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**An archaeological evaluation at
Fatholme,
Barton-under-Needwood,
Staffordshire:**

trial trenching phase

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**An archaeological evaluation at Fatholme,
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by

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Summary

Archaeological trial trenching was undertaken at Fatholme Farm, Barton-under-Needwood, Staffordshire (NGR SK 2050 1780) in August and September 1999. This followed a desk-based assessment, an aerial photographic assessment, fieldwalking and geophysical survey. Although the results of the fieldwalking and geophysical survey were largely negative, cropmarks on aerial photographs suggested the presence of archaeological features including linear boundaries, a pit alignment and a rectilinear enclosure. A series of fourteen trial trenches were excavated to test these possible features.

Very few features of potential archaeological interest were recorded in the trial trenches to the north or south of Fatholme Farm. However, a group of pits and linear ditches to the west of the farm appeared to confirm the presence of a pit alignment and a rectilinear enclosure in this part of the study area. A single fragment of prehistoric pottery was recovered from one of the ditches of the possible enclosure.

Introduction

The following report details the results of the trial trenching phase of an archaeological evaluation undertaken following the submission of a planning application for an industrial development at Fatholme Farm near Barton-under-Needwood, Staffordshire (centred on NGR SK 2050 1780, Fig. 1). The work was commissioned by Phoenix Consulting on behalf of Prorail Limited and was undertaken by Birmingham University Field Archaeology Unit in late August and early September 1999. The trial trenching followed a desk-based assessment (Martin 1998), an aerial photographic assessment (Cox 1998), a fieldwalking survey (Johnson 1999) and a geophysical survey (Bartlett 1999). The programme of trial trenching was based on a scheme of investigation prepared by Phoenix Consulting (Richmond 1999).

Archaeological background

The site lies to the southeast of the village of Barton-under-Needwood and is bounded to the east by the Birmingham to Derby railway. The boundary of the study area (Fig. 2) encloses approximately 18 hectares and the site lies on a sand and gravel terrace on the west bank of the River Trent just north of its confluence with the River Tame. Information on past settlement and landuse on the gravel terraces of the River Trent has primarily been obtained from aerial photographic survey notably by Jim Pickering and Rowan Whimster (1989). These surveys have demonstrated extensive and intensive

human activity on the gravel terraces since at least the Neolithic (Gaffney and Hughes 1993).

The desk-based study (Martin 1998) assessed the extent of the known archaeology within and around the potential development area. It included a walkover survey, an aerial photographic assessment (Cox 1998) and a comprehensive documentary and cartographic survey. Cropmarks identified during the aerial photographic survey suggested the presence of linear and discrete features within the site. The features which were thought to be of potential archaeological interest are marked on Figure 2. These included a pit alignment, linear features (possibly early land boundaries) and part of a possible rectilinear enclosure. Where such features have previously been identified and excavated in the area they have frequently been found to be of prehistoric or Romano-British date (e.g. Smith 1979 and Coates 1999). Few archaeological artefacts were collected during the fieldwalking and the geophysical survey failed to detect potential archaeological features. Consequently, the locations of the trial trenches were largely dictated by the results of the rectified aerial photographic survey.

Aims

The objective of the programme of trial trenching was to attempt to establish the presence/absence, character, extent, state of preservation and date of any archaeological features or deposits within the study area.

Method

A total of fourteen trenches were excavated of varying dimensions (see appendix). These provided a total sample of approximately 1% of the proposed development area. The rationale for each of the trench locations was principally based on the results of the aerial photographic assessment. Each of the trenches was located using a Total Station Theodolite and the ploughsoil was excavated using a mechanical excavator fitted with a 2m toothless ditching bucket under archaeological supervision. Where appropriate, the subsoil surface was hand cleaned. A representative sample of the features identified were hand excavated to provide information concerning the survival and complexity of feature fills, and to recover artefactual evidence. A detailed context record on individual pro-forma record cards was maintained and all feature and trenches were photographed using both colour and black and white film. Trench plans were drawn at a scale of 1:50 or 1:20 as necessary. Excavated sections of individual features were drawn at a scale of 1:10 or 1:20.

Summary results of trial trenching

Detailed results of the trial trenching, including the objectives of each trench location and descriptions of features and stratigraphy, are provided in the appendix. The following is a brief summary describing the principal features recorded.

The ploughsoil over most of the site varied between 0.3 and 0.4m deep. There was considerable variation in the subsoil. Over most of the central part of the study area this comprised a bright orange sand and gravel. However, in part of the northern area of the site (Trench 3), the underlying clays were exposed. In the southern part of the study area the upper subsoil comprised light yellow brown silty sands

There was little of archaeological interest in the trenches to the north of Fatholme Farm (Trenches 1-6). Only a few shallow linear features were recorded and there was no evidence that the archaeology known to the east of the railway extended into the study area. There was also little of archaeological interest in the three trenches to the south of Fatholme Farm (Trenches 10-12). Only a single, east-west linear feature was recorded (Trench 11, F29).

Several archaeological features were identified in the five trenches to the west of Fatholme Farm (Trenches 7-9, 13 and 14). Two pits (F20 and F21) were identified in Trench 7 and a third pit, cut by a later plough furrow, was recorded in Trench 13 (F50). All three pits were approximately 1m across and between 0.3 and 0.5m deep. Together they formed a northwest-southeast orientation, approximately corresponding with the pit alignment (*feature 01*) identified during the aerial photographic survey. Other features of potential archaeological interest included two ditches (F14 and F24) recorded in Trenches 8 and 9. They were between 1.5m and 2m wide and 0.5m and 0.8m deep with U-shaped profiles. F24 was cut by a later agricultural furrow and contained a fragment of prehistoric pottery. It seems probable that these ditches correspond with the western and northern sides of the possible rectilinear enclosure identified during the aerial photographic survey. The whole of this area was crossed by shallow features orientated northwest-southeast. These clearly corresponded with a series of agricultural furrows that were identified during the aerial photographic survey.

Discussion

The archaeology recorded in the trenches to the west of Fatholme Farm would appear to correspond with the features, including a pit alignment and a rectilinear enclosure, identified during the aerial photographic assessment. However, there was no evidence for any stratified deposits and all the identified features were heavily truncated by both medieval and modern ploughing. Several were cut by agricultural furrows. The pit alignment may relate to a series of late prehistoric land divisions forming part of a system also represented by pit alignments to the south of the study area at Catholme Farm (Hughes and Coates 1999). A similar alignment of pits has recently been excavated at Whitmoor Haye (Coates 1999). The possible ditched enclosure may have represented a

settlement enclosure of the type excavated at Fisherwick (Smith 1979) and at Whitmoor Haye (Coates 1999). However, there was no clear evidence in either Trenches 8 or 9 for internal domestic features such as roundhouse gullies or pits.

The absence of any significant archaeological features in the trenches to the north and south of Fatholme Farm suggests that the known archaeology to the east of the railway does not extend westwards into the study area.

Acknowledgements

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The project was managed by Gwilym Hughes and monitored by Andrew Richmond on behalf of Phoenix Consulting and Chris Welch on behalf of Staffordshire County Council.

Appendix

Detailed results of Trial Trenching

The features and areas referred to in italics correspond with numbers allocated during the aerial photographic survey (Cox 1998).

Trench 1

Aim: to investigate a possible concentration of pits identified during the aerial photographic survey (*area 36*).

Method: machine excavated trench 2m wide and 25m long and orientated NE-SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.4m. It comprised a red brown gravel with lenses of fine sand.

Features:

F1: shallow E-W linear feature filled with light yellow brown sandy loam and gravel. 3m wide.

F2: shallow E-W linear feature filled with light yellow brown sandy loam and gravel. 1.5m wide

Interpretation: the linear features identified maybe traces of former agricultural furrows. There was no evidence for the suggested pits.

Trench 2

Aim: to investigate a possible fragmentary ditch (*feature 35*) recorded in a disturbed area during the aerial photographic survey.

Method: machine excavated trench 2m wide and 40m long and orientated NE - SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.3m. It comprised a light yellow brown fine sand with some gravel.

Features:

F3: shallow E-W linear feature containing fragment of modern brick. 5m wide and up to 0.1m deep with shallow U-shaped profile.

Interpretation: modern linear feature.

Trench 3

Aim: to characterise an area on the edge of a concentration of cropmark evidence (*area 34*) and to see whether a ditch (*feature 37*) continues to the south.

Method: machine excavated trench 2m wide and 30m long and orientated NW-SE.

Stratigraphy: the natural subsoil was encountered at a depth of 0.3m. It comprised a yellow to dark grey clay.

Features: no features identified.

Interpretation: the ditch (*feature 37*) is visible on the ground as a modern field boundary and did not extend as far south as this trench.

Trench 4

Aim: to investigate the projected continuation of a group of linear features recorded during the aerial photographic assessment to the east of the railway (*area 34*). These might relate to the remains of a prehistoric settlement.

Method: machine excavated trench 2m wide and 40m long and orientated NE-SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.35m. It comprised a light yellow brown sand with some gravel.

Features: no features were identified.

Interpretation: no evidence for the continuation to the west of the suggested prehistoric settlement.

Trench 5

Aim: to investigate a possible linear feature identified during the aerial photographic assessment. Also to investigate whether suggested features to the east of the railway extended into the study area.

Method: machine excavated trench 2m wide and 40m long and orientated NE-SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.35m. It comprised a fine orange brown sand with some gravel.

Features:

F4: shallow linear E-W feature with dark yellow brown silty loam fill, 3m wide and 0.05m deep.

Interpretation: identified feature is probably the cut for a former land drain. No archaeological features identified.

Trench 6

Aim: to investigate an area of known ridge and furrow cultivation to see whether earlier sites are preserved.

Method: machine excavated trench 2m wide and 30m long orientated E-W.

Stratigraphy: the natural subsoil was encountered at a depth of 0.35m. It comprised orange sands and gravels.

Features:

F5: linear feature orientated NW-SE filled with yellow brown sandy loam with some gravel.

F6: linear feature orientated NW-SE filled with yellow brown sandy loam with some gravel. 3m wide.

F7: linear feature orientated NW-SE filled with yellow brown sandy loam with some gravel. 3m wide.

Interpretation: these feature are regularly spaced, between 8m and 10m apart, and clearly correspond with furrows identified during the aerial photographic survey. There were no signs of earlier activity.

Trench 7 (see Fig. 3)

Aim: an area excavation designed to investigate the relationship between a pit alignment (*feature 01*) and a linear feature (*feature 02*), thought to be the western side of a rectilinear enclosure.

Method: machine excavated trench 10m wide and 20m long orientated E-W.

Stratigraphy: the sand and gravel subsoil was encountered at a depth of 0.35m. It comprised a bright orange fine sand with some gravel. Several irregular-shaped patches of darker sand containing bands of dark brown 'organic-like' material were also recorded.

Features:

F8: linear feature orientated NW-SE running diagonally across the trench filled with yellow brown sandy loam and gravel. 3m wide and 0.2m deep.

F9: sub-circular area of darker sand and 'organic' deposit near to southern limit of excavation approximately 3m across.

F50: sub-circular pit cut by linear feature (F8) and filled with yellow brown silty sand and gravel. Up to 1m wide and 0.5m deep.

Interpretation: the broad linear feature (F8) appears to be an agricultural furrow. This cuts an earlier pit, which maybe associated with the pit alignment identified during the aerial photographic survey. The darker patches, including the excavated example (F9), appear to be natural variations in the sub-soil.

Trench 8 (see Fig. 3)

Aim: to investigate the line of the pit alignment (*feature 01*) and the interior of the possible rectilinear enclosure represented by *feature 02* and its possible northern side. A possible ring ditch has also been identified in this area (*SMR, PRN 1455*).

Method: machine excavated trench 2m wide and 50m long and orientated NE-SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.4m. It comprised a fine orange sand and gravel.

Features:

F10: probable linear feature, partly visible in SW end of trench.

F11: linear feature orientated NW-SE. 3m wide.

F13: linear feature orientated NW-SE. 3.5m wide and 0.7m deep.

F14: linear feature orientated NW-SE and cut by F13. 1.2m wide and 0.8m deep with U-shaped profile.

F15: linear feature orientated NW-SE. 2m wide.

F16: linear feature orientated NW-SE. 2m wide.

Interpretation: the spacing and character of the majority of the linear features identified (F10, F11, F13, F15, and F16) suggest that they are agricultural furrows. F14 was narrower and deeper and was cut by one of these probable furrows (F13) suggesting that it might represent the northern side of the rectilinear enclosure. The profile of this ditch was similar to that of F24 in Trench 9.

Trench 9 (see Fig. 4)

Aim: to investigate the western corner of the suggested rectilinear enclosure (*feature 02*).

Method: machine excavated trench 2m wide and 750m long orientated E-W. This was subsequently extended to investigate features at its western end.

Stratigraphy: the natural subsoil was encountered at a depth of 0.4m. It comprised an orange gravel with lenses of orange sand.

Features:

F23: linear feature with yellow brown sandy loam fill and orientated NW-SE. Up to 2m wide and 0.5m deep.

F24: linear feature with dark yellow brown silty loam fill and orientated N-S. Up to 2m wide and 0.5m deep. Fragment of prehistoric pottery recovered from its fill.

F25: sub-circular 'pit-like' feature filled with sand and gravel.

F26: linear feature with yellow brown sandy loam fill and orientated NW-SE. 0.8m wide and 0.1m deep.

F27: linear feature with yellow brown sandy loam fill and orientated NW-SE. 0.8m wide and 0.2m deep.

Interpretation: the orientation and character of at least two of the linear features (F23 and F26) suggest that they are agricultural furrows. However, the fill and orientation of the N-S feature (F24), which was cut by one of the probable furrows (F23), was noticeably different. This appears to be confirmed by the prehistoric pottery fragment from its fill suggesting that it corresponds with the linear cropmarked ditch identified during the aerial photographic assessment (*feature 02*).

Trench 10

Aim: to investigate the presence of deeper soils and to see if the pit alignment (*feature 01*) continued into this area.

Method: machine excavated trench 2m wide and 30m long and orientated NE-SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.35m. It comprised a white grey sand with some gravel.

Features:

F28: linear E-W feature containing modern brick. 1.5m wide, not fully excavated.

Interpretation: there was no indication of either deeper soils or any continuation of the pit alignment. The only feature identified was clearly modern in origin.

Trench 11

Aim: to determine whether the linear feature (*feature 33*), identified as a double pit alignment, to the east of the railway extended into the study area.

Method: machine excavated trench 2m wide and 30m long orientated NE-SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.35m. It comprised a light yellow brown sand with some gravel.

Features:

F29: linear E-W feature with dark brown sandy loam fill. 1.4m wide and 0.33m deep with a U-shaped profile.

Interpretation: there was no indication of the possible double pit alignment. However, the linear feature sampled may have been an ancient field boundary.

Trench 12

Aim: to investigate a generally blank area to act as a control.

Method: machine excavated trench 2m wide and 40m long.

Stratigraphy: the natural subsoil was encountered at a depth of 0.35m. It comprised a light yellow brown gravel with lenses of white sand.

Features:

A series of modern land drains (F30-F34) between 0.25m and 0.8m wide. All orientated N-S and some containing ceramic pipes.

Interpretation: no archaeologically significant features.

Trench 13 (see Fig. 4)

Aim: excavated to the west of Trench 7 in order to investigate an area of the possible pit alignment where it was not disturbed by a later agricultural furrow.

Method: machine excavated trench 3m wide and 17m long orientated NE-SW.

Stratigraphy: the natural subsoil was encountered at a depth of 0.4m. It comprised an orange gravel with lenses of orange sand.

Features:

F19: shallow linear feature orientated NW-SE. Up to 1.8m wide and 0.15m deep.

F20: sub-circular pit filled with yellow brown silty sand and gravel and cut by linear feature (F19). 1m across and 0.3m deep.

F21: sub-circular pit filled with yellow brown silty sand and gravel and cut by linear feature (F19). 1.4m across and 0.3m deep.

F22: narrow and shallow E-W linear feature filled with yellow brown sandy gravel. 0.3m wide and 0.05m deep. No finds.

Interpretation: it seems possible that the two 'pit-like' features (F20 and F21) are part of the pit alignment identified during the aerial photographic assessment. F19, which cuts both of these pits, is probably an agricultural furrow.

Trench 14

Aim: excavated to the east of Trench 7 in order to investigate an area of the possible pit alignment where it was not disturbed by a later agricultural furrow.

Method: machine excavated trench 3m wide and 11m long orientated NE-SW.

Features:

F17: NW-SE linear feature filled with yellow brown sandy loam and gravel. 3m wide.

F18: NW-SE linear feature filled with yellow brown sandy loam and gravel. 1.8m wide.

Interpretation: two features possibly correspond with linear features identified in Trench 8 to the east (F13 and F14).

References

- Coates G 1999 *Excavations at Whit Moor Haye Quarry, Alrewas, Staffordshire, 1997-1998. Post-Excavation Assessment and Updated Project Design*, BUFAU report no.495.
- Cox C 1998 *Fatholme Farm, Barton-under-Needwood SK2017 Staffordshire: Aerial photographic assessment, archaeology*, report no. APSLtd/9798/23.
- Gaffney V and Hughes G 1993 *Settlement and environment on the southeast Staffordshire gravels: new approaches to a threatened resource*, BUFAU report no. 237.
- Martin A L 1998 *Report on an archaeological desk-based assessment of land at Fatholme, Staffordshire*, Gifford and Partners Ltd report no. B1488A.02R.
- Richmond A 1999 *Written scheme of investigation for trial trenching: Fatholme, Barton-under-Needwood, Staffordshire*, Phoenix Consulting report no. P138B.
- Smith C 1979 *Fisherwick: the reconstruction of an Iron Age landscape*, British Archaeological Reports British Series 105.
- Whimster R 1989 *The emerging past. Air photography and the buried landscape*, London.

List of figures

Fig. 1 – Location of site

Fig. 2 – The study area showing principal cropmarked features and location of trial trenches. Scale 1:5000.

Fig. 3 – Plan and sections of Trenches 7 and 8. Plans at 1:200, sections at 1:50.

Fig. 4 – Plans and sections of Trenches 9 and 13. Plans at 1:200, sections at 1:50.

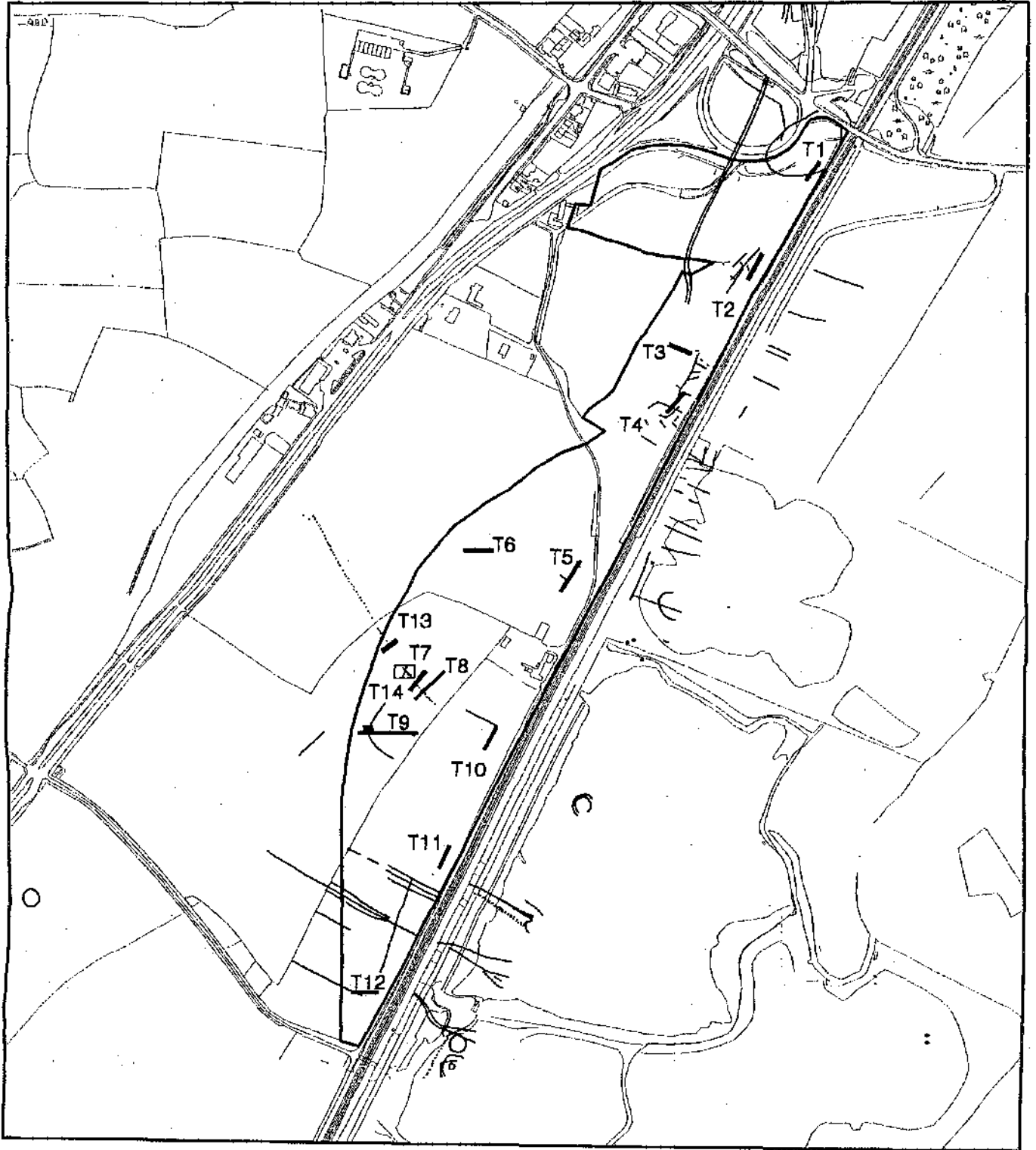


FIG.2

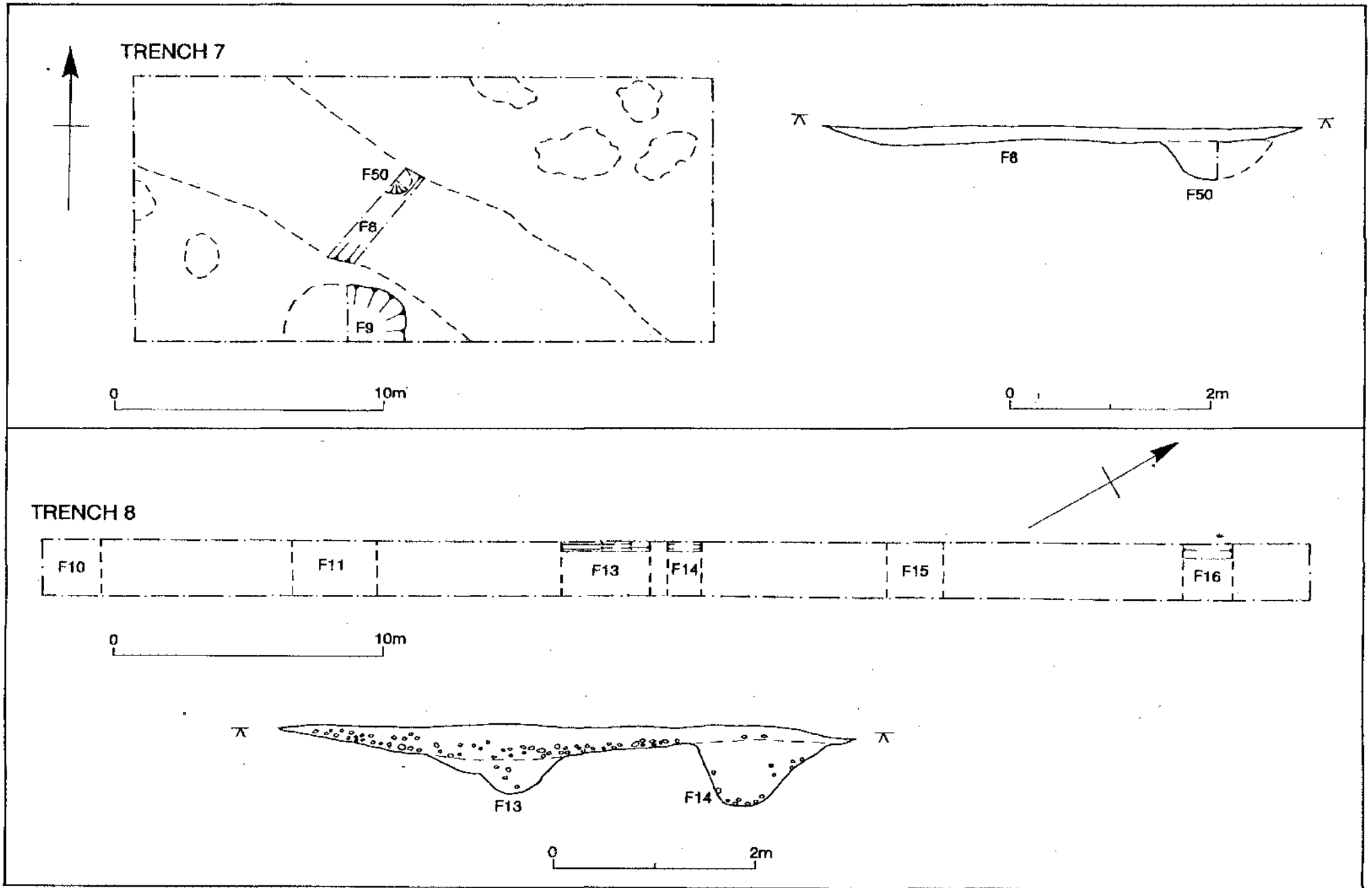


FIG.3

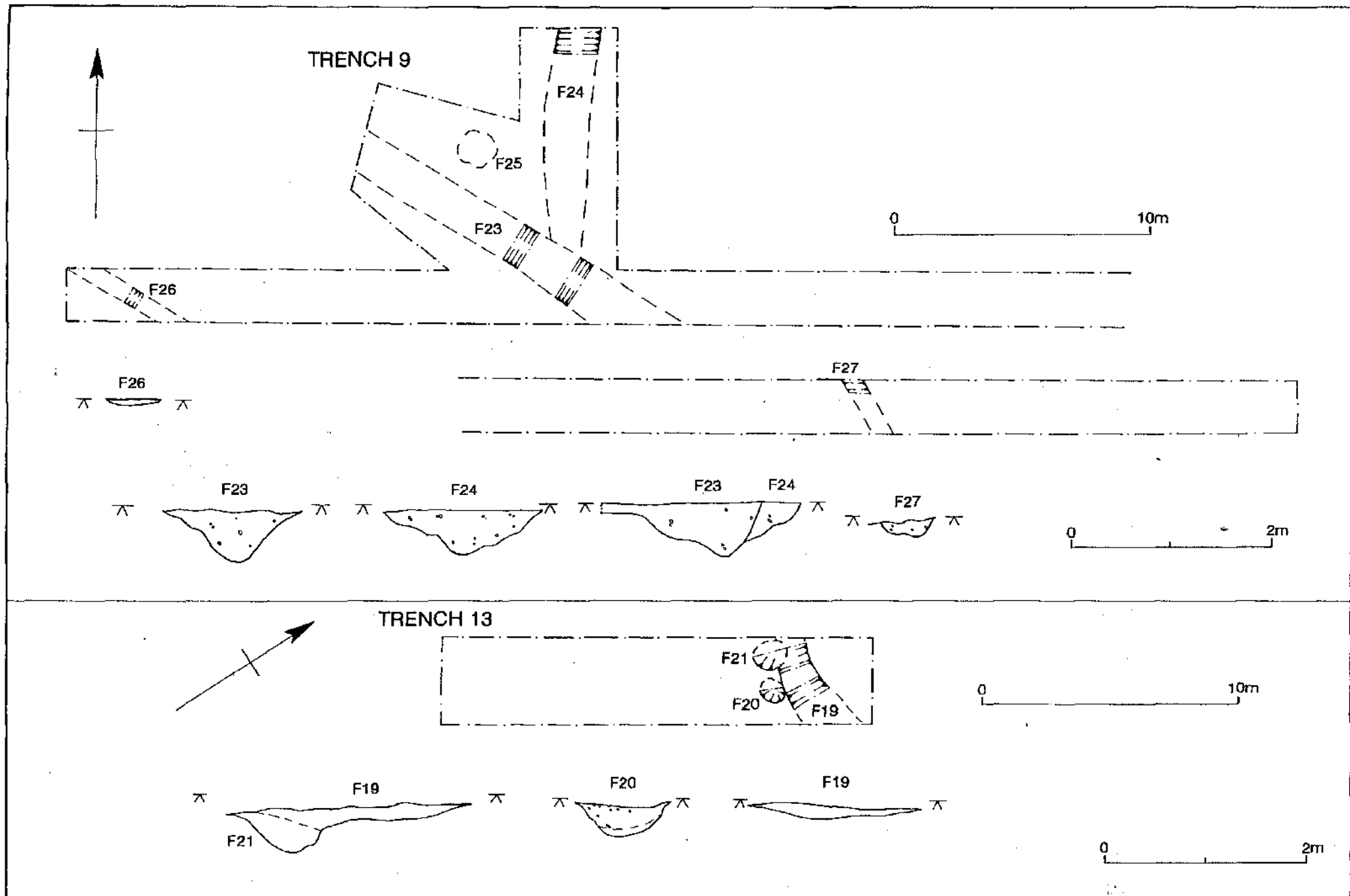


FIG.4