Land off Grove Road/Moor Lane Kirk Sandall Phase 2

Post-excavation Assessment and Updated Project Design

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Contents

List of Figures

List of Plates

List of Tables

Summary

Wessex Archaeology was commissioned by Albermarle Homes to undertake archaeological mitigation on land at Kirk Sandall, Doncaster, centred on National Grid Reference 460895 408074. The work was undertaken to fulfil an archaeological condition of planning consent for residential development of the site (14/02237/FULM). All work was undertaken in accordance with a Written Scheme of Investifation (WSI) approved by the South Yorkshire Archaeology Service (SYAS), on behalf of Doncaster Metropolitan Borough Council (DMBC), in advance of fieldwork commencement.

The most significant result may be the recovery of a small assemblage of medieval pottery. This material was generally residual in later contexts, however the pottery is of intrinsic interest, particularly a few sherds of Hallgate A1 ware.

A small amount of possible ferruginous furnace lining was recovered from a rubbish pit (1030). The possible furnace lining was bonded to rough, non-refractory handmade bricks. The same type of brick was used to partially line a second pit (1019) although no further evidence of smelting such as slag or the effects of heat were identified. If this line of interpretation can be sustained, it may indicate small-scale post-medieval iron production pre-dating systematic iron-working industry in the locality or region

The environmental assemblage was also of some intrinsic interest. The remaining finds assemblage comprises material of lower potential.

A range of linear features and pits were recorded across the three excavation areas (Areas C, D and E).

In Area C, discrete features were most common. One of the pits (1025=1036) may have been a waterhole; others (eg 1030) were likely rubbish pits. Interpretation of the features remains uncertain. Two postholes of probable medieval date were identified in Area C during the trial trench evaluation (Wessex Archaeology 2017, Trench 11), however no further conclusively medieval features were identified during the mitigation.

Area D contained five parallel ditches (3050 etc.) that correlate with a boundary depicted on the first edition Ordnance Survey map. A further ditch (3095) located to the south-west was parallel to these boundaries and therefore probably associated with the same system of land division. Further undated discrete and linear features were also recorded in this area.

Area E contained post-medieval or modern ditches (4035 and 4014) and a line of pits (4020 etc.) associated with a modern brick culvert located just outside the excavation area. Although these pits are almost certainly of 19th/20th-century date, it was from these contexts that the intrinsically interesting medieval pottery mentioned above was obtained.

Synthesis of these results with those from the phase 1 mitigation (Wessex Archaeology 2018a) and evaluation (Wessex Archaeology 2017) is recommended. A small scheme of further analysis of the pottery and environmental assemblages should be undertaken as detailed in the updated project design below. Kirk Sandall is a locality of some interest due to its status as a shrunken medieval village and its unusual post-medieval development. Publication in a suitable local journal such as the *Transactions of the Hunter Society is recommended.*

The archive is currently held at the offices of Wessex Archaeology in Sheffield, under the project code 207960. In due course, the archive will be deposited with Doncaster Museum and Art Gallery under an accession number to be determined. An OASIS form, wessexar1-335705 has been completed for this project and will be finalised at the time of deposition.

Acknowledgements

Wessex Archaeology would like to thank Albermarle Homes Ltd for commissioning the archaeological mitigation works, in particular Darryl Barker and Paul Bilous. Wessex Archaeology is also grateful for the advice of Andy Lines of the South Yorkshire Archaeology Service, who monitored the project on behalf of Doncaster Metropolitan Borough Council.

The fieldwork was directed by Catherine Douglas and Simon R Brown, with the assistance of Justyna Dekiert, Otis Gilbert, Jack Peverall, Aaron Friar, Michael Clarke, Martina Tenzer and Ciaran O'Neill. This report was written by Catherine Douglas, Simon R Brown, Ashley Tuck and Emma Metcalfe and was edited by Andrew Valdez-Tullett. The pottery was assessed by Chris Cumberpatch, the furnace lining by Ashley Tuck and other finds by Lorraine Mepham. Ashley Tuck is grateful to Yvette Marks (The University of Sheffield), Matthew Leicester (The University of Sheffield), Lorraine Mepham and Phil Andrews for advice about the furnace lining. The environmental samples were processed by Fiona Eaglesham, sorted by Liz Chambers and assessed by Inés López-Dóriga. The project was managed by Richard O'Neill and John Winfer on behalf of Wessex Archaeology. The report was edited by Andrew Valdez-Tullet. The illustrations are by Joanna Debska.

Land off Grove Road/Moor Lane, Kirk Sandall Phase 2

Post-excavation Assessment and Updated Project Design

1 INTRODUCTION

1.1 Project and planning background

1.1.1 Wessex Archaeology was commissioned by Albermarle Homes to undertake archaeological mitigation works comprising three archaeological strip, map and sample excavations covering 0.22 ha centred on NGR 460895 408074, off Grove Road and Moor Lane, Kirk Sandall, Doncaster, DN3 1LL (Fig. 1).

1.1.2 The work was carried out as part of a mitigation strategy required by Andy Lines, Archaeologist at South Yorkshire Archaeology Service (SYAS), on behalf of Doncaster Metropolitan Borough Council (DMBC).

The proposed development comprises the construction of 90 new domestic dwellings. A planning application (14/02237/FULM) was submitted to DMBC and it was granted, subject to conditions, two of which related to archaeological investigation. The archaeological conditions stated that:

> *Part A (pre-commencement)*
> *No development, including any demolition and groundworks, shall take place until the applicant, or their agent or successor in title, has submitted a Written Scheme of Investigation (WSI) that sets out a strategy for archaeological investigation and this has been approved in writing by the Local Planning Authority. The WSI shall include:*
> *• The programme and method of site investigation and recording;*
> *• The requirement to seek preservation in situ of identified features of importance;*
> *• The programme for post-investigation assessment;*
> *• The provision to be made for analysis and reporting;*
> *• The provision to be made for publication and dissemination of the results;*
> *• The provision to be made for deposition of the archive created;*
> *• Nomination of a competent person/persons or organisation to undertake the works; and*
> *• The timetable for completion of all site investigation and post-investigation works.*
>
> *Part B (pre-occupation/use)*
> *Thereafter the development shall only take place in accordance with the approved WSI and the development shall not be brought into use until the Local Planning Authority has confirmed in writing that the requirements of the WSI have been fulfilled or alternative timescales agreed.*

1.1.3 A Written Scheme of Investigation (WSI) was prepared by Wessex Archaeology (2018b) in accordance with industry best practice and guidance (CIfA 2014a-c, Historic England 2015). The WSI was submitted to Andy Lines of SYAS on behalf DMBC prior to the

commencement of fieldwork. The excavation was undertaken in two campaigns running from 26 November 2018 to 19 December 2018, and from 28 October 2019 to 7 November 2019.

1.1.4 A desk-based assessment (DBA) has previously been produced for the site (Ford 2006). An evaluation consisting of excavation of a single trench identified post-medieval structures (Richardson 2013). A larger trial trench evaluation (Wessex Archaeology 2017) was followed by phase 1 of the mitigation strip, map and sample excavation (Wessex Archaeology 2018a). The phase 1 mitigation work corresponded with trenches 12 and 13 from the trial trench evaluation; these contained intercutting post-medieval pits (trench 12) and cobble surfaces and walls relating to a farmyard (trench 13). The phase 2 excavation areas reported on here corresponded with trench 11 (area C) which was close to St Oswald's Church, trenches 8 and 9 (area D) and trenches 3 and 4 (area E), where undated cut features were identified.

1.2 Scope of the report

1.2.1 The purpose of this report is to provide the provisional results of the phase 2 excavation, and the preceding evaluation trenches (where relevant) and to assess the potential of the results to address the research aims outlined in the WSI. Where appropriate, the report recommends a programme of further analysis work, and outlines the resources needed to achieve the aims of the project (including the revised research aims arising from this assessment), leading to dissemination of the archaeological results via publication and the curation of the archive.

1.3 Location, topography and geology

1.3.1 The excavation area was located in Kirk Sandall, to the south-east of the River Don Navigation and to the south of St Oswald's Church, south-west of Moor Lane. The site was centred at NGR 460895 408074 and sloped gently down to the north from around 9 m above Ordnance Datum (OD) to around 7 m OD.

1.3.2 The site was occupied by unmanaged scrub grassland, an extant listed building (St. Oswald's Church), some hard-standing reflecting recently demolished buildings, portacabins and concrete blocks.

1.3.3 The soils of the area consist of Wigton Moor Association, described as 'permeable fine and course loamy soils variably affected by groundwater (SSEW 1983, 831c) and Newport 1 Association, described as 'Deep well drained sandy and coarse loamy soils (SSEW 1983, 551d). The drift geology of the area consists of alluvial silt and clay, while the solid geology comprises undifferentiated Permian and Triassic sandstones, including Bunter and Keuper (British Geological Survey online viewer).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

2.1.1 The following is derived from the existing desk-based assessment (Ford 2006) as well as additional research undertaken by Eleanor Cowle (Cowle 2017).

2.2 Archaeological and historical context

2.2.1 Evidence for prehistoric activity in the general vicinity is sparse, though a number of artefacts have been recovered. A flint blade was discovered within an area of new housing,

a Neolithic polished stone axe was found in the nearby village of Long Sandall, and a Bronze Age perforated stone hammer was also reportedly found nearby.

2.2.2 Later prehistoric evidence is often discernible from aerial photographs (eg Riley 1980). Cropmark data for the area shows 'brickwork' field systems visible to the southeast of the proposed development area. Excavations at Armthorpe, has shown that 'brickwork' field systems may also date to the Romano-British period (Richardson 2001; Richardson 2004; Richardson and Rose 2004; Tuck 2017).

2.2.3 The Romano-British period is well-represented within the town of Doncaster, to the southwest of Kirk Sandall. The Roman fort at Doncaster (Danum) was founded in c. AD 71 and occupation continued until the 4th century AD (Magilton 1977). A rectilinear enclosure to the north-west of the proposed development has been identified and interpreted as a possible Roman encampment, though only a single Romano-British sherd of pottery has been recovered from the immediate area.

2.2.4 The 'Sandall' element of the place-name is Old English meaning a 'sandy nook of land' (Smith 1961). The 'Kirk' element is Old Norse meaning church. Kirk Sandall has origins at least as long ago as the Norman period, with a church (St Oswald's) mentioned in the Domesday Book implying a Saxon date (Magilton 1977), as does herringbone work identified in the west wall of the nave (Ryder 1982), making it one of only fifteen Saxon churches in South Yorkshire (Andy Lines pers. comm.). A Saxon iron spearhead was also recovered near the church (Peter Robinson pers. comm.), which further supports a Saxon origin.

2.2.5 At the time of the Domesday survey, the parish of Sandall included a 'carucate in demesne and four borders' (Hunter 1828) and was part of the lordship of Conisbrough (Hey 1979). It has passed through several estate holders, such as the earls of Warren, the house of York, the Lords Hunsdon and the Cokes and there is a suggestion of a manor house here (ibid.). One of the most prominent families in Kirk Sandall was the Rokeby family. William Rokeby, who was born in 1460 became Rector of St Oswald's Church and was later the Archbishop of Dublin and Lord Chancellor of Ireland. He died in 1521 and his remains were interred at St Oswald's Church in the specially built Rokeby Chapel (Cowle 2017; Pevsner 1959). Kirk Sandall was held by the Rokeby family for 300 years but was sold to Mr George Martin in 1776 (Pevsner 1959). The lands owned by George Martin are depicted on the 1807 enclosure map.

2.2.6 Kirk Sandall is considered to be a shrunken medieval village with earthworks in two fields. One of these is located to the south-west of St Oswald's Church. There is a possibility of the remains of a Manor House on land formerly owned by George Martin according to the enclosure map and probably previously owned by the Rokeby family. A silver hammered penny dating to the reign of Elizabeth I was found nearby.

2.2.7 Modern development has altered the landscape of the area, particularly after the construction of the Don Navigation in the 18th century on the edge of the proposed development area. The glass industry was of particular significance in Kirk Sandall with the construction of the Pilkington Glass Factory which began operation in 1922 (Barker 1960). Most of the land of the glass factory was sold in 1969 and now forms part of the Kirk Sandall Industrial Estate.

2.3 Previous Investigations

2.3.1 Geophysical surveys have been carried out to the east of the proposed development area (Cottrell and Webb 1995; Webb 2002), as has an evaluation revealing a medieval rubble

field boundary (Brown 1995). Despite the antiquity of Kirk Sandall, these have revealed little archaeological evidence. Two watching briefs have been carried out at St Oswald's Church, revealing medieval and post-medieval structures associated with the construction of the church (Dennison 1999; Dennison and Dennett 2005). Other archaeological investigations carried out in the vicinity have not yielded evidence of archaeological remains (eg Heawood 2001).

2.3.2 A trial trench evaluation was carried out on the development site in 2013 consisting of a single trench, measuring 20 m by 2 m, over an anticipated access road. Towards the southern limits of the trench, a ditch and brick surface were investigated. Post-medieval pottery was associated with the ditch's fill (Richardson 2013).

2.3.3 The most recent archaeological investigations were focused on the site itself and consisted of the excavation of 16 evaluation trenches (Wessex Archaeology 2017). Fourteen of the sixteen trenches contained archaeological features and deposits. The majority of remains consisted of post-medieval wall footings and drainage features associated with 18th- to 20th-century buildings apparent on Ordnance Survey historic mapping. Evidence of medieval activity on site consisted of an assemblage of pot sherds recovered from subsoil deposits and residually in later features. Undated postholes, pits and ditches were also recorded (Wessex Archaeology 2017).

2.3.4 Following the results of the evaluation, a SMS excavation took place between 5 February and 4 April 2018 as part of a mitigation strategy within the phase 1 of the development. Two areas were excavated in order to further investigate archaeological evidence identified within the evaluation trenches 12 and 13. Additional structural remains of the 18th and/or 19th century related to former agricultural buildings, including dwellings. Drainage gullies were identified which may have been associated with post-medieval field systems. The excavation also uncovered a series of post-medieval pits of unknown function (Wessex Archaeology 2018a).

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 The general aims of the excavation, as stated in the WSI (Wessex Archaeology 2018b) and in compliance with the CIfA's *Standard and guidance for archaeological excavation* (CIfA 2014a), were:

- to examine the archaeological resource within a given area or site within a framework of defined research objectives;
- to seek a better understanding of the resource;
- to compile a lasting record of the resource; and,
- to analyse and interpret the results of the excavation and disseminate them.

3.2 Research objectives

3.2.1 The following research objective of the excavations was defined in the WSI (Wessex Archaeology 2018b):

- to further investigate the archaeological evidence previously identified in evaluation Trenches 5, 8, 9 and 11, in order to realise its extent, character and chronology.

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (Wessex Archaeology 2018b) and in general compliance with the standards outlined in CIfA guidance (CIfA 2014a). The methods employed are summarised below.

4.1.2 The areas of SMS excavation comprised former fields devoid of buildings as indicated by cartographic records, including the 1807 Enclosure map of Kirk Sandall (an extract of which was kindly supplied by Andy Lines) and subsequent Ordnance Survey maps contained within the evaluation report (Wessex Archaeology 2017). The archaeological SMS comprised the excavation, investigation and recording of the following areas (Fig. 1):

- Area C (approx. 450 m²) was located immediately to the north of the church where the previous evaluation identified a buried soil of 16th–17th century date overlaying a possible medieval posthole in Trench 11. The posthole produced pottery of 13th–14th century date.

- Area D (approx. 900 m²) was located along the northern side of a new road and parallel to the River Dun Navigation. The area encompassed the entirety of Trench 8 and extended towards the north-east across Trench 9. This targeted a cluster of postholes and a north to south ditch within Trench 8 with residual medieval pottery, and another ditch aligned north-east to south-west and a pit with burnt pebbles within Trench 9. During stripping of the overburden, there was a contingency for additional stripping towards the north and west if additional archaeology was uncovered, but this was not required. Instead, it was decided during an on-site meeting with Andy Lines that this area should be extended by 2 m to the north-east to fully expose a cluster of pits encountered along the north-east section of the trench.

- Area E (approx. 875 m²) encompassed the south-east end of Trench 5 which produced an undated pit or posthole (although the topsoil contained residual Romano-British pottery). The majority of this excavation area had not been exposed or investigated during the evaluation. There was a contingency for additional stripping if additional archaeology was uncovered, but this was not required.

4.2 Fieldwork methods

General

4.2.1 The excavation areas (C, D and E) were set out using GPS, in the same positions as those proposed in the WSI (Fig. 1). The topsoil/overburden was removed in level spits using a 360º excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist. Machine excavation proceeded in level spits until the archaeological horizon or the natural geology was exposed.

4.2.2 Where necessary, the surfaces of archaeological deposits were cleaned by hand to aid visual definition. All archaeological features and deposits identified were hand-excavated, sufficient to address the aims of the excavation. A sample of non-anthropogenic features such as root disturbance were also investigated. Where no dating evidence was recovered by 50% excavation in discrete features such as pits, 100% of the feature was excavated for finds retrieval.

4.2.3 Spoil derived from both machine stripping and hand-excavated archaeological features was visually scanned for the purposes of finds retrieval. A metal detector was also used. Where

found, artefacts were collected and bagged by context. All artefacts from excavated contexts were retained, although those from features of modern date (19th century or later) were recorded on site and not retained.

Recording

4.2.4 All archaeological features and deposits were recorded using Wessex Archaeology's pro forma recording system. A complete drawn record of excavated features and deposits was made including both plans and sections drawn to appropriate scales (generally 1:20 for plans and 1:10 for sections) and tied to the Ordnance Survey National Grid. The Ordnance Datum (OD: Newlyn) heights of all principal features were calculated, and levels added to plans and section drawings.

4.2.5 A Leica GNSS connected to Leica's SmartNet service surveyed the location of archaeological features. All survey data is recorded in Ordnance Survey National Grid coordinates and heights above OD (Newlyn), as defined by OSGM15 and OSTN15, with a three-dimensional accuracy of at least 50 mm.

4.2.6 A full photographic record was made using digital cameras equipped with an image sensor of not less than 10 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long term accessibility of the image set.

4.3 Artefactual and environmental strategies

General

4.3.1 Appropriate strategies for the recovery, processing and assessment of artefacts and environmental samples were in line with those detailed in the WSI (Wessex Archaeology 2018b). The treatment of artefacts and environmental remains was in general accordance with: *Guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b) and *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011).

5 STRATIGRAPHIC RESULTS

5.1 Introduction

Summary of archaeological features and deposits

5.1.1 A range of linear features and pits were recorded across the three excavation areas (Areas C, D and E). Plans of all features are shown on Figures 2, 4 and 6 and a full list of context numbers and context descriptions is contained in Appendix 1.

5.1.2 In Area C, discrete features were most common, and although some details were recorded such as partial brick lining and the relationships between features, interpretations are generally uncertain. One of the pits (1025=1036) may have been a waterhole; others (eg 1030) were likely rubbish pits. Two postholes of probable medieval date were identified in Area C during the trial trench evaluation (Wessex Archaeology 2017, Trench 11), however no further conclusively medieval features were identified during the mitigation.

5.1.3 Area D contained five parallel ditches (3050 etc.) that correlate with a boundary depicted on the first edition Ordnance Survey map. A further ditch (3095) located to the south-west was parallel to these boundaries and therefore probably associated with the same system of land division. A range of further discrete and linear features was also recorded in this area.

5.1.4 Area E contained post-medieval or modern ditches (4035 and 4014) and a line of pits (4020 etc.) associated with a modern brick culvert located just outside the excavation area. Although these pits are almost certainly of 19th/20th-century date, it was from these contexts that the intrinsically interesting medieval pottery was obtained.

Methods of stratigraphic assessment and quantity of data

5.1.5 All hand written and drawn records from the excavation have been collated, checked for consistency and stratigraphic relationships. Key data has been transcribed into an Access database for assessment, which can be updated during any further analysis. The excavation has been preliminary phased using stratigraphic relationships and the spot dating from artefacts, particularly pottery. Table 1 (below) provides a quantification of the records from the excavation.

Table 1 Quantification of excavation records

Type	Quantity
Context records	159
Context registers	8
Structure record	4
Animal bone group record	2
Graphics (A4 and A3)	17
Graphics (A1)	0
Graphics registers	4
Environmental sample registers	3
Object registers	0
Digital photographs	794

5.2 Soil sequence and natural deposits

5.2.1 The natural geological substrate (1002, 3004 and 4003) comprised mid-red sand with some occasional patches of yellow sand and 1% inclusions of coarse grit and stone, which was encountered at a maximum of 0.85 m below ground level (7.4 m OD) in Area D.

5.2.2 Relict ploughsoil subsoil was present across the site. In the centre of Area D, a lower horizon of relict ploughsoil subsoil comprised yellow brown mottled silt sand 0.2 m thick (3003). The main layer of subsoil (1001, 3002, 4002) overlay this and comprised brown sand silt up to 0.5 m thick.

5.2.3 The topsoil comprised brown loam (1000, 3001, 4001), was shallow (0.15 m thick) and contained modern dumped material such as brick rubble and broken concrete.

5.3 Area C

Evaluation

5.3.1 The evaluation (Trench 11) identified two possibly medieval postholes (evaluation contexts 1109 and 1111), one of which contained a single sherd of Coal Measures whiteware dated to the 13th–14th centuries (Wessex Archaeology 2017). These postholes were sealed by an early post-medieval buried soil layer (1107) from which 15th/16th century Coal Measures purple ware pottery was recovered alongside residual earlier material. These postholes and buried soil were contained within Area C, however no associated features or layers were identified during the mitigation excavation. Likewise, the direct continuation of modern structural remains of a former school recorded in evaluation Trench 11 were not recorded during the mitigation.

Post-medieval

5.3.2 Large sub-circular pit 1025=1036 (Figs 2 and 3, Section 2; Pl. 1) was a maximum of 1.7 m in diameter and 1.5 m deep. The pit contained a stone revetment near the base and a sequence of four grey, brown and red sandy fills suggestive of water-borne deposition. Bulk sediment samples taken from a fill (1038) were dominated by waterlogged remains of plant taxa, moderate amounts of mature and roundwood charcoal, and small numbers of preserved charred remains. Two sherds of pottery were recovered, one post-medieval and the other a presumably residual sherd of medieval Hallgate A ware. It is possible that pit 1025=1036 was a water hole.

5.3.3 Irregular pit 1030 (Figs 2 and 3, Section 3; Pl. 2) was around 1.5 m in diameter and 0.8 m deep. It contained ferruginous possible furnace lining perhaps associated with iron smelting and discussed in the artefactual results below. Four sherds of pottery dating from between the mid-15th century and the mid-18th. Animal bone and an iron nail were also present. The furnace lining or slag were *ex situ* and it is probable that pit 1030 was a rubbish pit. Pit 1030 was cut by a smaller pit (1034) located at the north-west side of 1030. This pit (1034) was 0.65 m in diameter and 0.35 m deep and contained a fill rich in coal and charcoal and may have been a second rubbish pit.

5.3.4 In the south, pit 1019 (Figs 2 and 3, Section 1 and Plan 1; Pl. 3) was partially lined on two sides with five courses of rough unbonded brick. It was irregular, 0.9 m to 0.98 m in diameter and 0.8 m deep with two dark loamy fills. A sherd of 16th- to 18th-century Midlands purple ware was recovered. Pit 1019 was accompanied by a smaller pit (1023) which may have cut pit 1019. Pit 1023 was 0.4 m in diameter and 0.2 m deep and contained a dog burial and two sherds of post-medieval pottery, the latest dating to the 18th century.

5.3.5 Three similar drains (1014, 1015 and 1016) were recorded, comprising brick or stone sides with stone flag caps bonded with lime mortar. Ditch 1014 also contained a ceramic pipe, possibly inserted later. Traces of black ash mortar on drain 1016 suggested it may have been reused as a foundation. Drain 1014 ran from south-west to north-east; drain 1015 from north-west to south-east and drain 1016 roughly east to west.

Undated

5.3.6 The north-east corner of Area C contained a series of features. A north to south aligned ditch (1008=1017) was 0.2 m wide and 0.44 m deep. The ditch continued beyond the area of excavation to the north. The southern terminal of ditch 1008=1017 was truncated by a pit (1006). Pit 1006 was a maximum of 1.2 m in diameter and 0.45 m deep. A further pit (1012) was hourglass-shaped in plan and lay to the south of pit 1006 on the alignment of a continuation of ditch 1008=1017. Pit 1012 was 1.8 m long, 0.65 m wide and 0.37 m deep. Two further pits (1010 and 1003) were located to the west of ditch 1008=1017. Pit 1010 was a maximum of 1.45 m in diameter and 0.36 m deep. Pit 1003 was a maximum of 1.03 m in diameter and 0.12 m deep and contained a dog burial and part of the skeleton of a cat. Although the purpose of pit 1003 appears clear (animal burial), the function of the other features in the north-east of Area C is obscure.

Building

5.3.7 The western boundary section of the site revealed the foundations of a multi-phase building that formerly stood on the site, probably the remains of a school depicted on historic maps (Fig. 8). This was recorded photographically and the results are presented as Fig. 9.

5.4 Area D

Post-medieval

5.4.1 Five parallel ditches (3005=3050, 3010=3054, 3012=3056, 3014=3058 and 3042=3060) ran on a north-west to south-east orientation (Figs 4 and 5, Section 4; Pls 4 and 5). They correspond with a boundary marked on the 1849 Ordnance Survey map (Fig. 8), although they may have had a drainage function. The westernmost ditch (3005=3050) was the largest, measuring 2.10 m wide by 1.20 m deep. It was truncated by a modern gully (3008=3052) containing a large ceramic drain. The middle three ditches were all of a similar size and shape, with concave profiles, widths of around 0.96m and depths of around 0.25 m. The eastern ditch (3042=3060) was wider and shallow at 0.55 m to 0.9 m wide and 0.12 m to 0.27 m deep. All five features contained similar pale grey silty sand fills. No finds were recovered. It is possible that some or all of the ditches may be older than the historic map. For this reason, two samples were taken from fill 3059 of ditch 3058 for portable optically stimulated luminescence (pOSL) dating (samples 313 and 314). These are yet to be analysed (see Potential below).

5.4.2 Another north-west to south-east oriented ditch (3095) was located in the south-west end of Area D. Four interventions were excavated (3019, 3033, 3038 and 3071) with a concave profile and a width of up to 1.5 m and a depth of 0.15 m–0.20 m. The primary fill (eg 3034) consisted of pale grey clay sand 0.10 m thick. This was overlain by a secondary fill (3020=3035=3039) which was 0.20 m thick and consisted of mid-brown sandy clay containing occasional sub-rounded gravels. At the north end of the ditch, there was a 90° bend and the ditch continued for a further 5 m on a perpendicular north-east to south-west orientation (interventions 3025 and 3069) which were shallower, 0.14 m deep. Three sherds of 17th- to 18th-century pottery were recovered from ditch 3095. Two samples were taken from fill 3035 for pOSL dating. The ditch does not appear on the first edition Ordnance Survey map (Fig. 8), suggesting that the ditch may have gone out of use prior to 1849, however it is parallel to a boundary on that map suggesting that it had some relation to the enclosure system depicted on the map.

5.4.3 The north-east to south-west oriented part of ditch 3095 was truncated by a line of five pits, four oval-shaped: 3021, 3023 (Pl. 6), 3031 and 3067; and one circular: 3040. The north-east terminal of the ditch (intervention 3069) ended in line with pit 3067. The oval shaped pits measured 1.15 m to 1.67 m long by around 0.73 m wide and had depths of around 0.20 m. The fills were loose grey brown silty sand with occasional charcoal inclusions. Four of the five pits contained 17th- to 18th-century pottery and ceramic building material.

Modern

5.4.4 Two areas of modern disturbance immediately east of intervention 3033 may relate to the excavation of evaluation trench 8.

Uncertain date

5.4.5 During the evaluation, six postholes were encountered in Trench 8 to the west of ditch 3095, but no further postholes were identified around this location during the mitigation work. Similarly, the continuation of a small undated ditch (evaluation context 815) identified elsewhere in evaluation trench 8 was not seen during the mitigation excavation.

5.4.6 Near the centre of Area D, two pits (3027 and 3029) were located 0.75 m apart from each other, 2 m west of the five parallel ditches (3050 etc.). Pit 3027 measured 0.9 m by 0.73 m in plan and had a depth of 0.20 m with a ‘U’-shaped profile and contained a single fill (3028) consisting of light grey brown silt sand with occasional charcoal flecks and cattle bones. Two samples were collected from fill 3028 for pOSL dating (samples 307 and 308). Pit 3029

was a little smaller, at 0.6 m by 0.5 m in plan and 0.14 m deep with a similar fill to pit 3027 although no finds were recovered. A small ditch recorded in evaluation trench 9 (evaluation context 904) may in fact have been another pit associated with 3027 and 3029. A further pit elsewhere in evaluation trench 9 (evaluation context 905) and contained cracked pebbles, possibly pot boilers, hinting at an early date.

5.4.7 In the north of Area D, a north to south oriented ditch (3092) extended for 3 m terminating at its southern end. It had a concave profile and was 1.40 m wide and 0.38 m deep. A primary fill (3093) consisted of clay sand with some charcoal inclusions. A secondary fill (3094) had a much denser concentration of charcoal as discussed in the environmental evidence section below. A piece of cattle bone was also recovered from the fill.

5.4.8 Near the south terminal of ditch 3092, there was a cluster of five pits, 3046, 3064, 3083 (visible on Pl. 8), 3085, 3087 and two postholes, 3044 and 3048 (Pl. 7). The pits ranged in diameter from 0.32 m to 0.94 m and had depths ranging from 0.15 m to 0.55 m. They had steep sides and concave profiles, and each contained a single pale grey silty sand fill. Pits 3085 and 3087 intercut and had very straight sides containing mixed silty sand fills with a modern appearance. No finds were recovered. Pit 3087 had a diffuse primary fill containing large sandstone cobbles. The postholes had diameters of 0.15 m to 0.20 m and depths ranging from 0.10 m to 0.30 m. The posthole fills were blackish grey clay sand and a piece of burnt wood was recovered from posthole 3048.

5.4.9 A gully, 3090, on a north-east to south-west orientation extended beyond the north-east limit of the excavation and terminated 3.2 m to the south-west, where it was truncated by modern disturbance which had removed the terminal. It measured 0.5 m wide by 0.2 m deep and contained a single secondary fill, 3091, consisting of mid-grey silty sand (Pl. 8).

5.4.10 To the southwest of gully 3090 were two large intercutting pits (3073 and 3075; Pl. 9). The pits were of a similar size and shape, with lengths of 2.27 m and 2.5 m, widths of 1.41 m and 1.7 m, and depths of up to 0.4 m. Each pit contained two pale grey silty sand fills, with occasional lenses of charcoal. No dateable artefacts were recovered. Two samples were taken from fill 3074 of pit 3073 for pOSL dating (samples 320 and 321).

5.4.11 A further linear feature (3062=3079) was located in the north-east of Area D, on an irregular north-west to south-east orientation approximately parallel to ditch 3092. Feature 3062=3079 measured 2 m wide by 0.48 m deep and may have been a palaeochannel or similar natural feature.

5.5 Area E

Post-medieval

5.5.1 A ditch (4035) crossed Area E on a north-east to south-west orientation (Fig. 6; Pl. 10). It had very straight sides, sloping at 45° angles, and a slightly undulating base. Four interventions were excavated (4017, 4022, 4026, and 4030) up to 2.2 m wide and 0.55 m deep. The single fill (4018=4023=4027=4031) consisted of pale grey brown clay sand. No dating evidence was retrieved, though the ditch had a modern appearance. The ditch was truncated by an oval pit (4028) measuring 1.7 m by 1.4 m in plan and 0.5 m deep. The pit had a dark brown silty sand fill containing 18th- to 19th-century pottery and glass. Ditch 4035 was also truncated by pit 4020 described below.

5.5.2 The north-east end of ditch 4035 (intervention 4017) was truncated by a north to south oriented ditch terminal 4014, which extended beyond the north-west limit of the trench and terminated 3 m to the south-east, where a modern drain had removed the end of the terminal

(Pl. 11). The ditch had a concave profile and a flat base and measured a width of 1.68 m by a depth of 0.42 m. It contained two blackish brown charcoal silt sand fills (4015 and 4016). A sample from deposit 4015 yielded a sizeable charred plant assemblage, which contained high numbers of cereals, chaff and other taxa. A single sherd of 17th- to 18th-century pottery was recovered.

5.5.3 A north-east to south-west oriented ditch (4012) extended 3.25 m to the north-east from the south-west limit of excavation before terminating. It had a shallow uneven profile and an undulating base and measured 0.88 m wide by 0.32 m deep. The single fill (4013) consisted of mottled grey brown silt sand. It contained seven pottery sherds dating to between 1740 and 1820, one dating to the 17th century and two sherds dating to the 18th century. The ditch was truncated by modern pit 4010 described below, which contained intrinsically interesting sherds of medieval pottery.

Modern

5.5.4 A large 20th-century brick culvert extended along the entire south-western edge of the trench on a north-west to south-east orientation. Five pits ran along the length of the culvert: 4004, 4006, 4008, 4010, 4020 at regular intervals of 2.5 m to 3 m (Pl. 12). The pits were oval shaped and all of a similar size, with lengths ranging from 1.16 m to 1.3 m, widths of 0.7 m to 0.87 m and depths of 0.2 m to 0.25 m. The fills consisted of dark grey brown sand clays, containing 19th- to 20th-century pottery, and CBM including degraded brick fragments. Pit 4010 contained five sherds of residual rare Hallgate A1 pottery dating to the 12th century, along with another sherd dating to the 11th to 12th centuries. Pit 4004 contained a sherd of late-13th- to 15th-century pottery and a sherd dating to between *c.*1740 and *c*.1820. Pit 4007 contained two sherds of post-medieval pottery, one dating to the 16th–17th century and the other dating to the 17th century. Pit 4020 contained a single sherd of 19th century pottery. A further shallow pit (4032) of similar size and shape was located 3.6 m northeast of pit 4008, containing a large concentration of charcoal and fired clay, but no finds were recovered (Pl. 13). It is probable that these pits were modern and that they were related to the brick culvert in some way. However, the residual medieval pottery assemblage recovered from them is of intrinsic interest as discussed in the Artefactual evidence section below.

5.5.5 An irregular-oval shaped pit (4024; Pl. 14) in the west corner of the site (2.7 m by 1.7 m in plan and 0.48 m deep) was likely to be a modern rubbish pit, as it contained modern pottery, glass, brick rubble, wood and ceramic building material. Pit 4024 could be interpreted as a sixth pit associated with pits 4020 etc described above, however it was of different size and off alignment with the other pits.

6 ARTEFACTUAL EVIDENCE

6.1 Introduction

6.1.1 This section considers the finds recovered from the site. Finds from previous phases of fieldwork have already been reported on (evaluation: Wessex Archaeology 2017; phase 1 mitigation: Wessex Archaeology 2018a), but are included here in tabulated quantification, and are cross-referred where appropriate; the section on the pottery covers the combined assemblage from all three phases of fieldwork, for the sake of consistency. Statements of potential and recommendations for further work are based on the combined assemblage from all fieldwork phases.

6.1.2 The combined assemblage ranges in date from Romano-British to post-medieval/modern, although the chronological focus is on the latter end of that chronological range; there is

nothing from the phase 2 mitigation earlier than medieval. It incorporates structural material (including brick samples taken from several structural components) as well as domestic refuse. All finds have been quantified by material type within each context, and the results are presented in Table 2, including sub-totals from previous phases.

Table 2 All finds by context (number / weight in grammes)

Context	Animal Bone	CBM	Pottery	Other Finds
evaluation all	62/302	30/302	117/2764	4 CTP, 8 glass; 4 metal; 2 stone
Phase 1 mitigation all	43/2524	21/2488	89/3914	2 CTP, 21 glass, 33 metal; 1 leather; 1 stone
Sub-total	*105/2826*	*51/2790*	*206/6678*	
PHASE 2 MITIGATION				
1004	83/338			
1005	18/129	1/125	17/354	4 CTP, 2 metal; 1 shell
1021			1/36	
1024	125/2032		2/2	
1026			1/24	
1027			1/44	
1028			1/11	
1029				
1031	12/1102	23/11896	5/111	1 iron
1032		26/10999		107 g slag
3022		1/22	1/25	
3026			2/24	1 glass
3028	88/284			
3032			1/17	
3039	2/44		2/117	
3068			3/108	
3072			2/63	
3094	34/52			
4005		1/222	3/55	
4007		1/63	2/27	
4009		1/16		
4011			14/252	
4013			12/139	
4016			1/19	
4021			1/6	
4029			4/9	2 glass
4031			1/5	2 metal
Sub-total	*362/3981*	*54/23343*	*77/1448*	
TOTAL	**467/6807**	**105/26133**	**283/8126**	

6.2 Pottery

Introduction

6.2.1 The combined pottery assemblage from all stages of fieldwork totalled 283 sherds of pottery weighing 8126 grams and representing a maximum of 240 vessels. The data are summarised in Appendix 2 (Tables 5–7). A full list of all of the pottery by context forms part of the project archive.

The pottery

6.2.2 The earliest sherd identified in the assemblage was of Roman date; an abraded body sherd in a local greyware fabric from a subsoil context found during the evaluation (501). This sherd was associated with a diverse group of wares consisting primarily of medieval pottery but with single sherds of later post-medieval and early modern to recent date; as such it appears to be residual in nature.

6.2.3 The earliest medieval pottery in the assemblage came from context 4011 and consisted of sherds from between two and five hand-made bowls in an oxidised sandy fabric which was identified as of Hallgate A1 type, a predecessor of the better known, and wheel-thrown, Hallgate A type (Buckland 1979; Cumberpatch *et al*. 1998–1999). Hallgate A1 ware has rarely been found outside Doncaster and is extremely scarce even within Doncaster itself (Cumberpatch, in prep.). The presence of even such a small group at Kirk Sandall is therefore of considerable significance (although apparently residual in a post-medieval context). The fact that the vessel types were limited to bowls and did not include any examples of the normally ubiquitous jugs is unusual but some deviation from the norm may be expected, given the largely aceramic nature of pre-Conquest society in South Yorkshire.

6.2.4 A sherd of an unidentified type (Oxidised Sandy ware) from evaluation context 801 (associated with two sherds of Hallgate A ware) was also hand-made and, in terms of its shape (notably the sagging base and small beaded foot) resembled Staxton / Potter-Brompton wares although the fabric was finer than both Hallgate A1 and Staxton / Potter Brompton ware. An 11th- to 12th-century date has been proposed for this sherd although its origin remains uncertain.

6.2.5 Hallgate A ware and Hallgate A ware type was identified in contexts 801, 1028, 1107, 1504, 1602. The 13th-century date cited in the data tables follows the conventional dating as proposed by Buckland *et al.* (1979). A full re-examination of the Doncaster pottery industry is in progress (Cumberpatch 2016; in prep.) and cannot be discussed in detail here. Briefly summarised however, the existing scheme describes a situation in which the hand-made Hallgate C ware was followed by Hallgate B and A wares which are dated to the 12th and 13th centuries respectively. This scheme was based upon just three pieces of dating evidence drawn from sites in West Yorkshire and Lincolnshire and does not take account of the more recent evidence for a phase of hand-made production within Doncaster which includes the Frenchgate wares, as well as the Hallgate A1 and Hallgate C wares (Cumberpatch and Sydes 2004; Cumberpatch *et al.* 1998–1999; Cumberpatch in prep.). It also takes no account of the evidence, drawn from sites across Doncaster, which suggests that the Hallgate B and A wares may, in fact, have been in production at the same time or at least overlapped by a considerable period and, as a result, are frequently found in the same contexts. An alternative scheme would see a relatively short-lived phase of hand-made pottery production in the immediate post-Conquest period, following the establishment of the Norman castle, an event dated to *c.*1089. This would have involved the arrival of a population, including the garrison of the castle, which was accustomed to the day-to-day use of pottery in way that the existing local population, which was largely aceramic, was not (Cumberpatch 2016; in prep.). That the earliest phase of pottery

production involved hand-made rather than wheel-thrown vessels may suggest that it was made on a more or less *ad hoc* basis by individuals who lacked the skills of many contemporary potters. We know from other evidence (including the Stamford ware pottery in Pontefract: Cumberpatch and Roberts 2013; Roberts *et al.* 2013) that potters were mobile and were able to establish new industries in response to changing local demand. This may explain the apparently sudden appearance of the technically accomplished Hallgate B and A wares which, if this argument is accepted, should both be dated to the 12th and 13th centuries, although further work is required to establish the finer details. The suggestion is supported by the widespread co-occurrence of both wares on sites across Doncaster and might suggest that the distinctions between them relate more to the existence of potteries drawing on different clay sources than on chronological distinctions. Further work is required to establish the details of the situation and also to investigate the implications of the patterns of distribution of the various Doncaster wares, both in the town itself and in the wider region but this lies beyond the scope of a project-funded report although the evidence from the present site will be of significance in any future review of the situation.

6.2.6 Evaluation trench 5 (subsoil) contained two sherds of Buff Gritty ware with a probable date range between the later 12th and early 14th centuries. The presence of red grit may suggest a local origin as similar inclusions occur in Frenchgate and Hallgate wares although the sherds were not identifiable to type. A similar but finer sherd (Buff Sandy ware) decorated with splashed glaze was identified in posthole 1111. The presence of splashed glaze suggests a date prior to the mid/late 13th century.

6.2.7 Trench 5 subsoil also contained two small sherds of Staxton / Potter-Brompton ware (Brewster and Hayfield 1992). This distinctive type of hand-made pottery dates to the period between the early/mid 13th and early 14th century and is a relatively unusual find on sites in South Yorkshire.

6.2.8 Two small sherds of Shell-tempered ware were recovered and have been identified by Jane Young. Using the fabric codenames of the City of Lincoln Archaeology Unit (Young *et al.* 2005), they have been identified respectively as Lincolnshire Fine-shelled ware (LFS: *c.*970–1200) and Lincolnshire Early Medieval Shelly ware (LEMS: *c.*1130–1230). The earlier of the two is a basal sherd of LFS found in deposit 4011; this is from a large jar or bowl. The thickness and angle of the base suggest an 11th or 12th century date. The second, also a basal sherd, comes from a large jar or bowl in LEMS, from evaluation trench 9 (subsoil). The vessel is in the minor sparser and higher fired fabric. Jars in this fabric usually have a narrower profile than is found in the more common fabric (Young *et al*. 2005, fig 100; 717–18) but no definite bowl profiles have so far been recovered. Too few well-stratified vessels have been recovered to be certain of close dating for the fabric but it is likely to have been produced between the mid-12th and early/mid-13th centuries.

6.2.9 Four evaluation contexts (trench 5 subsoil, layer 1107, posthole 1210 and made ground 1504) contained sherds of Coal Measures ware with all three principal sub-types (Coal Measures Fineware, Coal Measures Whiteware and Coal Measures Purple ware) all present, albeit in small quantities. Traditionally the Coal Measures wares have, along with Humberware, been seen as the successor to the Doncaster industry with production established in the countryside as urban land values rose in the late 13th and early 14th centuries. This may require revision as there is some evidence for an earlier phase of production represented by sites such as Upper Haugh (Cumberpatch 2004). More recently evidence from Sheffield Castle has provided independent support for an early phase of manufacture in the form of a C^{14} date of between AD 1040 and 1210 (at a 95.4% confidence level) from a context containing a sherd of Coal Measures Fineware (Cumberpatch 2019). Only one sherd of Coal Measures Fineware was identified in the present assemblage (layer

1504) but, perhaps significantly in view of the evidence for an earlier date mentioned above, this was associated with sherds of Hallgate A and A-type ware.

6.2.10 There is, as yet, no definite evidence for a change in the date ranges attributed to the Coal Measures Whiteware or the late medieval to post-medieval Coal Measures Purple ware. The date range of the latter, in particular, remains consistent with the more general evidence of a move towards black and purple glazed wares from the mid-15th century onwards (Cumberpatch 2003).

6.2.11 Coal Measures Whiteware was the commonest of the three types in the present assemblage with five sherds from trench 5 subsoil 501 and layer 1107, including the rim of a jar and a handle from a jug or cistern. Coal Measures Purple ware was represented by just two sherds from layer 1107 and posthole 1210.

6.2.12 Other later medieval wares were limited to two sherds of Humberware (trench 5 subsoil and layer 4005), an unusually small quantity given the wide distribution of this type of pottery and the large scale of its production.

6.2.13 Post-medieval pottery, dating to the period between *c.*1450 and *c.*1720, was well represented in the assemblage. In addition to the sherds of Coal Measures Purple, mentioned above, early post-medieval wares included two sherds of Cistercian ware (pit 1030 and unstratified) and two sherds of Green Glazed Sandy ware, both from pit 1030. While the latter type represents the very end of the medieval tradition of green glaze on oxidised bodies, Cistercian ware was amongst the first of the distinctively post-medieval wares, distinguished by a wide range of new vessel forms and colours, as discussed elsewhere (Cumberpatch 2003). Cistercian wares were made widely across the Midlands and northern England with production seemingly centred in 'potting villages' such as Wrenthorpe and Ticknall (Moorhouse and Roberts 1991; Spavold and Brown 2005) but may also have been manufactured in Doncaster (P. Robinson, pers. comm.). Cistercian ware consists mainly of tablewares, notably cups and tygs while contemporary larger utilitarian wares (jugs, jars, cisterns) are covered by the category of Midlands Purple ware. Although often used too broadly in the past to refer to any black or purple glazed pottery, the current use of this term focusses on wares distinguished by their very hard, dense, semi-vitrified fabrics usually containing quartz and black iron-rich grit. In the present case, examples were noted in evaluation trench 6 (subsoil), and in pits 1028 and 1030, with the identifiable sherds all seeming to come from jugs or cisterns. Close dating of individual examples of the type is difficult and production seems to have continued into the 18th century although its production declined thereafter in favour of wares (notably Brown Glazed Coarseware) which were fired to lower temperatures and which consequently required less fuel.

6.2.14 Later post-medieval wares, dating to the 17th century, were represented by Blackware (evaluation trench 9, pits 1004, 2049, well 2023) and Yellow ware (layer 1030, well 2023, pit 4006 and ditch 4012) with the latter perhaps including some early sherds that may be contemporary with the Cistercian wares. The Yellow ware sherd from layer 1030 was particularly notable in that it was a wide splayed and footed base which may be paralleled by examples from Wrenthorpe (Moorhouse and Slowikowski 1991, fig. 68; 335 and 337).

6.2.15 The Blackware group as a whole included a number of examples described as 'Blackware type' (well 2023 and pit 4006). These sherds and vessels were distinguished by the fact that they showed characteristics typical of both 17th-century Blackwares and 18th-century Late Blackwares. In the case of the handled jar from well 2023, for example, the form resembled that of a Blackware vessel (see, for example, Moorhouse and Slowikowski 1991, fig. 62; 213, 215, 217), as did the fact that the glaze covered the foot rather than ending above the

base in the style of Late Blackwares. In other respects the finish and particularly the fabric more closely resembled a Late Blackware vessel. The vessel showed signs of use-wear on the underside of the base and had a whitish deposit internally. The fabric was a red with a slightly sandy texture and was lighter in colour and less highly-fired than a typical Blackware. It seems unlikely that it represents a deliberately transitional form although the precise relationship between the manufacture of Blackwares and that of Late Blackwares is unclear. Similar sherds have been listed as 'Blackware type' in Table 5 to distinguish them from the more conventional Blackwares and from the Late Blackwares.

6.2.16 Well 2023 was also notable for the presence of other vessels which showed similar chronologically ambiguous traits. A Slipware vessel represented by a rim and handle was decorated with trailed slip lines under dark brown glaze but had a hard, fine, red fabric, similar to that typical of Blackwares, rather than the commoner orange to red fabric seen in local slipwares. Other sherds of Slipware from the same context were more conventional in character and bore red and white trailed designs on red bodies, sometimes enhanced with all-over white slip internally. The same was true of Slipware sherds from evaluation trenches 1 (well 113) and 9 (subsoil), layer 1005, cut 1019 and well 2023. With the exception of a mug or small jug (well 2023), all of these sherds were from press-moulded dishes or bowls.

6.2.17 Redware and Redware-type sherds were amongst the commonest of the larger late post-medieval to early modern utilitarian wares but the fabrics of many sherds (Redware type) differed from the norm in being harder and somewhat denser than is typical for the type. Individual sherds are described in the data table. The majority of vessels were dishes or bowls with some being large enough to be described as pancheons but the group included at least one handled jar (well 2023). Much the same was true of the Type 1 Slipwares (evaluation trenches 9 [subsoil] and 12 [pit 1218]), a Redware variant decorated with trailed white slip, with the fabrics of these vessels being harder than typical. The group included a handled bowl (trench 9 subsoil) decorated with short trailed slip lines on the rim.

6.2.18 Although the majority of Slipwares were conventional in character, representing press-moulded dishes with pie-crust rims and slip decoration internally, a sherd from a mug or tankard (well 2023, fill 2050) was unusual in having a fine, hard, dark red fabric very similar to that of Blackware. Other hollow ware vessels with slip decoration were noted in the same context and also in another fill of well 2023 (fill 2026).

6.2.19 Layer 1005 included the rim, spout and handle from a large jug (Slipware type) in a fine white fabric coated internally and externally with a thin red slip giving a red-brown finish under thick clear glaze. This large, round-bodied jug probably dates to the 18th century.

6.2.20 Pit 1023 and well 2023 both contained single sherds of Tin Glazed Earthenware, neither of which were closely datable. In general terms the type spans the period between the mid-16th and mid-18th centuries but dating depends upon the presence of distinctive painted designs and as both sherds were plain white no closer date was possible.

6.2.21 The 18th century saw the start of the industrial-scale production of fine stonewares and refined earthenwares but also the continuation of local production of vernacular tablewares and utilitarian wares using technology substantially unchanged from the post-medieval period (Cumberpatch 2014). This dichotomy is reflected in the present assemblage with vernacular tablewares represented by Late Blackware (contexts 4029 and well 2023), Mottled ware (evaluation trenches 1 [well 113], 9 (subsoil] and 12 [posthole 1210] and probably made ground 1506 in trench 15), in addition to the Slipwares discussed above. The local production of such wares is well-attested in South Yorkshire although as yet it is

not yet possible to ascribe specific examples to individual sites on the basis of visual inspection of the fabrics.

6.2.22 Refined earthenwares were represented by Creamware (evaluation pit 1212, layer 1005, pits 4004 and 4028, ditches 4012 and 4030), Banded Creamware (ditch 4012), Pearlware (evaluation pit 1212, pit 1023, ditch 4012 and pit 4028) and Edged ware (evaluation wall/drain 1205). Unfortunately the only sherd of transfer printed Pearlware (pit 1023) was too small for the design to be identified. Although the quantities were small, the presence of these wares, together with the Tin Glazed Earthenware mentioned above, attests to the widespread availability of fashionable pottery during the 18th century as well as the persistence of more traditional wares alongside them, a situation which presumably reflects the use of different wares in different social contexts (Cumberpatch 2014, 89–93).

6.2.23 Utilitarian wares are more difficult to date than are tablewares and both the Brown Glazed Coarseware and Yellow Glazed Coarseware categories included a number of distinctive fabrics, as noted in the data table. On balance, all of the yellow glazed wares and a considerable proportion of the brown glazed wares were probably of 18th-century date with some perhaps slightly earlier. A single sherd of Mottled Coarseware (evaluation trench 9 [feature 903]) was also of 18th-century type. Pancheons and bowls were the commonest forms but the Brown Glazed Coarsewares included several handled jars (evaluation trenches 5 [subsoil] and 7 [cleaning layer], and well 2023) and other hollow ware forms. As in the case of the vernacular tablewares, a local origin is probable as there were numerous potteries producing such wares throughout the 18th and 19th centuries with some surviving into the mid-20th century (Griffin 2012).

6.2.24 Nineteenth-century pottery included a wide range of typical tablewares and kitchenwares with smaller quantities of utilitarian ware.

6.2.25 Whiteware, both plain and transfer printed, was present in a number of contexts, notably evaluation trenches 7 [pit 704] and 12 [pit 1208], pit 1004, but also evaluation trench 15 [made ground 1507], layer 1005, well 2023, pits 4020 and 4028. The range of tablewares was wide (given the small size of the assemblage) with carvers/servers, bowls/pie dishes, cups, plates and at least one jug all identified. Transfer printed designs included Asiatic Pheasants and Willow but others were unidentifiable.

6.2.26 Bone China was well represented in evaluation trenches 7 [pit 704], 12 [pit 1208] and 15 [made ground 1507] and pit 1004, with vessels which included a chamberpot alongside various tablewares (cup, saucer, jug, plate etc). The majority of these items dated to the late 19th or early 20th century, as detailed in the data tables.

6.2.27 Decorated wares included Banded ware (evaluation pit 704), Mocha ware (evaluation posthole 1207), Slip-banded Cane Coloured ware (layer 1005) and Sponge-printed ware (pit 1004) with a group of Colour Glazed ware sherds from evaluation trenches 7 (pit 704), 12 (pit 1208) and 15 (made ground 1507). The latter included at least three sherds from teapots. Pits 1208, 1004 and well 2023 all contained sherds of Cane Coloured ware, one from a pie dish and another, decorated with a thin blue line, a footed base.

6.2.28 Utilitarian wares included a small number of sherds of Brown Glazed Coarseware, described above, and a rather larger quantity of Brown Salt Glazed Stoneware (evaluation trenches 1 [well 113], 7 [pit 704] and 12 [pit 1208] and layer 1005). One sherd was the lid-seated rim of a jar while three were from bowls, two of which had grey glaze internally. Other stonewares included bottles, flagons and a jam or marmalade jar (pit 704, made ground 1507, pit 1004 and well 2023).

Pottery distribution

Evaluation

6.2.29 The evaluation produced a total of 117 sherds of pottery weighing 2764 grams representing a maximum of 103 vessels. The data are summarised in Appendix 2, Table 5 Of the trenches excavated as part of this phase of the project, trenches 1, 5, 6, 7, 8, 9, 11, 12, 15 and 16 contained pottery from either subsoil contexts or identifiable features.

6.2.30 Context 116 (Trench 1), the backfill of cut 112, associated with a well, 113, contained three sherds of pottery, two of which were of certain 18th-century date with a third which was probably broadly contemporary.

6.2.31 Trenches 5 and 6 both produced pottery but only from subsoil contexts. The assemblage from context 501 included a wide range of types, the earliest being a sherd of Roman greyware. Medieval pottery included local Hallgate type ware and Coal Measures Whiteware with examples of regionally important Humberware and Staxton / Potter-Brompton ware together with an unidentified Buff Sandy ware. Later pottery was limited to two sherds of 17th to early 18th century Redware and a later sherd of Brown Glazed Coarseware.

6.2.32 In contrast context 601 (subsoil) produced just one sherd of pottery, a piece of Midlands Purple ware dating to the later 15th or 16th century.

6.2.33 Pottery was recovered from two contexts in Trench 7: 705 (pit 704) and cleaning layer 720. The largest group came from pit 704 and consisted exclusively of mid-19th- to early-20th-century wares with both utilitarian and tablewares represented. The former consisted primarily of stonewares, notably flagons or jars. The tableware component was somewhat larger and included both refined earthenwares and bone china, as summarised in Appendix 2, Table 6. Layer 720 contained just two sherds (Brown Glazed Coarseware and Redware, each broken into several pieces), both of 18th-century date.

6.2.34 Context 801, the subsoil context identified in Trench 8, contained just three sherds of pottery, all of them of medieval date. Two sherds were from Hallgate A ware type jugs while the third was the base of a hand-made vessel in an unusual and unidentified oxidised sandy fabric.

6.2.35 Two contexts in Trench 9 contained pottery: 901 and 904 (feature 903). The subsoil context, 901, produced a group of late post-medieval and early modern wares with one sherd of medieval Lincolnshire Early Medieval Shelly ware (see Appendix 2). None of the sherds seemed to post-date the end of the 18th century, suggesting that deposition in the area was of limited and chronologically circumscribed duration. Feature 903 contained four sherds, all of 17th-century date and, as such, comparable with the assemblage from the subsoil.

6.2.36 Two contexts in Trench 11 contained pottery; 1107 and 1112 (posthole 1111). All of the pottery was of medieval type, with the largest group from layer/soil horizon 1107. This was of mixed character and included Coal Measures wares (white and purple) with two smaller sherds of Hallgate A ware. Posthole 1111 contained a small sherd of splash-glazed Buff Sandy ware of probable mid/late-11th- to early/mid-13th-century date.

6.2.37 Six contexts in Trench 12 contained pottery, all of them structures or the fills of cut features. Pit 1218, filled by context 1219 contained two sherds of Type 1 Slipware, both decorated with curvilinear slip designs. Posthole 1210 contained a residual sherd of Coal Measures Purple ware alongside two sherds of 18th century Mottled ware and two sherds of slightly earlier Redware type. Context 1213, the fill of pit 1212, contained small sherds of

Creamware and Pearlware alongside a larger sherd of Brown Glazed Coarseware, the latter possibly slightly later in date than the former types. The same may be true of context 1205, part of wall or drain structure which produced the rim of an Edged ware pie dish and part of a Brown Glazed Coarseware pancheon. Context 1209, the fill of pit 1208, contained a diverse group of 19th-century wares which included parts of two teapots (Colour Glazed ware) alongside other tablewares and parts of two stoneware bowls. A 19th-century date is also indicated for the fill of posthole 1207 (context 1215) which contained a single sherd of Mocha ware.

6.2.38 Three contexts in Trench 15 contained pottery; 1504, 1506 and 1507. Each was associated with a different test pit (1, 2 and 3 respectively) and in each case the context was described as 'made ground'. This term, often used in relation to sites formerly occupied by industrial buildings, is an imprecise and somewhat ambiguous one in that almost any archaeological context could be described as being, in some sense, 'made' in that it is not undisturbed 'natural'. In the present case the same term is used to describe contexts which, on the evidence of the pottery, differ considerably in date. Context 1504 contained one sherd of Coal Measures Fineware and two sherds of Hallgate A type ware, suggesting a date in the 13th century although a 12th-century date cannot be ruled out. Context 1506 contained three sherds of 18th-century date and one, of unidentified type, which might be slightly earlier. Context 1507 produced a small group of 19th- to early-20th-century wares including tablewares (Bone China, Colour Glazed ware, Whiteware) together with the rim of a stoneware jam or marmalade jar.

6.2.39 Only one sherd of pottery was recovered from Trench 16. This was a sherd of Hallgate A type ware from a probable pond (context 1602).

Phase 1 mitigation

6.2.40 This phase produced an assemblage consisting of 89 sherds of pottery weighing 3914 grammes and representing a maximum of 81 vessels. The data are summarised in Appendix 2, Table 6.

6.2.41 Two contexts in Area 1 produced pottery assemblages: 1007 (pit 1004) and occupation deposit 1030. The largest group, from pit 1004, contained a largely 19th- to early-20th-century assemblage with a single sherd, presumably residual, of 17th-century Blackware (part of a bottle or costrel). The later pottery consisted of a range of kitchen and tablewares, utilitarian wares and retail wares, all typical of the period. Notable items included the rim of a chamberpot, the base of a teapot and parts of two stoneware bottles or flagons. In contrast, the sherds from deposit 1030 were of an earlier date and included a very distinctive splayed base in Yellow ware paralleled by examples from Wrenthorpe (Moorhouse and Slowikowski 1991, fig. 68; 335, 337).

6.2.42 Area 2 produced a much larger assemblage of which the greater part came from a well (2023). Only two other contexts contained pottery; 2027 and 2048. The first of these, a levelling layer, produced a small sherd of Brown Glazed Coarseware of late 17th- or 18th-century type while the second, the fill of pit 2049, contained a sherd of 17th-century Blackware. The fills of the well were somewhat mixed in character with a small number of sherds of 19th-century date (fill 2026; Cane Coloured ware, transfer printed and plain Whiteware: fill 2050; Whiteware, Stoneware) alongside larger assemblages of 17th- and 18th-century date. The latter included the ambiguous Blackware type vessels described and discussed above. The absence of formal tablewares of 18th-century type suggests a date prior to *c.*1720, despite the presence of a sherd of Late Blackware and several sherds of Slipware. The variety of Slipwares was particularly notable with variants including slip-trailed decoration on Yellow Glazed Coarseware type bodies and a slip decorated mug or

tankard with a fabric that was much closer to that of Blackware than it was to typical Slipware. The assemblage also included two sherds of Tin Glazed Earthenware, unfortunately not closely dated.

6.2.43 One sherd of Cistercian ware, the base of a small cup or tyg, was unstratified.

Phase 2 mitigation

6.2.44 This part of the assemblage consisted of 77 sherds of pottery weighing 1448 grams representing a maximum of 56 vessels. The data are summarised in Appendix 2, Table 7.

6.2.45 Layer 1005, cut 1021 and pits 1023, 1025 and 1030 contained a diverse array of types which included a sherd of Hallgate A ware (pit 1025) and recent wares (Slip Banded ware, transfer printed Whiteware; layer 1005) but which were dominated by post-medieval and early modern wares, including early post-medieval types which were rare elsewhere on the site (Green Glazed Sandy ware, Cistercian ware; pit 1030) alongside typical later post-medieval and early modern types (Midlands Purple ware, Redware, Slipware, Creamware and Pearlware). The small numbers of sherds from cut 1019, pit 1023 and pit 1025 make any definite interpretation difficult to sustain but the overall impression of a long period of activity on and around the site is consistent with the range of types.

6.2.46 Pits 3021, 3031 and 3067 and ditches 3025, 3038 and 3071 produced single sherds and small assemblages consisting almost entirely of mid-17th- to early 18th-century Redware and Redware type with just one sherd of Brown Glazed Coarseware (ditch 3025) which was probably slightly later in date.

6.2.47 Pit 4010 contained a small but significant and seemingly chronologically consistent group of sherds. The majority of these were hand-made wares of Hallgate A1 type, discussed in detail above, which were associated with a sherd of Lincoln Fine-shelled ware of 11th- to 12th-century date. This could be a useful piece of evidence which contributes to the dating of the hand-made Hallgate ware industry, but it should be noted that pit 4010 was modern in date, one of five similar pits associated with a 20th-century brick culvert.

6.2.48 Pit 4006 contained two sherds, both of later post-medieval type but the remainder of this group of contexts (pits 4004 and 4028, ditches 4012, 4014 and 4030) produced primarily early modern wares (notably Creamware) with sherds of residual medieval and post-medieval pottery (Humberware and Yellow ware) in pit 4004 and ditch 4012. Pit 4028 contained a small mixed group of early modern sherds with a small fragment of transfer printed Whiteware of mid- to late-19th-century date. Stratigraphic information and the arrangement of the pits with respect to the 20th-century brick culvert suggest that the assemblages obtained from these features were redeposited, though perhaps redeposited from a generally chronologically-limited source.

6.3 Ceramic building material and possible furnace lining

6.3.1 This category consists largely of post-medieval brick fragments from two fills (1031, 1032) in pit 1030. All are of a similar nature, representing handmade, unfrogged bricks in coarse, poorly wedged fabrics which are deteriorating through lamination. Upper surfaces have been roughly smoothed, while lower surfaces and edges show creasing and grass-marks. There are no complete examples, and only one measurable width (135 mm); thicknesses are consistent at around 60 mm.

6.3.2 Examples from both contexts have low-density ferruginous slaggy material bonded to them suggestive of furnace lining, although the use of what appear to be fairly standard bricks (ie not refractory bricks) for furnace construction is somewhat contra to this interpretation. In

places, the interface between the slaggy material and the bricks is quite sharp; this and the quantity of additional material suggests that it has been bonded to the bricks by some additional pyrotechnical process distinct from the initial firing of the bricks. The material is visibly ferruginous and in places resembles iron smelting furnace slag. These fragments were recovered ex situ from the fills of a rubbish pit (1030) and no other definitive evidence of iron smelting was identified from the site (a small quantity of slag was not certainly related to metalworking). Comparison with nearby pit 1019, where similar bricks (overfired and slightly distorted but with no visible adhering slaggy material) had been used to partially line the pit, may suggest that the activity was local, however no industrial residues nor evidence of heating were noted. If an interpretation of iron smelting is sustainable, the activity would have been small scale, and, in conjunction with the roughness of the bricks, may suggest activity pre-dating systematic iron-working industry in the locality or region.

6.3.3 Overfired fragments of similar bricks were noted from the evaluation, where they were recorded from eight structural elements; their date is suggested as 18th-century, although the dating of such crudely made bricks is not straightforward.

6.3.4 Two further brick fragments (showing no obvious signs of overfiring) were recovered, along with one pantile.

6.4 Clay tobacco pipe

6.4.1 All four fragments of clay pipe recovered are plain stems and cannot be closely dated. The only piece from previous phases which is more chronologically distinctive is a stem/heel fragment from the evaluation, probably from a bowl of 'transitional' form (*c.*1690-1720; White 2004, fig. 6.7), with an unidentified maker's mark.

6.5 Glass

6.5.1 Three pieces of window glass were found, all in pale greenish metal and broadly dated as post-medieval. Glass from previous phases included another fragment of post-medieval window glass and 11 fragments of free-blown or mould-blown green wine bottle (late 17th-early 19th-century); the remainder comprised 19th-/20th-century machine-made bottles.

6.6 Metal

6.6.1 Metal from the current phase comprises four iron nails. Metalwork from previous phases included objects of copper alloy, lead and iron, none obviously dating earlier than post-medieval.

6.7 Animal bone

6.7.1 Animal bone (363 fragments or 3.981 kg) came from three pits (1003, 1023 and 1030) in Area C, a pit (3027) and two ditches (3028 and 3092) in Area D. Bone preservation in Area C is generally good but in Area D the condition is poor and consequently much of the bone is fragmented.

6.7.2 Medieval to early post-medieval pit 1030 contained the right forequarter and metatarsal of an adult horse. The bones were found in articulation and there are signs of butchery on the distal humerus indicating the point at which the leg was detached from the carcass. The complete skeleton of a large male dog came from post-medieval to modern pit 1023. The animal had a shoulder height of approx. 0.68 m and there are signs of osteoarthritis on lumbar vertebrae and sacrum. A further dog skeleton, this time from a small, gracile animal with a shoulder height of approx. 0.38 m, and the part skeleton of a cat, came from undated pit 1003. Several cattle bones and a sheep/goat scapula also came from this feature. The

identified bones from the undated pit and ditches in Area D, are all cattle bones and include several from a young calf.

6.8 Other finds

6.8.1 Other finds comprise very small quantities of slag (of pyrotechnical origin but not necessarily metalworking), shell (one cockle) and (from previous phases) leather (shoe sole) and stone (two whetstones).

7 ENVIRONMENTAL EVIDENCE

7.1 Introduction

7.1.1 Fifteen bulk sediment samples were taken from a posthole, pits, ditches and a gully of medieval, post-medieval and uncertain chronology and were processed for the recovery and assessment of the environmental evidence. The bulk samples break down into the following feature groups:

Table 3. Sample provenance summary

Feature	No. of bulk samples	Volume (litres)
Posthole	1	8
Pit	9	257
Ditch	4	83
Gully	1	23
Totals	**15**	**371**

7.2 Aims and methods

7.2.1 The purpose of this assessment is to determine the potential of the environmental remains preserved at the site to address project aims and to provide data valuable for wider research frameworks. The nature of this assessment follows recommendations set up by Historic England (Campbell *et al.* 2011).

7.2.2 The size of the bulk sediment samples varied between 8 and 38 litres, and on average was around 25 litres. The samples were processed by standard flotation methods on a Siraf-type flotation tank; the flot retained on a 0.25 mm mesh, residues fractionated into 4 mm and 1 mm fractions. The coarse fractions (>4 mm) were sorted by eye and discarded. The environmental material extracted from the residues was added to the flots. One sample was waterlogged and excavated in quadrants; each quadrant was kept separate and the flots were stored in water in airtight containers. A riffle box was used to split one large flot into a smaller flot subsample. Some of the fine residue fractions and the flots were scanned using a stereo incident light microscopy (Leica MS5 microscope) at magnifications of up to x40 for the identification of environmental remains. Different bioturbation indicators were considered, including the percentage of roots, the abundance of modern seeds and the presence of mycorrhizal fungi sclerotia (eg *Cenococcum geophilum*) and animal remains, such as burrowing snails, or earthworm eggs and insects, which would not be preserved unless anoxic conditions prevailed on site. The preservation and nature of the charred plant and wood charcoal remains, as well as the presence of other environmental remains such as terrestrial and aquatic molluscs, animal bone and insects (in cases of anoxic conditions for their preservation), was recorded. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary and Hopf (2000), for cereals. Abundance of remains is qualitatively quantified (A*** = exceptional, A** = 100+, A* = 30-99, A = >10, B = 9-5, C = <5) as an estimation of the minimum number of individuals and not the number of remains per taxa.

7.3 Results

7.3.1 The flots from the bulk sediment samples were of variable volumes (Appendix 3). There were low numbers of roots and moderate numbers of modern seeds that may be indicative of some stratigraphic movement and the low possibility of contamination by later intrusive elements. Preservation was by both charring and waterlogging with some mineralisation noted in several samples (charred and waterlogged). Charred plant material was generally poorly preserved whilst waterlogged material comprised varying degrees of preservation. Wood charcoal was noted in small to moderate quantities and was from mature and roundwood. Fish scales and animal bone were present in some samples. No other environmental evidence was preserved in the bulk sediment samples. Coal, clinker, vitrified material and slag were present in most samples.

7.3.2 Only two samples produced sizeable charred plant assemblages, comprising varying degrees of preservation and with some iron coating. The sample from 17th/18th-century stone drain 4014, deposit 4015, contained high numbers of cereals, chaff and other taxa. Cereals included *Secale cereale* (rye) grains and rachis segments, *Triticum aestivum/turgidum* (naked wheat) grains and *Hordeum vulgare* (barley) grains. Also present were Vicieae (vetches), Poaceae (grasses) including *Avena* sp. (oats) and *Avena/Bromus* (oats/brome), Caryophyllaceae (pinks), Asteraceae (daisy family) and a *Raphanus raphanistrum* (wild radish) seed capsule fragment. The sample from undated ditch cut 3092, deposit 3094, produced a similar but smaller assemblage with no cereal chaff present but, additionally, Polygonaceae (knotweed, including *Persicaria* sp.) and Chenopodiaceae (goosefoot). This sample contained a moderate amount of mature wood charcoal.

7.3.3 The bulk sediment samples from pits 3027 3029, 3064, 3073, 3075, 1012, 1019 and 1030 (deposits 3028, 3030, 3066, 3078, 3076, 1013, 1021 and 1031) and ditch cuts 3058 and 4012 (deposits 3059 and 4013) had small numbers of cereals, predominantly rye (grains and a rachis segment), *Triticum* sp. (wheat), *Triticum/Secale* (wheat/rye), naked wheat, unidentified cereal (Triticeae) grain fragments and a tentatively identified barley grain. Other taxa noted were vetches, including a tentatively identified *Vicia faba* (broad bean, possibly cultivated), oats, oats/brome, Cyperaceae (sedges), Trifolieae (clover/medick/trefoil), seeds of the daisy family and a seed of indeterminate taxon. Ditch cut 4012, deposit 4013 contained a large amount of mature and roundwood charcoal whilst the other features only produced small to moderate amounts of charcoal from mature wood, with some iron coating present. Gully 1017, deposit 1018 produced only a seed of indeterminate taxon whilst posthole 3048, deposit 3049 contained only a small amount of mature wood charcoal.

7.3.4 Four samples from pit 1036, deposit 1038 were dominated by waterlogged remains, but small numbers of poorly preserved charred remains and moderate amounts of mature and roundwood charcoal were also noted. Waterlogged plant taxa included *Sambucus* sp. (elder), *Daucus carota* (wild carrot), Lamiaceae (mint family), *Ranunculus* sp. (buttercup), sedges, *Fumaria* sp. (fumitory), *Pimpinella* sp. (burnet-saxifrage), goosefoot, *Rubus* sp. (blackberry/raspberry) and *Betula* sp. (birch, including *B. pendula* (silver birch)). Charred material comprised mainly small numbers of cereals including barley (one grain tentatively identified), naked wheat and unidentified cereal grain fragments. Oats/brome, *Galium* sp. (bedstraw) and seeds of the daisy family were also noted. Waterlogged material comprised varying degrees of preservation with some mineralisation noted. No invertebrate remains preserved by waterlogging were observed.

7.4 Discussion

7.4.1 Although some of the samples have provided poor results, some significant environmental remains have been obtained from the site. The assemblage of charred plant remains is

largely consistent with medieval or post medieval agricultural activities, due to the presence of crops such as rye and naked or free-threshing wheat. Whilst most of the samples only contain probably residual material, the significant charred plant remains from cereals and other crop by-products in some of the sampled features (ditches) may indicate the proximity of areas destined to crop processing activities in the near environment. The waterlogged evidence has some environmental significance for the landscape of the local area. Rich charcoal samples possibly associated to industrial activities have been retrieved from some of the samples.

8 STATEMENT OF POTENTIAL

8.1 Stratigraphic potential

8.1.1 The stratigraphy of the phase 2 mitigation is not complex and is well understood. There is little potential for further analysis of the stratigraphic results from the mitigation of Areas C, D and E discussed in this report.

8.1.2 However, at present descriptions of the various phases of the investigation of the site (chiefly the evaluation, phase 1 mitigation and phase 2 mitigation) have each been treated in isolation. A synthesis of these phases of investigation should be compiled.

8.1.3 Neither the evaluation report (Wessex Archaeology 2017) nor the phase 1 mitigation report (Wessex Archaeology 2018a) contains specific recommendations for future analysis. However, both existing reports do recommend that their results be combined with the results of future work (ie, the present phase 2 mitigation) and considered together during subsequent phases of analysis and publication.

8.2 Finds potential

8.2.1 The combined finds assemblage from all fieldwork phases is not large. Of most potential is the pottery. Despite the small size of the assemblage overall and of the majority of the individual context groups, the assemblage is of greater significance than might at first appear. This is due largely to the presence of two important groups of sherds. The first of these are the hand-made Hallgate type wares from pit 4010, a rare occurrence of these types outside the centre of Doncaster and one which raises questions about the character of the site and its wider significance in 11th and early 12th centuries (Cumberpatch, in prep.). The sherds came from a modern pit, but are nevertheless an important find.

8.2.2 The second is the group of late 17th- to 18th-century wares from well 2023 which, as outlined above, includes types showing distinctive combinations of traits that do not generally occur together. As such they may be of considerable significance in contributing to our understanding of the changes in the organisation of production that seem to play a part in the transition between the post-medieval and early modern industries, an aspect of the period largely omitted from recent discussions (Cumberpatch 2003; 2014) due to a lack of evidence.

8.2.3 No other medieval artefacts were identified, and the remainder of the finds assemblage comprises commonly occurring post-medieval types which are of lower potential, although the overfired brick fragments recovered from various features during evaluation and mitigation (particularly those from pit 1030 with adhering slaggy residues) are of interest, and further examination is recommended in order to clarify their nature.

8.3 Environmental potential

8.3.1 The analysis of a selection of the charred plant remain samples (samples 322 and 402) has the potential to provide further environmental information on the nature of the settlement and local agricultural practices. Sample 402 originates from a deposit dated by pottery to the 17th/18th centuries; sample 322 is from an undated context (a recommendation to date this sample by radiocarbon analysis has been made below). All identifiable charred plant macrofossils will be extracted from the <5.6/4 mm residues and the flot, which may be subsampled with the aid of a riffle box in the case of very rich assemblages. The analysis will involve the full quantification (Antolín *et al*. 2016) and taphonomic assessment of the charred plant assemblages.

8.3.2 The analysis of the wood charcoal from 3 charcoal-rich samples (samples 302, 401, and 1) would provide information on the taxonomic composition, management and exploitation of the local woodland resource on the site. Sample 302 (pit 3073) is undated but is recommended for radiocarbon analysis below. Samples 401 (ditch 4012) and 1 (rubbish pit 1030) are is of post-medieval date but contain residual earlier pottery and are therefore possibly contaminated and unsuitable for wood charcoal analysis. Only sample 302 will be subjected to analysis.

8.3.3 Identifiable charcoal will be extracted from the 2 mm residue together and the flot (>2 mm). Larger richer samples will be sub-sampled: up to a maximum of 100 charcoal fragments per sample will be analysed, as recommended by Keepax (1988). Only fragments greater than 2 mm, and primarily those greater than 4 mm, will be examined, as fragments <2 mm generally lack sufficient anatomical detail and thus cannot be conclusively identified. Fragments will be prepared for identification according to the standard methodology of Leney and Casteel (1975). Charcoal pieces will be fractured with a razor blade to reveal three planes: transverse section (TS), radial longitudinal section (RL) and tangential longitudinal section (TL). They will then be examined under bi-focal epi-illuminated microscopy at magnifications of x50, x100 and x40. Identification will be undertaken according to the anatomical characteristics described by Schweingruber (1990) and Butterfield and Meylan (1980). Identification will be to the lowest taxonomic level possible, usually that of genus and nomenclature according to Stace (1997), individual taxon (mature and twig) will be separated, quantified, and the results tabulated.

8.3.4 All the information resulting from these analyses should be considered together with that from the waterlogged evidence for an environmental summary of the site, recommended for publication. The waterlogged and analysed charcoal and charred plant remain samples are recommended for retention, samples not analysed and unsorted residues are recommended for discard after the analysis has been completed.

8.4 Luminescence dating potential

8.4.1 Samples were collected in small light tight pots (film canisters). No sample preparation other than drying and disaggregation is required. Measurements give a raw luminescence count only. If it is assumed that: sediment was exposed to sunlight prior to burial, sediment mineralogy is broadly similar, and that background radiation levels are constant across the site, then the larger the measured pOSL signal, the older the sample. By collecting a profile through the sediments in trench 2 it will be possible to compare the levels of pOSL which may indicate if deposits were exposed to sunlight prior to burial. When used in conjunction with pOSL measurement of dated samples from other trenches on site, a relative chronology may be possible. The resolution of this relative chronology would be an indication that a deposit is likely older or younger than another context. For example, it may

be possible to determine if undated deposits in Area D are older or younger than the 18th/19th century fills of ditch group 3095.

8.4.2 Ten portable Optically Stimulated Luminescence (pOSL) samples were taken from ditches and pits of post-medieval and unknown chronology which have been stored until required for analysis. This dating technique has recently been used with moderate success at Sheffield Castle (Wessex Archaeology 2019). The luminescence samples are detailed in Table 2 below.

8.4.3 The contexts targeted for pOSL dating can be better dating using radiocarbon techniques. With the exception of ditch 3056, charcoal was recovered from each of the undated contexts sampled for pOSL dating. Ditch 3058 adjacent to ditch 3056 did contain charcoal suitable for radiocarbon analysis and it is recommended that this is performed instead of pOSL analysis of 3056. Radiocarbon analysis is a more developed technique that does not require calibration from local obtained control samples. It is expected that the quality of the results of the radiocarbon analysis will be superior to that of any pOSL analysis.

Table 3 pOSL samples

Sample number	Context number	Feature number	Established date	Contextual information
304 and 305	3035	3033	17th/18th century (pottery)	Part of ditch group 3095
307 and 308	3028	3027	Undated	Pit
310 and 311	3057	3056	Appears on 1849 Ordnance Survey map, may be older	Ditch
313 and 314	3059	3058	Appears on 1849 Ordnance Survey map, may be older	Ditch
320 and 321 (sample number 319 used to describe the 'series' of samples comprising 320 and 321)	3074	3073	Undated	Pit

8.5 Radiocarbon dating potential

8.5.1 It is recommended that a limited scheme of radiocarbon analysis is undertaken. In some areas (Area E, the majority of Area C and the south-west of Area D), the chronology of the site is reasonably well understood based on the recovered pottery and it is not considered necessary to target these features for further chronological refinement. The Hallgate A1 wares were recovered from later contexts and there is no potential to date these by proxies such as charred plant material.

8.5.2 However, there is potential to discover the age of various undated features in Areas C and D. These comprise undated pits and the five parallel ditches in Area C that correlate with a boundary depicted on historic maps. Although maps demonstrate that this boundary was present in the 19th century, the origins of the boundary are unknown. Pit 3073 and short linear feature 3092 should be targeted in particular due to the high potential of environmental samples 302 and 322 obtained from them. Table 4 below outlines the radiocarbon analysis recommendations.

Table 4 Radiocarbon recommendations

Feature number	Context number	Feature type	Sample number	Material	Comments
3073	3078	Pit	302	2x wood charcoal (ID'd)	Undated pit in east of Area D. High potential wood charcoal assemblage
3027	3028	Pit	315	2x charred cereal grain	Undated pit in centre of Area D
3058	3059	Ditch	318	2x charred cereal grain	One of five parallel ditches representing boundary present on first edition Ordnance Survey map. Origin of boundary unknown
3092	3094	Short linear feature/linear feature terminal	322	2x charred cereal grain	Undated linear feature in east of Area D. High-potential charred plant assemblage
1012	1013	Pit	4	2x charred cereal gain	Undated features in north-east of Area C

8.5.3 A total of 5 radiocarbon samples of short-lived remains are recommended for submission to the 14CHRONO Centre, Queen's University, Belfast. The calibrated age ranges will be calculated with OxCal 4.2.3 (Bronk-Ramsey and Lee 2013) using the IntCal13 curve (Reimer *et al.* 2013). All radiocarbon dates will be quoted as uncalibrated years before present (BP), followed by the lab code and the calibrated date-range (cal. BC) at the 2σ (95.4%) confidence, with the end points rounded out to the nearest 10 years.

8.6 Summary of potential

8.6.1 The results of the mitigation are generally of local significance and contribute to our understanding of the locality in the post-medieval period. The results have some utility in fleshing out the story of post-medieval and modern Kirk Sandall. Kirk Sandall is a curious locality due to its status as a shrunken medieval village and development into an industrial area while retaining its early medieval church. Aside from the pottery assemblage, there is little here to inform discussion of the medieval Kirk Sandall. The post-medieval features provide valuable information in the story of the development of Kirk Sandall from medieval village to 20th-century industrial area.

8.6.2 The pottery assemblage contains items of intrinsic interest and has the potential to contribute to the ongoing development of pottery chronologies. Examples of rare Hallgate A1 wares were obtained, although residually in modern contexts. In addition, pottery obtained from well 2023 during the phase 1 mitigation includes non-typical blackware and slipware vessels. Both of these groups of pottery deserve further study.

8.6.3 Some limited further examination is proposed for the overfired bricks with adhering slaggy material from pit 1030, together with a reconsideration of the nature of the structure in pit 1019, in an attempt to clarify the nature of the activity/ies represented here.

8.6.4 The environmental samples have some potential to expand on understanding nature of settlement and local agricultural practices in the post-medieval period.

8.6.5 There is potential for radiocarbon analysis to enhance understanding of the chronology of the site. This method should be used to reveal to date environmental sample 322 and to provide chronological information about less-well understood groups of features.

8.6.6 The results of previous phases of work, including the evaluation (Wessex Archaeology 2017) and phase 1 mitigation (Wessex Archaeology 2018a) should be synthesized with these results and the site considered as a whole for all future phases of analysis and publication.

8.6.7 The potential of the results of the various phases of investigation of the site will be realised in a small campaign of analysis culminating in publication in a regional journal such as the *Transactions of the Hunter Society*.

9 UPDATED PROJECT DESIGN

9.1 Summary of recommendations for analysis

Stratigraphic

9.1.1 The narrative of the various phases of investigation at Kirk Sandall should be combined. These chiefly comprise the trial trench evaluation (Wessex Archaeology 2017), the phase 1 mitigation (Wessex Archaeology 2018a) and the phase 2 mitigation reported on here.

Pottery

9.1.2 A full report on the combined medieval and post-medieval pottery assemblage is highly desirable given the rarity of hand-made Hallgate wares. Such a report should include the following elements:

- A full report on the assemblage to currently accepted standards (Prehistoric Ceramics Research Group *et al.* 2016)
- The illustration of the two rim sherds and associated body sherds of Hallgate A1 type from pit 4010 (line drawing and/or photography), and the group of non-typical Blackware and Slipware vessels from well 2023 (photography)

Ceramic building material

9.1.3 Some limited further examination is proposed for the overfired bricks with adhering slaggy material from pit 1030, together with a reconsideration of the nature of the structure in pit 1019, in an attempt to clarify the nature of the activity/ies represented here.

Other finds

9.1.4 No further work is warranted for any of the other finds categories. The animal bone has been recorded to a level sufficient for the site archive and while no further analytical work is required, a brief summary should be included in any future publication of the fieldwork results.

Environmental

- Analysis of charred plant remains from samples 322 and 402
- Analysis of wood charcoal from sample 302

Scientific dating

9.1.5 It is recommended that a scheme of 5 radiocarbon analyses to be undertaken. These analyses are considered to replace the need for pOSL analysis.

9.5.3 The Post-excavation Manager will be assisted by the Senior Research Manager and the Senior Publications Manager, who will help to ensure that the report meets internal quality standards as defined in Wessex Archaeology's guidelines.

10 STORAGE AND CURATION

10.1 Museum

10.1.1 The archive resulting from the project is currently held at the offices of Wessex Archaeology in Sheffield. Doncaster Museum and Art Gallery has agreed in principle to accept the archive on completion of the project, under an accession code to be determined; this will include material and records from all three stages of fieldwork.

10.1.2 Deposition of any finds with the museum will only be carried out with the full written agreement of the landowner to transfer title of all finds to the museum.

10.2 Preparation of the archive

Physical archive

10.2.1 The physical archive, which includes paper records, graphics, artefacts and ecofacts, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Doncaster Museum, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014c; Brown 2011).

10.2.2 All archive elements are marked with the site code 207960, and a full index will be prepared. The physical archive (from all fieldwork stages) currently comprises the following:

- 17 cardboard boxes or airtight plastic boxes of artefacts and ecofacts, ordered by material type
- 2 files/document cases of paper records and A3/A4 graphics

10.2.3 Archive quantities are likely to reduce slightly during final rationalisation and implementation of the proposed selection strategy (see below).

Digital archive

10.2.4 The digital archive generated by the project, which will include born-digital data (survey data, databases and spreadsheets, photographs and reports), will be deposited with the Archaeology Data Service (ADS) to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by full metadata.

10.3 Selection strategy

10.3.1 Wessex Archaeology follows national guidelines on selection and retention (SMA 1993; Brown 2011, section 4; and now the CIfA-recommended Archive Selection Toolkit), with the aim of retaining only those archive components which are considered to have further research potential beyond the immediate remit of the current project.

10.3.2 The recently-introduced Selection Toolkit has not been used from the beginning of this project, as is now recommended, but the basic principles will be followed, in that proposals for selection of both physical (finds and analogue records) and digital archive components will be drafted, for agreement by all stakeholders (in this instance, specialists both internal

to WA and external, SYAS, Doncaster Museum). The proposals for finds selection are summarised here.

Finds

- *Pottery:* despite its relatively small size and the character of the site from which it was recovered, the pottery assemblage includes a number of locally and regionally important elements and as such should be deposited in its entirety. It should not be discarded, dispersed, downsized or used as a teaching collection.
- *Ceramic Building Material:* small assemblage, group of bricks with possible furnace lining adhering are of interest. Limited further research potential; retain sample of brick only.
- *Clay tobacco pipes:* small assemblage, with only one datable piece with unusual incuse heel mark. Little further research potential; retain marked piece only.
- *Glass:* very small assemblage, fragmentary, all post-medieval/modern, with no items of intrinsic interest. No further research potential; retain none.
- *Stone:* two whetstones (post-medieval/undated) and an unworked pebble only. Little or no further research potential; retain none.
- *Slag:* very small assemblage, undiagnostic of specific pyrotechnical activities (metalworking or other). No further research potential; retain none.
- *Metalwork:* small assemblage, in poor condition, no objects dated earlier than post-medieval; no items of intrinsic interest. Little or no further research potential; retain none.
- *Leather:* one shoe sole (modern), waterlogged (and therefore unstable). No further research potential; retain none.
- *Animal Bone:* small assemblage, some in poor condition; no large feature groups. Little or no further research potential; retain none.
- *Marine Shell:* one cockle shell only. No further research potential; retain none.

10.4 Security copy

10.4.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

10.5 OASIS

10.5.1 An OASIS online record (http://oasis.ac.uk/pages/wiki/Main) has been initiated, with key fields and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.

11 COPYRIGHT

11.1 Archive and report copyright

11.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act* 1988 with

all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations* 2003. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.

11.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

11.2 Third party data copyright

11.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (eg, Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of *the Copyright, Designs and Patents Act* 1988 with regard to multiple copying and electronic dissemination of such material

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APPENDICES

Appendix 1: Context register

Area	Fill	Fill Interpretation	Fill Description	Cut	Cut Interpretation	Cut Description
C	1000	Topsoil	Dark brown clayey sandy silt			
C	1001	Subsoil	Mid-brown sandy silt			
C	1002	Natural	Red sand. Some small occasional patches of yellow sand.			
C	1004	Secondary fill	Dark brown with greyish mottling, Silty Clay	1003	Pit	sub oval pit containing dog burial dog burial
C	1007	Secondary fill	mid-brown with dark brown patches , silty sand	1006	Pit	sub oval pit cutting ditch 1008
C	1009	Secondary fill	mid-brown with dark mottling	1008	Ditch	N-S aligned ditch undated
C	1011	Secondary fill	dark brown, silty sand	1010	Pit	sub oval
C	1013	Secondary fill	dark brown, silty sand	1012	Cut	sub oval pit
C	1014	Structure	sandstone block and slab built culvert running NE-SW			
C	1015	Structure	sandstone block and slab built culvert running SE-NW			
C	1016	Foundation	roughly cut limestone blocks with Lime mortar			
C	1018	Secondary fill	dark brown, silty sand	1017	Ditch	N-S aligned ditch
C	1020	Structure	brick structure 5 two opposing walls within pit 5 courses high 3 bricks wide single skin	1019	Cut	rectangular, with vertical sides
C	1021	Backfill	dark grey. Sandy loam, with abundant very large sub rounded cobbles	1019	Cut	rectangular, with vertical sides
C	1022	Secondary fill	dark grey, sandy loam occasional brick and stone fragments	1019	Cut	rectangular, with vertical sides
C	1024	Fill	yellowish red sand contained dog burial	1023	Cut	sub circular pit
C	1026	Secondary fill	red sand	1025	Pit	subcircular, 1.7 x 1.4 x 1.4m with stone revetment near base
C	1027	Secondary fill	dark brown clayey sand	1025	Pit	subcircular, 1.7 x 1.4 x 1.4m with stone revetment near base
C	1028	Secondary fill	dark grey sandy clay	1025	Pit	subcircular, 1.7 x 1.4 x 1.4m with stone revetment near base
C	1029	Secondary fill	greyish brown, sand	1025	Pit	subcircular, 1.7 x 1.4 x 1.4m with stone revetment near base
C	1031	Secondary fill	Dark grey silty sand coal and charcoal inclusions	1030	Pit	Circular pit
C	1032	Secondary fill	Mixed dark grey and yellowish-brown silty sand large pieces of cbm and slag	1030	Pit	Circular pit

Area	Fill	Fill Interpretation	Fill Description	Cut	Cut Interpretation	Cut Description
C	1033	Layer	Red heat affected sand	1030	Pit	Circular pit
C	1035	Secondary fill	Dark grey silty sand, coal charcoal inclusions	1034	Pit	Shallow pit cutting 1031
C	1037	Secondary fill	Red sand	1036	Cut	Subcircular, 1.7 x 1.4 x 1.4m
C	1038	Secondary fill	Dark brown clayey sand	1036	Cut	Subcircular, 1.7 x 1.4 x 1.4m
C	1039	Secondary fill	Grey sandy clay	1036	Cut	Subcircular, 1.7 x 1.4 x 1.4m
C	1040	Secondary fill	Greyish brown sand	1036	Cut	Subcircular, 1.7 x 1.4 x 1.4m
D	3001	Topsoil	Dark brown clayey sandy silt			
D	3002	Subsoil	Mid-brown sandy silt seen across majority of Area D			
D	3003	Subsoil	Yellowish brown mottled silty sand subsoil underlying 3002			
D	3004	Natural	Red sand. Some small occasional patches of yellow sand.			
D	3006	Fill	Upper fill containing one sherd of post-med pot. Orange-brown clayey sand.	3005	Ditch	Post-medieval? NW-SE. Same as ditch 3050
D	3007	Fill	Lowest fill. Secondary fill. Yellow-orange sandy clay	3005	Ditch	Post-medieval? NW-SE. Same as ditch 3050
D	3009	Fill	Dark brown sandy clay. Deliberate backfill.	3008	Drain	Cut for modern ceramic drainage pipe. Same as drain 3052
D	3011	Fill	Single fill. Mid-grey silty sand with orange flecks	3010	Ditch	NW-SE. Same as ditch 3054
D	3013	Fill	Single fill. Mid-grey silty sand with small orange flecks	3012	Ditch	NW-SE. Same as ditch 3056
D	3015	Fill	Single fill. Mid-grey silty sand	3014	Ditch	NW-SE. Same as ditch 3058
D	3016	Made Ground	Redeposited natural orange brown clayey sand			
D	3020	Fill	Mid-brown sand. Single fill of ditch - secondary fill.	3019	Ditch	NW-SE. Same as 3033
D	3022	Fill	Mid-greyish brown Silty sandy, containing one piece of cbm and one sherd of post-med pot	3021	Pit	Oval pit. Truncating fill 3026 of ditch
D	3024	Fill	Mid-greyish brown silty sand, single fill	3023	Pit	Shallow, oval shaped pit. Sama as 3069 and 3071
D	3026	Fill	Mid-greyish brown silty sand. Single fill	3025	Ditch	Modern feature? Very straight and vertical sides at southwest end, but more irregular at northeast end
D	3028	Fill	Greyish brown charcoal-rich silty sand containing large quantity of animal bone	3027	Pit	Round pit, next to pit 2029
D	3030	Fill	Light greyish brown silty sand, single fill	3029	Pit	Small round pit, next to pit 3027
D	3032	Fill	Mid-brown sand containing one sherd of modern pot	3031	Pit	Oval shape, part of cluster of oval shaped pits in northwest part of Area D
D	3034	Fill	Light greyish brown clayey sand, primary fill	3033	Ditch	NW-SE
D	3035	Fill	Mid-brown sandy clay, secondary fill	3033	Ditch	NW-SE
D	3037	Fill	Light greyish brown silty sand, single fill	3036	Ditch	Southern terminal of a north-south oriented ditch
D	3039	Fill	Mid-brown clayey sand, secondary fill	3038	Ditch	NW-SE, same as ditches 3019 and 3033
D	3041	Fill	Mid-brown with a slight bluish hue sandy clay, single fill. Post-med pot and animal bone	3040	Pit	Post-medieval pit, truncating ditch 3039

Area	Fill	Fill Interpretation	Fill Description	Cut	Cut Interpretation	Cut Description
D	3043	Fill	Pale-mid-greyish brown silty sand	3042	Ditch	NW-SE shallow ditch, only seen in SE facing section of excavation area D
D	3045	Fill	Dark brown clay sand, single (secondary) fill	3044	Posthole	Posthole located amongst cluster of pits
D	3047	Fill	Mid-greyish brown sandy clay, single (secondary) fill	3046	Pit	Shallow pit amongst cluster of pits and postholes
D	3049	Fill	Dark grey mottled with black sandy clay, single fill	3048	Posthole	Deep post hole, near posthole 3044
D	3051	Fill	Blackish brown silty sand, single fill	3050	Ditch	NW-SE. Same as ditch 3005
D	3053	Fill	Dark greyish brown silty sand, single fill	3052	Drain	NW-SE cut for modern drain. Same as 3008
D	3055	Fill	Mid-greyish brown silty sand, single fill	3054	Ditch	NW-SE. Same as ditch 3010
D	3057	Fill	Mid-greyish brown silty sand, single fill	3056	Ditch	NW-SE. Same as ditch 3012
D	3059	Fill	Mid-greyish brown silty sand, single fill	3058	Ditch	NW-SE. Same as ditch 3014
D	3061	Fill	Mid-brownish grey silty sand, single fill	3060	Ditch	NW-SE. Same as ditch 3042
D	3063	Fill	Light yellowish grey silty sand, single secondary fill	3062	Palaeo-channel	NW-SE. Same as palaeo-channel 3079
D	3065	Fill	Light grey clay sand. Primary fill	3064	Pit	Pit amongst cluster of pits, east of paleochannel cut 3079
D	3066	Fill	Dark grey clay sand. Secondary fill, cut by posthole 3044	3064	Pit	Pit amongst cluster of pits, east of paleochannel cut 3079
D	3068	Fill	Mid-greyish, pinkish brown. Deliberate backfill	3067	Pit	Modern pit, truncates fill 3070 of ditch 3069
D	3070	Fill	Mid-greyish, pinkish brown silty sand, single fill	3069	Ditch	Shallow ditch next to modern pits 3031, 3023, 3021
D	3072	Fill	Light brown to greyish brown silty sand, deliberate backfill	3071	Ditch	SW-NE
D	3074	Fill	Mid-greyish brown silty sand, upper fill, cut by pit 3075	3073	Pit	Sub-oval pit of unknown date, next to pit 3075 and west to gully 3090
D	3076	Fill	Mid-orangey grey sandy clay, upper fill	3075	Pit	Oval pit, cutting fill 3074 of pit 3073
D	3077	Fill	Mid-grey clayey sand, lower fill	3075	Pit	Oval pit, cutting fill 3074 of pit 3073
D	3078	Fill	Mid-brownish grey clayey sand, lower fill	3073	Pit	Sub-oval pit of unknown date, next to pit 3075 and west to gully 3090
D	3080	Fill	Mix colours, dirty yellow to light grey with brown, orange flecks silty sand	3079	Palaeo-channel	Terminus, same as paleochannel 3062
D	3081	Fill	light orange to light yellowish grey silty sand	3079	Palaeo-channel	Terminus, same as paleochannel 3062
D	3082	Fill	light yellowish grey sandy clay, middle deposit	3079	Palaeo-channel	Terminus, same as paleochannel 3062
D	3084	Fill	Dark grey silty sand, secondary fill	3083	Pit	Small pit of unknown date, north of gully 3090,south of pit cluster (east of 3079)
D	3086	Fill	Light grey silty sand, deliberate backfill, cut by pit 3087	3085	Pit	Part of pit cluster east of 3079
D	3088	Fill	Dark grey with dark brown flecks silty sand, deliberate backfill	3087	Pit	Deep pit, part of pit cluster east of 3079, cuts fill 3086 of pit 3085
D	3089	Fill	Dark to light yellowish grey silty sand, primary fill	3087	Pit	Deep pit, part of pit cluster east of 3079, cuts fill 3086 of pit 3085

Area	Fill	Fill Interpretation	Fill Description	Cut	Cut Interpretation	Cut Description
D	3091	Fill	Mid-grey silty sand, secondary fill	3090	Gully	SW-NE gully, east of intercutting pits 3075 and 3073
D	3093	Fill	Mid-greyish brown clayey sand, lower fill	3092	Ditch	Possible ditch terminus of unknown date, N-S aligned, NE of paleochannel 3062 (same as 3079)
D	3094	Fill	Dark bluish grey sandy clay, upper fill	3092	Ditch	Possible ditch terminus of unknown date, N-S aligned, NE of paleochannel 3062 (same as 3079)
E	4001	Topsoil				
E	4002	Subsoil				
E	4003	Natural				
E	4005	Fill	Dark grey-brown sandy clay, deliberate backfill	4004	Pit	Post-medieval pit, in alignment with 4006, 4008, 4010, 4020
E	4007	Fill	Dark grey-brown sandy clay, deliberate backfill	4006	Pit	Post-medieval pit, in alignment with 4004, 4008, 4010, 4020
E	4009	Fill	Dark grey-brown sandy clay, deliberate backfill	4008	Pit	Possible post-medieval pit, in alignment with 4006, 4008, 4010, 4020
E	4011	Fill	Dark grey-brown sandy clay, deliberate backfill	4010	Pit	Post-medieval pit, in alignment with 4004, 4006, 4008, 4020, cuts fill 4013 of ditch 4012
E	4013	Fill	Mottled grey-brown orange silty sand, deliberate backfill, cut by pit 4010	4012	Ditch	SW-NE, shallow ditch terminus
E	4015	Fill	Mix blackish, reddish and greyish brown silty sand, bottom fill	4014	Ditch	NW-SE ditch terminus, cuts fill 4018 of ditch 4017 (same as 4022, 4026, 4030)
E	4016	Fill	Blackish brown silty sand, upper fill, truncated by modern drain	4014	Ditch	NW-SE ditch terminus, cuts fill 4018 of ditch 4017 (same as 4022, 4026, 4030)
E	4018	Fill	Mid-brown silty sand, single fill, truncated by ditch 4014	4017	Ditch	NE-SW ditch, same as 4022, 4026, 4030
E	4019	Dump layer	Pale grey to grey sand and gravel, modern dump of material			
E	4021	Fill	Dark grey brown sandy clay, deliberate backfill	4020	Pit	Post-medieval pit, in alignment with 4004, 4006, 4008, 4010
E	4023	Fill	Light to mid-brown, orange mottled, silty sand. Secondary fill	4022	Ditch	NE-SW ditch, same as 4017, 4026, 4030
E	4025	Fill	Dark grey, dark brown to orange silty sand mixed with modern construction debris	4024	Pit	Modern rubbish pit in NW corner of site
E	4027	Fill	Mid-brown, orange mottled silty clay. Secondary fill	4026	Ditch	NE-SW ditch, same as 4017, 4022, 4030
E	4029	Fill	Very dark brown silty sand, deliberate backfill	4028	Pit	Post-medieval pit, cuts fill 4031 of ditch 4030 (same as 4017, 4022, 4026)
E	4031	Fill	Mid-brown silty sand	4030	Ditch	NE-SW ditch, same as 4017, 4022, 4026
E	4033	Fill	Dark grey to dark brown sand with charcoal and burnt clay inclusions	4032	Pit	Possible Hearth, located NE of Pit 4008
E	4034	Fill	Dirty, dark yellow sandy clay, bottom fill	4032	Pit	Possible Hearth, located NE of Pit 4008

Appendix 2: Pottery by context

Table 6 Pottery by context: evaluation

Tr	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1	116	Brown Salt Glazed Stoneware	1	8	1	Base	Hollow ware	Brown salt glaze int & ext	LC18th – C19th	Thin base
1	116	Mottled ware	1	68	1	Profile	Bowl	Mottled glaze int & ext	C18th	Buff fabric w/ sparse red iron-rich grit
1	116	Slipware	1	42	1	Rim	Dish	Red on white feathered linear design int; pie-crust rim	C18th	Press-moulded dish
5	501	Brown Glazed Coarseware	1	13	1	BS/Handle	Handled vessel	Brown glaze int & ext	C18th – C19th	
5	501	Buff Gritty ware	2	13	2	BS	Hollow ware	U/Dec	LC12th – C14th	Buff fabric w/ a pale grey core; common, well-sorted quartz & red grit <1mm
5	501	Coal Measures Whiteware	1	26	1	Rim	Jar	Spots of brown glaze on lip & underside of rim	LC13th – C14th	Sharply everted rounded rim; finely finished; cf CMFW
5	501	Coal Measures Whiteware	2	23	1	BS	Hollow ware	U/Dec	LC13th – C14th	White fabric w/ common quartz, black grit & white rock frags <1mm
5	501	Coal Measures Whiteware	2	17	1	Rod handle	Jug/cistern	Thin, patchy pale green glaze ext	LC13th – C14th	Abundant, dense quartz & black grit up to mm, sparse white rock frags 1mm+
5	501	Coal Measures Whiteware type	1	19	1	BS	Hollow ware	Yellow-brown glaze ext	LC13th – C14th	Hard, buff fabric w/ abundant quartz & round red grit up to 1mm, occ up to 2mm
5	501	Greyware	1	13	1	BS	Hollow ware	U/Dec	C2nd – C4thAD	Abraded body sherd
5	501	Hallgate type ware	1	2	1	BS	U/ID	U/Dec	C12th – C13th	Heavily abraded fragment; soft orange sandy fabric
5	501	Humberware	1	37	1	Base	Hollow ware	Patchy green glaze ext	LC13th – C15th	Fine Humberware
5	501	Redware	1	34	1	Rim	Bowl	Clear (red) glaze int; red slip ext	LC17th – C18th	Rounded everted rim
5	501	Redware	1	19	1	BS	Dish/bowl	Clear (red) glaze int; heavily flaked	LC17th – C18th	
5	501	Staxton / Potter-Brompton	1	12	1	Base	Jar/CP	U/Dec	E/MC13th – EC14th	Slightly sagging base
5	501	Staxton / Potter-Brompton	1	4	1	BS	Hollow ware	U/Dec	E/MC13th – EC14th	Fresh break
6	601	Midlands Purple type ware	1	51	1	BS	Hollow ware	Pimpled purple glaze ext, dull green glaze int	LC15th – C16th	Hard, dense, semi-vitrified fabric w/ quartz & black grit
7	705	Banded ware	1	5	1	Rim	Bowl	Dark blue band ext	C19th	
7	705	Banded ware	1	9	1	BS	Hollow ware	Blue and brown bands ext	MC19th – EC20th	
7	705	Bone China	1	29	1	Handle	Jug	Moulded handle	MC19th – EC20th	

Tr	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
7	705	Bone China	1	20	1	Rim	Plate	Fluted rim w/ three gold lines inside rim & a gold line on the wavy edge	MC19th – EC20th	
7	705	Bone China	1	11	1	BS	Hollow ware	U/Dec	LC19th - EC20th	
7	705	Bone China	1	7	1	Rim	Plate	Fluted rim w/ hand-painted sepia geometric pattern; cold & black detailing	MC19th – EC20th	
7	705	Brown Salt Glazed Stoneware	1	11	1	Lid-seated rim	Jar	Brown salt glaze int & ext	C19th	
7	705	Colour Glazed ware	3	33	3	BS	Hollow ware	Dark brown mottled glaze int & ext	C19th	Fine red fabric
7	705	Colour Glazed ware	1	7	1	BS	Hollow ware	Dark brown glaze int & ext	C19th	Pale grey-brown refined earthenware fabric
7	705	Stoneware	1	60	1	Base	Flagon/jar	Buff stoneware w/ clear glaze int & ext	MC19th – EC20th	
7	705	Stoneware	1	38	1	Base	Flagon/jar	Buff stoneware w/ clear glaze int & ext	MC19th – EC20th	Use-wear on underside
7	705	TP Bone China	1	31	1	BS	Mug/jug	Overglaze transfer print; rural scene ext	LC19th – C20th	Discoloured
7	705	TP Whiteware	1	37	1	Footring base	Flatware	Asiatic Pheasants	M – LC19th	
7	705	Whiteware	1	15	1	Rim	Plate	U/Dec	M – LC19th	
7	705	Whiteware	1	7	1	Footed base	Hollow ware	U/Dec	MC19th – EC20th	
7	720	Brown Glazed Coarseware	4	62	1	BS/Handle	Handled jar	Thick brown glaze ext; mottled brown glaze int	C18th	Fine even orange fabric; part of handle attachment
7	720	Redware type	3	24	1	BS	Hollow ware	Red glaze ext w/ fine mottling; thin mottled glaze int	C18th	Fabric resembles BGCW but the glaze resembles Redware
8	801	Hallgate A type ware	1	64	1	BS/Strap handle	Jug	Patchy green glaze ext	C13th	Lower handle attachment w/ double thumbing; buff-grey fabric w/ common fine quartz & round red grit
8	801	Hallgate A type ware	1	54	1	BS/ Rod handle	Jug	Patchy green glaze ext	C13th	Lower handle attachment w/ triple thumbing; dark grey reduced sandy fabric w/ abundant fine quartz
8	801	Oxidised Sandy ware	1	38	1	Base	Jar/cooking pot	Smoothed ext	C11th – C12th	A fine orange sandy fabric w/ sparse quartz; hand-made; see text
9	901	Blackware	1	23	1	BS	Hollow ware	Black glaze int & ext	C17th	Hard, fine red fabric
9	901	Blackware	1	5	1	BS	Hollow ware	Black glaze int & ext	C17th	Hard red fabric
9	901	Blackware	1	9	1	BS	Hollow ware	Dark brown glaze int & ext w/ slight mottling	C17th	Hard, fine dark red fabric
9	901	Brown Glazed Coarseware	2	103	2	Footed base	Hollow ware	Mottled dark brown glaze int & ext	LC17th – C18th	Dark orange fabric w/ sparse quartz u to 1mm; glaze pooling

Tr	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
9	901	Brown Glazed Coarseware	1	18	1	BS	Hollow ware	Patchy brown glaze w/ slight mottling int & ext	C18th	
9	901	Brown Glazed Coarseware	1	3	1	BS	Hollow ware	Dark brown glaze int & ext	C18th	
9	901	Mottled ware	2	7	1	BS	Mug	Mottled glaze int & ext; rilled band ext w/ curvilinear applied slip lines ext	C18th	Very unusual combination of slip & mottled glaze; hard buff fabric
9	901	Redware type	1	90	1	Rim	Dish/pancheon	Heavy clubbed rounded rim w/ a shallow groove int	C17th – EC18th	Hard, dense orange fabric; harder than typical Redware
9	901	Redware type	1	44	1	Rim	Dish	Clear (red) glaze int; heavily flaked	C17th – EC18th	Pale orange fabric
9	901	Redware type	2	108	2	BS	Dish/pancheon	Clear (red) glaze int; some flaking	C17th – EC18th	Fine orange fabric
9	901	Redware type	1	26	1	Base	Dish/pancheon	Clear (red) glaze int; heavily flaked	C17th – EC18th	Mixed smooth and fine sandy fabrics
9	901	Lincolnshire Early Medieval Shelly ware	1	15	1	Base	Large jar/bowl	U/Dec	MC12th – E/MC13th	LEMS: Very heavily leached & vesicular fabric; an unusual and uncommon hard fabric
9	901	Slipware	1	43	1	Footed base	Hollow ware	Vertical linear & feathered white slip design ext on a thin red slip ext surface	C18th	Hard, fine buff fabric
9	901	Slipware type 1	3	95	1	Rim & handle	Handled bowl	Trailed white slip lines on everted rim; buff slip ext on a rilled surface	C17th – EC18th	Fine orange fabric
9	901	Slipware type 1	1	14	1	Rim	Dish/bowl	Trailed white (yellow) slip lines & dots on rim	C17th – EC18th	Clubbed, overhanging rim
9	901	Yellow Glazed Coarseware	2	58	1	Rim	Dish/bowl	Thick white slip int under clear (yellow) glaze	C18th	Orange fabric w/ common, well-sorted round red grit up to 0.5mm
9	901	Yellow Glazed Coarseware	1	25	1	BS	Dish/bowl	Clear (yellow-orange) glaze int only; thin orange slip ext	C18th	
9	904	Blackware	1	31	1	BS	Hollow ware	Black glaze int & ext	C17th	Hard, dense dark red fabric; possible part of a handle attachment
9	904	Mottled Coarseware	3	41	3	BS	Hollow ware	Mottled glaze int & ext	C17th	A hard orange fabric quite unlike conventional Mottled ware; closer to a hard Redware
11	1107	Coal Measures Purple ware	2	96	1	BS	Hollow ware	Thick purple glaze ext w/ sparse green mottling	C15th – C16th	Hard, dense pale grey fabric w/ common quartz & black grit up to 1mm, occ larger; fresh break
11	1107	Coal Measures Whiteware	1	33	1	BS	Hollow ware	Dry smoothed ext	C14th – EC15th	Buff-white fabric w/ moderate quartz up to 0.6mm & common round red grit up to 1mm
11	1107	Hallgate A	1	9	1	BS	Hollow ware	Green glaze ext	C13th	See text
11	1107	Hallgate A	1	11	1	BS	Hollow ware	Unglazed	C13th	See text
11	1112	Buff Sandy ware	1	3	1	BS	Hollow ware	Spots of green splashed glaze int; rilled ext	MC11th – E/MC13th	A buff sandy fabric w/ common quartz & red grit up to 0.4mm
12	1205	Brown Glazed Coarseware	1	25	1	BS	Pancheon	Dark brown glaze int	C19th	Fine red fabric

Tr	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
12	1205	Edged ware	2	5	1	Rim	Pie dish	Plain rim w/ blue feather-edged paint	E – MC19th	Crazedd & slightly discoloured
12	1209	Bone China	1	4	1	BS	Cup/bowl	U/Dec	LC19th – EC20th	
12	1209	Brown Glazed Coarseware	1	69	1	Rim	Pancheon	Dark brown glaze int only	LC18th – C19th	Heavy round clubbed rim w/ an int groove
12	1209	Brown Salt Glazed Stoneware	1	70	1	Rim	Bowl	Brown glaze ext; pale grey int; clubbed rim w/ fine incised lines ext	C19th	
12	1209	Brown Salt Glazed Stoneware	1	141	1	Base	Bowl	Brown glaze ext, pale grey int	C19th	Slightly distorted base
12	1209	Cane Coloured ware	1	9	1	Ring foot base	Hollow ware	Thin blue line on foot	C19th	
12	1209	Colour Glazed ware	1	55	1	Handle	Teapot	Moulded handle w/ light brown mottled brown glaze	C19th	Buff body
12	1209	Colour Glazed ware	1	22	1	Footed base	Teapot	Mottled brown glaze int & ext	C19th	Buff body
12	1209	TP Bone China	1	32	1	Ring foot base	Bowl	U/ID Sepia-printed pattern ext	M – LC19th	
12	1209	TP Whiteware	1	2	1	BS	Cup/bowl	U/ID TP design int & ext	M – LC19th	
12	1209	Whiteware	1	7	1	Rim/spout	Jug	U/Dec	MC19th – EC20th	
12	1211	Coal Measures Purple ware	1	19	1	BS	Hollow ware	Hard, thin purple-green glaze int & ext	C15th – C16th	Hard, dense, semi-vitrified reduced fabric w/ quartz & black grit up to 1mm
12	1211	Mottled ware	1	14	1	Handle?	Hollow ware	Mottled glaze int & ext	C18th	Odd rod-like element; possibly a handle; fine buff fabric w/ very fine red grit
12	1211	Mottled ware	1	8	1	Footed base	Cup/bowl	Mottled glaze int & on body above foot	C18th	Fine buff fabric
12	1211	Redware type	1	26	1	Rim	Dish	Flaky clear/red glaze int	LC17th – C18th	Fine soft buff-grey fabric
12	1211	Redware type	1	4	1	BS	Dish/bowl	Dull greenish glaze int	LC17th – C18th	Fine, soft buff-orange fabric
12	1213	Brown Glazed Coarseware	1	19	1	Base	Dish/pancheon	Dark brown glaze int only	C19th	Fine red fabric w/ sparse white rock frags up to 0.3mm
12	1213	Creamware	1	4	1	Footring base	Flatware	U/Dec	LC18th – EC19th	Pale (late) Creamware
12	1213	Pearlware	1	1	1	BS	Flatware	U/Dec	c.1780 – c.1840	
12	1215	Mocha ware	1	5	1	Rim	Bowl	Rilled band w/ green paint below rim flanked by dark brown lines; black mocha tree on orange slip band	C19th	
12	1219	Slipware type 1	2	117	2	Base	Dish	Trailed curvilinear & linear design int	C17th – EC8th	Harder than typical Type 1 slipware; orange fabric w/ fine red grit up to 1mm

Tr	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
15	1504	Coal Measures Fineware	1	4	1	BS	Hollow ware	Thin, patchy pale green splashed glaze ext	C12th – E/MC13th	Grey fabric w/ buff ext margin; common quartz & white rock frags up to 0.5mm
15	1504	Hallgate A	1	13	1	BS	Hollow ware	Friable, decayed dark green glaze ext	C13th	See text
15	1504	Hallgate A type ware	1	2	1	BS	Hollow ware	U/Dec	C13th	See text
15	1506	Brown Glazed Coarseware type	1	4	1	BS	Hollow ware	Dark brown glaze ext, dark mottled brown glaze int	C18th	Hard, fine red fabric
15	1506	Mottled ware type	3	78	2	BS	Hollow ware	Dark brown mottled glaze int & ext	C18th	Hard, fine orange fabric w/ sparse fine quartz
15	1506	Post-medieval Sandy ware	1	42	1	BS	Hollow ware	Clear (orange) glaze int only	C17th?	Buff-yellow fabric w/ common, well-sorted rounded buff rock frags & sparse quartz up to 0.5mm
15	1507	Bone China	1	22	1	Profile	Saucer	Single thin gold line int	LC19th – C20th	
15	1507	Colour Glazed ware	1	4	1	BS	Hollow ware	Black glaze int & ext w/ green & gold overglaze linear detailing	MC19th – EC20th	Fine red refined earthenware body
15	1507	Stoneware	1	36	1	Rim	Jam jar	Widely spaced vertical grooves	MC19th – EC20th	Pale grey stoneware
15	1507	Whiteware	1	10	1	Rim	Bowl/Pie dish	U/Dec	LC19th – C20th	
16	1602	Hallgate A type ware	1	18	1	BS	Hollow ware	Crazed & decayed dark green glaze ext	C13th	A hard, pale grey reduced HaA type fabric
		Total	**117**	**2764**	**103**					

Table 7 Pottery by context: phase 1 mitigation

Area	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1	1007	Blackware	1	13	1	Rim	Bottle/costrel	Black glaze int & ext	C17th	A fine hard red fabric
1	1007	Bone China	1	106	1	Rim	Chamber pot	Irregular, blue tendril-like pattern ext & on rim	LC19th – C20th	A thick, everted rim
1	1007	Bone China	1	9	1	Ring foot base	Dish/bowl	Irregular blue tendril design ext	MC19th – EC20th	
1	1007	Brown Glazed Coarseware	1	74	1	Rim	Pancheon	Dark brown glaze int only	C19th	Rounded clubbed rim
1	1007	Brown Glazed Coarseware	1	126	1	Rim	Pancheon	Heavily flaked brown glaze int & on ext of rim	C18th – C19th	A fine buff sandy fabric
1	1007	Brown Glazed Coarseware	1	5	1	BS	Hollow ware	Dark brown glaze int & ext	C19th	A fine dark orange fabric
1	1007	Brown Glazed Coarseware	1	110	1	BS	Pancheon	Dark brown glaze int; streaks ext	C19th – EC20th	
1	1007	Cane Coloured ware	1	2	1	Rim	Pie dish	U/Dec	C19th	

Area	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1	1007	Colour Glazed ware	1	13	1	Ring foot base	Teapot	Black glaze int & ext	C19th – EC20th	Fine red fabric
1	1007	Sponge-printed ware	1	10	1	Base	Flatware	Blue-printed leaf pattern int	c.1840+	
1	1007	Stoneware	1	338	1	Base & body	Bottle	Thin clear salt glaze int & ext	C19th	A hard, buff stoneware
1	1007	Stoneware	5	615	3	Base & BS	Flagon	Thin clear salt glaze int & ext	C19th	Light buff stoneware body
1	1007	TP Whiteware	6	140	6	Rim & BS	Flatware	Asiatic Pheasants	MC19th – EC20th	Large flatwares
1	1007	TP Whiteware	1	29	1	BS	Hollow ware	Sepia-printed Chinese style garden scene ext	M – LC19th	
1	1007	TP Whiteware	1	5	1	Rim	Flatware	Willow int	M – LC19th	
1	1007	TP Whiteware	1	1	1	Rim	Flatware	Moulded rim w/ blue floral pattern int	MC19th – EC20th	
1	1007	Whiteware	1	19	1	Profile	Dish	U/Dec	C19th – EC20th	A shallow dish (39.8mm deep) or jar w/ vertical walls & a beaded rim
1	1007	Whiteware	1	8	1	Rim	Bowl	Thin blue tendril design int; profiled rim	M – LC19th	Shallow rounded bowl
1	1007	Whiteware	1	7	1	BS	Flatware	U/Dec	MC19th – EC20th	
1	1030	Brown Glazed Coarseware	1	34	1	BS	Bowl/pancheon	Dark brown glaze nt only; rilled ext	LC18th – C19th	Hard, fine orange fabric
1	1030	Yellow ware	1	77	1	Splayed footed base	Jug?	Thin patchy yellow glaze int & ext	LC16th – C17th	A very distinctive and unusual base; cf Moorhouse & Slowikowski 1991:Fig 68;335, 337
2	2026	Brown Glazed Coarseware	4	70	3	BS	Hollow ware	Brown glaze int & ext	C18th	Hard orange fabric w/ sparse rock frags
2	2026	Brown Glazed Coarseware	1	9	1	BS	U/ID	Brown glaze on one side	C18th	Fine red fabric
2	2026	Brown Glazed Coarseware type	1	21	1	BS	Hollow ware	Brown glaze int & ext; rilled external surface	C18th	Hard, dull red fabric cf Blackware but slightly less dense
2	2026	Cane Coloured ware	1	11	1	BS	Hollow ware	U/Dec	C19th	
2	2026	Redware type	1	7	1	BS	Hollow ware	Clear glaze int & ext w/ iron streaks; groove ext	LC17th – C18th	A dark orange sandy fabric w/ sparse fine quartz up to 0.3mm; harder than typical Redware
2	2026	Redware type	1	11	1	BS	Dish/bowl	Clear (red) glaze int only	LC17th – C18th	A hard, fine, dense orange fabric w/ rare red grit up to2mm; harder than typical Redware
2	2026	Redware type	1	5	1	Base	Dish/bowl	Mottled red glaze int only	LC17th – C18th	Very thin base; hard, fine red fabric; harder than typical Redware
2	2026	Redware type	1	7	1	BS	Hollow ware	Mottled red glaze ext; no internal surface	LC17th – C18th	Fine orange fabric w/ sparse quartz grains
2	2026	Slipware	1	8	1	Rim	Mug/jug	Trailed curvilinear slip pattern on rim; rilled shoulder	C18th	Pale orange fabric w/ sparse red grit

Area	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
2	2026	TP Whiteware	1	3	1	BS	Flatware	Willow int	M – LC19th	
2	2026	Whiteware	1	1	1	BS	Flatware	U/Dec	M – LC19th	
2	2026	Yellow Glazed Coarseware	2	100	1	Rim	Pancheon	White slip under clear glaze int only; profiled rim	C18th	Pale orange fabric w/ sparse fine round red grit up to 0.5mm; profiled rim
2	2026	Yellow Glazed Coarseware	1	26	1	Rim	Pancheon	Thin white slip int under clear (yellow) glaze	C18th	A fine white fabric w/ sparse sub-angular white rock frags; clubbed rim
2	2026	Yellow Glazed Coarseware	1	4	1	BS	Pancheon	Thin clear glaze int & ext	C18th	Fine hard white fabric
2	2026	Yellow Glazed Coarseware type	1	21	1	Base	Pancheon	Clear glaze int & thin glaze ext w/ dark mottling	C18th	Pale buff-orange fabric w/ sparse red grit & fine white streaks; knife-trimmed ext
2	2027	Brown Glazed Coarseware	1	6	1	BS	Hollow ware	Brown glaze ext; no int surface	LC17th – C18th	A fine orange sandy fabric
2	2048	Blackware	1	18	1	BS	Hollow ware	Shiny black glaze int & ext	C17th	Fine, hard, even red fabric; occasionally blistered glaze int
2	2050	Blackware	1	4	1	Handle	Cup/tyg	U/Dec	C17th	Typical hard fine dark red fabric
2	2050	Blackware	1	7	1	Base	Hollow ware	Black glaze int & ext	C17th	Hard dark red fabric; use-wear on underside
2	2050	Blackware	1	18	1	BS	Hollow ware	Black glaze int & ext	C17th	Hard fine dark red fabric
2	2050	Blackware type	1	582	1	Profile	Handled jar	Dark brown glaze int & ext	LC17th – EC18th	Complete profile; see text
2	2050	Blackware type	1	348	1	Base	Hollow ware	Mottled brown glaze int & ext	LC17th – EC18th	Hard, red fabric, slightly less dense than typical Blackware; sparse red grit; use-wear on underside
2	2050	Blackware type	1	113	1	Base	Hollow ware	Mottled brown glaze int & ext	LC17th – EC18th	Hard, fine, red to grey fabric w/ sparse quartz; use-wear on underside of base
2	2050	Blackware type	1	8	1	Rim	Jar	Dark brown glaze int & ext	LC17th – EC18th	A rim sherd; probably part of the handled jar profile
2	2050	Blackware type	2	19	1	BS	Hollow ware	Brown glaze int & ext; rilled external surface	LC17th – EC18th	Hard, fine dark red fabric; closer to Blackware than Late Blackware
2	2050	Brown Glazed Coarseware type	1	62	1	BS	Hollow ware	Mottled brown glaze int & ext; rilled surface ext	LC17th – EC18th	Dark orange fabric w/ sparse quartz up to 1mm
2	2050	Brown Glazed Coarseware type	4	26	4	BS & flakes	Hollow ware	Mottled brown glaze int & ext where surfaces survive	LC17th – EC18th	Fine orange fabrics
2	2050	Brown Glazed Coarseware type	1	3	1	BS	Hollow ware	Deep grooves ext	LC17th – EC18th	Fine dark orange fabric
2	2050	Brown Glazed Coarseware type	1	5	1	Handle attachment	Handled jar	Mottled brown glaze ext	LC17th – EC18th	Fine orange fabric w/ sparse quartz grains up to 1mm
2	2050	Late Blackware type	1	80	1	Base	Hollow ware	Dark brown glaze int only; pooled on one side	LC17th – EC18th	Fine orange sandy fabric; knife-trimmed ext; thick white deposit int only
2	2050	Redware type	1	137	1	Rim & handle	Handled jar	Mottled brown glaze int & ext; thumb-impressed band below rim	LC17th – C18th	Hard, fine orange fabric w/ sparse hard red grit up to 1mm

Area	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
2	2050	Redware type	1	5	1	BS	Hollow ware	Clear glaze over thin red slip int & ext; ridge & grooves ext	LC17th – C18th	A fine dark orange fabric
2	2050	Slipware	1	22	1	BS & handle	Mug/tankard	Trailed wavy white slip lines ext under dark brown glaze int & ext	LC17th – EC18th	Hard, dark red fabric more closely resembling Blackware than Slipware
2	2050	Slipware	2	75	1	Rim	Dish/bowl	White slip int w/ wavy red slip line inside rim; circle & dot design int	LC17th – C18th	Fine orange fabric; occ round red grit up to 1mm
2	2050	Slipware	1	7	1	BS	Hollow ware	Trailed curvilinear white slip lines ext	C18th	Fine orange fabric
2	2050	Slipware	1	1	1	BS	Hollow ware	Trailed white (yellow) slip ext	C18th	Fine pale orange fabric
2	2050	Slipware	1	7	1	BS	Dish/bowl	White slip int w/ trailed red slip decoration	C18th	Fine pale orange fabric
2	2050	Stoneware	1	2	1	BS	Hollow ware	Thin clear glaze int & ext	C19th	
2	2050	Tin Glazed Earthenware	2	7	2	Rim & BS	Hollow ware	Thick white tin glaze int & ext	MC16th – MC18th	Plain rim
2	2050	Whiteware	1	11	1	Rim	Plate	Moulded floral pattern around rim	M – LC19th	
2	2050	Yellow Glazed Coarseware	3	111	1	Rim & BS	Bowl/pancheon	Thick white slip int under clear (yellow) glaze	C18th	A pale orange fabric w/ sparse red grit up to 1mm; elaborate profiled rim; fresh break
2	2050	Yellow Glazed Coarseware type	1	28	1	Rim	Dish/bowl	Thin clear (yellow) glaze int & ext	C18th	Small clubbed rim; fine white fabric w/ rare red grit up to 0.5mm
2	2050	Yellow Glazed Coarseware type	1	10	1	BS	Dish/bowl	Thin clear (yellow) glaze int only	C18th	Fine white fabric w/ rare red grit up to 0.5mm
2	2050	Yellow Glazed Coarseware type	2	14	2	Base	Dish/bowl	Thin clear (yellow) glaze int only	C18th	A fine white fabric
2	2050	Yellow ware type	1	17	1	BS	Hollow ware	Clear (yellow) glaze int only; ext surface finely pitted & abraded	LC17th – C18th	
	U/S	Cistercian ware	1	116	1	Base & body	Cup/tyg	Brown glaze int & ext	c.14540 – c.1600	Parallel wire marks on underside of base; small parallel-sided cup w/ thick irregular footed base
		Total	**89**	**3914**	**81**					

Table 8 Pottery by context: phase 2 mitigation

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1005	Brown Salt Glazed Stoneware	1	24	1	Footed base	Bowl	Undecorated	LC18th – C19th	
1005	Creamware	1	7	1	Rim	Plate	Undecorated	c.1740 – c.1820	Very light (late) Creamware
1005	Redware type	1	8	1	BS	Dish/bowl	Red slip ext; no glaze int but possibly flaked	C17th – EC18th	Fine orange fabric w/ moderate fine red fabric up to 0.5mm, occ larger; sparse white streaks; harder than typical Redware
1005	Redware type	1	15	1	Rim	Dish	Clear glaze int; slight mottling	C17th – EC18th	Harder and sandier than typical Redware; everted angular rim
1005	Slip Banded CC ware	1	5	1	BS	Hollow ware	Thin brown & white lines ext	C19th	
1005	Slipware	1	3	1	BS	Dish/bowl	Red & dark brown slip on white slip int; feathered	C18th	Press-moulded dish in a fine red fabric w/ sparse red inclusions
1005	Slipware type	10	282	1	Rim, spout & handle	Jug	Thin red slip int & ext under thick, clear glaze	C18th	A fine, hard, white fabric w/ sparse fine red grit; a large, round-bodied jug w/ a pulled spout & narrow strap handle
1005	TP Whiteware	1	10	1	Base	Carver/server	Willow int	M – LC19th	Ridges on underside of base
1021	Slipware	1	36	1	Rim	Dish	Pie-crust rim; white on red linear slip pattern int	C18th	Press-moulded rim; a pale orange fabric w/ occ red grit
1024	Tin Glazed Earthenware	1	0.5	1	BS	Hollow ware	No surfaces surviving	MC16th – MC18th	
1024	TP Pearlware	1	1	1	BS	Flatware	U/ID TP design int	c.1780 – c.1840	
1026	Midlands Purple ware	1	24	1	Handle	Jug/cistern	Hard, thin purple glaze	C16th – MC18th	Narrow strap handle; hard, semi-vitrified dark red to grey fabric
1027	Midlands Purple ware type	1	44	1	BS & handle stump	Jug/cistern	Patchy purple glaze ext	C16th – MC18th	Hard but not vitrified dark red fabric w/ quartz up to 1mm & dark red iron-rich grains up to 1.5mm
1028	Hallgate A type ware	1	11	1	BS	Hollow ware	Patchy green glaze ext	C13th	A hard, fine, reduced body w/ oxidised ext margin; fine quartz & sparse red grit up to 0.5mm
1031	Cistercian ware	1	4	1	BS/Handle	Cup/tyg	Brown glaze int & ext	c.1450 – c.1600	Fine dark red fabric
1031	Green Glazed Sandy ware	2	72	1	Base	Dish/bowl	Mottled green glaze int only	C15th – C16th	
1031	Green Glazed Sandy ware	1	22	1	Rim	Dish/bowl	Dark green glaze int; possible dark grey slip ext	C16th – C17th	Fine grey sandy fabric
1031	Midlands Purple ware	1	13	1	Rim	Jug/cistern	Hard, thin purple glaze	C16th – MC18th	Clubbed rim in a hard, dense, semi-vitrified dark red to grey fabric
3022	Redware	1	25	1	Rim	Dish	Clear (red) glaze on pale orange slip int	MC17th – C18th	Soft pale orange fabric
3026	Brown Glazed Coarseware	1	12	1	Handle	Jug/jar	Flaky brown glaze on top of handle	C18th	Oval handle

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
3026	Redware	1	12	1	Rim	Dish	Clear (red) glaze int; heavily flaked	MC17th – C18th	Round clubbed rim
3032	Redware	1	17	1	BS/Flake	Dish	Clear (red) glaze int	MC17th – C18th	Fine pale orange fabric w/ fine white streaks
3039	Redware	1	104	1	Rim	Dish	Clear (red) glaze on pale orange slip int; rilled ext	MC17th – C18th	Clubbed rim w/ a prominent wide shallow groove int
3039	Redware	1	13	1	BS	Dish	Clear (red) glaze on pale orange slip int; rilled ext	MC17th – C18th	
3068	Redware	2	103	1	Base	Dish	Clear (red) glaze on pale orange slip int	MC17th – C18th	Soft pale orange fabric; knife-trimmed ext
3068	Redware	1	5	1	BS/Flake	Dish	Rilled ext; int surface removed	MC17th – C18th	Soft pale orange fabric
3072	Redware type	1	47	1	BS	Dish	Clear glaze int	MC17th – C18th	Thick base; use-wear on underside
3072	Redware type	1	16	1	Rim	Dish	Clear glaze int only	MC17th – C18th	Round clubbed rim; black deposit on ext of rim
4005	Creamware	2	12	1	Rim/spout	Gravy boat	U/Dec	c.1740 – c.1820	Wide spout
4005	Humberware	1	43	1	BS	Hollow ware	U/Dec	LC13th – C15th	Fine Humberware
4007	Blackware type	1	7	1	BS	Hollow ware	Black glaze int & ext	C17th	A fine orange fabric unlike the normal dark red
4007	Yellow ware	1	20	1	Base	Hollow ware	Clear glaze int	C16th – C17th	Fine hard white fabric
4011	Hallgate A1 type	1	30	1	BS	Hollow ware	U/Dec (pitted & abraded surfaces)	LC11th – C12th	A fine sandy fabric; grey core w/ dark orange int & ext margins; common quartz up to 0.5mm; hand-made
4011	Hallgate A1 type	3	32	1	Rim	Bowl	Spots of clear glaze ext	LC11th – C12th	Flat-topped clubbed everted rim w/ internal flange; hard fine dark orange fabric w/ common quartz up to 0.5mm, occ larger; hand-made
4011	Hallgate A1 type	1	10	1	BS	Bowl?	Spots of misfired glaze ext	LC11th – C12th	Hard, fine orange fabric w/ common quartz & occ red grit up to 0.5mm
4011	Hallgate A1 type	7	138	1	Rim & BS	Bowl	U/Dec	LC11th – C12th	Dark orange fabric w/ common quartz & red grit up to 1mm; cf Hallgate C but with less red grit
4011	Hallgate A1 type	1	23	1	BS	Bowl?	U/Dec (pitted & abraded surfaces)	LC11th – C12th	Dark orange fabric w/ common quartz & red grit up to 1mm; cf Hallgate C but with less red grit
4011	Lincolnshire Fine-shelled ware	1	19	1	Base	Large jar/bowl	U/Dec (pitted & abraded surfaces)	C11th – C12th	LFS; A heavily leached sherd with flat voids
4013	Banded Creamware	2	3	1	BS	Hollow ware	Mottled purple-brown band ext	c.1740 – c.1820	
4013	Brown Glazed Coarseware	1	54	1	Base	Pancheon	Flaky brown glaze int only	C18th	Rounded abraded edges
4013	Brown Glazed Coarseware type	1	30	1	Rim/flake	Pancheon	U/ID	C18th	No internal surface surviving
4013	Creamware	2	33	2	Handle	Jug	U/Dec	c.1740 – c.1820	Strap handle

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
4013	Creamware	1	7	1	BS	Hollow ware	U/Dec	c.1740 – c.1820	Contact scar ext
4013	Creamware	1	4	1	BS	Hollow ware	U/Dec	c.1740 – c.1820	
4013	Creamware	1	1	1	BS/Rim	Flatware	U/Dec	c.1740 – c.1820	
4013	Creamware	1	2	1	BS	Flatware	U/Dec	c.1740 – c.1820	
4013	Pearlware	1	3	1	BS	Hollow ware	U/Dec	c.1780 – c.1840	
4013	Yellow ware	1	2	1	BS	Hollow ware	Clear glaze int only	C17th	Hard, fine white fabric
4016	Brown Glazed Coarseware	1	19	1	BS	Hollow ware	Patchy brown glaze int & ext	LC17th – C18th	Hard orange fabric w/ moderate, well-sorted quartz & red grit up to 1mm, mainly finer
4021	Whiteware	1	6	1	BS	Dish/bowl	U/Dec	M – LC19th	
4029	Creamware	1	1	1	BS	Hollow ware	U/Dec	c.1740 – c.1820	
4029	Late Blackware	1	6	1	BS	Hollow ware	Black glaze int & ext	C18th	Fine red fabric w/ occ red grit
4029	Pearlware	1	1	1	Rim	Flatware	U/Dec	c.1780 – c.1840	
4029	TP Whiteware	1	1	1	Rim	Flatware	Pale blue TP design int	M – LC19th	
4031	Creamware	1	5	1	Rim/spout	Pie dish	U/Dec	c.1740 – c.1820	
	Total	**77**	**1447.5**	**56**					

Appendix 3. Environmental data

Feature	Context	Sample	Vol (l)	Flot (ml)	Sub-sample	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Charcoal > 2mm (ml)	Charcoal	Other	Comments (Preservation)	Vege-tative parts	Uncharred Other
3064	3066	301	34	15	-	<1%, B, E	C	-	*Triticum* sp., Triticeae	C	Trifolieae, Vicieae, indet	2	Mature, some iron coating	-	Poor		
3073	3078	302	31	2750	25%	<1%, C, I	C	-	*Triticum* sp.	-	-	500	Mature, some large pieces and iron coating	-	Poor		
3075	3076	303	32	30		10%, A*, E	C	-	Triticeae	-	-	15	Mature, some iron coating	Vitrified material/ind waste (A)	Poor, some iron coating		
3027	3028	315	33	250		<1%, A, I	B	-	*Secale cereale*, Triticeae	C	Vicieae (inc. cf. *Vicia faba*), *Avena* sp.	5	Mature	Coal (A***), bone (A***)	Poor		
3029	3030	316	9	35		1%, A, I	C	-	cf. *Hordeum vulgare*, *Triticum/Secale*, Triticeae	C	Vicieae, Polygonaceae	5	Mature	Coal (A**)	Heterogenous		
3048	3049	317	8	35		10%, A*, E	-	-	-	-	-	5	Mature	Vitrified material/ind waste (B)	-		
3058	3059	318	17	20		10%, A*, E	C	-	Triticeae	C	Asteraceae, Cyperaceae	5	Mature, iron coated	Coal (B)	Heterogenous		
3092	3094	322	18	160		<1%, C, I	A*	-	*Secale cereale*, *Triticum aestivum/turgidum*, *Hordeum vulgare*, Triticeae	A*	Poaceae (*Avena* sp., *Avena/Bromus*), Polygonaceae, *Raphanus raphanistrum* seed	75	Mature, some iron coating	-	Heterogenous, some iron coating		

Feature	Context	Sample	Vol (l)	Flot (ml)	Sub-sample	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Charcoal >2mm (ml)	Charcoal	Other	Comments (Preservation)	Vege-tative parts	Uncharred Other
											capsule, Chenopodiaceae, Vicieae, *Persicaria* sp.						
4012	4013	401	38	675		5%, A, E, I	C	-	cf. *Secale cereale*	-	-	500	Mature + roundwood	-	Fair		
4014	4015	402	10	90		20%, A, I	A**	A*	*Secale cereale* grains (A) and rachis segments, *Triticum aestivum/turgidum* (B) and *Hordeum vulgare* (C) grains	A**	Vicieae (A*), Poaceae (*Avena* sp., *Avena/Bromus*), Caryophyllaceae, Asteraceae, *Raphanus raphanistrum* seed capsule frag	20	Mature	Coal (B)	Heterogenous		
1030	1031	1	32	700		2%, B, I	C	-	Triticeae	-	-	100	Mature	Coal/clinker (A***), Moll-t (C), vitrified material/ind waste/slag (C), fish scale (C)	Poor. Some mineralisation		
1019	1021	2	21	175		20%, A*, E, I, F	C	-	*Triticum aestivum/turgidum*, Triticeae	-	-	5	Mature	Coal/clinker (A***), Moll-t (C), Slag (C), fish scale (B)	Poor. Some mineralisation		
1036	1038	3A	9	20		<1%, E	C	-	*Hordeum vulgare*, Triticeae	-	-	A*	Mature	Coal/clinker (A**)	Charred - poor, waterlogged - heterogenous, some mineralisation	C	A - *Sambucus* sp., *Daucus carota*, Lamiaceae, *Ranunculus* sp., Cyperaceae, *Fumaria* sp.

Feature	Context	Sample	Vol (l)	Flot (ml)	Sub-sample	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Charcoal >2mm (ml)	Charcoal	Other	Comments (Preservation)	Vege-tative parts	Uncharred Other
1036	1038	3B	8	15		<1%, E	C	-	cf. *Hordeum vulgare*	-	-	A*	Mature	Coal/clinker (A**), fish scale (C)	Charred - poor, waterlogged - heterogenous, some mineralisation	C	A - *Sambucus* sp., *Daucus carota, Pimpinella* sp., Cyperaceae, Lamiaceae
1036	1038	3C	9	50		<1%, E, F	-	-	-	C	Asteraceae, *Galium* sp.	A*	Mature + roundwood	Coal/clinker (A**)	Heterogenous, some mineralisation	B inc. indet leaf	A* - *Pimpinella* sp., *Sambucus* sp., Cyperaceae, *Fumaria* sp., Lamiaceae, Cyperaceae, *Daucus carota, Pimpinella* sp., Chenopodiaceae, *Rubus* sp., *Betula* sp. (inc. *pendula)*
1036	1038	3D	8	50		<1%, E, F	C	-	*Triticum aestivum/turgidum*, Triticeae	C	Asteraceae	A*	Mature + roundwood	Coal/clinker (A**)	Charred - poor, waterlogged - heterogenous, some mineralisation	A	A* - *Sambucus* sp., *Betula* sp. (inc. *pendula*), Cyperaceae, *Pimpinella* sp., *Daucus carota, Fumaria* sp., Lamiaceae
1012	1013	4	31	225		10%, A*, I	B	C	*Secale cereale* grains and rachis segment, Triticeae grains	C	*Avena/Bromus,* Asteraceae	20	Mature, some iron coating	Coal/clinker (A**), Vitrified material/ind waste/slag (A), Amber (C)	Poor		
1017	1018	5	23	60		20%, A, E, I	-	-	-	C	Indet	2	Mature, some iron coating	Coal/clinker (A**), Vitrified material/ind waste (C)	Fair		

Key: Scale of abundance: A*** = exceptional, A** = 100+, A* = 30-99, A = 30-10, B = 9-5, C = <5; Bioturbation proxies: Roots (%), Uncharred seeds (scale of abundance), F = mycorrhizal fungi sclerotia, E = earthworm eggs, I = insects, Moll-t = terrestrial molluscs.

Appendix 4: OASIS form

OASIS ID: wessexar1-335705

Project details

Project name	Grove Road, Kirk Sandall - Phase 2 Mitigation
Short description of the project	The site is located in Kirk Sandall, to the south-east of the River Don Navigation and to the south of St Oswald's Church, south-west of Moor Lane. The excavation was the final stage in a programme of archaeological works which included trial trench evaluation and an earlier phase of mitigation, which found post-medieval structural remains and field systems. This final stage of archaeological mitigation recorded a number of post-medieval ditches, pits and structural remains as well as some possibly late medieval or earlier post-medieval pits and some undated features. The site produced a modest artefactual assemblage ranging in date from Romano-British to post-medieval/modern, with the chronological focus on the post-medieval/modern period. Of particular significance is a small assemblage of Hallgate type ware pottery sherds.
Project dates	Start: 26-11-2018 End: 07-11-2019
Previous/future work	Yes / Not known
Any associated project reference codes	207960 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Other 13 - Waste ground
Monument type	PITS Post Medieval
Monument type	DITCHES Post Medieval
Monument type	POSTHOLES Uncertain
Monument type	PITS Uncertain
Monument type	GULLY Uncertain
Monument type	PALAEOCHANNEL Uncertain
Significant Finds	ANIMAL BONE Uncertain
Significant Finds	POTTERY Post Medieval
Significant Finds	POTTERY Medieval
Investigation type	""""Open-area excavation"""
Prompt	Planning condition

Project location

Country	England
Site location	SOUTH YORKSHIRE DONCASTER BARNBY DUN WITH KIRK SANDALL Land off Grove Road/Moor Lane, Kirk Sandall, Doncaster
Postcode	DN9 3GA
Study area	0.22 Hectares

Site coordinates	6089 807 6089 00 00 N 807 00 00 E Point
Height OD / Depth	Min: 7.4m Max: 8.5m

Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	SYAS
Project design originator	Wessex archaeology
Project director/manager	Richard O'Neill
Project director/manager	John Winfer
Project supervisor	Catherine Douglas
Project supervisor	Simon Brown
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Albermarle Homes Ltd

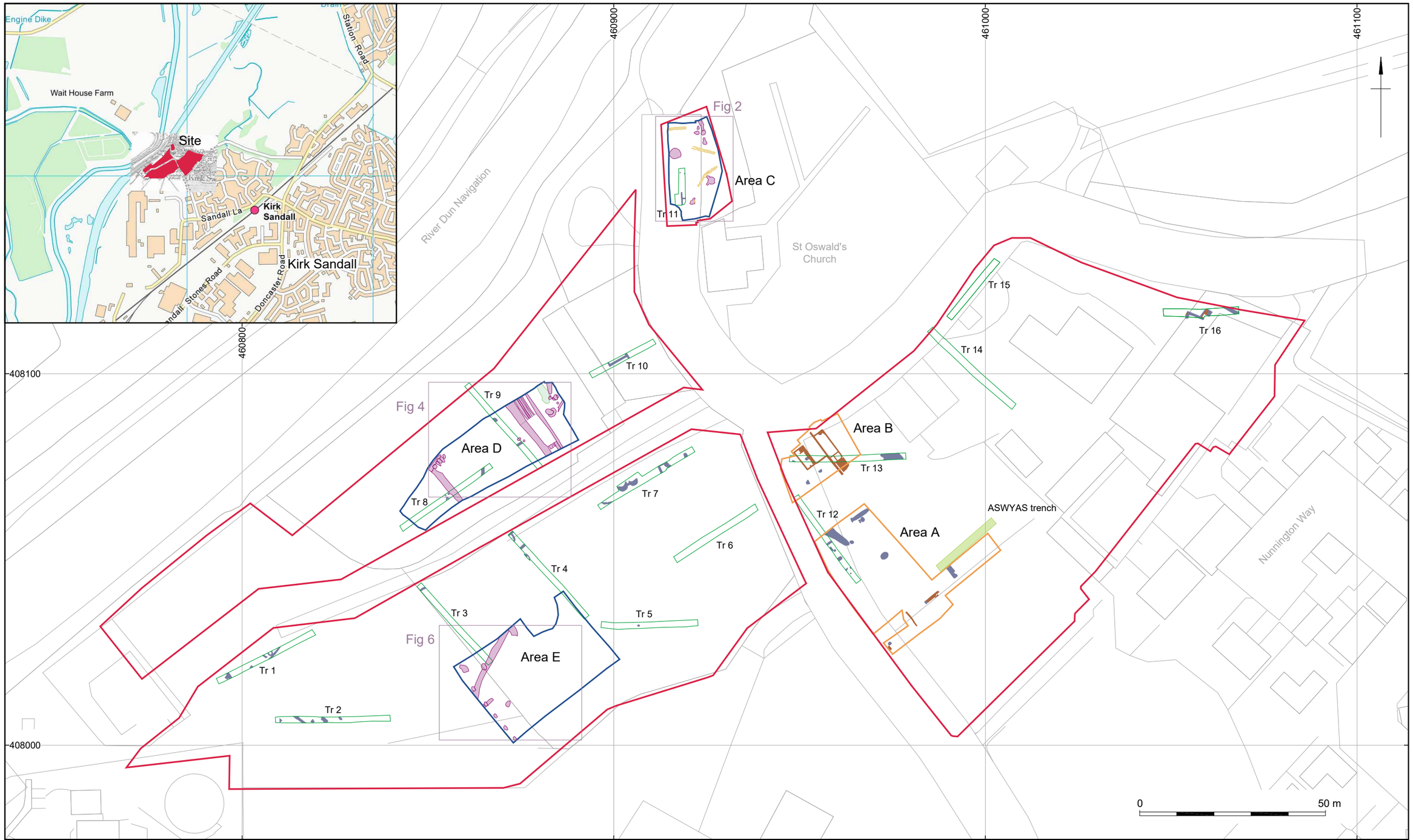
Project archives

Physical Archive recipient	Doncaster Museum and Art Gallery
Physical Contents	"Animal Bones","Ceramics","Industrial"
Digital Archive recipient	Doncaster Museum and Art Gallery
Digital Contents	"none"
Digital Media available	"Images raster / digital photography","Survey","Text"
Paper Archive recipient	Doncaster Museum and Art Gallery
Paper Contents	"none"
Paper Media available	"Context sheet","Drawing","Plan","Report","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Land off Grove Road/Moor Lane, Kirk Sandall, Doncaster, South Yorkshire, Phase 2 mitigation
Author(s)/Editor(s)	Tuck, A.

Author(s)/Editor(s)	Douglas. C
Author(s)/Editor(s)	Brown. S
Author(s)/Editor(s)	Metcalfe, E.
Other bibliographic details	207960.3
Date	2020
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield
Description	A4 comb bound report with colour plates and figures
Entered by	Ashley Tuck (a.tuck@wessexarch.co.uk)
Entered on	23 January 2020



Site
Strip, map and sample (SMS) area, Phase 1
Evaluation trench
Archaeology (previous excavations)
Structure (previous excavations)
Strip, map and sample (SMS) area, Phase 2
Archaeology (Phase 2)
Structure (Phase 2)

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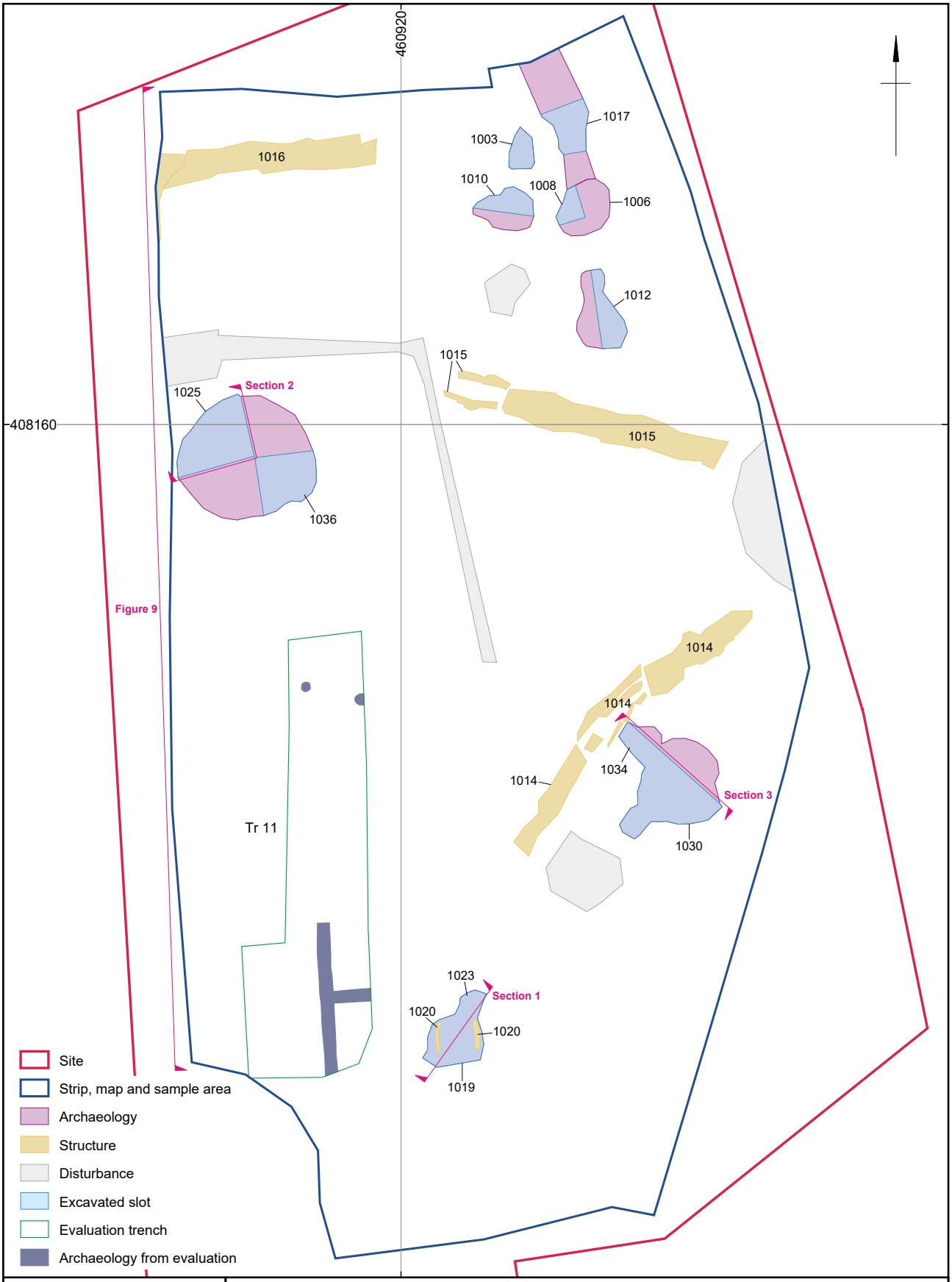
Site location showing evaluation trenches, SMS areas within Phase 1 and SMS areas within Phase 2

Figure 1



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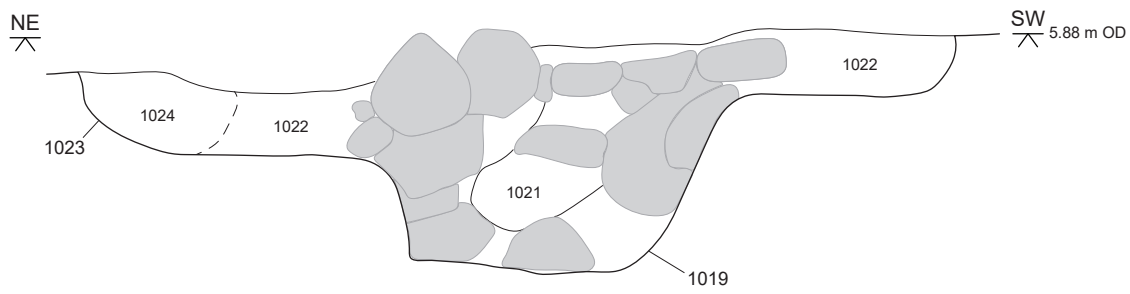
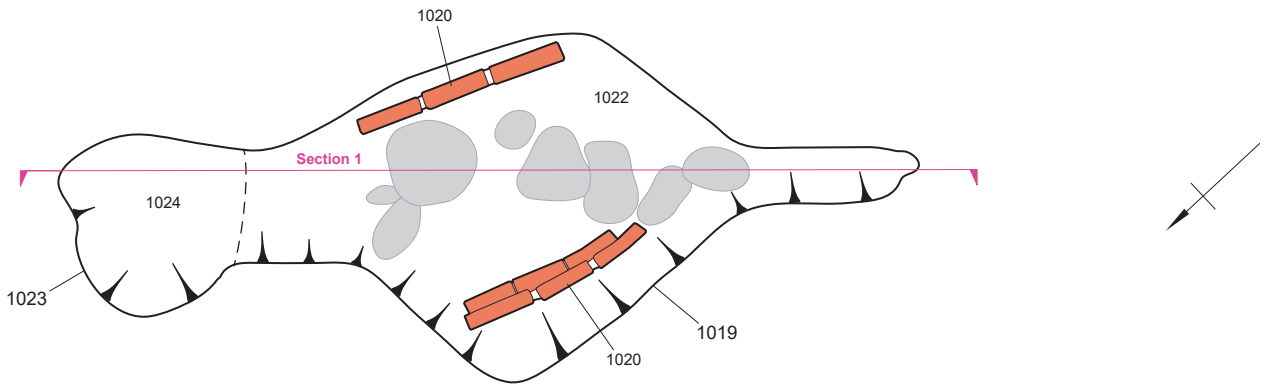
Plan of Strip, Map and Sample Area C

Figure 2

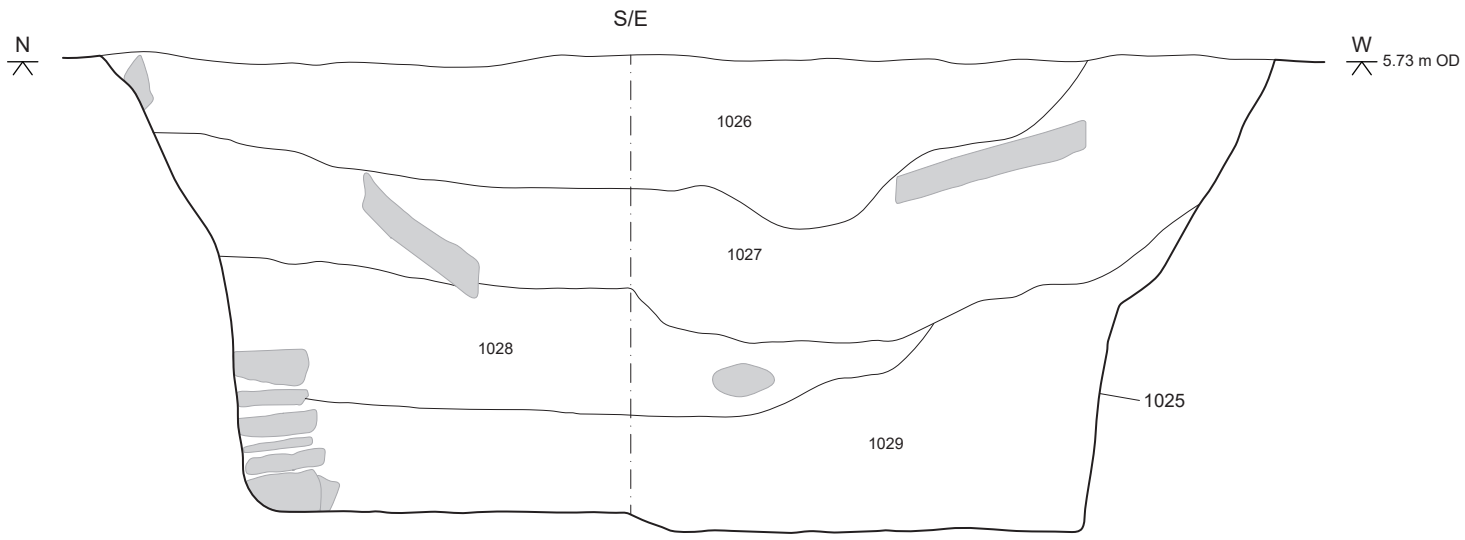
Section 1



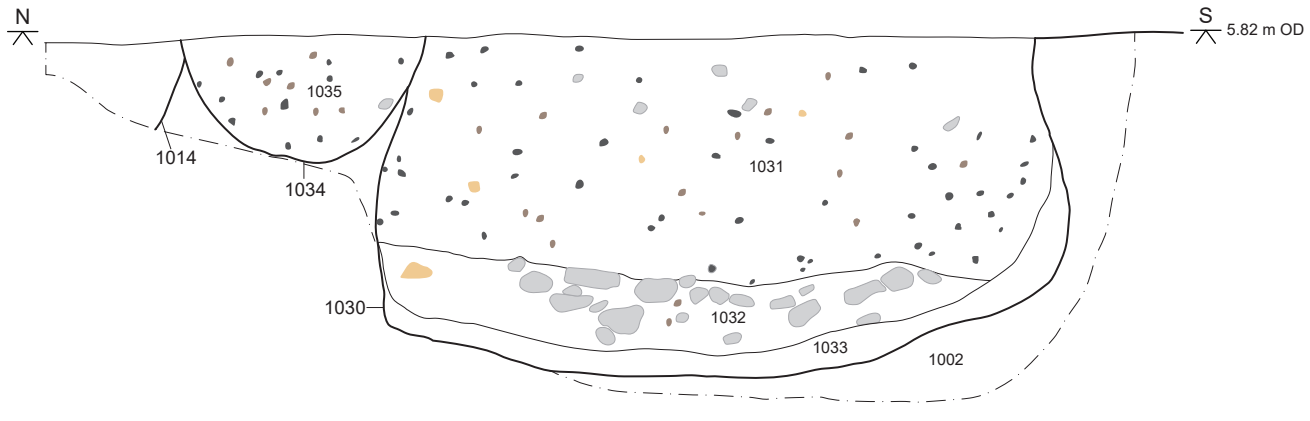
Plan 1



Section 2



Section 3



Stone
Coal
Charcoal
Pottery
Brick

0 1 m

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Section and plan drawings from Area C

Figure 3

460860

460880

408080

Tr 9

Tr 8

905

904

815

3005

3010

3012

3014

3092

3062

3087

3085

3048

3044

3046

3064

3083

3079

3090

3075

3073

Section 5

Section 6

3027

3029

Section 4

3058

3056

3060

3054

3050

3069

3025

3031

Group 3095

3067

3021

3023

3040

3038

3071

3019

Group 3095

3033

Site

Strip, map and sample area

Archaeology

Geology

Disturbance

Excavated slot

Evaluation trench

Archaeology from evaluation

0

5 m

Date:	29/11/2019
Revision Number:	0
Scale:	1:125 @A3
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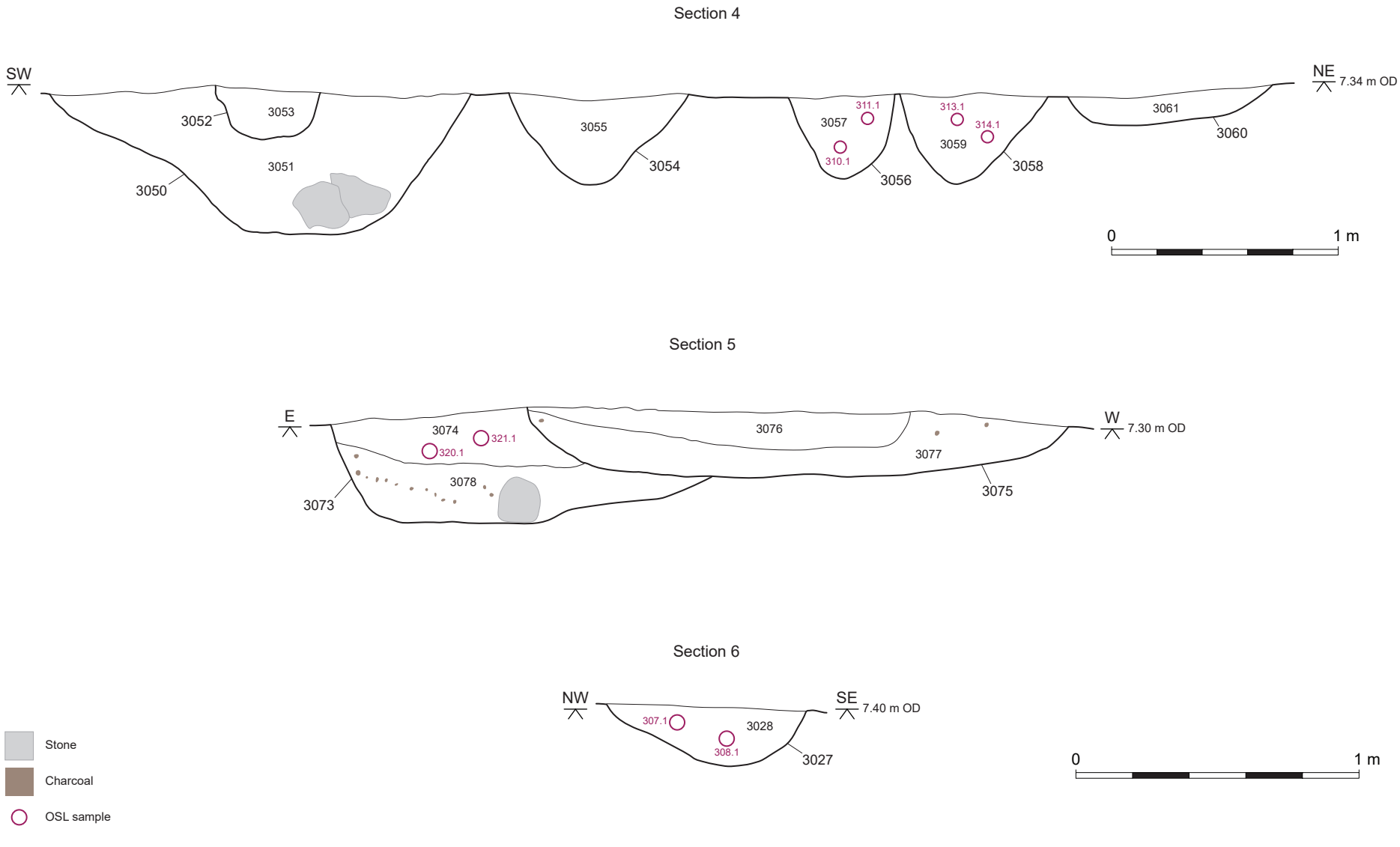
Plan of Strip, Map and Sample Area D

Figure 4



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Section drawings from Area D

Figure 5

460860

460880

408060

Tr 3

Section 7

4014

4017

Group 4035

4026

Section 8

4028

4024

4030

4020

4022

4012

Section 9

4010

4032

4008

Brick culvert

4006

4004

Site

Strip, map and sample area

Archaeology

Disturbance

Excavated slot

Evaluation trench

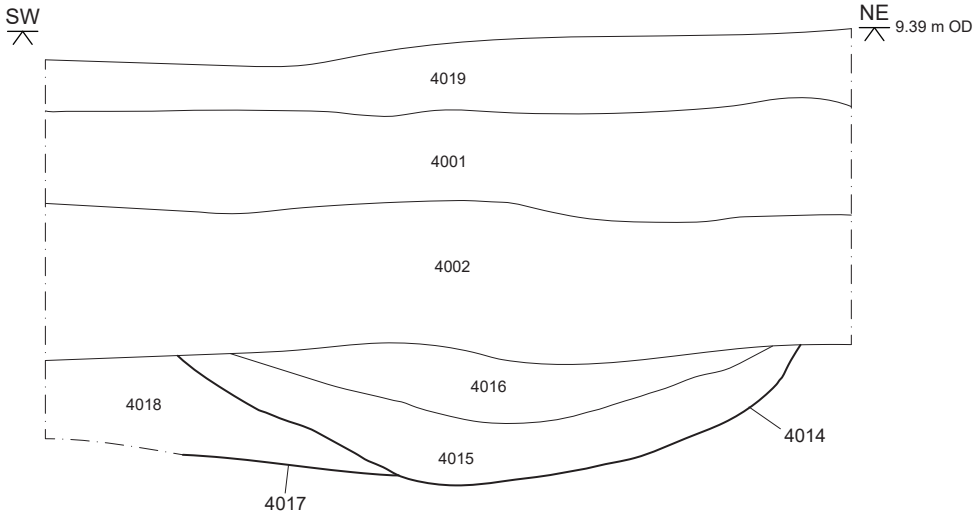
0 5 m

Date:	29/11/2019
Revision Number:	0
Scale:	1:125 @A3
Illustrator:	JD
Path:	S:\PROJECTS\207960\Graphics_Office\
	Rep figs\Mitigation\2019_11_25

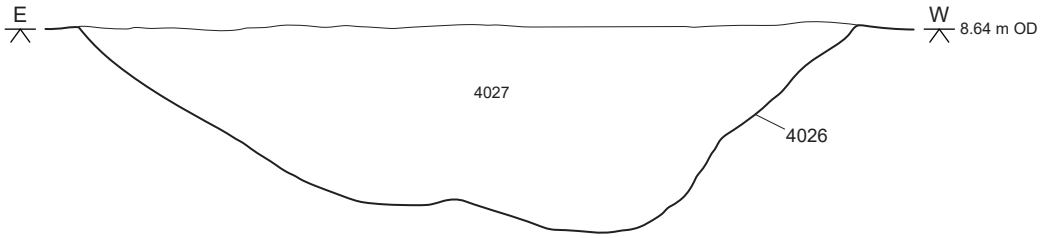
Plan of Strip, Map and Sample Area E

Figure 6

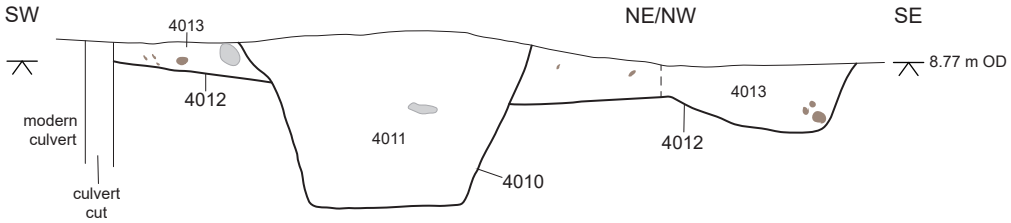
Section 7



Section 8



Section 9



Stone

Charcoal

0 1 m

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Section drawings from Area E

Figure 7

460800
460900
461000
461100
408100
408000
Tr 1
Tr 2
Tr 3
Tr 4
Tr 5
Tr 6
Tr 7
Tr 8
Tr 9
Tr 10
Tr 11
Tr 12
Tr 13
Tr 14
Tr 15
Tr 16
Area A
Area B
Area C
Area D
Area E
0
50 m

Site
Strip, map and sample (SMS) area, Phase 1
Evaluation trench
Archaeology (previous excavations)
Structure (previous excavations)
Strip, map and sample (SMS) area, Phase 2
Archaeology (Phase 2)
Structure (Phase 2)

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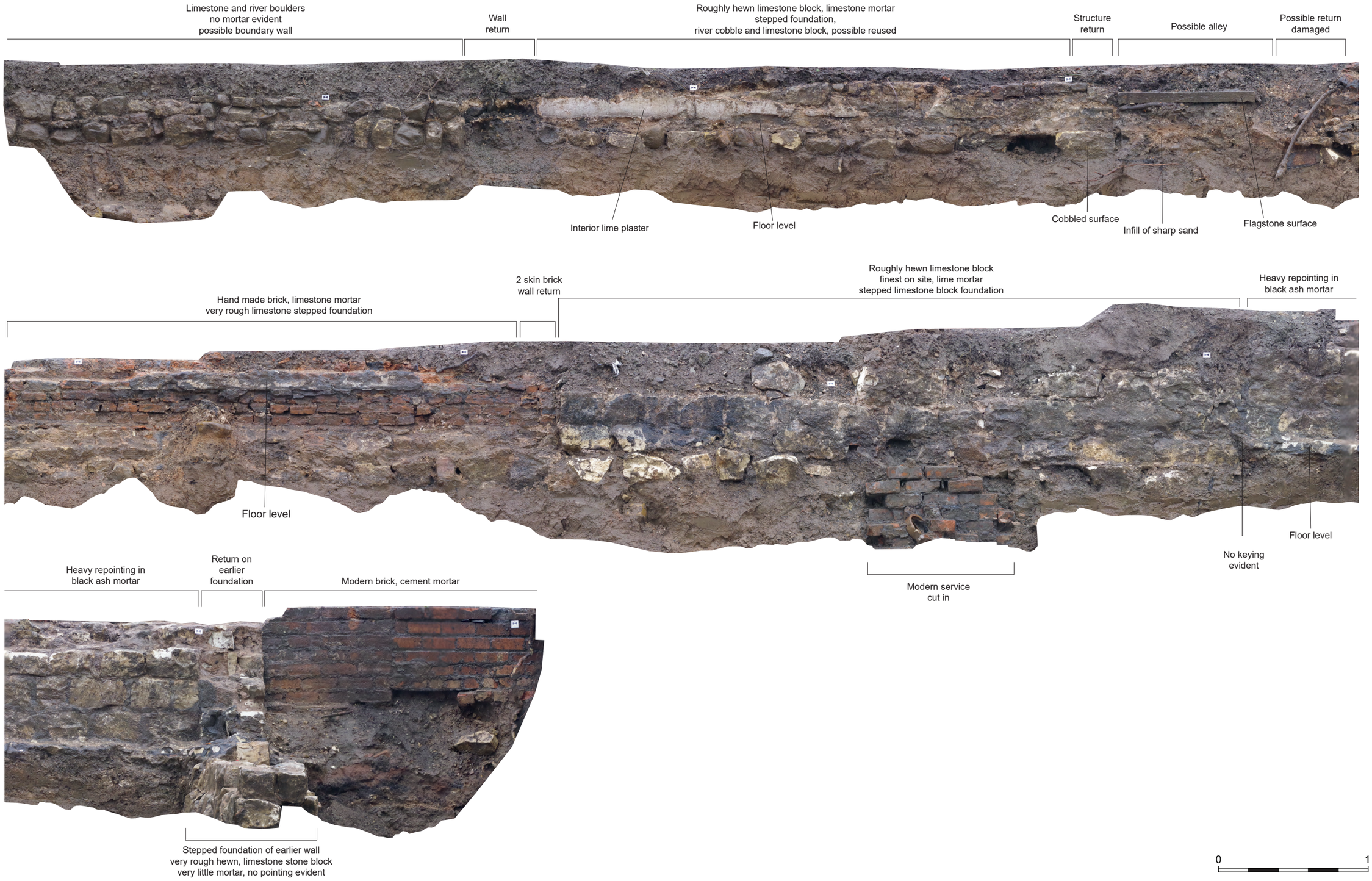
Site plan overlaid on first edition Ordnance Survey map of 1849

Figure 8



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Photographic record of structures in west section of Area C

Figure 9

Plate 1: West facing section of pit 1025

Plate 2: South-west facing section of pits 1030 and 1034

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Plate 3: Pits 1019, 1023 and structure 1020 from north-east

Plate 4: Five parallel ditches: 3005/3050, 3010/3054, 3012/3056, 3014/3058, 3042/3060 and pits 3027 and 3029, facing north-east

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Plate 5: Five parallel ditches 3050 (cut by modern drain 3052), 3054, 3056, 3058 and 3060, facing north-east (1 x 2 m scale)

Plate 6: North-east facing section of pit 3023 and ditch 3025, facing south-west (1 x 1 m scale)

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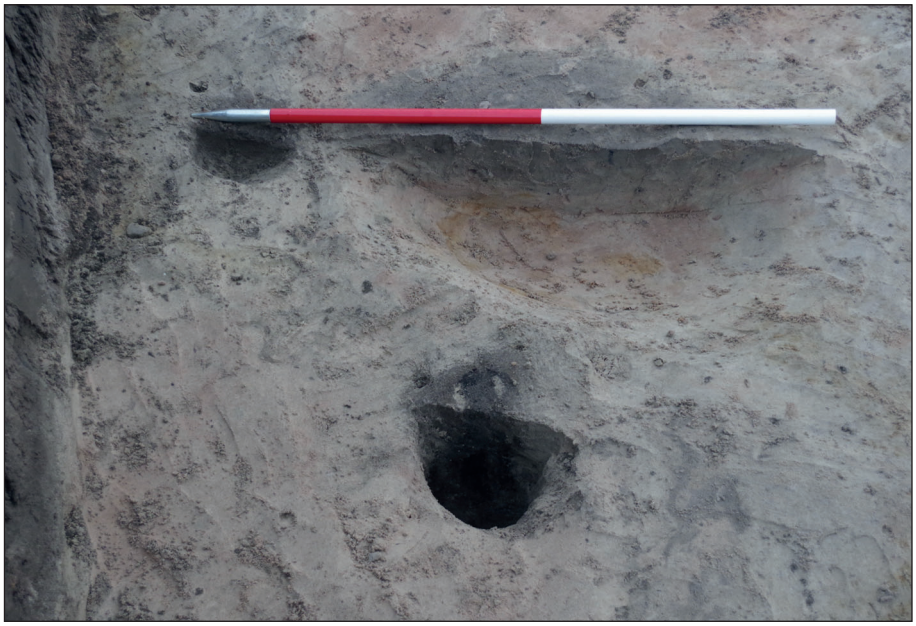

Plate 7: Pit 3046 and postholes 3044 and 3048, facing south-east (1 x 1 m scale)

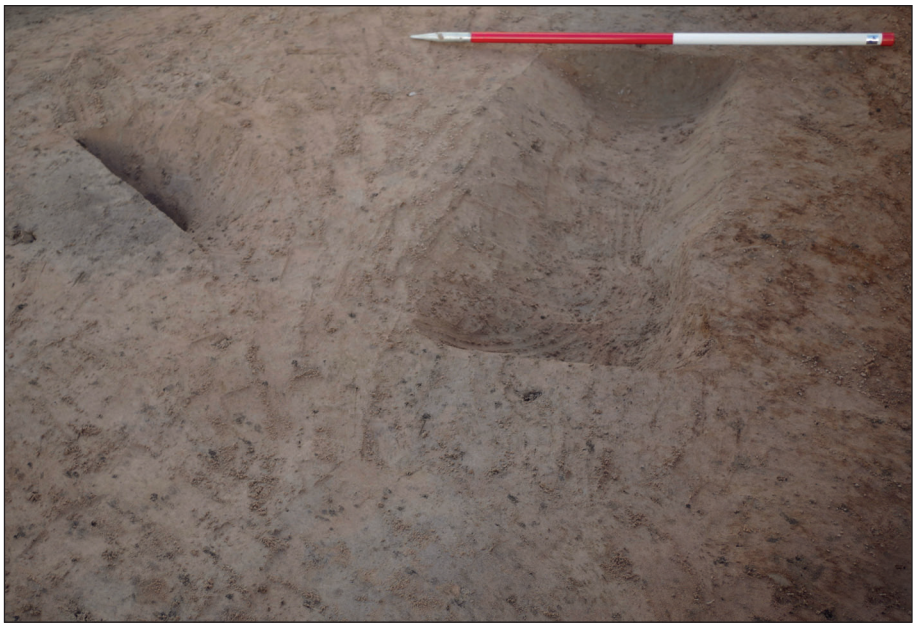

Plate 8: Pit 3083 and gully 3090, facing north (1 x 1 m scale)

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Plate 9: Pits 3073 and 3075, facing south (1 x 1 m scale)

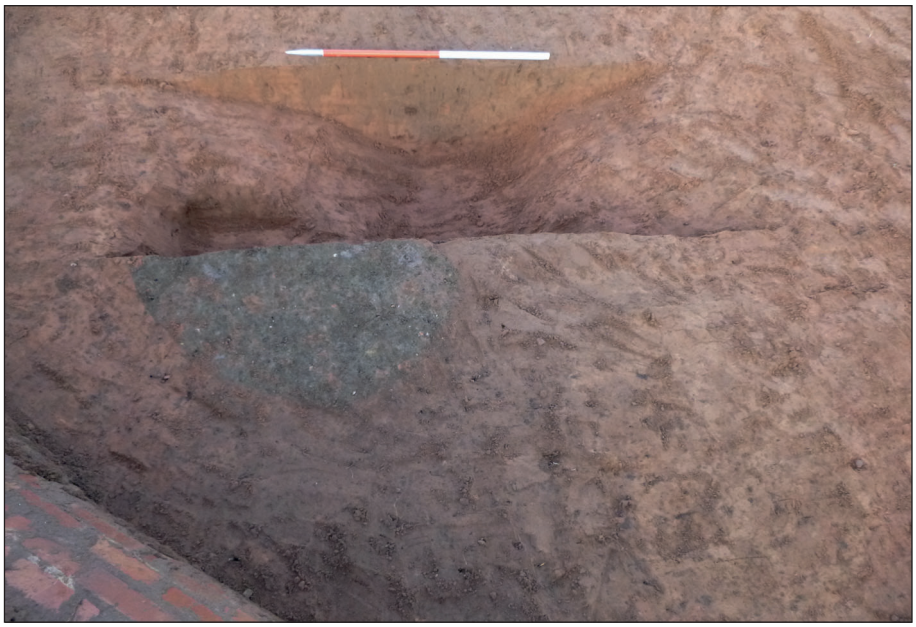

Plate 10: Ditch 4022 truncated by pit 4020, facing north-east (1 x 1 m scale)

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Plate 11: Ditch 4014 facing south-east, truncated by modern pipe trench (1 x 1 m scale)

Plate 12: Excavation of pits 4004, 4006, 4008, 4010 and 4020 running along the length of the brick culvert, facing north-west

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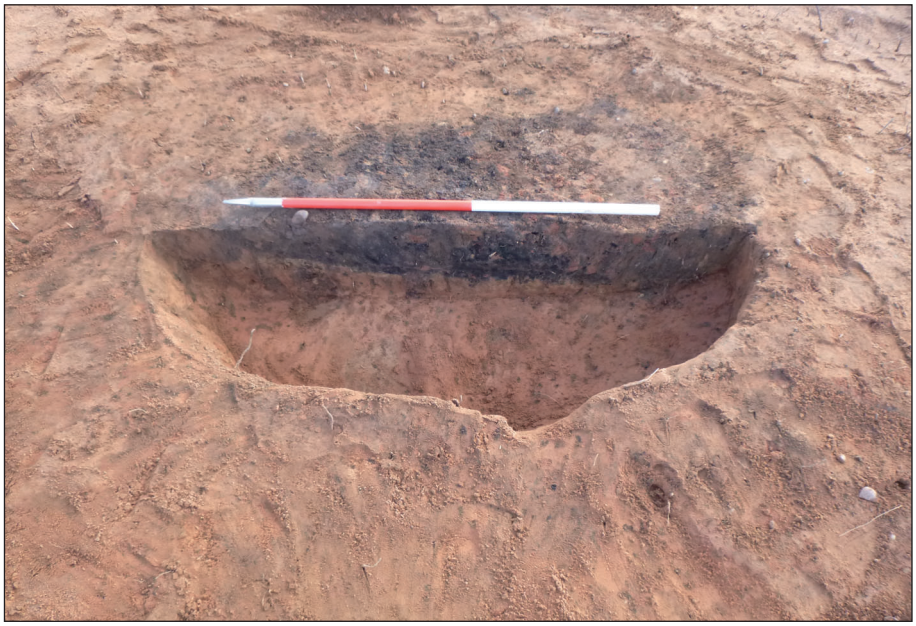

Plate 13: Pit 4032 facing south-east (1 x 1 m scale)

Plate 14: Pit 4024 facing south-west (1 x 1 m scale)

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