18? |
| 285 | 283 | 2 | pit fill | 113 | 6 | | 5 | 8 | 29 | | | | 10 | 1 | 13 | 30 | L.18? |
| 286 | 283 | 2 | pit fill | 841 | 53 | | 18 | 27 | 5 | | | | | 5 | 120 | 5 | M.17-18? |
| 287 | 283 | 2 | pit fill | 513 | 51 | | | 8 | | | | | | | 79 | | 17-18 |
| 289 | 288 | 2 | pit fill | 6 | | | | | | | | | | | 2 | | 16-18 |
| 290 | 42 | 2 | pit fill | 38 | | | 5 | | | | | | | | 21 | | 17 |
| 291 | 42 | 2 | pit fill | 25 | | | 3 | | | | | | | | 4 | | 17 |
| 298 | 297 | 2 | pit fill | 1 | | | | | | | | | | | | | 16-18 |
| 299 | 297 | 2 | pit fill | 9 | | | | | | | | | | | | | 16-18 |
| 303 | 302 | 2 | pit fill | 10 | | | | | | | | | | | | | 16-18 |
| 307 | 306 | 2 | pit fill | | 1 | | | | | | | | | | | | 16-18 |
| 312 | 311 | 2 | pit fill | 31 | 1 | | | | 1 | | | | | | 4 | | 17-18 |
| 99999 | - | - | u/s finds | | | | | | 8 | | | | | | | 1 | 17-18 |

Table 24. Pottery fabrics present by context (sherd count).

Recommendations and methodology for analysis and retention

- B.6.23 The pottery has been catalogued in full based on minimum standards (MPRG 2001).
- B.6.24 A proportion of the assemblage will be selected for disposal, as requested by the client and agreed with the Norfolk County Council Archaeologist. Following Historic England guidelines (HE 2014), representative samples of kiln furniture, structural waste and pottery will be retained, including examples of all forms, fabrics, overfired material, and component parts (rims, handles, bases, etc.). It is expected that this discard will primarily affect the largest three contexts (**43, 286, 287**), with smaller contexts being retained in their entirety. Material which has been discarded will be noted in the database. The related CBM and kiln furniture groups are extremely uniform, and it is likely that less than 50% of the material by weight will be retained. The pottery assemblage is also very similar throughout the contexts but it is likely that approximately 60% of the pottery will be retained for potential future study, with the majority of discarded material being body sherds, some bases and a few abraded or small rim sherds. Samples of pottery will be offered to other specialists working in the area and to the National Reference Collection of Post-Medieval Pottery, and a sample will also be retained for the forthcoming Norfolk post-Roman pottery fabric series.
- B.6.25 Representative pieces of pottery, CBM and kiln waste have been highlighted for illustration/photography in the database. Up to 129 vessels were noted as having potential for illustration during the cataloguing – however some of these were selected before the whole assemblage had been seen, and consequently there may be better examples from other contexts. The final selection will be made at the analysis stage, but allowance should be made for up to 100 drawings and 50 photographs.
- B.6.26 Samples will be selected for chemical analysis. As noted above, if it is possible to obtain samples from the Ber Street kiln, it will be worth comparing the two groups. Two samples of each redware group (GRE, IGBW, PMSW) and the TGE will be submitted for ICP-MS analysis, together with one sample each from Ber Street, a total of 10 samples. It will also be of value to determine the chemical composition of the contents of some of the saggars, which appear similar to lime mortar with a high sand content, and which presumably relate to glazing (a further two samples).
- B.6.27 An archive report on the entire ceramic assemblage will be prepared, to include descriptions of the fabrics and form types identified, evidence for manufacturing methods, and comparison with contemporary kiln groups and other pottery assemblages elsewhere in the region and beyond. This will take into account other dating evidence from the site (radiocarbon (but see S.4.5 above), artefactual), and will include CBM associated with the pottery manufacturing waste. The assemblage will be compared with the Norwich corpus to determine whether it is possible to tighten the dating for any particular forms. A shorter version of the report will be compiled from this for publication.

Tasks for analysis

| No. | Task | Time |
|-----|--|---------------|
| 1 | Lay out pottery from contexts 43, 286 and 287 to look for further cross-matches, select vessels for illustration and samples for ICP-MS, and decide on discard of material | 1 day |
| 2. | Visit NHER to look for information on other sites in the Cringleford area (sampling of Ber Street material may be possible at the same time) | 1 day |
| 3. | Compare vessel forms with Norwich type series and prepare a form/rim typology for Cringleford | 1 day |
| 4. | Prepare a full archive report on the pottery and manufacturing waste | 3 days |
| 5. | Prepare a publication report from the archive report. | 1 day |
| | <i>Total</i> | <i>7 days</i> |

Additional work by other specialists

- Illustration of up to 100 items
- Photography of up to 50 items
- ICP-MS analysis of up to 12 samples
- 1-2 days of Carole Fletcher's time to lay out material and help with pottery discard

NB: Thin-section analysis is not recommended owing to the marked similarity of post-medieval fabrics across the region.

Pottery summary catalogue

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|------|----|------|-----|
| 7 | | GRE | | | 2 | 4 | 2 |
| 8 | | GRE | | | 4 | 65 | 3 |
| 8 | | KF | SAG | | 1 | 17 | 1 |
| 19 | | GSW4 | | | 1 | 9 | 1 |
| 20 | | GRE | | | 13 | 470 | 12 |
| 20 | | GRE | BL | EVBD | 1 | 57 | 1 |
| 20 | | GRE | JR | SQBD | 19 | 642 | 13 |
| 20 | | GRE | LSV | SQBD | 8 | 667 | 5 |
| 20 | | KF | RING | | 2 | 15 | 2 |
| 20 | | KF | SAG? | | 4 | 123 | 3 |
| 28 | | GRE | | | 1 | 34 | 1 |
| 43 | | GRE | COL | | 3 | 120 | 2 |
| 43 | | GRE | JR | | 4 | 334 | 1 |
| 43 | | GRE | PP? | | 1 | 85 | 1 |
| 43 | | GRE | TOOL? | | 2 | 53 | 2 |
| 43 | | GSW4 | | | 1 | 17 | 1 |
| 43 | | KF | SAG? | | 3 | 88 | 2 |
| 43 | | KF | SAG? | BD | 1 | 80 | 1 |
| 43 | 01 | GRE | | | 12 | 548 | 12 |
| 43 | 01 | GRE | BLH? | | 3 | 474 | 3 |
| 43 | 01 | GRE | JR? | | 11 | 1036 | 8 |
| 43 | 02 | GRE | | FTEV | 1 | 56 | 1 |
| 43 | 02 | GRE | BL | BD | 5 | 276 | 4 |
| 43 | 02 | GRE | BL | FTBD | 29 | 1047 | 13 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|---------|--------|-----|------|-----|
| 43 | 02 | GRE | BL | LSBD | 1 | 176 | 1 |
| 43 | 02 | GRE | BL? | BD | 1 | 7 | 1 |
| 43 | 02 | GRE | DS | BD | 6 | 495 | 2 |
| 43 | 02 | GRE | DS | EV | 2 | 37 | 1 |
| 43 | 02 | GRE | DS | EVBD | 2 | 50 | 2 |
| 43 | 02 | GRE | DS | THEV | 2 | 36 | 2 |
| 43 | 02 | GRE | PL | EVBD | 12 | 792 | 11 |
| 43 | 02 | GRE | PL | EVSQ | 1 | 30 | 1 |
| 43 | 02 | GRE | PL | HOOK | 2 | 37 | 2 |
| 43 | 02 | GRE | PL | THEV | 7 | 307 | 7 |
| 43 | 02 | GRE | PN | EVBD | 2 | 133 | 1 |
| 43 | 02 | GRE | PN | THEV | 3 | 204 | 2 |
| 43 | 03 | GRE | | | 133 | 3440 | 129 |
| 43 | 03 | GRE | BL | | 5 | 97 | 5 |
| 43 | 03 | GRE | BL | BD | 8 | 223 | 7 |
| 43 | 03 | GRE | BL | FTBD | 3 | 56 | 3 |
| 43 | 03 | GRE | CH? | FTTAP | 1 | 36 | 1 |
| 43 | 03 | GRE | DD | BD | 1 | 73 | 1 |
| 43 | 03 | GRE | DS | HOOK | 2 | 22 | 2 |
| 43 | 03 | GRE | JR | BD | 4 | 79 | 4 |
| 43 | 03 | GRE | JRH? | FTBD | 1 | 24 | 1 |
| 43 | 03 | GRE | PK | COLL | 4 | 77 | 3 |
| 43 | 03 | GRE | PK | LSEV | 1 | 40 | 1 |
| 43 | 03 | GRE | PK | SQBD | 1 | 17 | 1 |
| 43 | 03 | GRE | PL | | 1 | 14 | 1 |
| 43 | 03 | GRE | PL | BD | 2 | 48 | 2 |
| 43 | 03 | GRE | PL | EVBD | 1 | 17 | 1 |
| 43 | 03 | GRE | PL? | EVBD | 2 | 45 | 2 |
| 43 | 03 | GRE | PL? | THEV | 1 | 17 | 1 |
| 43 | 03 | GRE | SK | BD | 5 | 86 | 2 |
| 43 | 03 | GRE | SK | CAV | 1 | 26 | 1 |
| 43 | 03 | GRE | SK? | CAV | 1 | 15 | 1 |
| 43 | 04 | GRE | | | 20 | 380 | 20 |
| 43 | 04 | GRE | BLH | BD | 3 | 79 | 3 |
| 43 | 04 | GRE | BLH | TAPBD | 1 | 39 | 1 |
| 43 | 04 | GRE | JRH | BD | 1 | 69 | 1 |
| 43 | 04 | GRE | JRH | FTEV | 1 | 51 | 1 |
| 43 | 04 | GRE | JRH | LSCOLL | 1 | 74 | 1 |
| 43 | 04 | GRE | JRH? | FLAR | 1 | 50 | 1 |
| 43 | 04 | GRE | MG? | | 2 | 9 | 2 |
| 43 | 04 | GRE | PK | | 10 | 729 | 10 |
| 43 | 04 | GRE | PK? | | 6 | 231 | 6 |
| 43 | 05 | GRE | | | 40 | 1614 | 37 |
| 43 | 05 | KF | SAG? | | 1 | 12 | 1 |
| 43 | 06 | GRE | | | 4 | 130 | 4 |
| 43 | 06 | GRE | JR/SAG? | BD | 4 | 129 | 4 |
| 43 | 06 | GRE | JR/SAG? | COLL | 1 | 56 | 1 |
| 43 | 06 | GRE | JR/SAG? | FTBD | 2 | 85 | 2 |
| 43 | 06 | GRE | JR/SAG? | SQBD | 2 | 102 | 2 |
| 43 | 06 | GRE | JR? | BD | 2 | 57 | 2 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|-------------|-----|------|-----|
| 43 | 06 | KF | SAG? | | 82 | 3138 | 80 |
| 43 | 06 | KF | SAG? | FTEV | 1 | 27 | 1 |
| 43 | 07 | GRE | ? | BD | 1 | 19 | 1 |
| 43 | 07 | GRE | ? | UPEV | 1 | 14 | 1 |
| 43 | 07 | GRE | ? | UPPL | 1 | 3 | 1 |
| 43 | 07 | GRE | BL | BD | 20 | 509 | 14 |
| 43 | 07 | GRE | BL | EV | 4 | 110 | 4 |
| 43 | 07 | GRE | BL | FTBD | 1 | 29 | 1 |
| 43 | 07 | GRE | BL | SQBD | 2 | 64 | 2 |
| 43 | 07 | GRE | BL | TAP | 1 | 37 | 1 |
| 43 | 07 | GRE | BL | TAPBD | 3 | 53 | 3 |
| 43 | 07 | GRE | BL? | TAP | 1 | 17 | 1 |
| 43 | 07 | GRE | CH | FTBD | 10 | 313 | 4 |
| 43 | 07 | GRE | CH | FTEV | 10 | 320 | 7 |
| 43 | 07 | GRE | DS/BL | SQBD | 1 | 6 | 1 |
| 43 | 07 | GRE | JG | BD | 2 | 32 | 2 |
| 43 | 07 | GRE | JG | EVBD | 1 | 6 | 1 |
| 43 | 07 | GRE | JG | UPPL | 2 | 10 | 2 |
| 43 | 07 | GRE | JR | BD | 26 | 926 | 16 |
| 43 | 07 | GRE | JR | CAV COLL | 1 | 24 | 1 |
| 43 | 07 | GRE | JR | COLL | 3 | 138 | 3 |
| 43 | 07 | GRE | JR | LSCOLL | 1 | 77 | 1 |
| 43 | 07 | GRE | JR? | BD | 1 | 34 | 1 |
| 43 | 07 | GRE | JRH | CAV COLL | 1 | 101 | 1 |
| 43 | 07 | GRE | LSV | BD | 2 | 187 | 1 |
| 43 | 07 | GRE | LSV | LSCOLL | 2 | 109 | 1 |
| 43 | 07 | GRE | PK | COLL | 3 | 68 | 3 |
| 43 | 07 | GRE | PK/JR | LSCOLL | 1 | 24 | 1 |
| 43 | 07 | GRE | PK/SK | COLL | 3 | 70 | 1 |
| 43 | 07 | GRE | PK? | LSEV | 4 | 71 | 1 |
| 43 | 07 | GRE | SK | BD | 1 | 23 | 1 |
| 43 | 07 | GRE | SK? | BD | 4 | 42 | 1 |
| 43 | 08 | GRE | | | 1 | 38 | 1 |
| 43 | 08 | GRE | BLH | | 2 | 48 | 2 |
| 43 | 08 | GRE | PK | | 3 | 221 | 2 |
| 43 | 08 | GRE | PK/SK | | 1 | 42 | 1 |
| 43 | 09 | GRE | BL | BD | 1 | 31 | 1 |
| 43 | 09 | GRE | PL | EVBD | 1 | 31 | 1 |
| 43 | 09 | GRE | PL | HOOK | 1 | 42 | 1 |
| 43 | 09 | GRE | PL | THEV | 2 | 124 | 2 |
| 43 | 10 | GRE | | | 143 | 2592 | 133 |
| 43 | 10 | GRE | DS/PL | | 3 | 90 | 3 |
| 43 | 11 | GRE | BL | BD | 2 | 70 | 2 |
| 43 | 11 | GRE | BLH | BD | 1 | 348 | 1 |
| 43 | 11 | GRE | BLH | FLAR | 2 | 82 | 1 |
| 43 | 11 | GRE | JG | BD | 1 | 14 | 1 |
| 43 | 12 | GRE | LD | PL | 4 | 226 | 4 |
| 43 | 13 | PMSW | PL | EVBD | 31 | 1131 | 3 |
| 43 | 14 | NIMS | BL | CAV | 4 | 43 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|---------|-------|-----|------|-----|
| 43 | 14 | PMSW | | | 7 | 95 | 7 |
| 43 | 14 | PMSW | DS | EV | 1 | 9 | 1 |
| 43 | 14 | PMSW | DS | THEV | 1 | 6 | 1 |
| 43 | 14 | PMSW | DS? | THEV | 1 | 17 | 1 |
| 43 | 14 | PMSW | MG? | UPPL | 2 | 13 | 2 |
| 43 | 14 | PMSW | PL | CAV | 1 | 79 | 1 |
| 43 | 14 | PMSW | PL | EVBD | 15 | 484 | 6 |
| 43 | 14 | PMSW | PL | HOOK | 1 | 101 | 1 |
| 43 | 14 | PMSW | PL | THEV | 4 | 80 | 3 |
| 43 | 14 | PMSW | PL/DS | THEV | 3 | 87 | 2 |
| 43 | 15 | PMSW | PL | | 13 | 469 | 8 |
| 43 | 15 | PMSW | PL | EVBD | 5 | 350 | 3 |
| 43 | 15 | PMSW | PL | EVTAP | 1 | 40 | 1 |
| 43 | 15 | PMSW | PL | THEV | 11 | 344 | 5 |
| 43 | 16 | GRE | | | 104 | 3058 | 98 |
| 43 | 16 | GRE | | BD | 1 | 45 | 1 |
| 43 | 16 | GRE | | BD? | 1 | 29 | 1 |
| 43 | 16 | GRE | ? | FTEV | 1 | 17 | 1 |
| 43 | 16 | GRE | BL | BD | 14 | 309 | 12 |
| 43 | 16 | GRE | BL | CAV | 3 | 86 | 1 |
| 43 | 16 | GRE | BL | EV | 2 | 30 | 2 |
| 43 | 16 | GRE | BL | FTBD | 3 | 79 | 2 |
| 43 | 16 | GRE | BL | FTEV | 1 | 20 | 1 |
| 43 | 16 | GRE | BL | TAPBD | 2 | 30 | 2 |
| 43 | 16 | GRE | BL? | | 2 | 94 | 2 |
| 43 | 16 | GRE | BL? | CAV | 1 | 21 | 1 |
| 43 | 16 | GRE | BLH | | 3 | 52 | 3 |
| 43 | 16 | GRE | BLH | BD | 5 | 176 | 5 |
| 43 | 16 | GRE | BLH? | BD | 2 | 18 | 2 |
| 43 | 16 | GRE | BLH? | FTBD | 1 | 9 | 1 |
| 43 | 16 | GRE | CD | | 1 | 23 | 1 |
| 43 | 16 | GRE | CH | FTBD | 3 | 79 | 2 |
| 43 | 16 | GRE | CH/JR | FTBD | 2 | 44 | 2 |
| 43 | 16 | GRE | CH/JR | FTEV | 1 | 16 | 1 |
| 43 | 16 | GRE | DD | UPPL | 1 | 60 | 1 |
| 43 | 16 | GRE | DS | | 1 | 14 | 1 |
| 43 | 16 | GRE | DS | EVBD | 1 | 9 | 1 |
| 43 | 16 | GRE | DS/PL | BD | 1 | 18 | 1 |
| 43 | 16 | GRE | DS/PL | THEV | 1 | 41 | 1 |
| 43 | 16 | GRE | DS? | THEV | 2 | 42 | 2 |
| 43 | 16 | GRE | JG | | 1 | 23 | 1 |
| 43 | 16 | GRE | JG | BD | 1 | 7 | 1 |
| 43 | 16 | GRE | JR | BD | 12 | 427 | 10 |
| 43 | 16 | GRE | JR | COLL | 3 | 101 | 3 |
| 43 | 16 | GRE | JR | FTBD | 2 | 117 | 2 |
| 43 | 16 | GRE | JR | SQBD | 1 | 61 | 1 |
| 43 | 16 | GRE | JR/JG? | BD | 1 | 13 | 1 |
| 43 | 16 | GRE | JR/PK | COLL | 1 | 24 | 1 |
| 43 | 16 | GRE | JR/SAG? | SQBD | 1 | 28 | 1 |
| 43 | 16 | GRE | LSV | | 5 | 621 | 2 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|---------|-------|-----|------|-----|
| 43 | 16 | GRE | PK | | 1 | 36 | 1 |
| 43 | 16 | GRE | PK | COLL | 7 | 202 | 6 |
| 43 | 16 | GRE | PL | EVBD | 1 | 25 | 1 |
| 43 | 16 | GRE | PL | HOOKE | 1 | 19 | 1 |
| 43 | 16 | GRE | PL | THEV | 1 | 37 | 1 |
| 43 | 16 | GRE | PL/DS | | 5 | 160 | 5 |
| 43 | 16 | GRE | PL? | THEV | 1 | 24 | 1 |
| 43 | 16 | GRE | PN? | EV | 1 | 28 | 1 |
| 43 | 16 | GRE | SK/BLH? | FLAR | 1 | 11 | 1 |
| 43 | 16 | GRE | SK? | BD | 1 | 45 | 1 |
| 43 | 16 | GRE | SK? | EV | 1 | 5 | 1 |
| 43 | 17 | GRE | DD | LSBD | 3 | 546 | 1 |
| 43 | 17 | GRE | PL | HOOKE | 1 | 246 | 1 |
| 43 | 17 | GRE | PL | THEV | 1 | 98 | 1 |
| 43 | 18 | GRE | JR | | 3 | 566 | 2 |
| 43 | 18 | GRE | PK | | 1 | 49 | 1 |
| 43 | 18 | GRE | SK? | | 1 | 23 | 1 |
| 43 | 19 | GRE | | | 12 | 584 | 12 |
| 43 | 19 | GRE | BL | BD | 4 | 238 | 4 |
| 43 | 19 | GRE | BL | EV | 1 | 16 | 1 |
| 43 | 19 | GRE | BL | FTEV | 5 | 224 | 4 |
| 43 | 19 | GRE | BL | SQBD | 1 | 156 | 1 |
| 43 | 19 | GRE | BL | TRBD | 1 | 32 | 1 |
| 43 | 19 | GRE | BLH | EVBD | 2 | 66 | 1 |
| 43 | 19 | GRE | DD | FTBD | 1 | 56 | 1 |
| 43 | 19 | GRE | DD | UPPL | 2 | 373 | 1 |
| 43 | 19 | GRE | DS | HOOKE | 1 | 12 | 1 |
| 43 | 19 | GRE | LD | PL | 1 | 12 | 1 |
| 43 | 19 | GRE | PL | | 1 | 20 | 1 |
| 43 | 19 | GRE | PL | EVBD | 9 | 536 | 7 |
| 43 | 19 | GRE | PL | THEV | 5 | 321 | 4 |
| 43 | 19 | PMRW | HORT? | THEV | 1 | 124 | 1 |
| 43 | 20 | GRE | | | 17 | 690 | 17 |
| 43 | 20 | GRE | BL | FTBD | 3 | 115 | 2 |
| 43 | 20 | GRE | DD | LSBD | 1 | 238 | 1 |
| 43 | 20 | GRE | DS/PL | THEV | 1 | 17 | 1 |
| 43 | 20 | GRE | PL | EV | 1 | 50 | 1 |
| 43 | 20 | GRE | PL | EVBD | 17 | 1114 | 10 |
| 43 | 20 | GRE | PL | EVSQ | 1 | 93 | 1 |
| 43 | 20 | GRE | PL | HOOKE | 2 | 55 | 1 |
| 43 | 20 | GRE | PL | THEV | 2 | 87 | 2 |
| 43 | 20 | GRE | PN | EVBD | 2 | 102 | 2 |
| 43 | 21 | KF | RING | | 281 | 2975 | |
| 43 | 22 | KF | SAG? | | 59 | 3182 | 58 |
| 43 | 22 | KF | SAG? | BD | 14 | 546 | 12 |
| 43 | 23 | GRE | | | 7 | 751 | 6 |
| 43 | 23 | GRE | BLH | | 1 | 162 | 1 |
| 43 | 23 | GRE | DD | | 1 | 110 | 1 |
| 43 | 23 | GRE | LSV? | | 3 | 694 | 2 |
| 43 | 24 | KF | JR/SAG? | BD | 1 | 64 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|---------|-------|-----|------|-----|
| 43 | 24 | KF | JR/SAG? | FTBD | 2 | 198 | 1 |
| 43 | 24 | KF | SAG? | | 36 | 2552 | 35 |
| 43 | 24 | KF | SAG? | BD | 11 | 528 | 7 |
| 43 | 24 | KF | SAG? | FTBD | 2 | 229 | 2 |
| 43 | 25 | GRE | | | 10 | 489 | 9 |
| 43 | 25 | GRE | ? | FTBD? | 1 | 17 | 1 |
| 43 | 25 | GRE | ? | FTEV | 1 | 30 | 1 |
| 43 | 25 | GRE | BL | BD | 1 | 37 | 1 |
| 43 | 25 | GRE | BL | TRBD | 1 | 76 | 1 |
| 43 | 25 | GRE | CH? | FTBD | 2 | 183 | 2 |
| 43 | 25 | GRE | CH? | FTEV | 1 | 22 | 1 |
| 43 | 25 | GRE | JR | BD | 3 | 104 | 3 |
| 43 | 25 | GRE | JR | TRBD | 1 | 33 | 1 |
| 43 | 25 | GRE | JR? | BD | 2 | 125 | 2 |
| 43 | 25 | GRE | JR? | COLL | 1 | 21 | 1 |
| 43 | 26 | GRE | | | 161 | 2533 | 122 |
| 43 | 26 | GRE | BL | BD | 2 | 23 | 2 |
| 43 | 26 | GRE | BL | EV | 2 | 24 | 2 |
| 43 | 26 | GRE | BL | FTEV | 1 | 37 | 1 |
| 43 | 26 | GRE | BL? | | 1 | 7 | 1 |
| 43 | 26 | GRE | BLH | | 1 | 14 | 1 |
| 43 | 26 | GRE | BLH | BD | 1 | 17 | 1 |
| 43 | 26 | GRE | DS | | 1 | 9 | 1 |
| 43 | 26 | GRE | DS | THEV | 1 | 62 | 1 |
| 43 | 26 | GRE | JG | FLAR | 1 | 8 | 1 |
| 43 | 26 | GRE | JR | BD | 6 | 159 | 6 |
| 43 | 26 | GRE | JR | COLL | 2 | 24 | 2 |
| 43 | 26 | GRE | JR/PK | COLL | 1 | 81 | 1 |
| 43 | 26 | GRE | LD | | 1 | 45 | 1 |
| 43 | 26 | GRE | LD | PL | 1 | 7 | 1 |
| 43 | 26 | GRE | PK | | 1 | 33 | 1 |
| 43 | 26 | GRE | PL | EVBD | 1 | 43 | 1 |
| 43 | 26 | GRE | PL | THEV? | 1 | 14 | 1 |
| 43 | 26 | GRE | PL/BL? | EVBD? | 1 | 24 | 1 |
| 43 | 26 | GRE | PL? | THEV | 1 | 29 | 1 |
| 43 | 27 | KF | SAG | | 30 | 2373 | 20 |
| 43 | 27 | KF | SAG? | | 2 | 23 | 2 |
| 43 | 27 | KF | SAG? | BD | 19 | 860 | 16 |
| 43 | 27 | KF | SAG? | FTBD | 9 | 379 | 7 |
| 43 | 27 | KF | SAG? | TAPBD | 1 | 102 | 1 |
| 43 | 28 | GRE | BL/SAG? | | 1 | 94 | 1 |
| 43 | 28 | GRE | BL? | CAV | 1 | 9 | 1 |
| 43 | 28 | GRE | CH/JR | FTBD | 1 | 53 | 1 |
| 43 | 28 | GRE | JG? | TAPBD | 1 | 6 | 1 |
| 43 | 28 | GRE | JR | BD | 3 | 62 | 3 |
| 43 | 28 | GRE | JR | COLL | 5 | 70 | 4 |
| 43 | 28 | GRE | JR | SQBD | 1 | 31 | 1 |
| 43 | 28 | GRE | JR/SAG | FTEV | 2 | 35 | 1 |
| 43 | 28 | GRE | JR/SAG? | FTBD | 1 | 66 | 1 |
| 43 | 28 | GRE | JR? | TAPBD | 1 | 15 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|---------|--------|-----|------|-----|
| 43 | 29 | GRE | JR | FTBD | 1 | 56 | 1 |
| 43 | 29 | KF | SAG | | 9 | 612 | 3 |
| 43 | 29 | KF | SAG | BD | 7 | 262 | 7 |
| 43 | 30 | KF | SAG | | 18 | 852 | |
| 43 | 30 | KF | SAG? | | 121 | 3631 | |
| 43 | 31 | GRE | | | 17 | 438 | 15 |
| 43 | 31 | GRE | CH | FTEV | 1 | 29 | 1 |
| 43 | 31 | GRE | JR/PK | COLL | 1 | 23 | 1 |
| 43 | 31 | GRE | JR/SAG? | FTBD | 1 | 23 | 1 |
| 43 | 31 | KF | SAG | | 11 | 1046 | 11 |
| 43 | 31 | KF | SAG | SQBD | 1 | 169 | 1 |
| 43 | 31 | KF | SAG? | BD | 2 | 76 | 2 |
| 43 | 32 | KF | SAG | BD | 11 | 1174 | 1 |
| 43 | 33 | GRE | | | 68 | 2226 | 65 |
| 43 | 33 | GRE | BL | SQBD | 1 | 15 | 1 |
| 43 | 33 | GRE | CH | FTBD | 6 | 264 | 2 |
| 43 | 33 | GRE | JR | BD | 4 | 92 | 4 |
| 43 | 33 | GRE | JR | FTEV | 2 | 47 | 2 |
| 43 | 33 | GRE | JR | LSEV | 1 | 30 | 1 |
| 43 | 33 | GRE | JR | UPBD | 2 | 47 | 1 |
| 43 | 33 | GRE | JR/PK | COLL | 6 | 192 | 6 |
| 43 | 33 | GRE | PK | COLL | 4 | 179 | 4 |
| 43 | 33 | GRE | PK? | COLL | 1 | 19 | 1 |
| 43 | 33 | GRE | PL? | | 1 | 30 | 1 |
| 43 | 33 | GRE | SK | COLL | 1 | 13 | 1 |
| 43 | 33 | GRE | SK | LSCOLL | 1 | 9 | 1 |
| 43 | 34 | KF | JR/SAG? | BD | 2 | 52 | 2 |
| 43 | 34 | KF | JR/SAG? | COLL | 1 | 43 | 1 |
| 43 | 34 | KF | SAG | | 10 | 674 | |
| 43 | 34 | KF | SAG | BD | 5 | 296 | 3 |
| 43 | 34 | KF | SAG | FTBD | 1 | 48 | 1 |
| 43 | 34 | KF | SAG | FTEV | 3 | 206 | 3 |
| 43 | 34 | KF | SAG? | | 15 | 344 | |
| 43 | 35 | GRE | LSV | LSCOLL | 6 | 1837 | 2 |
| 43 | 36 | GRE | | | 10 | 338 | 10 |
| 43 | 36 | GRE | CH | FTEV | 3 | 160 | 3 |
| 43 | 36 | GRE | JR | BD | 2 | 87 | 2 |
| 43 | 36 | GRE | JR | FTEV | 2 | 52 | 1 |
| 43 | 36 | GRE | JR/PK | FLAR | 1 | 42 | 1 |
| 43 | 36 | GRE | PK? | COLL | 1 | 16 | 1 |
| 43 | 36 | KF | SAG | | 16 | 867 | 11 |
| 43 | 36 | KF | SAG | BD | 17 | 582 | 16 |
| 43 | 36 | KF | SAG | FTBD | 1 | 36 | 1 |
| 43 | 36 | KF | SAG | FTEV | 2 | 129 | 2 |
| 43 | 36 | KF | SAG? | | 54 | 1739 | |
| 43 | 36 | KF | SAG? | BD | 1 | 31 | 1 |
| 43 | 36 | KF | SAG? | FTEV | 3 | 125 | 3 |
| 43 | 37 | IGBW | | | 9 | 99 | 9 |
| 43 | 37 | IGBW | JG | BD | 1 | 31 | 1 |
| 43 | 37 | IGBW | JG? | | 2 | 79 | 2 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|--------|----|------|-----|
| 43 | 37 | IGBW | JR | BD | 1 | 36 | 1 |
| 43 | 37 | IGBW | JR | FTBD | 1 | 32 | 1 |
| 43 | 37 | IGBW | MG | | 2 | 37 | 1 |
| 43 | 37 | IGBW | MG/TY | | 37 | 805 | 16 |
| 43 | 37 | IGBW | MG/TY | UPPL | 3 | 20 | 3 |
| 43 | 37 | IGBW | MG? | UPPL | 1 | 4 | 1 |
| 43 | 38 | SPEC | | | 8 | 71 | 5 |
| 43 | 38 | SPEC | CH? | | 1 | 83 | 1 |
| 43 | 38 | SPEC | JR? | | 3 | 155 | 1 |
| 43 | 38 | SPEC | MG | | 6 | 158 | 6 |
| 43 | 38 | SPEC | MG | UPPL | 11 | 217 | 2 |
| 43 | 38 | SPEC | PZIG | | 4 | 76 | 1 |
| 43 | sf 2 | GRE | | | 1 | 126 | 1 |
| 58 | | GRE | | | 16 | 695 | 7 |
| 58 | | GRE | BL | | 5 | 173 | 1 |
| 58 | | GRE | BL | FTEV | 1 | 53 | 1 |
| 58 | | GRE | BL? | THEV | 1 | 79 | 1 |
| 58 | | GRE | JR | BD | 1 | 82 | 1 |
| 58 | | GRE | LSV | | 16 | 1312 | 1 |
| 58 | | IGBW | MG | UPPL | 1 | 9 | 1 |
| 63 | | GRE | | | 3 | 91 | 3 |
| 63 | | GRE | BL/DS | | 1 | 19 | 1 |
| 63 | | GRE | BLH | LSEV | 1 | 19 | 1 |
| 63 | | GRE | BLH | UPBD | 2 | 11 | 1 |
| 63 | | GRE | DD | | 1 | 72 | |
| 63 | | GRE | PK | | 1 | 205 | 1 |
| 63 | | KF | RING | | 2 | 16 | 2 |
| 63 | | KF | SAG | | 3 | 104 | 3 |
| 63 | | KF | SAG | BD | 1 | 29 | 1 |
| 63 | | KF | SAG? | | 3 | 88 | 3 |
| 64 | | GRE | | | 58 | 1584 | 51 |
| 64 | | GRE | BL | BD | 3 | 62 | 3 |
| 64 | | GRE | BLH | BD | 1 | 21 | 1 |
| 64 | | GRE | CH | FTBD | 1 | 82 | 1 |
| 64 | | GRE | CH | FTEV | 1 | 33 | 1 |
| 64 | | GRE | CH? | FTBD | 2 | 54 | 1 |
| 64 | | GRE | COL | THEV | 1 | 99 | 1 |
| 64 | | GRE | DD | UPFT | 4 | 305 | 1 |
| 64 | | GRE | DD? | BD | 1 | 72 | 1 |
| 64 | | GRE | DS | BD | 1 | 41 | 1 |
| 64 | | GRE | DS | HOOK | 1 | 14 | 1 |
| 64 | | GRE | JR | BD | 15 | 812 | 6 |
| 64 | | GRE | JR | COLL | 5 | 166 | 5 |
| 64 | | GRE | JR | FTBD | 1 | 21 | 1 |
| 64 | | GRE | JR | FTEV | 1 | 23 | 1 |
| 64 | | GRE | JR | SQBD | 1 | 55 | 1 |
| 64 | | GRE | JR/CH | FTBD | 2 | 34 | 1 |
| 64 | | GRE | PK | | 1 | 79 | 1 |
| 64 | | GRE | PK | LSCOLL | 1 | 37 | 1 |
| 64 | | GRE | PL | EVBD | 9 | 551 | 3 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|--------|----|------|-----|
| 64 | | GRE | PL | THEV | 5 | 194 | 3 |
| 64 | | GRE | PL? | | 2 | 262 | 1 |
| 64 | | GRE | PN? | THEV | 1 | 119 | 1 |
| 64 | | IGBW | | | 1 | 3 | 1 |
| 64 | | KF | | | 7 | 220 | 7 |
| 64 | | KF | RING | | 5 | 204 | 5 |
| 64 | | KF | SAG | | 2 | 64 | 2 |
| 64 | | KF | SAG | BD | 4 | 135 | 3 |
| 64 | | KF | SAG | FTEV | 1 | 28 | 1 |
| 64 | | KF | SAG? | | 11 | 279 | 11 |
| 64 | | KF | SAG? | BD | 4 | 159 | 4 |
| 64 | | KF | SAG? | FTEV | 1 | 23 | 1 |
| 64 | | KF | SAG? | SQBD | 1 | 45 | 1 |
| 64 | | PMSW | | | 1 | 13 | 1 |
| 64 | | SPEC | MG | | 1 | 9 | 1 |
| 68 | | GRE | | | 2 | 295 | 1 |
| 68 | | GRE | BL | | 1 | 38 | 1 |
| 68 | | GRE | BL | TAPBD | 1 | 57 | 1 |
| 68 | | GRE | DD | LSCOLL | 1 | 163 | |
| 68 | | IGBW | | | 1 | 8 | 1 |
| 69 | | GRE | | | 1 | 53 | 1 |
| 69 | | GRE | BL | BD | 2 | 38 | 1 |
| 69 | | KF | RING | | 1 | 30 | 1 |
| 69 | | PMSW | DS | THEV | 1 | 33 | 1 |
| 69 | | PMSW | PL | THEV | 5 | 503 | 1 |
| 178 | | GRE | | | 1 | 23 | 1 |
| 238 | 8 | GRE | | | 1 | 3 | 1 |
| 265 | | GRE | | | 1 | 30 | 1 |
| 265 | | KF | SAG? | | 1 | 91 | 1 |
| 272 | | GRE | BL | EV | 1 | 34 | 1 |
| 272 | | GRE | DS? | THEV | 1 | 16 | 1 |
| 280 | | GRE | | | 64 | 1840 | 51 |
| 280 | | GRE | BL | | 1 | 67 | 1 |
| 280 | | GRE | BL | BD | 2 | 49 | 2 |
| 280 | | GRE | BL | FTEV | 2 | 39 | 1 |
| 280 | | GRE | BL/JR | FTEV | 1 | 24 | 1 |
| 280 | | GRE | CH? | SQBD | 1 | 30 | 1 |
| 280 | | GRE | CH? | THEV | 2 | 64 | 1 |
| 280 | | GRE | DD | LSBD | 2 | 97 | 2 |
| 280 | | GRE | DS | EVBD | 4 | 64 | 1 |
| 280 | | GRE | DS | UPPL | 1 | 100 | 1 |
| 280 | | GRE | JR | | 2 | 153 | 1 |
| 280 | | GRE | JR | COLL | 2 | 63 | 1 |
| 280 | | GRE | JR? | SQBD | 1 | 18 | 1 |
| 280 | | GRE | LD | PL | 2 | 18 | 1 |
| 280 | | GRE | LSV | | 1 | 273 | 1 |
| 280 | | GRE | LSV | FTBD | 1 | 147 | 1 |
| 280 | | GRE | PK | | 1 | 577 | 1 |
| 280 | | GRE | PK? | COLL | 2 | 23 | 2 |
| 280 | | GRE | PL | THEV | 10 | 275 | 2 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|------|----|------|-----|
| 280 | | IGBW | | | 14 | 314 | 12 |
| 280 | | IGBW | BL | FLAR | 1 | 24 | 1 |
| 280 | | IGBW | MG | | 1 | 15 | 1 |
| 280 | | IGBW | MG | UPPL | 1 | 3 | 1 |
| 280 | | IGBW | TK/TY | | 2 | 27 | 2 |
| 280 | | KF | RING | | 1 | 30 | 1 |
| 280 | | KF | SAG | | 7 | 404 | 2 |
| 280 | | KF | SAG? | BD | 2 | 51 | 2 |
| 280 | | KF TGE | SAG | | 4 | 367 | 3 |
| 280 | | KF TGE | SAG | UPTH | 1 | 18 | 1 |
| 280 | | KF TGE | SAG? | | 1 | 10 | 1 |
| 280 | | KF TGE | TILE? | | 1 | 82 | 1 |
| 280 | | LSRW | PL | EV | 1 | 34 | |
| 280 | | PMSW | DS | | 2 | 32 | 1 |
| 280 | | PMSW | DS/PL | | 1 | 17 | 1 |
| 280 | | PMSW | PL | THEV | 9 | 157 | 1 |
| 280 | | SPEC | | | 2 | 34 | 2 |
| 280 | | SPEC | MG? | | 1 | 19 | 1 |
| 280 | | SPEC | PK | SQBD | 1 | 45 | 1 |
| 280 | | TGE | | | 2 | 11 | 2 |
| 281 | | ESW | JG? | | 6 | 423 | 1 |
| 281 | | KF TGE | DISC | | 1 | 40 | 1 |
| 281 | | KF TGE | PROP | | 1 | 8 | 1 |
| 281 | | KF TGE | SAG | | 29 | 1888 | 22 |
| 281 | | KF TGE | SAG | UPFT | 34 | 2400 | 16 |
| 281 | | TGE | | | 13 | 116 | 10 |
| 281 | | TGE | DJ | | 1 | 10 | 1 |
| 281 | | TGE | JG | CAV | 10 | 127 | 2 |
| 281 | | TGE | JR | FLAR | 1 | 34 | 1 |
| 281 | | TGE | PL | | 2 | 32 | 1 |
| 282 | | ESW | | | 1 | 76 | |
| 282 | | GRE | | | 7 | 122 | 7 |
| 282 | | GRE | BL | SQBD | 1 | 17 | 1 |
| 282 | | GRE | BLH | | 1 | 110 | 1 |
| 282 | | GRE | CH | FTEV | 7 | 101 | 1 |
| 282 | | GRE | JR | SQBD | 1 | 37 | 1 |
| 282 | | GRE | PL | EVBD | 1 | 19 | 1 |
| 282 | | KF | SAG | | 1 | 64 | 1 |
| 282 | | KF | SAG? | | 1 | 33 | 1 |
| 282 | | KF TGE | SAG | | 3 | 235 | 3 |
| 282 | | KF TGE | SAG | UPFT | 2 | 145 | 2 |
| 282 | | KF TGE | TOOL? | | 1 | 7 | 1 |
| 282 | | TGE | | | 2 | 39 | 2 |
| 282 | | TGE | DJ | | 1 | 80 | |
| 282 | | TGE | JG | CAV | 1 | 21 | |
| 282 | | TGE | PL | EV | 1 | 22 | 1 |
| 284 | | ESW | | | 2 | 70 | |
| 284 | | GRE | | | 23 | 461 | 23 |
| 284 | | GRE | ? | BD | 1 | 20 | 1 |
| 284 | | GRE | BL | BD | 3 | 33 | 3 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|--------|--------|----|------|-----|
| 284 | | GRE | BL? | EV? | 1 | 17 | 1 |
| 284 | | GRE | BLH | | 1 | 13 | 1 |
| 284 | | GRE | BLH? | BD | 1 | 8 | 1 |
| 284 | | GRE | CH | FTBD | 4 | 106 | 4 |
| 284 | | GRE | CH | FTEV | 1 | 14 | 1 |
| 284 | | GRE | DS | THEV | 1 | 14 | 1 |
| 284 | | GRE | JR | COLL | 1 | 17 | 1 |
| 284 | | GRE | JR | FLAR | 1 | 33 | 1 |
| 284 | | GRE | JR | SQBD | 1 | 29 | 1 |
| 284 | | GRE | JR | UPFTTH | 1 | 23 | 1 |
| 284 | | GRE | JR? | BD | 1 | 20 | 1 |
| 284 | | GRE | LD | | 1 | 65 | 1 |
| 284 | | GRE | LD | PL | 1 | 9 | 1 |
| 284 | | GRE | LD? | | 1 | 9 | 1 |
| 284 | | GRE | LSV/DD | LSCOLL | 1 | 30 | 1 |
| 284 | | GRE | PK | | 2 | 27 | 2 |
| 284 | | GRE | PL | | 1 | 43 | 1 |
| 284 | | GRE | PL | EVBD | 4 | 105 | 3 |
| 284 | | GRE | PL? | EVBD | 1 | 17 | 1 |
| 284 | | GSW5 | | | 2 | 26 | 2 |
| 284 | | IGBW | | | 2 | 54 | 2 |
| 284 | | IGBW | MG | | 5 | 78 | 4 |
| 284 | | IGBW | MG | UPPL | 2 | 12 | 2 |
| 284 | | KF | RING | | 5 | 40 | 5 |
| 284 | | KF | SAG | | 3 | 93 | 3 |
| 284 | | KF | SAG? | BD | 2 | 58 | 2 |
| 284 | | KF | SAG? | FTBD | 1 | 57 | 1 |
| 284 | | KF TGE | SAG | | 8 | 277 | 8 |
| 284 | | KF TGE | SAG | UPFT | 3 | 165 | 3 |
| 284 | | LSRW | BL | FLAR | 3 | 41 | 1 |
| 284 | | PMSW | | | 4 | 67 | 4 |
| 284 | | PMSW | DS | EVBD | 2 | 27 | 2 |
| 284 | | PMSW | PL | COMP | 1 | 15 | 1 |
| 284 | | SPEC | | | 3 | 49 | 3 |
| 284 | | SPEC | JR? | UPPL | 1 | 16 | 1 |
| 284 | | SPEC | LSV | | 2 | 243 | 1 |
| 284 | | SPEC | PZIG? | | 1 | 8 | 1 |
| 284 | | TGE | | | 9 | 72 | 8 |
| 285 | | ESW | | | 1 | 19 | |
| 285 | | GRE | | | 64 | 1354 | 57 |
| 285 | | GRE | BL | BD | 2 | 46 | 1 |
| 285 | | GRE | BL | EVBD | 18 | 985 | 1 |
| 285 | | GRE | BL | FTEV | 1 | 14 | 1 |
| 285 | | GRE | BL? | FTEV | 1 | 22 | 1 |
| 285 | | GRE | BLH | BD | 1 | 26 | 1 |
| 285 | | GRE | DS/BL | | 1 | 16 | 1 |
| 285 | | GRE | JG? | FLAR | 1 | 31 | 1 |
| 285 | | GRE | JR | BD | 1 | 9 | 1 |
| 285 | | GRE | JR | COLL | 1 | 29 | 1 |
| 285 | | GRE | JR | FTBD | 1 | 27 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|--------|--------|----|------|-----|
| 285 | | GRE | JR | UPBD | 1 | 24 | 1 |
| 285 | | GRE | JR? | BD | 1 | 21 | 1 |
| 285 | | GRE | LSV | | 1 | 41 | 1 |
| 285 | | GRE | LSV | LSEV | 1 | 144 | 1 |
| 285 | | GRE | PK | | 3 | 156 | 2 |
| 285 | | GRE | PK | LSCOL | 1 | 29 | 1 |
| 285 | | GRE | PK | LSCOLL | 3 | 79 | 1 |
| 285 | | GRE | PK/LSV | LSCOLL | 3 | 122 | 1 |
| 285 | | GRE | PL | EVBD | 5 | 186 | 3 |
| 285 | | GRE | PL | HOOK | 1 | 18 | 1 |
| 285 | | GRE | SK? | | 1 | 30 | 1 |
| 285 | | IGBW | | | 3 | 118 | 3 |
| 285 | | IGBW | JR | COLL | 1 | 14 | 1 |
| 285 | | IGBW | JR | LSBD | 1 | 33 | 1 |
| 285 | | IGBW | MG | | 1 | 75 | 1 |
| 285 | | KF | | | 1 | 34 | 1 |
| 285 | | KF | SAG | | 3 | 192 | 3 |
| 285 | | KF | SAG? | | 8 | 309 | 8 |
| 285 | | KF | SAG? | BD | 1 | 56 | 1 |
| 285 | | KF TGE | SAG | | 23 | 1131 | 23 |
| 285 | | KF TGE | SAG | UPFT | 7 | 253 | 6 |
| 285 | | LSRW | PL | EV | 10 | 233 | 1 |
| 285 | | PMSW | | | 3 | 21 | 3 |
| 285 | | PMSW | DS | EVBD | 1 | 12 | 1 |
| 285 | | PMSW | DS | THEV | 1 | 14 | 1 |
| 285 | | SPEC | | | 4 | 91 | 4 |
| 285 | | SPEC | LSV | | 3 | 281 | 3 |
| 285 | | SPEC | LSV | COLL | 1 | 30 | 1 |
| 285 | | TGE | | | 21 | 179 | 20 |
| 285 | | TGE | DJ | | 1 | 41 | 1 |
| 285 | | TGE | DJ | FLAR | 2 | 46 | 2 |
| 285 | | TGE | DS | FLAR | 1 | 8 | 1 |
| 285 | | TGE | JR? | SQBD | 1 | 10 | 1 |
| 285 | | TGE | PL | | 1 | 11 | 1 |
| 285 | | TGE | PL | EV | 1 | 9 | 1 |
| 285 | | TGE | PORR | | 1 | 11 | 1 |
| 286 | | ESW | BT | COLL | 5 | 191 | 1 |
| 286 | | GRE | CH | FTBD | 2 | 514 | 1 |
| 286 | | GRE | CH? | | 1 | 600 | 1 |
| 286 | | GRE | SK | BD | 2 | 273 | 1 |
| 286 | | KF | RING | | 3 | 91 | 3 |
| 286 | 01 | GRE | | | 12 | 1796 | 11 |
| 286 | 01 | GRE | JR | | 2 | 263 | 2 |
| 286 | 01 | GRE | JR | LSCOLL | 1 | 65 | 1 |
| 286 | 01 | GRE | JRH | FTEV | 1 | 27 | 1 |
| 286 | 01 | GRE | LSV | | 1 | 93 | 1 |
| 286 | 01 | GRE | LSV | COLL | 1 | 195 | 1 |
| 286 | 01 | GRE | LSV | COMP | 4 | 444 | 3 |
| 286 | 01 | GRE | LSV | FLAN | 1 | 84 | 1 |
| 286 | 01 | GRE | LSV | LSBD | 1 | 139 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|--------|-------|----|------|-----|
| 286 | 01 | GRE | LSV | SQBD | 6 | 807 | 3 |
| 286 | 01 | GRE | PL | EVBD | 1 | 60 | 1 |
| 286 | 02 | GRE | | | 92 | 2262 | 88 |
| 286 | 02 | GRE | ? | FTBD | 1 | 8 | 1 |
| 286 | 02 | GRE | BL | BD | 3 | 152 | 3 |
| 286 | 02 | GRE | BLH | | 1 | 13 | 1 |
| 286 | 02 | GRE | BLH | BD | 1 | 12 | 1 |
| 286 | 02 | GRE | CH | FTBD | 1 | 60 | 1 |
| 286 | 02 | GRE | CH | SQBD | 1 | 30 | 1 |
| 286 | 02 | GRE | CH? | | 1 | 14 | 1 |
| 286 | 02 | GRE | DS | EVBD | 1 | 16 | 1 |
| 286 | 02 | GRE | JR | BD | 1 | 14 | 1 |
| 286 | 02 | GRE | JR | SQBD | 6 | 164 | 5 |
| 286 | 02 | GRE | JR/CH | FTBD | 1 | 24 | 1 |
| 286 | 02 | GRE | JR/CH | FTEV | 1 | 22 | 1 |
| 286 | 02 | GRE | LSV | COMP | 1 | 58 | 1 |
| 286 | 02 | GRE | PK | LSEV | 1 | 16 | 1 |
| 286 | 02 | GRE | PK? | COLL | 1 | 35 | 1 |
| 286 | 02 | GRE | PL | | 1 | 18 | 1 |
| 286 | 02 | GRE | PL | EVBD | 3 | 105 | 2 |
| 286 | 02 | IGBW | | | 5 | 110 | 5 |
| 286 | 02 | KF | SAG | | 4 | 140 | 4 |
| 286 | 02 | KF | SAG? | | 2 | 48 | 2 |
| 286 | 02 | KF | SAG? | BD | 1 | 23 | 1 |
| 286 | 02 | SPEC | | | 1 | 12 | 1 |
| 286 | 02 | SPEC | LSV/JR | | 5 | 136 | 4 |
| 286 | 03 | GRE | | | 32 | 1529 | 32 |
| 286 | 03 | GRE | BLH? | | 1 | 225 | 1 |
| 286 | 03 | GRE | LSV | | 9 | 1089 | 3 |
| 286 | 03 | GRE | PK | | 1 | 82 | 1 |
| 286 | 03 | GRE | SK | | 1 | 20 | 1 |
| 286 | 03 | IGBW | MG | | 1 | 32 | 1 |
| 286 | 03 | KF | SAG? | | 3 | 69 | 3 |
| 286 | 03 | SPEC | LSV | | 2 | 351 | 1 |
| 286 | 04 | GRE | BL | BD | 1 | 112 | |
| 286 | 04 | GRE | BL | FTEV | 1 | 20 | 1 |
| 286 | 04 | GRE | CH | FTBD | 4 | 278 | 3 |
| 286 | 04 | GRE | CH | FTEV | 2 | 165 | 2 |
| 286 | 04 | GRE | CH | SQBD | 1 | 38 | |
| 286 | 04 | GRE | CH? | FTEV | 2 | 140 | 1 |
| 286 | 04 | GRE | DS | THEV | 1 | 44 | 1 |
| 286 | 04 | GRE | JR | BD | 5 | 298 | 3 |
| 286 | 04 | GRE | JR | COLL | 3 | 225 | 3 |
| 286 | 04 | GRE | JR/CH | FTBD | 1 | 31 | 1 |
| 286 | 04 | GRE | LSV | COLL? | 4 | 510 | 1 |
| 286 | 04 | GRE | LSV | COMP | 1 | 143 | 1 |
| 286 | 04 | GRE | LSV | FLAR | 3 | 380 | 3 |
| 286 | 04 | GRE | LSV | LSBD | 1 | 142 | 1 |
| 286 | 04 | GRE | LSV | SQBD | 3 | 387 | 1 |
| 286 | 04 | GRE | PK | LSEV | 1 | 27 | |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|--------|---------|-----|------|-----|
| 286 | 05 | GRE | | | 56 | 1853 | 47 |
| 286 | 05 | GRE | LSV | | 25 | 1358 | 16 |
| 286 | 05 | GRE | PK | | 1 | 75 | 1 |
| 286 | 05 | GRE | PL/BL | | 5 | 563 | 3 |
| 286 | 05 | SPEC | | | 1 | 45 | 1 |
| 286 | 06 | GRE | | | 13 | 344 | 12 |
| 286 | 06 | GRE | BL | BD | 7 | 206 | 7 |
| 286 | 06 | GRE | BL | COMP | 1 | 9 | 1 |
| 286 | 06 | GRE | BL | EVBD | 1 | 153 | 1 |
| 286 | 06 | GRE | BL | HOOK | 1 | 19 | 1 |
| 286 | 06 | GRE | BL | SQBD | 1 | 32 | 1 |
| 286 | 06 | GRE | BL/SK? | CAV | 1 | 13 | 1 |
| 286 | 06 | GRE | BLH | BD | 1 | 21 | |
| 286 | 06 | GRE | BLH | FTEV | 1 | 24 | 1 |
| 286 | 06 | GRE | CH | FTBD | 4 | 151 | 2 |
| 286 | 06 | GRE | CH | SQBD | 1 | 31 | |
| 286 | 06 | GRE | DD | BD | 1 | 70 | 1 |
| 286 | 06 | GRE | JG | UPPL | 3 | 112 | 1 |
| 286 | 06 | GRE | JG? | | 1 | 54 | 1 |
| 286 | 06 | GRE | JR | BD | 2 | 154 | 2 |
| 286 | 06 | GRE | JR | COLL | 2 | 72 | 1 |
| 286 | 06 | GRE | JR | FTBD | 1 | 38 | 1 |
| 286 | 06 | GRE | JR | SQBD | 2 | 59 | 2 |
| 286 | 06 | GRE | JR/CH | FTEV | 2 | 75 | 1 |
| 286 | 06 | GRE | LSV | COLL | 1 | 78 | 1 |
| 286 | 06 | GRE | LSV | COMP | 1 | 90 | 1 |
| 286 | 06 | GRE | LSV | LSCOLL | 1 | 42 | 1 |
| 286 | 06 | GRE | PK | THEV | 1 | 34 | 1 |
| 286 | 06 | GRE | PK? | LSBD | 1 | 29 | 1 |
| 286 | 06 | GRE | PL | EVBD | 1 | 42 | 1 |
| 286 | 06 | GRE | PL | THEV | 1 | 149 | 1 |
| 286 | 06 | IGBW | | | 6 | 106 | 5 |
| 286 | 06 | PMSW | PL | EVBD | 1 | 35 | 1 |
| 286 | 06 | SPEC | | | 3 | 56 | 3 |
| 286 | 06 | TGE | | | 2 | 12 | 1 |
| 286 | 07 | KF | SAG | | 8 | 430 | 8 |
| 286 | 07 | KF | SAG | BD | 2 | 100 | 2 |
| 286 | 07 | KF | SAG? | | 10 | 379 | 10 |
| 286 | 07 | KF | SAG? | BD | 6 | 260 | 3 |
| 286 | 08 | GRE | | | 149 | 3240 | 122 |
| 286 | 08 | GRE | BLH | | 3 | 34 | |
| 286 | 08 | GRE | CD? | | 2 | 104 | 1 |
| 286 | 08 | GRE | LSV | | 13 | 513 | 5 |
| 286 | 08 | GRE | PK | | 1 | 17 | 1 |
| 286 | 08 | GRE | SK | | 1 | 27 | 1 |
| 286 | 09 | GRE | | | 13 | 309 | 13 |
| 286 | 09 | GRE | ? | FTBD | 1 | 15 | 1 |
| 286 | 09 | GRE | BL | BD | 3 | 97 | 3 |
| 286 | 09 | GRE | BL | FTBD | 4 | 59 | 2 |
| 286 | 09 | GRE | BLH | HORIZ R | 2 | 48 | 2 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|--------|----|------|-----|
| 286 | 09 | GRE | BLH? | | 1 | 24 | 1 |
| 286 | 09 | GRE | CH | FTBD | 7 | 223 | 4 |
| 286 | 09 | GRE | CH | FTEV | 6 | 205 | 6 |
| 286 | 09 | GRE | DS | EVBD | 1 | 12 | 1 |
| 286 | 09 | GRE | DS | THEV | 1 | 8 | 1 |
| 286 | 09 | GRE | JR | BD | 1 | 27 | 1 |
| 286 | 09 | GRE | JR | COLL | 5 | 140 | 3 |
| 286 | 09 | GRE | JR | SQBD | 2 | 70 | 2 |
| 286 | 09 | GRE | JR? | BD | 1 | 19 | 1 |
| 286 | 09 | GRE | JR? | SQBD | 1 | 32 | 1 |
| 286 | 09 | GRE | LSV | COLL | 2 | 48 | 2 |
| 286 | 09 | GRE | LSV | COMP | 6 | 328 | 2 |
| 286 | 09 | GRE | PK | LSCOLL | 1 | 33 | 1 |
| 286 | 09 | GRE | PK | LSEV | 1 | 43 | 1 |
| 286 | 09 | GRE | PK? | COLL | 1 | 18 | 1 |
| 286 | 09 | GRE | PL | EVBD | 10 | 280 | 6 |
| 286 | 09 | GRE | PL | HOOK | 1 | 21 | 1 |
| 286 | 09 | GRE | PN | TAPBD | 1 | 54 | 1 |
| 286 | 09 | GRE | SK? | BD | 1 | 10 | 1 |
| 286 | 09 | KF | SAG | | 7 | 194 | 7 |
| 286 | 09 | KF | SAG? | | 9 | 219 | 9 |
| 286 | 10 | GRE | | | 86 | 1777 | 82 |
| 286 | 10 | GRE | ? | SQBD | 1 | 22 | 1 |
| 286 | 10 | GRE | BL | BD | 3 | 125 | 2 |
| 286 | 10 | GRE | BL | FTEV | 1 | 23 | 1 |
| 286 | 10 | GRE | BL? | | 2 | 15 | 1 |
| 286 | 10 | GRE | BL? | FTBD | 1 | 14 | 1 |
| 286 | 10 | GRE | BL? | TAPBD | 1 | 10 | 1 |
| 286 | 10 | GRE | BLH | BD | 1 | 5 | |
| 286 | 10 | GRE | BLH | UPPL | 1 | 6 | 1 |
| 286 | 10 | GRE | CH | FTBD | 2 | 43 | 2 |
| 286 | 10 | GRE | CH | SQBD | 1 | 23 | 1 |
| 286 | 10 | GRE | JG | | 1 | 29 | 1 |
| 286 | 10 | GRE | JG? | SQBD | 1 | 9 | 1 |
| 286 | 10 | GRE | JR/CH | SQBD | 1 | 15 | 1 |
| 286 | 10 | GRE | JR? | BD | 1 | 16 | 1 |
| 286 | 10 | GRE | JR? | FTBD | 1 | 12 | 1 |
| 286 | 10 | GRE | LSV | | 15 | 510 | 5 |
| 286 | 10 | GRE | LSV | COLL | 1 | 60 | |
| 286 | 10 | GRE | LSV | FLAR | 1 | 70 | 1 |
| 286 | 10 | GRE | PK | COLL | 2 | 36 | 2 |
| 286 | 10 | GRE | PK | THEV | 1 | 17 | 1 |
| 286 | 10 | GRE | PL | EVBD | 2 | 63 | 1 |
| 286 | 11 | GRE | | | 2 | 22 | 2 |
| 286 | 11 | GRE | JR | BD | 1 | 57 | 1 |
| 286 | 11 | GRE | JR | COLL | 1 | 15 | |
| 286 | 11 | GRE | JR | SQBD | 1 | 27 | 1 |
| 286 | 11 | KF | SAG | | 24 | 1723 | 17 |
| 286 | 11 | KF | SAG | BD | 2 | 65 | 1 |
| 286 | 11 | KF | SAG | SQBD | 3 | 142 | 3 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-----------|--------|-----|------|-----|
| 286 | 11 | KF | SAG/JR | BD | 2 | 107 | 1 |
| 286 | 11 | KF | SAG? | | 24 | 650 | 23 |
| 286 | 11 | KF | SAG? | BD | 6 | 144 | 3 |
| 286 | 11 | KF | SAG? | TAPBD | 1 | 51 | 1 |
| 286 | 12 | GRE | | | 50 | 2719 | 44 |
| 286 | 12 | GRE | BL | BD | 5 | 211 | 4 |
| 286 | 12 | GRE | BL | FTBD | 3 | 50 | 3 |
| 286 | 12 | GRE | BL | FTEV | 1 | 45 | 1 |
| 286 | 12 | GRE | BLH | BD | 1 | 59 | 1 |
| 286 | 12 | GRE | CH | FTEV | 5 | 267 | 1 |
| 286 | 12 | GRE | DD | BD | 3 | 421 | 2 |
| 286 | 12 | GRE | DD? | LSBD | 1 | 45 | 1 |
| 286 | 12 | GRE | JR | BD | 2 | 116 | 2 |
| 286 | 12 | GRE | JR | COLL | 1 | 33 | 1 |
| 286 | 12 | GRE | JR | FTBD | 1 | 40 | 1 |
| 286 | 12 | GRE | LSV | | 5 | 321 | 4 |
| 286 | 12 | GRE | LSV | COMP | 1 | 86 | |
| 286 | 12 | GRE | PK | | 3 | 345 | 3 |
| 286 | 12 | GRE | PK | COLL | 1 | 34 | 1 |
| 286 | 12 | GRE | PK | LSCOLL | 2 | 88 | 2 |
| 286 | 12 | GRE | PK | THEV | 1 | 52 | |
| 286 | 12 | GRE | PL | | 1 | 85 | 1 |
| 286 | 12 | GRE | PL | EVBD | 8 | 488 | 4 |
| 286 | 12 | KF | | | 1 | 10 | 1 |
| 286 | 12 | KF | SAG | | 2 | 131 | 2 |
| 286 | 12 | SPEC | | | 14 | 203 | 11 |
| 286 | 12 | SPEC | CH? | FTBD | 1 | 74 | 1 |
| 286 | 13 | IGBW | | | 21 | 226 | 20 |
| 286 | 13 | IGBW | JG | | 1 | 55 | 1 |
| 286 | 13 | IGBW | JG? | | 2 | 177 | 2 |
| 286 | 13 | IGBW | LSV | | 1 | 28 | 1 |
| 286 | 13 | IGBW | MG | | 10 | 521 | 6 |
| 286 | 13 | IGBW | MG | UPPL | 2 | 8 | 2 |
| 286 | 13 | IGBW | TK/TY | | 4 | 225 | 4 |
| 286 | 14 | PMSW | | | 3 | 77 | 2 |
| 286 | 14 | PMSW | PL | | 9 | 313 | 3 |
| 286 | 14 | PMSW | PL | EVBD | 5 | 444 | 5 |
| 286 | 15 | KF TGE | SAG | | 3 | 156 | 3 |
| 286 | 15 | KF TGE | SAG | UPPL | 1 | 77 | 1 |
| 286 | 15 | KF TGE | SAG? | FT | 1 | 23 | 1 |
| 286 | 15 | TGE | | | 2 | 15 | 1 |
| 286 | 15 | TGE | DJ | THEV | 1 | 69 | 1 |
| 287 | | GRE | CH | | 9 | 639 | 1 |
| 287 | | GRE | CH | FTBD | 120 | 1248 | 1 |
| 287 | | GRE | JG | COLL | 20 | 464 | 1 |
| 287 | | GRE | PK | | 1 | 357 | 1 |
| 287 | | IGBW | JG | UPPL | 1 | 704 | 1 |
| 287 | | IGBW | MG | UPPL | 3 | 301 | 2 |
| 287 | | IGBW | MG IN SAG | UPPL | 6 | 1980 | 2 |
| 287 | | IGBW | TK IN SAG | UPPL | 3 | 1400 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|------|----|------|-----|
| 287 | | IGBW | TY | | 1 | 196 | 1 |
| 287 | 01 | GRE | | | 35 | 754 | 26 |
| 287 | 01 | GRE | BL | BD | 12 | 586 | 4 |
| 287 | 01 | GRE | BL | FTBD | 1 | 27 | 1 |
| 287 | 01 | GRE | BL/PL | | 1 | 206 | 1 |
| 287 | 01 | GRE | BL? | | 6 | 303 | 4 |
| 287 | 01 | GRE | BLH | COMP | 3 | 87 | 1 |
| 287 | 01 | GRE | BLH? | BD | 1 | 37 | 1 |
| 287 | 01 | GRE | COL | | 2 | 77 | 1 |
| 287 | 01 | GRE | LSV | | 14 | 1472 | 3 |
| 287 | 02 | GRE | | | 22 | 757 | 17 |
| 287 | 02 | GRE | LSV | | 5 | 930 | 1 |
| 287 | 02 | GRE | PK | | 7 | 385 | 4 |
| 287 | 03 | GRE | | | 23 | 1424 | 11 |
| 287 | 03 | GRE | CH | FTBD | 13 | 918 | 4 |
| 287 | 03 | GRE | CH/JR | BD | 23 | 743 | 1 |
| 287 | 03 | GRE | CH? | | 1 | 161 | 1 |
| 287 | 03 | GRE | DD? | | 2 | 148 | 1 |
| 287 | 03 | GRE | JG? | | 8 | 573 | 1 |
| 287 | 03 | GRE | JR | | 1 | 207 | 1 |
| 287 | 03 | GRE | JR? | | 5 | 323 | 1 |
| 287 | 03 | GRE | LSV | | 6 | 912 | 2 |
| 287 | 03 | GRE | SK | LSEV | 2 | 45 | 1 |
| 287 | 04 | GRE | | | 72 | 1850 | 57 |
| 287 | 04 | GRE | | BD | 1 | 56 | 1 |
| 287 | 04 | GRE | | R? | 1 | 20 | 1 |
| 287 | 04 | GRE | BL | LSBD | 13 | 751 | 1 |
| 287 | 04 | GRE | BL | SQBD | 1 | 78 | 1 |
| 287 | 04 | GRE | BLH | BD | 1 | 34 | 1 |
| 287 | 04 | GRE | CH? | | 3 | 277 | 3 |
| 287 | 04 | GRE | LSV | | 5 | 255 | 2 |
| 287 | 04 | GRE | PK | | 2 | 174 | 2 |
| 287 | 04 | GRE | PL | EVBD | 1 | 54 | 1 |
| 287 | 04 | GRE | PL | HOOK | 1 | 285 | 1 |
| 287 | 04 | GRE | PL | THEV | 1 | 33 | 1 |
| 287 | 04 | SPEC | | | 7 | 185 | 4 |
| 287 | 05 | GRE | BL | BD | 1 | 51 | 1 |
| 287 | 05 | GRE | BL | EVBD | 1 | 20 | 1 |
| 287 | 05 | GRE | BL | FTBD | 1 | 81 | 1 |
| 287 | 05 | GRE | CH | FTBD | 4 | 173 | 2 |
| 287 | 05 | GRE | CH/JR | BD | 3 | 140 | 1 |
| 287 | 05 | GRE | DD | BD | 1 | 94 | 1 |
| 287 | 05 | GRE | DD | EV | 1 | 48 | 1 |
| 287 | 05 | GRE | DS | | 1 | 49 | 1 |
| 287 | 05 | GRE | DS | EV | 1 | 26 | 1 |
| 287 | 05 | GRE | JG? | FTEV | 1 | 18 | 1 |
| 287 | 05 | GRE | JR | BD | 4 | 186 | 4 |
| 287 | 05 | GRE | JR | COLL | 1 | 59 | 1 |
| 287 | 05 | GRE | JR | EVBD | 1 | 33 | 1 |
| 287 | 05 | GRE | JR | FTBD | 1 | 32 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|---------|------|----|------|-----|
| 287 | 05 | GRE | JR/CH | FTEV | 2 | 30 | 1 |
| 287 | 05 | GRE | JR? | COLL | 2 | 36 | 2 |
| 287 | 05 | GRE | JR? | FLAR | 1 | 33 | 1 |
| 287 | 05 | GRE | JR? | TRBD | 1 | 17 | 1 |
| 287 | 05 | GRE | LSV | | 2 | 147 | 2 |
| 287 | 05 | GRE | LSV | COLL | 8 | 772 | 5 |
| 287 | 05 | GRE | LSV | COMP | 2 | 118 | 1 |
| 287 | 05 | GRE | PK? | COLL | 9 | 209 | 1 |
| 287 | 05 | GRE | PK? | FTBD | 2 | 67 | 2 |
| 287 | 05 | GRE | PL | EVBD | 4 | 93 | 3 |
| 287 | 05 | GRE | PN | BD | 1 | 70 | 1 |
| 287 | 06 | GRE | | | 8 | 166 | 8 |
| 287 | 06 | GRE | | THEV | 1 | 16 | 1 |
| 287 | 06 | GRE | JR/SAG? | BD | 2 | 53 | 2 |
| 287 | 06 | GRE | PL | EVBD | 1 | 68 | 1 |
| 287 | 06 | KF | RING | | 1 | 10 | 1 |
| 287 | 06 | KF | SAG | | 25 | 1246 | 10 |
| 287 | 06 | KF | SAG? | | 25 | 889 | 1 |
| 287 | 06 | KF | SAG? | BD | 6 | 272 | 5 |
| 287 | 06 | KF | SAG? | FTBD | 2 | 87 | 2 |
| 287 | 07 | KF | SAG | BD | 20 | 1505 | 1 |
| 287 | 08 | IGBW | | | 20 | 377 | 16 |
| 287 | 08 | IGBW | MG | | 7 | 94 | 2 |
| 287 | 08 | IGBW | MG | UPPL | 2 | 12 | 1 |
| 287 | 08 | IGBW | MG/TY | | 2 | 46 | 1 |
| 287 | 08 | IGBW | MG/TY | UPPL | 6 | 52 | 1 |
| 287 | 08 | SPEC | JG | | 1 | 16 | 1 |
| 289 | | GRE | | | 3 | 24 | 2 |
| 289 | | GRE | BL | FLAR | 1 | 13 | 1 |
| 289 | | GRE | JR? | BD | 1 | 27 | 1 |
| 289 | | GRE | PL | EVBD | 1 | 43 | 1 |
| 289 | | KF | RING | | 2 | 27 | 2 |
| 290 | | GRE | | | 13 | 353 | 13 |
| 290 | | GRE | BL | BD | 1 | 94 | 1 |
| 290 | | GRE | CH? | FTBD | 11 | 426 | 2 |
| 290 | | GRE | JR? | FTEV | 1 | 21 | 1 |
| 290 | | GRE | LSV | BD | 6 | 967 | 1 |
| 290 | | GRE | LSV | COLL | 1 | 68 | 1 |
| 290 | | GRE | PK | | 1 | 79 | 1 |
| 290 | | GRE | PK | COLL | 1 | 53 | 1 |
| 290 | | GRE | PL | EVBD | 3 | 181 | 3 |
| 290 | | KF | RING | | 1 | 28 | 1 |
| 290 | | KF | SAG | | 11 | 527 | 10 |
| 290 | | KF | SAG | BD | 1 | 67 | 1 |
| 290 | | KF | SAG | FTBD | 1 | 95 | 1 |
| 290 | | KF | SAG? | | 4 | 209 | 4 |
| 290 | | KF | SAG? | BD | 3 | 120 | 3 |
| 290 | | PMSW | | | 1 | 15 | 1 |
| 290 | | PMSW | PL | EVBD | 3 | 140 | 2 |
| 290 | | PMSW | PL | THEV | 1 | 68 | 1 |

| Context | Bag no | Fabric | Form | Rim | No | Wt/g | MNV |
|---------|--------|--------|-------|------|----|------|-----|
| 291 | | GRE | | | 10 | 255 | 10 |
| 291 | | GRE | BL? | BD | 1 | 23 | 1 |
| 291 | | GRE | CH | FTBD | 1 | 52 | 1 |
| 291 | | GRE | CH | FTEV | 2 | 100 | 1 |
| 291 | | GRE | CH? | FTBD | 1 | 16 | 1 |
| 291 | | GRE | DS | EVBD | 1 | 15 | 1 |
| 291 | | GRE | JR | BD | 1 | 15 | 1 |
| 291 | | GRE | JR | COLL | 1 | 15 | 1 |
| 291 | | GRE | JR/PK | COLL | 2 | 43 | 2 |
| 291 | | GRE | JR? | FTBD | 1 | 26 | 1 |
| 291 | | GRE | LSV | | 1 | 65 | 1 |
| 291 | | GRE | PL | HOOK | 1 | 53 | 1 |
| 291 | | GRE | PL | THEV | 2 | 54 | 2 |
| 291 | | KF | SAG | | 2 | 71 | 2 |
| 291 | | KF | SAG? | | 2 | 30 | 2 |
| 291 | | PMSW | | | 3 | 55 | 3 |
| 298 | | GRE | | | 1 | 229 | 1 |
| 299 | | GRE | | | 2 | 99 | 1 |
| 299 | | GRE | LSV | | 7 | 1331 | 2 |
| 303 | | GRE | | | 4 | 58 | 3 |
| 303 | | GRE | JR/PK | COLL | 2 | 30 | 1 |
| 303 | | GRE | LSV | | 4 | 270 | 2 |
| 307 | | IGBW | | | 1 | 4 | 1 |
| 312 | | GRE | | | 16 | 541 | 15 |
| 312 | | GRE | BL? | | 4 | 42 | 1 |
| 312 | | GRE | CH? | SQBD | 1 | 53 | 1 |
| 312 | | GRE | JR | SQBD | 1 | 22 | 1 |
| 312 | | GRE | LSV | | 1 | 24 | 1 |
| 312 | | GRE | LSV | BD | 1 | 57 | 1 |
| 312 | | GRE | PK/JR | COLL | 5 | 137 | 4 |
| 312 | | GRE | PL | EVBD | 2 | 77 | 2 |
| 312 | | IGBW | | | 1 | 7 | 1 |
| 312 | | KF | | | 4 | 160 | 4 |
| 312 | | TGE | | | 1 | 18 | 1 |
| 99999 | | KF TGE | PROP | | 1 | 8 | 1 |
| 99999 | | TGE | | | 7 | 41 | 7 |
| 99999 | | TGE | MG? | UPPL | 1 | 1 | 1 |

B.7 Ceramic building material and fired clay

By Sue Anderson

Introduction and methodology

- B.7.1 Fragmentary and complete bricks and tiles totalling 325 pieces (201,643g) were recovered from 55 contexts, the majority in Area 1 (20 pieces were collected from three contexts in Area 2).
- B.7.2 The assemblage was quantified (count, weight, minimum no. of objects) by fabric and form. Fabrics were identified on the basis of macroscopic appearance and main inclusions. The width, length and thickness of bricks and floor tiles were measured, but roof tile thicknesses were only measured when another dimension was available. Forms were identified from work in Norwich (Drury 1993), based on measurements; other form terminology follows Brunskill's glossary (1990). Recommendations for retention/discard are included in the database, but generally samples of all structures have been retained, together with examples from kiln fills and other features, all tile waste relating to pottery production on the site, and all unusual forms.

Summary of the fired clay assemblage

- B.7.3 Thirty fragments (877g) of fired clay were also collected from five contexts (Table 25). Two small pieces (18g) of orange fine sandy clay with flint and clay pellet inclusions came from natural sinkhole fill 164 in Area 2; the fragments were flattish and 14mm thick. All other fragments came from contexts associated with the Phase 2 post-medieval brick kilns in Area 1. Two pieces were probably fragments of the clay 'mortar' used to bond the kiln walls. These were found in fill 29 of kiln **34** (15mm thick with reduced surface), and pit fill 305 (small fragment with a drilled hole in the narrow edge). Twenty fragments were recovered from the floor 237 of kiln **241** and were hard slabs with a flattish undulating surface in a silty fabric, between 14-31mm thick, some of which had ferrous deposits on one side. Six fragments from fill 58 of kiln **52** comprised five hard rounded lumps containing coal chips, and one small abraded fragment which may be a piece of brick.

| Context | Sample | Fabric | Type | No | Wt/g | Colour | Surface | Impressions | Abr | Notes |
|---------|--------|--------|------|----|------|-------------|----------------------------|--|-----|--|
| 29 | 1 | fs | | 1 | 23 | orange | flattish | | | clay 'mortar' frag, 15mm thick, reduced surface - with CBM |
| 58 | 2 | fscq | | 1 | 19 | orange | flat surfaces, right-angle | | + | poss brick frag |
| 58 | 2 | fsca | | 5 | 195 | dark orange | some flat | 1 piece poss fine cloth impression on flat surface | + | hard rounded lumps containing common coal chips |
| 164 | | fsfcp | | 2 | 18 | pale orange | flattish | | + | 14mm thick |
| 237 | 9 | s | KL? | 9 | 265 | buff | flattish undulating | | + | hard slabs, up to 31mm thick, no Fe |
| 237 | 9 | s | KL? | 11 | 350 | buff | flattish undulating | | + | hard slabs, 14-22mm thick, ferrous deposits on one side |
| 305 | | fs | | 1 | 7 | orange | flattish | | | small frag with drilled 'hole' in thin edge - with CBM |

Table 25: Fired clay

Summary of the CBM assemblage

B.7.4 Table 26 shows the quantification by type and form. A full quantification by context, fabric and form is included as an appendix.

| Form | Code | No. | Wt/g | Min. No. |
|--------------------------------|------|------------|---------------|------------|
| Plain roof tile: medieval | RTM | 1 | 18 | 1 |
| Plain roof tile: post-medieval | RTP | 82 | 12422 | 83* |
| Pantile | PAN | 11 | 1937 | 10 |
| Ridge tile | RID | 1 | 285 | 1 |
| Post-medieval brick | LB | 199 | 153369 | 128 |
| | LB? | 3 | 2240 | 3 |
| Quarry floor tile | QFT | 1 | 2129 | 1 |
| Tile | T | 17 | 9722 | 15 |
| Kiln structure | KILN | 4 | 9582 | 3 |
| Terracotta | TERR | 1 | 9520 | 1 |
| Unidentified | UN | 5 | 419 | 5 |
| Totals | | 325 | 201643 | 251 |

Table 26. CBM quantities by form.

* Note that 'Min No' takes into account plain tiles which were stuck together, which is why it is higher than the fragment count

B.7.5 A wide range of fabric groups was recorded, but this was in part due to the lack of clean breaks for some of the more intact objects, or the small size of other pieces. The three main fabrics were fine sandy with ferrous inclusions (fsfe), medium sandy with flint (msf), and medium sandy with flint and ferrous inclusions (msffe). Other fabrics were similar with other natural inclusions such as clay pellets or chalk in some, and only a few pieces had deliberate additions of grog. A small proportion of the assemblage was white-firing.

B.7.6 Late bricks form the largest part of this assemblage, but they are only a small proportion of the brick which was present on the site. Complete bricks were recovered as samples from the structures of kilns, as well as the deposits inside them and other dump deposits around the site. Those recovered from the structures themselves are shown in Table 27. Generally two to three samples were recovered from each area of the kiln.

| Kiln | context | Function | fabric | abr | length | width | height |
|------|---------|-------------------------|--------|-----|--------|-------|--------|
| 21 | 21 | Kiln | msf | | | 116 | 45 |
| | | | msf | | 236 | 110 | 53 |
| | | | msf | | | 108 | 52 |
| | 23 | Kiln | msf | | 235 | 112 | 51 |
| | | | msf | | 232 | 115 | 50 |
| | 78 | Kiln W outer wall | msfcp | | 223 | 110 | 50 |
| | | | mscp? | | 207+ | 106 | 46 |
| | 79 | Kiln N outer wall | msf | | | | 55 |
| | | | msf | | 230 | 110+ | 59 |
| | | | msf | + | | 114 | 59 |
| | 80 | Kiln N wall of entrance | msf | | 236+ | 113 | 57 |
| | | | msf | | | 115 | 59 |
| | 81 | Kiln S wall of entrance | msf | | 242 | 117 | 55 |
| | | | msf | | | 113 | 60 |
| | 84 | Kiln furnace arch | msf | | 229 | 114 | 52 |

| Kiln | context | Function | fabric | abr | length | width | height |
|------|---------|--------------|--------|-----|--------|-------|--------|
| | | | msfe | | 240 | 110 | 55 |
| 34 | 26 | Kiln wall | msf | | 225 | 110 | 51 |
| | | | msf | | 233 | 111 | 50 |
| | 27 | Kiln | msf | | 223 | 108 | 51 |
| | | | msf | | 227 | 106 | 50 |
| | 138 | Kiln arch | msf | | 228 | 113 | 54 |
| | | | msf | | 216 | 112 | 50 |
| | 215 | Kiln | msffe | | | | 46 |
| | | msffe | | 227 | 110 | 49 | |
| 52 | 54 | Kiln wall | fsfcp | | 230 | 105 | 54 |
| | | | fsfcp | + | 235 | 109 | 55 |
| | 71 | Kiln storage | msffe | + | | 105 | 53 |
| | | | msffe | | | 110 | 52 |
| | 72 | Kiln wall | msf | + | 234 | 107 | 56 |
| | | msf | | 232 | 107 | 54 | |
| 241 | 233 | Kiln wall | msffe | | 242 | 121 | 53 |
| | | | msffe | | 248 | 121 | 52 |
| | 234 | Kiln wall | msffe | | 241 | 120 | 55 |
| | | | msffe | | 249 | 121 | 56 |
| 242 | 235 | Kiln wall | msffe | | 243 | 116 | 55 |
| | | | msffe | | | 118 | 51 |
| | | | msffe | | 240 | 120 | 55 |
| | 236 | Kiln wall | msffe | | 244 | 122 | 55 |
| | | | msffe | | | 116 | 52 |
| | | | msffe | | 249 | 121 | 51 |
| | 238 | Kiln floor | mscpfe | + | | 118 | 50+ |

Table 27. Post-medieval bricks from the kiln structures (all Phase 2)

B.7.7 Preliminary study of these data suggests that brick sizes and types in kilns **241** and **242** were similar, with all bricks in this group measuring over 240mm in length. The brick sizes in these kilns are comparable with those from later 15th- and 16th-century structures in the region, such as Breckles Hall, Stutton Hall and Hengrave Hall (Lloyd 1925, 89–95) and Gedding Hall (Anderson and Tester 2003). At least one brick of similar size was used in the south entrance wall of kiln **21**, but most of the other bricks from this structure fall in a smaller range in terms of length and thickness. This group is within the range of Drury's Norwich LB1 size (Drury 1993, 165) which he suggests can be dated to the later 16th to the 18th century. However, they are also comparable with late 15th-century bricks at Oxburgh Hall and early 16th century ones at East Barsham manor (Lloyd 1925). The bricks of kilns **34** and **52** were of similar size to the majority of those from kiln **21**, although those in **34** (including those recovered from its fill) were generally slightly shorter than the others. Also of note is the presence of diagonal hack (pressure) marks on the stretchers of bricks in all of the kilns except **241** and **242**, which may indicate a difference in the method of drying between the two groups. Bricks recovered from kilns **241** and **242** had traces of the silty clay 'mortar' used in the kiln attached to them, and some of those from kiln **21** also had this material on one or more surfaces. However the bricks recovered from the entrance of kiln **21** were mortared together with conventional white lime mortar, perhaps forming a later repair. If so, this might suggest that the longer, broader, thicker bricks were later than

the shorter thinner types, but there is of course high potential for re-use of earlier bricks on a brickwork site.

- B.7.8 Other material associated with the brick kilns, from the chamber fills or the constructions cuts, included a few pieces of plain roof tile and some possible 'specialist' types which do not fit within the typical size range of the bricks and tiles from the site. These included a tile with a knife-trimmed edge and underside, 34mm thick, from fill 19; a large tile (>200mm x >150mm x 50mm) in the fill of kiln **52**; and a fragment of an overfired 'brick' 85mm wide and 70mm thick from the same kiln. A small piece of white-firing tile from kiln **34** is likely to be later and intrusive. Overfiring of some roof tiles, other than those used in pottery manufacture, may indicate that these were also made at the site.
- B.7.9 Elsewhere on the site, CBM was recovered from pit and ditch fills, mostly in association with pottery kiln waste. These groups included fragments of peg tile which had been used in the pottery kiln(s) as spacers, probably on several occasions as most had a number of kiln scars and glaze deposits on both surfaces, sometimes with glaze covering earlier kiln scars or kiln scars which intercut each other. A few white-firing flat tiles may have been made deliberately as tin glazed earthenware kiln furniture. Some bricks from these groups also had spots of glaze on the surfaces. A few fragments of pantile were recovered from pits **9**, **279** and **283**, suggesting a date no earlier than the 17th century for these fills. Fragments of two or three thick, V-shaped, 'ridge' tiles were found in pits **279** and **283**; these appear to be fragments of arches from a kiln. One was 130mm long and another stood c.110mm high, with all measuring c.48mm thick. A large terracotta plinth was also recovered, the top damaged but the base square with a rough circular hollow to aid firing. The object had been made in a sanded form, and the sand remained on the upper surface. White lime mortar patches were present on the base. Again, this may have been made specifically for use in a kiln structure.
- B.7.10 Based on the evidence available, it appears that there were at least two phases of tile and brick-making at the site, perhaps reflecting simply a sequence of kiln building and repair with one or two in use at any one time. The preliminary comparison of brick sizes provides tentative evidence for **241** and **242** being slightly earlier than the other kilns, but this is far from conclusive. There is also no direct evidence at present that the kilns were still operational when pottery manufacturing took place on the site in the 17th century. Pottery waste was recovered from the upper backfill of kiln **52** only, suggesting that it was only partially open at the time. It was recovered from the basal fill of kiln **21**, however. A single small sherd of GRE came from the kiln base of **242**, but there was no evidence that this was a waster. A fragment of LMT or reduced GRE (green-glazed) was found in fill 28 of kiln **34**.

Assessment of potential and methodology for analysis

- B.7.11 The site is well stratified and most of the assemblage is derived from sealed contexts. No site plans, phasing or grouping were available at the time of assessment, although this has not impacted on the assessment process. The assemblage has been recorded in full and no further cataloguing is required. The fired clay needs to be put into context with relation to site phasing and the CBM.

B.7.12 Further work will be required to complete the CBM analysis once final stratigraphic and other artefact dating information is available. Its main potential is to provide information on the range of fabrics and forms being produced by the brick kilns, to provide evidence for the kiln technology used by the potters, and to aid in site taphonomy and dating.

B.7.13 This report provides an outline of the CBM types present in the assemblage, but the material has not yet been placed in context, either within the site itself or within the broader historic environment of the region and in comparison with other brick kiln sites in the region (e.g. Anderson and Tester 2003; Anderson 2012 and 2017; Drury 1975). More detailed description of the material recovered from the kilns and related waste dumps, and a discussion of the types of CBM being produced, will be required for the archive or publication report.

- Comparison of the assemblage with other large groups of CBM from the region will be possible.
- Three-dimensional spatial distribution of CBM fabrics and forms in features and structures will be important in studying the construction and use of the kilns.
- Tiles and bricks associated with the pottery waste dumps will be analysed in conjunction with other potting kiln waste.
- A report suitable for archive and/or publication will be prepared.
- Up to 5 fragments are worthy of illustration by line drawing or photography, as noted in the database.

| context | fabric | form | no | wt/g | minno | abr | length | width | height | peg | mortar | glaze | hackmarks | comments | date |
|---------|--------|------|----|------|-------|-----|--------|-------|--------|-------|----------------|-------|-----------|---|------|
| 5 | msffe | RTP | 1 | 70 | 1 | | | | | | | | | | pmed |
| 5 | mscpfe | RTP | 1 | 55 | 1 | | | | | 1 x R | | | | | pmed |
| 5 | msf | LB | 1 | 832 | 1 | | | 109 | 51 | | | | | | pmed |
| 5 | msffe | LB | 1 | 237 | 1 | | | | 46 | | | | | | pmed |
| 7 | fsfe | RTP | 5 | 83 | 5 | | | | | | | | | 1 thick (20mm) | pmed |
| 8 | mscpfe | RTP | 1 | 18 | 1 | | | | | 1 x R | | | | | pmed |
| 8 | msf | RTP | 1 | 54 | 1 | | | | | 1 x R | | | | overfired, reduced | pmed |
| 9 | msf | LB | 1 | 386 | 1 + | | | | | | | | | reduced header | pmed |
| 9 | fsfcp | RTP | 3 | 343 | 3 | | | | | 1 x S | | | | | pmed |
| 9 | fscp | PAN | 4 | 272 | 4 | | | | | | | | | | 17+ |
| 9 | msf | LB | 1 | 381 | 1 | | | 115 | 53 | | | | | reduced header | pmed |
| 9 | msf | LB | 1 | 407 | 1 | | | | 50 | | | | | reduced header | pmed |
| 9 | msf | LB | 1 | 506 | 1 | | | | 60 | | clay | | | | pmed |
| 9 | msf | LB | 1 | 235 | 1 | | | | 50 | | | | | overfired, reduced, vit surface | pmed |
| 17 | mscpfe | RTP | 1 | 23 | 1 | | | | | | | | | | pmed |
| 17 | msxfe | LB | 3 | 181 | 1 + | | | | 56 | | | | | =1 brick | pmed |
| 17 | msf | LB? | 1 | 31 | 1 + | | | | | | | | | | pmed |
| 19 | fsf | UN | 1 | 243 | 1 | | | | 34 | | | | | thick tile, rounded knife-trimmed edge and base - thick pantile or specialist KF? | pmed |
| 20 | fsfe | RTP | 1 | 137 | 2 | | | | | | | B | | tile fragments fused together, glaze on surface | pmed |
| 20 | fsfcp | LB | 1 | 30 | 1 | | | | 50+ | | | | | | pmed |
| 21 | msf | LB | 1 | 789 | 1 | | | 108 | 52 | | | | | | pmed |
| 21 | msf | LB | 2 | 2378 | 1 | | 236 | 110 | 53 | | | | diag | near-complete brick missing a corner | pmed |
| 21 | msf | LB | 1 | 1427 | 1 | | | 116 | 45 | | | | diag | reduced header | pmed |
| 23 | msf | LB | 3 | 2360 | 1 | | 232 | 115 | 50 | | clay on header | | | reduced stretcher | pmed |
| 23 | msf | LB | 1 | 2423 | 1 | | 235 | 112 | 51 | | | | | reduced stretcher | pmed |
| 26 | msf | LB | 3 | 2138 | 1 | | 233 | 111 | 50 | | | | | reduced stretcher to depth of 40mm | pmed |
| 26 | msf | LB | 4 | 2162 | 1 | | 225 | 110 | 51 | | | | | reduced stretcher to depth of 50mm, cracked & vit | pmed |
| 27 | msf | LB | 1 | 2246 | 1 | | 223 | 108 | 51 | | | | | reduced stretcher to depth of 25mm | pmed |
| 27 | msf | LB | 1 | 1853 | 1 | | 227 | 106 | 50 | | | | | stretcher reduced and cracked | pmed |
| 28 | msfe | RTP | 1 | 175 | 1 | | | | | 1 x R | | | | slightly overfired, peg hole not full thickness | pmed |

| context | fabric | form | no | wt/g | minno | abr | length | width | height | peg | mortar | glaze | hackmarks | comments | date |
|---------|--------|------|----|------|-------|-----|--------|-------|--------|----------|----------------|-------|---------------|---|------|
| 28 | mscf | RTP | 1 | 379 | 1 | | | 170 | 11 | 1 x R(2) | | | | | pmed |
| 28 | msffe | RTP | 1 | 288 | 1 | | | | | 1 x S | | | | slightly overfired, peg hole not full thickness | pmed |
| 29 | msf | LB | 1 | 2453 | 1 | | 225 | 110 | 52 | | | | | near-complete brick, fully reduced | pmed |
| 29 | msffe | LB | 1 | 1998 | 1 | | 223 | 110 | 51 | | | | | incomplete brick | pmed |
| 29 | fscq | LB | 1 | 176 | 1 | ++ | | | 52 | | | | longitudinal? | dense | pmed |
| 29 | msf | LB | 1 | 947 | 1 | | | 102 | 47 | | | | diag | aprox half brick, stretcher reduced/vit | pmed |
| 29 | msf | LB | 25 | 696 | 5 | + | | | | | | | | overfired, reduced, porous, some vit - small sample retained | pmed |
| 29 | msf | UN | 3 | 59 | 3 | + | | | | | | | | poss clay 'mortar' slabs, or underfired RT | pmed |
| 29 | fs | RTP | 8 | 184 | 8 | | | | | | | | | | pmed |
| 29 | fs | RTP | 3 | 60 | 3 | | | | | 1 x R | | | | reduced | pmed |
| 29 | wfs | T | 1 | 21 | 1 | + | | | 15 | | | | | kiln furniture? | pmed |
| 29 | msffe | LB | 1 | 1062 | 1 | | | 115 | 48 | | | | | aprox half brick, stretcher reduced/vit | pmed |
| 29 | msf | LB | 1 | 2455 | 1 | | 227 | 113 | 50 | | | | | near-complete brick, reduced surface & header, cracked | pmed |
| 29 | msf | RTP | 4 | 845 | 4 | | | | 10 | 1 x S | | | | all partly reduced - 2 retained | pmed |
| 39 | wfe | RTP | 2 | 14 | 2 | | | | | | | | | | pmed |
| 39 | msffe | LB | 1 | 63 | 1 | | | | | | | | | | pmed |
| 39 | msf | LB | 1 | 6 | 1 | ++ | | | | | | | | | pmed |
| 43 | ms | RTP | 2 | 16 | 1 | | | | | | | | | joining frags, vit material adhering | pmed |
| 43 | msffe | RTP | 2 | 623 | 2 | | | | | 1 x S | | B | | glaze all over, fused tiles | pmed |
| 43 | msffe | RTP | 1 | 390 | 1 | | | | | | | B | | kiln scars, 3 fingermarks close to edge, reduced, glaze both sides | pmed |
| 43 | msf | LB | 1 | 1550 | 1 | | | 127 | 52 | | | | | channel of ?drilled hole in 1 stretcher | pmed |
| 43 | fsfe | T | 1 | 548 | 1 | | | | 41 | | | | | partial floor brick/tile, unfused glaze on surface - KF | pmed |
| 43 | fsfe | T | 1 | 813 | 1 | | | | 35 | | | | | partial floor brick/tile - KF? | pmed |
| 43 | msffe | LB | 1 | 905 | 1 | | | 118 | 41 | | | | | vit stretcher | pmed |
| 43 | fs | RTP | 1 | 237 | 1 | | | 166 | 11 | 1 x R(2) | | B | | glaze on both surfaces | pmed |
| 43 | fs | RTP | 1 | 195 | 1 | | | | | 1 x S | | B | | glaze, kiln scars, some overlapping or glaze-covered, suggesting at least 3 uses, glaze on breaks | pmed |
| 43 | ms | RTP | 2 | 285 | 2 | | | | | | | G/B | | dark greenish brown glaze all over, ?saggar rim stuck to one side | pmed |
| 43 | ms | RTP | 1 | 584 | 1 | | | 169 | 12 | | | G/B | | dark greenish brown glaze all over, ?saggar rim stuck to one side | pmed |
| 43 | msf | LB | 1 | 1134 | 1 | | | 118 | 44 | | clay on header | | | reduced stretcher | pmed |

| context | fabric | form | no | wt/g | minno | abr | length | width | height | peg | mortar | glaze | hackmarks | comments | date |
|---------|--------|------|----|------|-------|------|--------|-------|--------|----------|--------------|-------|-----------|---|------|
| 43 | fs | RTP | 1 | 303 | 1 | | | | | | | B | | tile with kiln scar of jug rim (90mm diam) | pmed |
| 43 | ms | RTP | 1 | 223 | 1 | | | | | | | G/B | | dark greenish brown glaze all over, ?saggar rim stuck to one side | pmed |
| 43 | msffe | RTP | 1 | 377 | 1 | | | 164 | 11 | 1 x S(2) | | BL | | glaze on both surfaces, kiln scars | pmed |
| 43 | msffe | RTP | 1 | 275 | 1 | | | 168 | 12 | 1 x R(1) | | B | | reduced surfaces, glaze on underside | pmed |
| 43 | msf | LB | 1 | 971 | 1 | | | 115 | 47 | | | | | vit stretcher | pmed |
| 43 | ms | RTP | 1 | 135 | 1 | | | | | | | G/B | | dark greenish brown glaze all over, hollow ware base stuck to one side | pmed |
| 45 | wfg | LB | 11 | 1057 | 1 + | | | 107 | 46 | | | | | | pmed |
| 45 | fsfe | RTM | 1 | 18 | 1 | | | | | | | | | reduced core | med |
| 54 | fsfcp | LB | 4 | 2064 | 1 + | 235 | 109 | 55 | | | | | | | pmed |
| 54 | fsfcp | LB | 1 | 2404 | 1 | 230 | 105 | 54 | | | | | | | pmed |
| 58 | msf | LB | 1 | 2423 | 1 | 225 | 103 | 55 | | | | | diag | dragged fingermarks on surface, sooted | pmed |
| 58 | msf | LB | 1 | 2197 | 1 | 225 | 112 | 50 | | | | | diag | | pmed |
| 58 | msffe | RTP | 1 | 250 | 1 | | | | | | | | | | pmed |
| 58 | msf | LB? | 1 | 1165 | 1 | | 85 | 70 | | | | | | poss specialist kiln brick? slightly curved? overfired, blown, vit, reduced | pmed |
| 58 | msffe | T | 1 | 2510 | 1 | >200 | >150 | 50 | | | | | | roughly made - specialist kiln brick? | pmed |
| 63 | msffe | LB | 1 | 710 | 1 + | | 93 | 50 | | | | | | partial brick with hole through thickness, c.20mm diam, open to header end | pmed |
| 63 | msf | LB | 1 | 476 | 1 | | | 45 | | | clay on base | | | stretcher reduced | pmed |
| 63 | msf | LB | 1 | 903 | 1 + | | 117 | 49 | | | clay | | | ?unfused glaze on edged, but under clay 'mortar' - reused? | pmed |
| 63 | msf | LB | 1 | 1062 | 1 + | | 116 | 49 | | | | | | | pmed |
| 63 | msffe | LB | 1 | 417 | 1 + | | | 49 | | | | | | deep groove in surface, pre-firing, vit/glaze on surface | pmed |
| 63 | msf | LB | 1 | 385 | 1 | | | 46 | | | | | | overfired, reduced, vit stretcher | pmed |
| 63 | msgfe | LB | 1 | 446 | 1 | | 108 | 47 | | | | O | | glaze on surfaces and stretcher | pmed |
| 65 | fs | RTP | 1 | 697 | 2 | | 170 | 13 | | 1 x S | | B | | 2 tiles fused together, glaze and kiln scars, reduced | pmed |
| 65 | msfe | LB | 1 | 1156 | 1 | | 121 | 48 | | | | | | corner not at right-angles, cut before firing. reduced surface | pmed |
| 65 | msffe | LB | 1 | 933 | 1 + | | 113 | 41 | | | | O | | glaze on surfaces and stretcher | pmed |
| 68 | fs | RTP | 1 | 388 | 1 | | | | | 1 x R | | B | | multiple kiln scars, including 3 bobs | pmed |
| 69 | msffe | RTP | 1 | 326 | 1 | | 165 | 12 | | | | | | waped, reduced, kiln scar | pmed |
| 71 | msffe | LB | 2 | 1675 | 1 + | | 105 | 53 | | | | | | underfired | pmed |
| 71 | msffe | LB | 1 | 1466 | 1 | | 110 | 52 | | | | | | underfired | pmed |

| context | fabric | form | no | wt/g | minno | abr | length | width | height | peg | mortar | glaze | hackmarks | comments | date |
|---------|--------|------|----|------|-------|-----|--------|-------|--------|-------|---|-------|-----------|---|------|
| 72 | msf | LB | 1 | 2492 | 1 | | 232 | 107 | 54 | | | | diag | | pmed |
| 72 | msf | LB | 5 | 2401 | 1 + | | 234 | 107 | 56 | | | | diag | dense | pmed |
| 78 | msfcp | LB | 6 | 2179 | 1 | | 223 | 110 | 50 | | clay on stretcher | | | | pmed |
| 78 | mscp? | LB | 1 | 1902 | 1 | | 207+ | 106 | 46 | | clay all over | | | | pmed |
| 79 | msf | LB | 1 | 449 | 1 | | | | 55 | | clay | | | | pmed |
| 79 | msf | LB | 1 | 1417 | 1 + | | | 114 | 59 | | clay c.13mm thick | | | eroded stretcher | pmed |
| 79 | msf | LB | 5 | 2202 | 1 | | 230 | 110+ | 59 | | clay | | | brick fragments | pmed |
| 80 | msf | LB | 1 | 2676 | 1 | | | 115 | 59 | | white ms on surface, patches on stretcher | | | | pmed |
| 80 | msf | LB | 1 | 2795 | 1 | | 236+ | 113 | 57 | | white ms on surface, patches on stretcher | | | | pmed |
| 81 | msf | LB | 1 | 1862 | 1 | | | 113 | 60 | | thick white mortar | | diag | reduced header | pmed |
| 81 | msf | LB | 5 | 2956 | 1 | | 242 | 117 | 55 | | thick white ms mortar all over in patches | | | | pmed |
| 84 | msf | LB | 2 | 2048 | 1 | | 229 | 114 | 52 | | | | | reduced/vit header and stretcher | pmed |
| 84 | msfe | LB | 3 | 2640 | 1 | | 240 | 110 | 55 | | | | diag | reduced/vit header and stretcher | pmed |
| 94 | fsfe | LB | 15 | 945 | 15 + | | | | | | | | 1 diag | some underfired | pmed |
| 94 | msf | RTP | 2 | 83 | 2 | | | | | | | | | | pmed |
| 94 | msf | LB | 2 | 371 | 3 + | | | | | | ms white | | | brick fragments mortared together, with frag of tile | pmed |
| 94 | fsg | RTP | 2 | 54 | 2 | | | | | | | | | | pmed |
| 129 | mscpfe | RTP | 7 | 93 | 7 | | | | | 1 x R | | | | | pmed |
| 138 | msf | LB | 1 | 2286 | 1 | | 216 | 112 | 50 | | | | diag | poss deliberate removal of corner with diagonal cut post-firing, header reduced | pmed |
| 138 | msf | LB | 3 | 2161 | 1 | | 228 | 113 | 54 | | | | diag | reduced header | pmed |
| 178 | fsfe | RTP | 1 | 24 | 1 | | | | | | | | | | pmed |
| 215 | msffe | LB | 6 | 1177 | 6 | | | | 46 | | | | | partly reduced frags, no joining, but could be 1 brick | pmed |
| 215 | msffe | LB | 4 | 1682 | 1 | | 227 | 110 | 49 | | | | | underfired, cracked, header reduced | pmed |
| 233 | msffe | LB | 1 | 3107 | 1 | | 242 | 121 | 53 | | clay on surface | | | vit stretcher | pmed |
| 233 | msffe | LB | 1 | 2854 | 1 | | 248 | 121 | 52 | | | | | vit stretcher | pmed |
| 234 | msffe | LB | 3 | 2924 | 1 | | 241 | 120 | 55 | | | | | | pmed |

| context | fabric | form | no | wt/g | minno | abr | length | width | height | peg | mortar | glaze | hackmarks | comments | date |
|---------|--------|------|----|------|-------|-----|--------|-------|--------|----------|-----------------|-------|-----------|--|------|
| 234 | msffe | LB | 2 | 3010 | 1 | | 249 | 121 | 56 | | clay | | | vit stretcher | pmed |
| 235 | msffe | LB | 1 | 3109 | 1 | | 240 | 120 | 55 | | clay on surface | | | reduced stretcher | pmed |
| 235 | msffe | LB | 1 | 3247 | 1 | | 243 | 116 | 55 | | clay on surface | | | reduced stretcher | pmed |
| 235 | msffe | LB | 1 | 1672 | 1 | | | 118 | 51 | | clay | | | reduced stretcher | pmed |
| 236 | msffe | LB | 1 | 2951 | 1 | | 244 | 122 | 55 | | | | | reduced stretcher | pmed |
| 236 | msffe | LB | 1 | 1683 | 1 | | | 116 | 52 | | clay | | | reduced stretcher | pmed |
| 236 | msffe | LB | 1 | 3035 | 1 | | 249 | 121 | 51 | | clay | | | reduced stretcher | pmed |
| 238 | mscpfe | LB | 1 | 730 | 1 + | | | 118 | 50+ | | | | | burnt surface - from floor of kiln? | pmed |
| 265 | mscpfe | RTP | 3 | 622 | 1 | | | 169 | 11 | | | | | | pmed |
| 265 | msf | LB | 1 | 2597 | 1 | | 234 | 114 | 51 | | | | diag | | pmed |
| 265 | ms? | RTP | 1 | 141 | 1 | | | | | | | | | overfired, warped | pmed |
| 265 | fsfcp | LB | 1 | 2200 | 1 | | 233 | 112 | 48 | | | | diag | | pmed |
| 280 | wfs | T | 1 | 82 | 1 | | | | | | | SW | | corner frag, kiln furniture | pmed |
| 280 | msffe | RTP | 1 | 468 | 1 | | | 165 | 11 | 1 x R(2) | | B | | glaze all over base | pmed |
| 280 | msffe | LB | 1 | 649 | 1 + | | | 110 | 43 | | | | | completely reduced | pmed |
| 280 | fsfe | RTP | 1 | 115 | 1 | | | | | 1 x R | | O | | peg tile | pmed |
| 280 | GRE? | UN | 1 | 117 | 1 | | | | | | | B | | part of sphere? | pmed |
| 281 | fs | PAN | 1 | 257 | 1 | | | | | | | | | soot patches | pmed |
| 281 | wfs | T | 1 | 830 | 1 | | | >130 | 37 | | | | | kiln furniture? Sooted, KT edge | pmed |
| 281 | wfs | T | 1 | 116 | 1 | | | | | | | SW | | corner frag, kiln furniture | pmed |
| 281 | wfs | T | 1 | 76 | 1 + | | | | | | | W | | kiln furniture | pmed |
| 281 | wfs | T | 1 | 118 | 1 | | | | 35 | | | | | kiln furniture? | pmed |
| 282 | msffe | RID | 1 | 285 | 1 | | | | 19 | | | | | partial chamfered edge | pmed |
| 282 | msffe | KILN | 2 | 5267 | 2 | | | | 48 | | | | | large curved V-shaped tiles, c.110mm high, cut horizontal ends, may be part of kiln structure (see also context 285) | pmed |
| 282 | msgfe | LB | 1 | 1090 | 1 | | | 100 | 60 | | | | | vit header | pmed |
| 282 | msffe | LB | 1 | 1245 | 1 | | | 87 | 52 | | | | | small brick - specialist? | pmed |
| 282 | fs | PAN | 1 | 198 | 1 | | | | | | patch white ms | | | curving corner, patches of soot | pmed |
| 282 | msgfe | LB | 1 | 571 | 1 | | | | 65 | | | | | vit ?header | pmed |
| 282 | msf | LB | 1 | 2368 | 1 | | 220 | 113 | 52 | | | | diag | | pmed |
| 284 | wfs | T | 1 | 27 | 1 | | | | | | | | | kiln furniture, straight edge, flat | pmed |

| context | fabric | form | no | wt/g | minno | abr | length | width | height | peg | mortar | glaze | hackmarks | comments | date |
|---------|--------|------|----|------|-------|-----|--------|-------|--------|-------|----------------------------|-------|-----------|---|------|
| 284 | fsfe | PAN | 1 | 134 | 1 | + | | | | | | DB | | | pmed |
| 284 | msffe | LB | 1 | 1367 | 1 | | | 100 | 58 | | | | | partial brick overfired, dark purple | pmed |
| 284 | fsfe | PAN | 1 | 169 | 1 | | | | | | | | | | pmed |
| 284 | msfe | RTP | 1 | 120 | 1 | | | | | | | B | | kiln scars, some glazed over | pmed |
| 284 | fs | PAN | 1 | 124 | 1 | | | | | | | | | | 17+ |
| 285 | msffe | LB | 1 | 1253 | 1 | | | 110 | 58 | | | | | reduced header | pmed |
| 285 | ms | RTP | 1 | 58 | 1 | | | | | | | | | dark brown glaze, small ring stilt adhering (37mm diam) | pmed |
| 285 | wfs | T | 1 | 86 | 1 | | | | 15 | | | | | kiln furniture? | pmed |
| 285 | wfs | T | 1 | 35 | 1 | | | | 12 | | | | | kiln furniture? | pmed |
| 285 | wfs | T | 3 | 38 | 1 | | | | | | | | | kiln furniture? Not full thickness | pmed |
| 285 | fsfe | PAN | 2 | 783 | 1 | | | 230 | 14 | | ms white on edge | | | width is straight across, not via curve. soot patches | 17+ |
| 285 | msgfe | TERR | 1 | 9520 | 1 | | 302 | 262 | 130+ | | patches white on flat base | | | square plinth, roughly hollowed base, surface mostly lost (remaining areas sanded from mould) | pmed |
| 285 | msf | LB | 1 | 1479 | 1 | + | | 119 | 52 | | | | | partial brick | pmed |
| 285 | msffe | LB | 1 | 996 | 1 | | | 110 | 63 | | | | | overfired, vit headed | pmed |
| 285 | msffe | QFT | 1 | 2129 | 1 | | | 227 | 42+ | | | | | worn, KT edges | pmed |
| 285 | msffe | KILN | 2 | 4315 | 1 | | 135 | | 47 | | | | | large curved cbm fragment may be part of kiln structure (see also context 282) | pmed |
| 286 | fsfe? | RTP | 1 | 1032 | 2 | | | | | | | B | | warped, covered in glaze on convex side, concave side contains mortar-like material also found in saggars | pmed |
| 286 | fsfe | LB | 1 | 2224 | 1 | | 221 | 115 | 50 | | | | diag? | | pmed |
| 286 | fsfe | LB | 1 | 2082 | 1 | | 222 | 109 | 48+ | | | | | worn surface | pmed |
| 286 | fsfe | RTP | 1 | 103 | 1 | | | | | | | B | | kiln scars, glaze all over | pmed |
| 286 | msffe | T | 1 | 4330 | 1 | | 235 | 225 | 45 | | | | | KT edges, 1 corner roughly cut off diagonally (slightly concave) | pmed |
| 286 | wfs | T | 1 | 92 | 1 | | | | 16 | | | | | kiln furniture, straight edge, flat | pmed |
| 286 | ms | RTP | 1 | 82 | 1 | | | | | | | | | dark brown glaze, ?saggar rim adhering | pmed |
| 286 | msgfe | LB | 1 | 704 | 1 | | | 98 | 68 | | | | | overfired, dark purple, stretcher vit - specialist kiln? | pmed |
| 287 | un | LB? | 1 | 1044 | 1 | | | | | | white deposit, poss mortar | | | overfired, blown brick, large holes | pmed |
| 287 | msffe | LB | 1 | 1171 | 1 | | | 111 | 50 | | | | | overfired, reduced core | pmed |
| 287 | fsfe | RTP | 1 | 245 | 1 | | | | | | | | | kiln scars, glaze all over, at least 2 uses | pmed |
| 287 | fsfe | RTP | 1 | 130 | 1 | | | | | 1 x S | | | | kiln scars, glaze all over, at least 2 uses | pmed |

| context | fabric | form | no | wt/g | minno | abr | length | width | height | peg | mortar | glaze | hackmarks | comments | date |
|---------|--------|------|----|------|-------|-----|--------|-------|--------|-----|--------|-------|-----------|--------------------------------------|------|
| 290 | msf | LB | 1 | 1555 | 1 | + | | 115 | 50 | | clay | | | | pmed |
| 290 | fs | RTP | 1 | 830 | 2 | | | | | | | | | 2 peg tiles fused together by glaze | pmed |
| 296 | msfe | RTP | 1 | 142 | 1 | | | | | | | | | | pmed |
| 298 | msf | LB | 1 | 647 | 1 | | | 114 | 50 | | | | | | pmed |
| 299 | msffe | LB | 1 | 1176 | 1 | | | 115 | 48 | | | | diag | | pmed |
| 301 | fsfcp | LB | 1 | 799 | 1 | | | | 53 | | | | | | pmed |
| 301 | msffe | LB | 1 | 946 | 1 | | | 90 | 55 | | | | | purple, overfired, blown | pmed |
| 303 | msffe | LB | 1 | 2213 | 1 | | 234 | 109 | 51 | | | | diag | chamfered brick | pmed |
| 303 | fsfcp | LB | 1 | 707 | 1 | | | 110 | 50 | | | | | chamfered brick | pmed |
| 307 | fsfcp | RTP | 2 | 48 | 2 | | | | | | | | | | pmed |
| 312 | fsfcp | LB | 1 | 1165 | 1 | | | 121 | 60 | | | | | burnt stretcher and base | pmed |
| 312 | msf | LB | 1 | 598 | 1 | | | | 42 | | | B | | partially glazed, overfired, reduced | pmed |
| 312 | msf | LB | 1 | 1040 | 1 | | | 105 | 85 | | | | | specialist brick, overfired, blown | pmed |
| 312 | msf | LB | 1 | 403 | 1 | | | | 45 | | | | | reduced surface | pmed |

CBM catalogue

B.8 Clay tobacco pipe

By Carole Fletcher

Introduction

B.8.1 Archaeological works produced an assemblage of 71 fragments of white ball clay tobacco pipe, weighing 0.543kg. The bulk of the assemblage was recovered from a post-medieval (Phase 2) clay extraction pit, the remainder were recovered from pits, a sinkhole fill and a single fragment of clay tobacco pipe came from one of the brick kilns. The assemblage has undergone a moderate degree of reworking; no complete pipes were recovered, although complete bowls were found.

Methodology

B.8.2 Terminology used in this report is taken from Oswald's simplified general typology (1975, 37–41) and Hind and Crummy (1988, 47–66) with reference to Atkinson and Oswald (1969 7–11). The catalogue is based on the recording methods recommended by the Society for Clay Pipe Research (SCPR 1994). The plain and undecorated stem fragments have been counted and weighed with length and diameter recorded, burnishing or seam trimming details are only mentioned briefly unless significant. Stem bore analysis has also not been conducted. However, the bulk of the pipe bowls are relatively closely datable. The assessment of the assemblage has tentatively identified and dated the bowls present, only a single set of initials were recorded and no decoration beyond the milling/rouletting of the pipe bowl was found. The clay tobacco pipe and archive are curated by Oxford Archaeology East until formal deposition.

Factual data

B.8.3 This assemblage of 71 fragments of white ball clay tobacco pipe, weighing 0.543kg, comprises fragments of stem and 19 complete, partial or fragmentary bowls. The earliest pipe is an Oswald type 5 (Oswald 1975) bowl from c.1640–1660, recovered from Phase 2 extraction pit **42**. No decorated stem fragments were recovered, and rouletting was the only decoration found on bowls.

B.8.4 The majority of the pipe bowls recovered are c.1660–1680, both Oswald type 6 and 7 (Oswald 1975 37–42). Other pipe bowls are present in low numbers, with single examples of Oswald type 8 and 9 both c.1680–1710 (*ibid*). A single example of makers' initials was seen on the heel of a partial bowl (post-1660). The initials IM were also found on heels of 18 pipes recovered from the excavation at Duke Street, Norwich, where they appear on the heels of Oswald type 9 bowls (Fletcher 2019), and it seems very probable that the initialled pipe here is also an Oswald type 9.

Discussion

B.8.5 The assemblage is very probably, in part, locally produced, since pipe makers were present in Norwich (Atkin 1985). Unfortunately, only a single initialled was recovered, although 18 pipes with the same initials were recovered from excavations at Duke Street Norwich, and it is hoped that the maker will be identified. The assemblage spans

c.1640-1710, with the bulk of the assemblage dating to c.1660-1880. This small but relatively closely dated assemblage indicates the consumption of tobacco on, or in the vicinity of, the site, both very probably by the brick makers or kiln loaders, although some may relate to the potters producing the post-medieval vessels whose wasters were recovered from the extraction pits.

Statement of potential

B.8.6 The assemblage has some potential to aid the understanding of the post-medieval economy of the site, indicating the supply of clay tobacco pipes to the site, although only a single initialled pipe was recovered. However, the assemblage mainly provides dating evidence for the brick making and the longevity of the brick kilns and pottery manufacture; the latter indicated by the waster sherds from unlocated kilns.

Recommendations for further work

- Research on the pipe maker IM. Pipes with this mark were also recovered from the excavation at Duke Street Norwich. (0.25 day)
- Examine the lead-filled clay tobacco pipe and look for parallels. (0.25 day)
- Report on the above. (0.5 day)
- Photograph/illustrate the initialled pipe bowl for inclusion in the report.
- Photograph/illustrate the lead filled pipe for inclusion in the report.
- No further work is recommended for the remainder of the assemblage.

TOTAL = 1.25 days

Retention, dispersal and display

B.8.7 The plain, undecorated stems are recorded in the catalogue and may be discarded. The complete pipe bowls should be retained.

Task list

| Description | Performed by | Days |
|--|-------------------------------------|------|
| Identify the makers' mark on the pipe from 383 | Dr Ben Jervis (TBC) | 0.25 |
| Examine the pipe filled with lead and look for parallels | Dr Ben Jervis | 0.25 |
| Report on the initialled pipe and lead-filled pipe | Dr Ben Jervis | 0.5 |
| Photograph or illustrate the clay tobacco pipe bowl and stem fragments held together by lead and the initialled pipe | OAE photographer and or illustrator | 0.25 |

Catalogue of tobacco pipe

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|-----|------------------------------|-------|----------------------------|---|---|------------|---------------------------|
| 1 | 10 | 9 | Plain stem fragment | 1 | 1 | 0 | Length (51mm) of plain, undecorated, burnished stem, seams are still visible but well-trimmed. 9.5mm diameter tapering to 7.6mm | 0.005 | Not closely datable (NCD) |
| 1 | 20 | 18 | Plain stem fragment | 1 | 1 | 0 | Short length of plain, undecorated stem, slightly teardrop shaped with somewhat visible seams and possibly lightly burnished. 36mm long, 8.5 x 8.2mm | 0.004 | NCD |
| 1 | 43 | 42 | Complete bowl, Oswald type 6 | 1 | 0 | 1 | Complete bowl, heel and moderate length of stem (50mm) attached (diameter 9.8mm). The bowl is well formed, all seams have been trimmed, although they are still visible and there is some light burnishing around the area of the seams. The bowl is rouletted around part of its circumference, beginning at and slightly overlapping the seam on the back of the bowl, until approximately halfway around the left side of the bowl, after which it is absent. The heel is sub-rounded, with slight damage where it joins the stem, which may be due to trimming. The bore is relatively centrally placed and there is some discolouration in the bowl, but it is likely to be staining; it is not clear as to whether this pipe was smoked. The bowl is described as a type 6, although it is perhaps slightly straighter than most examples. This slight deviation may indicate that the pipe is local, although this is uncertain, as it does not have an exact parallel in Atkin (Atkin 1985) | 0.016 | c.1660-1680 |
| | | | Complete bowl, Oswald type 6 | 1 | 0 | 1 | Near-complete bowl with chip to rim at front of bowl, and a complete well-formed round heel, slightly damaged joint with stem (short length 12mm, diameter 10mm), where it has been trimmed. The lower seam beyond the heel is poorly trimmed. The upper seam and those on the bowl are more visible. The bowl having been relatively well finished with some light burnishing in the area of the front seam below the rim is a line of rouletting that is relatively deep on the back of the bowl and almost absent at the front of the bowl. The rim itself has been trimmed externally. There is a hairline crack running from the damaged rim to about halfway down the bowl on the right side of pipe and the trimming of the seam and subsequent light burnishing has left the surface uneven | 0.014 | c.1660-1680 |
| | | | Complete bowl, Oswald type 6 | 1 | 0 | 1 | Near-complete bowl with large chip (triangular) to rim on the right side of the bowl, with a complete well-formed slightly sub-round heel with an obvious visible and not well trimmed seams running across the heel. Somewhat uneven at joint with stem, slightly sub-rounded stem (11 x 10.8mm, short length 27mm, misshapen due to what appears to be relatively heavy trimming flattening the stem on either side of the seam where it has been trimmed. The upper seam trimming has also been somewhat flattened. The seam on the front of the bowl is visible and has been lightly burnished all around it. Burnishing is more thorough on the back of the bowl where the seam is more carefully hidden as a line of rouletting below the rim and only survives for short length on the back of the bowl. The rim of the bowl has been trimmed. Externally there is little if any | 0.015 | c.1660-1680 |

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|-----|---------------------|-------|----------------------------|---|---|------------|-------------|
| | | | | | | | discolouration internally the bowl or on the bowl, which is somewhat off-centre; it is unclear if the pipe has been smoked. The bowl having been relatively well finished with some light burnishing in the area of the front seam below the rim is a line of rouletting that is relatively deep on the back of the bowl and almost absent at the front of the bowl. The rim itself has been trimmed externally. There is a hairline crack running from the damaged rim to pottery halfway down the bowl on the right side of pipe and the trimming of the seam and subsequent light burnishing has left the surface uneven | | |
| | | | Incomplete bowl | 2 | 0 | 1 | Incomplete bowl missing most of the rim and front of bowl and broken into. A short section of rim survives at the back of the bowl with traces of rouletting, with a complete well-formed sub-rounded heel, and short length of stem (8mm, slightly sub-rounded, diameter roughly 10.4mm). The bowl having been relatively well finished with some light burnishing and well-trimmed seams. The interior of the bowl is somewhat grey, the discolouration extending into the fabric pipe | 0.010 | c.1660-1680 |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (58mm), undecorated, slightly oval, 7.9 x 7.3mm, tapering to 6.9-6.8mm. The stem is irregular, as if slightly squeezed when the clay was still malleable. The 'squeezed' area feels comfortable between finger and thumb, as if someone was attempting to form a barley twist but did not quite succeed. Trimmed seams, although still visible, and lightly burnished. Grey and burnt surfaces are probably the result of burning to clean the bore | 0.003 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (117mm) of plain, undecorated, slightly curved stem. Slightly diamond shaped, 12 x 11mm. tapering to 9.6 x 8.5mm. Seams are apparent in the somewhat diamond-shaped profile, but well-trimmed. Bore very off-centre, so close to the edge of the stem that the wall of the stem has broken to expose the bore. The stem appears to have been wiped rather than burnished | 0.015 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (88mm) of plain, undecorated, slightly curved stem. Circular profile with central bore. 8.4mm in diameter, tapering to 7.1mm, neatly trimmed seams | 0.007 | NCD |
| | | | Plain stem fragment | 2 | 1 | 0 | Length (84mm) of plain, undecorated stem, broken in two, slightly oval in profile. 10.4 x 9.6mm in diameter, tapering to 9.4 x 8.9mm. Pale grey surrounding bore, indicating use. Neatly trimmed seams and lightly burnished | 0.009 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (56mm) of plain, undecorated stem, slightly oval in profile. 10.4 x 9.4mm in diameter, tapering to 9.2 x 8.9mm. Trimmed seams, resulting in a flattened area to the side of the remaining visible seam | 0.007 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (50mm) of plain, undecorated stem, slightly oval in profile, curving. Trimmed seams and lightly burnished. Appears somewhat grey and discoloured. very probably due to burning to clean the pipe bore. 9.3mm in diameter, tapering to 8.6mm | 0.005 | NCD |

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|------------|-----------------------------------|-------|----------------------------|---|---|------------|-------------|
| | | | Plain stem fragment | 1 | 1 | 0 | Length (38mm) of plain, undecorated stem. Surface is grey and discoloured from burning. Well-trimmed seams and lightly burnished. 8.6mm in diameter, tapering 8.2mm | 0.003 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (39mm) of plain, undecorated stem. Slightly oval 9.6 x 8.8mm, tapering to 8.9 x 8.6mm. Well-trimmed seams and lightly burnished around seams | 0.004 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (33mm) of plain, undecorated stem, broken at join with bowl. Slightly oval 10 x 9.3mm in diameter, tapering to 9.3 x 8.8mm, seams are trimmed, lower seam very visible, lightly burnished around upper seam. Off-centre narrow bore by comparison with most of the stems recovered | 0.004 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (33mm) of plain, undecorated stem. Externally somewhat grey due to burning and bore also grey. Slightly oval 9.9 x 9.5mm in diameter, tapering to 9.2 x 9mm | 0.004 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (34mm) of plain, undecorated stem, internally grey, surface white with slight heat alteration. 10 x 9.3mm in diameter, tapering to 9.3 x 8.8mm | 0.004 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (32mm) of plain, undecorated stem. 6.9mm in diameter, well-trimmed seams and slightly burnished | 0.002 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length (24mm) of plain, undecorated stem with some heat alteration. Bore off-centre, moderately well-trimmed seams, 10.6 x 9.7mm in diameter | 0.003 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Short length (22mm) of plain, undecorated stem, diameter 6.3mm tapering to 5.7mm. From close to the mouthpiece of the pipe. Seams trimmed but one still visible and lightly burnished | 0.001 | NCD |
| 1 | 58 | 56 | Plain stem fragment | 1 | 1 | 0 | Length of plain, moderately abraded stem (72mm), broken where stem begins to flare outwards at heel of bowl, 11mm tapering to 9mm in diameter. One seam has been trimmed, leaving a flattened line, the other appears un-trimmed. There is a fault in the stem that may have been part of the mould as the seam runs across the fault | 0.010 | NCD |
| 1 | 64 | 317 | Near-complete bowl, Oswald-type 6 | 1 | 1 | 0 | Near-complete bowl with a chip in the rim on the back of bowl. Relatively thick-walled below rim is an incomplete line of rouletting running from the right side through to the left side across the back of the bowl. The line cannot be seen on the front of the bowl, where the trimming of the seam has resulted in flat planes and a ridge where the knife has been pulled up the rear seam on the bowl. On the stem, the surviving length of which is 21mm, the seams are neatly done. The bowl and stem are burnished. Stem bore is moderately sized, smaller than some of the other bores and off-centre towards the top of the pipe stem. Stem diameter is 10.6mm, the heel has been cut flat with, or parallel to, the stem and is teardrop shaped and neatly finished making it more similar to a type 7 bowl. However, as both bowl types have the same date range this is not as significant as it seems, and as with other bowls in the assemblage, may indicate it is a local pipe. A similar bowl and heel is illustrated in Atkin and recorded as 17th century (Atkin 1985 p126 fig2, 8) | 0.016 | c.1660-1680 |

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|-----|--|-------|----------------------------|---|--|------------|-------------|
| | | | Plain stem fragment | 1 | 1 | 0 | Length (51m) of plain, undecorated stem with some heat discolouration. Bore centrally placed, moderately well-trimmed seams, slightly oval, 8.1 x 7mm, tapering to 7 x 6.4mm | 0.004 | NCD |
| 1 | 67 | 42 | Near-complete bowl (Oswald type 7) and short stem fragment | 1 | 0 | 1 | Complete bowl with a very short (13mm) stub of stem still attached. Rouletted at the back of the bowl only | 0.015 | c.1660-1680 |
| | | | Near-complete bowl (Oswald type 5) and stem fragment | 1 | 0 | 1 | Near-complete bowl and heel with a short (25mm) length of plain stem still attached. Rouletted around the bowl just below the lip, dropping slightly to the front and right side and not meeting up with where it started. Teardrop shaped heel and front of bowl greyed | 0.015 | c.1640-1660 |
| | | | Incomplete bowl (probably Oswald type 7) and stem fragment | 1 | 0 | 1 | Incomplete bowl, damaged on both sides and particularly the front, entirely missing rim. An oval heel and 45mm of plain stem survive. Slightly greyed on the right side of bowl. Definite signs of use | 0.017 | c.1660-1680 |
| | | | Incomplete bowl (probably Oswald type 7) | 1 | 0 | 1 | Incomplete bowl, damaged on left side, missing rim on that side. Rouletted on surviving back of bowl, just below the rim. Most of an oval heel survives. Appears unused | 0.009 | c.1660-1680 |
| | | | Stem fragment with complete heel | 1 | 0 | 1 | Length of plain stem (35mm) with complete oval heel, flaring out where it would have joined the bowl. Interior of stem is grey | 0.008 | Uncertain |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of somewhat curved plain stem (58mm), undecorated, slightly oval 8.9 x 8.2mm, tapering to 7.6 x 7.3mm, well-trimmed seams, relatively centrally placed bore | 0.005 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of somewhat curved plain stem (51mm), undecorated, slightly oval 10.3 x 9.6mm, tapering to 9.7 x 9.5mm, poorly trimmed seams, slightly prominent, relatively centrally placed bore grey from use | 0.006 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (50mm), undecorated, circular profile 9mm, tapering to 8.8mm, well-trimmed seams, relatively centrally placed bore. blackened from use | 0.005 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (48mm), undecorated, slightly oval 9.5 x 9.2mm, tapering to 8.8 x 8.3mm, well-trimmed seams, somewhat off-centre bore | 0.005 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (41mm), undecorated, distinctly oval 8.9 x 8.3mm, tapering to 8.2 x 7.8mm, well-trimmed seams and lightly burnished around seams, relatively centrally placed bore, grey from use | 0.003 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (31mm), undecorated, slightly oval 10.1 x 10mm, tapering to 10 x 9.9mm, well-trimmed seams. Interior grey in section, relatively centrally placed bore | 0.003 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (29mm), undecorated, slightly oval 7.7 x 7.2mm, tapering to 7.2mm, well-trimmed seams, relatively centrally placed bore | 0.002 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (26mm), undecorated, fairly circular profile 8.8mm in diameter, well-trimmed seams, relatively centrally placed bore | 0.003 | NCD |

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|-----|---|-------|----------------------------|---|---|------------|-------------------------|
| 1 | 68 | 42 | Near complete bowl, Oswald-type 7 | 1 | 0 | 1 | Near-complete bowl, broken at stem/heel with only a small section of flat heel surviving. Rouletted below the rim from front to back but absent on the right side of the bowl. The bowl is grey and discoloured, very probably due to the pipe having been burnt to clear or clean the bore/bowl | 0.012 | c.1660-1680 (6/64-7/64) |
| 1 | 69 | 42 | Plain stem fragment | 1 | 1 | 0 | Length (92mm) of plain, undecorated stem, slightly oval, tapering from 10.3-8.5 x 8.2mm, off-centre bore. Damaged, with large flakes missing from the stem and stained by iron rich clay at the wider end. Well-trimmed seams and lightly burnished | 0.009 | NCD |
| 2 | 129 | 128 | Plain stem fragment with fragment of heel | 1 | 0 | 1 | Length (72mm) of plain, undecorated stem, tapering from 12.2-11mm. Slightly oval, broken at point of formation of heel and bowl, however, not enough of either survives to identify the likely form of the bowl. The upper seam is well trimmed, the lower less so, especially as it approaches the heel. The bore is slightly blackened and centrally placed in the stem, until it reaches the bowl end of the stem, where it is very much off to one side, almost against the stem wall | 0.011 | NCD |
| 1 | 280 | 279 | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (46mm), undecorated, slightly oval, 9.5-9.3mm tapering to 9.1-8.4mm. Well-trimmed seams, although still visible, and lightly burnished grey discoloured and burnt, probably due to cleaning. Bore is filled with chalk or plaster | 0.005 | NCD |
| | | | Fragment of bowl | 1 | 0 | 1 | Fragment of bowl wall and rim that is trimmed and chamfered internally, possibly an Oswald type 7 | 0.003 | c.1660-1680 |
| | | | Complete bowl, Oswald type 8 | 1 | 0 | 1 | Complete bowl with minor chip to rim edge. Ring of rouletting below the rim edge (fades slightly towards front of the bowl) well-formed rounded heel with slight roughness to left side which might be trimming damage. Neatly trimmed seams, only visible at heel stem junction, short length of stem, broken shortly after junction with heel. Lightly burnished | 0.019 | c.1680-1710 |
| 1 | 282 | 279 | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (40mm), undecorated, slightly oval 7.7 x 7mm, tapering to 6.4-6.9mm, well-trimmed seams and lightly burnished | 0.002 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (58mm), undecorated, diameter 9.6mm, tapering to 8.9mm. Well-trimmed seams and lightly burnished around seams | 0.005 | NCD |
| 1 | 284 | 283 | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (50mm), undecorated, slightly oval 8.9 x 8.8mm, tapering to 8.4 x 7.9mm, well-trimmed seams, one slightly prominent and lightly burnished, relatively centrally placed bore, grey from use | 0.005 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (45mm), moderately abraded, undecorated, diameter 8.8mm, tapering to 8.4mm, well-trimmed seams. The bore (slightly oval) is poorly placed in the stem, very much off to one side against the stem wall | 0.004 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (49mm), undecorated, diameter 10.3mm, tapering to 9.8mm, becoming more oval as it tapers. Well-trimmed seams and light burnishing give a striped appearance to part of the stem | 0.006 | NCD |

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|-----|---|-------|----------------------------|---|---|------------|---------------------------------|
| 1 | 285 | 283 | Plain stem fragment and partial heel/bowl | 1 | 0 | 1 | Short length of stem (38mm 9.6mm diameter) with trimmed seams and fragment of bowl back wall, partial base and near-complete teardrop-shaped heel (with initials) on each side of the heel. The left appears to be an I and the right an M (IM). The initial 'J' was almost always depicted as an 'I' until the mid-19th century, after which the 'J' was sometimes used http://www.pipearchive.co.uk/pdfs/howto/Guidelines%20Ver%201_2%20030917.pdf There are 18 examples of the initials IM on pipe heels in the assemblage from Duke Street Norwich (Fletcher 2019) and, where the pipe form could be recorded, these were identified as Oswald type 9 bowls c.1680-1710 (Oswald 1975). No pipe maker IM or JM was identified at the time of writing, however, further work on the Duke Street assemblage by the relevant specialist may identify a maker. This is the only initialled pipe in this assemblage and, if a type 9, is one of the later pipes in the assemblage | 0.008 | Post-1660, possibly c.1680-1710 |
| | | | Incomplete bowl Oswald type 9 | 1 | 0 | 1 | Short length of stem (20mm, 11mm diameter) and complete back wall and partial sides of bowl front of the bowl is almost entirely missing with a large jagged break, having also removed part of the rounded heel. Seams are all well-trimmed and below the lightly trimmed rim is a line of rouletting. The internal surface of the pipe bowl and, partially, the outer surface are grey and discoloured, as if indicating the pipe was smoked and burnt to clean the bowl Bore is centrally placed | 0.013 | c.1680-1710 |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (77mm, diameter 10.6mm, tapering to 9.4mm, slightly sub-rounded). The seams are relatively well trimmed, with some flattening to one surface due to trimming. There is no discolouration of the pipe stem | 0.009 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (54 mm) with a diameter of 11.4 mm, tapering to 10.4mm. One end has broken close to the junction of stem and heel/bowl as it is flaring. Seams are slightly trimmed, but what is presumed to be the lower seam is quite visible and still relatively prominent. The outer surface of the pipe is somewhat grey and discoloured from burning | 0.008 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (62 mm, diameter 9.9mm, tapering to 9mm mm, slightly sub-rounded). The seams are trimmed, with some flattening to one surface due to trimming and the other seam is still relatively highly raised, like burnishing. No discolouration of the stem | 0.007 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (62 mm, slightly oval 10.3 x 9.6mm tapering to 9.2 x 8.7mm). The seams are trimmed, with some flattening, but both seams are still visible, and one is slightly raised; the bore is off-centre and the stem is not discoloured | 0.007 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (42mm), undecorated, slightly oval 9.2 x 8.7mm, tapering to 8.7 x 8.4mm. Trimmed seams, slightly grey from burning | 0.004 | NCD |

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|-----|---|-------|----------------------------|---|--|------------|-------------|
| 1 | 286 | 283 | Near-complete bowl (Oswald type 7) and short stem fragment | 1 | 0 | 1 | Complete bowl with a short (31mm) length of stem still attached, and a complete oval/sub-rectangular heel. Rouletted around the bowl just below the rim, with gap around the seam on the front of the bowl. Definite signs of use. Well-trimmed seams, causing some flattening of the upper surface at junction with the bowl at the back of the pipe | 0.018 | c.1660-1680 |
| | | | Partial bowl (probably Oswald type 6) and short stem fragment | 1 | 0 | 1 | Partial bowl with a short (27mm) length of stem still attached, damaged on both sides, particularly the front and right of the bowl; only a small fragment of the rim survives, the surviving fragment is unlined or rouletted. The bowl wall is extremely thick. A complete oval heel survives, with well finished seams | 0.014 | c.1660-1680 |
| | | | Near-complete bowl (Oswald type 7) and stem fragment | 2 | 0 | 1 | Near-complete bowl and heel with 80mm of plain stem, broken at the join with bowl, possibly pre-deposition. Rouletted around the bowl just below the lip, which is slightly rough at the back of the bowl as if the clay was a little too wet when the rouletting was applied. Oval heel. Back and right of bowl and top part of stem are slightly greyed, very probably the result of burning to clean the bowl and bore. Well finished seams | 0.025 | c.1660-1680 |
| | | | Incomplete bowl, possibly an Oswald type 6 and two short stem fragments, joined by lead | 1 | 0 | 1 | Incomplete bowl, missing rim and upper 50-60% of the bowl and at the front of the bowl a missing V-shaped fragment almost to the heel, more damaged on front. A complete oval heel survives, with the mould seam still visible on the heel and back of stem. Some signs of use. It appears that sometime after its final use, the pipe had molten lead poured into the bowl, partially filling it and running into the pipe stem. This sudden heating seems to have cracked the stem in several places, allowing the cooling lead to expand slightly, pushing the broken stem fragments apart, while still leaving them connected. The bowl remains partially filled with lead and the sections of stem are likewise connected by lead | 0.023 | c.1660-1680 |
| | | | Stem fragment with partial heel and bowl | 1 | 0 | 1 | Partial bowl with a short (25mm) length of stem still attached. Extensively damaged, most of the bowl is missing. A partial heel survives, probably originally teardrop shaped. No signs of use | 0.007 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (78 mm, slightly oval, 8.4 x 8.9mm, tapering to 6.9 x 7.5mm). The seams are relatively poorly trimmed with some burnishing to one seam. Some discolouration of stem | 0.007 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (54 mm slightly oval at wider end, teardrop shaped at narrower end, 8.4 x 8.9mm, tapering to 6.9 x 7.5mm). The poorly trimmed seams are still relatively prominent and are the cause of the change in profile | 0.004 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (34mm, oval 6.9 x 5.7mm, tapering to 6.5 x 5.5mm). The seams are poorly trimmed with some flattening to one surface due to trimming; one seam is still relatively raised. Some discolouration of the stem | 0.002 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (33mm, slightly oval 9.8 x 9.5mm, tapering to 9.7 x 9.1mm). The seams are trimmed, with some flattening but both seams are still visible, and one is slightly raised | 0.004 | NCD |

| Trench | Context | Cut | Form | Total | No stems or stem fragments | No bowls or bowl fragments including heel fragments | Description | Weight kg. | Dating |
|--------|---------|------------|-----------------------------|-----------|----------------------------|---|--|--------------|--------------|
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (42mm slightly oval 8.6 x 7.9mm, tapering to 8.2 x 7.8mm). Fairly well trimmed seams | 0.002 | NCD |
| 1 | 287 | 283 | Complete bowl Oswald type 6 | 1 | 0 | 1 | Complete bowl and slightly teardrop shaped heel, unmarked, neatly finished, lined around the rim, although very faint on left side of the bowl. Seams trimmed but still visible, especially on underside of stem and on heel and at heel/bowl join on front of bowl. Lightly burnished over all of pipe stem and bowl, which is internally grey suggesting use | 0.016 | c.1660-1680 |
| 1 | 290 | 42 | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (48mm), moderately abraded, undecorated, diameter 7.7mm tapering to 6.4 x 6.8mm, becoming more oval as it tapers towards the mouthpiece. Trimmed seams | 0.003 | NCD |
| | | | Plain stem fragment | 1 | 1 | 0 | Length of plain stem (70.5mm), undecorated, slightly oval 10.6 x 10.3mm, tapering to 9.5 x 8.4mm. Well-trimmed seams although still visible, and lightly burnished around the seams, relatively centrally placed bore. Grey and burnt around bore, probably due to use | 0.009 | NCD |
| 1 | 312 | 311 | Incomplete bowl | 1 | 0 | 1 | Partial bowl, all of the upper part having been lost, thick walled, to back of bowl a complete somewhat lopsided and slightly irregular heel survives, attached to a short length of slightly oval stem (22mm, 10.2 x 9.3mm). All of the seams are neatly trimmed and lightly burnished around them, with some flattening of the bowl due to the trimming. The edge of the heel has been left somewhat rough and the base of the foot shows drag marks. There is no discolouration to indicate it has been smoked. The form is uncertain but is very probably an Oswald type 6 (Oswald 1975), although it not an exact match. It may, like some of the bowls from pit 42 , be a local pipe, although this is uncertain, as it does not have an exact parallel in Atkin (Atkin 1985) | 0.011 | 17th century |
| | | | | 71 | 46 | 22 | | 0.543 | |

B.8.8 Table XX Clay Tobacco Pipe by context

APPENDIX C ENVIRONMENTAL ASSESSMENTS

C.1 Faunal remains

By Hayley Foster

Introduction and methodology

- C.1.1 This assessment details the analysis of the animal bone recovered from Newfound Farm, Cringleford. The assemblage is of a small size, with 6.36kg of bone retrieved via hand collection. The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), horse (*Equus caballus*), pig (*Sus scrofa*), rabbit (*Oryctolagus cuniculus*), dog (*Canis familiaris*), and bird, probably domestic fowl. Animal bone was recovered solely from features dating to Phase 2, the post-medieval period.
- C.1.2 The method used to quantify this assemblage was based on that used for Knowth by McCormick and Murray (2007) which was modified from Albarella and Davis (1996).
- C.1.3 Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972) and von den Driesch (1976) were used where needed for identification purposes.

Factual data

- C.1.4 The assemblage is in a fair condition with moderate levels of fragmentation. Material was recovered from pits **(18, 42, 128, 259, 283, 286, 293)** and ditch **4**.
- C.1.5 Sheep/goat remains made up the highest percentage of the NISP followed by horse and cattle. It should be noted that the vast majority of sheep remains were retrieved from pits **18** and **259** and were partial skeletons of neonate lambs.

| Species | NISP | NISP% | MNI | MNI% |
|------------|------|-------|-----|-------|
| Sheep/Goat | 47 | 47.0 | 3 | 25.0 |
| Horse | 24 | 24.0 | 3 | 25.0 |
| Cattle | 18 | 18.0 | 2 | 16.7 |
| Pig | 8 | 8.0 | 1 | 8.3 |
| Dog | 1 | 1.0 | 1 | 8.3 |
| Bird | 1 | 1.0 | 1 | 8.3 |
| Rabbit | 1 | 1.0 | 1 | 8.3 |
| TOTAL | 100 | 100.0 | 12 | 100.0 |

Table 28: Number of identifiable specimens (NISP) and minimum number of individuals (MNI) of the total assemblage.

- C.1.6 Horse remains were retrieved from four separate features and consisted of both cranial elements and meat bearing elements. Only one specimen contained an unfused epiphysis indicating an animal ageing to less than 3.5 years of age at death.
- C.1.7 Cattle were the third most frequent species recovered, with a variety of elements represented in all contexts that bone was retrieved from. A single mandible aged to

24-30 months of age at death and there were two unfused distal radii which fuse before 42-48 months of age.

C.1.8 Pig remains were retrieved solely from pit **18**. The remains consisted of a partial piglet of 4-7 weeks of age at death according to the mandible wear data. As bone belonging to young animals is often porous and fragile, the piglet may have been buried complete.

C.1.9 Other species including dog, bird and rabbit were each represented by a single bone.

C.1.10 At Cringleford, domestic mammals were the mainstay of the food economy, with sheep/goat remains being the most well represented species. The size of the assemblage unfortunately does not allow for solid interpretations to be made regarding farming practices however, the limited data would suggest pigs and sheep were bred close to site as young animals were retrieved and that cattle were 2-3 years of age when slaughtered, suggesting probable exploitation for meat.

Statement of potential

C.1.11 The material is a good representation of a post-medieval (17th-18th/19th century) domestic faunal assemblage from a rural site where brick and pottery were also being produced. The data represents a modest quantity of identifiable animal bone, composed of mixed domestic refuse and partial young skeletons. Further analysis may help to shed light on what activities were being undertaken adjacent to Newfound Farm and how these might have been related to the more industrial aspects of the site.

Recommendations for further work

| Description | Performed by | Days |
|--|---------------|------|
| Take measurements and complete full recording | Hayley Foster | 0.5 |
| Writing of report and research comparative assemblages | Hayley Foster | 1.5 |

Retention, dispersal and display

C.1.12 It would be recommended that the assemblage be retained as it could add to the regional picture of diet and husbandry practices in this area of Norfolk.

C.2 Marine mollusca

By Carole Fletcher

Introduction and methodology

- C.2.1 A total of 0.018kg of shell was collected by hand from a pit, during the archaeological works. The shell recovered is oyster *Ostrea edulis*, from estuarine and shallow coastal waters. The shell is moderately well-preserved and does not appear to have been deliberately broken or crushed, however, it has suffered post-depositional damage.
- C.2.2 The shell was weighed and recorded by species, with right and left valves noted, when identification could be made, using Winder (2011) as a guide. The minimum number of individuals (MNI) was not established, due to the small size of the assemblage from most features. Simplified recording was used, and the shell is recorded in the text.

Factual data

- C.2.3 Shell was recovered from the fill of Phase 2 pit **311**, a partial left valve from a relatively thick, medium sized oyster (0.018kg), heavily damaged on the posterior ventral edge, with an almost straight break, however, this damage may be post-depositional.

Discussion

- C.2.4 This is too small an assemblage to draw any but the broadest conclusions, and the shell very probably represents general discarded food waste. Although not closely datable in themselves, the shell may be dated by association with pottery or other material also recovered from the feature, in this case a mid-late 17th-century clay pipe bowl and post-medieval pottery.

Statement of potential

- C.2.5 The assemblage has little potential to aid the regional or local research objectives.

Recommendations for further work

- C.2.6 This statement acts as a full record for the archive and no further work is required beyond summarising the information for publication.

Retention, dispersal and display

- C.2.7 The marine shell may be deselected prior to archive deposition.

C.3 Environmental bulk samples

By Rachel Fosberry

Introduction and methodology

C.3.1 Twelve samples were taken from a range of undated and dated features spanning the prehistoric to post-medieval periods. The samples were processed by tank flotation using modified Siraff-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. A magnet was dragged through each residue fraction for the recovery of magnetic residues prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds.

C.3.2 The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Tables 1-3.

Quantification

C.3.3 For the purpose of this assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

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

C.3.4 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance

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

U=untransformed

Results

C.3.5 Preservation of plant remains is predominantly by carbonisation and is limited to wood charcoal. Seeds of elderberry (*Sambucus nigra*) occur in an untransformed state. These seeds have an extremely tough outer coat (testa) and are particularly resistant to decay.

Phase 1: Prehistoric

C.3.6 Samples were taken from two of five prehistoric pits located in Area 2. Sample 5, fill 125 of pit **123** consists of a moderate amount of wood charcoal with frequent untransformed seeds of elderberry. Sample 6, fill 134 of pit **132** contains a small amount of wood charcoal only.

| Sample No. | Context No. | Cut No. | Area | Function | Feature type | Flot Volume (ml) | Weed Seeds | Charcoal volume (ml) | Pottery |
|------------|-------------|---------|------|----------|--------------|------------------|------------|----------------------|---------|
| 5 | 125 | 123 | 2 | Backfill | Pit | 125 | ####u | 120 | 0 |
| 6 | 134 | 132 | 2 | Sinkhole | Pit | 5 | 0 | 5 | 0 |

Table 29: Samples from Phase 1 prehistoric deposits

Phase 2: Post-medieval

C.3.7 Samples taken from features in Area 1 are all considered to be associated with the post-medieval brick/tile kilns. Wood charcoal is present in most of the samples as evidence of fuel. No other plant remains are preserved.

| Sample No. | Context No. | Area | Cut No. | Feature type | Function | Master Number | Charcoal volume (ml) | Pottery | CBM |
|------------|-------------|------|---------|--------------|----------------------------|---------------|----------------------|---------|-------|
| 1 | 29 | 1 | N/A | Kiln base | Disuse/Firing Ash | 34 | 150 | # | ##### |
| 2 | 58 | 1 | N/A | Kiln base | Demolition Layer/ backfill | 52 | 950 | 0 | ##### |
| 3 | 94 | 1 | 21 | Kiln base | Firing Waste | 0 | 1 | # | ##### |
| 8 | 238 | 1 | 242 | Kiln base | kiln floor remnant | 242 | 20 | # | ## |
| 9 | 237 | 1 | 241 | Kiln base | floor of kiln | 241 | 0 | 0 | #### |
| 10 | 287 | 1 | 283 | Pit | dump | 0 | 5 | ## | # |
| 11 | 296 | 1 | 295 | Pit | Backfill | 0 | 800 | 0 | 0 |
| 12 | 312 | 1 | 311 | Pit | backfill | 0 | 50 | ## | ##### |

Table 30: Samples from Phase 2 post-medieval deposits

Phase 0 - Undated

C.3.8 Samples taken from undated deposits within pit **98** and post-hole **185** in Area 2 both produced oak (*Quercus* sp.) charcoal (identified by Denise Druce). Sample 4, fill 101 of pit **98**, also contains charred hazelnut (*Corylus avellana*) shell fragments.

| Sample No. | Context No. | Area | Cut No. | Feature type | Flot Volume (ml) | Hazelnut shell | Charcoal volume (ml) |
|------------|-------------|------|---------|--------------|------------------|----------------|----------------------|
| 4 | 101 | 2 | 98 | Pit | 20 | # | 35 |
| 7 | 186 | 2 | 185 | Post-hole | 125 | 0 | 350 |

Table 31: Samples from undated deposits

Discussion

C.3.9 The environmental samples from this site have mainly produced wood charcoal, frequently in abundance. The only other plant remains preserved are a few fragments of charred hazelnut shell from undated pit **98** and untransformed elderberry seeds recovered from the basal fill of prehistoric pit **123**. The elderberry seeds may be contemporary with the pit deposit as these seeds have a tough outer coat that renders them resistant to decay, particularly in the anaerobic lower fills of deep features.

Statement of potential

C.3.10 The samples have limited potential for further study other than identification of the species of charcoal present (if appropriate) and the potential for radiocarbon dating of the hazelnut shell in Sample 4 (undated feature; see S. 4.5 above and App. C.4 below).

C.4 Radiocarbon dating certificates

RADIOCARBON DATING CERTIFICATE

08 November 2019

Laboratory Code SUERC-89927 (GU52906)

Submitter Zoe Ui Choileain
Oxford Archaeology East
15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

Site Reference ENF 145412

Context Reference 101

Sample Reference 4

Material Charred fruit fragment (nut shell fragment) : *Corylus avellana*

$\delta^{13}\text{C}$ relative to VPDB -24.5 ‰

Radiocarbon Age BP 3808 \pm 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon* 58(1) pp.9-23.

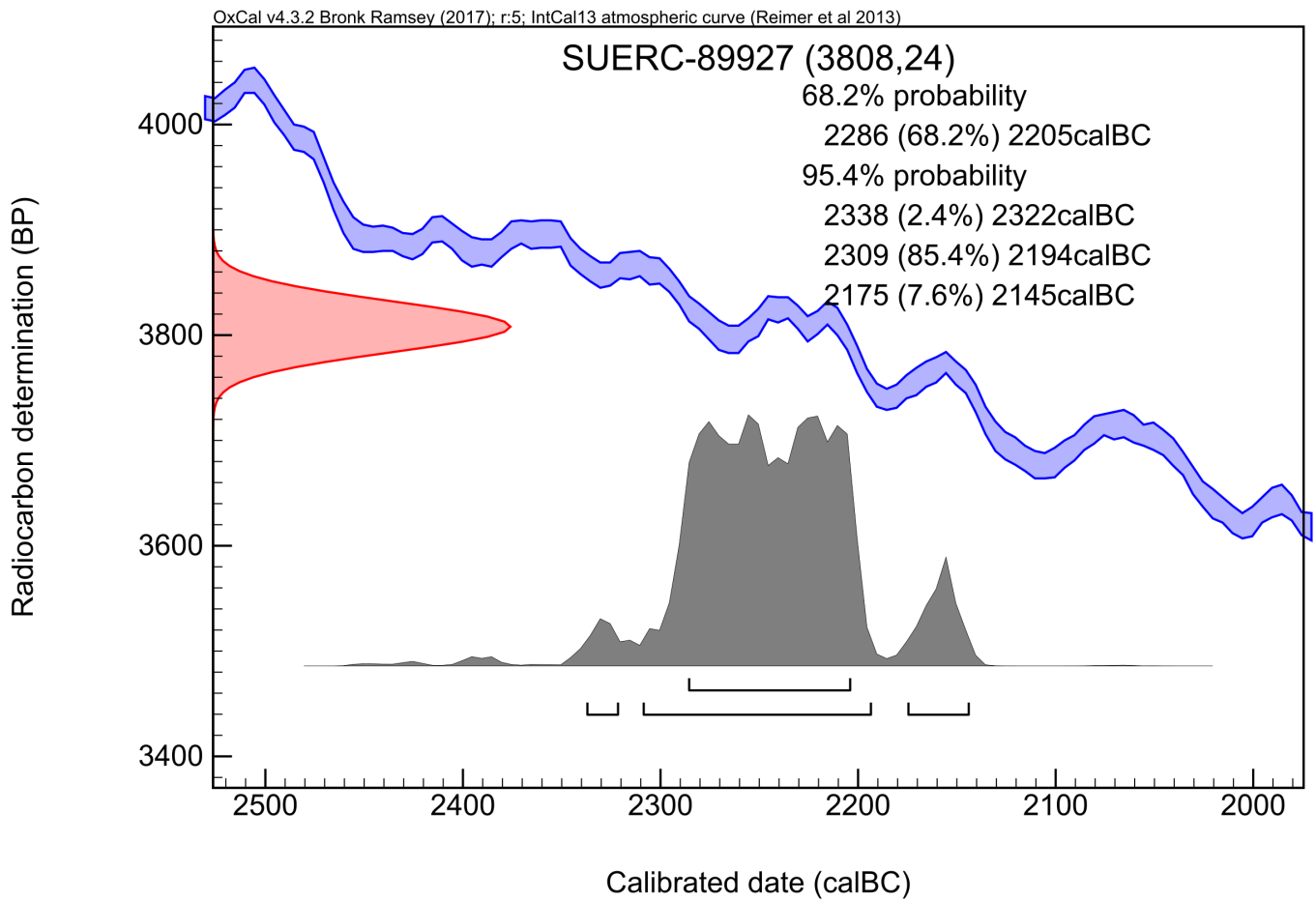
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :



Checked and signed off by :





The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon* 51(1) pp.337-60

† Reimer et al. (2013) *Radiocarbon* 55(4) pp.1869-87

RADIOCARBON DATING CERTIFICATE

08 November 2019

Laboratory Code SUERC-89928 (GU52907)

Submitter Zoe Ui Choileain
Oxford Archaeology East
15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

Site Reference ENF 145412

Context Reference 186

Sample Reference 7

Material Charcoal : Quercus sp

$\delta^{13}\text{C}$ relative to VPDB -26.4 ‰

Radiocarbon Age BP 1216 \pm 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon* 58(1) pp.9-23.

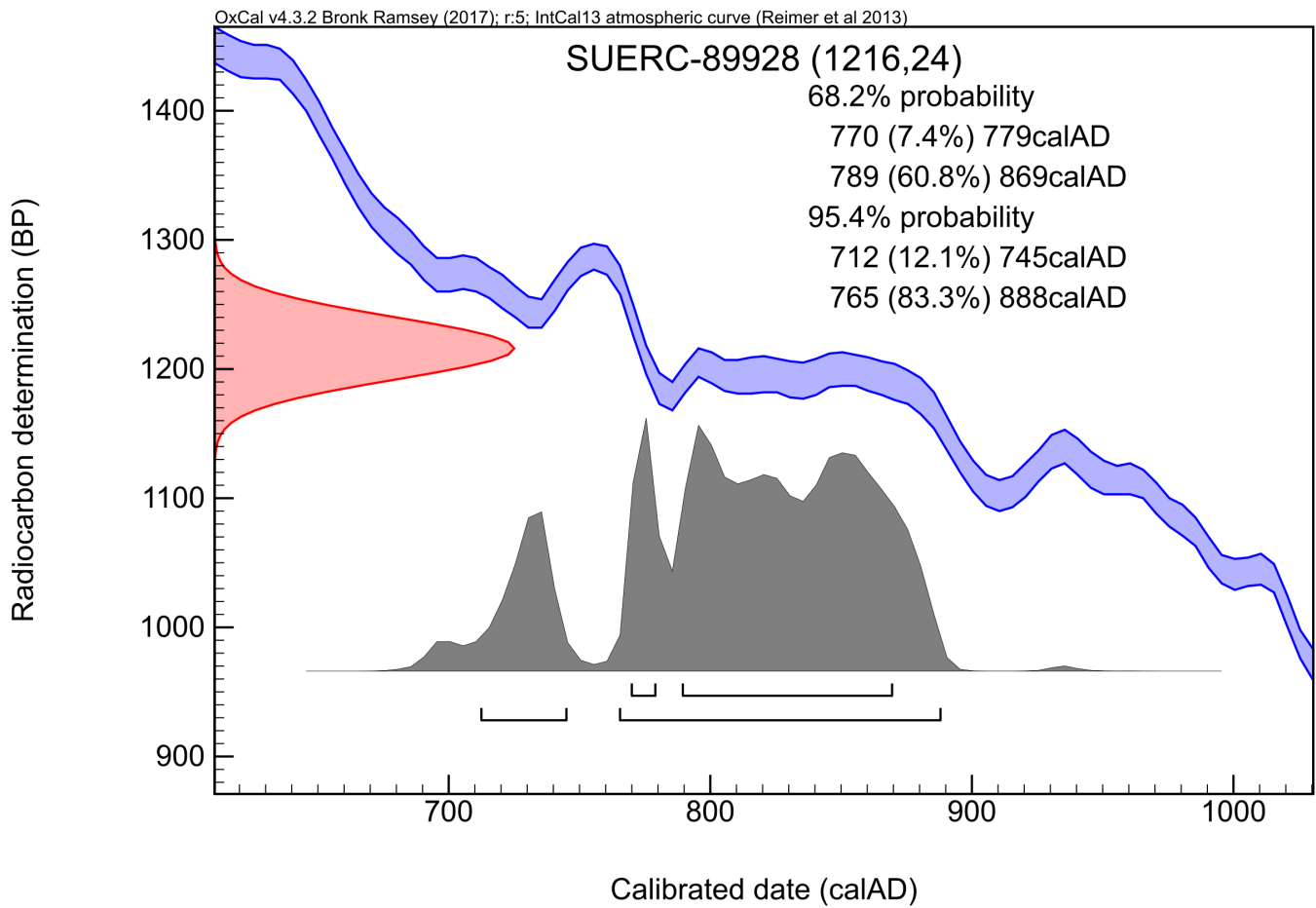
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :



Checked and signed off by :





The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon* 51(1) pp.337-60

† Reimer et al. (2013) *Radiocarbon* 55(4) pp.1869-87

APPENDIX D PRODUCT DESCRIPTION

Product number: 1

Product title: Full archive report

Purpose of the Product: To analyse the site and address the research aims and objectives stated in this report and to disseminate to the local community

Composition: Analytical/archive report deposited at Norfolk HER and ADS/OA online library

Derived from: Analysis of site records, specialist reports and data and background research

Format and Presentation: Analytical/archive client report

Allocated to: TC, NG, RC

Quality criteria and method: Checked and edited by RC and EP

Person responsible for quality assurance: EP

Person responsible for approval: EP

Planned completion date: 2021

Product number: 2

Product title: Publication report

Purpose of the Product: To disseminate the findings of the archaeological investigations to the local community

Composition: Published report, in accordance with the relevant journal and EH guidelines

Derived from: Analysis of site records, specialist reports and data and background research

Format and Presentation: One article (or possibly 2) in serial journal

Allocated to: TC, NG, RC

Quality criteria and method: Checked and edited by RC

Person responsible for quality assurance: EP

Person responsible for approval: EP

Planned completion date: (at earliest) 2021

APPENDIX E RISK LOG

E.1.1 The table below lists potential risks for the PX analysis work.

| No. | Description | Probability | Impact | Countermeasures | Estimated time/costs | Owner | Date updated |
|-----|--|-------------|-------------|--|----------------------|-------|--------------|
| 1 | Specialists unable to deliver analysis report due to over running work programs/ ill health/other problems | Medium | Variable | OA has access to a large pool of specialist knowledge (internal and external) which can be used if necessary | Variable | | |
| 2 | Non-delivery of full report due to field work pressures/ management pressure on co-authors | Medium | Medium-high | Liaise with OA management team | Variable | | |

Table 32 : Risk log

APPENDIX F HEALTH AND SAFETY POLICY

F.1.1 All OA post-excavation work will be carried out under relevant Health and Safety legislation, including the Health and Safety at Work Act (1974). A copy of the Health and Safety Policy can be supplied. The nature of the work means that the requirements of the following legislation are particularly relevant:

- Workplace (Health, Safety and Welfare) Regulations 1992 – offices and finds processing areas
- Manual Handling Operations Regulations (1992) – transport: bulk finds and samples
- Health and Safety (Display Screen Equipment) Regulations (1992) – use of computers for word-processing and database work
- COSHH (1988) – finds conservation and environmental processing/analysis

APPENDIX G OASIS REPORT FORM

Project Details

| | |
|--------------|--|
| OASIS Number | Oxfordar3-346944 |
| Project Name | Land at Newfound Farm, Cringleford, Norfolk - a Post Excavation Assessment (PXA) |

| | | | |
|--------------------|----------|------------------|----------|
| Start of Fieldwork | 29/10/18 | End of Fieldwork | 04/02/19 |
| Previous Work | Yes | Future Work | No |

Project Reference Codes

| | | | |
|------------|-----------|-------------------|---|
| Site Code | ENF145412 | Planning App. No. | Condition 42 (relating to archaeology) of Planning Permission (2013/1793) |
| HER Number | ENF145412 | Related Numbers | NWHCM: 2019.59 |

| | |
|---------------------------|---|
| Prompt | NPPF |
| Development Type | Residential |
| Place in Planning Process | After full determination (eg. As a condition) |

Techniques used (tick all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Field Observation (periodic visits) | <input type="checkbox"/> Part Excavation | <input type="checkbox"/> Salvage Record |
| <input checked="" type="checkbox"/> Full excavation (100%) | <input type="checkbox"/> Part Survey | <input type="checkbox"/> Systematic Fieldwalking |
| <input type="checkbox"/> Full Survey | <input type="checkbox"/> Recorded Observation | <input type="checkbox"/> Systematic Metal Detector Survey |
| <input type="checkbox"/> Geophysical Survey | <input type="checkbox"/> Remote Operated Vehicle Survey | <input type="checkbox"/> Test Pit Survey |
| <input checked="" type="checkbox"/> Open-Area Excavation | <input type="checkbox"/> Salvage Excavation | <input type="checkbox"/> Watching Brief |

| Monument | Period | Object | Period |
|----------|------------------------------|---------|-------------------------------------|
| Kiln | Post Medieval (1540 to 1901) | Pottery | Early Neolithic (- 4000 to - 3000) |
| Pit | Post Medieval (1540 to 1901) | Pottery | Late Neolithic (- 3000 to - 2200) |
| Ditch | Post Medieval (1540 to 1901) | Pottery | Early Iron Age (- 800 to - 400) |

Insert more lines as appropriate.

Project Location

| | | |
|--------------------|----------------|---|
| County | Norfolk | Address (including Postcode) Land at Newfound Farm, Cringleford, Norfolk |
| District | South Norfolk | |
| Parish | Cringleford | |
| HER office | Norfolk | |
| Size of Study Area | 1.7 ha | |
| National Grid Ref | TG 18658 06864 | |

Project Originators

| | |
|---------------------------|------------------------|
| Organisation | OA East |
| Project Brief Originator | Steve Hickling/CgMs |
| Project Design Originator | Nick Gilmour (OA East) |

| | |
|--------------------|------------------------|
| Project Manager | Nick Gilmour (OA East) |
| Project Supervisor | Tom Collie (OA East) |

Project Archives

| | Location | ID |
|--------------------------|-----------------------|----------------|
| Physical Archive (Finds) | Norwich Castle Museum | NWHCM: 2019.59 |
| Digital Archive | Norwich Castle Museum | NWHCM: 2019.59 |
| Paper Archive | Norwich Castle Museum | NWHCM: 2019.59 |

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

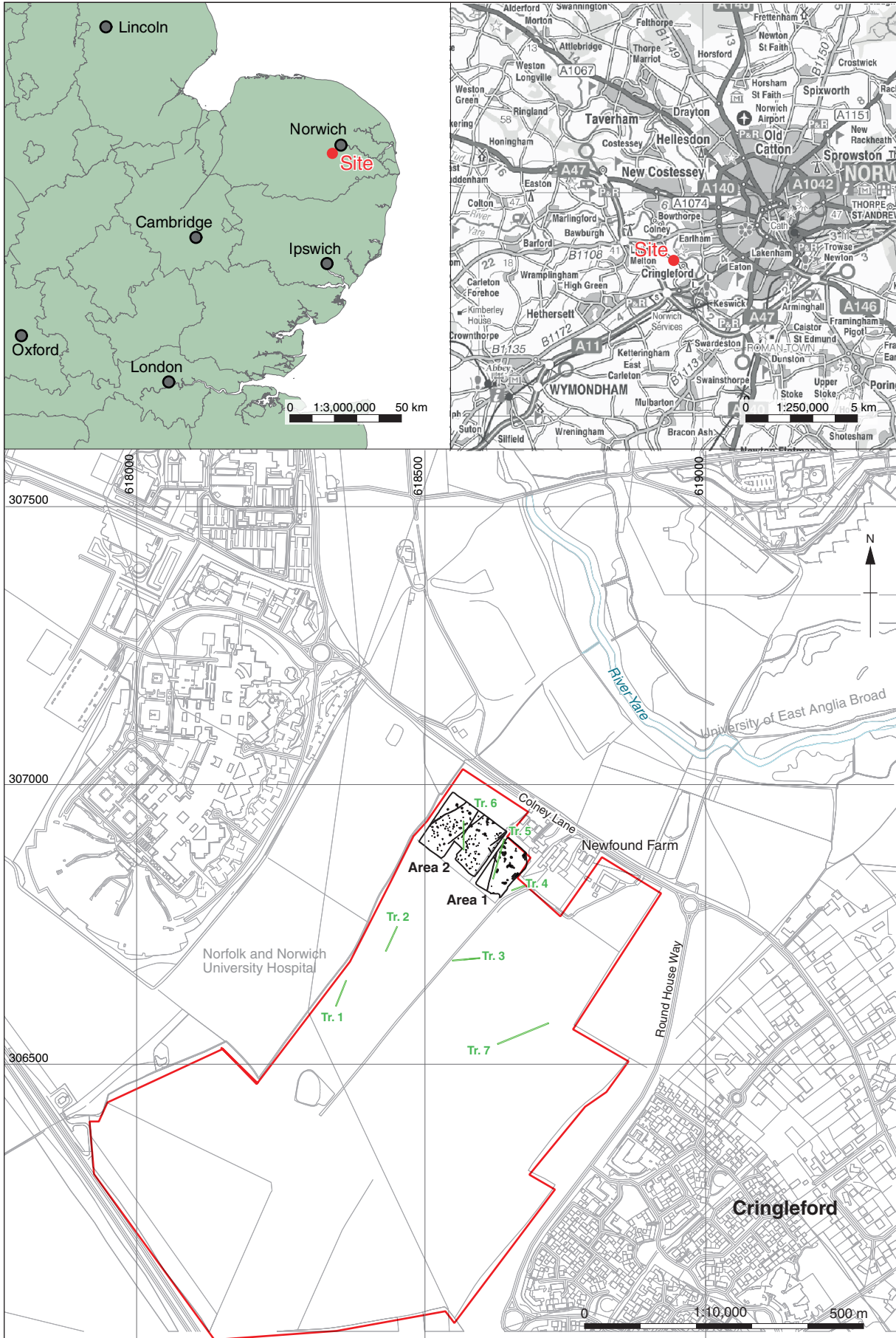
Digital Media

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

Paper Media

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

Further Comments



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 Figure 1: Site location showing archaeological excavation area (black), evaluation trenches (green) in development area (red)

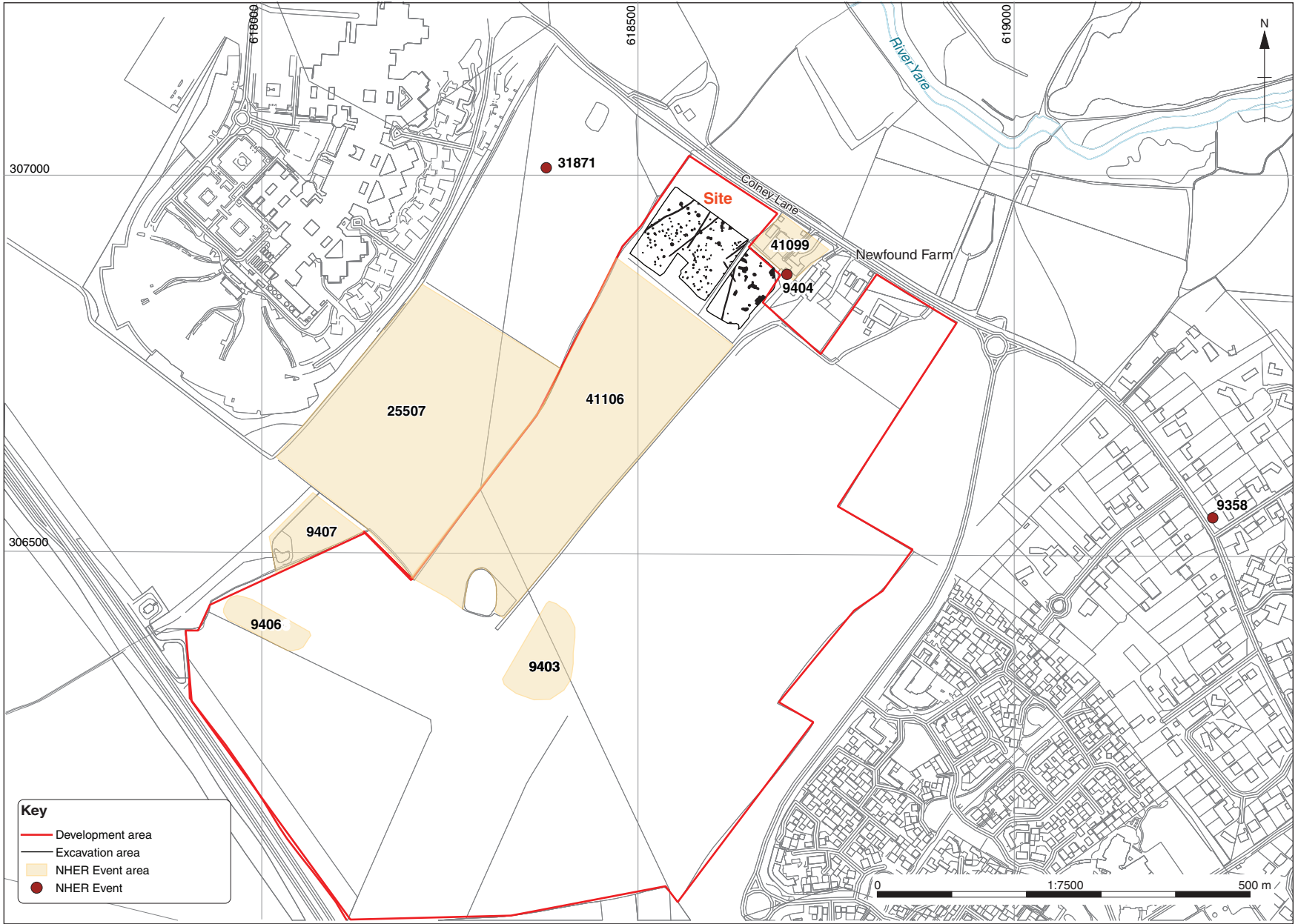


Figure 2: Excavation in relation to pertinent NHER sites

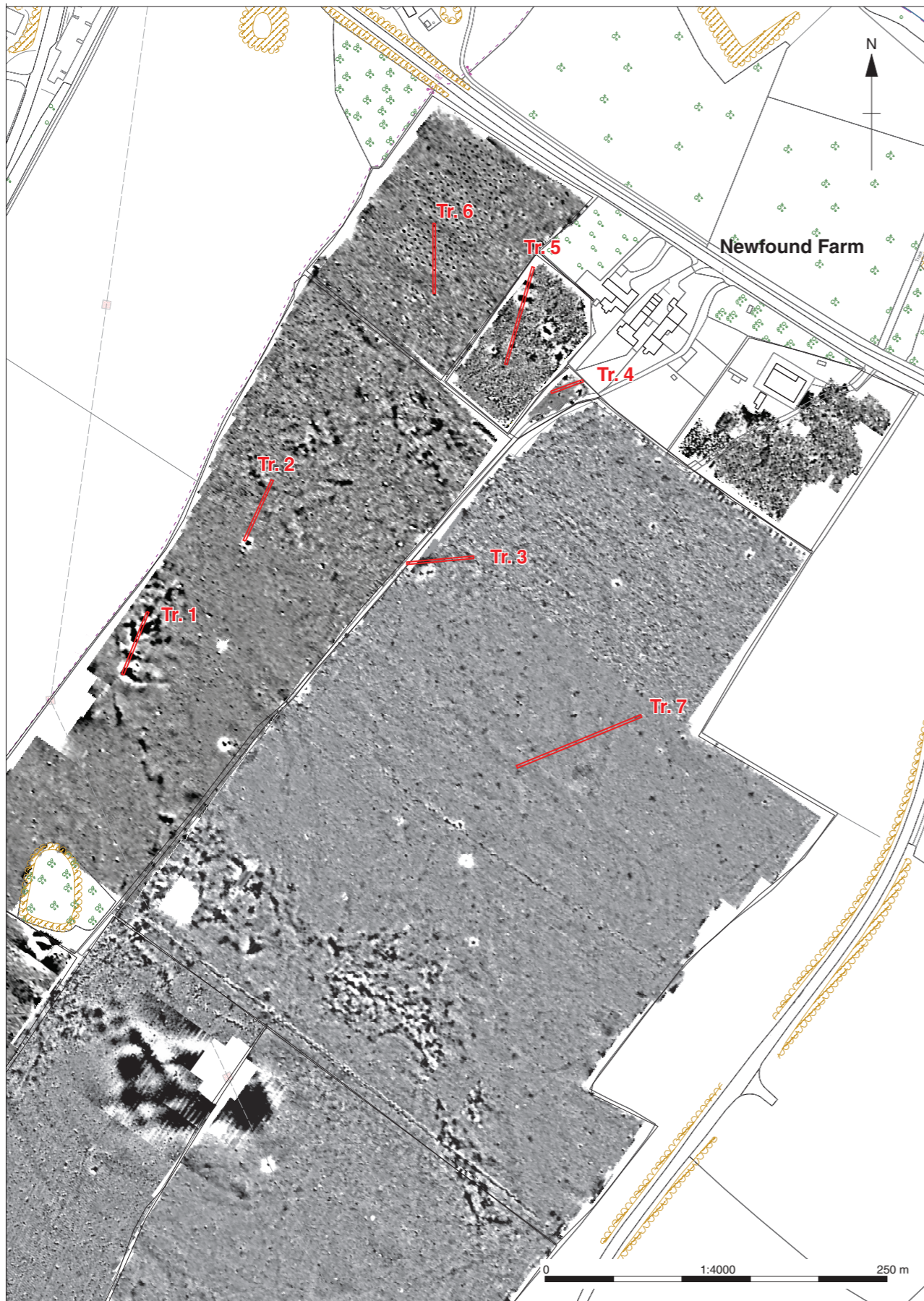


Figure 3A: Greyscale magnetic survey plot with evaluation trenches (in red) (after Masters 2011, fig.2a and Crawley 2013, fig.2)

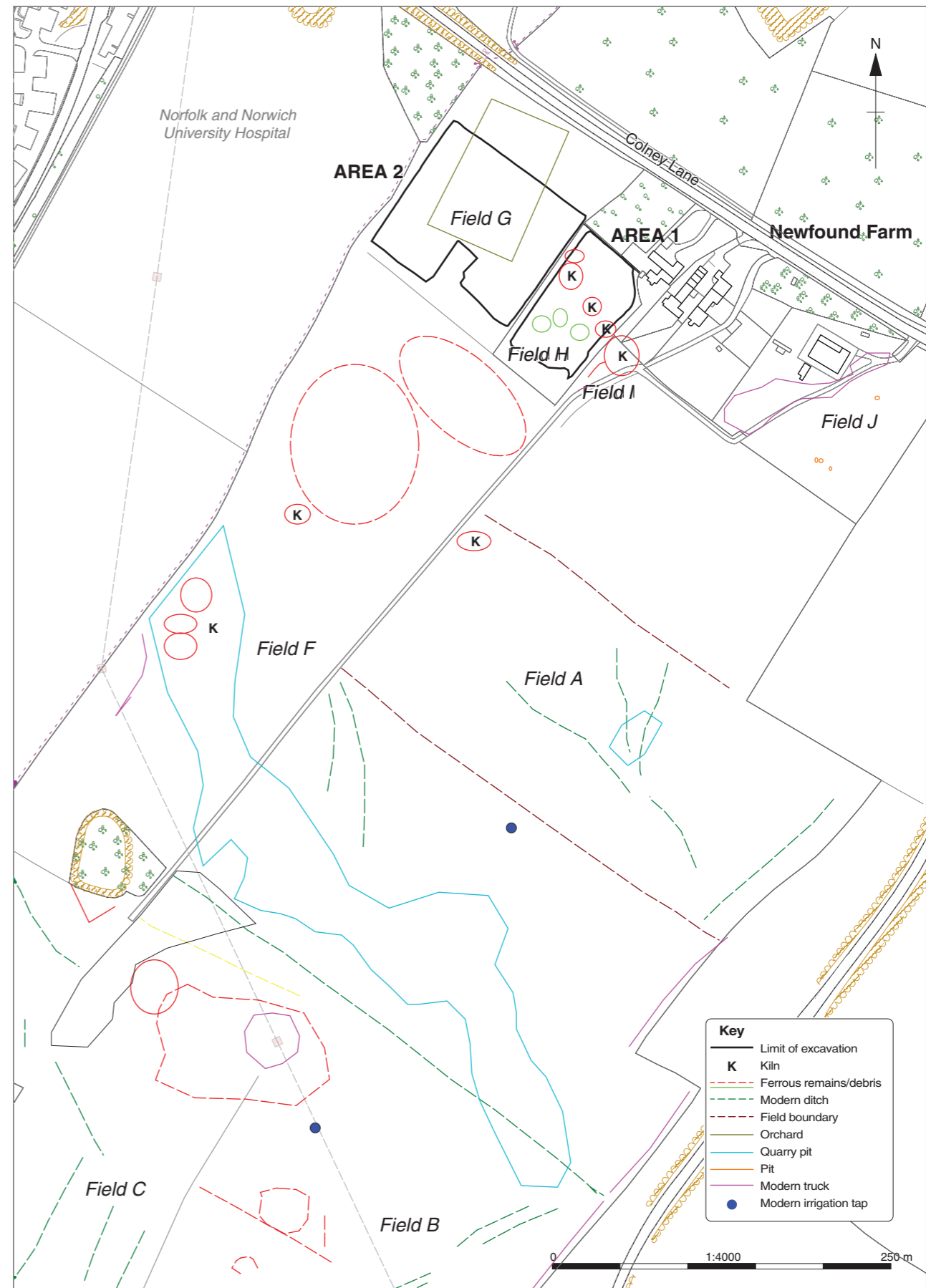


Figure 3B: Geophysical survey interpretation showing location of possible kiln anomalies (K) (after Master 2011, fig. 25)

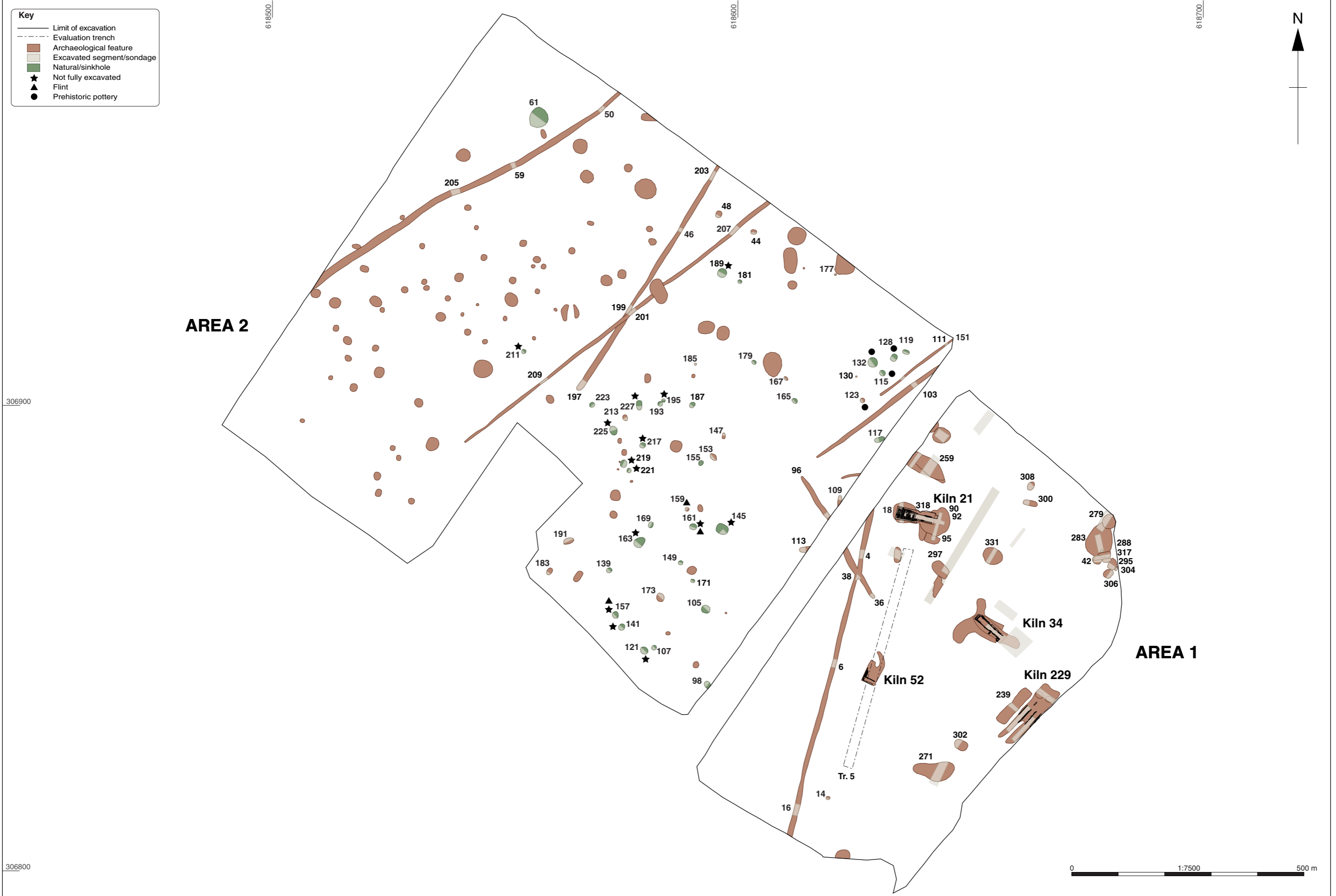


Figure 4: All features plan

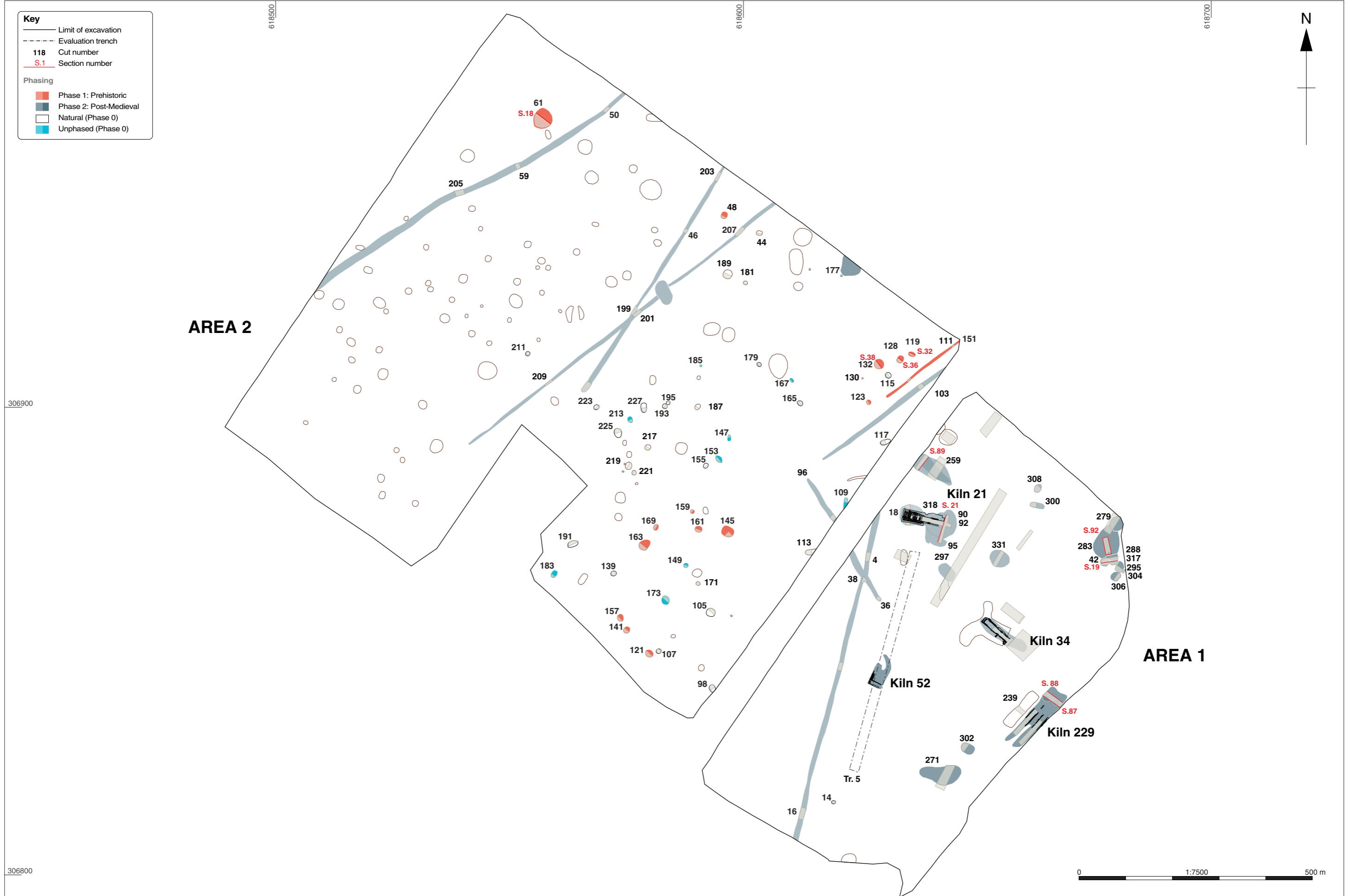


Figure 5: All features plan with provisional phasing

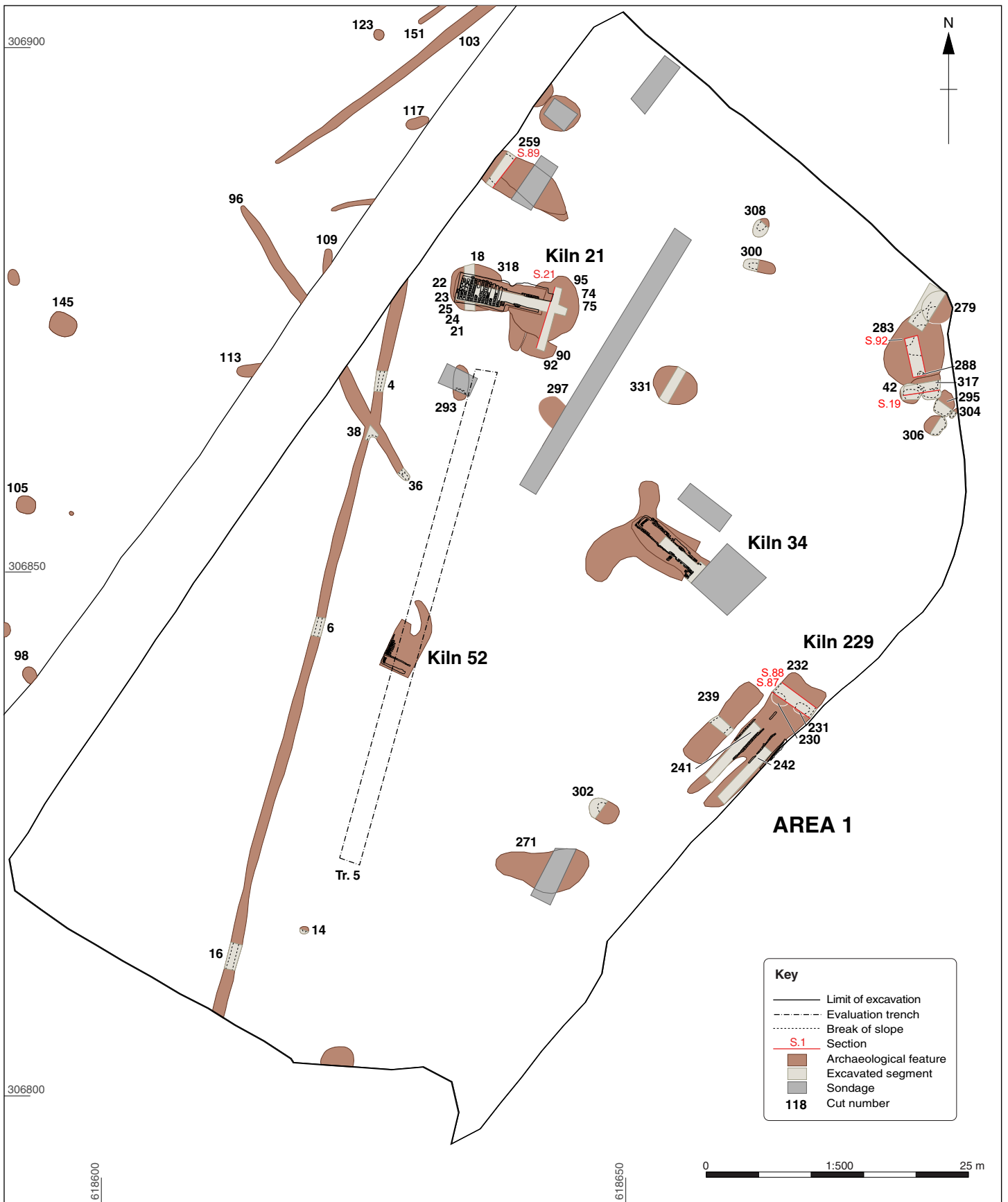


Figure 6: Detailed plan of Area 1 showing kilns and extraction pits

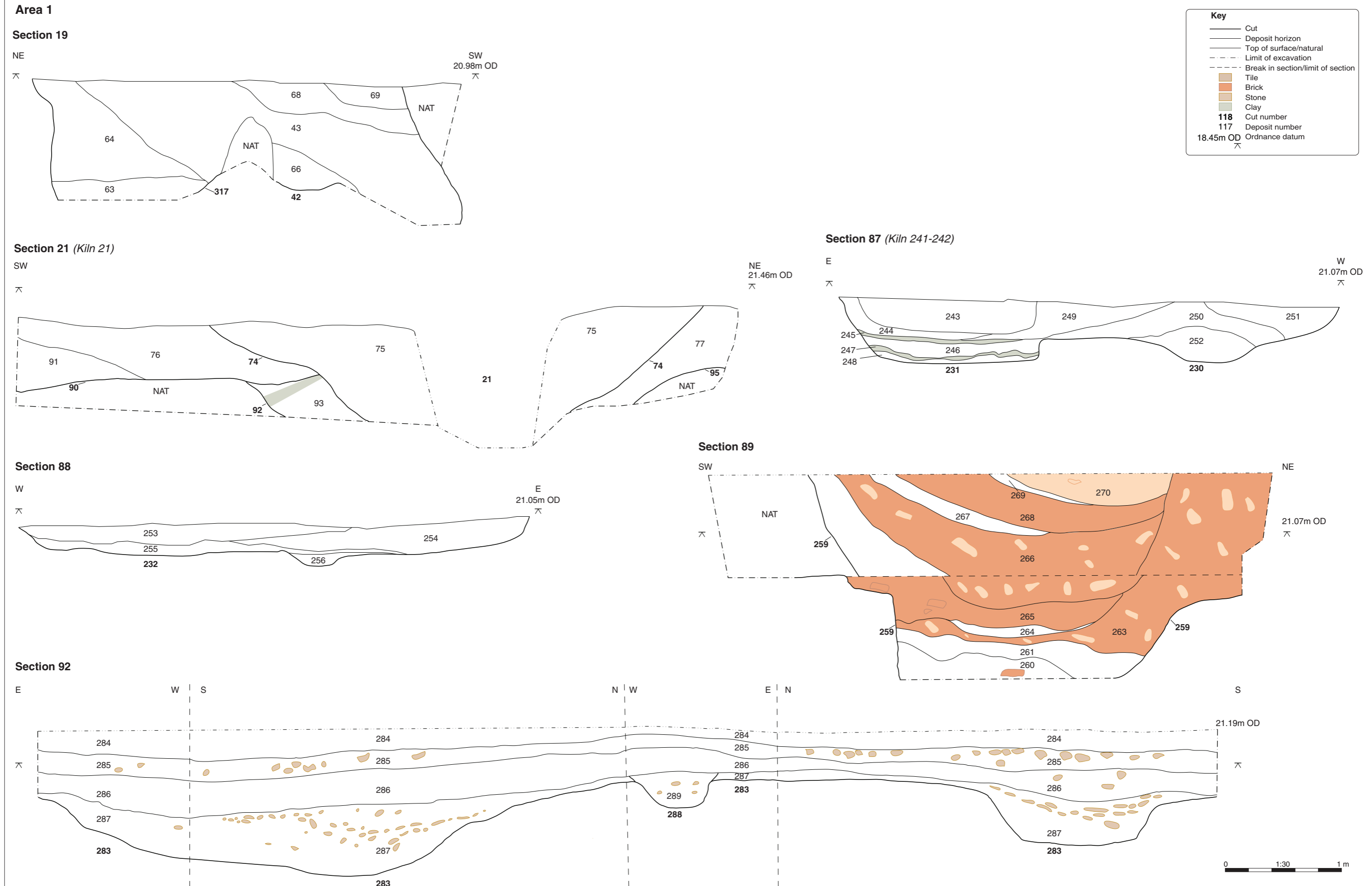
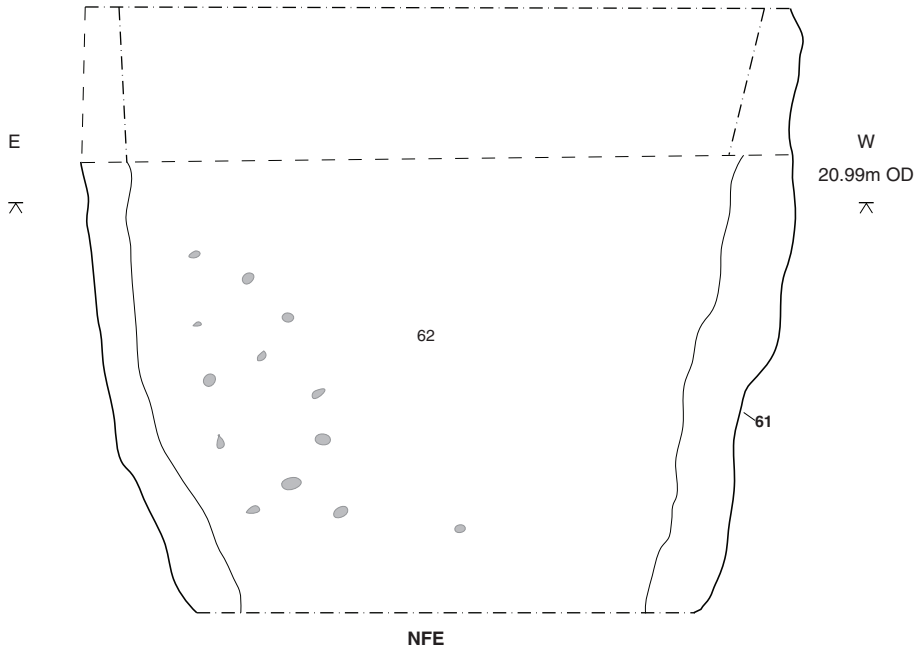


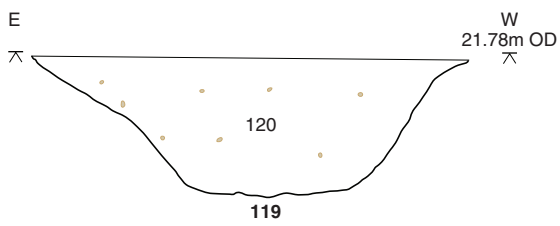
Figure 7: Selected sections from Area 1

Area 2

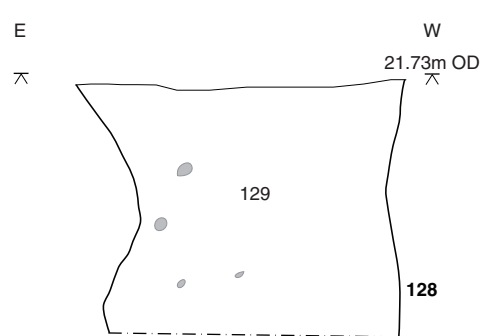
Section 18



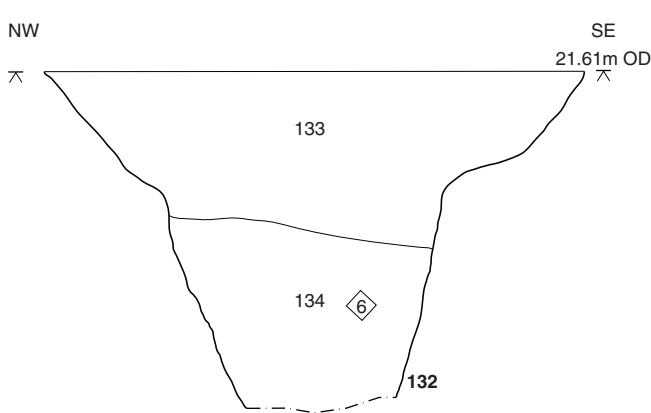
Section 32



Section 36



Section 38



Key

- - - - - Limit of Excavation
- Top surface
- Cut / conjectured
- Deposit Horizon conjectured
- - - - - Break in Section
- 117** Cut Number
- 116** Deposit Number
- ◊ Sample Number
- Flint
- Gravel
- 32.26 m OD Level



Figure 8: Selected Sections from Area 2



Plate 1: General shot of Area 1 showing kiln **52**, looking south-west



Plate 2: Working shot of kiln **21** (Area 1) with Newfound Farm in background, looking east



Plate 3: General view of Area 2 showing Phase 2 ditch 50, looking north-east



Plate 4: Natural sinkhole 98 (Area 1), looking east



Plate 5: Phase 1 pit 123, looking north-north-east



Plate 6: Phase 1 solution hollow 141 (Area 2), looking north



Plate 7: Working shot of kiln group 229, looking north



Plate 8: Working shot of kilns under excavation showing ground conditions

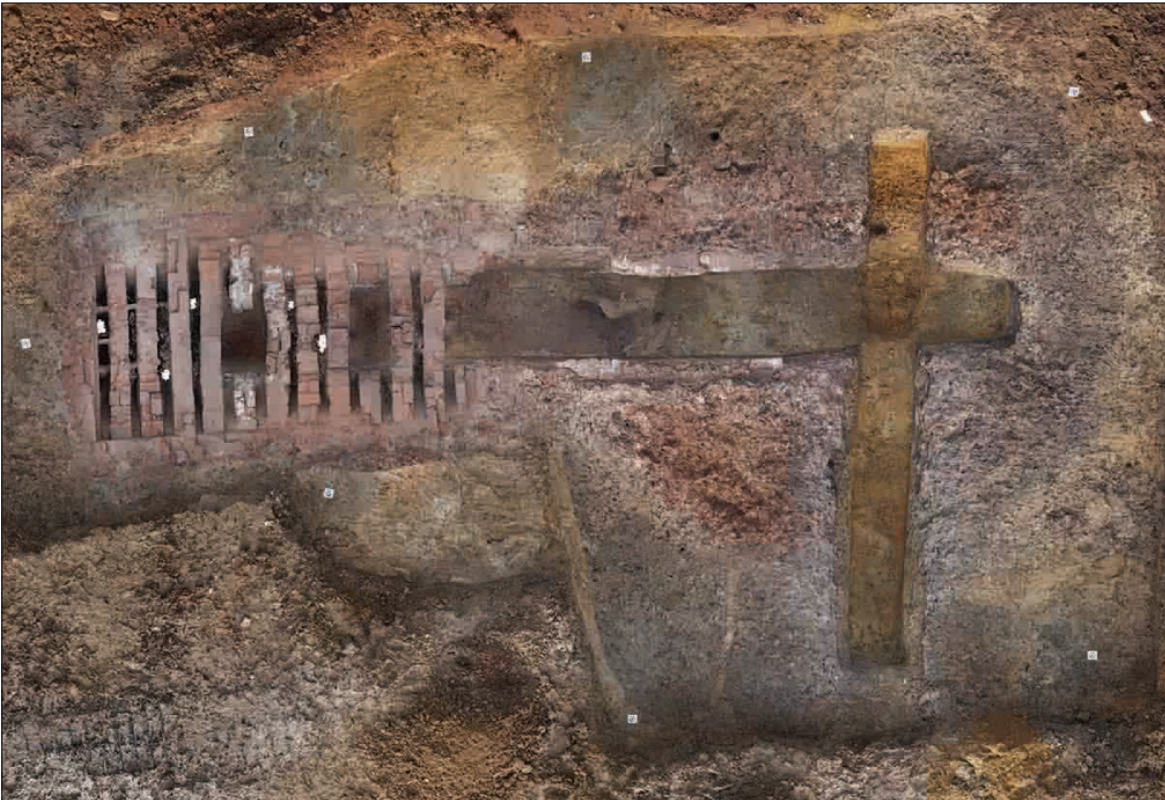


Plate 9: Photogrammetry of kiln **21** showing extant arches



Plate 10: Photogrammetry of kiln **34** showing collapsed arch **134** at western end of the chamber



Plate 11: Photogrammetry of kiln group 229



Plate 12: Photogrammetry of kiln 52



Plate 13: Group of black-glazed wares including a complete mug fused to its saggar



Plate 14: Highly decorated dish in the style of Metropolitan slipware



Plate 15: Tin-glazed saggar sherds, kiln furniture and fragments of glazed and decorated vessel with an unglazed sherd



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