SWILLINGTON BRICK WORKS

Interim Report

Archaeological Trench Evaluation

Prepared by

NETWORK ARCHAEOLOGY LTD

For

Hanson Building Products Ltd.

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1 NON-TECHNICAL SUMMARY

A programme of trench evaluation was carried out at the Swillington Brickworks. A total of 49 trenches were placed across areas of potential archaeology as indicated by the geophysical report. The site was located within the historic township of Swillington in the District of Leeds to the east of the M1 motorway, in an area of a proposed north-west extension of the existing brickworks quarry,. The aim of the evaluation was to gather sufficient information to establish the extent, condition, character and date, as far as circumstances permit, of any archaeological features or deposits.

The results of the evaluation indicated that two overlapping field systems existed from the Romano-British and Late Saxon/Medieval periods with an associated medieval droveway and enclosure and low level metal working activity. The field systems were identified from boundary ditches. Preliminary indications from the enclosure indicate stock related use. A possible rake out pit for a nearby kiln was also located. Features identified in the evaluation as requiring further analysis are detailed in the recommendations section.

2 INTRODUCTION

At the end of November 2006 Network Archaeology Ltd was commissioned to undertake a scheme of archaeological evaluation trenching. The evaluation site covered an area of 11.2 hectare of land that has been scheduled for quarry extraction. This report is an interim evaluation report and the full evaluation results will be incorporated into a final report detailing all archaeological works concerning the development area.

2.1 Commissioning Bodies

The evaluation was commissioned by Geoplan Limited, on behalf of Hanson Building Products limited. The archaeological contractor was Network Archaeology Ltd, a professional organisation which provides consultancy advice and undertakes field services. The evaluations were carried by Network Archaeology Ltd according to a Written Scheme of Investigation, produced in response to a scope of works drafted by West Yorkshire Archaeological Advisory Service (WYAAS).

2.2 The Development

The site is within the historic township of Swillington in the District of Leeds 7km east of the city centre. It is situated immediately the north west of the existing brickworks and quarry, just beyond the M1 motorway. Two adjoining areas were evaluated, a large area of 9.4 hectares (Area A) on the north-west side of the quarry and a smaller area of 2.8 hectares (Area B) to the north-east (Fig. 2).

2.3 The Site

An Environmental Impact Statement for the extension of the quarry at the Swillington Brickworks has recently been submitted. This was in response to a request for a scoping opinion from Leeds City Council. WYAAS advised that the archaeology should be included in the Environmental Impact Assessment for this site, as information held in the Sites and Monuments Record (SMR) indicated that the proposed development site lies within an area of archaeological interest. A scoping document was then prepared by WYAAS at the request of Geoplan Ltd to detail what was required for the evaluation and to allow an archaeological contractor to provide a quotation. A desk-based assessment was not considered necessary as existing records allow the archaeological potential of the site to be assessed, but a programme of field evaluation was required. A geophysical survey was commissioned, consisting of a measured magnetic gradiometer survey of the whole area of the proposed quarry extension.

2.4 Archaeological Background

Research carried out at West Yorkshire SMR at Wakefield revealed cropmarks visible on aerial photographs in the fields to the south and west of the existing brickworks and quarry. These revealed ditched enclosures and field systems, with some features appearing to continue towards the evaluation site. Excavation of the cropmark complex

immediately south of the existing brickworks and quarry confirmed the presence of a regionally significant Roman period settlement with associated roundhouses. Similar cropmarks on the route of the M1-A1 link probably had a similar provenance. These results indicated that the Swillington area was likely to have been intensively occupied from prehistoric times and that the known sites extended beyond the visible limits of the cropmarks.

A geophysical magnetic gradiometer survey was undertaken recording data at 0.5m intervals measured in sample blocks of minimum 40m width. Data was recorded at 0.5m stations on 1.0m spaced traverses. The survey was carried out on the whole 11 hectare area. The results indicated several strong linear magnetic anomalies on roughly south-west to north-east alignments in both areas indicating field systems; an area of enhanced activity, including curvilinear features, towards the eastern side of Area A indicating an enclosure and possible pits; and areas of possible disturbance at the south end of Area A and the north east of area B. Both areas had an overall linear pattern presumed to be furrows of medieval or later date. These results were then discussed between the client, contractor and WYAAS and a scheme of archaeological trench evaluation was designed, targeted on the basis of known research and geophysical anomalies with archaeological potential.

2.5 Aims

The overall purpose of the trench evaluation was to gather sufficient information to establish the extent, condition, character and date, as far as circumstances permitted. This was to enable WYAAS to make a reasonable and informed decision about future mitigation proposals: whether archaeological deposits should be preserved in situ, or might be more appropriately recorded archaeologically prior to destruction, either by summary record from a salvage excavation or watching brief, or a detailed record from open area excavation.

The specific evaluation objectives were to:

- sample excavate and record the visible archaeological remains;
- locate, sample excavate and record any other archaeological remains exposed by the evaluation;
- locate, recover, identify, and conserve, as appropriate, any archaeological artefacts;
- locate, recover, assess and analyse, as appropriate, any palaeo-environmental, palaeo-economic and organic remains;
- recommend measures for preservation in situ of archaeological, palaeo-environmental, palaeo-economic and organic remains, where feasible and desirable;
- compile an appropriate report and to publish the findings if warranted.

- produce a paper and digital archive to be deposited with Leeds museum.

2.6 Terms of Reference

This report has been produced for the consultant Geoplan Ltd and the client Hanson Building Products Ltd. Copies will also be distributed to the West Yorkshire Archaeological Advisory Service's (WYAAS) Senior Archaeological Officer for review and approval. The full evaluation assessment will be incorporated into a final definitive report once all archaeological works have been completed and subsequently to WYAAS records office for public access.

2.7 Resourcing

The archaeological investigations were managed by Stuart Noon and were carried out in the field between 29th of November 2006 and 12th of January 2007 inclusive, by a Project Officer and a team of 7 people.

3 PROCEDURES

3.1 Standards

The evaluation was conducted according to the scope of works set out by West Yorkshire Archaeological Advisory Service (WYAAS).

All works conformed to the Institute of Field Archaeologist's (IFA) *Code of Conduct* (1985, Revised September 2000), and the IFA's *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (1990, Revised September 2000), *Standard and Guidance for Archaeological Evaluation*, (1994, Revised September 2001), and *Standard and Guidance for Archaeological Excavation* (1994, Revised September 2001). The work was managed in accordance with the methods and practice described in *The Management of Archaeological Projects, second edition* (English Heritage, 1991).

3.2 Trench Numbers

Trenches were numbered before the evaluation started.

3.3 Evaluation

Forty-nine evaluation trenches were targeted for excavated, as detailed in Table 1 below.

Table 1: Summary of trench details

Trench No.	NGR	Dimensions of trenches	Targets for trench locations
1	438535 432066	40m x 2m	Linear features, probably ridge and furrow.
2	438502432049	40m x 2m	Linear features, probably ridge and furrow.
3	438479 432049	40m x 2m	Curvilinear feature; ridge and furrow.
4	438517 432008	40m x 2m	Curvilinear feature.
5	438538 432022	40m x 2m	Curvilinear feature.
6	438560 431987	40m x 2m	Furrows, curvilinear gully and pit
7	438579 431978	40m x 2m	Series of archaeological features.
8	438614 431963	40m x 2m	Drains and furrow.

Trench No.	NGR	Dimensions of trenches	Targets for trench locations
9	438633 431923	60m x 2m	Drains and field drains
10	438616 431899	80m x 2m	Four linear features.
11	438570 431909	40m x 2m	Trench targeted on continuation of a linear feature
12	438523 431940	40m x 2m	Pit, ditch and gully
13	438478 431945	40m x 2m	Trench targeted on continuation of a prominent linear feature
14	438431 431908	100m x 2m	Trench targeted to investigate two large potential linear features.
15	438425 431863	60m x 2m	Trench targeted to detect a linear feature
16	438499 431869	40m x 2m	Trench targeted on the same feature in trench 9, 10, 11, 17, and 16.
17	438555 431870	60m x 2m	Area of high archaeological potential.
18	438573 431834	60m x 2m	Area of high archaeological potential.
19	438555 431800	40m x 2m	Trench placed to target the possible terminus of a large curvilinear feature.
20	438522 431770	40m x 2m	Trench targeted on at least two linear features.
21	438499 431770	80m x 2m	Trench targeted to reveal the continuation of the curvilinear ditch observed in trench 19.
22	438539 431857	40m x 2m	Two prominent linear features.
23	438492 431841	40m x 2m	Trench to target a possible continuation of a prominent linear feature running south west.
24	438464 431817	40m x 2m	Trench targeted to verify the continuation of a prominent linear feature.
25	438450 431793	60m x 2m	Trench to attempt to determine if the feature observed in 22, 23 and 24 continued further south than 24.
26	438512 431743	60m x 2m	Field boundary and furrows.
27	438495 431687	40m x 2m	Furrows and geological changes.
28	438460 431703	40m x 2m	Trench was located on the periphery of disturbed ground.
29	438451 431749	60m x 2m	Targeting area to south of trenches 25 and 26.

Trench No.	NGR	Dimensions of trenches	Targets for trench locations
30	438376 431783	40m x 2m	Trench 30 was located along the western edge of area A.
31	438403 431733	40m x 2m	Furrows and geological change.
32	438349 431702	50m x 2m	Geological shift.
33	438428 431699	50m x 2m	Area that the geophysics suggested was disturbed ground.
34	438427 431650	40m x 2m	Area that the geophysics suggested was disturbed ground.
35	438496 431653	40m x 2m	Area that the geophysics suggested was disturbed ground.
36	438457 431598	40m x 2m	Area that the geophysics suggested was disturbed ground.
37	438413 431608	40m x 2m	Area that the geophysics suggested was disturbed ground.
38	438377 431624	40m x 2m	Area that the geophysics suggested was disturbed ground.
39	438359 431645	40m x 2m	Area that the geophysics suggested was disturbed ground.
40	438678 431869	40m x 2m	Targeted to verify the continuation of a linear feature running east west.
41	438731 431832	40m x 2m	Targeted on a large feature runs north east-south west through the trench.
42	438741 431818	40m x 2m	Furrows.
43	438806 431799	40m x 2m	Furrows.
44	438808 431771	40m x 2m	Furrows and possible feature.
45	438791 431750	40m x 2m	Furrows.
46	438697 431770	40m x 2m	Targeted on an apparently blank area in geophysics the area.
47	438677 431784	40m x 2m	Targeting area west of trench 46 and south of trench 40.
48	438598 431813	40m x 2m	No prominent archaeology other than ridge and furrow.
49	438652 431845	40m x 2m	Furrows.

3.3.1 Surveying

The evaluation trenches were accurately set out to sub-millimetre accuracy using Differential Global Positioning Satellite (DGPS) technology. The points at the centre of the two ends of each trench defined a baseline. This was used for surveying the archaeological features within the trench.

3.3.2 Topsoil Stripping

The trenches were all opened using a 360° tracked excavator, with 2m-wide ditching bucket, under the supervision of a suitably experienced archaeologist. The topsoil was placed adjacent to the trench. There was very little sub-soil over the extent of the evaluation area.

Trench 18 was subsequently extended to the east by excavating a 3 x 5.5m extension box to the east side of the trench. The reason for this extension was to reveal more of a possible rake out pit for a kiln that had only been partly revealed within the trench.

Trench 22 was extended to the north, at the east end of the trench. The extension was a 3 x 5.5m area. This extension was to investigate the relationship of a curvilinear ditch and a linear feature.

3.3.3 Excavation of Archaeological Deposits

After initial machining, all archaeological remains were subsequently excavated by hand. Detailed specifications for the work carried out can be found in the Written Scheme of Investigation (Network Archaeology 2005iii).

3.4 Field Records

3.4.1 Project Code

The project code is SWI06.

3.4.2 Allocation of Numbers

Contexts were numbered with the trench number as a prefix followed by a three digit identifier.

3.4.3 Written Records

Record sheets, in a format acceptable to the IFA, were used for on-site recording. Multi-context recording was used.

3.4.4 Drawings

Drawings were numbered with the trench number as a prefix followed a three digit identifier. Sections and plans were listed together on an overall drawing register. Each

sheet containing sections or plans was also allocated a sheet number from a sequence starting at 1.

Drawings included:

- Client's Ordnance Survey background mapping (at 1:2500, scale) showing the location of excavated areas;
- Excavation area plans (at 1:50 scale), detailing all natural and archaeological features;
- Section drawings at 1:20 scale of all excavated features and deposits.

3.4.5 Photographs

Monochrome and colour slide photographs were taken in 35mm format. These included pre-excavation shots, shots of excavated features in section, general plan shots of the site and working shots of staff and plant engaged in excavation. A full written record was made of all photographs taken. The feature context number, appropriate scales, and a north arrow, if appropriate, appeared in all photographs whenever possible.

3.5 Post-excavation

3.5.1 Consolidation of Archive

The written, drawn and photographic archive has been consolidated in accordance with the standards set out in Appendix 3 of the Management of Archaeological Projects (MAP 2, Stage 2).

In addition to the artefacts listed in Appendix A, the archive contains:

- 326 context sheets
- 30 trench record sheets
- 10 films.
- 114 drawings on 53 sheets.

3.5.2 Finds Processing

General

All artefacts have been retained for processing except unstratified twentieth-century material which has been noted and discarded. Spoil heaps were searched for unstratified finds.

Metal detecting

Spoil heaps were scanned for ferrous and non-ferrous metal artefacts using a metal detector capable of making this discrimination operated by an experienced metal detector user. Modern artefacts were noted but not retained, but nineteenth-century and earlier material was retained.

Environmental sampling policy

Bulk soil samples, normally of 30 litres, were taken of all significant archaeological deposits. Sample methods followed the guidance of the Association of Environmental Archaeology (1995) and English Heritage (2002). The collected samples have been assessed for their potential and subsequent study.

Artefact handling

All retained artefacts have been cleaned, marked, packaged and stored in accordance with current IFA guidelines. The long-term conservation and storage needs of the artefacts will be assessed and allowance made for preliminary conservation and stabilisation of all objects.

Certain categories of artefact, such as modern and post-medieval pottery, undiagnostic tile or brick, glass, and animal bone, may be selected for disposal with agreement with the museum that will hold the site archive.

All of the finds and samples that require specialist analysis have been sent to one of the following specialists:

- Alan Vince (independent, Lincoln): Pottery;
- Val Fryer (independent, Norfolk): Palaeo-environmental analysis;
- Tania Holmes (independent, York): Flint artefact studies;
- Rod Mckensie (independent): Metal-working slag and other industrial residues;
- Jenny Mann (Post-excavation Team, Lincoln City): Metalwork and other small finds.

3.6 Client report

This client report includes a summary, introduction, description of procedures, results, discussion, conclusion, references and appendices. A summary table of archaeological contexts, figures and plates are included in the appendices.

3.7 Archiving

The project archive has been prepared in accordance with the guidelines outlined in Management of Archaeological Projects (English Heritage 1991). The archive is

currently housed at the Lincolnshire office of Network Archaeology Ltd. On project completion it will be deposited with Leeds museum following their specific guidelines for archive deposition.

4 DESCRIPTION OF THE EVALUATED AREA

4.1 Topography and land use.

The site itself is on the top of an exposed hill with a gradual slope down to the south. The southern end of area A was at a height of approximately 81m above Ordnance Datum (O.D.) and the northern part of the site was at 86.30m.O.D. Area B was relatively flat with no dramatic changes, and was at around 86m O D. Area A was arable land, with a germinating crop at the time that the evaluation was carried out, while Area B appeared to have been permanent pasture.

5 RESULTS

The evaluation trenches revealed material from Roman, medieval and post medieval contexts. It appears that this area has been used for agriculture and for minor industrial use. The field boundaries identified appear to have been used, gone out of use and then been reinstated. The limited quantity of finds retrieved from the trenches had made it difficult to confidently phase and date the features. However, the evaluation confirmed that the geophysics gave a good picture of the features. Those features have been fairly well characterised so there is a high degree of confidence about the interpretations.

In consultation with West Yorkshire archaeological services, it was agreed that several trenches could be left unexcavated. Excavation of trenches 34, 35 and 37 indicated that the southern part of area A had little archaeological potential, the geophysics anomalies being caused by areas of large shale lenses within the natural substrate. Consequently, trenches 30, 31, 32, 33, 35, 36, 38, 39 were left unexcavated. Trenches 24 and 25 wre not excavated because the existence of a feature that they had been positioned to locate had already been investigated and characterised in several other trenches. Trenches 42, 44, 45, 46 in area B were not excavated as they proved to be positioned on ground disturbed by the construction of the screening mounds around the site.

Table2: Summary of evaluation results

Trench No.	Results
1	The only features found were furrows from ridge and furrow and field drains.
2	Four furrows and four field drains. No further archaeology was detected.
3	A feature that was later identified as a geological fault line comprising of a sedimentary outcropping.
4	The geological fault line continues from trench 3 through this trench. Several other furrows and drains were also detected.
5	Further exposed the geological fault line, furrows and drains observed in the previous trenches.
6	Small shallow pit and a small narrow gully. The trench also had three linear features as well as furrows and drains.
7	Two furrows, drains and a ploughscar.
8	Two ditches that appear to converge under the baulk. Three drains and a furrow.
9	Furrows and drains. Post medieval pottery and clay pipe was recovered from this trench.
10	One of the features was a double ditch feature *(fig 4) (fig 5)* with another double ditch later cut into it. Two linear features flanking the double ditch *(fig 6)* and a ditch on a 45° angle to the rest of the features. Post medieval clay pipe and pottery was recovered from this trench.

Trench No.	Results
11	Four furrows and two drains.
12	Two ditches and a pit.
13	Contained several ephemeral features that have been identified as old hedge lines and tree throws.
14	A pit, ditch and shallow gully were identified.. Medieval pottery and Roman pottery were recovered from this trench.
15	Contains a ditch and a shallow gully
16	Two linear features, possibly field boundaries. A single piece of Roman pottery was recovered from this trench.
17	Features include a double ditch, two flanking boundary ditches and a shallow drainage gully.
18	Trench 18 intersects the double ditch feature identified in other trenches. It also identifies a large pit *(fig 7)* and a curvilinear ditch. Several pieces of medieval pottery was recovered form this trench.
19	Curvilinear ditch.
20	Trench 20 had an ambiguous feature identified as being two converging boundary ditches. Medieval pottery and an early modern copper alloy object were found during excavation in this trench.
21	Remains from both parts of the semi-circular enclosure *(fig 8)*.
22	This trench encroaches onto the double ditch feature, another boundary ditch and part of the northern semi circular ditch. A truncated pit was also identified. Medieval pottery and a post medieval ceramic object were recovered from this trench.
23	A large linear feature and a shallow gully were identified in this trench.
24	Unexcavated.
25	Unexcavated
26	One feature recorded.
27	Contained two very ephemeral furrows.
28	Contained three very ephemeral furrows.
29	Contained four very ephemeral furrows.
30	Unexcavated.
31	Unexcavated.
32	Unexcavated.
33	Unexcavated.
34	Contained no archaeology and appears to be on disturbed ground.
35	Unexcavated.
36	Unexcavated.
37	Contained no archaeology and appears to be on disturbed ground.

Trench No.	Results
38	Unexcavated.
39	Unexcavated.
40	Contained a boundary ditch.
41	Natural feature detected.
42	Unexcavated.
43	Two ephemeral furrows and a field drain were identified during excavation.
44	Unexcavated.
45	Unexcavated.
46	Unexcavated.
47	The north eastern end of the trench identified a curvilinear feature *(fig 9)*.
48	Generated two field drains, two furrows and a natural hollow.
49	Contained several drains and furrows as well as two pits *(fig 49)*.

The topsoil was similar all of area A. It was grey brown firm silt clay with occasional inclusions of post medieval pottery, clay pipe and charcoal. The thickness of the topsoil was consistently 0.3m across the area. The topsoil in area B was mid-brown, very soft silty clay with modern pottery inclusions. The topsoil in area B seemed to have been disturbed, probably during the construction of the screening mounds to the north of the area. After the topsoil had been moved to create the screening mounds, imported topsoil was deposited. This would account for the different characteristics to the topsoil in Area A, including the presence of modern finds.

The natural glacial drift geology remained consistent across most of both area A and B. It was characterised as pale, mottled orange yellow, sticky clay. This was occasionally interrupted by seams of dark brown laminated shale.

5.1.1 Trench 1

Topsoil removal revealed a pale orange/grey clay natural geology. The only evidence for activity observed in this trench were five shallow furrows, oriented north east north by south west south, from post medieval ridge and furrow. Three field drains also oriented in the same direction were observed. In common with all the other excavated trenches, the full length of the trench was drawn in plan and section, and photographed.

5.1.2 Trench 2

Once cleaned, four furrows and four field drains were observed on the same orientation as the furrows and drains in trench 1.

5.1.3 Trench 3

The geophysical survey indicated that a prominent feature might have been present in this trench. Once cleaned the several features were visible. Apart from five furrows and a field drain, a narrow ditch and a geological fault of sedimentary rock were detected. The geological fault was a 2m wide well bedded laminated shale seam. The ditch [03/188] was excavated revealing it was 250mm in depth and 300mm in width. No datable material was recovered from the feature. The geological seam did appear to fit the dimensions of the feature visible in the geophysical report.

5.1.4 Trench 4

Trench 4 was located approximately 20m north of trench 3. The only features that were revealed in the trench were five furrows, five field drains and the continuation of the natural shale seam. No evidence of the ditch [03/188] that was recorded in trench 3 was observed as continuing through trench 4. This suggests that the feature that can be seen in the north east corner of the site, detected in trenches 3, 4 and 5, is a natural seam of sedimentary rock.

5.1.5 Trench 5

The trench yielded three furrows, five field drains and the continuation of the natural sedimentary stone seam. The continuation of the seam further suggests that the feature that can clearly be seen in the geophysical report is the same feature.

5.1.6 Trench 6

Trench 6 was located to the east of trench 5 and oriented north to south. Whilst cleaning the trench a series of cut features were observed as well as four field drains and a furrow [06/158]. A pit/post hole was partly revealed along the east side of the trench. The feature was sub-circular, 0.42m wide and 0.16m in depth. A 1.4m x 0.4m curvilinear gully 0.2m deep to the north of the pit/post hole was excavated. This may have been a linear feature with a post hole at the terminus but due to the poor definition of the cut this could not be determined. Three other linear features [06/142] [06/150] [06/156] all oriented on the same north-east to south-west alignment were excavated. Feature [06/156] had the furrow [06/158] cutting into it and a field drain cutting through the furrow. Feature [06/150] also has another linear feature [06/153] cutting through into it. No datable material was recovered from any of the features.

5.1.7 Trench 7

The geophysical data indicates that features present in trench 6 should be present in trench 7. However, once the topsoil had been removed from the trench and the natural geology had been cleaned it was revealed that only drains, a furrow and a plough scar were present in this trench.

5.1.8 Trench 8

This trench contained three drains and a single furrow as well as two ditches [08/226] and [08/228]. One of the ditches [08/226] was oriented north and measured 2.5m wide, 0.4m deep and had a field drain cutting through it. The other ditch [08/228] measures 1.1m in width and 0.15m deep and runs north-west. The alignment of the two ditches was such that they would have converged approximately one metre beyond the north baulk.

5.1.9 Trench 9

Once trench 9 was cleaned it was revealed that the only evidence of activity present was a series of furrows and drains. Because of the relatively good preservation of the remains all of the furrows and drains in this trench were excavated and given context numbers [09/003] [09/005] [09/015] [09/027] [09/024] [09/022] [09/020]. This data provided a representative overview of the profiles of the cut features and the depositional processes of these features.

5.1.10 Trench 10

The data presented by the geophysical survey indicated that trench 10 had a series of large ditches running through it. The evaluation trench located a ditch at its eastern end, that can be seen on the geophysical plot to run down the eastern side of area A. In section this feature [10/029] measures 1.5m wide and 0.5m deep, and its profile seemed to be characteristic of a field boundary ditch. This feature has been designated the 'eastern boundary'. The next feature excavated in trench 10 [10/049] was north-west of [10/029] and oriented on the same alignment. Ditch [10/049] appears to have another ditch [10/051] contemporary with it forming a double ditch feature. These two ditches [10/049] [10/051] have been disturbed by a pair of later, wider ditches [10/050] [10/048]. The later ditches were not placed directly on top of the earlier pair, so appear to represent a re-instatement, on a slightly different alignment of a boundary which had gone out of use, rather than simply re-cutting the existing ditches.. The top fill out of [10/050] was a grey brown silt clay (10/063) and produced a piece of slag, which was analysed by Dr Rod Mckensie. The slag unfortunately has no metalliferous residues attached, and was therefore impossible to determine if this piece relates to metal production.

Another ditch to the north-west on the same alignment [10/040] was excavated revealing an irregular feature with concave edges and a concave base. The basal deposit (10/055) in the feature contained post-medieval pottery. Another ditch had been re-cut [10/054] into (10/055), A piece of post medieval pottery was recovered from the re-cut. This ditch, designated the 'western boundary' is also characteristic of a boundary ditch. The western and eastern boundary, and the double ditch, together formed a major linear component of the landscape and may have defined a drove-way or trackway. The next excavated feature [10/044], unlike all the other linear features in this trench, was oriented east to west across the trench rather than north east to south west. In profile it had a flat base and irregular edges. No datable material was recovered from this feature

during excavation. The only other features in this trench were field drains and remnants of furrows. Medieval pottery was recovered from the topsoil.

5.1.11 Trench 11

The only features that were detected during the cleaning were four furrows and two field drains.

5.1.12 Trench 12

Trench 12 contained three cut features. The first feature excavated [12/133] was a pit 0.6m wide and 0.17m deep. The pit does not have any other features associated with it and no finds were recovered from it. The second feature investigated [12/135] was a ditch running east to west and corresponds with the north boundary recorded in trench 10, the geophysics results showing it continuing between the two trenches. In profile, the top of the sides sloped down at 45° then became vertical before breaking to a flat base. This profile is different to that of its continuation [10/044] in trench 10, although there are similarities, especially at the base of the features. It may be that part of the feature had been truncated by deeper ploughing over trench 10 in comparison to that over trench 12. Ditch [12/135] was cut into by a shallow gully measuring 0.7m wide and 0.25m deep.

5.1.13 Trench 13

During the cleaning of trench 13 several very irregular ephemeral features were detected. Contexts [13/192] [13/193] [13/195] [13/200] [13/210] [13/206] all appeared to be tree throw pits, perhaps the remnant of a former hedge line. A narrow and shallow gully [13/204] 0.6m wide and 0.05m deep and another curvilinear gully or ditch [13/208] 0.7m wide and 0.1m deep were excavated. Gully [13/208] was also excavated as gully [13/211], This curvilinear feature may have been part of a sub-circular enclosure ditch.

5.1.14 Trench 14

Trench 14 was the longest trench in the evaluation. Once cleaned, the trench revealed the base of a heavily truncated pit [14/214], 0.39m wide and 0.06m deep. No finds were associated with this feature. A linear feature [14/215] at the north end of the trench was also excavated revealing a linear feature 1.3m wide. The geophysical results suggest that ditch [14/215] is the feature that can be seen running through trenches 14, 12, 10 and 40. The profile through the excavated linear feature revealed that it has similarities in shape and fill with the profile through ditch[12/135] also implying that it was a continuation of the same ditch: this has been assumed in compiling the site matrix.. Pottery dating to the early second century was retrieved from the basal deposit (14/219) of [14/215]. The same style of pottery was found in a surface fill inside the feature. At the south end of the trench there is a shallow gully [14/231] that is visible on the geophysics results as a linear feature running south-east.

5.1.15 Trench 15

Once this trench had been opened and cleaned two furrows and a field drain were located, as well as a possible field boundary 8m from the northern end of the trench [15/236], and possible fence line [15/269]. The profile of the boundary ditch is very similar to shallow gully at the southern end of trench 14 [14/231]. The geophysics results also suggest that this is the same feature continuing through both the trenches. The possible fence line is very irregular and has uneven sides and base.

5.1.16 Trench 16

The geophysical report suggests that the feature detected in trench 9 and 10 should be detected in trench 16 and 17. A linear feature [16/251] & [16/253] with the same orientation as the feature observed in the geophysics report was excavated. The similarity of the profile to that of the features recorded in trenches 9 and 10 confirmed that they were almost certainly the same feature. Another linear feature [16/236] oriented east-south-east by west-north-west was excavated which produced early second century pottery in the single fill similar to the pottery found in trench 14. This feature could not be detected in the geophysics results. However, if this feature continued in this orientation it would have connected with the Roman north boundary. The profile of the ditch did not share any similarities with the profiles recorded in trenches 14 or 10. The two recorded ditches in this trench would have either converged or crossed under the eastern baulk of the trench. The trench also contained two furrows and three field drains.

5.1.17 Trench 17

Trench 17 was placed over many of the same features as trench 10, and it confirmed the continuation of the features recorded in trenches 9, 10, 16 and 18. The western boundary was excavated as [17/169] corresponding to ditches [16/251], [16/253] and [10/040]. A group of inter-cutting features [17/163] [17/165] [17/161] [17/167] correspond to the double ditch investigated in trench 10 [10/051] [10/050] [10/048] [10/049]. The sections excavated through this group of features revealed that ditches [17/163] and [17/165] have been later cut by ditches [17/160] and [17/167]. A small drainage gully 0.65m wide and 0.16m deep was excavated; no finds were recovered. The last feature investigated in this trench [17/121] was oriented in a direction similar to the rest of the features in the trench and corresponded in shape and on the geophysics with the eastern boundary [10/029].

5.1.18 Trench 18

During the cleaning of trench 18 a large feature was half exposed. The centre of the trench was extended 3m x 5.5m to east to reveal the whole feature for excavation. The oval feature measured 4.1m long and 2.4m wide oriented north to south along its longest axis. The feature was quarter sectioned [18/107] to retrieve the maximum level of information. The feature contained three fills, one of which produced early medieval pottery and two pieces of slag. The morphological analysis of the slag suggests that it is

a by-product of medieval smithing rather than smelting. Both the slag and the pottery were in the top fill of the feature.

A shallow curvilinear ditch was also excavated. This feature did not appear to have any association with any of the other features in this trench; no datable material was recovered from this feature.

The northern end of this feature encroached on to the same feature of grouped inter cutting double ditches that could be observed in trench 10, 17 and 16. The first two ditches [18/116] and [18/118] have been cut into by two later features [18/119] and [18/117]. The single fill of ditch [18/116], (18/123) contained late 11th century pottery and the upper fill of ditch [18/118] contained late 18th century pottery.

5.1.19 Trench 19

Trench 19 only had one cut feature detected [19/057]. The feature corresponded to part of a curvilinear ditch that can be seen in the geophysics results. The ditch had steep edges, and was 1.3m wide and 0.65m deep. No finds were recovered form this feature.

5.1.20 Trench 20

The only feature that was discovered in trench 20 was an ambiguous irregular feature [20/290]. The profile revealed a very gradual edge to the south and a sharp break of slope to the north. The base undulated and gave the impression that this was two ditches that were intersecting. The geophysics results also give the impression that there are two ditches converging in this area. The upper fill of the feature had a piece of medieval pottery and a piece of modern copper alloy in the topsoil. A furrow was also recorded at the northern end of the feature.

5.1.21 Trench 21

The geophysics suggested that trench 21 would reveal part of the same curvilinear feature that trench 19 located [21/242]. When the trench was opened and cleaned a feature approximately halfway down the trench was located. The profile of this ditch, the sequence of depositional events and fills appear to be very similar to those recorded in trench 19. No finds were recovered from this excavated section but it can be assumed from the similarities that trench 21 and trench 19 revealed the same feature.

The north eastern end of the trench detected a ditch that the geophysics suggested was part of a curvilinear feature, opposite the curvilinear ditch that trench 21 and 19 detected. The shape of the cut and fills are very similar to the cut of the ditch in trench 19 and ditch [21/242]. It seems likely that both of the curvilinear ditches are contemporary and were possibly the same feature but have since been plough-damaged and truncated.

There were no finds in any of the cut features; however a piece of late 17th century pottery was found in the topsoil.

5.1.22 Trench 22

The north western end of this trench crossed the group of inter cutting ditches [22/083] [22/085] [22/087] previously observed in trenches 10, 17 and 18. No finds were recovered from any of these features. A truncated pit defined by a clearly defined cut [22/089] was also excavated. The cut was 1.1m long, 0.8m wide and 0.08m deep and contained no datable material.

A linear feature that may be the continuation of a feature [22/076] observed in trench 10, 18, and 17 was also excavated. This ditch was 0.9m wide and 0.46m deep, had two fills and contained no finds.

The west end of the trench had a 3m x 5.5m box extension on the northern side of the trench. The aim of this extension was to try to locate part of the curvilinear ditch that was recorded in the northern part of trench 21. A linear feature [22/095] was located in the extended area which had similar profile and deposits to those of the curvilinear ditch in trenches 21 and 19. A single piece of 11th to 13th century pottery was retrieved from the upper fill (22/096) of this feature.

5.1.23 Trench 23

Once trench 23 had been cleaned, two cut features and a furrow were observed. The first feature investigated was a narrow shallow linear gully [23/271] which appeared to be very truncated. No finds were recovered from this feature. The only other feature in this trench should have corresponded with the group of inter cutting ditches previously investigated in trenches 10, 18, 17 and 22. The only remains of the features in this trench existed as an outline of the group [23/279] of features with no remains of different cuts or deposits delineating the interfaces between different contexts.

5.1.24 Trench 24

Trench 24 was not excavated as the trench was positioned over a feature that had already been investigated at several other points in the evaluation.

5.1.25 Trench 25

Trench 25 was also not excavated because of the limited amount of archaeology which the geophysics reported on this part of the evaluation area.

5.1.26 Trench 26

The investigation of trench 26 revealed that it had a linear feature that may have originally been detected in trench 20. In profile, the ditch was 1.79m wide and 0.47m deep. No datable material was retrieved from the feature. This trench also revealed four furrows.

5.1.27 Trench 27

This trench had no significant archaeology within it. Two very ephemeral furrows were recorded in the centre of the trench.

5.1.28 Trench 28

Trench 28 also had no significant archaeology within it. Three very ephemeral furrows were found along the base of the trench.

5.1.29 Trench 29

Trench 29 also had no features of archaeological significance. Four furrows were observed in the base of this trench.

5.1.30 Trench 30

It was decided in consultation with WYAAS that trench 30, along with another ten trenches, would not require excavation, as the geophysics indicates that there is little archaeology in this area and the ground appears to be disturbed. This disturbance may be due to previous quarry extraction. The whole area is scheduled to be stripped and mapped so if any archaeology is observed it can be excavated and recorded as necessary at that stage.

5.1.31 Trench 31

Trench 31 was not excavated or recorded.

5.1.32 Trench 32

Trench 32 was not excavated or recorded.

5.1.33 Trench 33

Trench 33 was not excavated or recorded.

5.1.34 Trench 34

Trench 34 was excavated to determine the nature of the disturbed ground and to see if any archaeology exists in this area. This confirmed that there was no surviving archaeology in this trench. The natural geology was mottled yellow red/orange silt clay with veins of shale. A 0.4m sondage was placed in the south east end of the trench to determine if this material was natural geology and not redeposited clay from some other activity. The sondage confirmed that the material was natural geology.

5.1.35 Trench 35

Trench 35 was excavated with the same aims as trench 34. The only activity observed in this trench was a single ephemeral furrow and a field drain. This trench also had a

sondage excavated through it to determine the nature of the natural. The result was the same as trench 34 and confirmed the clay material was natural geology.

5.1.36 Trench 36

Trench 36 was not excavated or recorded.

5.1.37 Trench 37

Trench 37 was excavated to confirm that the area of heterogeneous natural ground continued south as indicated by the geophysics. The trench confirmed this and no archaeology existed in this part of the area.

5.1.38 Trench 38

Trench 38 was not excavated or recorded.

5.1.39 Trench 39

Trench 39 was not excavated or recorded.

5.1.40 Trench 40

Trench 40 had a single cut feature towards the northern end of the trench. The linear feature was 1.35m wide and 0.63m deep with diffuse edges and two fills. The profile of this ditch was very similar to the ditch profiles observed in trench 10 and the northern part of trench 14. No datable material was recovered from the profile although small pieces of modern pottery were found within the topsoil.

5.1.41 Trench 41

The geophysics result suggests that a feature runs north to south through the trench, but on excavation it was realised that the feature was a geological interface. The only other feature recorded in the trench was a field drain running the full length of the trench. Modern pottery was also found in the topsoil associated with this trench.

5.1.42 Trench 42

Trench 41 was left unexcavated. It was decided that four trenches in area B could be left unexcavated because it appears that most of the archaeology has been disturbed in the construction of the bunds to the north.

5.1.43 Trench 43

Trench 43 was excavated to confirm the level of archaeology in the immediate area. The only activity observed in the trench was two very ephemeral furrows and three field drains.

5.1.44 Trench 44

Trench 44 was not excavated or recorded.

5.1.45 Trench 45

Trench 45 was not excavated or recorded.

5.1.46 Trench 46

Trench 46 was not excavated or recorded.

5.1.47 Trench 47

Trench 47 appeared to still have archaeological remains, which must mean that the southern part of area B was not disturbed during the construction of the bunds. Five furrows and three field drains were located as well as a curvilinear ditch towards the eastern end of the trench. The ditch was 1.14m wide and 0.3m deep. No datable material was recovered from the feature.

5.1.48 Trench 48

Trench 48 was opened and cleaned but only two furrows, two field drains and a natural hollow were found. No finds were located within the features.

5.1.49 Trench 49

Trench 49 revealed a series of furrows and two pits. The pits were unlike any of the other features found on site. The first pit [49/284] was circular, 0.9m diameter and 0.16m deep. The pit was full of burnt material and heat affected stone. This is possibly the remnants of a fire pit or hearth. The horizon of the material was very clear and a sample was taken. The second pit was sub-circular with a sloped base. It measured 1.1m in length, 0.8m in width and 0.6m deep. This pit did not contain any burnt material like that found in the other pit.

6 DISCUSSION

Apart from the appearance of furrows from post-medieval ridge and furrows, trenches 1-5 had an absence of archaeological remains. This suggests that the area in the north east part of area A is devoid of other archaeology.

Trenches 6-8 contained the traces of several gullies and ditches. As none of the features in these trenches appear to link up with each other it can be assumed that some of these features have been ploughed out only leaving the ephemeral remains observed..

Trenches 9, 10, 18, 17, 16, 22 and 23 all contained parts of one of the three linear features seen on the geophysics results. These three ditches all respect each other and are likely to have been in broadly contemporary existence. Dating of these features presents problems. The earliest components of the double ditch appeared to be very similar and seem likely to have been of the same date. The section through these features in trench 18 produced pottery dating to the late 11th century, but there was also late 18th century pottery in one of the fills. It is quite conceivable that this pair of ditches was a feature in the landscape for seven centuried, but it is perhaps more likely that either the earlier pottery is residual or that the later material is intrusive, perhaps from an unrecognised land drain. With such a limited level of datable material from the feature it seems difficult to judge which of these alternatives is most likely.

The two later component ditches of the double ditched feature follow the same orientation but do not appear to be directly re-cutting the two earlier ditches. This suggests that the original ditches had largely filled before being re-instated.

The two flanking ditches were presumably part of the same field system as the double ditch and they are on a parallel orientation. The western boundary appears to have had an original cut [10/040] with a smaller and later re-cut [10/054]. The primary fill of the earlier larger feature produced a piece of late 19th century pottery and the fill of the later re-cut a single piece of late 17th century pottery. One or both of these finds must be residual or intrusive, and they provide little help in dating the feature. The eastern boundary produced no datable finds.

The most likely interpretation for these features is that they were part of a complex boundary, probably incorporating a drove-way or track.

The northern boundary was on a different orientation to the other features and was clearly of a component of a different system of land division. Roman pottery was retrieved from the basal and top fills of this feature in trench 14. The presence of this material in both of these deposits does suggest that the feature was back-filled rapidly, t rather than by a gradual process which would incorporate pottery from different periods. No pottery was found in the other excavated parts of the ditch but the profile and deposition sequences in the other trenches were very similar confirming that it was a single feature continuing across the site, as indicated by the geophysics results.

The enclosure evaluated in trenches 19, 21 and 22 defined by two curvilinear ditches opposite each other produced several pieces of 11th to 13th century medieval pottery. Ther were few finds that would indicate domestic occupation, making it more likely that this enclosure was usee for stock management.

The large sub-circular feature in trench 18 that produced nine sherds of York gritty ware and pieces of slag is anomalous. The slag found in this feature might suggest that this was a smithing furnace but, if this was the case, more burnt material associated with it would be expected. The immediate area around this feature may have more features that have more industrial remains that explain the use of this feature.

In area B trench 49 and 47 produced features that may have further potential. Trench 49 produced two pits that had no datable material but are like no other features on the site. Further excavation of this area may reveal more similar features. The excavation of trench 47 revealed a curvilinear feature that was not revealed in the geophysical report.

The relationship the double ditch and the two flanking ditches is unclear but it does appear that they were used contemporaneously at some point in time. The relationship between the circular enclosure and the ditches is also unclear. However, further investigation of the northern half of the enclosure, where it appears to abut the eastern boundary, may reveal more information about the relationships. Phosphate analysis of the inside of the enclosure may reveal if the enclosure was used for stock. Further analysis of the possible termini of the enclosure would confirm if the enclosure has entrances defined by pairs of termini or if part of the enclosure has been ploughed out.

The large pit to the east of the enclosure that produced the early medieval York ware pottery also requires further investigation. The feature was not apparent from the geophysical report and could be surrounded by other features that have an industrial use. The two pits in trench 49 also did not appear in the geophysics report and were different to any of the other features on the site. The presence of burnt material in one of the pits could indicate an association with industrial activity. The curvilinear feature in trench 47 will possibly not require any further investigation as its extents will be revealed during the watching brief of the area.

7 CONCLUSION

Many questions remain about the nature and date of the remains detected and described in this report. The interpretation of the archaeological data is based on the evidence recorded within a restricted sample, the excavated trenches being less than 4% of the whole area of the site. Unpredictable, wet and windy weather during the period of the evaluations imposed further limitations on the quality and quantity of the recovered data.

However, the evaluations appear to have been very successful in defining the areas of archaeological potential within the development area. This should allow West Yorkshire Archaeology Advisory Service to produce specifications for future mitigation proposals, with a concentration on those areas which have been demonstrated to have significant archaeological potential. In doing this, the evaluations have successfully achieved their stated aims.

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9 STATEMENT OF INDEMNITY

Every effort has been taken in the preparation and submission of this report in order to provide as complete an assessment as possible within the terms of the brief and all statements and opinions are offered in good faith. Network Archaeology Ltd cannot accept responsibility for errors of fact or opinion resulting from data supplied by any third party, or for any loss or other consequences arising from decisions or actions made upon the basis of facts or opinions expressed in this report and any supplementary papers, howsoever such facts and opinions may have been derived, or as a result of unforeseen and undiscovered sites or artefacts.

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APPENDICES

APPENDIX A – TABLE 1. CONTEXT CATALOGUE

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
10/001	Cut				Sub oval shallow cut.	Shallow pit
10/002	Fill	10/001		10/001	Black burnt organic material	Fill of pit
09/003	Cut				Shallow linear feature	Furrow
09/004	Fill			09/003	Yellow grey silty clay	Fill of furrow
09/005	Cut				Steep sided linear cut	cut of field drain
09/006	Fill			09/005	Grey/brown/orange silt clay	Field drain fill
10/007	Cut				Shallow linear feature	Furrow
10/008	Fill			10/007	Grey/orange/brown silt clay	Fill of furrow
10/009	Layer		Pottery		Dark brown/grey soft clay silt	Ploughsoil
10/010	Layer				Orange/yellow stick clay	Natural
10/011	Cut				Shallow linear feature	Furrow
10/012	Fill			10/011	Yellow grey silty clay	Fill of furrow
09/013	Cut				Shallow linear feature	cut of field drain
09/014	Fill			VOIDED	Grey yellow clay silt	Field drain fill
09/015	Cut				Shallow linear feature	Furrow
09/016	Fill			09/015	Yellow grey silty clay	Fill of furrow
10/017	Cut				Shallow linear feature	Furrow
10/018	Fill			10/017	Brown clay loam	Fill of furrow
09/019	Fill		Heat affected clay	09/020	Compact brown silt clay	Fill of furrow
09/020	Cut				Shallow linear feature	Furrow
09/021	Fill			09/022	Compact brown silt clay	Fill of furrow
09/022	Cut				Shallow linear feature	Furrow
09/023	Fill		Pottery	09/024	Compact brown silt clay	Fill of furrow
09/024	Cut				Shallow linear feature	Furrow
09/025	Fill/cut		Clay Pipe	09/025	Number for cut and fill	Field drain
09/026	Fill/cut			09/026	Number for cut and fill	Field drain

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
09/027	Cut				Steep sided flat bottom	cut of field drain
09/028	Fill		Clay Pipe	09/027	Grey brown firm silty clay	Fields drain
10/029	Cut				Concave linear ditch	Enclosure ditch
10/030	Fill			10/029	Brown yellow clay	Fill of ditch
10/031	Fill			10/029	Brown yellow clay	Material for putative bank
10/032	Fill	10/002		10/029	Grey clay	Deposit in cut feature
10/034	Cut				"U" shaped linear feature	Truncated furrow
10/035	Fill			10/034	Brown grey silt	Remnant of furrow fill
10/036	Cut				Broad linear feature	Furrow
10/037	Fill			10/037	Orange grey clay	Remnant of furrow fill
10/038	Cut				Almost vertical sides	Cut of field drain
10/039	Fill			10/038	Yellow grey clay silt	Fill of field drain
10/040	Cut				Sharp break of slope concave edges	Ditch cut
10/041	Fill			10/054	Yellow grey clay silt	Fill of ditch recut
10/042	Cut				Steep sided cut	Cut for drainage pipe
10/043	Fill		Clay Pipe	10/040	Grey brown silt clay	Fill of drainage pipe
10/044	Cut				Irregular linear shape	Ditch cut
10/045	Fill			10/044	Brown grey clay silt	Ditch fill
09/046	Layer			09/046	Grey brown silt clay	Plough soil
09/047	Layer				Red orange firm clay	Natural
10/048	Cut				Linear feature with concave sides	Linear drainage ditch
10/049	Cut				Truncated linear feature	Linear drainage ditch
10/050	Cut				Linear feature with concave sides	Linear drainage ditch
10/051	Cut				Linear feature with concave sides	Linear drainage ditch
10/052	Cut				Linear feature with near vertical edges	Field drain
10/053	Cut				Linear feature with steep edges.	Field drain

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
10/054	Cut		Pottery		NE-SW linear feature with moderate edges.	Possible re-cut
10/055	Fill		Pottery	10/040	Mid grey/yellowish compact clay silt	Primary silting
19/056	Cut				Linear flat bottomed feature.	Ditch cut
19/057	Fill			19/056	Brown grey sand clay with flacks of charcoal	Top fill of ditch
10/058	Fill	10/006		10/058	Mid grey/brown orange silt clay.	Fill of ditch
10/059	Fill			10/048	Mid grey/brown orange silt clay.	Fill of ditch
10/060	Fill			10/060	Mid/light orange grey firm silt clay	Primary silting of ditch
10/061	Fill	10/007		10/049	Mid grey orange brown firm silt clay	Fill of ditch
10/062	Fill			10/049	Mid/light orange grey firm silt clay	Primary silting of ditch
10/063	Fill	10/008	Production waste	10/050	Mid grey orange brown firm silt clay	Upper fill of ditch
10/064	Fill			10/050	Mid/light orange grey firm silt clay	Primary silting of ditch
10/065	Fill	10/009		10/065	Mid grey brown firm silt clay	Fill of ditch
10/066	Fill			10/066	Mid grey brown sandy clay silt	Field drain.
10/067	Fill			10/055	Dark grey brown sandy silt clay	Fill of field drain
19/069	Fill	19/003		19/056	Blueish grey friable clay	Ditch fill.
19/070	Fill	19/004		19/056	Mid reddish grey friable sandy clay	Ditch fill.
19/071	Fill	19/005		19/056	Light grey brownish friable sand clay	Primary ditch fill
19/072	Layer				Dark grey brown sand clay silt	Plough soil
19/073	Layer				Orange brown clay	Subsoil
22/074	Fill			22/076	mid grey light brown orange silt clay	drainage or boundary ditch
22/075	Fill			22/076	Mixed orange brown, light grey silt clay	Primary silting of ditch
22/076	Cut				Linear feature with concave sides and gradual breaks	Drainage ditch
22/077	Layer				Mid grey brown sand silt clay	Plough soil
22/078	Layer				White yellow orange brown silt clay	Natural
22/079	Layer		Pottery		Light/mid yellow brown silt clay	Medieval sub soil
22/080	Fill			22/081	Light/mid yellow brown silt clay	Silting of gully

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
22/081	Cut				Linear feature with concave sides and gradual breaks	Small ditch and gully
22/082	Layer				compact friable grey and black	Thin coal seam
22/083	Cut				Linear feature with sharp breaks and concave edges	Shallow linear gully
22/084	Fill	22/013		22/083	Light brown yellow grey clay silt	Single fill of linear gully
22/085	Cut				Broad shallow u shaped ditch. Sharp break of slope	Remnants of drove/trackway
22/086	Fill	22/014		22/087	Grey tellow brown firm clay silt	Basal fill of linear
22/087	Cut				Broad shallow u shaped ditch. Sharp break of slope	Track/drove way
22/088	Fill	22/015		22/087	Soft grey brown clay silt	Meathering of trackway
22/089	Cut				Rectalinear feature with rounded corners.	Pit
22/090	Fill	22/016		22/089	Brown grey soft silt clay	Basal fill
18/091	Cut				Shallow U shape	Furrow
18/092	Fill			18/092	Grey brown firm silt clay	Fill of furrow
18/093	Layer				Dark grey brown firm clay silt	Plough soil
18/094	Layer				Light grey orange silt clay	Subsoil
22/095	Cut				E-W broad linear, flat bottomed feature	Boundary ditch
22/096	Fill	22/010	Pottery	22/095	Grey brown gritty silt	Upper fill of ditch
22/097	Fill	22/011		22/095	Red brown silt with iron panning	Middle fill of ditch
22/098	Fill	22/012		22/095	Grey and brown silt clay	
18/099	Cut				Linear shallow cut feature	Furrow bottom
18/100	Fill			18/099	Grey brown with orange patches silt clay	Furrow fill
18/101	Fill		Production waste	18/107	Light grey silty clay	Tertiary fill of possible kiln
18/102	Fill		Pottery	18/107	Grey brown silty clay	Tertiary fill of possible kiln
18/103	Cut				Linear feature with gradual breaks and concave sides.	Plough furrow
18/104	Fill			18/104	Mid grey, orange brown friable silt clay	Fill of plough furrow
22/105	Fill			22/105	Grey brown silt	Small gully
22/106	Cut				N-S v shapped linear feature	Gully fill

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
18/107	Cut				Irregular oval shape.	Cut of possible kiln
18/108	Fill		Pottery	18/108	Pale mottled brown grey clay silt	Area of burning in kiln pit
18/109	Fill	18/034		18/109	Mixed grey brown silt clay	Fill of possible kiln pit
18/110	Fill	18/017		18/107	Dark brown & black organic silt	Fill of possible kiln pit
18/112	Fill			18/107	Stones contained within area of burning.	Group of stones within kiln
18/113	Cut				W-E curvilinear feature	Cut of curvilinear ditch
18/114	Fill			18/113	Light-mid yellow compact friable silt clay	Secondary fill
18/115	Fill			18/113	Light-mid yellow compact friable silt clay	Fill of feature
18/116	Cut				Linear flat based u shaped feature.	Ditch cut
18/117	Cut				E-W linear u shaped feature.	Ditch cut
18/118	Cut	18/108			E-W linear u shaped feature.	Ditch cut
18/119	Cut	18/109			E-W linear u shaped feature.	Ditch cut
18/120	Cut				NE-SW linear u shaped feature	Cut of furrow
17/121	Fill	17/121		17/122	Mid grey brown silt clay	After use silting
17/122	Cut				N-S linear cut with a flat base.	Ditch cut
18/123	Fill	18/023	Pottery	18/116	Yellow brown firm silt clay.	Ditch fill
18/124	Fill			18/117	Blueish grey firm clay	Ditch fill
18/125	Fill	18/024		18/117	Yellow brown firm silt clay.	Ditch fill
18/126	Fill			18/118	Blueish grey firm clay	Ditch fill
18/127	Fill	18/025	Copper alloy object	18/118	Yellow brown firm silt clay.	Ditch fill
18/128	Fill			18/119	Blueish grey firm clay	Ditch fill
18/129	Fill	18/026		18/119	Yellow brown firm silt clay.	Ditch fill
18/130	Fill		Glass	18/120	Reddish brown firm clayey silt	Fill of furrow
12/133	Cut				Sub circular in plan.	Post hole
12/134	Fill	12/020	Production waste	12/133	Light brown grey clay silt	Fill of post hole

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
12/135	Cut		Worked flint		Linear ditch SW-NE	Ditch cut
12/136	Fill	12/121		12/135	Pale grey and orange silt.	Ditch cut
12/137	Cut				SW-NE linear feature	Ditch cut
12/138	Fill	12/022		12/137	Orange brown grey gritty shale	Ditch fill
18/139	Fill	18/139		18/107	Red sandstone lumps,high concentration of charcoal	Concentration of charcoal
06/140	Layer				Dark brown friable clay silt	Ploughsoil
06/141	Layer				Red orange firm silt clay	Natural subsoil
06/143	Fill	06/031		06/143	Soft light brown grey clay	Fill of ditch
06/146	Cut				Sub circular concave sides.	Small pit/post hole
06/147	Fill	06/027		06/146	Mid orange grey firm silt clay	Small pit/post hole
06/148	Cut				E-W curvilinear ditch	Curvilinear gully
06/149	Fill	06/028		06/148	Mid orange grey firm silt clay	Fill of curvilinear ditch
06/150	Cut				NE-SW linear with concave sides.	Linear field drain
06/151	Fill	06/029		06/151	Mid orange grey firm silt clay	Fill of boundary/drainage ditch.
06/152	Fill			06/150	Mid orange brown mottled firm silt clay	Fill of boundary/drainage ditch.
06/153	Cut				NE-SW linear with concave sides.	Linear boundary ditch
06/154	Fill			06/153	Orange brown grey silt clay	Boundary ditch
06/155	Fill	06/030		06/153	Orange brown grey silt clay	Fill of boundary ditch
06/156	Cut				SW-NE linear flat based feature	Drainage/boundary ditch
06/157	Fill	06/032		06/156	Firm brown grey clay silt	Back fill of drainage ditch
06/158	Cut				SW-NE linear broad, shallow feature	Plough furrow
06/159	Fill	06/033		06/058	Firm brown grey clay silt	Fill of furrow
17/160	Fill	17/037		17/161	N-S linear compact brown silt clay	After use silting phase
17/161	Cut				N-S linear feature with concave edges.	Ditch cut
17/162	Fill	17/038		17/162	Compact light to mid brown silt clay.	After use silting phase
17/163	Cut				N-S linear feature with flat base and steep sides.	Ditch cut

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
17/164	Fill	17/039		17/165	Compact light to mid brown silt clay.	After use silting phase
17/165	Cut				N-S linear	Ditch cut
17/166	Fill	17/040		17/167	Compact light to mid brown silt clay.	After use silting phase
17/167	Cut				N-S linear with concave edges.	Ditch cut
17/168	Fill	17/041		17/168	Compact light to mid brown silt clay.	After use silting phase
17/169	Cut				N-S linear	Ditch cut
06/170	Fill			06/156	Firm brown grey clay silt	Upper fill of backfilled linear
17/171	Fill	17/042		17/171	Compact light to mid brown silt clay.	After use silting phase
17/172	Cut				N-S linear feature with concave edges.	Ditch cut
06/173	Cut				NE-SW linear with concave sides.	Cut of ditch
06/174	Fill			06/174	Yellow grey compact silt clay	Fill of ditch
17/175	Layer				Mid grey silt clay	Ploughsoil
17/176	Layer				Mid yellow orange clay	Drift geology/ clay
04/177	Layer				Geological fault line	Geological fault line.
01/183	Layer				Mid grey brown silt	Ploughsoil
01/184	Layer				Pale orange-grey silt clay	Natural
02/185	Layer				Dark brown clay loam	Ploughsoil
02/186	Layer				Orange silt clay	Natural
18/187	Layer				Dark brown clay silt	Ploughsoil
03/188	Cut				Flat based linear ditch.	Ditch
03/189	Fill	03/043		03/188	Pale orange-grey silt	Fill of ditch
03/190	Layer				Mid brown grey silt	Ploughsoil
03/191	Layer				Pale orange and grey clay silt with shale bands	Natural
13/192	Fill	13/044		13/192	Irregular circular feature	Tree bowl
13/193	Cut	13/045			N-S linear feature	Possible hedge line
13/194	Fill			13/193	Firm mid brown grey clay silt	Tree bowl

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
13/195	Cut				Irregular circular feature	Tree throw
13/196	Fill	13/049			Firm mid brown grey clay silt	Single fill of tree throw
13/199	Fill	13/046		13/200	Mid brown firm grey silt clay	Shallow truncated pit.
13/200	Cut				Sub circular NE-SW feature	Shallow pit
13/201	Fill	13/047		13/202	Mixed orange grey brown silt clay	Fill of gully
13/202	Cut				N-S linear feature with concave base	Linear gully
13/203	Fill			13/204	Mixed orange grey clay.	Fill of linear gully
13/204	Cut				N-S linear.	Linear gully
13/205	Fill	13/048			Mid dark brown grey silt clay	Shallow pit
13/206	Cut				Sub circular NW-SE shallow concave feature	Shallow pit
13/207	Fill	13/051		13/208	Pale grey brown with orange flecks silt clay	Fill of gully
13/208	Cut				Curvilinear feature with disturbed edges	Cut of shallow ditch
13/209	Fill	13/052		13/210	Pale grey brown with orange flecks silt clay	Fill of shallow pit
13/210	Cut				Sub circular shallow bowl.	Shallow pit or tree bowl
13/211	Cut				N-S curvilinear feature with sharp breaks.	Curvilinear ditch
13/212	Fill			13/211	Firm light brown grey silt clay	Single fill of curvilinear feature
14/213	Fill	14/050		14/214	Compact mid grey silt clay	After use silting phase
14/214	Cut				E-W oval, shallow feature	Possible post hole
14/215	Cut				E-W linear feature with steep sides.	Boundary ditch
14/216	Fill			14/215	Mid yellow grey firm silt clay	Tertiary silting/backfill
14/217	Fill	14/217	Pottery	14/215	Light blueish grey firm clay	Secondary fill
14/218	Fill		Production waste	14/215	Mid yellow compact grey silt clay	Secondary silting
14/219	Fill	14/055	Pottery	14/215	Mid brown grey reddish brown silt clay	Primary ditch fill
14/220	Fill			14/215	Light blueish grey firm clay	Glay event
35/221	Layer				Mid brown, grey, silt.	Ploughsoil
35/222	Layer				Yellow orange grey clay and shale.	Natural

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
08/225	Fill	08/053		08/226	Mid orange brown grey silt clay.	Drainage ditch
08/226	Cut				N-S linear feature with concave base	Drainage ditch
08/227	Fill	08/054		08/228	Mid grey firm brown silt clay	Fill of drainage ditch
08/228	Cut				N-S linear feature with concave base	Drainage ditch
08/229	Layer				Dark brown grey sandy clay silt	Ploughsoil
08/230	Layer				Mid orange brown clay.	Natural clay
14/231	Cut				W-E linear shallow concave sided feature	Cut for a gully
14/232	Fill			14/231	Dark yellow brown silt clay	Fill of a gully
VOID						
VOID						
16/235	Fill	16/057	Pottery	16/236	Compact light grey brown clay silt	After use silt phase
16/236	Cut				NW-SE linear cut with shallow flat base	Field system ditch cut
16/237	Layer				Dark grey silt clay	Ploughsoil
16/238	Layer				Light brown yellow clay silt	Natural
21/239	Layer		Ceramic object		Mid grey silt	Ploughsoil
21/240	Layer				Yellow orange silt clay	Natural
21/241	Fill	21/59		21/242	Pale orange silt clay with shale inclusions	Main upper ditch fill
21/242	Cut				E-W linear flat bottomed feature	Enclosure ditch
21/243	Fill	21/60		21/242	Light grey silt.	Basal deposit
21/244	Cut				E-W narrow linear with u profile	Field ditch
21/245	Fill			21/244	Orange silt	Narrow linear slot
21/246	Cut				E-W linear flat bottomed feature	Cut of feature
21/247	Fill			21/246	Dark yellow brown compact silt clay	Primary fill of feature
21/248	Fill	21/061		21/246	Dark yellow grey compact silt clay	Primary silting
21/249	Cut				NNW-SSE Linear shallow feature	Furrow
21/250	Fill	21/058		21/249	Firm mid brown grey clay silt.	Fill of possible furrow

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
16/251	Cut				NE-SW shallow linear feature.	Boundary ditch
16/252	Fill	16/063		16/251	Pale grey brown orange silt clay	Fill of ditch
16/253	Cut				NE-SW shallow linear feature.	Cut of ditch
16/254	Fill	16/064		16/253	Pale grey brown orange silt clay	Ditch fill
21/255	Fill			21/242	Light yellow orange clay silt.	Top fill of ditch
21/256	Fill			21/242	Light orange clay silt.	Lower fill of ditch
21/257	Fill			21/242	Orange grey silt.	Basal fill from over cutting ditch
16/258	Layer				Light gret brown clay silt.	Sub soil
21/259	Fill			21-246	Light grey dark yellow silt clay	Secondary silting
21/260	Fill			21/246	Dark grey yellow silt clay	Ditch fill
21/261	Fill			21/246	Dark grey brown silt clay	Fill of linear
21/262	Layer	21/062			Greyish red friable clay silt	Preserved subsoil
15/263	Cut				Shallow linear ditch.	Field boudary ditch
15/264	Fill	15/066		15/263	Orange yellow brown clay loam	Ditch fill
15/265	Layer				Firm mid brown yellow clay silt	Natural
15/266	Layer				Firm dark brown grey clay silt.	Ploughsoil
15/267	Cut				E-W linear broad shallow feature	Furrow
15/268	Fill	15/065		15/267	Moist mid brown grey clay silt	Fill of linear feature
15/269	Cut	15/067			Linear NE-SW u shaped ditch	Linear slot, possible fence line
15/270	Fill			15/269	Mid brown shallow fill	Linear boundary slot
23/271	Cut				N-S shallow linear	Linear ditch
23/272	Fill	23/068		23/271	Pale brown grey silt clay	Fill of ditch
26/273	Layer				Light grey orange firm clay	Natural
26/274	Layer				Dark grey brown silt clay	Ploughsoil
26/275	Cut				NNE-SSW linear slightly rounded base	Cut of ditch

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
26/276	Fill			26/275	Mid brown yellow soft clay	Basel deposit of ditch
26/277	Fill	26/070		26/275	Mid grey clay	Secondary fill of ditch
26/278	Fill	26/071		26/275	Mid brown/yellow grey clay	Tertiary fill of ditch
26/279	Cut				Shallow N-S linear feature	Erosion scar from trackway.
23/280	Fill	23/69		23/279	Light yellow brown silt clay	After use silt phase
23/281	Layer				Mid brown grey silt clay	Ploughsoil
23/282	Layer				Mid/light yellow grey silt clay	Natural
49/283	Fill	49/072		49/284	Mid grey brown sand clay silt	Fill of fire pit
49/284	Cut				Circular shallow dish shaped feature	Fire pit/hearth
49/285	Fill	49/073		49/286	Pale grey brown, clay silt	Pit/ditch fill
49/286	Cut	49/73			Sub circular shallow dich feature	Pit
49/287	Fill			49/288	Pale grey brown orange clay silt	After use silt phase
49/288	Cut				N-S shallow linear feature	Furrow cuts
49/289	Cut/Fill				Group of modern field drains	Field drains
20/290	Cut				NE-SW intersection of two features	Ditch intersection
20/291	Fill	20/074	Heat affected clay	20/290	Mid yellow grey compact silt clay	Ditch fill
20/092	Fill	20/075		20/290	Grey clay	Lower ditch fill
20/293	Layer		Copper alloy object		Mid brown grey silt clay	Ploughsoil
20/294	Layer				Dark yellow grey compact clay	Natural
48/295	Layer				Mid brown soft silt clay	Ploughsoil
48/296	Layer				Light brown clay	Sub soil
48/297	Layer				Dark yellow grey compact clay	Natural
20/298	Cut				SW-NE curvilinear ditch.	Curving ditch cut
20/299	Fill			20/298	Orange grey silt.	Ditch fill
49/300	Layer				Dark grey brown clay soil.	Ploughsoil

Context	Type	Sample	Finds	Fill of	Description.	Interpretation.
49/301	Layer				Orange yellow clay	Natural
40/302	Cut				SW-NE Linear feature	Cut of ditch
40/303	Fill	40/076		40/302	Mid grey/brown firm clay	Secondry fill of ditch
40/304	Layer				Dark brown silty clay	Ploughsoil
40/305	Layer				Light yellow silty clay	Natural
40/306	Fill	40/077		40/302	Soft grey clay	Primary fill of ditch
41/307	Layer				Orange/yellow clay	Natural
41/308	Layer				Yellow orange silt clay	Natural
41/309	Layer				Dark grey, slightly brown silty clay	Top soil
43/310	Layer				Dark grey, slightly brown silty clay	Top soil
43/311	Layer				White and orange yellow silty clay	Drift Geology
43/312	Layer				Compact light grey brown clay silt	Sub soil
47/313	Fill	47/079		47/314	Mid brown grey silt clay	Secondry fill
47/314	Cut				S-N curving ditch	Boundary ditch
47/315	Layer				Mid brown grey silt clay	Top soil
47/316	Layer				Light redish silty clay	Sub soil
47/317	Layer				Mid grey-yellow compact clay	Natural drift geology
11/318	Layer				Greyish brown silty clay	Top soil
11/319	Layer				Mid greyish orange firm clay	Natural
47/320	Fill	47/078		47/314	Yellow grey silty clay	Primary fill
35/321	Layer				Mid bown grey silty clay	Plough soil
35/322	Layer				Light yellow orange clay silt.	Natural
37/323	Layer				Mid brown grey silt clay	Plough soil
37/324	Layer				Light yellow orange clay silt.	Natural
34/325	Layer				Mid brown loose grey clay silt	Plough soil
34/326	Layer				Mottled light yellow/red/orange silt clay	Natural

APPENDIX A – TABLE 2. FINDS CATALOGUE

SWI 06 Preliminary Finds Catalogue

Trench	Reg. Find No.	Context No.	Material Type	Prov. Period	Date Range	Count	Weight (gms)	Comments
9	n/a	19	Heat affected clay	Undetermined		1	2	
9	n/a	23	Pottery	Post-Medieval	17th to 18th C.	1	13	Black ware
9	n/a	25	Clay Pipe	Post-Medieval	17th to 18th C.	1	2	Undecorated stem fragments
9	n/a	28	Clay Pipe	Post-Medieval	17th to 18th C.	1	3	Undecorated stem fragments
10	n/a	9	Pottery	Medieval	Late 11th to early 13th C.	1	3	York Gritty
10	n/a	43	Clay Pipe	Post-Medieval	17th to 18th C.	1	3	Undecorated stem fragments
10	n/a	54	Pottery	Post-Medieval	Mid 17th to mid 18th C.	1	9	Slipware
10	n/a	55	Pottery	Post-Medieval	Late 19th to early 20th C.	1	22	Grey salt glazed stoneware jar
10	n/a	63	Heat affected clay	Undetermined		1	2	Kiln, hearth or furnace lining. no metalliferous residues attached.
14	n/a	217	Pottery	Roman	2nd C.	2	15	Grey Ware
14	n/a	218	Production waste	Medieval		1	7	Fragment of vitrified hearth, kiln or bloomery furnace lining with metalliferous slag attached.

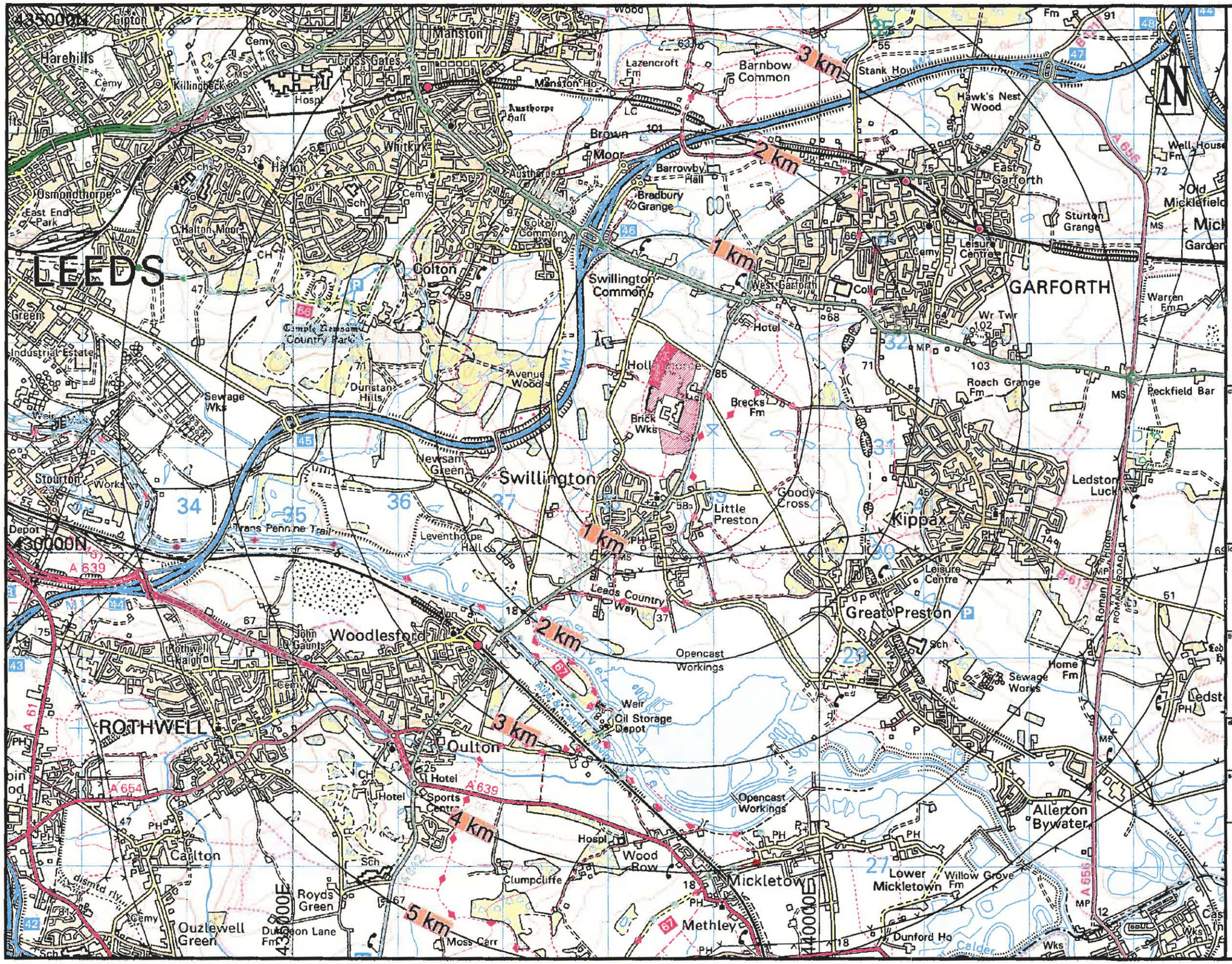
SWI 06 Preliminary Finds Catalogue

Trench	Reg. Find No.	Context No.	Material Type	Prov. Period	Date Range	Count	Weight (gms)	Comments
14	n/a	219	Pottery	Roman	2nd C.	1	22	Grey Ware
16	n/a	235	Pottery	Roman	Late 2nd to 4th C.	1	16	Grey Ware, Holm-Upon-Spalding Moor?
18	n/a	93	Pottery	Medieval	Late 11th to early 13th C.	1	14	York Gritty
18	n/a	93	Pottery	Medieval	Late 12th to early 14th C	1	11	Northern Gritty
18	1	101	Pottery	Medieval	Late 11th to 12th C.	2	56	Probably late 11th to 12th century. Hand made jar. Part of reg find 2
18	n/a	101	Production waste	Medieval		1	48	Possible iron smithing slag
18	2	102	Pottery	Medieval	Late 11th to 12th C.	1	16	Probably late 11th to 12th century. Hand made jar. Part of reg find 1
18	n/a	108	Pottery	Medieval	Mid 10th C.	59	543	York A Ware,vessel 1
18	n/a	108	Pottery	Medieval	9th to 11th C.	4	61	York A Ware, vessel 2
18	n/a	108	Pottery	Medieval	Late 11th to early 13th C.	1	12	York Gritty
18	n/a	108	Production waste	Medieval		1	495	Possible iron smithing slag from the base of a smithing hearth.slag
18	n/a	123	Pottery	Medieval	Late 11th to early 13th C.	1	4	York Gritty
18	n/a	123	Production waste	Medieval		1	257	Possible iron smithing slag
20	n/a	291	Heat affected clay	Undetermined		1	7	

SWI 06 Preliminary Finds Catalogue

Trench	Reg. Find No.	Context No.	Material Type	Prov. Period	Date Range	Count	Weight (gms)	Comments
20	n/a	291	Pottery	Medieval	Late 11th to early 13th C.	3	24	York Gritty
20	3	293	Copper alloy object	Early Modern	Early 20th C.	1	10	Coin, George V halfpenny, 1914.
21	n/a	239	Ceramic object	Post-Medieval	17th to 18th C.	1	5	Ceramic marble, carved from Blackware
21	n/a	239	Pottery	Medieval	Late 11th to early 13th C.	2	13	York Gritty
22	n/a	79	Pottery	Medieval	Late 11th to early 13th C.	2	32	York Gritty
22	n/a	96	Pottery	Medieval	Late 11th to early 13th C.	1	3	York Gritty
n/a	4	12127	Copper alloy object	Early Modern	Late 18th C.	1	18	u/s,Coin, George III Penny, 1797.
n/a	n/a	12135	Production waste	n/a		1	71	u/s, Modern glass slag.
n/a	n/a	12134	Production waste	n/a	20th C.	1	10	u/s,fuel ash slag, could date from as late as 20th c.
n/a	n/a	12130	Ceramic object	Early Modern	18th C.	1	1	u/s,Grey Stoneware marble with enamel decoration 18th c or later.
18	n/a	112	Heat affected stone	Undetermined		12	3600	<35>
18	n/a	109	Heat affected stone	Undetermined		12	8600	<34>

FIGURES



LEGEND

land with extant permission for quarrying

planning application area

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client:

Hanson

Hanson Building Products
Stewartby, Bedford
MK43 9LZ
TEL: 08705 258258
FAX: 01234 762042

location:

SWILLINGTON BRICKWORKS

title:

LOCATION PLAN

drawn by:	date:
RMS	May 2006
scale:	drawing number:
1:50,000	S23/18

GEOPLAN LIMITED

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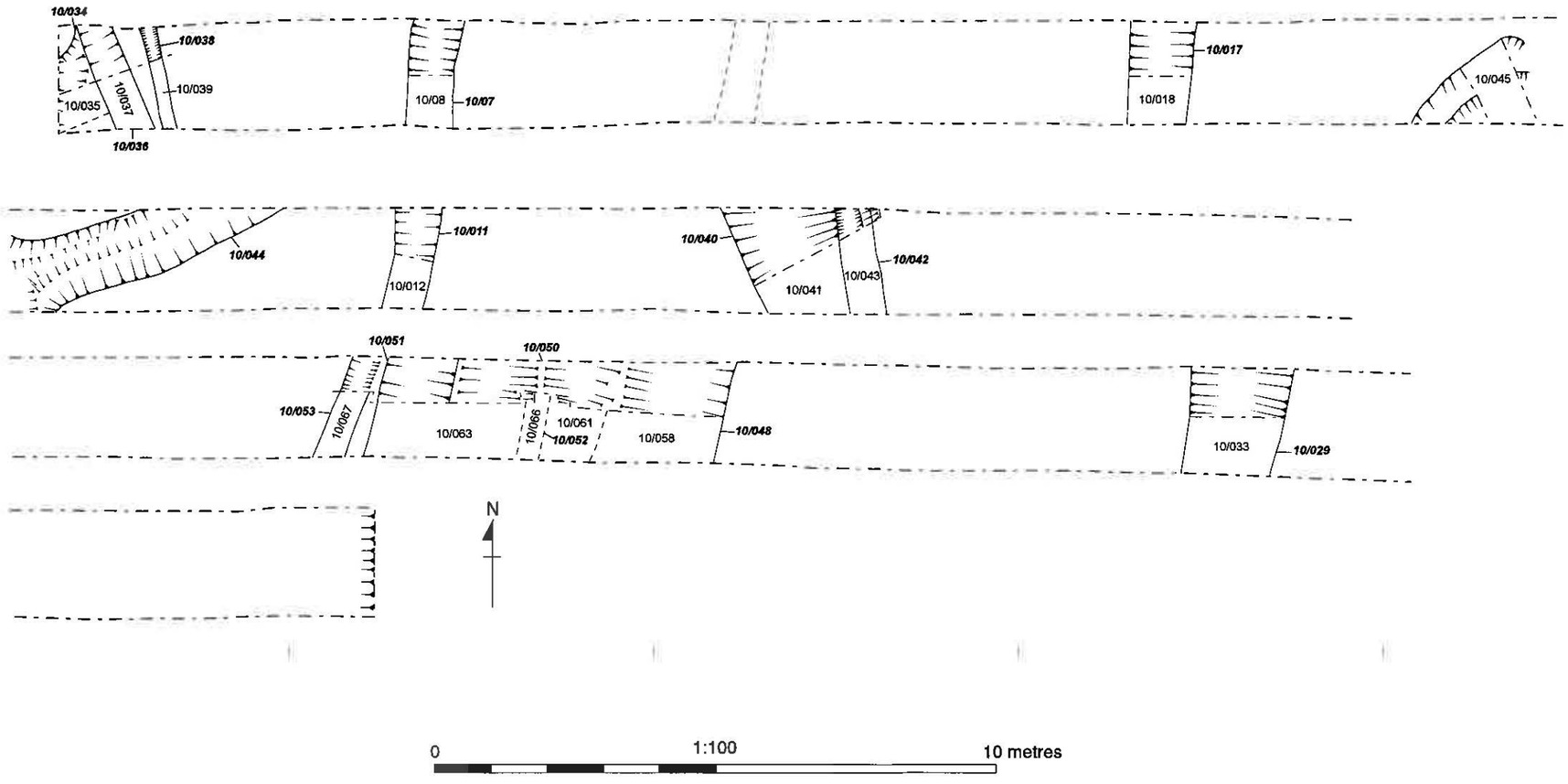

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

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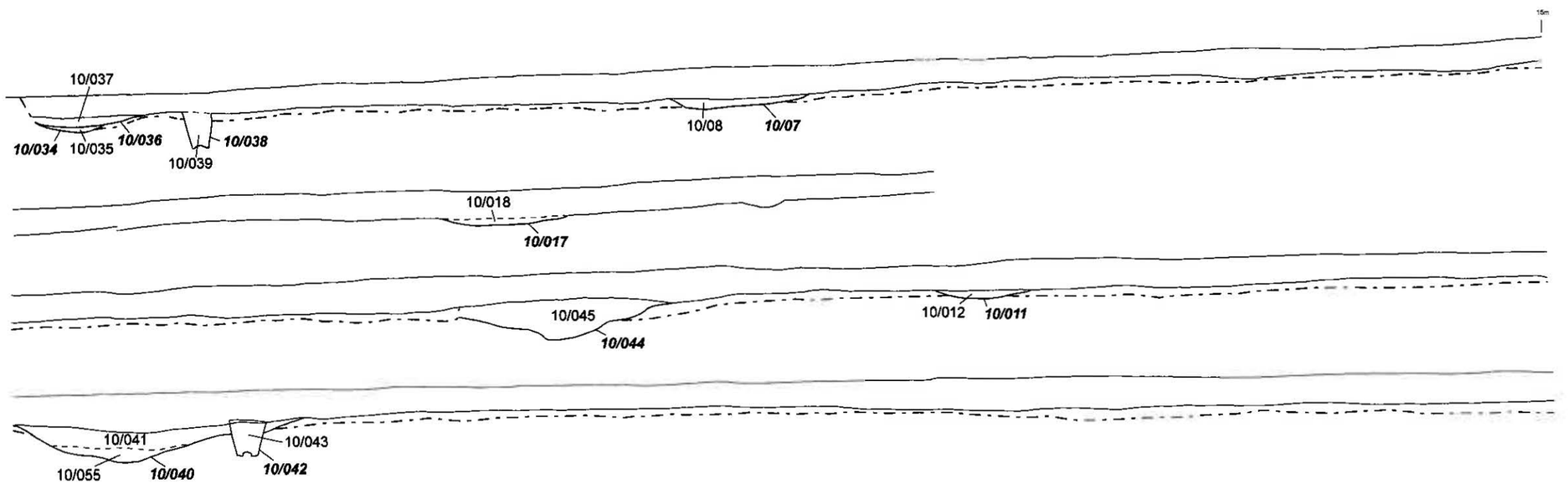
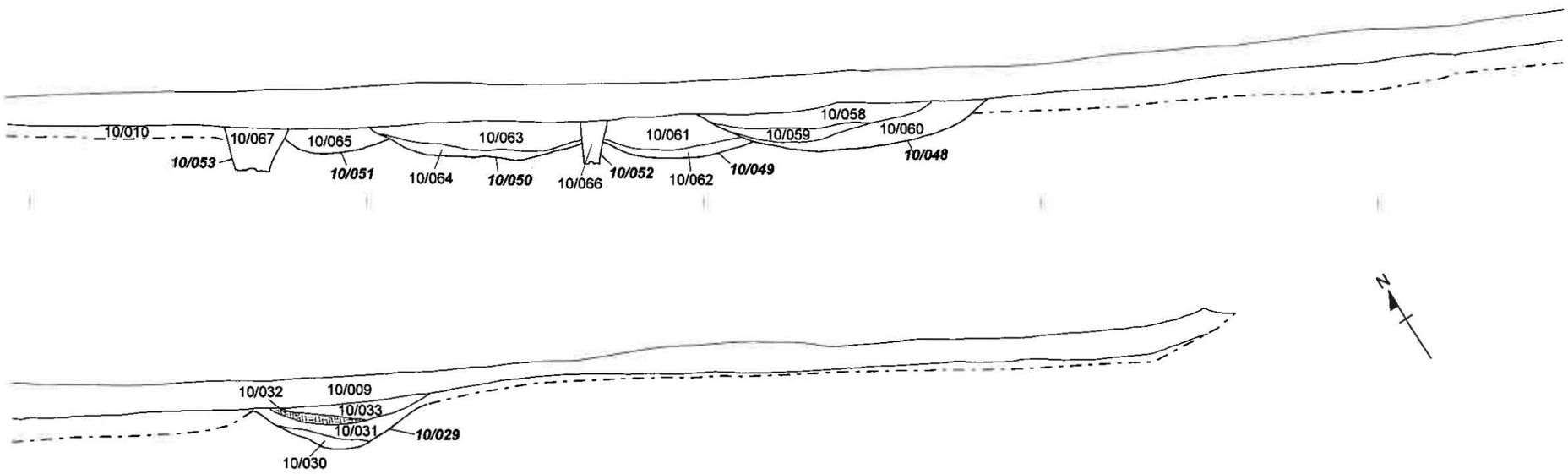
Fig 4: Plan of trench 10





0 1:50 5 metres

Key

51203 Fill number

14244 Cut number

Clay

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

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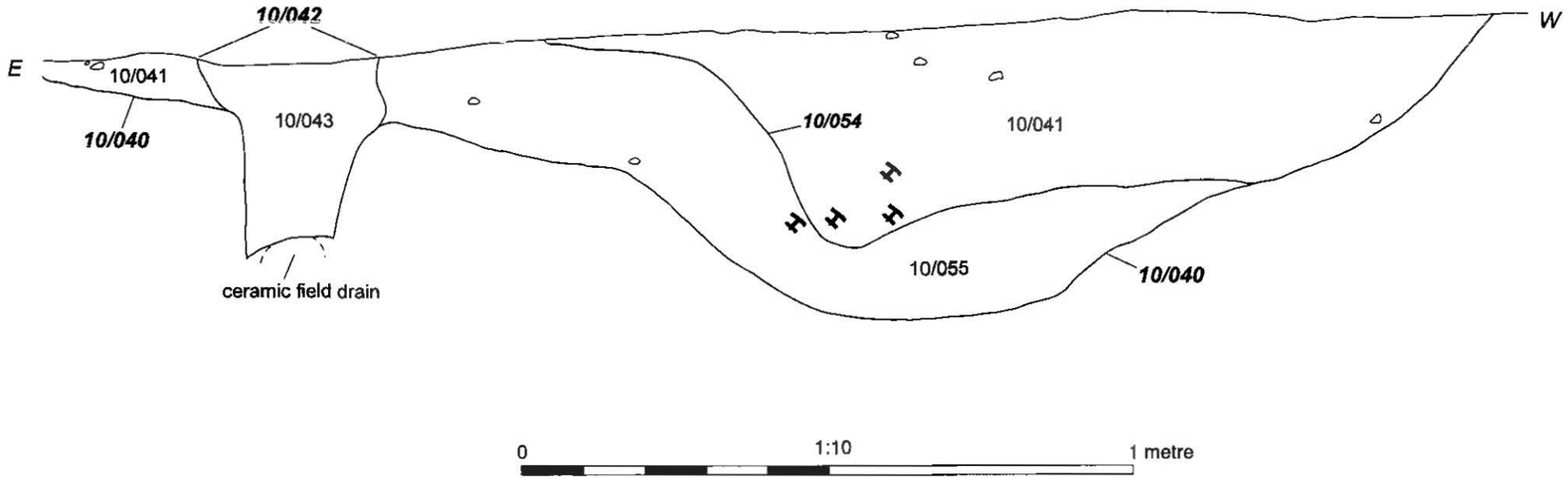
Fig 5: Section of Trench 10



Key

51203 Context number

14244 Cut number

Clay

Burnt clay

Coal

Charcoal

Manganese

Stones and pebbles

Burnt stone

P Pottery

Limestone

S Sandstone

C Chalk

Oxidation

OY Oyster

Snails

Ceramic building material

Daub

Flint

B Bone

Slag

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

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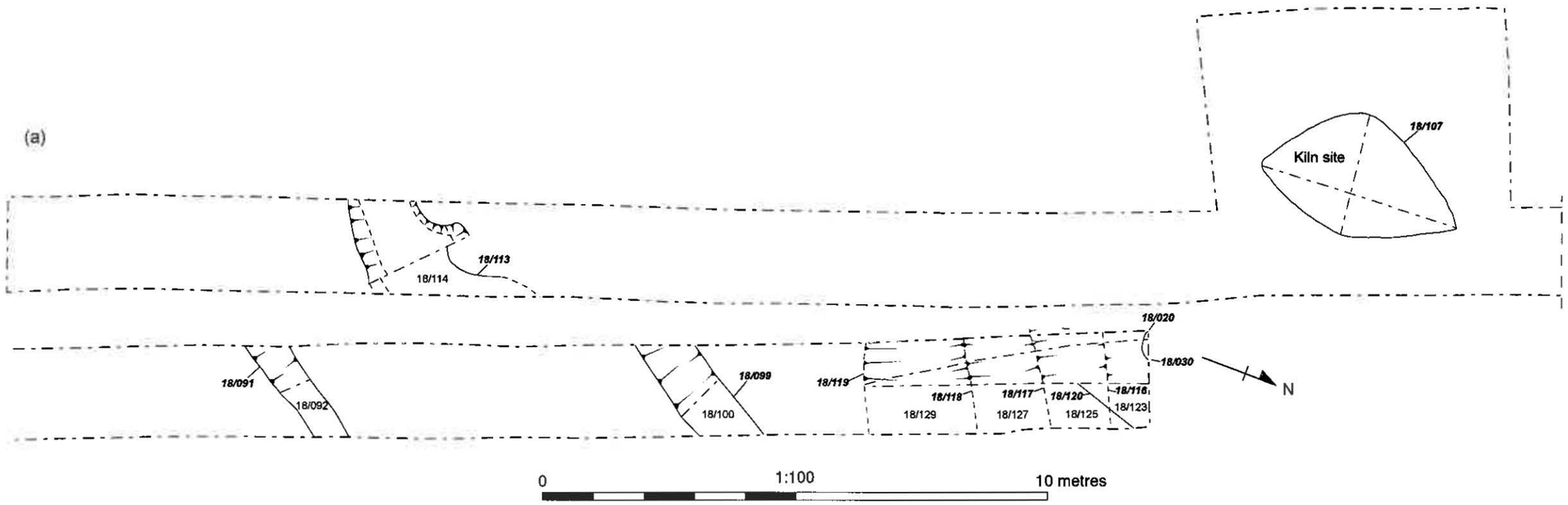
Fig 6: Section through 10/040

(a)



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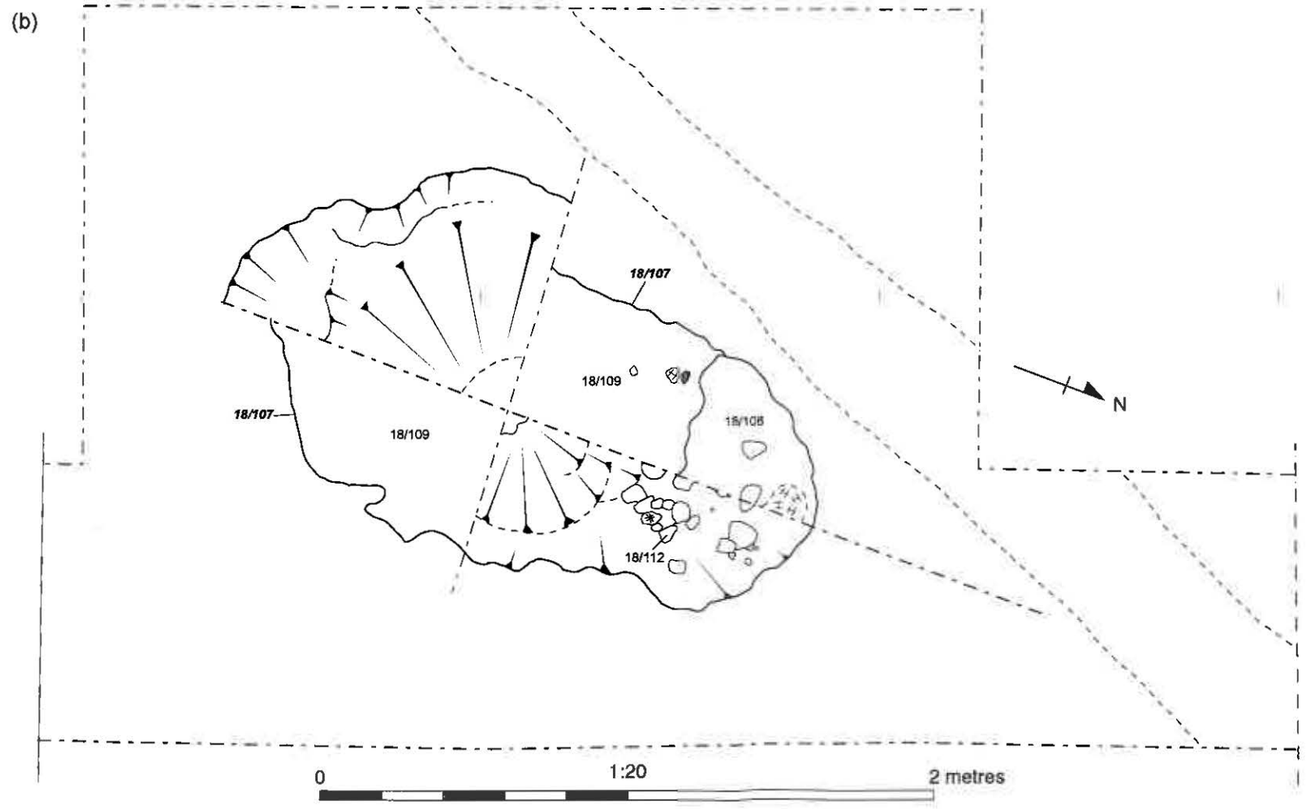

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

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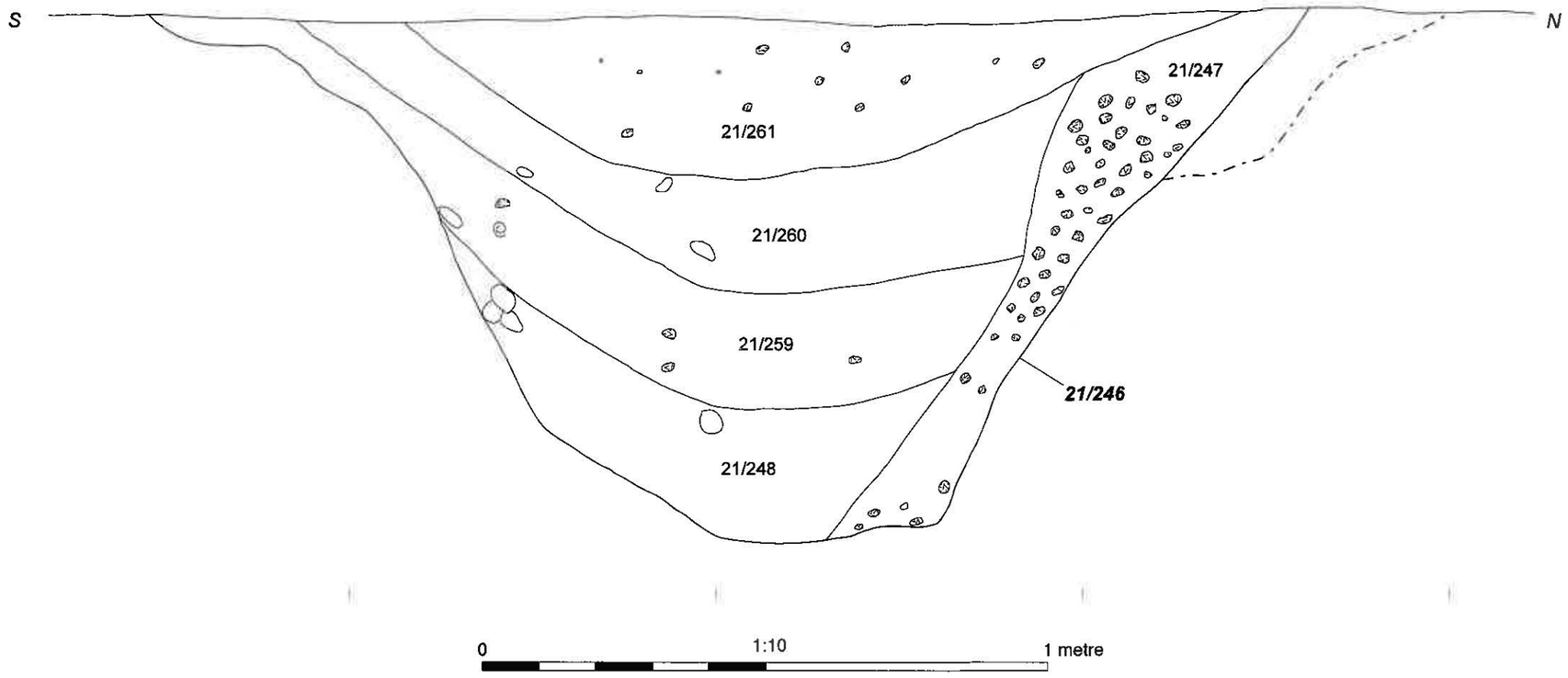
Fig 7: a) Plan of trench 18

Fig 7 b) Plan of kiln in trench 18



Key

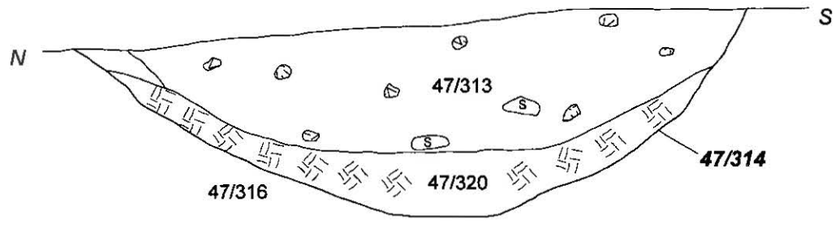
- 51203 Context number
- ***14244*** Cut number
- Clay
- Burnt clay
- Coal
- Charcoal
- Manganese
- Stones and pebbles
- Burnt stone
- P Pottery
- Limestone
- S Sandstone
- Chalk
- Oxidation
- OY Oyster
- Snails
- Ceramic building material
- Daub
- Flint
- B Bone
- Slag

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

network archaeology

SWI

Fig 8: Section through 21/246



0 1:10 1 metre

Key

51203 Context number

14244 Cut number

Clay

Burnt clay

Coal

Charcoal

Manganese

Stones and pebbles

Burnt stone

P Pottery

Limestone

S Sandstone

C Chalk

Oxidation

OY Oyster

Snails

Ceramic building material

Daub

Flint

B Bone

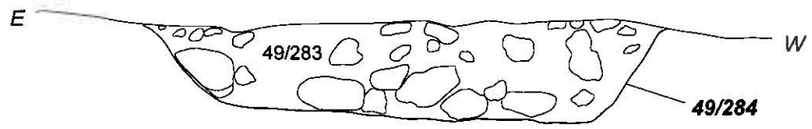
Slag

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

network archaeology

SWI

Fig 9: Section through 47/314



0 1:10 1 metre

Key

51203 Context number

14244 Cut number

Clay

Burnt clay

Coal

Charcoal

Manganese

Stones and pebbles

Burnt stone

P Pottery

Limestone

S Sandstone

C Chalk

Oxidation

OY Oyster

Snails

Ceramic building material

Daub

Flint

B Bone

Slag

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

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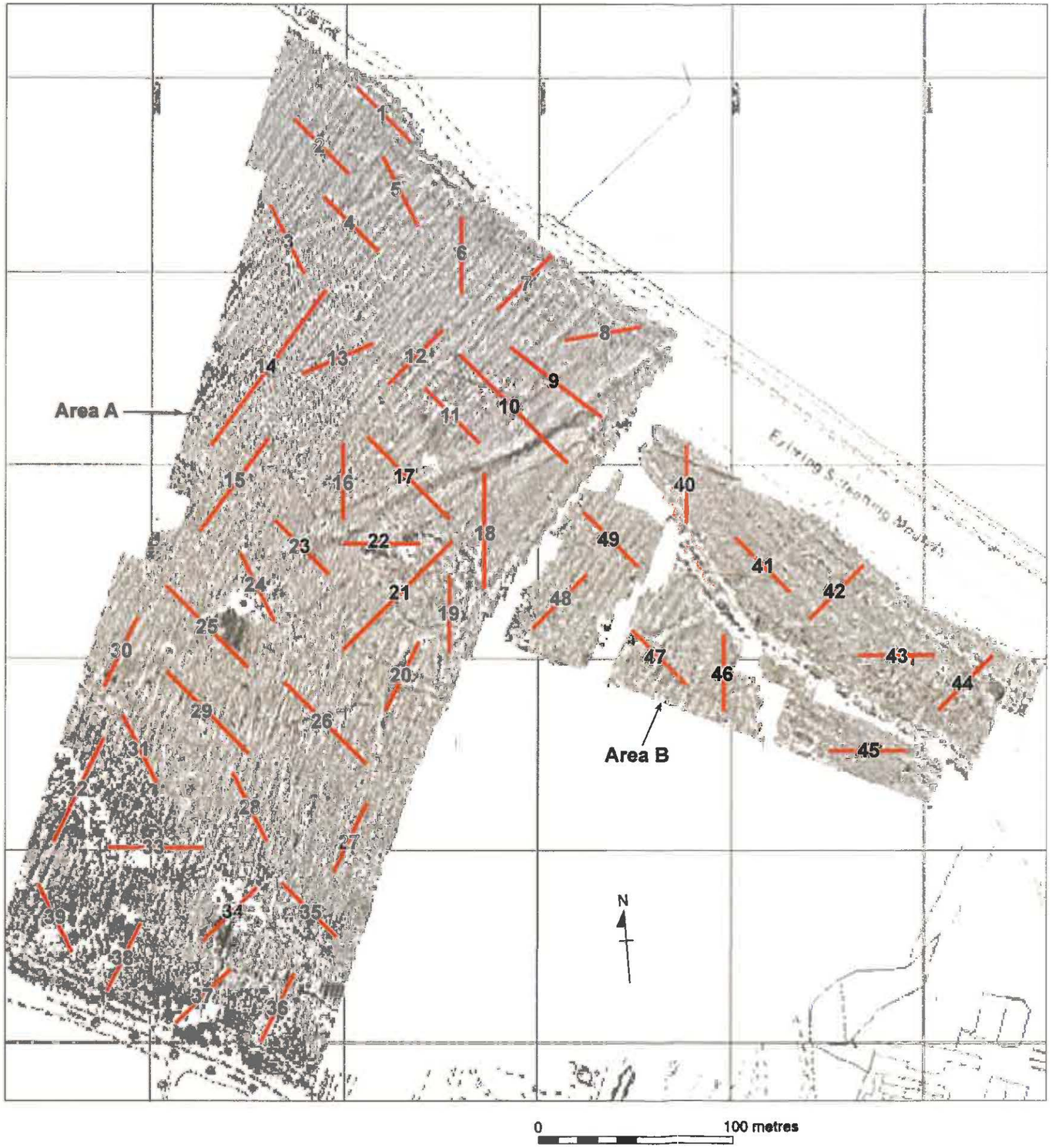
SWI

Fig:10 Section through 49/284



Key

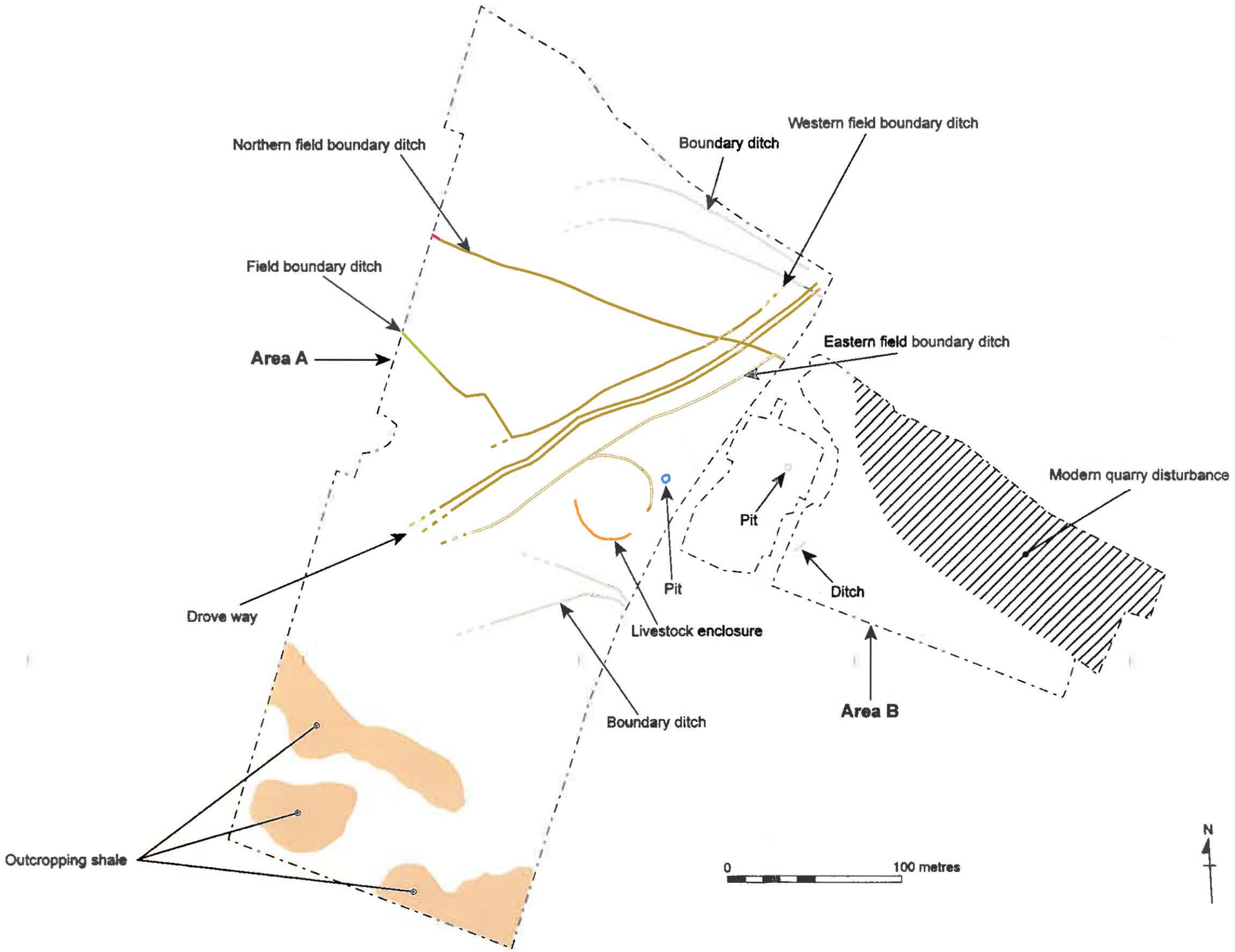
1 — Trench location and number

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

network archaeology

SWI

Fig 3: Geophysical survey results with survey areas, trench locations and trench numbers.



Key

- Romano-British 42BC - 400 AD
- Late Saxon 851 - 1065
- Medieval 1066 - 1539
- Post Medieval 1540 - 1900
- ?Unphased
- Limit of survey area

Ver	Date	Description	DM	Chk	App
1	19/2/07	First draft	DW	PF	CT

network archaeology

Swillington Brick Works
Trench evaluation

Fig 11: Interpretive plan of archaeological features

RAPID SCAN EVALUATION OF THE PLANT MACROFOSSIL ASSEMBLAGES FROM SWILLINGTON, YORKSHIRE (SWI 06)

Biological summery report.

Val Fryer, Church Farm, Sisland, Loddon, Norwich, Norfolk, NR14 6EF
February 2007

Introduction and method statement

At the time of writing, approximately 80% of the samples submitted for assessment have been processed. The deposits on site are thought to be largely of medieval date, although some residual Roman material may also be present.

Processing has been undertaken using manual water flotation/washover, with the flots being collected in a 500 micron mesh sieve. Dis-aggregation of the sample matrix, which is stiff yellowish-brown clay, has proved extremely difficult, and all samples have been pre-soaked in a mild bleach solution prior to processing. Rapid scan evaluation of the flots has been undertaken using a binocular microscope at magnifications up to x 16.

Results to date

The assemblages are mostly very small (<0.1 litres in volume). The material present appears to be reasonably well preserved, although some abrasion is apparent, possibly as a result of either prolonged exposure prior to burial or subsequent disturbance. A proportion of the macrofossils are heavily coated with fine silt particles, although it is thought unlikely that this will preclude identification of the material. Modern contaminants including fibrous roots, seeds, chaff and straw are present throughout, although rarely at a high density.

Rapid scan evaluation has shown that charcoal/charred wood fragments are predominant within most of the assemblages. Many of the samples appear to be derived from scatters of fuel/hearth debris, as coal fragments and pieces of black 'cokey' and tarry residues are abundant along with the charcoal. Other plant macrofossils are scarce, although cereal grains (possibly of rye (*Secale cereale* L.)), seeds, buds and fragments of charred root or stem are present within a small number of the assemblages.

Recommendations

It is to be noted that this evaluation is only an interim statement and is not conclusive, as it does not include the results from all samples submitted for assessment. Full assessment, in accordance with the site specification, will be undertaken.

2 grains - Tr 13
wasted rem - 49, 18, 14, 17, 2

Assessment of a Pottery Vessel from Swillington, West Yorkshire (SWI06)

Alan Vince

Three sherds from a handmade, gritty jar were recovered from archaeological fieldwork at Swillington, West Yorkshire, by Network Archaeology Ltd. The sherds all fit together and come from a large, sagging-based jar of Anglo-Saxon or early medieval date.

Description

The three joining sherds come from two contexts, 18/101 and 18/102. They appear to have been recently broken, in that there are no soil concretions on some of the broken edges.

The vessel is a handmade jar base. The vessel has a straight, slightly flaring lower wall and a slightly sagging base. It has a black, carbon-rich, core, oxidized external margin and reduced light grey internal margin.

The fabric contains abundant angular quartzose sand, with grains up to 4.0mm across. Most of these grains are quartz with overgrown faces with some off-white kaolinite and red fine-grained haematite cement adhering. Sparse rounded quartz grains ranging up to 3.0mm across and feldspar fragments up to 4.0mm across are also present. The groundmass contains abundant angular quartz up to 0.1mm across but little or no muscovite

The coarse inclusions in this fabric are derived from the Millstone Grit and are typical of vessels from West and North Yorkshire of Iron Age and Anglo-Saxon date. The sagging base, however, precludes an iron age date and can be paralleled in the early to mid Anglo-Saxon period. In particular, some of the larger vessels used to hold cremations have a similar size and profile. In midland England, however, the most likely context for vessels of this size and shape would be the 11th to 13th centuries. In the north of England, similar handmade industries are found in the early post-conquest period (e.g. Beverley Reduced Chalky ware, Didsbury and Watkins 1992;Watkins 1991 or Durham ware, Carver 1979). However, in West Yorkshire in the late 11th to 13th centuries there is a strong tradition producing wheelthrown, cylindrical-bodied white gritty wares (York Gritty ware, Holdsworth 1995; Mainman 1990).

Assessment

Dating and Interpretation

There are two possible contexts for the Stillington vessel. Firstly, it could be a large urn of early to mid Anglo-Saxon date, and, if so, more likely to date to the earlier than the later part of this period, since such large vessels are rare in mid-Saxon Fishergate, York (Mainman 1993; Vince and Steane 2005). Early Anglo-Saxon pottery is very rare in West Yorkshire. In fact, there is only two other vessels known to the author, from Dalton Parlours, Collingham (1990) and from Boston Spa, from a site excavated by West Yorkshire Archaeological Service (BTW04). For the mid-Saxon period too, there is very little pottery known from West Yorkshire and the only site known to the author is the Bishop's Palace at Otley (Hurst 1976) Fig 7.9 Nos 4 & 5).

Secondly, it might be an 11th to 13th-century handmade jar, made in a tradition which was introduced to northern England after the Norman conquest but which appears to be absent in West Yorkshire.

Whichever the correct interpretation, this vessel is unusual and the site from which it comes worthy of further investigation.

Further Work

The vessel should be illustrated and a thin section and chemical analysis undertaken, to compare with sample of the Otley and Boston Spa vessels.

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The Alan Vince Archaeology Consultancy, 25 West Parade, Lincoln, LN1 1NW

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Wrathmell, S. and Nicholson, A. (1990) *Dalton Parlours: Iron Age Settlement and Roman Villa*, West Yorkshire Archaeology Service, Wakefield

Assessment of Pottery from Swillington, West Yorkshire (SWI06)

Alan Vince

An archaeological watching brief carried out at Swillington, West Yorkshire produced sherds of an unusual Anglo-Saxon or early Medieval handmade vessel (Vince 2006). The date of this vessel could not be determined from internal evidence, since no good parallels were known. Subsequent fieldwork revealed further pottery which clarifies the date of the previously-assessed material, since that material is stratigraphically later than a feature which produced pottery of 10th-century date.

Description

Anglo-Scandinavian

Fragments of two vessels of York A ware (Mainman 1990; 1978) were found together with a single sherd of York Gritty ware.

Vessel 1 consists of 59 sherds comprising most of the base and about a third of the rim and sides of a jar. The base is flat but shows no sign of wheelthrowing or removal from the wheel. The lower body of the vessel also shows little or no sign of wheelthrowing but the shoulder and rim are clearly wheelthrown and show the ripple marks caused by the tension between the wheel and the potter's hands. It is not clear whether the pot was entirely thrown on the wheel and then the base reworked after removal from the wheel or whether a coil-built body was trued-up and finished on the wheel but it is possible that after reconstruction side-lighting and further study would establish the method of manufacture more clearly. X-radiography of the walls and base might also reveal the manufacturing method. The rim form is triangular and closely paralleled by vessels from Coppergate, York, dated by their Period 4 context to the mid 10th century (Mainman 1990, Fig 00 Nos. 00). The vessel has soot on the exterior from the underside of the base to the rim.

Vessel 2 consists of four sherds of a wheelthrown jar which provide a profile from the base to the shoulder. The base has been knife trimmed together with the lower 10mm of the wall. Both vessels were oxidized and in places have a light grey core but vessel 2 is less reduced than vessel 1 and consequently has a lighter colour, 10YR 7/4 (very pale brown) as opposed to 7.5YR 7/6 (reddish yellow) for Vessel 1.

The fabric of both vessels is tempered with a well-sorted quartzose sand between c.0.5 and 1.0mm across with rounded brown mudstone fragments up to 5.0mm across. The groundmass is fine-textured with a micaceous sheen.

Recent analysis of material from the Coppergate and Fishergate excavations in York and from the production site at Thorner has demonstrated that the Thorner site was producing York A ware and therefore dates between the later 9th and 11th centuries (Cumberpatch and Roberts 1998-1999; Vince 2004). Chemical analysis indicates that the pottery contains a very high frequency of barium, probably as a result of the inclusion of vein barytes in the sand.

Medieval

A sherd of York Gritty was found in the same feature fill as the two York A ware sherds whilst single sherds were also recovered from two other features. York Gritty ware was produced from Coal Measure whiteware clay, often marbled with lenses of redder colour, and was tempered with a coarse gravel, composed of similar quartz and sandstone grains to those found in York A ware but ranging up to 3.0mm across. Although there is no archaeological evidence as yet for the location of the kilns producing this ware it is very likely that Potterton was one of the production sites, since it has a potting place name mentioned in Domesday and this ware was in use in York by the late 11th century (Holdsworth 1995). However, York Gritty ware was also used throughout the 12th and into the 13th centuries and no features yet allow the vessels to be closely dated.

Assessment

The Alan Vince Archaeology Consultancy, 25 West Parade, Lincoln, LN1 1NW

http://www.postex.demon.co.uk/index.html

A copy of this report is archived online at
http://www.avac.uklinux.net/potcat/pdfs/avac2007001.pdf

The material from 18/108 includes two smashed vessels one of which can be closely paralleled in a mid 10th-century context in York. The other can also be broadly dated to the late 9th to early 11th centuries. The sherd of York Gritty ware from the same context might therefore either be intrusive from a mid 11th-century or later deposit, indicate that the filling took place over a century or more or perhaps indicate that York Gritty ware was produced before the Norman Conquest. However, at present the most likely context for York Gritty ware is in the decades following the conquest, since the rim form of York Gritty jars appears to have Norman parallels.

The previously-assessed vessel, from 18/101 and 18/102, is apparently stratigraphically later than 18/108 and therefore probably a late 11th to 12th century handmade vessel rather than an early to mid Anglo-Saxon vessel. As such it extends the known range of such vessels which are known in Lincolnshire and East Yorkshire but not West Yorkshire. Handmade wares, including glazed vessels, were produced in South Yorkshire, at Doncaster Market Place, probably in the mid 12th century (Buckland and Hayfield 1989).

Despite the location of the Thorner kiln in West Yorkshire, finds of York A ware are rare in the countryside and it had been surmised that the main market for this kiln site was York itself. The Swillington finds join a single vessel from Ingmanthorpe Manor (Vince 2005) and suggest that there may be a greater rural pottery use in 10th century West Yorkshire than otherwise supposed. Swillington is less than 10 miles to the south of Thorner, however, and Ingmanthorpe is about 10 miles to the north and it may be that in addition to its major market in York the Thorner products were traded directly from the production site for a short distance.

Further Work

The identity of the three vessels from 18/108 should be confirmed through thin section and chemical analysis. The vessels should be reconstructed, ideally professionally to a standard suitable for museum display, otherwise temporarily using tape so that they can be photographed and illustrated, and a report for publication produced.

Costing

Until April 2007, thin section analysis is costed at £24.00 plus VAT per sample and chemical analysis, is also costed at £24.00 plus VAT.

A report on the pottery listed in Appendix 1 incorporating the results of thin section and chemical analysis and suitable for publication would take half a day, £96.00 plus VAT.

Costs for illustration and reconstruction have not been obtained but an hour would be required to liaise and check the drawings.

Total: £240.00 plus VAT

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Appendix 1

DNO	Context	Action	class	Cname	Description	Form	Part	Nosh	NoV	Weight	Use
0	18/108	ICPS	POTTERY	YG	CYLINDRICAL WALLED	JAR	BS	1	1	11	SOOTED EXT
1	18/108	DR;ICPS;TS	POTTERY	YORKA	COMPLETE PROFILE;FLAT BASE;CYLINDRICAL BODY NARROWING TO TRIANGULAR RIM CF COPPERGATE PER 4	JAR	PROF	59	1	479	SOOTED EXT
2	18/108	DR;ICPS;TS	POTTERY	YORKA		JAR	BS	4	1	62	SOOTED EXT
0	18/102		POTTERY	SSTMG		JAR	BS	1	0	16	
0	18/101		POTTERY	SSTMG		JAR	B	2	1	59	
0	022/096		POTTERY	YG		JAR	BS	1	1	4	SOOTED EXT
0	10/009		POTTERY	YG		JAR	BS	1	1	3	

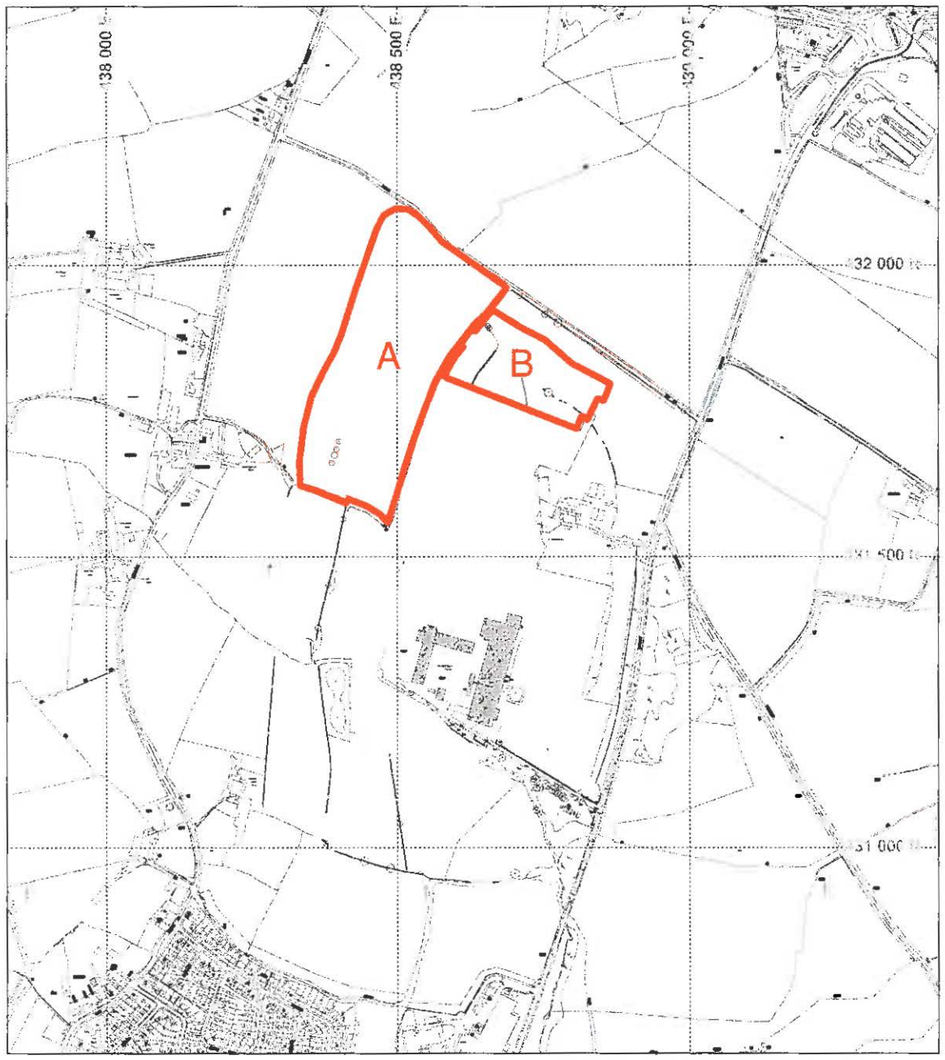

Figure 2: Location of evaluation areas A and B, scale 1:10 000
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