

Site & Landscape Survey

Interpretation, Design & Display

Land at Ruskin Avenue, Wrenthorpe **Archaeological Works Report No. Y054/12**









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Commissioned by	Prospect Archaeology Ltd
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Version	1.0 Draft
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This document has been prepared in accordance with CFA Archaeology Ltd standard procedures.

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1. INTRODUCTION 3

Summary

A programme of archaeological works consisting of evaluation trenching, strip and record and open-area excavation was undertaken by CFA Archaeology Ltd prior to the development of land at Ruskin Avenue, Wrenthorpe, near Wakefield, West Yorkshire.

Archaeological remains consisted of two Romano-British possibly livestock enclosures; a circular enclosure and a segmented curvilinear enclosure bisected by a ditch. These dated to between the 2nd and 3rd century AD. Although there was no evidence of internal structures to the enclosures a moderate amount of pottery points towards a low status rural settlement in the immediate area.

The geophysical survey suggests that approximately half of one of the enclosures may survive in an area beyond the current boundary of the proposed development site. Features relating to mining activity such as backfilled shafts and vents were also identified

1. INTRODUCTION

1.1 General

This report presents the results of a programme of archaeological works undertaken by CFA Archaeology Ltd (CFA) between 5 March and 5 April 2012, during preparatory groundworks at land off Ruskin Avenue, Wrenthorpe, near Wakefield, West Yorkshire (NGR: SE 3205 2304 centred, Fig. 1). The work was commissioned by Prospect Archaeology Ltd on behalf of Redrow Homes. The work was undertaken in order to comply with an archaeological planning condition (11/02067/FUL), and was in accordance with a specification prepared by Rebecca Remmer of West Yorkshire Archaeology Advisory Service (WYAAS) on behalf of Leeds City Council (Appendix 7).

The project was undertaken in three phases of work which followed the results of a geophysical survey; a monitored strip and map (Area A); evaluation trenching targeting geophysical anomalies (Area B), and; an open-area excavation, targeted on archaeological remains confirmed by trenching (Area C).

1.2 Site Location and Description

The development area was an irregular parcel of land approximately 7.5ha in extent, at the north-east of the village of Wrenthorpe. It was bound to the north-east by recreational fields, to the south-east by residential housing on Ruskin Avenue; to the south-west a small housing development and to the north-west by a railway line. The land sloped north to south with a gently cresting ridge in the middle of the field at c. 80m above the ordnance datum (AOD), sloping south towards Ruskin Avenue, at 60m (AOD).

The underlying solid geology of the site was Pennine Middle Coal Measures and formations of mudstone, siltstone and sandstone. The natural substrate was a generic glacial till typically found in the region. The till contained occasional tabular

sandstone fragments and minerals such as manganese (BGS 2012). The soils of the site are described as slowly permeable seasonally wet acid loamy and clayey soils supporting seasonally wet pastures and woodlands, landuse for the area is mainly grassland with some arable and forestry (Landis 2012). The recent land use of the site was arable.

1.3 Previous Archaeological work

A desk-based assessment of the site was carried out in 2010 which identified a number of sites and findspots in the surrounding area (Horn 2010). The putative course of a Roman Road had been identified at Snow Hill, to the south of the site (Margary 1973, 721). Other features of potential interest in the area were identified as areas of ridge-and-furrow, rhubarb cultivation and possible mining remains. Undated linear features identified from aerial photographs were found to exist in the wider environment.

A geophysical survey of the site was carried out in January 2012 (GSB Prospection 2012). The survey identified a number of features within the site which included ditches, a possible enclosure, an 'L'-shaped anomaly and a number of discreet features; possibly pits. The transcribed geophysical survey results are shown on Figure 3.

No intrusive archaeological fieldwork is known to have taken place within the proposed development area prior to the works described in this report.

1.4 Aims

In accordance with the specification (Remmer 2012), the aim of the archaeological works was to:

'...gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the area of interest.'

The research aims of the project follow the West Yorkshire research framework for the Iron Age and Roman Periods where relevant (WYAAS).

2. WORKING METHODS

2.1 General

All work was undertaken in accordance with the relevant specification (Appendix 7) and CFA standard procedures. The excavation and removal of all topsoil deposits in all areas was carried out using a mechanical excavator equipped with a smooth-bladed bucket under constant archaeological supervision. All further excavation required to fulfil the terms of the specification were carried out by hand.

There were three phases of archaeological work: a topsoil strip and record followed by sample excavation (Area A); evaluation trenching (Area B), and; following the excavation of the evaluation trenches and informed by the geophysical survey an area was opened up in order to fully investigate the archaeological features which were revealed (Area C).

Trench positions were located and surveyed using industry standard GPS equipment. Archaeological features were recorded by GPS and Lieca TCR307 reflectorless EDM. A Nikon 35mm SLR camera was used for black and white photographs using Ilford HP5 film. Recorded prints were printed on Fujicolor Crystal Archive Paper. A register of all photographs taken forms Appendix 2.

2.2 Standards and Guidance

CFA Archaeology is a registered organisation (RO) with the Institute for Archaeologists (IfA). All work was conducted in accordance with relevant IfA Standards and Guidance documents (IfA 1994, 1995 and 1996), English Heritage guidance (EH, 2005, 2006, 2008a, 2008b and 2011), and CFA's standard methodology.

2.3 Archiving

The project archive, comprising all CFA record sheets, finds, plans, reports, and photographs will be ordered according to WYAAS instructions and nationally and to nationally recognised standards (IfA 2001 and Brown 2011) and deposited at the Pontefract Museum, 5 Salter Row, Pontefract, WF18 1BA.

2.4 Monitoring

The archaeological works were monitored by Rebecca Remmer, Senior Archaeological Officer for West Yorkshire Archaeology Advisory Service, who was informed in advance of the works taking place and visited the site on 15, 23 and 30 March 2012.

3. RESULTS

The results follow the three phases of archaeological work undertaken and are divided into three sections: Area A was subject to a topsoil strip followed by sample excavation of archaeological features revealed; Area B trenching, and; Area C an open area excavation targeting confirmed archaeological features. A summary of all contexts forms Appendix 1.

3.1 Strip and Map: Area A

The strip and map recorded only post-medieval features (Fig. 1). Coal fragment inclusions were noted throughout the overlying topsoil (100) and subsoil (102) where present. The abundance of coal fragment residues attested to the presence of mining-related activity in the area.

Further evidence of mining was recorded with three backfilled shafts (105, 107, 110) (Figs 1 and 4). These were sub-circular in shape, between 3 and 5.8m in diameter and backfilled with re-deposited natural; burnt shale and coal (006). The features are not depicted on Ordnance Survey mapping, though they correlate with anomalies identified by the geophysical survey (Fig. 3). A shallow, curvilinear feature (108) was recorded close to Shaft 107 and is also presumed to be of mining or related origin. The feature, which appeared to be truncated had an overall length of 15.2m and was 0.05m deep and was filled by a dark-grey deposit of silty clay which contained coal flecks.

A truncated linear gully (103) with a flat base, 0.76m wide may have been a late post-medieval field boundary. The sterile fill (104) had coal fragment inclusions that had probably been ploughed into the deposit. The feature was depicted on the geophysical survey (Figs 1 and 5).

There were easily identifiable traces of ridge-and-furrow cultivation across the whole of Area A. The furrows were orientated north-west to south-east and were approximately 1.5m wide by 0.2m deep (Fig. 6).

The only other features noted, and which were clearly of modern origin were the remains of temporary road surfaces and wheel ruts created during railway maintenance. The natural substrate was also heavily scarred by modern ploughing. The former surfaces correlate with areas of magnetic disturbance detected by geophysical survey (Fig. 3).

3.2 The Evaluation: Area B

Seven evaluation trenches were excavated in total (Fig. 1). Trenches 2 and 3 were the focus of the subsequent excavation and are reported on below. All trenches were 50m long and 2.3m wide. The topsoil was generally about 0.35m thick comprising mid dark-grey, silty clay (001). A sterile colluvium (002) was apparent in places and was noted at the base of the south-facing slope in Trench 1 (0.2m thick) and in Trench 5 (0.1m thick). The natural substrate comprised sandy yellow-orange boulder clay, with sandstone fragments and inclusions of manganese. Furrows orientated north-west to south-east were also recorded in trenches 4 and 5. No archaeological remains were

recorded and no finds were recovered from trenches 1 and 5. The results from trenches 4 and 6 are described below.

Trench 4

The only significant archaeological remains recorded in Trench 4 were the truncated remains of a post-medieval gully (007) (Figs 1 and 7). The gully was orientated northeast to south-west and was 0.6m wide and 0.28m deep with steep sides. No finds were recovered from this trench.

Trench 6

The remains of a probable shaft or vent were recorded in Trench 6 (019) (Figs 1 and 8). The feature was only partially exposed within the trench but was probably circular in plan and correlated with a sub-circular geophysical anomaly. The shaft was excavated by machine to a depth of 1.3m and was filled by sandstone fragments, crushed coal and burnt shale (020) which continued beyond the limit of excavation.

3.3 Open Area Excavation: Area C

Area C was excavated after archaeological remains were uncovered in trenches 2 and 3 during the evaluation (Figs 1 and 2). The remains corresponded strongly to features identified by geophysical survey, which suggested the presence of a circular enclosure (Feature 1) and an 'L' shaped anomaly (Feature 2) (Fig. 3). The topsoil (001) in Area C was between 0.20 and 0.35m in depth with the shallowest deposits on the crest of the hill towards the north. The area had been scarred by modern ploughing; the natural substrate was glacial till with common sandstone fragments and gravel inclusions and the concentration of stone became more prevalent on higher ground. The solid geology where encountered was tabular sandstone bedrock. Evidence of ridge-and-furrow cultivation was present throughout Area C. The furrows were generally about 0.2m deep 1.3m wide and orientated north-west to south-east masking the archaeological horizon and some features, particularly Feature 2 where parts of the ditch circuit were orientated in the same direction as the furrows.

Feature 1: The Circular Enclosure

The results of the geophysical survey suggested the presence of a possibly segmented circular enclosure situated on the crest of the hill (Fig. 1-3). This was partly excavated (the northern part falling outside the excavation area) and the results showed that the enclosure ditch was a complete circuit with a projected circumference of 45.6m, an estimated diameter of 40m and internal area of 1,262m². No entrances were recorded nor any internal features. The lack of features may be due to horizontal truncation by successive episodes of cultivation and this area may have been prone to this because of the thinness of the topsoil here.

A series of sections were excavated through the ditch (014, 021, 033, 046, 062) Feature 1 (Figs 1, 2a and 2b) showing that the dimensions of the ditch varied with the depth between 1.2m (033) (Fig. 9) and 0.4m (014) (Fig. 13), and a width between 1.5 and 3m (014).

The presence of a furrow overlying and truncating the enclosure ditch hindered excavation in places (e.g. section 046), though the complete profile of a 2nd-century Belgic jar (Fig. 10) was recovered from the primary fill (022) (Fig.11). The profile of the ditch became more 'V' shaped to the south-east, where it also widened to 2.43m (033, and 062) (Fig. 12). The primary fill was clayey-silt containing lenses of dark-grey organic material (032) which appeared to have entered the ditch from the south-east.

Feature 2: The Curvilinear Enclosure and Associated Features.

Geophysical survey indicated the presence of a curvilinear feature and possible associated features to the south of the enclosure described above (Feature 1, Fig. 3). The evaluation trench (Trench 2) confirmed the presence of these features and further excavation followed (Figs 1, 2a and 2c).

Feature 2 comprised an irregular circuit of ditches (006, 012, 025, 034, 038, 042, 049, 058, 069, 070 and 071) open to the north and partitioned east to west by a linear ditch (056, 063 and 065) (Figs 1, 2a and 2c). The western part of the ditch (052 and 054) which was orientated roughly north-east to south-west, was heavily truncated and appeared discontinuous from the main enclosure circuit. The length of the 'main circuit' of ditches was 66m in length with the truncated western ditch measuring an additional 12m. The approximate area enclosed was 675m².

The ditch was deepest from the west to the east of the south-facing slope in Area C (Figs 1 and 2b). The terminus to the west (038, 042) was 0.88m deep by 1.75m wide and had a steep 'V' shaped profile cut through tabular sandstone bedrock (Fig. 14). This was the deepest recorded section of Feature 2. Sections 012 and 006 had similar profiles to section 058 being broadly 'V' shaped but were slightly shallower (0.50-0.68m respectively). All these sections were also cut through the naturally shelving sandstone bedrock (Fig. 15).

The 'V'-shaped profile continued in Section 034 which was 0.66m deep and 1.2m wide. It was filled by a sterile primary deposit of light grey silty-clay, which was probably washed into the open ditch. This was covered by a stony deposit with a distinct south-east to north-west tip of material (036). The infill possibly was the result of collapsing bank material on the external, outer perimeter of the circuit (Figs 16 and 17). The deposit contained 2nd-century domestic pottery including the rim of a Belgic Jar vessel; two sherds from separate cooking pots and a mortarium rim of 3rd-century date.

The ditch turned north-west (section 049 and 058) before returning again (Section 069) in a roughly north-east direction, shallowing out and narrowing at 0.8m in width and 0.5m depth. Stony material was recorded in places (060) containing flecks of charcoal and burnt animal bone and 16 sherds of 2nd-century pottery, mainly cooking pots and storage jars. It may be that parts of the ditch may have been deliberately backfilled (Fig. 18).

The ditch was partially obscured by furrows in places (Figs 2a and 2c.). This, coupled with dry hot weather meant that the visibility of archaeological remains was sometimes poor. In order to trace the course of the enclosure beyond Section 069,

boxed sondages were excavated. These excavations revealed a 90-degree return to the east (072) (Figs 2a, 2b and 19). Further excavations recorded a 1.2m wide, 0.7m deep segment of the enclosure which ran roughly east to west before terminating in a shallow, 0.13m deep, 0.78m wide sub-circular terminus (071) (Figs 2a, 2b and 20). No further trace of the enclosure ditch could be seen beyond the terminus 071.

The north-western edge of Feature 2 was recorded as a very shallow linear segment of ditch (Figs 2a and 2c). The feature was 0.65m wide with 0.29m deep. A section was excavated at the south-west end (052), which recorded a rounded terminus and a single sterile infilling deposit of friable, yellowy-orange sandy-clay. A further section was excavated (054) which also removed a single sterile deposit. The feature continued to the north-east but was heavily truncated and petered out (Figs 2a, 2c and 21). Although no finds were recovered from this ditch, it is interpreted as part of the circuit which formed the enclosure of Feature 2.

Feature 2 was bisected roughly east to west by a shallow linear ditch (017, 056, 063, 065) (Figs 2a and 2c). The ditch was identified during the excavation of evaluation Trench 2a (017). The width of the ditch varied from 0.80 to 0.50m and was up to 0.41m deep (Fig. 22). However, generally the ditch was very shallow and was more typically about 0.20m deep. All excavated sections contained the same sterile light-orange to greyish-brown silty sand.

The truncated remains of a short ditch or elongated pit (067) were to the north of the Ditch (063 (Figs 2a and 2c). No dating evidence was recovered from the single sterile fill; but, the feature may be contemporary with the enclosure ditch circuit of Feature 2. The maximum width was 0.7m and the feature was 0.35m deep. The north-east end of the feature was heavily truncated by a furrow.

A number of possible pits were excavated (003, 010 and 075) (Fig. 2a). These were small and irregular and filled by very sterile deposits (004, 011 and 076). The pits were typically less than 0.20m deep and did not seem to form any coherent structure, and may simply have been be stone-holes or vestigial tree-boles.

4. FINDS ASSESMENT

By Sue Anderson, Alex Croom, Mike Cressey and Martin Lightfoot

4.1 Introduction

Summary quantification

Table 1 shows the quantities of finds recovered during the fieldwork.

Find type	No.	Wt (g)
Pottery: Roman	44	848
Pottery: post-medieval	1	22
Charcoal	15	5
Flint flake	1	<1

Table 1 Finds quantities

A full catalogue of the Roman pottery appears as Appendix 5 and the Belgic-type jar (022) is illustrated in Figure 10.

4.2 Roman pottery

by Alex Croom

Forty-three sherds from stratified contexts and one unstratified sherd were submitted for assessment. This included ten rims with eight from different vessels. The surfaces of many of the sherds were highly abraded probably due to local soil conditions.

This was a small collection of pottery consisting mainly of BB1 and locally produced wares, with one sherd of mortarium and one Samian sherd. The vessels are all standard types as would be expected in this area. Of particular interest is the complete profile Belgic-type jar in context 022 (Fig. 10). The majority of the vessels dated to the 2nd century, with a single sherd, the mortarium, dated to the 3rd century.

There was a single rim-sherd of a Central Gaulish Samian Form 37 bowl and a single battered hammerhead rim-sherd of Mancetter-Hartshill ware mortarium, dating to the 3rd or 4th century AD.

The only forms represented in coarse wares were cooking pots and jars in BB1 and local grey wares. There is a complete profile jar in a Belgic fabric (022), and the rim of a second vessel of the same type (036). There is a close, but not exact, parallel in a similar fabric at Castleford (Rush 2000 *et al*, fig. 78, no. 535). There are no fine wares present.

The Roman pottery has been quantified in a ceramic archive catalogue (Appendix 5) (as defined by the Study Group for Roman Pottery guidelines: Darling 1999). The archive table includes a detailed description of the various fabrics and forms, their quantification by weight, sherd count and EVE (estimated vessel equivalents) as well as the dating of the individual vessels within each numbered deposit. The pottery is in a stable condition and no further conservation is required. It is recommended that all

the Roman pottery should be retained with the archive, and should be re-examined should further excavation be undertaken on the site.

4.3 Post-medieval pottery

by Sue Anderson

One sherd of unstratified post-medieval pottery weighing 22g was recovered. A partial rim sherd (the outer surface only) it was heavily abraded with only a few flakes of glaze still adhering to the surface. It was in a fine pale-pinkish orange fabric containing occasional haematite and sparse coarse white inclusions. It was a fragment of a bowl or dish of Wrenthorpe Yellow Ware and likely to be of 17th/18th-century date (Moorhouse and Roberts 1992).

No further work is recommended on this pottery and may be discarded.

4.4 Charcoal

by Mike Cressey

Fifteen fragments of charcoal were hand-collected from a single context (036). The fragments were viewed under a binocular microscope at x20, but were found to be heavily vitrified and not identifiable to species. Vitrification of charcoal suggests that the material was subject to temperatures of 800–1000°C or greater.

This material is not suitable for radiocarbon dating and no further work is required. The material may be discarded.

4.5 Flint Flake

A single flint flake (013) was recovered from environmental samples (4), and submitted for assessment. The flake is debitage as a result of secondary working. It was 5mm long, irregular, corticated and a bulb of percussion was observed on one side. In isolation it is not significant though it may attest to prehistoric activity on or near the site.

4.6 Assessment of Environmental Samples, by Mhairi Hastie

Methodology

Nine bulk environmental soil samples were submitted for assessment

Each sample was processed through a system of flotation; the floating debris (flot) collected in 250μ m sieve and, once dry, scanned using a binocular microscope for any archaeological material, the material remaining in the flotation tank was sieved through a 1mm mesh and air-dried, then any archaeological significant material removed.

Results

Very little was recovered from the samples, with only small amounts of industrial debris, burnt bone and one tiny lithic flake being recovered. The results are summarised in in Appendix 6

Lithic Flake: A small white flake, measuring 5mm by 5mm, was recovered

from the fill of a V-shaped ditch (013) (Sample 004).

Industrial Debris: Occasional small fragments of prill (small aggregates (droplets)

of slag formed from melted slag) were recovered from the secondary fill of ditch (014) (Sample 002), and a lump of what may be hearth ash or slag was recovered from the upper fill of

the same ditch (041) (Sample 001).

Burnt bone: Small fragments of burnt animal bone (measuring <1cm diam)

were recovered from the fill of ditch (014) (Sample 002) and

backfill of ditch (058).

Wood charcoal: Small fragments of wood charcoal were recovered from the

bulk of the samples (Samples 001-004 and 006-008). In all cases the charcoal was poorly preserved and has undergone much iron replacement. None of the charcoal would be suitable

for AMS dating.

No further work is recommended though the samples should be retained with the archive.

5. DISCUSSION

The site had been heavily truncated by modern ploughing and this may have contributed to the paucity of archaeological features within and around the two enclosures. Apart from the internal division within the curvilinear enclosure no structural features were identified. The curvilinear ditch appeared to have been segmented, though agricultural truncation of the site may have had an impact on removing shallower sections. There are indications that a bank existed, at least in part around the external circuit of Feature 2. A similar example was found at Royd Edge which also featured an enclosure with an external bank (WYAAS 2009, 99). Segmented, shallow, discontinuous ditches or gullies were also excavated at South Elmsall, Ferrybridge and Micklefield (WYAAS 2009, 18).

The remains at Ruskin Avenue are not necessarily typical of the Iron Age and Romano-British lowland enclosures excavated within West Yorkshire. Feature 1, although only partially excavated appears to be circular, based on the geophysical survey and excavation evidence.

Dating the development of field systems and phases of habitation on small-scale rural sites is often problematic (WYAAS 2009, 7); and, it is difficult to suggest functions or phase of use for the remains on site without related structural remains, such as roundhouses or hearths. However, the domestic nature of the pottery suggests the proximity of a former settlement. The curvilinear ditch system of Feature 2 may have acted as a possible stock enclosure or corral. The ditch, as well as possibly providing a barrier, may have helped drain water from the site towards the south facing slope, channelled and collecting rainwater. Irregular shaped enclosures may also be linked to stock control (WYAAS 2009, 36-40).

The ditch systems may have been partially backfilled in places and this may reflect a deliberate end to the use of the site, the lack of dating evidence beyond the 3rd century suggests the site was not occupied much beyond that date which may have been contemporary with other abandonments in the area, for example of enclosures near Whitwood (Burgess and Roberts 2004, 35-36).

Although there was only a small number of finds, the assemblage was dominated by Roman ceramics; mainly 2nd century in date. The exception was a single sherd of 3rd-century mortaria and a single lithic flake though these may be intrusive and residual respectively.

The small amount of slag recovered from the upper fill (016) of Ditch 014 may have been incorporated through bioturbation, which was extensive throughout that deposit in an area of shallow topsoil cover.

The lack of fine ware suggests a lower status rural site, probably a settlement, and indeed, the pottery is typically domestic in nature. Most of the Romano-British pottery produced and consumed in Northern England consists of relatively plain coarsewares. Black Burnished Ware from Dorset, and Mancetter-Hartshill wares, were all imports into northern England, but usually in very small amounts and they remained uncommon vessels on most rural settlements. The widespread adoption of

Roman pottery did not take place until the early to mid-2nd century AD, although its use was often still limited on many rural settlement sites (WYAAS, 2009: 99).

There is no significant evidence of later occupation, and none suggesting medieval activity. Post medieval activity appears largely confined to agriculture, evidenced by cultivation furrows, and mining activity, evidenced by the backfilled shafts or vents.

6. CONCLUSION

Conditions during the archaeological works were changeable, but were generally unseasonably warm and very sunny and dry throughout the excavation of Area C. Although the visibility of archaeological remains was affected by the weather and by the previous agricultural use of the site, the site was systematically cleaned and regularly examined for archaeological remains. The predicted continuation of ditches was examined and tested by sondages to ensure that the termini were correctly identified.

The excavation has added to the understanding of the morphology, dating and distribution of Romano-British enclosures in the area and produced useful dating evidence in the form of pottery. This evidence may be related to other evidence for the period which includes the course of a Roman road predicted to run a short distance to the south (Margary 1973, 721) and finds of Roman coins near the site in 1955 (Horn 2010).

The staged approach of geophysical survey, evaluation trenching and open-area excavation accurately identified and characterised archaeological remains and areas devoid of activity. The archaeological works have also predicted the continuation of archaeological remains in the area towards the north, and this report should inform any archaeological works which may occur here as a result of further construction. Should further archaeological works take place then more light may be thrown on the dating and the use of the site.

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Appendix 1: Context Summary

Context no.	Trench/Area	Fill of	Type	Description
000	Site	-	Deposit	Natural substrate; firm, light yellowish-orange, clay.
001	Site	Ī -	Deposit	Topsoil; friable, mid grey, clayey-silt.
002	Site	-	Deposit	Subsoil; friable, mid orangey-brown, clayey-silt
003	Area C	004	Deposit	Fill of small pit (004); friable, light brownish-red, clayey-sand.
004	Area C	-	Cut	Cut of small pit; c.0.75m length, 0.4m width, 0.2m depth, rounded base.
005	Area C	006	Deposit	Fill of 'V' shaped ditch (006); friable, light reddishbrown silty sand.
006	Area C		Cut	Cut of 'V' shaped ditch in excavated section of Feature 2; NE-SW, 1m excavated length, 1.4m width, 0.68 depth, regular steep sides, flat base.
007	Trench 4	-	Cut	Cut of linear post-medieval gully in Trench 4; NE-SW >3.6m length, c.0.6m width, 0.28m depth.
008	Trench 4	007	Deposit	Primary fill of post-medieval gully in Trench 4 (007); friable, greyish-orange clay, 0.3m width, 0.1m depth.
009	Area C	007	Deposit	Coal rich fill of post-medieval gully in Trench 4 (007); mid-dark grey sandy-clay, large coal fragments and coal flecks, 0.6m width, c.0.18m depth.
010	Area C	-	Cut	Cut of small pit; >0.5m length, 0.6m width, 0.18m depth.
011	Area C	010	Deposit	Fill of small pit (010); friable, light reddish-brown, sandy-silt
012	Area C	-	Cut	Cut of 'V' shaped ditch in excavated section of Feature 2: NW-SE, c.2m excavated length, 1.27m width, 0.46m depth, regular steep sides, tapered point at base.
013	Area C	012	Deposit	Fill of 'V' shaped ditch (012) in excavated section of Feature 2; light orangey-grey, silty-sand.
014	Area C	-	Cut	Cut of circular enclosure ditch in excavated section of Feature 1; NE-SW, 1m excavated length, c. 3.25 width, c.0.43m depth, regular steep sides, undulating base.
015	Area C	014	Deposit	Primary fill of circular enclosure ditch (014) in excavated section of Feature 1; friable, light-mid mottled grey, sandy-clay, c.2.8m width, c.0.15m depth.
016	Area C	014	Deposit	Upper fill of circular enclosure ditch (014) in excavated section of Feature 1; friable, mid orangey-grey, sandy-clay, c.2.8m width, 0.28m depth.
017	Area C	-	Cut	Cut of shallow curving linear ditch; E-W, 1m excavated length, 0.65m width, 0.18m depth, rounded flat base
018	Area C	017	Deposit	Fill of shallow curving linear ditch (017); light, orangey-brown silty-sand.
019	Trench 6		Cut	Cut of probable adit/shaft in Trench 6; >2.4m diameter, c.1.2m excavated depth, steep sided.
020	Trench 6	019	Deposit	Mixed fill of probable adit/shaft in Trench 6 (019); compact, mixed grey, black, red, sands, burnt coal, red blaes.
021	Area C	-	Cut	Cut of circular enclosure ditch in excavated section of Feature 1; E-W, c.2.5m excavated length, 1.84m width, c.0.8m depth, rounded base.
022	Area C	021	Deposit	Primary fill of circular enclosure ditch (021) in excavated section of Feature 1; light grey, sandy-silt,

Context no.	Trench/Area	Fill of	Type	Description
				c.1.6m length, c.0.35m depth.
023	Area C	021	Deposit	Secondary fill of circular enclosure ditch (021) in
				excavated section of Feature 1; mid grey, sandy-silt,
				c. 0.6m width, c.0.1m depth.
024	Area C	021	Deposit	Upper fill of circular enclosure ditch (021); friable
				light orangey-red, sandy-siltc.1.5m width, c0.4m
025	A C		D	depth.
025	Area C	-	Deposit	Cut of ditch in excavated section of Feature 2; c.1m
				excavated length, c.2m width, c.0.3m depth, irregular sides, flat base.
026	Area C	025	Deposit	Fill of ditch (025) in excavated section of Feature 2;
020	7 Hea C	023	Deposit	friable, orangey-brown, sandy-clay.
027	Area C	-	Deposit	Cut of ditch (027) in excavated section of Feature 2;
			- · · ·	1m excavated length, c.2m width, >0.54m depth.
028	Area C	027	Deposit	Upper fill of ditch (027) in excavated section of
				Feature 2; friable, orangey-brown, sandy-clay, >0.1m
				depth.
029	Area C	027	Deposit	Lower fill of ditch (027) in excavated section of
				Feature 2; friable, orangey-yellow, sandy-clay, 0.42m
			<u> </u>	depth.
030	Area C	033	Deposit	Upper fill of circular enclosure ditch (033) in
				excavated section of Feature 1; light, brownish-grey,
031	Area C	033	Deposit	clayey- silt, 2.1m width, c.0.3m depth. Secondary fill of circular enclosure ditch (033) in
031	Alea C	033	Deposit	excavated section of Feature 1; mid, grey, clayey silt,
				c.1.4m width, 0.05-0.35m depth.
032	Area C	033	Deposit	Primary fill of circular enclosure ditch (033) in
032	THOU C	033	Beposit	excavated section of Feature 1; light, greyish-brown,
				clayey-silt, 0.8m width, 0.55m depth.
033	Area C	-	Cut	Cut of circular enclosure ditch in excavated section of
				Feature 1; SW-NE, 2.4m excavated length, 2.6m
				width, 1m depth, regular sides, tapered point base.
034	Area C	-	Cut	Cut of ditch in excavated section of Feature 2; E-W,
				steep sided, 'V' shaped base, 1.2m excavated length,
02.5	A G	024	D :	c.1.2m width, c.0.66m depth.
035	Area C	034	Deposit	Primary fill of ditch (034) in excavated section of
				Feature 2; friable, light grey, silty clay with orange mottles, c.0.3m width, c.0.05m depth.
036	Area C	034	Deposit	Stone tip within ditch (034) in excavated section of
030	Aica C	034	Deposit	Feature 2; light orangey, mid brown, sandy clay,
				c.0.45m width, c.0.35m depth.
037	Area C	034	Deposit	Slumped fill of ditch (034) in excavated section of
			1	Feature 2; friable, mid brownish-orange, sandy-clay,
				1.2m width, c.0.4m depth.
038	Area C	-	Cut	Cut of terminal end of enclosure ditch in excavated
				section of Feature 2; NW-SE, 1.6m excavated length,
			<u> </u>	>0.88m depth.
039	Area C	038	Deposit	Lower fill of enclosure ditch terminus (038) in
				excavated section of Feature 2; friable, yellowy-
040	Aman C	020	Dan:4	brown, sandy-clay, >0.3m depth.
040	Area C	038	Deposit	Fill of enclosure ditch terminus (038) in excavated
				section of Feature 2; friable, yellowy-brown, sandy- clay, >0.4m depth.
041	Area C	038	Deposit	Upper fill of enclosure ditch terminus (038) in
V 7 1	THEA C	050	Deposit	excavated section of Feature 2; friable, yellowy-
				brown, sandy-clay, 0.15m depth.
042	Area C	-	Cut	Cut of enclosure ditch in excavated section of Feature
072				

Context no.	Trench/Area	Fill of	Type	Description
				0.67m depth, steep 'V' profile sides, flat base.
043	Area C	042	Deposit	Lower fill of enclosure ditch (042) in excavated
				section of Feature 2; friable, yellowy-brown, sandy-
044	Araa C	042	Donosit	clay, 0.7m width, >0.67m depth. Main fill of enclosure ditch (042) in excavated section
044	Area C	042	Deposit	of Feature 2; friable, orangey-brown, sandy-clay,
				1.20m width, 0.3m depth.
045	Area C	042	Deposit	Upper fill of enclosure ditch (042) in excavated
0.13	Tirea C	0.12	Deposit	section of Feature 2; friable, yellowy-grey, sandy-
				clay, 1.75m width, 0.19m depth.
046	Area C	-	Cut	Cut of circular enclosure ditch in excavated section of
				Feature 1; NE-SW, 1m excavated length, c.1.5m
				width, 0.7m depth, regular sides, rounded base.
047	Area C	046	Deposit	Primary fill of circular enclosure ditch (046)
				excavated section of Feature 1; light, greyish-brown,
				clayey-silt, 0.9m width, 0.3m depth.
048	Area C	046	Deposit	Secondary fill of circular enclosure ditch (046)
				excavated section of Feature 1; medium, greyish-
0.40			G .	brown, clayey-silt, 1.5m width, 0.4m depth.
049	Area C	-	Cut	Cut of enclosure ditch in excavated section of Feature
				2; N/S, 2.m excavated length, 1m width, 0.44m depth, regular sides, rounded point at base.
050	Area C	049	Deposit	Primary manganese rich fill of enclosure ditch (04) in
030	Alea C	049	Deposit	excavated section of Feature 2; friable, light orange,
				mottled grey, sandy-clay.
051	Area C	_	Deposit	Secondary fill of enclosure ditch (049) in excavated
			vp	section of Feature 2; friable, light grey, sandy-clay.
052	Area C	-	Cut	Cut of terminal end of linear in excavated section of
				Feature 2; NE/SW, 1.5m excavated length, 0.3m
				depth, rounded base.
053	Area C	052	Deposit	Fill of terminal end of linear (052) in excavated
				section of Feature 2; friable, yellowy-orange, sandy
0.5.4			~	clay.
054	Area C		Cut	Cut of linear ditch feature in excavated section of
				Feature 2; NE/SW, 1m excavated length, 0.65m
055	Area C	054	Deposit	width, 0.23m depth, shallow sides, rounded base. Fill of linear ditch feature in excavated section of
033	Alea C	034	Deposit	Feature 2; friable, yellowy-orange, sandy-clay.
056	Area C	_	Cut	Cut of linear ditch feature at West terminus in
	111000			excavated section of Feature 2; E/W, 1.4m excavated
				length, c.0.8m width, 0.41m depth, stepped sides, flat
				undulating base.
057	Area C	056	Deposit	Fill of linear ditch feature at West terminus in
				excavated section of Feature 2; friable, yellowy-
				brown, sandy clay.
058	Area C	-	Cut	Cut of ditch in excavated section of Feature 2; N-S,
				0.6m excavated length, 0.8m width, 0.5m depth, steep
050	A C	050	D	sides, concave base.
059	Area C	058	Deposit	Primary infilling deposit of ditch (058) in excavated
				section of Feature 2; firm, friable, mottled greyish- orange, clay, c. 0.45m depth, c.0.1m width.
060	Area C	058	Deposit	Deliberate backfill of (058) in excavated section of
	7 11 Ca C	0.50	Deposit	Feature 2; friable, mid greyish-orange, sandy-clay,
				c0.5m width, c.0.4m depth.
061	Area C	058	Deposit	Slumped deposit within cut (058) in excavated section
			1	of Feature 2; friable, mottled orange, mid grey, sandy-
				clay, 0.7m width, 0.3m depth.
062	Area C	-	Cut	Cut of circular enclosure ditch in Feature 1; 1m

Context no.	Trench/Area	Fill of	Type	Description	
				excavated length, 1.7m width, 0.84m depth, 'V'	
				shaped sides, tapered rounded point at base.	
063	Area C	-	Cut	Cut of ditch in excavated section of Feature 2: E-W,	
				2m excavated length, 0.6m width, 0.17m depth,	
0.64		0.62	5	rounded base.	
064	Area C	063	Deposit	Fill of ditch (063) in excavated section of Feature;	
				friable, yellowish-brown, sandy-clay, 0.6m width,	
065	Ama C		Cut	0.17m depth. Cut of ditch at East terminus of excavated section of	
063	Area C	-	Cui	Figure 2; 1m excavated length, 0.5m width, 0.13m	
				depth, shallow rounded base.	
066	Area C	065	Deposit	Fill of ditch at East terminus of excavated section of	
000	Aica C	003	Deposit	Figure 2; friable, yellowy-brown, sandy-clay.	
067	Area C	<u> </u>	Cut	Cut of elongated pit; c.2m length, 0.7m width,	
				rounded base.	
068	Area C	067	Deposit	Fill of elongated pit (067); loose, mid greyish-brown,	
				clayey-silt.	
069	Area C	-	Cut	Cut of ditch in excavated section of Feature 2; N-S	
				1.4m excavated length, 1.3m width, 0.46m depth,	
				regular sides, rounded base.	
070	Area C	-	Cut	Cut of ditch in excavated section of Feature 2; E-W,	
				0.45m excavated length, 1.2m width, 0.7m depth, 'V'	
				shaped profile.	
071	Area C	-	Cut	Cut of terminus of ditch at excavated section of	
				Feature 2: 0.6m excavated length, 0.78m width,	
072	A C	070	D	0.13m depth, shallow sides, flat base.	
072	Area C	070	Deposit	Fill of ditch (070) in excavated section of Feature 2;	
073	Area C	071	Deposit	friable, yellowy-grey, sandy-clay. Fill of terminus of ditch at excavated section of	
073	Alea C	0/1	Deposit	Feature 2; friable, yellowy-grey, sandy-clay.	
074	Area C	069	Deposit	Fill of ditch (069) in excavated section of Feature 2;	
074	7 Hea C	007	Deposit	friable, yellowy-grey, sandy-clay.	
075	Area C	076	Deposit	Fill of small sub-circular pit feature; light, brownish-	
0,0	111000		2 eposit	grey, silty-sand.	
100	Area A	-	Deposit	Natural substrate; firm, light yellowish-orange, clay.	
101	Area A	-	Deposit	Topsoil; friable, mid grey, clayey-silt.	
102	Area A	-	Deposit	Subsoil; friable, mid orangey-brown, clayey-silt	
103	Area A	-	Cut	Cut of truncated linear gully	
104	Area A	103	Deposit	Fill of gully103	
105	Area A	-	Cut	Cut of probable pit/adit/shaft	
106	Area A	105	Deposit	Mixed fill of probable pit/adit/shaft	
107	Area A	-	Cut	Cut of probable shaft/adit	
108	Area A	-	Cut	Cut of horse-show shaped feature adjacent to mine	
100	1110011			shaft (109)	
109	Area A	109	Deposit	Fill of horse-shoe shaped feature (110)	
110	Area A	-	Cut	Cut of probable shaft/adit	
		1	1	P	

Appendix 2: Photographic Register

Area A: Digital

Digi No	Contexts/description	Facing	Conditions
	General shot of the compound area during topsoil		
1	removal	SE	Overcast
2	General shot of cultivation furrows	N	Bright
3	General shot of area of red blaes	W	Bright
4	Shot of coal filled gully (103)	SE	Bright
5	General shot during topsoil removal	N	Overcast
6	Shot of possible shaft/adit (109)	Е	Overcast
7	Shot of possible shaft/adit (109)	N	Overcast
8	Shot of cultivation furrow	SE	Overcast
9	Shot of cultivation furrow	SE	Overcast
10	Shot of possible shaft/adit (109)	NE	Overcast
11	Shot of possible shaft/adit (109)	W	Overcast
12	Shot of possible shaft/adit (109)	N	Overcast
13	General shot towards the compound	SE	Overcast
14	General shot towards the compound	SE	Overcast
15	General shot of site entrance	Е	Bright
16	General shot during topsoil removal	NW	Bright
17	General shot towards the compound	SE	Overcast
18	General shot of area disturbed by former road surface	NW	Bright
19	Shot of possible shaft/adit (112)	NE	Bright
20	Shot of horseshoe shaped feature (010)	NW	Bright
21	General shot showing plough disturbance	NW	Bright
22	Section through horseshoe shaped feature (010)	N	Bright

Area B and C: Digital

Digi	Contexts/description	Facing	Conditions
No			
1	Shot of Trench 5		Bright
2	Shot of cultivation furrow Trench 5		
3	Shot of 'V' shaped ditch (006) Feature 2	East	Bright
4	Shot of 'V' shaped ditch (006) Feature 2	East	Bright
5	Shot of 'V' shaped ditch (006) Feature 2	West	Bright
6	Shot of 'V' shaped ditch (006) Feature 2	West	Bright
7	Shot of small pit (004)	North-west	Bright
8	Shot of Trench 4		Bright
9	Shot of sondage through cultivation furrow		Bright
10	Shot of post-medieval linear gully (004) in Trench 4		Bright
11	Post-excavation shot of linear 'V' shaped ditch (006) Feature 2	North-east	Bright
12	Post-excavation shot of linear 'V' shaped ditch (006) Feature 2	North	Bright
13	Shot of pit (010)	North	Bright
14	Shot of 'V' shaped linear ditch running (012) Feature 2	South-east	Overcast
15	Shot of north-east facing section of probable enclosure	South-west	Overcast

Digi No	Contexts/description	Facing	Conditions
	ditch (014)		
16	Shot of north-east facing section of probable enclosure ditch (014)	South-west	Overcast
17	Post-excavation shot of enclosure ditch (014) Feature 1	North-west	Overcast
18	Post-excavation shot of Trench 3	South-east	Overcast
19	Shot of shallow linear ditch (017) in Trench 2B	West	Overcast
20	Post-excavation shot of Trench 6 with shaft (019) in foreground	North-west	Overcast
21	Shot of (019) shaft in Trench 6, in plan	South-west	Overcast
22	Post-excavation shot of north-west facing section of shaft (019) in Trench 6	South-east	Overcast
23	Post-excavation shot of sondage in shaft (019) in Trench 6	South-west	Overcast
24	Post-excavation shot of Trench 1	South	Overcast
25	Post-excavation shot of Trench 1	North	Overcast
26	West facing section (021) of circular enclosure ditch	East	Overcast
27	General post-excavation shot of ditch Feature 2	North-east	Overcast
28	Post-excavation shot of south-west section of ditch Feature 2	North-east	Overcast
29	Post-excavation shot of north-west section of ditch Feature 2	South-east	Overcast
30	Post-excavation shot of south-east section of ditch Feature 2	North-west	Overcast
31	General shot of site and Feature 2	North-east	Overcast
32	General shot of site and Feature 2	South-west	Overcast
33	General shot of site and cultivation furrows	North-west	Overcast
34	General shot of site and Feature 1	West	Overcast
35	General shot of site and Feature 1	North-east	Overcast
36	South-west facing section in slot (033) through Feature 1	North-east	Overcast
37	General shot of ditch terminus (038) Feature 2	South-east	Bright
38	South-west facing section of ditch (034) Feature 2	North-east	Bright
39	South-west facing section of ditch (034) Feature 2	North-east	Bright
40	North facing section of ditch Feature 2	South	Bright
41	North facing section of ditch Feature 2	South	Bright
42	General shot of ditch terminal Feature 2	East	Bright
43	Shot of south facing section of ditch Feature 2	North	Bright
44	General shot of slot taken from near terminus of Feature 2	East	Bright
45	General shot of slot taken from near terminus of Feature 2	West	Bright
46	South-east facing section (046) of Feature 1	North-west	Bright
47	South-east facing section of cut (049) Feature 2	North-west	Bright
48	General shot of curving return of Feature 2	South-east	Bright
49	General shot of linear feature (052) Feature 2	North-east	Bright
50	South-east facing section of linear feature terminus (052) Feature 2	North-west	Bright
51	South-west facing section of sondage through linear (054) Feature 2	North-east	Bright
52	South-west facing section of sondage through linear (054) Feature 2	North-east	Bright
53	General shot of enclosure ditch terminus and linear feature (052) sondages; Feature 2	North-east	Bright

Digi No	Contexts/description	Facing	Conditions
54	South facing section of ditch (056) Feature 2	North	Bright
55	General shot of ditch (056) Feature 2	East	Bright
56	South-east facing section of ditch (058) part of enclosure Feature 2	North-west	Bright
57	South-east facing section of ditch (058) part of enclosure Feature 2	North-west	Bright
58	South facing section of (062) slot through Feature 1	North	Bright
59	East facing section of (063) slot through Feature 2	West	Bright
60	East facing section of (063) slot through Feature 2	West	Bright
61	General shot of Feature 2 showing sondages	West	Bright
62	East facing section of (065) slot through Feature 2	West	Bright
63	Slot through elongated pit (067)	West	Bright
64	South-east section of elongated pit (067)	North-west	Bright
65	General shot from above of Feature 1 post-excavation	North-west	Bright
66	General shot from above of Feature 1 post-excavation	North-west	Bright
67	General oblique shot of Feature 2 from above	South-west	Bright
68	General oblique shot of Feature 2 from above	South-west	Bright
69	Shot of south-west section through return of Feature 2	North-east	Bright
70	General shot of return of Feature 2 showing 3 sondages	East	Bright
71	Shot of enclosure ditch (069) Feature 2	North	Bright
72	Shot of enclosure ditch (069) Feature 2	North	Overcast
73	Shot of section of second return of enclosure ditch (069) Feature 2	South	Overcast
74	Shot of section of second return of enclosure ditch (069) Feature 2	South-west	Overcast
75	Cut of enclosure ditch (070) Feature 2	North-west	Overcast
76	Cut of enclosure ditch (070) Feature 2	South-east	Overcast
77	Cut of enclosure ditch (070) Feature 2	North-east	Overcast
78	Cut of enclosure ditch (070) Feature 2	South-west	Overcast
79	Cut of terminus of enclosure ditch Feature 2 (071)	West	Overcast
80	Terminus of enclosure ditch Feature 2 (071)	West	Overcast
81	West facing section through end of enclosure Feature 2 (071)	East	Overcast
82	General post-excavation shot of site	North-west	Overcast
83	General post-excavation shot of site	West	Overcast
84	General post-excavation shot of site	East	Overcast
85	General post-excavation shot of site	South	Overcast
86	General post-excavation shot of site	North-east	Overcast
87	General post-excavation shot of site	North-west	Overcast
88	General post-excavation shot of Feature 2 enclosure ditch	South-east	Bright
89	General post-excavation shot of Feature 2 enclosure ditch	West	Bright
90	General post-excavation shot of irregular end of enclosure ditch Feature 2 (first and second return)	North-west	Bright
91	General post-excavation shot of irregular end of enclosure ditch Feature 2 (first and second return)	North	Bright
92	General post excavation shot of return of enclosure ditch Feature 2	North	Bright
93	East facing section of sub-circular pit feature (076)	East	Overcast
94	Sub-circular pit feature (076) fully excavated	East	Overcast
95	General post-excavation shot of sub-circular pit feature	West	Bright

Digi	Contexts/description	Facing	Conditions
No			
	(076)		
96	General post-excavation shot of Feature 2	South-west	Bright
97	Working shot of Feature 1	West	Bright
98	General shot of Feature 2	East	Bright
99	Working shot of site	North-east	Bright
100	General shot of site	East	Bright
101	General shot of site	North-east	Bright
102	General shot of site	West	Bright
103	General shot of site	South-west	Bright

Black and White 35mm

Shot No	Contexts/description	Facing	Conditions
1	I.D. Shot		
2	South-west facing section of slot (033) in Feature 1	North-east	Bright
3	South-west facing section of slot (033) in Feature 1	North-east	Bright
4	General shot of sondages through Feature 1	North-east	Bright
5	Shot of sondage through ditch (034) Feature 2	North-east	Bright
6	Shot of sondage through ditch (034) Feature 2	Bright	
7	North facing section of sondage through enclosure ditch Feature 2	South	Bright
8	North facing section of sondage through enclosure ditch Feature 2	South	Bright
9	General shot of Feature 2 enclosure ditch terminus	North-east	Bright
10	General shot of Feature 2 enclosure ditch terminus	North-east	Bright
11	South-east facing section of sondage (046) through Feature 1	North-west	Bright
12	South-east facing section of sondage (046) through Feature 1	North-west	Bright
13	South-east facing section of ditch (049) part of curviliner Feature 2	North-west	Bright
14	South-east facing section of ditch (049) part of curviliner Feature 2	North-west	Bright
15	General shot of sondages through linear feature terminus (056)	North-east	Bright
16	General shot of linear feature terminus (056)	North	Bright
17	Shot of south-east facing section of ditch (058) part of Feature 2	ature 2	
18	Shot of south-east facing section of ditch (058) part of Feature 2		
19	Shot of south-facing slot through Feature 1	North	Bright
20	East facing section of curvilinear Feature 2	West	Bright
21	Shot of slot through elongated pit (067)	West	Bright
22			Bright
23	General oblique shot of Feature 1: Enclosure from above, Post-Excavation	North-west	Bright
24	General oblique shot of Feature 1: Enclosure from above, Post-Excavation	South-west	Bright
25	General oblique shot of Feature 1: Enclosure from above, Post-Excavation	South-west	Bright

26	Shot of south-west facing section through return of	North-east	Bright
	Feature 2		
27	General shot of site from spoil heap	Various	Overcast
28	General shot of site from spoil heap	Various	Overcast
29	General shot of site from spoil heap	Various	Overcast
30	General shot of site from spoil heap	Various	Overcast
31	Shot of terminus of enclosure ditch (071) Feature 2	South	Overcast
32	Shot of fully excavated terminus of enclosure ditch (071) Feature 2	West	Overcast

Appendix 3: Drawing Register

Dwg No.	Sheet No.	Scale	Plan / Section	Description/contexts	
1	1	1:10	Section	South-west facing section of 'V' shaped ditch (006) Feature 2	
2	1	1:10	Section	South facing section of small pit feature (010)	
3	1	1:10	Section	South facing section of small pit leature (010) South facing section of possible pit feature (010)	
4	1	1:10	Section	South-west facing section of post-medieval linear	
	1			gully (007) in Trench 4	
5	1	1:20	Plan	Plan of post-medieval linear gully (007) in Trench 4	
6	2	1:10	Section	North-east facing section (014) of Feature 1	
7	1	1:10	Section	North-west facing section of 'V' shaped ditch (013) Feature 2	
8	3 + 4	1:20	Plan	Plan of Trench 2A	
9	4	1:10	Section	East facing section of shallow linear ditch Trench 2B (017)	
10	4	1:20	Plan	Plan of Trench 3. Feature 1 (014)	
11	2	1:10	Section	West facing section of Feature 1 (021)	
12	2	1:20	Plan	Plan of Trench 2B. Shallow ditch (017) Feature 1	
13	5	1:20	Plan	Plan of Feature 1 (021)	
14	5	1:10	Section	North-east facing section of ditch (025) & (027)	
				Feature 2	
15	6	1:10	Section	South-west facing section. Slot in circular enclosure ditch (033)	
16	6	1:20	Plan	Plan of circular enclosure ditch (033)	
17	6	1:10	Section	South-west facing section of ditch (034)	
18	7	1:10	Section	West facing section and profile of enclosure ditch terminus (038) Feature 2	
19	7	1:10	Section	North facing section (042) of Feature 2	
20	7	1:10	Section	South-east facing section of sondage (046) through Feature 1 (046)	
21	7	1:20	Plan	Plan of section (046) through Feature 1	
22	6	1:10	Section	South-east facing section of ditch (049): part of Feature 2	
23	7	1:10	Section	South-east facing section of linear feature terminus (052)	
24	7	1:10	Section	South-west facing section of linear feature (054)	
25	6	1:10	Section	South facing section of linear feature terminus (056)	
26	6	1:10	Section	South-east facing section of enclosure ditch (058) Feature 2	
27	6	1:10	Section	East facing section of slot through east terminus (065) Feature 2	
28	6	1:20	Plan	Plan of slot through enclosure ditch (034) Feature 2	
29	6	1:20	Plan	Plan of slot through return at east end of enclosure ditch (049) Feature 2	
30	6	1:20	Plan	Plan of slot through Enclosure ditch (058) Feature 2	
31	8	1:10	Section	South-east facing section of elongated pit (067)	
32	8	1:10	Section	North-east facing section of elongated pit (067)	
33	8	1:20	Plan	Plan of elongated pit (067) showing truncation by plough-furrow	
34	5	1:20	Plan	Plan of west terminus of enclosure ditch Feature A	
35	5	1:20	Plan	Plan of return of Feature 2	
36	5	1:20	Plan	Plan of second return of Feature 2	
37	8	1:20	Plan	Plan of terminus of enclosure ditch Feature 2 (071	
<i>31</i>		1.20	1 1011	and 070)	

Dwg	Sheet	Scale	Plan /	Description/contexts
No.	No.		Section	
38	5	1:10	Section	Profile section of terminus of enclosure ditch Feature 2 (071)
39	5	1:10	Section	Section across end of enclosure ditch Feature 2 (071)
40	5	1:10	Section	Section through enclosure ditch Feature 2 between second return and terminus (070)
41	9	1:20	Plan	Cut of small sub-circular pit (076)
42	9	1:10	Section	Section of small sub-circular pit (076)

Appendix 4: Samples Register

Sample	Area	Context	Feature	Sample	Volume
No.				type	(L)
1	Area C	016	Circular Enclosure Ditch	Bulk	5
2	Area C	023	Circular Enclosure Ditch	Bulk	5
3	Area C	022	Circular Enclosure Ditch	Bulk	10
4	Area C	013	V' Shaped Linear Ditch Feature A	Bulk	5
5	Area C	035	Enclosure Feature A	Bulk	5
6	Area C	060	Enclosure Feature A	Bulk	5
7	Area C	039	Enclosure Feature A Terminus	Bulk	5
8	Area C	053	Linear Feature Terminus	Bulk	5
9	Area C	031	Circular Enclosure Ditch	Bulk	5

Appendix 5: Roman Pottery Catalogue

Context	Context Fabric Name	Vessel	Form	Sherd	ight	Rim FVF	Date	RimType	Sooting	Rim Description	Vessel Part	Comments	Vessel no
0	Samian	Bowl	Dragendorff37		12	4			I auci II	Describer	Rim		
22	Belgic	Jar	Cordon and grooves on shoulder	23	310	24		Rounded		Lid seated	Complete Profile	Not same vessel as 036; patchy grey/buff ext. surface	1
36	Belgic	Jar		1	28	9		Rounded		Lid seated	Rim	Same vessel form as in context 022, but not same vessel	
36	Mortarium: Mancetter- Hartshill	Mortarium	Hammerhead	1	23	5	Late C3-C4	Hammer- headed			Rim	Poor condition	1
36	Rossington Bridge BB1?	Cooking pot		1	57	19		Everted	External under rim		Rim	Surface affected by soil; no surviving decoration	1
36	South-east Dorset Cooking BB1 pot	Cooking pot		1	33	11	C2-Early C3 Everted	Everted			Rim	Not soil-affected; no surviving lattice	1
09	BB1	Cooking pot		5	<i>L</i> 9	18		Everted			Rim and Body	5 joining shh; soil-affected, no lattice visible	1
09	Grey ware (Rossington Bridge?)	Cooking pot		1	59	26		Everted			Rim	BB2 imit rim with ridge on shoulder	1
09	Unsourced reduced	Storage jar		2	123						Body	joining shh	1
09	Unsourced reduced	Storage jar		8	127						Body	joining shh	1

Appendix 6: Environmental Tables

Table 1: Composition of Residues

Context	Sample	Control description	Sample vol.	Lithic	Industrial debris Bu		Burnt	Charcoal
no	no	Context description	(litres)	flake	Poss. Prill	Poss. Hearth Ash / Slag	bone	
016	001	Upper fill of circular enclosure ditch (014)	5			+		
023	002	Secondary fill of circular enclosure ditch (014)	5		+		+	+
022	003	Primary fill of circular enclosure ditch (014)	5					+
013	004	Fill of V-shaped linear ditch (012)	5	+	+			
035	005	Primary fill of ditch (034), Feature A	3	Archae	Archaeologically sterile			
039/040/ 041	007	Fill of ditch (034) terminus, Feature A	5	Archae	Archaeologically sterile			
060	006	Backfill deposit in ditch (058), Feature A	5				+	+
053	008	Fill of linear feature terminus (052)	5					+
031	009	Secondary fill of circular enclosure ditch (033)	5		+			+

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant.

Table 2: Composition of Flots

Context no	Sample no	Context description	Flot Vol (ml)	Charcoal (Qty)
016	001	Upper fill of circular enclosure ditch (014)	20	+ (v small frags)
023	002	Secondary fill of circular enclosure ditch (014)	20	+
022	003	Primary fill of circular enclosure ditch (014)	10	+ (small frags)
013	004	Fill of V-shaped linear ditch (012)	10	+ (small frags)
035	005	Primary fill of ditch (034), Feature A	<10	
039/040/0 41	007	Fill of ditch (034) terminus, Feature A	10	+ (small frags)
060	006	Backfill deposit in ditch (058), Feature A	40	++
053	008	Fill of linear feature terminus (052)	20	+ (small frags)
031	009	Secondary fill of circular enclosure ditch (033)	<10	

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant.

Appendix 7: The Specification

WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE:
SPECIFICATION FOR A PRE-DETERMINATION ARCHAEOLOGICAL
EVALUATION BY TRIAL TRENCHING AND STRIP AND RECORD AT LAND OFF
RUSKIN AVENUE. WRENTHORPE.

Specification prepared on behalf of Wakefield Metropolitan District Council at the request of Nansi Rosenberg of Prospect Archaeology (Planning Application reference 11/02067/FUL).

1. Summary

- 1.1 A limited amount of archaeological work consisting of trial trenching and a strip and record exercise is proposed to help establish the archaeological significance of the above site. Any work arising from the results of the evaluation will be covered by a further specification.
- 1.2 This specification has been prepared by the West Yorkshire Archaeology Advisory Service, the holders of the WY Historic Environment Record

NOTE: The requirements detailed in paragraphs 6.3, 6.4, 6.5, 6.6 and 8.1 are to be met by the archaeological contractor **prior** to the commencement of fieldwork by completing and returning the attached form to the WY Archaeology Advisory Service.

2. Site Location & Description

Grid Reference: centred on SE 3205 2304

- 2.1 The proposed development site consists of an irregular shaped parcel of land (which measures c.7.5 hectares) which lies to the northeast of Wrenthorpe. It is bounded to the north by playing field and the A650, to the east by houses along Ruskin Avenue, to the south by houses and to the west by a railway line. The land slopes from 80m AOD in the north, to 60m AOD at the south. It is currently agricultural land.
- 2.2 The underlying geology of the site comprises mudstone, siltstone and sandstone of the Pennine Middle Coal Measures.

3. Background

- 3.1 A planning application for a residential development of 229 houses on land to the rear of Ruskin Avenue, Wrenthorpe, has been submitted to Wakefield Metropolitan District Council (11/02067/FUL).
- 3.2 The Planning Authority have been advised by the WYAAS that there is reason to believe that important archaeological remains may be affected by the proposed development and that an archaeological evaluation is required to establish the degree of archaeological recording that is necessary prior to determining the application.

- 3.3 This specification has been prepared by the WYAAS at the request of Nansi Rosenberg of Prospect Archaeology, acting on behalf of the applicants, to detail what is required for the evaluation.
- 3.4 Due to the presence of mine workings at a relatively shallow level, the developers plan to grout a large portion of the site (c. 1.7 hecatres), this grounting will be preceded by a topsoil strip which will be archaeologically monitored. The rest of the site will be subject to trial trenching. It is possible that this topsoil stripping may take place prior to the determination of the planning application, as part of site preparation works, and so it has been included within the same specification as the required pre-determination trial trenching.

4. Archaeological Interest

- 4.1 The proposed development site lies in an area of known archaeological significance. A desk based assessment of the site was carried in 2010 which identified a number of possible features in the surrounding area. The possible course of a Roman Road has been identified at Snow Hill, immediately south of the proposed development site, along with ridge and furrow, possible mining remains and linear features which had been identified from aerial photographs. It is possible that similar features extend into the proposed site. A Roman coin has been found within the proposed development site itself.
- 4.2 The north eastern part of the Snow Hill site was evaluated by trial trenching in January 2000 in advance of the construction of Phase 1 of the development. This involved the excavation of 7 trial trenches. A pit feature and debris of a demolished structure (presumed to be the remains of an early rhubarb shed) were identified, along with 17th century pottery.
- 4.3 A geophysical survey of the proposed site was carried out in January 2012 by GSB Prospection Ltd. This identified a number of features on the site, which included ditches, a possible enclosure and an 'L' shaped anomaly. A number of pit-like anomalies were identified which may be archaeological in origin.

5. Aim of the Evaluation

5.1 The aim of the evaluation is to gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the area of interest. The information gained will allow the Planning Authority to make a reasonable and informed decision on the planning application as to whether archaeological deposits should be preserved in-situ, or more appropriately, be recorded prior to destruction (whether this be a summary record from a salvage excavation or watching brief, or a detailed record from full open area excavation).

6. General Instructions

6.1 Health and Safety

6.1.1 The archaeologist on site will naturally operate with due regard for Health and Safety regulations. Where archaeological work is carried out at the same time as the

work of other contractors, regard should also be taken of any reasonable additional constraints that these contractors may impose. This work may require the preparation of a Risk Assessment of the site, in accordance with the Health and Safety at Work Regulations. The West Yorkshire Archaeology Advisory Service and its officers cannot be held responsible for any accidents or injuries that may occur to outside contractors while attempting to conform to this specification.

6.2 Confirmation of Adherence to Specification

6.2.1 Prior to the commencement of *any work*, the archaeological contractor must confirm adherence to this specification in writing to the WYAAS, or state (with reasons) any proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of the WYAAS to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor. **Modifications presented in the form of a rewritten specification/project design will not be considered by the WYAAS**. Any technical queries arising from the specification detailed below should be addressed to the WYAAS *without delay*.

6.3 Confirmation of Timetable and Contractors' Qualifications

6.3.1 Prior to the commencement of *any work*, the archaeological contractor **must** provide WYAAS **in writing** with:

- a projected timetable for the site work;
- details of the staff structure and numbers;
- names and CVs of key project members (the project manager, site supervisor, any proposed specialists, sub-contractors etc.),
- 6.3.2 All project staff provided by the archaeological contractor must be suitably qualified and experienced for their roles. The timetable should be adequate to allow the work to be undertaken to the appropriate professional standard, subject to the ultimate judgement of WYAAS.

6.4 Notification

6.4.1 The project will be monitored as necessary and practicable by the WYAAS, in its role as "curator" of the region's archaeology. The WYAAS should receive as much notice as possible, and certainly one week, of the intention to start fieldwork. This notification is to be supplied **in writing**, and copied to the relevant District Museum (see para. 9.1 below). As a courtesy, English Heritage's Science Adviser Dr Andy Hammon should also be notified of the intention to commence fieldwork (contact: tel. 01904 601983; email andy.hammon@english-heritage.org.uk). A copy of the contractor's risk assessment should accompany notification of intention to commence work.

6.5 Documentary Research

6.5.1 Prior to the commencement of *fieldwork*, the WY HER should be visited by either the project manager or the site supervisor, in order to gain an overview of the archaeological/historical background of the site and environs. In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor's report where they are considered to contribute to that report, but any extraneous material should be omitted. Please note that the WY

HER makes a charge for consultations of a commercial nature. The results of this exercise should be used to inform the whole project. Please note, however, that a formal desk-based report is not required and the results of this stage of work should be incorporated in the final report. Alternatively, if the contractor can obtain a copy of the desk based assessment (carried out by ASWYAS in 2010) and the geophysical survey from the developer/consultant then there would not be a requirement to visit the HER).

7. Fieldwork Methodology

7.1 Trench Size and Placement (Fig. 1)

7.1.1 The work will involve the excavation of fifteen 2m by 50m trenches, which can be machine-opened, and a strip and record covering roughly 1.7 hectares,. The contractor should also allow for a contingency amount of 300 square metres for the trial trenching. The use of the contingency will depend upon the results obtained in the initial trial trenching. The use of the contingency will be at the decision of the WYAAS, whose decision will be issued in writing, if necessary in retrospect after site discussions. Proposed trench locations are shown on Figure 1.

Total site area: 75,750m²

Total area of strip and record: 17,550m²

Total area of trenching: **1500m**² Contingency trenching: **300m**²

7.2 Method of Excavation

- 7.2.1 The trial trenches and strip and record area may be opened and the topsoil and recent overburden removed down to the first significant archaeological horizon in successive level spits of a **maximum** 0.2m. thickness, by the use of an appropriate machine using a wide toothless ditching blade. **Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits.** All machine work must be carried out under direct archaeological supervision and the machine halted if significant archaeological deposits are encountered. The top of the first significant archaeological horizon may be exposed by the machine, but must then be cleaned by hand and inspected for features and then dug by hand.
- 7.2.2 No archaeological deposits should be entirely removed unless this is unavoidable in achieving the objectives of this evaluation, although **all** features identified are expected to be half-sectioned and the **full** depth of archaeological deposits must be assessed. All trenches are to be the stated dimensions at their base.
- 7.2.3 All artefacts are to be retained for processing and analysis except for unstratified 20th-century material, which may be noted and discarded. Finds will be stored in secure, appropriate conditions following the guidelines in First Aid for Finds (3rd edition).

7.3 Method of Recording

7.3.1 The trenches and area of strip and record are to be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each trial trench is to be recorded even where no archaeological deposits have been identified.

- 7.3.2 The actual areas of trenching and any features of possible archaeological concern noted within the trenches or stripped area should be accurately located on a site plan and recorded by photographs, summary scale drawings and written descriptions sufficient to permit the preparation of a report on the material. The site grid is to be accurately tied into the National Grid and located on the largest scale map available of the area (either 1:2500 or 1:1250).
- 7.3.3 Digital photography: as an alternative to colour slide photography, good quality digital photography may be supplied, using cameras with a minimum resolution of 4 megapixels. Note that conventional black and white print photography is still required and constitutes the permanent record. Digital images will only be acceptable as an alternative to colour slide photography if each image is supplied in three file formats (as a RAW data file, a DNG file and as a JPEG file). The contractor must include metadata embedded in the DNG file. The metadata must include the following: the commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name, the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph. Images are to be supplied to WYAAS on gold CDs by the archaeological contractor accompanying the hard copy of the report.

7.4 Use of Metal Detectors on Site

- 7.4.1 Spoil heaps are to be scanned for both ferrous and non-ferrous metal artefacts using a metal detector capable of making this discrimination, operated by an experienced metal detector user (if necessary, operating under the supervision of the contracting archaeologist). Modern artefacts are to be noted but not retained (19th-century material and earlier should be retained.)
- 7.4.2 If a non-professional archaeologist is to be used to carry out the metal-detecting, a formal agreement of their position as a sub-contractor working under direction must be agreed in advance of their use on site. This formal agreement will apply whether they are paid or not. To avoid financial claims under the Treasure Act a suggested wording for this formal agreement with the metal detectorist is: "In the process of working on the archaeological investigation at [location of site] between the dates of [insert dates], [name of person contributing to project] is working under direction or permission of [name of archaeological organisation] and hereby waives all rights to rewards for objects discovered that could otherwise be payable under the Treasure Act 1996."

7.5 Environmental Sampling Strategy

- 7.5.1 Bulk samples must be taken from **all** securely stratified deposits using a strategy which combines systematic and judgement sampling, but which also follows the methodologies outlined in the English Heritage (2011) 'Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Second Edition)' guidance
- 7.5.2 Samples for specialist environmental analysis and scientific dating (soil profiles, archaeomagnetic dating, dendrochrology etc.) should be taken if suitable material is encountered during the excavation. The English Heritage Regional Science Advisor should be consulted (Dr Andy Hammon, tel.: 01904 601983, email:

andy.hammon@english-heritage.org.uk) and provision should be made for an appropriate specialist(s) to visit the site, take samples and discuss the sampling strategy, if necessary.

7.6 Conservation Strategy

7.6.1 A conservation strategy must be developed in collaboration with a recognised laboratory. All finds must be assessed in order to recover information that will contribute to an understanding of their deterioration and hence preservation potential, as well as identifying potential for further investigation. Furthermore, all finds must be stabilised and packaged in accordance with the requirements of the receiving museum. As a guiding principle only artefacts of a "displayable" quality would warrant full conservation, but metalwork and coinage from stratified contexts would be expected to be X-rayed if necessary, and conservation costs should also be included as a contingency.

7.7 Location of Services, etc.

7.7.1 The archaeological contractors will be responsible for locating any drainage pipes, service pipes, cables *etc*. which may cross any of the trench lines, and for taking the necessary measures to avoid disturbing such services.

7.8 Human Remains

7.8.1 Any human remains that are discovered must initially be left *in-situ*, covered and protected. WYAAS will be notified at the earliest opportunity. If removal is necessary the remains must be excavated archaeologically in accordance with the *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England* published by English Heritage (2005), a valid Ministry of Justice licence and any local environmental health regulations.

7.9 Treasure Act

7.9.1 The terms of the Treasure Act 1996 must be followed with regard to any finds that might fall within its purview. Any finds must 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 must be taken to protect the finds from theft.

8. Monitoring

8.1 The representative of the WYAAS will be afforded access to the site at any reasonable time. It is usual practice that the visit is arranged in advance, but this is not always feasible. The WYAAS' representative will be provided with a site tour and an overview of the site by the senior archaeologist present and should be afforded the opportunity to view all trenches, any finds made that are still on site, and any records not in immediate use. It is anticipated that the records of an exemplar context that has previously been fully recorded will be examined. Any observed deficiencies during the site visit are to be made good to the satisfaction of the Advisory Service's representative, by the next agreed site meeting. Access is also to be afforded at any reasonable time to English Heritage's Archaeological Science Advisor.

8.2 Please note that WYAAS now make a charge for site monitoring visits. An invoice will be raised on the archaeological contractor. One monitoring visit will be charged for this project. Please contact us for the current charge.

9. Archive Deposition

- 9.1 Before commencing the project, the archaeological contractor must contact the archaeological curator of the museum to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is Wakefield M.D.C. Museum and Arts, Pontefract Museum, 5 Salter Row, Pontefract, WF8 1BA. telephone 01924 305352; Museums Curatorial and Collections Officer: Mr David Evans (davidevans@wakefield.gov.uk).
- 9.2 It is the policy of Wakefield Museums to accept complete excavation archives, including primary site records and research archives and finds, from all excavations carried out in the District that it serves.
- 9.3 It is the responsibility of the archaeological contractor to endeavour to obtain consent of the landowner, in writing, to the deposition of finds with Wakefield Museum.
- 9.4 It is the responsibility of the archaeological contractor to meet Wakefield Museums' requirements with regard to the preparation of excavation archives for deposition

10. Unexpectedly Significant or Complex Discoveries

10.1 Should there be unexpectedly significant or complex discoveries made that warrant, in the professional judgement of the archaeologist on site, more detailed recording than is appropriate within the terms of this specification, then the archaeological contractor should urgently contact the WYAAS with the relevant information to enable them to resolve the matter with the developer.

11. Post-Excavation Analysis and Reporting

11.1 Finds and Samples

- 11.1.1 On completion of the fieldwork, any samples taken shall be processed and any finds shall be cleaned, identified, assessed/analysed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines.
- 11.1.2 Samples should be processed for the recovery of artefactual material, animal/fish/human bones, industrial residues, shell, molluscs, charcoal and mineralised plant remains as a minimum. 'Specialist' samples (e.g. monoliths, cores, plant/invertebrate macrofossils) should be processed separately as appropriate.
- 11.1.3 Material suitable for scientific dating (e.g. charcoal) should be identified to species and assessed for suitability by an environmental specialist prior to submission to a dating laboratory. Any human remains submitted for C14 dating should also have carbon (delta 13C) and nitrogen isotope analysis carried out by the radiocarbon laboratory.

- 11.1.4 All finds and biological material must be analysed by a qualified and experienced specialist.
- 11.1.5 Following identification, finds of 20th-century date should be noted, quantified and summarily described, but can then be discarded if appropriate. All finds which are of 19th century or earlier date should be retained and archived.

11.2 Field Archive

- 11.2.1 A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints/slides. Standards for archive compilation and transfer should conform to those outlined in Archaeological Archives a guide to best practice in creation, compilation, transfer and curation (Archaeological Archives Forum, 2007). An index to the field archive is to be deposited with the West Yorkshire Archaeology Advisory Service (preferably as an appendix in the report).
- 11.2.2 Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but **not** in a manner which alters detail or perspective). All digital prints must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the WY Archaeology Advisory Service, with supporting documentation indicating their archival stability/durability. Written confirmation that the materials are acceptable must have been received from the WYAAS prior to the commencement of work on site.
- 11.2.3 The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds in a publicly accessible archive (see para. 8.4 above). In the absence of this agreement the field archive (less finds) is to be deposited with the West Yorkshire Archaeology Advisory Service.

11.3 Report Format and Content

- 11.3.1 A report should be produced, which should include background information on the need for the project, a description of the methodology employed, and a full description and interpretation of results produced. It is not envisaged that the report is likely to be published, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers.
- 11.3.2 Location plans should be produced at a scale which enables easy site identification and which depicts the full extent of the site investigated (a scale of 1:50,000 is not regarded as appropriate unless accompanied by a more detailed plan or plans). Site plans should be at an appropriate scale showing trench layout (as dug), features located and, where possible, predicted archaeological deposits. Upon completion of each evaluation trench all sections containing archaeological features will be drawn. Section drawings (at a minimum scale of 1:20) must include heights O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. Where no archaeological deposits are encountered at least one long section of each trench will be drawn.

- 11.3.3 Artefact analysis is to include the production of a descriptive catalogue, quantification by context and discussion/interpretation if warranted, with finds critical for dating and interpretation illustrated.
- 11.3.4 Environmental analysis is to include identification of the remains, quantification by context, discussion/interpretation if warranted, and a description of the processing methodology. Radiocarbon results must be presented in full (laboratory sample number, conventional radiocarbon age, delta C13 value, calibration programme). Copies of the laboratory-issued dating certificates must be included as an appendix to the report.
- 11.3.5 Details of the style and format of the report are to be determined by the archaeological contractor, but should include a full bibliography, a quantified index to the site archive, and as an appendix, a copy of this specification.

11.4 Summary for Publication

11.4.1 The attached summary sheet should be completed and submitted to the WYAAS for inclusion in the summary of archaeological work in West Yorkshire published on WYAAS' website.

11.5 Publicity

11.5.1 If the project is to be publicised in any way (including media releases, publications etc.), then it is expected that the WYAAS will be given the opportunity to consider whether it wishes its collaborative role to be acknowledged, and if so, the form of words used will be at the WYAAS' discretion.

11.6 Consideration of Appropriate Mitigation Strategy

11.6.1 The report should not give a judgement on whether preservation or further investigation is considered appropriate, but should provide an interpretation of results, placing them in a local and regional, and if appropriate, national context. However, a client may wish to separately commission the contractor's view as to an appropriate treatment of the resource identified.

11.7 Report Submission and Deposition with the WY HER

- 11.7.1 A copy of the report is to be supplied **directly** to the WYAAS, in a timely manner to allow further work, if necessary, to be scheduled and the planning application to be determined in an informed manner, and certainly within a period of two months following completion of fieldwork so as not to delay a planning decision to be made, unless specialist reports are awaited. In the latter case a revised date should be agreed with the WYAAS. Completion of this project and advice from WYAAS on an appropriate mitigation strategy are dependant upon receipt by WYAAS of a satisfactory report which has been prepared in accordance with this specification. Any comments made by WYAAS in response to the submission of an unsatisfactory report will be taken into account and will result in the reissue of a suitably edited report to all parties, within a timescale which has been agreed with WYAAS.
- 11.7.2 The report will be supplied on the understanding that it will be added to the West Yorkshire Historic Environment Record where it will be publicly accessible

once deposited with the WYAAS unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposition.

- 11.7.3 A copy of the final report (in .pdf format) shall also be supplied to English Heritage's Science Advisor (Andy Hammon, English Heritage, 37 Tanner Row, York Y01 6WP).
- 11.7.4 Copyright Please note that by depositing this report, the contractor gives permission for the material presented within the document to be used by the WYAAS, in perpetuity, although The Contractor retains the right to be identified as the author of all project documentation and reports as specified in the *Copyright*, *Designs and Patents Act* 1988 (chapter IV, section 79). The permission will allow the WYAAS to reproduce material, including for non-commercial use by third parties, with the copyright owner suitably acknowledged.
- 11.7.5 The West Yorkshire HER supports the Online Access to Index of Archaeological Investigations (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The archaeological contractor must therefore complete the online OASIS form at http://ads.ahds.ac.uk/project/oasis/. Contractors are advised to contact the West Yorkshire HER officer prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, the West Yorkshire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer at the West Yorkshire HER.

12. General Considerations

12.1 Authorised Alterations to Specification by Contractor

- 12.1.1 It should be noted that this specification is based upon records available in the West Yorkshire Historic Environment Record and on a brief examination of the site by the WYAAS. Archaeological contractors submitting tenders should carry out an inspection of the site prior to submission. If, on first visiting the site or at any time during the course of the recording exercise, it appears in the archaeologist's professional judgement that:
- i) a part or the whole of the site is not amenable to evaluation as detailed above, and/or
- ii) an alternative approach may be more appropriate or likely to produce more informative results,

then it is expected that the archaeologist will contact the WYAAS as a matter of urgency. If contractors have not yet been appointed, any variations which the WYAAS considers to be justifiable on archaeological grounds will be incorporated into a revised specification, which will then be re-issued to the developer for redistribution to the tendering contractors. If an appointment has already been made and site work is ongoing, the WYAAS will resolve the matter in liaison with the developer and the Local Planning Authority.

12. 2 Unauthorised Alterations to Specification by Contractor

12.2.1 It is the archaeological contractor's responsibility to ensure that they have obtained the WYAAS' consent in writing to any variation of the specification prior to the commencement of on-site work or (where applicable) prior to the finalisation of the tender. Unauthorised variations may result in the WYAAS being unable to recommend determination of the planning application to the Local Planning Officer based on the archaeological information available and are therefore made solely at the risk of the contractor.

12.3 Technical Queries

12.3.1 Similarly, any technical queries arising from the specification detailed above, should be addressed to the WYAAS without delay.

12.4 Valid Period of Specification

12.4.1 This specification is valid for a period of one year from date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

Rebecca Remmer West Yorkshire Archaeology Advisory Service

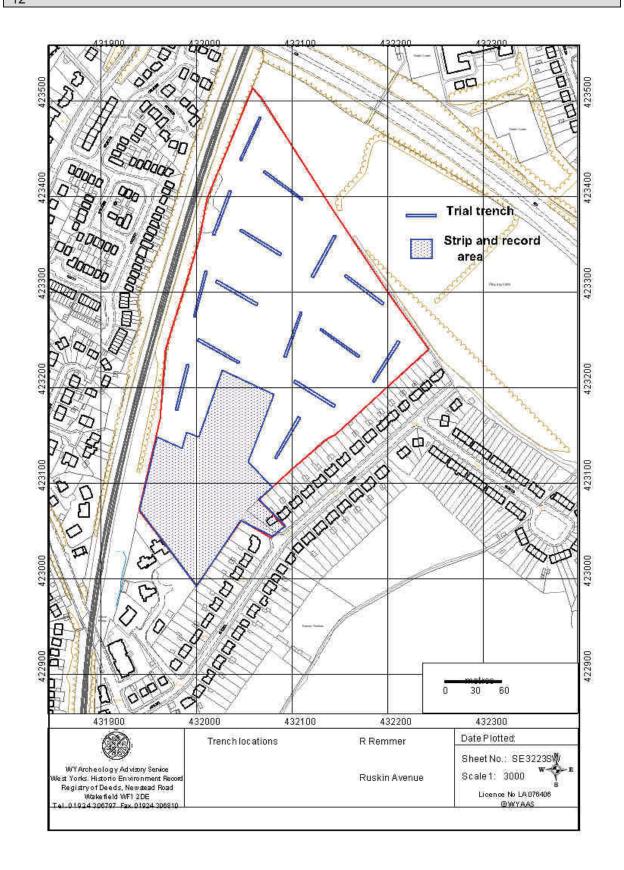
February 2012

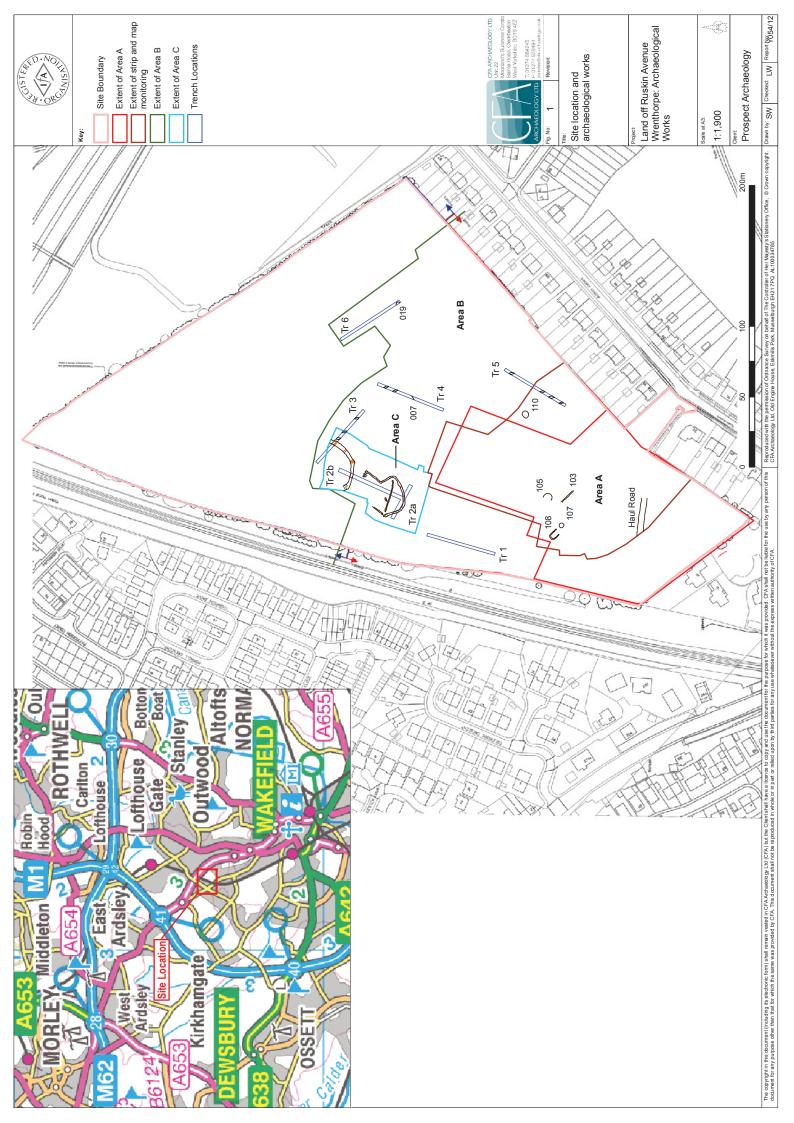
WY Historic Environment record
West Yorkshire Archaeology Advisory Service
Registry of Deeds
Newstead Road
Wakefield
WF1 2DE

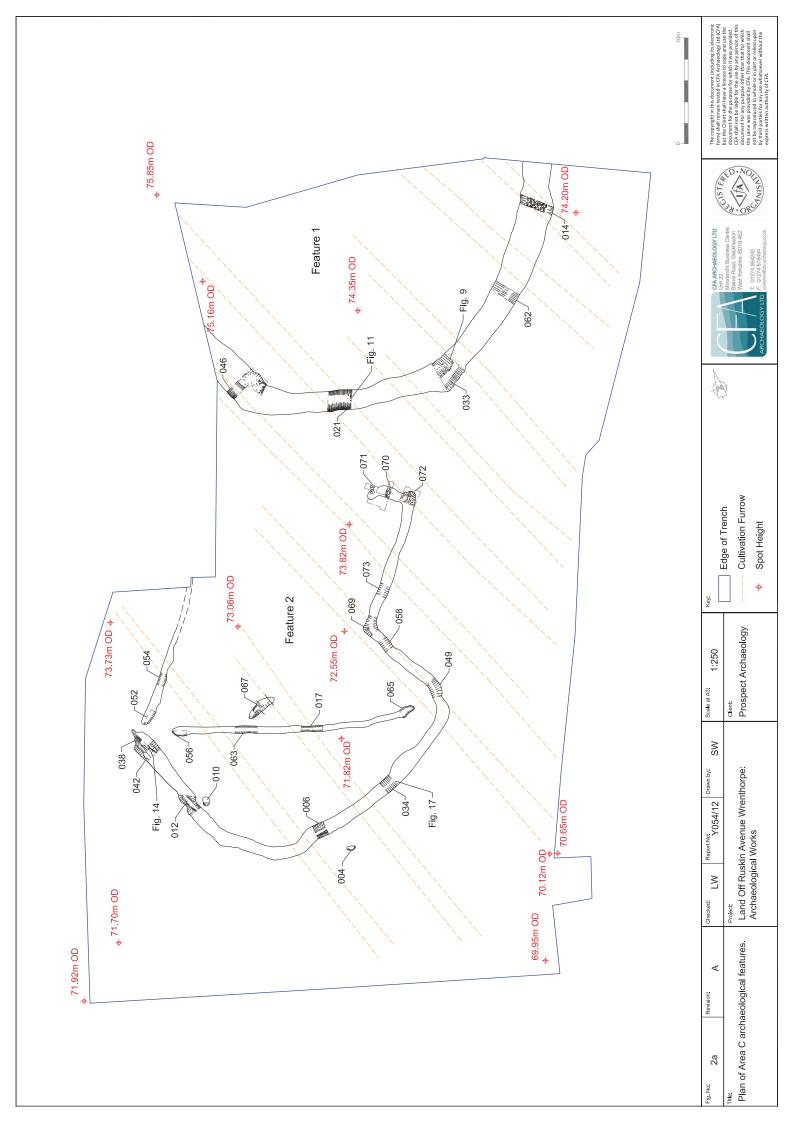
Telephone: (01924) 305992

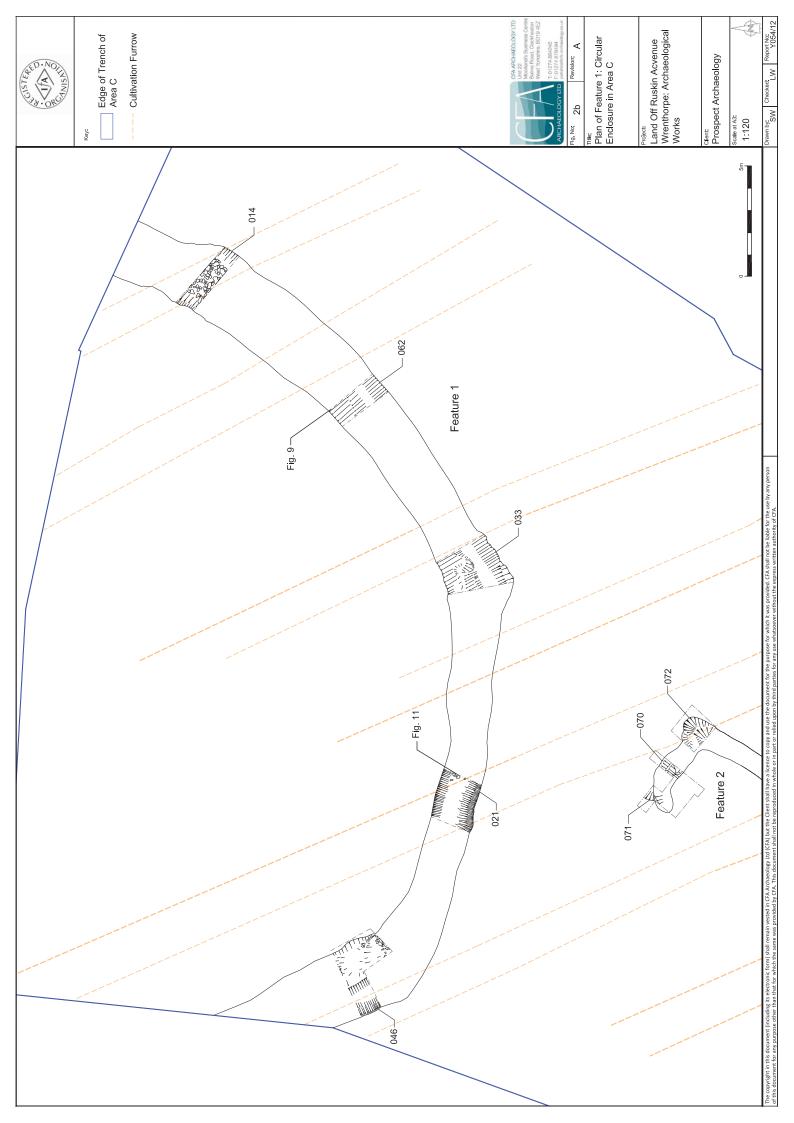
Fax: (01924) 306810

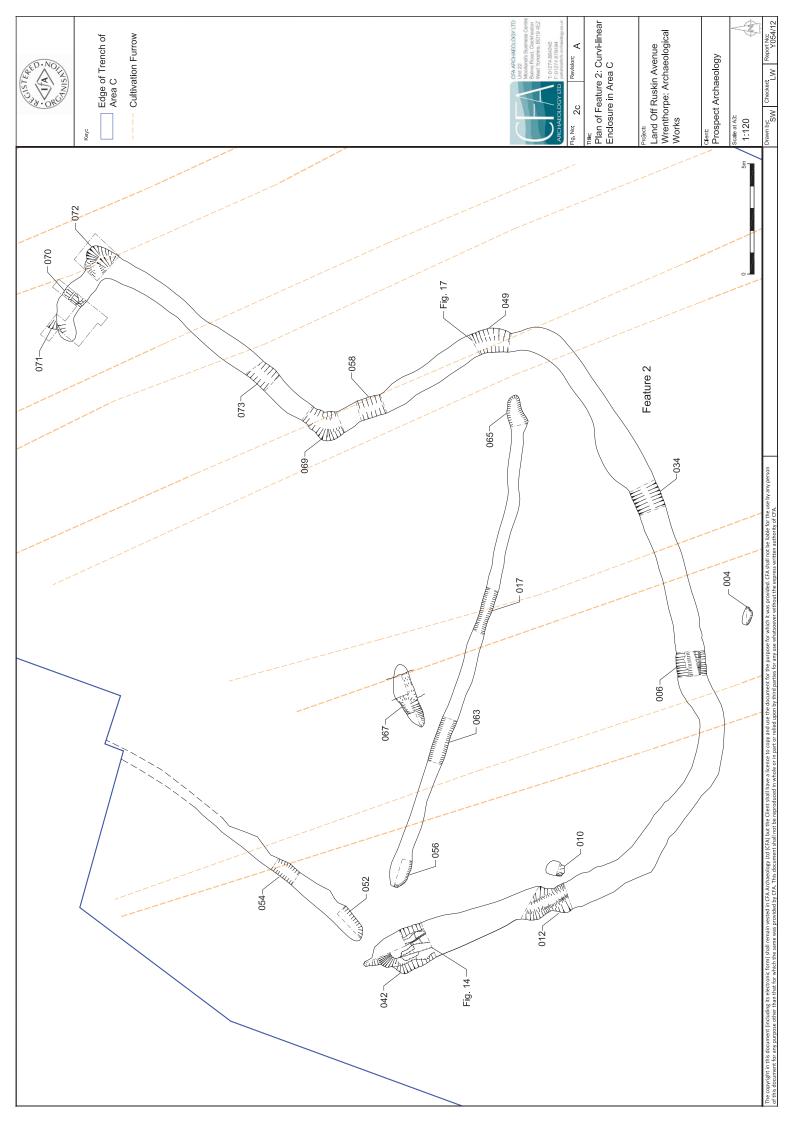
E-mail: rremmer@wyjs.org.uk











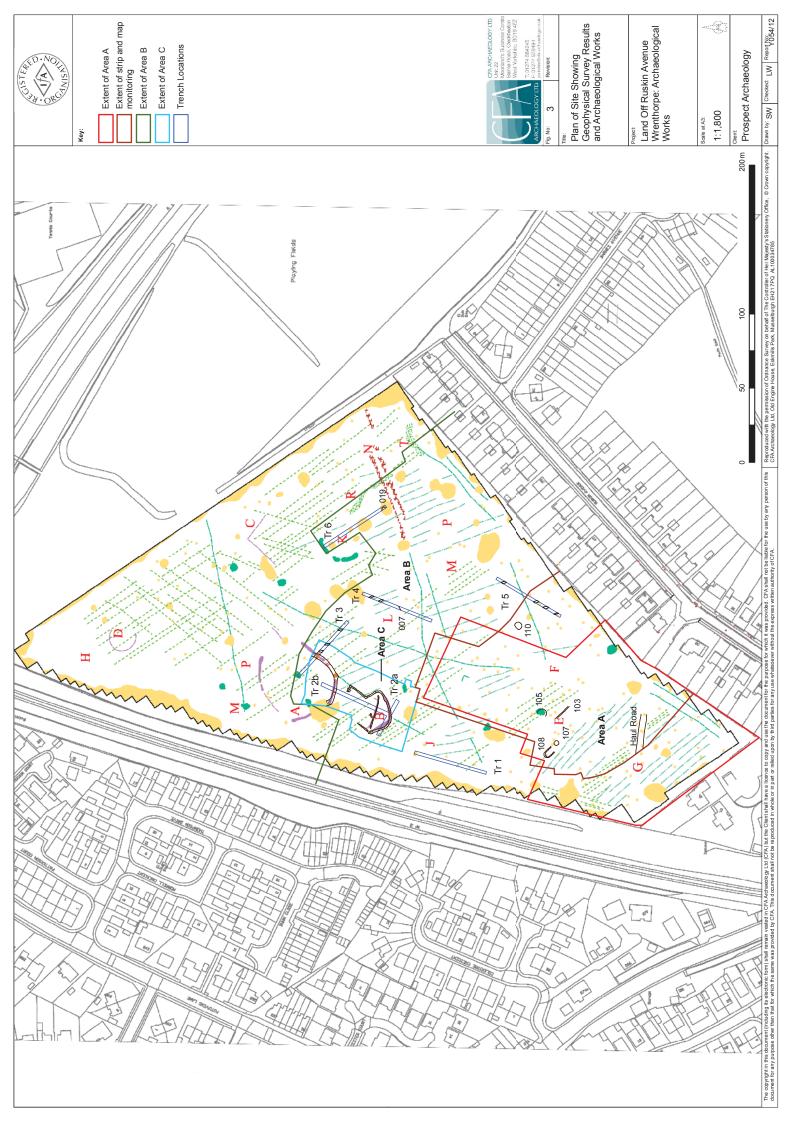




Fig. 4 - General shot of probable mine shaft 107 in Area A





Fig. 5 - Shot of south-west facing section of gully 103 in Area A Fig 6 - Shot of relict cultivation furrows in Area A

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Fig. 7 - Shot of south-west facing section of gully 007 in Trench 4: Area B



Fig. 8 - Post-excavation shot of sondage through probable mine shaft 019 in Trench 6

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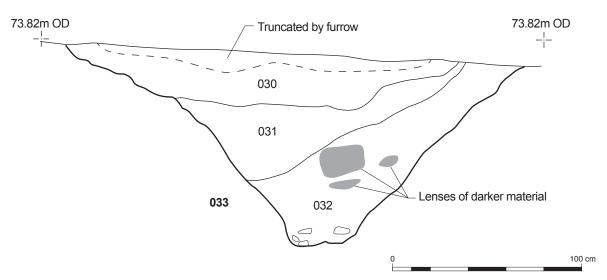


Fig. 9 - South-west facing section of 033. Feature 1: Area C

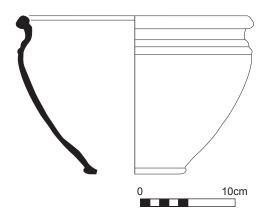


Fig. 10 - Profile of Belgic Jar from section 021: Feature 1

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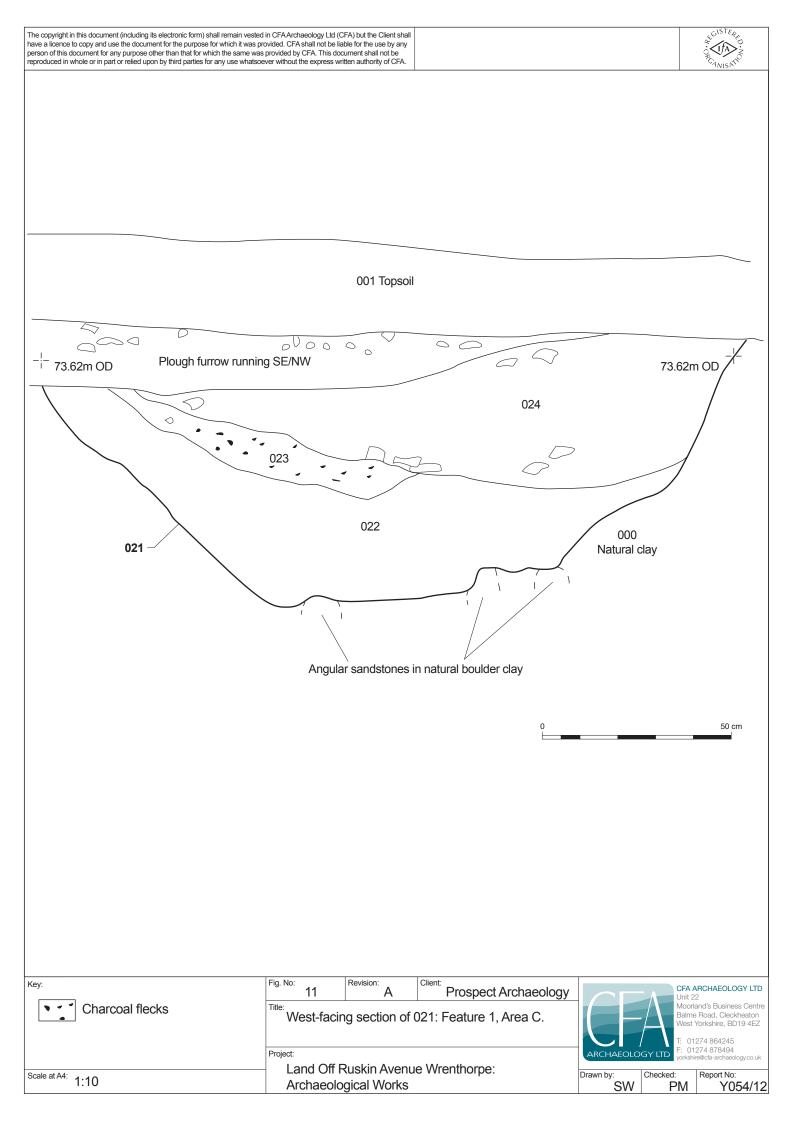




Fig. 12 - Shot of south-west facing section of 033. Feature 1: Area C

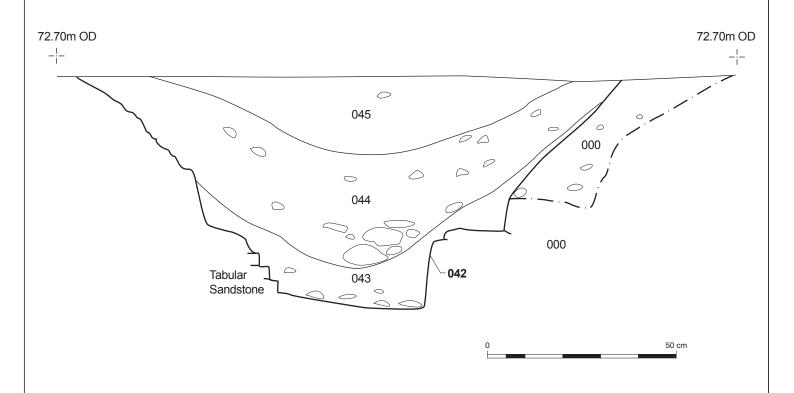


Fig. 13 - Shot of section 014. Feature 1: Area C

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	Project:			ARCHAEOLO	OGY LTD F: 01	274 878494 ire@cfa-archaeology.co.uk
Scale at A4: 1:10		Ruskin Avenu gical Works	e Wrenthorpe:	Drawn by:	Checked: PM	Report No: Y054/12



Fig. 15 - Shot of south-west facing section of 006. Feature 2: Area C.

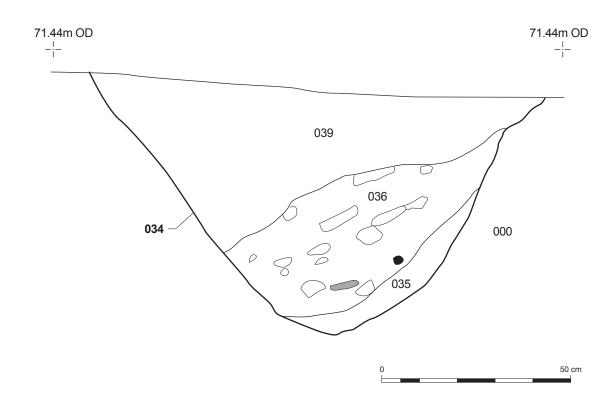


Fig. 16 - South-west facing section of 034. Feature 2: Area C.

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Scale at A4: 1:10		Ruskin Avenu gical Works	e Wrenthorpe:	Drawn by:	Checked: PM	Report No: Y054/12



Fig. 18 - Shot of south-east facing section of 058. Feature 2: Area C.



Fig. 19 - Shot of terminus 072. Feature 2: Area C.

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Fig. 20 - Shot of terminus 071 with section 070 in background.

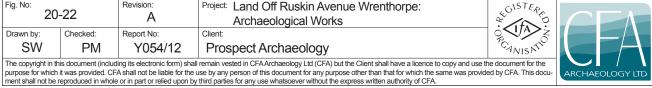


Fig. 21 - Shot of south-east facing section of terminus 052, with section 054 in background.



Fig. 22 - Shot of west facing section of terminus 056. Feature 2: Area C.

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CFA ARCHAEOLOGY LTD Unit 22 Moorland's Business Centre

Balme Road, Cleckheaton

WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE SUMMARY SHEET ARCHAEOLOGICAL FIELDWORK IN WEST YORKSHIRE

Site name/ Address: Land at Ruskin Avenue, Wrenthorn	Site name/ Address: Land at Ruskin Avenue, Wrenthorpe					
Township: Wrenthorpe	District: Wakefield					
National Grid Reference: SE 3205 2304						
Contractor: CFA Archaeology						
Date of Work: March/April 2012						
Title of Report: Land at Ruskin Avenue, Wrenthorpe, Archaeological Works						
Date of Report: 10/07/2012						
SUMMARY OF FIELDWORK RESULTS:						
A programme of archaeological works consisting of evaluation trenching, strip and record and open-area excavation was undertaken by CFA Archaeology Ltd prior to the development of land at Ruskin Avenue, Wrenthorpe, near Wakefield, West Yorkshire.						
Archaeological remains consisted of two Romano-British possibly livestock enclosures; a circular enclosure and a segmented curvilinear enclosure bisected by a ditch. These dated to between the 2nd and 3rd century AD. Although there was no evidence of internal structures to the enclosures a moderate amount of pottery points towards a low status rural settlement in the immediate area.						
	half of one of the enclosures may survive in an area oment site. Features relating to mining activity such as					

Date of summary: 10/07/2012

Author of summary: Martin Lightfoot