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**Archaeological Excavations at Stamford Road,
Oakham, Leicestershire, 1997**

Post-excavation Assessment and Research Design

by
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SUMMARY

The north and east sides of an Early to Middle Iron Age enclosure were located. These had been recut in the Late Iron Age and the northern ditch had been continued eastward to form a T-shaped layout. Late Iron Age features were located across the area. Part of an enclosure of late 1st-century BC/early-1st century AD date was excavated, together with a possible kiln and a pit. Subsequent activity in the Roman period was represented by gullies and pits. Post-Roman and modern features were also found, including evidence of ploughing from the medieval period.

INTRODUCTION

Background

Archaeological excavation was undertaken by Birmingham University Field Archaeology Unit in September 1997, prior to road construction on land north of Stamford Road, Oakham, Rutland at NGR SK 869 086 (Fig. 1). The work was commissioned by John Samuels Archaeological Consultants (JSAC) on behalf of David Wilson Homes Limited and was undertaken in accordance with an archaeological specification (BUFAU 1997) based on a project brief by the County Archaeological Officer for Leicestershire County Council.

Land to the north, proposed for housing, and the access road itself were the subject of a desk-based assessment, geophysical survey and trial trenching (JSAC 1997). Geophysical survey in the road access area revealed two possible rectilinear enclosures as well as a number of linear features (Fig 2). Trial trenching in the area (Trenches 48-50) also located a number of linear features. A preliminary examination of the pottery suggested occupation dating to between the Bronze Age and early Roman period, along with evidence for medieval agriculture. In the light of the excavation results, which failed to identify Bronze Age material, the pottery from the evaluation will be re-examined. Charred plant remains were found in datable contexts and the waterlogging in the lower fills of ditches suggested that preservation was good. The recommendation for full excavation led to the work reported here.

Objectives, methods and report layout

The excavation was intended to clarify the earlier work and to recover the plan of successive periods of activity, together with associated artefactual and palaeo-environmental evidence. The proposed road line was excavated and all significant archaeological features and deposits were recorded. A programme of extensive detailed sampling was undertaken. The excavated area measured 120 x 20m, and was based on the results of the trial trenches and the geophysical survey evidence. The ploughsoil, generally 0.3m deep, was removed by mechanical excavator with a 360° arm and toothless ditching bucket under archaeological supervision. The subsoil surface or the uppermost archaeological horizon was then cleaned manually as necessary. This revealed a post-medieval colluvium in the north of the area, 0.3-0.65m deep, which was then mechanically excavated to sub-soil depth.

The northern part of the area partially flooded following machine excavation. The high watertable also affected the excavation of some of the features, in particular the deep linear ditches. The southern 20m of the area, to the south of Trench 50, had been ploughed down to the subsoil removing any archaeology. The area containing accessible surviving archaeology was thus 60 x 20m.

A 2m x 2m test pit (Fig. 3) was excavated through the waterlogged alluvial deposits in the northern part of the area by the environmental consultant (James Greig). This deposit was interpreted as the infill of a palaeochannel. The test pit was excavated to a depth of 2.6m. The assessments of the samples collected from this test pit are detailed below.

Recording was by means of pro-forma record cards for contexts and features, supplemented by plans (scales 1:20 and 1:50) and sections (scales 1:10 and 1:20), and monochrome print and colour slide photography. Spatial recording of artefact locations was normally two-dimensional within context and by segment for linear features. Excavation in plan and 3-dimensional recording of artefact locations was limited to selected features. Appropriate samples (up to 30 litres) were taken for environmental analysis from selected features following consultation with archaeobotanists.

Following discussion with the County Archaeological Officer, it was decided to machine excavate a trench to the north between trial trench 47 and the stream (Fig. 2). This was 20m long by 1.6m wide and was aligned north-south. It was located to determine whether or not the archaeological activity recorded to the south survived in this area. In the event no features of archaeological interest were identified.

Five periods, Early-Middle Iron Age, Late Iron Age, transitional Iron Age/Roman, Romano-British, and post-Roman have been determined on the basis of a preliminary examination of the artefacts recovered from excavated features and the few observed stratigraphic relationships. The artefactual evidence suggests earlier activity in the Neolithic/Bronze Age.

The following report outlines the excavation results and provides a quantitative and qualitative assessment of the archive and finds. This is followed by proposals for further analysis leading to full publication of the results.

EXCAVATION RESULTS

Period 1 Early/Middle Iron Age

Two ditches meeting at right angles were recorded, F1045A, running east-west, was joined by F1078A from the south (Fig. 3). Both ditches had been recut in Period 2. None of the three sections cut across the ditches could be taken deep enough to bottom the features. The northern ditch, F1045A, was excavated to a depth of 0.65m. The ditch was 2.8m wide with sloping sides, and the lowest fill excavated, a silt and charcoal layer 1043, had survived later recutting. To the south, ditch F1078A was 3.6m wide and was excavated to a maximum depth of 1.2m. The earliest fill seen was an orange/brown silty clay, 1087, lying beneath a dark layer of silt with much charcoal, 1084.

Although not fully excavated, layers 1043 in F1045A and 1087 in F1078A may have formed the primary fills of ditches which had later been recut, the recutting removing all evidence at the ditch junction. The evidence suggests that the two ditches initially formed the north and east sides, and the north-east corner, of an enclosure. Pottery of Early/Middle Iron Age date was recovered from layers 1084 and 1087. There was no dating evidence from layer 1043. However, the trial trench had recovered pottery tentatively dated to the Bronze Age from its equivalent, 4904, as well as a rotary quern. Animal bone and fired clay was also recorded.

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Period 2 Late Iron Age

The Period 1 ditches were recut and the northern ditch was subsequently continued eastward, the ditches forming a T-junction arrangement (Fig. 3). Ditch F1045B was 2.6m wide. Although not bottomed, a concave-sectioned profile could be suggested, with a possible depth of 0.8m. Its fills comprised silt layers with charcoal and bone, 1064 and 1044. To the south, ditch F1078B was 2m wide and 0.65m deep with a smooth concave-sectioned profile and a fill of dark grey silty clay, 1016. Ditch F1045 had been continued eastward as ditch F1050. This was 1.5m wide and 0.4m deep, steep-sided and flat-bottomed, with a dark clay fill, 1049. At the junction of the three ditches, excavation was halted at 0.65m. The ditch profiles showed sharply sloping sides and a silt fill, 1095, demonstrating that ditches F1045B and F1078B had been open at the same time. The evidence suggested that F1050 had been a later addition.

North of F1045B were two groups of features. To the west, pit F1047 was 0.2m deep with gently sloping sides and a flat base. Its fill was of yellow brown silty clay, 1046. It was cut by F1065 a similarly shallow, flat-based pit with a similar fill. To the east was a hearth, F1074, filled with ash and burnt clay, 1073. Nearby was a shallow

scoop, F1071, filled with silty clay, 1070, which contained possible hearth residues, charcoal and burnt clay.

In the angle of F1045B and F1078B was a possible pit, F1063, filled with grey brown silty clay, 1048. This was cut by a possible gully terminal, F1042, 0.35m deep, with a fill containing much burnt material, 1041.

Gully F1058 to the east of the excavated area was 1.2m wide and 0.25m deep, with steeply sloping sides. Its clay fill, 1057, contained some charcoal flecking. A small circular feature to the north, F1069, 0.1m deep, was flat-based and steep-sided. It was filled with mixed blue clay, 1068, and may have formed the base of a posthole.

Directly east of F1078B was a curving, V-sectioned, gully, F1052, varying from 0.65m to 1m in width and 0.42 to 0.46m in depth. Its fill comprised dense charcoal, 1060, and red-brown clay, 1051/1054. Cutting this feature was a pit, F1085, c 2m in diameter and 0.7m deep with sloping sides and a fill of brown clay with charcoal, 1053. Further east, a pit-like features, F1029, with shallow sloping sides and a depth of 0.4m, was filled with dark silty clay, 1028.

These groups of features do not indicate activity within one particular enclosure. The ditches therefore seem likely to demarcate a number of separate areas rather than being a replication of the Period 1 enclosure. Charcoal and burnt material in the features suggests crop processing or perhaps industrial activities. The gullies may be an indication of structures. Gully F1058 and ditch F1050 can perhaps be related to features shown on the geophysical survey, both continuing for about 20m eastward.

Pottery of Late Iron Age date was recovered from layers 1044, 1049 and 1095 in the ditch group. Layer 1064 contained charcoal and fired clay. Late Iron Age pottery was found in F1029, F1042, F1047, F1052, F1058, F1063, F1069 and F1085. Layer 1016 in ditch F1078B contained pottery of mid-1st century AD date. This may be from intrusive material or represent an unrecognised Period 3 recutting. A fragment of *tegula* in pit F1047 may be intrusive.

Period 3 Late-1st-century BC/early-1st-century AD

The western edge of an enclosure defined by ditch F1036/F1038 was located (Fig. 3). The ditch varied from 0.33m deep to the north to 0.58m deep to the south, and was uniformly steep-sided with a narrow base slot, with a fill, 1035/1037, of grey/brown silty clay.

To the south, a keyhole-shaped pit, F1009, had steeply-sloping sides with a shallow concave-shaped base sloping upward to the south from 0.7m to 0.3m in depth. It was filled with a dark silty clay, 1007/1032, with much charcoal and fired clay. Nearby was a pit F1014/F1015, 0.4m deep with sloping sides and a flat base filled with dark silty clay, 1012/1013.

The profile of ditch F1036 suggests that it may have held vertical planking rather than acting as a drainage ditch. There was little sign of weathering. The enclosure defined by F1036 is likely to be that located in the geophysical survey, although the plot does not coincide exactly with the excavated feature. The enclosure was 18m wide by at least 26m long. The southern side may not be that suggested by survey but may lie to the south. No internal features were recognised and, although an entry on the west side was suggested by the survey, none lay within the excavated area. F1009 to the south may have been a pottery kiln, with F1014/1015 an associated quarry pit.

Ditch F1036 contained pottery of transitional Iron Age/Romano-British date, earlier Iron Age material in F1038 presumably being residual. Pottery of a similar transitional date was found in F1009 and F1014/F1015, the evidence suggesting that this layout was abandoned around the beginning of the Roman period. A fragment of a copper alloy bracelet was found in F1036.

Period 4 Romano-British

At the south-west corner of the Period 3 enclosure, a shallow gully, F1089, cut the earlier ditch, and was traced for a short distance westward (Fig. 3). It was filled with yellow/brown silty clay, 1088. The east side of the Period 3 ditch was cut by a sub-circular hearth, about 0.35m deep, with a fill, 1033, of dark silt with a large amount of charcoal. These features were sealed by a layer of colluvium which was cut by three features. A small circular hearth, F1025, 0.3m in diameter and 0.15m deep, had sloping sides and a flat base and was filled with silt and charcoal, 1024. Nearby was a feature containing the bottom half of a rotary quern, F1026, with a concentration of burnt stone to the north. A pit, F1040, had also been cut into the colluvium.

In the north of the area, a pit, F1066, 0.3m deep, with steeply sloping sides and a flat base cut the Period 2 pit F1065. It was filled with brown clay, 1046 and was cut in turn by F1062, of similar size and profile with a grey brown charcoally clay fill, 1061.

In the south of the area, a pit-like feature, F1086, cut the Period 2 features, F1052 and F1085. It was filled with dark silt with a high amount of charcoal, 1056. To its south, a spade-cut gully, F1104, 0.25m deep, cut across the Period 3 F1009 and F1014/1015, while to its east, a vertical-sided, flat-bottomed pit, F1031, 0.65m deep, was filled with dark brown silt with much charcoal, 1030.

This group of miscellaneous features once again had a high charcoal content in their fills. There were clearly two phases of activity in one area divided by a deposit of colluvium. F1031, F1086 and F1089 contained late-1st/early-2nd-century pottery. Pit F1066 contained a copper alloy chain-link bracelet.

Period 5 Post-Roman activity

The area was scored by plough furrows indicative of ridge and furrow activity and of more recent ploughing. A number of stone and ceramic land drains were recorded.

THE RESEARCH ARCHIVE AND FINDS ASSESSMENTS

Table 1: Site records

	Total
Feature Records	43
Context Records	61
Drawings	
A1	2
A3	17
A4	6
Photographs	
Black and White	108
Colour slide	40
Colour print	36
Sample records	1
Assemblage summaries	53
Survey record sheets	5

Table 2: Finds

	Total
Prehistoric pottery	361
Roman	188
Medieval pottery	22
Post-Medieval pottery	114
Worked flint	76
Bone frags	961
Copper	5
Iron	14
Glass	26
Clay Pipe	24
Ceramic Tile	16

The pottery by Annette Hancocks and Ann Woodward

Details of the collection

The ceramic assemblage comprised 685 sherds deriving from 34 contexts. Pottery was recovered dating from at least four ceramic periods. These are discussed in some detail below. In addition, 104 sherds of pottery were recovered from the evaluation undertaken by John Samuels Archaeological Consultants (Williams, Appendix A,

June 1997). This ceramic material should be analysed and integrated into any future publication. All the finds material recovered needs to be classified in relation to its local, regional and national significance. This is particularly pertinent with regard to known sites within the vicinity of Oakham, such as the pre-Roman Iron Age site at Whitwell, some 1km to the east (Adams et al 1981).

A total of 361 sherds of prehistoric pottery of Mid-Late Iron Age were recovered from the excavations (53% of the total-ensemble). At least 15 rims, three bases and a lid provided diagnostic material for dating the site and for comparison with other sites of this period from Leicestershire, most notably Whitwell. Rim forms observed included flat-rimmed barrel-shaped jars, flat, externally-expanded rims and straight-necked, weak-shouldered jars. In some cases these were decorated in the regional scored-ware tradition (Elsdon 1992).

Some 27% of the pottery recovered (188 sherds) was of Roman date (2nd century). At least five diagnostic rim forms were identified, including lid-seated jars. Some of the material was of a later date and associated with the Nene Valley pottery industry.

A total of 22 sherds (3%) of the total ceramic assemblage was of medieval date. Most of the material was associated with the medieval ridge and furrow. A total of 114 sherds (17%) of the assemblage comprised pottery of post-medieval date. This material was generally unstratified.

Discussion

The material from Stamford Road, Oakham, is of particular significance, given that several previous excavations and/or watching briefs have been undertaken in the immediate vicinity. Fieldwork locally has been carried out by Clay and Graf (1986) and by Clay (1987; 1988; 1989). Material of prehistoric date was recovered from nearby sites, and in conjunction with the newly excavated material, the knowledge of the period has been further enhanced. Interestingly, few Late Iron Age ceramics have been recovered from the Gwash Valley near Oakham. The ceramic assemblages recovered to date have close analogies with heavily scored vessels from Wakerley (Jackson and Ambrose 1978) and Twywell (Jackson 1975), Northants, some six miles to the south of Oakham. The prehistoric and Roman ceramics have the potential to yield the greatest volume of information concerning site formation, function and use, given the stratified nature of the ceramics from these periods.

Recommendations for further analysis

Integration of the evaluation archive material with the excavation archive material to form an overview of the site must be a priority.

Definition of fabric series: all the ceramics will be allocated fabric codes in a single running sequence and where possible integrated into the existing type fabric series for Leicestershire.

Definition of form series: each fabric group within a context will be divided into decorated and undecorated body sherds, rims, handles and bases. The pottery will be quantified by count, weight, rim equivalents and minimum number of vessels. Forms will be recorded by vessel class and form type. A single coding system will be adopted to allow integration and manipulation within the database framework.

Selection of illustrated sherds: all feature sherds will be illustrated where sufficient profiles survive to warrant publication.

Other finds by Lynne Bevan

Flint

A total of 76 items of humanly-struck flint was recovered, the majority of which consisted of 51 unretouched flakes. Six cores and eight more substantial struck chunks comprised the remainder of the debitage. Identifiable tools consisted of one leaf-shaped arrowhead, one barbed and tanged arrowhead, a bifacially-worked pressure-flaked implement, a blade, four retouched flakes, and three scrapers.

The raw material used was of a generally good quality, mid-grey to dark grey and brown in colour with a translucent appearance and the thin, compacted cortex characteristic of pebble flint from secondary deposits, probably river gravels. Most of the cortex had been removed and some items had started to re-corticate. Cores had been reduced to a very small size which suggests that good quality flint was at a premium.

With the exception of the two arrowheads which date to the Neolithic (leaf-shaped) and early Bronze Age (barbed and tanged) periods respectively, this small collection contains no other chronologically-distinctive items. A generally later prehistoric date, during the later Neolithic to Bronze Age, seems likely in view of the generally broad shape of flakes and the flake detachments on the cores.

The flint derived from overlying layers or from features with a secure post-Bronze Age date. That twelve of the flints were recovered from contexts containing prehistoric pottery without any obvious later material suggests the re-deposition of flints from earlier periods in Iron Age features.

Although the three unstratified scrapers suggest that the site was the focus of habitation at some time during later prehistory, the small size of the collection and its general distribution on site does not indicate a settlement of any longevity.

The compilation of a short report is recommended, as well as illustration of up to six items.

Objects of Copper Alloy

Items of copper alloy consisted of a curved strip, possibly from a bracelet (1035), a small buckle from a belt or strap, chainlinks from jewellery (1046), a fragment of perforated plate and the curved edge of a post-Medieval shoe buckle. With the exception of the shoe buckle fragment, all of the items appear to be of Roman date. Further research is recommended, including the selective illustration of 1-3 items.

Fired Clay

Small quantities of fired clay/daub came from the following contexts:

1001, 1003, 1007*, 1012*, 1013*, 1016*, 1028*, 1030*, 1035*, 1037*, 1041*, 1044*, 1046*, 1048*, 1049*, 1053*, 1064*, 1084*, 1087*, 1095*.

Those contexts marked with an asterisk also contained prehistoric pottery, including context 1007 from kiln F1009, and several ditches and pits. Unusual among the amorphous fragments were parts of a curved, object with smooth sides and a deliberate perforation (context 1041). Further work, including reconstruction and illustration, is recommended for this object.

Glass

The only Roman glass, part of a rim from a small flask and two fragments of window glass, came from context 1093. Further work is recommended on the rim with a view to relating it to a datable form.

Modern glass consisted of 16 fragments of bottle glass and seven fragments of window glass, which, with the exception of two fragments from contexts 1011 and 1057, were unstratified.

No further action was thought necessary for the remainder of the collection. No artefacts were identified among the nine fragments of stone recovered. Fourteen iron nails were recorded. Small quantities of slag came from ditch fills 1013, 1035, and 1037, and a further small quantity was also collected from the topsoil. The first two contexts also contained Roman pottery with which the metalworking activities might have been contemporary. Twenty-four fragments of clay pipe (eight bowls and 16 stems) were collected from the surface, and a four stem fragments were recovered. Fourteen small fragments of ceramic tile were recovered, twelve of which were collected from topsoil or otherwise unstratified. A fragment of possible Roman *tegula* and another possible Roman tile fragment were found.

The charred plant remains by Angela Monckton

Introduction

Features were sampled if they were datable and had the potential to contain charred plant remains. A total of 12 samples of about 20 litres in size from eight contexts was processed and submitted for this assessment. Two contexts of Period 1 (1084 and 1087) were of Early to Middle Iron Age date, three contexts of Period 2 (1044, 1051 and 1053) were of Late Iron Age date, two contexts of Period 3 (1037 and 1035) were of late-1st century BC to early-1st century date AD and one context of Period 4 (1056) was of late-1st to early-2nd century AD date.

Methods

Samples were wet sieved in a York tank using a 0.5mm mesh with flotation into a 0.5mm mesh sieve. The flotation fractions (flots) were air dried and packed carefully in self-seal polythene bags and submitted for the assessment. The flots were examined with a x10 stereo microscope. The plant remains were identified without comparison with modern reference material so the identifications should be regarded as provisional. The remains were noted with an estimate of quantity and tabulated below (Table 3).

Range and Variety of Material

Charred plant remains were found in all the samples and although not abundant represent cereals including glume wheat (*Triticum dicoccum/spelta*) and hulled barley (*Hordeum vulgare*) with a variety of arable weeds, mainly those with larger seeds. These include the larger grasses (Poaceae), cleavers (*Galium aparine*), vetch type (*Vicia/Lathyrus*) and pod fragments of wild radish (*Raphanus raphanistrum*). Smaller seeds include docks (*Rumex* sp.) and clover type (*Medicago/Melilotus/Trifolium*).

Statement of Potential and suggested further work

Although there are insufficient remains for detailed analysis these remains show the cereals in use, possibly over several phases of the site. The remains are probably from the cleaning of cereals for consumption and the variety of weeds present may indicate that the cereals were possibly grown nearby. The remains found will be useful for comparison with other sites in the area and with any further finds from this development area in the future.

It is suggested that the samples with more remains are sorted and recorded in detail. It is suggested that a short report and table of remains is prepared in line with the context information and phasing of the site.

Table 3 FLOT ASSESSMENT.

Phase	Cont	Feat	Samp Vol. litres	Flot Vol. mls	Gr	Cf	Se ch	Se un	Oth	Nut	Ch	Comments
1	1084 sp3	1078 Ditch		105	-	-	1	-	1	-	++	A frag of wild radish pod, a small frag of grass stem.
1	1084 sp2	1078 Ditch		40	2	2	2	-	-	-	++	Two cereal grains, two wheat glumes, brome grass and vetch type seeds.
1	1087 sp25	1078 Ditch		25	1fr	-	-	-	-	-	+	
1	1087 sp26	1078 Ditch		15	1	-	3	-	2	1	+	A cereal grain, brome grass and clover type seeds, onion couch grass tuber and hazel nutshell.
2 LIA	1044 sp2	1045 Ditch		7	1	-	2	-	3	-	+	A barley grain (hulled), a vetch type seed, tuber frag and grass stem.
2	1044 sp4	1045 Ditch		95	c10	-	c20	-	2	-	1+	Wheat and barley, seeds including cleavers, spike rush and vetch, tuber frags #
2	1051 sp13	1052 Gully		5	-	-	-	-	-	-	fl	
2	1053 sp14	1085 Pit		7	-	-	-	-	1	-	fl	Charred ?root frag.
3	1007 sp3	1009 Kiln		30	c10	-	c50	-	-	-	+	Barley grains, a moderate number of seeds including cleavers, dock, wild radish, with tuber frags #
3	1035 sp11	1036 Ditch		12	3	-	1	-	-	-	1	Wheat grains and a seed of brome grass.
3	1035 sp10	1036 Ditch		10	-	2	1	-	-	-	+	Wheat glumes and a seed of cleavers.
4	1056	1056 ?Pit		15	3	-	6	-	3	-	+	Wheat grain, seeds of cleavers, dock, vetch type and grass, ?tuber frag.

Key: Gr = grain, Cf = chaff, Se ch = charred seed, Se un = uncharred seed, Oth = other charred item, Nut = nutshell, Ch = charcoal, fl = flecks, frag/fr = fragments. sp = spit sampled.
= further work required.

Pollen and Plant macrofossils by James Greig

Field sampling

Test augering next to the stream (Fig. 3) revealed about 1m of alluvium under the modern ploughsoil. Beneath this was about 0.7m of organic peaty sediment underlain by blue-grey clay. A test sample of the most organic of the peaty sediment was collected, and in the laboratory sieved and washed over, and the presence of seeds noted (see Table 4, "test sample"). This showed the promise of the sediment for further work.

A pit, 2m x 2m, was dug by machine close by the original borehole to reveal the organic sediment layer, which was about 0.75m thick, and this was sampled in monolith boxes. Bulk samples were also collected at an interval of 10cm. The precarious state of the excavation made it necessary to work quickly.

Laboratory work

The pollen sub-samples were collected from the monoliths. The ones at 20, 30, 40, 50 and 70cm depth have been prepared for pollen analysis and some of these counted. In some cases the preparations have needed some further work to produce good slides for counting, so not all preparations have yet been counted. The pollen results so far are in Table 5. Basically, the samples do contain pollen which seems to be well enough preserved for useful counts.

The bulk samples have been sieved and processed to extract beetle remains (see report by D. Smith), and the residues returned to be sieved and sorted for seeds. They are expected to produce small floras which will be informative, especially about the immediate surroundings of the site.

Results to date

The discussion is based on the pollen samples at 20 and 50cm, and the test macrofossil sample. The samples indicate an open, occupied landscape with grasslands, and cereal crops in the vicinity, but little woodland. There is some evidence of wetland and marsh, as would be expected in a place where organic sediment was deposited. The upper sample (20cm) contains *Centaurea cyanus* (cornflower) pollen, which is normally regarded as characteristic of the medieval period. The lower sample does not, suggesting that it is earlier in date. An even lower sample (70 cm) also has low tree pollen, suggesting that the landscape was open and occupied throughout the time represented by this sequence. Further pollen counting should reveal a pattern of environmental change through time at this site.

The seeds from the small test sample provide some evidence of marsh plants (as expected) such as *Ranunculus flammula* (lesser spearwort), *Lychnis flos-cuculi* (ragged robin), *Hypericum* sp. (St John's wort), *Mentha* (?water) mint, *Juncus* (rush), *Carex* (sedge), while the pollen records *Caltha* (marsh marigold) and *Sparganium* (bur-reed). Rather more significant archaeologically is *Hyoscyamus niger* (henbane)

which is a weed now rather rare, but recorded archaeologically in various past periods. The bulk samples should provide much better seed floras, with more clues about what was happening on dry (and therefore occupied) land.

The sequence of events so far revealed is that the deposit seems to have started forming some time after the main phase of woodland clearance, and probably as a result of deposition of soil from the disturbed land in the stream valley. This change in sedimentation has been seen in a number of sites to result in the formation of partly organic sediments. The sequence continued over the years up to the present time, although the more recent alluvium has a low organic content probably because the ground has become drier with the infilling of the stream valley.

There are parallels such as the site at Beckford (Worcestershire), where an organic sequence seems to cover the period from the Bronze Age to the early medieval period.

Further work

The assessment clearly indicates the presence of well preserved organic remains. Both pollen and seeds survive in useful quantities, and have the potential for reconstructing the past landscape in which the site lay. It is suggested that the remains are recorded in detail and tabulated and that a report is prepared. At least two radiocarbon dates will need to be obtained from the samples collected in order to correlate the results with the archaeological sequence outlined above.

Table 4

Plant list, names and order according to Stace (1991). ts = test sample

sample:	ts	
<i>Ranunculus flammula</i> L.	+	crowfoot
<i>R.</i> subgenus <i>Ranunculus</i>	+	buttercup
<i>Lychnis flos-cuculi</i>	+	chickweed
<i>Hypericum</i> sp.	+	St John's wort
<i>Apium</i> cf. <i>inundatum</i> (L.) H.G. Reichenb	+	fools' watercress
<i>Hyoscyamus niger</i>	+	henbane
<i>Mentha</i> sp.	+	mint
<i>Sambucus nigra</i> L.	+	elder
<i>Juncus</i> sp.	+	rush
<i>Carex</i> sp.	+	sedges
Poaceae nfi	+	grasses
charcoal fragments	+	
musci	+	mosses
coleoptera	-	beetle fragments
trichoptera	+	caddis

Table 5 pollen and spores

sample (cm)	20	30	40	50	70	
<i>Pteridium</i>	2	-	-	3	-	bracken
<i>Polypodium</i>	+	-	-	2	-	clubmoss
<i>Pinus</i>	2	-	-	5	-	pine
<i>Ranunculus-tp.</i>	39	-	-	3	-	buttercups*
<i>Caltha</i>	-	-	-	2	-	marsh marigold
<i>Ulmus</i>	-	-	-	?	-	elm
<i>Quercus</i>	5	-	-	6	-	oak
<i>Betula</i>	1	-	-	1	-	birch
<i>Alnus</i>	-	-	-	3	-	alder
<i>Corylus</i>	5	-	-	13	-	hazel
<i>Carpinus</i>	1	-	-	-	-	hornbeam
<i>Chenopodiaceae</i>	2	-	-	5	-	goosefoot*
<i>Caryophyllaceae</i>	5	-	-	3	-	campions etc*
cf. <i>Spergula</i>	1	-	-	-	-	? spurrey
<i>Persicaria maculosa-tp.</i>	1	-	-	-	-	persicaria*
<i>Persicaria bistorta-tp.</i>	-	-	-	1	-	bistort*
<i>Rumex-tp.</i>	2	-	-	-	-	docks*
Brassicaceae	7	-	-	9	-	cress fam
<i>Trifolium pratense</i>	-	-	-	1	-	clover
Apiaceae	1	-	-	-	-	umbellifers*
<i>Plantago lanceolata</i>	9	-	-	5	-	plantain
Dipsacaceae	-	-	-	1	-	teazels
<i>Cirsium-tp.</i>	-	-	-	3	-	spear thistle
<i>Centaurea cyanus</i>	3	-	-	-	-	cornflower
<i>Centaurea nigra</i>	2	-	-	7	-	knapweed
Lactuceae	40	-	-	75	-	
<i>Artemisia</i>	-	-	-	1	-	mugwort
<i>Anthemis-tp.</i>	1	-	-	2	-	mayweeds
Aster-tp	16	-	-	2	-	daisies etc.
Cyperaceae	52	-	-	47	-	sedges*
Poaceae	125	-	-	35	-	grasses*
Cerealia-tp.	12	-	-	7	-	cereals
<i>Sparganium</i>	-	-	-	10	-	bur-reed

* = macrofossil record, possibly corresponding

The insect remains by David Smith

Introduction

In total eight bulk samples of approximately 12 litres were collected from the test pit through the palaeochannel (see Greig above). These samples consisted of an organic alluvial clay. The samples were taken as a continuous column of 10cm slices throughout the depth of the palaeochannel.

It has been suggested that this deposit represents the remains of a flood.

The insects from these samples were assessed in order to determine:

- 1) the state of preservation of the insect remains present.
- 2) whether an analysis of these insect remains would be informative as to the nature of the environment both within this channel and in the countryside surrounding it.
- 3) whether an analysis of these insects would suggest the nature of the land use of the area around this palaeochannel.
- 4) whether insect species present were derived from the nearby settlement and what this would suggest about the living conditions in this settlement.

Sample preparation and analysis

The weights and volumes and context details of these samples are listed in Table 6. In all cases a 2 litre sub-sample has been retained to be processed for the plant macro-fossil analysis. The remainder of the samples were then processed using the standard method of paraffin flotation as outlined in Kenward *et al.* (1980). This paraffin flot was then sorted under a binocular microscope.

The faunas present were accessed using the system for "scanning" faunas as outlined by Kenward *et al.* (1985). On average the time taken to scan each sample was around 20 minutes. All the species present have been identified as far as was possible.

Two considerations should be taken into account in regard to the following results.

- 1) The identifications of the insects present are provisional. Equally, many of the taxa present could be identified down to species during a full analysis producing more detailed information. Therefore, these faunas should be regarded as incomplete and possibly biased.
- 2) The various proportions of insects suggested are very notional and subjective.

Results

The Coleoptera recovered are listed in Table 6. The numbers of individuals present are estimated in the following way * = 1-2 individuals ** = 2-5 individuals *** = 5-10 individuals **** = 10+ individuals. The taxonomy used for the Coleoptera (beetles) follows that of Lucht (1987).

Preservation

The average state of preservation of all of the insect material was poor. Many of the remains were very fragmentary and pitted. As a result small and probably unrepresentative faunas were recovered. The shattered and eroded nature of this material probably suggests that it was derived from alluvium during flood.

The potential of these faunas

Despite the low number of individuals recovered some of the species of insect present are informative on a number of the issues outlined above.

Present are a range of beetles, such as the *Donacia*, *Notaris* and *Thyrogenes* species, which, if they are fully analysed should be informative as to the aquatic environment from which this flood deposit was derived. A number of the insect species suggest that emergent vegetation was present in the surrounding area. A fuller identification of these remains should mean that the specific species of plants that these insects feed on will be identifiable.

Present throughout the whole deposit are numbers of *Aphodius* dung beetles. These species feed in the dung of herbivores lying in the open. They are, as a result, typical of pasture. Their presence here may be seen as indicating that some of this alluvial material may have had an origin on meadow-land.

None of the species present is associated with human habitation. This may suggest that this flood deposit is not derived directly from an area of human settlement.

Suggested further analysis

This assessment has suggested that there is value in conducting a full analysis of these insect faunas. It is expected that such an analysis should produce information which would be helpful in interpreting several aspects of this deposit. Such an analysis should also produce results which would be comparable to the pollen and plant macro-fossil analysis from this same deposit.

Table 6 The Insects Recovered in the Samples from Oakham.

	20-30	30-40	40-50	50-60	60-70	70-80
Sample volume (Lt)	3	2	3	2	3	1.5
Sample weight (Kg)	3.5	3.5	3.75	2.35	3.60	2.5
COLEOPTERA						
Carabidae						
<i>Dyschirius</i> sp.	+	-	-	-	-	-
<i>Bembidion ?guttula</i> (F.)	+	-	-	-	-	-
<i>Pterostichus strenuus</i> (Panz.)	+	-	-	-	-	-
<i>P. nigrita</i> (Payk.)	+	-	-	-	-	-
Hydraenidae						
<i>Ochthebius</i> sp.	-	-	-	-	-	+
<i>Helophorus</i> sp.	-	-	-	-	-	+
Hydrophilidae						
<i>Cercyon</i> (aquatic) spp.	++	++	++	++	+	-
<i>Megasturnum boleotophagum</i> (Marsh).	++	-	-	-	-	-
<i>Enochrus</i> sp.	-	-	-	-	+	-
Silphidae						
<i>Silpha</i> sp.	+	-	-	-	-	-
Staphylinidae						
<i>Micropeplus</i> sp.	-	-	-	-	-	+
<i>Lesteva</i> sp.	-	+	-	-	-	-
<i>Stenus</i> sp.	+	-	-	-	-	-
<i>Tachyphorus</i> sp.	+	-	-	-	-	-
Throscidae						
<i>Throscus</i> spp.	++	-	-	-	-	-
Scarabaeidae						
<i>Aphodius</i> spp.	++	+	++	++	+	-
Chrysomelidae						
<i>Donacia</i> sp.	+	-	-	-	-	-
Curculionidae						
<i>Notaris</i> spp.	+	++	-	-	-	++
<i>Thyrogenes</i> sp.	+	-	-	-	-	-

Animal bone

A total of 961 fragments of animal bone was recovered, primarily from well-stratified and dated contexts, such as ditches F1078 and F1045. The material has potential for more in-depth analysis and the resulting data can be set alongside that from other environmental material.

ASSESSMENT OF POTENTIAL FOR ANALYSIS

The excavations have added a dating framework to the trial trench and survey data. The flint artefacts suggest some activity in the Neolithic/Bronze Age. The Early/Middle Iron Age enclosure has been confirmed but unfortunately the ditches could not be bottomed. The sequence of ditch cuts may well be refined in post-excavation. The sequence as understood at present shows the earlier enclosure being reused as a more widespread set of boundaries and then replaced by a further rectilinear enclosure at the end of the Iron Age or the outset of the Roman period. Romano-British activity is attested by finds but the features do not indicate coherent structures.

Further work on characterising the excavated features is necessary, particularly to understand the ditch sequences and to assess the nature of the widespread evidence for burning from industrial or crop processing activity. This can be compared with similar activity elsewhere such as the evidence for iron smelting at Whitwell (Todd 1982). The ceramic analysis still needs to be set in its regional context. However, the initial assessment of the pottery suggests that the structural and stratigraphic analysis can be fitted into a tightly datable sequence. Given this dating framework, work on the environmental evidence will also be greatly enhanced. The potential for recovery of palaeoenvironmental evidence and its importance was recognised during the trial trenching. The assessment of the samples collected during the excavation indicates the presence of an important sequence which has the potential for establishing the environmental context of the occupation.

The following objectives can thus be suggested:

- 1) Detailed characterisation of the site features in post-excavation.
- 2) Pottery analysis to provide both detailed dating evidence and a regional context
- 3) Analysis of animal bone and charred plant remains in the context of 1) and 2).
- 4) Analysis of the pollen, seeds and insect remains from the organic deposit at the northern end of the site. If these deposits can be securely dated, this analysis will make a significant contribution to an understanding of the landscape at the time of the occupation of the site.

Once these objectives have been achieved the excavation report will be able to suggest detailed interpretations to add to the dating sequence. It is clear from the dating evidence that the primary focus is on activity in this area in the last century of the 1st millennium BC and the 1st century AD. One of the major research objectives in recent years has been the understanding of the impact of Rome, before as well as after the Conquest (Millett 1990). This impact may well be shown in the landscape and agricultural changes which will be particularly the focus of the Oakham report (Dark and Dark 1997).

REPORT SYNOPSIS

Excavations at Stamford Rd, Oakham, Leicestershire, 1997 by Mark Hewson and Roger White

Introduction: previous work, geology, topography, circumstances, methods, location of archive

Structural results: period review

Prehistoric and Romano-British pottery by Annette Hancocks and Ann Woodward

Flint by Lynne Bevan

Romano-British objects by Lynne Bevan

Fired clay by Lynne Bevan

Animal bone by Umberto Albarella

Charred plant remains by Angela Monckton

Pollen and plant microfossils by James Greig

Insect remains by David Smith

Discussion: settlement patterns, interpretations, landscape alterations, parallels at regional sites, the contribution of Oakham to current debate on Iron Age/RB transition

Figures and tables: location, period plans 1-4, sections, pottery, flint, fired clay. Tabulated finds data.

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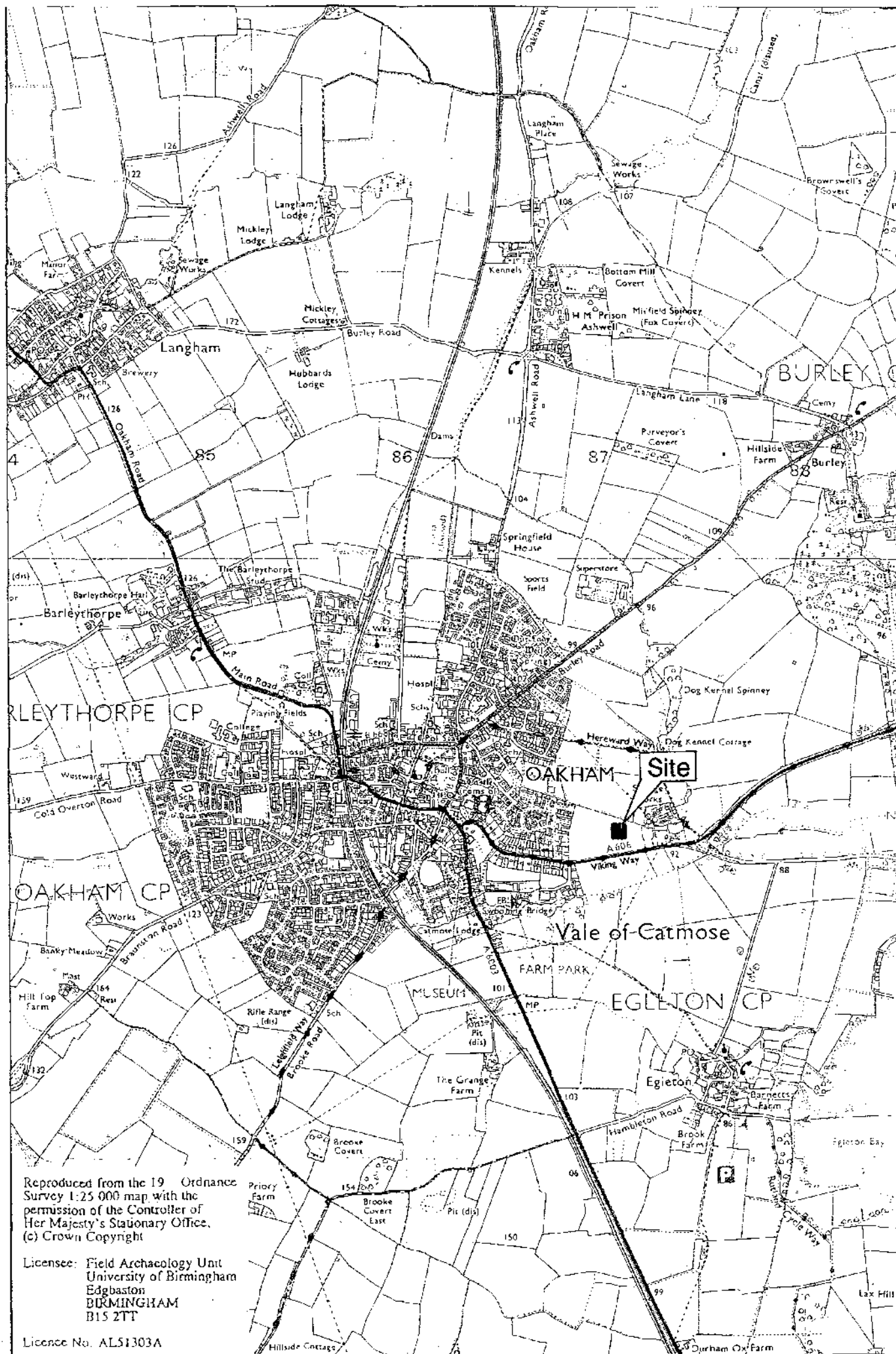
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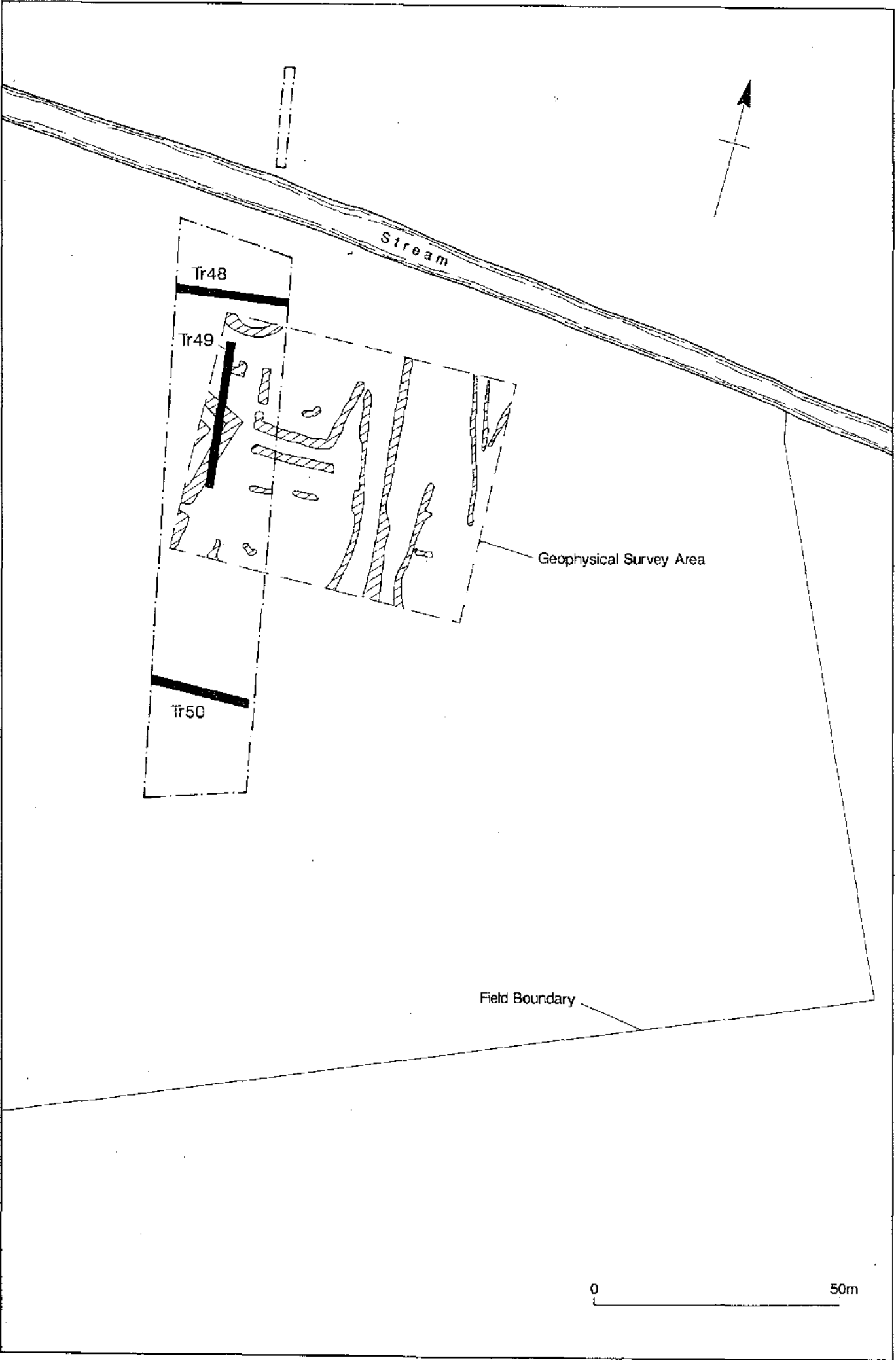


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Fig.1



Stream

Tr48

Tr49

Tr50

Geophysical Survey Area

Field Boundary

0 50m

