

LOW PLAINS QUARRY, LAZONBY, PENRITH, CUMBRIA



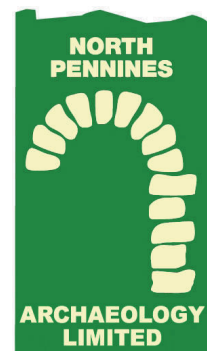
WATCHING BRIEF REPORT

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Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by North Pennines Archaeology Ltd on the preparation of reports.

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SUMMARY

In October 2009, North Pennines Archaeology Ltd were commissioned by Tarmac Ltd to undertake an archaeological watching brief on groundworks relating to the 1.8 hectare extension to the north of the current extraction face (Phase West 2) at Low Plains Quarry, Lazonby, Penrith (NGR: NY 4997 4166, Figure 2)

The works affected an area of known archaeological significance, as identified by a desk-based assessment (Lancaster University Archaeology Unit 2000) and an excavation to the south of the current proposed extraction area (Oxford Archaeology North 2007). These combined works identified the presence of possible prehistoric features and comprised the discovery of burnt mounds, linear features and prehistoric cremation pits. During works to the south of the current quarry face, it was observed that a possible Roman ditch continued uninterrupted into, and beyond, the proposed extraction area.

In June 2009 Tarmac Ltd commissioned North Pennines Archaeology Ltd, to undertake a Geophysical survey (Clark 2009). The results of this confirmed that potential archaeological remains did continue into the proposed extraction area, and would be adversely affected by the proposed works.

As a consequence of these findings, Tarmac Ltd requested that an archaeological watching brief be undertaken during the topsoil strip, in order to identify, excavate and record any features prior to gravel extraction commencing. The works were subject to an informal agreement between Tarmac Ltd and Cumbria County Council. As a result of this agreement, a Project Design for the works was submitted to, and approved by, Jeremy Parsons, Historic Environment Officer at Cumbria County Council (Town 2009)

The archaeological watching brief was undertaken over 14 days between the 5th and 16th October, 2009. The watching brief monitored the removal of topsoil down to a natural substrate, observing and recording any potential archaeological features that may exist within the extraction area.

Archaeological remains were observed, which were consistent with the findings of both the 2007 watching brief conducted to the south of the current works, and the 2009 geophysical survey. The remains comprised the continuation of a possible Roman ditch, which contained fragments of metal slag and possible kiln material, and five pits which were observed to have scorched stone inclusions; although these features contained no datable artefacts, they could potentially date to the prehistoric period. Finally, post-medieval features comprising a ditch and three tree boles were observed. The post-medieval ditch was also observed to be in alignment to a current field boundary, and therefore potentially represents a post-medieval field boundary at the site, although again, this feature contained no datable artefacts.

As this archaeological watching brief was conducted as part of a recommendation to observe groundworks in association with the extension to the north of the current extraction face, no further work within this phase of works is deemed necessary. However, given the high archaeological potential of the area, it is recommended that any future work be subject to a programme of archaeological investigation.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Jonathon Garbutt, Estates Manager for Cumbria, Dumfries and Galloway and Alan Scally, both at Tarmac Ltd, for commissioning the project, and for their assistance throughout the work. NPA Ltd would also like to thank Jeremy Parsons, Historic Environment Officer at Cumbria Country Council for all his help and assistance throughout the project.

North Pennines Archaeology Ltd would also like to extend their thanks to Alan Reay, Site Foreman, and Mike Thompson, Quarry Manager, and all grounds men and staff at Low Plains Quarry, for their help during this project.

The archaeological watching brief was undertaken by Michael McElligott and Helen Noakes. The report was written by Helen Noakes, who also produced the drawings. The project was managed by Matthew Town, Project Manager for NPA Ltd. The report was edited by Martin Railton, Project Manager for NPA Ltd.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In October 2009, North Pennines Archaeology were invited by Johnathon Garbutt, on behalf of Tarmac Ltd, to undertake an archaeological watching brief, in advance of a 1.8 hectare extension to the north of the existing quarry at Low Plains Quarry, Lazonby, Penrith (NGR:NY 4997 4166 Figure 1).
- 1.1.2 This scheme of works affected an area of known archaeological interest, as identified by a previous desk-based assessment and excavation conducted to the south of the site by Oxford Archaeology North (OA North 2007). This phase of works identified two possible burnt mounds and a number of pits and ditches which were interpreted as being of prehistoric origin.
- 1.1.3 Further archaeological works comprising a geophysical survey, conducted in June 2009 by North Pennines Archaeology Ltd (Clark 2009) concluded that there was a potential that prehistoric features, initially identified during the previous works and to the south, would continue into the current extraction area.
- 1.1.4 As a result of previous archaeological findings within the quarry, Tarmac Ltd requested that an archaeological watching brief be undertaken during the topsoil strip, in order to identify, excavate and record any features prior to gravel extraction commencing. The works were subject to an informal agreement between Tarmac Ltd and Cumbria County Council, and were also consistent with the specification set out within a Project Design (Town 2009) submitted to, and approved by, Jeremy Parsons, Historic Environment Officer, Cumbria County Council.
- 1.1.5 All groundworks associated with the extension to the north of the current quarry were excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines, and in line with the English Heritage, *Management of Research Projects in the Historic Environment* (MoRPHE 2006) and the Institute for Archaeologists (IfA 2008) and generally accepted best practice.
- 1.1.6 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by North Pennines Archaeology Ltd in response to a request by Jonathon Garbutt, Estates Manager for Cumbria, Dumfries and Galloway at Tarmac Ltd, for an archaeological watching brief of the study area. Following acceptance of the project design by Jeremy Parsons of Cumbria County Council, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 THE WATCHING BRIEF

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2008).

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
- to produce a photographic record of all contexts using colour digital, 35mm colour print and black and white formats, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful of dating purposes;

- to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).

2.2.3 An open area of approximately 1.8 hectares was stripped of soil (topsoil and subsoil), which was used for the current restoration of the area to the south of the proposed extraction. Archaeological monitoring and supervision of groundworks associated with the stripping commenced on Monday 5th October 2009. A summary of the findings of the watching brief is included within this report.

2.3 THE ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2007). The archive will be deposited within an appropriate repository, with copies of the report sent to the County Historic Environment Record at Cumbria County Council, available upon request. The archive can be accessed under the unique project identifier NPA 09, LPQ-A, CP 922/09

2.3.2 North Pennines Archaeology, and Cumbria County Council Historic Environment, support the **Online AccesS to the Index of Archaeological InvestigationS (OASIS)** project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project. The site has been given the unique identification number, northpen3-66151, as part of the OASIS Project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Low Plains Quarry lies approximately 0.5km to the south of Armathwaite, to the west of Lazonby, within the Eden Valley and situated to the east of the Pennines at NGR NY 4997 4166 (Figure 1).
- 3.1.2 The site lies at a height of approximately 130m AOD within an area of varied topography, mainly comprising of a steep hillside existing within the northwestern parts of the site. To the east, the ground sloped steeply downhill, before rising slightly to form a valley. The site is bounded to the south by the existing gravel extraction plant, Blackrack Beck to the west, and at the north and east by field boundaries (Figure 2).
- 3.1.3 The underlying geology comprised outcrops of weakened sandstones and mudstones of Permo-Triassic age, which at the last glaciations were overlaid by boulder clays and some sands and gravels, which over time formed drumlins (Countryside Commission 1998).

3.2 HISTORICAL CONTEXT

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 *Prehistoric:* the earliest evidence of activity comprises Neolithic, Bronze Age and Iron Age sites identified close to the quarry, including nearby Lazonby Fell. A number of spot finds, including evidence of flint arrowheads, tanged and barbed flints and polished stone axes dating from both the Neolithic and Bronze Age periods have been found in the areas surrounding the quarry from as early as 1875.
- 3.2.3 A possible Iron Age or Romano-British enclosure located on Blaze Fell (HER 728) is also located approximately 1km to the north of the proposed works at Low Plains Quarry. This sub-circular feature 78m in diameter has been subject to intensive ploughing and now exists as a 3m wide, 0.2m high earthwork.
- 3.2.4 Aerial photography of the area, conducted in 1993, show cropmarks of undated, but potentially prehistoric features, comprising curvilinear ditches and long linear features existing at distances of up to 215m, within areas surrounding the watching brief.

- 3.2.5 Prehistoric activity was also identified within the quarry, to the south of the proposed works, and comprised the discovery of four Bronze Age cremations during one phase of work, and two burnt mounds with associated pits and ditches during the last phase of works at the site.
- 3.2.6 *Roman:* the site lies within close proximity to the modern A6, which follows the line of the Roman road constructed to link Brougham and the forts of Verterae (now occupied by the ruins of Brough Castle) and Old Penrith (Voreda). These would have played a vital part in the distribution of goods and services in to the area, as well as establishing strongholds for the military occupation of the area.
- 3.2.7 Further highlighting this military presence, approximately 3.5km to the south-east of the site, at Salkeld Gate, lays the ruins of a probable fortlet, a small rectangular earthwork, measuring 48m by 50m and which is now a Scheduled Monument.
- 3.2.8 Excavations undertaken at Cross Hill Farm during 1976, 10km to the south of the site (Higham and Jones 1983) found evidence for a defended settlement which comprised two phases of occupation. The first, in the 2nd century AD was represented by the discovery of a roundhouse built from wattle and daub, with a stone lined floor inside. Occupation at the site continued into the 4th century at which point a rectangular building was constructed, which was associated with extensive metalworking practices, and possible kilns.
- 3.2.9 Within closer proximity to the quarry, three Roman tombstones were reported to exist in the churchyard at Lazonby, in 1688, and were believed to have been brought from the fort at Old Penrith. The exact location of these tombstones is however, now uncertain.

3.3 PREVIOUS WORK

- 3.3.1 Numerous excavations and investigations have occurred in the immediate area around Low Plains Quarry, including a desk-based assessment conducted by Lancaster University Archaeology Unit (LUAU 2000), which indicated that few archaeological sites were known within the close confines of the area proposed for the gravel extraction plant, and very little within the current proposal area itself.
- 3.3.2 In 2003 an area to the south-east of the current works was stripped under archaeological supervision (OA North 2007). This phase of works was required due to the presence of a known cropmark within the area, which had the potential to be of prehistoric date. However, no archaeological features were identified.

- 3.3.3 An archaeological excavation was conducted to the north of this site during 2004 due to the discovery of four Bronze Age cremation pits during quarrying. Further archaeological monitoring of the remaining 0.1 hectares provided no further archaeological remains however. (OA North 2007)
- 3.3.4 In 2007 an area of 4.1 hectares, and existing to the south of the current proposed extraction phase, was monitored under archaeological supervision (OA North 2007). During this phase of work, two burnt mounds, potentially prehistoric in date, and a number of pits and ditches, were observed. One of these pits, (Pit 6) contained the fragment of a possible lignite bangle. Linear features identified during this phase of works were also observed to continue into the northern areas of the site, into the current phase of works.
- 3.3.5 A geophysical survey was undertaken by North Pennines Archaeology Ltd (Clark 2009), north of all the previous works, and within the area included in the current works, to ascertain how far archaeological deposits continued into the current extraction phase. The survey revealed that several of the linear features, identified during the 2007 watching brief and which were highlighted as being possible prehistoric archaeological features, did indeed continue into the proposed extraction area, and potentially continued further to the north of this phase.

3.4 THE NORTH-WEST REGIONAL RESEARCH FRAMEWORK

- 3.4.1 The North-West Regional Research Framework for the Historic Environment (NWRRF) sets out the Research Aims for the region. Many of the archaeological discoveries at Low Plains Quarry require a careful consideration of this framework in relation to their significance at a regional and wider level.
- 3.4.2 In particular, the framework states that the majority of the burnt mound sites known from the region are in Cumbria, but the number within the region generally is low compared to other parts of the country, and the current regional distribution is unlikely to reflect that of the past.
- 3.4.3 A lack of dating and palaeoenvironmental study on burnt mound sites within the region can be overcome within this study by the systematic environmental soil sampling of any identified remains which may relate to this type of monument. Environmental analysis of burnt mounds within other regions of the UK, would suggest that they are a long-lived class of monument which has at times proved difficult to interpret (Brennand 2006).
- 3.4.4 The framework further states that human remains dating from the period remain rare on a regional level and those known are largely represented by cremated material, such as those found during the 2005 excavations to the

north of the current works. Few prehistoric funerary sites have been excavated under modern conditions, and there is currently little understanding of Neolithic or Bronze Age burial practices (*ibid*). The extent to which a cremation complex existed at Low Plains Quarry is still unknown, and should future discoveries be made nearby, the results of these findings may help to identify further areas in need of investigation.

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

- 4.1.1 The watching brief monitoring was undertaken in one phase, from 5th October 2009 until the 16th October 2009. These works comprised the observation of the removal of topsoil and excavation down to the natural substrate, in order to record any archaeological features present at the site, prior to the extraction of these soils to obtain the underlying sands and gravels (Figure 2).
- 4.1.2 The topsoil, which comprised moderate to loosely compacted dark blackish-brown silty sand **(100)**, which had frequent root and sub-rounded stone inclusions, was stripped by a 360° tracked excavator (a Komatsu PC 450LC), fitted with a toothless ditching bucket down to the natural substrate. Topsoil was present across the site to a depth ranging between 0.70m and 0.10m.
- 4.1.3 Beneath the topsoil, the natural drift geology, which comprised of compacted orange sands and natural gravels **(101)**, was visible. During the course of the watching brief, several potential archaeological features were observed cut into this deposit, and comprised five potentially prehistoric pits, a possible Roman ditch, and a post-medieval boundary ditch and tree boles.

4.2 POTENTIAL PREHISTORIC PITS

- 4.2.1 A group of five small pits (Figure 3 and 4) containing charcoal and scorched stony deposits were observed on the west side of the site. Pit **[133]**, (Plate 1) which was circular in plan, measured 1m in diameter and was filled to a depth of 0.15m by moderately compacted black-brown silty sand **(132)**. Frequent charcoal flacks and chunks were observed within this deposit, which also contained root material.
- 4.2.2 Located approximately 1.10m to the north-west of this feature, Pit **[135]** measured 0.8m in diameter, and was filled to a depth of 0.05m by a similar, black-brown silty sand deposit **(134)**.
- 4.2.3 Pits **[143]**, **[145]** and **[147]** were similar features, and measured 1.15m, 0.80m and 0.75m in diameter, and were filled to depths of 0.10m, 0.18m and 0.10m respectively. These deposits were similar in nature to those observed within features **[133]** and **[135]**, and comprised black-brown silty sand which had frequent inclusions of sub-rounded stones, often with scorch marks, charcoal, and root matter, **(142)**, **(144)** and **(146)**.



Plate 1: East facing section of pit [133]



Plate 2: South facing overview of Pits [133] and [135].

4.3 POSSIBLE ROMAN DITCH

- 4.3.1 A linear feature [105] was observed on the east side of the site (Figures 6-8) and interpreted as the continuation of a probable Roman boundary ditch, [9] initially observed during the 2007 watching brief carried out to the immediate south of the watching brief area, by Oxford Archaeology North.
- 4.3.2 Measuring approximately 27m in extent, and aligned on a north east- south west alignment, this feature [105] was observed to have steeply sloping sides, a flat base and had a prominent V shaped profile (Plate 3) suggestive of a Roman boundary ditch. The feature was excavated in seven sectional slots, numbered [114], [115], [121], [117], [123], [125] and [127] respectively.
- 4.3.3 The ditch [105] was observed to be a maximum of 1.80m in width at the southern extent, although severe plough truncation observed over the entire extent of the ditch, and prevalent in the northern limits, reduced the width of the feature to 0.80m within the northern limits of the site.
- 4.3.4 The ditch [105] was filled to a depth ranging between 0.70m and 0.24m, by loose to moderately compacted greyish-brown silty sand, (104), (116), (120), (118), (122), (124) and (126) respectively.
- 4.3.5 These deposits contained frequent inclusions of sub-rounded stones and rooty matter. Within the upper strata of deposit (120), one piece of iron slag, and one piece of possible kiln lining were observed, and tentatively suggest that metal working may have been undertaken in the surrounding areas, the source of this industry is unknown however.
- 4.3.6 Within the northern limit of the excavation, the ditch [105] had been almost entirely plough truncated away. This is due to the location of the ditch being positioned aside the brow of the hill, within an area which would have suffered the effects of plough damage more readily due to the lower depths of subsoils around this area, as a result of the effects of colluvial action.
- 4.3.7 As a result, the terminus of the linear was not observed during the excavation, and crop marking occurring within the field next to the boundary, suggests that the feature continues further to the north, (A. Reay, *pers.comm*).



Plate 3: Section 9 of linear [105], showing plough scaring, visible in upper strata of deposit (122)



Plate 4: South facing overview of linear [105], a possible Roman boundary ditch

4.4 POST-MEDIEVAL FEATURES

- 4.4.1 Another linear feature [103] was observed which appeared to be in alignment to an extant field boundary (Plate 5), and correlated to the position of gully [26], as found during the 2007 watching brief conducted to the south of the site (Figures 9 and 10)
- 4.4.2 Measuring an extent of 12m in length and a maximum of 0.80m in width, this feature was excavated in six sectional slots, numbered [109], [110], [137], [139] and [141] respectively, and all measuring a maximum of 1.0m in width.
- 4.4.3 The ditch [103] was observed to have steep sloping sides, with a flat base and a U-shaped profile (Plate 6). It was filled to a maximum depth of 0.40m by moderate to loosely compacted dark brown silty sand, (102), (108), (136), (138) and (140) respectively. These deposits contained frequent sub-rounded stone inclusions and root material. No datable artefacts were observed within these deposits, however the alignment to an existing boundary ditch strongly suggests that this feature served a similar purpose, and in the absence of dating material, is more likely to be a post-medieval feature.



Plate 5: North facing of alignment of a ditch [103] with a modern boundary marker.



Plate 6: South facing photograph of section [137] of linear [103]

- 4.4.4 Three pits were observed within the area of the watching brief, all of which were irregular in shape, and which on excavation, were interpreted as tree boles.
- 4.4.5 To the east of the linear feature, a pit **[111]** measured 1.5m in diameter and was filled to a maximum depth of 0.20m by loosely compacted greyish-brown silty sand **(112)**, which contained inclusions of root matter and sub-rounded stones. Visible root capillaries were observed within the shallow, concave base of this feature (Plate 7).
- 4.4.6 A second pit **[129]**, ovoid in shape, measured 1.50m north-south and 3.10m east-west. This shallow concave based feature was filled to a depth of 0.15m by loosely compacted dark-blackish brown silty sand **(128)** which had frequent inclusions of charcoal flecks, sub-rounded stones and root matter. Again, visible root capillaries were observed within the base of this feature (Plate 8) leading to the interpretation that this feature represents the remains of a tree bole.
- 4.4.7 Finally, oval pit feature **[107]** measured 1.50m east-west and 0.80m north-south. This feature was filled to a depth of 0.50m and contained moderately compacted dark grayish-black silty sand **(106)** which had frequent inclusions of charcoal.



Plate 7: Section of pit [111], facing north and showing visible root capillaries in the base of the feature.

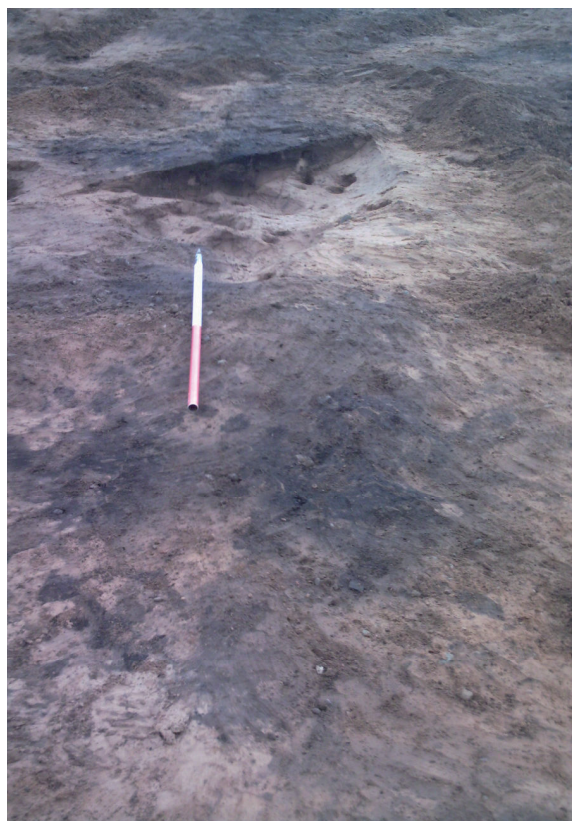


Plate 8: East facing overview of pit [129], a tree bole, showing visible root capillaries.

- 4.4.8 Within the section of pit [107], charcoal banding and root capillary action appeared to support the interpretation for this feature as a tree bole.

4.5 ARCHAEOLOGICAL FINDS AND ENVIRONMENTAL SAMPLING

- 4.5.1 Archaeological finds, comprising one piece of Iron slag, and one piece of possible kiln lining, were observed within deposit (120) in the section numbered [121] of linear [105].
- 4.5.2 Due to the small amount of material recovered the potential for these artefacts to help date the deposits from which they belonged, as well as to offer further information regarding on-site processes, is limited.
- 4.5.3 A total of 31 environmental soil samples were collected from eighteen separate contexts from features encountered across the site. Of these, a total of four samples were from possible prehistoric pit features [133], [135], [143] and [145]; nine samples were taken from the various sections of linear [105]; two samples were taken from the various sections across linear [103] and three samples were from pit features interpreted as being tree boles, [111], [107] and [129].
- 4.5.4 Further processing of these samples can be undertaken at a later date should this be considered necessary.

5 FINDS

5.1 FINDS ASSESSMENT

- 5.1.1 A total of two finds from one context was recovered during the watching brief (Table 1). These included one piece of Iron slag, weighing a total of 27g, and one piece of possible kiln lining, weighing a total of 0.16g. These finds were obtained from deposit (120), within a section of ditch [105].
- 5.1.2 No other finds indicative of metalworking activity occurring at the site were found in association with these finds, and therefore very little can be obtained by the further study of these artefacts.
- 5.1.3 The finds were cleaned and packaged according to standard guidelines, and recorded under the supervision of F. Giecco (NPA Ltd Technical Director). The metalwork was placed in a stable environment and was monitored for corrosion.

Context	Material	Quantity	Weight (kg)	Period
120	Iron Slag	1 piece	0.27	Unknown
120	Kiln waste?	1 piece	0.16	unknown

Table 1: Finds Table of Artefacts Recovered from the Watching Brief.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

- 6.1.1 Archaeological deposits relating to previous works, and potentially dating to prehistoric periods, were observed during the watching brief at Low Plains Quarry.
- 6.1.2 A series of five pits, all containing pieces of charcoal and evidence of scorched stones, are suggested as potentially dating from the prehistoric period. These features may be the remains of pot boiler pits, which potentially were used as a method of convection cooking, whereby heated stones were placed in a pit containing water, and would actively raise the temperature of the water within. The presence of these features is hardly unsurprising when coupled with the findings of a large burnt mound during the 2007 watching brief conducted to the south of this phase of work. These features also appear to be clustered nearby to two similar pits, as found during the previous works at the site.
- 6.1.3 The presence of such features is of significance as the North-West Regional Research Framework (NWRRF) states that the excavation of burnt mounds found within Cumbria are underrepresented, compared to the statistics for other regions within the UK. A lack of excavation and dating evidence has meant that these monuments have been little understood. An increased rate of excavation and environmental processing may aid more accurate interpretation of these monuments.
- 6.1.4 A possible Roman ditch which was orientated northeast-southwest, continued beyond the current extraction phase, and into areas to the north of phase West 2. One piece of Iron slag and a possible piece of kiln fragment were found within a deposit from this ditch, although these did not provide enough evidence to successfully date the ditch.
- 6.1.5 The form of this feature suggests that this may be a Roman boundary ditch. However, the occurrence of intensive ploughing, as observed by the numerous plough scars orientated in a northwest-southeast direction, coupled with the good preservation of the deposits, observed where the deposits survived to a minimum depth of 0.29m, suggests that this feature may have its origins later in history
- 6.1.6 It would be expected that intensive ploughing, as demonstrated to have been occurring at the site, would, over a period of time, severely truncate a prehistoric feature. This was not evident at the site. Other taphonomic processes relating to the visible colluvial washing observed at the base of the

hill, may have occurred at the site, which aided the survival of this feature. Without further datable artifacts the provenance of this feature has to be in doubt. However, the ditch does not appear on the 1st edition Ordnance Survey map of 1861, when the parishes surrounding Lazonby were subject to the enclosure acts, suggesting that this feature must pre-date this event.

- 6.1.7 A post-medieval boundary ditch was observed to be aligned to an extant field boundary comprising part of a dry stone wall and hedge. The ditch also correlated to the position of a gully excavated during the 2007 excavations conducted to the south of the site, and is visible on the 1st edition Ordnance Survey map of the area. The form of this feature coupled with this alignment and a lack of datable artefacts argues strongly for the provenance of this feature to be based within the post-medieval period.
- 6.1.8 Three pits were observed to contain deposits which indicated that these features contained the remains of trees. No dateable artefacts were found within these deposits, and the suggested origin of these features therefore is somewhere from the post-medieval to modern day periods.

6.2 RECOMMENDATIONS

- 6.2.1 As this watching brief was conducted as a condition of groundwork associated with the extension to the northern face of Low Plains Quarry, no further archaeological work is deemed necessary. However, given the site's location in relation to known archaeological remains and the findings of tentative prehistoric features found during this, and previous phases of works at the site, it is recommended that any work conducted in the future be subject to a similar programme of archaeological investigation.

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APPENDIX 1: CONTEXT TABLE

CONTEXT	TYPE	DESCRIPTION
100	Deposit	Dark brown silty sand, Topsoil
101	Deposit	Orange sandy-gravels, Natural
102	Deposit	Fill of section [109]
[103]	Cut	Group number for a probable Post-medieval ditch
104	Deposit	Fill of section [114]
[105]	Cut	Group number for a possible Roman boundary ditch
106	Deposit	Fill of [107]
[107]	Cut	Cut of probable tree bole
108	Deposit	Fill of [110]
[109]	Cut	Section of [103], a post-medieval ditch, filled by 102
[110]	Cut	Section of [103], a post-medieval ditch, filled by 108
[111]	Cut	Cut of probable tree bole
112	Deposit	Fill of [111]
113	Deposit	Same as 104, fill of [114]
[114]	Cut	Section 5, of [105] a possible Roman ditch, filled by 104
[115]	Cut	Section 6, of [105] a possible Roman ditch, filled by 116
116	Deposit	Fill of [115]
[117]	Cut	Section 7, of [105] a possible Roman ditch, filled by 118
118	Deposit	Fill of [117]
119	Deposit	Same as 120, fill of [121]
120	Deposit	Fill of [121]
[121]	Cut	Section 8, of [105] a possible Roman ditch, filled by 120
122	Deposit	Fill of [123]
[123]	Cut	Section 9, of [105] a possible Roman ditch, filled by 122
124	Deposit	Fill of [125]
[125]	Cut	Section 10, of [105] a possible Roman ditch, filled by 124
126	Deposit	Fill of [127]
[127]	Cut	Section 11, of [105], a possible Roman ditch, filled by 126
128	Deposit	Fill of [129]
[129]	Cut	Cut of probable tree bole
130	Deposit	Fill of [131]
[131]	Cut	Section 12, of [103], a post-medieval ditch, filled by 130
132	Deposit	Fill of [133]
[133]	Cut	Cut of possible prehistoric pit
134	Deposit	Fill of [135]
[135]	Cut	Cut of possible prehistoric pit
136	Deposit	Fill of [137]
[137]	Cut	Section 15, of [103] a post-medieval ditch, filled by 136
138	Deposit	Fill of [139]

CONTEXT	TYPE	DESCRIPTION
[139]	Cut	Section 16 of [103], a post-medieval ditch, filled by 138
140	Deposit	Fill of [141]
[141]	Cut	Section 17, of [103] a post-medieval ditch, filled by 140
142	Deposit	Fill of [143]
[143]	Cut	Cut of possible prehistoric pit
144	Deposit	Fill of [145]
[145]	Cut	Cut of possible prehistoric pit
146	Deposit	Fill of [147]
[147]	Cut	Cut of possible prehistoric pit

Table 2: List of Contexts issued during Watching Brief

APPENDIX 2: FIGURES
