

LAND ADJACENT TO 4 ST GEORGE'S CRESCENT, CARLISLE, CUMBRIA

Archaeological Evaluation



Client: Ollie Holt

NGR: NY 3995 5687

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Greenlane Archaeology Ltd,
2 Albrights Yard, Theatre Street,
Ulverston, Cumbria, LA12 7AQ

Tel: 01229 588 500
Email: info@greenlancearchaeology.co.uk
Web: www.greenlancearchaeology.co.uk

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Non-Technical Summary

An archaeological evaluation was requested by Cumbria's County Council Historic Environment Service (CHES) ahead of the proposed construction of a single dwelling on land adjacent to 4 St George's Crescent, Carlisle, Cumbria, due to the high potential for archaeological remains on the site. Greenlane Archaeology produced a project design which was accepted by CHES and the work was carried out on the 10th December 2009.

The development site is located near to the line of Hadrian's Wall and the fort at Stanwix, and maps show that it has seen little development. The proposed development site is situated 215m to the west of the fort, between the line of the wall and the *Vallum*, and this area is thought to be the *vicus* or settlement area outside the fort. A number of Roman artefacts have been discovered in close proximity to the site, most notably a glass *phalera* (a type of medallion) found in 1851 during the construction of houses along Eden Mount, and an amber bead found in the gardens of 10 St George's Crescent.

The work revealed that the natural ground surface of the site had been directly overlain by a widespread and uniform deposit of Roman refuse underlying a diffuse thin layer of gravels which may represent the lower element of a metalled surface that had been subsequently disturbed. These deposits were overlain by a homogenous and thick deposit of cultivated soil which probably related to the enclosure of the land as a garden. The layer of *in situ* Roman refuse contained scattered daub and numerous sherds of pottery with a date range of AD 120-170 which covers the Hadrianic and Antonine periods. The fabrics were a mixture of imported and local wares that were typical for a military settlement. Within the narrow trench no negative features were found below the Roman deposits, although the deposits in themselves do suggest occupation of the area or nearby vicinity. Previous work on the east side of the Scotland Road has revealed clear and substantial remains of the *vicus* settlement with finds of a similar date range. A thin subsoil layer was also present below the Roman refuse and this represents the pre-Roman ground surface which could potentially reveal cut Roman features or evidence of earlier occupation in the area. Further archaeological investigation of the site is recommended in order to further establish the extent and character of the deposits so far encountered.

Acknowledgements

Greenlane Archaeology would like to thank Mr Ollie Holt for commissioning and supporting the project and Jez Marvin at Unwin Jones partnership for providing information and assistance.

The site work was conducted by Sam Whitehead and Tom Mace. Sam Whitehead also wrote the report. The post-medieval finds were examined by Jo Dawson, who edited the report along with Dan Elsworth. The Roman pottery was assessed by Ruth Leary with assistance from Gwladys Monteil, Kay Hartley, and Andrew Souter.

The project was managed by Dan Elsworth. The illustrations were produced by Sam Whitehead and Tom Mace, the latter of whom also copyedited the text.

1. Introduction

1.1 Circumstances of the Project

1.1.1 As part of a pre-planning requirement relating to the construction of residential accommodation on land adjacent to 4 St George's Crescent, Carlisle, Cumbria (NGR NY 3995 5687), a programme of archaeological work was requested by Cumbria County Council's Historic Environment Service and a brief issued by Jeremy Parsons the Historic Environment Officer (*Appendix 1*). This determined that the work should comprise the archaeological evaluation of 20 square metres of the site. Greenlane Archaeology submitted a project design (*Appendix 2*) which was accepted, and the work was conducted in December 2009 in accordance with guidelines from the Institute for Archaeologists (IfA 2008a, 2008b).

1.2 Location, Geology, and Topography

1.2.1 The area of the site is located in Carlisle to the north of the River Eden. The proposed development site is located in close proximity to significant remains belonging to the Roman period, specifically the line of Hadrian's Wall and the fort at Stanwix. The site now lies close to Brampton Road, which heads north-east out of the City, and a short distance to the east of the A7 which runs northwards out of Carlisle (see Figure 1). The land surrounding the urban conurbation is generally improved and intensively managed pasture (Countryside Commission 1998, 20). The geology of the Solway basin area largely comprises Mercian Mudstones and Permo-Triassic red sandstones. Prior to the last glaciation erosion of these soft Permo-Triassic and Jurassic rocks left the area in low relief; this was covered in a thick layer of boulder clay deposited by glaciation, which in turn was covered in areas of sands and gravels as the waters melted.

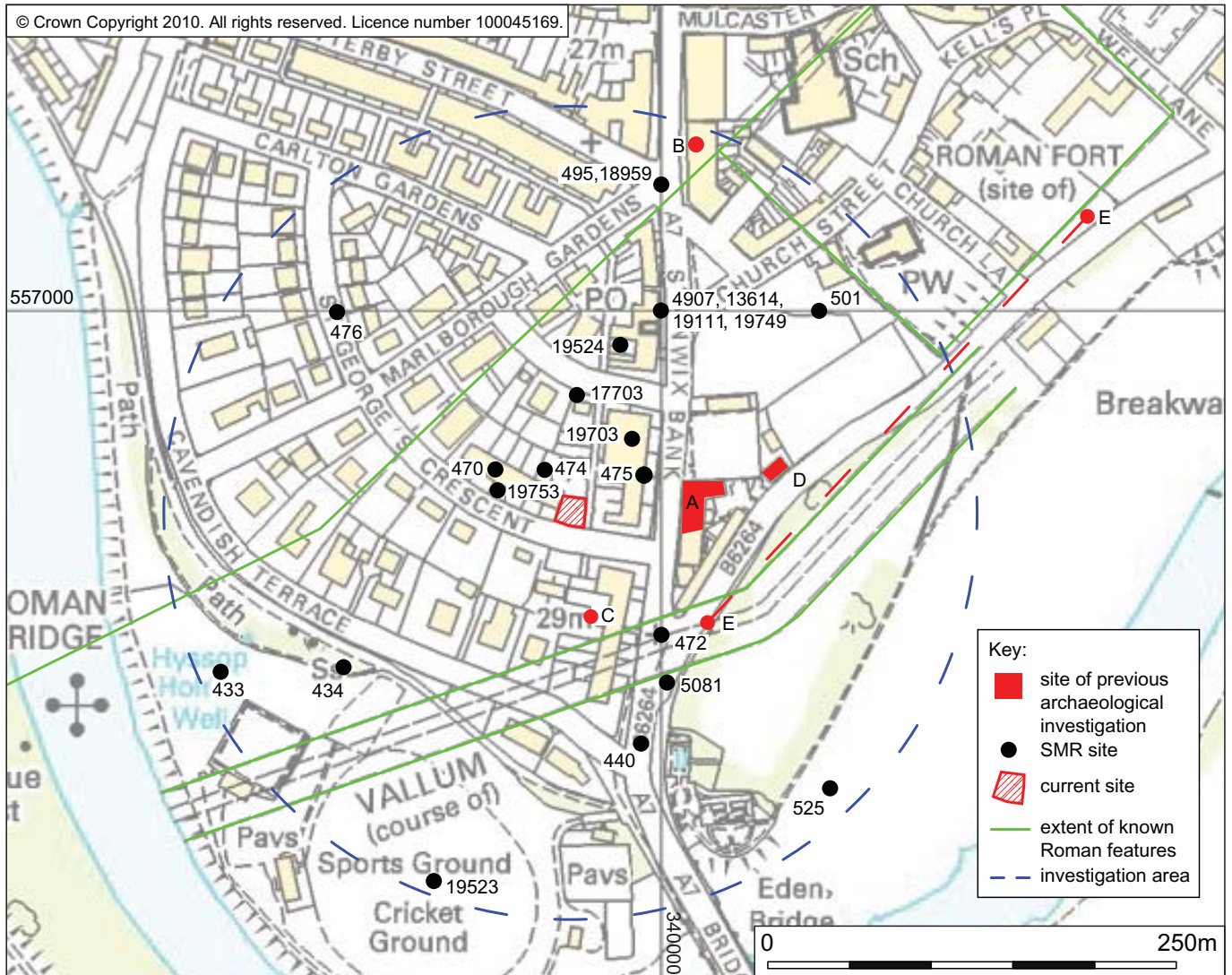
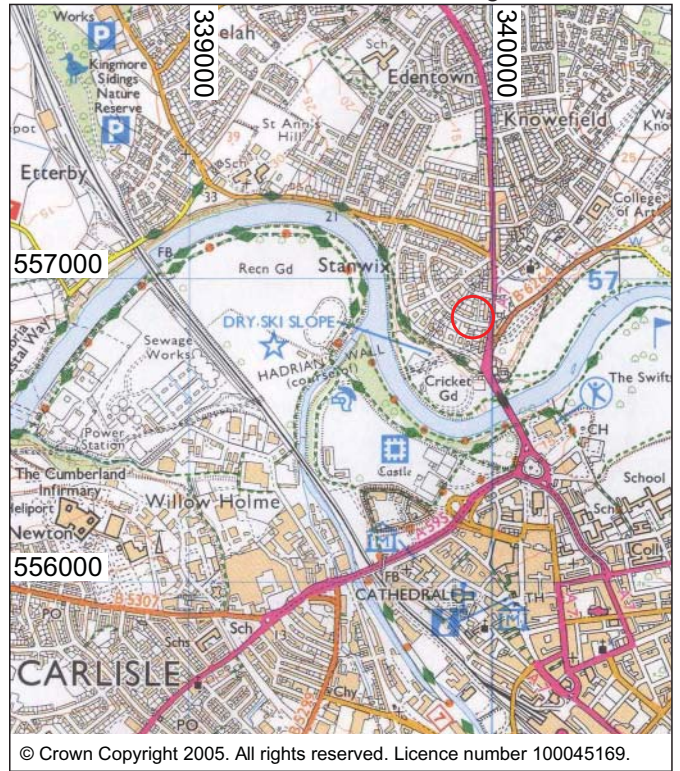
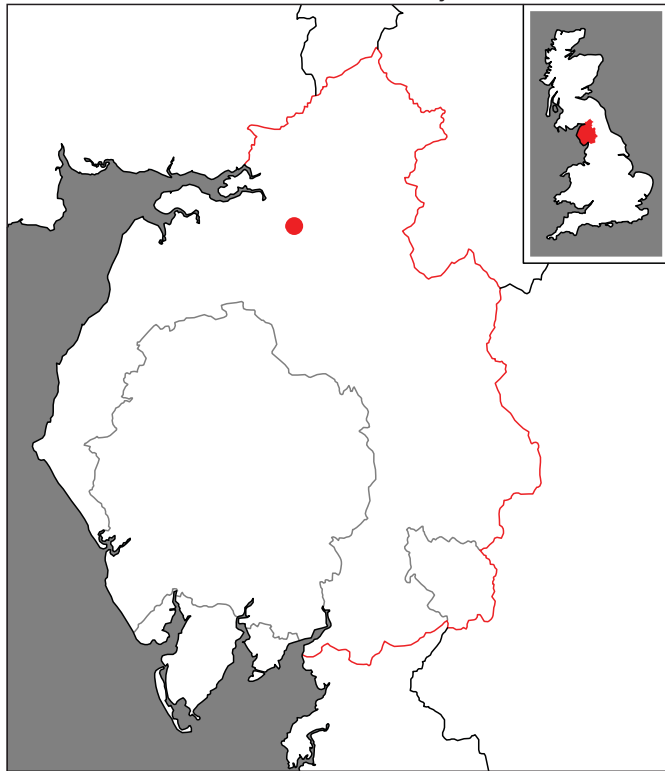


Figure 1: Site location and gazetteer

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2. Methodology

2.1 Desk-Based Assessment

2.1.1 A desk-based assessment was carried out in accordance with IfA guidelines (IfA 2008a). This principally comprised an examination of early maps of the site, information from the Cumbria Historic Environment Record, and published secondary sources. The intention of this element of the project was to assess the potential and nature of the deposits and finds likely to be encountered during the evaluation phase by referring to previous archaeological work carried out nearby, as well as random finds recorded from the vicinity, and by referring to old maps showing different land use at the site. The following sources of information were used during the desk-based assessment:

- **Cumbria County Council Historic Environment Record (HER):** this is a list of all the known sites of archaeological interest within the county, which is maintained by Cumbria County Council and is the primary source of information for an investigation of this kind. All of the known sites of archaeological interest within 250m of the centre of the proposed development area were examined; each identified site comes with a grid reference, description and source and any additional information which was referenced was also examined as necessary. In addition, unpublished reports of archaeological investigations in the vicinity of the site were examined;
- **Cumbria County Record Office, Carlisle (CRO(C)):** this was visited in order to examine early maps and plans of the site, and local and regional histories;
- **Greenlane Archaeology Library:** additional secondary sources were also examined to provide information for the site background.

2.2 Site Visit

2.2.1 A brief visit to the site was carried out prior to the evaluation. This was principally in order to identify any constraints to the evaluation such as issues of health and safety but also the presence of any structures that might have damaged below ground remains or features that might be of archaeological interest. The site visit revealed that the site was covered in overgrowth and some small trees but, there were otherwise no likely impediments to the archaeological work.

2.3 Archaeological Evaluation

2.3.1 The intention of this element was to establish, where possible, whether any remains of archaeological significance were present on the site, their nature, degree of survival, extent, significance, and date. All aspects of the archaeological recording were carried out according to the standards and guidance of the Institute for Archaeologists (IfA 2008b). The evaluation involved the excavation and recording of 21m² of trenching which was recorded in the following manner:

- **Written record:** descriptive records of all deposits and features were made using Greenlane Archaeology *pro forma* record sheets. In addition, a general record was made of each trench and the day's events;
- **Photographs:** photographs in both 35mm colour print, and colour digital format were taken of all archaeological features uncovered during the evaluation, as well as general views of the site, the surrounding landscape, and working shots. A selection of the colour digital photographs is included in this report, and the remainder are presented on the accompanying CD. A written record of all of the photographs was also made using Greenlane Archaeology *pro forma* record sheets;
- **Drawings:** drawings were produced on site as follows:
 - i. Trench plans were produced at a scale of 1:50;
 - ii. Trench and feature sections were drawn at a scale of 1:20

2.3.2 Features of interest were recorded relative to the known location of nearby buildings and other structures that were evident on the site plans and Ordnance Survey maps. The height over datum was gained from a benchmark on the A7 close to the site.

2.4 Finds

2.4.1 **Processing:** artefacts were washed, naturally air-dried, and packaged appropriately in self-seal bags with white write-on panels.

2.4.2 **Assessment and recording:** the finds were assessed and identified and a list of them was compiled (see *Appendix 5* and *6*).

2.5 Environmental Samples

2.5.1 No samples were deemed necessary as no suitable contexts were encountered.

2.6 Archive

2.6.1 A comprehensive archive of the project has been produced in accordance with the project design (*Appendix 2*) and current IfA and English Heritage guidelines (English Heritage 1991, Brown 2007). The archive, which comprises the drawn, written, and photographic record, will be deposited with the Cumbria Record Office in Carlisle (CRO(C)). A copy of the written report will also be submitted to the client, Greenlane Archaeology will retain a copy, and digital copies will be produced for the Cumbria Historic Environment Record (HER) and the OASIS scheme (English Heritage 2007).

3. Desk-Based Assessment

3.1 Historical background

3.1.1 The later fort at Stanwix, known as *Petriana*, was the largest on Hadrian's Wall, and housed the *ala petriana* cavalry regiment who were 1,000 strong (Dacre 1985). The purpose of the fort was to safeguard the route into Scotland, and the north side of the Eden river crossing. This fort appears to replace an earlier, smaller fort sometime in the Antonine period (AD 138-161), which was called *Uxelodunum* (OA North 2008, 5; ASUD n.d.).

3.1.2 Investigations carried out during the 1930s had established the location of the Wall and *Vallum* (see Simpson 1932; 1933; 1934; Simpson and Hogg 1935), but it was not until larger-scale excavations were undertaken in 1984 that a more detailed understanding of the fort itself was gained (Dacre 1985). The site itself is located 215m to the west of the fort, and lies between the *Vallum* to the south and Hadrian's Wall to the north. On the basis of various random finds, and a watching brief carried out in 1986 (see Section 3.2.2) this area is considered to be within the *vicus* or civilian settlement, and it has yet to be excavated in any controlled manner. The *vicus* is thought to extend to the east and west of the fort; to the east it has been identified in several locations, typically to the south of the *Vallum*, while evidence to the west suggests it is situated between Hadrian's Wall and the *Vallum* (ASUD n.d.).

3.2 Previous work

3.2.1 **Introduction:** there have been numerous findspots in the vicinity of the site, and several excavations within the fort site at Stanwix. A quick summary of the previous archaeological work within a 250m radius of the site is presented below to put the potential of the site into perspective. Numerous individual findspots are shown on Figure 1, some of which have occurred very close to the site, and details of these can be found in the gazetteer (*Appendix 3*).

3.2.2 **A - Watching brief on Stanwix Bank:** in 1986 a watching brief was carried out at the site of Miles MacInnes Hall, some 65m from the St George's Crescent site, on the east side of Scotland Road known as Stanwix Bank (Caruana 2000). While the recording of this site was compromised by a lack of funds and a methodology that largely involved recording features in section, noting deposits where possible, and collecting artefacts (including detailed coverage of all the spoil with a metal detector, which probably skewed the results to give an abnormally large number of metal finds), it was clear that there was considerable Roman activity in this area. The presence of timber buildings, possible ovens, and cobbled surfaces that possibly related to a north/south road was noted. The area had been cultivated in the Post-Roman period and a layer of plough soil up to 1m thick was observed which contained a considerable amount of Roman building stone. Made ground and demolition layers were also recorded. The finds from this site were very rich and included 41 coins, some of which were first century but they appeared to have largely been deposited from about AD 120 onwards, which was in keeping with the assemblage of stamped and graffitied samian ware, much of which was from the later second or early third centuries. Glassware, an earthenware lamp, leather shoes and lead seals were among the other finds. Some mention is also made of a watching brief carried out in association with this work in 1984 but no further information is given.

3.2.3 **B - Evaluation at 18-22 Scotland Road:** trenches excavated at this site located the north wall of the fort, the exterior rampart, and beyond that a metalled surface considered to be an inter-*Vallum* road (Carlisle Archaeological Unit 1999).

3.2.4 **C - Watching Brief at 6 Devonshire Terrace:** despite being close to the north/south road and the line of the *Vallum* this trench was not deep enough to reach any deposits below the garden soils (Walker 2006).

3.2.5 **D - Watching brief at the Crown and Thistle Hotel, 1977:** a watching brief was carried out by the Central Excavation Unit during ground works for an extension to the rear of the inn. The work revealed that the natural had been previously truncated when the inn was originally built and nothing was found (English Heritage 2009).

3.2.6 **E - Watching Brief along Brampton Road, 2007:** this consisted of five test pits dug along Brampton Road by CFA Archaeology Ltd (CFA Archaeology 2009). Archaeological remains were only encountered at the north-east end of the assessment area, in close proximity to the fort, and comprised a wall and three oak posts.

3.2.7 **Excavations at Stanwix fort:** numerous excavations have been conducted at the fort site, which is located some 215m to the west of 4 St George's Crescent (see Simpson 1932, 1933, 1934, 1935; Dacre 1985). The later excavations uncovered a 24m section of the north-west curtain wall including an interval tower, and a brick stamped with a ninth legion stamp was recovered which suggests a link between this fort and Carlisle (*Luguvalium*) and Scalesceugh where similar stamps have been recovered (*op cit*, 53-71). More recent work, typically in the form of watching briefs and small-scale evaluations, has been carried out in several places within the fort area that have further revised the understanding of the sites development (ASUD n.d.).

3.2.8 **Summary:** the 1984 excavations at the fort suggest that the fort at Stanwix was re-built, a larger fort replacing the smaller original wall fort *Uxelodunum*. This development appears to have occurred in the second half of the 2nd century during the Antonine period (AD 131-161). The evidence from Stanwix bank, and the numerous findspots to the west and north, suggests that the site at 4 St George's Crescent is located in the area of the *vicus*. While much recent work has resolved the phasing of the fort and military wall there is little known about the extent and nature of the *vicus* area.

3.3 Map regression

3.3.1 **Introduction:** the earliest available maps of the area provide little information as they are not sufficiently detailed and so only those that are have been utilised in the map regression.

3.3.2 **Tithe Map 1840:** the site is located within field 41 (Plate 1), and the accompanying schedule for this map names the field as 'Near Dukes Field' and it is described as 'Old Grass Land' (CRO(C) DRC 8/181 1840). Based on this description it is possible that it has never been ploughed.



Plate 1: Tithe map 1840; the site is located in field 41

3.3.3 **Ordnance Survey 1874:** this map (Plate 2) which was surveyed in 1865 shows that the cottages along Eden Mount have now been constructed; these are to the right of the number 70. St George's Crescent has not yet been constructed, and will run between the Eden Mount properties and those of

Devonshire Terrace to the south. The map indicates that there was a structure on the site at this date, shown at the south-west of the Eden Mount block, to the west of the back lane.



Plate 2: Ordnance Survey map 1874

3.3.4 **Ordnance Survey 1901:** by this time St George's Crescent has been constructed, but the site which is the plot of land at the east end, and adjacent to the Eden Mount rear passage, has remained undeveloped (Plate 3). The small outbuilding that occupied this plot on the 1874 map has been removed and later maps show that the site has remained gardens to this day.



Plate 3: Ordnance Survey map 1901

3.3.5 **Conclusion:** it is apparent that the site has seen relatively little development even though the settlement of Stanwix has become incorporated into the general residential area of Carlisle. This is perhaps in part because of the nature of the houses in this area, which tend to be large and with extensive grounds, leaving some areas open and undeveloped as a result. However, some infilling of these spaces has evidently taken place more recently (see Figure 1).

4. Fieldwork Results

4.1 Evaluation

4.1.1 **Introduction:** the evaluation comprised a single 'T'-shaped trench; the north/south section was approximately 7.7m long and the east/west arm extended the trench a further 6.6m to the east (Figure 1). The trench was approximately 1.5m wide and the total area excavated was approximately 21m². The trench was carefully excavated in shallow spits with a 1½ ton mini-digger fitted with a flat bladed bucket.

4.1.2 A total of four stratified deposits were recorded: topsoil, garden/plough soil, a layer of diffuse Roman occupation deposits, and a pre-Roman land surface on top of the orange clay natural. Each layer was consistent in depth and character across all sections of the trench, suggesting uniformity across the majority of the site. A total of five potential cut features were evident at the level of the natural geology but these all proved to be the result of plant roots (see Plate 4 and Plate 5). A single archaeological feature was encountered; wall **07**, at the east end of the trench. There was also a 19th century field drain some 4.5m to the west (**06**) (see Plate 4). A summary list of all of the contexts encountered is presented in *Appendix 4*.



Plate 4: View of the trench looking east



Plate 5: View of the trench looking north

4.1.3 **Topsoil (01):** this 0.25m thick, dark, silty deposit is the result of leaf litter and other organic matter that has accumulated since the land has ceased to be cultivated or looked after; its depth, and the age of some of the trees present, suggests that this has been a considerable period of time. No finds were recovered and so no further inference can be made about the date of this context.

4.1.4 **Garden/plough soil (02):** this homogeneous and slightly humic deposit was between 0.30 and 0.50m thick, and clearly represented cultivated land. This may correspond to the 'Old grass land' shown on the earliest map of the site (Plate 1) or after the land became gardens between 1840 and 1865. The

latter would seem more probable, however, as the pottery recovered had a late 18th to 20th century date range (see *Appendix 5*).

4.1.5 Roman layer (03): this layer was sealed and preserved by the garden soil layer, and comprised a 0.15m - 0.30m thick deposit of sub-rounded gravels and small pebbles in a dark greyish-brown sandy-silt matrix. The gravels were more concentrated towards the top of this layer, and while not forming a solid surface they did appear to have been introduced to consolidate the more silty and organic lower deposits. Discrete areas of pinkish clay were also observed in the lower part of the deposit (see *Plate 6*) and these were possibly the remains of clay structures such as wattle and daub partitions. While the layer contained no features, and looked fairly insignificant in plan, it clearly represented the remains of occupation or associated activity, perhaps even a yard. It must be remembered that the narrow confines of a trench are not the best conditions for observing such a layer, and the clearing of a wider area of this deposit may well reveal a better picture of its spatial distribution and make up. Finds from this deposit included amphora fragments, mortarium, samian ware, medium and fine grey wares, and black burnished wares: these fabrics are all typical of military occupation and date from the Hadrianic and Antonine periods, with a typical date range of AD 120-170 (see *Appendix 6*). The sherds are often large and show little abrasion, suggesting a reasonably large sized dump deposit in its primary context.



Plate 6: View of the north-facing section showing discrete areas of pinkish clay within the Roman layer (03)

4.1.6 Subsoil (04): this 0.17m thick layer of brownish pale-grey silty-clay sat on top of the glacial till and was entirely sterile and homogeneous. It appeared to represent the pre-Roman land surface and as such represents a buried soil.

4.1.7 Backfill of land drain trench (05): this dark-brown sandy-silt filled the cut (06) which had truncated the Roman layer (03) and had incorporated pottery from that deposit. The Roman pottery

comprised a single sherd of colour coated ware, black burnished ware and medium grey ware, and these again conformed to the mid first century date suggested by layer **(03)**. Other finds from this deposit included a sherd of 12th or 13th century red gritty ware, a late 18th to 20th century fragment of clay pipe stem, and a mammal bone and smithing waste which were not closely dateable. This drain may have partially truncated the garden soil, which would partially explain the inclusion of these later finds. The edge of the pipe trench appeared to truncate a root bole, although this relationship was difficult to determine due to water flowing into the feature as a result of the partial removal of the ceramic land drain.

4.1.8 **Wall (07)**: this wall was located at the east end of the trench and was orientated north/south, a total of five courses survived and the upper surface was 0.5m below the present ground surface. The construction trench for this wall footing truncated the upper three layers and the brickwork was seated on the clayey subsoil layer **(04)** which directly overlay the orange clay natural. The bricks appeared to have been re-used and appeared earlier (perhaps 18th century or even older) than the date of the structure that they undoubtedly relate to, which is apparent on the Ordnance Survey map of 1874 and was therefore constructed between 1840 and 1865 (see Plate 1 and Plate 2). Many of the bricks were broken or damaged which made the coursing somewhat irregular, they were hand made and bonded by a gritty white lime mortar.

4.1.9 **Natural features (09) and unnumbered**: four small shallow round features and a larger pit-like feature were encountered cut into the natural clay. One of these was given a context number and description **(09)** before it became apparent that they were the result of root action – they are marked in red on Figure 2.

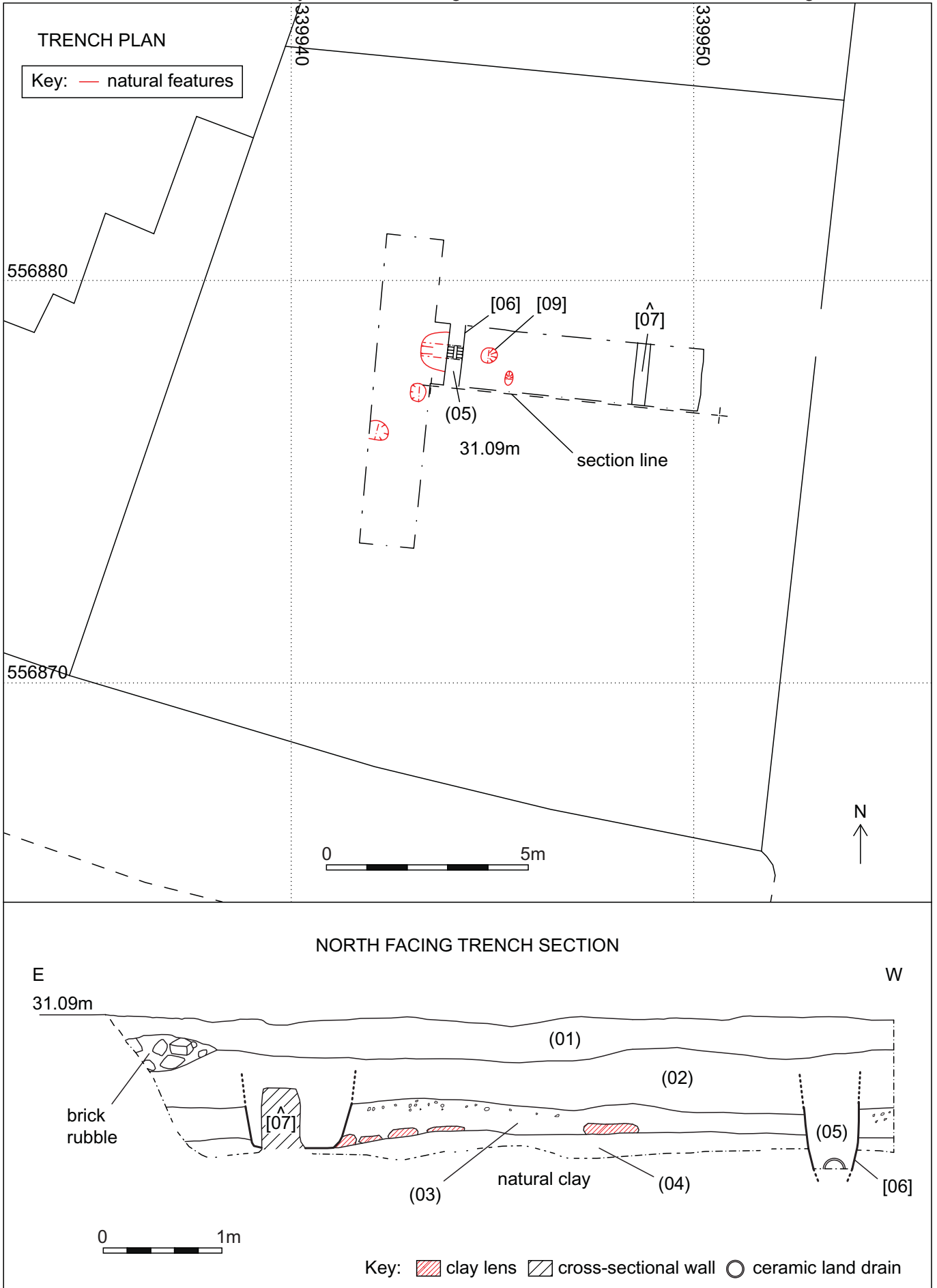


Figure 2: Trench plan and section

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5. Finds

5.1 Artefacts

5.1.1 All the finds derived from the garden soil **(02)**, the Roman layer **(03)** and the backfill of the land drain trench **(05)**. The majority of finds were pottery sherds and the remainder were largely undiagnostic. The pottery recovered from **(03)** dated the deposits to around the mid- to late second century, and details of the assemblage can be found in *Appendix 6*. Finds from the garden soil **(02)** included ceramic building material, smithing waste, dressed stone and pottery sherds, but only the pottery was dateable and this suggests a 19th century date. The single fragment of 12th to 13th century red gritty ware from the backfill of the land drain trench **(05)** is of interest, but it would appear to be residual based on the results of previous excavations in the area and the known history of the site.

5.2 Summary and Discussion

5.2.1 The pottery recovered from the two main layers **(02)** and **(03)** was abundant enough to accurately date these deposits, and most importantly has dated the *in situ* Roman deposits to the mid- to late second century. The form and date of the pottery is broadly similar to that found during the watching brief at the Miles MacInnes Hall, and in, fact due to the circumstances of that project compared to this evaluation, form a much more coherent collection of finds from an identifiable and discrete deposit.

6. Discussion and Conclusion

6.1 Discussion

6.1.1 This section brings together the results of the historical background, map regression and field observations in order to provide a basic synopsis of activity at the site.

6.1.2 The map regression revealed that in 1840 the site was in a field that was described as 'old grass land', this area of Stanwix had yet to be developed and there was no suggestion of any prior development. It has been suggested by the 1986 work at Stanwix Bank (see *Section 3.2.2*) that the site was located within the *vicus* of the Roman fort, and the presence of *in situ* Roman refuse suggests that is the case.

6.2 Conclusion

6.2.1 This evaluation has shown that the site at 4 St George's Crescent lies within the Roman *vicus* of the fort at Stanwix, and that *in situ* and well preserved deposits with a tight date range (AD c120-170) extend across the site as a whole. The previous published work on the *vicus*, and indeed the fort itself, shows that this part of Carlisle is poorly understood; this site offers an excellent opportunity to address many of the spatial and temporal issues currently being debated.

6.3 Recommendations

6.3.1 Further work is needed at the site to establish the nature of the deposits which are well sealed below a thick layer of garden soil. These deposits might contain, or seal, cut features or structures and might also contain well preserved organic and environmental remains.

6.3.3 In addition, the buried soil preserved beneath the Roman deposits could provide an excellent opportunity to determine if there was any earlier activity in this part of Carlisle before the Roman occupation. This activity may take the form of ploughing as has been noted to the east of the fort at Tarraby Lane, Stanwix (McCarthy 2002, 38).

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Appendix 1: Project Brief

BRIEF FOR AN ARCHAEOLOGICAL EVALUATION

ON LAND ADJACENT TO 4 ST GEORGE'S CRESCENT, CARLISLE, CUMBRIA

Issued by the

County Historic Environment Service

Environment Unit



Date of Brief: 03 September 2009

This Design Brief is only valid for 1 year after the above date. After this period the County Historic Environment Service should be contacted. Any specification resulting from this Brief will only be considered for the same period.

SITE DESCRIPTION AND SUMMARY

Site: land adjacent to 4 St George's Crescent, Carlisle

Grid Reference: NY 3995 5687

Scope of Evaluation: 20 square metres of trial trenching

Detailed proposals and tenders are invited from appropriately resourced, qualified and experienced archaeological contractors to undertake the archaeological project outlined by this Brief and to produce a report on that work. The work should be under the direct management of either an Associate or Member of the Institute of Field Archaeologists, or equivalent. Any response to this Brief should follow IFA Standard and Guidance for Archaeological Field Evaluations, 2001. No fieldwork may commence until approval of a specification has been issued by the County Historic Environment Service.

PLANNING BACKGROUND

- 2.1 Cumbria County Council's Historic Environment Service (CCCHES) has been consulted by Unwin Jones Partnership regarding the proposed erection of one dwelling on land adjacent to 4 St George's Crescent, Carlisle.
- 2.2 The scheme affects an area considered to have a high archaeological potential within close proximity to Hadrian's Wall and the Roman fort at Stanwix, Carlisle.
- 2.3 Because of the high archaeological potential of the site, the County Historic Environment Service has advised that further information concerning the potential impact of the proposal on archaeological remains is required. In order to provide this information an archaeological evaluation of the site is necessary. This Design Brief sets out the requirements for the adequate archaeological evaluation of the site.
- 2.4 This advice is in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) and with policy LE8 of the Carlisle Local Plan.

ARCHAEOLOGICAL BACKGROUND

- 3.1 The site lies in between the line of Hadrian's Wall and *vallum*, and 200m south west of the Roman fort at Stanwix. Considerable evidence for Romano-British and Roman activity has been revealed extending beyond the fort and Roman coins and jewellery have been found on St George's Crescent.

SCOPE OF THE PROJECT

- 4.1 *Objectives*
 - 4.1.1 The evaluation should aim to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied.
- 4.2 *Work Required*
 - 4.2.1 A desk-based assessment of the existing resource, to be undertaken before any work commences on site. This should include an assessment of primary and secondary maps and documents relating to the site, to set the evaluation results in their geographical, topographical, archaeological and historical context. Records held by the County Historic Environment Record and County Records Office should be consulted.

- 4.2.2 A visual inspection of the site. This should include a walkover of the site noting any surface features of potential archaeological interest, areas of potentially significant disturbance, and hazards and constraints to undertaking further archaeological work on site (including the siting of live services, Tree Preservation Orders and public footpaths).
- 4.2.3 The excavation of one or more linear trial trenches to adequately sample the threatened available area, and the investigation and recording of deposits and features of archaeological interest identified within those trenches. All features must be investigated and recorded unless otherwise agreed with the County Historic Environment Service. Initial topsoil removal can be undertaken by machine, but subsequent cleaning and investigation must be by hand. A minimum sample of 20 square metres should be investigated.
- 4.2.4 The following analyses should form part of the evaluation, as appropriate. If any of these areas of analysis are not considered viable or appropriate, their exclusion should be justified in the subsequent report.
- A suitably qualified specialist should assess the environmental potential of the site through the examination of suitable deposits, including: (1) soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features, and; (2) the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits.
 - Advice is to be sought from a suitably qualified specialist in faunal remains on the potential of sites for producing bones of fish and small mammals. If there is potential, a sieving programme should be undertaken. Faunal remains, collected by hand and sieved, are to be assessed and analysed, if appropriate.
 - The advice from a suitably qualified soil scientist should be sought on whether a soil micromorphological study or any other analytical techniques will enhance understanding site formation processes of the site, including the amount of truncation to buried deposits and the preservation of deposits within negative features. If so, analysis should be undertaken.

SPECIFICATION

- 5.1 Before the project commences a project proposal must be submitted to, and approved by, the County Historic Environment Service.
- 5.2 Proposals to meet this Brief should take the form of a detailed specification prepared in accordance with the recommendations of The Management of Archaeological Projects, 2nd ed. 1991, and must include:
- ❖ A description of the excavation sampling strategy and recording system to be used
 - ❖ A description of the finds and environmental sampling strategies to be used
 - ❖ A description of the post excavation and reporting work that will be undertaken
 - ❖ Details of key project staff, including the names of the project manager, site supervisor, finds and environmental specialists and any other specialist sub-contractors to be employed
 - ❖ Details of on site staffing, expressed in terms of person days
 - ❖ A projected timetable for all site work and post excavation work
- 5.3 The proposed locations of the trial trench/trenches should be determined following the desk-based assessment and site visit and must be agreed with the County Historic Environment Service.
- 5.4 Any significant variations to the proposal must be agreed by the County Historic Environment Service in advance.

REPORTING AND PUBLICATION

- 6.1 The archaeological work should result in a report, this should include as a minimum:
- ❖ A site location plan, related to the national grid
 - ❖ A front cover/frontispiece which includes the planning application number and the national grid reference of the site
 - ❖ The dates on which the fieldwork was undertaken
 - ❖ A concise, non-technical summary of the results

- ❖ An explanation of any agreed variations to the brief, including justification for any analyses not undertaken (see 4.2.4)
 - ❖ A description of the methodology employed, work undertaken and the results obtained
 - ❖ Plans and sections at an appropriate scale, showing the location and position of deposits and finds located, and absolute heights above Ordnance Datum.
 - ❖ A list of, and dates for, any finds recovered and a description and interpretation of the deposits identified
 - ❖ A description of any environmental or other specialist work undertaken and the results obtained
- 6.2 Two copies of the report should be deposited with the County Historic Environment Record within two months of completion of fieldwork. This will be on the understanding that the report will be made available as a public document through the County Historic Environment Record.
- 6.3 The results of the evaluation will need to be made available for inclusion in a summary report to a suitable regional or national archaeological publication if further archaeological fieldwork is expected.
- 6.4 Recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation should **not** be included in the report. Such recommendations are welcomed by the County Historic Environment Service, and may be outlined in a separate communication.
- 6.5 Cumbria HER is taking part in the Online Access to Index of Archaeological Investigations (OASIS) project. The online OASIS form at <http://ads.ahds.ac.uk/project/oasis> must therefore also be completed as part of the project. Information on projects undertaken in Cumbria will be made available through the above website, unless otherwise agreed.

THE ARCHIVE

- 7.1 An archive must be prepared in accordance with the recommendations in Brown, DH, 2007, *Archaeological Archives A Guide To Best Practice In Creation, Compilation, Transfer and Curation*, Archaeological Archives Forum. Arrangements must be made for its long term storage and deposition with an appropriate repository. A copy shall also be offered to the National Monuments Record.
- 7.2 The landowner should be encouraged to transfer the ownership of finds to a local or relevant specialist museum. In this case Tullie House Museum is the most likely repository. The museum's requirements for the transfer and storage of finds should be discussed before the project commences.
- 7.3 The County Historic Environment Service must be notified of the arrangements made.

PROJECT MONITORING

- 8.1 One weeks notice must be given to the County Historic Environment Service prior to the commencement of fieldwork.
- 8.2 Fieldwork will be monitored by the Historic Environment Officer on behalf of the developer.

FURTHER REQUIREMENTS

- 9.1 It is the archaeological contractor's responsibility to establish safe working practices in terms of current health and safety legislation, to ensure site access and to obtain notification of hazards (eg. services, contaminated ground, etc.). **The County Historic Environment Service bears no responsibility for the inclusion or exclusion of such information within this Brief or subsequent specification.**
- 9.2 All aspects of the evaluation shall be conducted in accordance with the Institute of Field Archaeologist's *Code of Conduct* and the IFA's *Standard and Guidance for Archaeological Field Evaluations*.
- 9.3 Human remains must be left *in situ*, covered and protected when discovered. No further investigation should normally be permitted beyond that necessary to establish the date and character of the burial, and the County Historic

Environment Service and the local Coroner must be informed immediately. If removal is essential, it can only take place under appropriate Department for Constitutional Affairs and environmental health regulations.

- 9.4 The involvement of the County Historic Environment Service should be acknowledged in any report or publication generated by this project.

FURTHER INFORMATION

For further information regarding this brief, contact

Jeremy Parsons
Historic Environment Officer
Cumbria County Council
County Offices
Kendal
Cumbria LA9 4RQ
Tel: 01539 713431
Email: Jeremy.Parsons@cumbriacc.gov.uk

For further information regarding the County Historic Environment Record, contact

Jo Mackintosh
Historic Environment Records Officer
Cumbria County Council
County Offices
Kendal
Cumbria LA9 4RQ
Tel: 01539 713432
Email: jo.mackintosh@cumbriacc.gov.uk

Appendix 2: Project Design

LAND ADJACENT TO 4 ST GEORGE'S CRESCENT, CARLISLE, CUMBRIA

Archaeological Evaluation Project Design



Client: Mr Ollie Holt

NGR NY 3995 5687

November 2009

Client: Ollie Holt

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1. Introduction

1.1 Project Background

1.1.1 Prior to the proposed erection of a single dwelling on land adjacent to 4 St George's Crescent, Carlisle, Cumbria, Cumbria County Council's Historic Environment Service (CHES) was consulted by Unwin Jones Partnership. The proposed development site is in an area of high archaeological potential and so a recommendation was made by the CHES that a programme of archaeological assessment is carried out. A brief for this assessment was then issued by CHES, which outlined that it should comprise an evaluation of part of the site (CHES 2009). The evaluation is intended to establish, where possible, whether any remains of archaeological significance are present on the site, their nature, and degree of survival, extent, significance, and date. As part of the work on site a desk-based assessment is also to be carried out. This is intended to set the site in its historical and topographical landscape, establish the location, extent, survival and significance of any known archaeological remains on the site prior to the evaluation.

1.1.2 The proposed development site is located in close proximity to significant remains belonging to the Roman period, specifically the line of Hadrian's Wall and the fort at Stanwix. Investigations carried out during the 1930s had established the location of the Wall and Vallum (see Simpson 1932; 1933; 1934; 1935) but it was not until larger-scale excavations were undertaken in 1984 that a more detailed understanding of the fort was gained (Dacre 1985). The proposed development site is situated to the west of the fort, but in an area where a number of Roman remains have been discovered, including a glass *phalera* (a type of medallion) found in 1851 during the construction of houses along Eden Mount (see Toynbee and Richmond 1953; Hogg 1974).

1.2 Greenlane Archaeology

1.2.1 Greenlane Archaeology is a private limited company based in Ulverston, Cumbria, and was established in 2005 (Company No. 05580819). Its directors, Jo Dawson and Daniel Elsworth, have a combined total of over 16 years continuous professional experience working in commercial archaeology, principally in the north of England and Scotland. Greenlane Archaeology is committed to a high standard of work, and abides by the Institute for Archaeologists' (IfA, formerly the Institute of Field Archaeologists (IFA)) Code of Conduct. The desk-based assessment and evaluation will be carried out according to the Standards and Guidance of the Institute of Field Archaeologists (IFA 2008a; 2008b).

1.3 Project Staffing

1.3.1 The project will be managed by **Dan Elsworth (MA (Hons), AIFA)**. Daniel graduated from the University of Edinburgh in 1998 with an honours degree in Archaeology, and began working for the Lancaster University Archaeological Unit, which became Oxford Archaeology North (OA North) in 2001. Daniel ultimately became a project officer, and for over six and a half years worked on excavations and surveys, building investigations, desk-based assessments, and conservation and management plans. These have principally taken place in the North West, and Daniel has a particular interest in the archaeology of the area. He has recently managed a number of archaeological excavation projects in the county including an evaluation in Milnthorpe (Greenlane Archaeology 2008a), and a watching brief in Kendal (Greenlane Archaeology 2008b), and undertook a desk-based assessment for a site adjacent to the Roman fort at Over Burrow in Lancashire (Greenlane Archaeology 2009).

1.3.2 The desk-based assessment will be carried out by **Dan Elsworth**. The archaeological evaluation will be supervised by **Sam Whitehead (BSc (Hons), MA)**, with assistance from a suitably qualified individual. Sam graduated from the University of Liverpool in 1994 with an honours degree in Archaeology, and has more than seven years continuous professional experience in commercial archaeology, much of which was in a supervisory capacity. He has extensive experience of excavations, evaluations, and watching briefs, as well as report writing and illustration production. Recent relevant projects include evaluations at Collin Croft, Kendal (Greenlane Archaeology 2007), and Heversham (Greenlane Archaeology 2009a), and a large evaluation and excavation at 130-136 Stricklandgate, Kendal (Greenlane Archaeology 2008c).

1.3.3 All artefacts will be processed by Greenlane Archaeology, and it is envisaged that they will initially be assessed by Jo Dawson, who will fully assess any of post-medieval date. Finds of earlier date will be assessed by specialist sub-contractors as appropriate, and in this case it is envisaged that these may include Ruth Leary for Roman pottery, Professor David Shotton for Roman coins, and suitable specialists at Oxford Archaeology North for other Roman finds. CHES will be notified of any other specialists, other than those named, who Greenlane Archaeology wishes to engage, before any specialist contracts are awarded, and the approval of CHES will be sought.

1.3.4 Environmental samples and faunal or human remains will be processed by Greenlane Archaeology. It is envisaged that environmental samples will be assessed by specialist sub-contractors at Headland Archaeology and faunal or human remains by specialists at Oxford Archaeology North depending on their timetabling constraints. CHES will be informed and their approval will be sought for these arrangements.

2. Objectives

2.1 Rapid Desk-Based Assessment

2.1.1 To examine information held in the Cumbria Historic Environment Record (HER), early maps of the proposed development site, and any other relevant primary and secondary sources in order to better understand its development, set it in its historic context, and assess the significance of any existing and potential archaeological remains.

2.2 Site Visit

2.2.1 To examine the site and identify suitable locations for the evaluation trenches and any constraints on their excavation.

2.3 Archaeological Evaluation

2.3.1 To excavate a series of evaluation trenches or test pits covering an area of at least 20m². These will assess the presence or absence of features of archaeological interest within the area, their extent, date, and significance.

2.4 Report

2.4.1 To produce a report detailing the results of the desk-based assessment and evaluation, that will outline the historic development of the site, list the known sites of archaeological interest, present the results of the evaluation, and assess the potential of the site and significance of the remains.

2.5 Archive

2.5.1 Produce a full archive of the results of the evaluation.

3. Methodology

3.1 Rapid Desk-Based Assessment

3.1.1 An examination of both primary and secondary sources, particularly maps, but also published and unpublished local histories, pieces of research, articles and studies relating to the proposed development site and a suitable area around it (the 'study area') will be carried out. These sources will be consulted at the following locations:

- **Cumbria Historic Environment Record (HER):** this is a list of all of the recorded sites of archaeological interest recorded in the county, and is the primary source of information for a study of this kind. Each site is recorded with any relevant references, a brief description and location related to the National Grid. All of the references relating to sites identified in the HER will be examined in order to verify them and add any necessary background information. In addition, relevant secondary sources, particularly previous archaeological investigations in the immediate area, will also be examined;
- **Cumbria Record Office (Carlisle):** the majority of original and secondary sources relating to the site are deposited in the Cumbria Record Office in Carlisle. Of principal importance are early maps, especially those produced by the Ordnance Survey. These will be examined in order to trace the origin and development of any buildings or other structures on the site, and, where possible, their function. In addition, information relating to the general history and archaeology will also be consulted, in order to establish the context of the sites identified within the study area, and the potential for further, as yet unknown, sites of archaeological interest;
- **Greenlane Archaeology:** a number of copies of maps, local histories, unpublished reports, and journals are held in Greenlane Archaeology's library. These will be consulted in order to provide further information about the development of the site, and any other elements of archaeological interest.

3.1.2 The results of this assessment will be used to establish the location, extent, date, and development of any sites of archaeological interest demonstrated to be present within the proposed development area and its environs.

The extent of all of the sites identified will be shown on an appropriately scaled maps and areas of archaeological interest or significance will be shown and the extent or level of their potential expressed as considered necessary.

3.1.3 Recommendations for areas to be targeted by evaluation trenching will be presented based on the results of the assessment. This will take into consideration the areas in which there is evidence for the presence of archaeological remains, the significance of known remains, areas of high potential, or areas which are likely to be disturbed by subsequent activity on the site.

3.2 Site Visit

3.2.1 A rapid inspection of the site will be carried out primarily in order to identify suitable areas to position the evaluation trenches, but also to reveal the presence of anything that could constrain their excavation. This would particularly include issues relating to matters of health and safety such as the presence of live service or overhead cables, but also adjoining structures and the presence of trees. Any factors that would prevent or make difficult access to the site will also be identified. Brief notes will be made on the nature of the site and photographs taken as necessary.

3.3 Archaeological Evaluation

3.3.1 The results of the desk-based assessment and site visit will be utilised to present proposed trench locations to CHES. These will be intended to examine the areas that will be affected by the proposed development and any features of archaeological interest, while at the same time taking into consideration any access difficulties or issues of health and safety.

3.3.2 A total of at least 20m² of evaluation trenching is required by the brief (CHES 2009). Depending on the results of the desk-based assessment, it is envisaged that this will be covered by excavating two trenches each of approximately 6m long and 1.7m wide (a standard excavator bucket width), until significant archaeological deposits or the natural geology are reached, or to a depth of 1.2m. These trenches will target the areas identified during the desk-based assessment as having the greatest archaeological potential, following consultation with CHES. It is anticipated that the evaluation will take one day on site with two archaeologists (totalling two person days).

3.3.3 The evaluation methodology, which is based on Greenlane Archaeology's excavation manual (Greenlane Archaeology 2007a), will be as follows:

- The site will be checked with a Cable Avoiding Tool (CAT) in order to establish the presence of live electrical services. Any existing service plans will also be consulted in order to identify the presence of other services;
- The trenches will be excavated with regard to the position of any services, focussing on the areas of high archaeological interest or potential, and avoiding areas which are likely to have been severely damaged or truncated by later activity, unless they are considered to have a high potential;
- The overburden (which is likely to largely comprise relatively modern make-up deposits) will be removed by machine under the supervision of an archaeologist until the first deposit beneath it is reached;
- All deposits below the overburden will be examined by hand in a stratigraphic manner, using shovels, mattocks, or trowels as appropriate for the scale. Deposits will only be sampled, rather than completely removed, below the first identified level of archaeological interest, unless specified by the CHES, with the intension of preserving as much *in situ* as possible;
- The position of any features, such as ditches, pits, or walls, will be recorded and where necessary these will be investigated in order to establish their full extent, date, and relationship to any other features. Negative features such as ditches or pits will be examined by sample excavation, typically half of a pit or similar feature and approximately 10% of a linear feature;
- All recording of features will include hand-drawn plans and sections, typically at a scale of 1:20 and 1:10, respectively, and photographs in both 35mm colour print and colour digital format;
- All deposits, trenches, drawings and photographs will be recorded on Greenlane Archaeology *pro forma* record sheets;
- All finds will be recovered during the evaluation for further assessment as far as is practically and safely possible. Should significant quantities of finds be encountered an appropriate sampling strategy will be devised;

- All faunal remains will also be recovered by hand during the evaluation, but where it is considered likely that there is potential for the bones of fish or small mammals to be present appropriate volumes of samples will be taken for sieving;
- Deposits that are considered likely to have preserved environmental remains will be sampled. Bulk samples of between 10 and 40 litres in volume, depending on the size and potential of the deposit, will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits, and ditches) and occupation deposits such as hearths and floors. An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by specialist sub-contractors (see *Section 1.3.5* above), who will examine the potential for further analysis. All samples will be processed using methods appropriate to the preservation conditions and the remains present;
- Any human remains discovered during the evaluation will be left *in situ*, and, if possible, covered. CHES will be immediately informed as will the local coroner. Should it be considered necessary to remove the remains this will require a Home Office licence, under Section 25 of the Burial Act of 1857, which will be applied for should the need arise;
- Any objects defined as 'treasure' by the Treasure Act of 1996 (HMSO 1996) will be immediately reported to the local coroner and secured stored off-site, or covered and protected on site if immediate removal is not possible;
- Each evaluation trench will be backfilled following excavation although it is not envisaged that any further reinstatement to its original condition will be carried out.

3.3.4 Should any significant archaeological deposits be encountered during the evaluation these will immediately be brought to the attention of CHES so that the need for further work can be confirmed. Any additional work and ensuing costs will be agreed with the client and according to the requirements of CHES, and subject to a variation to this project design.

3.4 Report

3.4.1 The results of the desk-based assessment and evaluation will be compiled into a report, which will include the following sections:

- A front cover including the appropriate national grid reference (NGR) and planning application number;
- A concise non-technical summary of results, including the date the project was undertaken and by whom;
- Acknowledgements;
- Project Background;
- Methodology, including a description of the work undertaken;
- Results of the desk-based assessment including historical background, map regression and appropriate details relating to any sites of archaeological interest identified within the study area or areas of archaeological potential;
- Results of the evaluation including descriptions of any deposits identified, their extent, form, and potential date, and an assessment of any finds or environmental remains recovered during the evaluation;
- Discussion of the results including an assessment of the significance of any archaeological remains present within the study area, areas of further archaeological potential, areas in which further work is recommended, and appropriate types of further work;
- Bibliography, including both primary and secondary sources;
- Illustrations at appropriate scales including:
 - a site location plan related to the national grid;
 - a plan showing the location of the study area in relation to nearby structures and the local landscape;
 - copies of early maps, plans, drawings, photographs and other illustrations of elements of the site, annotated with the extent of the proposed development area where appropriate;
 - a plan showing the position of the evaluation trenches;
 - plans and sections of the evaluation trenches showing any features of archaeological interest;

- photographs of the evaluation, including both detailed and general shots of features of archaeological interest and the trenches;
- illustrations of individual artefacts as appropriate.

3.5 Archive

3.5.1 The archive, comprising the drawn, written, and photographic record of the desk-based assessment and evaluation, formed during the project, will be stored by Greenlane Archaeology until it is completed. Upon completion it will be deposited with the Cumbria Record Office in Carlisle (CRO(C)). The archive will be compiled according to the standards and guidelines of the IFA (Brown 2007), and in accordance with English Heritage guidelines (English Heritage 1991). In addition details of the project will be submitted to the Online Access to the Index of archaeological investigations (OASIS) scheme. This is an internet-based project intended to improve the flow of information between contractors, local authority heritage managers and the general public.

3.5.2 A copy of the report will be deposited with the archive at the Cumbria Record Office in Carlisle, one will be supplied to the client, and within two months of the completion of fieldwork, three copies will be provided for the Cumbria Historic Environment Record (HER). In addition, Greenlane Archaeology will retain one copy, and digital copies will be deposited with the NMR and OASIS scheme as required.

3.5.3 The client will be encouraged to transfer ownership of the finds to a suitable museum. Any finds recovered during the evaluation will be offered to Tullie House Museum in Carlisle. If no suitable repository can be found the finds may have to be discarded, and in this case as full a record as possible would be made of them beforehand.

4. Work timetable

4.1 Greenlane Archaeology will be available to commence the project on 16th November 2009, or at another date convenient to the client. It is envisaged that the project will comprise tasks in the following order:

- Task 1: rapid desk-based assessment;
- Task 2: site visit;
- Task 3: submission of proposed trench plan to CHES;
- Task 4: evaluation trenching;
- Task 5: production of draft report including illustrations;
- Task 6: feedback, editing, and production of final report;
- Task 7: finalisation and deposition of archive.

5. Other matters

5.1 Access

5.1.1 Access to the site will be organised through co-ordination with the client and/or their agent(s).

5.2 Health and Safety

5.2.1 Greenlane Archaeology carries out risk assessments for all of its projects and abides by its internal health and safety policy and relevant legislation. Health and safety is always the foremost consideration in any decision-making process.

5.3 Insurance

5.3.1 Greenlane Archaeology has professional indemnity insurance to the value of £250,000. Details of this can be supplied if requested.

5.4 Environmental and Ethical Policy

5.4.1 Greenlane Archaeology has a strong commitment to environmentally and ethically sound working practices. Its office is supplied with 100% renewable energy by Good Energy, uses ethical telephone and internet services supplied by the Phone Co-op, has floors finished with recycled vinyl tiles, and is even decorated with organic paint. In addition, the company uses the services of The Co-operative Bank for ethical banking, Naturesave for environmentally-conscious insurance, and utilises public transport wherever possible. Greenlane Archaeology is

also committed to using local businesses for services and materials, thus benefiting the local economy, reducing unnecessary transportation, and improving the sustainability of small and rural businesses.

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Appendix 3: Site Gazetteer

SMR number

- 433 Milecastle 66 (Stanwix Bank), Pennant noted the '*vestiges of some dikes describing a small square, the site of a fort to defend the pass*' (Pennant 1772, 72). There are now no visible remains.
- 434 A cliff fall near Hyssop Bank revealed a stupendous number of horse bones, believed to be the cemetery of the Stanwix garrison horses. Birley places site to '*between Milecastle 66 and the vallum*' (Pennant 1772, 72).
- 440 Pillar found at Stanwix Bank. Tuscan capital pillar and Roman pottery found in 1812, 15" in diameter. In the same area in 1815 hewn stone and large bricks, along with the base of a column with a pedestal were found. During road widening in 1816 human remains were found in a vault along with Roman pottery with 'SARRI' on the rim (Whellan 1860, 140).
- 470 A carved stone thought to be a horse block was found in the yard of a house where the Old Mail Road turned out of Stanwix. The stone has a figure of a Roman man playing the bagpipes carved into it and can be seen beside the Abbey Gate in the grounds of Tullie House (OS index: PSA 10, Ferguson, 1885, 320-2).
- 472 Red sandstone slab 11" high with figure of Mercury in relief holding a purse and wand (*cauduceus*), found where Scotland and Newcastle Road join.
- 474 Inscribed Roman altar, on right side a jug, on left side a *patera*. It was found some time before 1725, considered by Horsley to be the altar at Stanwix. Full inscription in Collingwood and Wright (1965).
- 475 Glass Phalera from No. 3 Eden Mount: this beautiful opaque blue glass bust of a lady was found in a well, along with some coins, by workmen laying the foundations for number 3 Eden Mount. The discovery was first published in the *Carlisle Journal* in 1851. The *Carlisle Journal* article also details finds made during the construction of the neighbouring property at a similar date, these included 'two ancient walled wells' a quantity of red and buff-coloured pottery, an amphora one yard in length an iron spear head and two corn grindstones. Subsequent articles have determined that the bust is thought to represent Agrippina the Elder wife of Germanicus, and date from cAD 23 (Toynbee and Richmond 1953, 40-48; Hogg 1974, 217-218).
- 476 Small Roman bronze statuette 2 and three quarter inches in height, left hand holds an orb.
- 495 Hadrian's Wall gate.
- 501 Two Roman altars found in 1725 and 1931. One is dedicated to the Mother Goddess, the other to Emperor Verus (Collingwood and Wright 1965, 620-1).
- 525 Two Late Bronze Age socketed axes were found together on Kings Meadow, Carlisle. They are closely similar but do not appear to have come from the same mould (Clough 1969, 21, 33).
- 4907 A vault, said to be 'probably Roman', discovered before 1816 (reported in a news article in the Cumberland Paquet, 1816)
- 5081 Carlisle to Newcastle military road – built between 1751 and 1758 it is unique because it was not built for economic reasons (Hindle 1984, 71-2, 74, 141).
- 13614 A c10th century Anglian Cross Head, said to be from Stanwix, is now at Tullie House Museum, Carlisle.
- 17703 Coins – two found at Old Croft, Stanwix were AD 152-3 and AD 238-41 (Shotter 1991, 272).
- 18959 A post-medieval fountain.

19111 A Roman coin found in Stanwix in 1976, the exact findspot is unknown. It is a Sestertius of Septimus Severus (third century AD) (Shotter 1989, 42).

19523 Pottery find 1993, Edenside Cricket ground, Carlisle. Lid fragment from an open mouthed bowl of Nene Valley colour coated ware normally found in a third century context (Richardson, 1999, 24).

19524 Amphora handle with badly worn stamp found in the garden of 10 Eden Mount in Stanwix in 1995. It is thought to be from a Spanish vessel which was common from the first to third centuries. (Richardson, 1999, 25).

19703 Weight find – private garden of Mr M Wardlow, Eden Mount, Stanwix. The find was a ball weight with a circular hole penetrating through it and weighed 3.2kg, it is believed to be post medieval (Richardson, 1998, 35).

19749 A heavily corroded cold chisel with a square butt was found by the donor, Mr M. Huntingdon, in his garden at Landsdowne Close, Stanwix, at a depth of c23cm. While Roman period objects do turn up in gardens in the Stanwix area, the unchanging design of cold chisels makes casual finds extremely hard to date (Richardson 1998, 45).

19753 A translucent Amber bead with yellow wave decoration of the Trajanic period was found in garden of 10 St George's Crescent in 1982, it is now at Tullie House, Acc No L-1982-2.

Appendix 4: Summary Context List

Context	Type	Description	Interpretation
01	Layer	Greyish dark-brown sandy-silt	Topsoil
02	Layer	Dark-brown sandy-silt	Garden soil
03	Layer	Sub-rounded gravels and pebbles in a brownish dark-grey silt	Roman occupation
04	Layer	Brownish pale-grey silty-clay	Upper natural, alluvium
05	Fill	Dark-brown sandy-silt	Land drain trench backfill
06	Cut	19 th century field drain	Drainage
07	Structure	Brick	Wall
08	Fill	Greyish dark-brown sandy-silt	Fill of (09)
09	Cut	Sub-circular irregular hollow	Bioturbation

Appendix 5: Summary List of Finds Excluding Roman Pottery

Context	Fabric	Qty	Description	Date range
02	Pottery	2	Red earthenware flowerpot fragments, including one base	18 th to 20 th century
02	CBM	1	Red hand-made brick fragment including corner	Not closely dateable
02	Stone	1	Dressed red sandstone slab fragment	Not closely dateable
02	Pottery	2	Brown-glazed grey bodied stoneware jar fragments – base and shoulder	18 th to mid-20 th century
02	Pottery	5	White earthenware (undecorated basin rim and base, three fragments of 'Willow' transfer-printed plates)	19 th to early 20 th century
02	Pottery	2	Buff-coloured earthenware, including factory-produced slipware bowl rim	Late 18 th to early 20 th century
03	CBM	1	Red brick fragment	Not closely dateable
03	Stone	1	Slate fragment	Not closely dateable
03	Bone	1	Very degraded large mammal bone fragment	Not closely dateable
03	Bone	1	Calcined (burnt) fragment – rib or small mammal long bone?	Not closely dateable
05	Clay tobacco pipe	1	Stem fragment, narrow bore	Late 18 th to early 20 th century
05	Pottery	1	Red gritty ware	12 th to early 13 th century
05	Bone	1	Very degraded large mammal fragment	Not closely dateable
05	Industrial residue	1	Smithing waste?	Not closely dateable

Appendix 6: Romano-British Pottery Assessment Report

The pottery was examined in context groups and catalogued according to the Guidelines of the Study Group for Romano-British Pottery for basic archiving (Darling 2004). The fabrics were recorded in broad groups and source suggested where appropriate. Reference was made to the National Fabric Collection where appropriate (Tomber and Dore 1998). Details of fabric variations were recorded where appropriate. Forms were described. The samian was identified by Gwladys Monteil and the mortarium by Kay Hartley.

Quantity and provenance

There were 26 sherds of Romano-British pottery. The quantities of pottery sherds recovered from the contexts are shown in Table. 1.

Range and variety of material

Wares

The fabric of the pottery was first examined by eye and sorted into ware groups on the basis of colour, hardness, feel, fracture, inclusions and manufacturing technique. If the sherds could not be adequately grouped by eye then they were examined under an x30 binocular microscope and compared with sherds from known sources. National fabric collection codes are given wherever possible (Tomber and Dore 1998).

Ware group/Context	03	05	Total
BB1 (BB1 DOR)	4	1	5
Colour coated ware		1	1
Dressel 20 amphora (BAT AM)	8		8
Fine grey ware	1		1
Medium grey ware	8	1	9
White-slipped oxidised mortarium	1		1
samian (Central Gaul)	1		1
Total	23	3	26

Table 1 Quantities of wares

Forms

The amphora was a Dressel 20 type from Spain and contained olive oil originally. The form suggested a date within the late first to early second century (Peacock and Williams 1986, fig.65 no. 22). The grey ware reeded-rim bowl is of late first to early second century form (Gillam 1970 nos 214-7). At least to BB1 bowls or dishes were present and a bodysherd from a BB1 jar with acute lattice burnish. These lack diagnostic features but can be broadly dated to the Hadrianic-early Antonine period. The colour coated sherd comes from the rim and body of a beaker. Although the rim is incomplete it has a double groove just above the junction of the rim and body and the rim is curving out very sharply. This may be from a beaker with a cornice type rim belonging to the series of rough cast beakers dating to the Hadrianic-early Antonine period in the North West similar to beakers from Wilderspool. The fabric is very fine, oxidised with a reddish slip. The white slipped mortarium has a hooked flange with the top of the flange level or

just above the height of a small bead rim. The flange bears a maker's stamp, DIS/LDB, a potter working at Wilderspool and Carlisle cAD 120-50 with primarily Hadrianic date range (Webster 1992, fig. 39, no. 367, comments by K Hartley). A large fragment from a samian dish, form Curle 23, was identified and the fabric indicates a source in Central Gaul dating to cAD 120-70.

Chronology

The types of fabrics and forms identified in the assemblage date from the early to mid-second century. Sherds of Black burnished ware 1 were present in both contexts giving a date after cAD 120. Two types of vessel were present in this ware, a cooking type jar with acute lattice burnish on the girth, a pattern current in the second century from cAD 120-200, and a dish or bowl form. Two BB1 bowl/dish vessel were present and one had burnished loops outside the base, a feature typical of vessels dating after the mid-second century. The Dressel 20 amphora rim form compared with vessels of the late first to early second century as did the reeded rim bowl. The samian vessel in context **03** was dated to AD 120-70. All the vessels would fit a date in the Hadrianic to early Antonine period and most are consistent with a Hadrianic date.

Function, sherd conditions and site status

The pottery types present are of military type and include at least two imported luxury items, the samian bowl, fine tableware from potteries in Gaul, and the Spanish amphora originally containing olive oil. The grey wares are likely to be of local production and the reeded rim bowl form is typical of the potteries around Carlisle serving the military. The presence of graffito on the amphora rim also indicates numeracy/literacy consistent with a military character (Evans 1987).

The group is too small for statistical analysis but the presence of an amphora with evidence of re-use (a graffiti reading IV), cooking and storage vessels (the BB1 bowls/dishes and jar and grey ware closed vessels), tablewares (samian bowl and colour-coated beaker) and vessels related to food preparation (mortarium) suggest the full range of domestic activities. The re-use of large commodious vessels such as amphorae, after their contents had been used up, appears to have been common throughout the Empire (Van der Werff 2003). Numbers incised on the rim commonly relate to modii and sextarii (dry measures) and bear witness to the secondary use of amphorae for the storage of dry goods. Indeed Van der Werff suggests the possibility that these measurement relate to the amount of grain a military unit was entitled to which was then stored in the suitable inscribed amphora. The scorched condition of the rim and bodysherds of this amphora may indicate a tertiary use related to cooking or this may be the result from scorching after the vessel was broken and deposited as rubbish.

Taphonomy

The sherds were in fairly good condition and included large pieces suggesting deposition of fresh ceramic debris.