

## **Colchester Archaeological Trust Ltd**

### **Geophysical Survey and Trial Trenching at Birch, Colchester.**

NGR: TL 924193

#### **For ARC Southern Ltd**

#### **Introduction**

Following the earlier discovery of substantial quantities of Roman building materials and pottery in ploughsoil to the north-east of Palmer's Farm, Birch, an opportunity arose to carry out a small-scale site investigation in the interval between the August 1998 harvest and sowing for the following season's crop. The investigation consisted of a limited geophysical scan followed by trial trenching.

#### **Geophysical Survey**

Plots showing the results from the geophysical investigation are contained in the Appendix. The survey produced several point anomalies, but no distinct outlines of buried features. The areas where anomalies occurred were investigated in the course of the trenching.

#### **Trial Trenches**

Seven 2.4 metre wide trenches were excavated at the locations shown on Figure 2. Trenches 1, 2, 3, 4, 6 and 7 were placed in Field One; Trench 5 lay in Field Two. In the descriptions below, the ploughsoil (referred to as L1) was a dark brown to dark greyish brown silt loam. In most of the trenches this sealed a subsoil (L2) of pale grey to pale greyish brown silty clay loam.

##### **Trench 1.**

*Plan: Figure 3*

Length: 64 metres.

The northern stretch of this trench was located in the area where fieldwalking had produced the heaviest concentration of Roman surface finds (Fig. 2, Cluster A). To the south, the trench extended into an area (area D) where pottery and tile were present in the ploughsoil in lesser quantities.

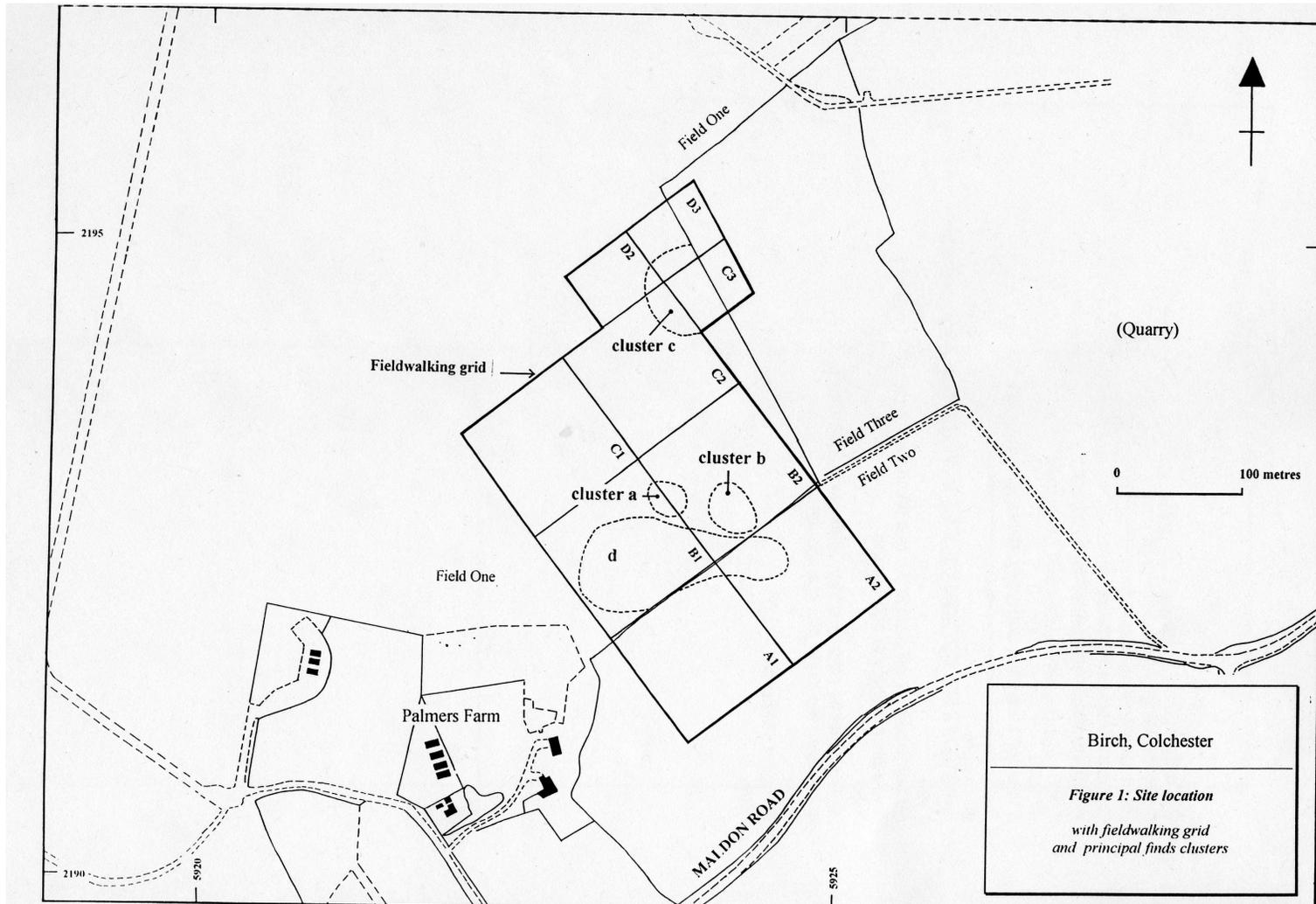
##### **Stratigraphy**

L1. Ploughsoil. 30-40cm.

L2. Subsoil. Up to 30cm.

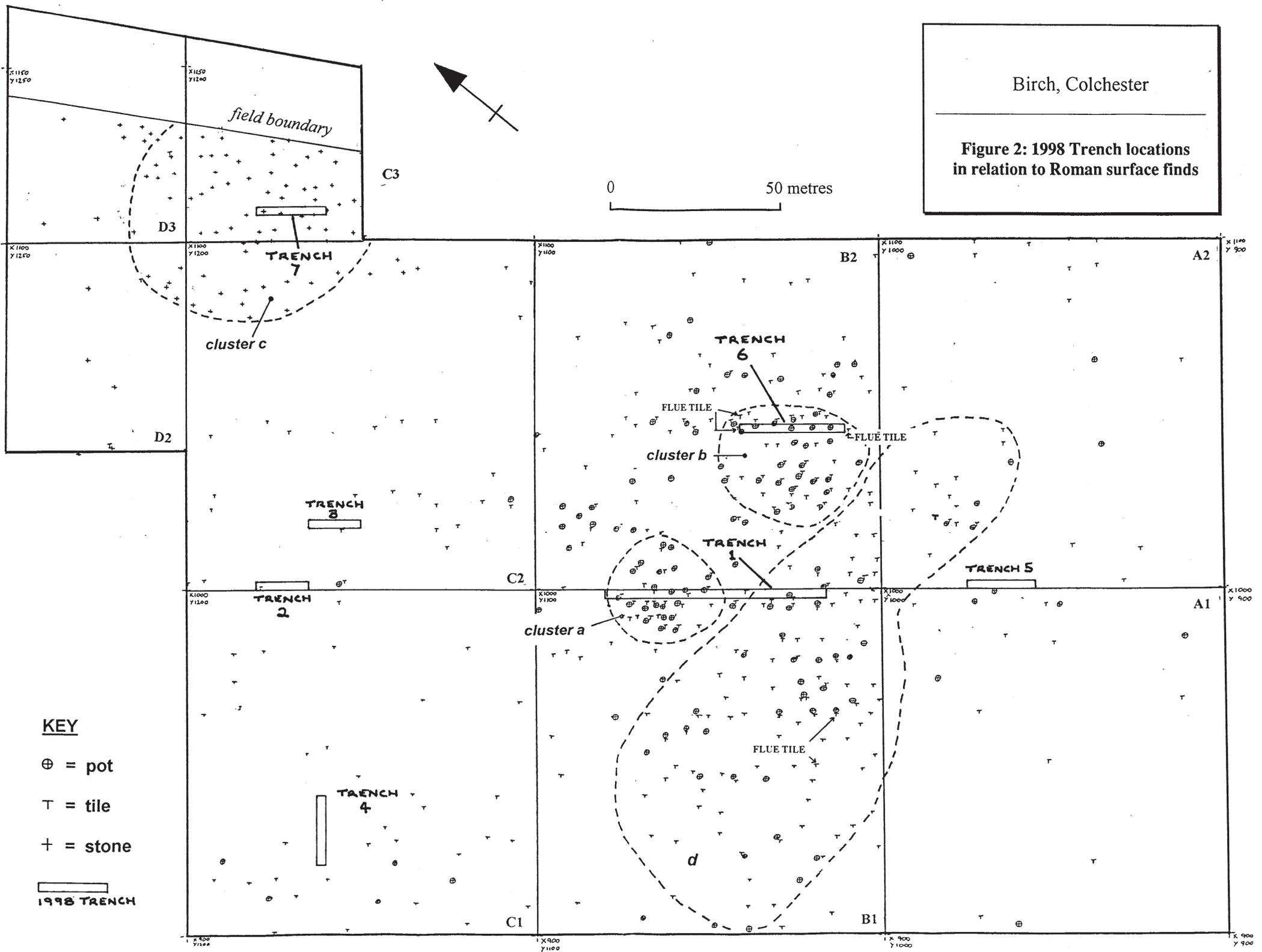
The subsoil layer was only present in the southern 30 metres of the trench. Elsewhere, ploughsoil (L1) rested directly above L3.

L3. Natural. Reddish brown clay loam with grey streaks and mottles.



Birch, Colchester

Figure 2: 1998 Trench locations in relation to Roman surface finds



**KEY**

⊕ = pot

T = tile

+ = stone

▭ = 1998 TRENCH

In the northern stretch of Trench 1 the following features were revealed when removal of the ploughsoil exposed natural clay loam, L3.

- F1. Pit or natural feature of indeterminate date. Mid greyish brown silty clay loam.
- F2. A linear feature of indeterminate date. Mid greyish brown silty clay loam.
- F3. A pit, Roman tile and pottery fragments were present in the mid greyish brown silty clay loam fill.
- F4. A linear feature with a mid greyish brown silty clay loam fill, cut by F5.
- F5. A sand-filled groove, probably modern.
- F6. Pit or natural feature cut by F5. Grey silt loam.
- F7. A linear feature with a greyish brown silt loam upper fill. A small section of the fill was removed, revealing a 40cm deep curved ditch-like profile with a olive discolouration of the fill at the sides and bottom of the feature. One fragment of Roman pottery was recovered from the lower part of the fill.
- F10. A complex mix of soils, overall of similar appearance to F7 but with stone dominated areas of fill. F10/a consisted of red burnt pebbles and contained an iron fragment, possibly a nail.

In the southern half of the trench the field subsoil, L2, survived, sealing a broad depression filled with dark greyish brown clay loam (F11). This was excavated to an overall depth of 90cms. Only one find, a Roman imbrex fragment, was recovered from this material. Other features in this part of the trench were F9, a clay filled vertical slot which appeared to be relatively late, and F8, a linear feature of uncertain but possibly early date.

Although several of the features were of indeterminate date it is worth noting that fills of F1 and F4 closely resembled that of F3, which itself appears to be satisfactorily early. F10 may at least in part be associated with F7.

## **Trench 2**

Length: 15 metres.

This trench was positioned in an area which had previously produced a number of point anomalies in the form of unusually strong readings during the magnetometer survey.

### Stratigraphy

- L1. Ploughsoil. 25cm.
- L2. Subsoil. 15 -25cm.
- L3. Natural; mainly reddish brown clay with pockets of sandy gravel.

No features of archaeological significance were revealed. In the southernmost 7 metres of the trench, L3 was covered by a layer of weak concrete, the surviving base of a parking bay associated with the World War II airfield. Within the concrete was a large iron ground pin, 60cm long, 3cm in diameter. The pin lay at a depth of 50cm from the ploughsoil surface. Two more pins were found in the nearby Trench 3.

## **Trench 3**

Length: 15 metres.

Trench 3 lay a short distance to the east of Trench 2 and again was dug to investigate the source of point anomalies noted in the geophysical survey.

### Stratigraphy

- L1. Ploughsoil. 30 - 35cm.
- L2. Subsoil. 24cm.
- L3. Natural; mainly pale brown clay with reddish brown gravelly sand containing ironpan formations.

No archaeologically significant features were revealed. The southern 3.5 metres of the trench was covered by further remains of the concrete aircraft bay exposed in Trench 2. Here, the concrete contained two iron ground pins of the same type as that found in Trench 2. Both lay 30cm below the ground surface and evidently account for the local point anomalies in the magnetometer scan.

#### **Trench 4**

Length: 20 metres.

Trench 4 was located in an outlying area of the field where Roman material was present but relatively sparsely distributed in the ploughsoil.

#### Stratigraphy

- L1. Ploughsoil. 25cm.
- L2. Subsoil. 19cm.
- L3. Natural; predominantly reddish brown clay with yellowish and greyish brown mottles, interspersed with stoney sand containing ironpan formations.

No buried features were revealed in this trench.

#### **Trench 5**

*Plan: Figure 4*

Length: 20 metres.

This trench was located in Field Two, known locally as “nine acre field”. It was positioned to investigate a faint outline noted in the geophysical plot.

#### Stratigraphy

- L1. Ploughsoil. 23cm
- L2. Subsoil. 13cm
- L3. Natural; mainly reddish brown to grey clay withpockets of gravel and small flints.

The faint outline noted in the geophysical scan coincides with F1, a pale greyish brown silty clay loam linear feature with indistinct edges which crossed the central part of the trench. No finds were associated with this feature.

#### **Trench 6**

*Plan: Figure 5*

Length: 30 metres.

Trench 6 spanned an area where fieldwalking had previously yielded particularly strong concentrations of surface finds (Fig. 2, Cluster B).

#### Stratigraphy

- L1. Ploughsoil. 23cm.
- L2. Subsoil. 20cm.
- L3. Natural; mainly reddish brown clay with thin pockets of gravel.

Removal of the subsoil L2 revealed the features shown in plan on Figure 5. The interruptions labelled F9, F11, F12 and F13 are of uncertain significance. Although possibly pits, no finds were associated with them and their grey silty clay fills may simply represent natural soil irregularities. The gravel and clay features F5 and F10 appeared to be natural except for the presence of deeply embedded small

fragments of red tile which may have been impressed by the machining. Fuller manual excavation of these features would be necessary to clarify their interpretation.

Finds from the fills of the linear features F1, F2 and F4 were exclusively Roman. The profile obtained from a 30cm deep section manually excavated across the western side of F1 and F2 suggests that the features are ditches or gulleys. The backfilled F2/F4 was later cut by the clay-filled linear feature F3, which produced no dateable finds. In the central part of the trench, F8 is possibly of early date, but its relationship to the other linear features is indeterminate due to an absence of dating evidence.

### **Trench 7**

Length: 20 metres.

Trench 7 was situated near the northern extremity of the gridded area, in a region where septaria was present in quantity in the ploughsoil (Fig. 2, Cluster C). Septaria is a hard nodule found in clays and was widely used locally for building purposes in the Roman period.

#### Stratigraphy

- L1. Ploughsoil. 25cm.
- L2. Subsoil. 25cm.
- L3. Natural; a mottled reddish brown and grey clay with extensive thin pockets of gravel and occasional ironpan formations at the southern end of the trench.

No archaeologically significant features were revealed in this trench.

In total, the ground area examined by trenching amounted to 430 square metres, which represents a 0.64% sample of the 6.7 hectares within the site grid. This is a statistically small sample, but if typical, these initial results seem to indicate that the site has in the past been subject to a significant level of archaeological erosion. It is also worth noting that a fairly close correspondence was found between the incidence of surface finds and the underlying presence of convincingly early archaeological features. The features were commonest in the northern part of Trench 1 and in Trench 6; both locations which had previously produced exceptionally high quantities of surface finds (Clusters A and B) when fieldwalked in 1997. Where surface finds were less common, the trenches were either devoid of features (Trenches 2, 3 and 4), or yielded indeterminate results (Trench 5 and the southern part of Trench 1). The only exception was the large septaria cluster (Cluster C), at the northern corner, where the 20m long Trench 7 revealed no features.

The Colchester Museums archival code for this season's work is 1998. 250.

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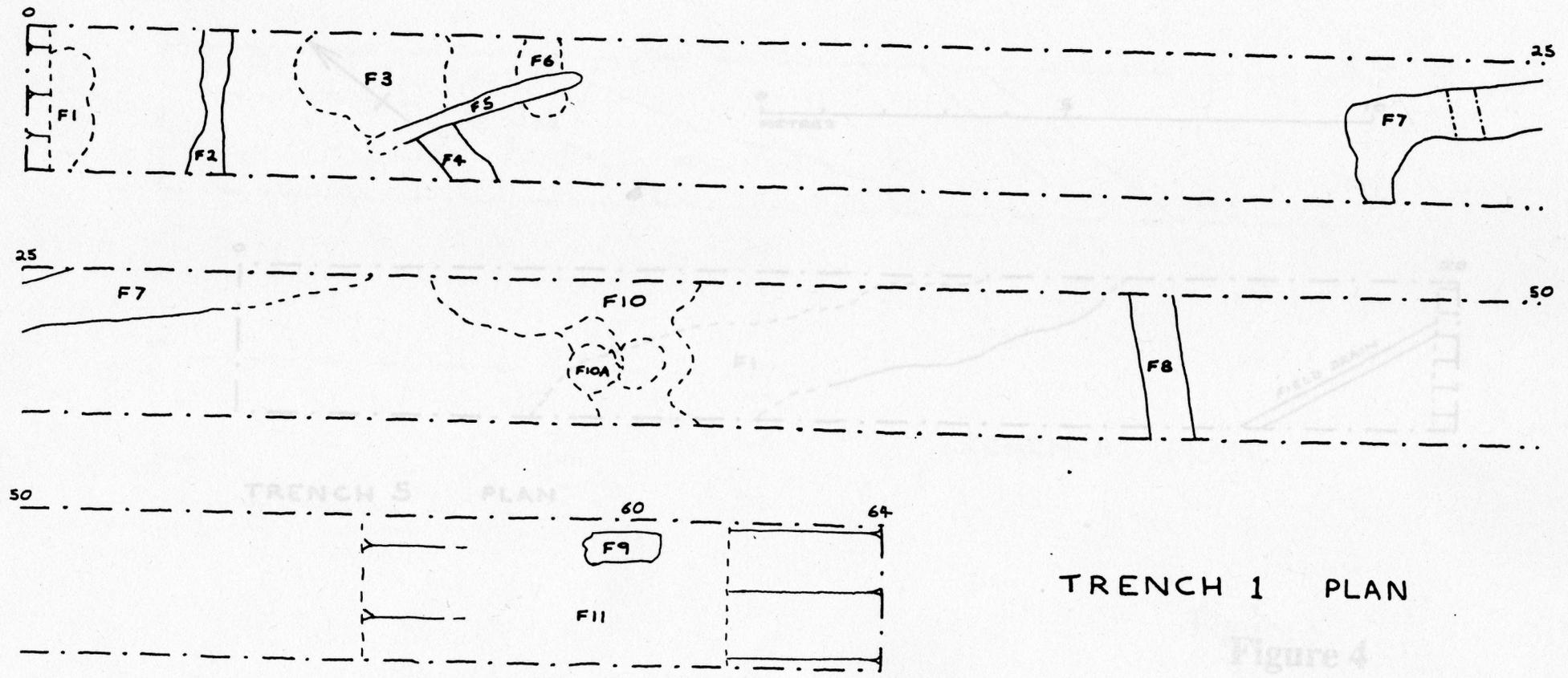
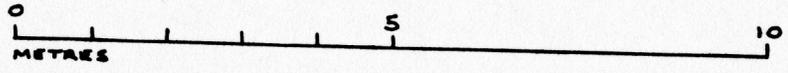


Figure 3

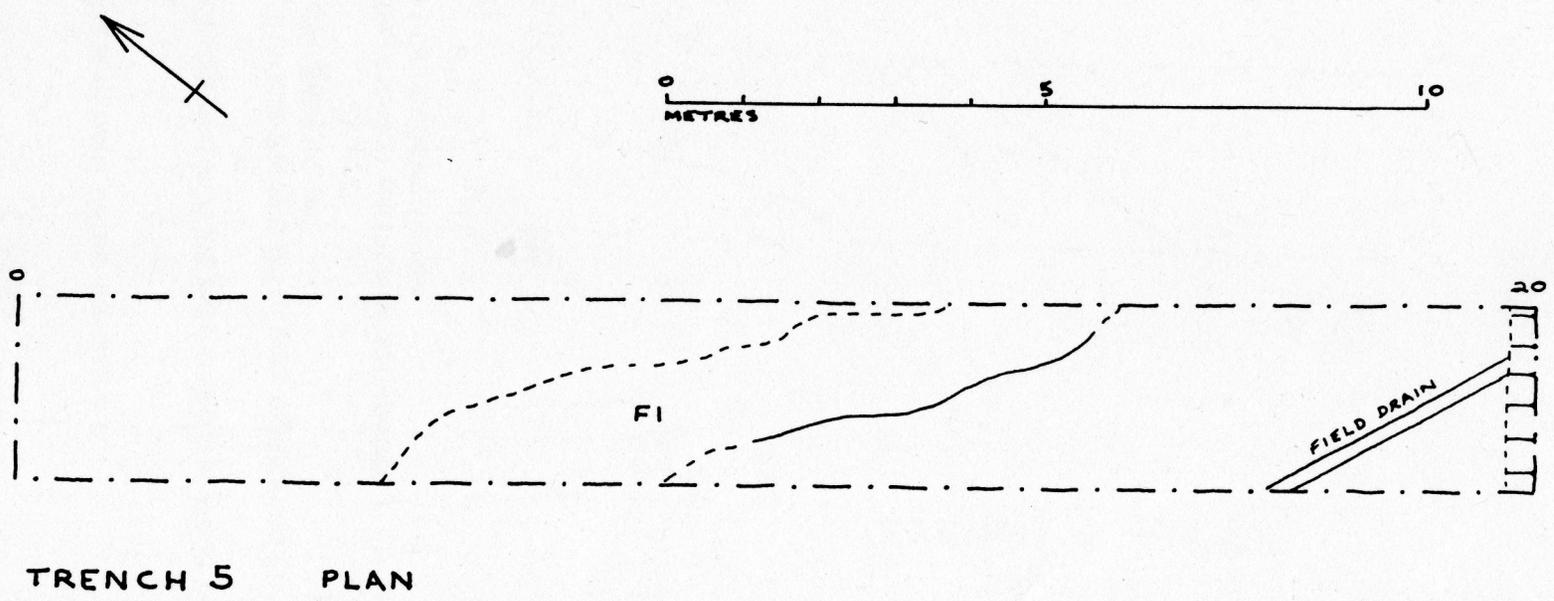
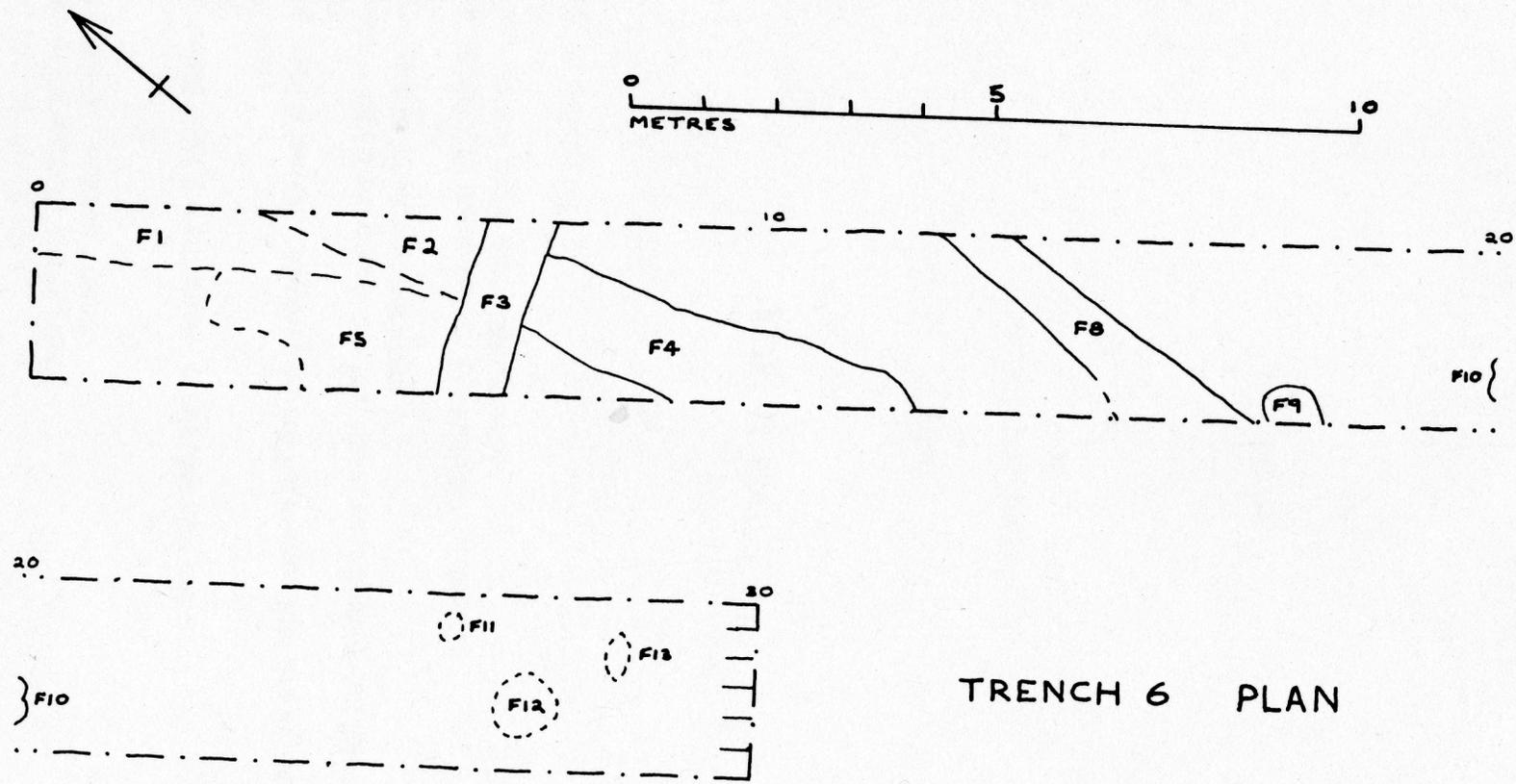


Figure 4



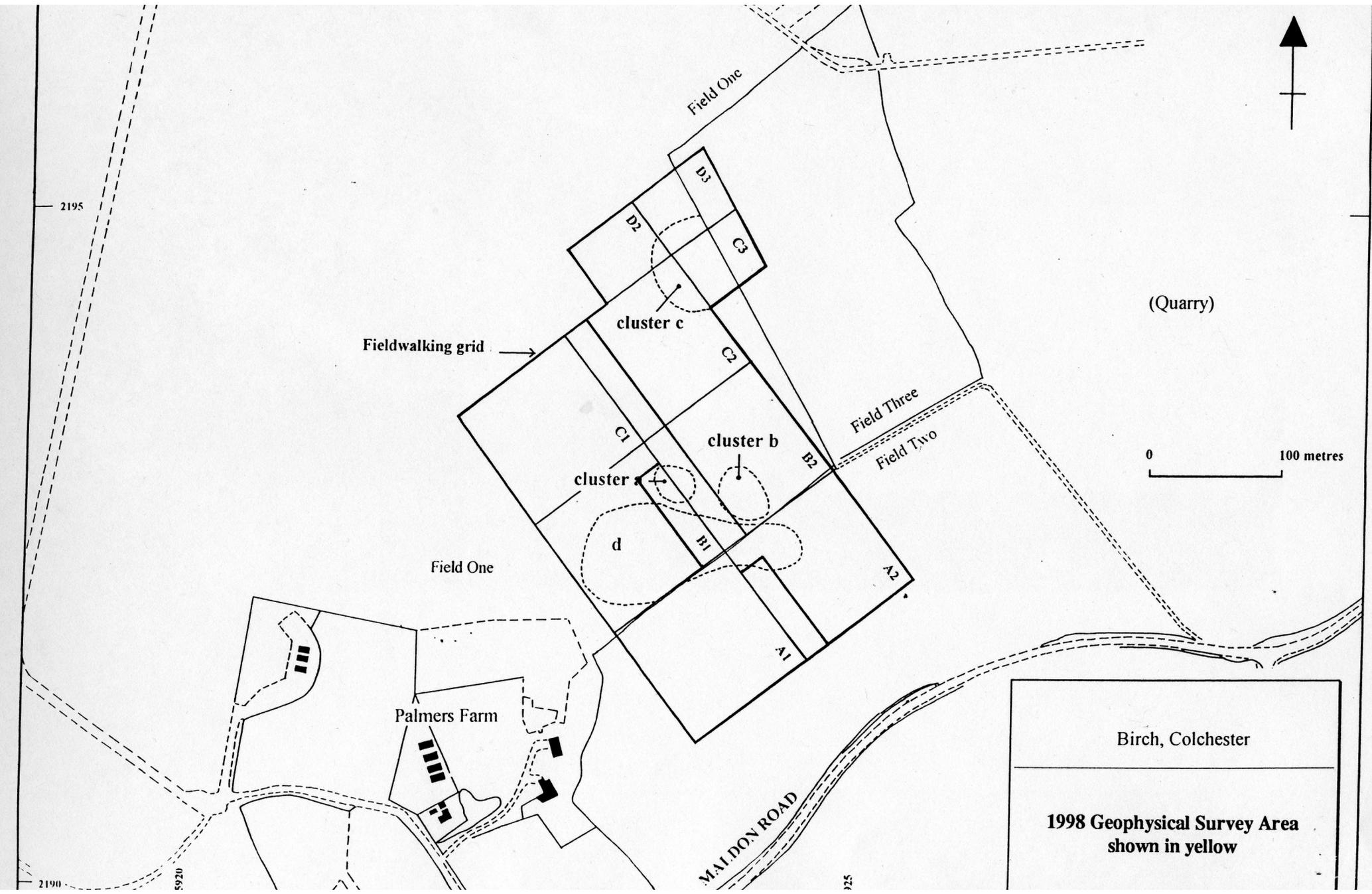
TRENCH 6 PLAN

Figure 5

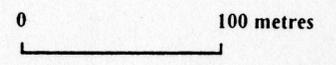
## **Appendix**

*1998 Geophysical survey at Birch*

*NGR: TL 924193*



(Quarry)



Birch, Colchester

1998 Geophysical Survey Area  
shown in yellow

MALDON ROAD

Palmers Farm

Fieldwalking grid

Field One

Field Three

Field Two

Field One

D3  
D2  
G3

cluster c

cluster b

cluster a

d

C1

C2

B2

B1

A2

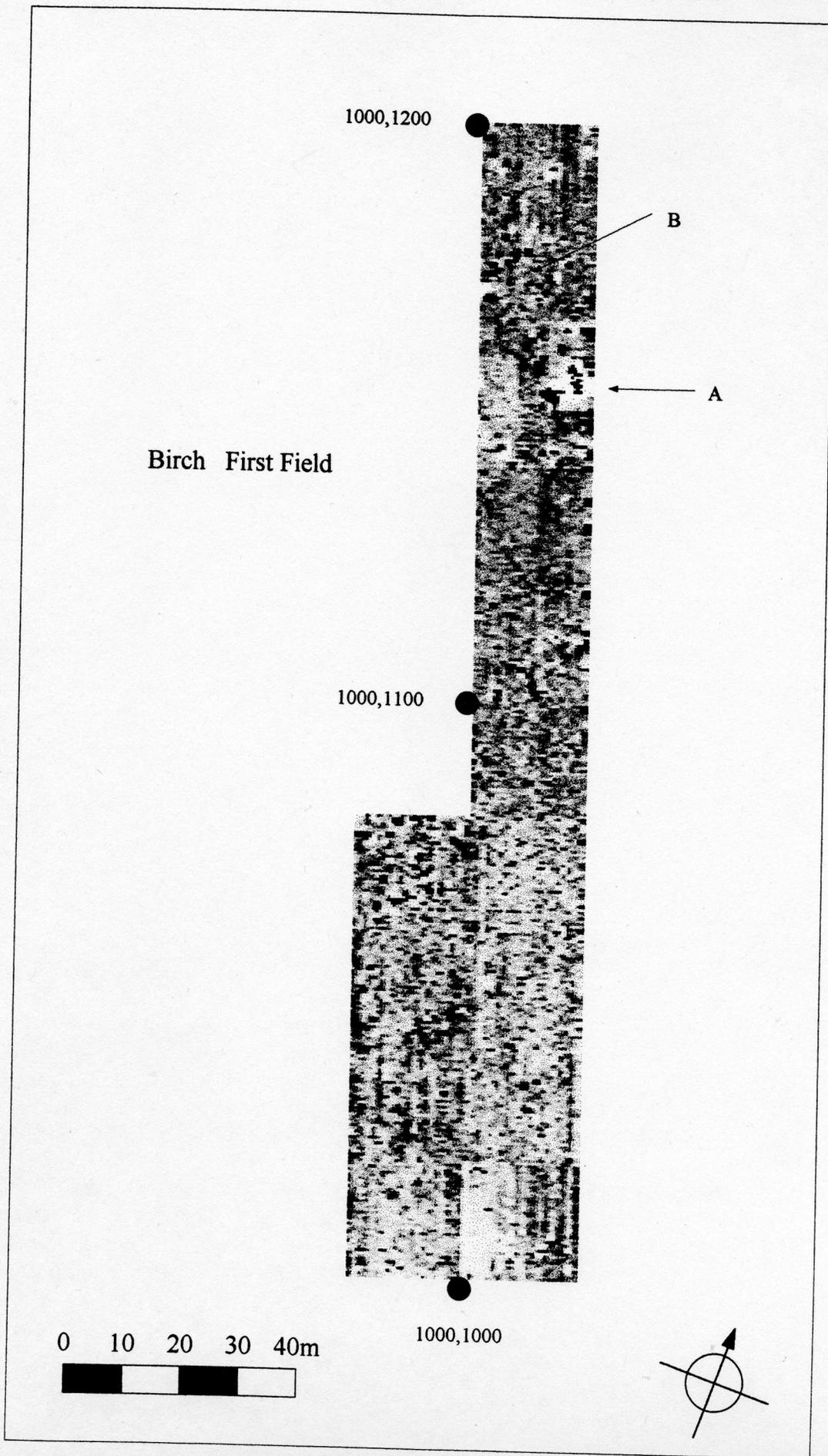
A1

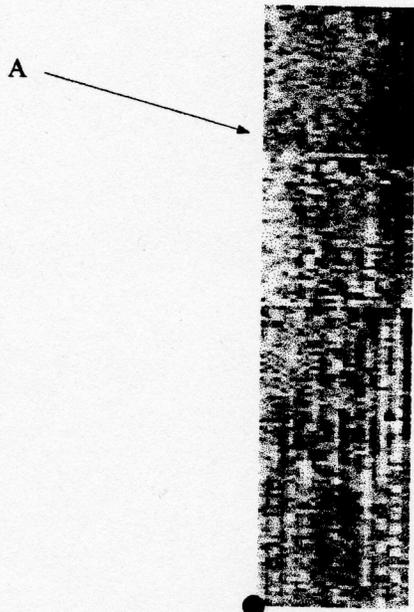
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2190

5920

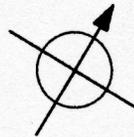
225





1000,900

0 10 20 30 40m



FIELD TWO