WYAS Archaeological Services

Wings Across The Ings
Wombwell
South Yorkshire

Archaeological Evaluation

Report no. 3136
June 2018

Client: The Garganey Trust

Wings Across The Ings, Wombwell
South Yorkshire

Archaeological Evaluation

Summary

The archaeological excavations at the site of a proposed nature lagoon has helped to clarify the results of an earlier geophysical survey and has also defined the areas that contain archaeological deposits. The archaeological features and deposits appear to be Romano-British in date and conform to known patterns of brickwork field systems and enclosures that exist in this part of the region. Limited pottery recovered from the site suggests that it may have been made on or close to site, perhaps associated with the kilns at Rossington Bridge and the wider Doncaster area.

WYAS
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Services

Report Information

Client:	The Garganey Trust
Address:	11 Springfields, Barnsley, S75 1JS
Report Type:	Archaeological Evaluation
Location:	Wombwell
County:	South Yorkshire
Grid Reference:	SE414033
Period(s) of activity represented:	Romano-British, Post-medieval
Report Number:	3136
Project Number:	8243
Site Code:	WOM18
OASIS No.:	archaeol11-320071
Planning Application No.:	2017/1246
Museum Accession No.:	TBC
Date of fieldwork:	March 2018
Date of report:	June 2018
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1 Introduction

Archaeological Services WYAS (ASWYAS) were commissioned by Kirsten Holland of KH Consulting, on behalf of the Garganey Trust, to carry out an archaeological evaluation on land at Wombwell Ings, Wombwell, South Yorkshire. The work was in advance of proposed landscaping in relation to the Wings Across the Ings project (WATI) involving the creation of new wetland habitat and an improvement in flood defences. The work was carried out in accordance with the requirements of the National Planning Policy Framework (DCLG 2012) and by employing standards laid down by Historic England (2008) and the Chartered Institute for Archaeologists (2014). The work was carried out during March 2018.

Site location and topography and land use

The site is centred on NGR SE 414 033 and is located 1.40km east of Wombwell, 0.97km south of the village of Darfield and approximately 7.50km to the south-east of the centre of Barnsley (Fig. 1).

The site lies within the floodplain formed by the River Dove and River Dearne. The confluence of the two rivers lies 0.44km to the north-east of the site boundary. The site is bounded to the north by the Billing Dike, to the west by a sewerage treatment plant and waste ground and to the south and east by a mix of agricultural land and wetland habitat. The site itself consists of two agricultural fields divided by a hedgerow. The larger western field had been ploughed in advance of seeding and the smaller field had been left as pasture (Fig. 2).

Soils and geology

The solid bedrock geology of the area comprises mudstone, siltstone and sandstone of the Pennine Middle Coal Measures Formation - sedimentary bedrock formed approximately 310 to 318 million years ago in the Carboniferous Period in an environment dominated by swamps, estuaries and deltas. Superficial deposits are recorded across much of the site largely consisting of glaciofluvial sand and gravel deposits of mid-pleistocene date. Quaternary alluvial deposits are recorded at the north-eastern end of the site (BGS 2018).

The soils across most of the site are of the Dale association, described as slowly permeable, seasonally waterlogged clayey, fine loamy and fine silty soils on soft rock. The north-east of the site is covered by soils recorded as part of the Conway association described as deep, stoneless fine silty and clayey soils variably affected by groundwater (Soil Survey of England and Wales 1983).

2 Archaeological and Historical Background

The site has been subject to a heritage assessment (FAS 2018) and a geophysical survey (Magnitude Surveys 2017). The results of these reports are used as a basis for the following background.

Cropmarks, of likely Iron Age to Romano-British date, have been recorded from aerial photographs within the site. Aerial photographs, held by SYAS and Historic England, have

been used to plot cropmarks across the site which suggest the presence of an enclosure and connected rectilinear features. Some potential has been identified for alluvial deposits, recorded in the north-eastern extent of the site, to mask archaeological features. Lillie and Cheetham (1999) note the upper 1-2m of alluvium could equate to uniform deposition of sediments since deforestation in the post-Roman period. Roman activity in the wider landscape has also been suggested by a 17th-century account of a coin hoard encountered in the fields 'in Darfield', assumed to be Roman in date.

Evidence for early medieval activity is found in the wider landscape at All Saints' Church in Darfield. Here, fragments of 8th and 9th-century sculpture are reused in the walls of the medieval church and the socket for a medieval standing cross is located in the churchyard. The site of the former Wombell Old Hall represents the site of the medieval manorial seat of the Wombwell family, now demolished.

To the south of the site, extant ridge and furrow earthworks of medieval and/or post-medieval date is noted. Into the modern period the area became increasingly industrial in character, although the site itself appears to have remained undeveloped. Exploitation of the coal resources of the area saw numerous collieries established. With it, local settlements saw an increase in size and population.

Available editions of historic Ordnance Survey maps detail the development of the site from the mid-19th century onwards. The 1854 Ordnance Survey map shows the site as a series of regular fields extending to the Bulling Dike. By 1938 the field boundaries had been removed and the area appears to have taken the open character displayed today.

In November 2017 a fluxgate gradiometer survey was completed across the site (Magnitude Surveys 2017). The survey detected several strong, ditch-like anomalies that strongly correlate with cropmark features previously identified in the west of the site by aerial photography. However, the geophysical survey identified further indications of probable field boundaries and enclosures extending towards the east of the site. Overall, the configuration of the anomalies detected in the geophysical survey could support an Iron Age/Romano-British date for the features, while the detection of intercutting ditch-like anomalies may suggest the potential for multi-phased activity. Several possible kiln or fired features have been identified around the fringes of the apparent settlement area. Agricultural activity has primarily been identified in the form of ploughing, both modern and ridge and furrow. The potential remnants of a former field boundary have been identified also. A large expanse of ground along the north-eastern edge of the site suggested a deposit of mixed waste or ferrous material.

3 Aims and Objectives

The overarching aim of the archaeological evaluation is to advance understanding of the significance of archaeological remains at the site, to inform an assessment of the potential impact of the proposed work, in line with cultural heritage policies set out in NPPF (DCLG 2012). The archaeological evaluation should assess the presence, preservation, character and depth of deposits across the site, so that the impact of the proposed development, including excavation, deposition of material and changes to water levels, can be fully assessed.

The specific objectives of the evaluation are set out below:

- to gather sufficient information to established the presence/absence, character, extent, state of preservation and date of archaeological deposits at the site, in terms of horizontal and vertical extent;
- to assess the significance of any remains present;
- to assess the preservation of archaeological remains across the site, and the contribution that their state of preservation makes to significance;
- to assess the impact of the proposed scheme on archaeological deposits across the site, in terms of direct impact, and also the changing hydrological and environmental conditions that would result from the scheme;
- to inform the design of an appropriate mitigation strategy, by design or record.

4 Methodology

All work was undertaken in accordance with accepted professional standards and guidelines (Historic England 2008; CIfA 2014) and in accordance with the ASWYAS site recording manual (ASWYAS 2011) and in adherence to the Written Scheme of Investigation (Appendix 1).

A series of trenches, totalling 2% of the site, were positioned to investigate areas of archaeological deposits, and also to define the deposit model in areas where the geophysical survey produced negative results (Fig. 2). Trenches measured 100m x 4m (Trench 2, 3, 5, 7, 8, 10 and 11), 75m x 2m (Trench 12 and 16) or 50m x 2m (Trench 1, 4, 6, 9, 13, 14, 15).

All trenches were set out and the limits resurveyed using a Trimble VRS differential GPS accurate to +/-0.01cm. The trenches were opened in a controlled manner using a mechanical excavator using a flat-bladed ditching bucket under direct archaeological supervision. All topsoil deposits were removed in level spits with the topsoil and subsoil being separated to allow for re-instating in reverse order. Machining stopped at the first archaeological horizon or natural deposits, whichever was encountered first. All excavations of archaeological

deposits were undertaken manually with the stripped surface being cleaned and investigated for archaeological remains. Spoil heaps were then scanned using a metal detector.

All trenches were accurately recorded in plan using GPS. Feature sections were drawn at a scale of 1:10 or 1:20. All plans and sections include spot heights that relate to Ordnance Datum in metres.

A full written, drawn and photographic record was made of all archaeological work undertaken. An inventory of the primary archive is provided in Appendix 2 and a concordance of contexts is provided in Appendix 3. ASWYAS currently hold the site archive in a stable and secure location, and it will be deposited with a local museum in due course.

5 Results

A total of sixteen evaluation trenches were excavated on the site, the results of which are summarised in Appendix 4. Across the site, a dark brown or greyish-brown clayey-silt topsoil was found at the surface, measuring between 0.10m and 0.35m in depth. The topsoil sealed a thin naturally occurring subsoil, generally consisting of mid-brown silty-sand or silty-clay, up to 0.50m in depth. The topsoil had been recently ploughed across most of the site, whilst the area around Trenches 14 and 15 had been left as pasture. Here, the topsoil was much thinner and the subsoil thicker. In Trench 1 a much deeper subsoil, probably alluvial in origin, was encountered at its northern end. At the eastern end of Trench 5, the northern end of Trench 12 and throughout Trench 13, a landfill deposit measuring up to 0.75m in depth was recorded. This deposit filled a cut through the subsoil and natural and was overlain by topsoil (Plates 5 and 11). It consisted of a dark blackish or greyish, burnt deposit containing numerous bottles, pottery vessels, leather objects and animal bones. A sample of objects from this deposit were retained and are discussed below. Each trench was excavated to the level of the natural geology. This consisted of light yellowish-brown weathered sandstone and sandy-clay, occasionally overlain by deposits of loose sand and gravel.

Archaeological features were encountered in Trenches 1-3, 6-11 and 15. They consisted of a series of ditches, gullies, furrows and small discrete pits with a kiln excavated in Trench 10. The results of these trenches are discussed in detail below. The remaining trenches contained no archaeological features. Any geophysical anomalies that these trenches targeted appeared to be the result of geological variations or modern features such as land drains. These trenches are not discussed in detail but their results can be seen in Appendix 4.

Trench 1 (Fig. 3, Plate 1)

Trench 1 contained a north to south aligned furrow at is southern extent which was investigated to confirm its origin but not recorded any further. A short distance to the north, a small linear gully (103) ran westwards into the trench before ending a rounded, well-defined terminus. Both upper (105) and lower (104) fills contained no finds. The feature probably represents a small boundary ditch of unknown date.

At the northern end, the trench was crossed by a linear geophysical anomaly. Around this point the trench became much deeper, with the subsoil (101) increasing from 0.20m to 0.50m in depth. There were no clear sign of the feature that caused the anomaly but hand-excavation through the subsoil revealed possible traces of it in section. The most likely origin of the anomaly was recorded as Ditch 106. It had a wide, V-shaped profile, measured 1.25m wide and 0.35m deep and was aligned south-east to north-west. Its single fill (107) contained no finds, was sterile of carbonised materials and appeared to have been sealed by the subsoil (101). Two later features (108 and 110) cut through the subsoil and Ditch 106 on each side. They had irregular profiles and are probably the result of natural disturbance but may be later ditch re-cuts. Each feature had a single fill (109 and 111), neither of which contained any finds.

Trench 2 (Figs. 4-5, Plate 2)

Trench 2 contained a series of ditch features crossing the trench with an approximately south-west to north-east alignment and some possible discrete pits.

Ditch 203 crossed the trench near the north-western extent running in a south-west to north-east direction. It measured 2.00m wide and 0.44m deep with a steep, V-shaped profile. Its single fill (218) contained no finds and the soil sample produced only modern material and coal.

Ditch 206 crossed the trench towards the centre and ran in a south-west to north-east direction. It measured 0.90m wide and 0.26m deep with a wide, V-shaped profile. Its single fill (207) contained no finds and the soil sample, again, contained modern material and coal.

Ditch 208 was found crossing the trench a few metres to the south-east of 206 and ran in the same general direction as 206. It measured 1.60m wide and 0.36m deep with a wide, flat profile. Its single fill (209) contained no finds and a soil sample taken contained modern material and coal.

Ditch 210 crossed the trench towards its south-eastern end. It measured 2.90m wide and 0.80m deep with a wide, U-shaped profile with steep sides and a flat base. Ditches 203 and 210 correlate closely with two geophysical anomalies which appears to form part of a rectangular enclosure. The upper fill (204) produced a small amount of clinker while the lower fill (205) contained modern material and coal. Neither fill produced any finds.

Pit 214 and 216 were found within an area of natural disturbance to the north-west of the trench. They may represent isolated small pits but are more likely to be part of the natural disturbance. Pit 214 was round in shape with a circumference of 0.44m, was 0.06m deep and contained a single fill (215) which contained no finds. Pit 216 measured 0.60m in length, 0.48m wide and 0.12m deep . It contained a single fill (217) which contained no finds.

Trench 3 (Figs 6-7, Plates 3-4)

Trench 3 contained a large number of linear ditches and gullies with occasional small, discrete pits. The features all correlate strongly with the geophysical anomalies.

A series of three shallow segmented gullies with a roughly south-west to north-east alignment were excavated towards the south-western end of the trench. They correspond with a weak geophysical anomaly.

Gully 336 ran from the south-western end of the trench for 2m before ending in a rounded, gradually sloping terminus. It was up to 0.70m wide and was 0.09m deep. Its single fill (337) contained no finds. There was a void of 8m to the north-east of Gully 336 before a second gully was excavated (303, 305). It had a width of up to 0.80m and a depth of up to 0.12m with gradually sloping, rounded termini at each end. Its single fill (304, 306) contained no finds but samples taken contained a substantial amount of clinker indicating a possible post-medieval waste deposit. A gap of 11m separated it from a third gully (307, 309, 315) which ran for 9m before extending beyond the north-western side of the trench. At this point the feature appeared to turn north-westwards. This gully was up to 1.02m wide and 0.28m deep. It contained a single fill throughout the feature (308, 310) aside from its northernmost end where two distinct fills were recorded (316, 317). It contained pottery and slag finds throughout. Fill contexts 308 and 310 were sterile of environmental material, however, fill 317 was unique amongst the samples as it contained a small assemblage of carbonised cereal grains. Two small, round pits were found along the edge of the third gully. Pit 311 had a circumference of between 0.62m and 0.75m and a depth of 0.28m. It was almost entirely truncated by Gully 309 and contained a single fill (312) which produced pottery of 2nd-century AD date or later. Pit 313 had a circumference of 0.70m and a depth of 0.30m. Its single fill (314) contained no finds and was environmentally sterile. Some large stones within 314 may represent packing stones around a post.

Ditch 338 crossed the trench with a north-west to south-east direction, between the second and third segmented gullies, *c.* 18m from the south-western end of the trench. It measured 3.57m wide and 1.27m deep with a steep, V-shaped profile. The majority of the fill was a homogenous light greyish-brown material (339). A mid-reddish brown fill was also visible (340) against the north-eastern side of the feature. Neither fill contained any finds or environmental material.

Ditch 332 crossed roughly the centre of the trench with a north-west to south-east direction. It measured 1.96m wide and 0.94m deep with a wide, U-shaped profile. It contained three fills (333, 334, 335). The uppermost fill (333) contained pottery dating between the late 2nd and mid-3rd century AD but no environmental material.

Ditch 320 crossed the trench, in a general east-west direction approximately 20m from the north-east limit of Trench 3. It measured 0.56m wide and was 0.17m deep with a U-shaped profile and flat base. Its single fill (321) contained pottery of 2nd-century AD or later date but no environmental material was recovered.

Pit 318 lay between to the Ditches 332 and 320. It had a circumference of between 0.65m and 0.70m and a depth of up to 0.09m. No finds were recovered from its single fill (319).

Ditch 322 crossed the trench, near its north-eastern limit. It measured 1.10m wide and 0.45m deep with a steep, V-shaped profile. Its single fill (323) contained a flint burin but was devoid of environmental material.

Gully 326/330 crossed the trench on a roughly north to south orientation, between Ditches 320 and 322. It measured between 0.40m and 0.90m wide and up to 0.22m deep and its single fill (327, 321) contained no finds or environmental remains. The feature cut two irregular patches of light grey or greyish-brown sandy or silty material (324, 328) which were investigated but appeared to be natural in origin.

Trench 6 (Fig. 8, Plate 6)

Trench 6 targeted a single large linear geophysical anomaly in its centre which correlated strongly with a large ditch and subsequent recut. A furrow was investigated at the far north-western end of the trench but was not recorded any further.

Ditch 603 was the earliest feature in the trench. It survived to a width of 2.07m and a depth of 0.40m with a U-shaped profile. It contained two fills (604, 605), neither of which contained any finds. Fill 604 was environmentally sterile bar modern straw.

Ditch 606 truncated Ditch 603 on its north-western side. It measured 3.31m wide and 0.84m deep, with a wide U-shaped profile and contained three fills (607, 608, 609). The feature contained no finds and probably represents a recut of Ditch 603.

Gully 610 was the latest feature, cutting Ditch 606 on its north-western edge. It measured 1.19m wide and 0.21m deep, contained one fill (611) with no finds and is probably the trace of a plough furrow.

Trench 7 (Fig. 9, Plates 7-8)

Trench 7 contained five furrows and a single larger ditch, all of which correlate strongly with the results of the geophysical survey.

Ditch 703 was found at the far south-eastern extent of the trench. It measured 2.00m wide and 0.53m deep with a wide, U-shaped profile. It contained two fills. The lower fill (704) contained no finds and an environmentally sterile sample. The upper fill (705) also contained no finds.

Trench 8 (Fig. 10)

Trench 8 contained a number of furrows with parallel north-south orientations and a ditch on an east-west alignment. These results correlate well with the geophysical survey though no trace was found of two north-west to south-east anomalies crossing the south-western end of the trench.

Ditch 802 crossed the centre of the trench on a north-west to south-east alignment. It contained two fills. The lower fill (803) continue no material culture but produced a small concentration of crushed charcoal and a sliver of birch. The upper fill (804) contained two sherds of white glazed pottery and a flint bulb of percussion.

Trench 9 (Fig. 11, Plates 7-8)

Trench 9 contained a single ditch crossing close to the centre of the trench on a south-west to north-east alignment which corresponds closely with a geophysical anomaly.

Ditch 903 measured 1.06m in width and 0.32m in depth. It contained a single fill (904) which contained no finds but a few fragments of clinker and modern straw assigned to post-medieval or modern intrusion.

Trench 10 (Fig. 12, Plate 9)

Trench 10 contained shallow traces of plough furrows at its south-western end, a ditch at its north-eastern end and a kiln close to its centre. These results correlate very closely with those of the geophysical survey.

Kiln 1004 correlates well with a strong geophysical anomaly, one of several interpreted on the site as possible kilns. It lay partially beyond the trench edge, with probably just under half of the feature within the trench. Within the trench it measured 5.30m long and up to 1.80m wide with a typical ‘teardrop’ or ‘keyhole’ shape. Along the edge of much of the feature the natural was scorched with a reddened colour and a burnt reddish-brown clay along part of the edge (1014) may have been the remains of a clay lining of the kiln. Much of the base of the feature was filled with 1005 which was silty and contained large fragments of heated stone, including larger sandstone fragments and smaller pieces of limestone. Some of the stones may be the remains of a kiln structure that collapsed into the base. No finds were recovered though it was rich in charcoal and coal. Large fragments of clinker were present within fill 1005, the majority of which appeared to be coal derived fuel material. Two distinct clayey fills lay above this (1006, 1002), both of which contained little stone in comparison with 1005 and are probably the result of backfilling or natural silting of the feature after it went out of use. Both contexts contained well-preserved animal bone while more clinker was evident in 1006.

Ditch 1007 crossed the trench with a north-west to south-east alignment approximately 15m from the north-western extent of excavation. It measured 2.06m wide and 0.64m deep with a steep, U-shaped profile. It contained numerous fills. The base was filled with three fills (1013, 1012, 1011) which appeared to fill the feature from its north-eastern side, possibly the result of a bank of material eroding from this edge of the ditch. The remainder of the feature was filled with two distinct fills (1010, 1008). The uppermost fill (1008) contained a fragment of glass and produced oak and birch charcoal as well as clinker. Fill 1011 contained two retouched flint blades of possible Neolithic/Bronze Age origin.

Trench 11 (Figs. 13-14, Plate 10)

Trench 11 targeted a number of geophysical anomalies which appear to make up series of field boundaries and small enclosures and parallel plough furrows. These anomalies correlate strongly with the features investigated in the trench.

Ditch 1109 crossed close to the south-eastern end of the trench on a south-west to north-east alignment. It had a width of 2.30m and was 0.60m deep and its two fills (1110 and 1113) contained no finds. The ditch was later recut by Ditch 1111, truncating the centre of the feature. Ditch 1111 measured 1.04m wide and 0.52m deep and its single fill (1112) contained no finds and a soil sample where only modern material was evident. Both ditches were then covered by a tertiary fill (1114) which contained no finds.

Gully 1103 crossed the trench on a south-west to north-east alignment approximately 35m from the south-east extent. It measured 0.65m wide and 0.18m deep with a steep, U-shaped profile. Its single fill (1104) contained no finds and a soil sample which contained only modern material. Immediately to the north-west, Gully 1105/1117 entered the trench from the north-eastern edge, ran parallel south-westwards and turned to the north-west before terminating. It measured up to 0.65m wide and 0.18m deep and its single fill (1106, 1118) contained no finds and a soil sample which produced only modern material.

Ditch 1119 measured 1.40m wide and 0.58m deep, crossing close to the centre of the trench with a north-east to south-west alignment. It contained three fills (1120, 1121, 1122) though each had diffuse boundaries, suggesting gradual silting of the feature over a long period. Fill 1122 contained post-medieval pottery.

Ditch 1128 entered the trench from the north, towards its north-western end, running for approximately 6m before a well-defined, rounded terminus. It measured 1.2m wide and 0.84m deep and had a steep, V-shaped profile. Its single fill (1129) contained no finds and a environmental sample where only modern material was identifiable.

Ditch 1125 crossed the trench close to its north-western end with a south-west to north-east alignment. It measured 1.30m wide and 0.54m deep and contained two fills (1126, 1127), neither of which contained any finds. The lower fill (1126) appeared to be a layer of silted material underlying the later backfill (1127). Environmental samples contained only modern material.

Ditch 1132 entered the trench near its north-western extent with a western orientation. The feature curved north-westwards slightly before rapidly becoming shallower and terminating. It measured 1.78m wide and 0.34m deep and its single fill (1133) contained no finds but an environmental sample produced a small deposit of highly crushed charcoal and evidence for later intrusion through clinker and straw.

A number of furrows were test excavated along the trench, exhibiting similar broad, shallow profiles, two of which were recorded (1107, 1130).

Trench 15 (Fig. 15, Plate 12)

Trench 15 targeted a number of geophysical anomalies which show some correlation with the features excavated.

Pit 1503 lay partially beyond the south-eastern edge of the trench. It extended into the trench for 1.10m and had a width of 0.85m and a depth of 0.16m. Its single fill (1504) contained no finds, however, several crushed slivers of oak were identified within the environmental sample.

Gully 1505 crossed the centre of the trench on an approximate north-south alignment. It measured *c.* 0.30m wide and 0.08m deep and its single fill (1506) contained no finds and an environmental sample with only unidentifiable crushed waste.

Pit 1507 lay partially beyond the south-eastern edge of the trench. It extended into the trench for 0.60m and was 0.80m wide and 0.36m deep. Its single fill (1508) contained no finds and the environmental sample recovered was sterile.

Gully 1509 crossed the trench with a south-east to north-west alignment, near its north-eastern limit. It measured 0.60m wide and was 0.16m deep. Fill 1510 produced no finds and the environmental sample was sterile.

6 Artefact Record

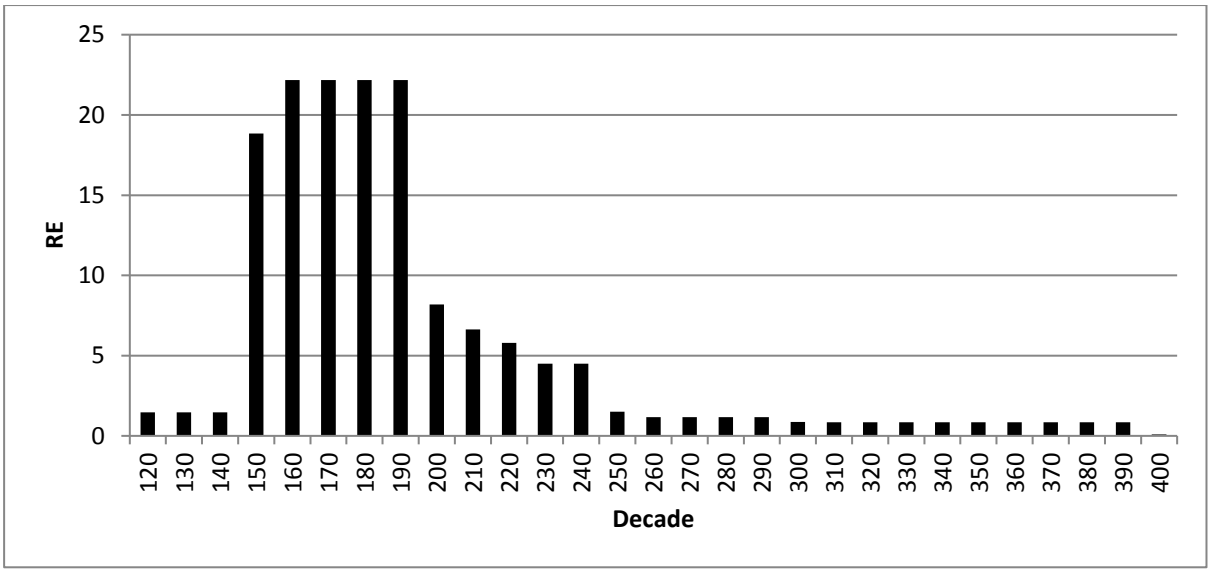
The Romano-British pottery, fired clay and stone by Phil Mills

The pottery

There were 64 sherds weighing 1173g presented for study, of which 63 sherds, 1160g were stratified. Material was examined by context and recorded by number of sherds (NoSh) weight in grams (Wt), minimum number of rims (MNR), and rim equivalents (RE). There were a total of twelve vessels based on rim count with a RE of 154% and five bases.

All the forms identified and the fabrics are consistent with products of the South Yorkshire greyware industry, the focus of which is some 13km to the east around Blaxton (Buckland and Dolby 1980) and Bessacarr (Mills and Evans 2016).

Chart 1. Date distribution for all rims



The date distribution of the pottery rims is shown in Chart 1. This shows a probable date range of the mid to late 2nd century AD. The main evidence for dating comes from a number of BB copy jars (as Buckland and Dolby 1980, nos 58, 61, 62, 63 (x2) and 65). There is also a flanged rim bowl of probable Antonine date (Buckland and Dolby 1980, type Ca.24) and an undercut bead rim dish (Buckland and Dolby 1980, 14) as well as some less precisely dated large handled jar (Buckland and Dolby 1980, type F.131) and wide mouth jars/basins (Buckland and Dolby 1980, types Hb.150, Hc-d 191 and 195). Whilst this is a small assemblage, it should be noted that there are no lid seated vessels in the group.

Table 1. Pottery by context type

Context	No%	Wt%	MNR%	RE%
Ditch	95.2%	99.0%	100.0%	100.0%
Pit	4.8%	1.0%	0.0%	0.0%
N	62	1159	12	154

Table 1 shows the breakdown of the pottery by context type. The majority of material is from ditches with a small amount from pits. This is consistent with a mainly rural site with some industrial aspects. There is a single example of a possible Rossington bridge type/South Yorkshire black burnished ware (B03) bead rim bowl (Buckland and Dolby 1980, Ca.14). All the other vessels are in South Yorkshire fabric R112, although some examples have coarser sand than is usual in the fabric range. A number of the sherds are overfired with oxidised

surfaces, consistent with probable waste material from on-site production. There is one unstratified sherd of grog tempered fabric R50.

This is a small group of pottery which may have been made on site and can be considered an outlier of the South Yorkshire pottery industry (Buckland and Dolby 1980). The range of forms suggests that this was operating in the mid-point of the industries development perhaps mid to late 2nd century AD and as such further investigation of the site could yield important data about the development of the South Yorkshire industry.

The burnt clay

There were 175 fragments weighing 233g of burnt clay submitted for study. They were recovered from contexts 1005 and 1006 (see Appendix 5). These were all in the form of unidentifiable fragments. There were no pieces obviously from any kiln furniture, and what is present is consistent with a clay lining.

The stone

There were 127 pieces of stone, weighing 2155g, submitted for study. They were again recovered from contexts 1005 and 1006 (see Appendix 5). This comprises one fragment of a red calcareous sandstone and the rest of a soft limestone. None of the pieces are diagnostic and may perhaps be packing from the kiln structure.

Post-medieval pottery by Chris Cumberpatch

The pottery assemblage consists of a total of fifteen sherds, vessels and objects weighing 3464g. The details are summarised in Appendix 5. The material consists of a sample of complete, decorative or diagnostic sherds recovered from the landfill deposits recorded in Trench 12.

The assemblage is not a typical domestic one and consists primarily of utilitarian wares, decorative and novelty items with domestic tablewares notable by their absence.

Utilitarian wares are represented by sherds from three or four Yellow Glazed Coarseware pancheons (unstratified). Such vessels are difficult to date with any accuracy but these examples appear to be of 19th or early to mid-20th-century date rather than any earlier.

Retail vessels included a number of small bottles, jam or marmalade jars and part of a flagon (deposit 1202). The flagon bears part of the name of a Barnsley brewery (The Barnsley Botanical Brewery) although bears no details of this brewery could be traced. The bottles and jars are unmarked and presumably once carried paper labels identifying the contents.

A small jug (deposit 1202) is stamped with a registration number (116267) under a red-brown lead glaze. Such numbers usually indicate the date of registration of a specific shape or design with the Patent Office and superseded the earlier diamond marks in 1884. Numbers 64520 to 141273 were used between January 1887 and January 1890 but vessels of this design could have been used after these dates (Godden 1991, 526 - 528).

Trench 12 also contained two items that might have formed part of the same object. This is an inkwell consisting of an elaborate triangular object advertising bottled Bass beer and a small receptacle to hold the ink with a 'non-spill' design. The base of the object bares a maker's mark (Royal Doulton/England) and a registration number (473834) on the underside. The number indicates a registration date between 1905 and 1922 although the specific maker's mark was used (in impressed form at least) between *c*. 1902 and 1922 and again between *c*. 1927 and 1936 (Godden 1991, 215).

Two teapots, one bearing an elaborate black-printed oriental scene with coloured detailing, the other plain, are both too small for practical use (although both were functional) and may have been decorative items or parts of a child's toy tea set. The final item is the upper part of a rather flamboyant decorative item, moulded and with gold detailing and a transfer printed design showing the head and shoulders of a woman in stylised 18th or early 19th-century dress.

The unusual nature of the assemblage suggests that it derived, at least in part, from a public house or a licensed hotel and the fact that it seems to have been recovered from a landfill deposit might suggest that it came from the demolition or clearance of such an establishment, probably sometime in the mid-20th century.

Other finds by Zoe Horn

Clay tobacco pipes

Two unstratfied tobacco clay pipe bowls were recovered. One is a promotional item for Harvey's Port with handshake detail. The second is undecorated although the rim of the bowl is milled and there is a marker's mark 'DUBLIN' in an oval cartouche. The clay pipes are of late 19th or early 20th-century date.

Glass bottles

Glass bottles were recovered from two landfill deposits, five from Trench 5 and fourteen from Trench 12. These are catalogued below and provide a date in the later 1880s or early 1900s, as indicated by the post-medieval pottery.

- a small clear complete bottle marked 'ATKINSON & BARKER' which would have contained the Royal Infant Preservative as patronised by Queen Victoria. The mixture's composition was listed in the druggist general receipt book of 1878, but first went on sale in the 1790s (Quack Doctor 2018). *Context 503, Trench 5*
- a rectangular clear bottle with front and side panels, marked '"HARLENE" FOR THE HAIR'. The word Harlene was trademarked in 1903 by Edwards Harlene Company Limited (Hair Raising Stories 2018). *Context 503, Trench 5*
- two rectangular clear bottles with front and side panels marked 'TABLETALK' on one panel, 'SAUCE' on another and 'LEEDS' on a third. *Context 503, Trench 5*

- an incomplete codd-neck bottle marked ‘J. BECKETT, SHAW LANE, MINERAL WATER WORKS, BARNSLEY’, dated to the late 1800s (Worthpoint 2018). It also displays the same handshake as seen on one of the clay pipes, which is a reputed masonic symbol. *Context 503, Trench 5*
- three square clear, three panelled bottles: one marked ‘FLETCHER’S SAUCE, SHIPLEY’ , one marked ‘FLETCHER’S GRILL SAUCE’ and one marked ‘FLETCHER’S TIGER SAUCE, SELBY’. Fletcher initially produced sauce at the Airedale Works in Shipley. He also had a glass bottle manufacturing plant in Leeds. Fletchers (Shipley) Ltd was registered in 1907 with a share capital of £20,000. The sauce and bottling works were transferred to a model garden factory at Selby near York in 1915 (Letslookagain 2018). *Context 1202, Trench 12*
- a square clear bottle with no panels marked ‘“CAMP” COFFEE & CHICORY, GLASGOW’, dating from 1885 (Brian Edwards 2018). *Context 1202, Trench 12*
- a moulded clear round bottle marked ‘POSIONOUS’ on a fluted panel. Around the neck is labelled ‘NOT TO BE TAKEN’. *Context 1202, Trench 12*
- a rectangular clear bottle with chamfered edges, labelled with ‘VENO’S LIGHTNING COUGH CURE’. *Context 1202, Trench 12*
- a rectangular clear bottle with rounded edges, labelled with ‘KOMPO’ and ‘REGISTERED’ in a lozenge-shaped panel. *Context 1202, Trench 12*
- two medicine bottles (slightly different sizes) are noted, one in green glass and one clear, both labelled ‘TABLE-SPOONS’ with accompanying graduations. *Context 1202, Trench 12*
- a rectangular, rounded clear bottle, labelled ‘G DUTTON & SON’, ‘WHOLESALE DRUGGIST, BOLTON’, ‘CHEST & LUNG MIXTURE OR SYRUP OF LINSEED & LIQOURICE’. *Context 1202, Trench 12*
- a rectangular, rounded clear bottle, labelled ‘FENNINGS’ FEVER CURER’. *Context 1202, Trench 12*
- a rectangular, clear bottle with chamfered corners, labelled ‘“ANZORA” REGD’ for the hair, from the Anzora perfumery company, London (What the Victorians threw away 2018). *Context 1202, Trench 12*
- a square clear sauce bottle with chamfered corners, labelled ‘THE “A1” SAUCE’. *Context 1202, Trench 12*
- a square clear sauce bottle with rounded corners, labelled ‘GARTON’S HP SAUCE’. The original HP recipe was invented and developed in 1899 by Frederick Gibson Garton, a grocer from Nottingham. Garton sold the recipe for the sum of £150 to settle a debt with Edwin Samson Moore, the founder of the Midlands Vinegar

Company, who launched what we know today as HP Sauce (HPsauce 2018). *Context 1202, Trench 12*

Leather shoes

Part of four leather shoes were recovered from the landfill deposits in Trenches 5 and 12. This footwear does not contradict the dates provided by the glass bottles and pottery. These are listed below.

- small ladies leather boot, mid-calf. Opposing rows of fifteen copper-alloy buttons. Decorative toe. *Context 503, Trench 5*
- ladies size 4 Oxford lace-up shoe with a small heel. *Context 1202, Trench 12*
- child-size Oxford lace-up shoe with a flat heel. *Context 1202, Trench 12*
- man-size lace-up boot with a flat heel. Metal protectors for the leather sole present. *Context 1202, Trench 12*

Given the relatively modern date for the finds from the landfill deposits, these are recommended for discard. It is proposed that the clay pipes are retained.

Flint by Jason Dodds

Four flint objects are catalogued below. These are likely to be intrusive in later deposits but should be retained as part of the site archive.

- Secondary flint flake. Edge damage. East Yorkshire Wolds origin. *Unstratified*
- Flint dihedral burin, generally used for engraving - a point is created at the tip. Possible Lincolnshire origin. Mesolithic. *Ditch 322, Fill 323, Trench 3*
- Bulb of percussion. East Yorkshire Wolds origin. *Ditch 802, Fill 804, Trench 8*
- Two retouched blades made from the same flint (may be the same tool). Probably a Neolithic/Bronze Age knife. East Yorkshire Wolds origin. *Ditch 1007, Fill 1011, Trench 10*

7 Environmental Record

Carbonised plant macrofossils and charcoal by Diane Alldritt

A total of 46 environmental sample flots were taken during the evaluation and were examined for carbonised plant macrofossils and charcoal. No carbonised remains were present in the retents. The environmental samples were processed by Archaeological Services WYAS using a Siraf-style water flotation system (French 1971). The flots were dried before examination under a low power binocular microscope typically at x10 magnification. The samples varied from 5 to 40 litres in volume. Identified plant remains including charcoal were removed and

bagged separately by type. Wood charcoal was examined using a high powered Vickers M10 metallurgical microscope at magnifications up to x200. The reference photographs of Schweingruber (1990) were consulted for charcoal identification. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

The presence of carbonised remains within the environmental samples is extremely scarce at <2.5ml up to 5ml of trace charred detritus found and with a number of sterile samples also encountered (Appendix 6). Five of the samples produced small concentrations of carbonised material, mostly charcoal fragments and cereal grain, in amounts 5ml to 25ml. Large quantities of clinker and coal are present in some of the samples, in particular from kiln 1004, suggesting probable post-medieval activity or industrial processes using high levels of heat. Modern material was found throughout the samples in amounts from <2.5ml up to 25ml, and mostly consists of modern seeds, straw fragments and occasional earthworm egg capsules, indicating potential for bioturbation and plough disturbance.

A single sample from Ditch 106 (fill 107) is sterile of carbonised remains. Five samples were taken from Trench 2 with all proving sterile of carbonised remains. Ditch 210 (fill 204) produced a small amount of clinker. Ditches 203 (fill 218), 206 (fill 207), 208 (fill 209) and 210 (fill 205) are sterile of carbonised material and contain modern material and coal.

Eighteen samples were examined from ditches and gullies in Trench 3 with seventeen of these proving sterile of carbonised remains. Gully terminus 315 (fill 317) was unique amongst the samples in producing a small assemblage of carbonised cereal grain, probably a mixed deposit of cereal drying waste. The grain consists mostly of *Triticum aestivum* (spelt wheat) along with a small amount of *Avena* sp. (oat) and *Hordeum vulgare* sl. (barley), whilst a few specimens of *Bromus* sp. (bromes) are also present, perhaps a weed of the cereal crop or itself a cultivar. The grain shows some slight degradation but is generally fairly good, suggesting it had not been moved far from the source of burning. These remains are probably from Iron Age or Romano-British period agricultural activity in the vicinity. Ditch terminus 305 (fill 306) was sterile of carbonised material but did produce a very large amount of clinker, possibly a post-medieval industrial waste deposit. Similarly gully 303 (fill 304) also contained a quantity of clinker in amongst modern straw and seed detritus.

Ditch 802 (fill 803) produced a small discrete concentration of crushed charcoal with a single sliver of 5mm *Betula* (birch) identifiable. This was probably a trace inclusion from burning activity occurring nearby.

A single sample from Ditch 903 (fill 904) produced no carbonised remains but did contain a few fragments of clinker and modern straw suggesting post-medieval or modern intrusion and mixing.

Six samples were examined from Trench 10 with four found to be sterile of carbonised remains.

Four samples from kiln 1004 were found to contain high concentrations of clinker and coal from fills 1005 and 1006. The clinker in fill 1005 was present in large fragments 20mm to 30mm in size with some fragments resembling oak, although not accurately identifiable, whilst the majority of it is probably originally coal derived fuel material. The kiln is probably post-medieval with an industrial purpose given the nature of the content or at least involved in processes requiring very high levels of heat.

Ditch 1007 (fill 1008) produced a fairly large concentration of *Quercus* (oak) charcoal with a small amount of *Betula* (birch) charcoal also present. This is probably a discrete deposit of fuel waste. Clinker is also present in this sample.

Eight samples from Trench 11 were all found to be sterile apart from sample 12 (ditch 1132, fill 1133) which contained a small deposit of highly crushed charcoal which was possibly oak type but too small to identify accurately. It also contained clinker and modern straw so there was probably representing later intrusion.

Four samples were examined from Trench 15, with two proving sterile and two producing small quantities of charcoal. Pit 1503 (fill 1504) contained a few crushed slivers of *Quercus* (oak), whilst gully 1505 (fill 1506) also produced crushed detritus with nothing identifiable. This is possibly wind-blown or trampled material from burning activity occurring nearby. Samples taken from pit 1507 (fill 1508) and gully 1509 (fill 1510) are sterile.

The environmental samples overall were largely found to be sterile with only a few discrete deposits of burnt remains encountered, but many features contained clinker and coal probably originating from post-medieval industrial activity in the area which had subsequently become mixed through the deposits by ploughing and general bioturbation. Kiln 1004 contained large amounts of clinker and coal and probably had an industrial purpose. This feature was possibly the origin for some of the clinker spread across the rest of the site.

Cereal grain was present in one feature only, gully terminus 315 (fill 317) and consists of a mixed deposit of spelt wheat, barley and oat grains, probably waste from a number of cereal drying events perhaps using a corn drier or hearth. These remains are probably Iron Age or Romano-British in date and suggest agricultural activity occurring in the vicinity.

Further work at the site has a fairly low potential to produce any significant quantities of carbonised material except perhaps in the area around Trench 3 where the cereal grain was recovered.

Animal bone by Jane Richardson

Animal bones were recovered exclusively from kiln 1004 (across fills 1005 and 1006). They include numerous fragments representing a horse skull and mandibles, atlas, and axis. The loose teeth present (upper and lower cheek teeth) are extremely well worn, with one tooth worn to a peg, indicating an aged animal at death. Vertebrae and a fragment of horse pelvis are also present and it is likely that a single animal is represented. No further analysis of this assemblage is recommended but it should be retained as part of the site archive.

8 Discussion and Conclusions

Feature visibility and preservation

Generally the features investigated correspond well with the geophysical survey anomalies and crop mark data, although some of the features identified, such as those in Trench 3, indicated that the enclosures are likely to contain internal archaeological remains not detected by the geophysical survey. Several trenches that were targeted upon anomalies failed to identify any archaeological remains, instead identifying modern agricultural land drains or ploughing activity. This was most clearly seen in in Trenches 4, 5, 14 and 16.

Where both crop marks and geophysical survey data concur, archaeological features were exposed. The contrast between archaeological features and plough furrows was clear in all trenches.

The geophysical survey, did identify possible kiln like structures and this was confirmed by the presence of a kiln in Trench 10. Large areas of disturbance were also identified towards the north of the site. The trenching confirmed that these were large areas of landfill deposits from the later 19th and 20th centuries.

The features, although truncated by modern ploughing in some areas, were generally well preserved. None of the features investigated had any indication of having been waterlogged. As such any change in the hydrological and environmental conditions by the proposed development is unlikely to impact significantly upon the archaeological remains.

Dating and phasing

The residual flint finds from across the site add to the evidence of prehistoric activity in the area, although the features excavated as part of the evaluation are unlikely to be of an early prehistoric date.

The pottery recovered from the evaluation conforms to the previous identification of a Romano-British enclosure and field system. The pottery all has a form that suggest it locally produced and dates to the mid to late 2nd century AD.

A number of the sherds are overfired with oxidised surfaces, consistent with probable waste material. Either wasters from the kilns were traded to this site or wasters came from local pottery production. Although the geophysical survey identified kilns, the excavated example in Trench 10 is probably post-medieval in origin with an industrial purpose given the nature of the content. At this stage the purpose of the other possible kilns on site and their use for pottery production cannot be ruled out.

Much of the later activity on site relates to the landfill deposits along the northern side of the proposed development area. The unusual nature of the assemblage suggests that it derived from a public house perhaps following demolition or clearance sometime in the early to mid-20th century.

Environmental evidence

The environmental samples overall were largely found to be sterile with only a few discrete deposits of burnt remains encountered. The majority of the features contained clinker and coal probably originating from post-medieval industrial activity in the area. This is most clearly seen in the kiln excavated in Trench 10.

Cereal grain was present in one feature in Trench 3. This gully terminus 315 (fill 317) contained a mixed deposit of spelt wheat, barley and oat grains, probably waste from a number of cereal drying events perhaps using a corn drier or hearth. These deposits are also focused within the most archaeologically busy part of the site.

Conclusions

The archaeological excavations have helped to clarify the results of the geophysical survey and have also helped define the areas that contain archaeological deposits. The archaeological excavation has demonstrated that many of the geophysical survey anomalies are archaeological and the area of disturbance towards the north of the site is a result of 20th-century landfill.

The majority of archaeological features and deposits investigated appear to be Romano-British in date and conform to known patterns of brickwork field systems and enclosures that exist in this part of the region. The pottery recovered from the evaluation, is a significant assemblage, given the limited quantity of pottery recovered from other brickwork enclosures in this area and it has the potential to add to the growing picture of Romano-British activity in this area, as well as the pottery kilns at Rossington Bridge and the wider Doncaster area.

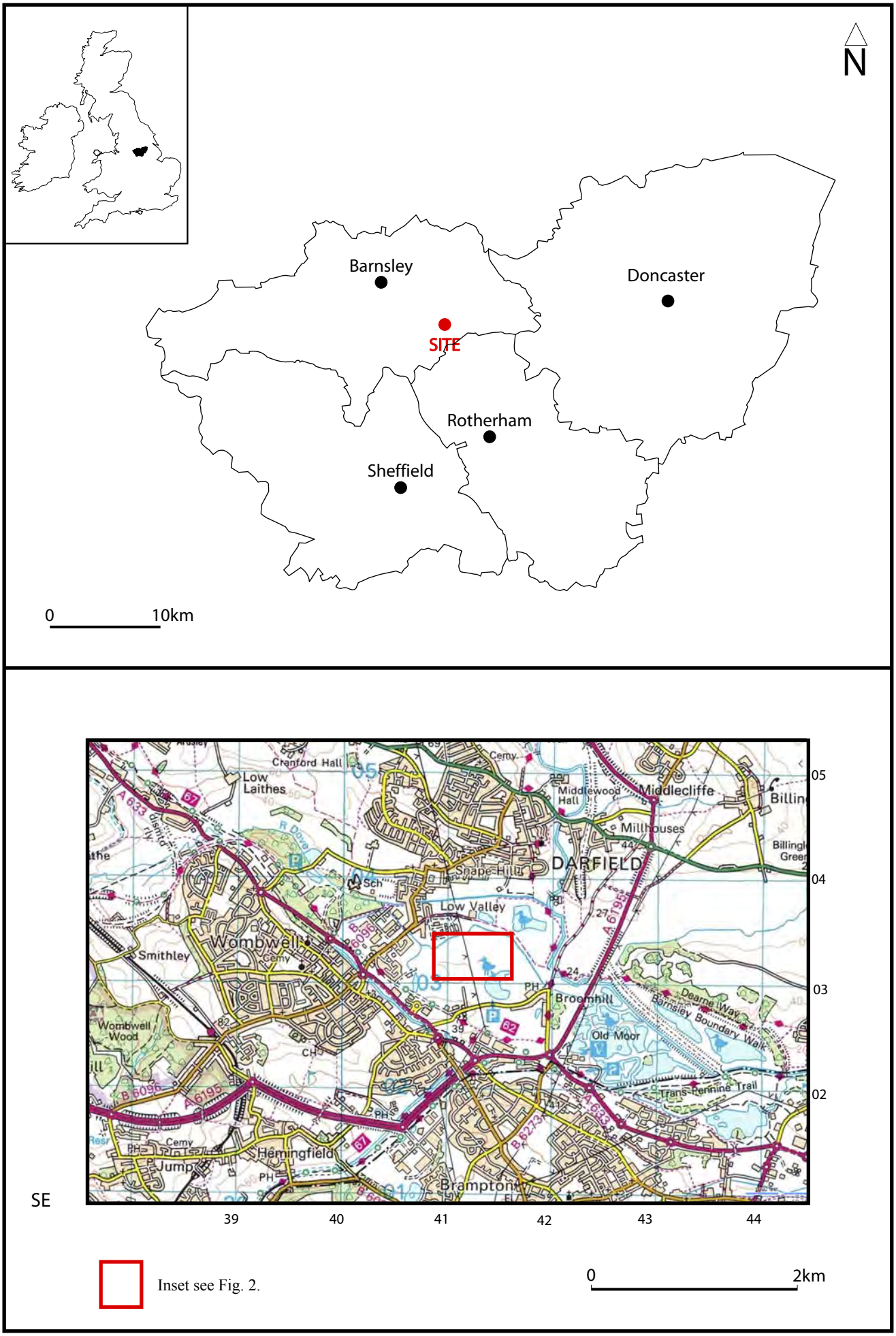


Fig. 1. Site location

SITE BOUNDARY
GEOPHYSICAL ANOMALY
TRIAL TRENCH LOCATION
ARCHAEOLOGICAL FEATURE
PLOUGH FURROW

Wombwell Ings

N

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

403400

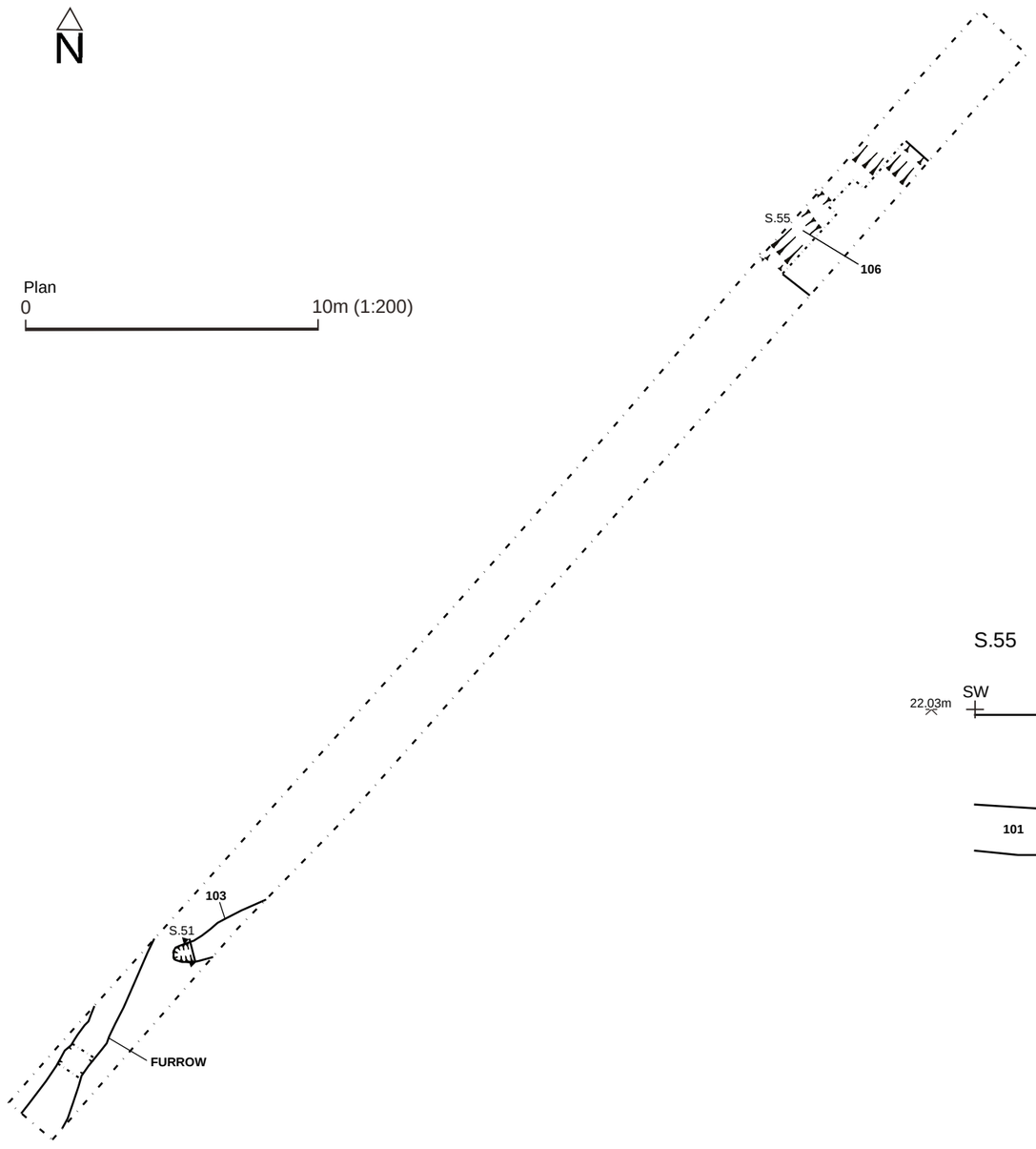
403200

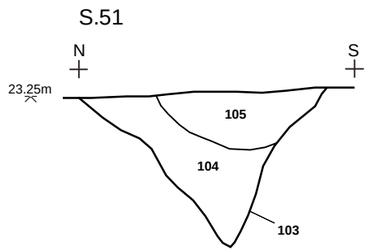
412200 414200 416200

Archaeological Services W Y A S
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 0163

0 100m

Fig. 2. Sit plan showing trench locations, geophysical survey results and locations of archaeological features (1:2000 @ A3)





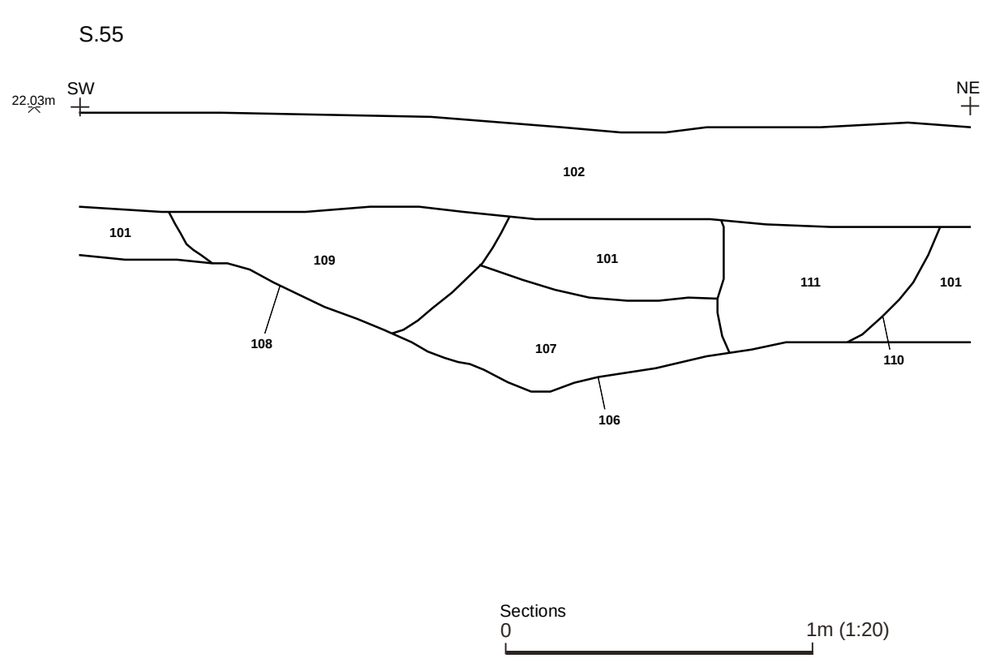


Fig. 3. Trench 1 plan and sections

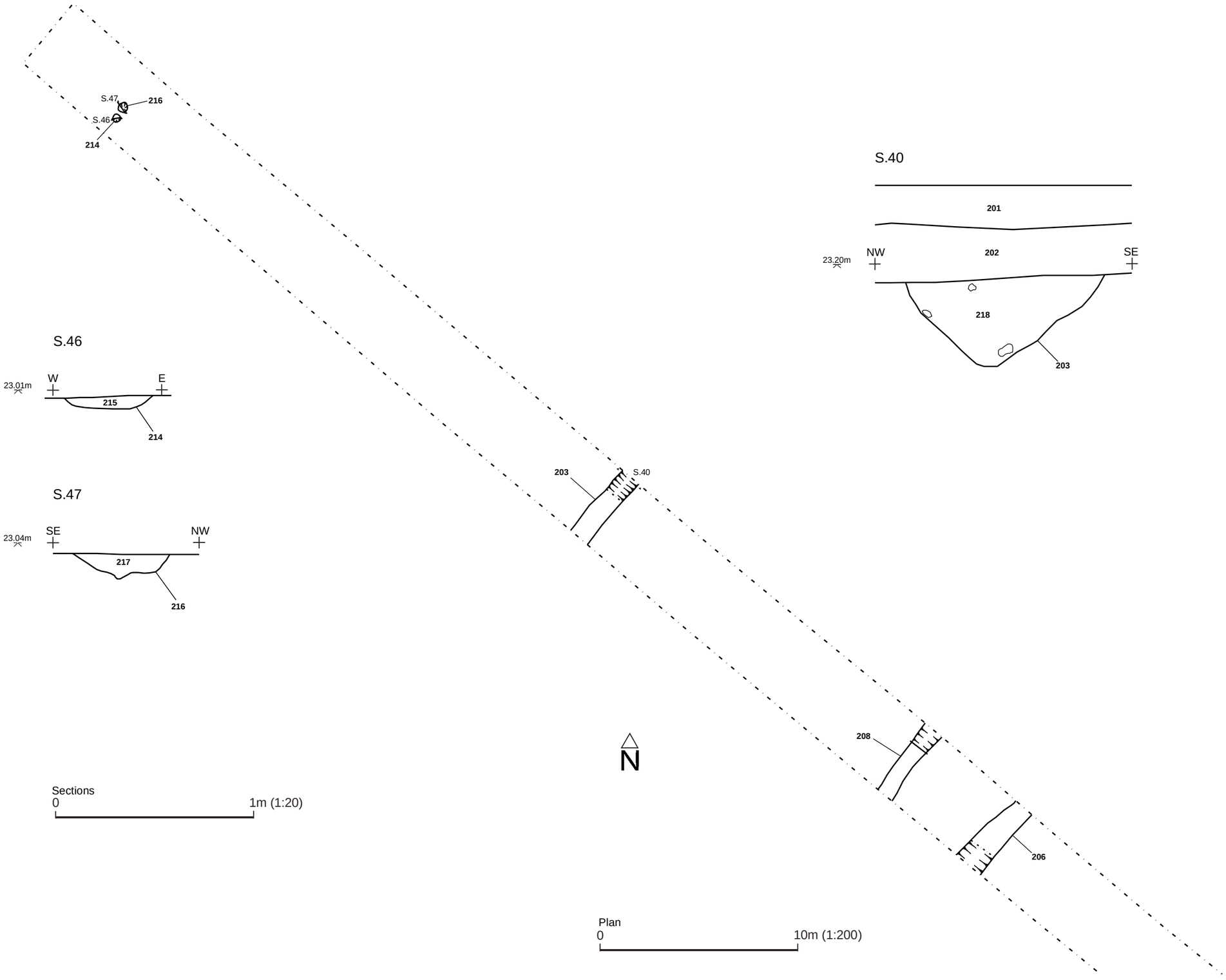


Fig. 4. Trench 2, NW end plan and sections

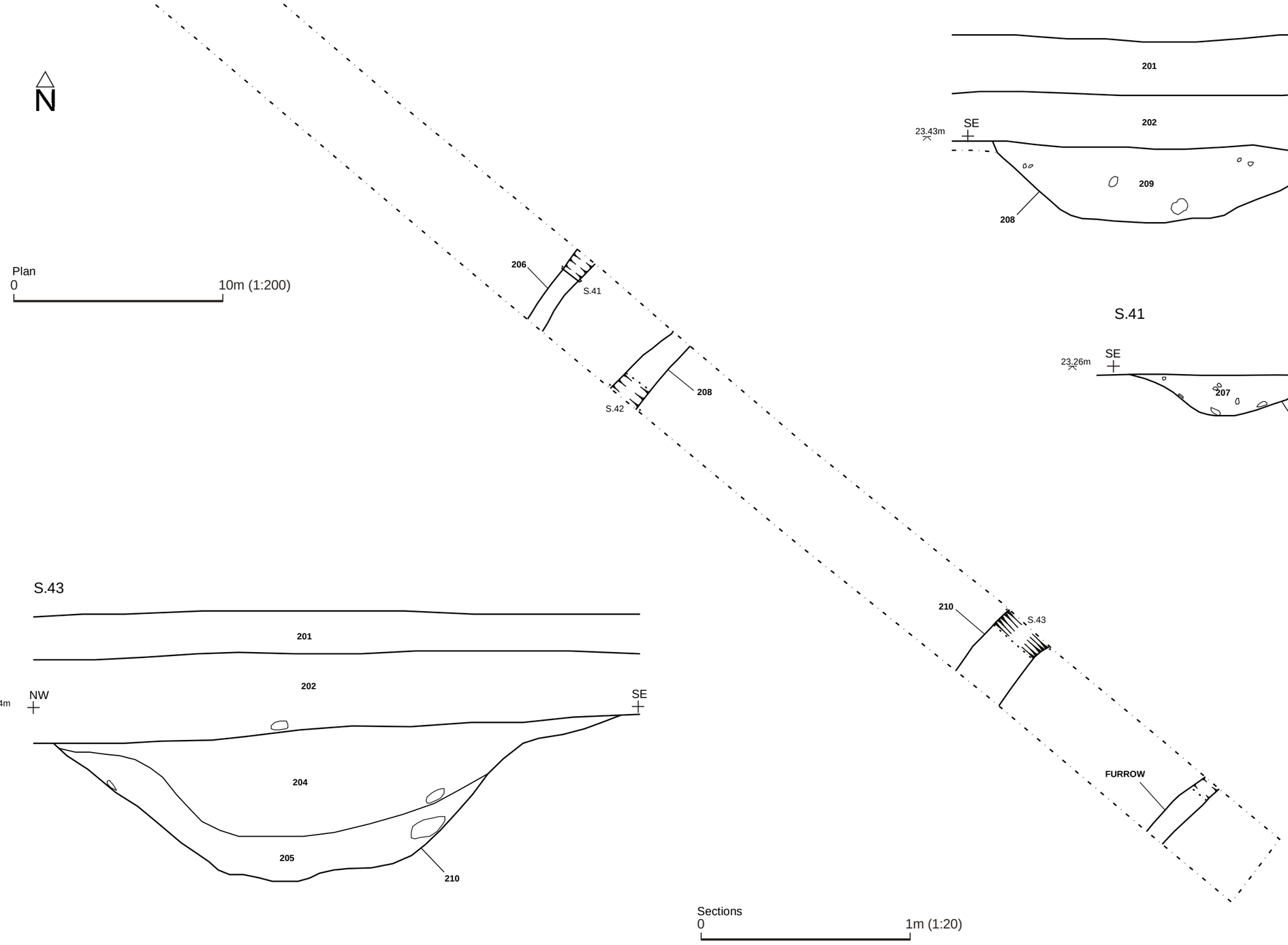
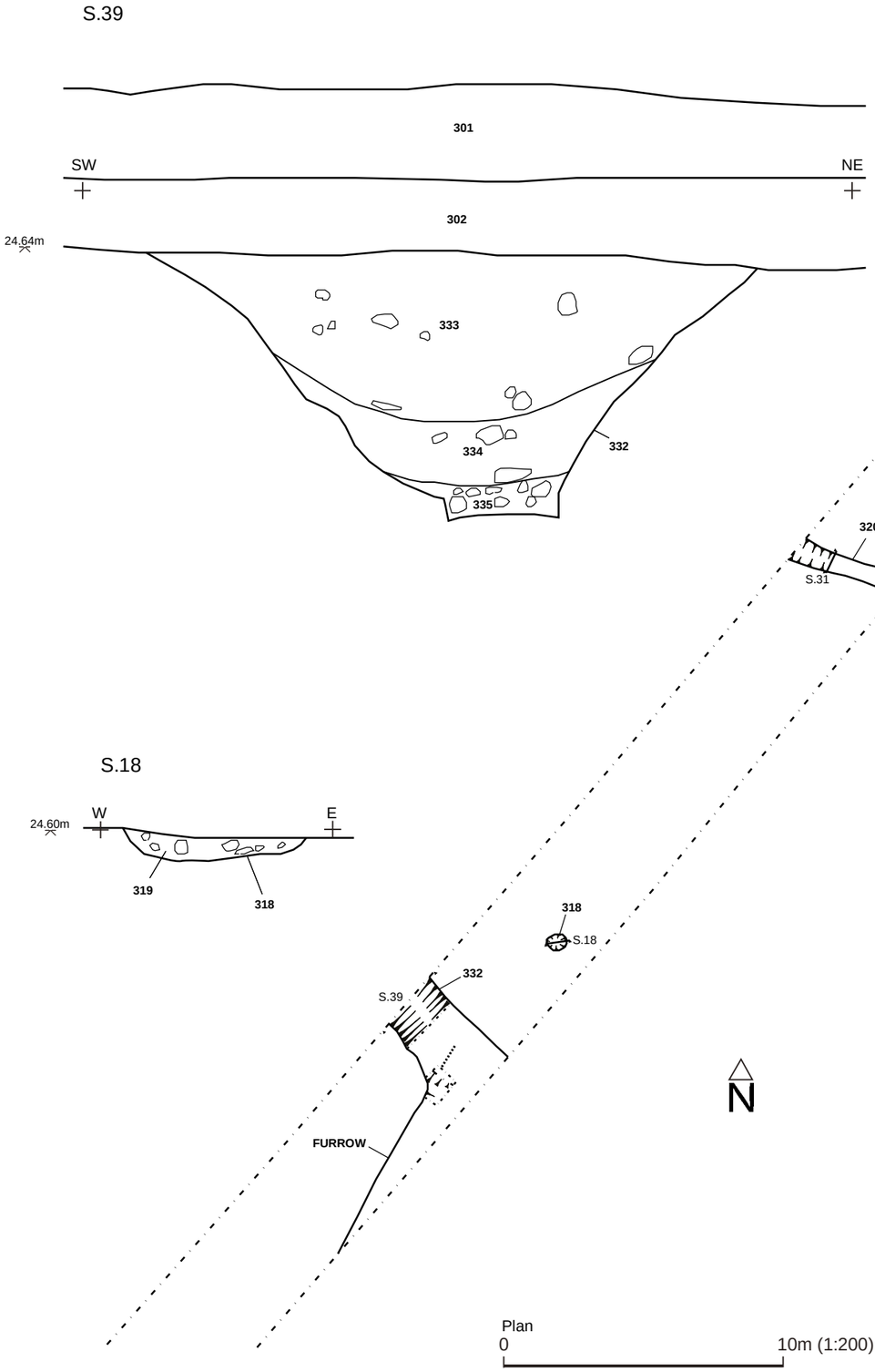
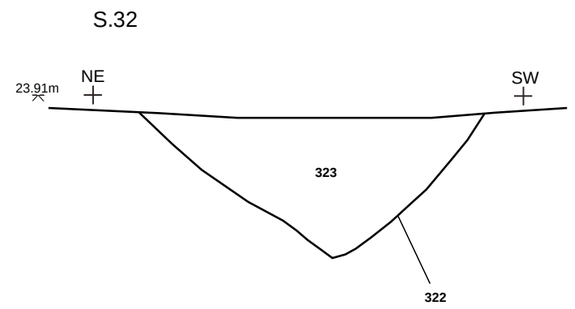
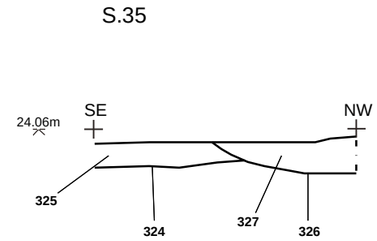
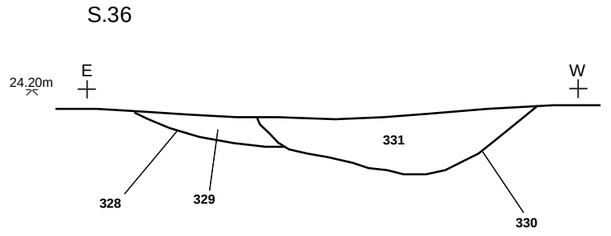


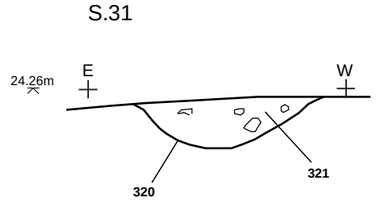
Fig. 5. Trench 2, SE end plan and sections











Sections
0
1m (1:20)

Fig. 6. Trench 3, NE end plan and sections

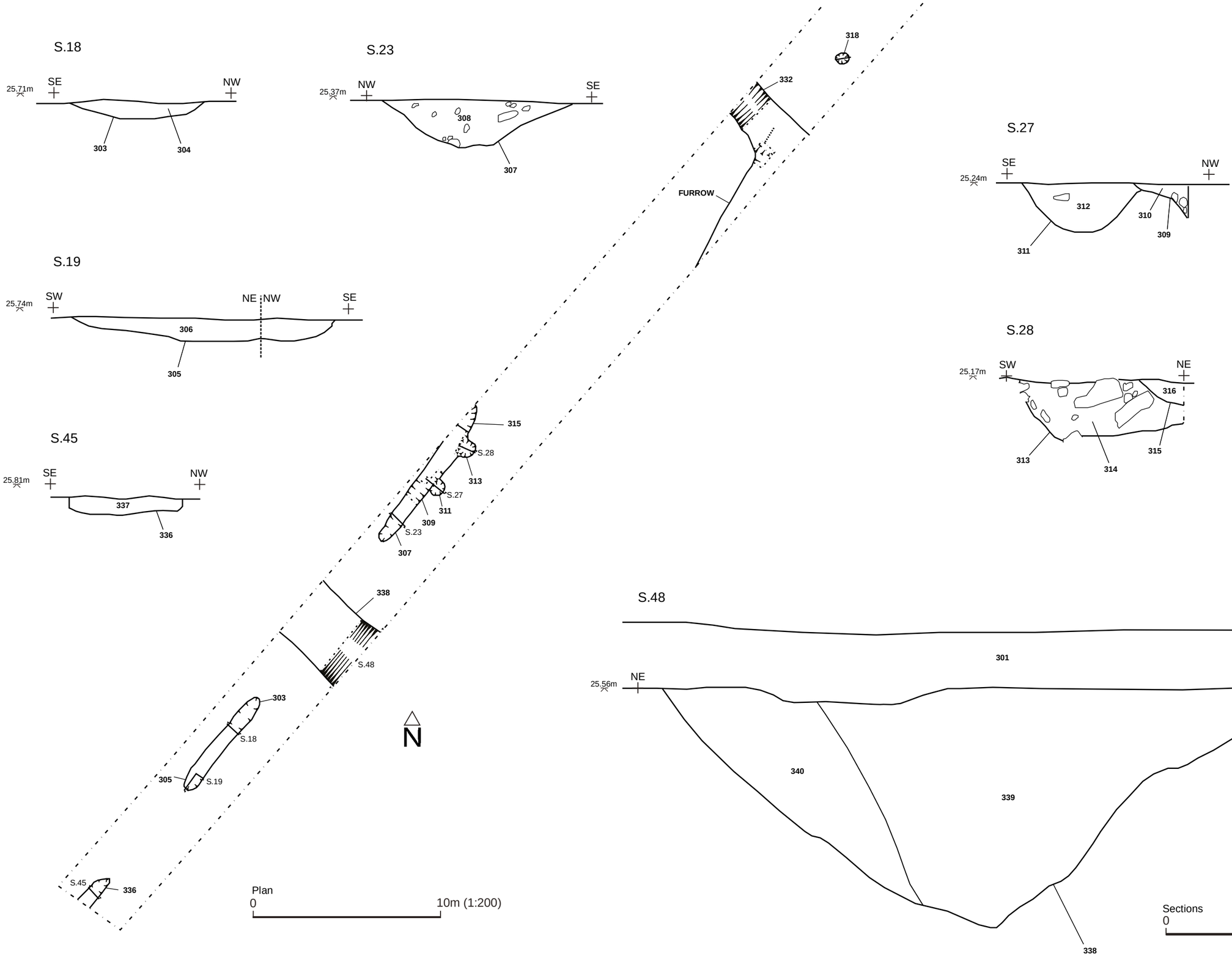


Fig. 7. Trench 3, SW end plan and sections

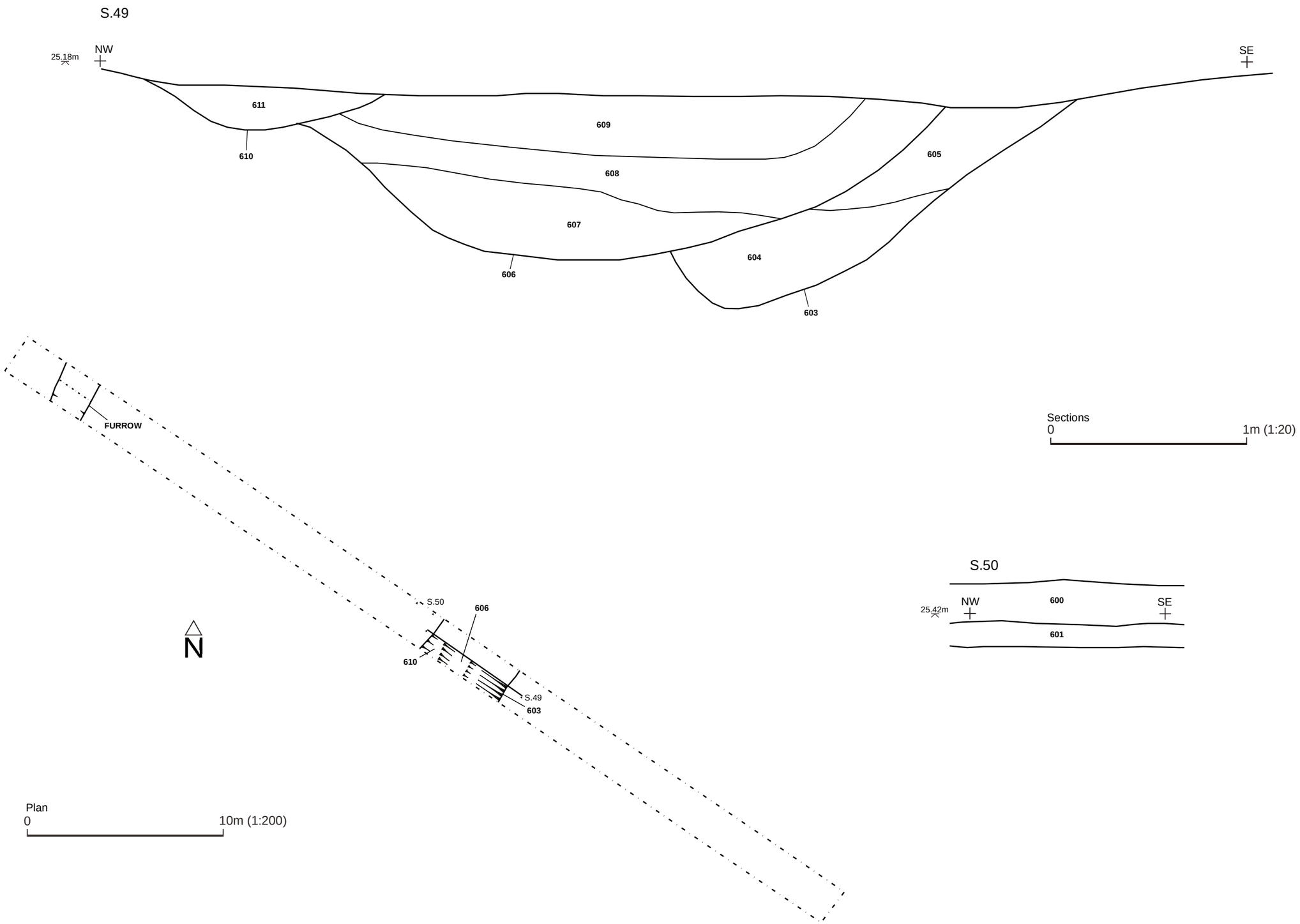


Fig. 8. Trench 6 plan and sections

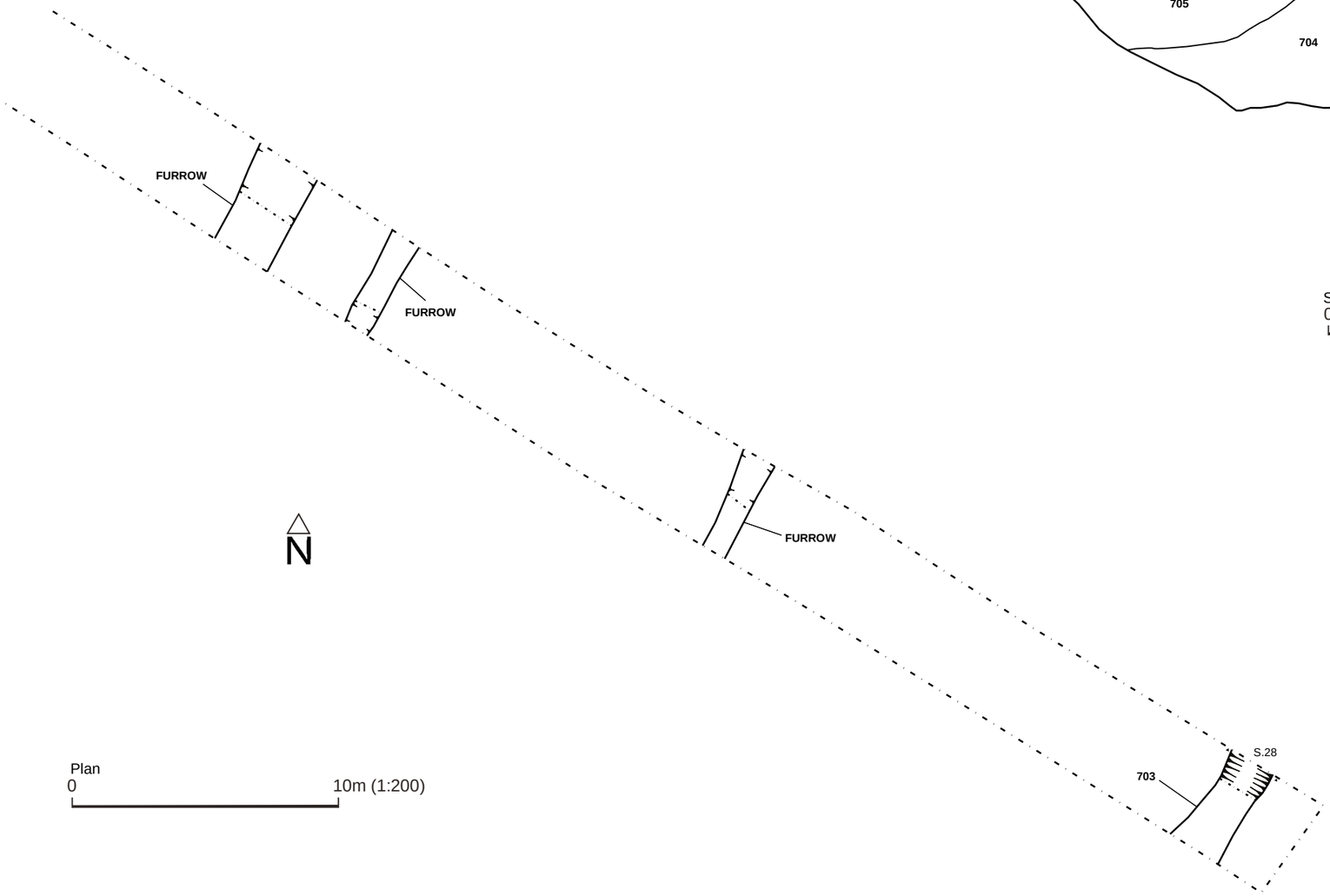
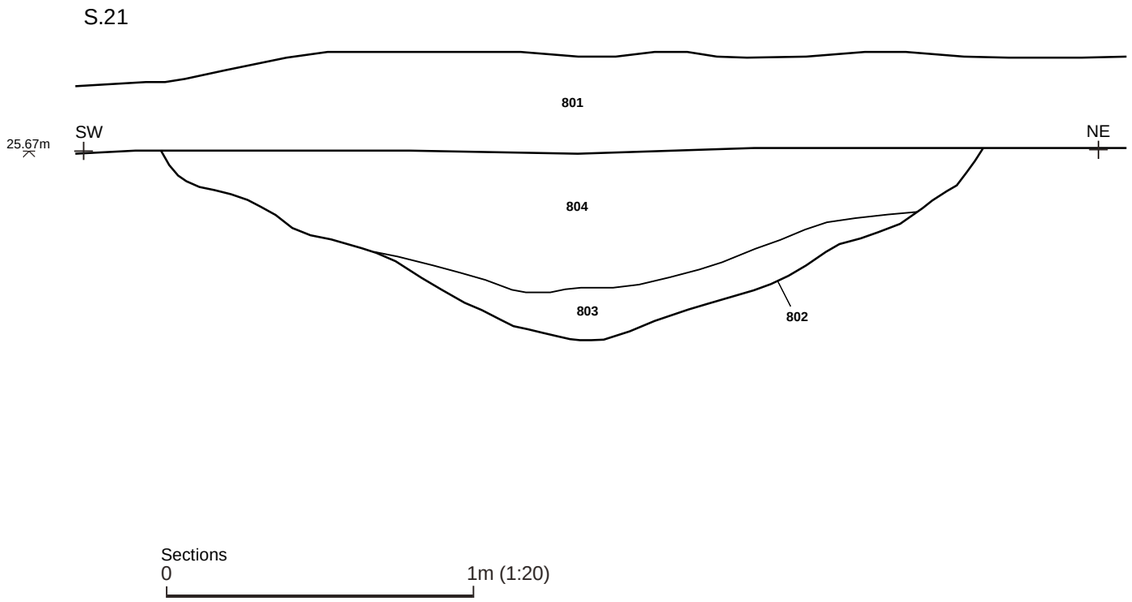


Fig. 9. Trench 7 plan and section



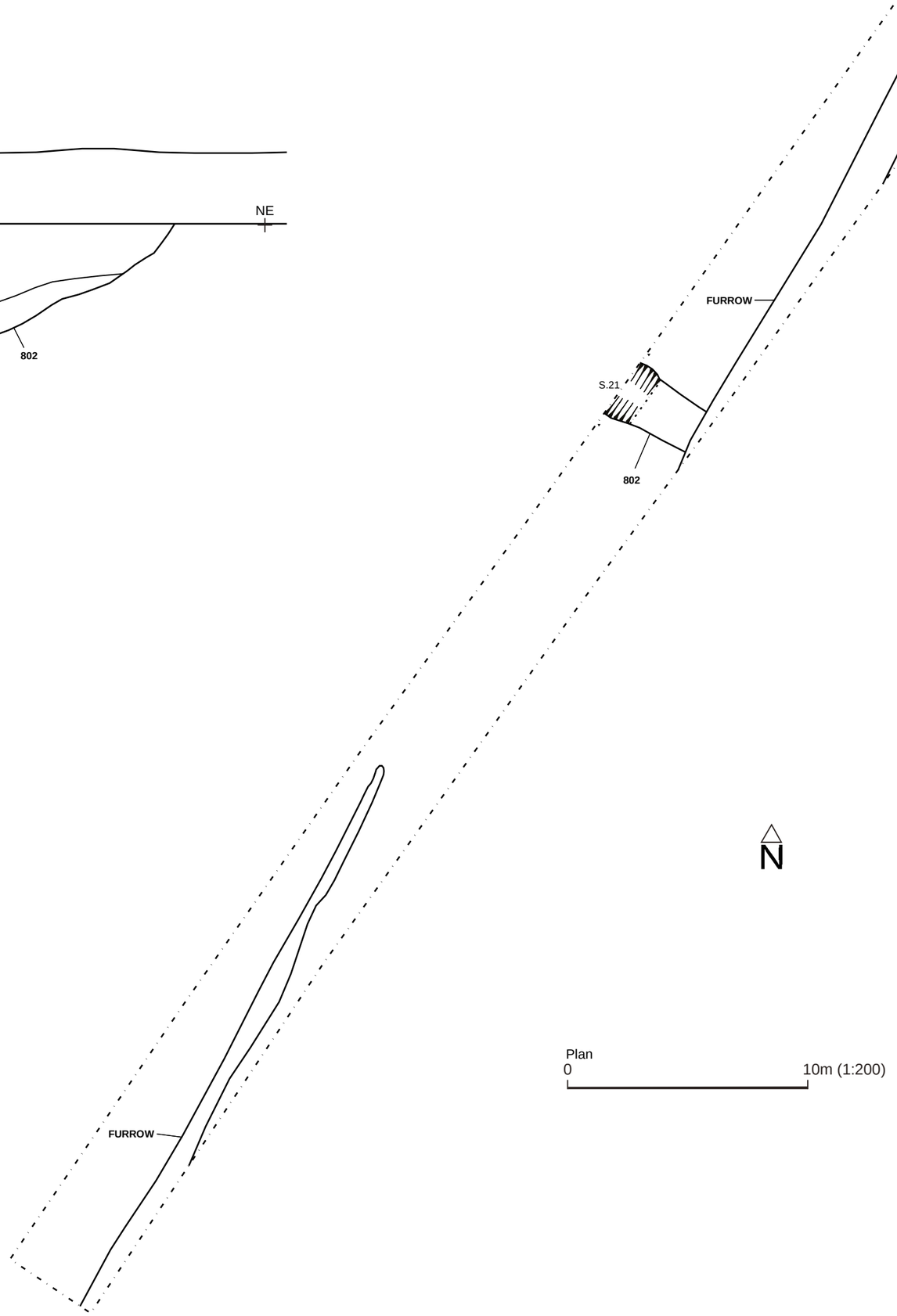


Fig. 10. Trench 8 plan and section

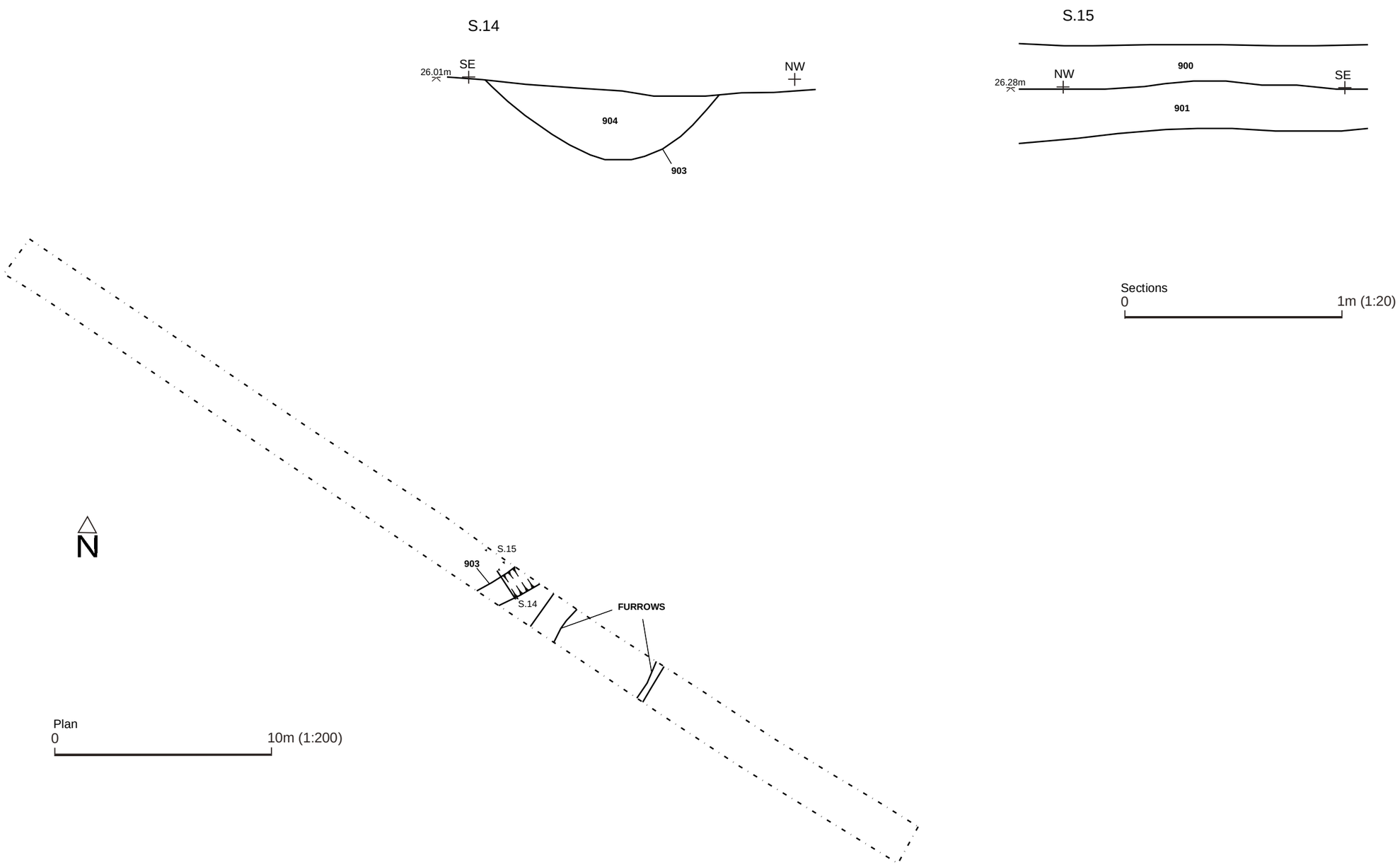


Fig. 11. Trench 9 plan and sections

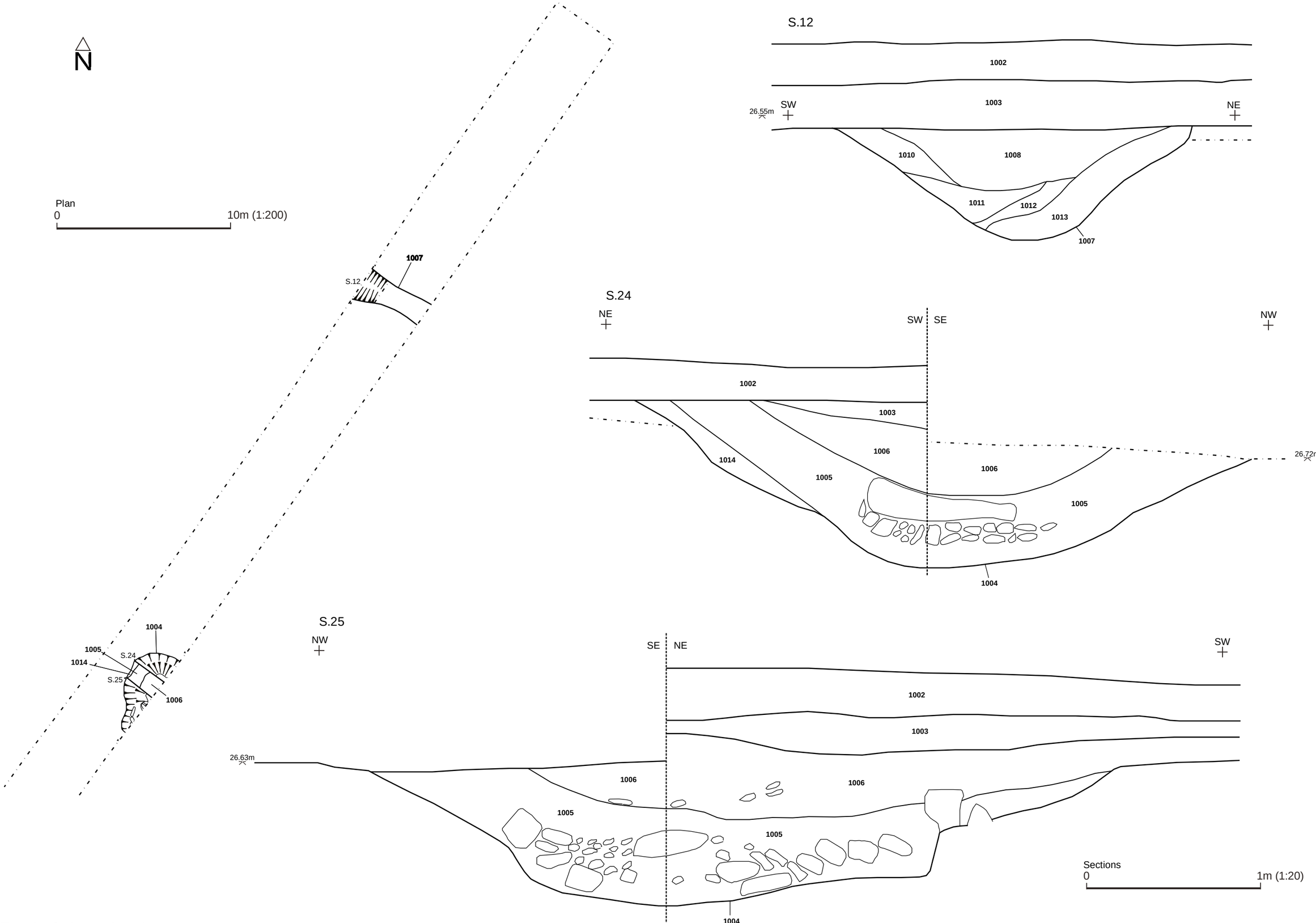


Fig. 12. Trench 10 plan and sections

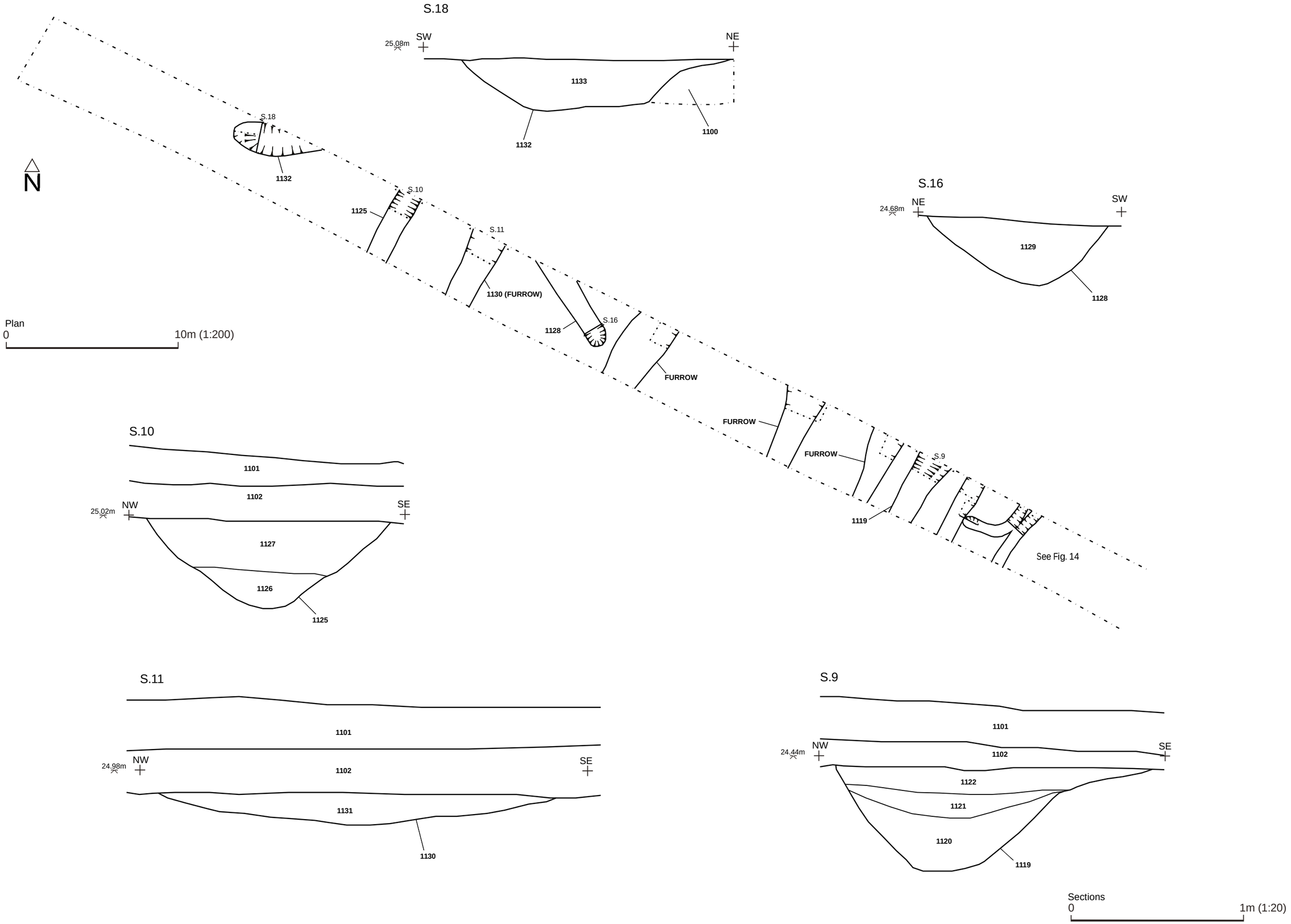


Fig. 13. Trench 11, NW end plan and sections

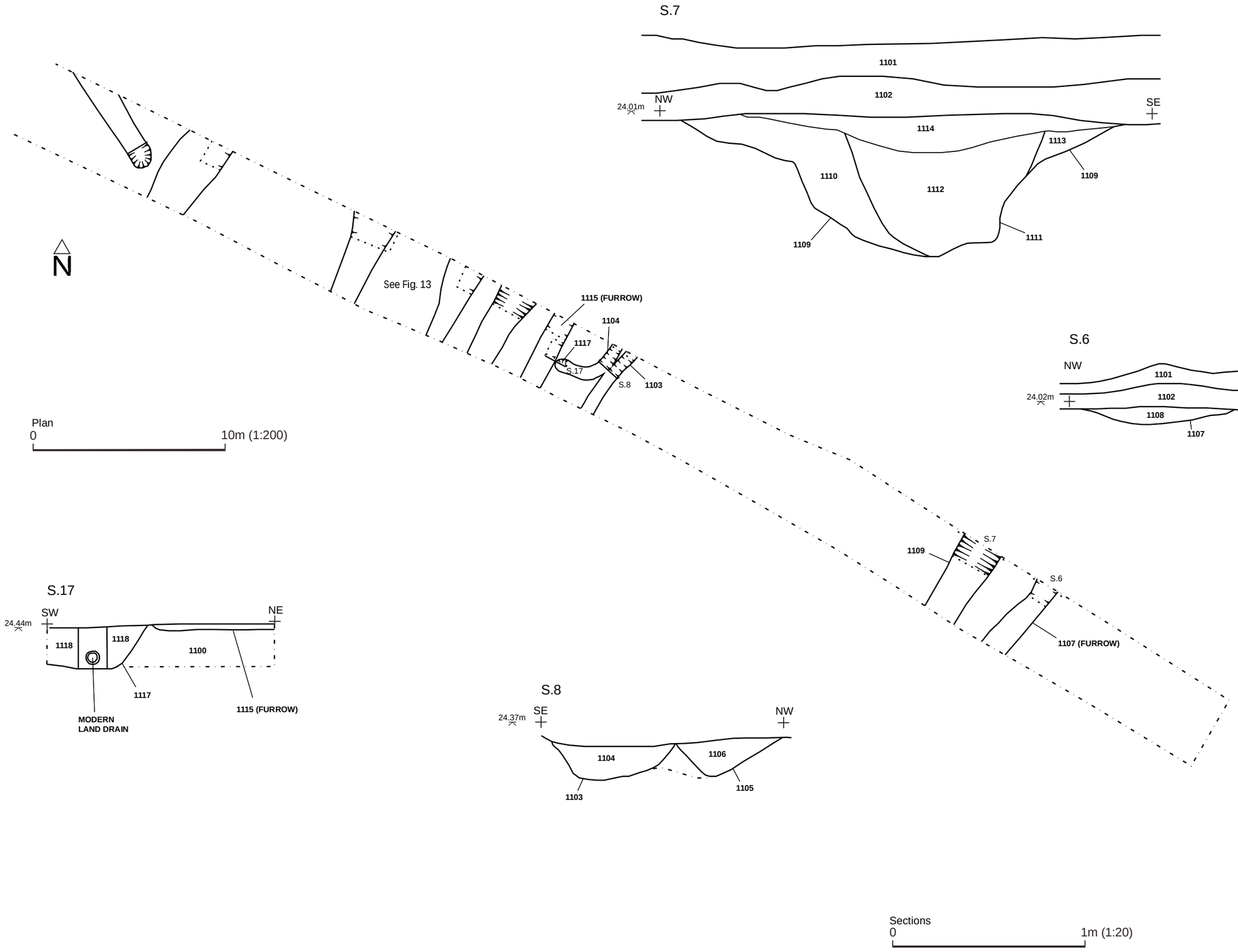
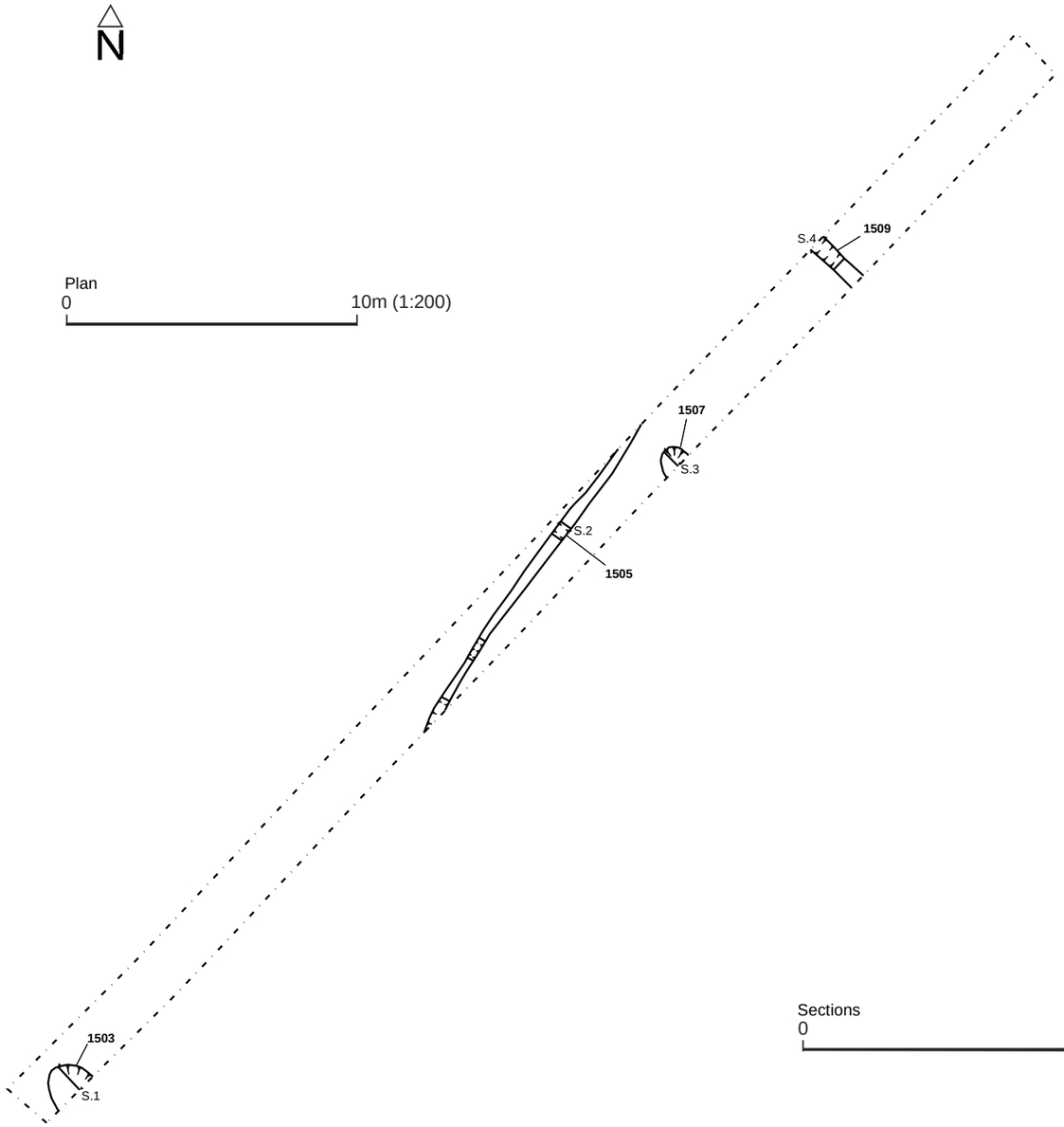
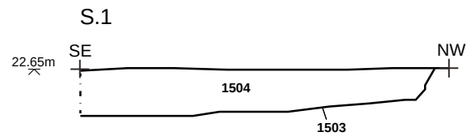
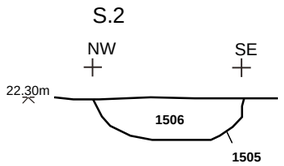
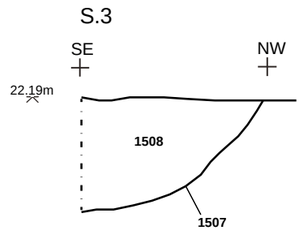


Fig. 14. Trench 11, SE end plan and sections









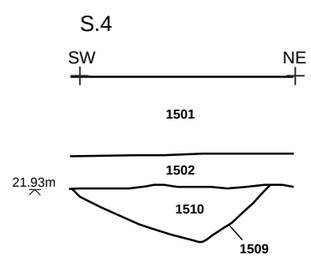


Fig. 15. Trench 15 plan and sections

Plate 1. Trench 1, looking south-west

Plate 2. Trench 2, ditch 210, looking north-east

Plate 3. Trench 3, pit 313, looking north-west

Plate 4. Trench 3, ditch 322, looking north-west

Plate 5. Trench 5, landfill deposit 503, looking south-west

Plate 6. Trench 6, ditches 603 and 606 and furrow 610, looking east

Plate 7. Trench 9, ditch 903, looking south-west

Plate 8. Trench 9, looking north-west

Plate 9. Trench 10, kiln 1004, looking south

Plate 10. Trench 11, furrow 1130, looking south-west

Plate 11. Trench 13, looking north-west

Plate 12. Trench 15, lookng north-east

Appendix 1: Written scheme of Investigation

FAS HERITAGE

WOMBWELL – ARCHAEOLOGICAL EVALUATION

WRITTEN SCHEME OF INVESTIGATION

1.0 INTRODUCTION

This document presents a Written Scheme of Investigation (WSI) for an archaeological evaluation to be undertaken to support a planning application for proposed wetland creation at Wombwell, South Yorkshire. The WSI has been prepared by FAS Heritage on behalf of the Garganey Trust, following discussions with Andy Lines, South Yorkshire Archaeology Service (SYAS).

1.1 LOCATION AND LAND USE

The main part of the proposed site lies to the east of Wombwell, occupying a large arable field bounded by Bulling Dike to the north. Land rises to the south, and a sewage works occupies land to the northwest (NGR: SE 414 033)(Plate 1; Figure 1). A second parcel of land to the north, to the south of Doveside, also forms part of the proposed scheme.

1.1.1 Proposed scheme

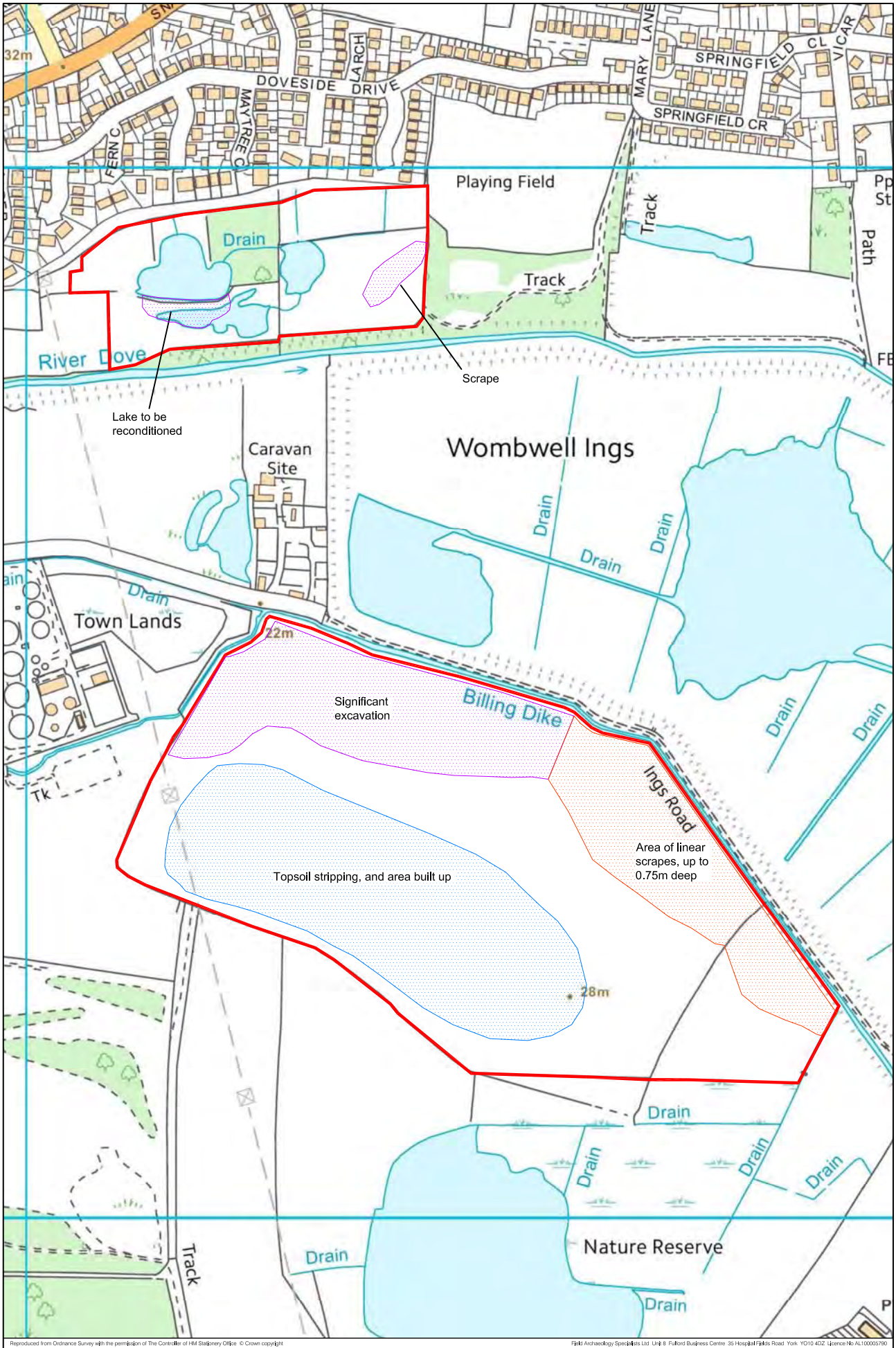
The proposed wetland creation would see a large amorphous cut excavated in the northern part of the Wombwell site to form a large body of water; to the northeast a series of scrapes would create a wetland habitat. The resulting material would be deposited to form a raised mound on the southern part of the site. At the Doveside site, an existing lake would be reconditioned, and a scrape created at the eastern part of the site (see Figure 1).

1.2 AIMS AND OBJECTIVES

The overarching aim of the archaeological evaluation is to advance understanding of the significance of archaeological remains at the site, to inform an assessment of the potential impact of the proposed work, in line with cultural heritage policies set out in NPPF (DCLG 2012).

The objectives of the evaluation are set out below:

- to gather sufficient information to established the presence/absence, character, extent, state of preservation and date of archaeological deposits at the site, in terms of horizontal and vertical extent;
- to assess the significance of any remains present;
- to assess the preservation of archaeological remains across the site, and the contribution that their state of preservation makes to significance;
- to assess the impact of the proposed scheme on archaeological deposits across the site, in terms of direct impact, and also the changing hydrological and environmental conditions that would result from the scheme;
- to inform the design of an appropriate mitigation strategy, by design or record.



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Location of proposed works	Scale 1:5000	Figure 1

1.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A desk-based assessment for the site identified the potential for archaeological remains across the site (FAS 2017), and the site was the subject of a subsequent magnetometry survey (Magnitude 2017). Within the site boundary, cropmarks of potential Iron Age to Romano-British date were identified from aerial photographs and plotted onto Ordnance Survey mapping; these were further defined by the geophysical survey, which also identified probable kilns or other fired features (Magnitude 2017).

The following reports are available to consult for further detail:

- FAS 2017. Wombwell Ings: Heritage Assessment
- Magnitude Surveys 2017. Geophysical Survey Report: Wombwell Wetlands Scheme

No further known heritage assets were recorded at the site, and historic maps indicate that the site has been open and agricultural in character since at least the mid-19th century. The geophysical survey identified some anomalies which appear consistent with 19th-century field boundaries.

2.0 METHODOLOGY

2.1 GENERAL STANDARDS

The archaeological contractor will comply with the Code of Conduct of the Chartered Institute for Archaeologists (CIfA). The evaluation will be carried out in accordance with the following:

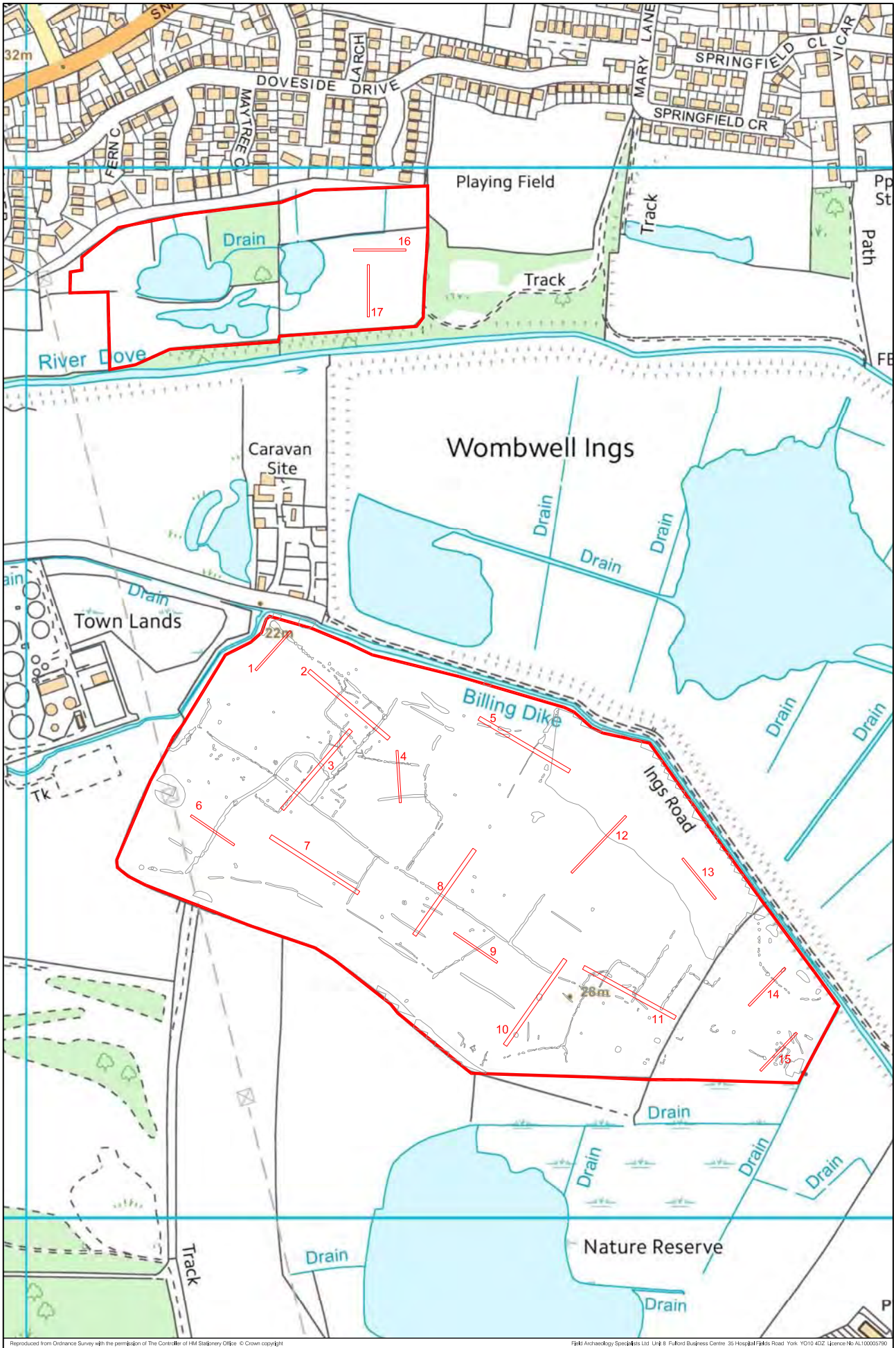
- CIfA, Standard and Guidance for Archaeological Field Evaluation, 2014
- Yorkshire, The Humber and the North-East: A Regional Statement of Good Practice for Archaeology in the Development Process, 2009
- Historic England. Preserving archaeological remains: decision-taking for sites under development, 2016

2.2 EVALUATION STRATEGY

The aim of the archaeological evaluation is to assess the presence, preservation, character and depth of deposits across the site, so that the impact of the scheme – excavation, deposition of material, changes to water levels – can be assessed in full. A series of trenches have been designed totalling 2% of the site, positioned to investigate areas of archaeological deposits, and also to define the deposit model in areas where the geophysical survey produced negative results.

Figure 2 shows the proposed location of trenches in the main area of proposed works. The trenches measure either 100mx4m (Interventions 2, 3, 5, 7, 8, 10, 11), 75mx2m (Intervention 12), or 50mx2m (Interventions 1, 4, 6, 9, 13, 14, 15, 16 and 17).

Interventions 1 to 5 are intended to enhance understanding of the significance of archaeological deposits that would be totally removed by the proposed excavations. These have been targeted on known archaeological anomalies, and extend into the enclosed areas.



Proposed trench locations (with geophsyical survey results) | Scale 1:5000 | Figure 2

Intervention 3, 6 to 11 are intended to assess the significance of remains that will not necessarily be removed fully but which would be the subject of topsoil stripping followed by the deposition of large quantities of excavated material over to raise ground levels.

Interventions 12 and 13 are designed to assess archaeological remains (if present) in an area where the geophysical survey produced no results, while Intervention 14 and 15 are intended to assess geophysical anomalies in the southeastern end of the site. There would be linear scrapes up to 0.75m deep across this area, and so the character of the upper 1m in particular is to be assessed.

Doveside

Interventions 16 and 17 are situated at Doveside, to evaluate archaeological deposits within the area of the proposed scrape. *These trenches may not be required, subject to confirmation of the proposed scheme and should be costed as an additional item.*

2.3 EXCAVATION METHODOLOGY

All trenches will be excavated using a mechanical excavator fitted with a **wide toothless ditching bucket**, under continuous archaeological supervision. Topsoil and overburden will be removed in spits until the latest archaeological horizon is encountered, at which point excavation will proceed by hand. Under no circumstances will the machine be used to cut arbitrary trenches down to natural deposits.

It is possible that archaeological remains are sealed by depths of alluvium in parts of the site (see FAS 2017; Magnitude 2017), and that trenches may need to be stepped in to facilitate safe working.

All faces of the trench that require examination or recording will be cleaned sufficiently to establish the presence or absence of archaeological remains. Spoil will be stockpiled a minimum of 1m from the edges of each trench.

The top of the first significant archaeological horizon or the natural subsoil will be cleaned sufficiently to allow for its inspection for features. All subsequent deposits will be excavated by hand, and will be investigated sufficiently to establish their nature, extent and date, unless remains are deemed of sufficient importance to require total preservation *in situ.*

2.3.1 Sampling strategy

All features exposed will be sample excavated, typically being:

- 50% of every discrete feature
- 20% of the area of linear/curvilinear features, or a minimum 1m length if the feature is less than 5m long.

Deposits at junctions/interruptions in linear features will be sufficiently investigated for the relationship between components to be established. All termini will be investigated.

Within the constraints of the site, the excavation trenches will be maintained in a manner that allows quick and easy inspection without any requirement for additional cleaning.

In the event of human burials being discovered, they will be left *in situ*, covered and protected and the coroners' office should be informed. If removal is essential, work will comply with relevant Ministry of Justice regulations.

Appropriate procedures under the relevant legislation must be followed in the event of the discovery of artefacts covered by the provisions of the Treasure Act 1996.

During and after the excavation, all recovered artefacts must be stored in the appropriate materials and storage conditions to ensure minimal deterioration and loss of information (this should include controlled storage, correct packaging, regular monitoring of conditions, immediate selection for conservation of vulnerable material).

2.4 RECORDING PROCEDURE

The edges of the trenches, the current ground level and base of each trench, and all archaeological deposits and features will be accurately located in relation to the Ordnance Survey National Grid and Ordnance Survey Datum.

The drawn record from the site will include a representative selection of long sections from the excavations that clearly allow the nature and depth and any significant changes in the deposits recorded to be demonstrated.

A full written, drawn and photographic record will be made of all material recovered during the course of the evaluation. Archaeological deposits, features and structures will be recorded using a standard system of context and other record forms. A series of indexes, capable of interrogation, will be maintained for all site records. A stratigraphic site matrix will be compiled during the course of the evaluation; the stratigraphy of all trenches will be recorded even where no archaeological deposits have been identified. The planning of features will be at scales of 1:10 or 1:20; sections will be recorded at a scale of 1:10, 1:20 or 1:50.

2.4.1 Photographic recording

The photographic record will consist of 35mm colour slide and 35mm monochrome photography. Monochrome photography will be undertaken using silver-based film to ensure archival stability.

A photographic record of all contexts should be taken in colour transparency and black and white print and should include a clearly visible, graduated metric scale. A register of all photographs should be kept.

2.5 ENVIRONMENTAL EVALUATION STRATEGY

A systematic environmental sampling method will be employed. Deposits which are clearly of a mixed/secondary origin such as make-up layers or deposits, which display a high degree of residual/intrusive artefactual material will not be the subject of environmental sampling unless a

specific question relating to function or social status can be addressed. Where deposits are thought to be of primary origin and have potential to contain biological remains, an appropriate sampling regime will be implemented, in accordance with *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (Second Edition)(2011).

The sampling strategy should be sufficient to allow for a preservation assessment to be undertaken, as set out in Historic England 2016 *Preserving Archaeological Remains* (Section 2). If required, Historic England Science Adviser should be consulted regarding appropriate methodology.

2.5 DATING STRATEGY

All deposits should be assessed for their potential for dating evidence. Where appropriate, samples are to be collected from the site and processed by a suitably trained specialist for dating purposes. In the event that such deposits or structures are identified, SYAS should be contacted to discuss the appropriate response.

2.6 FINDS RECOVERY AND TREATMENT

All finds processing, conservation work and storage of finds will be carried out in compliance with the CIfA *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014) and those set by UKIC (Walker 1990).

All finds identified during evaluation will be hand-collected and processed. Residues recovered as part of the Environmental Evaluation Strategy will be routinely sorted for cultural material and scanned with a magnet for small ferrous objects and hammerscale. Where deemed appropriate, coarse sieving (10mm mesh) or bulk samples (1mm mesh) will be collected specifically for finds recovery, particularly for industrial residues.

Finds treatment will be undertaken in accordance with guidelines set down in *First Aid for Finds* (Watkinson and Neal 1998). Archive preparation will be undertaken in accordance with *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990). In accordance with guidelines, all metalwork and a sample of metallurgical residues will be submitted for X-radiography prior to assessment.

All wet-preserved artefacts will be treated in accordance with *First Aid for Finds* (Watkinson and Neal 1998), *Waterlogged Organic Artefacts. Guidelines on their recovery, analysis and conservation* (English Heritage 2012) or *Waterlogged wood, guidelines on the recording, sampling, conservation and curation of structural wood* (English Heritage 2010).

The terms of the Treasure Act 1996 will be followed with regard to any finds which might fall within its purview. Any such finds will be removed to a safe place and reported to the local coroner as required by the procedures as laid down in the “Code of Practice”. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

2.7 ARCHIVE PREPARATION

Prior to the commencement of fieldwork, Experience Barnsley will be contacted to discuss archiving and to ensure that appropriate standards are adhered to (contact: Natalie Murray, Collections Manager, Experience Barnsley 01226 773198). The deposition and disposal of artefacts will be agreed with the legal owner and recipient museum **prior** to the work taking place. Details of land ownership will be provided by the client to the appointed contractor.

On completion of the field investigation all records and material will be curated in accordance with *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990) and will be indexed, ordered, quantified and checked for consistency. Context, finds, sample and other paper-based records will be transferred to an integrated computer based system. The drawn record will be digitised in an appropriate format that will permit the output of standard AutoCAD type DXF files.

The archival record will include all material relating to the site and its excavation including correspondence, written, drawn and computerised records. As part of the preparation for the post-excavation programme, the artefactual, ecofactual and samples will be quantified and described. In addition the stratigraphic matrix and a site summary will be prepared.

The digital archive will be provided in a non-magnetic storage medium using generic file formats including PDF.

Preliminary conservation and stabilisation of objects will be undertaken prior to an assessment of long-term conservation and storage needs.

2.8 POST-EXCAVATION AND REPORTING PROCEDURES

Upon completion of the fieldwork, all finds, samples and stratigraphic information will be assessed for their potential for further analysis by an appropriately experienced specialist. Basic stratigraphic information should be supplied to the project specialists.

For ceramic assemblages, recording shall be carried out in a manner compatible with existing typological series in local pottery reference collections, *e.g*. the South Yorkshire and north Derbyshire medieval ceramics reference collection:
http://archaeologydataservice.ac.uk/archives/view/ceramics_eh_2003/

The guidelines for handling Post Roman Ceramics produced by the Medieval Pottery Research Group are also to be followed, for relevant material: MPRG, 2001 “Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics” Medieval Pottery Res Group Occ Paper 2.

Where further fieldwork is not to be undertaken and assessment has identified the need for further analysis, this will be completed drawing upon the contingency allowed. This will included reporting and publication of results, if required.

An evaluation report will be prepared and will include as a minimum:

- OASIS reference number and an 8 figure grid reference
- The nature and extent of the proposed development and client information
- A location plan of the site at an appropriate scale of at least 1:10 000
- A location plan showing trench locations within the site. This must be at a recognisable planning scale, and located with reference to the national grid
- Plans and sections of archaeology located at a recognisable planning scale (1:10, 1:20, 1:50 or 1:100, as appropriate)
- Period based discussion of the known and potential archaeological remains within the proposed development area, if possible placed within their local and regional context
- Assessment of the preservation of archaeological and palaeoenvironmental remains across the site
- Results of the assessment of all finds categories, by appropriate specialists
- Results of the assessment of palaeoenvironmental, industrial and other samples by appropriate specialists
- Results of any scientific dating
- Discussion of the potential physical impact of the proposed development on known and potential archaeological deposits
- Recommendations on whether further investigation or preservation is considered appropriate will be first discussed with SYAS and be clearly expressed in the report.
- Detailed context index

Each page and paragraph should be numbered within the report and illustrations cross-referenced within the text.

2.9 ARCHIVE DEPOSITION

Archiving work will be carried out in compliance with the CIfA *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives* (December 2014). The archive and the finds will be deposited in the appropriate local museum, within 6 months of completion of the post-excavation work and report.

3.0 PUBLICATION AND DISSEMINATION

A note will be prepared on the results of the recording work for publication in an appropriate local journal. If the results of the work merit it, a full paper will be proposed for publication in an appropriate journal.

Provision will be made for publicising the results of the work locally, e.g. by presenting a paper at South Yorkshire Archaeology Day and talking to local societies.

An *Online Access to Index of Archaeological Investigations* (OASIS) form will be submitted for the project at http://ads.ahds.ac.uk/project/oasis/.

4.0 COMPANY AND PERSONNEL

Prior to the commencement of fieldwork, the archaeological contractor will provide SYAS with sufficient evidence that they have appropriate excavation experience and current insurance to undertake excavations. All project personnel will be familiar with the results of earlier phases of work and the aims and objectives of the evaluation.

This section of the WSI should be updated, or an addendum provided to detail key personnel and nominated specialists, and providing a general timetable for the completion of site investigation and post-investigation works.

The contractor will provide an indication of the resources they are proposing to use on the site, expressed where appropriate as a number of person days for each grade.

All staff must be suitably qualified and experienced for their project roles. Short CVs/relevant career histories will be provided for all site staff of supervisor or higher grade as well as any specialists involved in the project either in the field or during the post excavation phase. Details will also be supplied for office based staff involved in the management and direction of the project.

5.0 MONITORING ARRANGEMENTS

The work will be monitored by SYAS, who will be notified prior to each stage of work, including a minimum 2 weeks' notice of the commencement of works. The Historic England Science Adviser should be consulted regarding appropriate strategies for assessment of preservation, and potential preservation *in situ*.

Any changes to the proposed scheme of investigation will be discussed with, and agreed by, SYAS before implementation.

Reasonable access to the site will be afforded to SYAS for the purposes of monitoring the archaeological evaluation and regular updates will be provided to ensure that the project aims and objectives are being met.

6.0 HEALTH & SAFETY

The archaeological contractor will operate with due regard for Health and Safety regulations, and will ensure that all relevant requirements are met with regard both to site personnel and to members of the public. A Risk Assessment and Method Statement will be prepared, in accordance with the Health and Safety at Work Regulations.

7.0 INSURANCE

The archaeological contractor will carry appropriate levels of Public Liability, Employers Liability and Professional Indemnity insurances.

8.0 REFERENCES

FAS 2017. *Wombwell Ings: Heritage Statement*
Magnitude Survey 2017. *Geophysical Survey Report: Wombwell Wetlands Scheme*

Appendix 2: Inventory of primary archive

Phase	File/Box No	Description	Quantity
Evaluation	File no.1	Context register sheets	18
		Drawing register sheets	4
		Sheets of permatrace	10
		Sample register sheets	1
		Photo register sheets	5
		Trench sheet	16
		Context sheets	200

Appendix 3: Concordance of contexts yielding artefacts or environmental remains

Context	Trench	Description	Artefacts and environmental samples
100	1	Natural	
101	1	Topsoil	
102	1	Subsoil	
103	1	Terminus cut	
104	1	Fill of [103]	
105	1	Fill of [103]	
106	1	Ditch cut	
107	1	Fill of [106]	◊47
108	1	Ditch cut	
109	1	Fill of [108]	
110	1	Irregular cut	
111	1	Fill of [110]	
200	2	Natural	
201	2	Topsoil	
202	2	Subsoil	
203	2	Ditch cut	
204	2	Fill of [210]	◊24
205	2	Fill of [210]	◊25
206	2	Linear cut	
207	2	Fill of [206]	◊27
208	2	Linear cut	
209	2	Fill of [208]	◊26
210	2	Ditch cut	
214	2	Pit cut	
215	2	Fill of [214]	
216	2	Pit cut	
217	2	Fill of [216]	
218	2	Fill of [203]	◊28
300	3	Natural	
301	3	Topsoil	
302	3	Subsoil	
303	3	Linear cut	
304	3	Fill of [303]	◊31 1 sherd/ lC2-MC3
305	3	Linear cut	
306	3	Fill of [305]	◊22 & 30
307	3	Linear cut	
308	3	Fill of [307]	◊32 19 sherds/LC2
309	3	Ditch cut	
310	3	Fill of [309]	◊35 11 sherds/MC2-EC3
311	3	Pit cut	
312	3	Fill of [311]	◊36 3 sherds/C2+
313	3	Pit cut	
314	3	Fill of [313]	◊37

Context	Trench	Description	Artefacts and environmental samples
315	3	Linear cut	
316	3	Fill of [315]	16/LC2
317	3	Fill of [315]	◊38 4 sherds/MC2-EC3
318	3	Pit cut	
319	3	Fill of [318]	◊39
320	3	Ditch cut	
321	3	Fill of [320]	◊40 4 sherds/C2+
322	3	Ditch cut	
323	3	Fill of [322]	◊23
324	3	Cut of natural feature	
325	3	Fill of [324]	◊44
326	3	Ditch cut	
327	3	Fill of [326]	◊45 1 sherd/C2+
328	3	Cut of natural feature	
329	3	Fill of [328]	
330	3	Ditch cut	
331	3	Fill of [330]	◊41
332	3	Ditch cut	
333	3	Fill of [332]	◊46 1 sherd/LC2-MC3
334	3	Fill of [332]	
335	3	Fill of [332]	
336	3	Terminus cut	
337	3	Fill of [336]	◊29
338	3	Ditch cut	
339	3	Fill of [338]	◊33
340	3	Fill of [338]	◊34
600	6	Natural	
601	6	Topsoil	
602	6	Subsoil	
603	6	Ditch cut	
604	6	Fill of [603]	◊42
605	6	Fill of [603]	
606	6	Ditch cut	
607	6	Fill of [606]	
608	6	Fill of [606]	
609	6	Fill of [606]	
610	6	Furrow	
611	6	Fill of [610]	
700	7	Natural	
701	7	Topsoil	
702	7	Subsoil	
703	7	Ditch cut	
704	7	Fill of [703]	◊43
705	7	Fill of [703]	
800	8	Natural	
801	8	Topsoil	

Context	Trench	Description	Artefacts and environmental samples
802	8	Ditch cut	
803	8	Fill of [802]	
804	8	Fill of [802]	◊21 2 sherds/Post-Medieval
900	9	Natural	
901	9	Topsoil	
902	9	Subsoil	
903	9	Ditch cut	
904	9	Fill of [903]	◊13
1001	10	Natural	
1002	10	Topsoil	
1003	10	Subsoil	
1004	10	Kiln cut	
1005	10	Fill of [1004]	◊14 & 18
1006	10	Fill of [1004]	◊15 & 20
1007	10	Ditch cut	
1008	10	Fill of [1007]	◊16
1009	10	Fill of [1007]	
1010	10	Fill of [1007]	
1011	10	Fill of [1007]	
1012	10	Fill of [1007]	
1013	10	Fill of [1007]	
1014	10	Fill of [1004]	◊19
1100	11	Natural	
1101	11	Topsoil	
1102	11	Subsoil	
1103	11	Ditch cut	
1104	11	Fill of [1103]	◊7
1105	11	Ditch cut	
1106	11	Fill of [1105]	◊8
1107	11	Furrow cut	
1108	11	Fill of [1107]	
1109	11	Ditch cut	
1110	11	Fill of [1109]	
1111	11	Ditch cut	
1112	11	Fill of [1111]	◊6
1113	11	Fill of [1109]	◊5
1114	11	Fill of [1109]	
1115	11	Furrow cut	
1116	11	Fill of [1115]	
1117	11	Terminus cut	
1118	11	Fill of [1117]	
1119	11	Ditch cut	
1120	11	Fill of [1119]	◊9 1 sherd/post-Medieval
1121	11	Fill of [1119]	
1122	11	Fill of [1119]	
1125	11	Ditch cut	

Context	Trench	Description	Artefacts and environmental samples
1126	11	Fill of [1125]	
1127	11	Fill of [1125]	◊10
1128	11	Terminus cut	
1129	11	Fill of [1128]	◊11
1130	11	Linear cut	
1131	11	Fill of [1130]	
1132	11	Ditch cut	
1133	11	Fill of [1132]	◊12
1500	15	Natural	
1501	15	Topsoil	
1502	15	Subsoil	
1503	15	Pit cut	
1504	15	Fill of [1503]	◊1
1505	15	Linear cut	
1506	15	Fill of [1505]	◊2
1507	15	Pit cut	
1508	15	Fill of [1507]	◊3
1509	15	Ditch cut	
1510	15	Fill of [1509]	◊4

Appendix 4: Trench tables

Trench 1		
General Description	**Orientation**	NE-SW
Trench contained one furrow, a ditch terminus, and a ditch which appeared to be sealed by an alluvial subsoil deposit and later disturbed by rooting. This feature corresponds with the geophysical anomaly.	**Average Depth (m)**	0.60
	Width (m)	2.00
	Length (m)	50.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
100	Layer	-	-	-	Natural
101	Layer	-	-	0.25	Subsoil
102	Layer	-	-	0.50	Topsoil
103	Cut	1.00 (ex)	0.85	0.51	Ditch terminus leading into pit with steep sides and a narrow, concave base
104	Fill of 103	1.00 (ex)	0.85	0.51	Mid-orange-brown loose sandy-silt
105	Fill of 103	1.00 (ex)	0.85	0.51	Light orange-brown loose sandy-silt
106	Cut	1.00 (ex)	3.00	1.00	Ditch, steep-sided and a V-shaped channel base
107	Fill of 106	1.00 (ex)	1.40	0.50	Light orange-brown compact sand-clay
108	Cut	1.00 (ex)	1.20	0.60	Ditch, deep sided with rounded base
109	Fill of 108	1.00 (ex)	1.20	0.60	Mid-grey-brown friable clay-silt
110	Cut	1.00 (ex)	0.60	0.60	Irregular with near vertical sides and an irregular base
111	Fill of 110	1.00 (ex)	0.60	0.60	Mid-grey brown friable clay-silt

Trench 2		
General Description	**Orientation**	NW-SE
The trench targeted geophysical anomalies which appear to form a sub-rectangular enclosure. The features correlate strongly with the geophysics, containing four or five ditches or gullies and two pits.	**Average Depth (m)**	0.55
	Width (m)	4.00
	Length (m)	100.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
200	Layer	-	-	-	Natural
201	Layer	-	-	0.30	Topsoil
202	Layer	-	-	0.25	Subsoil
203	Cut	1.00 (ex)	2.00	0.44	Ditch, steep sided with V-shaped base
204	Fill of 210	1.00 (ex)	2.90	0.60	Mid-orange-brown friable clay-sand
205	Fill of 210	1.00 (ex)	2.00	0.30	Light grey-brown friable clay-silt
206	Cut	1.00 (ex)	0.90	0.20	Ditch with moderately sloping sides and a concave base
207	Fill of 207	1.00 (ex)	0.90	0.20	Light brownish-grey moderately firm sand-clay
208	Cut	1.00 (ex)	1.60	0.36	Wide U-shaped ditch, moderately sloping sides and a concave base
209	Fill of 208	1.00 (ex)	1.60	0.36	Light brownish-grey moderately firm sand-clay
210	Cut	1.00 (ex)	2.90	0.60	Steep sided ditch with flat base
214	Cut	0.44 (ex)	0.44	0.06	Shallow circular pit with moderate sides and a mostly flat base
215	Fill of 214	0.44 (ex)	0.44	0.06	Light brown-grey firm clay-sand
216	Cut	0.60 (ex)	0.48	0.12	Ovate pit with slightly irregular concave base
217	Fill of 216	0.60 (ex)	0.48	0.12	Light grey-brown moderately soft sandy-clay
218	Fill of 203	1.00 (ex)	2.00	0.44	Mid-dark brown friable silty-clay

Trench 3		
General Description	**Orientation**	NE-SW
The trench targeted geophysical anomalies which appear to form a set of several sub-rectangular enclosures. The features correlate strongly with the geophysics, containing eight linear ditches or gullies and three pits.	**Average Depth (m)**	0.50
	Width (m)	4.00
	Length (m)	100.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
300	Layer	-	-	-	Natural
301	Layer	-	-	0.25	Topsoil
302	Layer	-	-	0.25	Subsoil
303	Cut	1.00 (ex)	0.74	0.10	Shallow ditch with concave base
304	Fill of 303	1.00 (ex)	0.74	0.10	Mid-grey brown friable sandy-clay
305	Cut	1.00 (ex)	0.38 (ex)	0.12	Shallow terminus with gently sloping sides and rounded base
306	Fill of 305	1.00 (ex)	0.38 (ex)	0.12	Mid-grey-brown friable sandy-clay
307	Cut	1.50 (ex)	0.92	0.12	Linear ditch terminus with rounded end
308	Fill of 307	1.50 (ex)	0.92	0.12	Mid-red-brown soft clay-sand
309	Cut	1.12 (ex)	1.02	0.26	V-shaped linear with moderate sides and a concave base
310	Fill of 309	1.12 (ex)	1.02	0.26	Mid-grey brown soft clay-sand
311	Cut	0.75	0.62	0.28	Ovate steep-sided pit with a concave base
312	Fill of 311	0.75	0.62	0.28	Mid-grey-brown friable clay-sand
313	Cut	0.70	0.68	0.30	Sub-circular pit with very steep sides and a concave base
314	Fill of 313	0.70	0.68	0.30	Mid-yellow-brown friable sandy-clay
315	Cut	1.44 (ex)	0.62	0.28	Ditch terminus narrowing to a rounded point
316	Fill of 315	1.44 (ex)	0.62	0.28	Mid-yellow-brown soft sandy-clay
317	Fill of 315	1.44 (ex)	0.62	0.20	Mid-grey-brown soft sandy-clay

318	Cut	0.68	0.65	0.09	Shallow sub-circular pit with flat base
319	Fill of 318	0.68	0.65	0.09	Dark brown-grey friable sandy-clay
320	Cut	1.10 (ex)	0.62	0.17	Linear ditch with moderate sides and a flat base
321	Fill of 320	1.10 (ex)	0.62	0.17	Mid-yellow-brown moderately soft sandy-clay
322	Cut	1.00 (ex)	1.10	0.45	Linear V-shaped ditch with rounded base
323	Fill of 322	1.00 (ex)	1.10	0.45	Mid-red-brown loose clay-silt
324	Cut	0.84 (ex)	0.26	0.08	Natural gully
325	Fill of 324	0.84 (ex)	0.26	0.08	Very loose mid-grey sand
326	Cut	1.08 (ex)	0.44	0.14	Shallow V-shaped linear
327	Fill of 326	1.08 (ex)	0.44	0.14	Loose mid-brown silt
328	Cut	0.56 (ex)	0.40	0.09	Natural gully
329	Fill of 328	0.56 (ex)	0.40	0.09	Light grey-brown hard clay-silt
330	Cut	1.00 (ex)	0.90	0.22	Ditch with steep sides and a rounded base
331	Fill of 330	1.00 (ex)	0.90	0.22	Mid-grey-brown loose silty-clay
332	Cut	1.00 (ex)	1.96	0.94	Ditch with steep sides and a vertical slot base
333	Fill of 332	1.00 (ex)	1.96	0.62	Dark yellow brown moderately soft sandy-silt
334	Fill of 332	1.00 (ex)	1.34	0.30	Dark brown-grey soft silty-clay
335	Fill of 332	1.00 (ex)	0.40 – 0.60	0.14	Dark blue-grey very compact silty-clay
336	Cut	1.00 (ex)	0.70	0.09	Ditch terminus with flat base
337	Fill of 336	1.00 (ex)	0.70	0.09	Dark grey-brown loose silt
338	Cut	1.00 (ex)	3.57	1.27	V-shaped ditch with steep sides and irregular base
339	Fill of 338	1.00 (ex)	3.57	1.27	Light grey-brown loose silty-sand
340	Fill of 338	1.00 (ex)	0.84	1.14	Mid-red-brown firm silt

Trench 4

General Description		Orientation	N-S
Trench targeted two weak linear geological anomalies. Both correlated with features which were investigated but proved to be geological in origin.		Average Depth (m)	0.40
		Width (m)	2.00
		Length (m)	50.00
Contexts			
Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
400	Layer	-	-	-	Natural
401	Layer	-	-	0.20	Topsoil
402	Layer	-	-	0.20	Subsoil

Trench 5					
General Description				**Orientation**	NE-SW
Trench targeted a small number of weak geophysical responses and an area interpreted as mixed waste or ferrous material. No archaeological features were uncovered. A layer of modern landfill was found to the south-eastern end of the trench which was found to be cut through the subsoil and natural and was sealed by the topsoil.				Average Depth (m)	0.40
				Width (m)	4.00
				Length (m)	100.00
Contexts					
Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
500	Layer	-	-	-	Natural
501	Layer	-	-	0.20	Topsoil
502	Layer	-	-	0.20	Subsoil
503	Layer	-	-	0.25	Landfill deposit

Trench 6		
General Description	**Orientation**	NW-SE
Trench targeted a single large linear geophysical anomaly which correlated with two large intercutting ditches and a furrow	**Average Depth (m)**	0.40
	Width (m)	2.00

crossing the centre of the trench.	**Length (m)**	50.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
600	Layer	-	-	-	Topsoil
601	Layer	-	-	0.25	Subsoil
602	Layer	-	-	0.20	Natural
603	Cut	1.00 (ex)	2.07	0.40	V-shaped ditch with steep sides and concave base
604	Fill of 603	1.00 (ex)	1.41	0.40	Mid-grey firm clay-silt
605	Fill of 603	1.00 (ex)	1.38	0.43	Mid-brown-grey firm clay-silt
606	Cut	1.00 (ex)	3.31	0.84	U-shaped ditch with steep sides and wide, flat base
607	Fill of 606	1.00 (ex)	3.10	0.40	Mid-grey firm clay-silt
608	Fill of 606	1.00 (ex)	3.31	0.84	Mid-brown-grey firm clay-silt
609	Fill of 606	1.00 (ex)	2.68	0.32	Mid-grey-brown firm clay-silt
610	Cut	1.00 (ex)	1.19	0.21	U-shaped probable furrow with shallow sloped sides and wide, concave base
611	Fill of 610	1.00 (ex)	1.19	0.21	Mid-grey-brown firm clay-silt

Trench 7

General Description		
	Orientation	NW-SE
Trench targeted a single linear geophysical anomaly. It contained five furrows and one ditch which correlates strongly with the results of the geophysical survey.	**Average Depth (m)**	0.40
	Width (m)	4.00
	Length (m)	100.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
700	Layer	-	-	-	Natural
701	Layer	-	-	0.20	Topsoil

702	Layer	-	-	0.20	Subsoil
703	Cut	1.00 (ex)	2.00	0.53	U-shaped ditch with steep, concave sides and wide, concave base
704	Fill of 703	1.00 (ex)	1.06	0.53	Mid-grey-brown friable sand-silt
705	Fill of 703	1.00 (ex)	1.00	0.30	Dark brown friable sand-silt

Trench 8

General Description	**Orientation**	NE-SW
The trench targeted three linear geophysical anomalies, two of which proved negative and one correlates strongly with a ditch. Two furrows and an area of probable rooting or burrowing were observed.	**Average Depth (m)**	0.35
	Width (m)	4.00
	Length (m)	100.00

Contexts

Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
800	Layer	-	-	-	Natural
801	Layer	-	-	0.35	Topsoil
802	Cut	1.00 (ex)	2.66	0.62	U-shaped ditch with steep, straight sides and wide, concave base
803	Fill of 802	1.00 (ex)	0.72	0.38	Light grey-brown loose sand-silt
804	Fill of 802	1.00 (ex)	2.66	0.44	Mid-brown loose silt

Trench 9

General Description	**Orientation**	NW-SE
Trench contained one ditch which correlates strongly with the results of the geophysical survey. Several furrows were also observed.	**Average Depth (m)**	0.40
	Width (m)	2.00
	Length (m)	50.00

Contexts

Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
900	Layer	-	-	-	Topsoil

901	Layer	-	-	0.20	Subsoil
902	Layer	-	-	0.20	Natural
903	Cut	1.00 (ex)	1.06	0.32	U-shaped ditch with steep, straight sides and a flat base
904	Fill of 903	1.00 (ex)	1.06	0.32	Dark brown loose clay-silt

Trench 10					
General Description			**Orientation**	SW-NE	
Trenched contained a number of furrows, a kiln and one ditch which correlates strongly with the results of the geophysical survey.			**Average Depth (m)**	0.40	
			Width (m)	4.00	
			Length (m)	100.00	
Contexts					
Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
1001	Layer	-	-	-	Natural
1002	Layer	-	-	0.17	Topsoil
1003	Layer	-	-	0.23	Subsoil
1004	Cut	5.30	1.80 (ex)	1.40	Kiln with hourglass/teardrop shape in plan and steep, concave sides and a concave base
1005	Fill of 1004	5.30	1.80 (ex)	0.40	Dark grey-brown loose clay-silt
1006	Fill of 1004	1.02	1.05 (ex)	0.37	Light brown-grey loose clay-silt
1007	Cut	1.00 (ex)	2.06	0.64	V-shaped ditch with steep, straight sides and a flat base
1008	Fill of 1007	1.00 (ex)	1.66	0.36	Mid-grey-brown soft sand-clay
1010	Fill of 1007	1.00 (ex)	0.74	0.18	Light yellow-brown soft sand-clay
1011	Fill of 1007	1.00 (ex)	0.80	0.18	Light grey-brown soft sand-clay
1012	Fill of 1007	1.00 (ex)	0.56	0.14	Mid-grey-brown firm clay
1013	Fill of 1007	1.00 (ex)	1.18	0.26	Mid-grey-brown soft sand-clay
1014	Fill of 1004	1.00 (ex)	1.80	0.16	Mid-brownish-red hard clay

Trench 11		
General Description	**Orientation**	SE-NW
Trench targeted a number of geophysical anomalies which appear to form a set of enclosures and possible trackway or field boundaries. On excavation the trench contained eight ditches or gullies and several furrows.	**Average Depth (m)**	0.45
	Width (m)	4.00
	Length (m)	100.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
1100	Layer	-	-	-	Natural
1101	Layer	-	-	0.33	Topsoil
1102	Layer	-	-	0.19	Subsoil
1103	Cut	1.00 (ex)	0.65	0.18	U-shaped gully with steep sides and a concave base
1104	Fill of 1103	1.00 (ex)	0.65	0.18	Mid-grey-brown friable silt-clay
1105	Cut	1.00 (ex)	0.55	0.20	U-shaped gully with steep sides and a concave base
1106	Fill of 1105	1.00 (ex)	0.55	0.20	Mid-greyish-brown friable silty clay
1107	Cut	1.00 (ex)	1.60	0.18	Furrow with wide, flat profile
1108	Fill of 1107	1.00 (ex)	1.60	0.18	Light grey-brown soft sandy-clay
1109	Cut	1.00 (ex)	2.30	0.60	U-shaped ditch with steep, straight sides and a flat base
1110	Fill of 1109	1.00 (ex)	2.30	0.60	Light brown-grey sand-clay
1111	Cut	1.00 (ex)	1.04	0.52	U-shaped ditch with steep, straight sides and a flat base. Recut of 1109
1112	Fill of 1111	1.00 (ex)	1.04	0.52	Light orange-grey firm clay
1113	Fill of 1109	1.00 (ex)	0.44	0.18	Light brown-grey firm sand-clay
1114	Fill of 1109/1111	1.00 (ex)	1.98	0.22	Light grey-brown soft sand-clay
1115	Cut	1.00 (ex)	1.80	0.10	Furrow with wide, flat profile
1116	Fill of 1115	1.00 (ex)	1.80	0.10	Mid-grey-yellow friable clay
1117	Cut	0.51 (ex)	0.28 (ex)	0.20	U-shaped gully with steep sides and a concave base

1118	Fill of 1117	0.51 (ex)	0.28 (ex)	0.20	Mid-grey loose clay-silt
1119	Cut	1.00 (ex)	1.40	0.58	U-shaped ditch with steep, straight sides and a concave base
1120	Fill of 1119	1.00 (ex)	1.22	0.30	Mid-grey-brown friable silt-clay
1121	Fill of 1119	1.00 (ex)	1.24	0.12	Mid-orange-brown hard silt-clay
1122	Fill of 1119	1.00 (ex)	1.40	0.14	Mid-grey-brown friable silt-clay
1125	Cut	1.00 (ex)	1.30	0.54	U-shaped ditch with steep, straight sides and a concave base
1126	Fill of 1125	1.00 (ex)	0.50	0.21	Light brown friable sand-silt
1127	Fill of 1125	1.00 (ex)	1.30	0.34	Mid brown friable sand-silt
1128	Cut	1.00 (ex)	1.05	0.42	U-shaped gully with steep sides and a concave base
1129	Fill of 1128	1.00 (ex)	1.05	0.42	Dark brownish-grey loose friable silt
1130	Cut	1.00 (ex)	2.28	0.18	Furrow with wide, flat profile
1131	Fill of 1130	1.00 (ex)	2.28	0.18	Light grey-brown soft sand-clay
1132	Cut	3.34	1.77	0.34	U-shaped ditch with steep, straight sides and a concave base. Shallow slope near terminus
1133	Fill of 1132	3.34	1.77	0.34	Dark brown friable clay-silt

Trench 12

General Description	**Orientation**	NE-SW
Trench targeted an area interpreted as mixed waste or ferrous material. A layer of modern landfill was found to the north-eastern end of the trench which was found to be cut through the subsoil and natural and was sealed by the topsoil. No archaeological features were uncovered.	**Average Depth (m)**	0.70
	Width (m)	2.00
	Length (m)	70.00

Contexts

Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
1200	Layer	-	-	-	Natural
1201	Layer	-	-	0.34	Topsoil
1202	Layer	-	-	0.30-0.75	Landfill deposit

Trench 13					
General Description				**Orientation**	NW-SE
Trench was placed over a large geophysical anomaly interpreted as mixed waste or ferrous material. A layer of modern landfill was found throughout the trench which lay above the natural and was sealed by the topsoil. No archaeological features were uncovered.				**Average Depth (m)**	0.85
				Width (m)	2.00
				Length (m)	50.00
Contexts					
Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
1300	Layer	-	-	-	Natural
1301	Layer	-	-	0.40	Topsoil
1302	Layer	-	-	0.40-0.50	Landfill deposit

Trench 14					
General Description				**Orientation**	NE-SW
The trench targeted a weak curvilinear geophysical anomaly and cropmark. No archaeology present.				**Average Depth (m)**	0.40
				Width (m)	2.00
				Length (m)	50.00
Contexts					
Context No	**Type**	**Length (m)**	**Width (m)**	**Depth (m)**	**Description**
1400	Layer	-	-	0.25	Topsoil
1401	Layer	-	-	0.15	Subsoil
1402	Layer	-	-	-	Natural

Trench 15					
General Description				**Orientation**	NW-SE
The trench targeted several geophysical anomalies and contained				**Average Depth (m)**	0.40

two pits and two gullies.	**Width (m)**	2.00
	Length (m)	50.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
1500	Layer	-	-	-	Natural
1501	Layer	-	-	0.25	Topsoil
1502	Layer	-	-	0.15	Subsoil
1503	Cut	1.14	0.85	0.16	Shallow pit with steep sides and flat base
1504	Fill of 1503	1.14	0.85	0.16	Mid-grey-brown friable silt-clay
1505	Cut	11.80	0.35	0.10	U-shaped gully with steep sides and a concave base
1506	Fill of 1505	11.80	0.35	0.10	Mid-grey-brown friable silt-clay
1507	Cut	0.59	0.80	0.37	Pit with steep sides and concave base
1508	Fill of 1507	0.59	0.80	0.37	Mid-grey-brown friable silt-clay
1509	Cut	1.00 (ex)	0.64	0.18	V-shaped ditch with steep sides and concave base
1510	Fill of 1509	1.00 (ex)	0.64	0.18	Mid-grey-brown friable silt-clay

Trench 16

General Description	**Orientation**	NW-SE
The trench targeted a single linear geophysical anomaly which correlated with a feature which was investigated but was a field drain.	**Average Depth (m)**	0.50
	Width (m)	2.00
	Length (m)	75.00

Contexts

Context No	Type	Length (m)	Width (m)	Depth (m)	Description
1600	Layer	-	-	-	Natural
1601	Layer	-	-	0.20	Topsoil
1602	Layer	-	-	0.30	Subsoil

Appendix 5: Artefact catalogues

Romano-British Pottery Spot Dating

Area	Context	Context	Spot date	NoSh	Wt	MNR
0	**0**	Unstratified		1	13	0
3	**304**	Ditch	LC2 - MC3	1	206	1
3	**308**	Ditch	LC2	19	135	4
3	**310**	Ditch	MC2-EC3	11	338	2
3	**312**	Pit	C2+	3	12	0
3	**316**	Ditch	LC2	16	221	3
3	**317**	Ditch	MC"-EC3	4	106	1
3	**321**	Ditch	C2+	4	12	0
3	**327**	Ditch	C2+	1	1	0
3	**333**	Ditch	LC2-MC3	1	118	1
8	**804**	Ditch	Post Med	2	8	0
11	**1120**	Ditch	Post Med	1	3	0

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Area	Context	Sample no	Part	Fabric Code	Function	Form Type	Date From	Date to	Base	Handle	NoSh	Wt	MNR	RE	RD	Soot	Comments
0	**0**		Body	R50							1	13	0	0			
11	**1120**		Body	Z30							1	3	0	0			porcelain with brown transfer print
3	**304**		Rim	R112	WMJ	Hc.191	160	250			1	206	1	13	35		WMJ or large bowl with squared rim
3	**308**		Body	R112							11	45	0	0			
3	**308**		Rim	R112	b	Ca.24	120	200			1	22	1	9	22		
3	**308**		Rim	R112	J	Ea.62	150	200			2	15	1	15	15		
3	**308**		Rim	R112	J	Ea.63	150	200			3	45	1	39	15		BB copy
3	**308**		Rim	R112	J	Ea.63	150	200			1	7	1	7	16		
3	**308**	**32**	Body	R112							1	1	0	0			
3	**310**		Base	R112					11		1	34	0	0			
3	**310**		Base	R112					11		1	21	0	0			
3	**310**		Body	R112							5	41	0	0			
3	**310**		Body	r112							1	5	0	0			may be misfired r112
3	**310**		Handle	R112						1	1	58	0	0			v coarse sand
3	**310**		Rim	b03	D	Ca.14	120	300			1	18	1	6	22		undercut bead rim
3	**310**		Rim	R112	J	F.131	150	225		1	1	161	1	8	20		
3	**312**		Body	R112							1	6	0	0			
3	**312**	**36**	Body	R112							2	6	0	0			

Area	Context	Sample no	Part	Fabric Code	Function	Form Type	Date From	Date to	Base	Handle	NoSh	Wt	MNR	RE	RD	Soot	Comments
3	**316**		Base	R112					11		1	4	0	0			
3	**316**		Base	R112					11		1	35	0	0			
3	**316**		Body	R112							6	25	0	0			
3	**316**		Body	R112							3	22	0	0			black surfaces
3	**316**		Rim	R112	J	Ea.58	150	200			1	6	1	6	15		
3	**316**		Rim	R112	J	Ea.65	150	200			1	4	1	5	15	1	oxidised ext surface poss waster
3	**316**		Rim	R112	WMJ	Hb.150	150	400			3	125	1	21	25		grooves on shoulder
3	**317**	**38**	Base	R112					11		1	69	0	0			
3	**317**	**38**	Body	R112							2	18	0	0		1	poss waster
3	**317**	**38**	Rim	R112	J	Ea.61	150	225			1	19	1	8	15		
3	**321**		Body	R112							4	12	0	0		1	waster? Overfired
3	**327**	**45**	Body	R112							1	1	0	0			
3	**333**		Rim	R112	WMJ	Hc-d.195	160	250			1	118	1	17	25		A WMJ with a squared rim and external groove
8	**804**		Body	Z30							2	8	0	0			blue transfer print

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Trench	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
12	U/S	Inkwell	1	483	1	Profile	Inkwell	Advertising item; 'BASS IN BOTTLE'	1905 – 1922	Maker's mark (Royal Doulton ENGLAND) & reg number (Rd No 473834) on underside
12	U/S	Inkwell	1	36	1	Profile	Inkwell	U/Dec	1905 – 1922	Internal ink holder, probably associated with the Bass advertising object
12	U/S	Porcelain	1	118	1	Profile	Teapot	Black printed overglaze Chinese design w/ hand-painted detailing; misfired glaze	LC19th – EC20th	A small, possibly decorative, teapot' (handle missing); base diam 51.9mm, height 75.7mm
12	U/S	Porcelain	1	66	1	Body	Teapot	U/Dec (white glaze)	LC19th – EC20th	Small teapot; base diam 45mm, height 44m
12	U/S	Porcelain	1	117	1	Upper body	Ornament	Moulded vase w/ two handles; external gold detailing & TP design head & shoulders of a woman in C18th dress	LC19th – EC20th	
12	U/S	Stoneware	1	167	1	Complete	Bottle	Brown salt glaze ext	C19th – EC20th	Small brown bottle: base diam 49.5mm height; 93.4mm
12	U/S	Stoneware	1	227	1	Body	Jug	Red-brown lead glaze ext	1887 – 1890	Handle broken; base diam 50.1mm, height 105.5mm; Stamped: 'REGISTERED No 116267'
12	U/S	Stoneware	1	189	1	Complete	Bottle	Grey lead glaze ext	MC19th – EC20th	Base diam 52.6mm, height 94.1n
12	U/S	Stoneware	1	320	1	Complete	Jam jar	Widely spaced fluting	MC19th – EC20th	Pale grey stoneware
12	U/S	Stoneware	1	166	1	BS	Flagon	Printed label; 'THE BARNSLEY BOTANICAL BREWER… / BARNSLEY'	LC19th – EC20th	
	U/S	Stoneware	1	352	1	Complete	Jam jar	Widely spaced fluting	MC19th – EC20th	Pale grey stoneware Stamped '5' on underside
	U/S	Yellow Glazed Coarseware	1	355	1	Rim	Pancheon	White slip int under clear glaze	C19th – EC20th	Rounded overhanging rim
	U/S	Yellow Glazed Coarseware	1	363	1	Rim	Pancheon	White slip int under clear glaze; unslipped (red) band on top of rim	C19th – EC20th	
	U/S	Yellow Glazed Coarseware	1	185	1	Rim	Pancheon	White slip int under clear glaze; unslipped (red) band on top of rim	C19th – EC20th	
	U/S	Yellow Glazed Coarseware	1	320	1	Base	Pancheon	White slip int under clear glaze	C19th – EC20th	
		Total	**15**	**3464**	**15**					

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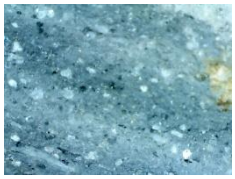
Area	Context	Sample	Fabric	NoSh	Wt
10	1005	14	D00	61	50
10	1005	18	D00	88	135
10	1006	16	D00	3	4
10	1006	20	D00	23	44
10	1005	18	ST11	1	16
10	1005	14	ST21	17	283
10	1005	18	ST21	52	470
10	1006	20	ST21	57	1386

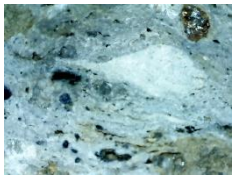
The fabrics

B03

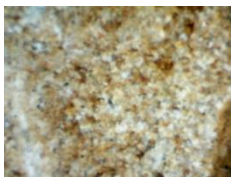
D00



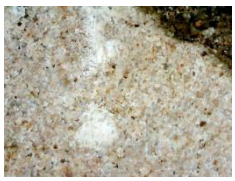
R112



R50



ST11



ST21

Images of fresh breaks, each 6mm wide

B03 A possible Rossington Bridge/ South Yorkshire black burnish ware

D00 A red burnt clay with Common sand inclusions

R112 South Yorkshire greyware. a reduced fabric with grey core, margins and surfaces, with common moderate sand temper c.0.3-0.4mm.

R50 A hard reduced fabric with grey core and brownish grey margins and surfaces; common moderate sand temper c0.3mm and rounded grey grog(?) inclusions c1-5mm.

ST11 A red sandstone 2with calcareous inclusions

ST21 A soft limestone

Appendix 6: Catalogue of carbonised plant macrofossils and charcoal

	Context	107	204	205	207	209	218	304	306	306	308	310	314	317	321	323	327
	Sample	47	24	25	27	26	28	48	22	30	32	35	37	38	40	23	45
	Trench	Tr.1	Tr.2	Tr.2	Tr.2	Tr.2	Tr.2	Tr. 3	Tr.3	Tr. 3	Tr.3	Tr.3	Tr.3	Tr.3	Tr.3	Tr.3	Tr.3
	Feature	106	211	211	206	208	203	303	305	305	307	307	313	315	320	322	326
	Sample Volume (litres)	20	20	20	10	20	20	20	20	20	20	20	20	20	20	20	20
	Total CV	0	0	0	0	0	0	0	0	0	0	0	0	10ml	0	0	0
	Modern	10ml	<2.5ml	2.5ml	<2.5ml	2.5ml	10ml	5ml	10ml	5ml	10ml	20ml	10ml	25ml	15ml	2.5ml	10ml
Carbonised Cereal Grain	**Common Name**																
Avena sp.	oat													2			
Triticum spelta	spelt wheat													7			
Hordeum vulgare sl.	barley													3			
Charcoal																	
Quercus	oak																
Betula	birch																
Carbonised Weeds																	
Bromus sp.	bromes													8			
Other Remains																	
Coal					2	1	2									2	
Clinker			5+					20+	50+	30+							
Modern straw				2			1	1									1
Modern seeds		5+					5+	10+			5+	5+	5+	1	2		1
Earthworm egg capsules																	

	Context	331	333	337	339	340	604	704	804	904	1005	1005	1006	1006	1008
	Sample	41	46	29	33	34	42	43	21	13	14	18	15	20	16
	Trench	Tr.3	Tr.3	Tr.3	Tr.3	Tr.3	Tr.6	Tr.7	Tr.8	Tr.9	Tr.10	Tr.10	Tr.10	Tr.10	Tr.10
	Feature	330	332	336	338	338	603	703	802	903	1004	1004	1004	1044	1007
	Sample Volume (litres)	20	20	10	10	10	20	20	20	10	40	20	20	30	20
	Total CV	<2.5ml	0	0	0	0	0	0	5ml	0	0	0	0	0	25ml
	Modern	10ml	15ml	10ml	<2.5ml	5ml	2.5ml	10ml	10ml	5ml	10ml	15ml	10ml	30ml	20ml
Carbonised Cereal Grain	**Common Name**														
Avena sp.	oat														
Triticum spelta	spelt wheat														
Hordeum vulgare sl.	barley														
Charcoal															
Quercus	oak														7 (0.31g)
Betula	birch								1 (0.06g)						2 (0.23g)
Carbonised Weeds															
Bromus sp.	bromes														
Other Remains															
Coal					5+				1		10+		5+		
Clinker			2	1						5+	20+	20+		10+	5+
Modern straw					5+	1	1	5+				1		20+	
Modern seeds		5+	1	5+				1					1		
Earthworm egg capsules															

	Context	1106	1112	1120	1127	1129	1133	1504	1510
	Sample	8	6	9	10	11	12	1	4
	Trench	Tr.11	Tr.11	Tr.11	Tr.11	Tr.11	Tr.11	Tr.15	Tr.15
	Feature	1105	1111	1119	1125	1128	1132	1503	1509
	Sample Volume (litres)	10	10	20	20	20	20	5	10
	Total CV	0	0	0	0	0	10ml	5ml	0
	Modern	2.5ml	2.5ml	5ml	5ml	5ml	20ml	30ml	40ml
Carbonised Cereal Grain	**Common Name**								
Avena sp.	oat								
Triticum spelta	spelt wheat								
Hordeum vulgare sl.	barley								
Charcoal									
Quercus	oak							2 (0.08g)	
Betula	birch								
Carbonised Weeds									
Bromus sp.	bromes								
Other Remains									
Coal									
Clinker							5+		
Modern straw		1					20+		20+
Modern seeds		2	1	10+	10+	10+			
Earthworm egg capsules			1		1				

Sterile samples: 314 (39), 321 (36), 325 (44), 1009 (17), 1104 (7), 1114 (5), 1506 (2), 1508 (3)

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