No. 219.14

BIRMINGHAM UNIVERSITY
FIELD ARCHAEOLOGY UNIT

LITTLE PAXTON QUARRY, DIDDINGTON, CAMBRIDGESHIRE

Phase 3 Evaluation 1998

Field 6 (South)

B.U.F.A.U.

Birmingham University Field Archaeology Unit
Project No. 219.14
October 1998

LITTLE PAXTON, DIDDINGTON, CAMBRIDGESHIRE
Phase 3 Evaluation 1998

Field 6 (South)

by
Richard Cuttler and Alex Jones

with a contribution by Lynne Bevan

illustrations by Nigel Dodds

For further information please contact:
Simon Buteux, Iain Ferris or Peter Leach (Directors)
Birmingham University Field Archaeology Unit
The University of Birmingham
Edgbaston
Birmingham B15 2TT
Tel: 0121 414 5513
Fax: 0121 414 5516
E-Mail: BUFAU@bham.ac.uk
Web Address: http://www.bufau.bham.ac.uk

LITTLE PAXTON QUARRY, DIDDINGTON, CAMBRIDGESHIRE

Phase 3 Evaluation, Field 6 (South)

Contents

Figures

LITTLE PAXTON QUARRY, DIDDINGTON, CAMBRIDGESHIRE

Phase 3 Evaluation, Field 6 (South)

1.0: SUMMARY

The archaeological potential of an area proposed for gravel extraction was tested by an archaeological evaluation involving targeted trial-trenching. Two possible incomplete cropmarked enclosures, and other indistinct linear cropmarked features were recorded within the site. Fieldwalking recovered a concentration of flint artifacts of early prehistoric date from the centre/north of the site.

A low density of artifacts was recorded from sample sieving of the ploughsoil. Trial-trenching identified parts of two probable ditched enclosures, although no evidence was found of the other crop-marked features. The finds mainly comprised flint artifacts, including five scrapers, 23 retouched flakes, three cores and 46 unretouched flakes.

2.0: INTRODUCTION

The results of air photograph analysis and fieldwalking of the site are described in separate reports (Air Photo Services; Bevan and Edwards 1998).

This report describes the results of testing of the artifactual content of the ploughsoil and trial-trenching in the southern part of Field 6 (hereafter called 'the site', centred on NGR TL 204658: Figs. 1 and 2) within the Phase 3 area at Little Paxton Quarry, Diddington, Cambridgeshire. The work was undertaken by Birmingham University Field Archaeology Unit (BUFAU) on behalf of Bardon Aggregates Limited in April 1998. The methodology adopted follows a specification prepared by BUFAU (BUFAU 1998).

The purpose of the evaluation was to define the location, extent, date, character, condition, significance and quantity of any archaeological remains on the site, in order to permit the formulation of an archaeological mitigation strategy, if appropriate. The objective of the testing of the artifactual content of the ploughsoil was to recover evidence of pre-Iron Age activity. The aim of the trial-trenching was to test the character of the identified cropmarked features (Fig. 2), the area of possible alluvial cover in the west of the site, the area in the centre of the site which contained the greatest concentrations of fieldwalking finds, and also those areas for which no archaeological information was available.

3.0: METHODOLOGY

3.1: Trial-trenching

A total of 11 trenches, each measuring 25m by 2m, was excavated (Figs. 2 and 3), including two additional trenches to the specification (1A and 4A), which were dug to clarify the identification of cropmarked features. Trenches 4, 4A, and 8 were located to test possible cropmarked enclosures. Trenches 3 and 5 were located to test a group of indistinct cropmarks in the north of the site, in the approximate location of one of the concentrations of flint finds from fieldwalking. Trenches 1 and 1A were sited to examine a group of possible pits. The remaining trenches were located to test the site as widely as possible. A 360 degree excavator with a toothless ditching bucket was used to remove the ploughsoil, under archaeological control. Where a B-horizon soil or alluvium was encountered below the ploughsoil, part of the trench was machined through the B-horizon soil to expose the subsoil, and part was machined to expose the uppermost horizon of the B-horizon soil. The machined horizons were manually cleaned as necessary to define features, or possible features, and a representative sample of the features, or possible features, present was hand-excavated. No sampling for charred plant remains was undertaken because of the paucity of the dating evidence.

Recording was by means of pro-forma record cards for contexts and features, supplemented by plans (scale 1:50) and sections (scale 1:50), monochrome print and colour slide photography.

3.2: Testing of the archaeological content of the ploughsoil

This was achieved by hand-sieving (or sorting with a trowel where the ploughsoil was too wet for sieving) approximately 1 cubic metre of topsoil at the trench ends (excluding the additional Trenches 1A and 4A).

4.0: THE SITE AND ITS SETTING

This evaluation forms the second part of the evaluation of the Phase 3 area within the overall quarry concession. The adjoining Field 5 (South) was evaluated in early 1998 (Dingwall and Jones 1998). The Phase 1 and 2 areas of the quarry were evaluated in 1992 (Leach 1992, Jones 1992). A series of excavations undertaken since that date in advance of quarrying (Jones and Ferris 1994, Jones 1995, Jones 1998, Jones forthcoming) has investigated settlement and activity dating from the Neolithic to the Romano-British periods. Neolithic activity is represented by clusters of small pits, possibly forming pit-circles (Area B: Jones 1995, fig. 3), and by flint artifacts found extensively within the topsoil. Two roughly-circular features, also in Area B, may have formed eaves-drip gullies surrounding huts measuring 15m and 8m in diameter. The Mid-Late Iron Age is represented by farmstead enclosures (Area B), further enclosures examined by trial-trenching (Jones 1992) adjoining the southeastern boundary of the Phase 3 area, and by a probable Iron Age square barrow (Jones 1998). Romano-British activity was focused towards the south of the quarry (Area A: Jones

and Ferris 1994) and comprised a 'ladder' enclosure containing traces of timber-framed buildings, wells and a possible 'drinking trough', all dating to the 3rd-4th centuries.

This ongoing programme of excavation is intended to determine the changing function and economy of the area, in particular focusing upon the potential for future comparison of structural and economic data from the four discrete Iron Age foci. Integrated analysis of settlement patterning is also intended to contribute towards a broader, multi-period, landscape-based study of changes in settlement in the Great Ouse Valley.

5.0: RESULTS

5.1: Trial-trenching

Trenches 1 and 1A (Fig. 3)

Trench 1 measured 25m in length and was aligned northeast-southwest. The natural orange sand and gravel (1252) was overlain by a yellow alluvial clay (1251), measuring 0.17m in depth. This layer was cut by four features (F162, F163, F164, F170). A north-south aligned gully (F162), in the centre of the trench, originally identified as a cropmarked feature, was backfilled with yellow-brown sand-clay (1228). To the west was another (unexcavated) possible gully dug on a similar alignment (F164), backfilled with blue-grey clay (1231). Both gullies were truncated by a pit (F163), which was backfilled with grey sand (1229 and 1230). Features F163 and F164 were both truncated by a modern gully (F170). The infilled features, and deposit 1251, were all sealed by the ploughsoil (1256), which measured 0.30m in depth.

An iron tag was recovered from the upper fill of feature F163. It is possible that this find was intrusive, and that it originally derived from feature F170.

Trench 1A measured 25m in length, was 4m in width and was orientated northeast-southwest. A yellow alluvial clay (1251) exposed in the base of the trench was sealed by a ploughsoil horizon (1256), measuring 0.30m in depth. No archaeological features were identified in this trench.

Trench 2 (Fig. 3)

Trench 2 measured 25m in length, and was aligned north-south. The subsoil exposed by machining at the base of the trench comprised an orange sand and gravel (1252), mixed with a yellow alluvial clay (1259). The subsoil was cut by two pits (F166, F167), located towards the south of the trench, and a small gully (F168), which terminated in the north of the trench. Features F116 and F167 are probably natural in origin. The subsoil and backfilled features F166-F168 were overlain by 0.30m of ploughsoil (1257).

Trench 3 (Fig. 3)

Trench 3 measured 25m in length, and was aligned approximately north-south. The trench was machined at two levels, exposing the sand and gravel subsoil (1252) for a length of 17m. At the northern end of the trench was a poorly-defined linear feature (F169), aligned north-south, interpreted as a natural feature. It measured 0.15m in depth and 0.75m in width, and was both backfilled and sealed by a sandy clay alluvium (1258). This layer also sealed the subsoil (1252), measuring between 0.18m (south of trench) and 0.27 (north of trench) in depth. Above was the ploughsoil (1250), here measuring 0.30m in depth.

Trenches 4 and 4A (Figs. 3-4)

Trench 4 measured 30m in length and was orientated north-south. At the southern end of the trench the red sand and gravel subsoil (1252) was overlain by two bands of mixed silt and redeposited subsoil (1262 and 1263), each measuring approximately 0.90m in width, interpreted as modern service trenches. Three further linear bands (F161; 1260 and 1261), aligned east-west, were located towards the centre of the trench. Feature F161 measured 1.06m in depth and 2.72m in width. It was backfilled with silt (1218), overlain by clay (1219), recorded below further silting (1216, 1217 and 1218). Feature F161 probably represents the southern side of the double-ditched cropmark enclosure. Towards the north of the trench were two circular patches of mid-grey silt sand (1264 and 1265), measuring approximately 0.75m in diameter, possibly small pits or post-holes. The subsoil (1252) and the backfilled features were sealed by 0.30m of ploughsoil (1267).

Trench 4A measured 25m in length and was orientated north-south. The red sand and gravel subsoil (1252) was overlain by three bands of silt (1266, 1273 and 1274). Measuring 0.90m in width, context 1274 was aligned northeast-southwest towards the southern end of the trench. Context 1273, a probable modern service trench located towards the centre of the trench, measured 2.10m in width and was aligned northwest-southeast. In the north of the trench context 1266 was aligned northeast-southwest. Layers 1266, 1273 and 1274 were overlain by 0.30m of ploughsoil (1267).

Trench 5 (Fig. 3)

Trench 5 measured 30m in length and was orientated east-west. The mixed yellow sand and gravel subsoil (1252) was overlain by alluvium measuring approximately 0.29m in depth. Towards the western end of the trench the alluvium (1252) was cut by a north-south aligned ditch (F150) with gradually sloping sides and a rounded base. It measured 2.10m in width and 0.24m in depth, and was backfilled with grey silt-clay (1200). In the east of Trench 5 was a small irregular gully (F151) aligned northeast-southwest, which may be natural in origin. Measuring 0.45m in width and 0.14m in depth, feature F151 was filled by a compact light brown clay. Backfilled features F150 and F151 and the subsoil (1252) were sealed by ploughsoil (1250), measuring 0.30m in depth.

Trench 6 (Fig. 3)

Trench 6 measured 25m in length and was orientated northeast-southwest. The natural red sand and gravel (1252) was sealed by a dark yellow alluvium (1269), 0.27m in depth, which was overlain by the ploughsoil (1250), here 0.30m in depth.

No features of archaeological, or possibly archaeological, origin were identified in Trench 6.

Trench 7 (Figs. 3-4)

Trench 7 measured 25m in length and was orientated east-west. The red sand and gravel subsoil (1252) was recorded at a depth of 0.30m below the modern surface. A number of features was recorded cutting the subsoil. A gully (F160) terminal, measuring 0.85m in width, was recorded within the trench. It was backfilled with yellow alluvial clay (1214), sealed by brown sandy clay (1213). An adjoining patch of silt (1272:unexcavated) may be interpreted as a possible natural feature. Also identified were a small, north-south aligned gully (F159) and a northwest-southeast aligned ditch (F158). The ditch was backfilled with grey sandy clay, and was cut by a modern field drain (F154). Features F160, 1272, F159 and F158 were sealed by a layer of alluvium (1221), measuring a maximum of 0.28m in depth at the extreme eastern end of the trench, becoming shallower towards the west. Above was the ploughsoil (1200).

Trench 8 (Figs. 3-4)

Trench 8 measured 25m in length and was orientated north-south. The orange sand and gravel subsoil (1252) was sealed by a layer of mixed red clay-silt (1225, 1227) measuring 0.06m in depth. A curvilinear ditch (F152: possibly equivalent to feature F158 in Trench 7), aligned northeast-southwest, was recorded in the south of the trench. It measured a maximum of 1.45m in width and 0.24m in depth, and was backfilled with light grey clay (1202). Ditch F153 to the north probably originally terminated within the trench. It was cut by a modern field drain (F154), which contained a large iron stake within its backfill (1222). Further to the north was pit F156, which measured 0.66m in diameter and 0.28m in depth. It was backfilled with grey-brown silty clay (1208). This feature was cut by an east-west aligned, V-shaped ditch (F155), measuring a maximum of 1.20m in width and 0.50m in depth. In the north of the trench were two circular patches of grey silt (1275 excavated, 1271: unexcavated), possibly natural in origin. These features were sealed by a layer of alluvium (1221) measuring 0.24m in depth, recorded below the modern ploughsoil (1223).

Trench 9 (Fig. 3)

Trench 9 measured 25m in length and was orientated east-west. Part of the trench was machined to a depth of 0.30m below the modern surface to expose the subsoil (1270), here consisting of clay. This clay was sealed by a layer of alluvium (1232), exposed by machining at its uppermost horizon over the remainder of the trench. This alluvium

measured 0.40m in depth and was cut in the east of the trench by a shallow north-south aligned ditch (F165), measuring 1.15m in width and 0.24m in depth. This well-defined feature had steep sides and a flat base. The alluvium (1232) and backfilled feature F165 were sealed by ploughsoil (1231).

5.2: Testing the artifactual content of the subsoil

The results of this testing are presented in Table 1 below, and are further considered in Section 7.0.

TABLE 1: Finds from testing the artifactual content of the ploughsoil

Tr	*Context*	*Flint finds*
1SW	1235	-
1NE	1234	-
2S	1237	1 flake
2N	1236	-
3S	1239	1 retouched, 1 flake
3N	1238	1 scraper, 1 retouched, 2 flakes
4S	1241	1 core 1 retouched, 2 flakes
4N	1240	2 retouched
5E	1242	1 scraper, 1 retouched, 2 flakes
5W	1243	2 flakes
6NE	1244	-
6SW	1245	5 flakes
7E	1246	1 scraper, 1 retouched, 1 flake
7W	1247	1 scraper
8N	1248	1 core
8S	1249	1 flake
9W	1276	-
9E	1277	-

6.0: FINDS by Lynne Bevan

TABLE 2: Other flint finds

Flakes

T7, F161, 1215
T7, F161, 1217

Retouched

1250 (Topsoil)

The flint assemblage from trial-trenching and testing the artifactual content of the topsoil comprises 77 items of humanly-struck flint: five scrapers, 23 retouched flakes, three cores and 46 unretouched flakes (Tables 1 and 2).

As found in previous work in the area, the raw material used was a high quality flint, medium to dark grey and brown in colour with the thin, compacted cortex characteristic of a river gravel origin.

The only chronologically-diagnostic item was a discoidal scraper worked around its entire circumference from context 1242 (Trench 5), a tool form usually associated with the Early Bronze Age. The generally broad, squat shape of the flakes supports a later prehistoric origin for the assemblage, possibly contemporary with the scraper.

While the cores and flakes attest to tool-making, the high incidence of scrapers and retouched flakes, which account for a third of the assemblage (36.3%) is suggestive of habitation-focused, home-based activities. A high concentration of material, including a scraper and 16 retouched pieces, came from context 1250.

The other finds comprised a single sherd of 18th century brown glazed pottery, and two sherds of possible Romano-British pottery, dating from the 2nd-4th century, all from the topsoil (1250).

7.0: DISCUSSION

Fieldwalking recorded concentrations of flint finds in the area surrounding Trenches 3 and 5. The further testing of the artifactual content of the topsoil (Table 1) also identified concentrations of worked flint. The main flint concentrations occurred in the centre of the site (Trenches 3-6), an area containing a number of linear cropmarked features. Only one fragment of worked flint was recovered from the west of the site (Trenches 1, 2 and 9).

The double-ditched cropmark enclosure in the extreme south of the site was successfully identified (Trench 4, feature F161). Although no finds were recovered from the ditch fills, this enclosure probably forms part of a group of farmstead enclosures of Middle Iron Age date, recently excavated in Field 2 (to the south of the present site boundary). Similarly, trial-trenching has identified the southern end of the circular, possible cropmarked enclosure (F153, Trench 8). This ditched feature butt-ended within the trench, and its identification was further complicated by truncation from a modern disturbance (F154). The northern side of the circular, cropmark enclosure lay beyond the trench.

Correlation of the other features identified by trenching with the cropmark evidence is more difficult, possibly as a result of the difficulty of defining features cut into, or infilled with, alluvium. Pit F163 (Trench 1) may correspond with one of the identified pit-like cropmarks in the west of the site. This cropmark group resembled the pit clusters recorded by excavation (but not as cropmarked features) in Field 5 to the west of the site. However, on the assumption that the iron tag in the backfill of pit F163

was not intrusive, it may be fairly recent in origin. A similar, recent date for the remaining pit-like cropmarks in the vicinity cannot be confirmed on the present evidence.

Little correlation was noted between the identified features in Trenches 3 and 5 and the identified cropmarked features in this area. No features of anthropogenic origin were found in Trench 3, and the only one archaeological feature was defined in Trench 5 to the south.

The evaluation has confirmed the northernmost extent of the complex of farmstead enclosures located in Field 2 to the south, which only extends slightly into the extreme southern edge of the site (Trench 4). Similarly the cropmarked ditch identified in Trench 8 probably relates to a settlement to the east (in the area now quarried away). The cropmark evidence suggests a substantial, partitioned rectilinear cropmark is located to the north of the site. The absence of datable artifacts from the identified ditched features was notable, and suggests these were located on the margins of settlement areas. Also notable was the absence of evidence for ditched field systems, such as those located in Field 5 to the west of the site.

No evidence of Romano-British, or later, activity was recorded within the site, save a few stray finds.

8.0: IMPLICATIONS AND PROPOSALS

8.1: Implications

With the exception of the cropmark features identified in Trenches 4 and 8, the evaluation has generally demonstrated a relatively low level of activity within the site. The flint scatters recovered from the topsoil may derive from features obliterated by plough truncation, as recorded elsewhere at Little Paxton, although the possibility of some survival of features of early prehistoric date should not be overlooked.

Although only a relatively low density of archaeological features was identified, it is nevertheless important that these areas are investigated and recorded in advance of gravel extraction. The Trench 4 enclosure forms an integral part of the Field 2 'system' of farmstead enclosures to the south of the site. Similarly, the Trench 8 enclosure may be the sole survivor of a settlement area now quarried away. In the context of a multi-period, landscape-based project such as Little Paxton investigation of these intra-settlement areas has some merit. Investigations in Field 5 to the west of the site identified important feature groups of early prehistoric date, away from the main settlement complexes identified by the cropmark and evaluation evidence.

8.2: Proposals

The remains identified do not merit preservation *in situ*. A strategy for their preservation by record is proposed below. For the purpose of formulating proposals for further work the site is divided into three zones:

8.2.1: Zones of the main identified cropmarks. Zone 1 (around Trench 4) and Zone 2 (around Trench 8).The zones should be stripped of topsoil under archaeological supervision preparatory to an archaeological excavation, which will involve hand-sampling of the identified features following a strategy to be agreed with the County Archaeology Office.

8.2.2: Zone 3, the remainder of the site. Although the evaluation has failed to identify many of the cropmarked features located within this zone, and the density of archaeological features identified and artifactual scatters within the topsoil is generally low, the archaeological potential of this area should not be written off.

A recording brief during/after topsoil stripping is suggested over this zone, to identify, plan and sample the features present by hand-excavation.

9.0: ACKNOWLEDGEMENTS

The project was sponsored by Bardon Aggregates Limited. We are grateful to the Quarry Manager, Duncan Hayden for his help. The evaluation was supervised by Richard Cuttler, assisted by John La Niece, Peter Noble and Andrew Hardwick. The flint was reported on by Lynne Bevan. The report was edited by Iain Ferris, and the illustrations were prepared by Nigel Dodds.

10.0: REFERENCES

Air Photo Services. 1998. *Little Paxton, Cambridgeshire. Aerial Photographic Assessment, update to 1998.*

Bevan, L. and Edwards, K. 1998. *Little Paxton Quarry, Diddington, Cambridgeshire. Field 6 (South) Fieldwalking 1998.* BUFAU Report No. 219.13.

BUFAU. 1998. *Specification for Evaluation, Little Paxton Quarry, Field 6 (South).* BUFAU.

Dingwall, L. and Jones, A. E. 1998. *Little Paxton Quarry, Diddington, Cambridgeshire. Phase 3 Evaluation 1998. Field 5 (South).* BUFAU Report No. 219.10.

Jones, A. E. 1992. *Little Paxton Quarry, Diddington, Cambridgeshire. Phase 2 Assessment 1992.* BUFAU Report No. 219.01.

Jones, A. E. 1995. Little Paxton Quarry, Diddington, Cambridgeshire: Archaeological Excavations 1992-3. Second Interim Report. The Southwest Area. Settlement and Activity from the Neolithic to the Bronze Age. *Proceedings of the Cambridge Antiquarian Society*, LXXXIII, 7-22.

Jones, A. E. 1998. An Iron Age Square Barrow at Diddington, Cambridgeshire. Third Interim Report of Excavations at Little Paxton. *Proceedings of the Cambridge Antiquarian Society*, LXXXVI, 5-12.

Jones, A. E. forthcoming. Little Paxton, Cambridgeshire: A River Valley Landscape, in Dawson, M. (ed.) *The Archaeology of the Ouse Valley*.

Jones, A. E. and Ferris, I. M. 1994. Archaeological Excavations at Little Paxton, Diddington, Cambridgeshire, 1992-3. First Interim Report; The Romano-British Period. *Proceedings of the Cambridge Antiquarian Society*, LXXXII, 55-66.

Leach, P. J. 1992. *Little Paxton Quarry, Diddington, Cambridgeshire. Phase 1 Assessment 1992.* BUFAU Report No. 219.

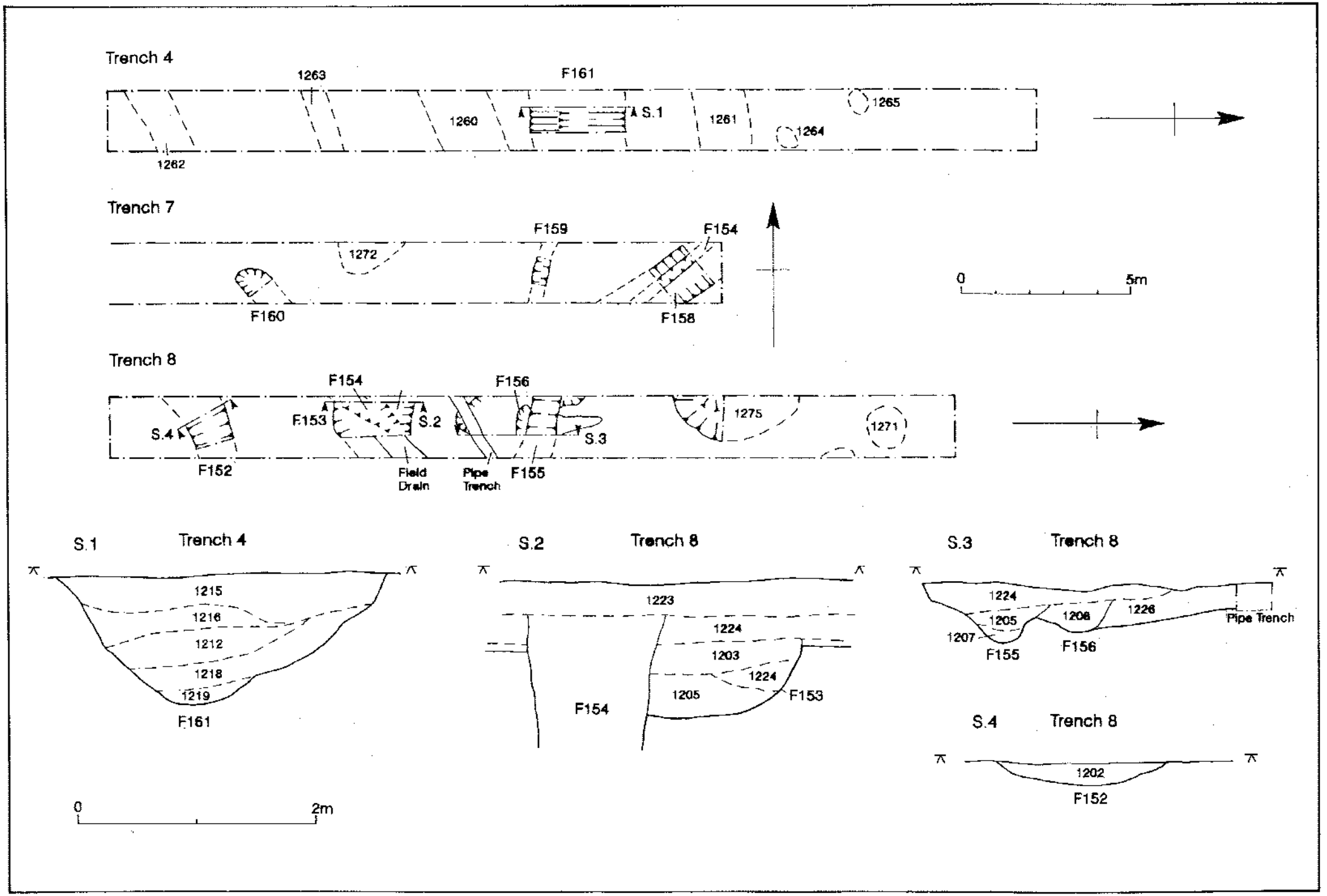
Trench 4
1263
F161
1260
S.1
1261
1265
1264
1262
Trench 7
F159
F154
1272
F160
F158
0
5m
Trench 8
F154
F156
S.4
F153
S.2
S.3
1275
1271
F152
Field Drain
Pipe Trench
F155
S.1
Trench 4
1215
1216
1212
1218
1219
F161
0
2m
S.2
Trench 8
1223
1224
1203
1224
1205
F153
F154
S.3
Trench 8
1224
1205
1208
1226
1207
F155
F156
Pipe Trench
S.4
Trench 8
1202
F152

FIG.4

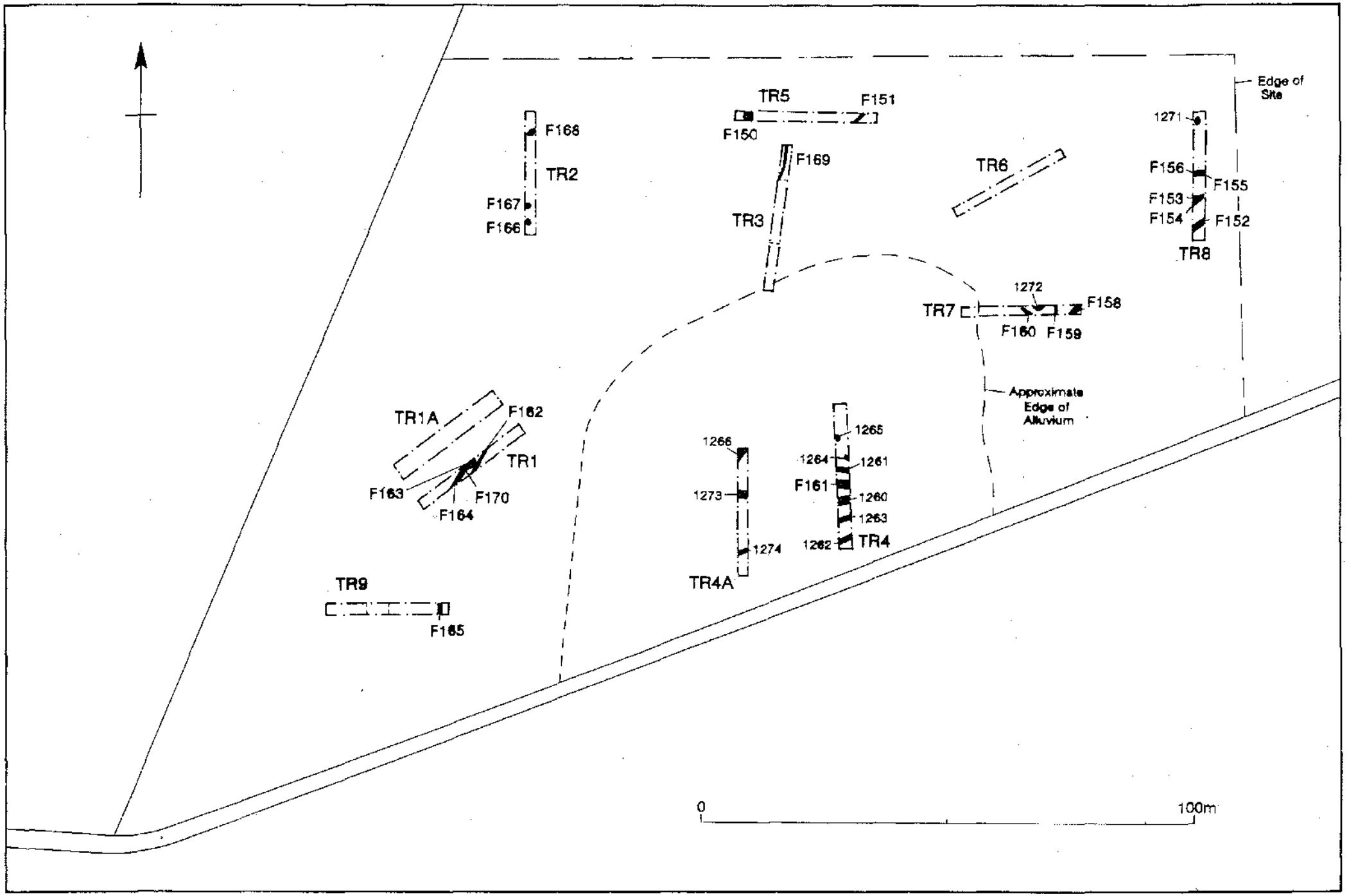
Edge of Site
TR5
F151
F150
F168
TR2
F167
F166
F169
TR3
TR6
1271
F156
F155
F153
F154
F152
TR8
1272
TR7
F158
F160
F159
Approximate Edge of Alluvium
TR1A
F162
TR1
F163
F170
F164
1266
1265
1264
1261
F161
1260
1263
1262
TR4
1273
1274
TR4A
TR9
F165
0
100m

FIG.3

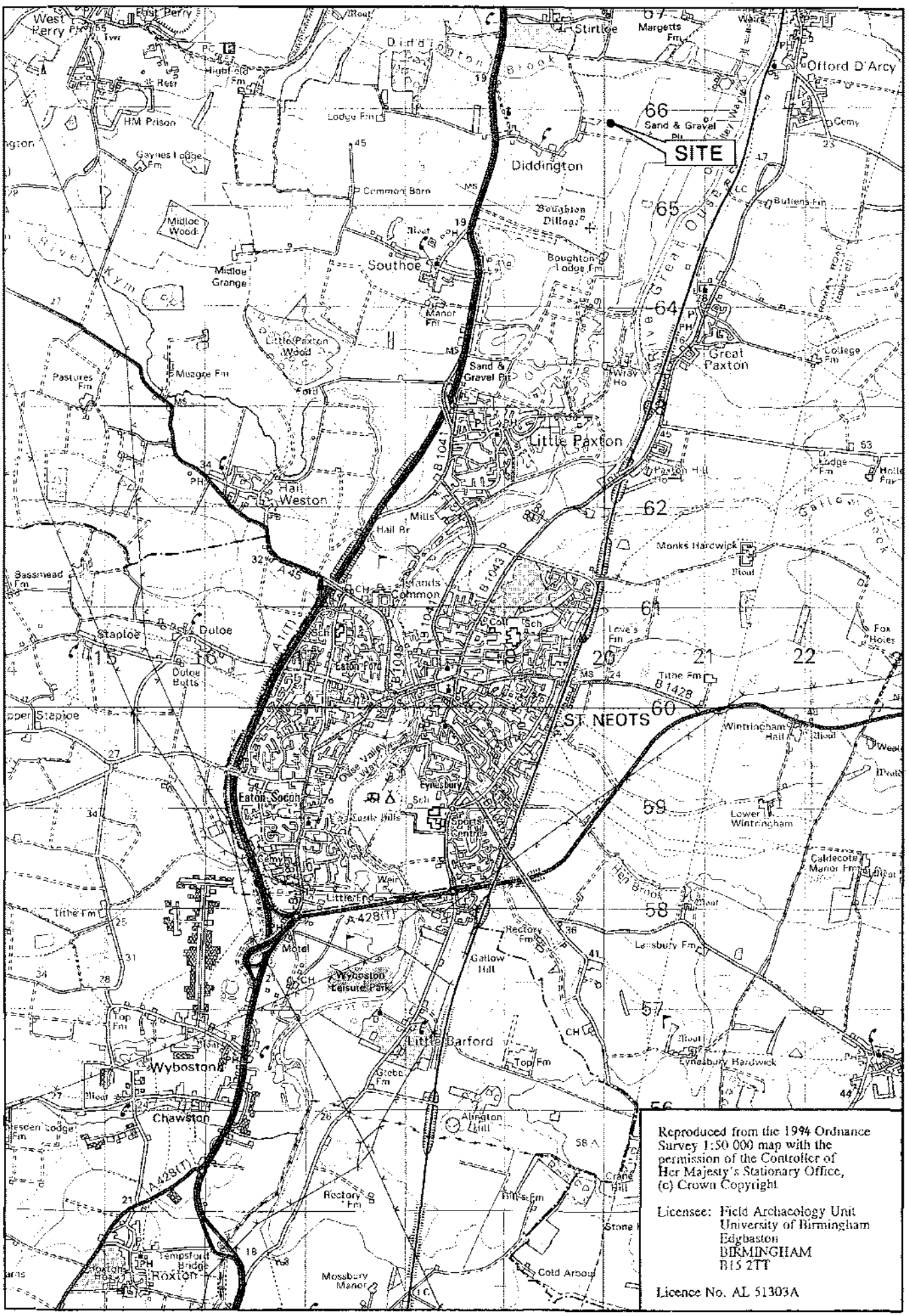
SITE
Sand & Gravel
Diddington
Southoe
Great Paxton
Little Paxton
Hail Weston
ST NEOTS
Eaton Socon
Eaton Ford
Wyboston
Chawston
Little Barford
Roxton
Offord D'Arcy
Stirtloe
Monks Hardwick
Wintringham
Lower Wintringham
Eynesbury
Eynesbury Hardwick
Staploe
Dutoe
Upper Staploe
Bassmead Fm
Pastures Fm
Midloe Grange
Midloe Wood
Little Paxton Wood
Boughton Dillage
Boughton Lodge Fm
Common Barn
Lodge Fm
Gaynes Lodge Fm
HM Prison
West Perry
East Perry
Highfield Fm
Muagre Fm
Manor Fm
Sand & Gravel Pit
Mills
Hail Br
Islands Common
Wyboston Leisure Park
Gallow Hill
Rectory Fm
Top Fm
Glebe Fm
Alington Hill
Crane Hill
Mossbury Manor
Cold Arbour
Tempsford Bridge
Tithe Fm
Lessbury Fm
Caldecote Manor Fm
Bullens Fm
College Fm
Lodge Fm
Fox Holes
Love's Fm
Wray Ho
Parson Hill
Castle Hills
Sports Cntr
Weir
Little Fm
Morel
Hill Brook
Gallow Brook
Roman Road
A 45
A 428(T)
B 1041
B 1043
B 1428
Reproduced from the 1994 Ordnance Survey 1:50 000 map with the permission of the Controller of Her Majesty's Stationary Office, (c) Crown Copyright
Licensee: Field Archaeology Unit
University of Birmingham
Edgbaston
BIRMINGHAM
B15 2TT
Licence No. AL 51303A

FIG.1

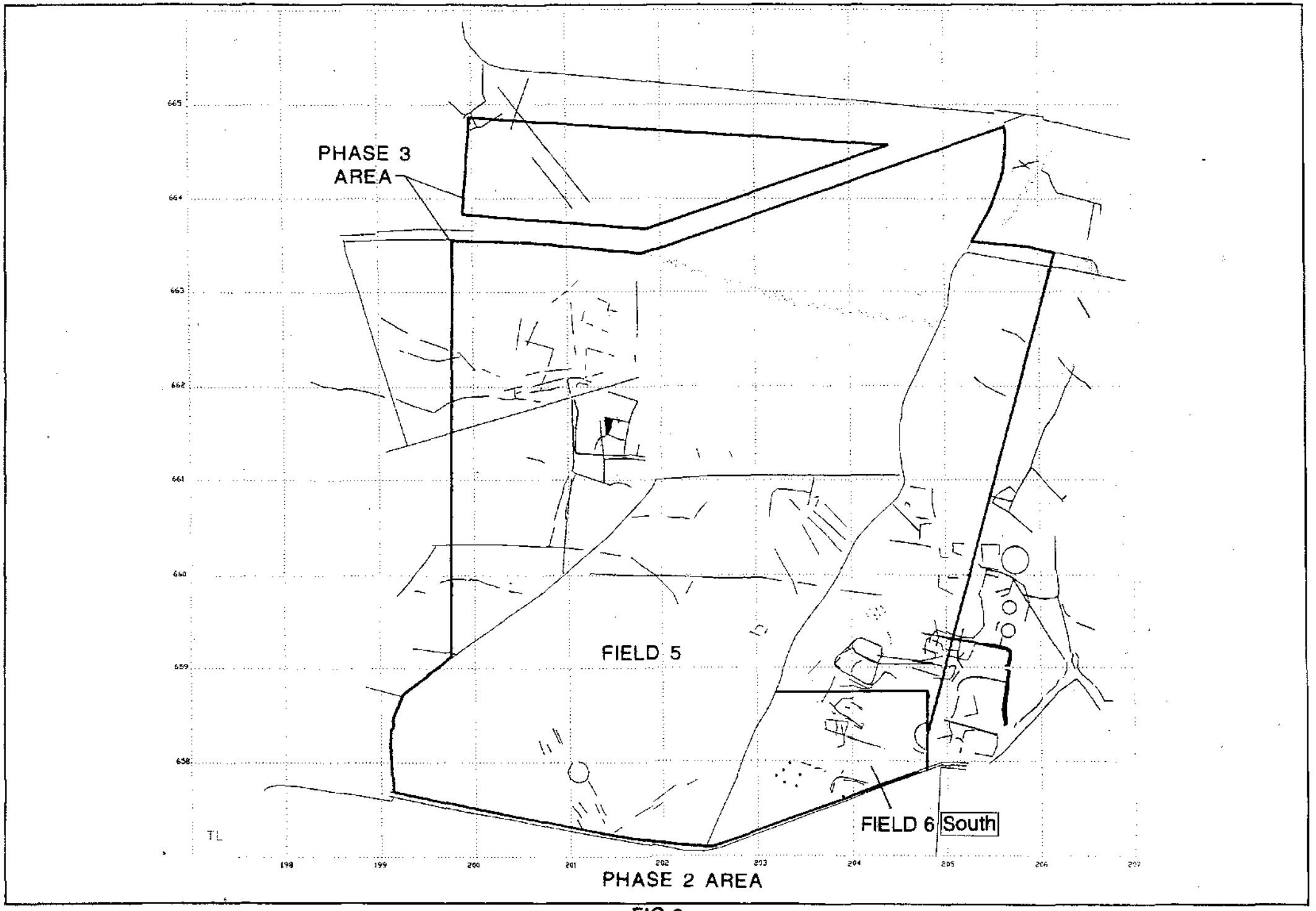
PHASE 3
AREA
FIELD 5
FIELD 6 South
PHASE 2 AREA
TL
665
664
663
662
661
660
659
658
198
199
200
201
202
203
204
205
206
207

FIG.2