

High Street
Shafton
South Yorkshire

Archaeological Excavation

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Summary

Archaeological Services WYAS was commissioned to carry out the archaeological excavation of land off High Street, Shafton (SE 391107), on behalf of Ben Bailey Homes Ltd (planning application no. B/99/0903/HR).

The archaeological excavation confirmed the presence of a 1st to 2nd-century AD ditched enclosure and identified the remains of internal and external structures and hearths. A combination of geophysical survey and excavation revealed that the small corner enclosure lay within a larger ditch-defined field and was possibly approached via a driveway along the southern side of the field. Artefactual evidence provided sufficient dating information for most of the linear components of the site, and radiocarbon dating established that use of the internal hearths had been contemporary with the occupation of the enclosure. The environmental remains revealed the disposal of cereal-processing waste on domestic hearths.

1. Introduction

- 1.1 Archaeological Services WYAS was commissioned to carry out the archaeological excavation of land off High Street, Shafton, on behalf of Ben Bailey Homes Ltd. The site is located immediately west of High Street, in the village of Shafton which lies *c.* 7km north-west of Barnsley (Fig. 1). The excavation was requested by the South Yorkshire Archaeology Service as a condition of planning consent relating to the proposed residential development of the site (planning application no. B/99/0903/HR). The excavation was undertaken between the 19th June and 10th August 2000.
- 1.2 The application area is centred at SE 391107 and consists of two sub-rectangular fields bounded by tall hedges and a construction site to the east, housing estates to the north and south-east, a stream to the south and a low field boundary to the west (Fig. 2). The northern field slopes gently from *c.* 78m above ordnance datum (OD) in the north-west and north-east down to *c.* 75.5m in the central part of the field. The southern field slopes downwards from *c.* 75.5m OD in the north-east and *c.* 78.5m in the south-east to *c.* 70m at the south-western field boundary.
- 1.3 The underlying geology of the site is undifferentiated Middle Coal Measures clays and mudstones, and the Shafton coal seam outcrops close to the southern boundary of the site (British Geological Survey 1976). The soils are mapped as slowly permeable seasonally waterlogged loams of the Bardsey association (713a; Soil Survey of England and Wales 1983). At the time of excavation the ground cover was dense weeds.

2. Archaeological Background

- 2.1 The site lies within an area where air photography has identified crop marks which indicate the presence of later prehistoric or Romano-British field systems, although no crop marks were observed within the application area itself. It was also suspected that evidence for early mineral extraction industries, such as the remains of bell-pits, may be found within the site.
- 2.2 The first stage of archaeological investigation comprised a sample geophysical (gradiometer) survey of *c.* 6 hectares of land which was carried out in March 1999 (Webb and Whittingham 1999). Several magnetic anomalies indicating infilled ditches were identified and seemed to form a rectilinear enclosure and a double-ditched feature. Isolated anomalies suggestive of pits or areas of burning were also identified, plus evidence of ridge and furrow agriculture, field drains, modern tipping and mining.
- 2.3 The second stage of investigation involved the excavation of sixteen trial trenches in September and October 1999 which confirmed and enhanced the results of the geophysical survey (Fig. 2; Howell 1999). In addition to the previously identified enclosure and double-ditched feature, the evaluation recorded several possible structures, including a roundhouse, plus numerous post-holes and pits. Pottery recovered from the features suggested that they were open during the earlier part of the Roman period. Evidence was also found for post-medieval and modern coal extraction in the southern and eastern parts of the application area.

3. Method

- 3.1 A written scheme of investigation was prepared by Archaeological Services WYAS and agreed by the South Yorkshire Archaeology Service (Webb 1999; Appendix VII). The aims and objectives of the excavation were:
- to gather sufficient information to establish the presence/absence of archaeological remains within the proposed development area;
 - to determine the extent, condition, character, quality of survival, importance and date of any archaeological remains present;
 - to establish the extent of any settlement outside the previously identified enclosure and,
 - to establish more clearly the relationship between the settlement/enclosure and the trackway to the south.
- 3.2 The excavation areas (Areas 1-3) were located to investigate the main enclosure, the double-ditched trackway and the area in-between (Fig. 2). The trench locations were established and set out using a 600 series robotic Geodimeter total station theodolite with location information derived from the geophysical survey stations.
- 3.3 The trenches were machine excavated, using an appropriate mechanical excavator fitted with a toothless ditching bucket, under direct archaeological supervision, in level spits to the top of the first archaeological horizon or undisturbed natural. The resulting surface was cleaned manually and inspected for archaeological remains. All archaeological features were hand excavated in accordance with the sampling strategy set out in the written scheme of investigation. A written, drawn and photographic record was made of all features and followed the Archaeological Services WYAS standard method (Boucher 1995) and the requirements of the written scheme of investigation (Webb 1999). The trench limits were surveyed with the Geodimeter total station theodolite.
- 3.4 Following the machine stripping of the site, and prior to the commencement of excavation, the Archaeological Services WYAS Environmental Officer devised a soil sampling strategy appropriate to the soil conditions and features found at the site. A soil sampling programme was undertaken for the recovery of carbonised plant remains, vertebrate remains, molluscs and small artefacts. It was hoped that this would aid artefact recovery, provide evidence for the reconstruction of the economy and environment, and retrieve carbonised material should radiometric dating be required. Soil samples of between ten and thirty litres were taken from the primary fills of all features and from other fills where appropriate.
- 3.5 As Area 1 incorporated evaluation Trenches A and J and lay adjacent to evaluation Trench B, the results from the evaluation trenches are clearly integral to the results and conclusions of the excavation. Therefore the features, artefacts and environmental samples from these trenches were reconsidered during the current post-excavation analysis. The evaluation results have been incorporated into the results section and inventories of this report but detailed descriptions have been omitted where that information is provided in the evaluation report (Howell 1999). Evaluation features, artefacts

and environmental samples can be easily identified by their 3-digit context numbers (compared to the 4-digit numbers of the excavation).

- 3.6 The paper archive and artefacts resulting from the works are currently stored by Archaeological Services WYAS and will be deposited with Doncaster Museum within a time scale agreed between Archaeological Services WYAS and the recipient museum. The accession reference is DONMG:2001.7.
- 3.7 Subsequent to the completion of the excavation, and in advance of the development of the northern part of the application area, an archaeological watching brief was specified by the South Yorkshire Archaeology Service and carried out by Archaeological Services WYAS. This work monitored the area adjacent to evaluation Trenches C, D and E (Fig. 2), and was carried out between 23rd August and 5th September 1999. All groundwork associated with the construction of the access roads and sewers in the area indicated on Figure 2 were undertaken under archaeological supervision. The area was excavated down to the first archaeological horizons or undisturbed natural deposits using a JCB equipped with a toothless ditching bucket. No archaeological features, deposits or artefacts were identified and therefore a separate report has not been produced and no archive was created as a result of these works. The specification for the watching brief is included in this report as Appendix VIII.

4. Results

4.1 The Stratigraphic Sequence

- 4.1.1 Different levels of erosion were evident across the site. Only 0.3m to 0.4m of topsoil was recorded in Areas 1-3 compared to the 0.6m recorded in the low-lying evaluation trenches (K and L) in the eastern part of the application area. Subsoil was present in the lowest parts of the excavation areas but elsewhere the topsoil tended to lie directly above undisturbed clay and sandstone deposits. These natural deposits varied slightly depending on the local topography; outcropping sandstone was visible in the western part of Area 1 and had previously been noted in evaluation Trench O (the two highest parts of the application site).
- 4.1.2 The likely contributors to the erosion of the higher ground were evident. In the eastern half of the application site the geophysical survey identified a series of anomalies consistent with modern field drains and, in the western part of the site, evidence of ridge and furrow agriculture. These features were also identified in several of the evaluation and excavation trenches. Shallow, linear, regularly spaced furrows clearly traversed Areas 1 and 2 (not illustrated) and were only investigated sufficiently to ensure accurate identification, or if they were likely to be concealing earlier features.
- 4.1.3 Archaeological features could not be identified in the topsoil or subsoil and were only visible at the level of the undisturbed natural. Fill descriptions are only provided in the text when variations from the general greyish-brown silty clay deposits were noted or when significant quantities of inclusions were present. The surface of undisturbed natural deposits was encountered at between 76.7m OD and 74.5m in Area 1, between 74.7m OD and 73.8m in Area 2 and, at 73.8m OD in Area 3.

- 4.1.4 The main element of the site was Ditch 1, a north-west/south-east sinuous linear boundary which provided a link between the D-shaped enclosure in Area 1 and a double-ditched feature to the south, in Area 2 (Fig. 3). Ditch 1 was observed to cut two of the other ditches relating to the enclosure. However, despite the excavated evidence clearly demonstrating that Ditch 1 lay at the top of the stratigraphic sequence, and hence was the latest feature at the site, it is inconceivable that the remainder of the enclosure could have existed without the presence of an earlier ditch or boundary on that alignment.
- 4.1.5 Rather, the enclosure appears to represent a single phase of construction, appended to a pre-existing boundary (Ditch 1) which was later recut and redefined. In fact many of the ditches revealed evidence of recutting which probably represents maintenance rather than the presence of earlier phases or the wholesale reconstruction of the enclosure. Within the enclosure the discrete features almost certainly represent several (sub)phases of post-built structures, but the identification of separate phases is curbed by a paucity of closely datable finds and the likely removal of features through truncation.

4.2 Area 1 (Figs 4-6)

- 4.2.1 Area 1 was located over the enclosure and investigated an area of approximately 3000m², incorporating evaluation Trenches A and J. Aside from the four main enclosure ditches a number of shorter ditches and discrete features were identified. Three narrow ditches subdivided the enclosure and the majority of the discrete features were pits and post-holes located within the enclosure. For convenience in reporting, the discrete features have been divided into three spatially distinct groups; 'a northern group', 'a central group' and 'a southern group'. A probable roundhouse and a small number of post-holes and other short ditches lay outside of the enclosure and these are grouped together as 'external features'.
- 4.2.2 The fills of these features did not vary greatly in composition, tending to comprise silty clays in slightly differing proportions. It is significant however, that there was a distinct contrast between the coloration of the fills of Ditches 1 and 2. Ditch 2 contained reddish-brown silty clay deposits with visibly higher concentrations of heat-reddened stones than Ditch 1, which contained greyish-brown deposits and was considerably more difficult to distinguish from the undisturbed natural.

4.2.3 Ditch 1

Ditch 1 extended for the full length of Area 1 (59m) and was also visible in evaluation Trench B. To the south it continued into Areas 2 and 3 and its form in these areas is discussed below. Ditch 1 was a substantial boundary feature which had been utilised to form the eastern side of the enclosure (Fig. 5a, S.112, S.118; Fig. 5b, S.176). It varied between 1.40m and 3.00m in width which was almost certainly due to differential truncation as the ditch survived to between 0.55m and 1.10m in depth, and the two narrowest sections were also the shallowest. The ditch maintained a U-shaped profile along its length although some 'stepping' and irregularity to the sides was observed.

- 4.2.4 No recutting was recorded but between one and four fills were present in the eleven recorded sections. Where four fills were present the primary fill appeared to represent rapidly slumped deposits. The positions of Ditches 2 and

5, adjoining the western side of Ditch 1, suggest that any bank associated with Ditch 1 would have to have been located on its eastern side. This assertion is supported by the greater deposition of slumped material on the eastern side of Ditch 1 (Fig. 5a, S.112, S.118).

- 4.2.5 Generally, a maximum of three gradually accumulated fills were present along much of the ditch's length. The only positions along Ditch 1 where a single fill was noted were at the two terminals, 23m north of the trench edge. However, the sequence in this area was problematic. The outline in plan suggested that the butt-ends formed a 2m-wide entranceway into the enclosure, which had later been closed by the construction of a short length of narrower ditch (1140), but the homogenous nature of the single fills meant that stratigraphic evidence was absent. The infilled terminals and ditch 1140 were later covered by deposit 1084, which comprised angular sandstone blocks in a clay matrix (Fig. 5a, S.160). Deposit 1084 incorporated a deliberate north/south alignment of stones which appeared to have been inserted into fill 1133 and which probably functioned as a drain. The deposition of 1084 in this discrete area seems to have been an attempt to consolidate and drain waterlogged ground.
- 4.2.6 At the intersections Ditch 1 appeared to cut Ditches 2 and 5 (Fig. 5b, S.184). This is likely to represent the recutting and cleaning of Ditch 1 after Ditches 2 and 5 had constructed and had begun to silt up. Given the apparent importance of the boundary formed by Ditch 1 it seems reasonable to propose that regular maintenance would have been necessary to keep the ditch open and effective.
- 4.2.7 The fills of Ditch 1 yielded 300 sherds of Romano-British pottery (63% of the whole assemblage), although notably 273 of these represented three near-complete vessels found in three separate excavated sections (1048, 1069, 1153). A copper alloy bead was recovered from the northernmost excavated section in evaluation Trench B, and a flint flake and a piece of burnt daub were recovered from the intersection with Ditch 2. In addition, two of the excavated sections yielded significant quantities of heat-shattered stones. The pottery dates the infilling of the ditch to the 2nd century AD and indicates that maintenance of the ditch had ceased by the beginning of the 3rd century AD. The consolidation of the waterlogged entranceway (deposit 1084) clearly post-dated the infilling of the ditches.
- 4.2.8 **Ditch 2**
- Ditch 2 was appended to the western side of Ditch 1 to form the western and southern sides of the D-shaped enclosure. The ditch had a total length of 65m, and varied between 0.7m and 1.3m in width, and between 0.13m and 0.46m in depth. Typically the ditch had a U-shaped profile and a single fill (Fig. 5a, S.87, S.101), but two excavated sections along the southern side of the enclosure revealed two or three fills (Fig. 5a, S.109). Again this variation may be satisfactorily explained by differential truncation across the site as the widest and deepest section contained the greatest number of fills.
- 4.2.9 Six of the twelve excavated sections through Ditch 2 yielded artefacts; mainly 2nd-century pottery (101 sherds), although a single fragment of burnt daub was recovered from the south-western corner of the enclosure. Several sections of Ditch 2 contained significant quantities of heat-cracked stones.

4.2.10 No recutting was recorded, but the fact that Ditch 2 cut an internal subdivision of the enclosure (Fig. 5a, S.89) indicates that Ditch 2 had probably been cleaned and redefined. At its south-eastern end Ditch 2 conjoined, and was cut by, Ditch 1 but at its northern end it terminated in a butt-end 1.4m south of Ditch 3. The observed relationship with Ditch 1 is likely to result from the cleaning of Ditch 1 rather than the true sequence of enclosure development.

4.2.11 The 1.5m-wide gap between Ditches 2 and 3 may have formed an entranceway from the enclosure into further enclosures or fields to the north and west. Following the infilling of the terminals of Ditches 2 and 3 the area around the gap had been consolidated in a similar manner to the entranceway in Ditch 1. A metalled surface was formed by the deposition of small rounded stones (139) into a wear-hollow between the ditches. Close to the northern limit of deposit 139 an alignment of sandstone blocks (141) had been laid on the top of the metalled surface. The westernmost stone block had a circular pivot-hole in its upper face (Plate 1; section 5.4.1). No dating evidence was recovered from deposit 139 but stratigraphically it can be considered to be contemporary with deposit 1084 which lay above the infilled terminals of Ditch 1.

4.2.12 **Ditch 3**

Ditch 3 was not directly associated with the enclosure. Instead it appears to have formed the northern boundary of a large field identified during the geophysical survey. Ditch 3 was U-shaped in profile, between 0.9m and 1.0m wide, 0.3m deep and contained a single fill (for sections see Howell 1999). Only 14.5m of the boundary was revealed within the excavated area and at its eastern end it terminated in a butt-end near Ditch 2. The subsequent sequence of deposition in this area has already been described above.

4.2.13 **Ditch 4**

Ditch 4 was orientated approximately north-east/south-west and formed the northern side of the enclosure. The ditch was between 0.7m and 1.6m wide and was 0.25m to 0.47m deep, with a single fill (for sections see Howell 1999). It was curvilinear in plan and was considerably more irregular in outline than the other enclosure ditches, particularly at the eastern end. It is tentatively suggested that at its eastern end Ditch 4 intersected with a short north/south ditch segment (1099/1113). The intersection was complicated by the presence of feature 1115/1129 which was 0.16m to 0.22m deep and contained an ash-rich fill (Fig. 5a, S.157). This feature may have been an irregular pit or, as is suggested on Figure 4, the eastern butt-end of Ditch 4. The fill of Ditch 4 yielded two undiagnostic sherds of probable Roman-period pottery and the fill of ditch segment 1113 contained eight sherds of probable 2nd-century greyware.

4.2.14 **Ditches 5, 6 and 7**

Ditch 5 was L-shaped in plan and conjoined Ditch 1 in the south-eastern part of the enclosure. It was, in total, 19m long and maintained a fairly uniform width of 0.75m, although the depth varied between 0.16m and 0.28m. It contained a single fill and no recuts (Fig. 5b, S.178, S.209). Like Ditches 2 and 7 it was shown to be cut by Ditch 1 and again this is suggested to be due to the maintenance and cleaning of Ditch 1. Three of the four excavated sections yielded a total of eleven sherds of mainly 2nd-century pottery.

4.2.15 Ditch 6 formed a subdivision in the south-western 'corner' of the enclosure. Severe truncation in this area meant that it was only clearly visible for 4.5m, but it probably originally conjoined Ditch 2 to the west and may have extended towards Ditch 5 in the east. A single section was excavated through the feature, revealing a 0.7m wide U-shaped profile with a depth of 0.2m (Fig. 5a, S.164).

4.2.16 Ditch 7 was located approximately 12.5m north of, and parallel to, Ditch 6. It survived as two 4m-long ditch segments which, prior to truncation, may originally have formed a single linear feature. The shallow, irregular shape of the western segment's terminal certainly seems to support this suggestion although the eastern segment survived to a greater depth (Fig. 5b, S.229). The ditch(es) were 0.5m to 0.9m wide and 0.15m to 0.37m deep. The western segment of Ditch 7 was cut by Ditch 2 (Fig. 5a, S.89).

4.2.17 **Internal features: northern group**

These 37 features were all located within the enclosure, to the north of the subdivision created by Ditch 7. Apart from five (probable) pits the group consisted of post-holes and stake-holes, attesting to the presence of post-built structures in this part of the enclosure. From this arrangement of post-holes the outline of two structures may be extracted. In the north-western corner of the enclosure were a four-post structure (formed by 127, 129, 131, 133) and a six-post structure (142, 148, 164, 166, 168, 181). These features and structures are described in greater detail in the evaluation report (Howell 1999). No pattern was discernible in the post-holes further east but the presence of three pairs of double post-holes (1123, 1137, 1227) and a beam slot (1141) suggest the presence of a fairly substantial timber structure(s).

4.2.18 The post-holes were on, average, 0.3m deep and ranged between 0.18m and 0.54m in diameter (Fig. 6, S.155, S.165, S.169, S.212, S.226, S.227). The largest post-holes (158, 1143) had vertical sides and were around 0.5m in diameter and 0.5m deep (S.169). Only post-holes 142, 158 and 1143 contained evidence of post-pipes and packing material, and it is likely that these held substantial posts. Post-hole pairs 1137 and 1227 contained heat-cracked stones, whilst a concentration of charcoal was observed in the base of post-hole 1123 (S.155, S.165, S.227). Several of these features yielded small quantities of pottery; all consistent with a 2nd-century date.

4.2.19 Four pits were located to the south of the four- and six-post structures. All were shallow, ovoid and fairly irregular in plan with no discernible function. However, an above-ground superstructure was indicated by the presence of small post-holes adjacent to and in the base of pit 179. Truncation may have removed similar evidence from the other pits.

4.2.20 **Internal features: central group**

The central group comprised 24 features, concentrated in the western part of the enclosure between Ditches 6 and 7. The group was mostly made up of post-holes, but immediately south of Ditch 7 lay a beam slot (1216) with two small post-holes in its base and two shallow irregular pits were located near to the eastern extent of the group.

4.2.21 The nineteen post-holes varied in size between 0.11m and 0.45m in diameter and the majority (78%) were less than 0.2m deep (Fig. 6, S.99, S.103, S.111,

S.131, S.135, S.138, S.215). Four post-holes were 0.28m to 0.4m deep (1027, 1029, 1090, 1107) and two of these contained post-packing (1090, 1107). Post-hole 1031 was only 0.2m deep but also contained stone post-packing. Nine sherds of pottery were recovered from post-hole 1090. All of these characteristics indicate that the group represented at least one substantial structure. However, although some alignments of up to three features can be picked out of the group, none of these combine to suggest convincing building outlines. It is notable that the beam slot (1216) was parallel with Ditch 7, indicating that the internal structures reflected the alignment of the enclosure.

4.2.22 Internal features: southern group

The southern group consisted of fourteen features located in the area bounded by Ditches 2, 5 and 6. Two pits near Ditch 5 lay at the edge of the group and pit 1189 appeared to have pre-dated this subdivision. Further south, gully 1147 pre-dated Ditch 2 and adds to the impression of several subphases in this area. Three sherds of pottery from pit 1189 were consistent with the general 2nd-century date for the enclosure.

4.2.23 The majority of the post-holes were located adjacent to Ditch 2 (Fig.6, S.95, S.149, S.190, S.194, S.196, S.198). Out of this group three post-holes (including 1117) may form the north-western arc of a circle, possibly associated with post-hole 1175 and gully 1178. It is tentatively suggested that these could represent the remains of a circular post-built structure. The majority of these features were extremely shallow, particularly those forming the north-western arc which survived to only 0.07m deep on average. Post-hole 1175 was the exception, surviving to 0.42m depth and containing heat-shattered stones as post-packing (S.194). Post-hole 1117 yielded a single sherd of pottery.

4.2.24 Two nearby intercutting hearths (1014, 1020) provide further evidence of domestic activity in this area (S.95). The earliest hearth pit (1014) was 0.46m in diameter and 0.20m deep, with three distinct fills. The lower deposit (1015) was a heat-affected silty sand which had been covered by a 0.05m deep charcoal-rich deposit (1016) representing the main *in situ* burning surface. This was then covered by a further, charcoal-scarce, but heat-affected deposit (1017) and a burnt sandstone block. A second hearth pit (1020) of similar dimensions cut the northern edge of 1014. This hearth contained two silty sand deposits (1021, 1022) which each contained fragments of charcoal and some reddening. Both hearths contained significant quantities of charred cereal and weed remains (see section 6 below).

4.2.25 External features

Apart from three post-holes in the north-west corner of Area 1 and an isolated post-hole in the south-west corner, the external features were associated with the northern entranceway or were located to the west of Ditch 2 (in evaluation Trench A).

4.2.26 The three features located in the vicinity of the 8m-wide gap between Ditches 1 and 4 appear to relate to the entranceway. Ditch 1085 was probably a short ditch segment and had been cut by Ditch 1 on its eastern side. It was 1.88m wide, 0.2m deep and had a minimum length of 3.5m. Ditch 106 had been identified during the evaluation and thought to represent a continuation of

Ditch 4, however it was shown to be a short ditch segment which terminated just beyond the southern edge of Trench B. It was 2.95m long, c. 0.8m wide and 0.3m deep. A single 0.65m diameter post-hole (1055) was located 1.5m north of ditch 1099.

- 4.2.27 The features on the west of Ditch 2 relate to a probable roundhouse represented by the possible remains of a stone wall (215) and a gully (188) which are described in detail by Howell (1999). A double post-hole (1165) could be part of a south-east facing porch/entranceway (Fig. 6, S.186), whilst nearby, five flat sandstone slabs may be the remains of a flagged surface. The probable roundhouse contained a single internal feature; a shallow pit (185) contained two heat-affected fills but no evidence of *in situ* burning or cereal remains. The structure was dated by a single sherd of 1st to 2nd-century pottery recovered from post-hole 1165. A large pit (183), 1.7m in diameter and 0.39m deep, was located close to the entrance.
- 4.2.28 The excavation of Area 1 attempted to identify continuations of these structural remains, but unfortunately no further gullies, post-holes or stony deposits were found, despite careful examination of the area. It must be assumed that such remains had been eroded/truncated or, in the case of the stones from the putative wall, cleared during the later ploughing of the field.

4.3 Area 2 (Figs 7, 9)

- 4.3.1 The gradiometer survey had not identified a strong anomaly consistent with the continuation of Ditch 1 to the south of Area 1. It was possible however, that a continuation Ditch 1 was present and would intersect a double-ditched feature that was shown clearly on the gradiometer survey interpretation (Webb and Whittingham 1999). Area 2 was positioned to investigate this possible intersection, and covered an area of c. 400m². The major features identified in this area were the three ditches anticipated from the geophysical survey results, plus a ditch segment and two discrete features.

4.3.2 Ditch 1

As Figure 3 shows, it is probable that the main north/south ditch in Area 2 represents a continuation of Ditch 1 from Areas 1 and 3. In Area 2 the ditch was visible for a length of 10.5m and apparently terminated or turned at the intersection with Ditch 8. Ditch 1 had a U-shaped profile, 1.1m wide and 0.5m deep. It contained three distinct fills and, possibly, two recuts (Fig. 9, S.58). It is noteworthy that the sequence of fills closely reflected that which was observed in Area 3.

4.3.3 Ditch 8

Ditch 8 was orientated east/west and traversed the entire breadth of the trench (21m), corresponding with part of a 73m long anomaly identified by the gradiometer survey. The outline of this ditch was extremely irregular and the excavated sections revealed fairly complex sequences of fills and recuts, particularly at the intersection with Ditch 1. It is likely that the outline in plan represents a composite of numerous episodes of ditch construction, and possibly more than one east/west ditch.

- 4.3.4 The sequence to the east of the intersection with Ditch 1 was the clearest and both excavated sections through Ditch 8 revealed a U-shaped profile and three

fills (Fig. 9, S.83). In each case the secondary fill comprised a 0.06m to 0.13m deep charcoal-rich deposit. In this part of the trench Ditch 8 was 1.6m to 1.8m wide and 0.55m to 0.7m deep.

4.3.5 At the western edge of the trench Ditch 8 had reduced to 0.9m in width and 0.25m in depth. The profile remained U-shaped but in the east-facing section (S.59) only a single fill was visible, contrasting with three fills in the west-facing section (S.57). Notably the secondary fill was a charcoal-rich deposit and thus the sequence appeared to be identical to that observed at the eastern end of Ditch 8.

4.3.6 The intersection of Ditch 8 and Ditch 1 proved to be complex (S.76, S.77). At least two recuts were identified: cut 2040 appeared to recut Ditch 8 and was probably a ditch terminal or pit, and the later cut (2048) may represent the re-establishment of the east/west alignment of Ditch 8. The charcoal deposit(s) identified to the west (S.57) and east (S.83) was not observed at the intersection. It is probable that this area was redefined and recut many times during the duration of its use. It seems likely that Ditches 1 and 8 initially co-existed but that the east/west alignment (Ditch 8) was recut after Ditch 1 had infilled. The upper fill of recut 2040 yielded the only artefact from Area 2 – a residual flint flake.

4.3.7 Ditch 9

Ditch 9 was located *c.* 5m south of, and parallel to, Ditch 8. Ditch 9 extended across the whole 21m breadth of the trench, and corresponded with part of a 95m long anomaly identified by the gradiometer survey. The plan of Ditch 9 is similar in its irregularity to that of Ditch 8, presumably concealing a similarly complex sequence of construction.

4.3.8 At the western trench edge the ditch, which had been disturbed by modern tree roots, was 1.1m wide and 0.9m deep with a V-shaped profile and three fills (Fig. 9, S.69). This profile and sequence was also observed in the centre of the trench, although here the tertiary fill of the V-shaped cut was truncated by a recut. The recut had a U-shaped profile, with a width of 1.5m, a depth of 0.68m and four fills (S.72). The U-shaped ditch appeared to have extended to the eastern trench edge where the ditch was 1.5m wide, 0.5m deep and contained only one fill.

4.3.9 Other features

A 4.5m long ditch segment (Ditch 10) was aligned north-west/south-east and lay between Ditches 8 and 9. The position of this ditch, with the northern end adjacent to the intersection of Ditch 1 and Ditch 8, suggests that it was an extension of Ditch 1. The segment was 0.9m wide and 0.2m deep, with a shallow U-shaped profile and a single fill.

4.3.10 Two discrete features were identified. Pit 2017 was irregular and shallow and possibly natural in origin. Pit 2044 was 0.75m long, 0.3m wide and 0.2m deep (Fig. 9, S.80). It contained an ashy charcoal-rich fill and heat-cracked stones, suggesting that it may represent a hearth pit, possibly a source of the charcoal observed in Ditch 8.

4.4 Area 3 (Figs 8, 9)

4.4.1 Area 3 was positioned between Areas 1 and 2 to investigate a possible continuation of Ditch 1 which was identified as a segmented anomaly by gradiometer survey. The trench covered an area of *c.* 200m² and revealed one linear and one discrete feature. No finds were retrieved from this trench.

4.4.2 Ditch 1

A north-west/south-east ditch continued the alignment of Ditch 1 from Area 1, and traversed the length of the trench (9.5m). It varied between 0.9m and 1.4m in width and 0.5m to 0.6m in depth. Two fills were revealed in the northernmost section, becoming three in the southern part of the trench and possibly representing at least one recut (Fig. 9, S.55).

4.4.3 Post-hole 3006

Post-hole 3006 was 0.5m in diameter and 0.15m deep (Fig. 9, S.55). No relationship was discernible with Ditch 1 but the similarity in the upper fills of these features suggests that they were contemporary.

5. Artefact Record

5.1 The Romano-British Pottery

by Jeremy Evans PhD

5.1.1 Some 410 sherds of Roman pottery were recovered from the second phase of excavations on the site, although a large number of these (66%) came from three fairly complete vessels from the eastern boundary ditch (Ditch 1, contexts 1049, 1068 and 1151). Most of the datable material is of 2nd-century date, with a single sherd, possibly of later date, from 1201 (Ditch 5). The evaluation assemblage comprised 66 sherds, all from Trench A, which were of 1st to 2nd-century date (Evans 1999). A catalogue, incorporating material from both the evaluation and the excavation phases of work, is provided in Appendix V.

5.1.2 This assemblage is a comparatively large one from a rural site in this region, and is of some importance given the few published rural sites in the area. The assemblage is dominated by South Yorkshire industry products and some of the oxidised ware and the Black Burnished ware (BB1) may also be from this source. The dating evidence in the excavation assemblage is better than in the previous (evaluation) collection and is fairly solidly 2nd-century in date. It is perhaps of note that whilst 86% of this assemblage was of South Yorkshire greyware only 35% of the previously recovered assemblage was. Whilst the evaluation assemblage was a very small group the proportion of greyware and the types of fabrics recovered might suggest an earlier emphasis in the north-western part of the enclosure.

5.1.3 It is of note that the three fairly complete vessels all came from the eastern boundary ditch and the possibility of structured deposition here might be considered. The absence of samian and finewares and the functional composition of the assemblage, with 73% jars and 26% tablewares, are all typical of a basic level rural site.

5.1.4 The national research framework for the study of Romano-British pottery identifies pottery from rural sites as being 'highly significant for our understanding of the Romano-British economy and Romanization' (Willis 1997, 15) and the northern regional research framework (Evans and Willis 1997, 22, 25) emphasises the particular need for data from rural sites in the northern region. These sites represent the living conditions of the vast majority of the Romano-British population and their consumption patterns, and as such an adequate sample needs full examination and publication. The pottery from this site could be particularly useful as part of a broader regional study as few rural sites have been excavated in South Yorkshire and relatively little is known about rural pottery supply and usage in this region.

5.2 The Worked Flint and Stone

by Ian Brooks PhD

5.2.1 Two worked flint and stone artefacts were recovered. The descriptions follow that of Inizian *et al.* (1992) and the colours are defined by the Geological Society of America's *Rock-color Chart* (Goddard *et al.* 1948).

5.2.2 The artefact from context 2049 (Ditch 8) is a tertiary flake (58 x 27 x 7mm) of an opaque, pinkish grey (5 YR 8/1) flint. The right hand dorsal surface of the artefact has been polished and the knapping platform is prepared with a dihedral butt. Damage along the right hand edge is suggestive of extensive use, although no modification of the flake was recorded. The flint type used for this artefact is typical of the flints within the chalk of the Lincolnshire and Yorkshire Wolds (Wood and Smith 1978). These are exposed some 60km to the east, however similar flint types are also found within the tills and river gravels of Lincolnshire and Yorkshire (Kent *et al.* 1980).

5.2.3 The size of the flint artefact, and the partly polished dorsal surface, would suggest that the flake is the result of the modification of a polished tool, probably an axe. The raw material used is also typical of that used for many of the polished axes from this region (Moore 1979). The carefully prepared knapping platform would suggest that this working was not accidental but the result of the deliberate reworking of the original tool. It is not certain whether this reworking was as a result of re-shaping the axe, probably to re-sharpen it, or if the polished tool was being used as a raw material source.

5.2.4 The second artefact is from context 198 (Ditch 1) and is a tertiary flake (40 x 24 x 6 mm) of an opaque, light grey (N7) stone which macroscopically would appear to be a tuff, possibly British Implement Petrology Group VI (Langdale) (Clough and Cummins 1979, 127).

5.2.5 The left, distal, dorsal surface has been polished suggesting that at one time this artefact was part of a polished tool such as an axe. As the proximal end had a series of removals, on the dorsal surface, this flake was not the result of damage whilst using the original tool, but was removed as part of a deliberate knapping strategy. It is assumed that the original tool was being used as a raw material source at this time.

5.2.6 It is curious that both lithic artefacts recovered from these excavations would appear to have been the result of the reworking of polished stone tools, however this is assumed to be coincidental. Both, it is assumed were originally from polished tools (one of flint and one of stone) with a broad Neolithic to

Early Bronze Age date range. It is not known when the reworking of the original tools took place.

5.3 The Industrial Slag

by Jane Cowgill

- 5.3.1 Two pieces of slag were recovered from two separate contexts in Area 1. No slag was recovered during the evaluation. The surface of context 1024 (Ditch 2) yielded a 1g fragment of molten glass and context 1039 (Ditch 1) yielded 34g of very dense, flowed, probable tap slag which may be Roman in date. It should be noted that recent evidence suggests that the presence of tap slag is not necessarily an indicator of industrial activity at the site; fragments have been recovered from sites in areas (e.g. the Fens) where iron ores do not occur.
- 5.3.2 The presence of spheroidal hammerslag in the sample retents is discussed in section 6.3.2.

5.4 The Stone Objects

with geological contribution by Geoff Gaunt PhD

- 5.4.1 Two worked sandstone blocks were amongst the line of stones described as structure 141 in the north-western part of Area 1 (Howell 1999). The first is subrectangular (0.26m x 0.21m x 0.11m) and has a circular hole of diameter 0.05m and depth 0.04m cut into its upper surface (Plate 1). It is possible that this acted as a pivot-hole, associated with a superstructure, and it may be significant that this was located close to a putative enclosure entrance. A second stone within this alignment (0.59m x 0.32m x 0.11m) has several linear possible tool marks on its lower face and may perhaps have once been used as a sharpening stone (Plate 2).
- 5.4.2 Two mutually fitting fragments of sandstone post-packing were recovered from the fill (1144) of post-hole 1143 in the northern group. The lithology is unusual and warrants detailed description. The sandstone is greyish white with brownish red streaks and patches, fine to (mainly) coarse grained with sub-angular to sub-rounded grains, poorly sorted, fairly well compacted, with scattered degraded feldspar and severely degraded ironstone grains, sparse small to minute coaly and other carbonaceous fragments and very sparse muscovite. The reddish discoloration is due to locally concentrated ferruginous staining on quartz-grain surfaces. From an abnormally coarse-grained Coal Measures sandstone, probably (on grounds of proximity) the Mexborough Rock (Mitchell *et al.* 1947, 79-81) or Ackworth Rock (Goossens and Smith 1973, 494-495). Both contain detrital ironstone, resultant reddish staining and carbonaceous inclusions.

5.5 The Metalwork

- 5.5.1 A small, cylindrical copper-alloy bead was recovered from Ditch 1 in evaluation Trench B. The outer surfaces of the bead are badly degraded. The diameter of the artefact is 13.55mm and the depth is 9.05mm, and it weighs 4g. The central perforation is 5.80mm in diameter.

5.6 Other Artefacts

- 5.6.1 Two fragments of burnt daub were identified during examination of the pottery assemblage. One fragment was recovered (during the evaluation) from Ditch 1

at the south-eastern corner of the enclosure (context 198) and one from Ditch 2 at the south-westernmost part of the enclosure (context 1002).

- 5.6.2 Three sherds of post-medieval pottery were recovered. Two were unstratified but one sherd came from the surface of context 1024 (Ditch 2) and illustrates the presence of some intrusive activity in the north-western part of Area 1.

6. *Environmental Record*

6.1 *Sample Selection, Processing and Assessment*

- 6.1.1 A total of 140 soil samples were taken during the evaluation and excavation of the site. The majority of these (135) were taken for general biological analysis (GBA) and the remainder were spot samples for specific identification or as potential datable material (Table 1).

Table 1. Summary of the environmental sampling programme

	GBA samples	Spot samples	Total
Evaluation	33	2	35
Excavation	102	3	105
Total	135	5	140

- 6.1.2 Upon completion of fieldwork the objectives of the project were reviewed and the soil samples' potential for providing sufficient information to meet these objectives was assessed. As the pottery assemblage provided adequate dating information for the enclosure, the primary objective of the sampling programme was to provide economic and environmental information. Therefore samples were selected from fills which were:

- uncontaminated by intrusive features;
- closely associated with the function of the feature (i.e. deposits burned *in situ*);
- near contemporary with the use or construction of the feature (i.e. primary fills) and/or,
- located in feature groups which were of significance to the interpretation of the site.

- 6.1.3 Using these criteria an even cross-site spatial distribution of samples was achieved. A total of 35 samples from primary ditch fills and discrete features were selected for processing and analysis (Appendix IV). Up to five litres of each of the 35 selected samples was processed using an Ankara-style flotation tank fitted with a 300 micron sieve and a 1mm mesh. The fine sieved material (the 'flot') was sorted, identified and quantified by Jane Richardson PhD, and Table 2 lists these results by context. It should be noted that not all of the processed samples contained botanical remains. The ten samples containing botanical remains were selected for detailed analysis. The large flots from the primary fills of Hearths 1014 and 1020 (fills 1015, 1021) were sent directly to the specialist for sorting and identification. As Table 2 shows, wood charcoal

was also recovered during flotation. A representative sub-sample of charcoal was selected, by the specialist, from the primary fills of Hearths 1014 and 1020 for analysis.

Table 2. Results of the assessment of the flot samples

Context number	Sample number	Sample size (l)	Cereal grain	Cereal chaff	Weed seeds	Charcoal	AMS date
145	10	7.0			+	+++	*
184	24	5.0			++	+++	
186	25	5.0				++++	*
189	26	5.0				+	
1002	57	5.0	+			++	
1016	59	5.0	++++	++++	++	++++	*
1017	58	5.0	+	+	+	++++	*
1022	66	6.0	++++	+++	++	++++	*
1038	68	5.0				++	*
1041	69	5.0					
1068	78	5.0					
1072	81	5.0				+++	
1088	88	1.0				++	
1091	86	2.5				++	
1100	90	6.0			+	++	
1114	98	5.0	+	+	++	++++	*
1118	96	5.0				++++	*
1124	100	2.5				++++	
1128	102	5.0		+	+	+++	*
1133	106	1.0					
1142	108	5.0				++++	*
1144	109	5.0				+	
1148	110	5.0				+++	*
1152	118	1.0					
1155	112	5.0					
1164	115	2.5				++	
1166	116	2.1				+++	*
1201	128	5.0			+		
1217	135	2.9				++++	
2006	37	5.0					

Context number	Sample number	Sample size (l)	Cereal grain	Cereal chaff	Weed seeds	Charcoal	AMS date
2028	48	1.0					
2030	49	1.0					
2042	54	1.0					
3009	41	1.0					
3015	39	1.0					

Key : + = rare (0-5), ++ = occasional (6-10), +++ = common (11-50), ++++ = abundant (>50)
 * = potentially sufficient charred material for AMS date, **bold** contexts were sent for specialist analysis

6.2 The Botanical Remains

by Ruth Young PhD

6.2.1 The flots from twelve samples were analysed for botanical remains. Table 3 shows the identifications by context.

6.2.2 Cereals

The first obvious trend to note is that the vast majority of cereal grains recovered are from contexts related to the two hearths (1014 and 1020), and it is from the secondary fill contexts (1016 and 1022) that almost 90% of the total numbers of identified grains have been recovered. Although smaller amounts of grains have been recovered from the other hearth contexts, the botanical material in contexts 1015 and 1021 (the primary fills) was dominated by wood charcoal (discussed below). This situation is echoed with the chaff – the vast majority (90%) recovered from the secondary hearth fills.

6.2.3 Outside the hearth-related contexts, only one or two grains or chaff fragments were recovered from isolated contexts, such as the two wheat grains (1114), and the glume fragments from ditch fills (1114, 1128, 1201). This strongly suggests a very clear contrast in function spatially across the site, with cereal processing confined to the area round the hearths in the southern area. Although there were slightly greater numbers of weed seeds than cereal or chaff remains recovered from the ditch and pit contexts (145, 184, 1002, 1100, 1114, 1128, 1201), when compared with the number of weed seeds from those contexts associated with the two hearths, they are not of great significance.

6.2.4 The number and type of weed seeds recovered from the non-hearth contexts and features are likely to represent ‘background noise’ in terms of plant material around the site. Weeds such as *Chenopodium album* (associated with cultivated land, grassland), *Vicia/Lathyrus* spp. (disturbed land, grassland), *Rumex* sp. (woodland, disturbed land), *Plantago lanceolata* (disturbed land, grassland), *Urtica urens* (cultivated land, disturbed land), *Carex* spp. (grassland, marsh), *Galium aparine* (disturbed land), and *Bromus* sp. (arable, disturbed land, grassland) are characteristic of land being cleared and utilised for agriculture (Carruthers 2000, 184-5). This suggests a local origin for these seeds.

6.2.5 Although the pits (144, 183) in the north-west of the enclosure may have been used for storage, and even possibly grain storage, unless either burnt material is being placed in them or material burnt *in situ*, it is unlikely that seeds/grains would survive. Their distance from the hearths would also tend to preclude their use as waste pits. It is more likely that ash and charcoal cleared from the hearths would have been dumped in the southern part of the site, perhaps even to the south of Ditch 2, or scattered. The absence of weed seeds from any other sampled feature may be due to low overall concentration of plant remains outside the hearth areas themselves.

6.2.6 The relatively large amounts of chaff, and the weed seeds recovered with the cereal grains from the hearth contexts (particularly 1016 and 1022), could suggest that this is a producer rather than consumer site (van der Veen 1992, 92). However, it is also possible to argue that consumer sites may be importing grain such as emmer and spelt (both glume wheats), which has been only partially processed, and then stored (Hillman 1981). One of the significant factors in this debate is the presence of larger weed seeds that are unlikely to have been retained beyond the coarse sieving stage, such as *Vicia/Lathyrus*, *Polygonum convolvulus*, *Galium aparine* and *Bromus mollis/secalinus*, and the presence of straw nodes (van der Veen 1992). Given the presence of weeds from this size category in the assemblage, along with possible straw waste, it could be argued that this is a producer site. However, when the absence of recovered querns is taken into account, it may be that this assemblage does indeed represent the discarded waste from a crop that has been brought onto the site from elsewhere. Again, the presence of weed seeds in a number of contexts in relatively low numbers could support either interpretation.

6.2.7 **The wood charcoal**

The identified wood charcoal showed that a range of species were being utilised at this site, although only material from the primary fill of both hearths was examined (Table 4). Willow comprised some 30% of the identified types, while oak accounted for 44%. The presence of willow, and the sedge amongst the weed seeds, may be due to the proximity of both a stream and river to the site. A range of other types was noted from both hearths, and accounts for the remaining 26% of the identified wood. Hazel nut was noted among the other plant remains, and tree types such as hazel, birch, ash and the stone and pip fruit trees are likely to represent a mixed or forest edge environment.

6.2.8 The tree form of willow can be pollarded, and the shoots can be used for wattle stakes, or similar purposes. For example, the very thin coppice shoots of one year in age ('osiers') are used for wickerwork (Boulton and Jay 1947). Willow is described as tough rather than strong, and tending to dent rather than split, yet is easily worked after seasoning (*ibid*). It is possible that some of the willow recovered from the two hearths was being brought onto site for purposes other than fuel, and perhaps represents waste from these other functions.

Table 3. Identified material from the flot samples

Context	145	184	1002	1015	1016	1017	1021	1022	1100	1114	1128	1201
Cereals:												
<i>Triticum dicoccum</i> Schubl.				4	89	3	5	35				
<i>Triticum spelta</i> L.				2	12			29				
<i>Triticum</i> sp.				2	22		5	8		2		
<i>Hordeum vulgare</i> L.				1	8	2	2	32				
unident.	1			2	20	1	3	24				
Chaff:												
<i>T. dicoccum</i> glume bases				3	70	4	4	68				
<i>T. spelta</i> glume bases				1	4			42				
<i>Triticum</i> sp. glume bases				3	33		4	12		2	1	1
<i>Hordeum vulgare</i> rachis internodes	1			1	3		2	7				
indet. chaff garments				1	14		4	23				
Weeds:												
<i>Papaver</i> sp.				1						7		
<i>Chenopodium</i> sp.		2			2		3					
<i>C. album</i> L.		4		4	6	2	7	17	2	1	2	2
<i>Galium aparine</i> L.								1				
<i>Malva sylvestris</i> L.									1			
<i>Vicia/Lathyrus</i>					2					1		
<i>Rumex</i> sp.				5	1		6	1		1		
<i>Plantago lanceolata</i> L.		1		1								
<i>Urtica urens</i> L.							2		1			
<i>Bromus mollis/secalinus</i>			1	4	6		3	4		1		
<i>Carex</i> spp.				3			1	4				
<i>Polygonum convolvulus</i> L.		1		1				11				
Unident.:				4	1		3	4	2			
Other:												
<i>Corylus avellana</i> L.									1			

Triticum dicoccum - emmer wheat; *Triticum spelta* - spelt wheat; *Triticum* sp. - wheat; *Hordeum vulgare* - six-row barley; *Bromus mollis/secalinus* - brome grass; *Carex* sp. - sedge; *Chenopodium* sp. - goosefoot; *C. album* - fat hen; *Galium aparine* - goosegrass; *Malva sylvestris* - mallow; *Papaver* sp. - poppy; *Plantago lanceolata* - ribwort plantain; *Polygonum convolvulus* - black bindweed; *Rumex* sp. - dock; *Urtica urens* - small nettle; *Vicia/Lathyrus* - vetch/pea; *Corylus avellana* - hazel nut

Table 4. Wood charcoal identifications from the primary hearth fills

Species/context	1015	1021
<i>Salix</i> sp. (willow)	8	7
<i>Quercus</i> spp. (oak)	12	10
<i>Fraxinus excelsior</i> (ash)	3	1
<i>Corylus avellana</i> (hazel)	1	1
<i>Prunus</i> spp. (stone fruit)	1	-
<i>Crataegus</i> sp. (pomaceous fruit)	-	1
<i>Betula</i> spp. (birch)	-	1
Unident.	2	2
Total examined	27	23

6.2.9 While the quantity of chaff associated with the cereal grains recovered from the hearth contexts suggests that this may well represent processing waste, it is unclear whether this is likely to have been processing from locally grown crops, or from crops imported in a semi-processed state. The absence of quern stones may support the latter interpretation. Also, the relative absence of plant remains of any kind outside the hearth contexts may also support an interpretation of a site where only limited agricultural activity or food processing is being carried out. It is interesting that no animal bone material has been recovered at all, although this may be because of disposal patterns rather than a reflection of animal husbandry or consumption. Unfortunately, the plant remains do little to shed light on this question.

6.3 The Sample Retents

6.3.1 The sample retents (the washed material collected in the 1mm mesh after flotation) were scanned for the recovery of any additional organic materials and artefacts. A magnet was then passed through the retent until all magnetic material had been recovered. A summary of the results is presented in Table 5.

6.3.2 Magnetic material was recovered from many of the samples and is quantified by weight as a proportion of the original sample volume. This material tended to comprise heat-affected sand and other soil components rather than metal/metalworking fragments; although two samples from Ditch 1099 (samples 98 and 102) also contained very small amounts of metalworking slag. Notably, however, a third sample from Ditch 1099 (sample 90) did not yield any metalworking debris. The single piece of spheroidal hammerslag recovered from the two sample retents is not sufficient to infer metalworking at the site. Hammerslag is much rarer than plate hammerscale and would usually be expected to occur in large quantities in a ratio of around 1:50 (spheroidal hammerslag : plate hammerscale) if metalworking has taken place on site. The occurrence of spheroidal hammerslag without hammerscale is unusual and can indicate primary smithing, however these residues are extremely light and the small quantities found in Ditch 1099 are more likely to have been transported to the site by wind or perhaps underfoot.

- 6.3.3 Iron makes up about 6% of the earth's crust, being mostly dispersed through soils and rocks as chemical compounds, particularly iron oxides, which have weak, measurable magnetic properties. Anthropogenic and geomorphological activities can redistribute these compounds and change (enhance) others into more magnetic forms. In particular, the magnetic susceptibility of fills can be enhanced significantly by heating. These processes can create small localised magnetic anomalies which can be detected by a magnetometer or magnetic susceptibility meter. (For further information see 'Appendix 1 Gradiometer survey: technical information and methods' in Webb and Whittingham, 1999.)
- 6.3.4 The quantification of magnetic material from sample retents cannot compare with the detailed measurements obtained by geophysical instruments. However, at a very crude level, it may be inferred that fills containing magnetic material have had a closer association with human activity (possibly 'industrial' or 'domestic' activity) than those fills which do not.
- 6.3.5 Table 5 shows that the smallest quantities of magnetic material were collected from Ditches 1 and 5, and features in Areas 2 and 3, whilst the greatest quantities were recovered, unsurprisingly, from the hearths in the south of the enclosure. These results also suggest that Ditch 1 contained smaller quantities of magnetic material than Ditch 2. This correlates well with the greater frequency of heat-cracked stones observed in Ditch 2 compared to Ditch 1, and with the reddish colouration of the fills of Ditch 2. The implications of this distribution and the comparable magnetometer data are discussed further below.
- 6.3.6 The recovery of magnetic material from the sample retents provides a very coarse measurement of the degree of 'settlement' activity in the vicinity of these features. It is possible to use this information, at a very general level, for sites such as this where there is little variation in the underlying geology and in the composition of the fills. More accurate information can only be obtained through magnetic susceptibility survey.

Table 5. Material recovered from the sample retents

Group/feature	Context no	Sample no	Sample volume (l)	Magnetic material (g)	Magnetic material (g/l)	Hammerslag (no. frags)	Other
Ditch 1	1068	78	5				
Ditch 1	1038	68	5	trace	trace		charcoal
Ditch 1	3009	41	1	trace	trace		
Ditch 1	1088	88	1	trace	trace		charcoal
Ditch 1	1133	106	1	trace	trace		charcoal
Ditch 1	1152	118	1	trace	trace		charcoal
Ditch 1	2006	37	5	0.5	0.1		charcoal
Ditch 2	1041	69	5	1	0.2		charcoal

Group/feature	Context no	Sample no	Sample volume (l)	Magnetic material (g)	Magnetic material (g/l)	Hammerslag (no. frags)	Other
Ditch 2	1002	57	5	5	1		
Ditch 2	1072	81	5	5	1		
Ditch 5	1155	112	5				
Ditch 5	1201	128	5	0.5	0.1		
Ditch 8	2042	54	1				charcoal
Ditch 9	2028	48	1	trace	trace		charcoal
Ditch 9	2030	49	1	0.5	0.1		charcoal
Gully 188	189	26	5	2	0.4		
Ditch 1099	1114	98	5	2	0.4	1	charcoal
Ditch 1099	1128	102	5	7	1.4	1	
Ditch 1099	1100	90	6	13	2.2		
Gully 1141	1142	108	5	2	0.4		
Gully 1147	1148	110	5	1	0.2		coal, glass
Gully 1216	1217	135	2.9	3	1		charcoal
Ditch 3014	3015	39	1	trace	trace		charcoal
Hearth 1014	1016	59	5	7	1.4		charcoal, stone
Hearth 1014	1015	60	7	20	2.9		charcoal, cinder
Hearth 1014	1017	58	5	17	3.4		charcoal
Hearth 1020	1021	65	5	9	1.8		charcoal, cinder
Hearth 1020	1022	66	6	12	2		charcoal, seed
Pit 144	145	10	7	2	0.3		
Pit 183	184	24	5	7	1.4		
Pit 185	186	25	5	13	2.6		
Post-hole 1090	1091	86	5	2	0.4		
Post-hole 1117	1118	96	5	6	1.2		charcoal, coal
Post-hole 1123	1124	100	2.5	1	0.4		
Post-hole 1143	1144	109	5	0.5	0.1		
Post-hole 1165	1164	115	2.5	3	1.2		charcoal, pot
Post-hole 1167	1166	116	2.1	2	0.9		coal

Note: 'trace' = a few particles of magnetic material present but weighing <0.5g

7. Radiocarbon Dating

- 7.1 Charred material was recovered from a number of the sample flots and retents (Tables 2 and 5). Of the features containing sufficient charred material for either a 'high-precision' or an AMS determination, only the hearth fills (contexts 1015 and 1021) contain charcoal deposits which have a clear association with the date and function of the feature. Unfortunately, although both hearth samples contain oak (*Quercus*), willow (*Salix*), ash (*Fraxinus excelsior*) and hazel (*Corylus avellana*) there was insufficient charcoal present from any one of the short-lived species to submit for 'high-precision' dating. For these samples an AMS date is feasible but has the potential for returning an imprecise date.
- 7.2 The two hearth samples were submitted for an AMS determination (Table 6). The samples were measured at the University of Arizona AMS Facility and the results calibrated at the Scottish Universities Research and Reactor Centre (SURRC). The certificates are included as Appendix VI.

Table 6. Radiocarbon dating results

Laboratory sample code	Context	Material	1 date range	2 date range	Radiocarbon age BP
AA-45878 (GU-9620)	1015	<i>Salix sp.</i> charcoal	cal AD 74-210	cal AD 26-240	1885±45 yrs
AA-45879 (GU-9621)	1021	<i>Salix sp.</i> charcoal	cal AD 4-117	41 cal BC - cal AD 130	1950±40 yrs

Note: The calibrated age ranges are determined from the University of Washington, Quaternary Isotope Laboratory, Radiocarbon Dating Program, Rev. 4.0 1998

- 7.3 Although both samples returned date ranges which, at the 95% level of confidence, indicate very late Iron Age to Romano-British activity, the stratigraphic sequence established during excavation can be used to provide additional clarification of the dates.
- 7.4 The sample from 1015 (Hearth 1014; AA-45878) yielded a slightly later date range than the sample from 1021 (Hearth 1020; AA-45879). This is inconsistent with the stratigraphic evidence which shows that Hearth 1014 is earlier than Hearth 1020. The radiocarbon date ranges may be adjusted to produce a revised date range which takes account of the stratigraphic evidence (Table 7).

Table 7. Combined stratigraphic and radiocarbon dating results

Stratigraphic position	Hearth	Context	2 date range	Revised date range
Earliest	1014	1015	cal AD 26-240	cal AD 26-130
Latest	1020	1021	41 cal BC - cal AD 130	cal AD 26-130

8. Discussion

8.1 Dating Evidence

- 8.1.1 Apart from the presence of two residual lithics there is no artefactual evidence to suggest that the application area was occupied prior to the 1st century AD. The ceramic assemblage indicated that the enclosure ditches probably infilled in the 2nd century, although a very slightly earlier date was suggested by the small ceramic assemblage from the roundhouse and nearby features in the north-western part of Area 1. Essentially the artefactual evidence indicates that the structure(s), field, enclosure and possible droveway existed in a single phase of activity which, as there is no evidence for 3rd-century pottery deposition, appears to have commenced in the later 1st century and been abandoned some time during the later 2nd century.
- 8.1.2 The artefactual dating was supported by the radiocarbon analysis of two hearth deposits. Further interpretation of the radiocarbon results, incorporating the stratigraphic evidence, indicated that an early/mid-1st-century to mid-2nd-century date range is most likely to be appropriate for the use of the hearths. This is not inconsistent with the later 1st-century to later 2nd-century date indicated by the ceramics.
- 8.1.3 The stratigraphic and dating evidence is consistent with a single phase of enclosure activity appended to a boundary ditch. There is insufficient evidence to suggest that the numerous discrete features associated with the enclosure, significantly pre- or post-date the enclosure. Although the ceramics were the only diagnostic artefacts from the site, the assemblage was unusually closely datable and comprised material recovered from a wide and even distribution of the ditched features. Unfortunately few of the 81 discrete features yielded artefacts and as a result they can only be assumed to be contemporary with the enclosure (and thus broadly contemporary with each other). Beyond the enclosure, and associated settlement, some elements of the field system could possibly be of earlier date, although no evidence was identified.

8.2 Field Layout and Modification

- 8.2.1 The geophysical data and the excavation evidence combine to reveal an articulated landscape of fields, a D-shaped enclosure and a possible droveway. Although the sequence of construction and redefinition of these land divisions is complex in places, it is clear that the three main components were interconnected. The sinuous, north-west/south-east aligned ditch (Ditch 1) seems to form the main element of this landscape. It cuts across the (modern) contours from above the enclosure on the highest ground, to the possible droveway which lies midway down the slope of the modern field.
- 8.2.2 As discussed earlier, Ditch 1's position in relation to other features makes it probable that it is the earliest element of this landscape. In fact, although there is no supporting artefactual evidence it is possible that some features originated in the pre-Roman period but this cannot be recognised archaeologically until the community was sufficiently Romanised to use and discard Roman-period ceramics. An absence of pre-Roman pottery is an all too familiar theme on probable Iron Age sites in Yorkshire, and particularly South Yorkshire. However, recent work in West Yorkshire has clearly demonstrated the Iron Age origins of field systems which continued to be

modified and developed during the Roman period, and which produced no Iron Age artefacts (O'Neill 2001; Howell 2001), and this may be true of some elements at Shafton.

- 8.2.3 The remainder of the sequence is difficult to determine. Both the 28m by 23m D-shaped enclosure and an irregular 115m by 35m field were appended to the western side of Ditch 1, with the southern boundary of the field formed by a double-ditched feature (Ditches 8 and 9). It is unclear whether the field and enclosure were contemporary and it is also uncertain if the double-ditched feature pre-dated the construction of the field. No relationship existed between the two elements of the putative droveway and neither of its ditches yielded datable artefacts. Ditch 10 may perhaps have been positioned to restrict access along the 'droveway' but it is also feasible that the two 'droveway' ditches were not contemporary and that they represent a shifting boundary. If the latter were the case then Ditch 10 may have been constructed at the southern end of Ditch 1 in order to expand the area of the large field.
- 8.2.4 Episodic recutting of the enclosure and 'droveway' ditches was fairly common but was not carried out uniformly along the length of the ditches. Thus, it seems clear that various parts of the site were maintained, re-emphasised and modified throughout the use of the enclosure.
- 8.2.5 The geophysical anomalies outlining the boundaries of the larger field are not strong enough to indicate the position of an entranceway. The excavation revealed that access to the smaller enclosure appears to have been gained via its north-eastern corner where the arrangement of ditches forms a funnel, possibly directing movement into the enclosure. This wide entrance also appears to have been restructured with additional ditches, indicating its continued use.
- 8.2.6 Further entrances may have been located at the ditch terminals on the eastern side and in the north-western corner of the enclosure, although these latter accesses appear more restrictive than the larger, north-eastern one. If the gap between the enclosure ditches in the north-west of the enclosure did indeed form an entrance, it is difficult to reconcile its position with the location of the possible roundhouse which surely would have restricted access in this area. The maintenance and drainage of the waterlogged ditch terminals at these putative entrances probably occurred towards the end of the occupation of the enclosure; possibly at a time when the ditches had infilled but the boundaries continued to be marked by earthwork banks.

8.3 The Enclosure

- 8.3.1 The D-shaped enclosure is of a type known as 'clothes-line enclosures'; a term which is applied to small enclosures that hang off linear boundaries (English Heritage 1989). Many of the enclosures in this class have been identified through aerial reconnaissance although an increasing number have been investigated through excavation. A wide range of dates have been obtained from these monuments from the Late Bronze Age to Roman periods. However, the Shafton enclosure appears to be of comparable date to the recently excavated Romano-British examples at Billingley Drive, Thurnscoe, South Yorkshire (Neal 2000), Wombwell, South Yorkshire (Webb 2001;

Northamptonshire Archaeology 2001) and Dawson's Wood, West Yorkshire (O'Neill 2001).

8.3.2 **Subdivision and Specialisation within the Enclosure**

The enclosure was subdivided into at least three distinct areas by the construction of ditches, possibly setting apart zones for specific activities. A greater density of features was apparent in the western half of the enclosure. Few post-holes were located to the east of Ditch 5, although of course, the eastern half of the enclosure may have held above-ground structures, or features which are now archaeologically invisible such as pad-stones rather than post-holes.

- 8.3.3 As described in paragraph 6.3.3 above areas of domestic activity will tend to have greater magnetic enhancement than areas which were peripheral to settlement. Thus the geophysical data obtained during the pre-excavation stage of evaluation can contribute to an examination of the uneven distribution of activity within the enclosure. The strongest anomaly in the gradiometer survey corresponds with Ditch 2 whilst Ditch 1, the most substantial feature in Area 1, produced only a weak magnetic response. The proportions of magnetic material in the sample retents clearly reflected these findings. It seems reasonable to propose that the absence of features recorded in the eastern part of the enclosure reflects a real lack of structures and domestic/industrial activity in that area, rather than an absence of recorded features due to truncation or problems with identification.
- 8.3.4 In this context it is of increased significance that Ditch 1 yielded the greatest quantity of artefacts. The recovery of three almost complete vessels from the fills of this ditch and nowhere else at the site has already been noted; it may be of importance that this area of greatest deposition contrasts with the area of greater settlement activity.
- 8.3.5 The areas of the geophysical survey furthest from the enclosure tended to produce discontinuous or weak anomalies, suggesting that settlement activities were concentrated near to the enclosure. The excavated evidence also suggests that, apart from the external possible roundhouse, settlement activity was confined to the enclosure itself. A north/south orientated anomaly, interpreted as the western field boundary, produced only a weak magnetic response, although the putative driveway was fairly strong at its eastern end in particular. This may reflect increased traffic along this boundary and supports the interpretation as a driveway. The geophysical data suggest that at least one of the driveway ditches extended for some 160m beyond Area 2. The anomaly was not continuous and therefore the association with Ditch 9 cannot be confirmed, but the alignment seems feasible.
- 8.3.6 Although the majority of the discrete features within the enclosure did not produce significant geophysical responses, some of the larger pits in the north-western part of the enclosure did. Several similar discrete anomalies were recorded near the western field boundary and the driveway; possibly reflecting other areas of less intense activity within the field itself. An alignment of discrete geophysical anomalies extends to the east of the excavated areas, but it is not known whether these are archaeological in origin.

8.3.7 Structures

Outside of the enclosure, but within the large field, lay the partial outline of a possible roundhouse of 1st to 2nd-century AD date. Although usually associated with Iron Age activity, the roundhouse-building tradition has been shown to continue well into the Roman period at a number of sites in the north of England including West Yorkshire (Wheelhouse 2001; WYAS in prep.), Nottinghamshire (Chadwick 1999) and Yorkshire in general (Wilson 1997). Although it is unusual to identify stone building material in association with a structure such as this, the gully, south-east facing porch/entranceway and nearby hearth are typical features of roundhouses. The position of the structure outside of the small enclosure is also not without comparison; a recently excavated example from near Swillington, Leeds was also located outside of a subdivided enclosure but within a landscape of larger field divisions (Wheelhouse 2001).

8.3.8 The density of post-holes within the Shafton enclosure suggests that, in addition to the identification of four- and six-post structures, several other structures may have gone unrecognised. The concentrations of post-holes clearly attest to the presence of a structure(s) but the form is not apparent from the archaeological remains.

8.3.9 The remains of a circular post-built structure may be tentatively identified in the south-western corner of the enclosure. Clearly this is highly speculative but the dimensions of the proposed building, at 6-8m in diameter, and the post-hole and gully defined south-east facing porch/entranceway are fairly typical features of roundhouses in the region. Clear comparisons may be found amongst the prehistoric examples at South Elmsall, West Yorkshire (McNaught in prep.) and Swillington Common, West Yorkshire (Howell 2001), the Iron Age structures at Dalton Parlours, West Yorkshire (Wrathmell and Nicholson 1990) and Romano-British roundhouses at Thurnscoe, South Yorkshire (Neal 2000). The presence of hearths in the vicinity of the putative Shafton example contributes to an impression of domestic activity in this part of the enclosure.

8.3.10 Agriculture and Storage

The pits and post-structures in the north-west of the enclosure may have been used for storage. Unfortunately the environmental evidence did not support this as, although four-post structures are commonly associated with the storage of grain or straw (Gent 1983), unburned grains and seeds are unlikely to survive at this type of site. Clearly the hearth-pits in the south of the enclosure were used to dispose of cereal-processing waste and it seems likely that food supplies would be stored somewhere close by. The botanical remains from across the site indicate that cereals were probably brought to the site in a semi-processed state, with the waste from the final processing being burned on small hearths. It seems that crops were processed elsewhere and brought to the settlement for winnowing, storage and use. The absence of animal bones from the site may well be due to inappropriate preservation conditions, but it could be suggested that all food preparation and/or waste disposal was carried out away from the enclosure.

8.3.11 Industrial Activity

Although the issue of industrial activity was raised by the presence a fragment of tap slag and a very small quantity of spheroidal hammerslag no metalworking features were identified. The artefacts are likely to be redeposited.

8.4 The Site in Context

- 8.4.1 The settlement of Shafton lies within a heavily disturbed and developed modern landscape. The only other known archaeological remains within a 2.5km radius of the Shafton High Street excavations are crop marks at SE 397 104 (SYAS SMR PIN 4371) which were investigated in advance of the construction of the Shafton Bypass (Keith 1999; Webb and Whittingham 2000; Martin 2001). Preliminary results suggests that this complex site, which includes a 0.06ha circular enclosure and internal features, may date to the 1st to 2nd century AD and thus could occupy part of the same early Roman landscape as the remains found at High Street Shafton, which lies only 1km to the north-west.
- 8.4.2 The remains of slightly later occupation were identified at a 2nd-3rd-century rural site at Hemsworth, West Yorkshire (SE 441 139), located 4kms north-east of Shafton. Ditched enclosures and possible structures were accompanied by a small quantity of Romano-British pottery (mainly local coarse greywares) and seemed to represent a low status rural domestic site (WYAS in prep.).
- 8.4.3 Despite the density of archaeological remains revealed by the Shafton High Street and Shafton Bypass investigations few other sites or potential sites are recorded in the immediate vicinity. Air photographs of a 310ha study area to the south-west of Shafton, along the route of the proposed Cudworth bypass, revealed only twelve areas of crop-marked remains - only five of which may have been prehistoric or Roman in date (Deegan 2001). Deegan suggests that this is likely to reflect poor photographic coverage and 20th-century development rather than an absence of earlier occupation.
- 8.4.4 A multiple enclosure site at Billingley Drive, Thurnscoe, located some c. 9km south-east of Shafton (SE 452 052), was identified as crop marks (Riley 1978). Excavation revealed marked similarities to the Shafton High Street enclosure; preliminary results indicate that the ditched enclosures of the 0.5ha farmstead developed through three phases from the late 2nd to the early 4th centuries AD (Northern Archaeological Associates 2000; Neal 2000). It is in phase 2 that the Thurnscoe farmstead most resembles the remains identified at High Street Shafton, although the late 2nd to early 3rd century enclosures in phase 1 are also comparable. In the mid-3rd to mid-4th centuries (phase 2) the Thurnscoe farmstead comprised a D-shaped enclosure, a square enclosure, associated boundary ditches and a droveway. The D-shaped enclosure measured 35m by 23m (compared to 28m by 23m at Shafton) and also appeared to be appended to a major boundary feature. Within the enclosure were the remains of several post-built roundhouses and it seems clear that this area was the focus of the settlement. The square enclosure, appended to the opposing side of the same boundary ditch was interpreted as an 'agricultural activity' enclosure and incorporated a T-shaped corn-drying/malting oven near its entranceway.

- 8.4.5 It seems probable that the settlement at Shafton functioned in a very similar manner to the Thurnscoe farmstead. The identical morphology of the D-shaped enclosures suggests that there existed a preferred enclosure-construction method, despite the fact that the form of these features might be expected to be influenced by such factors as topography and fluvial systems. In addition each site appears to incorporate separate zones for different activities such as occupation and crop processing, and the ditches were carefully maintained. The complete pottery vessels deposited in the main boundary ditch at High Street Shafton revealed a formalised ritual aspect of behaviour which was not identified through the material culture at Thurnscoe, although a Romano-British inhumation cemetery is thought to have existed in phase 3 at Thurnscoe (Neal 2000).
- 8.4.6 At Wombwell (SE 375 025) c. 6.5km south-west of Shafton, a 35m by 40m D-shaped enclosure had probably been appended to a linear boundary and a 50m by 60m sub-square enclosure appeared to have been subsequently appended to both the boundary and the D-shaped enclosure (Northamptonshire Archaeology 2001). The dating of this sequence is tentative but a (non-primary) ditch fill of the sub-square enclosure yielded a 2nd-century pottery date and a 60 BC – AD 90 radiocarbon date (calibrated at 2σ ; 1990 ± 40 BP (lab. code not provided)). These preliminary results are certainly compatible with the later 1st to later 2nd-century AD date for High Street Shafton. The association of the Wombwell enclosures with a double-ditched trackway and larger fields is also clearly comparable with the landscape revealed at Shafton and further work at Wombwell may well provide additional information which would enhance the interpretation of the Shafton site.
- 8.4.7 Other than the examples detailed above there are few sites in the vicinity which provide direct morphological comparisons for the High Street Shafton enclosure and field system. Many enclosure sites have been subject to aerial reconnaissance and/or geophysical survey but the follow up investigations have tended to be small scale and have not yielded dating resolution or large artefact assemblages. Sites such as High Street Shafton, Billingley Drive Thurnscoe and the anticipated further work at Shafton Bypass and Wombwell are extremely important opportunities to examine such sites in detail.

9. **Conclusions**

- 9.1 Whilst it remains possible that the field and enclosure at High Street Shafton may have pre-Roman origins, the greater deposition of artefacts occurred in the 2nd century AD and it is likely that the enclosure, at least, had been abandoned by the 3rd century. The types of ceramics found here indicate that this was a typical rural Romano-British settlement with generally low levels of pottery use and deposition. The identification of subdivisions, structural remains and hearths is of significance as this type of evidence is rarely preserved at such sites. Although the geophysical data are not sufficiently detailed to provide conclusive evidence some general trends have been identified, which seem to support the archaeological evidence for settlement activity being concentrated in the western half of the enclosure. Activity within the enclosure occurred largely within the subdivisions, although the deposition of complete pots in the eastern boundary ditch contrasted with the main area of occupation and may indicate formalised patterns of deposition.

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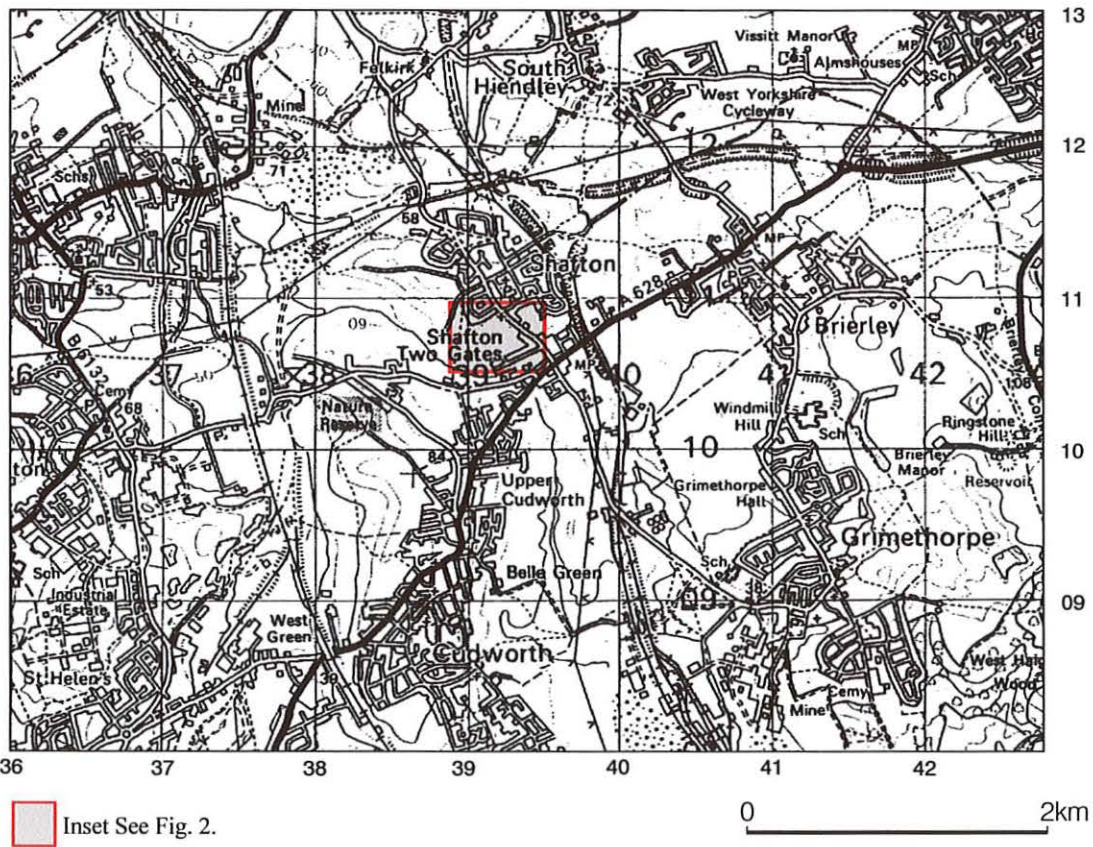
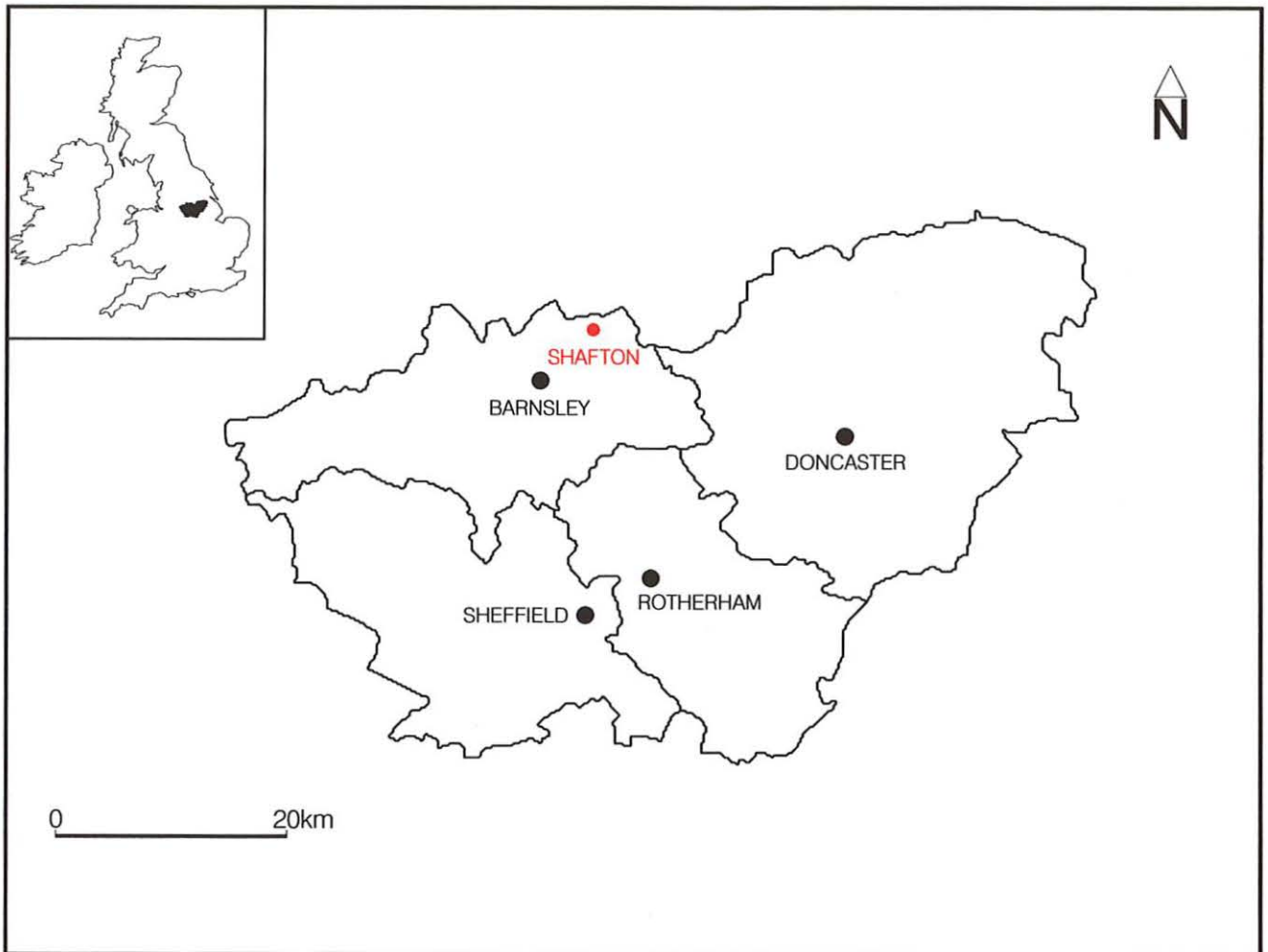


Fig. 1. Site Location

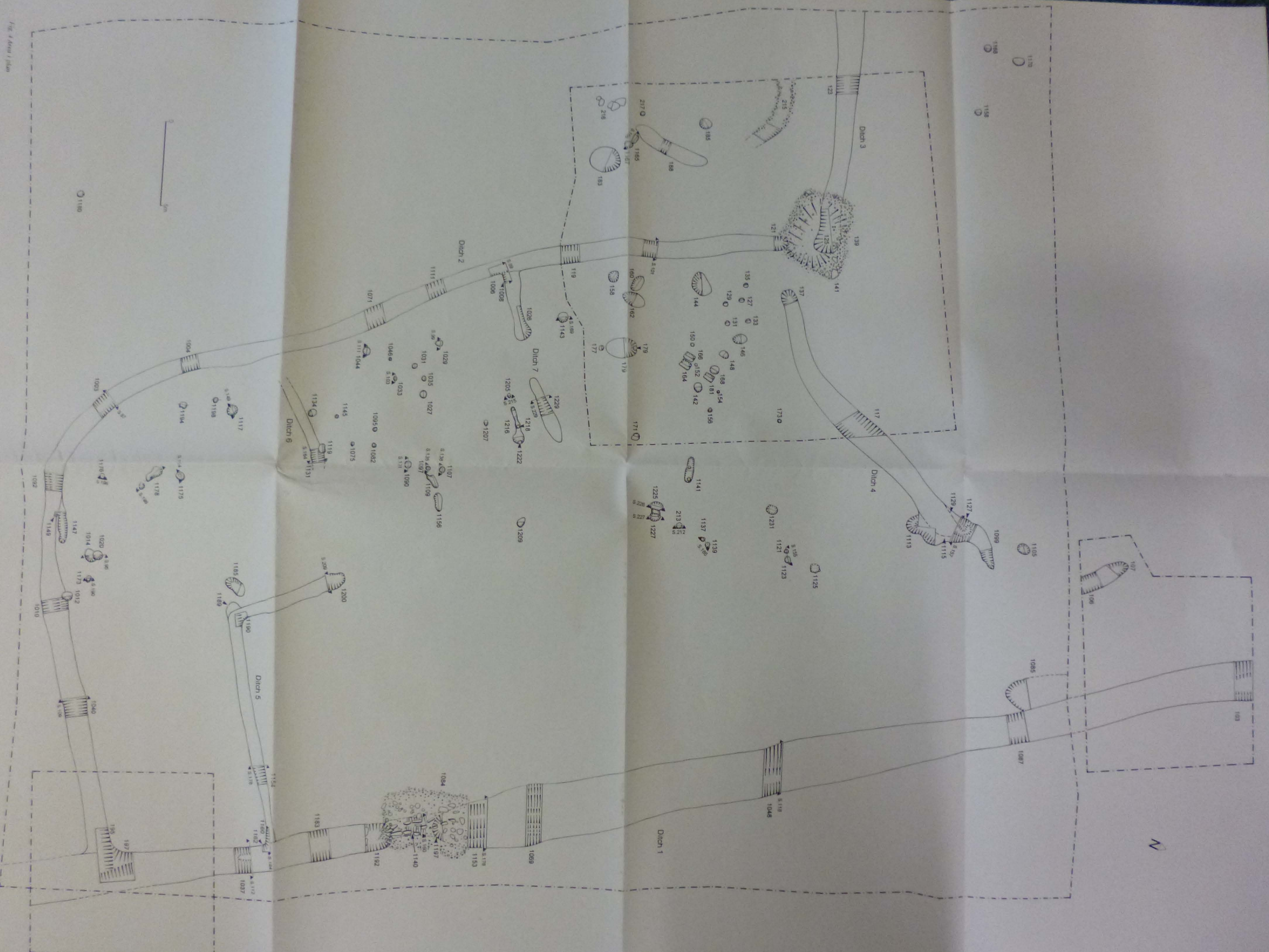


Fig. 2. Site location showing gradiometer greyscale data and trench locations

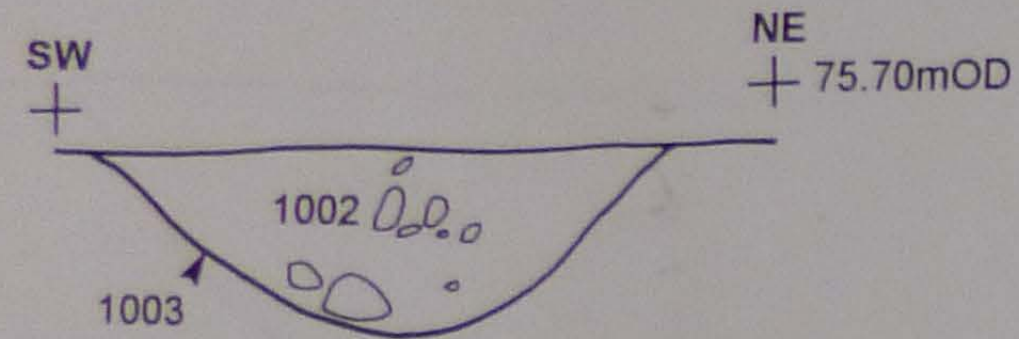


Fig. 3. Composite plan showing excavated features and interpretation of gradiometer data

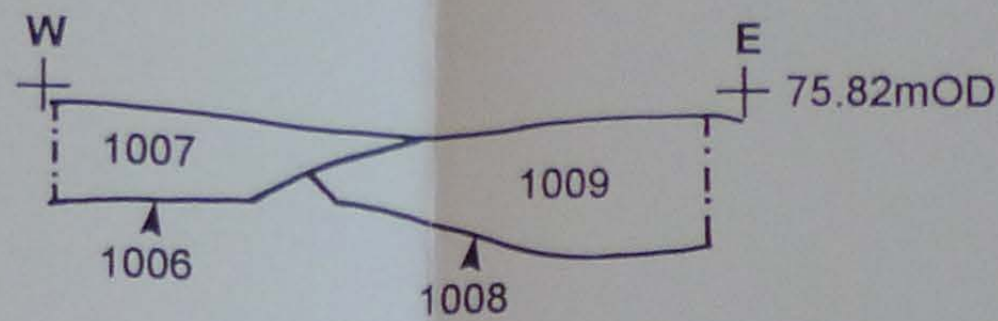
Fig. 4 Area 1 plan



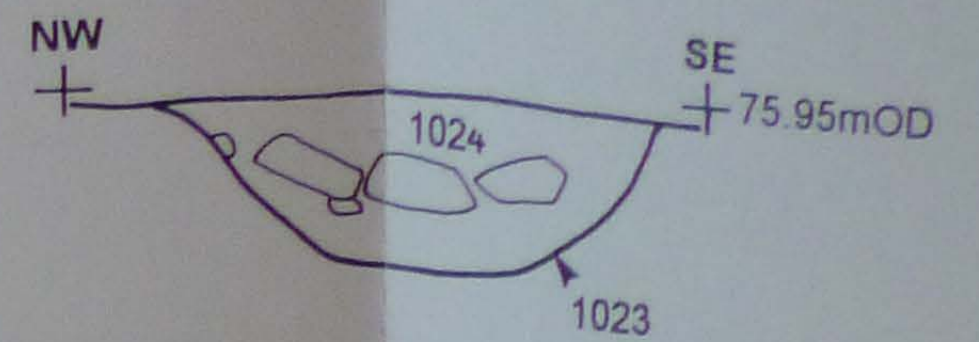
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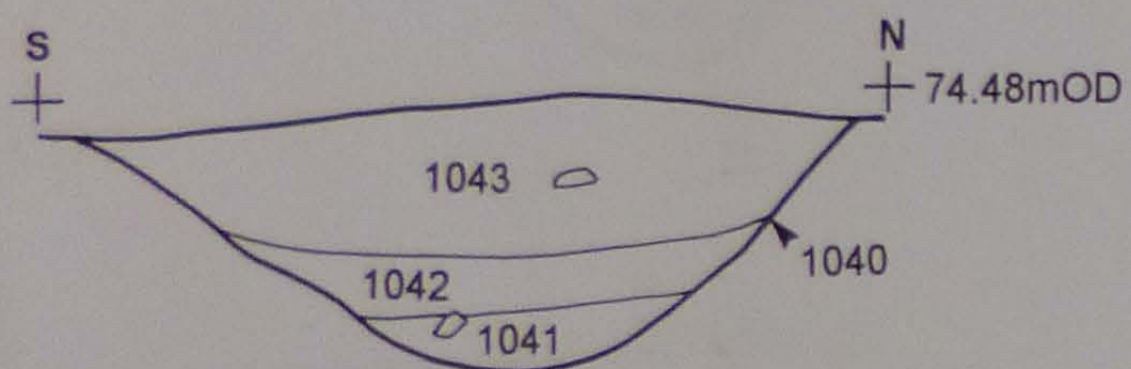
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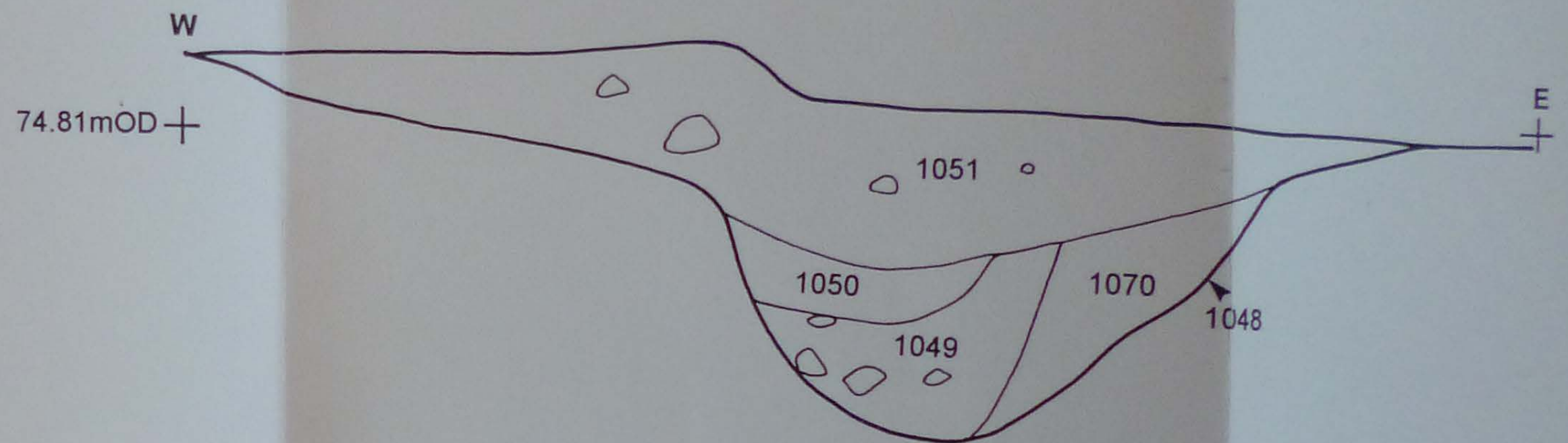
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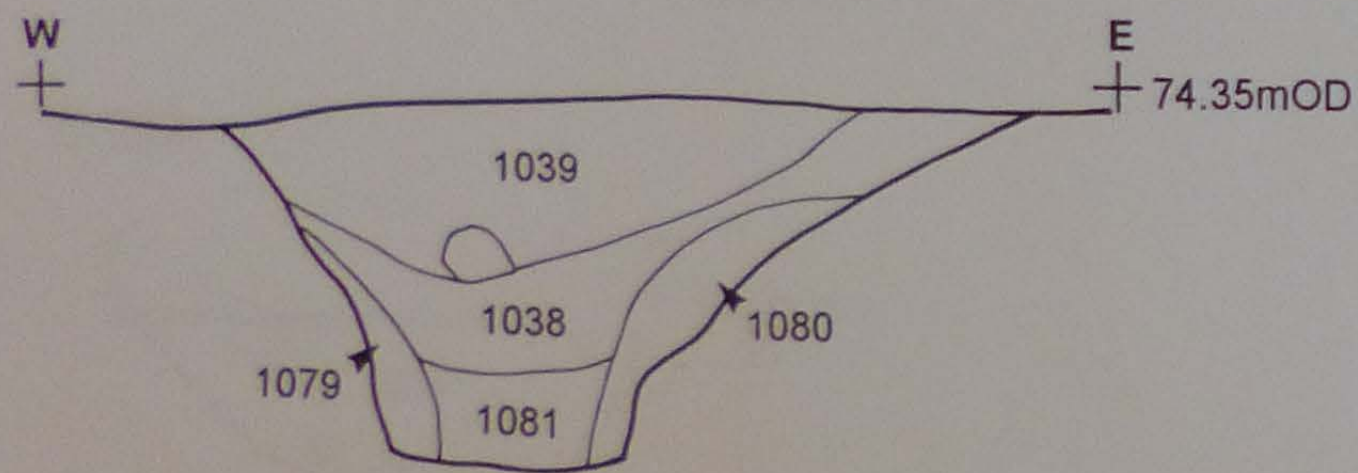
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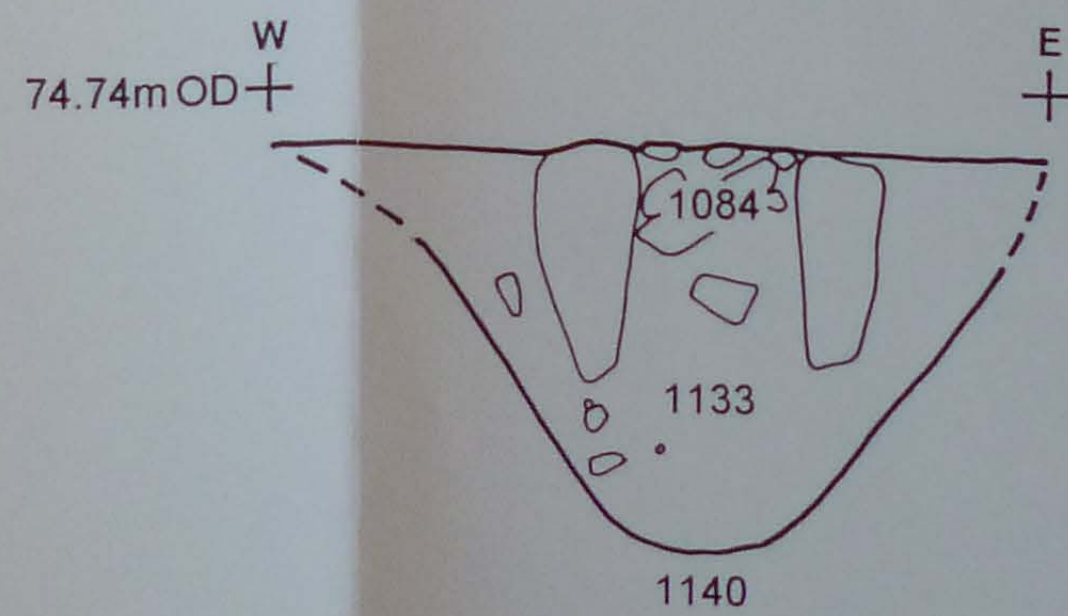
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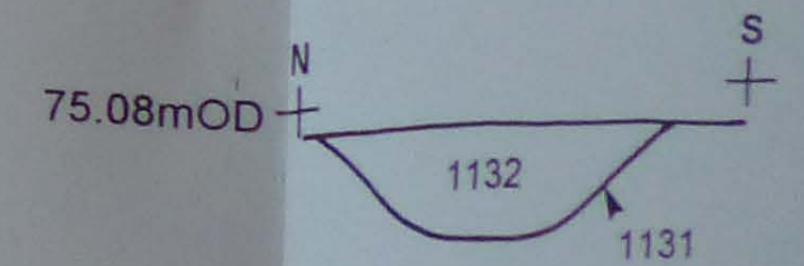
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S.160



S.164



S.157

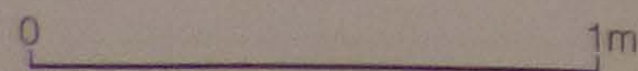
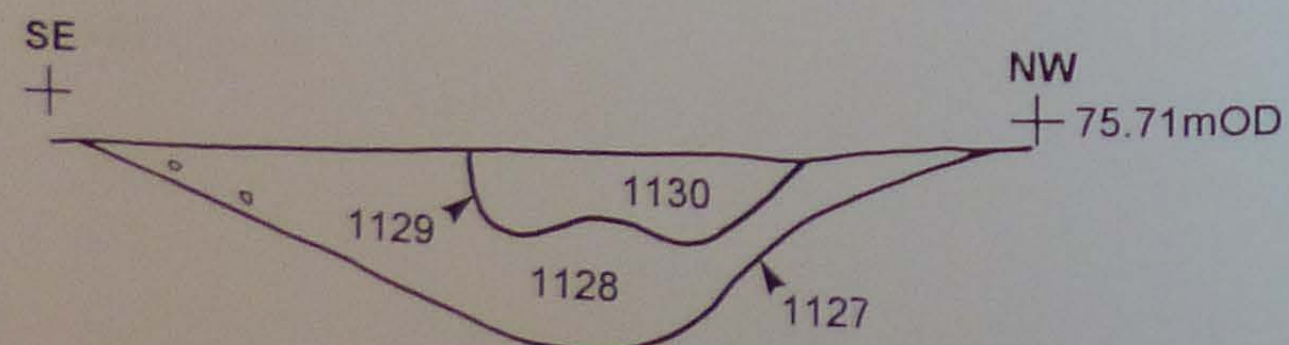


Fig. 5a Area 1 ditch sections

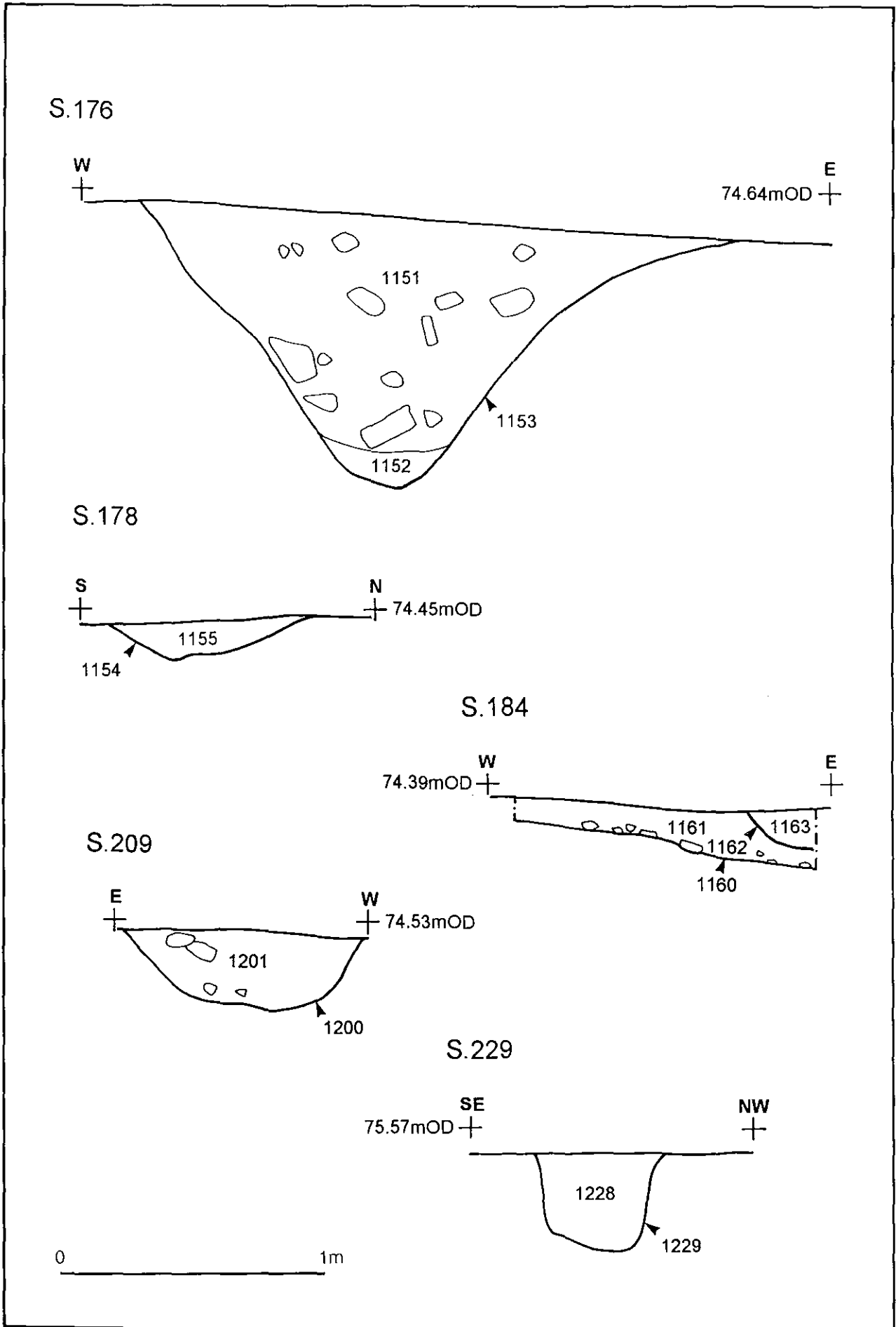
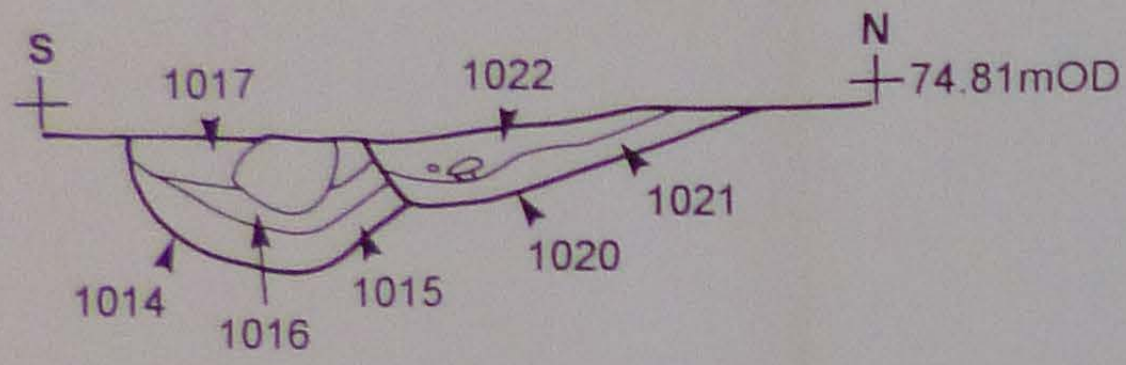
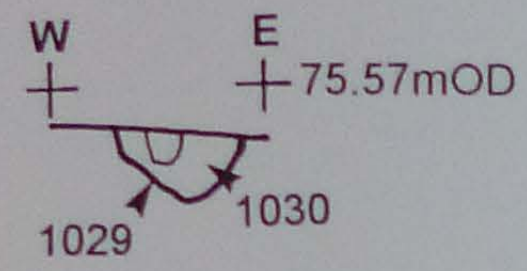


Fig. 5b Area I ditch sections

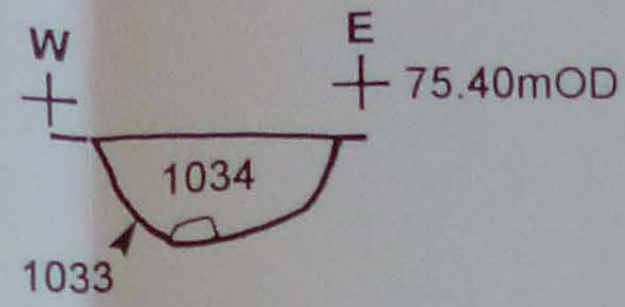
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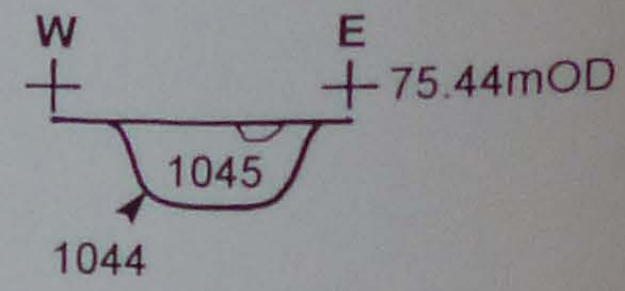
S.99



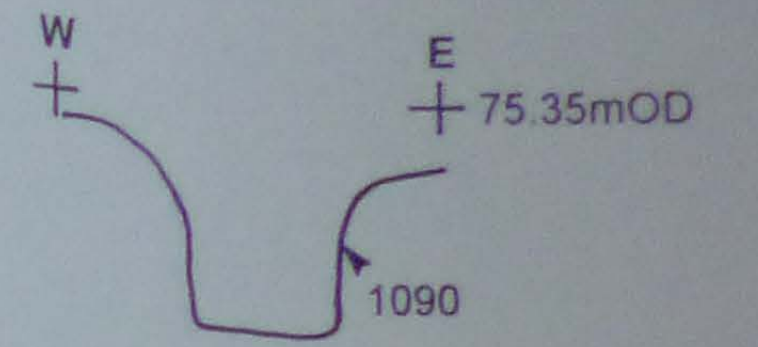
S.103



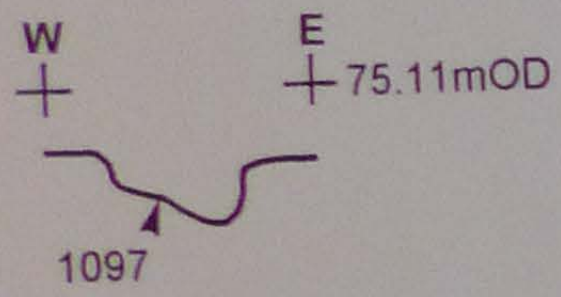
S.111



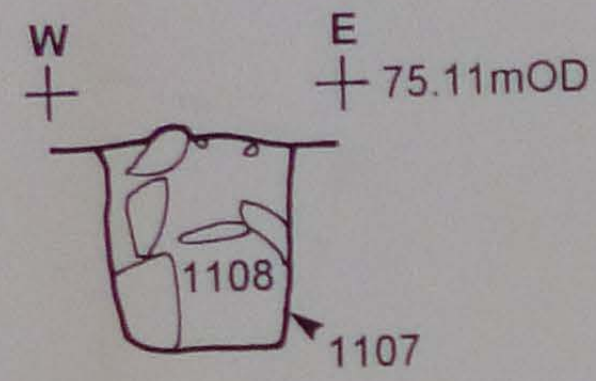
S.131



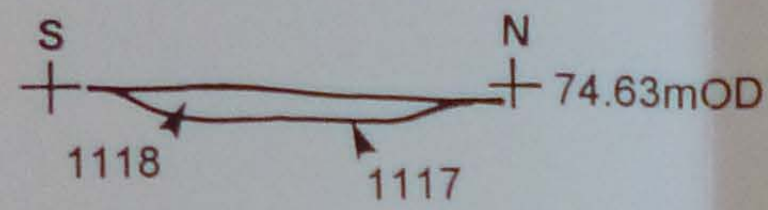
S.135



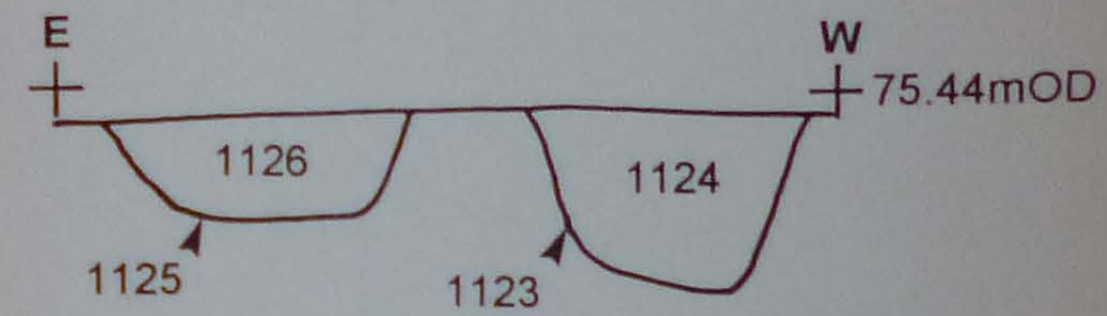
S.138



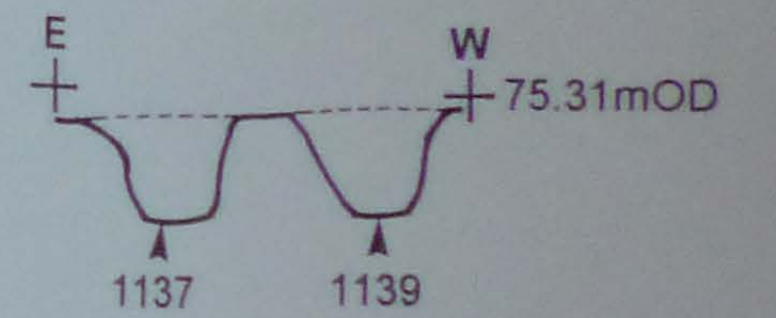
S.149



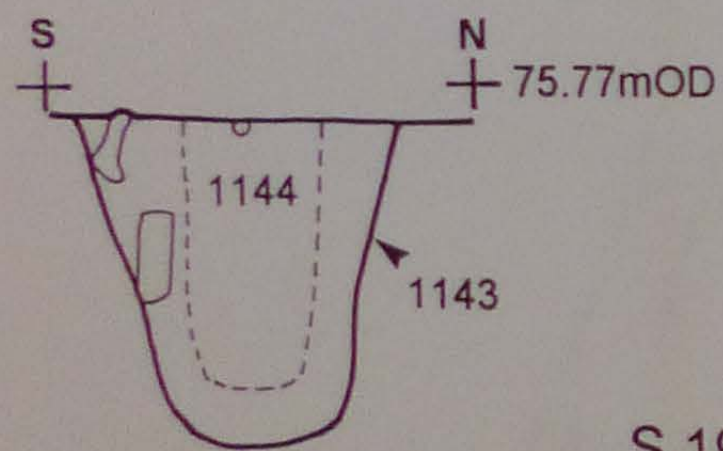
S.155



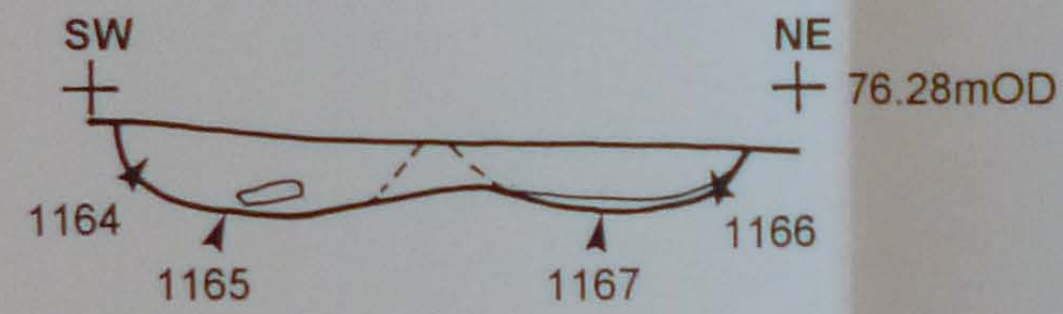
S.165



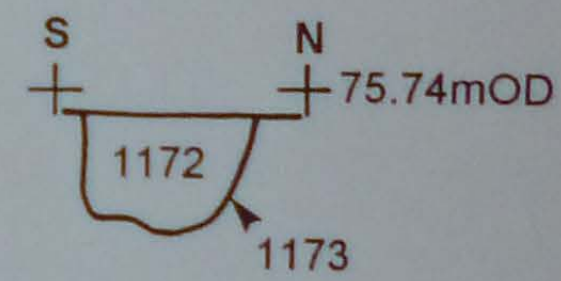
S.169



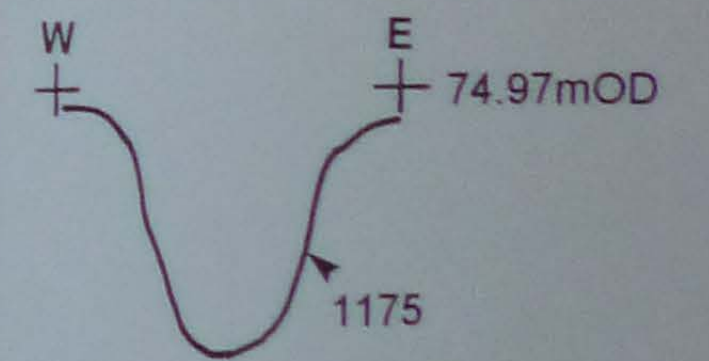
S.186



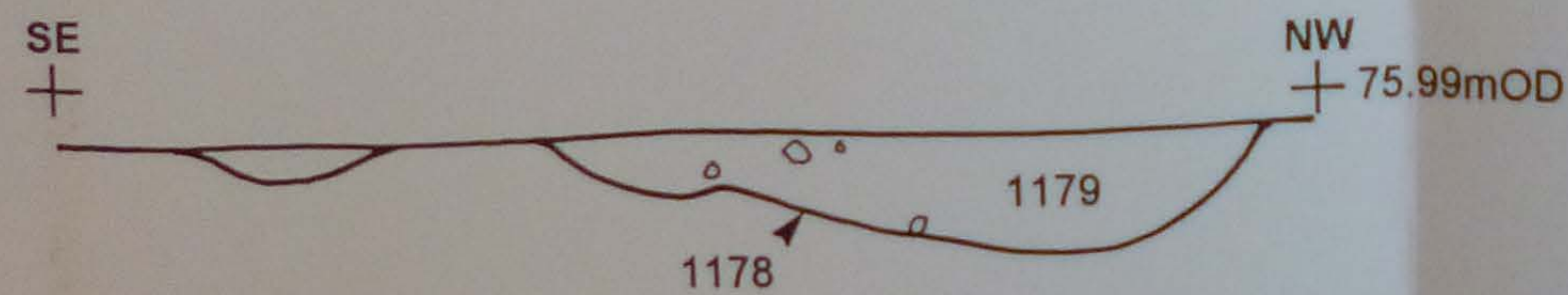
S.190



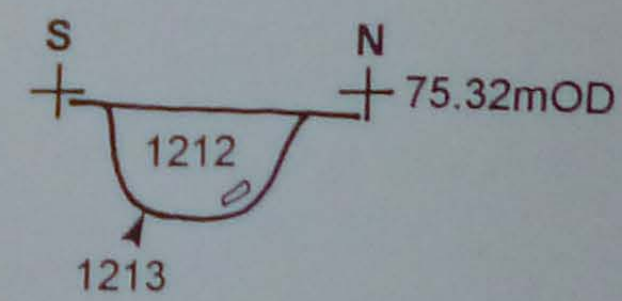
S.194



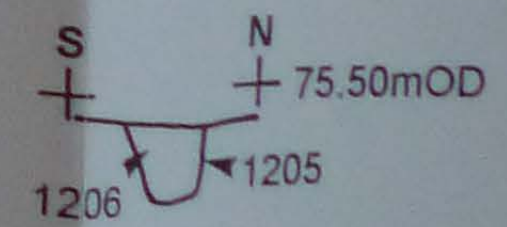
S.198



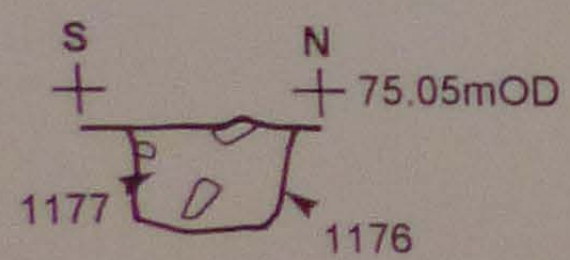
S.212



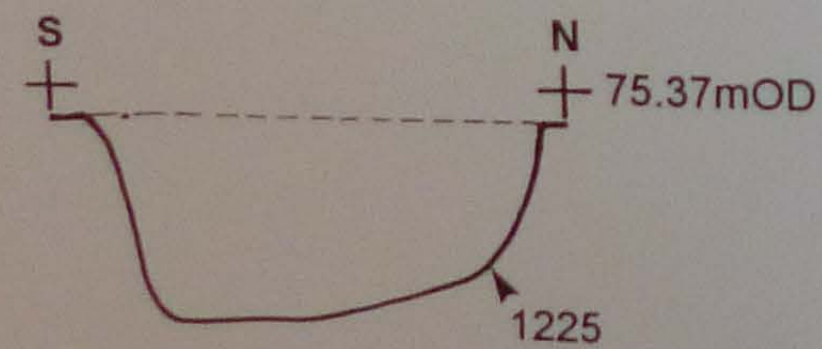
S.215



S.196



S.226



S.227

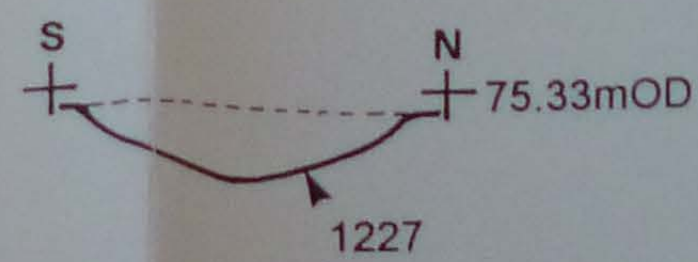


Fig. 6 Area 1 pit and post-hole sections

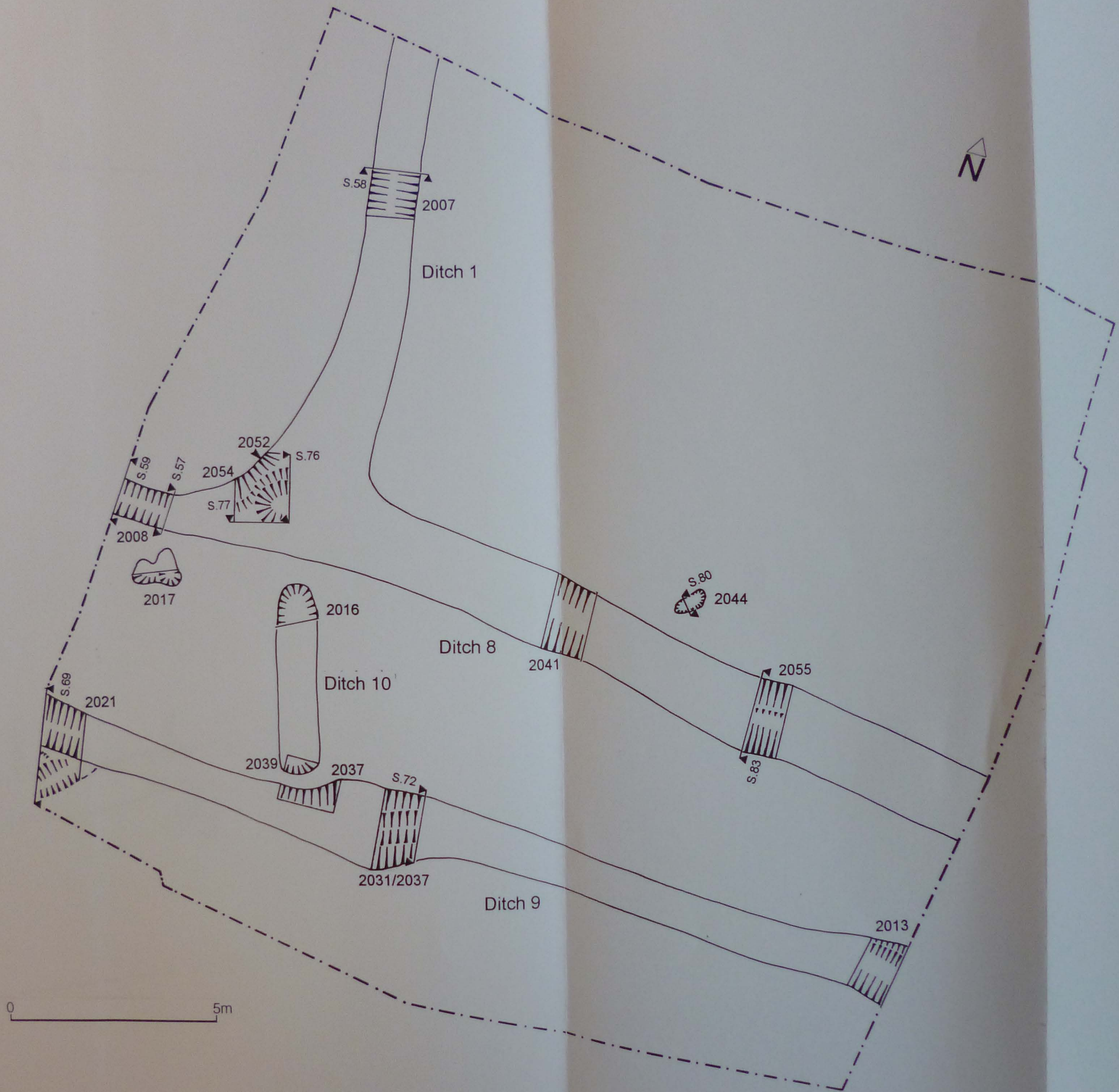


Fig. 7 Area 2 plan

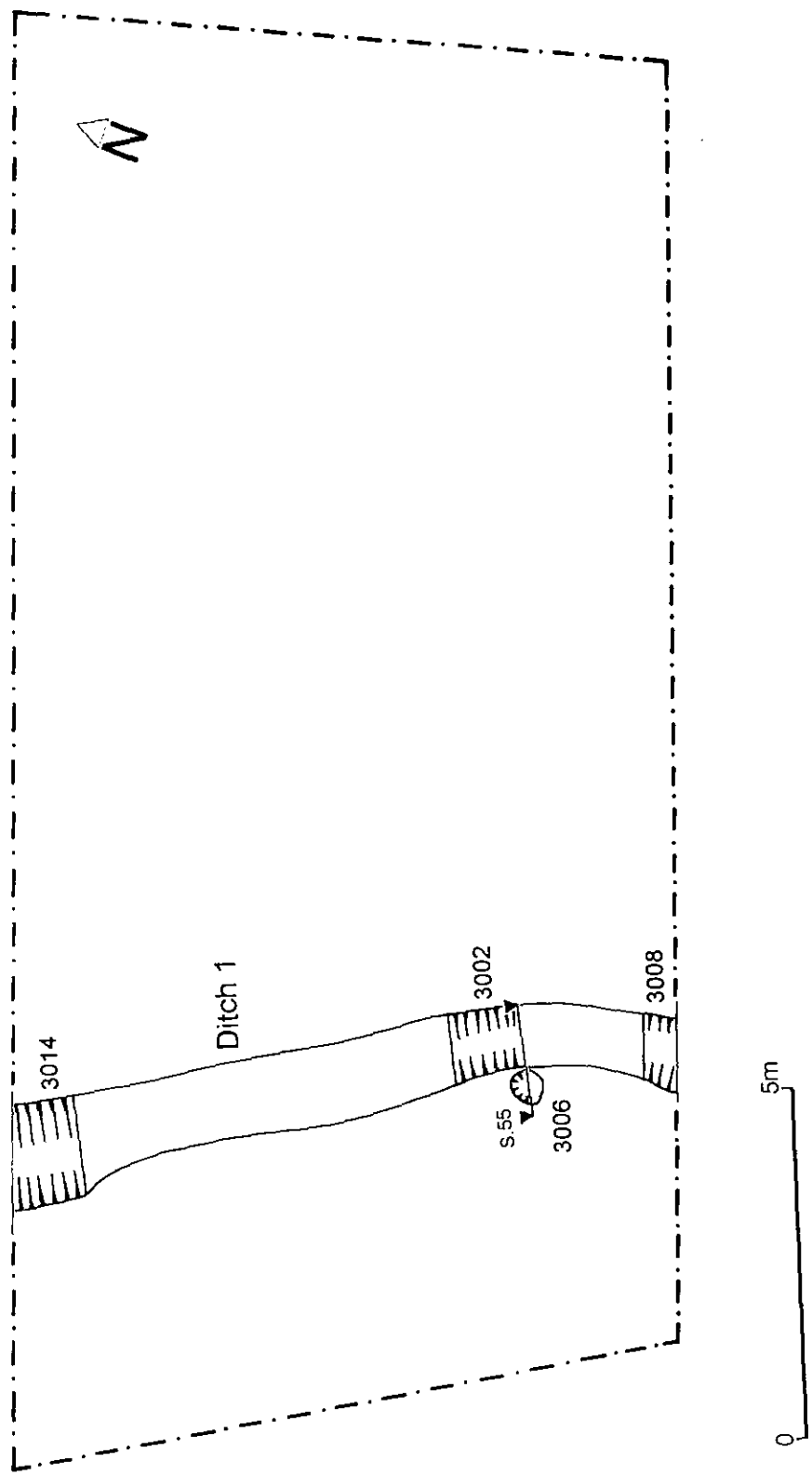


Fig. 8 Area 3 plan

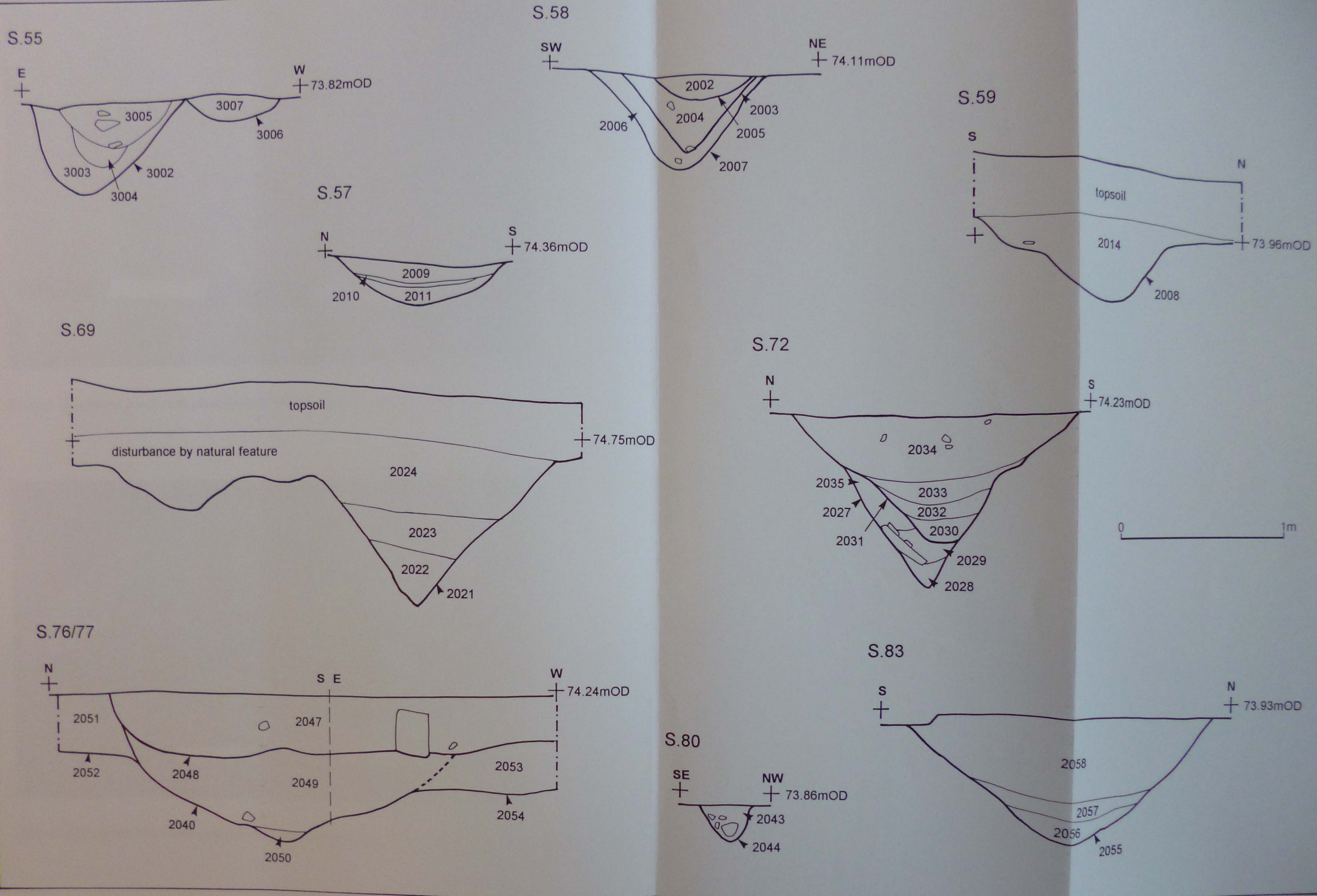


Fig. 9 Areas 2 and 3 sections



Plate 1. Sandstone block with pivot-hole from structure 141, within Ditches 2 and 3

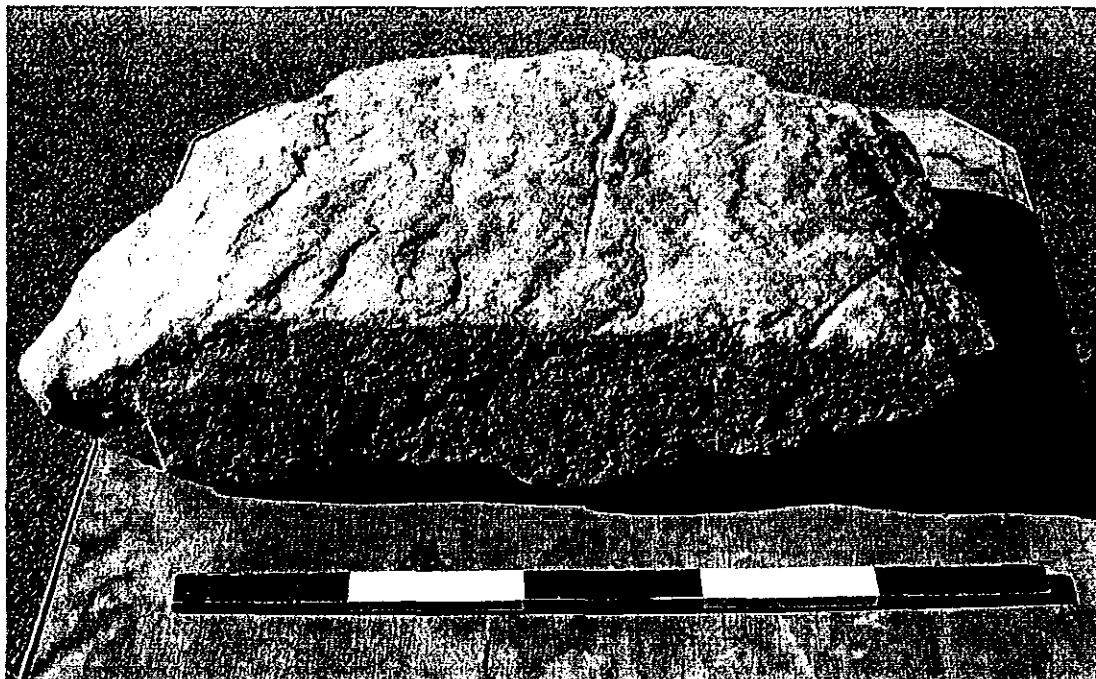


Plate 2. Sandstone block with possible tool marks from structure 141, within Ditches 2 and 3

Appendix I

Inventory of primary archive

File no.	Description	Quantity
I	Area 1 context register	12
	Area 1 context cards (nos 1000-1231)	232
II	Areas 2 and 3 context registers	5
	Areas 2 and 3 context cards (2000–2061, 3000–3016)	79
III	Drawing register	18
	Drawing sheets	52
IV	Finds register	1
	Samples register	6
	Environmental samples form (on-site)	72
	Finds and samples form B (copies)	7
V	Film register	1
	Film record sheets	18
	Colour slides (unmounted)	8 films
	Colour print negatives	1 film
	Monochrome negatives	9 films
	Mono contact print sheets	11
VI	Samples register (copy)	6
	Environmental laboratory record sheets	49
VII	Secondary archive:	
	Written scheme of investigation	1 report
	Geophysics report (unbound)	1 report
	Evaluation report	1 report
	Excavation report (unbound)	1 report
	Survey station co-ordinates	1
	Specialist report - flint	2 reports
	Specialist report – slag	1
	Specialist report – pottery	1 report
	Specialist report – assessment of environmental flots	1
Specialist report – analysis of botanic remains	1 report	
Loose	Level book	1 book
	1:200 plan of Area 1	1 (A3)

Appendix II

Inventory of contexts

Context	Area	Group	Description
101	1 (Tr B)	1	upper (tertiary) fill of ditch 103
102	1 (Tr B)	1	secondary fill of ditch 103
103	1 (Tr B)	1	ditch cut
104	1 (Tr B)	1	primary fill of ditch 103
105	1 (Tr B)		sole fill of ditch 106 (107)
106	1 (Tr B)		ditch cut (107)
107	1 (Tr B)		ditch cut
108	1 (Tr B)		sole fill of ditch 107
117	1 (Tr A)	4	ditch cut
118	1 (Tr A)	4	sole fill of ditch 117
119	1 (Tr A)	2	ditch cut
120	1 (Tr A)	2	sole fill of ditch 119
121	1 (Tr A)	2	ditch cut
122	1 (Tr A)	2	sole fill of ditch 121
123	1 (Tr A)	3	ditch cut
124	1 (Tr A)	3	sole fill of ditch 123
125	1 (Tr A)	3	ditch cut
126	1 (Tr A)	3	sole fill of ditch 125
127	1 (Tr A)		post-hole cut
128	1 (Tr A)		fill of post-hole 127
129	1 (Tr A)		post-hole cut
130	1 (Tr A)		fill of post-hole 129
131	1 (Tr A)		post-hole cut
132	1 (Tr A)		fill of post-hole 131
133	1 (Tr A)		post-hole cut
134	1 (Tr A)		fill of post-hole 133
135	1 (Tr A)		post-hole cut
136	1 (Tr A)		fill of post-hole 135
137	1 (Tr A)	4	ditch cut
138	1 (Tr A)	4	sole fill of ditch 137
139	1 (Tr A)		metalled surface
140	1 (Tr A)		deposit
141	1 (Tr A)		stone structure
142	1 (Tr A)		post-hole cut
143	1 (Tr A)		primary fill of post-hole 142
144	1 (Tr A)		pit cut
145	1 (Tr A)		fill of pit 144
146	1 (Tr A)		pit cut
147	1 (Tr A)		fill of pit 146
148	1 (Tr A)		post-hole cut
149	1 (Tr A)		fill of post-hole 148
150	1 (Tr A)		post-hole cut

Context	Area	Group	Description
151	1 (Tr A)		fill of post-hole 150
152	1 (Tr A)		post-hole cut
153	1 (Tr A)		fill of post-hole 152
154	1 (Tr A)		post-hole cut
155	1 (Tr A)		fill of post-hole 154
156	1 (Tr A)		post-hole cut
157	1 (Tr A)		fill of post-hole 156
158	1 (Tr A)		post-hole cut
159	1 (Tr A)		fill of post-hole 158
160	1 (Tr A)		pit cut
161	1 (Tr A)		fill of pit 160
162	1 (Tr A)		pit cut
163	1 (Tr A)		fill of pit 162
164	1 (Tr A)		pit cut
165	1 (Tr A)		fill of pit 164
166	1 (Tr A)		pit cut
167	1 (Tr A)		fill of pit 166
168	1 (Tr A)		post-hole cut
169	1 (Tr A)		fill of post-hole 168
170	1 (Tr A)		post-pipe of post-hole 142
171	1 (Tr A)		post-hole cut
172	1 (Tr A)		fill of post-hole 171
173	1 (Tr A)		post-hole cut
174	1 (Tr A)		fill of post-hole 173
175	1 (Tr A)		pit cut
176	1 (Tr A)		fill of pit 175
177	1 (Tr A)		post-hole cut
178	1 (Tr A)		fill of post-hole 177
179	1 (Tr A)		post-hole cut
180	1 (Tr A)		fill of post-hole 179
181	1 (Tr A)		pit cut
182	1 (Tr A)		fill of pit 181
183	1 (Tr A)		pit cut
184	1 (Tr A)		fill of pit 183
185	1 (Tr A)		hearth-pit cut
186	1 (Tr A)		upper (secondary) fill of hearth-pit 185
187	1 (Tr A)		primary fill of hearth-pit 185
188	1 (Tr A)		gully cut
189	1 (Tr A)		fill of gully 188
195	1 (Tr J)	2	ditch cut
196	1 (Tr J)	2	sole fill of ditch 195
197	1 (Tr J)	1	ditch cut
198	1 (Tr J)	1	upper (secondary) fill of ditch 197
199	1 (Tr J)	1	primary fill of ditch 197
215	1 (Tr A)		collapsed stone wall
216	1 (Tr A)		stone surface
217	1 (Tr A)		post-hole cut

Context	Area	Group	Description
218	1 (Tr A)		fill of post-hole 217
1000	1		topsoil
1001	1		subsoil
1002	1	2	fill of ditch 1003
1003	1	2	ditch cut
1004	1	2	ditch cut
1005	1	2	fill of ditch 1004
1006	1	2	ditch cut
1007	1	2	fill of ditch 1006
1008	1	7	ditch cut
1009	1	7	fill of ditch 1008
1010	1	2	ditch cut
1011	1	2	fill of ditch 1010
1012	1		shallow discrete cut
1013	1		fill of cut 1012
1014	1		hearth-pit cut
1015	1		primary fill of cut 1014
1016	1		secondary fill of cut 1014
1017	1		upper (tertiary) fill of cut 1014
1018	1		fill of post-hole 1019
1019	1		post-hole cut
1020	1		hearth-pit cut
1021	1		primary fill of cut 1020
1022	1		upper (secondary) fill of 1020
1023	1	2	ditch cut
1024	1	2	fill of ditch 1023
1025	1	7	fill of ditch 1026
1026	1	7	ditch cut
1027	1		fill of post-hole 1028
1028	1		post-hole cut
1029	1		post-hole cut
1030	1		fill of post-hole 1029
1031	1		post-hole cut
1032	1		fill of post-hole 1031
1033	1		post-hole cut
1034	1		fill of post-hole 1033
1035	1		post-hole cut
1036	1		fill of post-hole 1036
1037	1	1	ditch cut
1038	1	1	tertiary fill of ditch 1037
1039	1	1	upper (fourth) fill of ditch 1037
1040	1	2	ditch cut
1041	1	2	primary fill of ditch 1040
1042	1	2	secondary fill of ditch 1040
1043	1	2	upper (tertiary) fill of ditch 1040
1044	1		post-hole cut
1045	1		fill of post-hole 1044

Context	Area	Group	Description
1046	1		post-hole cut
1047	1		fill of post-hole 1046
1048	1	1	ditch cut
1049	1	1	secondary fill of ditch 1048
1050	1	1	tertiary fill of ditch 1048
1051	1	1	upper (fourth) fill of ditch 1048
1066	1	1	upper (tertiary) fill of ditch 1069
1067	1	1	secondary fill of ditch 1069
1068	1	1	primary fill of ditch 1069
1069	1	1	ditch cut
1070	1	1	primary fill of ditch 1048
1071	1	2	ditch cut
1072	1	2	fill of ditch 1071
1075	1		post-hole cut
1076	1		fill of post-hole 1075
1079	1	1	primary fill of ditch 1037
1080	1	1	primary fill of ditch 1037
1081	1	1	secondary fill of ditch 1037
1082	1		post-hole cut
1083	1		fill of post-hole 1082
1084	1		stony deposit
1085	1		cut of irregular feature
1086	1		fill of feature 1085
1087	1	1	ditch cut
1088	1	1	primary fill of ditch 1087
1089	1	1	upper (secondary) fill of 1087
1090	1		post-hole cut
1091	1		fill of post-hole 1090
1092	1	2	ditch cut
1093	1	2	primary fill of ditch 1092
1094	1	2	upper (secondary) fill of ditch 1092
1095	1		post-hole cut
1096	1		fill of post-hole 1095
1097	1		post-hole cut
1098	1		fill of post-hole 1097
1099	1		ditch cut
1100	1		fill of ditch 1099
1101	1		fill of pit 1102
1102	1		pit cut
1103	1		fill of pit 1104
1104	1		pit cut
1105	1		post-hole cut
1106	1		fill of post-hole 1105
1107	1		post-hole cut
1108	1		fill of post-hole 1107
1109	1		shallow discrete cut
1110	1		fill of cut 1109

Context	Area	Group	Description
1111	1	2	ditch cut
1112	1	2	fill of ditch 1111
1113	1		ditch cut (1099)
1114	1		fill of ditch 1113
1115	1	4	ditch cut
1116	1	4	fill of ditch 1115
1117	1		post-hole cut
1118	1		fill of post-hole 1117
1119	1		post-hole cut
1120	1		fill of post-hole 1119
1121	1		post-hole cut
1122	1		fill of post-hole 1121
1123	1		post-hole cut
1124	1		fill of post-hole 1123
1125	1		post-hole cut
1126	1		fill of post-hole 1125
1127	1		ditch cut (1113)
1128	1		fill of ditch 1127 (1113)
1129	1	4	ditch cut
1130	1	4	fill of ditch 1129
1131	1	6	ditch cut
1132	1	6	fill of ditch 1132
1133	1	1	primary fill of ditch 1140
1134	1		post-hole cut
1135	1		fill of post-hole 1134
1136	1		fill of post-hole 1137
1137	1		post-hole cut
1138	1		fill of post-hole 1139
1139	1		post-hole cut
1140	1	1	ditch cut
1141	1		beam slot cut
1142	1		fill of cut 1141
1143	1		post-hole cut
1144	1		fill of post-hole 1143
1145	1		post-hole cut
1146	1		fill of post-hole 1145
1147	1		gully cut
1148	1		fill of gully 1147
1149	1	2	ditch cut
1150	1	2	fill of ditch 1149
1151	1	1	upper (secondary) fill of ditch 1153
1152	1	1	primary fill of ditch 1153
1153	1	1	ditch cut
1154	1	5	ditch cut
1155	1	5	fill of ditch 1154
1156	1		pit cut
1157	1		fill of pit 1156

Context	Area	Group	Description
1158	1		post-hole cut
1159	1		fill of post-hole 1158
1160	1	5	ditch cut
1161	1	5	fill of ditch 1160
1162	1	1	ditch cut
1163	1	1	fill of ditch 1162
1164	1		fill of post-hole 1165
1165	1		post-hole cut
1166	1		fill of post-hole 1167
1167	1		post-hole cut
1168	1		post-hole cut
1169	1		fill of post-hole 1168
1170	1		possible post-hole cut
1171	1		fill of cut 1170
1172	1		fill of post-hole 1173
1173	1		post-hole cut
1174	1		fill of post-hole 1175
1175	1		post-hole cut
1176	1		post-hole cut
1177	1		fill of post-hole 1176
1178	1		pit cut
1179	1		fill of pit 1179
1180	1		post-hole cut
1181	1		fill of post-hole 1180
1182	1	1	fill of ditch 1183
1183	1	1	ditch cut
1184	1		upper (secondary) fill of post-hole 1185
1185	1		post-hole cut
1186	1	5	fill of ditch 1190 and 1189
1187	1		fill of pit 1189
1188	1		context not used
1189	1		pit cut
1190	1	5	ditch cut
1191	1	1	fill of ditch 1192
1192	1	1	ditch cut
1193	1		primary fill of post-hole 1185
1194	1		possible post-hole cut
1195	1		fill of post-hole 1194
1196	1	1	fill of ditch 1197
1197	1	1	ditch cut
1198	1		post-hole cut
1199	1		fill of post-hole 1198
1200	1	5	ditch cut
1201	1	5	fill of ditch 1200
1202	1		possible post-hole cut
1203	1		fill of possible post-hole 1204
1204	1		possible post-hole cut

Context	Area	Group	Description
1205	1		post-hole cut
1206	1		fill of post-hole 1205
1207	1		post-hole cut
1208	1		fill of post-hole 1207
1209	1		post-hole cut
1210	1		fill of post-hole 1209
1211	1		fill of possible post-hole 1202
1212	1		fill of post-hole 1213
1213	1		post-hole cut
1214	1		gully cut
1215	1		fill of gully 1214
1216	1		gully cut
1217	1		fill of gully 1216
1218	1		post-hole cut
1219	1		fill of post-hole 1218
1220	1		gully cut
1221	1		fill of gully 1220
1222	1		post-hole cut
1223	1		fill of post-hole 1222
1224	1		fill of post-hole 1225
1225	1		post-hole cut
1226	1		fill of post-hole 1227
1227	1		post-hole cut
1228	1		fill of gully 1229
1229	1		gully 1228
1230	1		fill of post-hole 1231
1231	1		post-hole cut
2000	2		topsoil
2001	2		subsoil
2002	2	1	fill of 2003
2003	2	1	final recut of ditch 2007
2004	2	1	fill of 2005
2005	2	1	recut of ditch 2007
2006	2	1	fill of 2007
2007	2	1	ditch cut
2008	2	8	ditch cut
2009	2	8	upper (tertiary) fill of ditch 2008
2010	2	8	charcoal-rich secondary fill/lens in ditch 2008
2011	2	8	primary fill of ditch 2008
2012	2	9	fill of ditch 2013
2013	2	9	ditch cut
2014	2	8	fill of ditch 2008
2015	2		fill of ditch 2016
2016	2		ditch segment cut
2017	2		shallow discrete cut
2018	2		fill of cut 2017
2019	2		fill of furrow

Context	Area	Group	Description
2020	2		furrow cut
2021	2	9	ditch cut
2022	2	9	primary fill of ditch 2021
2023	2	9	secondary fill of ditch 2021
2024	2	9	upper (tertiary) fill of ditch 2021
2025	2		natural feature
2026	2		natural
2027	2	9	ditch cut
2028	2	9	primary fill of ditch 2027
2029	2	9	secondary fill of ditch 2027
2030	2	9	primary fill of recut 2031
2031	2	9	recut of ditch 2027
2032	2	9	secondary fill of ditch 2027
2033	2	9	tertiary fill of recut 2031
2034	2	9	upper (fourth) fill of recut 2031
2035	2	9	tertiary fill of ditch 2027
2036	2	9	upper fill of ditch 2037
2037	2	9	ditch cut
2038	2		fill of ditch 2039 (2016)
2039	2		ditch segment cut (2016)
2040	2	78	ditch/pit cut (recut of 2054)
2041	2	8	ditch cut
2042	2	8	primary fill of ditch 2041
2043	2		fill of cut 2044
2044	2		shallow discrete cut
2045	2	8	charcoal-rich secondary fill/lens in ditch 2041
2046	2	8	upper (tertiary) fill of ditch 2041
2047	2	78	fill of recut 2048
2048	2	78	recut of ditch/pit 2040
2049	2	78	secondary fill of ditch 2040
2050	2	78	primary fill of ditch 2040
2051	2	71	fill of ditch 2052
2052	2	71	ditch cut
2053	2	78	fill of ditch 2054
2054	2	78	ditch cut
2055	2	8	ditch cut
2056	2	8	primary fill of ditch 2055
2057	2	8	secondary fill of ditch 2055
2058	2	8	upper (tertiary) fill of ditch 2055
2059	2	8	ditch cut (=2041)
2060	2	8	upper fill of ditch 2059
2061	2		natural
2062	2		natural
3000	3		topsoil
3001	3		subsoil
3002	3	1	ditch cut
3003	3	1	primary fill of ditch 3002

Context	Area	Group	Description
3004	3	1	secondary fill of ditch 3002
3005	3	1	upper (tertiary) fill of ditch 3002
3006	3		post-hole cut
3007	3		fill of post-hole 3006
3008	3	1	ditch cut
3009	3	1	primary fill of ditch 3008
3010	3	1	secondary fill of ditch 3008
3011	3	1	upper (tertiary) fill of ditch 3008
3012	3		furrow cut
3013	3		fill of furrow 3013
3014	3	1	ditch cut
3015	3	1	primary fill of ditch 3014
3016	3	1	upper (secondary) fill of ditch 3014

Appendix III

Inventory of artefacts

Fabric	Area	Context	SF no.	Quantity	Details
Romano-British pottery	1 (Tr B)	104		10	
	1 (Tr A)	118		1	
	1 (Tr A)	120		28	
	1 (Tr A)	120		14	surface finds
	1 (Tr A)	122		2	
	1 (Tr A)	126		9	
	1 (Tr A)	138		1	
	1 (Tr A)	unstrat		1	
evaluation sub-total				66	
	1	1002		14	
	1	1007		31	
	1	1038		5	
	1	1049	05	28	
	1	1050		6	
	1	1068		66	
	1	1072		11	
	1	1086		1	
	1	1089		6	
	1	1091		7	
	1	1094		1	
	1	1114		8	
	1	1118		1	
	1	1124		2	
	1	1136		1	
	1	1142		3	
	1	1151		179	
	1	1155		5	
	1	1161		3	
	1	1164		1	
	1	1187		3	
	1	1201		3	
	1	1226		3	
		unstrat	04	22	
excavation sub-total				410	
Total				476	
Post-med pottery		unstrat		2	
	1	1024	06	1	
Daub	1 (Tr J)	198		1	
	1	1002		1	
Stone/flint flakes	2	2049	04	1	
	1 (Tr J)	198		1	

Fabric	Area	Context	SF no.	Quantity	Details
Cu alloy	1 (Tr B)	101	ev01	1	
Worked stone	1 (Tr A)	141	ev02	1	
	1 (Tr A)	141	ev03	1	
Slag	1	1024		1	molten glass
	1	1039		1	probable tap slag
Uncertain material	1	1144		2	2 frags unident.

Appendix IV**Inventory of samples processed**

Sample	Area	Context	Group	Type	Description
10	1 (Tr A)	145		GBA	sole fill of pit 144
24	1 (Tr A)	184		GBA	sole fill of pit 183
25	1 (Tr A)	186		GBA	upper (secondary) fill of possible hearth 185
26	1 (Tr A)	189		GBA	sole fill of gully 188
37	2	2006	1	GBA	primary fill of ditch 2007
39	3	3015		GBA	primary fill of ditch 3016
41	3	3009	1	GBA	primary fill of ditch 3008
43	3	3003	1	GBA	primary fill of ditch 3002
48	2	2028	9	GBA	primary fill of ditch 2027
49	2	2030	9	GBA	primary fill of ditch 2031 (recut of 2027)
54	2	2042	8	GBA	primary fill of ditch 2041
57	1	1002	2	GBA	sole fill of ditch 1003
58	1	1017		GBA	upper (tertiary) fill of hearth 1014
59	1	1016		GBA	secondary fill of hearth 1014
60	1	1015		GBA	primary fill of hearth 1014
65	1	1021		GBA	primary fill of hearth 1020
66	1	1022		GBA	upper (secondary) fill of hearth 1020
68	1	1035	1	GBA	secondary fill of ditch 1037 (after slumping)
69	1	1041	2	GBA	primary fill of ditch 1040
78	1	1068	1	GBA	primary fill of ditch 1069
81	1	1072	2	GBA	sole fill of ditch 1071
86	1	1091		GBA	fill of post-hole 1090
88	1	1088	1	GBA	primary fill of ditch 1087
90	1	1100		GBA	sole fill of ditch 1099
96	1	1118		GBA	fill of post-hole 1117
98	1	1114		GBA	sole fill of ditch 1113
100	1	1124		GBA	fill of post-hole 1123
102	1	1128		GBA	sole fill of ditch 1127
106	1	1133	1	GBA	primary fill of ditch 1140
108	1	1142		GBA	fill of gully 1141
109	1	1144		GBA	fill of post-hole 1143
110	1	1148		GBA	sole fill of gully 1147
112	1	1155	5	GBA	sole fill of ditch 1154
115	1	1164		GBA	fill of post-hole 1165
116	1	1166		GBA	fill of post-hole 1167
118	1	1152	1	GBA	primary fill of ditch 1153
128	1	1201	5	GBA	sole fill of ditch 1200
135	1	1217		GBA	sole fill of gully 1216

Appendix V

Romano-British pottery by Jeremy Evans Ph.D.

Fabric code	Description
O01	A buff-orange fabric with some coarse quartz sand <i>c.</i> 0.3-0.8mm
O02	An oxidised ware with black core and orange-brown margins and surfaces with some angular grey grog <i>c.</i> 0.5-1.5mm and some to common vegetable temper voids up to 2mm
O03	An oxidised fabric with orange core, margins and surfaces with common sand <i>c.</i> 0.3-0.4mm and occasional to some rounded red ironstone <i>c.</i> 1-3mm, perhaps a South Yorkshire product
R01	A greyware with some to common fine lime sand <i>c.</i> 0.2-0.4mm, occasional sub-angular quartz <i>c.</i> 0.4mm and some angular grey grog <3mm
R02	South Yorkshire greyware (Buckland and Dolby 1980)
R03	A mid-grey fabric with some angular grey grog <i>c.</i> 1-3mm and occasional to some organic temper voids <3mm
R04	A reduced fabric with dark grey-brown core, orange-brown margins and black surfaces, with abundant to very fine sand <i>c.</i> 0.05mm
W01	A 'clean', 'soapy' whiteware with occasional sand and occasional red ironstone both <i>c.</i> 0.2mm

Catalogue

Context	Description
unstrat. Tr. A	A greyware bodysherd, Roman. Wt 7g
unstrat. general	7 freshly broken sherds from a single greyware rimsherd from a curving walled, bead rimmed, wide-mouthed jar. Fabric R01. Diam. 350mm; RE 6%; wt 86g
	A rimsherd from a jar in South Yorkshire greyware with everted, rising rim, rim sooted, perhaps cf Buckland and Dolby (1980) class E(a), Hadrianic-Antonine(?). Diam 140mm; RE 13%; wt 25g
	A simple base sherd from a jar in South Yorkshire greyware, 2nd-4th century. Base diam. 90mm; BE 12%; wt 13g
	13 bodysherds from closed forms in South Yorkshire greyware. Wt 64g
104	9 sherds from an oxidised sandy flagon neck with a handle scar, very eroded, also a sandy oxidised flagon footing base, not necessarily from the same vessel, probably 1st-2nd century. Wt 101g
118	A sandy greyware bodysherd, exterior burnished. Roman. Wt 1g
surface of 120	14 small sherds and fragments in a 'soapy' handmade fabric with black core and orange-brown margins and surfaces with common shell voids <i>c.</i> 0.5-3mm. Possibly Dalesware but perhaps rather an Iron Age or early Roman fabric. Wt 15g
120	A greyware wide-mouthed jar with everted rim in a reduced fabric with common large grey grog temper, fabric and form as vessel in context 126, comprising 4 rimsherds, 5 bodysherds and a bodysherd with a handle stub. Perhaps 1st-2nd century. Diam. 180mm; RE 63%; wt 315g

Context	Description
120	<p>13 greyware bodysherds from a single vessel, overfired, sandy greyware, possibly South Yorkshire, perhaps 2nd-4th century. Wt 145g</p> <p>A BB1 jar base and 3 bodysherds, very burnt and eroded; also a BB1 jar bodysherd with acute lattice decoration, Hadrianic-Antonine. Wt 38g</p>
122	<p>2 joining lower wall sherd from a wide mouthed jar(?), heavily eroded. Possibly South Yorkshire greyware. Perhaps 2nd-4th century. Wt 130g</p>
126	<p>Jar with everted rising rim, hooked at tip in a reduced fabric with common large angular grey grog, perhaps a Lincolnshire or Derbyshire fabric. Perhaps later 1st-2nd century. Diam. 60mm; RE 19%; wt 70g</p>
138	<p>A very eroded coarse sandy bodysherd with grey interior and white core and exterior. Possibly medieval (or Roman). Wt 8g</p>
1049	<p>Much of a BB1(?) groove rimmed dish with chamfered base, surfaces very spalled by post-depositional erosion, with 11 rimsherds, 7 base sherds and 10 bodysherds. The fabric has abundant sand c. 0.3mm, no visible shale, perhaps South Yorkshire BB1. The form is Hadrianic-Antonine, cf Buckland and Dolby (1980), no 6. Diam 170mm; RE 90%; base diam. 140mm; BE 94%; wt 300g</p>
1002	<p>4 bodysherds and a rim fragment in South Yorkshire greyware (R02). The rim fragment is from a medium-mouthed jar with everted, rising rim, perhaps a BB copy, perhaps Hadrianic-Antonine. Diam. c. 120mm; RE<5%; wt 15g</p> <p>A wide-mouthed jar rimsherd in South Yorkshire greyware, eroded, with beaded rim, cf Buckland and Dolby (1980) class H, 2nd-4th century. Diam. 340mm; RE 8%; wt 92g</p> <p>A bodysherd and 2 joining base sherds from a large simple base, perhaps from a wide-mouthed jar in South Yorkshire greyware (R02), 2nd-4th century. Base diam. 160mm; BE 31%; wt 150g</p> <p>A bodysherd and a rimsherd from a wide-mouthed jar with a beaded rim in fabric R01 (perhaps from the same vessel as the unstratified rim) of similar form to South Yorkshire wide-mouthed jars, perhaps 1st-2nd century. Diam. 350mm; RE 6%; wt 115g</p> <p>A rimsherd and 2 bodysherds in a clean, 'soapy' whiteware (W01) of beaded and flanged form, probably from a segmental bowl rather than a delicate mortarium. Perhaps 2nd century. Diam. 270?mm; RE 4%; wt 37g</p>
1007	<p>4 joining rimsherds and 27 bodysherds in South Yorkshire greyware (R02). The rim is from a small jar with short, straight, everted rising rim. Diam. 110mm; RE 36%; wt 90g</p>
1038	<p>A BB1(?) jar rim and shoulder sherd, sooted, cf Buckland and Dolby (1980) class E(a), Hadrianic-Antonine. Diam. 140mm; RE 12%; wt 17g</p> <p>4 greyware sherds in R03. Wt 23g</p>
1050	<p>A sandy greyware bodysherd in South Yorkshire greyware (R02) with vertical linear rusticated decoration, Flavian-Trajanic. The sherd appears to have been trimmed to form a crude counter c. 36 x 34mm. Wt 7g</p> <p>A slightly eroded South Yorkshire greyware bodysherd (R02). 2nd-4th century. Wt 8g</p> <p>A joining eroded bodysherd and rimsherd from a simple rimmed dish, probably South Yorkshire greyware (R02), 2nd-4th century. Diam. 180mm; RE 7%; wt 27g</p> <p>A jar shoulder bodysherd in South Yorkshire greyware. Wt 8g</p> <p>An eroded simple base from a small jar (or beaker) in South Yorkshire greyware. Base diam. 30mm; BE 75%; wt 33g</p>

Context	Description
1068	5 rimsherds in South Yorkshire greyware (R02) from a jar with a straight everted, rising rim, slightly lid-seated, cf Buckland and Dolby (1980) type E(b). Also 57 bodysherds probably mainly from this vessel. Diam. 140mm; RE 83%; wt 563g 2 bodysherds in South Yorks greyware (R02), 2nd-4th century. Wt 4g
1072	9 bodysherds, eroded, in South Yorkshire greyware. Wt 32g Also 2 joining sherds from the chamfered base of a 'cheese press', Buckland and Dolby (1980) class J. Base diam. 110mm; BE 6%; wt 15g
1086	A beaded jar rimsherd in South Yorkshire greyware (R02), perhaps cf Buckland and Dolby (1980) no 131, class F, 2nd-4th century. Diam. 190?mm; RE 8%; wt 40g
1089	A South Yorkshire greyware bodysherd. Wt 3g An eroded rim fragment from a bead/groove rimmed dish, Hadrianic-Antonine. Diam. 190?mm; RE 3%; wt 4g A South Yorkshire greyware jar rim fragment, slightly hooked. Diam. 160?mm; RE 6%; wt 10g 3 joining bodysherds from an oxidised flagon neck, fabric O03, 1st-2nd century. Wt 21g
1091	6 eroded bodysherds and an eroded and burnt jar base, probably South Yorkshire greyware, 2nd-4th century. Base diam. 130mm; BE 11%; wt 62g
1094	A simple base sherd from a large jar or wide-mouthed jar in South Yorkshire greyware. Base diam. 130mm; BE 36%; wt 185g
1114	8 eroded bodysherds in South Yorkshire greyware, probably from at least three vessels. Wt 12g
1118	A South Yorkshire greyware necked jar(?) rim fragment with beaded rim, sooted. 2nd-4th century. Diam. ?; RE <2%; wt 2g
1124	2 joining sandy bodysherds, perhaps South Yorkshire greyware (R02) burnt orange. Wt 5g
1136	An oxidised closed form bodysherd (O02) with black core and orange-brown margins and surfaces. Wt 43g
1142	A rimsherd and 2 joining shoulder sherds from a wide-mouthed jar with beaded rim in South Yorkshire greyware (R02), Buckland and Dolby (1980) class H. Diam. 350mm; RE 6%; wt 83g
1151	Much of a medium-mouthed rather globular jar with everted, rising rim and pair of loop handles on the shoulder, exterior unburnished. This comprises 7 rimsherds, 4 base sherds and 166 bodysherds in South Yorkshire greyware (R02) cf Buckland and Dolby (1980) no 131 and Buckland <i>et al.</i> (1980) no. 25, 2nd-4th century. Diam. 150mm; RE 91%; base diam. 140mm; BE 50%; wt 2667g A bodysherd, broken into 2, in O01. Wt 3g
1155	4 eroded bodysherds and an eroded base sherd from a closed form. Base diam. 90mm; BE 11%; wt 23g
1161	3 South Yorkshire greyware bodysherds (R02), exterior heavily sooted. These sherds look like they might belong to the same vessel as the jar in (1068). Wt 32g
1164	A bodysherd in fabric R01, 1st-2nd century. Wt 3g

Context	Description
1187	2 joining rimsherds and a joining bodysherd from a wide-mouthed jar with a squared, grooved rim, perhaps cf Buckland and Dolby (1980) no 200, 2nd-4th century. Diam. 300mm; RE 18%; wt 160g
1201	3 South Yorkshire bodysherds (R02), one has burnished lattice decoration which appears to be obtuse. Perhaps 3rd-4th century. Wt 8g
1226	2 rimsherds and 1 bodysherd from a simple rimmed dish in a fine greyware with black well-burnished surfaces, R04, perhaps a TN copy? Possibly 1st-early 2nd century. Diam. 190?mm; RE 6%; wt 8g

Appendix VI

Radiocarbon dating certificates



Scottish Universities Research and Reactor Centre

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East Kilbride Scotland UK G75 0QF

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E-mail: g.cook@surr.gla.ac.uk
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RADIOCARBON DATING CERTIFICATE

18 January 2002

Sample	AA-45878(GU-9620)
Submitter	Andrea Burgess Archaeological Services WYAS P.O.Box 30, Nepshaw Lane South Morley, Leeds LS27 0UG
Material	Charcoal : Salix sp.
Sample Reference	High Street Shafton (HSX00) : 1015: sample 60
Delta ¹³C rel. PDB	-26.2‰
Radiocarbon Age BP	1885 ± 45
Calibrated Age Ranges	1σ cal AD 74-210, cal BP 1876-1740 2σ cal AD 26-240, cal BP 1924-1710

N.B. 1. The above ¹⁴C age is quoted in conventional years BP (before 1950 AD). The error is expressed at the one sigma level of confidence.

2. The calibrated age ranges are determined from the University of Washington, Quaternary Isotope Laboratory, Radiocarbon Dating Program, Rev. 4.0 1998. The decadal atmospheric calibration curve is used throughout and the calendar age ranges, obtained from the intercepts (Method A), are expressed at both the one and two sigma levels of confidence. In the case of marine shell samples derived from around the U.K. coastline, an apparent age (reservoir effect) of 405 ± 40 years (Harkness, 1983) is subtracted from the conventional ¹⁴C age prior to calibration using the decadal atmospheric curve.

3. Samples with an AA coding are measured at the University of Arizona AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to SURRC should also quote the GU coding that is given in parentheses after the AA code.

Reference

Harkness, D.D. (1983) The extent of natural ¹⁴C deficiency in the coastal environment of the United Kingdom. In *¹⁴C and Archaeology*, Groningen August 1981, 351-364.

Conventional age and calibration age ranges calculated by :-

P. Naysmith

Date :- 21-1-02

Checked and signed off by :-

Gordon E Cook

Date :- 21-1-02



Scottish Universities Research and Reactor Centre

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RADIOCARBON DATING CERTIFICATE

18 January 2002

Sample	AA-45879(GU-9621)
Submitter	Andrea Burgess Archaeological Services WYAS P.O.Box 30, Nephshaw Lane South Morley, Leeds LS27 0UG
Material	Charcoal : Salix sp.
Sample Reference	High Street Shafton (HSX00) : 1021; sample 65
Delta ¹³C rel. PDB	-27.3‰
Radiocarbon Age BP	1950 ± 40
Calibrated Age Ranges	1σ cal AD 4-117, cal BP 1946-1833 2σ cal BC 41-cal AD 130, cal BP 1990-1820

N.B. 1. The above ¹⁴C age is quoted in conventional years BP (before 1950 AD). The error is expressed at the one sigma level of confidence.

2. The calibrated age ranges are determined from the University of Washington, Quaternary Isotope Laboratory, Radiocarbon Dating Program, Rev. 4.0 1998. The decadal atmospheric calibration curve is used throughout and the calendar age ranges, obtained from the intercepts (Method A), are expressed at both the one and two sigma levels of confidence. In the case of marine shell samples derived from around the U.K. coastline, an apparent age (reservoir effect) of 405 ± 40 years (Harkness, 1983) is subtracted from the conventional ¹⁴C age prior to calibration using the decadal atmospheric curve.

3. Samples with an AA coding are measured at the University of Arizona AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to SURRC should also quote the GU coding that is given in parentheses after the AA code.

Reference

Harkness, D.D. (1983) The extent of natural ¹⁴C deficiency in the coastal environment of the United Kingdom. In *¹⁴C and Archaeology*, Groningen August 1981, 351-364.

Conventional age and calibration age ranges calculated by :- *P. Naupsmith*

Date :- 21-1-02

Checked and signed off by :-

Gordon Z Cook

Date :- 21-1-02

Appendix VII
Specification for archaeological excavation

**High Street, Shafton,
South Yorkshire
Written Scheme Of Investigation**

1. Introduction & Archaeological Background

- 1.1 An archaeological excavation has been requested for the above proposed development area (SE 392 107). This document forms the strategy for further evaluation of the site via open area excavation and large scale trial trenching, and has been prepared for Mr M. Jones of Ben Bailey Homes Ltd, by Archaeological Services WYAS for approval by the Sites and Monuments Record (SMR) of the South Yorkshire Archaeology Service.
- 1.2 There is reason to believe, following a geophysical survey (Stage 1), and preliminary trial trenching (Stage 2) that the western half of the application area contains the remains of a Romano-British settlement, set within a landscape of fields and probably approached by a trackway running east to west. The limited ceramic evidence found during the trial trenching suggests that the site was occupied at least from the late 1st-2nd centuries AD. The remains are in places ephemeral having been truncated by plough damage.
- 1.3 Consequently South Yorkshire SMR has advised that preservation in situ is not an option as the archaeological remains are often not buried deeply. The alternative is preservation by record – by archaeological excavation and recording. It has been recommended therefore that further archaeological field evaluation should be carried out, in line with government guidance as set out in D.O.E. Planning Policy on Archaeology and Planning (PPG16 1990). The results of this evaluation will mitigate against the impact of the proposed development on the archaeological deposits to be assessed.
- 1.4 This document details the proposed methodology for the required field evaluation.

2. Aims and Objectives

- 2.1 In the area of the proposed development, any below-ground works are likely to impact greatly upon any surviving archaeological deposits within and below topsoil cover. It has been recommended therefore that further archaeological excavation should take place, particularly inside the enclosure and in the area of the possible settlement, in order to fully record the archaeological deposits.
- 2.2 The general aims and objectives of the archaeological excavation in the area of the proposed development will be:
- to gather sufficient information to establish the presence/absence of archaeological remains within the proposed development area;
 - to determine the extent, condition, character, quality of survival, importance and date of any archaeological remains present.
- 2.3 Specifically:
- to establish the extent of any ‘settlement’ outside the previously identified enclosure;

- to establish more clearly the relationship between the settlement/enclosure and the trackway to the south.

3. **Proposed Method**

- 3.1 Experience that has been gained from evaluating this type of landscape suggests that it is more worthwhile opening larger areas to try and isolate possible areas of occupation than simply targeting the field boundary ditches which are often of prehistoric/Romano-British date but which invariably contain little datable material. Of more interest, is the potential of identifying discrete areas of occupation within, or on the periphery of, the field system. The validity of this approach has been demonstrated with the results from the the initial large scale trial trenching which identified an area of probable occupation outside the presumed main enclosure.
- 3.2 The next phase of the evaluation will involve the investigation of those areas indicated on the figure attached to this document (Figure 1). They are positioned to investigate the nature, depth and extent of any deposits encountered. All trench locations will be established and set out using the 600 series robotic Geodimeter system and locational information being derived from the geophysical survey stations.

Proposed trench areas

Trench	Dimensions	Area
1	50m by 60m	3000m ²
2	10m by 20m	200m ²
3	20m by 20m	400m ²
	Total	3600²

- 3.3 Trench 1 encloses Trench A from the first phase of trial trenching and is positioned to evaluate any further archaeological features within the main body of the enclosure, determine the extent of the 'settlement' and determine the relationship between the two.
- 3.4 Trench 2 is located to establish the relationship between the enclosure/settlement and the field system/trackway and to determine whether further features (undetected by the geophysical survey) survive outside (to the east of) this feature.
- 3.5 Trench 3 is also positioned to establish the relationship between the enclosure/settlement and the field system.
- 3.6 An area not exceeding 10% of the total area (i.e 360m²) to be set aside as a contingency to evaluate fully any archaeological features extending beyond the limits of the above three trenches. The client will be notified prior to any use of the contingency.
- 3.7 The location of the proposed trenches will be read from the available map data. These co-ordinates will then be used to set out the trenches which will maximise the accuracy of the trench locations. However, due to unforeseen nature of the below-ground modern make-up it is proposed that the trench

locations may be subject to change at the discretion of the supervising archaeologist and in consultation with the South Yorkshire SMR.

3.8 All trenches to be machine excavated, using an appropriate mechanical excavator with a toothless ditching bucket, under direct archaeological supervision, in level spits to the top of the first archaeological horizon or undisturbed natural. The resulting surface to be inspected for archaeological remains and tagged as seen. Where archaeological remains require clarification the relevant area will be cleaned by hand. Non-modern artefacts will be collected from the excavated topsoil.

3.9 Archaeological features will be hand excavated in an archaeologically controlled and stratigraphic manner in order to meet the aims and objectives outlined above. All features will be investigated in order to understand the full stratigraphic sequence, down to the naturally occurring deposits. Where minor archaeological features such as agricultural boundary ditches are identified, they will be planned and minimally sampled (10% by length). Where more substantial or significant features or deposits are identified, they will be treated through the following sampling strategies :

- Linear features: A minimum of 10% (or a minimum sample of 1m if the feature is less than 10m long) of the deposits within linear features, such as boundary or drainage ditches associated with domestic, agricultural, industrial, funerary or ritual enclosures, or fields, or trackways, will be excavated to their full depth. These segments will be of no less than 1m in length. Where possible one section will be located and recorded adjacent to the trench edge.
- Intersections of linear features: The deposits at the junctions of, or interruptions in, linear features will be totally removed over a sufficient length to determine the nature of the relationship between the components. Excavation of an 'L'-shaped section will be undertaken in the first instance to demonstrate and record relationships and then expanded to the full widths, planned and recorded.
- Discrete features: Pits, post-holes and other isolated features will normally be half-sectioned to determine and record their form. The exceptions will be potential sunken-floored buildings, wall-settings, hearths, kilns, storage pits or other identifiable domestic, agricultural, industrial, funerary or ritual structures or buildings. These features will be half sectioned as a minimum, with a provision for 100% excavation if necessary, in order to interpret determine and record their form. Huts, barns, kilns, gateways, causeways, working hollows, floor levels, hearths will also be excavated to a degree whereby their extent, nature, form, date, function and relationship to other features and deposits can be established. Again at least 50% of these features will be excavated, with a provision for 100% excavation if required to achieve the aims of the excavation.
- Built structures, such as walls, will be examined and sampled to a degree whereby their extent, nature, form, date, function and relationship to other features and deposits can be established.

- 3.10 A full written, drawn and photographic record will be made of all material revealed during the course of the evaluation. The trench limits will be surveyed using the Geodimeter Total Station with larger scale hand drawn plans of features at 1:20, as appropriate. Sections of linear and discrete features will be drawn at 1:10. All sections, plans and elevations will include spot-heights related to Ordnance Datum in metres as correct to two decimal places and survey tie-in information will be undertaken during the course of the evaluation and will be fixed in relation to nearby permanent structures and roads and to the National Grid (located on the 1:2500 map of the area).
- 3.11 All finds will be recorded, where practicable, three dimensionally using the robotic 600 series Geodimeter system. The resulting data will be downloaded and processed using Landscape 3.1 software. All artefacts recovered will be retained and removed from the site for conservation and analysis (except in the case of 19th and 20th century artefacts that will be noted but not retained). Non-modern artefacts will be collected from the excavated topsoil to aid in an assessment of the spatial distribution of finds across the site. Finds material will be stored in controlled environments, where appropriate. All artefacts recovered will be retained, cleaned, labelled and stored as detailed in the guidelines laid out in the IFA Guidelines for Finds Work. Conservation, if required, will be undertaken by the University of Bradford or other approved conservators dependent on availability. UKIC guidelines will also apply.
- 3.12 Context recording will be by Archaeological Services WYAS standard method (Boucher 1995). All contexts, and any small finds and samples from them will be given unique numbers. Bulk finds will be collected by context. Colour transparency and monochrome negative photographs will be taken at a minimum format of 35mm.
- 3.13 An environmental and/or soil specialist will visit the site prior to the commencement of the excavation to advise on the implementation of an appropriate sampling strategy. This may include any or all of the following options:-
- A soil-sampling programme may be undertaken for the identification and recovery of carbonised and waterlogged remains, vertebrate remains, molluscs and small artefactual material.
 - Where appropriate and practicable soil samples of between 10 and 30 litres may be taken from excavated contexts, and larger samples will be taken of any rich carbonised deposits. Particular attention will be paid to the sampling of primary ditch fills and any surviving buried soils beneath banks or other positive features (if any of the latter are found to survive) and for the recovery of material suitable for radiocarbon, thermoluminescence and/or dendrochronological determinations, as appropriate.
 - If buried soils or other appropriate deposits are encountered column samples may be taken for micromorphological and pollen analysis. Where appropriate environmental material will be stored in controlled environments.
- 3.14 In the event of human remains being discovered during the excavation these will be left *in situ*, covered and protected, in the first instance. The removal of

human remains will only take place under appropriate Home Office and environmental health regulations, and in compliance with the Burial Act 1857. If human remains are identified the SMR and Coroner will be informed immediately. A Home Office licence will be obtained prior to the removal of the remains and contingency provision will be made for the specialist reports on the remains and either Helen Start MSc or Dr Charlotte Roberts will undertake this osteoarchaeological work.

- 3.15 Provision will be made for the recovery of samples suitable for scientific dating. Contingency sums will be made available for thermoluminescent dating and radiometric/AMS dating, if deemed necessary, and will only be acted upon in consultation with the South Yorkshire Sites and Monuments Record. In the event that archaeomagnetic dates may be possible, these will have to take place on-site and will therefore be dependent upon specialist availability. If this is not possible then archaeomagnetic dating may have to be delayed or enacted upon during a further stage of work.
- 3.16 Further contingency provisions will be made available for specialist reports on animal bone, pottery, metalwork and other miscellaneous small finds. All contingencies are to have the prior agreement of the South Yorkshire SMR before they are invoked and this agreement will be recorded in writing, if necessary in retrospect.
- 3.17 All finds that fall within the purview of the Treasure Act 1996 will be reported to HM Coroner according to the procedures outlined in the Act, after discussion with the client and the SMR.
- 3.18 It is envisaged that the evaluation and recording of the three areas will be completed within six to eight weeks. The archaeological team will consist of a Project Manager, a Project Supervisor and five Site Assistants. Although the field team may be subject to change all Archaeological Services WYAS staff are professionals.

4. *Archive preparation and deposition*

- 4.1 The site archive will contain all the data collected during the exploratory work, including records, finds and environmental samples. It will be quantified, ordered, indexed and internally consistent. Adequate resources will be provided during fieldwork to ensure that all records are checked and internally consistent. Archive consolidation will be undertaken immediately following the conclusion of fieldwork:
 - the site record will be checked, cross-referenced and indexed as necessary;
 - all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of the recipient museum;
 - all retained finds will be assessed and recorded using pro forma recording sheets, by suitably qualified and experienced staff. Initial artefact dating will be integrated with the site matrix;
 - all retained environmental samples will be processed by suitably experienced and qualified staff and recorded using pro forma recording sheets, to identify at this stage presence or absence of environmental remains.

- 4.2 The archive will be assembled in accordance with the specification set out in English Heritage's "*Management of Archaeological Projects 2*" (English Heritage, 1991; Appendix 3). In addition to the site records, artefacts, ecofacts and other sample residues, the archive shall contain:
- site matrices where appropriate;
 - a summary report synthesising the context record;
 - a summary of the artefact record;
 - a summary of the environment record.
- 4.3 The integrity of the primary field record will be preserved. Security copies will be maintained where appropriate.
- 4.4 Provision will be made for the deposition of the archive, artefacts and environmental material, subject to the permission of the relevant landowner (and if no further archaeological work is to be initiated), in an appropriate recipient museum (Doncaster Museum). The museum will be advised of the timetable of the proposed investigation prior to evaluation commencing. Further, Archaeological Services WYAS will adhere to any reasonable requirements the museum may have regarding conservation and storage of the excavated material and the resulting archive. The archive will be prepared in accordance with the guidelines published in "*Guidelines for the preparation of Excavation Archives for long-term storage*" (United Kingdom Institute for Conservation, 1990) and "*Standards in the Museum care of archaeological collections*" (Museums and Galleries Commission, 1994). Provision will be made for the stable storage of paper records and their long-term storage on a suitable medium, such as microfilm. A copy will be provided to the National Monuments Record.
- 4.5 Should further archaeological evaluation be initiated and/or additional archaeological work undertaken, the evaluation archive will be prepared accordingly for incorporation into the final archive.
- 4.6 Archive deposition will be arranged in consultation with the recipient museum and the South Yorkshire SMR and will take into account all requirements of the recipient museum and of the relevant guidelines outlined above. The timetable for deposition will be agreed on completion of the site archive and narrative.
- 5. Report preparation, contents and distribution**
- 5.1 Upon completion of the evaluation, the artefacts, ecofacts and stratigraphic information shall be assessed as to their potential and significance for further analysis. If the post-excavation analysis delays the final report an interim report will be produced within 6 months.
- 5.2 A post-excavation assessment report will be prepared and include the following :
- a non-technical summary of the results of the work;
 - a summary of the project's background;
 - the site location;

- an account of the method;
 - the results of the evaluation, including phasing and interpretation of the site sequence and spot-dating of ceramics;
 - a post-excavation assessment of the stratigraphic and other written, drawn and photographic records;
 - a catalogue and post-excavation assessment of each category of artefact recovered during excavation;
 - a catalogue and post-excavation assessment of any faunal remains recovered during the excavation;
 - a catalogue of soil samples collected and post-excavation assessment of the results of the soil sampling programme;
 - catalogues and post-excavation assessments and/or summary reports of all scientific dating procedures or other analyses carried out;
 - an appendix containing a list and summary descriptions of all contexts recorded and,
 - a summary of the contents of the project archive and its location.
- 5.3 The report will be supported by an overall plan of the site, accurately identifying the location of trenches; individual trench plans as excavated, indicating the location of archaeological features with supporting section drawings where appropriate; and photographs.
- 5.4 The report will also contain the specialist assessments of the artefacts and ecofacts recovered with a view to their potential for further study. This may form another phase of work. If this is required a separate Brief and costing will be provided at the time.
- 5.5 Finally, the post-excavation report will outline the archaeological significance of the deposits identified, and provide an interpretation of the results in relation to other sites in the region.
- 5.6 Copies of the report will be submitted to the Client, the Local Planning Authority, and the Sites and Monuments Record within an agreed timetable, notwithstanding any contractual requirements on confidentiality (see section 7 below).
- 6. Publication and Dissemination**
- 6.1 It is to be appreciated that the assessment may produce results of sufficient significance to merit publication in their own right. Allowance will be therefore be made for the preparation and publication of the work in the appropriate issue of *Archaeology in South Yorkshire*, and, if of regional or national significance, within an appropriate journal. Any decisions on the publication of the archaeological evidence will be made in consultation with the South Yorkshire Archaeology Service.
- 6.2 It is understood that the results of the excavation may be of interest to the wider public and as such may be disseminated by means of occasional talks.

7. Copyright, Confidentiality and Publicity

- 7.1 Unless the Client commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic record and reports rests with the originating body (Archaeological Services WYAS). Issues concerning copyright will be agreed between Archaeological Services WYAS and the Client at the outset of the project.
- 7.2 The circumstances under which other parties can use the report or records will be identified at the commencement of the project, as will the proposals for the distribution of the report. Archaeological Services WYAS will respect the Client's requirements over confidentiality, but will endeavour to emphasise the company's professional obligation to make the results of archaeological work known to the wider archaeological community within a reasonable time.

8. Health and Safety

- 8.1 Archaeological Services WYAS has its own Health and Safety policy, which has been compiled using national guidelines such as SCAUM. These guidelines conform to all relevant Health and Safety legislation.
- 8.2 In addition each project undergoes a 'Risk Assessment' which sets project specific Health and Safety requirements to which all members of staff are made aware of prior to on-site work commencing.
- 8.3 Health and safety will take priority over archaeological matters. Necessary precautions will be taken over underground services and overhead lines at the outset of the project.

9. Insurance

- 9.1 Archaeological Services WYAS is covered by the insurance and indemnities of the City of Wakefield Metropolitan District Council.
- 9.2 Insurance has been effected with: Zurich Municipal, Sterling House, 2 The Bourse, LEEDS LS1 5EE.
- 9.3 The policy number is QLA 03R896 0013.
- 9.4 Any further enquiries should be directed to: Head of Financial Services, Central Services Department, City of Wakefield MDC, County Hall, Bond Street, Wakefield WF1 2QW.

10. Monitoring

- 10.1 The work will be monitored by the Sites and Monuments Record office of the South Yorkshire Archaeology Service who will be consulted before the commencement of any site works and afforded the opportunity to inspect the site and the records at any stage of the work.

11. Resources and Programming

11.1 Project personnel :

Project Manager:	Alistair Webb BA
Chief Surveyor:	Rob McNaught BSc (Hons)
Project Supervisor:	Rob McNaught
Site Assistant	Marina Rose BSc (Hons)
Site Assistant	Stephen Toase BSc (Hons)
Site Assistant	TBA
Artefact co-ordinator:	Kath Keith BA (Hons)
Illustrator/CAD operator:	Andy Swann MAAIS
Photographer:	Paul Gwilliam BA (Hons)

11.2 Post-excavation specialists :

Prehistoric pottery specialist:	Blaise Vyner BA FSA
Roman pottery specialist:	Dr Jeremy Evans PhD
Medieval pottery specialist:	Dr Chris Cumberpatch PhD
Flint specialist:	Dr Ian P Brooks PhD
Soils and environmental specialists:	Dr Ben Gearey PhD Dr Margaret Bastow PhD
Faunal analyst:	Dr Jane Richardson PhD
Human bone specialist:	Dr Charlotte Roberts BSc (Hons)
Metalwork specialist:	Holly Duncan MIFA
Artefact conservationist:	Yannick Minvielle-Debat

11.3 All appropriate specialists have been approached and are willing to undertake the work within the time-scales and parameters set out in the specification. The list of Archaeological Services WYAS project personnel may be subject to change.

Appendix VIII

Specification for watching brief

High Street, Shafton
SE 392 107 (centred)
Specification for Watching Brief

1. Introduction and Archaeological Background

- 1.1 An archaeological watching brief has been requested for the above proposed development area (SE 392 107). This document forms the strategy for the final phase of archaeological evaluation of the site via an archaeological watching brief and has been prepared for Mr M. Jones of Ben Bailey Homes Ltd., by Archaeological Services WYAS for approval by the Sites and Monuments Record (SMR) of the South Yorkshire Archaeology Service.
- 1.2 There is reason to believe, following a geophysical survey (Stage 1), preliminary trial trenching (Stage 2) and full open area investigation of the western half of the application area (Stage 3), that the site contains the remains of a Romano-British settlement, set within a landscape of fields and probably approached by a trackway running east to west. The limited ceramic evidence found during the trial trenching suggests that the site was occupied at least from the late 1st-2nd centuries AD. The remains are in places ephemeral having been truncated by plough damage.
- 1.3 Consequently South Yorkshire SMR has advised that preservation *in situ* is not an option as the archaeological remains are often not buried deeply. The alternative is preservation by record - by archaeological excavation and recording. It has been recommended therefore that further archaeological field evaluation should be carried out, in line with government guidance as set out in D.O.E. Planning Policy on Archaeology and Planning (PPG16 1990). The results of this evaluation will mitigate against the impact of the proposed development on the archaeological deposits to be assessed.
- 1.4 This document details the proposed methodology for the required field evaluation.

2. Aims and Objectives

- 2.1 In the areas of the proposed development (see attached plan), any below-ground works are likely to impact upon any surviving archaeological deposits within and below topsoil cover. It has been recommended therefore that further archaeological work in the form of a watching brief should take place, in order to fully record the archaeological deposits.
- 2.2 The general aims and objectives of the watching brief will be:
- to identify the relationship between the field system (recorded as boundary ditches in trial trenches C, D and E) and the settlement enclosure (Area 1 in the current excavation)
 - to establish the relationship between the settlement enclosure/field system and the double ditched 'trackway'.

3. *Fieldwork Methodology*

- 3.1 All groundworks associated with the construction of the access roads and sewers in the areas indicated on the attached plan should be undertaken under archaeological supervision. This will initially necessitate all groundworks down to archaeological horizons or the natural, whichever is soonest, being carried out using a Hymac/JCB equipped with a toothless ditching bucket.
- 3.2 If any archaeological features are identified following the supervised soil strip, sufficient time will be accorded by the developer to allow the archaeologists to clean, sample and record such features to achieve the aims stated above. All recording will be done in accordance with Archaeological Services WYAS standard method (Boucher 1995).
- 3.3 In this circumstance heavy plant or excavators will not be operated in the immediate vicinity of the archaeological remains or the archaeologists. NB - health and safety will take priority over archeological matters.
- 3.4 The results of this phase will determine whether additional work is required during the construction of the houses and whether this watching brief needs to be intensive or can be intermittent.
- 3.5 Access to the site should be afforded to the developer's nominated archaeological contractor at all reasonable times.
- 3.6 Reasonable prior notice (14 days) of the commencement of the development is to be given to the archaeological contractor. The South Yorkshire Sites and Monuments Record Office shall be notified in advance of the commencement of the watching brief.

4. *Archive*

- 4.1 Upon completion of the fieldwork all finds shall be cleaned, identified, assessed, spot-dated and properly stored. The archive shall be compiled consisting of all primary written documents, plans, sections and photographs.

5. *Report*

- 5.1 A report shall be produced to include background information, a summary of the works carried out, a description and interpretation of the findings, and an assessment of the importance of the archaeology found.