

An archaeological evaluation at Birch Pit, northern extension, Colchester, Essex

May 2001

**on behalf of
Hanson Aggregates**

NGR: TL 928 199
Colchester Museum accession no: 2001-82
Planning application no: ESS/15/00/COL
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CAT site code: BIR



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CAT Report 141

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1 Summary

Several prehistoric ditches were excavated in evaluation trenches in the north-east corner of the site, including a Bronze Age ditch from which a quantity of pottery and flintwork were recovered. A parallel pair of shallow ditches further east were probably of later prehistoric date. Two large quarry pits nearby were apparently in use in the Roman period, although some Saxon sherds were found in the backfill of one. Features elsewhere on the site were sparse, but included post-medieval or modern field-boundary ditches as well as a large pit used to dump materials left over from the American Air Force base at the end of the Second World War.

2 Introduction

- 2.1** The evaluation was carried out on behalf of Hanson Aggregates in order to assess the impact of the proposed mineral extraction from the northern extension to the Birch Pit on any surviving archaeological remains on this large site (NGR TL 928 199; Fig 1).
- 2.2** Previous archaeological discoveries from the site itself were negligible, although extensive cropmarks have been recorded from the surrounding area including a large rectangular enclosure with associated trackways and fields which lies some 0-8km to the north-west.
- 2.3** A fieldwalking survey of 73 ha by the Colchester Archaeological Trust (CAT) in 1992, which extended onto the south-west corner of the present site, identified two concentrations of Roman pottery, tile and building stone on land to the west. A further programme of fieldwalking in 1997, followed by a geophysical survey and trial-trenching in 1998 on the more southerly of the concentrations, suggested the presence of at least two Roman structures (CAT Reports 8 and 23).
- 2.4** A small oven or kiln of probable Roman date, perhaps used for corn-drying, was excavated by CAT in 1995, 0.3km to the east.
- 2.5** The western end of the site formed part of an American Air Force base constructed over fields during the Second World War, although the runways lay further to the west. There were reports of a large dump of material from the base after the war on or near the present site.

3 Evaluation trenches

- 3.1** The evaluation consisted of a series of machine-cut trial trenches dug in order to assess the likely extent and preservation of any surviving archaeological deposits. They were intended to provide an evenly-spaced sample across the site with coverage initially set at 2.5% of the total area of the northern extension. The sample could be increased where necessary up to 5% by positioning trenches in between the original ones, as agreed upon in conjunction with the Heritage Advice, Management and Promotion group (HAMP) of Essex County Council who monitored the project.
- 3.2** The trenches were dug between 8th May and 16th May 2001 by a mechanical excavator with a 1.85m flat-edged ditching bucket. Initially 24 trenches were excavated, most of which were 50m in length. They were aligned on the OS grid and were each designated by a letter (east-west) and number (north-south); see Figure 2. Subsequently two further 50m-long trenches were added (E1 and Q1), as well as a small 12m-long trench and extensions to three of the original trenches. Machining involved removing the topsoil/ploughsoil and other overlying layers in order to reach either significant archaeological deposits or the natural subsoil.
- 3.3** Following machining, the archaeological features were cleaned and excavated by hand, which usually consisted of half-sectioning the features prior to recording. A sample of the machine spoil-heaps was examined using a metal-detector and the finds were recovered.

4 Results

4.1 Prehistoric ditches (Figs 3-6)

4.1.1 Several ditches were uncovered in trenches in the north-eastern part of the site (Fig 3).

4.1.2 Ditch F8

In trench L1, ditch F8 extended from the south-east to the north-west and was traced for 3.5m (Fig 4). It was 0.8m wide and 0.55m deep with a distinctive profile; the western side was close to vertical, while the slope of the other side was less pronounced.

A quantity of pottery and flintwork was recovered from the light brownish-grey clayey backfill. This included a small quantity of Bronze Age sherds of Deverel-Rimbury type. Some base sherds from a vessel in a coarse flint-gritted fabric also of likely Bronze Age date were recovered during machining. The flints included two small blades of Neolithic/Bronze Age type, as well as six waste flakes and a small worked flint nodule; one of the waste flakes could be reattached to the flint lump. Two small fire-cracked unworked flint fragments were also recovered.

Although F8 appeared to be a drainage ditch, the unusual profile could indicate that it held upright timbers and thus a structural use should not be ruled out. Due to the proximity of the edge of the site to the north and obstructions to the south, it was not possible to trace the extent of F8, although it did not appear to extend as far as trench N2 which was 65m to the south-east.

4.1.3 Ditches F2/F11 and F10/F17

There were two parallel shallow ditches 100m to the east of F8, 10m apart, and aligned approximately east-west. The more northerly ditch (F2/F11; Fig 5) was located in trenches Q1 and R1, and was 1m wide and 0.3m deep. The other ditch (F10/F17; Fig 6), in trenches P1 and Q1, was 0.7m wide and 0.15m deep. Finds from both were sparse and included four sherds of probable late Bronze Age/Early Iron Age (LBA/EIA) date from F10/F17 together with a small flint flake, while only two small undiagnostic sherds of possible LBA/EIA date came from F2/F11.

Both ditches had a similar pale brownish-grey clayey fill and were probably contemporary, perhaps forming part of a droveway. They were on a different alignment to F8, and the finds suggest that they were slightly later in date. It was unclear whether F10/F17 extended into trench R1 as the relevant part of this trench was obscured by a modern service trench and may also have been destroyed by F1.

4.1.4 Other ditches

Several undated shallow ditches uncovered elsewhere on the site may also have been of prehistoric date. They included an east-west ditch (F6; Fig 10) in trench D2, the end of an east-west ditch (F5; Fig 9) in trench P2, and a possible north-south ditch observed in trench R2.

4.2 Roman quarry pits (Figs 3, 7 and 8)

4.2.1 Pits F1 and F9

Evidence for two large pits was also uncovered in the north-eastern part of the site.

4.2.2 Pit F1

The southern edge of one pit (F1; Fig 7) was observed in trench R1 which was subsequently widened in an attempt to clarify the feature. The edge was traced for 5m, although the upper part of F1 had a gently sloping profile which made definition difficult. It appeared to dip more sharply at a depth of approximately 1m below the modern ground-level. The pit was not bottomed, although a machine-cut trial trench indicated that it was at least 1.85m deep below modern ground-level. It was only possible to excavate a small area adjacent to the west section by hand.

The fill of F1 was a yellowish-brown clayey deposit from which was recovered a small quantity of Roman pottery, including sherds from the deep machine-cut trench. Several very small fragments of probable residual prehistoric pottery were also noted.

It was not possible to locate the northern edge of the pit, partly due to the presence of modern service trenches and partly due to the gently sloping upper profile of F8 which made identification difficult without more extensive machine-trenching.

The natural subsoil into which the pit was cut was a firm chalky Boulder Clay of unknown thickness. It seems likely that F1 was a quarry pit, perhaps for the extraction of clay rather than sand or gravel. The small quantity of finds from F1 suggest a Roman date.

4.2.3 Pit F9

Another large pit (F9; Fig 8) was uncovered 78m south-west of F1 at the east end of trench N2. Here also the trench was widened in order to clarify the feature, although again only its southern edge was revealed. The south-eastern side of F9 was well defined, while the south-western edge appeared less regular. A narrow north-south trial trench was hand-dug into F9, which had a gently sloping profile (Fig 8). The bottom of F9 continued to shelve downwards beyond the north section where it reached a depth 1.5m below modern ground-level. The fill was a greyish-brown clayey deposit, the lower 0.3m of which was lighter and more yellowish-brown in colour. A quantity of pottery was recovered from F9, including several Roman sherds and also two joining vegetable-tempered sherds of probable Saxon date. Several small prehistoric sherds (probably residual) and a fragment of burnt daub were also found.

While the extent of F9 remained unclear, it seems likely that it too was a quarry pit, perhaps, like F1, in use during the Roman period. The Saxon sherds which were recovered during machining of the upper part of the backfill may have been introduced during the gradual filling-up of the pit after it was abandoned. The natural subsoil cut by F9 was clay, although a fine gravel appeared to have been reached in the deeper part of the hand-dug trench.

4.3 Post-Roman features (Figs 9 and 10)

4.3.1 At the western side of the site, the remains of several ditches were uncovered in trenches D1 and E1 (Fig 10), including an east-west ditch (F7/F13) and a north-south ditch (F14/F15).

Ditches F7/F13 and F14/F15

The east-west ditch F7/F13 survived up to 1.2m wide and 0.3m deep, and extended into the north-south ditch which appeared to be comparatively shallow. The southern part (F14) of the latter ditch was largely machined away during topsoil-stripping, while the northern part (F15) extended under the east section of trench E1. The east-west ditch was not traced further east in trench F3.

Peg-tile and brick fragments as well as two iron ploughshare fragments were recovered from F7/F13. The ditches probably belonged to post-medieval or modern field boundaries predating the construction of the Second World War airfield.

4.3.2 The airfield dump

The airfield dump was located in the eastern half of trench J3 and consisted of a large pit (F3) which was traced for some 40m. The pit was not bottomed during the evaluation but was over 1.5m deep. The north-western edge of F3 extended from about halfway along trench J3 to just under 10m from its west end. There were slight traces of burning in places along this edge. The pit was cut into natural gravel, which

was presumably replaced as backfill, a light brownish-grey slightly loamy deposit with abundant gravels.

Limited machine-trenching at the eastern end of trench J3 revealed large quantities of corroded ironwork, some apparently from sheets and others from objects such as cookers. There were quantities also of decayed electrical components as well as pottery sherds. The latter were British white 'china', often stamped with the year of manufacture (1941-4).

The full extent of F3 was unclear, although subsidence has been observed in the surrounding area over recent years. An oval-shaped depression is visible on the ground, and when plotted this gives dimensions of approximately 80m east-west and 35m north-south (Fig 9). The pit was apparently used to dispose of materials from the American Air Force base after the war, partly it seems to prevent pilferage; the burnt edges observed in F3 may relate to local reports of large bonfires on the site.

Other deposits noted during the evaluation may also be connected to the Air Force base. These include a layer of gravel (L6), 0.25m thick, in the southern half of trench F1 and the central part of trench F2; this sealed a clayey make-up layer (L7) which was 0.25m thick. The gravel perhaps formed a roadway or an area of hardstanding in the eastern part of the base.

Extensive clayey make-up layers up to 0.45m thick were also observed at the northern ends of trenches D2 and F5.

- 4.3.3** Other probable modern features include an east-west ditch (F4) in trench P2, large pits F16 (in trench M1) and F19 and F20 (in trench N3), and also a rectangular pit (F18) which was 1.8m long and at least 0.25m deep, at the south end of trench D2 and associated with a dump layer (L8) which both contained large quantities of burnt stones and charcoal. The badly plough-damaged remains of a gravelled surface (L9), 0.1m thick, which contained large ?ragstone cobbles and perhaps formed part of a metallised track, were uncovered near the surface at the west end of trench J1.
- 4.3.4** Metal-detecting of the machine spoil from a sample of the evaluation trenches produced large quantities of modern finds, such as cartridge cases, nails, a horseshoe, cable lengths, and fragments of agricultural implements.

5 Conclusions

5.1 Prehistoric

Significant archaeological remains were discovered in evaluation trenches in the north-east corner of the site. A Bronze Age date for the ditch F8 in trench L1 was confirmed by the finds of pottery and flintwork, although its extent and function remain unclear. Less certain was the date of the two parallel ditches (F10/F17 and F2/F11) further east, although the small quantity of sherds recovered suggest a possible Late Bronze Age/Early Iron Age date. These ditches indicate at least one phase of a developed prehistoric field system on the site.

5.2 Roman

The two large pits F1 and F9 which were uncovered nearby were probably quarry pits of Roman date, although it was not possible to clarify their full extent. As with the double ditch F10/F17 and F2/F11, the sparse datable finds means that this interpretation is based on very meagre evidence, especially in view of the probable Saxon sherds from F9. However, the absence of finds such as Roman roof-tile may indicate that the centre of settlement was based some distance away at this time.

5.3 Post-medieval

Elsewhere on the site, the evaluation trenches produced little of archaeological value. Post-medieval or modern field-boundary ditches were uncovered at the western side of the site. Surviving remains from the Second World War American Air Force base appeared slight, with the exception of the large pit F3 located in trench J3. The full extent of the pit and the range of materials dumped in it were not clarified.

6 Acknowledgements

The Colchester Archaeological Trust is grateful to Hanson Aggregates for funding the evaluation and for their co-operation on site, and to Pat Connell of Essex County Council HAMP who monitored the project. Thanks also to Nigel Brown of Essex County Council HAMP for his comments on the prehistoric pottery, and to those who worked on the site, especially A Roy, D Sims, N Rayner and C Lister.

7 Abbreviations

- CAR 7* Colchester Archaeological Report 7, *Post-Roman pottery from excavations in Colchester, 1971-85*, by John P Cotter, 2000
- CAR 10* Colchester Archaeological Report 10, *Roman pottery from excavations in Colchester, 1971-86*, by Robin P Symonds and Sue Wade, ed by Paul Bidwell and Alexandra Croom, 1999

8 Archive deposition

The evaluation archive, including the full site records, plans, photographs and finds, will be permanently deposited with Colchester Museum under accession code COLEM 2001-82.

9 Appendix: Finds list

List of finds by context (COLEM 2001-82). All weights are in g.
Roman pottery codes taken from *CAR 10*. Post-Roman fabric codes taken from *CAR 7*.

Context	No	Finds	Weight	Group date
F1	4	2 sherds GX – Roman (2nd-4th century)	7	Roman
		1 sherd GX – Roman (1st century)	4	
	26	1 sherd - ?prehistoric	1	
F3	1	1 sherd fabric 48D earthenware, stamped 1941	62	modern (c 1945)
	6	2 sherds fabric 48D earthenware, stamped 1943 and 1944	26	
	27	1 sample of electrical component		
F7	2	1 peg-tile fragment		post-medieval/ modern
		2 small brick fragments		
F8	3	5 sherds coarse flint-gritted fabric, inc base sherds – Bronze Age	37	Bronze Age
	17	4 sherds - ?prehistoric	7	
	18	1 flint blade fragment – Neolithic/Bronze Age		
	19	3 sherds, one with pinched decoration – Bronze Age	26	
	20	7 flint flakes inc 1 blade and 6 waste flakes, one of which fits with (21) – Neolithic/Bronze Age		
	21	1 flint core fragment		
	22	2 burnt flint fragments		
F9	5	2 joining sherds vegetable-tempered fabric with rim - Saxon	29	Roman to Saxon
		1 sherd - ?Roman	1	
	11	1 sherd GX - Roman	11	
	14	3 sherds - ?prehistoric	7	
	16	1 base sherd GX – Roman (1st century)	7	
	23	1 burnt daub fragment	45	
	24	8 sherds - ?Roman	11	
F10	9	3 sherds – Late Bronze Age/Early Iron Age	8	LBA/EIA
F11	15	2 sherds - ?prehistoric	1	prehistoric
F13	12	2 brick fragments – 18th century or later		post- medieval/modern
	13	2 Fe ?ploughshare fragments		
F17	10	1 sherd – Late Bronze Age/Early Iron Age	9	LBA/EIA
	30	1 flint flake		
U/S	7	3 sherds GX – Roman (1st century)	37	
	8	2 sherds vegetable-tempered fabric - ?Saxon	10	
	28	1 flint flake		
	29	miscellaneous metal-detector finds inc horseshoe, cartridge cases, nails, etc		

Don Shimmin, June 2001

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Distribution list

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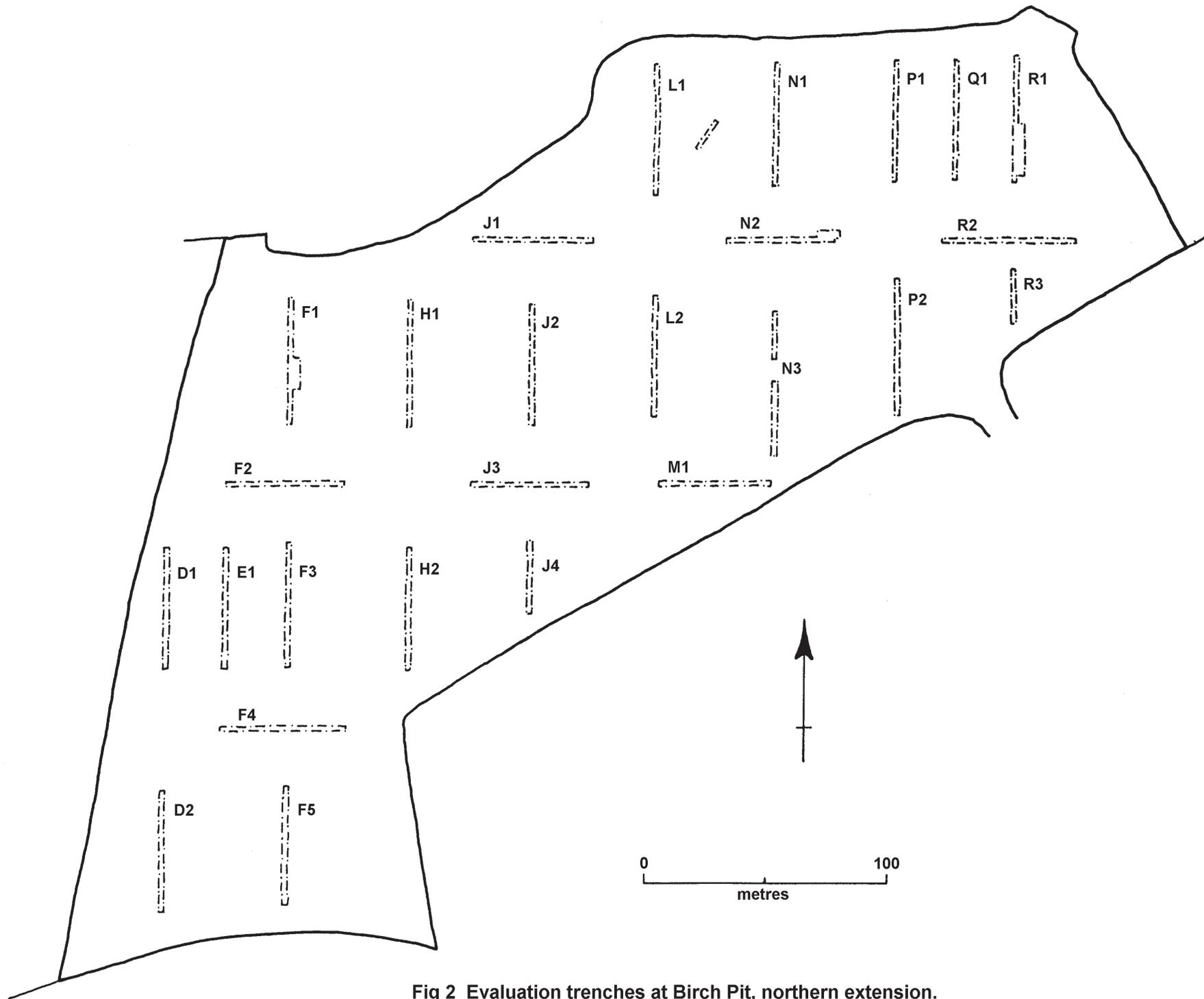


Fig 2 Evaluation trenches at Birch Pit, northern extension.

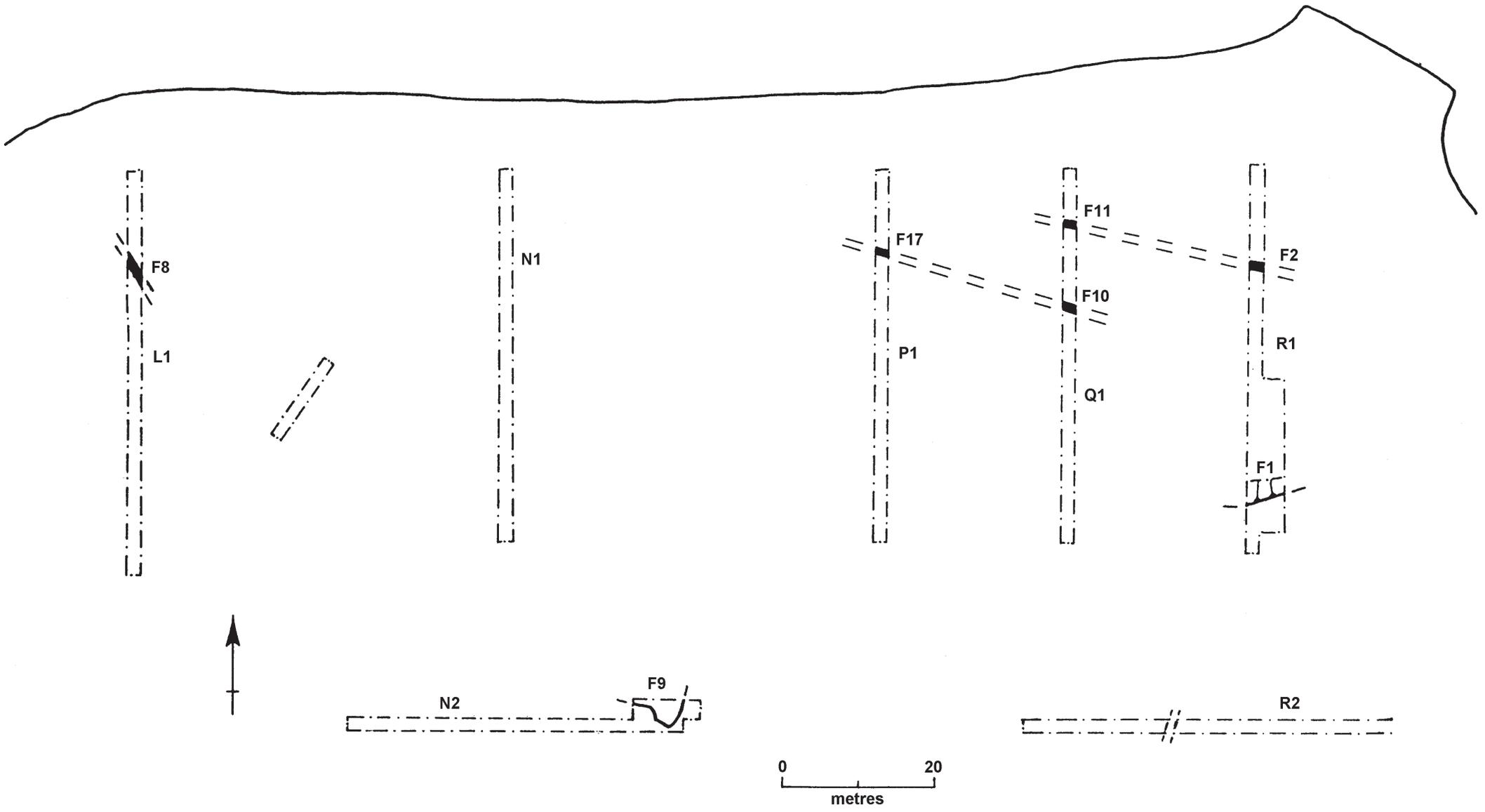


Fig 3 Features in the north-east corner of the site.

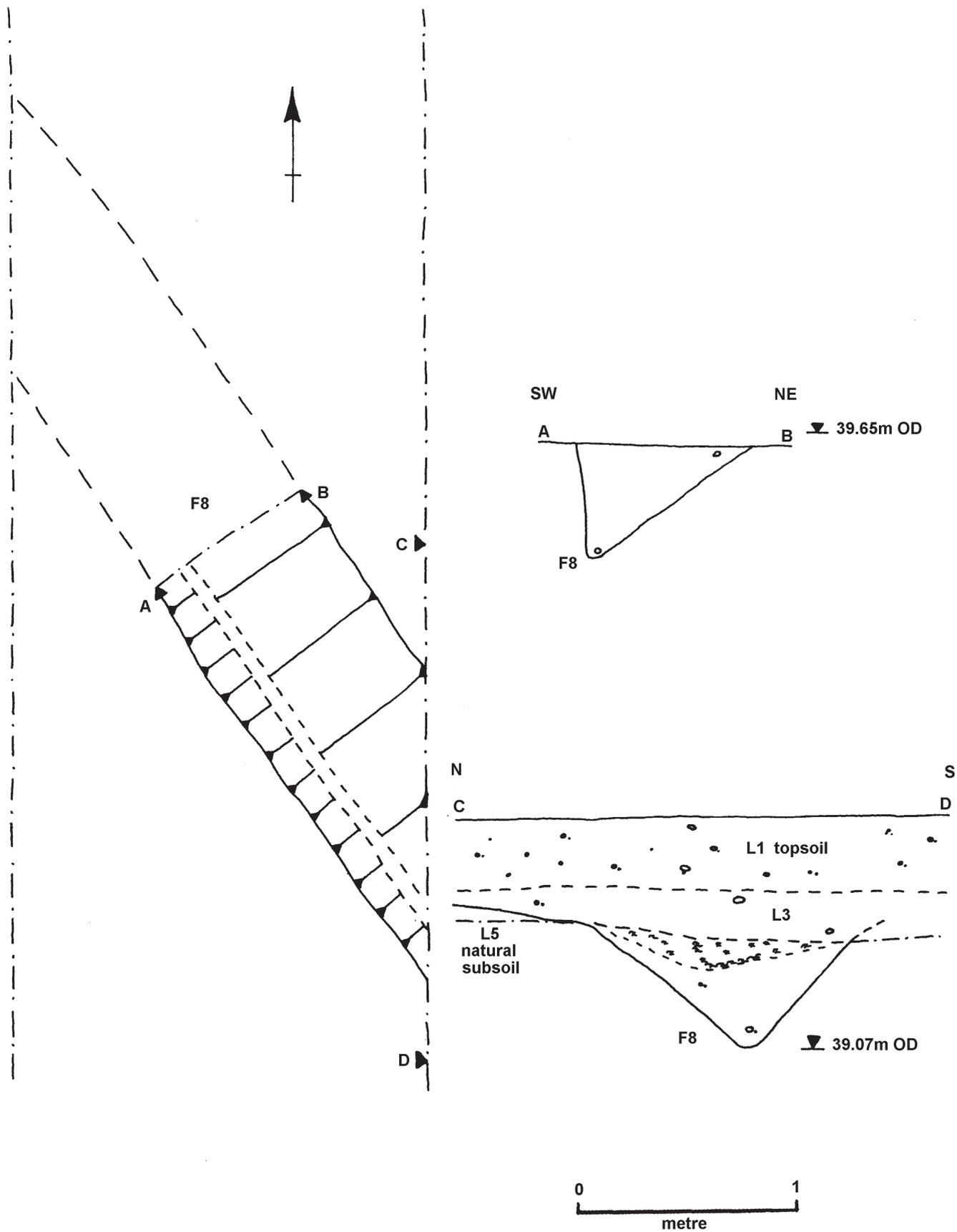


Fig 4 Bronze Age ditch (F8) in trench L1.

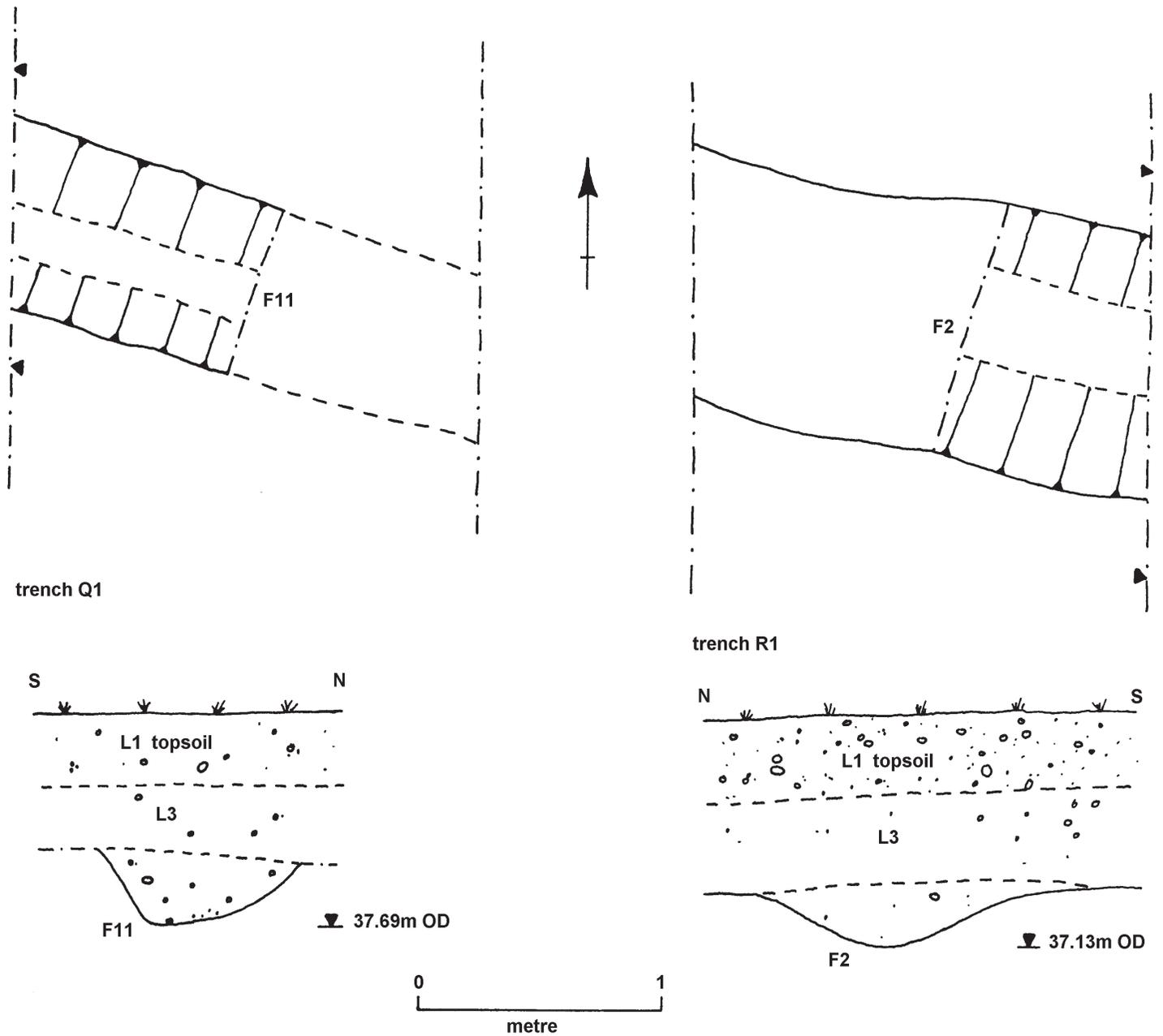


Fig 5 Prehistoric ditch (F2/F11) in trenches Q1 and R1.

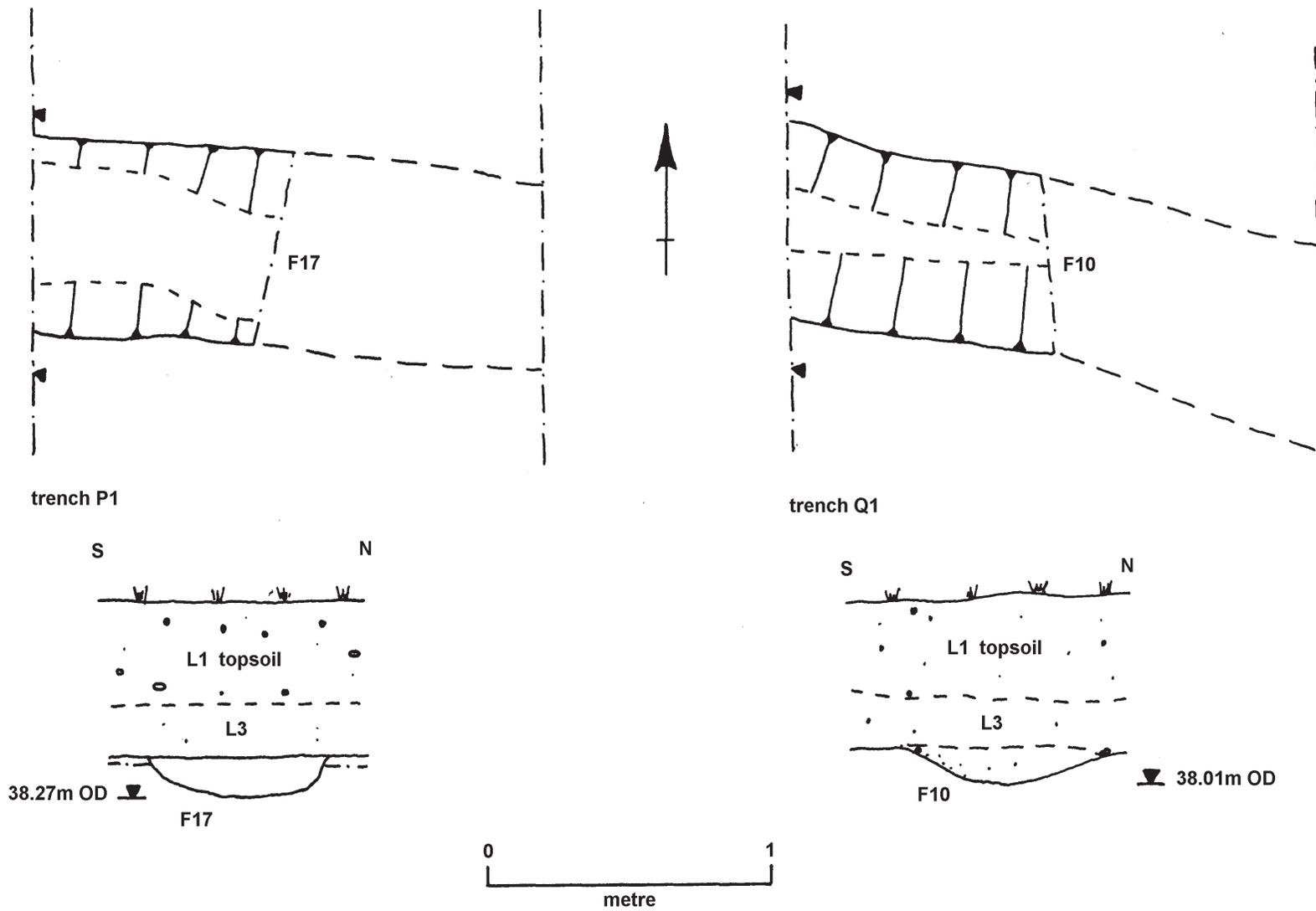


Fig 6 Prehistoric ditch (F10/F17) in trenches P1 and Q1.

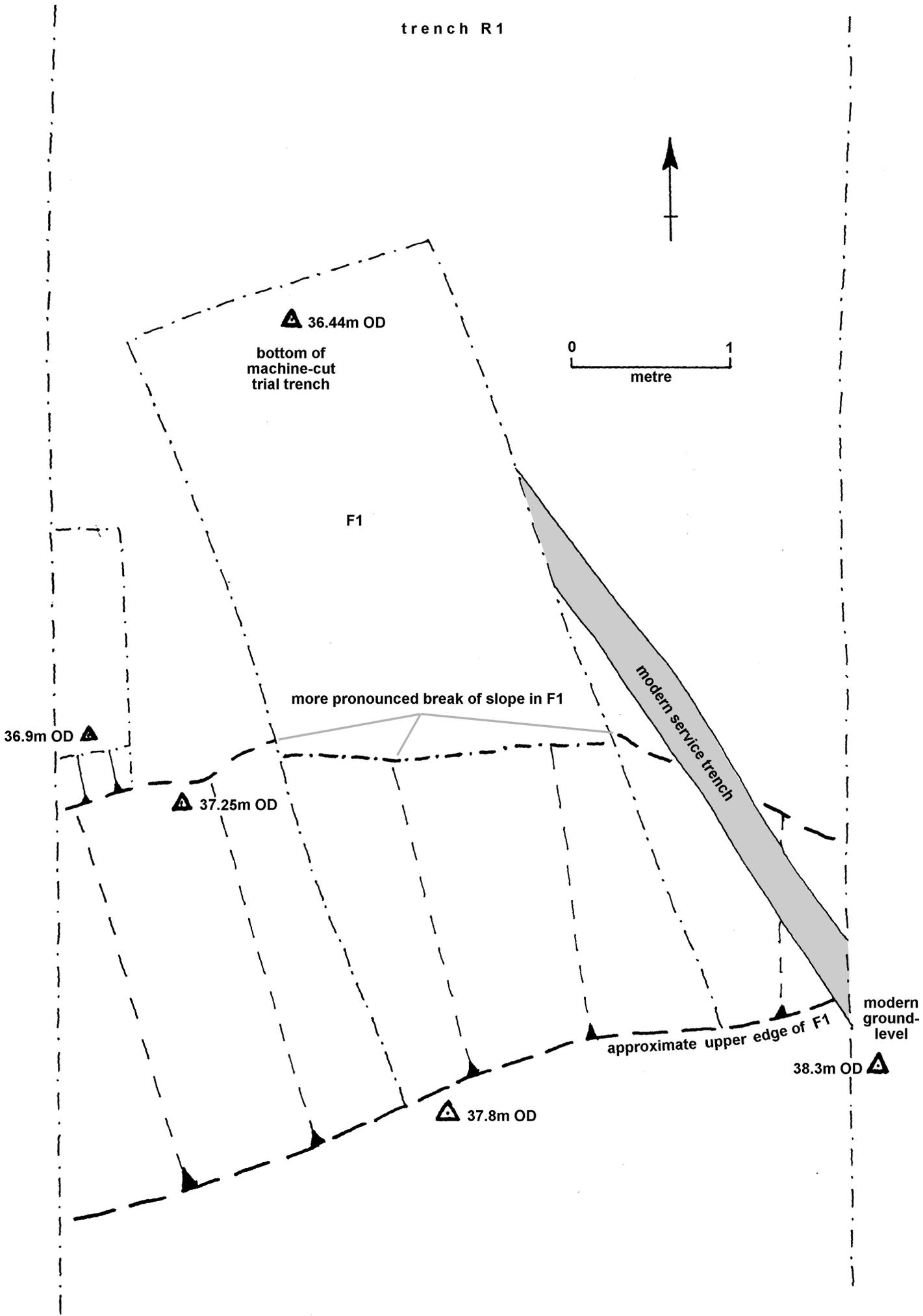


Fig 7 Southern edge of probable Roman pit (F1) in trench R1.

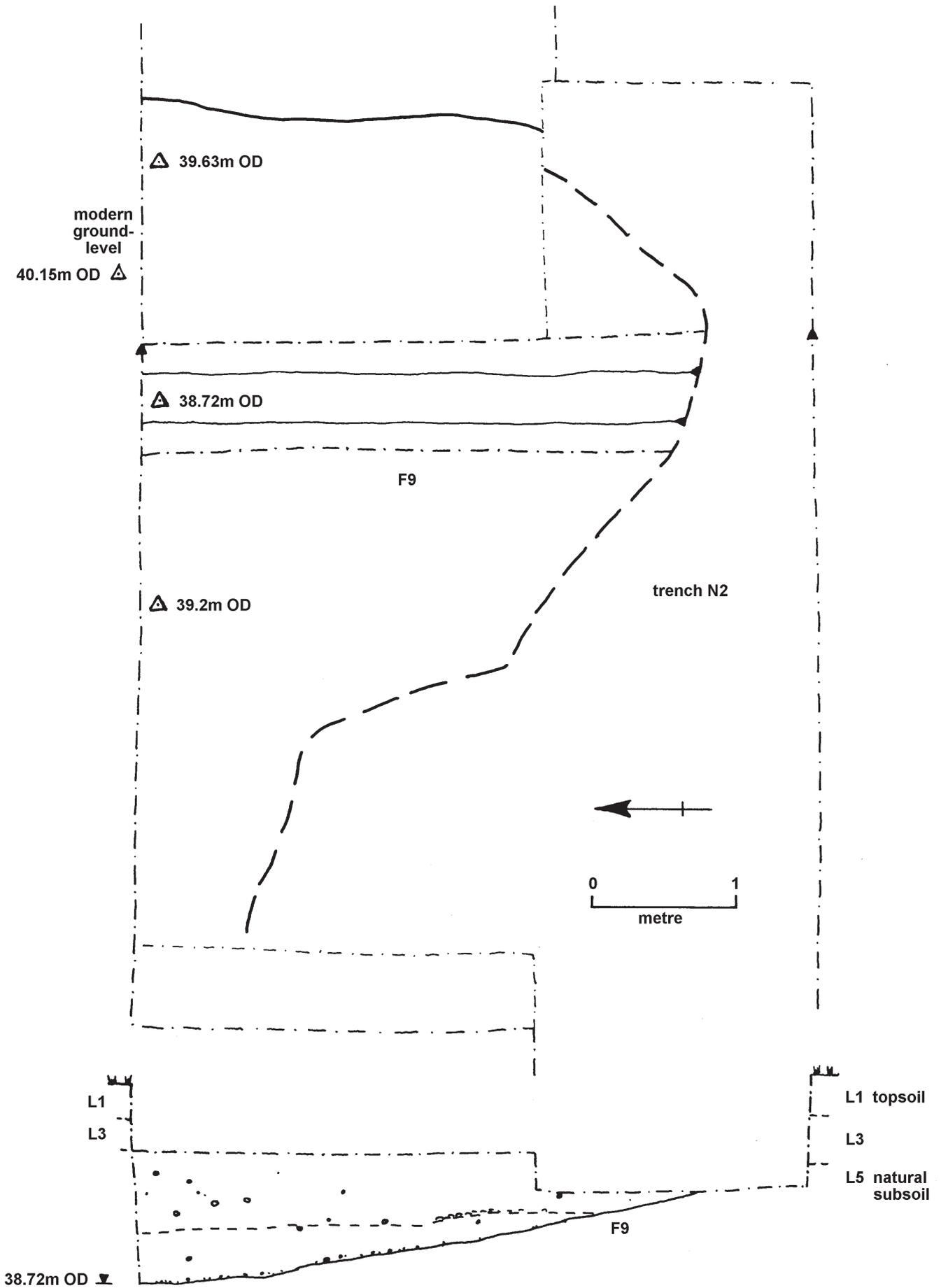


Fig 8 Probable Roman pit (F9) in trench N2.

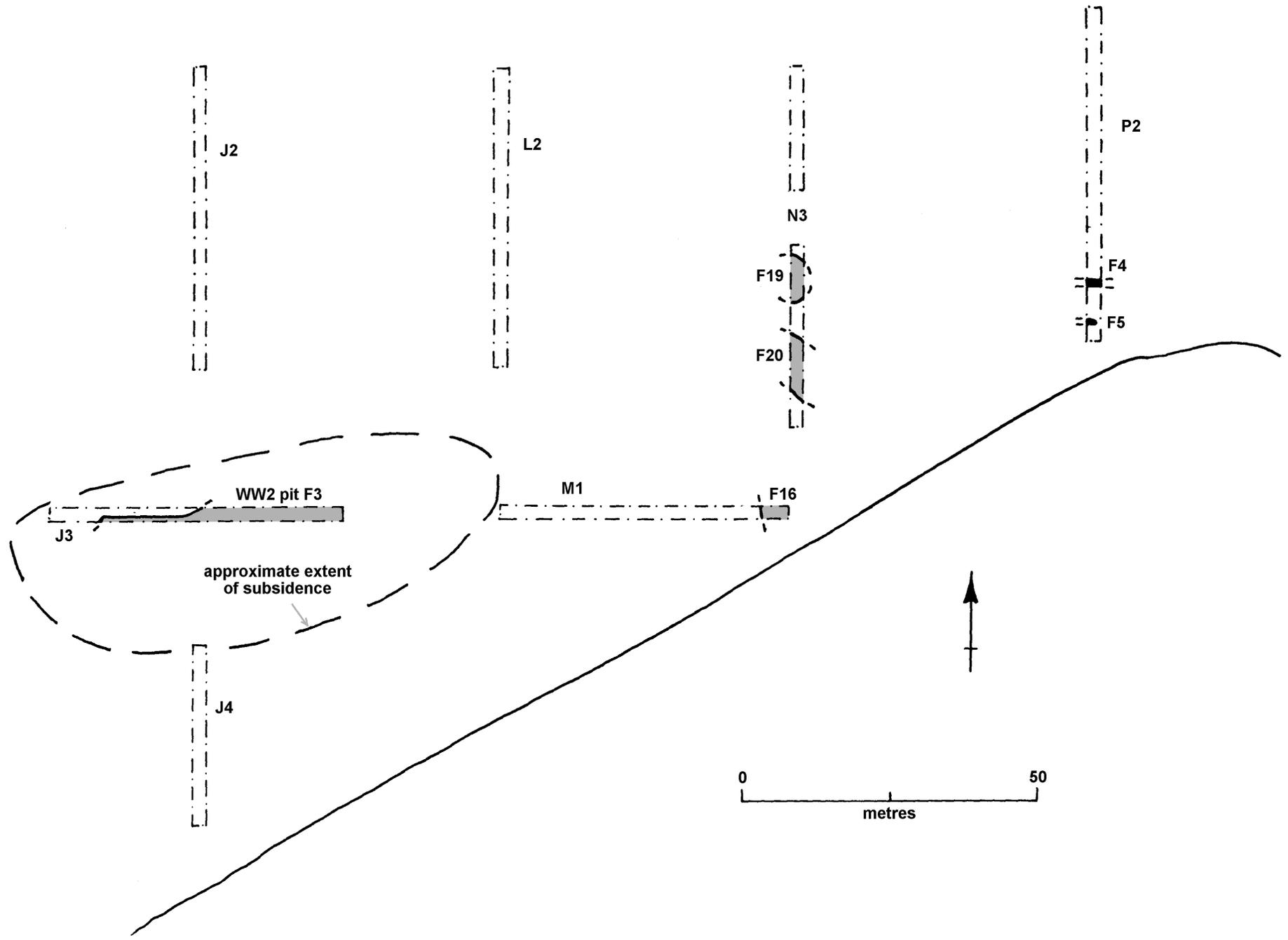


Fig 9 Features in the south-eastern part of the site.

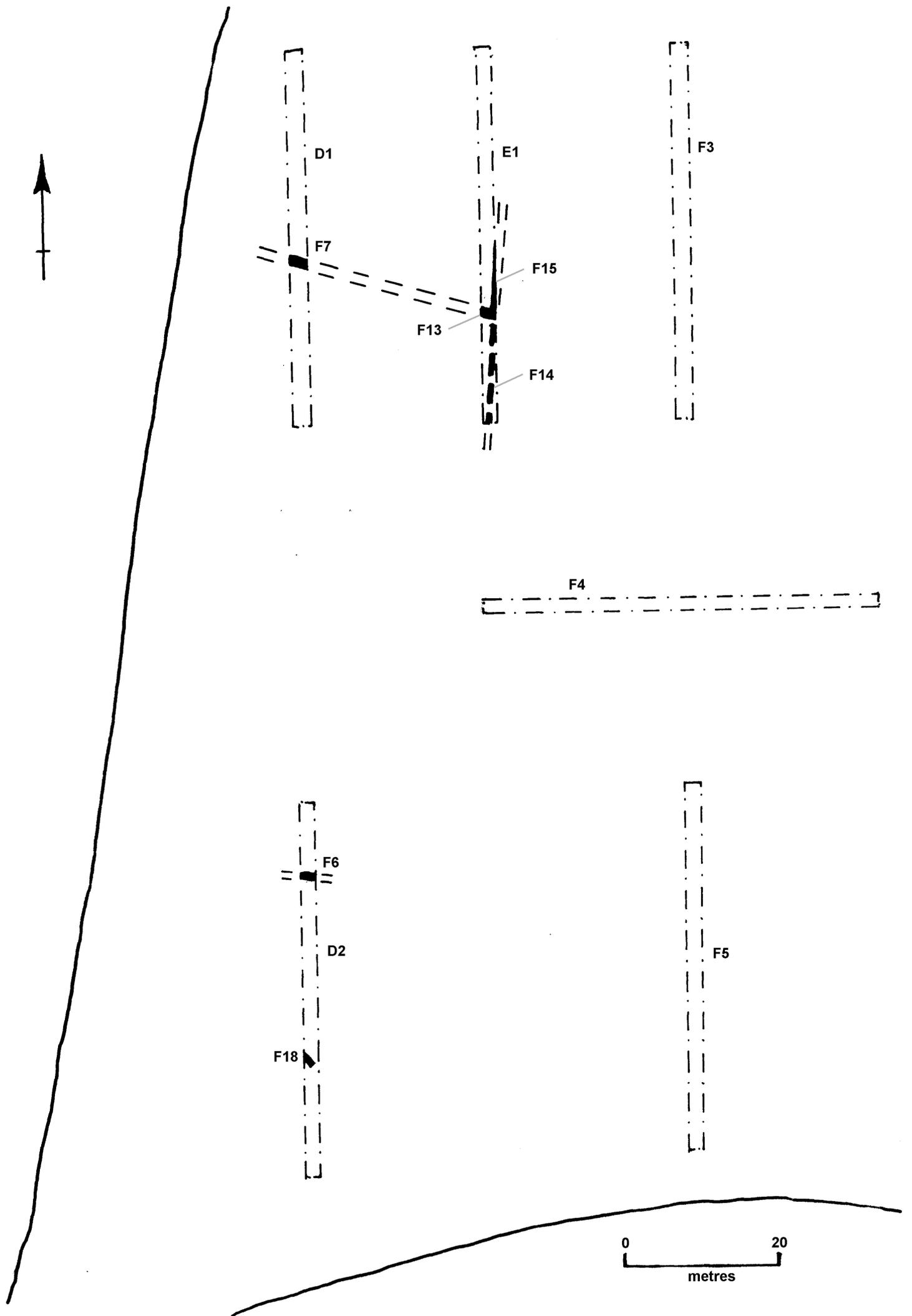


Fig 10 Features in the south-west corner of the site.

ESSEX HERITAGE CONSERVATION RECORD

Summary sheet

Site name/address: Birch Pit, northern extension, Colchester, Essex	
Parish: Birch	District: Colchester Borough
NGR: TL 928 199	Site code: BIR 2001-82
Type of work: Evaluation	Site director/group: Colchester Archaeological Trust
Date of work: May 2001	Size of area investigated: 9 ha
Location of finds/curating museum: Colchester Museum	Funding source: Hanson Aggregates
Further seasons anticipated? Yes	Related EHCR nos: 11924
Final report: CAT Report 141 and summary in <i>Essex Archaeology and History</i>	
Periods represented: Bronze Age, LBA/EIA, Roman and modern	
Summary of fieldwork results: <p>Several prehistoric ditches were excavated in evaluation trenches in the north-east corner of the site, including a Bronze Age ditch from which a quantity of pottery and flintwork were recovered. A parallel pair of shallow ditches further east were probably of later prehistoric date. Two large quarry pits nearby were apparently in use in the Roman period, although some Saxon sherds were found in the backfill of one. Features elsewhere on the site were sparse but included post-medieval or modern field-boundary ditches as well as a large pit used to dump materials left over from the American Air Force base at the end of the Second World War.</p>	
Previous summaries/reports: None	
Author of summary: Don Shimmin	Date of summary: June 2001