

**ARCHAEOLOGICAL FIELD EVALUATION OF A PROPOSED
QUARRY AT OXTON ROAD, NEAR BURNTSTUMP, RAMSDALE,
ARNOLD, NOTTINGHAMSHIRE**

**Report to ENTEC UK Ltd on behalf of TARMAC and
GREENWAYS**

JANUARY 1999



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SUMMARY

* The proposed site, c. 28ha, centred on SK586 495, for a Quarry and Waste Amenity Facility, contains a dense pattern of cropmark features. The archaeological work proposed by T&PAU involved the detailed plotting of aerial photographs, detailed evaluation excavations (Trenches 01-03) and rapid excavation of apparently blank areas (Trenches 04-10), in order that the impact of the proposal upon the area's archaeological resource may be determined. Fieldwalking was also conducted when field conditions were suitable.

* The cropmarks were interpreted as ditches of rectilinear field-systems, double-ditched boundaries, and a cluster of curvilinear features possibly forming a number of enclosures which may be associated with settlement. Areas of deeper soil, thought to be the accumulation of colluvium, were noted towards the north-western end of the field.

* The evaluations demonstrated that the extent of field-systems, and features suggestive of settlement activity, extend beyond that previously recorded on the SMR.

* Ditches corresponding to the cropmark plot of the field-system were excavated in Trenches 01 and 02, and linear features identified in Trenches 09 and 10, are interpreted as boundary ditches belonging to the field-system. An excavated ditch and a linear feature in Trench 08, may be the suspected continuation of SMR 2281. Pottery recovered from these features give a range of dates from prehistoric, to Conquest period, through to Romano-British.

* Features interpreted as pits and post-holes were excavated in Trenches 01, 02 and 03, and similar, unexcavated, features recorded in plan in Trenches 04, 06, 07, 08 and 10, together with burnt features in Trenches 05, 07 and 08, are suggestive of settlement and other activities. Artefacts suggest that at least some of these features are Romano-British in date.

* Only two sherds of Romano-British Derbyshire ware, four undatable flint flakes and a quern- or mill-stone were recovered by fieldwalking. Little significance can be attributed to the distribution of such a small number of finds. However, there was a wide spread of fire-cracked pebbles, which are often found in later prehistoric and early historic settlement contexts.

* The weathering cone on the ditch in trench 01, survival of the tops of post-holes in Trench 03, and the presence of a sub-soil layer, all suggest that areas of the site are relatively well preserved for a cropmark site. Trench 05, across a hollow, demonstrated the preservation of significant depths of colluvium and soils, which may retain stratigraphic relationships with features.

* The plan of the cropmark field-systems are comparable with the Brickwork-plan field-systems, recorded north of Ollerton. There are no coherent patterns of field-systems recorded between this site and Ollerton despite the fact that the geology and crops seem conducive to cropmark production.

* The Arnold field-systems are close to an apparent focus of Iron Age and Roman-British activity on Ramsdale Hill, to the south-east of the proposed development, to which they could be related.

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ARCHAEOLOGICAL FIELD EVALUATION OF A PROPOSED QUARRY AT OXTON ROAD, NEAR BURNTSTUMP, RAMSDALE, ARNOLD, NOTTINGHAMSHIRE

1 INTRODUCTION

An area of c. 28ha, centred on NGR SK586 495, is proposed as an extension to an existing Quarry and Waste Amenity facility (Fig. 1). The development would involve topsoil and subsoil stripping with associated works for access roads and soil bunds, followed by quarrying, which would destroy any archaeological remains within the areas worked.

The area of the proposed site has been subject to a desk-top assessment by Entec (Atkinson and Josephs 1998) which identified the following principal archaeological remains:

- * cropmarks of probable field-systems and enclosures (SMR 2283a, 2283b)
- * cropmarks of a long, boundary feature, curving towards the proposed quarry area (SMR 2281)
- * hedgerows adjoining the Ollerton and Oxton Roads on boundaries defined by 1791.

In the Nineteenth Century the land was part of the Ramsdale and Watchwood Estate (Atkinson and Joseph 1998, 4).

The proposed site is located on Sherwood Pebble Beds (Geological Survey of Great Britain Sheet 126, 1972), free-draining sands with abundant pebbles. It contains a dense pattern of cropmark features of geological and archaeological origin (Fig. 1). It is possible that buried archaeological features associated with the cropmarks continue into the apparently blank parts of the proposed development area.

Within the proposed site, seven sample areas were subject to geophysical survey (resistivity, magnetometry scanning and gridded survey; as described in Masters & Hindmarch 1998) by Northamptonshire Archaeology, but produced only two weak

anomalies, one identifiable as a probable cropmark (Masters & Hindmarch 1998, Fig. 3, area 5).

Details were required of the nature(s), date(s), extent, state of preservation and importance of archaeological remains contained within the proposed site, in order that the impact of the proposal upon the archaeological resource may be determined.

2 SCHEME OF WORKS

The archaeological work proposed by T&PAU involved the detailed plotting of the aerial photographs, followed by trial excavations of the cropmarks (by detailed excavation) and apparently blank areas (by rapid excavation; Garton, 1998). Fieldwalking was also conducted when the field conditions were suitable.

Plotting and analysis of cropmarks from aerial photographs

Four oblique photographs of this area, taken in July 1979 by Derrick Riley, are held by the NMR. Of these, three are currently held by T&PAU (NMR No: SK 5849-1 to 3). These photographs were scanned, then digitised in MapInfo, to produce a cropmark plot showing both linear features (presumed archaeological) and darker bands (presumed geological/deeper bands of soil). Once the evaluations had started, a set of photographs taken by Richard Blant, the landowner, became available. Further linear cropmarks showed faintly in the northern part of the evaluation area, not visible in the earlier photographs. Since these photographs were not taken for archaeological purposes they had fewer fixed points for plotting than is desirable, hence the cropmarks are shown as a dashed line in Figure 1.

Cropmark Evaluation and Rapid Excavation trenches

The aerial photograph plots allowed targeting of the different cropmark types by detailed excavations (e.g. apparent field-boundaries, double-ditched boundaries, enclosures) and different subsoil conditions. Rapid excavations were undertaken to investigate the nature of the area devoid of cropmarks and the suspected continuation of cropmarks from outside the proposed development area (SMR 2281). All of the excavations were 3m wide (to enable a good view of the exposed surface) and were stripped of topsoil by a 180° mechanical excavator, using a toothless ditching bucket on its back-actor, as described in the Scheme of Treatment (Garton, 1998).

Three detailed excavations (Trenches 01-03, Fig. 1) were focused on investigating the known cropmarks. These were hand-cleaned and features which were visible at this level were photographed, planned and recorded (as described in Garton, 1998). A sample of the exposed features was excavated to establish the nature of the cropmark features, the level of preservation, and if they contained datable artefacts.

In addition, two long, intermittent, trenches (04- 07 and 09-10; Fig. 1) were stripped of topsoil across the area apparently devoid of cropmarks. The trenches ran at c. 45° across the projected line of the field-systems to the west of the cropmark area and into at least two areas of probable deeper soils. The third rapid excavation (Trench 08, Fig. 1) targeted any continuation of the linear cropmark feature to the north-east of the proposed quarry area (SMR 2281, Fig. 1). Features which were visible at this level were recorded by a single EDM survey point, then drawn in outline. Where there was any concentration of features, these areas were hand-cleaned, photographed and recorded by plan.

The areas marked out for trenches were surveyed using metal-

detectors prior to, and after, stripping, and the topsoil from machining was also surveyed. Artefacts recovered from the topsoil were recorded by trench, or 10m stretch where the trenches were longer; only one find, a piece of twisted copper-alloy wire was recovered apparently *in situ*, within Trench 10 (073, Fig. 6f; ACN, Appendix 3).

The work was monitored by the County Archaeological Officer and ENTEC, Archaeological Consultants.

3 CROPMARK AERIAL PHOTOGRAPH PLOT (Fig. 1)

The cropmark plot showed both linear features, presumed archaeological (shown in red, Fig. 1) and darker bands which are presumed to be areas of deeper soil (outlined in green, Fig. 1).

The main archaeological cropmarks are a series of approximately parallel, long, linear features, running approximately north-west to south-east, with shorter linear features, running approximately north-east to south-west. These cropmarks are interpreted as ditches of a rectilinear field-system. Double-ditched boundaries are also visible, apparently integral with the field-system. Towards the north-west end of the proposed site are a cluster of curvilinear features which appear to form a number of enclosures to either side of a long ditch of the field-system, which may indicate a settlement focus. Further curvilinear features to the south and south-east may also be enclosures.

The presumed areas of deeper soil (outlined in green, Fig. 1) correspond with topographic hollows (visible on the contour plot, produced by the client; Fig. 1) where the field markedly slopes down along its south-eastern edge and towards the north-eastern end of the proposed site. These areas of deeper soils are presumably accumulation through soil-creep and runoff, i.e.

colluvium. Cropmarks are only noted towards the tops of these hollows, presumably where the soils are thinner and therefore do not mask the features.

4 CROPMARK EVALUATION TRENCHES

Trench 01

Trench 01 was located within geophysics area 5 across the anomaly interpreted as the cropmark ditch (Fig. 1). This samples the area of field-systems.

Excavation of a c. 10m by 3m trench revealed a number of apparent features, beneath c. 0.25m of topsoil (001) and c. 0.15m of brown sandy silt loam (e.g. 072 in Fig. 2), visible in section as an intermittent layer above the sands and gravel. The sandy silt loam, 072, is interpreted as the basal remnants of either a ploughsoil or a natural soil developed on the Sherwood sands and gravels. Visible in the topsoil are concentrations of pebbles from recent agricultural destoning of the field for potato crops (Section A-B, Figure 2; Plate 1).

A linear feature (005), c. 3.5m to 4.2m wide, was clearly visible running south-east to north-west across the middle of the trench (Fig. 2). A 1m wide section across the exposed south-east end of the feature was excavated in c. 0.1m spits. In section (A-B, Fig. 2; Plate 1) the feature was found to be a ditch, c. 3.6m wide and up to 1.4m deep, with a very steep slope, c. 65°, to the south-west side, and sloping to c. 45° along the south-eastern side. Towards the top edges of the feature, both sides appear to flare-out, which suggests the survival of a weathering cone, and therefore the ditch survives to a good state of preservation, apparently sealed beneath the remnant soil (072).

The ditch appears to have infilled rapidly with thin bands of reddish brown, inwashed sands (visibly void of pebbles in Fig. 2), presumably marking intermittent periods of low energy sedimentation. Following an initial infill of gravel, presumably

from slumping/erosion of the gravel sides, the ditch appears to have infilled with washed in sand and silt and upcast sand and gravel from along the north-east edge suggesting that the upcast bank lay on this side. The near vertical, central, sandy pipe (g) was interpreted as the disturbance from an animal burrow. The ditch has been recut several times, as a series of shallow, narrow gulley-like features (c and k; Section A-B; Fig. 2), up to 0.75m wide and 0.3m deep (k, Section A-B; Fig. 2), cut in to the top of the infilled ditch. The gulley features 005c are overlain by 005b, which is cut by 005k. Such recuts represent continuation of the boundary, but as a less substantial feature.

Two small sub-rounded features, c. 0.45m wide (016 and 017, Fig. 2), were half-sectioned and found to be up to 0.15m deep (016, Section E-F; Fig. 2) and 0.2m deep (017, C-D; Fig. 2) and are interpreted here as shallow pits, or the surviving bases of post-holes.

Features 027 and 028 were not excavated (Fig. 2), but are provisionally interpreted here as infilled hollows or features of unknown date and form.

Other apparent features were found on excavation to be little more than remnant soil infilling scoops and hollows in the top of the sands and gravel and are not recorded on Figure 2.

No datable artefacts were recovered from any of the excavated features, nor were any observed within the topsoil during machining.

Trench 02

A trench, initially c. 10m by 3m and running approximately west to east, was positioned in order to investigate two cropmark ditches, parallel and c. 5m apart, in an apparent area of deeper soils (Fig. 1).

Initial cleaning of the trench revealed a mixed level of subsoil and gravels at the base of the topsoil, at c. 0.35m deep, within which no features could be discerned. A c. 0.1m spit was removed by hand and cleaning of the exposed surface revealed a single linear feature (021), c. 1.5m wide, running approximately north to south across the eastern end of the trench (Fig. 3). This feature was thought to be one of the two linear features identified from the aerial photograph plot (Fig. 1).

As no corresponding linear feature was visible in the exposed area approximately 7m to the west of 021, it was decided to extend the trench further to the east in order to locate the second linear feature. Machining off the topsoil revealed an irregular band of yellowish brown sandy silt (024), c. 2m wide, running approximately north-west to south-east and c. 2.5m to the west of 021 (Fig. 3).

Both 021 and 024 were sampled by excavation of 1m wide sections against the northern edge of the trench, in c. 0.1m spits.

Feature 021 was found to comprise two shallow ditches: 021a, surviving to c. 0.35m wide and 0.23m deep, cut along its eastern edge by 021b, c. 1.2m wide and 0.3m deep (Section A-B, Fig. 3). One sherd of probable prehistoric pot (AAA, Appendix 1) was recovered from the very top of 021a in the initial hand cleaning.

Excavation of 024 by 0.1m spits showed an interleaving of sands and gravels with the sandy silt, therefore a box section (C-D, Fig. 3) was excavated, together with a further excavated section to the south. Its irregular nature, in both plan and section, suggested 024 to be the infill of ephemeral runoff channels and scours, perhaps eroded by water running down the hollow.

As the second expected cropmark feature had not been located, and comparison of the trench plan and cropmark plot suggested that it should lie to the west of 021 (Fig. 1), the trench was

extended for another 5m to the west immediately prior to backfilling. Cleaning of this extension revealed an apparent feature c. 2m wide and running approximately north to south, which appeared to butt 2m from the northern edge of the trench (022, Fig. 3): this could be the anticipated second linear, since this cropmark is not clear through the deeper soils of the hollow. Feature 022 appears to cut another feature (065), c. 1m wide, which runs approximately west to east (Fig. 3). Further, narrow, linear features, up to c. 0.6m wide, may run north off 065 (Fig. 3).

A small sub-rounded feature (025), c. 0.2 to 0.3m wide, was half sectioned. This was found to be a shallow, steep sided feature, c. 0.15m deep with faunal disturbance at its base (Section E-F, Fig. 3). This feature (025) is interpreted here as the base of a shallow post-hole.

Trench 03

Trench 03 was located on a curvilinear boundary, close to an apparent entrance gap with a straight boundary. Cultural debris and other features are often located at such entrance gaps.

Cleaning of the trench revealed a number of features, one of which appeared to be linear (004), c. 1.5m wide, running approximately north-east to south-west (Fig. 4), with numerous fire-cracked pebbles scattered over the exposed surface (Plate 2). A 1m wide section was excavated across the feature. This revealed a V-shaped ditch, c. 0.65m deep, lying directly beneath the topsoil (Section A-B, Fig. 4; Plate 2) and containing numerous fire-cracked pebbles throughout its depth (Appendix 2). The ditch appears to initially have rapidly infilled with sandy silt, then a coarser sand and gravel (004c, Section A-B; Fig. 4) which is slightly higher along the south-east edge, perhaps indicating the side from which the upcast material was eroding i.e. it may have had a bank along its south side.

Comparison of the position of ditch 004 to the curvilinear cropmark (Fig. 1), locates 004 c. 5m to the south-east of the cropmark. This may be due to an error in the cropmark plot, or alternatively 004 may be another ditch with the trench just missing the cropmark to the north-west (Fig. 1).

Two narrow linear features (002,013; Fig. 4), visible in plan c. 0.7m wide (002) and c. 0.4m wide (013), running approximately north-east to south-west, appeared to butt within the trench. In section, 013 was found to be, c. 0.65m wide and c. 0.38m deep, beneath the topsoil (Section G-H, Fig. 4). In section, 002 was c. 1.2m wide beneath the topsoil and c. 0.5m deep (Section C-D, Fig. 4) and conjoined with another feature (019, Section E-F; Fig. 4), c. 0.5m wide and 0.35m deep, which appeared to run to the south-east. Due to the homogeneous brown sandy silt loam fill of the features it was not possible to differentiate the features during excavation and therefore their relationship is uncertain. The flaring out towards the top of the features, forming a wide spread of material at the base of the topsoil (Sections C-D and E-F, Fig. 4), suggests a high level of preservation of these features, where the weathered top of the features still survive.

An apparent irregular feature (014), was found to be a series of intercut features (014a and 014b, Section I-J; 015 and 020, Section K-L; Fig. 4), their homogenous brown sandy silt loam fills making it impossible to distinguish any individual features during excavation. However, these features are interpreted as post-holes up to 0.6m wide (015), with deeper possible post impressions up to 0.5m deep (014a, Section I-J; 015, Section K-L, Fig. 4). A small sub-rounded feature (026), c. 0.12m wide and c. 0.18m deep may be a further stake- or post-hole (Fig. 4).

In section 013 and 019 appear to be very similar, with one near-vertical side with a shallow lip at the top edge, and a shallower side rounding off to a pointed base (Sections G-H and E-F, Fig.

4). This profile can also be seen to some extent in 015 and 014a (Fig. Sections K-L and I-J, Fig. 4). Such profiles may be found in post-holes where the posts have been deliberately removed. Feature 002b may have had a similar profile, prior to being recut (by 002a: Section C-D, Fig. 4). Excavation across the butt-end of 002 revealed a post-pipe in section marked by a paler sandy loam (002, Section M-N, Fig. 4; Plate 3). Features 013, 019 and 002 are therefore interpreted as either a series of inter-cut post-holes, or slots containing posts which were dug out.

5 RAPID EXCAVATION TRENCHES

The rapid excavations entailed identification of potential archaeological features in plan from their shape and fills which, for the most part, were similar to those proved elsewhere on the site by excavation. Interpretations of features in the rapid excavations are therefore provisional, except in those instances below where they have been sampled by excavation.

Trench 04 (Fig. 1)

Rapid excavation of a 30m by 3m trench revealed seven features in plan, ranging from possible double post-hole features (007), sub-rectangular pits up to 1m wide (006, 008 and 010), butting linear features up to 2.5m wide (009 and 011), to a curvilinear feature, c. 1m wide (012). All the features comprised brown sandy silt loam fills. None were excavated and no artefacts were found.

Trench 05

This 15m long trench was situated towards the base of a hollow, in an area of probable deeper soils (Fig. 1). The removal of the topsoil revealed an apparently continuous spread of homogeneous brown loamy sand within which no features could be discerned. It was decided to remove these sediments down to the underlying sands and gravels, to provide a section through the deposit, in order to examine the stratigraphic sequence (Fig. 5; Plate 4).

Three different stratigraphic units were recorded above the sands and gravels (070) of the Sherwood Pebble beds exposed at the base of the sequence (Fig. 5).

At the southern end of the section (Plate 4) were two units (067 and 068) each with at least two sub-horizons identified by their different colours and pebble densities and sizes between the topsoil (001) and the underlying the Pebble Beds (070). The depth of these units (c. 0.6m) could suggest some input of colluvium from the sides of the hollow. The upper horizon had a higher density of pebbles (067b) and it can be interpreted in at least two different ways. If it is a deflation horizon (with finer material being removed by wind/water), this suggests movement of colluvial deposits both into the top of the hollow and then downslope to the east. If it is interpreted as a sorted horizon, with the stones being moved down the soil profile by biological activity under stable soil conditions (e.g. under pasture or woodland), then the relatively stone-free brown sandy loam immediately above it is the truncated remnants of a stable soil (067a). This palaeosol was a maximum of c. 0.15m deep and was recorded for a c. 4m length before being truncated by recent ploughing (001).

In the centre of the section there was a sandy silt band (071, Fig. 5), c. 3m wide, at the base of the section. Above this lay a brown sandy loam (069), which looked like a mixture of the horizons to the south (067, 068), perhaps from mixing of those horizons. Alternatively, the co-incidence of the junction of the sandy silt (071) with sand and gravels (070), immediately below the admittedly merging junction of 067 and 068, is suggestive of a feature; it is possible that 069 and 071 are the continuation of a linear feature, running north-west to south-east, visible on aerial photographs to the north-west (Fig. 1).

In the northern part of the section a feature of brown sandy loam (066, Fig. 5), c. 2.25m wide, is cut into the sand and gravel

(070), which itself is cut by a burnt feature (027, Fig. 5). Feature 027, c. 1.15m wide, has a high charcoal content with a narrow strip of heat-reddened sand along its edge which is presumably the effect of *in situ* burning. 027 is therefore interpreted as a fire inside a pit cut into feature 066, which cuts the sands and gravels of the pebble beds and abuts context 069. No artefacts were recovered.

This section illustrates a complex history for the site which cannot be unravelled from this excavated section alone, but demonstrates the potential surviving in some hollows for the interleaving of feature fills, 'natural' and cultural stratigraphy.

Trench 06

Three features were identified: one may be a pit or the butt-end of a linear feature running north-east to south-west, possibly aligned with the field-system (Fig. 1). The bow of a Romano-British fibula was recovered from the spoil-heap by metal-detecting (Appendix 3).

Trench 07

Seventeen features were revealed along the length of the trench (Fig. 6a). The majority of the features, potentially archaeological, were sub-rounded, varying from c. 0.1m to 1m in diameter and may represent post-holes and pits, with brown sandy silt loam fills. A few features had indistinct edges and may represent tree-boles or other biological activity.

Towards the north-east end of the trench, a narrow linear feature of dark brown sandy silt loam, c. 0.2m wide, was recorded (053, Fig. 6a). The east-west alignment of the feature, interpreted here as a probable gulley, does not appear to correspond with any of the linear field boundaries identified from the aerial photograph plot (Fig. 1). Feature 053 may represent a different phase to the field-system or may be related to activity not

directly associated with the field-systems.

An apparent area of burning (052, Fig. 6a; Plate 5), was partially revealed in plan projecting from the north-west edge of the trench. Topsoil was machine stripped back from the section in order to fully reveal the feature in plan, with the overlying remnant soil removed by hand to expose the top of the feature. Once fully exposed, feature 052 was sub-rounded in plan, up to 2m wide, with frequent flecks of charcoal within a very dark greyish brown sandy silt fill (Plate 5). The outer edge of the feature abuts a thin halo of reddened sand indicative of *in situ* burning (similar to 027, Trench 05; Fig. 5). One small, unabraded, sherd of Romano-British Derbyshire ware was recovered from cleaning of the feature (ACF, Appendix 1).

A copper-alloy button or coin was recovered from the spoil heap by metal-detecting (Appendix 3).

Trench 08

A trench, c. 75m long, was stripped of topsoil to investigate the suspected continuation of cropmarks from outside the proposed development area (SMR 2281, Fig. 1). Twenty-seven potential archaeological features were recorded, varying from sub-rounded, c. 0.2m to 1.15m wide, to linear features, c. 0.5m to 1m wide, running north-east to south-west, representing possible pits, post-holes, gulleys and ditches (Fig. 6b). A number of the features appeared to be concentrated towards the centre of the trench, which were hand-cleaned and recorded in detail (054-063, Fig. 6b).

A section across one of the linear features (058a, Fig. 6b) showed it to be a ditch, c. 1.7m wide beneath the topsoil, and up to 0.65m deep (Section A-B, Fig. 6c). The feature rapidly infilled with washed-in sands and silts, followed by sands and gravels interpreted as upcast, visible as a stonier fill along the north-west edge of the feature (Section A-B, Fig. 6c). The

uppermost fill of the feature may be a recut, c. 0.4m deep (Fig. 6c). Feature 058(a) together with linear feature 059 (unexcavated), may represent the suspected continuation of SMR 2281 (Fig. 1), or relate to the field-system. Feature 058a appears to be cut on the south-west by a separate feature (058b, Fig. 6b), which produced a sherd of Romano-British Derbyshire ware from hand-cleaning it (ACJ, Appendix 1).

Two features (054 and 063, Fig. 6b) were partially revealed in section. Feature 054 contains a high percentage (c. 30%) of charcoal fragments within a dark grey loamy sand. Since there is no scorching of the surrounding sand this may suggest that the charcoal fill was deposited from elsewhere rather than being burnt *in situ*. Feature 063 consists of an area of apparently heat reddened sand, c. 1m across, within an apparent sub-rectangular feature of brown loamy sand, c. 1.5m wide. The heat reddening suggests burning *in situ*.

Metal-detecting of the spoil heap recovered a possible, small, copper-alloy coin (Roman?) and part of what appears to be a copper-alloy spur (Appendix 3).

Trench 09

A number of linear features were revealed by cleaning which appear to run in two directions (Fig. 6d). Features 049, c. 1m wide, and 064, c. 3.5m wide, both run approximately north-west to south-east, some 31.5m apart. They appear to correspond with the projected line of cropmarks identified to the south (Fig. 1) and are presumed to be part of the field-system. A section across 049 (Section C-D, Fig. 6e; Plate 6) revealed the feature to be a ditch, c. 1.65m wide and 0.75m deep. The fill of the ditch seems to reflect the sequence of infilling observed across the site (e.g. 004, Trench 03) with clean sands and silts washed-in from one side and mixed sands and gravels, probably from upcast, from the other (Section C-D, Fig. 6e; Plate 6). 049 may be a recut of an earlier ditch (Fig. 6d).

Two small, abraded, sherds of early Romano-British pottery, possibly immediately pre-conquest, were recovered from hand-cleaning of 064 (ACH,ACI), and a unstratified sherd of unabraded Derbyshire ware (ACB) was retrieved during machining of the trench (Appendix 1).

Features 050, c. 0.6m wide, and 051, c. 0.45m wide, are parallel and c. 1.5m apart (Fig. 6d), with a further indistinct linear, c. 6m to the north (Fig. 6d). These features run counter to the field-system recognised from the aerial photographs (Fig. 1), and may represent a different phase of field-system on a different alignment or other unidentified activity (as 053 in Trench 07, Fig. 6a).

Trench 10

Topsoil stripping of this trench revealed a high density of potential archaeological features, with twenty-four features occurring in a 33m by 3m area (Fig. 6f). The features showed a wide variety of form, varying from small subrounded features, c. 0.25m wide, to a large sub-rounded feature (029) some 4m wide, to linear features up to 1m wide (028 and 040), all with brown sandy silt loam fills. These features may represent post-holes, pits and gulleys. Some features were intercutting, suggesting more than one phase of activity (029 appeared to cut a linear feature which ran to the east; 028 cut 032; Fig. 6f).

Although no features were dug, a quantity of Romano-British pottery sherds were recovered from cleaning of 028 (AAB-ABX, Fig. 6f; Appendix 1) and a tiny scrap of probable prehistoric pottery came from cleaning 029 (ACA). Feature 028 appears to be a linear, running south-east to north-west, positioned close to the cropmark, but perhaps not aligned precisely with it (Fig. 1).

6 FIELDWALKING REPORT

Methodology

The area to be walked was laid out in transects spaced at 10m intervals, each marked with flags at convenient points. The transects were walked by members of the fieldwalking team, and finds searched for, and marked, for a distance of up to 1m to each side of the centre line of each transect. These finds were individually inspected by the fieldwalking supervisor, and ignored or recorded as the collection strategy (outlined below) demands. Find spots were recorded in three dimensions using an EDM (Topcon GTS-3B), and survey data recorded in the field on a computer. Details of ground conditions and survey protocol were recorded on standard pro-forma.

Fieldwalking: Collection strategy

The collection strategy is summarised in tabular form below.

Category	Sub-category	Treatment		
		Ignore	Record location	Record location & save
pottery	medieval and earlier post-medieval and later		x	x
brick/tile	certainly Roman, & medieval ridge uncertain date	-	-	x
baked clay		x		
bone	uncertain/human/animal worked	-	-	x
metal	(medieval & earlier) post-medieval or later, or undatable	x		x
flint	worked unworked	x		x
stone	artefacts and faced stone possible building stone i.e. unworked stone over 200mm (e.g. skerry, limestone, miscellaneous angular stone) pebbles, fire-cracked pebbles	x	x	x
mortar			-	-
glass			x	
slag			x	
coke			x	
coal			x	
charcoal		x		

KEY

Ignore

Record location

Record location & save

-

do not record location or save find
record location in three dimensions, note material category and
save a sample of this type of find
record location in three dimensions, allocate three-letter code,
and save artefact for further study
level of recording at discretion of supervisor.

Results

POST-MEDIEVAL POTTERY

Post-medieval material appeared to be scattered across the field with a concentration of material towards its southern access (Fig. 9). Such material is usually interpreted as the result of manuring with domestic or farm refuse, its concentration with the entrance perhaps suggests its carriage from the south.

FIRE-CRACKED PEBBLES

A quantity of fire-cracked pebbles were identified on the field (Fig. 10). There are no apparent concentrations of fire-cracked pebbles, they appear to be thinly spread across the field, save for an apparently blank area across the middle of the field immediately south of the curvilinear cropmark complex (SMR 2283, Fig. 10).

While not specifically datable, fire-cracked pebbles are often found in later prehistoric and early historic settlement contexts, where they are usually associated with domestic activities such as cooking. Although there are no marked concentrations of fire-cracked pebbles, the spread of such material towards the northern and southern end of the area fieldwalked (Fig. 10) could be suggestive of domestic activity.

FLINTWORK AND STONE

Four pieces of flint were recovered from fieldwalking (BAA, BAG, BAH & BAK: Appendix 4; Fig. 11). One piece appears to be a battered flake from bifacial implement, however all are undatable.

A large disc-shaped stone, c. 0.54m across, with a central hole of c. 60mm diameter (BAC, Appendix 4), thought to be a quern- or millstone was recovered from a field boundary (Fig. 11), presumably where it had been put after being pulled up by the plough. Its exact function is, as yet, unknown, and at this time it remains undated.

ROMANO-BRITISH POTTERY

Only two sherds of Derbyshire ware were recovered by fieldwalking (Fig. 11, Appendix 4), one rim and one body sherd, and both found immediately north of the modern hedge boundary running across the site (Fig. 11).

Comment

It was hoped that the distribution of ancient, durable, artefacts would give clues as to the location of primary habitation or rubbish disposal. However, the quantity of ancient finds from fieldwalking is disappointing, especially as it is known that the archaeological features can contain large numbers of pottery sherds (e.g. the top of linear feature 028 in Trench 10: Fig. 1). The apparent lack of artefacts in the topsoil could be attributed to a number of factors.

Firstly, fieldwalking is restricted to the recovery of durable artefacts present in the topsoil. At 10m intervals, with a 2m wide transect searched for finds, only 20% of the surface is covered, and since the material on the ploughsoil surface is variously reckoned to be between 0.5-7% of that present in the ploughsoil at anyone time (Ammerman 1985; Tingle 1987,89; Clark & Schofield 1991, 94-100), a single fieldwalking episode, as reported here, will only be dealing with maximum of a 1% sample of the material in the ploughsoil: any scarce artefacts will hardly be represented if at all.

It is also well known that the distribution of artefacts will be influenced by a host of non-archaeological factors (ploughing regimes, the biases of individual fieldwalkers) as well as factors such as farming practices and soil depositional processes (cf. Shennan 1985, 40-44). In this case the destoning of the fields for potato crops (R. Blant, *pers. comm.*), where the soils are 'sieved' and stone and other material (which can include artefacts) placed in narrow trenches, may have removed artefacts from the ploughsoil. Archaeological material was not evident

within the stone lines revealed by topsoil stripping during the evaluation trenching so may not have been durable enough to survive this process.

The current evaluations suggest that the archaeological features are not severely truncated in places (see p. 24-25): thus the mechanism for introducing further artefacts into the ploughsoil is reduced. In addition, only small quantities of artefacts might be expected in areas of field-system, away from areas of primary refuse disposal, unless manuring of the fields from the settlements was practised. Evidence from the brick-work plan field-systems in the north of the county, with which these cropmarks are analogous (see p. 25), suggests that the artefact scatters are mostly confined to settlement enclosures, and are rarely found within the fields. However, as at Oxton Road, artefact scatters are not always recovered in fieldwalking, even when excavation demonstrates their relative abundance in features (e.g. Garton et al. 1988, 32).

7 POTTERY REPORT by R.S. Leary

Excavations yielded 73 sherds (784gm) of ceramic material. This comprised one small scrap of probable fired clay or very abraded brick, two sherds of quartz-tempered pottery of a type common in the prehistoric period, two sherds of grog-tempered pottery of a type common in the Conquest period until the end of the first century AD, and the remainder dating to the Romano-British period. The only pottery from fieldwalking was two sherds of Romano-British Derbyshire ware.

Most of the pottery came from context 028 in Trench 10 and comprised a small group of fairly large and only moderately abraded sherds from around four different vessels: a Derbyshire ware, cupped-rim jar, an ovoid jar with wavy line combed decoration, a lipped bowl in grey ware, and bodysherds of an unknown vessel type in a fine grey ware. A second Derbyshire ware jar may be represented by a single bodysherd of slightly different fabric, and a second ovoid jar by grey ware sherds with an unusual burnished decoration of concentric lines with horizontal lines or grooves running across them. The lipped bowl suggests a date in the second or early third centuries AD (Buckland et al. 1980 type Ca), and the Derbyshire ware would fit with that date range. The ovoid jar is a long-lived type and the decoration is mostly worn away making dating by typology more difficult. The zones of combed decoration delimited by grooves or cordons can be compared with vessels made at Little London in the first half of the third century AD (Oswald 1937, pls. II-III; Todd 1968a dates kilns to c. 250 AD; and Buckland and Dolby 1980 to 200-250 AD). Although such zoned decoration is also found on later vessels, the moderately soft and sandy fabric in light grey contrasts with the hard, lead grey fabrics so common in the third and fourth centuries AD. Together with the absence of later forms, such as flanged bowls and Dales ware or Dales ware type jars, a date range in the second to early third century AD is suggested. The condition and concentration of the pottery from this feature suggests a focus of primary rubbish disposal. One

orange, abraded sherd was tentatively identified as fired clay or brick.

Trench 10 also yielded unstratified sherds, including one probably from a third Derbyshire ware vessel, and sherds from a jar with outcurving rim of a similar date to the vessels from 028 (cf. Buckland *et al.* 1980, type Ea).

Two small abraded sherds from 064 in Trench 09 had grog, or argillaceous inclusions, and compare well with a fabric group dating from the Conquest to the end of the first century AD (which includes Trent Valley ware; Todd, 1968b).

A single Derbyshire ware sherd from 052 Trench 07 compares with the sherds from 028 Trench 10. 058b in Trench 08 yielded another basal sherd of Derbyshire ware.

Context 029, Trench 10 yielded a tiny scrap of quartz-tempered pottery, identified as prehistoric. A second abraded sherd of buff, quartz-tempered pottery, which came from Trench 02 (context 021a) is also likely to be prehistoric.

Thus the assemblage was comprised principally of pottery dating to the second or early third centuries, with a small number of sherds of prehistoric or first century date, and probably none of later third or fourth century date, although that latter possibility cannot be completely ruled out because of the longevity of the types recorded.

8 INTERPRETATION and DISCUSSION

The evaluations produced information on several broad categories of evidence which are summarised together here.

Field-systems

The lack of correspondence of the ditch in Trench 03 with the cropmark and the fact that a cropmark intersection was not located in trench 04 and Trench 10, suggests that the cropmark plot requires some adjustment to take account of the undulating topography, particularly in the eastern part of the site. Ditches corresponding to the cropmark plot of the field-system were located and excavated in Trench 01 (005, Fig. 2; Plate 1) and Trench 02 (021 and 022, Fig. 3). Linear features, which were either proven as, or highly likely to be ditches, which aligned with the field-system were also identified in Trenches 09 and 10 (Figs 6d, Plate 6; Fig. 6f), with the possibility of a continuation of a cropmark ditch in Trench 05 (Fig. 5). They are all interpreted here as boundary ditches belonging to the field-system. In addition, the unexcavated feature 065 in Trench 02 (Fig. 3) whilst not appearing as a cropmark, was orientated at approximate right-angles to the long boundaries of the field-system, and may be part of it. The excavated ditch (058a, Figs 6b and 6c), and adjacent linears (unexcavated) in Trench 08 (Fig. 6b), may be the suspected continuation of SMR 2281 (Fig. 1), or belong with activities other than the field-system as they do not appear to align well.

Pottery recovered from these features give a range of dates from prehistoric (in 021, Trench 02), to Conquest period (064, Trench 09) through to Romano-British (028, Trench 10: Appendix 1). However, since all these artefacts came from the uppermost fills of the ditches, they do not date them, but they illustrate the range of material present on the site which became incorporated into the final fills of the ditches. No artefacts were found in the initial, primary fills of the filled-ditches, which would date them.

Linear features in Trenches 02, 07 and 09 (Fig. 1; Figs 3, 6a and 6d) appear to be aligned counter to the cropmark field-system. They may represent another set of field-boundaries on a different alignment, or other activities.

Settlement and other activities

Features interpreted as pits and post-holes were excavated in Trenches 01, 02 and 03 (Figs 2-4). Similar, unexcavated, features recorded in plan in Trenches 04, 06, 07, 08 and 10 (Fig. 1; Figs 6a,b and f), are also highly likely to be pits and/or post-holes. Such features, together with the burnt features in Trenches 05, 07 and 08 (Figs 5, 6a and 6b; Plate 5) are suggestive of settlement and other activities. Artefacts recovered from cleaning suggests that at least some of these features were Romano-British in date.

A substantial quantity of fire-cracked pebbles was found within the fill of ditch 004 (Trench 03, Figs 1 and 4; Appendix 2). Very few fire-cracked pebbles were recorded in any other of the excavated features except ditch 005 in Trench 01 (Figs 1 and 3, Appendix 2). While not specifically datable, fire-cracked pebbles are often found in a settlement context, where they are often associated with domestic activities, usually interpreted as being from cooking. If so, ditches 004 and 005 may be either enclosure ditches associated with, or close to, settlement activities. The proximity of intercut post-holes and slots in Trench 03, suggesting structures, are also indicative of settlement activity.

In Trench 10 (Fig. 1), the probable post-hole and pit features are relatively densely distributed (Fig. 6f), and since some were used for primary rubbish disposal (e.g. the top fill of linear 028), this would seem to be highly indicative of Romano-British domestic or other activities close by.

The evaluations demonstrate that the extent of both field-systems

and features suggestive of settlement activity extends across the flattish plateau and into the hollows, i.e. beyond that previously recorded on the SMR. The only place where none is yet recorded is within the hollows along the south-eastern edge of the area where no evaluation has been conducted.

Preservation of the archaeology

It is axiomatic that cropmark sites will be truncated, since the features must be present at the base of the topsoil for the crops to register differential growth patterns. However, the amount of truncation will vary from site to site, and even across a site, as the limited amount of excavation suggests here. The weathering cone on the ditch in Trench 01, the survival of the tops of post-holes in Trench 03, and the presence of a subsoil layer, intermediate between the modern ploughsoil and sands and gravels in Trenches 01, 02 and 07, all suggest that areas of the site are relatively well preserved for a cropmark site.

Fine stratification, such as post-pipes in post-holes, is rarely identified on sand and gravel sites. This is presumably because the sediments are not cohesive and any disturbance by biological activity effectively mixes the fills, making fine detail disappear. However, on this site there is some evidence for the stratification of fills. For example, the sequential infill of these ditches is interpretable, with primary fills recognised in Trenches 01, 03, 08 and 09, and possible bank material eroding, or pushed back into, the ditches. The probable tops of post-holes disturbed by post removal, with hints of the post-impressions themselves, and one showing a possible post-pipe (all in Trench 03) suggests that careful excavation, in damp conditions prevailing in spring and autumn, could recover some of the detailed evidence which would be required to start to interpret any structures.

Trenches 02 and 05 were located in hollows across bands of darker crop growth interpreted as possible deeper soils (Fig. 1). The

topsoil was not deeper in Trench 02 than in 01 and 03, but the subsoils, which were limited in extent in 01 (072 over 017 and 005) and 03 (in the eastern corner), were more evenly spread in Trench 02, where a 0.1m hand-dug spit had to be removed below the topsoil to locate ditches 021a and b. Since no weathering cone was recognised along either edge of ditches 021a and b (Fig. 3), it is impossible to say whether this was their original depth, or whether these were the truncated remnant of a much deeper set of features. The shallow depth of the possible post-hole 025, and the evidence for scouring and infill in the silts down-slope of ditch 021, may suggest that this hollow has been subject to considerable erosion and redeposition (024 in Fig. 3). Trench 05 ran across a similar hollow, but further down its slope, and the evidence here is quite different. Again, there may be truncation of features cut into the subsoil, but there is also preservation of significant depths of colluvium and soils, which may retain stratigraphic relationships with features (Fig. 5).

Local context

The plan of the cropmark field-systems immediately invite comparison with the Brickwork-plan field-systems recorded on the Sherwood Sandstones by D. Riley (1980). The elements of long, parallel, linear boundaries, cut into shorter strips by cross boundaries, some with double ditches, and with adjoining curvilinear and rectilinear enclosure clusters, is a pattern now familiar in Nottinghamshire, north of Ollerton, and South Yorkshire (Riley 1980, 13, 28, 68). However, none are recorded on the Sherwood Pebble Beds between the Ramsdale site and Ollerton, and although there are hints of rectilinear field-systems in the cropmarks of the Trent Valley to the south and east (e.g. Whimster 1989, 82, 86; Knight 1992, 83), none are as coherent as these and the Brickwork-plan fields. The small amount of dating evidence from both the Brickwork-plan, Trentside and Ramsdale field-systems all suggest a period of use within the Romano-British period, with hints from earlier pottery of

prehistoric occupation too (e.g. Knight 1992, 83; Garton 1987, 43, 44, 67). The SMR was checked for cropmark information for the area from the Trent Valley to Ollerton (each dot being a cropmark record in Fig. 7). Cropmarks are relatively sparse around the Ramsdale site and include abundant records of enclosures and linear features, and some circles, but no coherent patterns of field-systems despite the fact that the geology and crops seem to be conducive to cropmark production.

From the limited evaluation evidence, the Ramsdale field-systems appear to contrast with those of the Brickwork-plan where the settlement/activity denoted by scatters of pits and post-holes appears to be rare within the field-systems away from the enclosure clusters (e.g. Hodsock: Taylor & Garton 1997; Barnby Moor: Garton, 1991; Garton & Malone 1992; East Carr, Mattersey (Garton *et al.* 1995, 28). It will be interesting to compare the fieldwalking pattern from the two areas.

The SMR records for Roman and Iron Age sites (from artefact find-spots) was plotted for the same area as the cropmarks: it shows a rather more even, if sparse scatter (Fig. 8). The Ramsdale field-systems are close to an apparent focus of Iron Age and Roman-British activity on Ramsdale Hill, the Mercia Mudstone Hill that borders the south-eastern edge of the proposed development (the grid-square to the south-east in Fig. 8). An earthwork enclosure documented by Hayman Rooke in 1792, since lost, may have been located by amateur excavations on the hill, where ditches have produced a collection of Late Iron Age and early Romano-British pottery and metalwork (Turner & Turner 1997). In addition, when the golf course on the slopes facing the Ramsdale site was constructed, there was hearsay of Iron Age coins and other metalwork being found. Until recently, this was one of the few good collections of material of this date, but excavations along the Trent Valley (e.g. Chapel Farm, Shardlow: Knight *et al.* 1997; Holme Pierrepont: R.S. Leary pers. comm.; Gamston: Knight 1992), suggest that the range of pottery is

typical for this period (R. Leary *pers. comm.*). It would not be surprising if the Ramsdale field-systems were related to this hillside settlement.

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APPENDIX 1: ROMANO-BRITISH POTTERY CATALOGUE AND SUMMARY OF
POTTERY BY TRENCH AND CONTEXT. R.S. Leary

Introduction to Roman Pottery Catalogue.

The pottery was examined by eye, using a x10 hand lens and a x30 microscope where necessary, and divided into fabric groups on the basis of their colour, hardness, feel, fracture and the type, quantity, sorting, shape and size of any inclusions. The vessel form, if known, and any decoration were recorded by reference to a type series being developed for the region. The archive comprises fabric descriptions; form type series with verbal descriptions, references to published parallels; pottery catalogue in DBase database format; list of codes used in the pottery catalogue; quantification of forms and fabrics represented on the site, using sherd count and weight values and rim percentage values.

Fabrics

The sherds were examined rapidly by eye with selected use of a x30 binocular microscope and x10 hand lens. The sherds were divided into fabric groups (Fulford and Huddleston 1991, 41), such as grey ware or oxidised ware, with distinctive, known fabrics such as the Nene Valley ware and grog-tempered ware fabrics being given their own fabric codes.

Colour: narrative description only

Hardness: (after Peacock, 1977)

soft - can be scratched with a finger-nail
hard - can be scratched with a penknife-blade
very hard - cannot be scratched with a penknife-blade

Feel: tactile qualities

smooth - no irregularities felt
rough - irregularities felt
sandy - grains can be felt across the surface
leathery - smoothed surface, like polished leather
soapy - smooth feel, like soap

Fracture: visual texture of fresh break (after Orton, 1980)

smooth - flat or slightly curved, with no visible irregularities
irregular - medium, widely-spaced irregularities
finely irregular - small, closely-spaced irregularities
laminar - 'stepped' appearance
hackly - large and generally angular irregularities

Inclusions:

Type: (after Peacock, 1977)

Frequency: indicated on a 4-point scale - abundant, moderate, sparse and rare, where abundant indicates the break is packed with a particular type of inclusion, rare indicates the break has only one or two pieces of that inclusion

Sorting: indicates the homogeneity of size of a type of inclusion

Shape: (after Orton, 1980)

angular - convex shape, sharp corners
subangular - convex shape, rounded corners
rounded - convex shape, no corners
platey - flat or concave

Size: fine - 0.10-0.25mm
medium - 0.25-0.50mm
coarse - 0.50-1.00mm
very coarse - 1.00mm or greater

Fabrics:

BRCK: orange fired clay or brick.

DBY: Derbyshire Ware (as Kay, 1962).

GRA2: Grey. Soft with smooth feel and finely irregular fracture. Moderate, well-sorted fine, subangular quartz; rare, ill-sorted, medium-sized, white inclusions; rare, fine, rounded black inclusions. General group of fine grey wares.

GRB1: this is a large group of fabrics covering otherwise undifferentiated grey wares with moderate quantities of medium-sized quartz and sparse iron oxide inclusions.

GTA8: buff or grey. Hard with slightly grainy feel and irregular fracture. Moderate, well-sorted, fine, rounded, opaque, quartz; sparse, ill-sorted, fine to medium-sized, white, laminar inclusions; sparse, well-sorted, coarse, angular grey and buff grog.

PQ: Quartz-tempered ware, identified as prehistoric.

Pottery Form Descriptions

The form descriptions are taken from a regional type series used by T&PAT. The type series is hierarchical in character using three character alphanumeric codes. The first character denotes the class (Webster 1976), the second denotes subclasses

determined by body profile and the third character denotes rim forms within each class. In some cases it is possible to identify the class and rim form or the class and subclass only in which case the unknown code is omitted. Where the class is unknown codes are used to denote the rim, body or base form eg. EVT: everted rim. Reference is made to published corpora wherever possible.

Classes

A: platters
B: straight-sided bowls and dishes, often indistinguishable
C: carinated and hemispherical bowls
D: carinated cups and beakers
E: deep bowls.
F: beakers
G: not used
H: flasks
J: flagons
K: not used
L: jars
M: black-burnished ware jar forms
N: not used
O: narrow-necked jars
P: storage jars
Q: lids

Subclasses

B3: flat-rim bowl/dish. Copying BB1 products (Gillam 1976, nos.57-61) dating to the second century but present in third century kilns such as Blaxton (Buckland and Dolby 1980, type C) but virtually absent at the fourth century kilns at Branton (Buckland 1976).

LA7: cupped-rim jar with slight facetting on outside of rim. Derbyshire ware type dating from the mid-second to mid-fourth centuries.

O: ovoid jar.

RECORDING SHEETS

The pottery database records the fabric and form of each sherd from each area. On the archive print-out the following are recorded:

TR: trench, CONTEXT, FINDCODE, SGRP: sherd group, FAB: fabric, CNT: count, WGHT: weight, ABRAS: abrasion, PRT: part of vessel, FORM, RIM D: rim diameter, RIM %: percentage of rim present, DECTEC: decorative technique, DECMOTIF: decorative motif, DECPOS: position of decoration, JOINS, SAME: from same vessel as, COND: condition, COMMENTS.

Form: BKR: beaker
B+F: bead and flange
CAR: carinated
COL: colander
EVT: everted rim
FRB: footring base
IMB: imbrex
PED: pedestal base
SPY: splayed base
STP: strap handle
TUB: tubulus
TUR: turned
BED: bead rim
BRCK: brick
CHM: chamfered
CV: closed vessel
FLG: flagon
HKD: hooked rim
MOR: mortarium
PLN: plain rim or
plain base
STJ: storage jar
TEG: tegula
T/T tegulae or tubulus

Part: PRO: profile
BDY: diagnostic bodysherid
BAS: base
SCR: scraps
FLG: flange
R+B: rim and bodysherid
BDX: undiagnostic
bodysherid
B+B: base and bodysherid
HA: handle
SPOT: spout

Decoration:

Technique:

BNH: burnished
GRV: grooved
CB: combed

Motif:

+: indicates decoration is between grooves or cordons

CRV: curved
WVY: wavy line
CONC: concentric lines
HRZ: horizontal line
SGE: single

Position:

AOO: all over outside
OSR: outside rim
ISR: inside rim
OSN: outside neck
OUB: outside upper body
OLB: outside lower body
ISB: inside body
TOF: top of flange
TOR: top of rim
AO: all over
AOR: all over rim
TOR: top of rim
OSH: outside shoulder
OMB: outside middle
body
OSB: outside body
IBS: inside base
OSF: outside flange
ILB: inside lower body

Condition:

BM: burnt matter, with position indicated by the same
codes as decoration.
CRJ: cross joins with
SAME: same vessel as

Abrasion:

- U: unabraded, no worn surfaces
- M: moderately abraded, worn edges and/or one worn surface
- A: abraded, worn edges and some wear on two surfaces
- V: very abraded, severely worn all over

APPENDIX 2: Fire-cracked pebbles from excavated features

TRENCH	CONTEXT	SPIT No.	No. FCPS	WEIGHT(kg)	TOTAL FCPS	TOTAL kg
01	005	1	25	2.44		
01	005	2	33	1.72		
01	005	3	6	0.49		
01	005	4	8	0.38		
01	005	5	12	0.55		
01	005	6	10	0.54		
01	005	7	8	0.42		
01	005	8	2	0.07		
01	005	9	2	0.07	106	6.68
02	021	1	11	1.18		
02	021a	2	5	0.25		
02	021b	2	7	0.53		
02	021b	3	6	0.62	29	2.58
03	002	1	4	0.07		
03	002	2	10	0.05		
03	002	3	2	0.02	16	0.14
03	004	1	28	3.00		
03	004	2	52	4.99		
03	004	3	29	3.50		
03	004	4	6	0.40		
03	004	5	1	0.22	116	12.11
13	013	1	3	0.26	3	0.26
09	049	1	3	0.13		
09	049	2	4	0.16		
09	049	3	3	0.44		
09	049	4	3	0.36		
09	049	5	6	0.45	19	1.54

APPENDIX 3: LIST OF METALWORK FROM METAL-DETECTOR SURVEY

FIND CODE	MATERIAL	OBJECT/DATE	TRENCH NO	CONTEXT NO
ACD	Copper alloy	Bow of Romano-British Fibula	06	Unstratified
ACE	Copper alloy	Romano-British coin?	07	Unstratified
ACH	Copper alloy	Spur fragment?	08	Unstratified
ACI	Copper alloy	Romano-British coin?	08	unstratified
ACN	Copper alloy	Twisted wire-Fragment of brooch?	10	Surface of 073

APPENDIX 4: FINDS FROM FIELDWALKING

GRID REF.	FIND CODE	MATERIAL	OBJECT	DATE	COMMENT	EASTING	NORTHING	LEVEL (OD)
SK5849	BAA	Flint	Flake	PRE	Battered Flake from Bifacial Implement	58697.86	49645.97	106.45
SK5849	BAB	Pot	Rim	RB	Derbyshire Ware	58549.73	49593.99	107.49
SK5849	BAC	Stone	Quern?	-	Large round stone with central hole-Quern/Millstone?	59522.30	49599.26	108.20
SK5849	BAD	Pot	Body sherd	RB	Derbyshire Ware?	58633.15	49552.10	106.54
SK5849	BAG	Flint	Flake	PRE	-	58420.38	49094.78	106.00
SK5849	BAH	Flint	Flake	PRE	-	58465.09	49167.80	105.79
SK5849	BAK	Flint	Flake	PRE	-	58862.95	49429.76	96.91

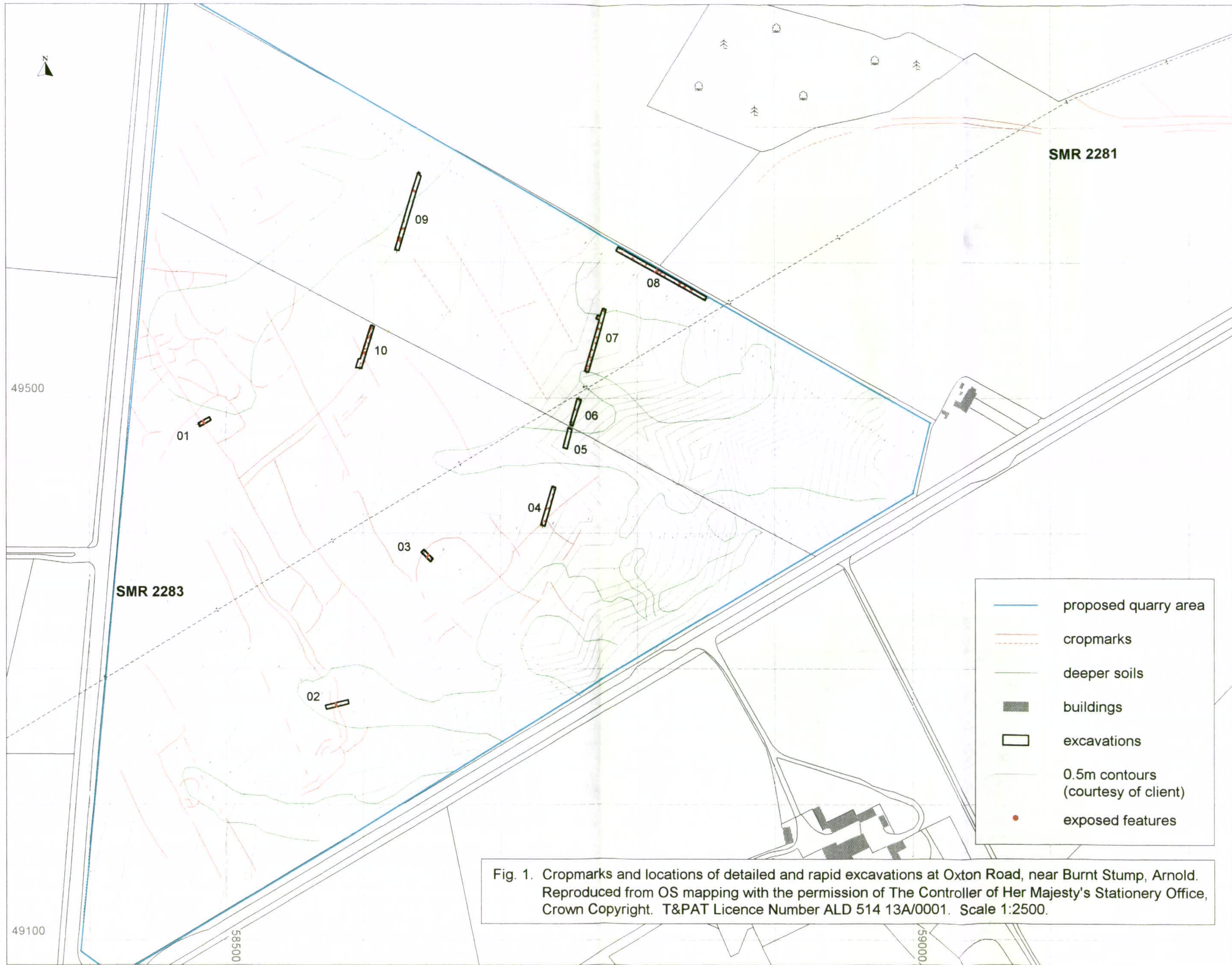


Fig. 1. Cropmarks and locations of detailed and rapid excavations at Oxtan Road, near Burnt Stump, Arnold. Reproduced from OS mapping with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright. T&PAT Licence Number ALD 514 13A/0001. Scale 1:2500.

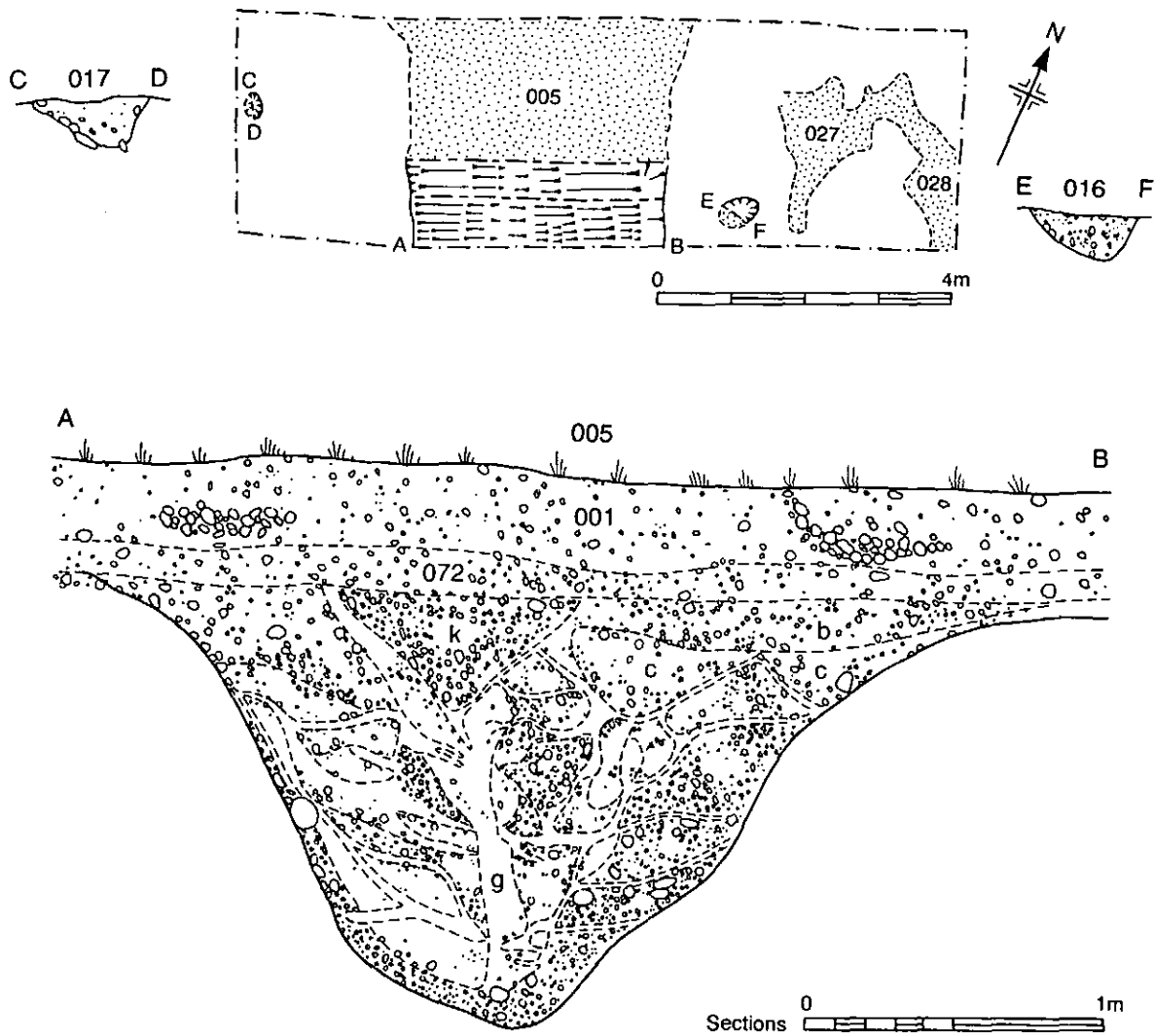


Figure 2. Trench 01: Post-excavation plan with excavated portion of features hachured, unexcavated features stippled, Scale 1:100; Sections of ditch 005 and post-holes 016 and 017, Scale 1:25.

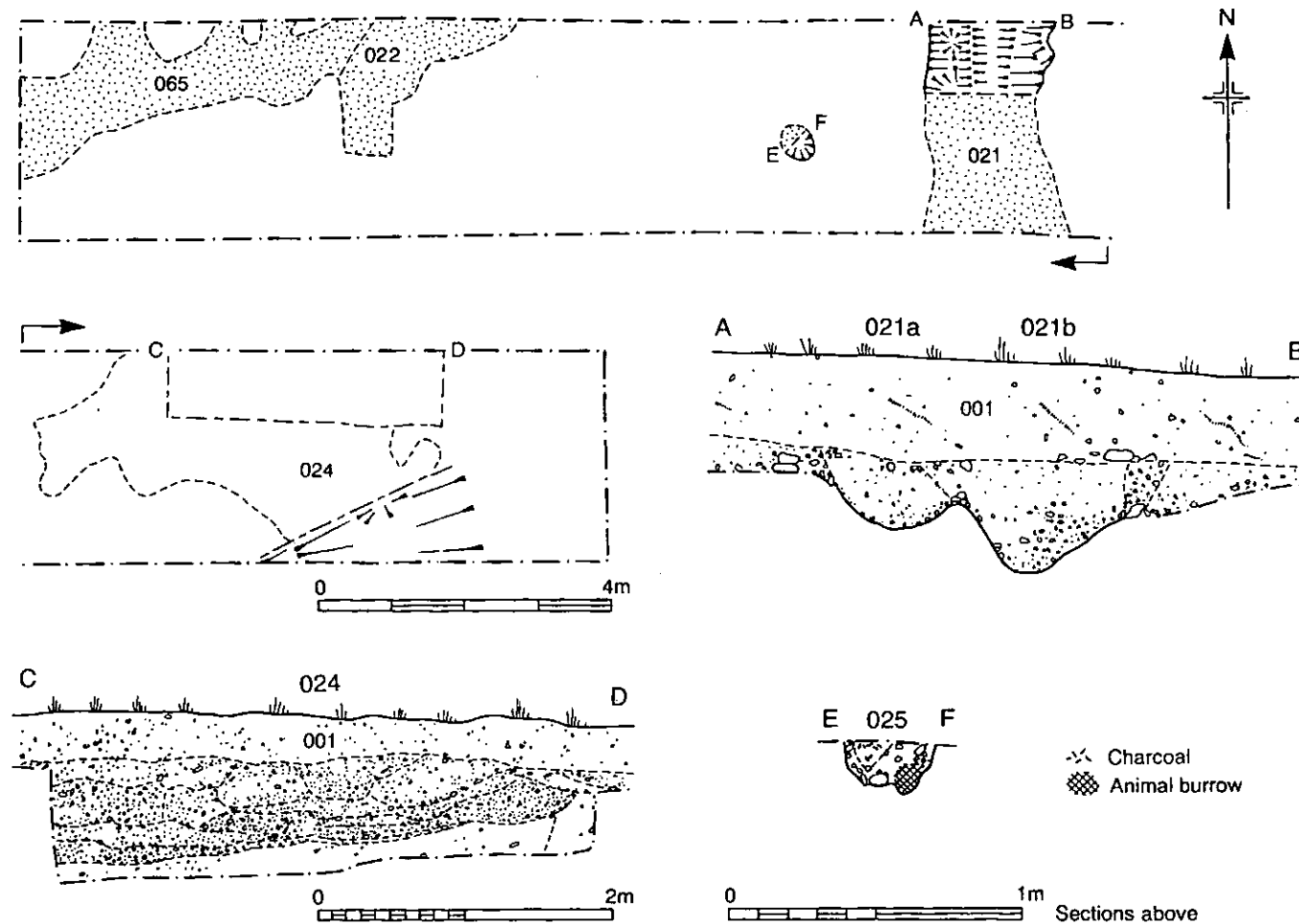


Figure 3. Trench 02: Post-excitation plan with excavated portions of features hachured, unexcavated features stippled and features interpreted as ephemeral run-off channels (024) left blank, Scale 1:100; South-facing section of 021, south-east facing section of post-hole 025, Scale 1:25; and south-facing box section of 024, Scale 1:50.

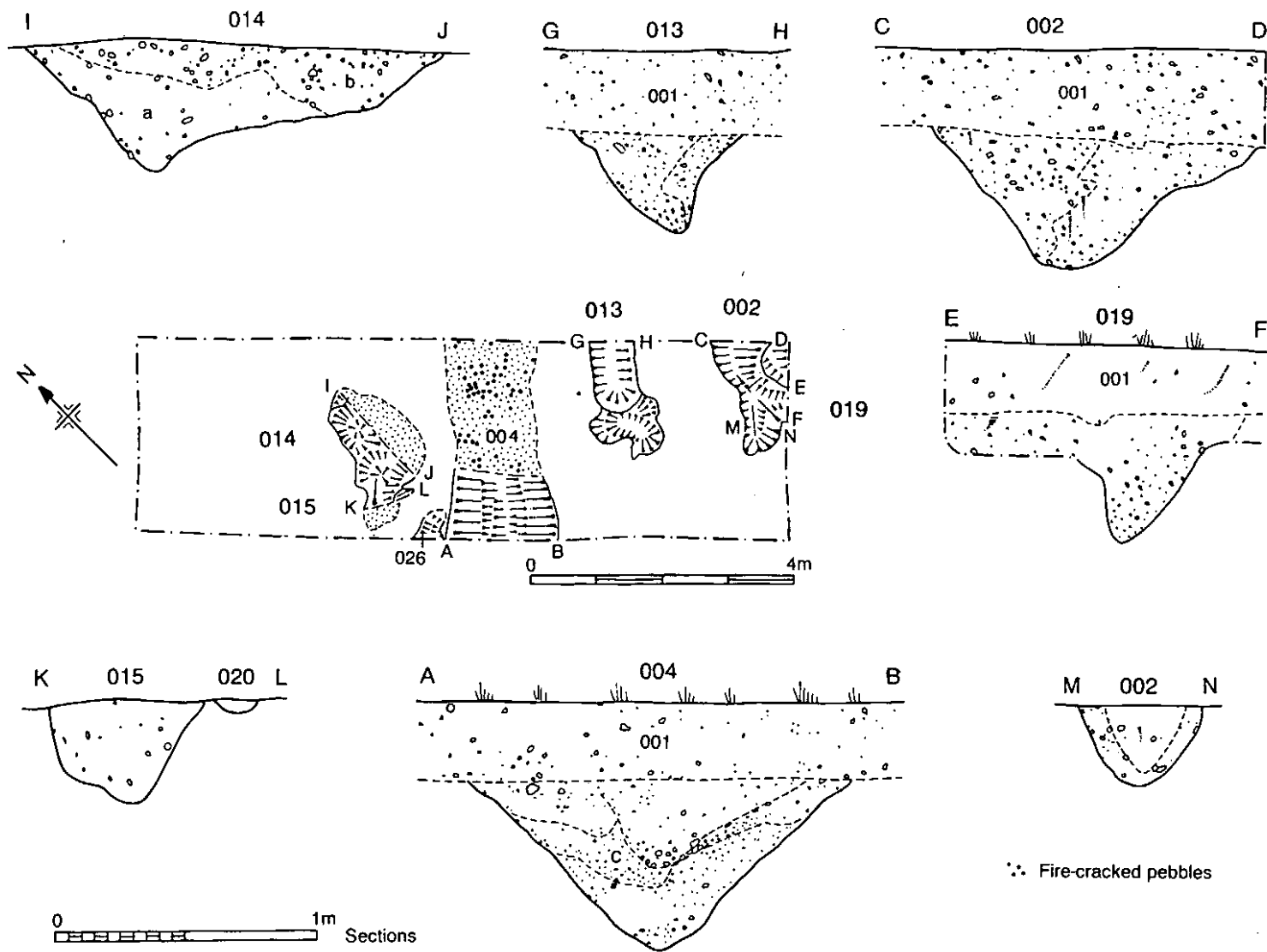


Figure 4. Trench 03: Post-excavation plan with excavated portions of features hachured, unexcavated features stippled, Scale 1:100; Sections, Scale 1:25.

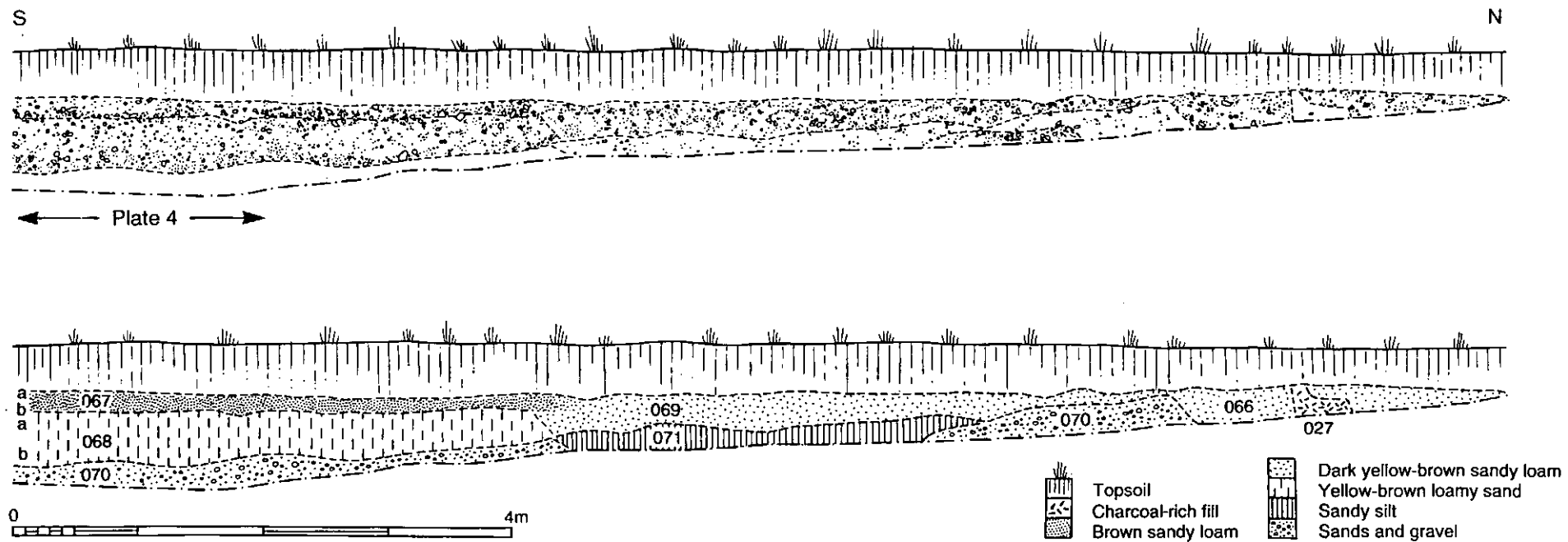


Figure 5. Trench 05: East-facing section and its interpretation showing the stratigraphic sequence and features 027 and 066, Scale 1:50.

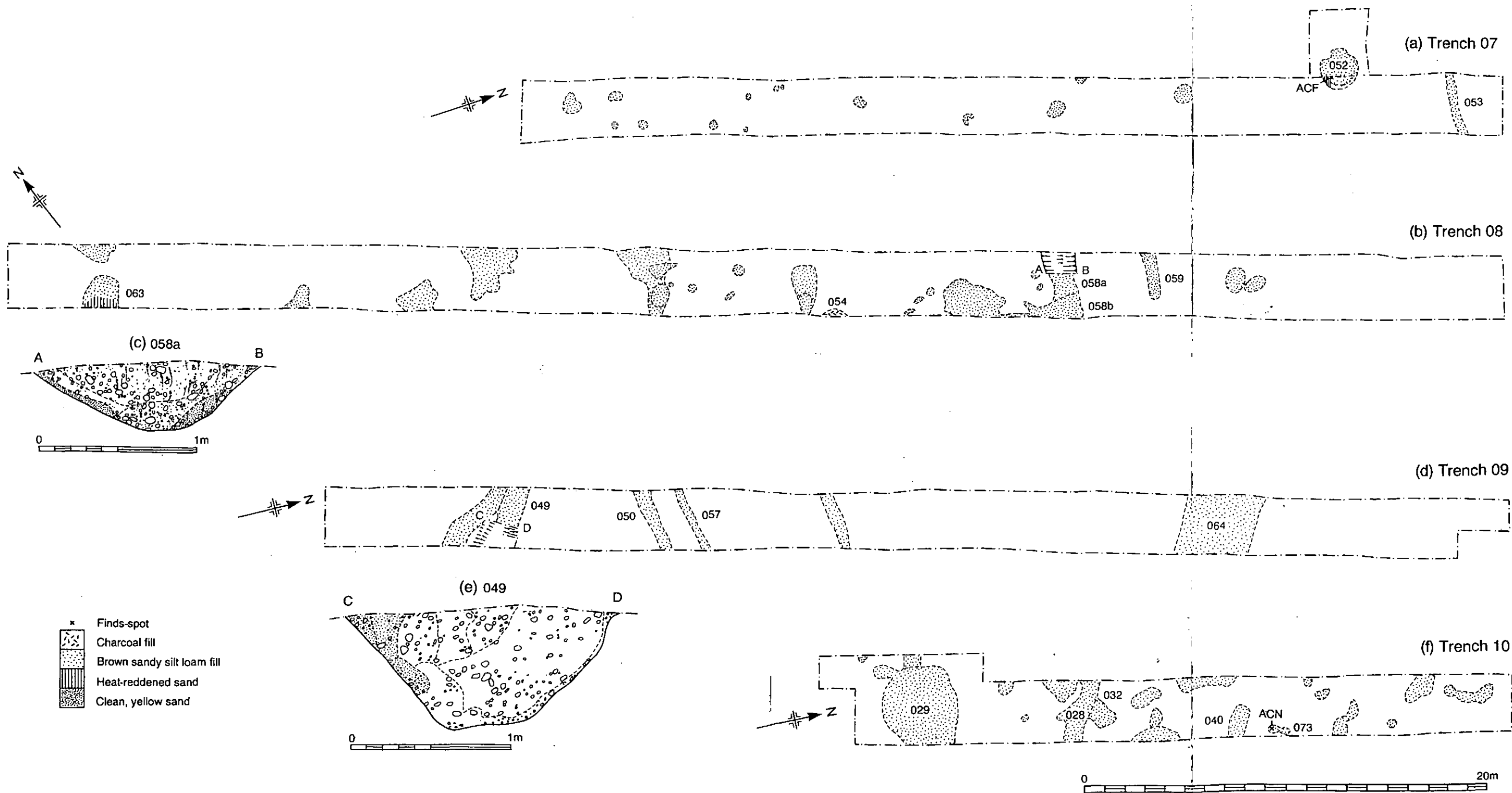


Figure 6. a) Trench 07: Plan, Scale 1:200.
 b) Trench 08: Plan, Scale 1:200.
 c) Trench 08: North-east facing section of 058a, Scale 1:25.
 d) Trench 09: Plan, Scale 1:200.
 e) Trench 09: South-east facing section of 049, Scale 1:25.
 f) Trench 10: Plan, Scale 1:200

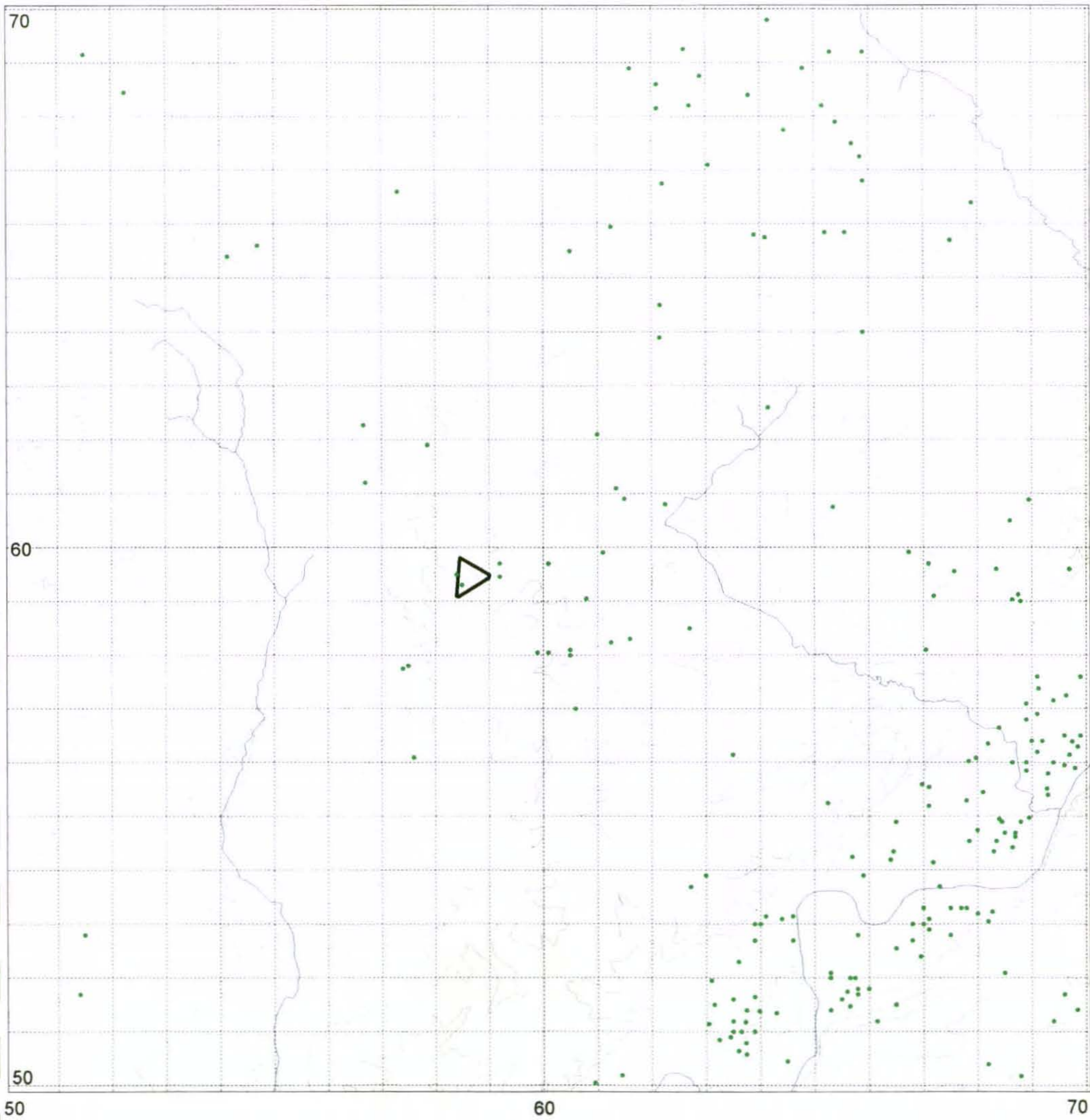


Figure 7. The location of cropmarks recorded on the SMR from the Trent Valley to Ollerton. The evaluation area is marked by a triangle. Scale 1:100,000

SMR information supplied by the Heritage Team, Nottinghamshire County Council.

● Cropmarks

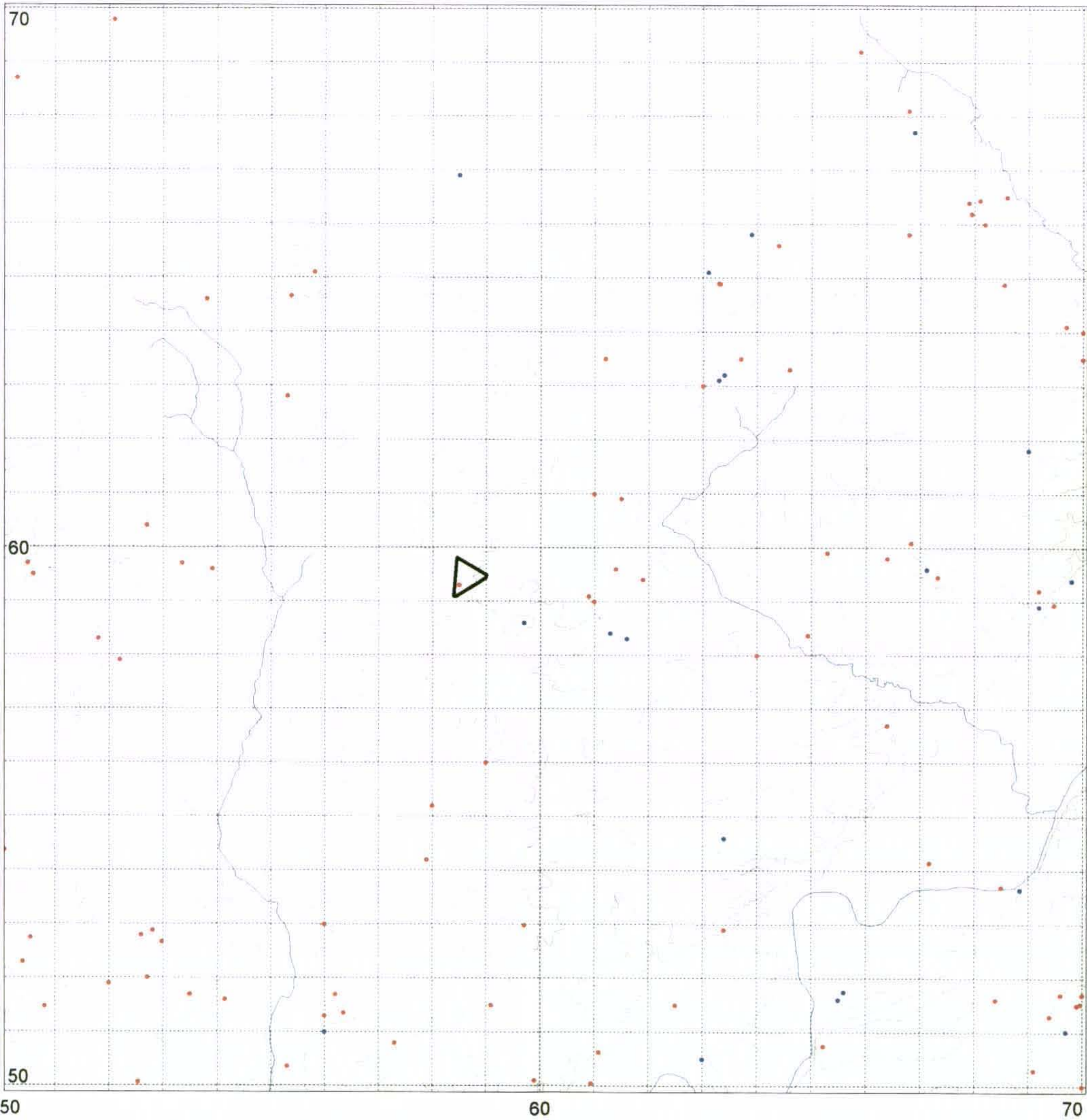


Figure 8. The location of Roman and Iron Age sites, from artefact finds recorded on the SMR, from the Trent Valley to Ollerton. The evaluation area is marked as a triangle. Scale 1:100,000

SMR information supplied by the Heritage Team, Nottinghamshire County Council.

- Iron Age
- Roman

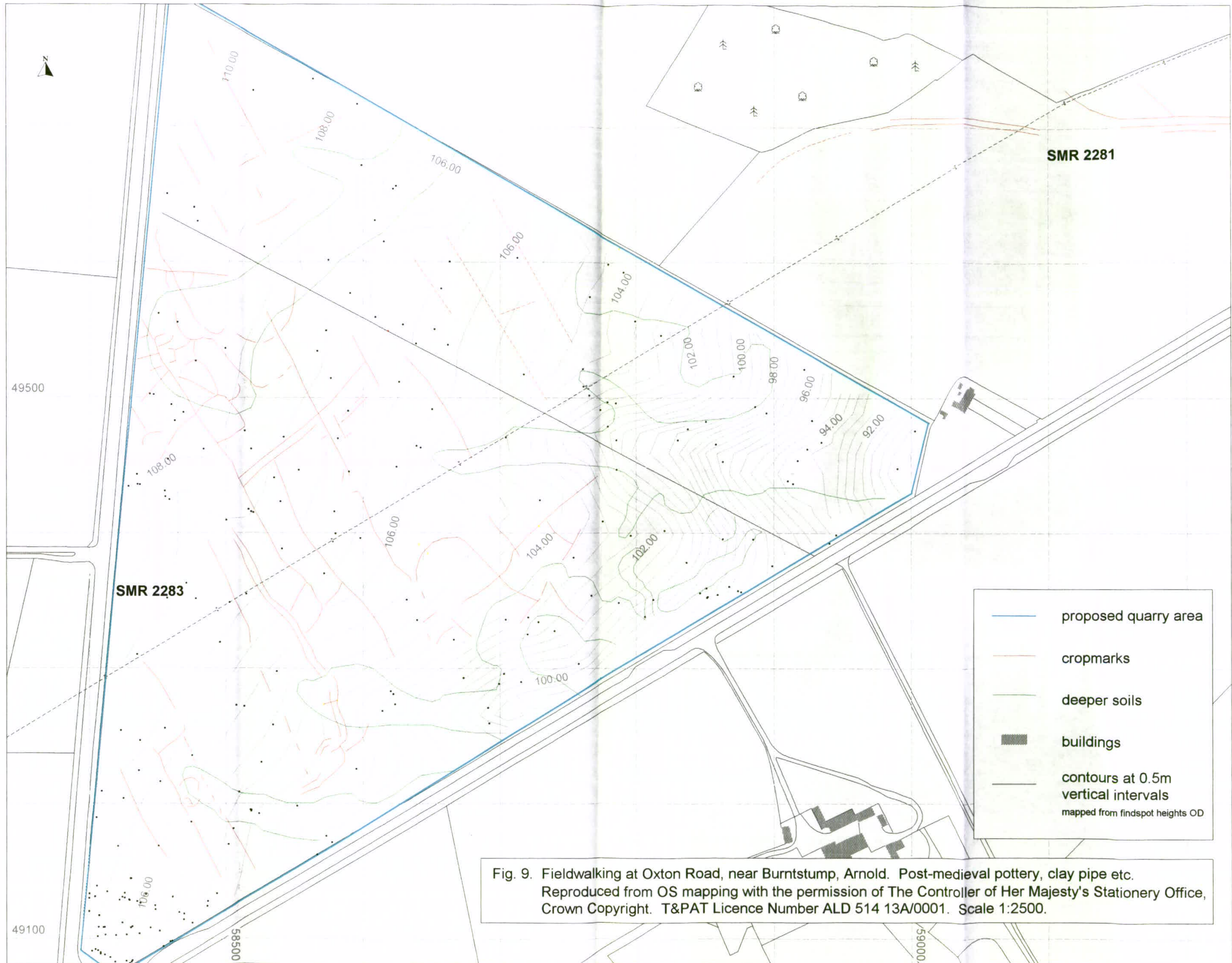


Fig. 9. Fieldwalking at Oxtan Road, near Burntstump, Arnold. Post-medieval pottery, clay pipe etc. Reproduced from OS mapping with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright. T&PAT Licence Number ALD 514 13A/0001. Scale 1:2500.

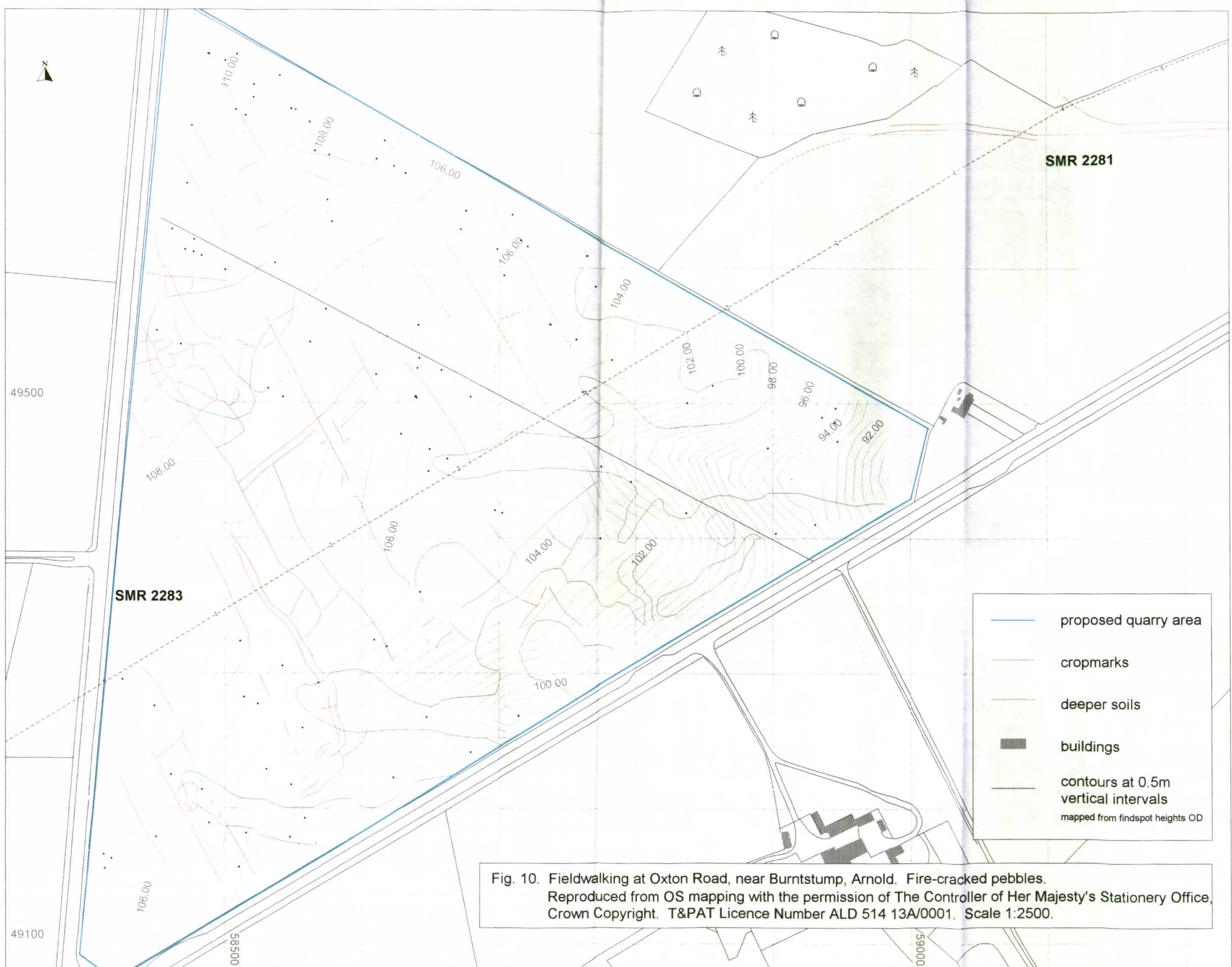


Fig. 10. Fieldwalking at Oxtan Road, near Burntstump, Arnold. Fire-cracked pebbles.
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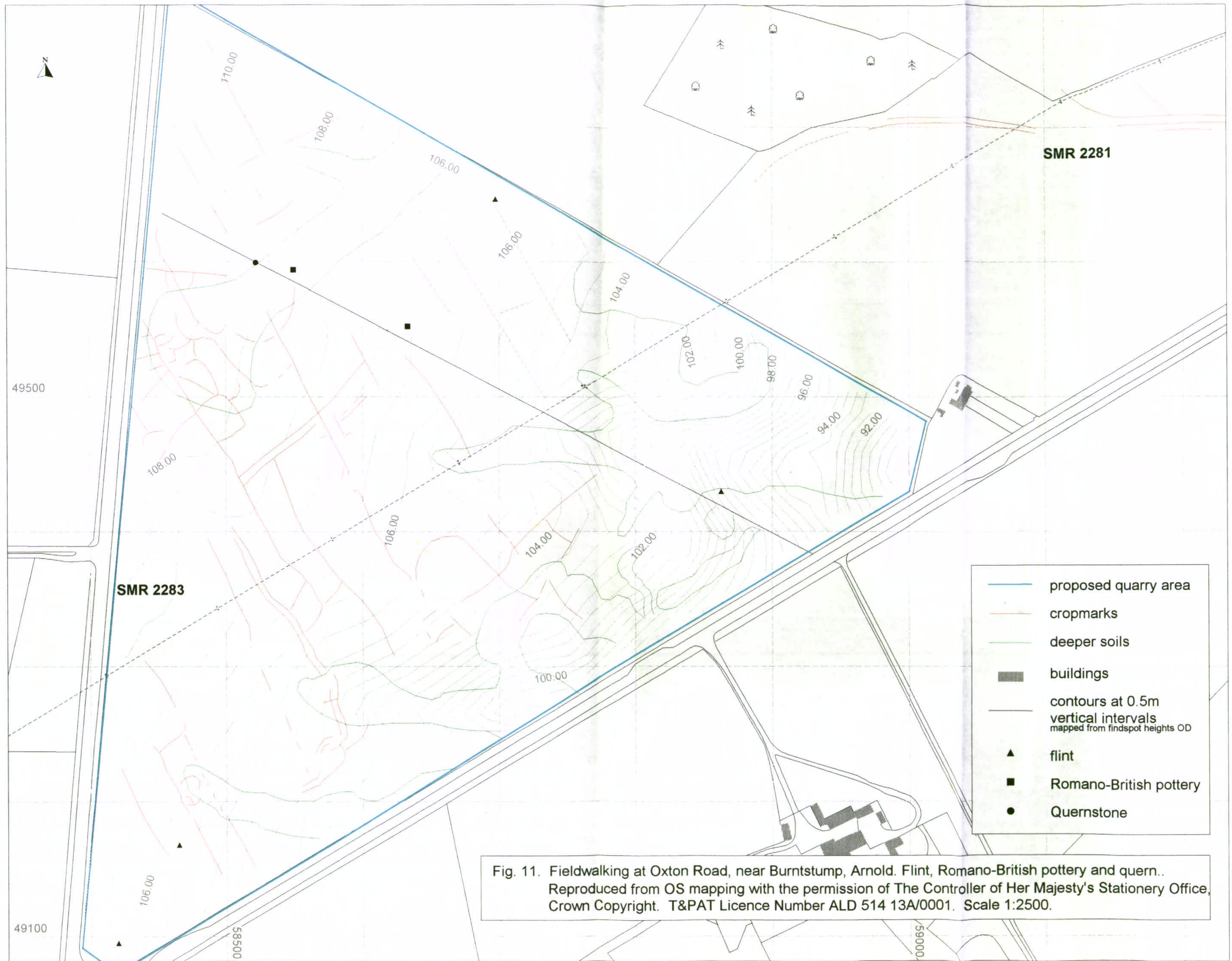


Fig. 11. Fieldwalking at Oxtan Road, near Burntstump, Arnold. Flint, Romano-British pottery and quern..
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Plate 1. North-west facing section of field-system ditch 005, Trench 01.



Plate 2. North-east facing section of enclosure ditch 004, Trench 03, showing fire-cracked pebbles scattered over the exposed surface.



Plate 3. 002 cut 1, Trench 03, showing the apparent post-pipe, visible as a sandier fill in section.



Plate 4. Stratigraphic sequence of palaeosol and colluvium above the Pebble Beds, at the southern end of the section, Trench 05.

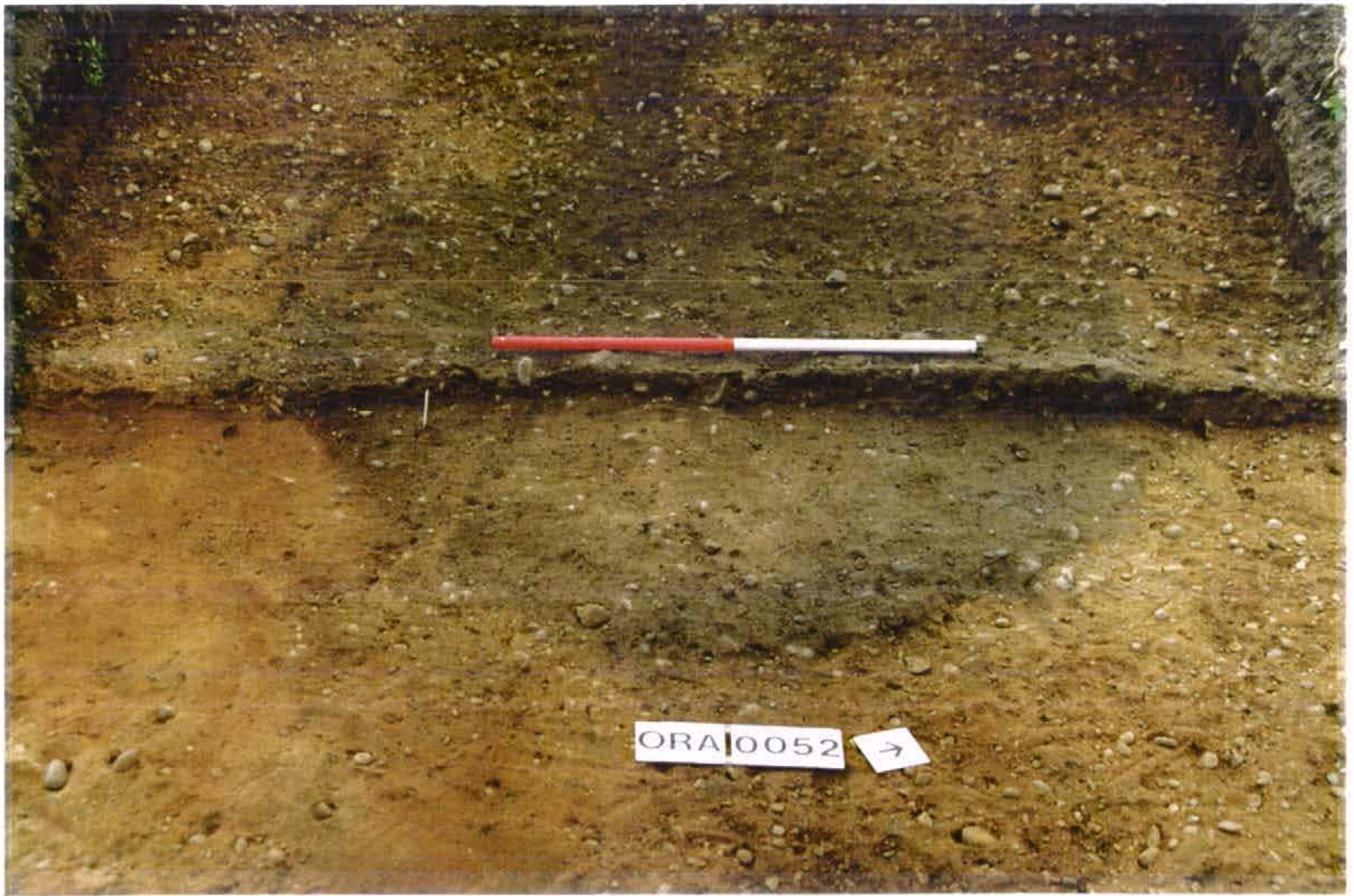


Plate 5. Burnt feature 052, Trench 07, fully exposed in plan, showing the thin halo of heat-reddened sand, indicative of *in situ* burning.



Plate 6. South-east facing section of field-system ditch 049, Trench 09.