RPS Planning, Transport and Environment

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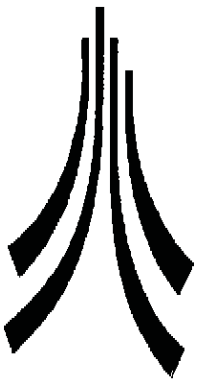

August 1995

A1 DISHFORTH TO NORTH OF LEEMING (HARROGATE MUSEUM)

NORTH YORKSHIRE

Final Evaluation Report

Commissioned and funded through:

Barton Howe Warren Blackledge

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EXECUTIVE SUMMARY

The Highways Agency had appointed Pell Frischmann Consultants Limited as the lead consultants for the upgrading of the Dishforth to North of Leeming stretch of the A1 and Pell Frischmann had retained Anthony Walker and Partners (now Barton Howe Warren Blackledge) as archaeological consultants for this project. Much of this stretch of the A1 follows the line of Dere Street Roman road and a desk-top survey suggested a number of areas of archaeological potential. Further non-destructive surveys (field walking, geophysical survey, and earthwork surveys) confirmed this suggestion and a field evaluation by trial excavation was commissioned. This work was undertaken by Lancaster University Archaeological Unit between March and May 1995.

This report covers trial excavations at six sites all lying within the collection area of the Royal Pump House Museum, Harrogate. A separate report (LUAU 1995a) covers seven sites lying within the collection area of the Yorkshire Museum. The locations of trenches were laid out by surveyors working for Barton Howe Warren Blackledge and machining was carried out under close supervision from LUAU by various mechanical excavators always using toothless buckets. Trenches were manually cleaned and any archaeological features or deposits were hand excavated, and photographic, textual, and drawn records were made. Finds were retained and bagged by context for later examination and recording, and soil samples were taken for subsequent study, if appropriate.

Despite the proximity of known prehistoric monuments (Hutton Moor henge and the recently discovered double pit alignment to the south) only a single ditch was discovered in Areas 1 and 2. There was no real dating evidence from this ditch and its function is uncertain although it could have been a boundary to a field, track or enclosure.

Again in Areas 11 and 12 an extensive scatter of flint was found during fieldwalking but excavation revealed only two ditches. The geophysical survey showed two ditches meeting in a T-shape but excavation revealed them in an L-shape. The ditches varied in depth and profile over the exposed lengths and it is possible that there had been a lowering of the ground surface level by erosion, wind action, soil-splash, ploughing, etc., since the time of their original excavation. No positive dating evidence was recovered. The few pieces of worked flint from the fills of one of the ditches could have been deposited there at any time after the ditch had started to fill up and there was no evidence to link these ditches to the extensive flint scatter in the immediate vicinity. A nearby shallow pit contained bone of a probable recent date and it appears to be unrelated to the ditches.

ACKNOWLEDGEMENTS

LUAU would like to thank Dave Hodgkinson and Keith Cooper for supervising and also Rob and Pete McNaught, Mark Williams and Jill Bagnall for their hard work in sun, rain, and snow.

The illustrations are by Dick Danks. The project was directed and this report written by James Wright and managed by Mark Fletcher.

1. INTRODUCTION

1.1 Background

Barton Howe Warren Blackledge was retained by Pell Frischmann Consultants Limited as archaeological consultant for the proposed improvements to the A1 between Dishforth and north of Leeming. After a desk-top survey a number of non-destructive techniques (field walking, geophysical survey, and surveying) were employed (MAP undated; Anthony Walker and Partners 1994; Geophysical Surveys 1994) which reduced the number of areas requiring immediate evaluation to six (numbered 1, 2, 6, 11, 12, and 13). A specification for the work was issued (Anthony Walker and Partners 1995) and after acceptance of their project design (LUAU 1995b) Lancaster University Archaeological Unit was commissioned to conduct the archaeological trial excavations on these sites. These involved 17 trenches with a total area of 1100m². Variation Number 1 removed Area 6 from the requirement, thus the number of trenches excavated in five areas was 12 with a total area of 1910m².

The geophysical survey in Areas 1 and 2 had revealed a scatter of pit-like and short linear anomalies. Areas 11 and 12 had extensive scatters of flints and some geophysical anomalies, among which was a possible enclosure in Area 12. In Area 13 initial surveys had revealed a thin scatter of flints and pit-like and curvilinear geophysical anomalies. This is the final report of the findings for the area covered by the Royal Pump House Museum, Harrogate (Figs. 1 and 2).

1.2 Trial Excavation Methodology

The location of all the trenches was laid-out by surveyors employed by Barton Howe Warren Blackledge (Figs. 4 and 5). Before machining a metal detector was employed to test for metal objects. A variety of mechanical excavators, both wheeled and tracked, but all with toothless buckets were used under close supervision to remove topsoil and where necessary subsoil. After machining the trenches were manually cleaned and inspected. The nature of the geological deposits and the drying of the ground sometimes made archaeological features difficult to detect and it was then necessary manually to lower the level within the trenches. In trenches where no archaeological features were present *pro forma* trench sheets were filled in recording the topsoil, the natural geology, and where appropriate the subsoil. Any archaeological features were excavated by hand, and a *pro forma* sheet was filled in for each context, where possible following Hodgson (1976); sections were recorded at a scale of 1:10 and plans at 1:20. Context numbers for Area 1 started at 0101, for Area 11 at 1101 etc, so that the first two digits of a context number show the area that the context was in. Photographs for black and white prints and for colour transparencies were taken. Samples of 30 litres volume were taken from archaeological contexts for General Biological Analysis and Bulk Sieving. In addition the spoil heaps were inspected for finds and where appropriate so was the topsoil surface in the vicinity of the trenches.

1.3 Final Report Methodology

This Final Report is based on the Interim Report (Wright 1995). The *Excavation* section has been expanded and the *Environmental Report* has been added, which allows a more widely based *Discussion*. In addition, more plans have been added.

2. EXCAVATION RESULTS

2.1 Area 1

Trench 1A, the only trench in Area 1, was positioned to sample a pair of intersecting linear anomalies (Fig. 4) and was 10m long and 5m wide. A ditch, F0100, was partially uncovered at the north-eastern corner of the trench (Fig. 6). The estimated width of the ditch was between 2.5m and 3.0m, it was 1.08m deep with a slightly rounded V-shaped profile and it ran just west of north to east of south. The lowest fill, 0104, was a red brown sandy silt loam which was 0.61m deep. Above, on the western side of the ditch, was fill 0103 which had the same texture as 0104 but contained large stones. The top fill was 0102, again a red brown sandy silt loam but with fewer and smaller stones than fill 0103. The ditch was at a slight angle to the present A1.

2.2 Area 2

Three trenches, 2A, 2B, and 2C, with a total area of 150m² were positioned to intersect geophysical anomalies; for 2A and 2B these were pit-like anomalies and 2C was to sample one of a scatter of linear anomalies (Fig. 4). No archaeological features were uncovered from these trenches. The natural geology, which consisted of sand, sand and gravel, and gravel, contained many patches of red sand which may have produced the anomalies on the geophysical survey.

2.3 Area 11

Fieldwalking had revealed an extensive scatter of worked flint and geophysical survey showed some pit-like and linear anomalies. Trenches 11A, 11B, 11C, and 11F were all positioned to sample the concentrations of flint, and Trenches 11D and 11E were positioned to sample the flint scatter and adjacent anomalies (Fig. 5). The six trenches of Area 11 had a total area of 625m².

2.3.1 Trench 11A

This trench, which was 5m wide by 15m long, contained a circular feature, F1117, which after excavation was felt to have been caused by natural disturbance, and no drawings are presented of this. It had a shallow U-shaped profile and much of the fill contained black organic patches which were probably of a recent origin.

2.3.2 Trench 11E

A 10m wide by 20m long trench was excavated to reveal geological deposits of loose sand with rounded stones which made definition of features difficult. However two ditches at right-angles to each other, M1107 and M1112, were identified (Figs. 6 and 7). Two segments, F1102 and F1108, of ditch M1107 were excavated and one, F1113, of M1112.

Segment F1102 was excavated for a length of 1.15m, it had a depth of 0.55m and a width of 1.22m. The break of slope at the top and bottom was gradual and the base was rounded. The lowest fill, 1106, a sandy silt loam, contained medium-sized sub-rounded stones and was 0.20m deep. Above was fill 1110, a red brown

silty clay loam containing small stones, and the highest fill, 1102, was a sandy silt loam of 0.15m depth.

In segment F1108 the sides sloped at a very gentle angle to a rounded base and the depth was 0.30m. This segment was excavated for a length of 1.48m and was 1.14m wide. The lower fill, 1111, was an orange brown sandy loam containing river-rounded stones, and fill 1109 above was a sandy silt loam, of the same colour, and was 0.10m deep.

The only fill, 1114, of segment F1113 of ditch M1112 was a dark brown silty loam which was 1.53m wide and 0.10m deep.

It was difficult to see these ditches before excavation, and to check that they did not continue beyond, respectively, the eastern and northern edges of the trench two sondages, 1115 and 1116, were excavated. In each sondage geological deposits were reached at no more than 0.10m below the level of machining, and it was concluded that the ditches did terminate in the trench.

A shallow oval shaped feature, F1104, with a length of 0.42m and a width of 0.23m, was half sectioned and shown to be 0.05m deep. Its only fill, 1103, was a dark brown sandy silt loam.

2.4 Area 12

One trench, 12A, with an area of 75m² was located to examine geophysical anomalies, possibly of an enclosure, close to a flint scatter (Fig. 5). After manual cleaning of the trench reddish brown bands of compact clay could be seen running roughly north-east to south-west. Two sondages were excavated through these deposits which confirmed that they were of a natural origin.

2.5 Area 13

Detailed fieldwalking had revealed a scatter of worked flint, and subsequent geophysical survey identified pit-like and curvilinear anomalies, of which a concentration of pit-like anomalies was selected for investigation. One trench, 13A, with a total area of 60m², was excavated over this concentration (Fig. 5) and revealed a mixed banding of sandy clays and rounded gravels with colours that varied from yellow to red. A sondage was excavated through an almost linear band of sand and this showed that it was a geological deposit.

3. FINDS REPORT

3.1 Introduction

A total of 65 fragments or artefacts was recovered in the course of trial excavation between 13th March and 10th May 1995. Finds were recovered from two areas (Trenches 1A, 11A, 11E and 11F).

3.1.1 Collection strategy

A strategy of total collection for all classes of material was regarded as potentially inappropriate for the smaller excavations; the marked lack of material evidence, however, required the modification of this policy in order to maximise the information potential of individual trenches. In consequence finds of all dates were collected by context.

3.1.2 Processing strategy

All finds were handled and processed in accordance with LUAU standard practice. On collection they were placed in marked self-seal polythene bags, and then further boxed for transfer to LUAU premises. In the laboratory the material was subjected to primary finds' processing procedures, basically washing, sorting, drying, and re-bagging. Appropriate material was clearly and legibly marked in the standard LUAU format of site identifier code, trench and context number. In this case the code used was LEE95.

A database using Microsoft Works was created in order to facilitate rapid quantification and assessment. This database will be made available if required. Full documentation, in an appropriate format, will accompany the finds archive on deposition.

3.1.3 Assessment strategy

All finds were examined and assessed by an in-house LUAU finds specialist with appropriate expertise.

Assessment was by rapid scan, and all finds from the project were examined in this fashion. The following criteria were adopted: preservation as an indicator of depositional and post-depositional circumstance, dating potential, and artefact range as an indication of site type.

3.2 Preservation

The material classes represented were primarily stone (including flint), ceramic, and bone. Almost no glass or metalwork (ferrous or non-ferrous) was recovered. The level of preservation varied with material group but stone (including flint) was excellent, ceramic good to excellent, and bone medium to good, although on some occasions bone had been reduced by ground conditions to a soft, crumbly consistency which led to rapid deterioration.

3.3 Dating Potential

For most purposes the finds have been divided into four broad chronological groups, Prehistoric, Romano-British, Medieval, and Post-Medieval/Modern. Detailed comment is appended to individual trench discussions.

Prehistoric: The occurrence of prehistoric material was low, represented only by a few worked flints, and likely to represent the equivalent of background noise - activity in the area over a prolonged period, but not necessarily directly on the site examined.

Romano-British: Romano-British material was almost absent.

Medieval: No medieval material was collected.

Post-Medieval/Modern: There was no post-medieval/modern material.

3.4 Artefact Range

The finds groups from the excavated trenches were too small for valid comment. Attempts at synthesis, when dealing with a range of material from the disconnected elements of a linear survey, would be misleading and valueless.

3.4.1 Trench 1A

Two fragments of worked flint were recovered, only one was stratified (fill 0103). They are likely to represent little more than 'background noise'. A rim sherd of Roman type, possibly BB1 (Black Burnished Ware 1), was recovered from the field.

3.4.2 Area 11

One flint scraper was recovered, unstratified. It is likely to represent little more than 'background noise', although when considered with the flint artefacts from Trench 11E, a slightly more positive interpretation might be accorded the site.

3.4.3 Trench 11E

Three worked flints, two of them scrapers, were recovered from fills 1101, of segment F1102, and 1111, of segment F1108, both elements of ditch M1107. A further, ostensibly unworked, fragment was noted in fill 1101 of segment F1102. A relatively large amount of well-preserved bone was recovered from fill 1103 of very shallow ?pit F1104. It derives from a single individual (probably immature sheep/goat) and is likely to be of recent date.

3.4.4 Trench 11F

Only a single fragment of unworked stone, and a single fragment of bone, both unstratified, were recovered from this trench. Neither is of significance.

4. ENVIRONMENTAL REPORT

4.1 Introduction

Ten 'general environmental samples' (GES - as defined by the archaeological contract specification) from eight sites adjacent to the A1 between Leeming and Dishforth, North Yorkshire were submitted for an assessment of their content of biological remains and their potential for further bioarchaeological analysis. Sites are distinguished by area/trench number.

4.2 Methodology

Five subsamples were taken from selected GES samples and processed as 'general biological analysis' samples (GBAs *sensu* Dobney *et al* 1992) for assessment of their content of biological remains. These were mostly samples indicated by the excavator as offering the greatest potential for preservation of biological remains.

None of the samples were deemed suitable for examination for the eggs of parasitic nematodes.

The GBAs were described in the laboratory using a standard *pro forma*. The 'test' samples selected were processed following methods outlined by Kenward *et al* (1980; 1986).

4.3 Results

The results of the investigations are grouped by site (area/trench) and presented in context number order.

Almost all of the samples showed evidence of bioturbation by modern rootlets and/or earthworm activity.

The GBA residues were small and of extremely uniform composition - mostly sand and gravel with some stones (to 30mm) and occasionally a trace of fine charcoal (to 5mm). Any deviations from this general description are noted in the text below.

Similarly, the residues from sieving of excess material and BS samples were very uniform - sand, gravel and stones with fragments of charcoal and poorly preserved bone in some of the residues. Any deviations from, or additions to, this general description are noted in the text below.

4.3.1 Trench 1A

One sample from this site was selected.

4.3.1.1 Fill 0104 of ditch F0101 Sample 14

This consists of just moist, light to mid brown, crumbly to unconsolidated, slightly clayey sand with very small to large stones (2mm to 60+mm) present.

The small washover was mostly sand, charcoal (to 5mm) and a few rootlets. A fragment of fly puparium, an earthworm egg capsule and a few weed seed fragments (at least one of which was ?modern) were also noted. The latter included *Chenopodium* sp., *Polygonum* sp. and *Aethusa cynapium* L. (Fool's Parsley).

4.3.2 Trench 11E

Four samples from this site were selected.

4.3.2.1 Fill 1103 of shallow pit F1104 Sample 26

This was a dry, light to mid orange-brown, unconsolidated (working sticky when wet), slightly clay sand. Very small and small stones (2mm to 20mm) were present in the sample.

The small washover contained a few weed seeds, some ?*Cenococcum* (soil fungus) sclerotia and plant detritus, and a little charcoal and sand.

4.3.2.2 Fill 1106 lowest fill of ditch segment F1102 Sample 29

This was a just moist, mid reddish brown, crumbly (working soft), silty clay with small to large stones present (6mm to 60+mm).

The small washover was mostly sand with a little charcoal (to 5mm), a few rootlets and a single earthworm egg capsule.

4.3.2.3 Fill 1111 lower fill of ditch segment F1108 Sample 31

This sample comprised a just moist, mid grey-brown, crumbly to unconsolidated (working slightly plastic), sandy silty clay with small to large stones present (6mm to 60+mm).

The large washover was mostly modern rootlets and sand with some fragments of charcoal.

4.3.2.4 Fill 1114 only fill of segment F1113 Sample 32

This was just moist, mid reddish brown, crumbly (working soft), silty/clay or clay/silt with some small stones (6mm to 20mm) present.

The small washover was mostly sand with some charcoal (to 5mm) and a few modern rootlets. A few ?*Chenopodium* sp. seeds, a charred grain and a charred seed, a few earthworm egg capsules and a ?modern *Anotylus tetracarinatus* (Block) head were also noted.

5. DISCUSSION

There was a substantial ditch, with no dating evidence, in Trench 1A. Little evidence could be found to help establish the function of this ditch although its depth would be consistent with it having been a boundary of some form - either to a field or trackway, possibly around an enclosure. There were flints seen in the field and also a rim sherd of Black Burnished Ware 1 pottery was found, but there was no evidence to connect these with the ditch. In view of the nearby recently discovered double pit alignment *c*400m to the south and Hutton Moor henge of similar Later Neolithic/Early Bronze Age date *c*1km to the north the results were disappointing.

In Trench 11E the two ditches, at right-angles to each other, M1107 and M1112, were probably field boundaries and although there is the possibility that they were a part of an enclosure the geophysical evidence does suggest field boundaries. No reliable dating evidence was recovered as the worked flint, which might support a prehistoric date, could be residual, field-walking having shown the presence of flint in the vicinity. The three sections excavated through these two ditches varied widely in profile. It is possible that when originally excavated the ground surface was higher than now, although this is not an entirely satisfactory explanation. Possibly the mixed sands, gravels, and clays created difficulties when digging these ditches, or the ditches may have been quarries for materials to build banks. Immediately to the east, the junction of the ditches was investigated, in sondage 1115, but no evidence of the ditch was found before reaching natural sands and clay after only *c*0.1m. The ditch may survive as a 'topsoil feature' capable of giving a geophysical response but undetectable by excavation.

The very mixed geological deposits of gravel, sand, silt, and clay which interleaved and overlaid each other in no obvious fashion, and which also contained visible metal staining particularly iron, may have caused false geophysical responses. It seemed that the features in the centre of the trenches were patches of red-stained natural clay causing the excavator to speculate that the colouring and the geophysical response were related.

No further analytical work is justified, and the archive which forms the basis of this report should be prepared for storage at the Royal Pump House Museum.

6. ARCHIVE

The archive consists of :

1 ring binder containing trench and context sheets
15 sheets A2 and A4 of drafting film with plans and sections
1 file with correspondence, including tender document, specification etc
1 box of finds
2 computer discs (Word 2 for Windows, Works)
All extracted fossils from the environmental subsamples, and the residues and washovers are currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described. There is no justification on bioarchaeological grounds for retention of the samples.
Copies of Environmental, Finds, Interim and Final Reports

The archive will be deposited at the Royal Pump House Museum, Harrogate subject to signed Certificates of Gift being received.

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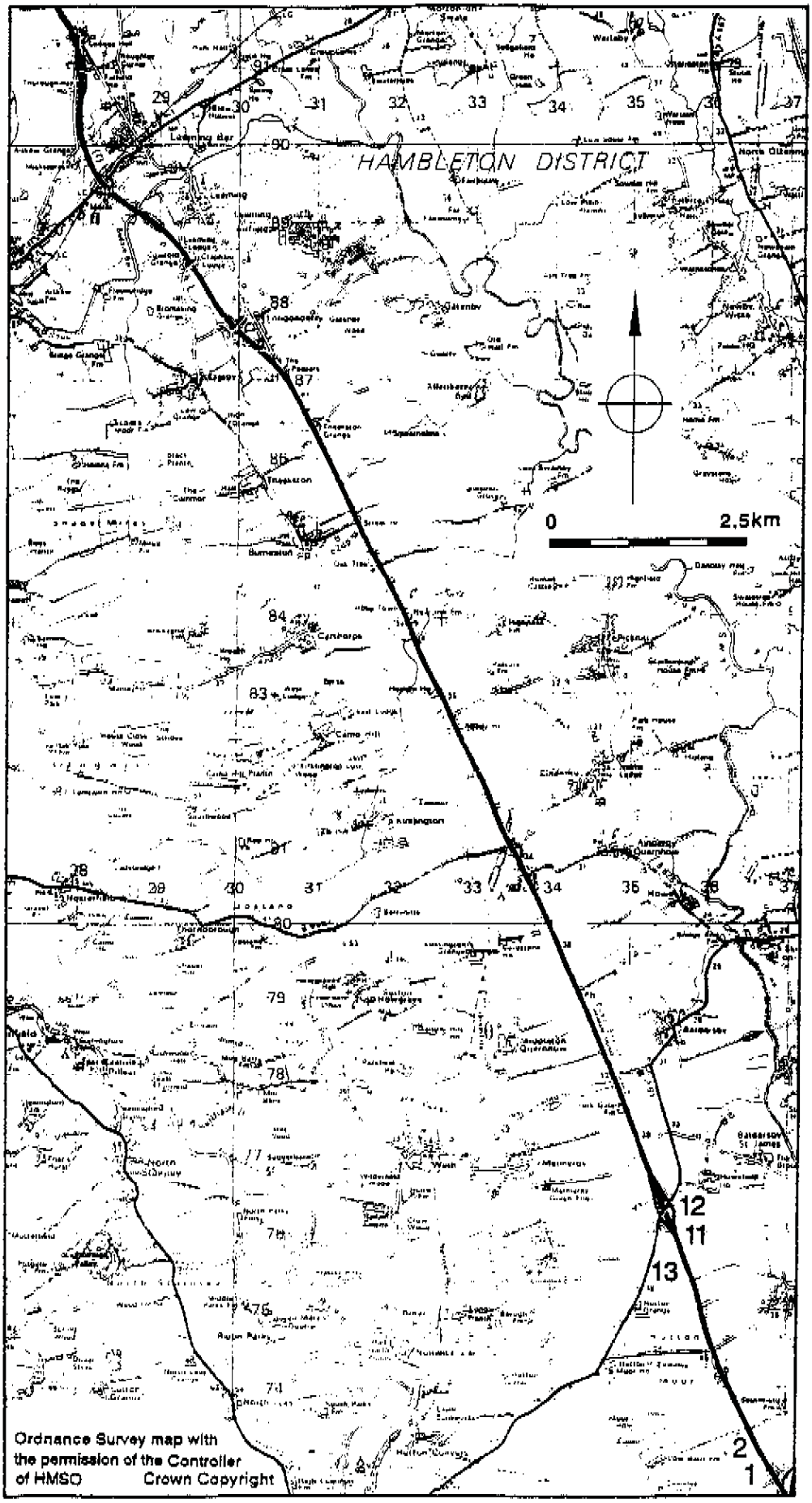


Fig.1 Location of evaluations

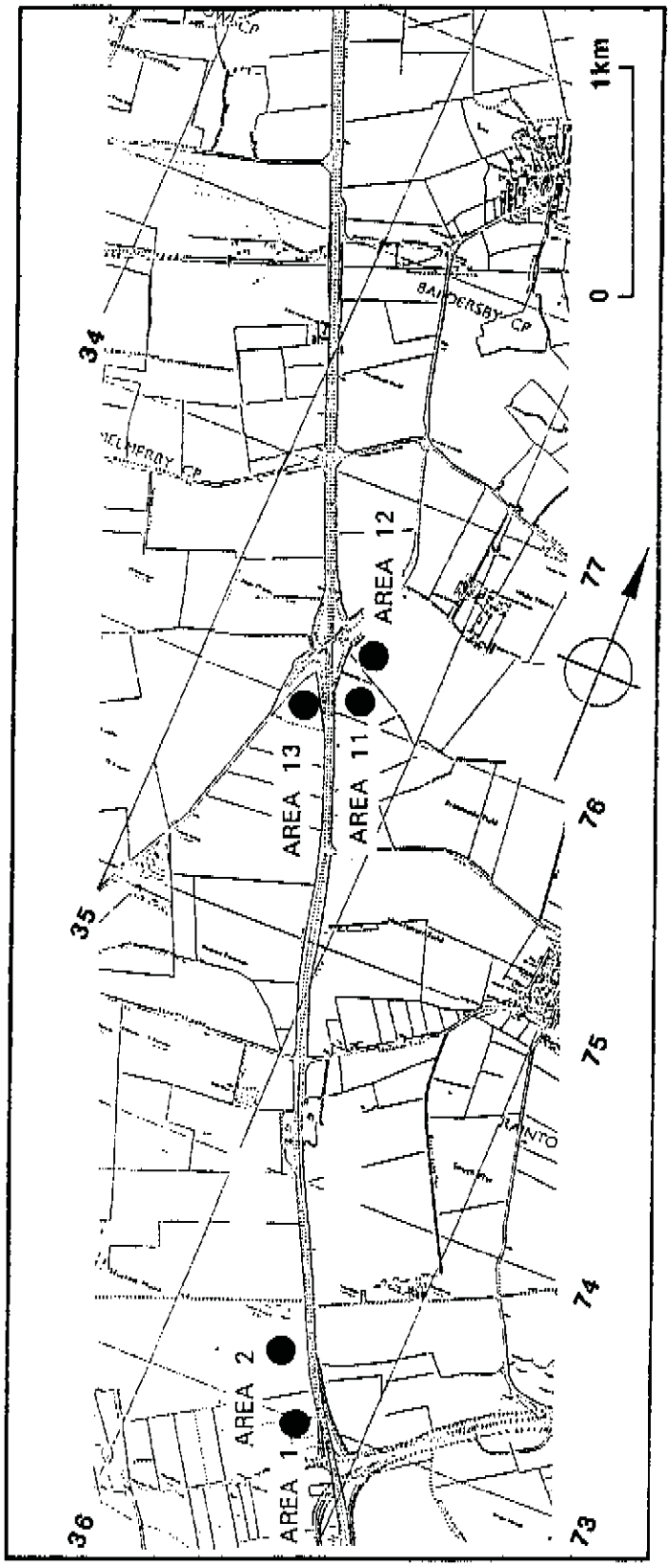


Fig.2 Location of Areas 1,2,11,12 and 13

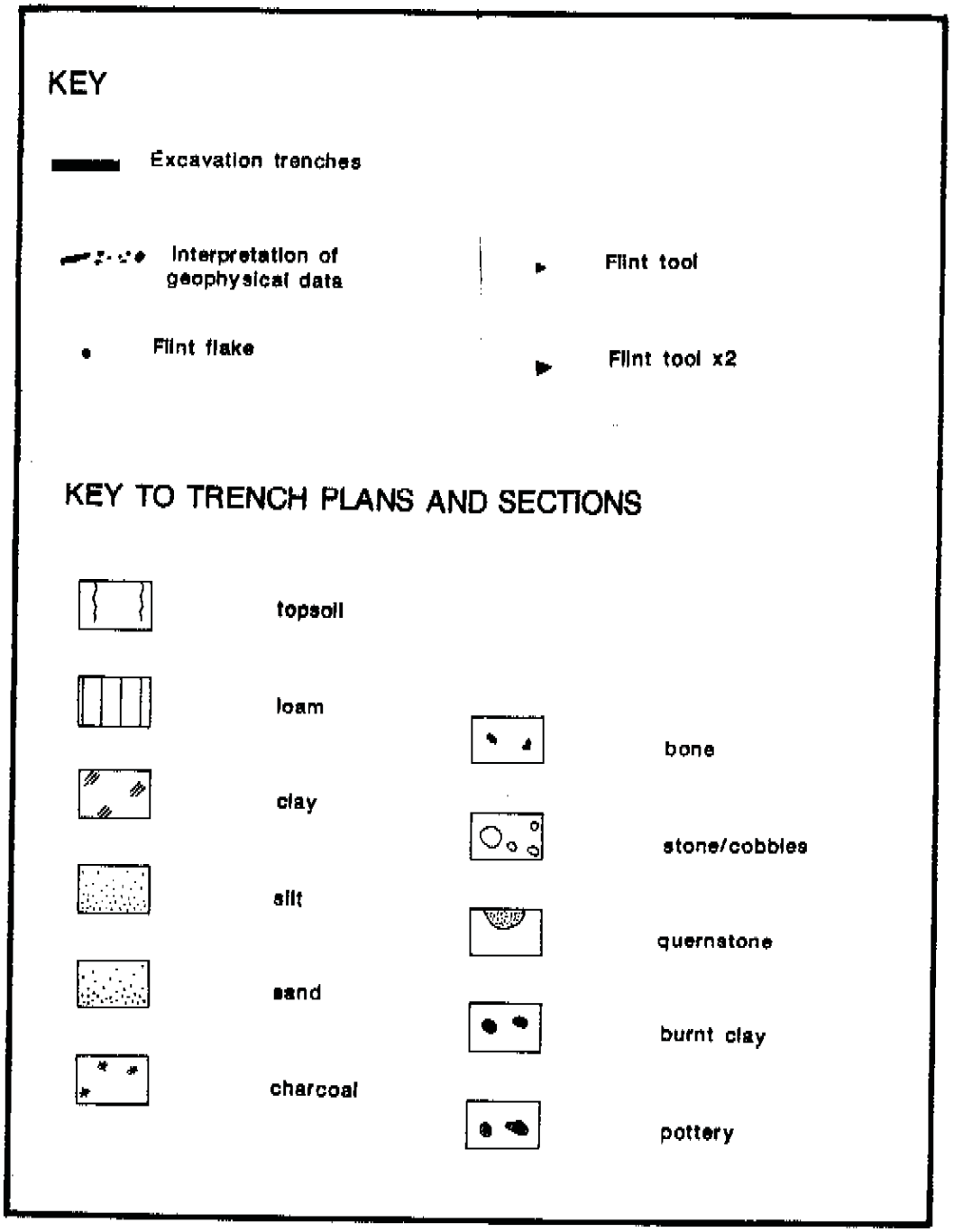


Fig.3

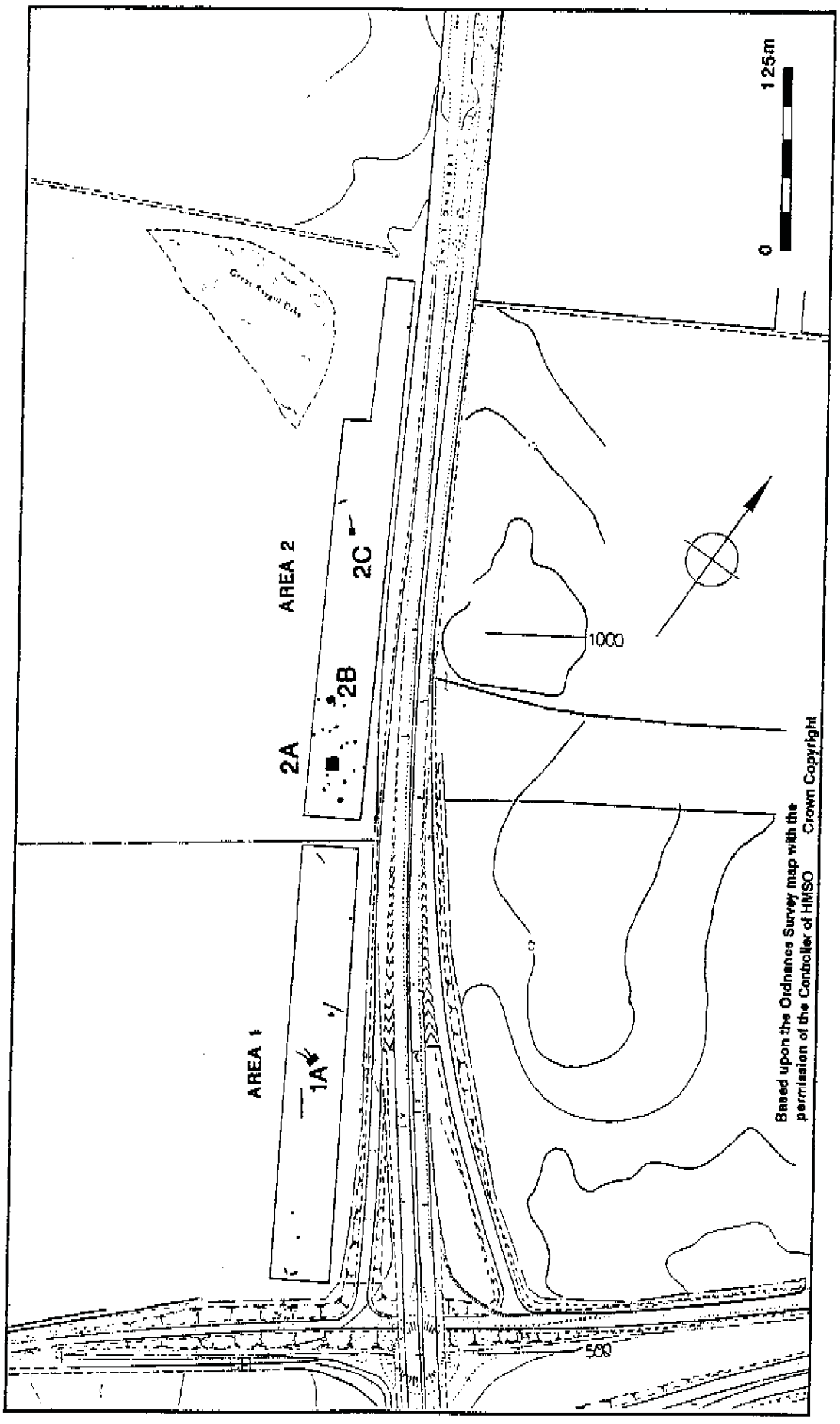


Fig.4 Location of Trenches 1A, 2A, 2B and 2C

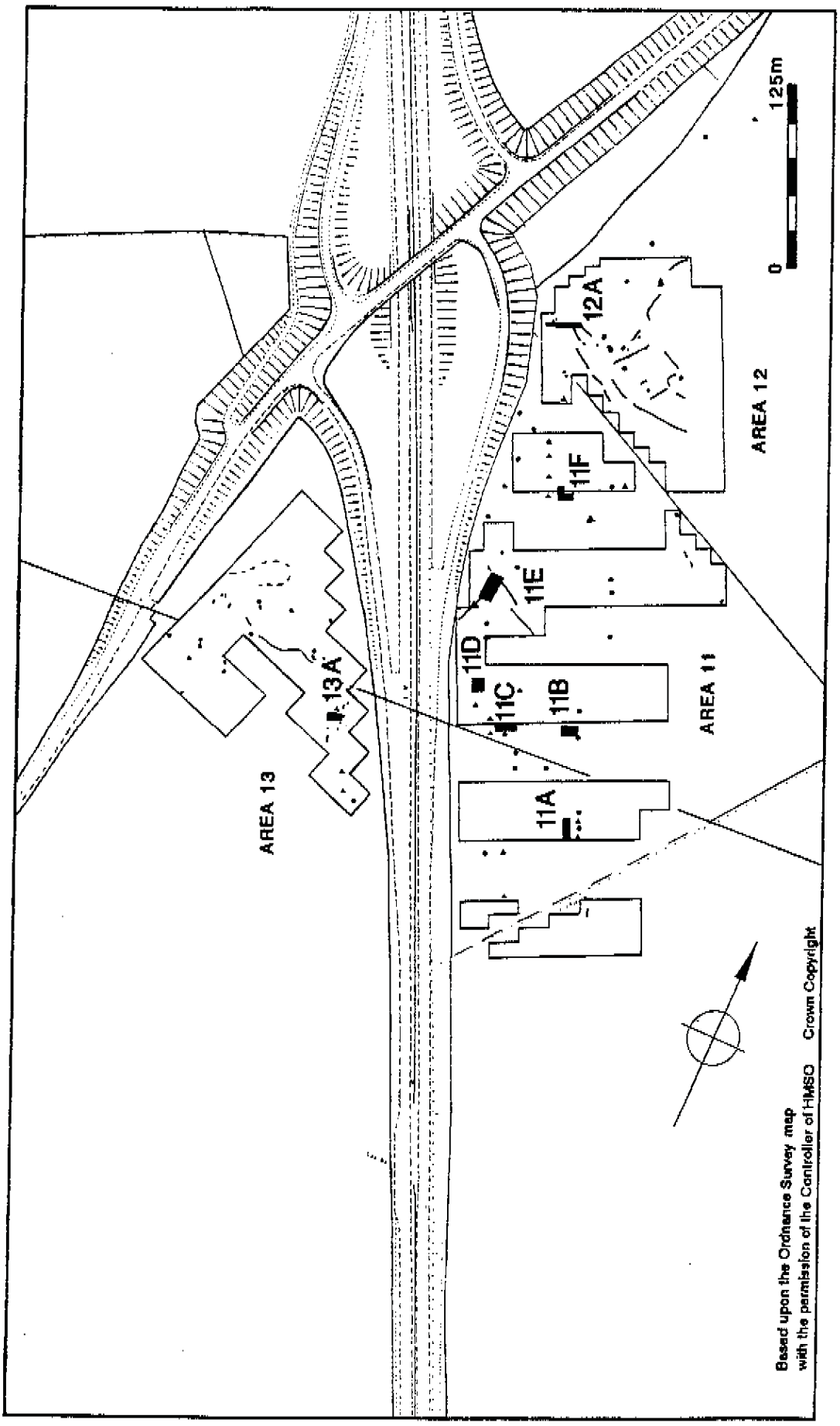


Fig.5 Location of Trenches 11A–F, 12A and 13A

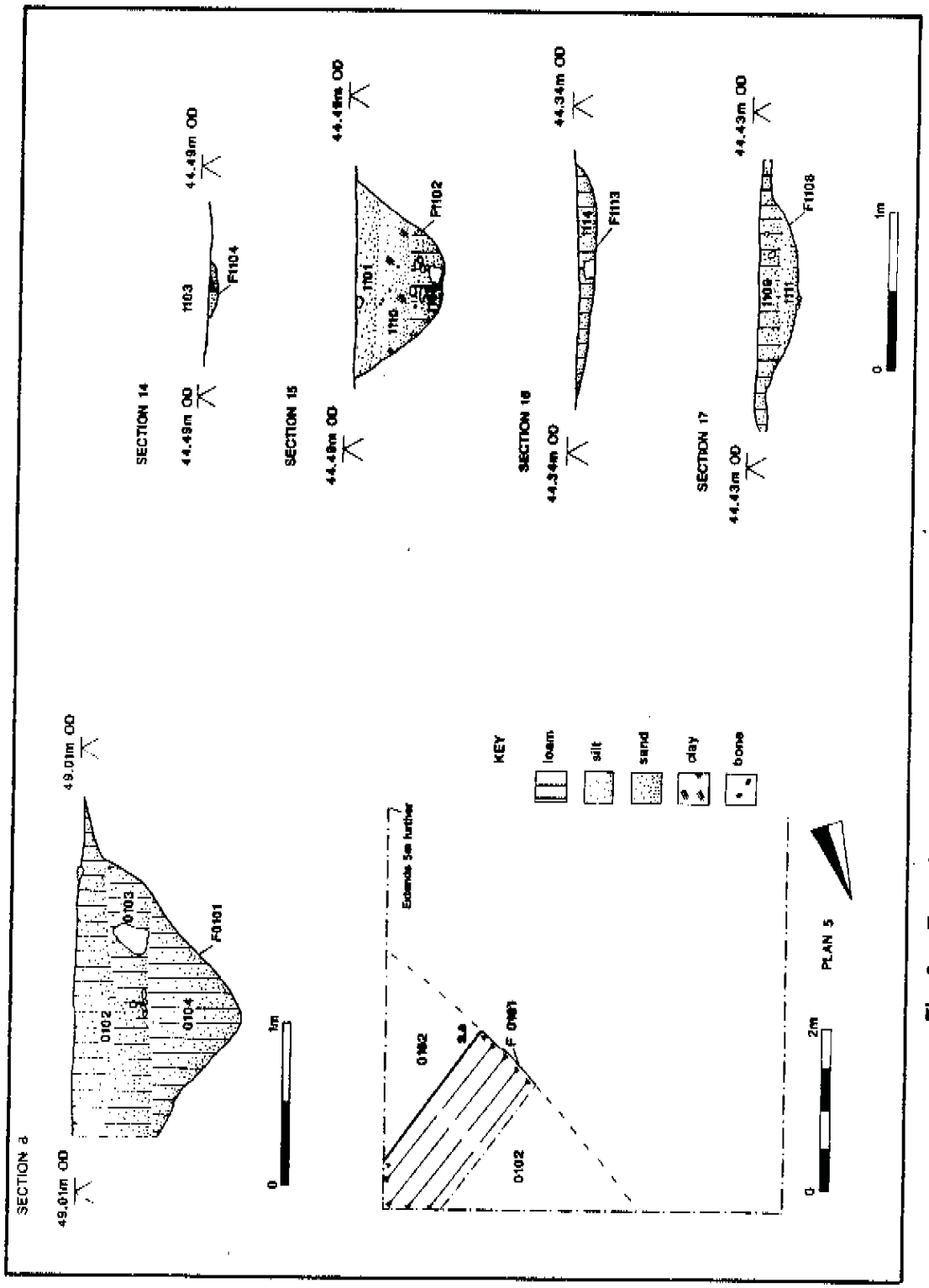


Fig.6 Trench 1A,plan and sections; Trench 11E, sections

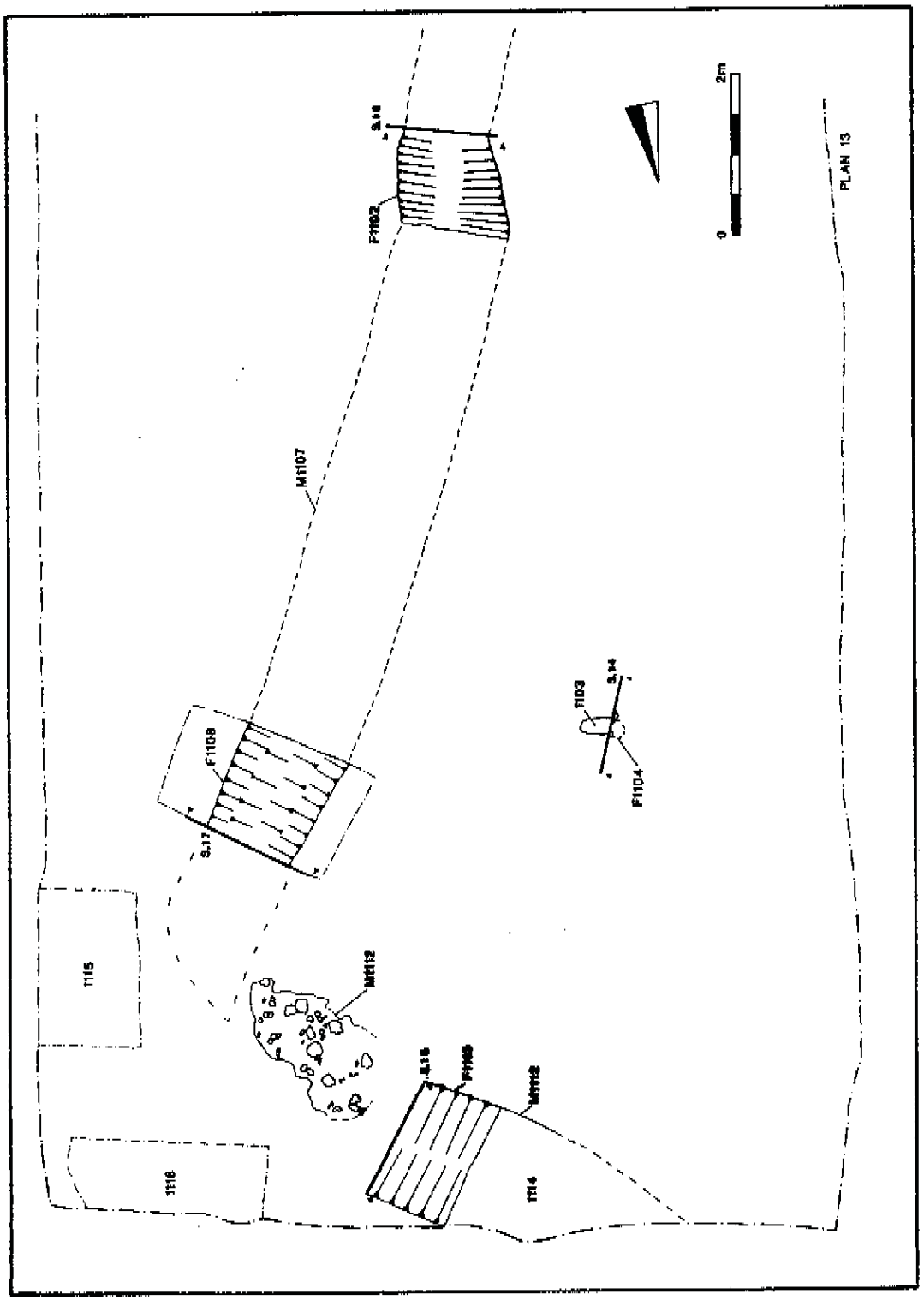
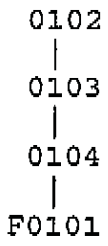


Fig.7 Trench 11E, plan

APPENDIX 1

Tr. 1A



Tr. 11E