

Client Report No. 223/05

**REPORT ON
AN ARCHAEOLOGICAL
DESK-BASED ASSESSMENT
AND FIELD EVALUATION
ON LAND ADJACENT TO
1 CLOSE STREET,
CARLISLE,
CUMBRIA**

**For
DALTON PARK
DEVELOPMENTS
NGR NY 4070 5531**

**Planning Application Ref:
1/05/0090**

C J Jones BA, MA, AIFA
P Crompton BSc Hons
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Mobile: 07979 617882
Email: c.jones@nparchaeology.co.uk

6th July 2005



CONTENTS

	<i>Page</i>
List Of Figures and Plates.....	ii
Non-Technical Summary.....	iii
Acknowledgements.....	iv
1 INTRODUCTION AND LOCATION.....	1
2 AIMS AND METHODOLOGY.....	1
2.2 PROJECT DESIGN.....	1
2.3 DESK-BASED ASSESSMENT.....	1
2.4 VISUAL SITE INSPECTION.....	2
2.5 FIELD EVALUATION	2
2.5 PROJECT ARCHIVE	2
3 ARCHAEOLOGICAL BACKGROUND.....	3
3.1 PREVIOUS WORK	3
3.2 19TH-CENTURY OBSERVATIONS	3
3.3 OTHER INVESTIGATIONS	3
4 HISTORICAL BACKGROUND	5
4.1 PLACE NAME EVIDENCE	5
4.2 PREHISTORIC	5
4.3 ROMAN.....	5
4.4 MEDIEVAL.....	6
4.5 POST MEDIEVAL	6
5 RESULTS.....	7
5.1 GENERAL INFORMATION	7
5.2 TRENCH 1	7
5.3 TRENCH 2	7
6 THE FINDS	9
6.1 THE POTTERY.....	9
6.2 BONE.....	10
6.3 SLAG.....	10
6.4 IRON.....	10
6.5 COPPER ALLOY	10
7 THE ENVIRONMENTAL EVIDENCE	11
7.1 METHODOLOGY	11
7.2 RESULTS.....	11
7.2.1 SAMPLE 1 (CONTEXT 108).....	12
7.2.2 SAMPLE 2 (CONTEXT 106).....	12
7.2.3 SAMPLE 3 (CONTEXT 114).....	13
7.2.4 SAMPLE 4 (CONTEXT 115).....	13
7.2.5 SAMPLE 5 (CONTEXT 116).....	13
7.3 BONE AND MOLLUSC REMAINS.....	13
7.4 DISCUSSION.....	14
7.5 CONCLUSION AND RECOMMENDATIONS	14
8 CONCLUSIONS	14
9 BIBLIOGRAPHY	15
10 APPENDIX 1 – LIST OF CONTEXTS.....	17
11 APPENDIX 2 – ILLUSTRATIONS.....	18
12 APPENDIX 3 – ROMAN POTTERY FABRIC SERIES	21

LIST OF FIGURES AND PLATES

	<i>Page</i>
Figure 1	Site Location..... 23
Figure 2	Location of Trenches 24
Figure 3	Plan and Section of Pit 113 25
Figure 4	Location of Roman burials along Botchergate/London Road 26
Plate 1	Trench 1 Pre-Excavation 18
Plate 2	Trench 1 Post-Excavation..... 18
Plate 3	Trench 2 Pre-Excavation 19
Plate 4	Detail of Medieval Pit 20

NON-TECHNICAL SUMMARY

In June 2005 North Pennines Archaeology Ltd undertook an archaeological desk-based assessment and field evaluation on land at 1 Close Street, Carlisle, Cumbria. The work was requested in response to a planning application for the erection of 8 apartments, a scheme considered to affect an area of high archaeological potential. The work conformed to the standards set out in a brief provided by Cumbria County Council Historic Environment Service.

The work involved the consultation of the County Sites and Monuments Record in Kendal and the County Record Office, Carlisle, in order to assess the existing information regarding the site's historic, archaeological, topographical and geographical context prior to the commencement of fieldwork. This involved the collection of all readily available information regarding the archaeological landscape of the study area, including the locations and settings of Scheduled Ancient Monuments, Listed Buildings, Parks and Gardens and other, non-designated archaeological remains. This was followed by a visual site inspection and the excavation of a series of trial trenches in order to assess the presence/absence, nature, extent and state of preservation of archaeological remains.

The work revealed the presence of a single medieval pit in trench 2 and a number of denuded features. These were sealed by a series of soil build up layers, the earliest of which contained a number of fragments of Roman period pottery.

ACKNOWLEDGEMENTS

The project was managed and fieldwork directed by Chris Jones BA, MA, AIFA, assisted by Frank Giecoco, Joanne Beaty, Alan James and Odele Smith. The report was written by Chris Jones and edited by Juliet Reeves.

1 INTRODUCTION AND LOCATION

- 1.1 In June 2005 North Pennines Archaeology Ltd undertook an archaeological field evaluation on land at 1 Close Street, Carlisle, Cumbria on behalf of Dalton Park Developments. The work was required in a brief provided by Jeremy Parsons of Cumbria County Council Historic Environment Service (CCCHES, 2005) in response to a planning application for the erection of 8 apartments, a scheme which affects an area considered to have a high archaeological potential, within the Carlisle Archaeological Hazard Area (SMR 3560).
- 1.2 The site is located to the north of modern London Road and Botchergate, within the area of the early Roman cemetery, Late Roman and medieval settlement. The area is shown in Figure 1.
- 1.3 The site is situated within an urban landscape, at a height of approximately 62m AOD. The geology of the area consists of orange brown boulder clay (SSEW 1984).

2 AIMS AND METHODOLOGY

- 2.1 The work undertaken consisted of a desk-based assessment, visual site inspection and field evaluation.

2.2 PROJECT DESIGN

- 2.2.1 A project design was prepared in response to a brief prepared by Cumbria County Council Archaeology Service and English Heritage for an archaeological field evaluation. This included a detailed specification of works to be carried out, which consisted of a desk-based assessment prior to fieldwork, a visual site inspection, the excavation of a series of trial trenches and a programme of post excavation and reporting.

2.3 DESK-BASED ASSESSMENT

- 2.3.1 The assessment involved the consultation of the Cumbria County Council Sites and Monuments Record, Kendal. This was in order to obtain information on the location of all designated sites and areas of historic interest and any other, non-designated sites within the study area, which included monuments, findspots, Listed Buildings and Conservation Areas.
- 2.3.2 An electronic enquiry was also made of English Heritage's National Monuments Record and the website of the Archaeology Data Service. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.
- 2.3.3 Further documentary study was undertaken at the County Record Office, Carlisle, which involved the collection of all relevant historical maps and documents including surveys, Tithe and Enclosure Maps, Acts of Parliament and early Ordnance Survey maps.

2.3.4 The desk study was undertaken in accordance with the Institute of Field Archaeologists *Standards and Guidance for Archaeological Desk-Based Assessments* (IFA 1994).

2.4 VISUAL SITE INSPECTION

2.4.1 A visual site inspection was undertaken prior to the commencement of fieldwork which found no evidence of existing services limiting the scope of work on site. The site was considerably overgrown with bramble and bracken and also had been used for fly tipping. As a result the site was cleared by machine prior to the on-site work taking place.

2.5 FIELD EVALUATION

2.4.1 The field evaluation consisted of the excavation of 2 linear trial trenches measuring 10m x 1.5m and 5m x 1.5m, which provided a 5% sample of an area 422m². This was in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals.

2.4.2 In summary, the main objectives of the excavation 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 that useful for dating purposes;
- to recover paleoenvironmental material where it survives in order to understand site and landscape formation processes.

2.4.3 Each trench was mechanically excavated by a JCB 3CX excavator equipped with a toothless ditching bucket, under archaeological supervision, to the natural substrate. Each trench was then manually cleaned and any putative archaeological features investigated.

2.4.4 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 Colour Print and Colour Slide film.

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

2.5 PROJECT ARCHIVE

2.5.1 The full archive has been produced to a professional standard in accordance with the current English Heritage guidelines set out in the *Management of Archaeological Projects* (English Heritage, 2nd Ed. 1991). The archive will be deposited within an appropriate repository and a copy of the report given to the County Sites and Monuments Record, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA 05 CLO-A.

3 ARCHAEOLOGICAL BACKGROUND

3.1 PREVIOUS WORK

- 3.1.1 There has been no previous archaeological assessment undertaken within the study area. However, there have been a number of assessments and interventions undertaken within the environs of the site.

3.2 19TH-CENTURY OBSERVATIONS

- 3.2.1 In the later 19th century, a number of Roman burials were discovered on both sides of Botchergate, extending from Court Square to London Road and Gallows Hill. Over 40 burials were found at different times, including cremations and inhumations, together with miscellaneous discoveries of Roman pottery.
- 3.2.2 In 1895 an urn full of bones was found in Tait Street, and another is recorded opposite Tait Street (Charlesworth 1978, 125). At the Crown Inn, at the northern corner of Crown Street and Botchergate, Haverfield recorded the discovery of two small vessels, one containing a pipeclay figurine of Venus and burnt bone (*Ibid*, 126). As burials in Roman times were usually located outside the occupied areas, there is a clear case for regarding Botchergate as lying outside the core settlement of Carlisle.

3.3 OTHER INVESTIGATIONS

- 3.3.1 In 1985, a number of gas-pipe trenches below the western pavement of Botchergate were watched to determine whether archaeological remains could be identified. They revealed road metalling, thought at the time to belong to the Roman and medieval road, the projected line of which lies below Blackfriar's Street and extends towards the Roman fort at Tullie House (CAU 1985).
- 3.3.2 In 1994 Carlisle Archaeological Unit undertook an evaluation in the Cecil Street car park, south of Tait Street, where remains of cremation burials were located, together with field boundaries defining fields that are probably Roman in date. Here the depth of archaeological deposits varied between approximately 0.6m and 1.45m below the modern ground surface (McCarthy and Flynn 1994).
- 3.3.3 During July and August 1997, Carlisle Archaeological Unit undertook a rescue excavation prior to the redevelopment of the former Co-Op building at 40-78 Botchergate, Carlisle. As most of the frontage buildings were to be retained, the investigation focused on the area to the rear, adjacent to Collier Lane, which was to be cleared and built over. A complex sequence of Roman activity was revealed, including part of a substantial earthwork (Zant 1999; Zant and Giecco 1999).
- 3.3.4 In 1997 Lancaster University Archaeological Unit found traces of a small Roman settlement of uncertain function at St Nicholas Yard during an excavation. The work revealed two broad, shallow ditches, which appeared to be separated by a metallised surface. Traces of possible burials and other features were also located. The excavations also revealed putative medieval features including an oven and the remains of walls, possibly associated with the former 12th century leper hospital (Howard-Davis and Leah 1999).

- 3.3.5 A series of evaluations followed by large-scale excavations were carried out by Carlisle Archaeology during 1998 and 1999 between Tait Street and Mary Street on the eastern side of Botchergate, revealing complex, deeply stratified Roman deposits including a sequence of buildings fronting Botchergate and a number of cremation burials (Zant and Giecco 1999; Giecco 2001).
- 3.3.6 An evaluation was carried out in July 2000 by Carlisle Archaeology at King Street, revealing extensive archaeological deposits throughout the site, the vast majority of Roman date (Reeves 2000).
- 3.3.7 An excavation was undertaken on the north-eastern side of Botchergate by Lancaster University Archaeological Unit (LUAU, now Oxford Archaeology North). The work revealed extensive Roman and Medieval archaeological deposits which provided a complete stratigraphic sequence for the Roman and post-Roman periods. The features included two Roman cremations from the late 1st century AD, a series of hearths from the early 2nd century AD, including a probable lead smelting furnace, which were overlain by later medieval deposits including evidence for structures adjacent to the street frontage (LUAU 2001).
- 3.3.8 In January-February 2003, North Pennines Heritage Trust undertook a field evaluation on the site of the corn mill, Harraby Green, Carlisle, which revealed the substantial below ground remains of the latest phase of the mill and also probable remains of medieval settlement, consisting of a clay and cobble foundation and a number of medieval pottery fragments in an area north of the post medieval and modern mill (Jones 2003).
- 3.3.9 In February 2004, North Pennines Archaeology Ltd undertook a field evaluation on land adjacent to St Nicholas Bridge, across the line of the Canal Branch of the London, Midland and Scottish Railway from London Road. The results of the evaluation included a series of stakeholes which were observed cut into the natural subsoil within trenches 1 and 2, one of which contained medieval pottery. A number of fragments of redeposited Roman and medieval pottery were found within a layer of buried ploughsoil. Deposits associated with the London and North Western Railway, which included a Wagon Repair and a Creosoting Shed, both of which survive on site, significantly truncated pre-1900 deposits.
- 3.3.10 In April 2004 North Pennines Archaeology Ltd undertook a field evaluation on land at Rydal Street (NY 4070 5545). The work revealed no significant archaeological features, although a number of sherds of Roman and medieval pottery were recovered from a series of soil build-up layers.
- 3.3.11 In May 2004 North Pennines Archaeology Ltd undertook a field evaluation on land adjacent to the site of the Meadow Brewery. Two postholes, one with an associated line of stake holes, were identified within trench 1. The site comprised an area of pasture prior to the mid 19th century when the brewery was built. The first building on the site was built in the later 19th century, presumably as a bakery. The bakery ceased production prior to 1970 when the building and an early 20th century extension were converted into a motor repair shop. The site has been derelict since the mid 1990s when the motor repair shop ceased operations.

4 HISTORICAL BACKGROUND

4.1 PLACE NAME EVIDENCE

- 4.1.1 The site lies close to the area known as Botchergate, which derives its name of *Botchardgate* from 'Botchard', who held the medieval lordship, and 'gate' from the Anglo-Scandinavian *gate*, which means road (Parson and White 1829).

4.2 PREHISTORIC

- 4.2.1 There is extensive evidence for prehistoric activity within and around Carlisle, including the remains of ard marks from prehistoric ploughing at Blackfriars Street and Lowther Street. Neolithic and Bronze Age pottery was found at Scotby Road, including Grooved Ware and Beaker pottery, and a collared urn and burnt mound were excavated at Garlands Hospital (Perriam 1992, 3). Flints of Neolithic and Bronze Age date have also been found, and two socketed Late Bronze Age axes were found at Kings Meadow, Stanwix (SMR No. 525). It has been suggested that the promontory on which Carlisle Castle now stands has been a defended site since at least the Iron Age and possibly a pre-Roman *dun*.

4.3 ROMAN

- 4.3.1 By 73 AD the Romans had established a fort at the northern end of the present city centre, and this quickly expanded to become a substantial civilian settlement measuring over 40 acres in area. The withdrawal by the Romans from Scotland in the 80s, and later the building of Hadrian's Wall from AD 122, probably had a substantial impact on the settlement. By about AD 200 Carlisle, known as *Luguvalium*, seems to have been granted special status, and it continued to flourish, with a large number of houses, shops, administrative and other public buildings, until the end of the Roman occupation around AD 400.
- 4.3.2 Outside the core part of the Roman town of Carlisle, in the period between the Flavian period and the mid 2nd century, many forts were built, some of which were temporary camps, and others were more substantial. Some doubtless housed troops on active campaigns, whilst others probably provided accommodation for soldiers redeployed during the withdrawal from Scotland and in the context of an evolving frontier policy. In addition, there are many small farmsteads, whose economy would have been linked in some way to that of Carlisle and the needs of the military.
- 4.3.3 The corridor either side of London Road and Botchergate has long been known to contain Roman remains, with some 40 burials recovered during building works in the 19th century, and other remains recovered during systematic archaeological excavation during the 1990s (Carlisle Archaeology, Lancaster University Archaeological Unit). Little is known, however, regarding the extent of the Roman cemetery (and settlement) or the nature and extent of medieval settlement.

4.4 MEDIEVAL

- 4.4.1 Following the withdrawal of the Legions in the early part of the 5th century, Carlisle probably continued to be occupied, and it housed an important monastic community from the 7th century. The arrival of the Normans in 1092 heralded a period of major change, during which the city was enclosed by walls. Throughout the Middle Ages and up to the Jacobite rebellion in 1745, Carlisle was a major frontier city on the borders of England and Scotland.
- 4.4.2 From the Middle Ages until the late 18th century, Carlisle was more or less confined to the land within the city walls, apart from three ribbon-like suburbs outside the three city gates. From the end of the 18th century, with the rapid expansion of the town during the Industrial Revolution, the three suburbs grew very rapidly in size, with new housing, factories, roads, and industrial and commercial premises. These developments, together with the advent of the railways, expanded over what had previously been open countryside.
- 4.4.3 The development site lay outside the principal area of settlement during the medieval period, a territory that, outside the protection of the city walls, was subject to ravaging by frequent raids and invading retinues. It is likely the site consisted of agricultural land during the medieval period, and formed part of the medieval lordship or *demesne* of Carlisle.

4.5 POST MEDIEVAL

- 4.5.1 Following the union of the English and Scottish Crowns with the accession of James I to the English throne in 1603, a programme of pacification of the borderlands began. This saw a modernisation of tenureships of great benefit to northern landowners and a breakdown of the traditional forms of Border service (Spence 1984; 64). This process of modernisation led to the undertaking of two detailed surveys of the Socage or manorial lands of Carlisle, by Thomas Johnson in 1608 and Aaron Rathbone in 1611 (Ibid, 67).
- 4.5.2 During the later 18th and the 19th centuries, the introduction of the factory system and increasingly complex technologies gave rise to a substantial population increase in urban areas throughout Britain. In Carlisle, the construction of factories and their attraction to migrant workers from the adjacent countryside saw a concomitant rise in the urban population and a need for new residential housing outside the traditional city centre. A prime area, immediately outside the historic core, was the area north and east of Botchergate. Close Street was situated within one of the poorest areas of the expanding city. The area was characterised by narrow streets and cramped, back-to-back terraced housing.

5 RESULTS

5.1 GENERAL INFORMATION

- 5.1.1 The evaluation was undertaken by Chris Jones, Frank Giecco, Jo Beaty, Alan James and Odele Smith.
- 5.1.2 Two linear trial trenches were excavated across the proposed development site, providing a 5% sample of an area 422m².
- 5.1.3 All references to cardinal directions refer to site grid north. Heights refer to the depth below current ground level.

5.2 TRENCH 1 (PLATES 1-2)

- 5.2.1 Trench 1 measured 10m x 1.5m and was oriented east – west. The natural substrate was observed at a depth of 1.20m and consisted of orange-brown boulder clay (**101**).
- 5.2.2 A possible linear slot was revealed (**105**) cutting into the natural substrate (**101**), which measured 3.25m wide x 0.05m deep and was filled by a mid brown clay loam (**106**). A small, sub-oval pit was also observed (**107**), which measured 1.5m in length x 0.5m wide and was 0.05m deep, filled by a mid brown clay loam (**108**).
- 5.2.3 These features were overlain by a series of loamy garden soil deposits (**102** – **104**). These soil build up layers consisted of medieval and post medieval/19th century garden soil. Context 102 was sealed by modern overburden which consisted of 20th century refuse (**100**).

5.3 TRENCH 2 (FIGURE 3, PLATES 3-4)

- 5.3.1 Trench 2 measured 5m x 1.5m and was oriented northeast – southwest. The natural substrate was observed at a depth of 1.20m and consisted of orange brown boulder clay (**101**).
- 5.3.2 A large, sub-circular pit was observed within trench 2, which cut the natural substrate (**101**), and overlain by a series of soil build up layers similar to those observed within trench 1 (**102** – **104**).
- 5.3.3 The pit (**113**) was sealed beneath soil build up **103** and is probably contemporary with soil build up **104**. Pit **113** was filled by three distinct deposits, a compact blue-grey clay (**116**), which was sealed by a mid-brown mottled clay (**115**) and a mid-brown clay loam (**114**). Each of these deposits produced sherds of medieval pottery and residual Roman pottery. A number of fragments of burnt bone were also observed.
- 5.3.4 Context 102 was sealed by modern overburden as also observed within trench 1 (**100**).

- 5.3.5 A shallow linear slot was observed in the north-east corner of trench 2 (**109**), which measured 0.80m in length x 0.30m wide x 0.05m deep, and was oriented approximately north – south. The slot was filled by a mid brown clay loam (**110**) which produced 1 sherd of Roman pottery.
- 5.3.6 Part of a small, probable sub-circular feature was observed in the north-west corner of trench 2 (**111**). The feature was filled by a mid-brown clay loam (**112**), which did not produce any cultural material. Owing to the limited extent of the feature and the impracticality of extending the trench it is not possible to comment further.

6 THE FINDS

Context	Pottery	Bone	Clay Pipe	Fe	Cu	Slag	CBM	Other
100	3	1	4	6	-	-	1	3
102	1	-	1	1	1	-	-	-
103	3	1	-	-	-	-	1	-
104	9	3	-	-	-	-	1	2
106	1	-	-	-	-	-	-	-
108	2	-	-	-	-	-	-	-
110	1	-	-	-	-	-	-	-
114	13	27	-	2	-	-	7	1
115	-	-	-	-	-	1	-	-
Total	33	32	5	9	1	1	3	6

Table 1: Finds by Context.

6.1 THE POTTERY

- 6.1.1 33 sherds of pottery were recovered from all contexts during the evaluation. These consisted principally of Roman and medieval fabrics, with the exception of modern fabrics recovered from the modern overburden (100) and post medieval garden soil (102).
- 6.1.2 Context 103 produced 1 body sherd and 1 bead rim of red gritty ware (12th century) from a cooking vessel or vessels, and 1 buff coloured, part-reduced fabric with an olive green slip. This context also produced 1 tile fragment of unknown date.
- 6.1.3 Context 104 produced 7 fragments of Parchment Crambeck Ware (Fabric 28) which included a fragment from a flagon with traces of brown painted decoration, of probable late 3rd – 4th century date. This context also produced an abraded body sherd of reduced grey ware (Fabric 11) and a body sherd of hard white fabric with no visible inclusions (Fabric 6). This context also produced 2 brick fragments.
- 6.1.4 Context 106 produced 1 rim sherd of reduced grey ware (Fabric 11).
- 6.1.5 Context 108 produced 1 abraded body sherd of Central Gaulish Samian and 1 abraded sherd of sandy micaceous fabric (Fabric 20).
- 6.1.6 Context 110 produced 1 sherd of red gritty ware (12th century).

- 6.1.7 Context 114 produced 11 sherds of Roman Pottery and 7 tile fragments. These included a part-reduced grey ware body sherd, a reduced grey ware handle and 2 body sherds, 3 fragments of mortaria (Fabric 12), an inverted rim of orange oxidised ware with a pale buff slip (from a cooking vessel; Fabric 4) and 1 body sherd of Central Gaulish Samian. This context also produced 1 bead rim of partially reduced grey ware from a small jar (Fabric 11), 1 reduced grey ware rim sherd and 1 body sherd (Fabric 11) and 1 fragment of coarse oxidised orange fabric with white grit inclusions (Fabric 13).

	FABRIC 4	FABRIC 6	FABRIC 11	FABRIC 12	FABRIC 13	FABRIC 20	FABRIC 28	SAMIAN
104	-	1	1	-	-	-	7	-
106	-	-	1	-	-	-	-	-
108	-	-	-	-	-	1	-	1
114	2	-	8	3	1	-	-	1

Table 2: Roman Pottery (See Appendix for Fabric Series Descriptions).

- 6.1.8 Context 114 also produced 1 fragment of medieval pottery, which consisted of a rim sherd from a part - oxidised greyware rim with combed decoration (overfired) and a dark green slip (13th – 15th centuries).

6.2 BONE

- 6.2.1 There were 32 bone fragments recovered from all contexts, which included 27 fragments of burnt or cremated bone from context 114 and 3 fragments from context 104. The individual fragments from contexts 100 and 103 consisted of animal bone fragments.

6.3 SLAG

- 6.3.1 Context 115 produced 1 piece of crude iron slag.

6.4 IRON

- 6.4.1 There were 9 corroded iron fragments recovered from the evaluation trenches, 7 of which are of post medieval and modern date. Context 114 produced 2 iron nail fragments.

6.5 COPPER ALLOY

- 6.5.1 Context 102 produced 1 copper alloy button of 19th-20th century date.

7 THE ENVIRONMENTAL EVIDENCE

7.1 METHODOLOGY

7.1.1 Five contexts from both trenches produced matrices considered suitable for analysis. Each of these samples was individually subjected to manual water flotation.

7.1.2 Flotation separates the organic, floating fraction of the sample from the heavier mineral and finds content of sands, silts, clays, stones, artefactual and waterlogged material. Heavy soil and sediment content measuring less than 1mm passes 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.

7.1.3 The residue, as well as retaining the soil matrix matter measuring more than 1mm, contains the larger artefacts, such as bone or pottery, which can then be extracted and recorded. The floating fraction or 'flot' generally comprises the organic material of mainly plant matter, seeds, both charred and uncharred, small or parts of bone, both burnt and unburnt, and insect remains. A rapid assessment by scanning the material with a hand lens or microscope then allows for recommendations to be made as to the samples' potential. Further work by palaeobotanists or entomologists can then be carried out if necessary.

7.1.4 Where the preservation has been favourable, the organic remains may produce a valuable suite of information regarding the depositional environment of the material. This can include seasonality and climate, anthropogenic activities, and elements of the economy.

7.2 RESULTS

SAMPLE NUMBER	CONTEXT NUMBER	SAMPLE SIZE (litres)	FLOT SIZE (cm ³)	RETENT SIZE (cm ³)
1	108	5	10	2000
2	106	6	5	1000
3	114	10	5	4000
4	115	4	5	2500
5	116	4	5	1500

Table 3 Details of samples and contexts.

DETAILS			RETENT CONTENT										FLOT CONTENT										
Context	Context type	Sample number	Stones	Gravel	Charred wood	Magnetic material	Bone	Burnt bone	Metal artefacts	Pottery	Other artefacts	Charred wood	Insects	Charred grain	Elder	Chenopodium	Dwarf spurge	Woody plant parts	Other seeds/spores	Modern roots	Bone	Burnt bone	
108	Fill	1	3	2	1	1	0				1	0	0	0	1	1	0	0	3	0	0		
106	Fill	2	1	3	1	1	0	1	0	0	1	0	1	0	1	0	0	0	3	0	0		
114	Fill	3	2	3	1	1	0	1	0	1	0	1	0	2	0	0	0	0	3	0	0		
115	Fill	4	2	3	1	1	0	1	2	0	0	1	0	0	1	0	0	0	3	0	0		
116	Fill	5	2	3	1	1	0	1	0	2	0	1	0	1	1	0	0	0	3	0	0		

Table 4 Contents of flot and retent residues from samples.

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

7.2.1 SAMPLE 1 (CONTEXT 108)

7.2.1.1 This sample was taken from the fill of linear feature (107). A fragment of Central Gaulish Samian ware was recovered from this context and a pot sherd of probable Roman date was produced from the retent fraction. The flot produced a small amount of charred wood as very small fragments. The main constituent of the flot was modern root material. There was a modern seed each of *Chenopodium* and *Euphorbia*. The amount of flot recovered (10cm³) though was a very small percentage of the total sample processed (5 litres).

7.2.1.2 Other than the pottery the residue produced a large amount of stones and gravel to a volume of 2 litres. The retent was trawled with a magnet and a small amount of magnetic material was recovered. This took the form of metal bearing rock fragments. There are many iron bearing rocks that are magnetic and the minimal amount associated with the retent does not suggest any metalworking activity.

7.2.2 SAMPLE 2 (CONTEXT 106)

7.2.2.1 This sample was produced from the fill of a shallow pit (105). This context produced two sherds of pottery of probable Roman date. The flot produced a small amount of charred wood fragments and also contained a seed of *Chenopodium* and a charred grain of wheat or barley, too fragmentary to identify.

7.2.2.2 The residue (1 litre) produced mainly gravel with some stones. It also contained a small amount of charred wood and a small amount of magnetic material. The magnetic material consisted of metal bearing rock fragments. The iron bearing rocks are probably the same as those in sample 1, the provenance being similar. A small amount of burnt bone was also present in the residue.

7.2.3 SAMPLE 3 (CONTEXT 114)

7.2.3.1 The sample removed from this mid brown silty clay layer had inclusions of stones and gravel with a few small pebbles. The flot (10cm³) produced no seeds but contained 3 charred grains as barley or wheat. The main constituent of the flot was again modern root material.

7.2.3.2 The residue was made up of stones and gravel. There were also some fragments of burnt bone. The sample as a whole produced little environmental material as a percentage of the original. A fragment of Roman pottery was also recovered from the retent, several fragments of which had also been recovered during excavation.

7.2.4 SAMPLE 4 (CONTEXT 115)

7.2.4.1 This sample was removed from a brown grey silty clay, the fill of a pit. The flot (5cm³) produced mainly roots and one modern seed of elder (*Sambucus nigra*). A small amount of charred wood was present as small fragments.

7.2.4.2 There were some small fragments of burnt wood and bone in the retent with small stones and gravel also present making up the main matrix. There were also several metal concretions with small stones adhered to them. These may originally have been artefacts but without x-ray analysis it cannot be said for certain.

7.2.5 SAMPLE 5 (CONTEXT 116)

7.2.5.1 This sample was removed from a matrix of blue-grey clay. The material had an amount of small stones and small gravel in it. The flot was extremely small but still produced a charred grain of wheat or barley, a charred oat, a small amount of charred wood fragments and a charred dock (*Rumex*) seed.

7.2.5.2 The retent comprised small stones and gravel with a few small fragments of charred wood, burnt bone and a small amount of magnetic material. There were also 3 fragments of Roman pottery.

7.3 BONE AND MOLLUSC REMAINS

7.3.1 There was very little bone material recovered from the site. There was a complete cattle phalange, the only example of unburnt bone. The other bone consisted of 3 fragments of burnt bone from context 104 and 15 fragments of burnt bone from context 114. At least 5 of the latter were rib fragments, possibly human. The colour and condition of the burnt bone suggested that it had reached a high temperature.

7.3.2 There were no mollusc remains recovered from the site.

7.4 DISCUSSION

- 7.4.1 None of the samples produced sizeable quantities of flot although they all contained fragments of charred wood and 3 of them contained charred grain (106, 114, 116). There were relatively few modern weeds as intruders but this would be expected in an urban context. There were no other charred seeds associated with the samples apart from the grain and the dock found in sample 5.

7.5 CONCLUSION AND RECOMMENDATIONS

- 7.5.1 These fills show evidence of direct anthropogenic activity, as domestic use. Further investigation of this site will help to discover the nature of the activities that were carried out in the environs and lead to a better understanding of processes that were carried out in this period in this area. Further excavation of the area would add considerably to our knowledge of the environs in this period as a suburb of Carlisle.

8 CONCLUSIONS

- 8.1 The evaluation revealed a stratigraphic sequence on site which consisted of a series of garden soil layers approximately 0.9m – 1.20m deep. Trench 2 revealed a substantial pit of probable medieval date and 2 unidentified features of probable anthropogenic origin.
- 8.2 There was a marked absence of material along the street frontage (Close St), with evidence of activity to the rear of the development site. It is likely that the site consisted of medieval and post-medieval gardens. No in-situ evidence of Roman settlement was revealed in either of the trenches, despite the residual presence of burnt or cremated bone within the fill of pit 113, and that contained within medieval garden soil 104.
- 8.3 It is recommended that the design of the proposed development take into account the likely presence of medieval pitting towards the rear of the site. Due to the limited evidence for archaeological activity at the front of the site it is anticipated that no significant remains survive in this area, however, there remains the possibility that discreet archaeological features may be present and limited further work is anticipated here.

9 BIBLIOGRAPHY

Primary Sources

- Bulmer's Directory of Cumberland, 1860
- A.B.Moss's Directory of Carlisle, 1884-5
- Parson and White's Directory of Cumberland, 1829
- Map of the Socage Manor of Carlisle, 1610
- Hodkinson and Donald's Map of Cumberland, 1774
- Botchergate Tithe Map 1848
- Ordnance Survey 1st Edition 1856. HMSO © Crown Copyright
- Ordnance Survey 2nd Edition 1912. HMSO © Crown Copyright
- Ordnance Survey 3rd Edition 1925 HMSO © Crown Copyright
- Ordnance Survey 4th Edition 1950 HMSO © Crown Copyright

Secondary Sources

- Carlisle City Council (1997) *Carlisle District Local Plan*.
- CCC & LDNPA (2003) *Cumbria and the Lake District Joint Structure Plan*.
Cumbria County Council/Lake District National Park Authority.
- Charlesworth, D. (1978) Roman Carlisle. *Archaeological Journal* **135**, 115-37.
- DoE (1987) *Circular 8/87*. Department of the Environment.
- 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.
- DoE (1990) *The Planning (Listed Buildings and Conservation Areas) Act*.
Department of the Environment.
- English Heritage (1991) *Management of Archaeological Projects (MAP2)*.
London: English Heritage.
- English Heritage (2003) *Register of Parks and Gardens*.
- English Heritage (2003) *Register of Battlefields*.
- English Heritage (2003) *Register of Buildings at Risk*.
- Giecco, F.O. (2001a) *Preliminary Report on Excavations at Botchergate*.
Carlisle Archaeology. Unpublished Report.
- Giecco, F.O. (2001b) *An Archaeological Desktop Assessment on land at 84-88
Botchergate, Carlisle*. Carlisle Archaeology Project Designs and Client
Reports 13/01. Unpublished Report.

- HMSO (1979) *Ancient Monuments and Archaeological Areas Act*. London: HMSO.
- HMSO (1990) *The Planning (Listed Buildings and Conservation Areas) Act 1990*. London: HMSO.
- IFA (1994) *Standards and Guidance for Archaeological Desk-Based Assessments*. Reading: Institute of Field Archaeologists.
- Jones, C.J. (2005) *Project Design for an Archaeological Field Evaluation on land adjacent to 1 Close Street, Carlisle, Cumbria* North Pennines Archaeology Ltd. Project Design No. 223.
- Lee, J. (1998) *The Place Names of Cumbria*.
- LUAU (2001) *An Archaeological Excavation at Botchergate, Carlisle*. Unpublished Report.
- McCarthy, M.R and Flynn, P.A. (1994) *Botchergate Relief Road, Carlisle, Cecil Street Car Park: An Archaeological Evaluation*. Unpublished Report, Carlisle Archaeological Unit.
- Nicolson, J. and Burn, R. (1777; Rev. Ed. 1976) *The History and Antiquities of the Counties of Cumberland and Westmorland*. Volume I. E.P. Publishing Limited.
- Parsons, J.N. (2005) *Brief for an Archaeological Field Evaluation on land adjacent to 1 Close Street, Carlisle, Cumbria*. Cumbria County Council Historic Environment Service.
- Perriam, D. R. (1992), *Carlisle: An Illustrated History*. Carlisle: Bookcase, Cumbria Library and Tullie House Museum.
- Reeves, J. (2000) *Report on an Archaeological Evaluation at King Street, Botchergate, Carlisle*. Carlisle Archaeology Ltd. Client Report. Unpublished Report.
- Spence, R.T. (1984) The Backward North Modernized? The Cliffords, Earls of Cumberland and the Socage Manor of Carlisle 1611-1643. *Northern History*. XX: 64-87.
- SSEW (1984) *Soils and their use in Northern England*. Soil Survey of England and Wales.
- Zant, J. (1997) *Report on an Archaeological Excavation on land at Collier Lane, Botchergate, Carlisle*. Carlisle Archaeology Ltd. Client Report. Unpublished.
- Zant, J and Giecco, F. (1999) Recent work in Carlisle. *Current Archaeology*. 164, 306-9.

10 APPENDIX 1 – LIST OF CONTEXTS

Context	Type	Description
100	Deposit	Modern overburden
101	Deposit	Postglacial till
102	Deposit	Post Medieval/Modern garden soil build-up
103	Deposit	Medieval garden soil build-up
104	Deposit	Medieval garden soil build-up
105	Cut	Pit
106	Fill	Fill of 106
107	Cut	Linear feature
108	Fill	Fill of 107
109	Cut	Pit/Slot (undefined)
110	Fill	Fill of 109
111	Cut	Pit
112	Fill	Fill of 111
113	Cut	Pit
114	Fill	Upper fill of 113
115	Fill	Secondary fill of 113
116	Fill	Primary fill of 113

Table 1: Index of Contexts

11 APPENDIX 2 – ILLUSTRATIONS



Plate 1: Trench 1. Pre-Excavation, looking west.



Plate 2: Trench 1. Post-excavation, looking east.

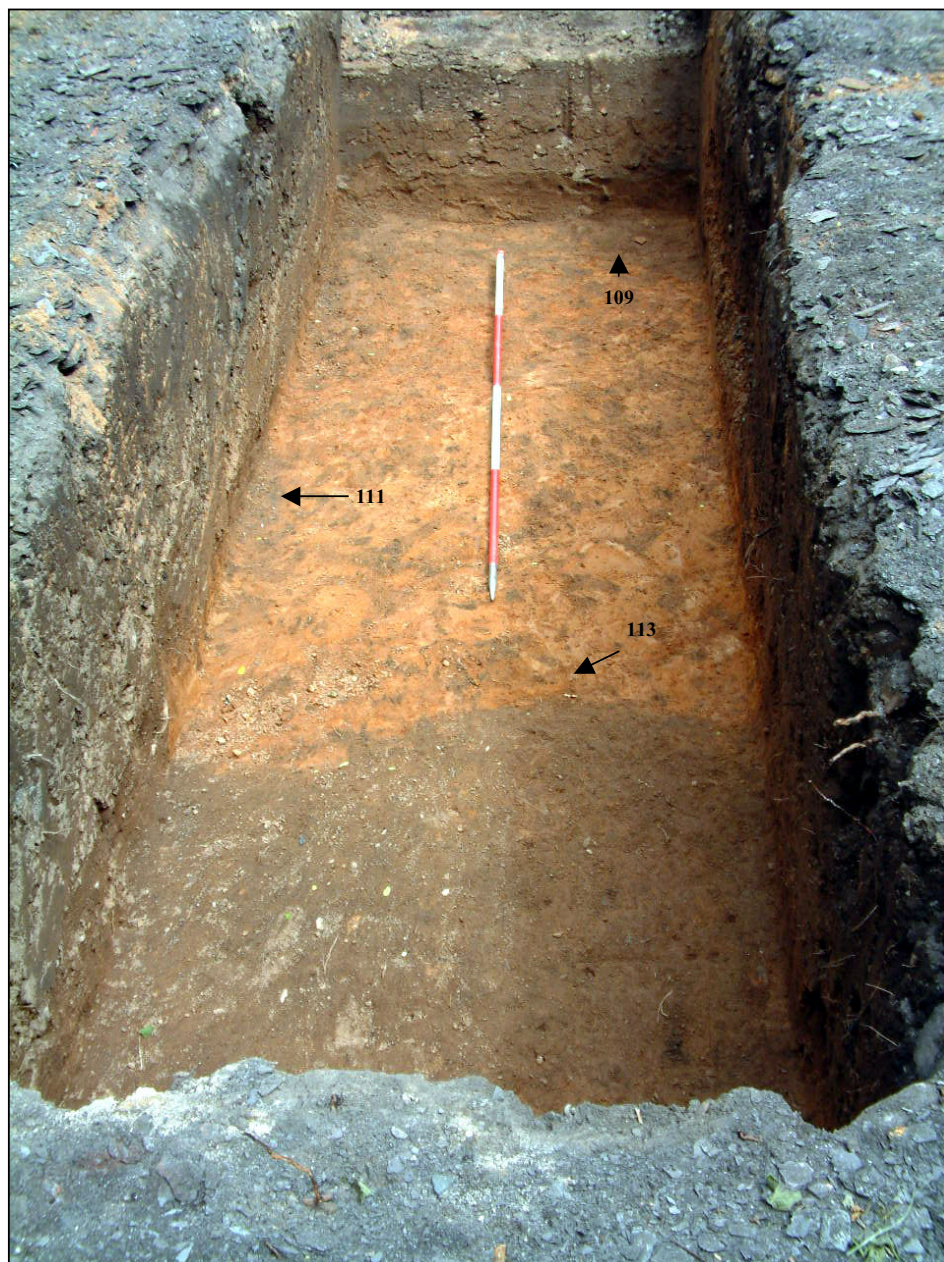


Plate 3: Trench 2, Pre-excavation, looking north-east.



Plate 4: Trench 2: Detail of Pit 113.

12 APPENDIX 3 – ROMAN POTTERY FABRIC SERIES

Fabric 1 Black burnished Ware 1 (BB1) (Williams 1977).

Fabric 2 Black Burnished Ware 2 (BB2) (Williams 1977).

Fabric 3 Rustic Ware. Hard, mid-grey fabric with darker grey outer surface and rusticated decoration.

Fabric 4 Oxidised, orange ware with white/cream slip. Usually a fairly sandy fabric. Local ware; could well be the product of more than one source.

Fabric 6 Hard, white fabric with no visible inclusions and smooth outer surface. Source unknown. Could well be the product of more than one source.

Fabric 7 Hard, fine-textured, pinkish-buff fabric with mica-dusted surface.

Fabric 9 Terra Nigra. Hard, pale pinkish-grey fabric with shiny black outer surface (Rigby 1973).

Fabric 11 Unidentified grey ware. The products of several sources, many or all of which, are likely to be local.

Fabric 12 Unidentified oxidised wares. The products of several sources, many or all of which, are likely to be local.

Fabric 13 Hard, oxidised orange fabric which contains a fair amount of white grit (and some larger inclusions), making the surface pimply. Possibly the product of more than one source, at least some of which are likely to be local.

Fabric 14 Rough-cast ware. Fine-textured, pink fabric with rough-cast decoration. Sometimes has a darker pinkish-brown slip. Local ware? Possibly a local imitation of imported rough-cast beakers, such as those in fabric 15.

Fabric 15 Rough-cast ware. Fine, hard, orange fabric with grey core and purplish-grey slip and rough-cast decoration. Anderson's North Gaulish Fabric 1 (Anderson 1980).

Fabric 17 Severn Valley Ware. Hard, orange fabric with pale grey core and mica visible in surfaces. May have burnished line or lattice decoration (Webster 1976).

Fabric 20 Hard, sandy orange fabric with small amount of mica inclusions and bright orange/red slipped surfaces. Probably local.

Fabric 21 Nene Valley Colour-coated Ware. Fairly hard, white or pink fabric with colour-coat of various colours from dark grey to orange-brown (Howe et al 1980).

Fabric 22 Huntcliff Ware. Soapy-textured, calcite-gritted, grey or black fabric, heavily charged with white calcite grit or having voids left by dissolved-grit. Hand made.

Fabric 27 Grey Crambeck Ware. Very pale grey fabric with lead-grey surfaces (Corder and Birley 1937; Evans 1989).

Fabric 28 Parchment Crambeck Ware. Hard, yellowish-white fabric usually with red/brown painted decoration (Corder and Birley 1937; Evans 1989).

Fabric 30 Rhineland? Very fine, white fabric with orange/red slip and barbotine decoration.

Fabric 34 'Rhenish' ware. Very hard, orange/grey/orange fabric with glossy black slip. Trier (Greene 1978, Symonds 1992).

Fabric 35 Central Gaulish colour-coated ware ('Rhenish'). Very fine-textured, hard, pink fabric with glossy, black slip (Greene 1978).

Fabric 43 Pompeian Red Ware. Hard, pale grey fabric with dark greycore and thick maroon-red slip on inner surface. Possibly Peacock Fabric 4 (Peacock 1977).

Fabric 44 Hard, fine-textured pale grey fabric with very smooth, darker grey, shiny metallic surfaces. Rouletted decoration. Local ware?

Fabric 46 Hard, granular-textured, pinkish-buff fabric with quartz sand inclusions. Mica-dusted surfaces. Regional import?

Fabric 59 Derbyshire Ware. Very hard, grey fabric with red core and copious large quartz grit inclusions, giving the surface the appearance of 'goose-flesh petrified' (Gillam 1939, Kay 1962, Jones and Webster 1969).

Fabric 70 Dales Ware. Distinctive shell-gritted ware (Loughlin 1977) Mortarium Fabrics.

Fabric 301 Carlisle area. Often very hard, dense, dark red-brown to pink-brown fabric with some fine, mainly quartz inclusions. Inclusions vary in size and quantity. Usually a cream or buff slip but occasionally a ractian, red-brown slip on flange and bead. Trituration grit consists of white quartz, red-brown and occasionally blackish material. The commonest of the locally produced fabrics.

Fabric 303 Carlisle/Old Penrith area. Fairly fine-textured, orange-brown fabric with some evenly distributed, ill-sorted quartz inclusions. Trituration grit consists of quartz, sandstone and blackish and grey material. Both hardness and texture vary in this group and it certainly contains the products of more than one workshop. Surface treatment varies; cream/buff or self coloured slip. Less common than fabric 301.

Fabric 306 Carlisle/Scalesceugh area. Hard, fine-textured, orange-brown fabric, sometimes with grey core. Few inclusions. Seems to have only white quartz trituration grit.

Fabric 313 Gallia Belgica. More than one pottery, probably all in Gallia Belgica and including one the Pas de Calais. Fine-textured, usually softish, white to brownish-cream fabric sometimes with a pink core; tiny quartz and flint inclusions. Trituration grit consists mainly of flint with occasional quartz and rare red-brown material. The considerable variation in colour and in the IL rim types associated with this fabric suggests that more than one pottery is involved.

Fabric 316 South Carlton, Lincoln. Probably other sites in the vicinity also. Usually micaceous, fairly fine-textured, greyish-cream fabric with some fine quartz and red-brown inclusions. Trituration grit may include transparent and pinkish quartz, sandstone, and haematite, red-brown and blackish, probably iron-rich, material. Often has a brownish slip.

Fabric 317 The Rhineland. Slightly greyish-white fabric with fairly frequent, fine, transparent and pink quartz inclusions. Trituration grit consists of closely packed, well-sorted, tiny fragments of quartz.

Fabric 318 Soller, Kreis Duren, Lower Germany. Fine-textured, light brown fabric, fired to brownish-cream at the surface. Smallish, but ill-sorted transparent quartz, red-brown and blackish inclusions with some larger quartz, red-brown and softish cream-coloured inclusions. Trituration grit is all quartz.

Fabric 322 Crambeck. Fairly close-textured and slightly sandy off-white fabric, sometimes pink, or with pink, grey or occasionally a black core, abundant quartz, mica and red-brown inclusions, usually visible at x10 magnification. Trituration grit consists of abundant black slag fragments. There are many gradations in the texture but it is always sandier than fabric 323 (Corder and Birley 1937, Evans 1989).

Fabric 323 Crambeck. Very fine-textured, cream fabric. Trituration grit consists entirely of fairly finely fragmented black iron slag, usually packed close together in the lower half of the mortarium. May have a buff-brown slip; often decorated with motifs in red-brown slip (Corder and Birley 1937, Evans 1989).

Fabric 328 Castor-Stibbington area of the Lower Nene Valley. Hard, fairly fine textured, off-white fabric with a pink or pale grey core. The quartz inclusions are often too small to be seen at x10 magnification; rare red-brown and/or black inclusions. Trituration grit consists entirely of ironstone. May be self-coloured or may have a brownish slip. This is the most common mortarium fabric produced in the lower Nene Valley.

Fabric 339 Technical College Kiln, Lincoln. Cream fabric, often fired to brownish-orange on parts of surface near spout. Frequent quartz and rare and larger red-brown inclusions. Trituration grit includes red-brown sandstone.

Fabric 352 Northern England, probably Carlisle area. Hard cream or creamy-pink fabric with quartz sand and some red inclusions. Mixed quartz, red and grey trituration grit.