



Low Plains Quarry, Lazonby, Cumbria

Archaeological Watching Brief



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Prepared by: Mark Bagwell
Position: Project Officer
Date: November 2005

Checked by: Jamie Quartermaine Signed.....
Position: Project Manager
Date: November 2005

Approved by: Alan Lupton Signed.....
Position: Operations Manager
Date: November 2005

Receiving Museum Penrith Museum
Museum Accession No

Oxford Archaeology North

Storey Institute
Meeting House Lane
Lancaster
LA1 1TF
t: (0044) 01524 848666
f: (0044) 01524 848606

w: www.oxfordarch.co.uk
e: info@oxfordarch.co.uk

© Oxford Archaeological Unit Ltd 2004

Janus House
Osney Mead
Oxford
OX2 0EA
t: (0044) 01865 263800
f: (0044) 01865 793496

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SUMMARY

Oxford Archaeology North was commissioned by Tarmac Northern Ltd to archaeologically supervise the removal of a soil bund and associated top-soil strip at their quarry at Low Plains, Lazonby, Cumbria (NGR: NY 4997 4166). The work took place in July 2005, prior to the extension of the quarry. This was the third phase of archaeological fieldwork at the quarry and previously a significant group of four Bronze Age cremations in 2004 had been discovered (OA North 2005); this was located less than 5m to the east of the site. The potential for further Bronze Age cremations within the quarry extension was, therefore, considered high.

The site lies within an area of known prehistoric sites, particularly on the nearby Lazonby Fell, where Neolithic, Bronze Age and Iron Age sites are located. The programme of works was designed to locate any subsurface features, specifically further evidence of Bronze Age cremation activity.

Following acceptance of a project design produced by OA North in accordance with a verbal brief by Cumbria County Council, an area measuring 1000m² was stripped under archaeological supervision. No features of any archaeological significance were revealed during the programme of works, although one flint was recovered from the surface of the natural subsoil.

On the basis of these results the topsoil strip for the quarry extension was able to proceed without further archaeological works. However, it is recommended that if there are further quarry works in the area of the present site then these should be subject to additional archaeological investigation.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) wish to thank Alan Scally of Tarmac Northern Ltd for commissioning the work, and also Jeremy Parsons, Cumbria County Council Historic Environment Service, for providing guidance during the work.

The fieldwork was conducted by Mark Bagwell and Dave McNicol. Illustrations were created by Emma Carter, and the worked flint was assessed by Christine Howard-Davis. This report was compiled by Mark Bagwell and was edited by Jamie Quartermaine and Alan Lupton. The project was managed by Jamie Quartermaine.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Oxford Archaeology North (OA North) were invited by Tarmac Ltd to undertake an archaeological watching brief during the removal of a large soil bund covering an area of approximately 1000m² at Low Plains Quarry, Lazonby, Cumbria (Fig 1).
- 1.1.2 The work, in advance of proposed sand and gravel extraction, took the form of the supervised removal of the lower part of the bund followed by a topsoil strip of the area. The site was subsequently hand-cleaned followed by excavation and recording of archaeological features. This phase of work follows on from, and was informed by, an archaeological excavation in May 2004 (OA North 2005), which was located immediately adjacent to the western limits of the soil bund, and revealed a group of cremation burials dated to the Bronze Age.
- 1.1.3 The watching brief was undertaken in accordance with a project design produced by OA North in accordance with a verbal brief by the Assistant Archaeologist for Cumbria County Council (CCCAS).

1.2 SITE LOCATION AND GEOLOGY

- 1.2.1 Low Plains Quarry (centred NY 4997 4166) lies at the base of the south-facing slopes of Blaze Fell, some 10km north of Penrith (Fig 1). The site is on low-lying ground between two rivers, c2.5km east of the River Petteril and c3km west of the River Eden. Historically, the area was in Cumberland but, since 1974, has lain within the county of Cumbria. The place name 'Low Plains' is applied to two separate farmsteads in the area, one at NY 4960 4170 and the other at NY 5030 4150.
- 1.2.2 The site lies in an area of Penrith and Brockram (New Red) Sandstone (Doubleday 1901, 8-9; Higham 1986, 6), but locally the drift geology is sand and gravel. The drift geology was overlain by well-drained loamy soils, and '*enjoys something of a rain-shadow status*' (Higham 1986, 8), which makes it attractive to arable cultivation. The site is within the Eden Valley, an area characterised by a mixture of undulating mixed farmland, and sandstone hills with woodland and lowland heath vegetation (Countryside Commission 1998, 38). Currently, the land is principally used for arable (barley) with pasture on the steeper slopes to the north-west of Low Plains Farm. Woodland has been planted along the edge of Blackrack Beck, which runs to the west of the current area of investigation.

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 **Prehistory:** the fertile Eden Valley catchment area, and nearby Lazonby Fell, attracted very early settlement, not least because the valley provides the most accessible north/south communication route through the north-west of Britain. Higham (1986) identified the Eden Valley as one of the 'core areas' in which

groupings of Neolithic settlement first appeared in the north of England. Lazonby Fell, which lies about 2km south-east of the site, is an area of unploughed heathland which has allowed good survival of Neolithic and Bronze Age monuments, including cairns, and there have been antiquarian discoveries of artefacts, such as vessels, flint arrowheads and grooved or sculptured stones, in particularly dense concentrations (Lambert 1996, 16). Jefferson was describing such prehistoric remains when he said that '*Some urns were found on the fell, about sixty years since, which contained bones and ashes...there were then several cairns on the commons*' (Jefferson 1840, 462).

- 1.3.2 Remnant Iron Age field systems, trackways and other settlement remains suggest that, in later prehistory, small-scale cultivation and livestock management took place in increasingly centralised communities. One settlement, at Lazonby Fell Plantation, is known from this period and lies about 1km south-east of the present site at around NY 5003 4042. Excavation yielded evidence for contemporary trackways and field boundaries (LUAU 1994, 53) and the site was described as '*a small, circular or kidney-shaped enclosure with stone walls, and a large hut with stone walls, located on a rise and reminiscent of a small hillfort*'.
- 1.3.3 **Roman Period:** the site lies close to elements of the Roman military infrastructure, including the Roman road between Brougham and Carlisle forts, now the line of the A6 road. This was built in the first century (Margary 1957) and may have had an impact on and around the study area, immediately to its east. Temporary marching camps, mostly likely to date to AD72/73 when the Roman Governor Quintus Petilius Cerialis waged a campaign against the dissident Brigantian leader Venutius, were constructed close to the road, for example at Petteril Green, c1km west of the study area and Plumpton Head (also known as Old Penrith, and to the Romans as *Voreda* – Austen 1991) c3.5km to the south (Lambert 1996, 15). Austen (1991) has argued that the permanent fort at Old Penrith may have been established slightly later, cAD 90, after the successful campaign against the *Caledones*, culminating in the victory at Mons Graupius (AD 83). There is a likelihood that settlement sites of the period also exist in its vicinity (Lambert 1996, 15).
- 1.3.4 **Early Medieval Period:** the archaeological evidence for the post-Roman centuries in the North West is sparse, particularly compared with that from many other parts of England. There is no documented early medieval activity within the vicinity of the study area; however, there are numerous settlements in the Eden Valley, whose names have Anglian origins (Rollinson 1996, 35). The place-name 'Elkrington', seen in field names in the vicinity of the site, includes elements often seen in place names deriving from Old English, but this is not a reliable indication of settlement. The important group of six early tenth century Viking furnished burials from Cumwhitton lies within the Eden Valley c6km to the north of Lazonby (OA North, forthcoming) and a single Viking burial furnished with spurs, bridle fittings, spears, a shield, an axe, a ritually bent sword, and bone combs is also known from beneath a cairn at Hesketh-in-the-Forest, just to the west of Lazonby (Edwards 1992; Higham 1986). In addition there is an important group of hogback stones from St Andrews Church, and two early medieval settlement sites have been recently excavated near Brougham. There was evidence for timber buildings, probably

predating AD 800, found at Fremington (Oliver *et al* 1996, 127-169), Whinell Forest (Heawood and Howard-Davis 2002) and at Shap (*ibid*). Artefactual evidence from these sites has been limited, as is often the case in this period, but has included loom weights (from Fremington and Shap) and pottery (from Fremington).

- 1.3.5 Extensive Scandinavian influence can also be seen in many of the place names of the surrounding area, with characteristic Scandinavian suffixes such as *-by* (Lazonby), meaning village or settlement; *-thwaite* (Galthwaite), meaning a clearing, meadow or paddock; and *-thorpe* (Melkinthorpe), meaning a secondary settlement or hamlet (Mills 1998).
- 1.3.6 **Medieval Period:** there is no specific evidence for occupation or activity within the study area during the medieval period; however, there is a reference in an antiquarian report to '*a place called Castle Rigg the ruins of a building appear, moated round*' (Hutchinson 1794, 289). This corresponds to the nearby Castlerigg Castle to the east of the site, but there are no longer any extant medieval remains at the castle site (Perriam and Robinson 1998, 210).
- 1.3.7 The site is believed to have lain within the extensive estates of the Dacre family (Dilley 1972, 264) and the parish of Lazonby, an area of rural and agricultural character throughout the Middle Ages. By the late eighteenth century, the parish was home to '*about 115 families, four whereof are presbyterians*' according to Nicholson and Burn (1777, 416).
- 1.3.8 **Post-Medieval Period:** at the beginning of the nineteenth century, changes in land tenure and farming practice may have been partly responsible for a brief and rapid spate of population growth in the area. An Act of Parliament enclosed the local commons in 1803; the population of Lazonby township at that time was around 320. In 1811 it was 384, but by 1821 had risen steeply to 533 (Whellan 1860, 575); thereafter it grew more slowly. There is no record of how many of these people lived in the study area, but it is possible that the two Low Plains farms were established on newly enclosed ground in the early nineteenth century, before the Ordnance Survey first edition map (1845).
- 1.3.9 The economy of the area reflected that of the parish at large, whose inhabitants were '*engaged in agricultural pursuits, and in quarrying, large quantities of red sandstone, etc, being sent from this parish*' (Whellan 1860, 575).
- 1.3.10 A comparison between modern mapping and the Ordnance Survey first edition map (1845) shows that the area itself has remained almost entirely unchanged since the mid nineteenth century. With the exception of small stone quarries, the area has remained rural and agricultural in character throughout the twentieth century, until its recent appropriation for quarrying on a considerably larger scale. The current quarrying concession covers an area of roughly 7000m² of which 3385m² was stripped of topsoil under archaeological supervision in 2003 (OA North 2003).

1.4 PREVIOUS ARCHAEOLOGICAL WORK

- 1.4.1 An extended programme of investigation has been undertaken at the Low Plains site since 2000 (Fig 2), the first stage of which was an archaeological desk-based assessment (LUAU 2000), prior to the current quarry extension,

which contained both a desk-based study and a site inspection. A geophysical survey was undertaken by GSB Prospection (2002), and archaeological investigations were undertaken by OA North in 2003 (OA North 2003) and 2004 (OA North 2005).

- 1.4.2 The desk-based assessment revealed a number of sites within the area of the quarry extension and within the vicinity of the study area, which comprised undated cropmarks that are likely to relate to disused field-systems (LUAU 2000). It also identified a ring cropmark (Site **16**) as having the most archaeological potential within the development area (Fig 2). The results of a geophysical study by GSB Prospection over the cropmark in 2002, were ambiguous, and could neither confirm nor refute the presence of an archaeological feature (GSB 2002). The cropmark was subject to an archaeological field investigation in 2003 by OA North, during which a total area of 3385m² was stripped by machine to the natural subsoil (Fig 2). Careful manual excavation could not locate any physical trace of the feature itself, suggesting that it had been solely within the topsoil and therefore of relatively recent date. The only find, from the topsoil, comprised a single flint artefact, possibly an end-scraper (OA North 2003).
- 1.4.3 A second phase of archaeological fieldwork, located immediately to the north of the 2003 investigation, was carried out in May 2004 (OA North 2005; Fig 2) at the request of the quarry owners, Tarmac Northern Ltd. This was required to investigate three features revealed during topsoil stripping operations and a fourth was revealed during the archaeological investigation; all contained cremated bone. Within one feature the bone was contained within an urn of Bronze Age date and one of the other features also produced pottery fragments of the same period.
- 1.4.4 The area of investigation covered by the present report was contiguous with the eastern edge of the 2004 excavation area (Fig 2), and the cremations were located less than 5m to the west. Due to their close proximity, the potential for further Bronze Age cremations was considered high, prompting the latest phase of fieldwork.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by OA North in June 2005 (*Appendix 1*) in accordance with a verbal brief by CCCAS. It provided for an archaeological watching brief during the removal of the lowest 0.5m of a large soil bund, followed by the supervised strip of topsoil to the level of the natural subsoil or first archaeological horizons. A contingency was provided for an excavation in the event of the identification of archaeological remains. The fieldwork followed the method statement detailed in the project design (*Appendix 1*) and complied with current legislation and accepted best practice, including the Code of Conduct and the relevant professional standards of the Institute of Field Archaeologists (IFA). Following acceptance of the project design, OA North undertook the watching brief in July 2004.

2.2 THE WATCHING BRIEF

2.2.1 The investigation area, totalling c1000m², comprised a roughly square area measuring approximately 37m north/south by 31m east/west (Figs 2 and 3; Plate 1). The western site boundary was contiguous with the 2004 excavation area and the southern site boundary ran along the northern edge of the area stripped in 2003 (Fig 2). Initially, the volume of the soil bund was mechanically reduced to a height of 0.5m without an archaeological presence. Close archaeological supervision of the remainder was initiated followed by the supervised removal of topsoil and subsoil deposits to the level of the natural subsoil or to the level at which the first archaeological horizons were encountered. All excavation was undertaken by a mechanical excavator with a 1.8m toothless bucket. Thereafter, the investigation area was hand cleaned by a team of field archaeologists, followed by the manual excavation of potential archaeological deposits and features. A list of contexts is presented in *Appendix 2*.

2.2.2 Recording comprised a full description and preliminary classification of features, horizons or structures revealed, on OA North *pro-forma* sheets. The features were surveyed by total station and the survey control I was tied into the National Grid. A photographic record in both colour slide and monochrome formats was also compiled.

2.3 THE ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*) and with current IFA and English Heritage guidelines (English Heritage 1991). The archive will be deposited in the Penrith Museum, with a copy of the archive being deposited in the Cumbria Record Office (Carlisle).

3. RESULTS

3.1 INTRODUCTION

3.1.1 The results of the watching briefs are provided below. A full context list is presented in *Appendix 2*. The location of each of the features in plan is shown in Figure 3.

3.2 WATCHING BRIEF

3.2.1 An area measuring 37m north/south by a maximum of 31m east/west was stripped of topsoil and subsoil to reveal the underlying natural glacial till at a depth of 0.50m below the ground surface, which corresponded with the level at which the Bronze Age cremations were found within the 2004 excavation (OA North 2005) (Plate 1). The entire investigation area was then manually cleaned as recommended in the Project Design (*Appendix 2*).

3.2.2 Natural subsoil, **22**, comprising orange fine sand with occasional small-medium sub-angular and sub-rounded stones, was cut by a shallow feature, **26**, situated along the eastern edge of the investigation area. It was subcircular, measuring 2.15m east/west by 1.6m north/south, with a depth of 0.35m, and was filled with a dark-grey-brown silty sand, **25**. The feature produced no evidence of cremation activity or datable finds. However, its undulating base and irregular sides suggested that it might have been a natural feature, and possibly a tree throw (Plate 2).

3.2.3 The natural subsoil was cut by four, regularly spaced, north/south aligned linear ploughmarks, **24**, comprising V-shaped cuts with depths of between 50mm and 120mm by 150mm wide. They were traced for a maximum of 20m across the site. Their alignments were parallel to the line of the present field boundary to the east of the investigation area, suggesting they were contemporary and, therefore, may represent ploughing of a relatively recent date.

3.2.4 The natural subsoil was sealed by a 0.20m thick subsoil deposit, **21**, comprising orange-brown fine silty sand, probably formed by ploughing activity during the post-medieval period. Topsoil, **20**, comprising a very dark brown-grey, fine silty-sand deposit between 0.20m and 0.30m in depth, sealed the subsoil.

3.3 THE FINDS

3.3.1 A single mid-brown 'toffee coloured' flint, with some cortex present, was recovered from the top of the natural subsoil. It was a retouched, flint flake, reminiscent of an end blade scrapper, with re-working at the proximal end to remove the bulb of percussion. The form of the flint is not inherently datable, but could potentially be Neolithic in origin.

4. CONCLUSIONS

4.1 DISCUSSION

- 4.1.1 The feature revealed in the west of the investigation area produced no dating evidence or evidence for cremation activity. Its morphology, however, was suggestive of a tree throw (Plate 2). Several linear features in the centre of the site were interpreted as relatively recent ploughmarks based on their orientation with respect to the surrounding modern day field system.
- 4.1.2 The archaeological fieldwork revealed that the Bronze Age cremation activity located to the west (OA North 2005) did not continue eastwards into the present investigation area. Neither were there any residual traces of cremated bone within natural subsoil or subsoil deposits to suggest cremations in the vicinity that may have been disturbed by later ploughing. However, a flint scraper, typologically dated to the Neolithic period, was recovered from the top of the natural subsoil, which, together with a similar residual find from soil stripping in 2003 (OA North 2003), suggests wider prehistoric activity within the surrounding local landscape.
- 4.1.3 Substantial areas of the site have been stripped under archaeological supervision (OA North 2003 and 2005). While this has revealed four Bronze Age cremations within a distinct cluster (OA North 2005), the implications are that now the full extent of this particular cemetery group has been established. However, this does not preclude the potential for further burial groups within areas subject to future sand and gravel extraction at Low Plains quarry.
- 4.1.4 **Impact:** while it is evident that the current quarry extension will have an adverse effect on any surviving archaeological remains within the area of the quarry extension, no significant archaeological resource was identified or confirmed during the present watching brief. The presence of the flint does, however, demonstrate prehistoric activity within the vicinity.

4.2 RECOMMENDATIONS

- 4.2.1 Given the absence of any significant archaeological remains within the extent of the study area, no further archaeological works were required in the immediate vicinity of this soil bund. However, the presence of the cremations and the cropmarks identified by the archaeological assessment (LUAU 2000), demonstrates that the general area has considerable archaeological potential, particularly for the prehistoric periods. Therefore it is recommended that any additional episodes of quarry extension in the environs of the present site should involve a programme of archaeological watching briefs or evaluation.

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APPENDIX 1
PROJECT DESIGN

June 2005

Oxford
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LOW PLAINS QUARRY, LAZONBY

CUMBRIA

ARCHAEOLOGICAL WATCHING BRIEF

Proposals

The following project design is offered in response to a request from Tarmac Quarry Products Ltd for an archaeological watching brief of the Low Plains Quarry site.

1. INTRODUCTION

1.1 CONTRACT BACKGROUND

1.1.1 Oxford Archaeology North (OA North) has been invited by Tarmac Ltd to submit a project design and costs for an archaeological watching brief during the removal of a large soil bund at Low Plains Quarry, Lazonby, Cumbria, in advance of a proposed sand and gravel extraction. This follows on from and is informed by an archaeological excavation which recorded a series of Bronze Age cremation burials in May 2004 (OA North 2005). The soil bund is immediately adjacent to the cremation site and there is the potential that there are further burials beneath the bund. The project design is in accordance with a verbal brief by the Assistant Archaeologist for Cumbria County Council.

1.2 ARCHAEOLOGICAL BACKGROUND

1.2.1 The group of cremations were identified in the course of the bulk soil strip of the area, when a mechanical excavator cut through the top of a cremation urn. The area was then subject to an excavation and three further cremations were revealed. Cremation **1** comprised an inurned burial, whilst Cremation **2** contained both broken pottery and cremated remains. Cremation **3** was aceramic, but did contain the largest amount of bone, whilst Cremation **4** contained only very small amounts of bone and charcoal. Based upon the typology of the pottery from Cremations **1** and **2**, the cremations would appear to date to the Bronze Age, but closer dating, particularly of the unurned features, is not possible without radiocarbon assay. Whether these features represent the sole survivors of a more extensive cremation cemetery is uncertain, given that the area to the west of the cremations was bulk stripped prior to the present investigation and the area to the east presently has a large soil bund on top. Cropmarks attest to the fact that the area has been ploughed in the past, as perhaps do abrasions noted on the upper-body sherds of cremation urn *12*.

1.2.2 In addition there have been other archaeological features identified within the area, although their relationship to the cremations is not known. A small crop mark (Site 16) to the south of the site was seemingly a small enclosure and was very clear even from surface observation and comprised a series of concentric circles indicative of a small enclosure, which was no more than 12m across. However, excavation of the site did not reveal any features and there was the possibility that the feature was entirely within the top soil and hence was removed during the initial top soil strip.

1.3 OXFORD ARCHAEOLOGY NORTH

1.3.1 OA North has considerable experience of the evaluation and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 18 years. Evaluations and assessments have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North undertook the initial assessment of the site and OA North has also undertaken the definitive archaeological study of the Shell pipeline, which examined a one kilometre wide corridor, which included part of the Low Plains study area. OA North has also undertaken numerous assessments, landscape survey and evaluations on similar quarry or opencast extraction sites such as the nearby gravel extraction site at Kirkby Thore. OA North has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. OA North and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct.

2. METHODS STATEMENT

2.1 The following programme has been designed in accordance with a verbal brief by Jeremy Parsons, Assistant Archaeologist for Cumbria County Council to provide an archaeological watching brief during the removal of a soil bund at the Low Plains site. The required stages to achieve these ends are as follows:

2.2 WATCHING BRIEF

- 2.2.1 Initially the volume of the soil bund will be mechanically reduced down to a height of 0.5m without archaeological supervision. At this point a member of OA North staff will initiate a watching brief and further mechanical excavation will be under close archaeological supervision. The soil will be carefully excavated with a toothless bucket down to the level of the highest archaeological horizon, and will be the same horizon as that which the cremations from the adjacent site (OP North 2005) were identified. Thereafter the ground will be cleaned by hand, using hoes, shovels or trowels as appropriate. If any features or deposits of archaeological potential are identified at this stage, they will be investigated manually in order to determine, where possible, their extent, nature date and significance.

2.3 CONTINGENCY EXCAVATION OF ARCHAEOLOGICAL FEATURES

- 2.3.1 The following scheme of investigation is conditional, and in the event of significant archaeological features or deposits being encountered on the site during the watching brief. Such features or deposits will need to be subject to a contingency excavation. It is assumed that OA North will have the authority to stop groundworks for a period that is sufficient to inform the Client and CCCAS, agree a variation in costing, and to call in additional archaeological support to implement the necessary programme of archaeological work. The duration and the cost of this element is totally reliant on the number and nature of the features identified during the topsoil strip and groundworks, but, should extensive work be necessary, sufficient archaeological support will be provided to meet any development deadlines. In normal circumstances, field recording will include a continual process of analysis, evaluation, and interpretation of the data, in order to both maximise efficiency and to establish the necessity for any further more detailed recording that may prove essential.
- 2.3.2 Excavation will be by manual techniques. Pits and postholes will be subject to a 50% by volume controlled stratigraphic excavation, with the remainder of the feature, should it prove necessary to be removed in entirety, excavated quickly keeping only that dating evidence which is securely derived from the feature in question.
- 2.3.3 Linear cut features, such as ditches and gullies, will be subject to up to a maximum of 20% by volume controlled stratigraphic excavation, with the excavation concentrating on any terminals and intersections with other features which would provide important stratigraphic information. As with pits and postholes, should it prove necessary to remove the remainder of the feature to expose underlying features and/or deposits, it will be excavated quickly keeping only that dating evidence which is securely derived from the feature in question. Extensive linear deposits or homogeneous spreads of material will be sample excavated by hand to a maximum of 10-20% by volume (the size of the sample to be agreed following consultation with the Assistant Archaeologist).
- 2.3.4 Structural remains will be excavated manually to define their extent, nature, form and, where possible, date. Any hearths and/or internal features will be 100% sample excavated to provide information on their date and function, and the extent of any associated floor surfaces will be determined.
- 2.3.5 It should be noted that no archaeological deposits will be entirely removed from the site unless their excavation is necessary to reveal other features and/or deposits. If the excavation is to proceed below a depth of 1.2m then the sides will be stepped in. Cut features identified against the edges of the excavation will not be excavated below a safe working limit of 1.2m unless it is confirmed by CCCAS that they are of exceptional importance.
- 2.3.6 In the event of the discovery of human remains, these will be covered and left *in situ* and CCCAS will immediately be informed. A Home Office Licence will then be applied for, as required by the *Burials Act 1857*, and removal of the burials will wait until the licence is granted.
- 2.3.7 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by the Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.

- 2.3.8 Results of all field investigations will be recorded on *pro-forma* context sheets. The site archive will include both a photographic record and accurate large-scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and, following on-site processing, will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.
- 2.3.9 Environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from suitable deposits (ie the deposits are reasonably well-dated and are from contexts the derivation of which can be understood with a degree of confidence). Samples will also be collected for technological, pedological and chronological analysis as appropriate. If necessary, access to conservation advice and facilities can be made available. OA North maintains close relationships with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs artefact and palaeoecology specialists with considerable expertise in the investigation, excavation and finds management of sites of all periods and types, who are readily available for consultation. The treatment and assessment of such samples is included as a contingency and will only be undertaken where necessary, following consultation with CCCAS and with the Client.
- 2.3.10 The position of the excavation will be recorded using a total station. The information will be tied in to OD.

2.4 FIELDWORK REPORT

- 2.4.1 **Archive:** the results of Stages 2.1-2.3 above will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of archaeological projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly quantified, ordered, and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the Institute of Field Archaeologists in that organisation's Code of Conduct. This archive will be provided in the English Heritage Centre for Archaeology format, as a printed document, and a synthesis (the evaluation report and index of the archive) will be submitted to the relevant Sites and Monuments Record. The archive will be deposited with the County SMR within 6 months of the end of the fieldwork.
- 2.4.2 The archive will be formed of all the primary documentation, including the following:
- Context Records
 - Finds Records
 - Sample Records
 - Field / Inked Drawings and digital copies of CAD data
 - Photographic negatives, prints and colour transparencies
 - Written report
 - Administrative records
 - Conservation records.
- 2.4.3 **Report:** two copies of a written synthetic report will be submitted to the Client and a further copy to the SMR. The report will present, summarise, and interpret the results of the programme detailed in Stages 3.1-3.3 above, and will include an index of archaeological features identified in the course of the project, with an assessment of the sites development. It will incorporate appropriate illustrations, including a location map, copies of the site plans and section drawings, and the location plan of groundworks all reduced to an appropriate scale. The report will consist of an acknowledgements statement, list of contents, executive summary, introduction summarising the brief and project design and any agreed departures from them, methodology, interpretative account of the archaeological stratigraphy and details of the features and stratigraphy recorded, table of contexts, a complete bibliography of sources from which data has been derived, and a list of further sources identified during

the programme of work. If required the report will make recommendations for further mitigative recording. The report will be in the same basic format as this project design.

2.5 OTHER MATTERS

- 2.5.1 **Health and Safety:** full regard will, of course, be given to all constraints (services etc) during the course of the fieldwork, as well as to all Health and Safety considerations. OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1991) and risk assessments are implemented for all projects. It is assumed that the Client will provide any available information regarding services within the study area, if available.
- 2.5.2 **Reinstatement and Security:** it is presumed that the Client will have responsibility for site security and for fencing-off any deep groundworks to prevent any accidents occurring to OA North/Client staff.
- 2.5.3 **Project Monitoring:** OA North will consult with the Client regarding access to land within the study area. This consultation will include, if required, the attendance of the Cumbria County Archaeologist. Any proposed changes to the project brief or the project design will be agreed with the Assistant Archaeologist, Cumbria County Council, in conjunction with the client.

3. WORK PROGRAMME

- 3.1 The work can be undertaken within eight days and OA North can execute projects at very short notice once an agreement has been signed with the client.
- 3.2 The project will be under the management of **Jamie Quartermaine, BA, Surv Dip, MIFA** (Unit Project Manager) to whom all correspondence should be addressed. All Unit staff are experienced, qualified archaeologists, each with several years professional expertise.

APPENDIX 2: CONTEXT LIST

Context Number	Form	Description
20	Deposit	Topsoil
21	Deposit	Subsoil/ploughsoil
22	Deposit	Natural subsoil
23	Fill	Fill of 24
24	Group of four linear cuts	Ploughmarks
25	Fill	Fill of 26
26	Cut	Probable tree-throw

ILLUSTRATIONS

FIGURES

Figure 1: Location map

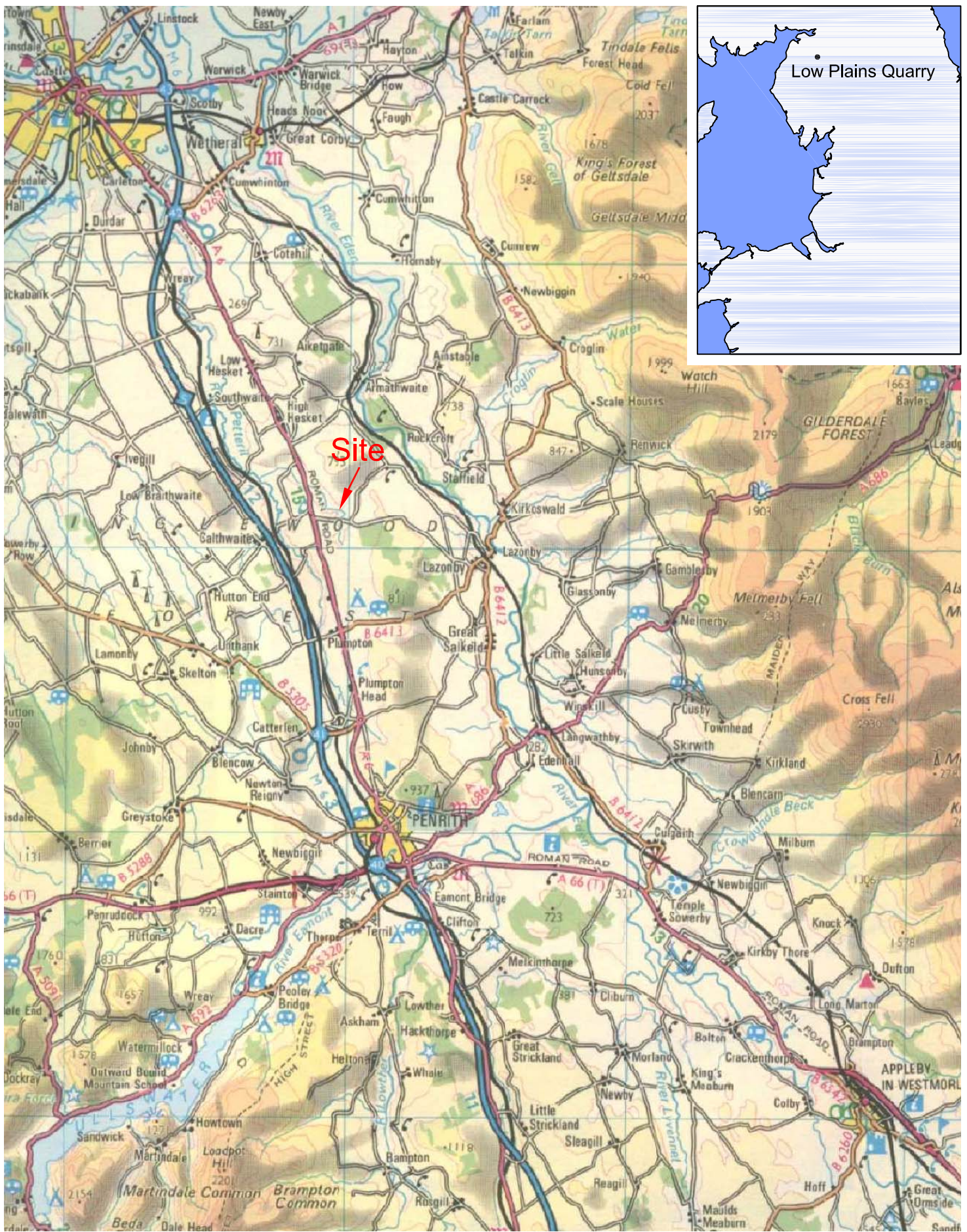
Figure 2: Site location plan and areas of previous topsoil stripping in 2003 and 2004

Figure 3: Detailed site plan

PLATES

Plate 1: General view of area of investigation, following the removal of the soil bund

Plate 2: Pit **26**, interpreted as a possible tree throw

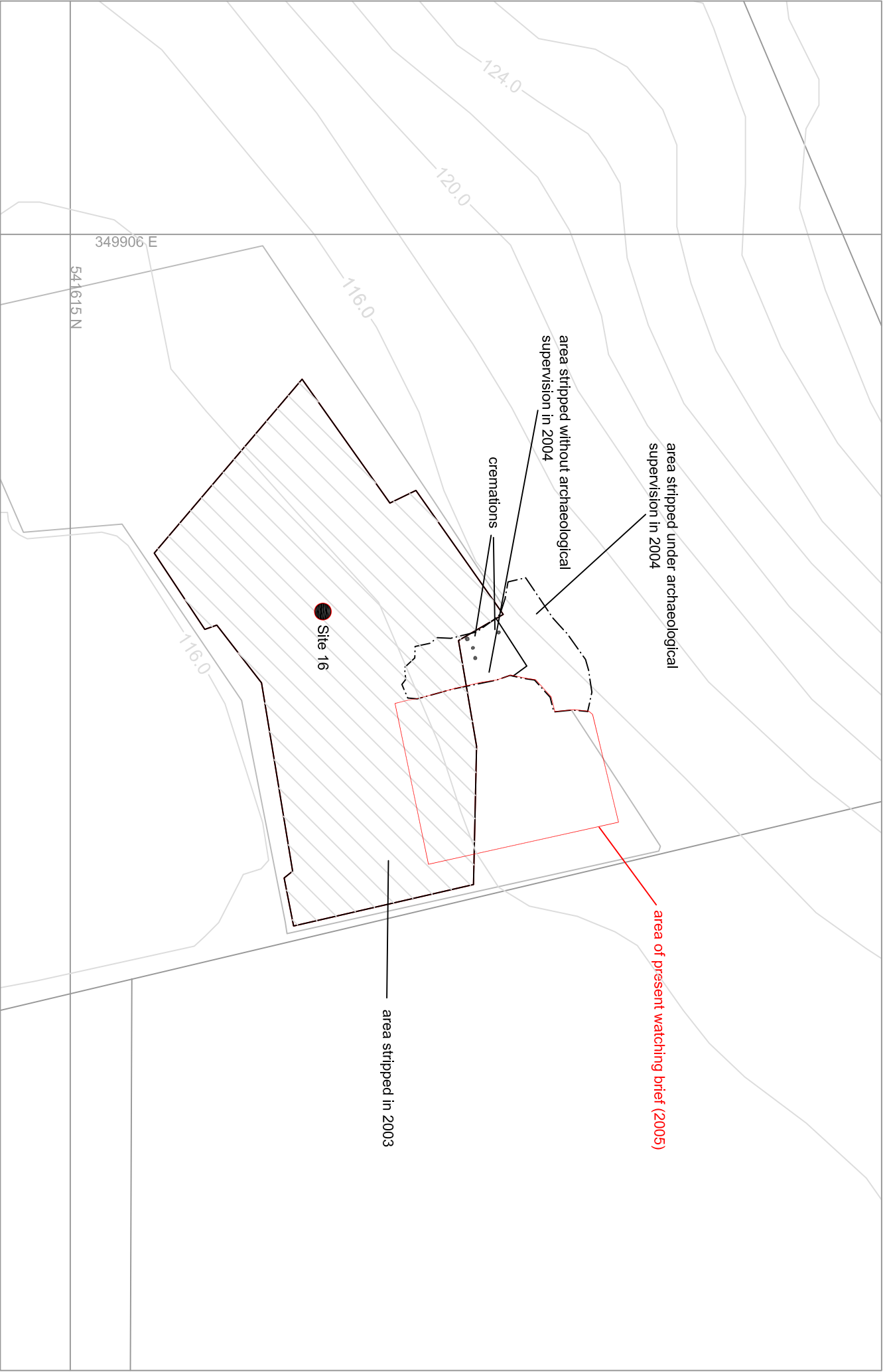


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0 2000 metres

Figure 1: Site Location Map



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Figure 2: Site location plan and areas of previous topsoil stripping in 2003 and 2004





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Figure 3: Detailed Site Plan

0 10m



Plate 1: General view of area of investigation, following the removal of the soil bund

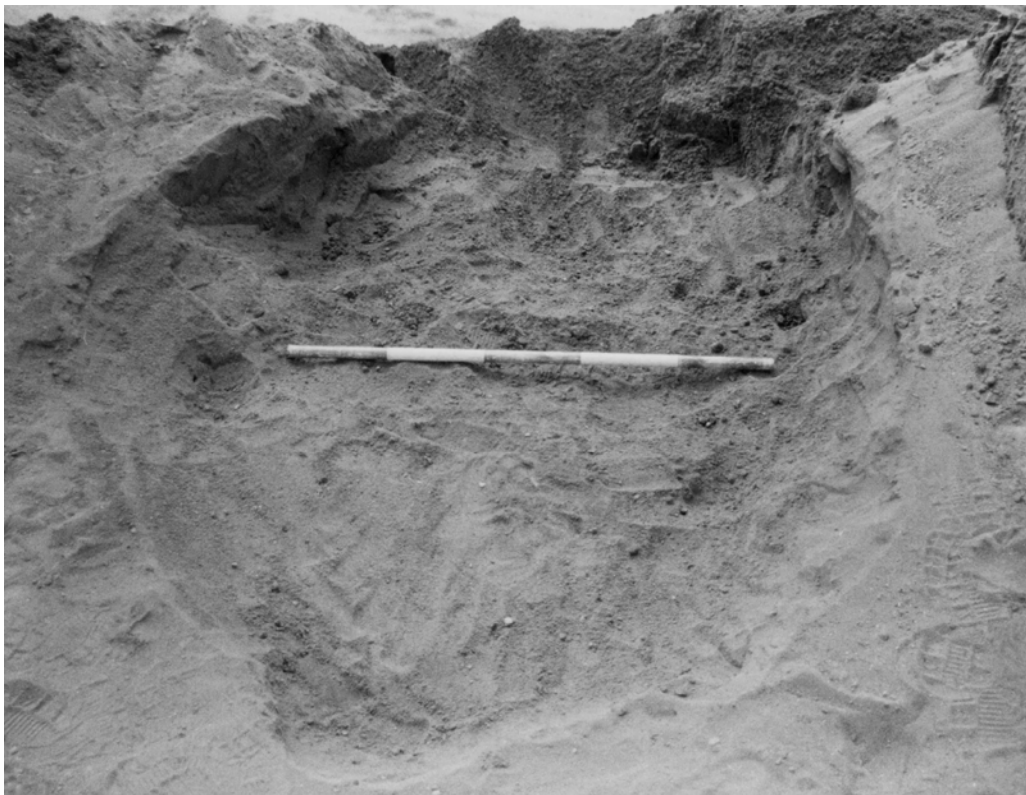


Plate 2: Pit 26, interpreted as a possible tree throw