NORTH PENNINES ARCHAEOLOGY LTD

Project Designs and Client Reports No. CP/542/07

ARCHAEOLOGICAL EVALUATION ON LAND AT MARSH HOUSE, BURGH-BY-SANDS, CUMBRIA

FOR SUSAN LISTER

NGR NY 3225 5900

Oasis Project Number northpen3-31087

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EXECUTIVE SUMMARY

During May 2007, North Pennines Archaeology Ltd undertook an archaeological field evaluation on land at Marsh House, Burgh-By-Sands, Cumbria. The work was commissioned by Susan Lister in order to fulfil an archaeological evaluation brief issued by English Heritage. This followed a planning application to Carlisle City Council for a residential development at the site. Marsh House lies in an archaeologically sensitive area and is located within the visual envelope of Hadrian's Wall and Vallum. As a result, English Heritage and Cumbria County Council Historic Environment Service (CCCHES) recommended an archaeological evaluation be undertaken, in accordance with an English Heritage brief, and a written scheme of investigation submitted to, and approved by, English Heritage and CCCHES. The focus of the evaluation was to assess the projected location of the Vallum, which has been depicted by the Ordnance Survey as running through the proposed development site on an east-west alignment.

The village of Burgh-by-Sands, situated on the line of Hadrian's Wall and Vallum, has a diverse archaeological history. The Roman remains within the village have been the focus of many studies since the mid nineteenth century. Until recently, these gave the Roman fort and its associated extramural settlement an enigmatic quality as no modern open area excavations had been undertaken. The precise line of the Vallum has been confirmed at both ends of the village during excavations carried out by the Central Excavation Unit (CEU) between 1978 and 1989 (Austen 1994). However the exact line of the Vallum inside the village has hitherto not been confirmed.

Four evaluation trenches were excavated, two to the north of Marsh House (Trench 1 and 2), and two to the south of the house (Trench 3 and 4). The results of the evaluation failed to locate the Vallum or any of its associated features (South and North Mounds, etc) within the evaluation trenches. However, the evaluation did reveal substantial and well-preserved deposits of archaeological significance dating from the Roman period to the post-medieval period, in both Trench 1 and 2. The archaeological evidence for the Roman period comprised a possible defensive or boundary ditch, from which Roman pottery dating from the mid second century was recovered. It was also evident that the ditch remained open as a landscape feature at least until the medieval period as the upper fills of the ditch yielded a number of pottery sherds dating from the fourteenth to the sixteenth centuries.

The post-medieval period was largely characterised by a sequence of shallow linear ditches and pits, which appear to pertain to agricultural activity which show evolving land boundaries. Also a number of field drains were excavated which show that the land suffered from drainage problems. The final two trenches (Trenches 3 and 4) failed to locate any significant archaeological deposits or features.

The analysis of this data will inevitably provide new and important information for the Roman occupation of Burgh-By-Sands, which may be amalgamated with the body of evidence that has already been complied, to produce a much-enhanced picture of the land surrounding the fort and associated civilian vicus. It also has the opportunity to reassess the location of the Vallum within Burgh-by-Sands.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Susan Lister for commissioning the project, and for her assistance throughout the fieldwork. Ken Birkett is thanked for his patient and diligent machining of the trenches.

North Pennines Archaeology Ltd would also like to extend there thanks to Mike Collins, Hadrian's Wall Archaeologist for English Heritage for his help during this project and to Jeremy Parsons, Assistant Archaeologist, Cumbria County Council for his site visit.

Kevin Mounsey and Joe Jackson undertook the evaluation under the supervision of Martin Sowerby. Metal detecting was kindly undertaken by Alan James. The report was written by Martin Sowerby, who also produced the drawings. The initial specialist finds work was undertaken in house by Jo Beatty. The project was managed by Martin Railton, Senior Project Officer, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 During May 2007 North Pennines Archaeology Ltd undertook an archaeological field evaluation on land at Marsh House, Burgh-By-Sands, Cumbria. Marsh House lies immediately to the south of the projected line of the Vallum (NGR NY 3225 5900; see Figure 2).

1.1.2 The work was commissioned by Susan Lister in order to fulfil an archaeological evaluation brief issued by English Heritage. This followed a planning application to Carlisle City Council for a residential development at the site. Marsh House lies in an archaeologically sensitive area and is located within the visual envelope of Hadrian's Wall and Vallum. As a result, English Heritage and Cumbria County Council Historic Environment Service (CCCHES) recommended an archaeological evaluation be undertaken, in accordance with an English Heritage brief, and a written scheme of investigation submitted to, and approved by, English Heritage and CCCHES. The focus of the evaluation was to assess the projected location of the Vallum, which has been depicted by the Ordnance Survey as running through the proposed development site on an east-west alignment.

1.1.3 The field evaluation comprised the excavation of a series of linear trial trenches in order to provide a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. The principal objective of this evaluation was to establish the presence/absence, nature, extent and state of preservation of any archaeological remains and to record these where they were observed.

1.1.4 This report sets out the results of the work in the form of a short document outlining the findings, followed by a statement of the archaeological potential of the area, an assessment of the impact of the proposed development, and recommendations for further work.

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 Susan Lister for (Railton 2007). This design was in accordance with a brief prepared by Mike Collins, Hadrian's Wall Archaeologist for English Heritage (Collins 2007).

2.1.2 Following acceptance of the project design, 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 of Field Archaeologists (IFA), and generally accepted best practice.

2.2 ARCHAEOLOGICAL EVALUATION

2.2.1 The field evaluation consisted of the excavation of a series of trial trenches in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. The location and size of the trial trenches were agreed with Mike Collins, Hadrian's Wall Archaeologist (Figure 2). In summary, the main objectives of the evaluation were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed;
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to recover artefactual material, especially where useful for dating purposes;
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes;
- to assess how the presence/absence, of archaeological remains will impact on the proposed development works.

2.3 SITE SPECIFIC AIMS

2.3.1 The main site-specific aim of the evaluation were defined as follows:

- to define the location, character, extent and state of preservation of the Vallum or any other significant archaeological remains, should these be encountered in the defined study area, and *protect them from impact by the proposed development.*

2.3.2 A total of four trenches were excavated to record the presence or absence of archaeological feature and characterise the nature and significance of any recorded features. The trenches were mechanically excavated by an excavator equipped with a toothless ditching bucket, under archaeological supervision, to the natural substrate or the top of archaeological deposits, whichever was encountered first. Each trench was

then manually cleaned and any putative archaeological features investigated and recorded according to the North Pennines Archaeology Ltd standard procedure as set out in the NPAL Excavation Manual (Giecco 2001).

2.3.3 Photography was undertaken using Canon EOS 100 and EOS 300V Single Lens Reflex (SLR) cameras. A photographic record was made using digital photography, 200 ISO Black and White Print and Colour Slide film.

2.3.4 All work was undertaken in accordance with the Institute of Field Archaeologists Standards and Guidance for Archaeological Field Evaluations (IFA 1994).

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the project design, and in accordance with current English Heritage guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report given to the Cumbria Historic Environment, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA 07 MHB-A.

2.4.2 North Pennines Archaeology supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological fieldwork. As a result, details of the results of this evaluation will be made available by North Pennines Archaeology, as a part of this national project. The site has been given the unique identification number, northpen3-31087 as part of the Oasis Project.

3. BACKGROUND

3.1 LOCATION AND TOPOGRAPHY

3.1.1 Burgh-By Sands is located 5.9 miles (9.5km) west of Carlisle, Cumbria on the Solway Estuary (see Figure 1). The Solway Basin is a broad, lowland plain landscape fringed by the low, rugged, relatively remote coastline of the Solway Firth and the Irish Sea. It is framed by the Cumbria High Fells to the south, the hills of the Scottish borders to the north and the Border Moors and Forests to the north-east. To the north, the foreshore of the Solway Firth is dominated by large expanses of intertidal mudflats etched by a shifting maze of minor channels (BGS 2001).

3.1.2 Burgh by Sands lies at the point where the River Eden joins the Solway. The land is relatively low lying and undulating; cattle and sheep are the predominate form of agriculture. A large expanse of mudflats lies to the north of the village called Burgh Marsh, which is used for winter grazing of sheep and during the summer for cattle (Countryside Commission 1998).

3.2 HISTORICAL BACKGROUND

3.2.1 Hadrian's Wall was designated as a World Heritage Site in 1987 and forms the most complex and best preserved of the frontiers of the Roman Empire. (English Heritage 2002). The World Heritage Site (WHS) comprises a visual envelope between 1km and 6km from the site in order to serve as a buffer zone to protect the site and its immediate landscape from development detrimental to the visual amenity of the site (*ibid*).

3.2.3 The WHS is centred on the military installations constructed from AD 122 on the orders of the Emperor Hadrian. The WHS also includes other Roman sites and structures which predate Hadrian's Wall, such as the arrangement of forts along the Cumbrian Coast between Bowness-on-Solway and Ravenglass, and incorporates a wealth of pre-Roman and post-Roman sites and landscapes (*ibid*). Hadrian's Wall was constructed in the early 2nd century on a line connecting the Tyne and the Solway and represented at various times the northern frontier of Roman Britain.

3.2.4 The Wall was a composite military barrier, which in its final form comprised several separate elements; a stone wall fronted by a V-shaped ditch, and a number of purpose-built stone garrison fortifications such as forts, milecastles and turrets. A large earthwork and ditch, built parallel with and to the south of the Wall, known as the Vallum, and a metalled supply road linking the garrison forts, which is known as the 'Roman Military Way'. The Wall begins in the east at Wallsend in Tyneside and continues to the west terminating at Bowness-on-Solway in Cumbria, a distance of 80 Roman miles (73.5 English miles or 117 kilometres). The Wall, conceived by Hadrian was to be ten feet wide and about fifteen feet high. The front face of the wall most likely sported a crenulated parapet, behind which the soldiers patrolled along a paved rampart-walk (Bedoyere 1998).

3.2.5 The more detailed history of Hadrian's Wall is well documented and is summarised in numerous publications (Breeze and Dobson 2000; Daniels 1978 and Birley 1961).

3.4 SITE SPECIFIC BACKGROUND

3.4.1 ***Burgh-by-Sands I:*** to the south of the later fort on Hadrian's Wall, a large fort has been found at Hill Farm, Longborough, which is seemingly aligned with a Roman road which runs along the humpback ridge of Fingland Rigg, to the auxiliary fort at Kirkbride (Jones and Wolliscroft 2001). This road passes directly in front of the fort, and probably represents a westward extension of the Stanegate frontier system sometime during the Trajanic period. Although unexcavated, the Burgh-by-Sands I fort, judging from its alignment with this late-Stanegate extension quite possibly dates to the Trajanic period, although it is possible that the fort may have been founded during the campaigns of Agricola around AD79/80 (*ibid*).

3.4.2 ***Burgh-by-Sands II***: aerial photographs taken by Barri Jones in 1977 revealed the outline of a large Roman fort on top of the commanding hill to the south of Burgh village. The construction date of this timber-built auxiliary fort has been established around the late-Trajanic, early-Hadrianic period (Jones and Wolliscroft 2001). Also shown on aerial photography is a 19m wide circular cropmark lying within the defences of the fort close to its southeast gate (*ibid*). This feature has been identified as a Roman four-post watchtower with a circular ditch. This timber tower has been dated by the finding of black-burnished ware pottery shards in one of the main postholes to about AD120, when this type of pottery began to appear. This timber-built tower was not in service long before being demolished and replaced by the Burgh-by-Sands II fort. It is generally accepted that this fort was built as part of the initial scheme for Hadrian's Wall (Daniels 1978; Breeze 2007).

3.4.3 ***The Wall Fort:*** the Wall fort was evidently an addition to the original Hadrianic plans, because turret 71B, which originally occupied the site, had to be demolished before the fort could be built astride the line of the Wall (Breeze 2007). It would appear from pottery recovered at Fort II that the transfer of the garrison to the stone-built fort on the line of the Wall occurred well into the Hadrianic period (*ibid*). The site of the Hadrianic Wall fort at Burgh-by-Sands now lies beneath the modern village.

4 EVALUATION RESULTS

4.1 INTRODUCTION

4.1.1 The machine stripping of the trenches, which were subsequently excavated by hand down to the natural subsoil, permitted an examination of the archaeological remains within the site. All trench locations are depicted in Figure 2; detailed plans and sections for Trenches 1 and 2 are depicted in Figures 3, 4 and 5.

4.2 TRENCH 1

4.2.1 Trench 1 was aligned northeast by southwest and is located to the front of Marsh House. Originally, Trench 1 was to measure 15m by 1.60m wide. However the subsequent discovery of a possible telecommunication cable within the proposed development area necessitated a reduction in length of Trench 2. As a direct result of this, Trench 1 was extended by 2m making it 17m long by 1.60m wide (see Figures 2 and 3; Plates 1-7).

4.2.2 The natural subsoil ***100*** was encountered at 0.67m below ground level at 15.69m OD at the northeast extent. However, at the southwest end it was obscured by deposit ***113***.

Plate 1: Trench 1, pre-excavation, facing northeast

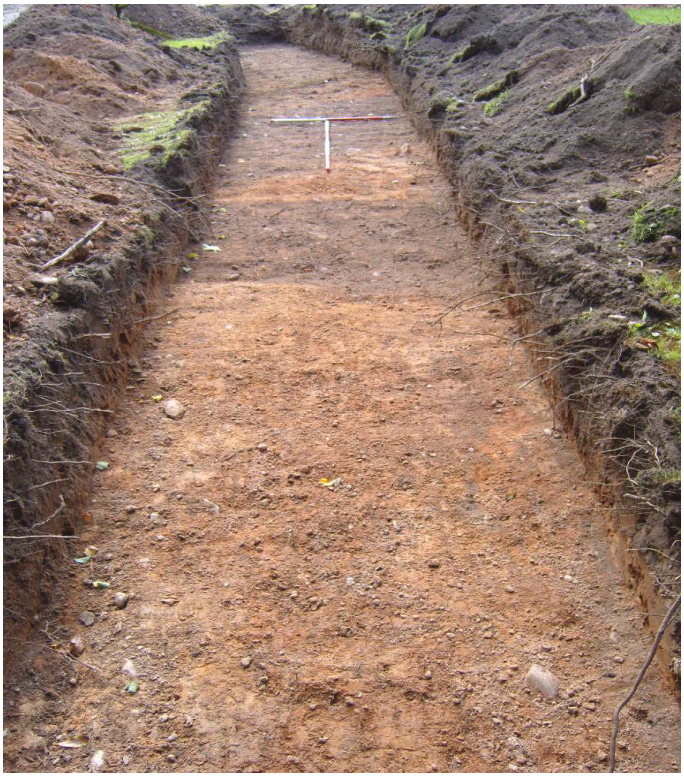

Plate 2: Trench 1, pre-excavation, facing southwest

4.2.2 The natural appears to have been deposited in broad bands, varying in colour between bright orange, mid greyish orange, deep red and orangey brown generally comprising sterile gritty sandy silt with *c20-30%* small to medium sub angular stones.

4.2.3 The earliest datable feature was ditch ***107***, which measured 1.99m wide by 0.87m deep, with a broad V-shaped profile giving way to an uneven base, and was orientated broadly east to west. The profile of this ditch is reminiscent of Roman military features designed for defensive purposes, particularly of those constituting outlying defences around forts. However, it is more likely the ditch served as a boundary, as the fort is located a considerable distance away. Its primary deposit was a loose pale grey silty sand mixed with redeposited natural material ***108***, which had accumulated at the bottom of the ditch. It probably remained open for a period of time, as redeposited natural material was observed slumped down the sides, possibly indicating a bank. The primary fill was overlaid ***109***, which consisted of moderately compacted mid greyish brown silty sand and clay. Interestingly, a sherd of medieval pottery dating to the fourteenth century was recovered from this, indicating that the ditch was still an open landscape feature during the medieval period. Overlaying context ***109*** was the upper fill of the ditch ***110***, which consisted of loose mixed silty clay. The nature of this fill appears to show that the ditch was deliberately back filled during the post-medieval period possibly during the construction of Marsh House in 1805 in order to create a flat garden surface (see Figure 3; Plate 3).

Plate 3: Ditch ***107***, showing fills ***108***, ***109*** and ***110***, also visible is drain ***111*****,** note grey silty deposit ***113*** on the left of the photograph, facing west

4.2.4 To add further that the ditch was an open feature, a red ceramic horseshoe type drain was placed within the trench on the same alignment, which truncates the upper fill of the ditch ***107***. The cut for the drain ***111***, measured 0.51m wide by 0.26m deep and was backfilled by a loose mid brown silty clay mixed with redeposited topsoil material ***112***. The ceramic drain pieces were stamped `Drain 1830`.

4.2.5 Several other features were revealed within the trench, which appear to demonstrate a sequence of evolving land boundaries. Ditch ***105***, was located 0.54m to the north-east of ditch ***107***, and shared the same east-west alignment. The excavation of this feature showed that the ditch had a fairly uniform width of 2.68m, and a maximum depth of 0.26m. The nature of the single fill, ***106***, consisting of compacted light brown sandy gravel, suggested that this ditch had been deliberately backfilled in a single event (see Plates 4 and 5).

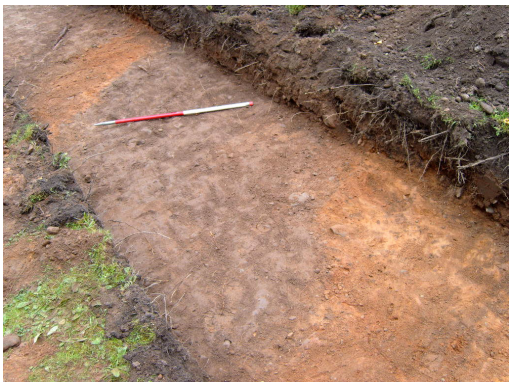

Plate 4: Ditch ***105***, facing west

Plate 5: Ditch ***105***, facing east, post-excavation

4.2.6 Linear feature ***101***, was stratigraphically the latest in the sequence of the three ditches identified within Trench 1. It was located approximately 0.91m to the north-east of ditch ***105***, however it was aligned broadly north-west by south-east. The ditch was 0.42m wide by 0.26m deep. Again its single fill ***102***, which yielded post-medieval pottery, demonstrates that the feature was deliberately backfilled in a single action. The ditch was cut by drain ***103*** (see Plates 6 and 7).

Plate 6: Ditch ***101***, facing west,

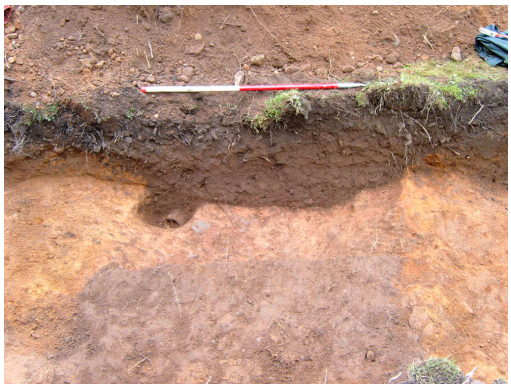

Plate 7: Ditch ***101***, facing east, post-excavation, showing drain ***103***

4.2.7 Towards the southwest end of the trench was an extensive layer of grey silty sand ***113***, which contained a quantity of charcoal. Due to the possibility that the layer formed part of the south mound of the Vallum, the deposit was not comprehensively investigated. Nevertheless, the nature of the soil and its constituents possibly indicate ditch fill rather than the foundation of the Vallum mound. A layer of subsoil ***114***, up to 0.37m thick overlain by the topsoil ***115***, approximately 0.25m deep made up the remaining depth of the trench.

4.3 TRENCH 2

4.3.1 Trench 2 was aligned broadly north-south and was located to the north of Marsh House. Originally the trench was to be 20m long by 1.60m wide, however the location of a telecommunication/electricity cable within the development area resulted in the size of the trench being reduced by 2m. The natural geology ***200*** was encountered 0.47m below ground level at 16.19m OD at the northern extent of the trench, and 0.82m below ground level at 14.37m OD at the southern end of the trench (see Figure 2 and 4; Plates 8-15).

4.3.2 The natural geology consisted of bright orange sand with *c*10-15% small to medium sized rounded to sub-rounded stones. In the northern extent of the trench it had a much higher sand content and contained lenses of pale grey pea-grit-rich sandy gravel.

4.3.3 The earliest datable archaeological feature comprised a linear ditch ***207***, which was located at the southern extent of the evaluation trench. The ditch measured 2.47m wide and up to 0.47m deep with gradually sloping sides and a rounded/concave base. The excavation of the ditch revealed that it contained two discrete fills; the primary fill **209** appeared to have originated from the gradual erosion of the ditch sides and fragments of pottery retrieved from the primary fill have been broadly dated to the second century AD. The fill consisted of fairly compacted light to mid brownish grey silty clay.

4.3.4 The upper fill ***208*** contained a large proportion of stone, indicative perhaps of deliberate backfilling. A fragment of pottery retrieved from the upper fill may be broadly dated to the fourteenth to sixteenth century, which indicates that the ditch was an open landscape feature during this period (see Figure 4; Plates 10 and 11).

4.3.5 A red ceramic field drain was visible cutting fill ***208***, which was the same feature that was observed in Trench 1. The cut for the drain ***216***, measured 0.47m wide by 0.20m deep and was filled by dark brown redeposited material ***217***. The red ceramic drain was stamped `Drain 1830`.

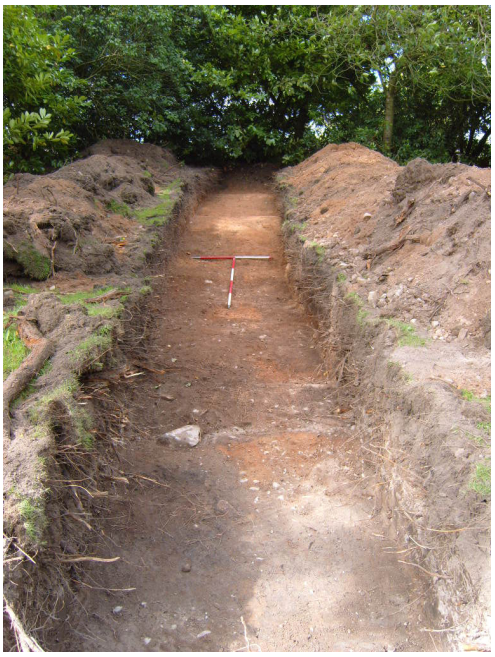

Plate 8: Trench 2, facing north

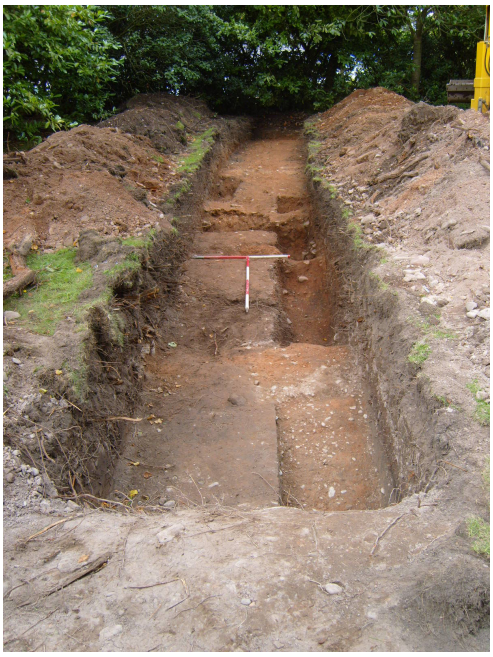

Plate 9: Trench 2, facing north, post-excavation

Plate 10: Ditch ***207***, facing east

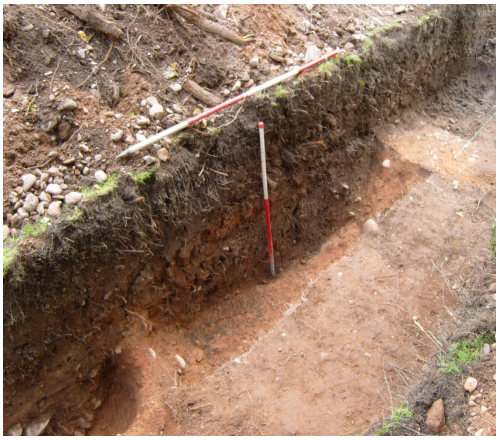

Plate 11: Ditch ***207***, facing east-west

4.3.6 Feature ***215***, located 0.43m to the south of ditch ***207***, measured 1.60m east-west by 1.19m north-south by 0.33m deep and continued beyond the southern limits of the

evaluation trench. Its primary deposit consisted of a dark greyish brown to black silt, ***216***, which was overlaid by an extensive deposit of pale grey silt ***210***, which appears to have been have formed by water action. It is not clear what this feature represents, however due to its uniform profile it could possibly form part of a ditch feature.

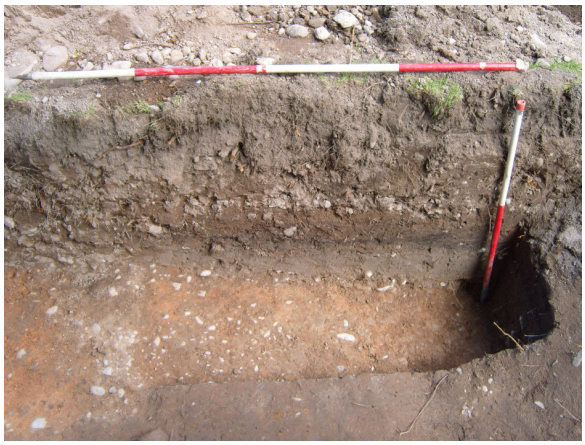

Plate 12: Cut ***215***, facing east, southern extent of Trench 2

4.3.7 A large sub-circular pit ***213***, located 0.09m to the north of ***207***, measured 1.67m north-south and was 0.58m deep. The slope on the southern side of the pit was almost vertical, whereas the northern slope was more gradual and its base was uneven. Its was filled by a compacted light brown silty sand ***214***, which contained post-medieval pipe fragments. A number of small rounded stones were found at the base of the feature, which seems to be deliberately placed. However as the feature was not fully excavated their function remains unknown. It appears that the pit was truncated by another pit-like feature ***205***, to the north (see Plates 13 and 14).

Plate 13: Pit ***213***, facing east

Plate 14: Pits ***205*** and ***213***, facing north-east

4.3.8 Pit ***205***, had a sub-rounded shape in plan and measured 0.90m east-west by 0.30m deep, however its full extent was unknown as the feature continued beyond the trench.

It had steeply sloping sides with a rounded base. Its single fill, up to 0.30m deep, consisted suggesting a post-medieval date for this feature.

4.3.9 A small pit ***201***, measuring 0.62m north-south by 0.56m east-west by 0.33m deep was situated 0.41m to the north of pit ***205***. It was filled by a moderately compacted light brown silty sand, which contained *c*80% small rounded stones. No finds were recovered from the fill to ascertain a date for this feature (see Figure 4; Plate 15).

4.3.10 A linear cut ***203***, which is difficult to date precisely, exacerbated by the distinct lack of finds was located in the northern extent of the trench. It measured 1.09m wide and had an average depth of 0.30m with a U-shaped profile and a concave base. It was orientated broadly northwest by southeast. The southeast end terminated in a rounded butt end, but to the northwest it continued beyond the edge of the excavation trench. The fill ***204***, consisted of moderately compacted light brown silty sand with *c* 20% small rounded and angular stone inclusions (see Figure 4; Plate 15). A layer of subsoil ***211***, up to 0.19m thick overlain by the topsoil ***212***, approximately 0.16m deep made up the remaining depth of the trench.

4.3.11 A layer of subsoil ***211***, up to 0.19m thick overlain by the topsoil ***212***, approximately 0.16m deep, made up the remaining depth of the trench.

Plate 15: Linear feature ***203*** and pit ***201***, facing north

4.4 TRENCH 3

4.4.1 Trench 3 was 5m in length by 1.60m wide and was aligned northwest by southeast. The trench was located to the south of Marsh House and was placed within the projected location of the south mound of the Vallum. The natural substrate was ***300*** encountered at a maximum depth of 0.50m (see Figure 2; Plates 16 and 17)

4.4.2 This natural ***300***, consisted of compacted greyish orange sandy silt with frequent inclusions of small rounded gravels. A relatively large linear cut aligned northeast by southwest, ***301***, which measured 2m long by 0.50m wide, was situated in the north-western extent of the trench. It had vertical sides and a flat base, and contained a single fill ***302***; the cut also contained a red ceramic field drain (see Plate 17).

Plate 16: Trench 3, facing north-west

Plate 17: Trench 3, Cut ***301***

4.4.3 The natural was overlaid by the subsoil ***303***, which consists of loose dark reddish grey silty sand approximately 0.30m deep. Up to 0.20m of topsoil ***304***, made up the remaining depth of the trench.

4.4.4 No other significant archaeological features were noted within the trench. However the topsoil and the backfill of the drain cut yielded a small finds assemblage, which included 19th to 20th century domestic wares.

4.5 TRENCH 4

4.5.1 Trench 4 was 5m in length by 1.60m wide and orientated northwest by southeast. The trench was located to the rear of Marsh House approximately 11m to the east of Trench 3 and was placed to evaluate the projected line of the south mound of the Vallum (see Figure 2, Plates 18 and 19).

4.5.2 The earliest deposit observed, at a maximum depth of 0.54m was the natural geology ***400***. It consisted of moderately compacted pale brownish orange sand with occasional small sub rounded stones. At the southeast extent of the trench a sub-circular feature was observed cutting the natural geology. This feature ***401***, was an oval shaped 0.22m deep cut with an uneven profile measuring 1.23m southwest/northeast and was filled by light grey silty sand ***402***. Due the uneven sides of the feature it was thought that the feature represented a tree or bush, which was removed when Marsh House was constructed. Up to 0.54m of subsoil ***403*** and the topsoil ***404*** made up the remaining depth of the trench both of which consist of loose silty sand with occasional small sub-rounded inclusions.

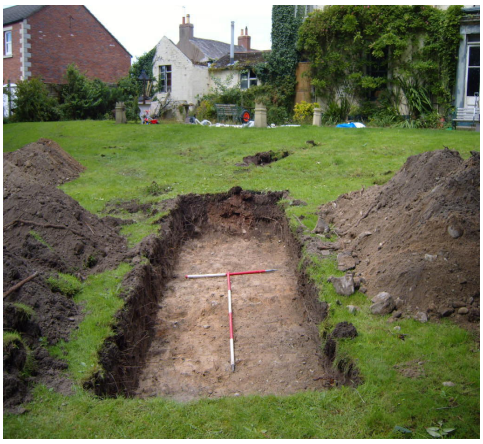

Plate 18: Trench 4, facing north-west

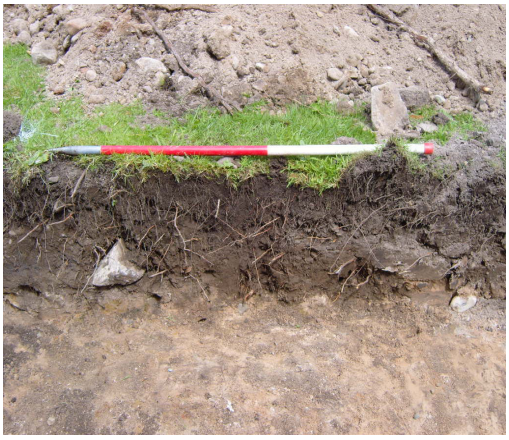

Plate 19: Trench 3, north-east facing section

5 FINDS

5.1 INTRODUCTION

5.1.1 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.

5.2 ROMAN CERAMIC VESSELS

5.2.1 In total 4 fragments of Roman ceramic vessels were recovered; of these 3 sherds derived from reduced greywares and 1 sherd was of Black-Burnished Ware Type 1. The pottery was recovered from context ***209***, which is the primary fill of ditch ***207***. The pottery assemblage can be dated to the second century AD, the period of which the fort and extra-mural settlement were thought to have been established. It is not possible to ascertain a production centre for the Roman ceramics, however, apart from the BB1 pottery, the two sherds of Greyware and a body sherd consisting of fine textured orange-brown fabric are likely to originated from local production centres most likely at Carlisle or Scaleceugh.

5.3 MEDIEVAL AND LATER CERAMIC VESSELS

5.3.1 A total of 2 fragments of medieval and 24 sherds of post-medieval pottery were recovered during the evaluation.

5.3.2 The medieval pottery was predominately dated to the fourteenth to sixteenth centuries. A single sherd, consisting of a flagon base from a reduced Greyware vessel with a green glazed slip, was recovered from ***108***, the secondary fill of ditch ***107***. In Trench 2 a possible flagon vessel showing evidence of a handle was recovered from ***208***, the secondary fill of ditch ***207***. Again, the vessel consists of reduced greyware with a dark green glazed slip.

5.3.3 The post-medieval assemblage was dominated by heavy-duty domestic storage and cooking vessels (Blackware and Brownware). A number of finer tablewares (Transfer Printed Ware and English Stoneware etc) were also recovered. This shows some level of domestic activity in the area. The sherds show an average date of nineteenth to twentieth centuries.

5.4 METAL OBJECTS

5.4.1 A total of 18 Fe and 3 Cu Alloy objects were recovered from Marsh House, Burgh-By-Sands. The 18 Fe objects were recovered from all four trenches (see finds table), but were unfortunately too corroded to identify any of the objects. The size of the objects ranged from small fragments of 50mm to larger heavier fragments of 100mm. The Cu Alloy fragments were all recovered from Trench 2 (U/S), and consisted of 1 Cu Alloy

button with a star shaped design, 1 Cu Alloy clasp possibly from some sort of binding (book or bag) and a Cu Alloy spoon handle (silver-plated) with an ornate flower type design at the end of the handle. These 3 objects were dated to the late nineteenth to twentieth centuries, based on the lack of corrosion and the style of design.

Context	Trench	Material	Quantity	Weight (kg)	Period
102	1	Fe	1	0.23	Post-Medieval
102	1	Pottery	3	0.012	Post-Medieval
102	1	Clay Pipe Stem	1	0.001	Post-Medieval
102	1	Bottle Glass	4	0.041	Post-Medieval
102	1	Window Glass	1	0.001	Post-Medieval
106	1	Fe	3	0.852	Post-Medieval
106	1	Clay Pipe Stem	2	0.011	Post-Medieval
106	1	Charcoal	1	0.13	Post-Medieval
109	1	Fe	1	0.17	Medieval
109	1	Pottery	1	0.088	Medieval
U/S	1	Fe	4	0.256	Post-Medieval
U/S	1	Pottery	5	0.084	Post-Medieval
206	2	Fe	4	0.186	Post-Medieval
206	2	Clay Pipe Stem	2	0.008	Post-Medieval
208	2	Pottery	1	0.021	Medieval
209	2	Pottery	4	0.07	Roman
209	2	Charcoal	1	0.014	Unknown
209	2	Ceramic Field Drain	1	3.054	Post-Medieval
U/S	2	Fe	6	0.526	Post-Medieval
U/S	2	Pottery	8	0.199	Post-Medieval
U/S	2	Cu Alloy	3	0.01	Post-Medieval
U/S	3	Pottery	5	0.097	Post-Medieval
U/S	3	Bottle Glass	1	0.032	Post-Medieval
U/S	4	Pottery	3	0.046	Post-Medieval
U/S	4	Clay Pipe Stem	1	0.004	Post-Medieval

Table 1: Finds Table of Artefacts Recovered from the Evaluation.

5.5 CLAY TOBACCO PIPES

5.5.1 A total of 6 clay tobacco pipe stem fragments were recovered from Marsh House, Burgh-By-Sands. Unfortunately the stems had no maker's stamps or styled bowl fragments, which made precise dating difficult. However, these could be broadly dated to the post-medieval or modern periods.

5.6 GLASS

5.6.1 A total of 5 sherds of bottle glass were recovered, the majority of which derived from late and disturbed contexts such as ***102***. A single sherd of window glass was also recovered from context ***102***. The bottle glass was a mix of wine bottle sherds and a square clear glass storage bottle. The bottle and window glass all date to the post-medieval and modern periods.

5.7 CHARCOAL

5.7.1 A total of 2 fragments of charcoal were recovered from the evaluation. The charcoal fragments were recovered from Trench 1, context ***106*** and Trench 2, context ***209***.

5.8 CERAMIC OBJECTS

5.8.1 A horseshoe type ceramic field drain portion were recovered from the evaluation (Trench1, Context ***111***). The drain portion has been stamped with the word drain and the date 1830. The fact that the drain was recovered from a Roman ditch shows the area had been disturbed in the nineteenth century by the laying of field drains.

6 ENVIRONMENTAL DATA

6.1 INTRODUCTION

6.1.1 A series of four evaluation trenches were excavated in the grounds of Marsh House, Burgh-by-Sands, Cumbria. The objective of the environmental analysis was to establish the presence/absence, nature, extent and state of preservation of any ecofactual remains and to determine their origins.

6.1.2 The site provided conditions of moist loosely compacted soil. Preservation of the organic remains and bone was then expected to be reasonable, depending on the acidity of the soil.

6.2 ENVIRONMENTAL REMAINS

6.2.1 In the trenches excavated 3 contexts were considered worth sampling. These samples came from two separate ditch features. The three whole earth samples were selected for processing in order to assess their environmental potential. This will help provide further information as to the depositional processes involved in their formation. The methodology employed required that the whole earth samples be broken down and split into their various different components. This was achieved by a combination of water washing and flotation. The recovered remains can then be assessed for content.

6.2.2 Flotation separates the organic, floating fraction of the sample from the heavier mineral and finds content of sands, silts, clays, stones, artefacts and waterlogged material. Heavy soil and sediment content measuring less than 1mm falls through the retentive mesh to settle on the bottom of the tank. Flotation produces a 'flot' and a 'residue' for examination, whilst the heavier sediment retained in the tank is discarded. The method relies purely on the variation in density of the recovered material to separate it from the soil matrix, allowing for the recovery of ecofacts and artefacts from the whole earth sample.

6.2.3 The retent, like the residue from wet sieving, will contain any larger items of bone, or artefacts. The flot or floating fraction will generally contain organic material such as plant matter, fine bones, cloth, leather and insect remains. A rapid scan at this stage will allow further recommendations to be made as to the potential for further study by entomologists or palaeobotanists, with a view to retrieving vital economic information from the samples. Favourable preservation conditions can lead to the retrieval of organic remains that may produce a valuable suite of information in respect of the depositional environment of the material, which may include anthropogenic activity, seasonality and climate and elements of the economy.

6.2.4 The contents of the samples are listed below in Tables 2 and 3.

SAMPLE NUMBER	CONTEXT NUMBER	SAMPLE SIZE (litres)	FLOT SIZE (cm^3)	RETENT SIZE (cm^3)
1	108	30	5	100
2	208	10	4	150
3	210	10	4	200

Table 2 Details of samples and contexts

DETAILS			RETENT FRACTION							LIGHT FRACTION									
Context	Context type	Sample number	Root material	Charred wood	Magnetic material	Burnt bone	Bone	Gravel	Stones	Insects	Charred wood	Root material	Charred grain	Grass	Chenopodium	Elder	Other seeds	Charred organic	Woody plant parts
108	Fill	1	1	1	1	0	0	3	1	0	1	3	0	0	0	0	0	0	1
208	Fill	2	1	1	1	0	0	2	2	0	1	3	0	0	0	0	0	0	1
210	Fill	3	1	1	1	0	0	3	1	0	1	3	1	1	0	1	0	0	1

Table 3 Contents of flot and retent residues from samples

Key to tables: Fill = ditch, posthole or pit fill. Contents assessed by scale of richness 0 to 3. 0 = not present, 1 = present, 2 = common, 3 = abundant

6.2.5 **SAMPLE 1 (CONTEXT 108)** This sample was the primary fill of ditch ***107*** in Trench 1. The matrix was a red-brown sandy soil. The retent was made up mainly of gravel with a few small stones present. There was also a small amount of charcoal and magnetic material. The flot contained mainly root material with a small amount of tiny fragments of charcoal and a few woody plant parts. No seeds were present in this material.

6.2.6 **SAMPLE 2 (CONTEXT 209)** This sample came from the primary fill of ditch ***207***. The retent of this sample was made up of gravel and stones with small amounts of root material, charred wood and magnetic material. The flot contained mainly root material with small amounts of charcoal and woody plant parts. No seeds were present in this sample.

6.2.7 **SAMPLE 3 (CONTEXT 210)** Sample 3 was the secondary fill of feature ***215***, tentatively identified as a ditch. From this moderately compact grey silty soil, the retent produced mostly gravel with some stones. There were also small amounts of root material, charcoal and magnetic material.

6.2.8 The flot yielded mostly root material with small amounts of woody plant parts and charcoal. There were also a total of 5 charred grains recovered from this context. All the grains were naked. Four of the grains were quite small and the other was considerably larger.

6.2.9 It is very difficult to identify the grains as all the surfaces are quite distorted but from their general shape they are probably barley. Two of them are 'twisted' indicating 6-

row barley. It cannot be said though that they are a naked variety as the hull may have been burned off during the intense charring process in this case. From this flot a grass seed and one of elder were also recovered.

6.3 DISCUSSION

6.3.1 Only one of the samples produced charred grain and seeds. The charred grain is not associated with the seeds as these were probably modern contaminants as they were uncharred and not mineralised.

6.3.2 The context 210 from which the charred grain came, a pale grey silt, may have been formed by water action in which case the grain could have washed in from the surrounding area. This indicates it has been reworked during deposition.

6.3.3 All the samples contained some amount of root material and as it is quite robust it is probably fine tree roots or hairs. These may have come from the Sequoia tree in close vicinity of the trenches, especially as the roots would have sought the additional moisture available in the ditch when the weather was dry.

6.4 CONCLUSION AND RECOMMENDATIONS

6.4.1 Charred grain was recovered in the flot from only one of the samples. It is obvious that there was some on site activity leading to the recovery of the charred grain but it is difficult to determine what the source of this material was given the limited information retrieved from the site. This is also compounded by the fact that the silt may have been water borne.

6.4.2 The potential for further information being gained from the examination of this material is limited and so it is recommended that no further work be done.

7 CONCLUSIONS

7.1 ARCHAEOLOGICAL POTENTIAL

7.1.1 The project has provided an opportunity to study the Vallum, and had the potential to confirm its exact location within the central section of the village. Excavations undertaken in the 1985 tentively identified the location of the Vallum at the western extent of Burgh-by-Sands, whilst the Vallum was excavated at the eastern extent during excavations in 1978. Both excavations confirmed that the ditch was on average 6m wide with the sides characteristically steeply sloping. The projected line of the Vallum was mapped by the Ordnance Survey, which indicated that the projected course of the Vallum runs through the grounds of Marsh House.

7.1.2 The results of the evaluation failed to locate the Vallum or any associated features within the evaluation trenches. The earliest datable feature was a ditch ***207***, in Trench 2, which had a broad U-shaped profile and was orientated broadly east to west. Based on provisional finds dating from its primary fill ***209***, it was evident that the ditch was in use during the mid second century AD. Ditch ***107***, in Trench 1 is likely to be the same feature. However, the V-shaped profile of this ditch is reminiscent of Roman military features designed for defensive purposes and those particularly of those constituting outlying defences around forts. Even though both ***107*** and ***207*** appear to be the same feature the profile of the ditch differs significantly, possibly as a result of a recut. It is more likely that the ditch served as a boundary, as the fort is located a considerable distance away. It was also evident that the ditch remained as a landscape feature at least until the medieval period as the upper fills of the ditch (***109*** and ***208***) yielded pottery sherds dating from the fourteenth to the sixteenth centuries.

7.1.3 The post-medieval period was largely characterised by a sequence of shallow linear ditches ***101***, ***105*** and ***203*** all of which appear to pertain to agricultural activity which show evolving land boundaries. Interestingly ditch ***105*** lies on the same alignment to the Roman ditch, indicating that the ditch was still an open landscape feature until relatively recent, perhaps only filled in when Marsh House was constructed. The ditches are likely to have represented boundary features, and may also have been utilised for drainage.

7.1.4 A number of post-medieval pits were excavated ***(201, 205*** and ***213)***, all of which were in Trench 2. The profile of pit ***201***, resembles a large posthole, a number of stones recovered from the fill ***202*** possibly indicate post packing.

7.1.5 The proposed development has the potential to impact upon Roman and later landscape features to the north of Marsh House through the construction of foundations and provision of services.

8 BIBLIOGRAPHY

8.1 BIBLIOGRAPHY

Austen, P.S, 1994, *Recent Excavations on Hadrian's Wall at Burgh-by-Sands Trans Cumberland Westmorland Antiq Archaeol Soc*, 1994, 35-54

Bedoyere, G, 1998, *Hadrian's Wall, History and Guide,* Tempus, London

Birley, E, 1961, *Research on Hadrians Wall,* Titus Wilson, Kendal

British Geological Survey 2001, *Solid Geology Map: UK North Sheet 1:625 000, 4th edition, NERC* Birley, E 1961 *Research on Hadrian's Wall,* Titus Wilson and Son, Kendal

Breeze, DJ, and Dobson, B, 2000 *Hadrian's Wall*, London

Breeze, D.J 2007 (ed) 2007 *J Collingwood Bruce's Handbook to the Roman Wall,* 14th edition, Newcastle-upon-Tyne

Collins, M 2007 *Brief for an Archaeological Evaluation on land at Marsh House, Burgh-by Sands, Cumbria*

Countryside Commission, 1998 *Countryside Character, volume 2: North West*

Daniels, CM (ed) 1978 *J Collingwood Bruce's Handbook to the Roman Wall,* 13th edition, Newcastle-upon-Tyne

DoE 1990 *Planning Policy Guidance Note 15: Planning and the Historic Environment*. Department of the Environment.

DoE 1990 *Planning Policy Guidance Note No.16: Archaeology and Planning*. Department of the Environment.

English Heritage 1991 *Management of Archaeological Projects (MAP2).* London: English Heritage.

English Heritage 2002 *Hadrians Wall Management Plan 2002-2007,* English Heritage

IFA (1994) *Standards and Guidance for Archaeological Desk-Based Assessments*. Reading: Institute of Field Archaeologists

IFA (1994) *Standards and Guidance for Archaeological Evaluations*. Reading: Institute of Field Archaeologists

Giecco, F.O, (2001), *North Pennines Heritage Trust Excavation Manual*. Unpublished: North Pennines Heritage Trust.

Jones, G.D.B and Wooliscroft 2001, *Hadrians Wall from the Air*, Tempus, Stroud

Railton, R, 2007 *Project Design for an Archaeological Evaluation on land at Marsh House, Burgh-by-Sands, Cumbria*

Wilmott, T, 1997*Birdoswald*, English Heritage

APPENDIX 1: CONTEXT LIST

Context Number	Trench	Category	Interpretation
100	1	Layer	Natural
101	1	Cut	Field Boundary
102	1	Fill	Fill of 101
103	1	Cut	Drain
104	1	Fill	Fill of 103
105	1	Cut	Field Boundary
106	1	Fill	Fill of 105
107	1	Cut	Ditch
108	1	Fill	Fill of 107
109	1	Fill	Fill of 107
110	1	Fill	Fill of 107
111	1	Cut	Drain
112	1	Fill	Fill of 111
113	1	Deposit	Unknown
114	1	Layer	Subsoil
115	1	Layer	Topsoil
200	2	Layer	Natural
201	2	Cut	Unknown
202	2	Fill	Fill of 201
203	2	Cut	Ditch?
204	2	Fill	Fill of 203
205	2	Cut	Pit
206	2	Fill	Fill of 206
207	2	Cut	Ditch
208	2	Fill	Fill of 207
209	2	Fill	Fill of 207
210	2	Layer	Unknown
211	2	Layer	Subsoil
212	2	Layer	Topsoil
213	2	Cut	Unknown
214	2	Fill	Fill of 213
215	2	Cut	Unknown
216	2	Fill	Fill of 215
217	2	Cut	Drain
218	2	Fill	Fill of 217
300	3	Layer	Natural
301	3	Cut	Drain
302	3	Fill	Fill of 301
303	3	Layer	Subsoil
304	3	Layer	Topsoil
400	4	Layer	Natural
401	4	Feature	Tree-bole
402	4	Fill	Fill of 401
403	4	Layer	Subsoil
404	4	Layer	Topsoil

APPENDIX 2: FIGURES