



WYAS
**Archaeological
Services**

**Land off Woodward Court
Mirfield
West Yorkshire**

Trial Trenching Evaluation

Report no. 3149
August 2018

Client: BWB Consulting Ltd



**Land off Woodward Court,
Mirfield,
West Yorkshire
Trial Trench Evaluation**

Summary

A scheme of archaeological investigation, involving trial trenching evaluation, was carried out on land off Woodward Court, Mirfield. The objectives of the archaeological evaluation were generally successful in that the results confirmed the interpretation of the geophysical survey and were able to offer some interpretation. Several backfilled coal mines were identified and are likely to date to the mid-19th century at the latest. The majority of the archaeological remains on site formed a series of ditches interpreted as earlier field boundaries which conform to the results of the geophysical survey. It is possible these features are the remains of a late medieval strip field system, gradually removed over the post medieval and modern periods. Perhaps most significantly, four small pits of prehistoric origin were identified. Two of them showed evidence of in-situ burning and two contained substantial amounts of burnt human remains. Pottery indicated that there were Bronze Age cremation burials.



Report Information

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Report Type: Trial Trenching Evaluation
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1 Introduction

West Yorkshire Archaeological Services (ASWYAS) were commissioned by BWB consulting on behalf of their client Bellway Homes Ltd, to undertake an archaeological evaluation ahead of proposed development on land off Woodward Court, Mirfield, West Yorkshire (Fig.1).

The archaeological work was carried out in accordance with a specification produced by BWB consulting (2018; see Appendix 1) in consultation with the West Yorkshire Archaeology Advisory Service. The work was necessary in order to evaluate the impact the development might have on potential surviving archaeological remains.

The archaeological work was undertaken in accordance with accepted professional standards and guidelines including Historic England (2008), the Chartered Institute for Archaeologists (CIFA 2014a and CIFA 2014b) and other current and relevant best practice and standards and guidance, including the ASWYAS site recording manual (ASWYAS 2014).

Site location and topography and land use

The proposed development site (PDA) covers an area of approximately 4.5 ha and is located on land immediately to the east of Woodward Court and to the west of Balderstone Hall (HER 1313670), on the north-eastern limit of Mirfield, centred at SE 209 210. The Site is bounded by existing housing to the south-west and south-east and to the north-west by Crossley Fields Junior & Infants School.

The Site is situated on gently sloping ground at approximately 96m aOD in the north-west to 86m aOD in the south-east. The entire area is currently in use as pastureland with mature hedges along all sides.

Soils and geology

The bedrock geology of the area comprises Falhouse rock sandstone of the Langsettian substage (BGS 2018). This was reached to the south of site in trenches 16 and 17 at the southernmost limit of each trench. No superficial geology has been recorded for this area. The soil is characterised as slowly permeable, seasonally wet, acidic loamy and clayey soils (Landis 2018).

2 Archaeological and Historical Background

Following the results of the geophysical survey (Phase 2018), the specification (Appendix 1, Section 2) determined that the site was within an area of potential archaeological interest. The specification broadly defined the history and archaeological background of the area immediately surrounding the planned development site. The following paragraphs are taken from the specification (BWB 2018) and are included here as background information for the site.

Prehistoric period

There is only sporadic evidence for prehistoric activity in the Mirfield area. An earthwork identified at Knowl by the Reverend J. Ismay, in the mid-18th century, is a possible henge. In 1819 it was described as comprising a circular bank and surrounding ditch, with entrances on two sides. The site has now been levelled and built over.

A number of prehistoric artefacts have been discovered around the wider area of Mirfield including a Mesolithic tranchet axe south of the River Calder in 1965 and a Bronze Age axe found between the Church of St Mary and Castle Hall Hill, much closer to the site, in 1970. A carved sandstone head was discovered in a stone wall close to a well or spring on Mirfield Moor, called 'Five Thorns Well', and was thought to be possibly Celtic in origin.

Roman period

There is no clear evidence for any Roman period activity within Mirfield. It has been suggested that a Roman road ran from the fort at Slack, north-eastwards through Brighthouse before perhaps meeting a branch at Hartshead Moor. None of these suggestions has been adequately verified.

Early Medieval period

It is probable that there was a settlement at Mirfield during the Anglo-Saxon period, close to the parish church of St Mary. A late Anglo-Saxon carving, probably used as a funerary monument, is housed in the current (Victorian) church, indicating a late Anglo-Saxon burial ground. It may also point to the existence of a contemporary chapel in the vicinity. Next to the present church is a Norman motte known as Castle Hall Hill. This may well stand on the site of an Anglo-Saxon thegn's homestead. Indeed, evidence of an earlier possible bank has been identified within the profile of the motte.

Medieval period

The medieval St Mary's church was located a short distance to the east of the present, Victorian church. Traditionally, it is thought to have been erected in the 13th century, when Mirfield became a parish: previously, it had been part of the extensive territory of the minster church at Dewsbury. Nevertheless, Peter Ryder (1988) believes that the 11th-century graveyard monument within the present, church, coupled with the fact that the tower and nave of the previous church appear to be 13th-century additions, suggest that there may have been a chapel there prior to the 13th century.

The motte and bailey castle is likely to have been constructed between 1086 and 1159, and as noted above, may have been created by infilling an already existing earthwork, possibly a late Saxon thegn's fortified residence. The present rectory manor house, south-west of the church and castle site, is thought to represent an early 16th century construction but was extensively modernised in the 20th century.

A number of other buildings within the township have medieval foundation dates. These include Northorpe Hall, Paper Hall, Nick House, Wellhouse Farmhouse and Barn and Water

Royd Hall. The widespread distribution of these extant buildings illustrates the dispersed pattern of medieval settlement at Mirfield.

Post-medieval and modern period

Mirfield remained a rural settlement until the onset of the industrial revolution in the mid-19th century and the rapid development of new industries and mining. These are present in the HER data as a Tanner Close, Brick Works, Mirfield Colliery, Dark Lane Colliery and mine workings.

Most if not all of the industrial and commercial buildings within Mirfield date from the 1800s and a large proportion of the residential buildings were also constructed in this period. The majority of this construction and the obliteration of undeveloped green-field sites occurred as a response to the increased industrialisation of the township.

Notable structures from this period include the Crossley Hospital located immediately to the north of the site. This opened as a Municipal Infectious Diseases Hospital in 1895, with a smallpox unit added in 1905. The King's Head Tavern situated to the west of the site was, according to Pobjoy (1969), in existence from 1600. Stott (2003) records that the building had a number of cellars that were cut into solid rock. The tavern has since been demolished.

To the south-west of the site is Mirfield Grammar School which was built in 1875. To facilitate an increase in pupil numbers, extensions were made to the building in 1909. A fire in 1961 led to an almost complete reconstruction of the building. Much of the current building dates to this reconstruction phase.

Situated to the east of the site is the grade II listed Balderstone Hall which comprises a large detached house built in the early to mid-18th century. However, there are accounts which suggest it was built by Dr John Balderstone in 1690.

3 Aims and Objectives

The work was undertaken in accordance with the research objectives detailed in the specification (BWB 2018). The objective of the works was to verify the potential remains identified in the results of the geophysical survey and to characterise and date any surviving archaeology. The archaeological works were designed to target potential remains identified in the geophysical survey and to investigate apparent blank areas.

The aim of the trial trenching was to identify the scope and nature of any potential remains and to assess, based on the results, whether any further archaeological mitigation is needed.

4 Methodology

All investigations were undertaken in accordance with the Standards and Guidance for field evaluation prepared by the Chartered Institute for Archaeologists (CIfA, 2014) and the CIfA

Code of Conduct (CIfA, 2014) as detailed in the specification (BWB 2018) and in accordance with the ASWYAS site recording manual (ASWYAS 2014).

The works consisted of eighteen 50m x 2m trenches (Fig. 2) targeting anomalies identified in the geophysical survey as well as apparent 'blank' areas. 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 with a flat-bladed ditching bucket under the direct supervision of an archaeologist. Topsoil deposits were removed in level spits with the topsoil and subsoil being separated to allow for re-instating in reverse order. Machine excavation stopped at the first archaeological horizon or natural deposits, depending on which was encountered first. All excavations of archaeological deposits were undertaken manually with the stripped surface being cleaned and investigated for archaeological remains if necessary.

All features and trenches were accurately recorded in plan using a GPS and individual features were drawn at a scale of 1:20 or 1:50 where appropriate. Feature sections were drawn at a scale of 1:10 or 1:20. All hand drawn plans and sections included spot heights which related to Ordnance Datum.

10L or 20L samples were taken from every archaeological deposit (dependant on the size and nature of the feature) with burnt or charcoal rich deposits being 100% sampled. Potentially modern features, such as coal working, were photographed and planned, but not excavated.

5 Results

A total of 18 trenches were excavated across two areas: trenches 1-4 in a small east-west oriented field at the north end of the PDA (Area 1), and trenches 5-18 in a larger north-south oriented field to the south (Area 2; see Fig.2). The current proposals for the site will see no development, apart from a new access road, within Area 1, with all residential units located within Area 2. The natural substrate was reached at an average depth of 0.5m, with a minimum depth of 0.3m and a maximum depth of 0.8m. Some slight variation was noted in the natural geology, which was observed in some areas as a firm yellowish brown sand and in others as a yellowish brown sand abundant with fragmented limestone (Pls 1-3). Towards the southern ends of trenches 16 and 17, bedrock was reached.

The following results are presented by area, followed by a short summary. A full description of each trench and associated contexts can be found in Appendix 4.

Area 1 (Fig. 2)

All four trenches in Area 1 were found to contain south-west to north-east oriented ploughing furrows which correlate with the geophysical record (Phase 2018). Coal mining activity was identified in Trenches 1, 2 and 3, but was judged to be of relatively little archaeological

significance. The suspected areas of mine working were machine excavated and found to have been backfilled with mixed soils, rubble and coal waste (Pl. 4). Trenches 1 and 2 were the only interventions in Area 1 to contain features of archaeological interest.

Trench 1 revealed two small pits: 048 (Pl. 5) measuring 0.38m wide and 0.08m deep (Fig.3, S.22), and 046 (Pl. 6) measuring 0.31m wide and 0.12m deep (Fig.3, S.21). Both of these features contained charcoal-rich deposits, (049 and 046 respectively), from which a substantial amount of burnt human bone was recovered. Pit 046 is noteworthy as it contained a large, coarse, basal sherd of possibly Early Bronze Age pottery, which may represent an urn truncated by the relatively recent mining activity.

The remains of a small pit-like feature (044) were also identified towards the western end of Trench 2, 0.35m wide and 0.18m deep (Fig. 4, S.17). No finds were recovered from the fill (045).

Most of the features identified in Area 1 correlated closely with the results of the geophysical survey; the ploughing furrows were confirmed, and the large geophysical anomalies were found to correspond with areas of mine working and proved to be none mechanical extraction based on bell pits. The most noteworthy features in Area 1 were pit features 046 and 048, representing urned cremation burials which probably date to the Bronze Age.

Area 2 (Fig. 2)

Plough furrows are also present across most of the trenches in Area 2, on a north-south orientation as opposed to the east-west orientation of furrows in Area 1. Once again, this confirms the indications on the geophysical survey. Potential coal mining activity was also present across Area 2, recorded in Trenches 13, 15, 16 and 17 (Pl. 7). The suspected areas of mine working were all machine excavated to a depth of 4m, the maximum reach of the machine excavator. They appear to have been backfilled with mixed soil deposits and coal waste, with profiles varying from moderate to near vertical slopes. Trenches 10, 13, 15, 17 and 18 exposed no extant remains other than plough furrows and suspected coal working.

Towards the western side of Area 2, the geophysical survey recorded a ditch (in some places two parallel ditches) on an approximately north-south alignment. Sections of these ditches were excavated in Trench 6 (025; Fig.6, S.13), Trench 7 (027; Fig.7, S.20) and Trench 12 (018; Fig.11, S.11). There were apparent recuts of ditch 027 in Trench 7 (029), and ditch 018 in Trench 12 (012). Ditch 027 had a 'V' shaped profile with a width of 1.1m and a depth of 0.7m, broadly replicated in Trench 12 by ditch 018. Ditch 025, however, is closer in form to the ditch recuts 029 and 012, with a broad concave profile, a width of 2.6m and a depth of 0.5m.

A second, roughly parallel ditch immediately east of the one described above was recorded on the geophysical survey, possibly confined to the stretch running between two further ditches extending at right-angles towards the east. It was observed as ditch 009 in Trench 12

(Fig.11, S.9; Pl. 8). The space confined by the two broadly parallel ditches was postulated as a (ditched) trackway in the geophysical survey report (Phase 2018).

The geophysical survey indicated two further ditches running broadly at right-angles to ditch 018/025/027. The more northerly of these was intercepted in Trench 7, close to, but not at its junction with 027 and its recut (032 in Fig.7, S.20). The same ditch seems to have been located in Trench 8 (007; Fig.6, S.6) and Trench 9 (036; Fig.9, S.19). Ditches 032 and 036 had similar 'V' shaped profiles. They measured 2.2m and 2.4m wide respectively, and 0.8m and 0.75m deep. Ditch 007 was slightly wider and shallower, measuring 2.96m wide and 0.45m deep. Ditch 032 had a similar profile to ditch 027 in Trench 7, and was truncated by the recut of 027 (029), further suggesting contemporaneous use of these ditches (Pl. 9). A ditch running northwards from 007/032/036, visible on the geophysical survey, was recorded in Trench 5 (003; Fig. 5, S.1). It was 1.38m wide and 0.18m deep.

The second ditch shown on the geophysical survey as running approximately at right-angles to ditch 018/025/027 was located in Trench 11 as 'V' shaped ditch (022; Pl. 10 and Fig. 10, S.25) It was 2.04m wide and 0.58m deep. A second, U-shaped ditch as also recorded (039, with possible recut 040; Fig. 10, S.25). It was 0.6m wide and 0.42m deep, and the recut 2.36m wide and 0.42m deep. This linear feature appears in the geophysical survey to cross the entire width of Area 2. It should be noted, however, that it was not observed in Trench 15. Either it terminates short of Trench 15, or it takes a course just to the north-west of the north-west end of the trench.

A final ditch feature was exposed in Trench 16, interpreted as a probable field boundary, ditch (020) (2.1m W x 0.5m D) (Fig.10, S.15) appears to be a linear feature turning on an approximate right angle (Plate 11). This confirms the results of the Geophysical survey which identifies this feature as the corner of a rectilinear enclosure.

Only two features were revealed in Area 2 that had not been detected by the geophysical survey, both small pits containing evidence of potential *in-situ* burning. Feature 015 (0.60m wide and 0.21m deep), was a small, circular pit in Trench 12, with a charcoal rich fill (016), containing an abundance of burnt wood and stone, with evidence of heat-affected natural (Fig.11, S.7). Feature 034 was an elongated, ovular feature in Trench 14, with a fill (035) containing occasional charcoal flecking and frequent heat-affected stones (Fig.12, S.16). There was clear evidence of heat-affected natural around this feature. A number of small, fragmented sherds were recovered from this feature and probably date to the Bronze Age period. No finds were recovered from feature (015), but the similarity and proximity of this feature to pit features (034), (046) and (048) suggest a probable prehistoric origin.

6 Artefact Record

Pottery by Blaise Vyner

Trench 1, Pit 048, Fill 047

Part of the base of a jar (c.55%), surfaces and fabric grey-pink, numerous small and occasional medium-sized indeterminate grits in a friable fabric, wall thickness c. 12 mm, weight 100 gm, base external diameter c. 8 cm.

The friable fabric and wall thickness of this vessel suggests that it is likely to be of Bronze Age date, although whether it should be attributed to the Early or Middle Bronze Age is more difficult to establish. However, the general absence of Middle Bronze Age pottery from West Yorkshire would favour an Early Bronze Age date, since cremation urns of this period are sparsely distributed across the area. The base external diameter, 8 cm, would not be uncommon in Collared Urns and it is likely that this fragment is all that remains of a cremation burial possibly once placed beneath a low mound. These vessels were current in the region in the period 2100 – 1700 cal BC (Richardson and Vyner 2007, 54). The intensity of modern development in West Yorkshire has limited the survival of prehistoric burials in the area (Manby 1986, 67-8), although more complete evidence survives in the rural fringes.

Trench 1, Pit 048, Fill 049

Three undiagnostic ceramic scraps, likely to be Bronze Age.

Treatment

Grit sizes are expressed as small (<3 mm), medium (3-6 mm) and large (6-9 mm). Distinctive particles smaller than 0.02 mm are described as dust. Grit quantities refer to the estimated average number of pieces visible per 100 mm square: occasional (1 or less), few (2) and many (3 to 4). Quantification excludes fragments with a total surface area of less than around 100² mm.

6 Environmental Record

Human Bone

Two human cremations were submitted for assessment from deposits 47 and 49. The bone from deposit 47 weighted 75g and that from 49 was 300g. The cremations were confirmed to be human (*post comm* Malin Holst). The deposits are associated with Bronze Age pottery and as such are likely to be the remains of urned cremations.

Further work on the assemblage is recommended in order that the remains be fully reported.

Carbonised Plant Macrofossils and Charcoal by Diane Alldritt

Introduction

A total of twenty one environmental sample flots taken during archaeological trial trenching evaluation, were examined for carbonised plant macrofossils and charcoal. In addition charcoal and possible hazel nutshell taken from five of the sample retents were analysed for identifiable remains.

Archaeological investigations involved the opening of eighteen trial trenches with seven of these found to contain no archaeological remains, although several backfilled mine shafts of probable 18th to early 19th century date were encountered. The archaeology consisted of a series of ditches, probably field boundaries, along with two Bronze Age cremation burials and a number of pit features. Samples were examined from pit and ditch features in trenches 1, 2, 5, 6, 7, 8, 9, 11, 12, 14 and 16.

Methodology

The bulk environmental samples were processed by ASWYAS using a Siraf style water flotation system (French 1971). The samples varied from <3littres up to 20litres in volume. The flots were dried before examination under a low power binocular microscope typically at x10 magnification. All 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).

Results

The environmental samples produced some very large concentrated charcoal flots with carbonised material recovered up to 2400ml in volume from some of the pit features indicating areas of significant burning. In contrast the ditch features produced considerably less with typically from <2.5ml up to 50ml of charcoal and crushed charred detritus encountered. Modern material was present in amounts from 10ml up to 100ml mainly modern roots with occasional modern seeds, clinker and earthworm egg capsules indicating bioturbation and mixing occurring through the deposits. The ditch samples contained the majority of the intrusive remains found in the samples suggesting fairly modern features or recent disturbance from ploughing and industrial activity.

Results are given in appendix 5 and discussed below.

Discussion

Trench 1

Two samples from pit features in Trench 1 produced significant concentrations of charcoal representing substantial areas of burning activity.

Pit 046, deposit 047 contained a large amount of *Quercus* (oak) charcoal 1.0cm to 2.0cm in size in amongst highly crushed charcoal detritus. Two fragments of cremated bone were also recovered from the sample. Pit 048 deposit 049 was similar with all oak charcoal identified together with a fragment of degraded burnt bone, and a large amount of crushed charred waste material. The charcoal in both pit features looked like it was probably re-deposited from elsewhere, perhaps shoveled from a funeral pyre and deposited in the pits.

Trench 2

A single sample from pit 044, deposit 045 in trench two contained no identifiable remains, with only a few crushed traces of charred detritus present.

Trench 5

Ditch 003, deposit 004 in Trench 5 contained a few crushed slivers of oak charcoal in amongst modern material, suggesting the burnt remains were possibly from disturbance of earlier features or bioturbated through the deposit.

Trench 6

Ditch 025, deposit 026 in Trench 6 contained the same types of remains seen in Ditch 003, with a sliver of crushed oak charcoal and modern material present. These remains are probably not particularly significant other than to indicate residual material.

Trench 7

Three ditch features sampled in Trench 7 all produced modern remains, with a few crushed slivers of degraded charcoal recovered from ditches 029, deposit 031 and Ditch 032, deposit 033 whilst ditch 027, deposit 028 produced slightly more crushed charcoal but nothing could be identified from any of the features. Ditch 027, deposit 028 contained a few fragments of modern leaf, which still retained their colour, hence this feature is probably very recent or has been recently disturbed!

Trench 8

Two samples were examined from ditch features in Trench 8 with crushed charred detritus found in both.

Ditch 005, deposit 006 possibly a plough furrow had churned up a few crushed oak slivers, probably remnants from earlier burning activity. Ditch 007, deposit 008 in contrast contained a single fragment of *Betula* (birch) charcoal in reasonable condition and a large 2.0cm chunk of clinker, probably originating from post-medieval / industrial burning activity in the vicinity.

Trench 9

Ditch 036, deposit 037 produced two fragments of *Betula* (birch) charcoal in amongst a large amount of modern roots, with the charcoal possibly bioturbated from nearby burning.

Trench 11

Three ditch samples from Trench 11 produced trace amounts of charred material.

Ditch features 039 and 040, deposits 041 and 042 contained no identifiable carbonised material, although [040] did have a few fragments of clinker probably from more recent disturbance. Ditch [022] (024) produced a few traces of charcoal with *Quercus* (oak) and *Corylus* (hazel) identified in amongst modern straw and roots.

Trench 12

Two samples from pit 015 in Trench 12 contained very large significant deposits of oak charcoal. Deposit 016 produced an extremely large deposit of charcoal consisting of 1.0cm to 3.0cm chunks of *Quercus* (oak) with no other remains present. Fill 017 was slightly smaller

but still produced a significant amount of charcoal with again all found to be oak type. These quantities of charcoal indicate that this may well be the site of a fire pit or cremation pyre of similar date to pits 046 and 048 in Trench 1.

Trench 14

Two samples from pit 034 in Trench 14 were probably fire pits or areas for waste disposal. Sample 3 from pit 034, deposit 035 produced a small concentration of oak charcoal whilst sample 16 contained a much larger deposit with mainly oak charcoal 1.0cm to 4.0cm in size along with occasional *Alnus* (alder) and a single fragment of *Corylus avellana* (hazel) nutshell. This feature is probably also representative of prehistoric activity in the area.

Trench 16

Ditch 020, deposit 021 had a small concentrated deposit of highly crushed charcoal with nothing identifiable due to the small size of the material. This was probably re-deposited from nearby burning or had resulted from the ditch feature cutting through earlier activity.

Conclusion

The environmental samples reflected the different phases of activity taking place at the site, with significant burning events revealed by the substantial charcoal remains recovered from pit features 015, 034, 046 and 048 probably relating to Bronze Age cremation practices or other prehistoric burning activity. The ditch features in contrast contained mixed material with far fewer carbonised remains recovered, indeed much of the crushed fragmentary charcoal from the ditches was probably residual from earlier activity subsequently mixed with clinker and modern material. The environmental material from the ditches is consistent with the features being post-medieval or fairly recent field boundaries.

The plant assemblage consisted primarily of charcoal with the majority of this found to be oak type. Small amounts of birch, hazel and alder were also present and possibly had been used as kindling on large oak cremation pyres. No cereal grain or weeds of agricultural land were present in the samples. A single fragment of hazel nutshell from pit 034 was the only indicator of food resources found in the samples, and this was probably also related to the prehistoric phase of events.

Further work at the site has a good potential to continue to produce carbonised material related to prehistoric activity in the area.

8 Discussion

Early prehistoric remains

Two features of archaeological interest were observed in Area 1: pit features 046 and 048, both of which contained a substantial amount of burnt human remains. A large base sherd was recovered from the fill of feature 046, which, in context, is highly suggestive of a cremation urn, likely dating from the Bronze Age period. Although no pottery was recovered

from feature 048, its similarity with and proximity to 046 may indicate this feature is also a broadly contemporary cremation burial.

Though no cremated bone was recovered from Area 2, the environmental assessment indicates that there may be other features there which derive from cremation activity: the quantities of charcoal recovered from pits 015, 034, 046 and 048. We cannot discount the possibility, therefore, that further Bronze Age cremations – likely to be heavily truncated by later activity if they survive at all – are located there.

Possible medieval ridge and furrow

The ridge and furrow recorded in the geophysical survey was confirmed in the trial trenching by the observation of furrows taking the same alignments. The ridges in Area 1 are aligned south-west to north-east, whilst those in Area 2 run approximately at right-angles, from north-west to south-east. The ridges in Area 2 have a slight but definite reverse-‘S’ shape, which is characteristic of open-field ridges of medieval date rather than the narrower, straight ridges of post-medieval times which continued to be formed in the 18th and 19th centuries. The ridges in Area 1, though less extensively recorded, also seem to be slightly curved.

On current evidence, therefore, these two areas are likely to have been parts of two arable furlongs in medieval times, with a ‘headland’ which is currently occupied by the boundary between the two fields.

Undated field boundaries and circular features

The geophysical survey recorded a pattern of ditches which appear to mark field boundaries and a possible trackway, the ditches presumably once accompanied by banks and fences or hedges. These are essentially undated. The environmental assessment report suggests they are probably relative recent, and a similar conclusion has been drawn on the basis of historic mapping evidence. On the 1819 map of Mirfield, four strip fields are pictured directly adjacent to the west of the PDA, and one field boundary within the PDA, following the line of ditches 022 and 039, appears to be a direct continuation of the southern boundary of the adjacent strip fields. It was removed at some point between 1908 and 1922 (NLS 2018; Old Maps 2018).

The boundaries are clearly of a different date from the ridge and furrow, and presumably, therefore, either pre-date or post-date what is likely to be the remains of medieval open fields. A later date is suggested by the coincidence of one of the ditches with a 19th-century boundary, and by the absence of any finds which would indicate otherwise. On the other hand, the morphology of the field enclosures and potential ditched trackway is reminiscent of later prehistoric and Roman field boundaries frequently recorded in the eastern part of West Yorkshire and beyond.

The apparently circular features showing in the geophysical survey towards the centre of Area 2, perhaps ditches, were not identified in the trenching. They may be post-medieval features, like the field boundary ditches, but it should be noted that one of the undated,

charcoal-rich pits, in Area 2 (Trench 12, 015), was located close to the southern circular feature identified within the geophysical survey and not within the evaluation trenches.

Coal mining

Evidence of potential coal mining was present in both Areas 1 and 2, these possible areas of mining activity were found in several of the trenches across the site. Coal working is known in Mirfield and a number of coal mines are visible on maps of Mirfield through the 19th and early 20th centuries (NSL 2018).

From 1871, large industrialised sinking operations were begun across Mirfield, producing pits that could extract as much as 200 tons of coal a day. Prior to this, the majority of coal extracted in and around Mirfield lay very close to the surface, meaning that coal could be extracted easily through smaller pits known as 'day holes', these were less intrusive mines on a smaller scale, dating up to the early 19th century (ASWYAS 2004).

The mine workings present in the PDA, were small scale, exploratory operations not present on OS maps. They are similar in nature to the 'day holes' described above and may date to the same approximate period, with a *terminus ante quem* of the mid-19th century. These types of features are very common within the coal extraction areas of West Yorkshire.

Further investigation during the course of the site work by Geotechnical teams was undertaken into the areas of possible mining. This revealed deep features that appeared to be backfilled with coal waste and look to be bell pits for coal extraction. The features did not look to be part of any post-medieval mechanical extraction.

9 Conclusions

The scheme of archaeological trial trenching meet he objectives of the work and was generally successful in that the results confirmed the interpretation of the geophysical survey and were able to offer some interpretation. Several backfilled bell pits and mining features were identified and are likely to date to the mid-19th century at the latest. The majority of the archaeological remains on site formed a series of ditches interpreted as earlier field boundaries which conform to the results of the geophysical survey. It is possible these features are the remains of a late medieval strip field system, gradually removed over the post medieval and modern periods. Perhaps most significantly, four small pits of prehistoric origin were identified. Two of them showed evidence of in-situ burning and two contained substantial amounts of burnt human remains. Pottery indicated that there were Bronze Age cremation burials. Interpretation of the features and geophysical survey features was further complicated by modern land use and the paddocking of animals.

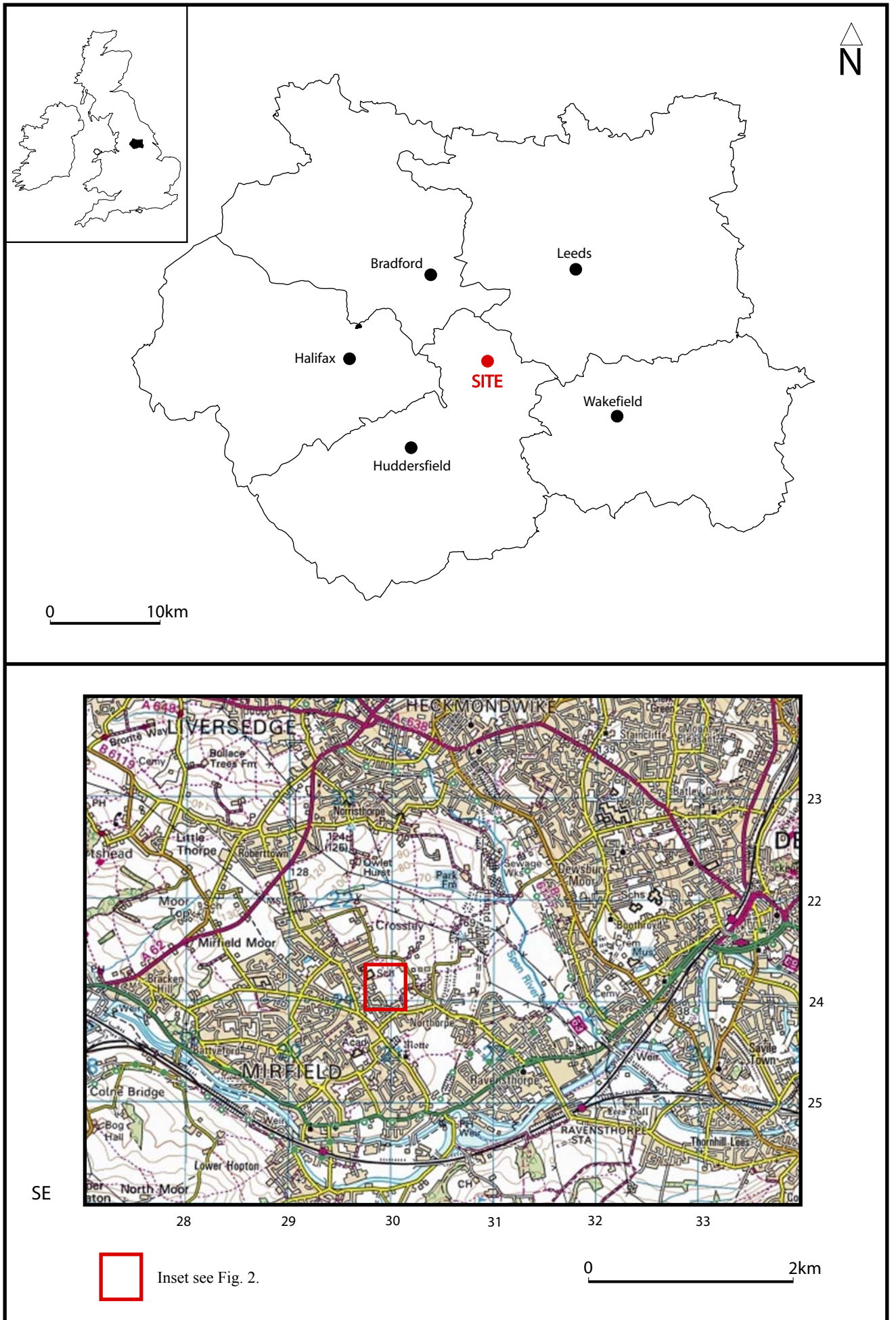


Fig. 1. Site location

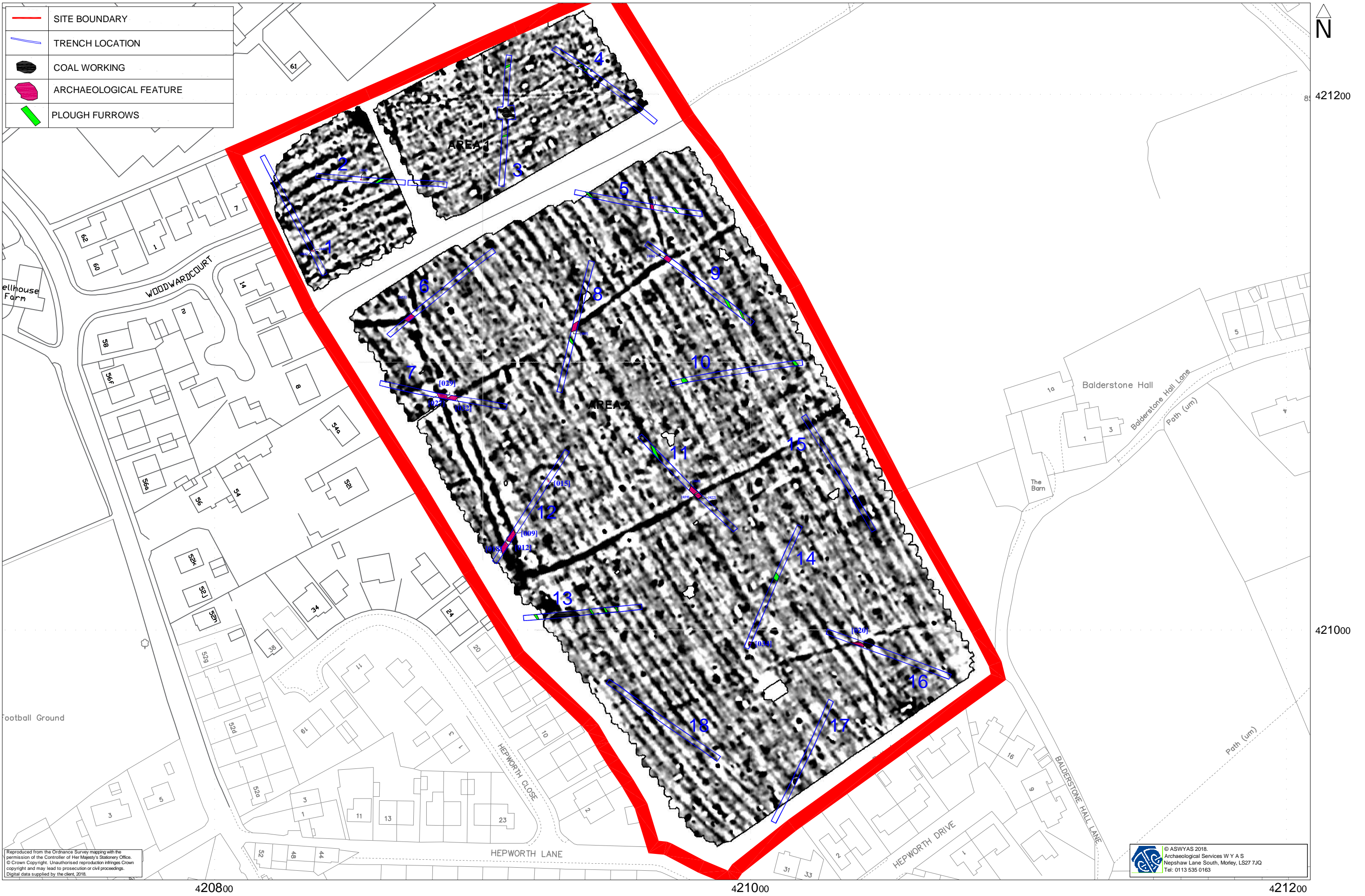
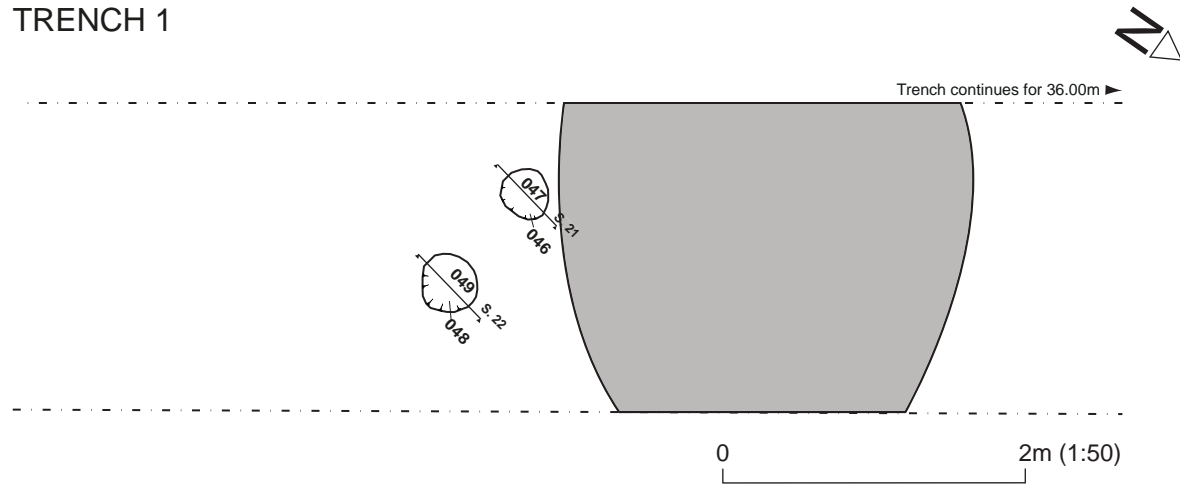


Fig. 2. Trench locations @ 1:1250

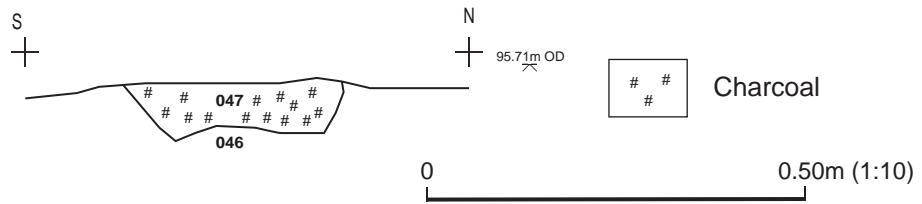
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 Nephaw Lane South, Morley, LS27 7JQ
 Tel: 0113 535 0163

TRENCH 1



S. 21



S. 22

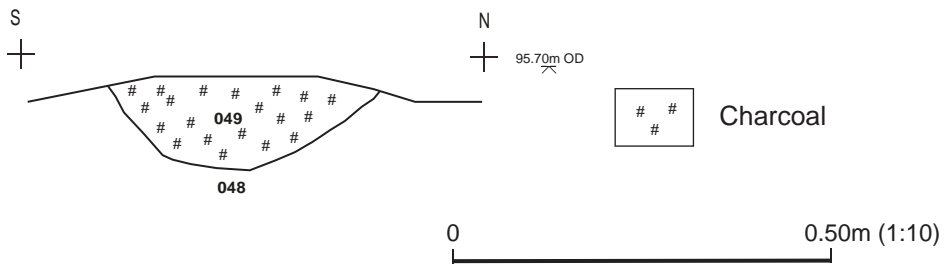
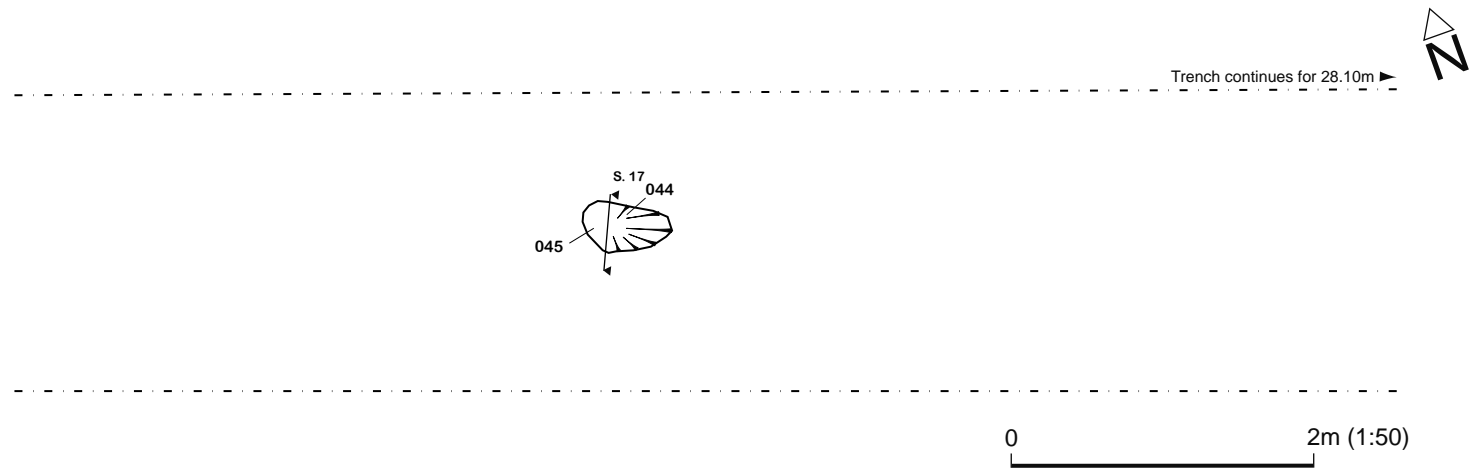


Fig. 3. Trench 1, plan and sections

TRENCH 2



S. 17

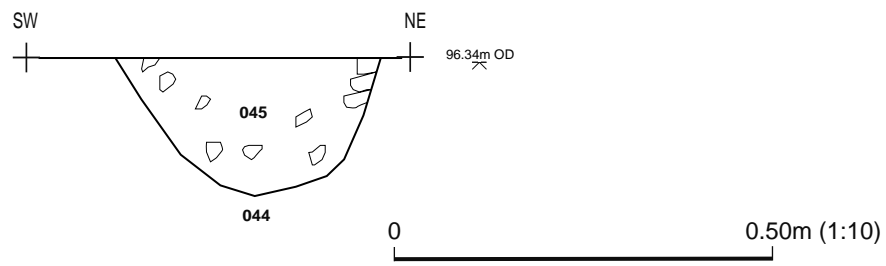


Fig. 4. Trench 2, plan and section

TRENCH 5

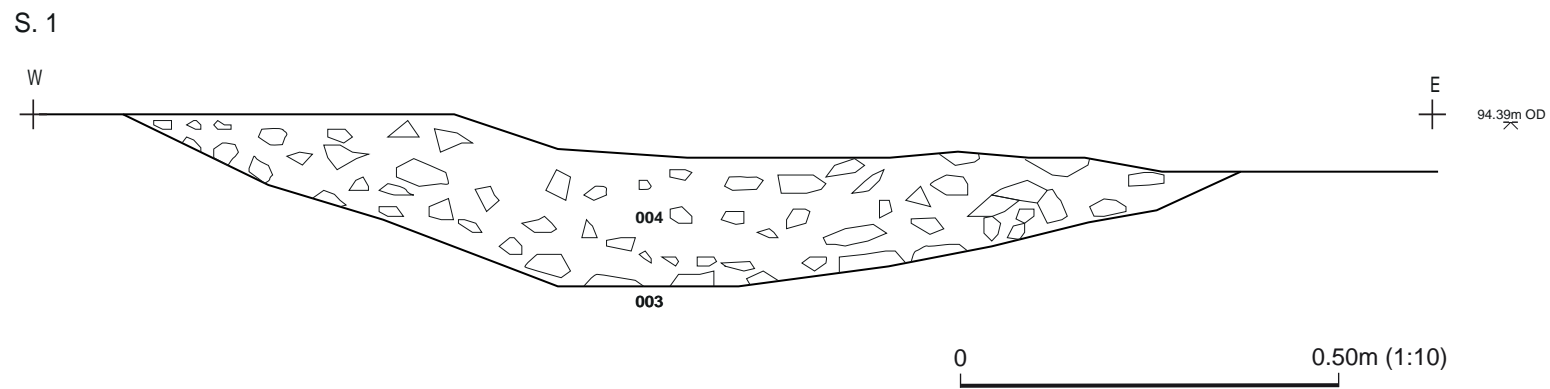
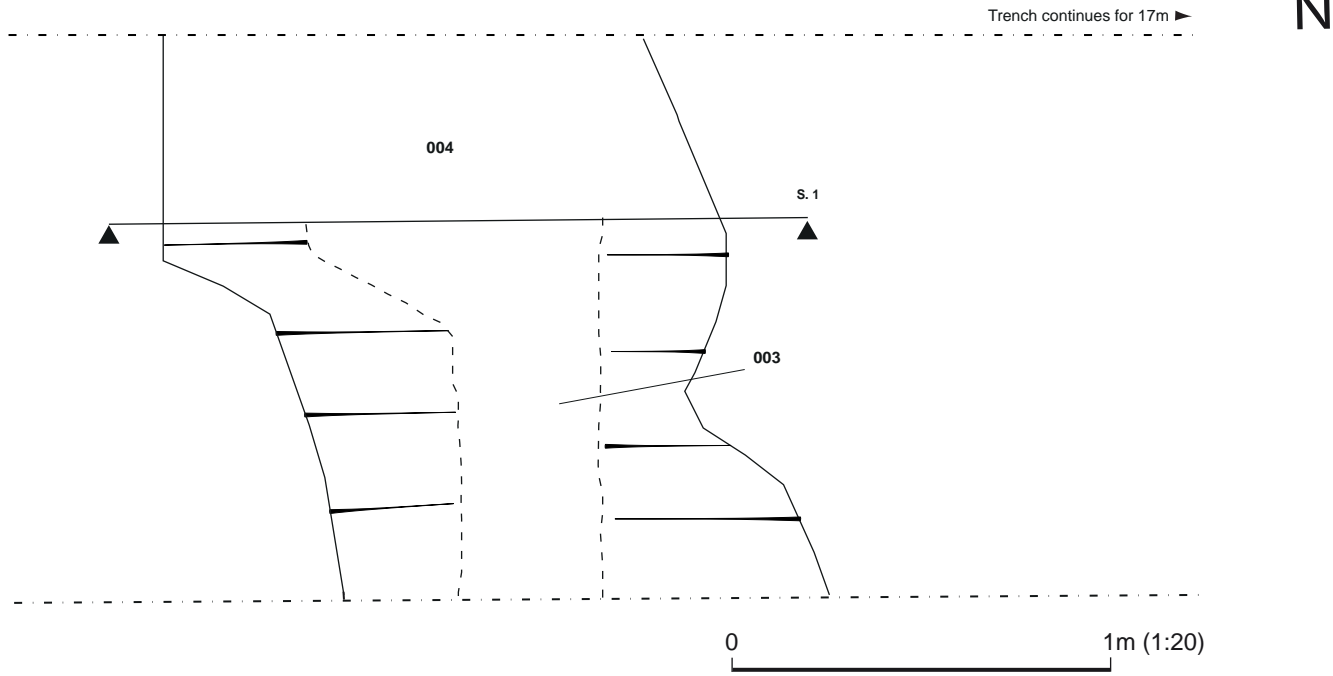
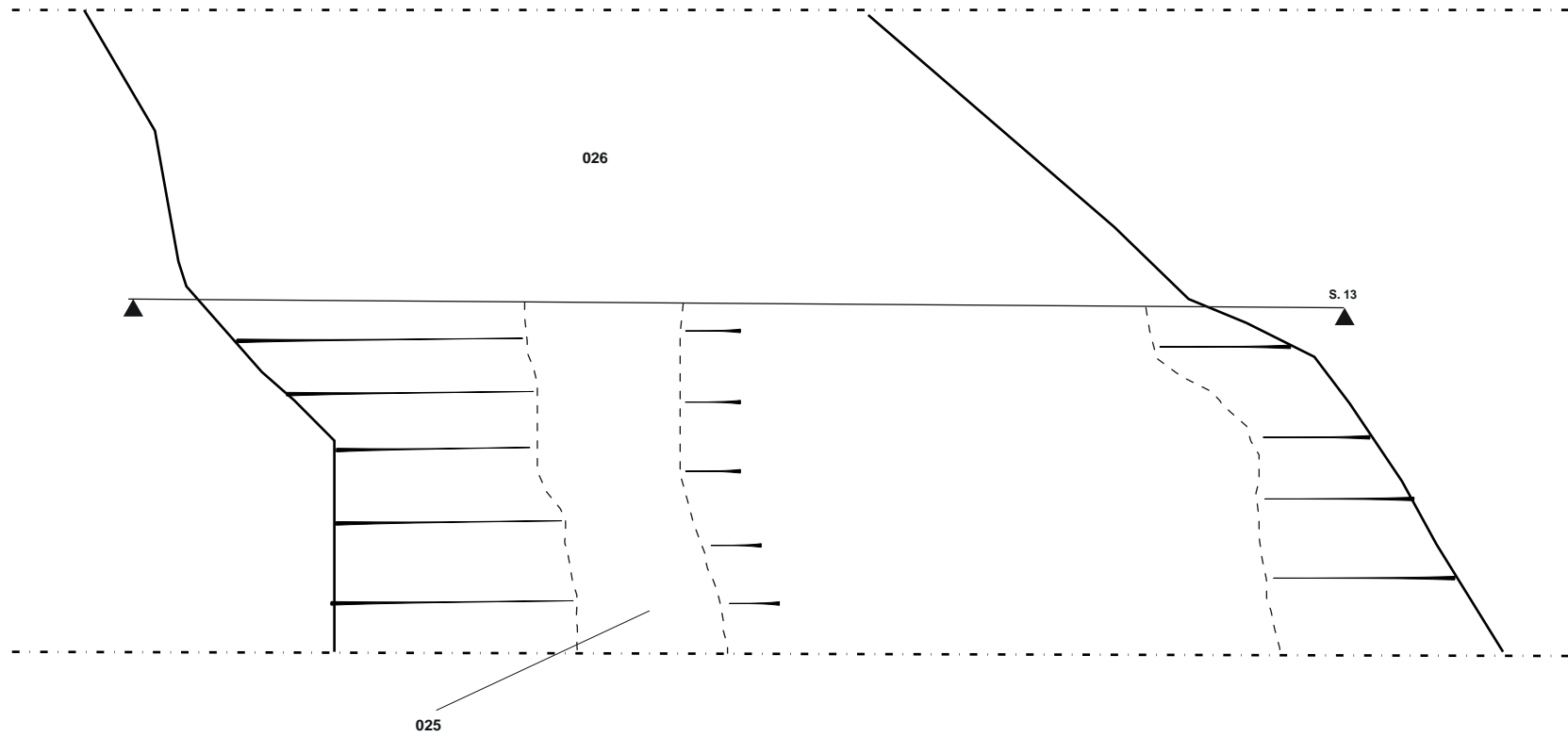


Fig. 5. Trench 5, plan and section

TRENCH 6

Trench continues for 8.20m



S. 13



94.01m OD

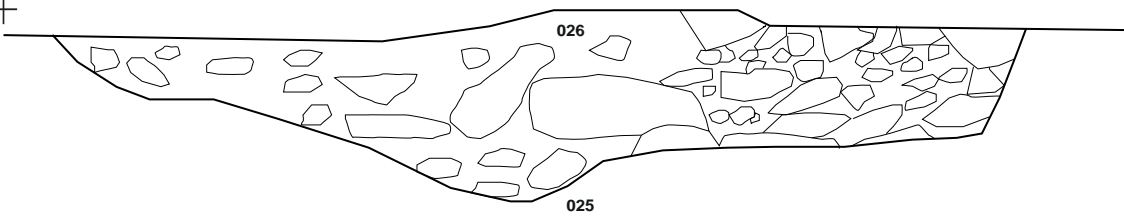
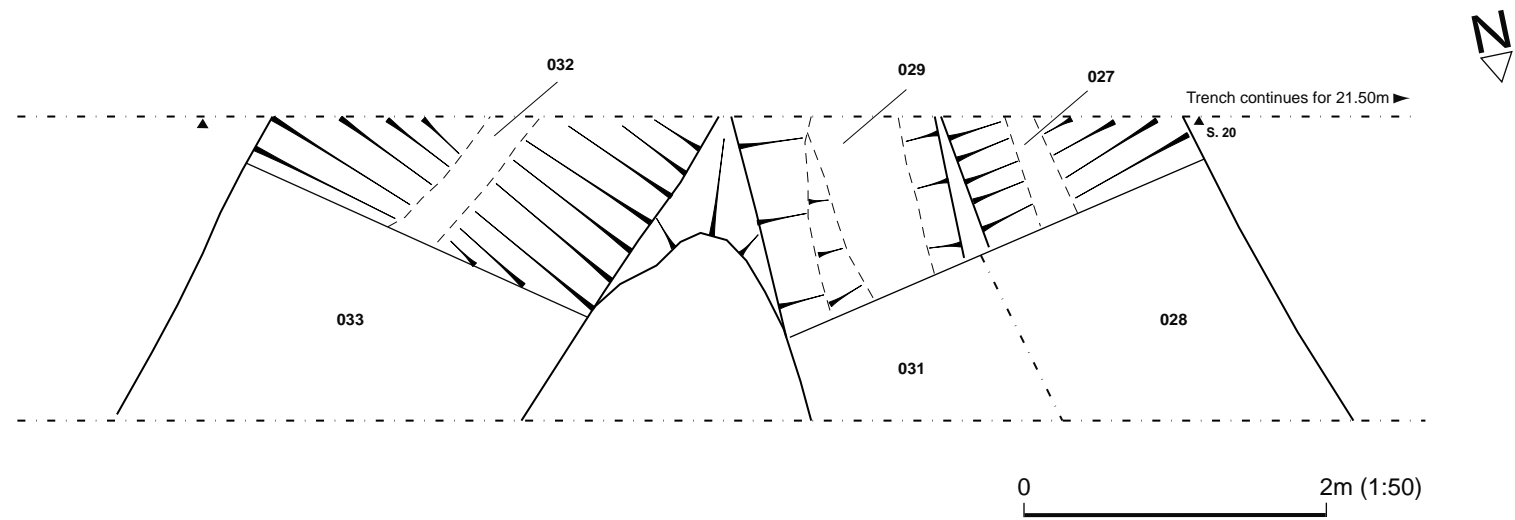


Fig. 6. Trench 6, plan and section

TRENCH 7



S. 20

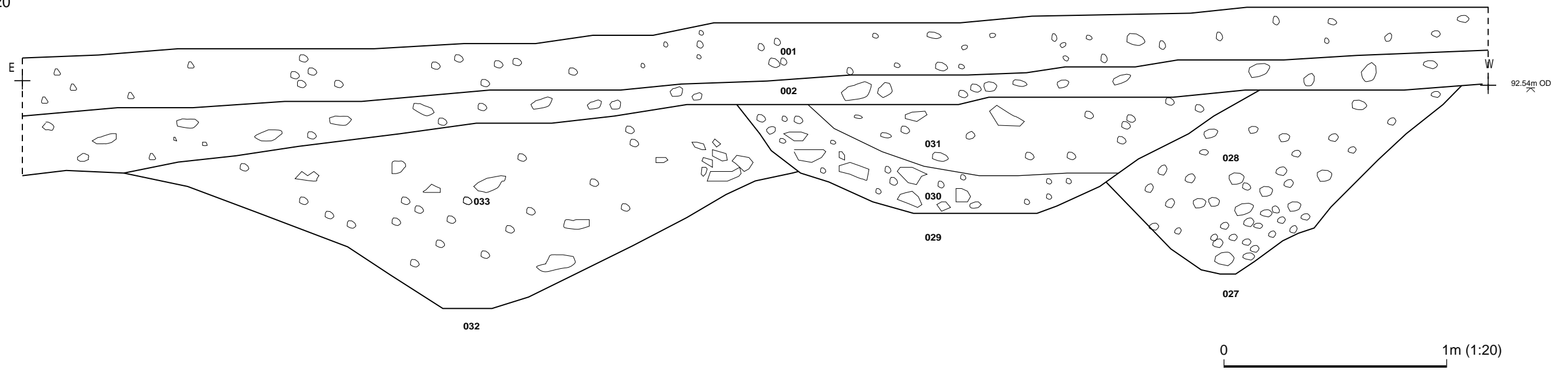


Fig. 7. Trench 7 plan and section

TRENCH 8

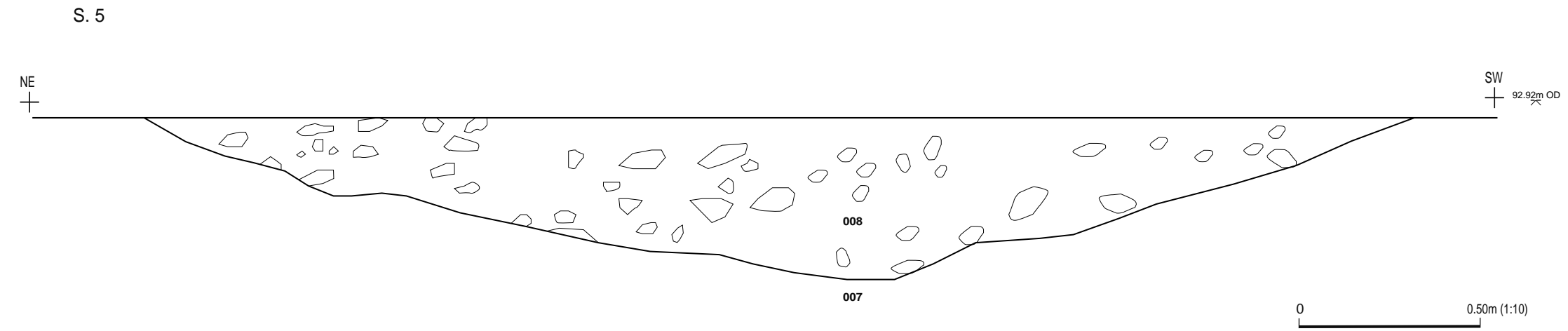
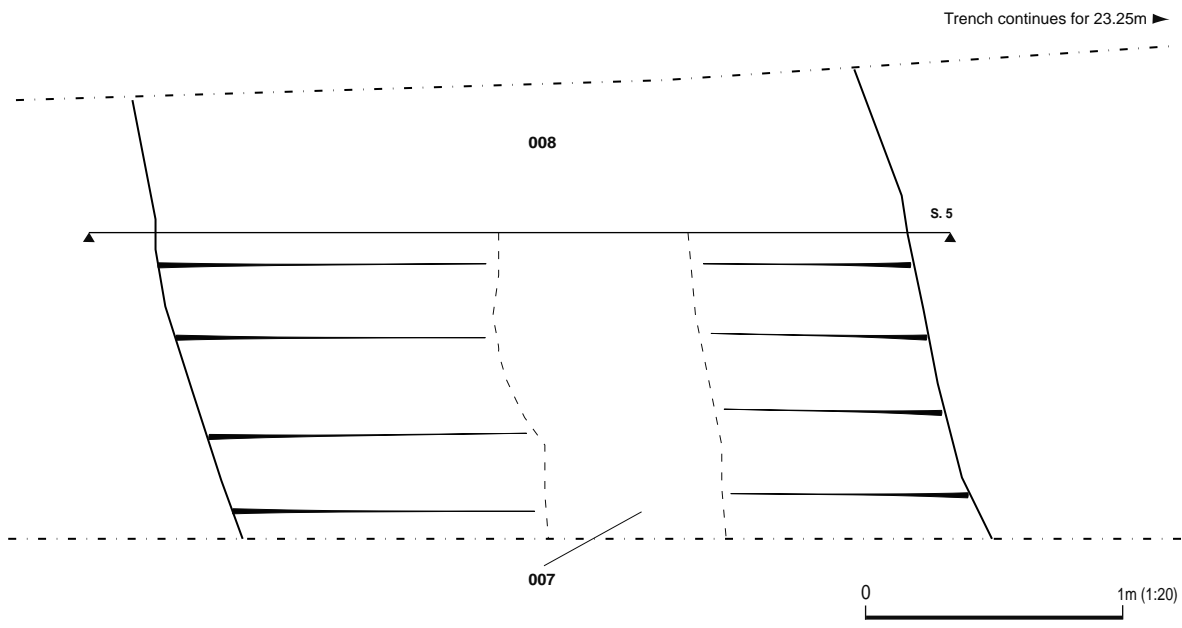
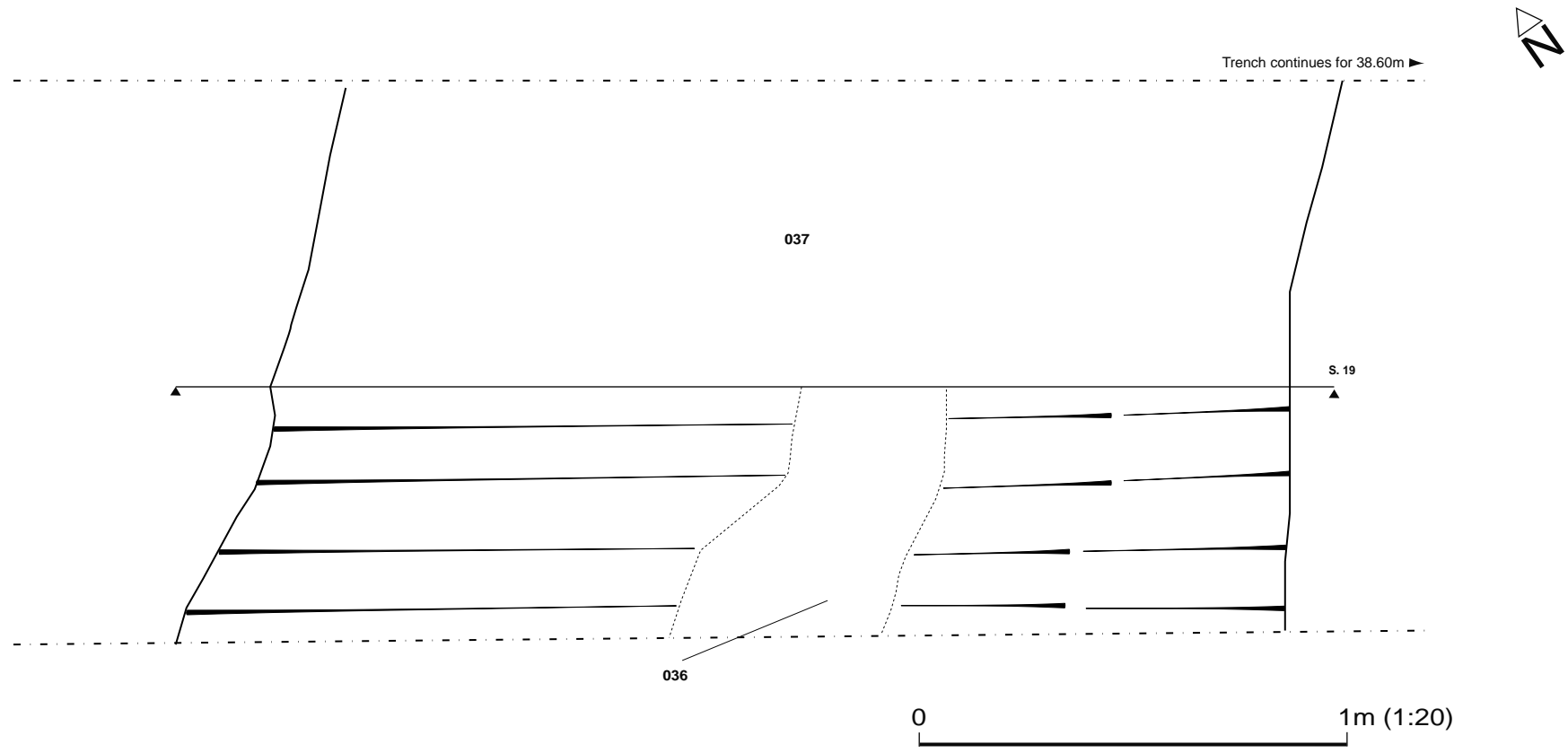


Fig. 8. Trench 8 plan and section

TRENCH 9



S. 19

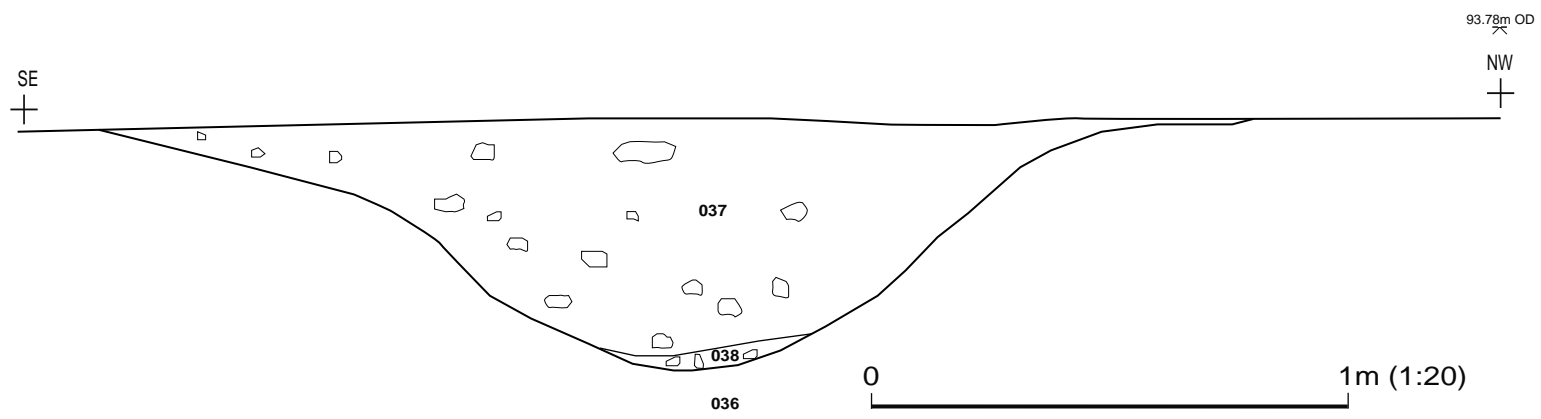
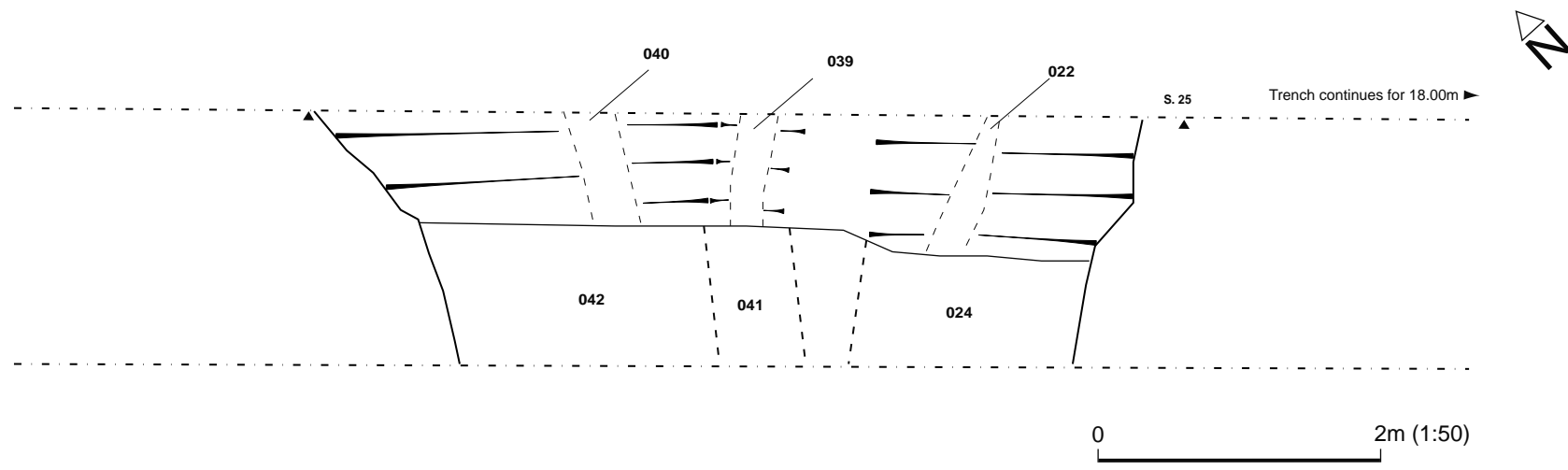


Fig. 9. Trench 9, plan and section

TRENCH 11



S. 25

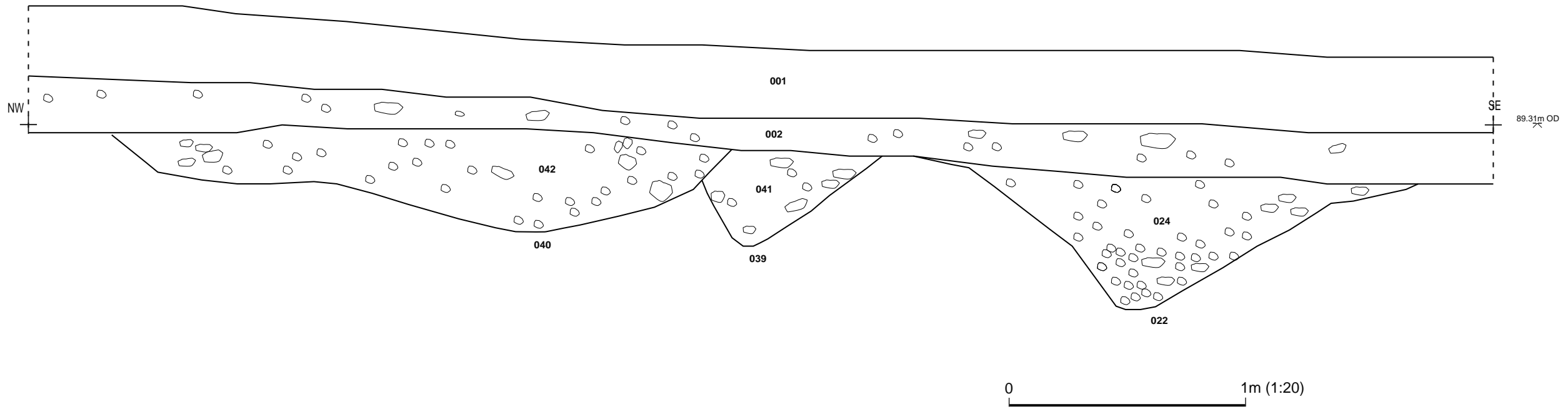


Fig. 10. Trench 11, plan and section

TRENCH 12

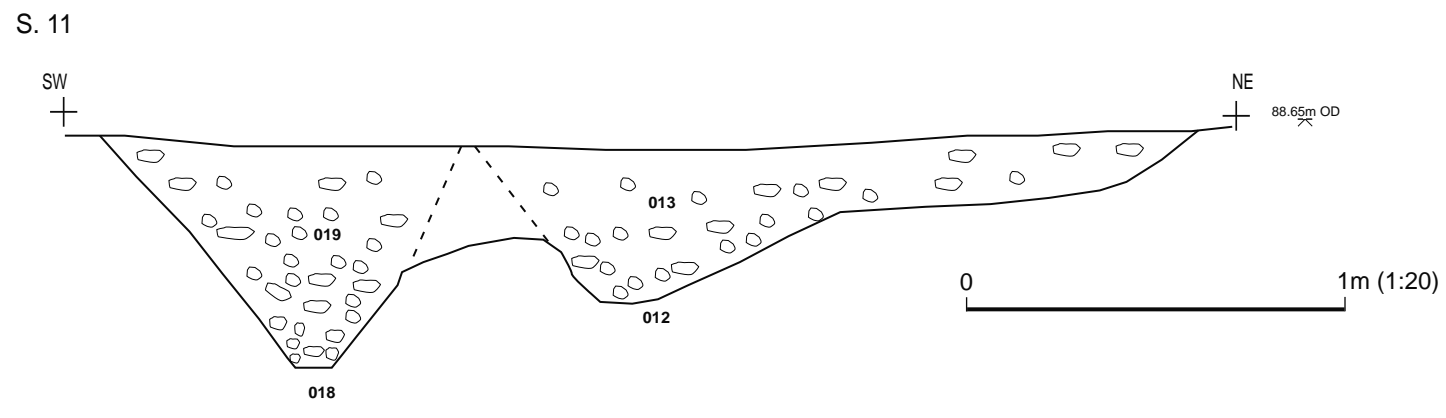
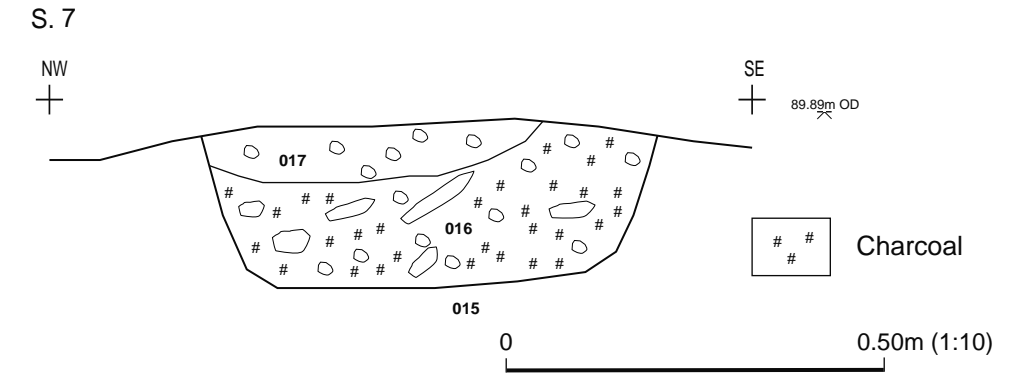
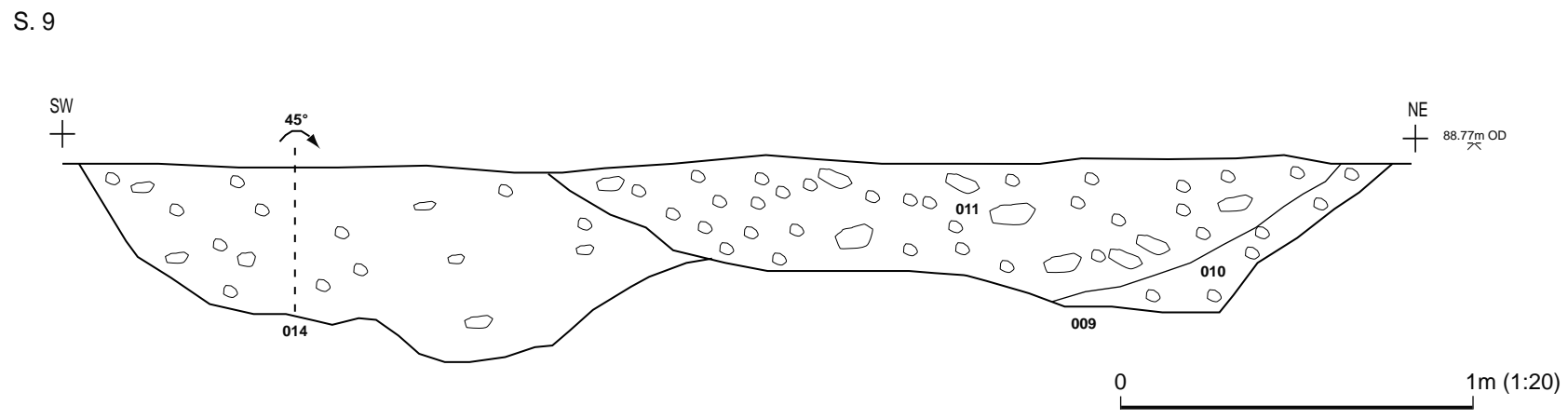
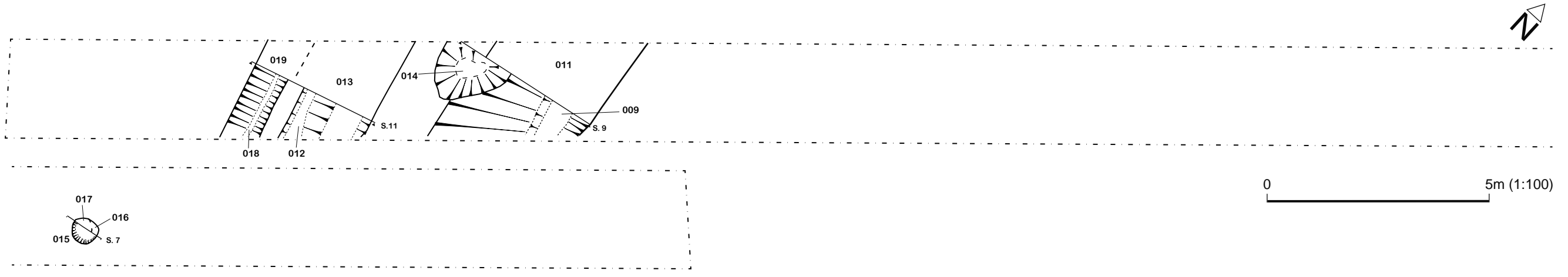
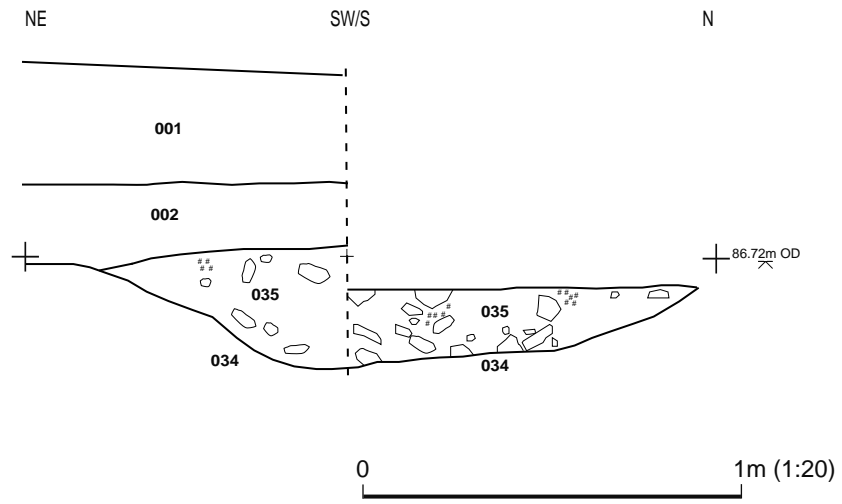


Fig. 11. Trench 12, plan and sections

TRENCH 14

S. 16



TRENCH 16

S. 15

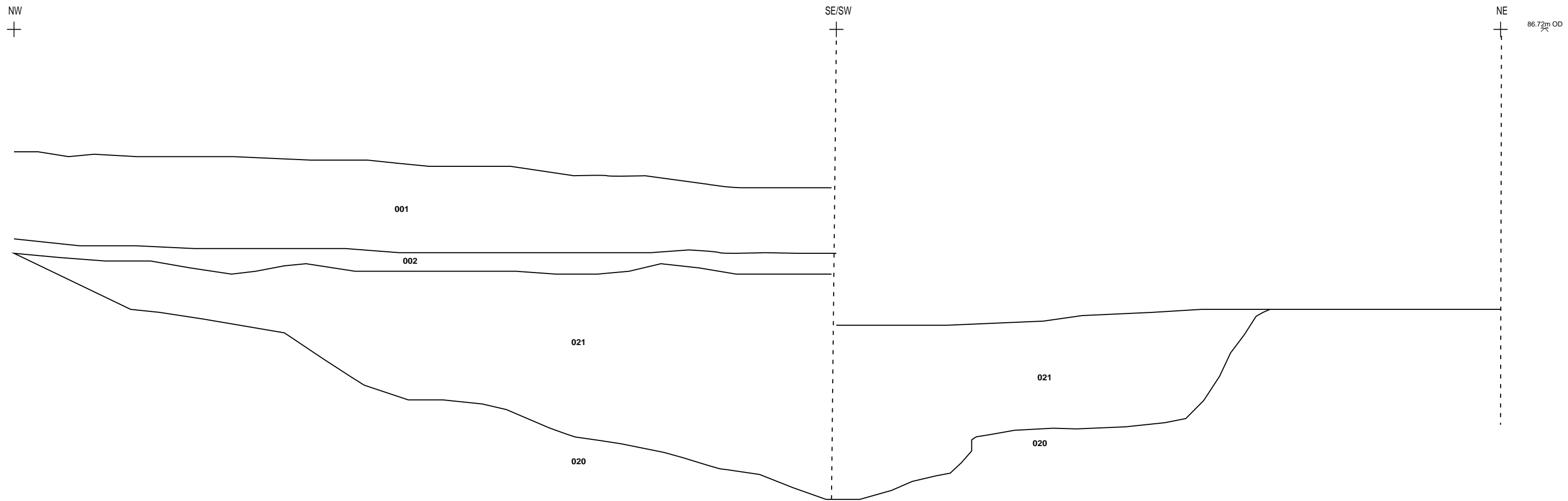


Fig. 12. Trench 14 and 16, sections



Plate 1. General view of Trench 18, looking south-east



Plate 2. General view of Trench 8, looking north-east



Plate 3. General view of Trench 13, looking east



Plate 4. Excavated mine workings in Trench 16, looking north-west



Plate 5. Section through possible cremation burial (048), looking north-west



Plate 6. Section through possible cremation burial (046), looking north-west



Plate 7. Coal working in Trench 13, looking west



Plate 8. Oblique view of ditches (009),(012) & (018) in Trench 12, looking north



Plate 9. Oblique view of ditches (027), (029) & (032) in Trench 7, looking south-west



Plate 10. Section through ditch (022) in Trench 11, looking east

Appendix 1: Written scheme of investigation

Appendix 2: Inventory of primary archive

| Phase | File/Box No | Description | Quantity |
|------------|-------------|-------------------------|----------|
| Evaluation | File no.1 | Context register sheets | 2 |
| | | Drawing register sheets | 2 |
| | | Sample register sheets | 1 |
| | | Photo register sheets | 2 |
| | | B&W negative strips | 2 |
| | | Trench record sheets | 18 |
| | | Context cards | 45 |

Appendix 3: Concordance of contexts environmental remains

| Context | Trench | Description | Artefacts and environmental samples |
|---------|--------|------------------------------------|-------------------------------------|
| 004 | 5 | Fill of Ditch 003 | GBA 6 |
| 006 | 8 | Fill of Ditch 005 (maybe a furrow) | GBA 7 |
| 008 | 8 | Fill of Ditch 007 | GBA 8 |
| 011 | 12 | Fill of Ditch 009 | GBA 17 |
| 013 | 12 | Fill of Ditch 012 | GBA18 |
| 016 | 12 | Fill of Pit 015 | GBA 1 |
| 017 | 12 | Fill of Pit 015 | GBA 2 |
| 019 | 12 | Fill of Ditch 018 | GBA 19 |
| 021 | 16 | Fill of Ditch 020 | GBA 10 |
| 024 | 11 | Fill of Ditch 022 | GBA 15 |
| 026 | 6 | Fill of Ditch 025 | GBA 9 |
| 028 | 7 | Fill of Ditch 027 | GBA 22 |
| 031 | 7 | Fill of Ditch 029 | GBA 21 |
| 033 | 7 | Fill of Ditch 032 | GBA 20 |
| 035 | 14 | Fill of Pit 034 | GBA 3; GBA 16 |
| 037 | 9 | Fill of Ditch 036 | GBA 12 |
| 041 | 11 | Fill of Ditch 039 | GBA 14 |
| 042 | 11 | Fill of Ditch 040 | GBA 13 |
| 045 | 2 | Fill of Pit 044 | GBA 11 |
| 047 | 1 | Fill of Pit 046 | GBA 4 |
| 049 | 1 | Fill of Pit 048 | GBA 5 |

Appendix 4: Trench tables

| Trench 1 | | | | | |
|--|-------------|-------------------|--------------------------|------------------|--|
| General Description | | | Orientation | | NW-SE |
| Trench contained large coal and stone deposit towards SE extent (possible backfilled mining shaft), three furrows oriented E-W and two small pits. | | | Average Depth (m) | | 0.45 |
| | | | Width (m) | | 2.00 |
| | | | Length (m) | | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.28 | Topsoil |
| 002 | Layer | - | - | 0.20 | Subsoil |
| 046 | Cut | 0.31 | 0.29 | 0.08 | Sub-circular, concave pit, imperceptible break at the top, moderate slopping sides, concave base |
| 047 | Fill of 046 | 0.35 | 0.29 | 0.08 | Dark greyish black clayey silt with inclusions of charcoal and burnt bone |
| 048 | Cut | 0.38 | 0.35 | 0.12 | Sub-circular, concave pit, imperceptible break at the top, moderate slopping sides, concave base |
| 049 | Fill of 048 | 0.38 | 0.35 | 0.12 | Dark greyish black clayey silt with inclusions of charcoal and burnt bone |

| Trench 2 | | | | | | |
|---|-------------|-------------------|------------------|--------------------------|---|------|
| General Description | | | | Orientation | | |
| Trench contained natural coal outcrop observed towards E extent of trench, one furrow oriented N-S and one pit observed towards W extent of trench. | | | | Orientation | | E-W |
| | | | | Average Depth (m) | | 0.45 |
| | | | | Width (m) | | 2.00 |
| Length (m) | | 50.00 | | | | |
| Contexts | | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description | |
| 000 | Layer | - | - | - | Natural | |
| 001 | Layer | - | - | 0.25 | Topsoil | |
| 002 | Layer | - | - | 0.10 | Subsoil | |
| 044 | Cut | 0.59 | 0.35 | 0.18 | Oval, U-shaped pit, sharp break at the top, gradually slopping sides, imperceptible break at the irregular base | |
| 045 | Fill of 044 | 0.59 | 0.35 | 0.18 | Mid to dark brown loose silt with frequent stones | |

| Trench 3 | | | | | | |
|--|-------------|-------------------|------------------|--------------------------|--------------------|-------|
| General Description | | | | Orientation | | |
| Trench contained two furrows oriented E-W and a large coal outcrop towards trench centre. No archaeology present. | | | | Orientation | | NE-SW |
| | | | | Average Depth (m) | | 0.53 |
| | | | | Width (m) | | 2.00 |
| Length (m) | | 50.00 | | | | |
| Contexts | | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description | |
| 000 | Layer | - | - | - | Natural | |
| 001 | Layer | - | - | 0.30 | Topsoil | |
| 002 | Layer | - | - | 0.20 | Subsoil | |

| Trench 4 | | | | | |
|--|-------------|-------------------|------------------|--------------------------|--------------------|
| General Description | | | | Orientation | NW-SE |
| Trench contained four furrows oriented E-W. No archaeology present. | | | | Average Depth (m) | 0.45 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.30 | Topsoil |
| 002 | Layer | - | - | 0.15 | Subsoil |

| Trench 5 | | | | | |
|--|-------------|-------------------|------------------|--------------------------|--|
| General Description | | | | Orientation | E-W |
| Trench contained, three furrows and one ditch aligned N-S. | | | | Average Depth (m) | 0.40 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.25 | Topsoil |
| 002 | Layer | - | - | 0.25 | Subsoil |
| 003 | Cut | 1.00 (exc.) | 1.38 | 0.18 | Liner, U-shaped ditch, imperceptible break at the top, very shallow sides, imperceptible break at irregular base |
| 004 | Fill of 003 | 1.00 (exc.) | 1.38 | 0.18 | Mid brown loose sandy silt with frequent large to medium stone inclusions |

| Trench 6 | | | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--|------|--|
| General Description | | | | Orientation | | | |
| Trench contained furrows and one ditch aligned NW-SE. | | | | NE-SW | | | |
| | | | | Average Depth (m) | | 0.40 | |
| | | | | Width (m) | | 2.00 | |
| | | | | Length (m) | | | |
| 50.00 | | | | | | | |
| Contexts | | | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description | | |
| 000 | Layer | - | - | - | Natural | | |
| 001 | Layer | - | - | 0.35 | Topsoil | | |
| 002 | Layer | - | - | 0.10 | Subsoil | | |
| 025 | Cut | 1.00 (exc.) | 2.60 | 0.50 | Linear, U-shaped ditch, sharp break at the top, gradually slopping sides, gradual break at narrow irregular base | | |
| 026 | Fill of 025 | 1.00 (exc.) | 2.60 | 0.50 | Mid to dark brown loose silt with frequent stone inclusions | | |

| Trench 7 | | | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--|------|--|
| General Description | | | | Orientation | | | |
| Trench contained three furrows oriented N-S, two linear ditches aligned NW-SE and a linear ditch aligned NE-SW. | | | | E-W | | | |
| | | | | Average Depth (m) | | 0.43 | |
| | | | | Width (m) | | 2.00 | |
| | | | | Length (m) | | | |
| 50.00 | | | | | | | |
| Contexts | | | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description | | |
| 000 | Layer | - | - | - | Natural | | |
| 001 | Layer | - | - | 0.33 | Topsoil | | |
| 002 | Layer | - | - | 0.18 | Subsoil | | |
| 027 | Cut | 0.85 (exc.) | 1.10 | 0.75 | Liner, V-shaped ditch, sharp break at the top, steep sides, sharp break at the flat base | | |

| | | | | | |
|-----|-------------|-------------|------|------|--|
| 028 | Fill of 027 | 0.85 (exc.) | 1.10 | 0.75 | Dark yellow-brown loose sandy silt with frequent limestone pebbles |
| 029 | Cut | 1.30 (exc.) | 1.20 | 0.55 | Liner, U-shaped ditch, sharp cut at the top, moderate concave sides, gradual cut at the concave base |
| 030 | Fill of 029 | 1.30 (exc.) | 1.00 | 0.36 | Mid yellow-brown friable silty sand with frequent limestone fragments |
| 031 | Fill of 029 | 1.30 (exc.) | 1.36 | 0.30 | Mid yellow-brown friable sandy silt with occasional limestone fragments |
| 032 | Cut | 1.30 (exc.) | 2.40 | 0.80 | Linear, V-shaped ditch, sharp break at the top, steep straight sides, sharp break at the flat base |
| 033 | Fill of 032 | 1.30 (exc.) | 2.40 | 0.80 | Dark yellow-brown loose sandy silt with moderate limestone gravels |

| Trench 8 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--|
| General Description | | | | Orientation | NE-SW |
| Trench contained four furrows oriented N-S, one linear ditch aligned E-W, one narrow possible ditch feature aligned NW-SE (probably a furrow) | | | | Average Depth (m) | 0.38 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.28 | Topsoil |
| 002 | Layer | - | - | 0.18 | Subsoil |
| 005 | Cut | 1.00 (exc) | 0.90 | 0.20 | Linear, U-shaped, shallow possible ditch (probably furrow) |
| 006 | Fill of 005 | 1.00 (exc) | 0.90 | 0.20 | Mid brown loose silt with frequent stones |
| 007 | Cut | 1.00 (exc) | 2.96 | 0.44 | Linear, U-shaped ditch, sharp cut at the top, steep sides, gradual cut at irregular base |

| | | | | | |
|-----|-------------|------------|------|------|---|
| 008 | Fill of 007 | 1.00 (exc) | 2.96 | 0.44 | Mid to dark brown loose silt with frequent stones |
|-----|-------------|------------|------|------|---|

| Trench 9 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--|
| General Description | | | | Orientation | NW-SE |
| Trench contained two or three furrows oriented N-S and one linear ditch, possibly a field boundary. | | | | Average Depth (m) | 0.56 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.23 | Topsoil |
| 002 | Layer | - | - | 0.15 | Subsoil |
| 036 | Cut | 0.80 (exc.) | 2.20 | 0.72 | Linear, V-shaped ditch, sharp break at the top, steep straight sides, sharp break at the flat base |
| 037 | Fill of 036 | 0.80 (exc.) | 2.20 | 0.65 | Dark yellow brown friable silty sand with frequent limestone fragments |
| 038 | Fill of 036 | 0.80 (exc.) | 0.35 | 0.09 | Mid yellow-brown loose sandy silt with moderate large limestone fragments |

| Trench 10 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--------------------|
| General Description | | | | Orientation | E-W |
| Trench contained six furrows oriented N-S. No archaeology present. | | | | Average Depth (m) | 0.50 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |

| | | | | | |
|-----|-------|---|---|------|---------|
| 001 | Layer | - | - | 0.33 | Topsoil |
| 002 | Layer | - | - | 0.15 | Subsoil |

| Trench 11 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|---|
| General Description | | | | Orientation | NE-SW |
| Trench contained two possible furrows oriented N-S and three parallel linear ditches aligned E-W. | | | | Average Depth (m) | 0.45 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.30 | Topsoil |
| 002 | Layer | - | - | 0.15 | Subsoil |
| 022 | Cut | 1.00 (exc.) | 2.04 | 0.58 | Linear, V-shaped ditch, sharp break at the top, steep straight sides, sharp break at the flat base |
| 024 | Fill of 022 | 1.00 (exc.) | 2.04 | 0.58 | Dark yellow-brown loose sandy silt with frequent limestone fragments |
| 039 | Cut | 1.00 (exc.) | 0.60 | 0.42 | Linear, U-shaped ditch, moderate break at the top, moderate concave sides, gradual break at the concave base |
| 040 | Cut | 0.80 (exc.) | 2.56 | 0.42 | Linear, U-shaped ditch, moderate break at the top, shallow concave sides, imperceptible break at the concave base |
| 041 | Fill of 039 | 1.00 (exc.) | 0.60 | 0.42 | Mid yellow-brown friable sandy silt with occasional gravels and pebbles |
| 042 | Fill of 040 | 0.80 (exc.) | 2.56 | 0.42 | Dark yellow-brown loose sandy silt with occasional stones |

| Trench 12 | | | | | |
|--|-------------|-------------------|--------------------------|------------------|---|
| General Description | | | Orientation | | NE-SW |
| Trench contained one furrow oriented N-S, four parallel ditches aligned SE-NW and one pit. | | | Average Depth (m) | | 0.45 |
| | | | Width (m) | | 2.00 |
| | | | Length (m) | | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.25 | Topsoil |
| 002 | Layer | - | - | 0.23 | Subsoil |
| 009 | Cut | 1.30 (exc.) | 2.34 | 0.44 | Linear, U-shaped ditch, moderate break at the top, moderate straight sides, gradual break at the flat base |
| 010 | Fill of 009 | 1.30 (exc.) | 0.50 | 0.20 | Mid yellow-brown loose silty sand with rare stones |
| 011 | Fill of 009 | 1.30 (exc.) | 2.18 | 0.40 | Mid red-brown friable sandy silt with occasional limestone gravels and pebbles |
| 012 | Cut | 1.25 (exc.) | 1.86 | 0.40 | Linear, U-shaped ditch, gradual break at the top, moderate straight sides, sharp break at the flat base |
| 013 | Fill of 012 | 1.25 (exc.) | 1.86 | 0.40 | Mid red-brown friable sandy silt with frequent limestone cobbles |
| 014 | Tree throw | 1.60 (exc.) | 1.50 | 0.55 | Irregular shape in plan and section, full of preserved wood and root |
| 015 | Cut | 0.55 (exc.) | 0.60 | 0.22 | Circular, flat based u-shaped small pit, sharp break at the top, steep straight sides, sharp break at the flat base |
| 016 | Fill of 015 | 0.55 (exc.) | 0.55 | 0.21 | Black loose silt with frequent charcoal and burnt wood |
| 017 | Fill of 015 | 0.55 (exc.) | 0.45 | 0.07 | Dark brown loose sandy silt with occasional limestone pebbles |
| 018 | Cut | 1.55 (exc.) | 0.96 | 0.58 | Linear, V-shaped ditch, sharp break at the top, steep straight sides, sharp break at the flat base |

| | | | | | |
|-----|-------------|-------------|------|------|--|
| 019 | Fill of 018 | 1.55 (exc.) | 0.96 | 0.58 | Mid red-brown friable sandy silt with frequent limestone cobbles |
|-----|-------------|-------------|------|------|--|

| Trench 13 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--------------------|
| General Description | | | | Orientation | E-W |
| Trench contained approximately five furrows oriented N-S and large natural coal outcrop observed towards W extent of trench. No archaeology present. | | | | Average Depth (m) | 0.50 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.33 | Topsoil |
| 002 | Layer | - | - | 0.23 | Subsoil |

| Trench 14 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--|
| General Description | | | | Orientation | NE-SW |
| Trench contained one furrow oriented N-S and one pit at the SW extent of the trench | | | | Average Depth (m) | 0.43 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.30 | Topsoil |
| 002 | Layer | - | - | 0.13 | Subsoil |
| 034 | Cut | 0.93 | 0.66 | 0.32 | Sub-circular concave pit, moderately steep sides |
| 035 | Fill of 034 | 0.93 | 0.66 | 0.32 | Mid red-brown friable silty clay with frequent stone and occasional charcoal |

| Trench 15 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--------------------|
| General Description | | | | Orientation | NW-SE |
| Trench contained natural coal outcrop observed towards SE trench extent. No archaeology present. | | | | Average Depth (m) | 0.55 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.30 | Topsoil |
| 002 | Layer | - | - | 0.20 | Subsoil |

| Trench 16 | | | | | |
|--|-------------|-------------------|------------------|--------------------------|---|
| General Description | | | | Orientation | NW-SE |
| Trench contained probably backfilled mining shaft and enclosure ditch. | | | | Average Depth (m) | 0.48 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.27 | Topsoil |
| 002 | Layer | - | - | 0.20 | Subsoil |
| 020 | Cut | 1.10 | 2.10 | 0.57 | Linear, U-shaped ditch, imperceptible break at the top, moderately sloping sides, gradual break at the base |
| 021 | Fill od 020 | 1.10 | 2.10 | 0.57 | Mid yellow-brown friable silty clay with frequent stone inclusions |

| Trench 17 | | | | | |
|---|-------------|-------------------|------------------|--------------------------|--------------------|
| General Description | | | | Orientation | NE-SW |
| Trench contained one large coal outcrop towards SW extent of trench, possibly backfilled mining shaft. No archaeology present. | | | | Average Depth (m) | 0.65 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.23 | Topsoil |
| 002 | Layer | - | - | 0.27 | Subsoil |

| Trench 18 | | | | | |
|----------------------------|-------------|-------------------|------------------|--------------------------|--------------------|
| General Description | | | | Orientation | NW-SE |
| No archaeology present. | | | | Average Depth (m) | 0.45 |
| | | | | Width (m) | 2.00 |
| | | | | Length (m) | 50.00 |
| Contexts | | | | | |
| Context No | Type | Length (m) | Width (m) | Depth (m) | Description |
| 000 | Layer | - | - | - | Natural |
| 001 | Layer | - | - | 0.30 | Topsoil |
| 002 | Layer | - | - | 0.15 | Subsoil |

Appendix 5: Carbonised plant remains, charcoal and other material

| | | | | | | | | | |
|----------------------------------|-------------------------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|-------------|
| | Context | 4 | 6 | 8 | 11 | 13 | 16 | 17 | 19 |
| | Sample | 6 | 7 | 8 | 17 | 18 | 1 | 2 | 19 |
| | Trench | Tr.5 | Tr.8 | Tr.8 | Tr.12 | Tr.12 | Tr.12 | Tr.12 | Tr.12 |
| | Feature | ditch [003] | ditch [005] | ditch [007] | ditch [009] | ditch [012] | pit [015] | pit [015] | ditch [018] |
| | Sample Volume (litres) | 20 | 20 | 20 | 20 | 20 | <15 | <3 | 20 |
| | Total CV | 10ml | 15ml | 5ml | 15ml | 2.5ml | 2400ml | 800ml | 15ml |
| | Modern | 35ml | 100ml | 50ml | 30ml | 40ml | 20ml | 30ml | 20ml |
| Charcoal | Common Name | | | | | | 50 | 20 | |
| <i>Quercus</i> | oak | 1 (0.06g) | 7 (0.37g) | | | | (22.20g) | (4.35g) | 2 (0.24g) |
| <i>Corylus</i> | hazel | | | | 1 (0.07g) | | | | |
| <i>Alnus</i> | alder | | | | | | | | 2 (0.24g) |
| <i>Betula</i> | birch | | | 1 (0.09g) | 1 (0.05g) | | | | |
| Carbonised Wild Resources | | | | | | | | | |
| <i>Corylus avellana</i> nutshell | hazel nutshell | | | | | 1 (0.04g) | | | |
| Other Remains | | | | | | | | | |
| Burnt bone | | | | | | | | | |
| Clinker | | | | 1 | | | | | |
| Modern seeds | | 5+ | 2 | | | | | | |
| Modern straw | | | | | | | | | |
| Modern leaf fragments | | | | | | | | | |
| Earthworm egg capsules | | 1 | 1 | | | | 2 | | 1 |

| | | | | | | | | |
|----------------------------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| Context | | 21 | 24 | 26 | 28 | 31 | 33 | 35 |
| Sample | | 10 | 15 | 9 | 22 | 21 | 20 | 3 |
| Trench | | Tr.16 | Tr.11 | Tr.6 | Tr.7 | Tr.7 | Tr.7 | Tr.14 |
| Feature | | ditch [020] | ditch [022] | ditch [025] | ditch [027] | ditch [029] | ditch [032] | pit [034] |
| Sample Volume (litres) | | 20 | 10 | 20 | 20 | 20 | 20 | 10 |
| Total CV | | 50ml | 5ml | 5ml | 10ml | <2.5ml | 5ml | 30ml |
| Modern | | 60ml | 25ml | 30ml | 50ml | 100ml | 20ml | 10ml |
| Charcoal | Common Name | | | | | | | |
| <i>Quercus</i> | oak | | 1 (0.07g) | 1 (0.02g) | | | | 5 (1.96g) |
| <i>Corylus</i> | hazel | | 1 (0.07g) | | | | | |
| <i>Alnus</i> | alder | | | | | | | |
| <i>Betula</i> | birch | | | | | | | |
| Carbonised Wild Resources | | | | | | | | |
| <i>Corylus avellana</i> nutshell | hazel nutshell | | | | | | | |
| Other Remains | | | | | | | | |
| Burnt bone | | | | | | | | |
| Clinker | | | | | | | 1 | |
| Modern seeds | | | 5+ | 1 | 2 | | | |
| Modern straw | | | 1 | | | | | |
| Modern leaf fragments | | | | | 4 | | | |
| Earthworm egg capsules | | | | 1 | | 2 | 2 | 1 |

| | | | | | | | | |
|----------------------------------|-------------------------------|-----------|-------------|-------------|-------------|-----------|-----------|-----------|
| | Context | 35 | 37 | 41 | 42 | 45 | 47 | 49 |
| | Sample | 16 | 12 | 14 | 13 | 11 | 4 | 5 |
| | Trench | Tr.14 | Tr.9 | Tr.11 | Tr.11 | Tr.2 | Tr.1 | Tr.1 |
| | Feature | pit [034] | ditch [036] | ditch [039] | ditch [040] | pit [044] | pit [046] | pit [048] |
| | Sample Volume (litres) | 10 | 20 | 10 | 10 | <5 | <5 | 10 |
| | Total CV | 315ml | 10ml | 2.5ml | 5ml | <2.5ml | 380ml | 700ml |
| | Modern | 10ml | 50ml | 20ml | 40ml | 10ml | 10ml | 20ml |
| Charcoal | Common Name | | | | | | | |
| | | 14 | | | | | 34 | 27 |
| <i>Quercus</i> | oak | (12.09g) | | | | | (3.98g) | (4.40g) |
| <i>Corylus</i> | hazel | | | | | | | |
| <i>Alnus</i> | alder | 1 (0.15g) | | | | | | |
| <i>Betula</i> | birch | | 2 (0.15g) | | | | | |
| Carbonised Wild Resources | | | | | | | | |
| <i>Corylus avellana</i> nutshell | hazel nutshell | 1 (0.01g) | | | | | | |
| Other Remains | | | | | | | | |
| Burnt bone | | | | | | | 2 (0.06g) | 1 (0.05g) |
| Clinker | | | | | 2 | | | |
| Modern seeds | | | | | | | | |
| Modern straw | | | | | | | | |
| Modern leaf fragments | | | | | | | | |
| Earthworm egg capsules | | | | 2 | 1 | | | |

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