NORTH PENNINES ARCHAEOLOGY LTD

Project Designs and Client Reports No. CP/135/04

REPORT ON AN ARCHAEOLOGICAL EVALUATION AT DEMESNE FIELD BOWNESS ON SOLWAY CUMBRIA

For

UNITED UTILITIES

NGR NY 2262

HSD 9/2/6462

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12th November 2004

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NON-TECHNICAL SUMMARY

In August 2004 North Pennines Archaeology Ltd undertook an archaeological field evaluation in the north east corner of the Demesne field opposite St Michael's church in the village of Bowness on Solway, Cumbria. This was in response to a condition of a scheduled monument consent application to refurbish and move a new pole mounted transformer.

The work followed a rapid desk-based assessment and site visit. The field evaluation involved the excavation of a single trial trench in order to assess the presence/absence, extent, nature and state of preservation of archaeological deposits within the area of the proposed cable trench.

The trench confirmed the presence of significant Roman structural remains including wall foundations and probable occupation layers beneath an average of 0.30m of modern overburden. These deposits confirm the well preserved remains of a probable *vicus* running alongside the south road adjoining the fort.

ACKNOWLEDGEMENTS

Thanks are due to the following people Chris Jones, Kevin Mounsey, of North Pennines Archaeology Ltd, Alan James for his invaluable assistance, and Mike Collins of English Heritage.

1 INTRODUCTION AND LOCATION

1.1 In August 2004 North Pennines Archaeology Ltd was commissioned by United Utilities to undertake an archaeological field evaluation on Demesne field opposite to St Michael's church, Bowness on Solway, Cumbria. This report fulfils the conditions set out in the scheduled monument consent for a programme of archaeological investigation prior to the proposed refurbishment works on a pole mounted electricity transformer.

1.2 The village of Bowness on Solway lies approximately 10 miles to the west of Carlisle on the Solway coast. The village lies on the site of the Roman fort of Maia which was, after Stanwix, the largest fort on Hadrian's wall. The fort guarded the strategic final fording point on the Solway and formed the western terminus of Hadrians' wall. Very little excavation has been conducted on the fort, which occupied over six acres, this area not including its vicus, the full extent of which is still unknown.

1.3 The purpose of the assessment was to evaluate the site in order to define the presence or absence of archaeological remains. The fieldwork was undertaken in a single phase of three days duration. Modern overburden was removed by hand until any archaeological deposits were exposed. These deposits were then recorded in plan and left in situ, the only additional excavation involved the sectioning of obvious modern cut features. Any artefactual material was collected to facilitate the interpretation and date of the archaeological features. No bulk environmental samples were taken as no archaeological features were excavated.

2 PREVIOUS WORK

2.1 Manchester University carried out a topographical and partial geophysical survey of the field in 1997, confirming the position of southern road out of the fort and the presence of intensive settlement activity on either side of the road.

2.2 One small trench was excavated within the Demesne field in 2000 by the former Carlisle Archaeology Ltd. This service trench recorded significant Roman remains including a wall line surviving for over three courses, which corresponds with feature 115 recorded during the present evaluation.

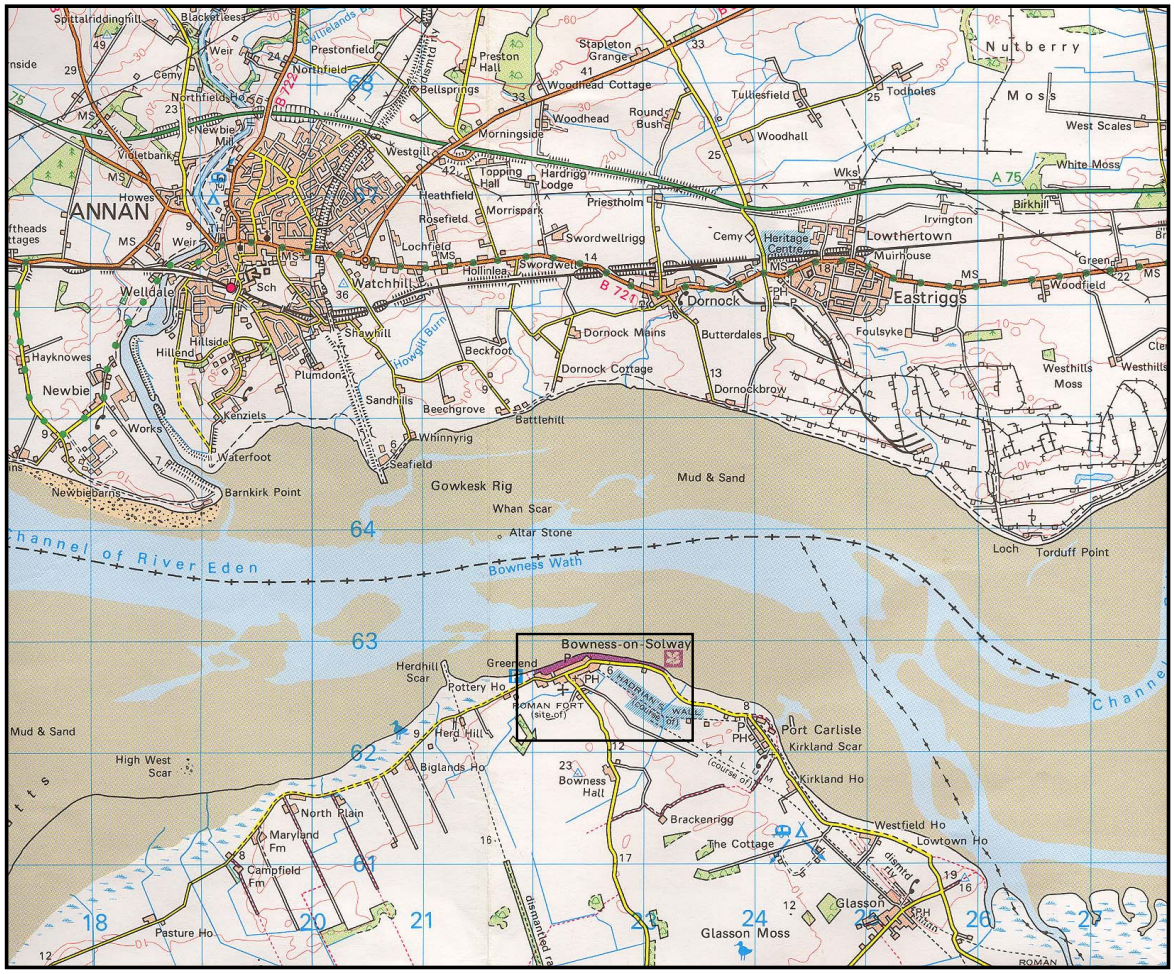

FIGURE 1: AREA LOCATION

NGR: NY 2265

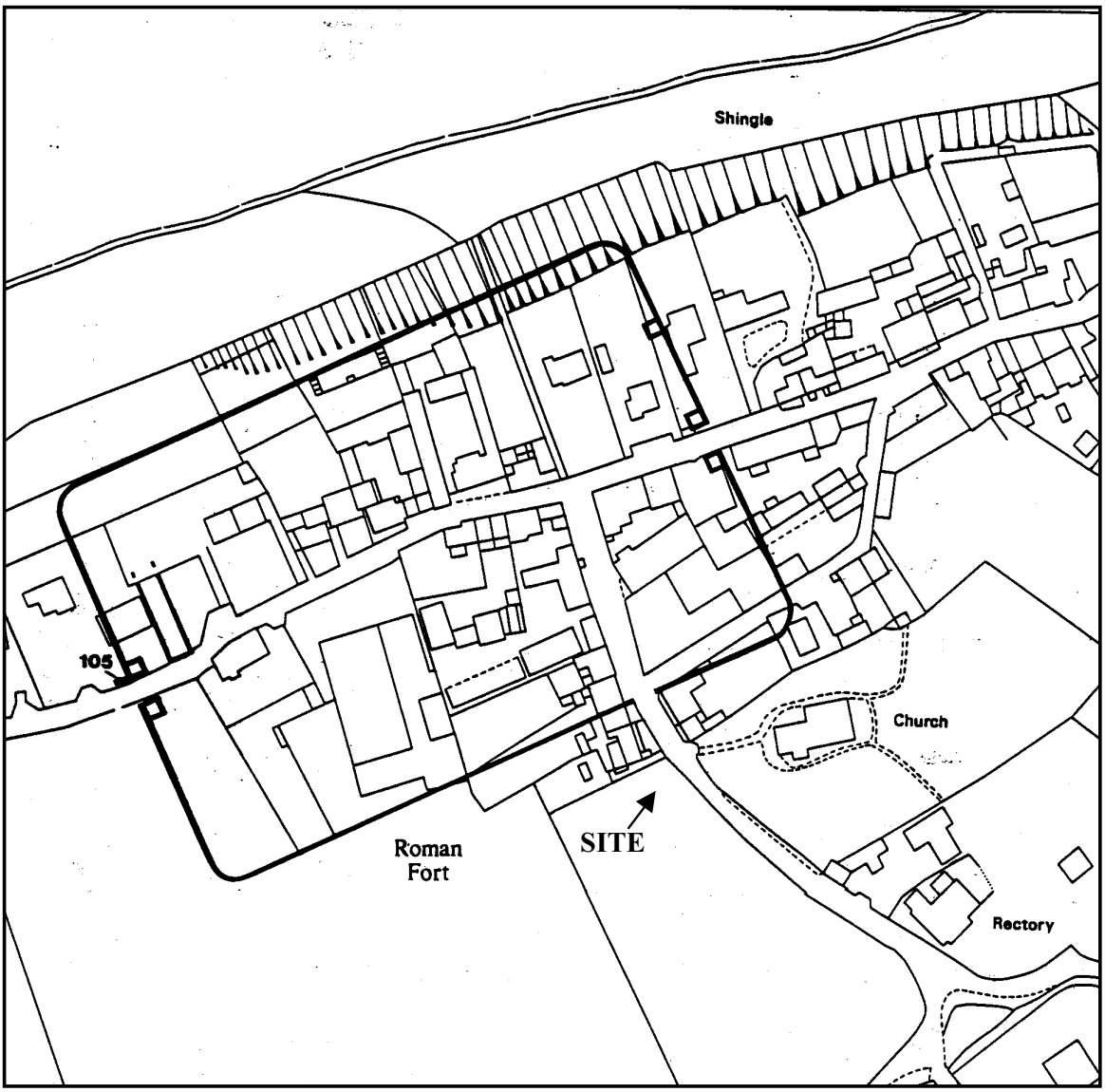

FIGURE 2: LOCATION OF FORT IN RELATION TO SITE

Scale 1:200

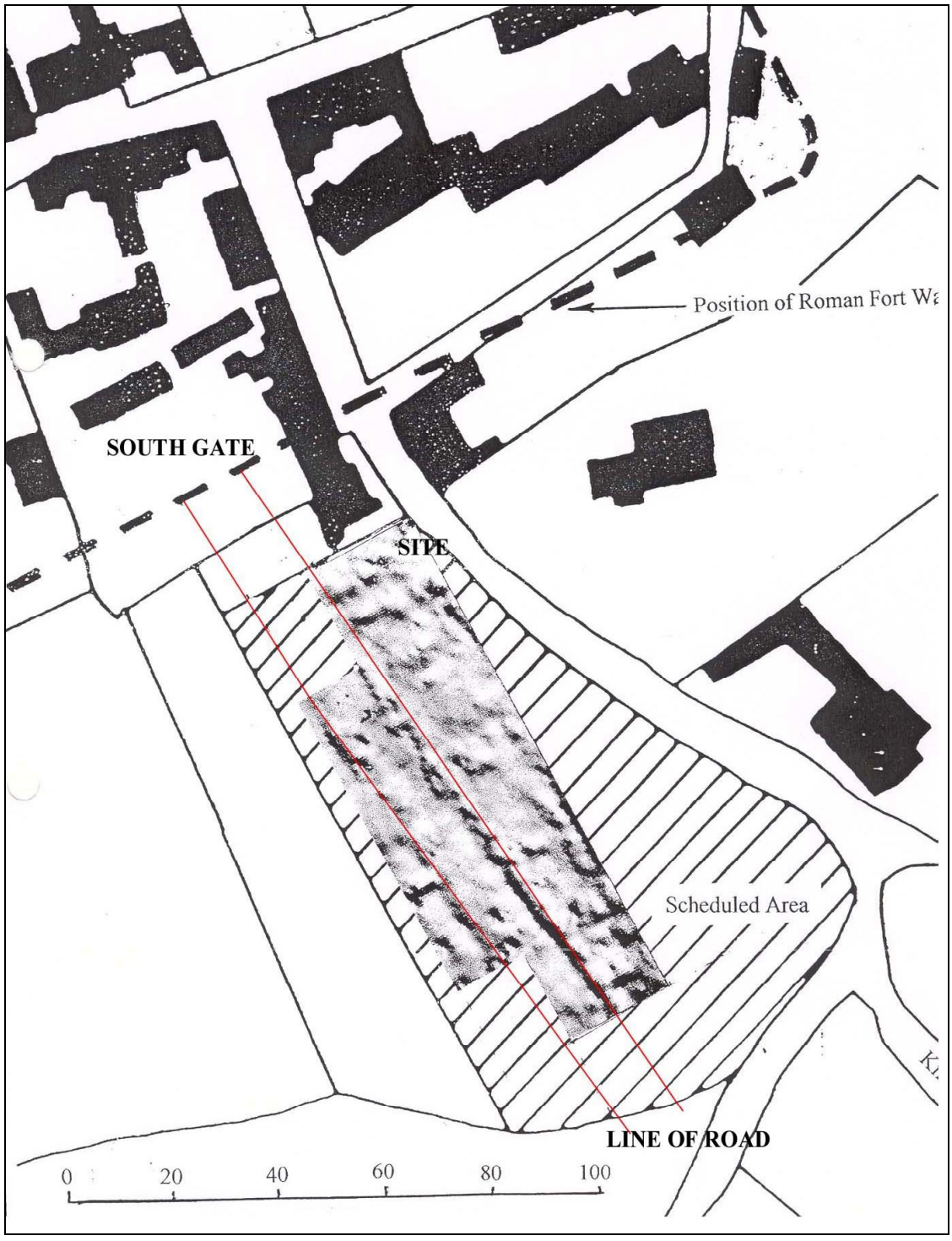

FIGURE 3: LOCATION OF GEOPHYSICAL SURVEY
Carried out by Barri Jones of the Department of Art and History and Archaeology, University of Manchester 1997.

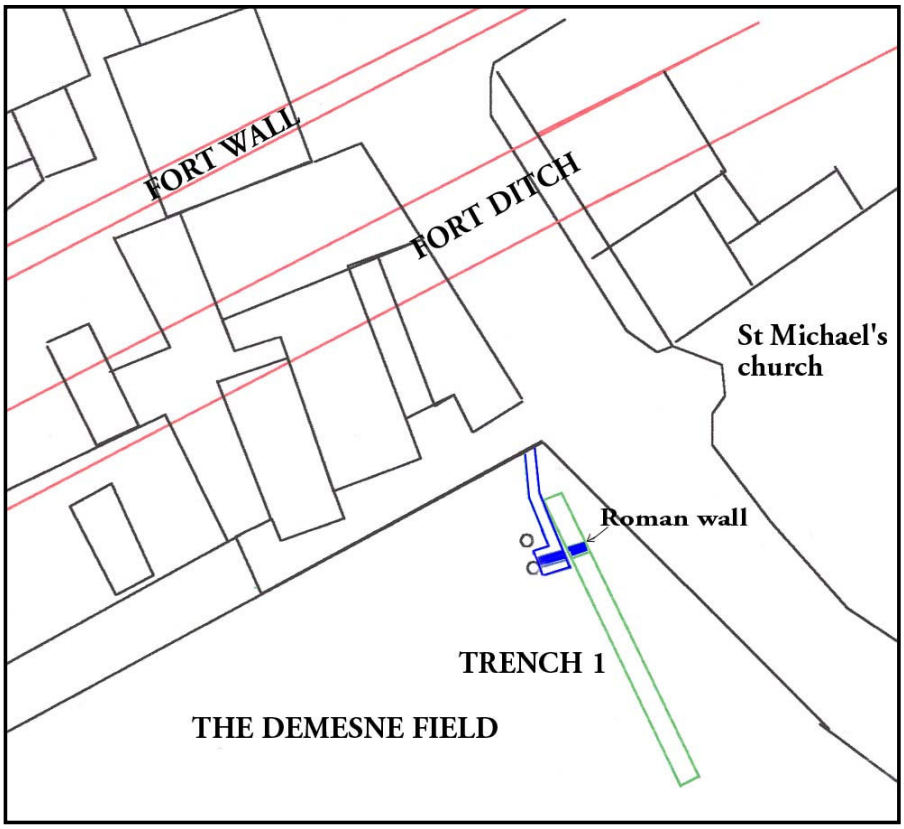

FIGURE 4: Trench Location Plan

Scale 1:400

Key: Trench 1 highlighted in green
2000 Carlisle Archaeology Ltd trench highlighted in blue

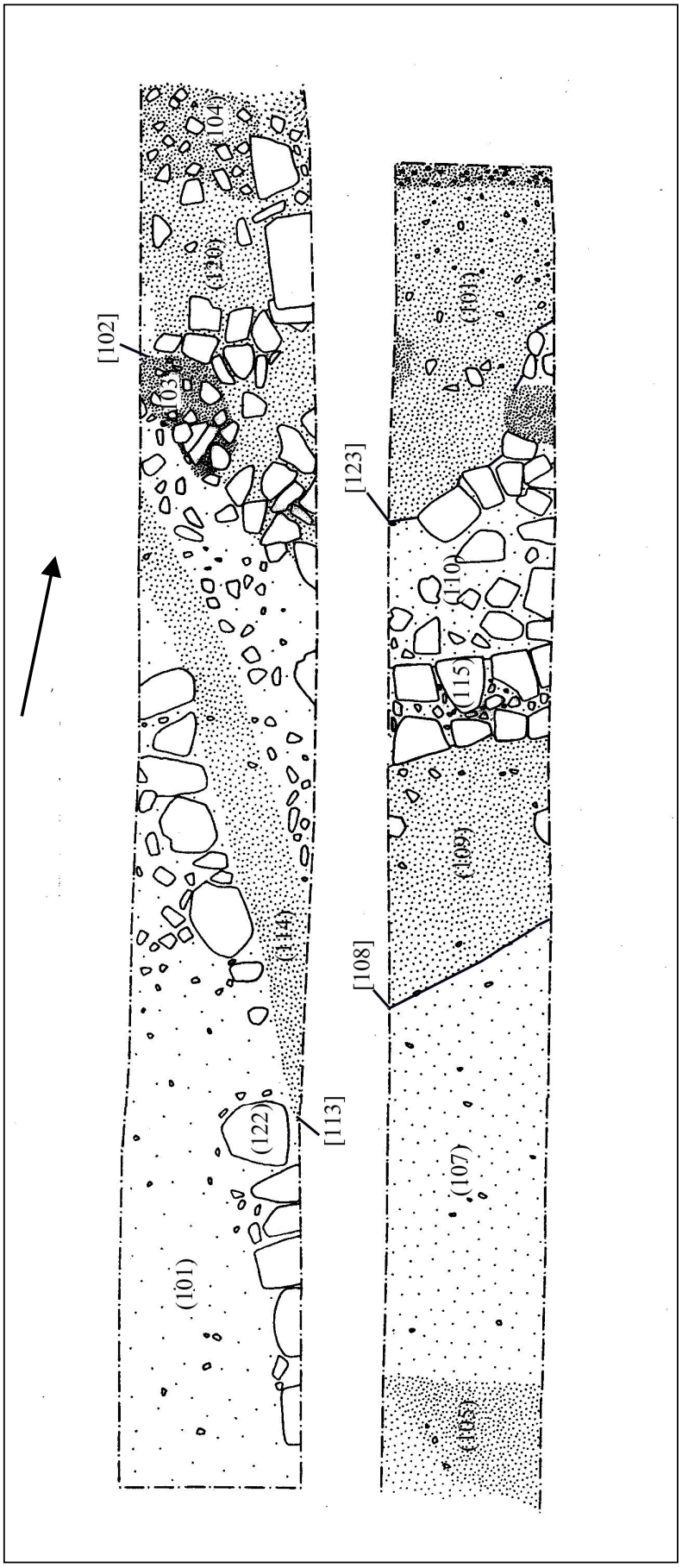

Figure 5: Trench Plan
Scale 1:40

3 AIMS AND METHODOLOGY

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

3.2 Project Design

3.2.1 A project design was prepared in response to the scheduled monument consent (HSD 9/2/6462), which granted a Class 7 Consent, under the provisions of the ancient Monuments (Class Consents) Order 1994. This included a detailed specification of works to be carried out, which consisted of a rapid desk-based assessment and field evaluation which was approved by Mike Collins (Hadrian's Wall Archaeologist).

3.2.2 The work consisted of the hand excavation of one 18m by 1.2m linear trial trench, in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. In summary, the main objectives of the evaluation were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
- to recover artefactual material, especially that useful for dating purposes;

3.2.3 The trench was excavated by hand to the top of archaeological deposits. The trench was then manually cleaned and recorded according to the North Pennines Archaeology Ltd standard procedure as set out in the North Pennines Archaeology Ltd Excavation Manual. Photography was undertaken using a Canon EOS 100 Single Lens Reflex (SLR) manual camera. A photographic record was made using 400 ISO colour print film.

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

4 DESK TOP ASSESSMENT

4.1 The site lies outside the Roman fort of Maia, a Scheduled Ancient Monument, World Heritage Site and the most westerly fort on Hadrian's Wall (NY 2262). The current extent of knowledge concerning Roman Bowness has been summarised by Birley (1961, 211-214), and by Daniels (1978, 255-8). The stone-built fort is estimated to be approximately six acres in extent, the second largest on Hadrian's Wall.

4.2 The construction of this fort is uncertain, though it was probably built in the late 2nd - early 3rd centuries AD. It was preceded, as elsewhere on the Cumbrian side of the Wall, by an earlier fort of turf and timber construction, about which very

little is known (Giecco 2001a). To the south of the wall lay the Vallum, although there is little or no information as to the precise position of this feature or the point at which it terminated (Ibid.).

4.3 Previous work and casual finds have suggested that the fort extended from the Hadrianic period (c. AD 120-130) to the 4th century AD. There is no evidence of any sub-Roman or post-Roman activity until the 12th century, which may be accounted for by substantial truncation of earlier deposits during the post medieval and modem periods (Ibid.).

4.4 The principal programmes of investigation have taken place in 1930, 1955, 1967, 1973 and 1975, during which the western ramparts, the west gate and intervallum road, and an adjacent barrack block were located (Daniels 1989). In 1973 part of the west rampart and west gate of both the original turf and timber fort and the later stone rebuild were located. Another internal structure close to the assumed position of the central range could not be interpreted (Ibid; Potter 1979, 320-49). Further excavations in 1988 demonstrated that the line of the eastern defences of the stone fort was over 30m further west than was previously thought, reducing the size of the fort from a presumed seven acres to approximately six acres (Giecco 2001, 2; Austen 1989, 19-20).

4.5 South of the fort, Bellhouse carried out work in 1986-87 in Demesne field west of the church (Field 122), where earthworks considered to be associated with the vicus still exist (Giecco 2001a; Bellhouse 1988, 42-3). Bellhouse concluded that the earthworks were Post-Roman in origin and that a postulated road leading south from the fort did not exist, although it is dubious as to whether the scale of the work was sufficient to facilitate a view to be formed as to the nature and date of the earthworks and waterlogged deposits in the area (Giecco 2001a).

4.6 In 1996 the Carlisle Archaeological Unit undertook a limited programme of work in the garden of Maia House immediately west of the western defences. No trace of the outer fort ditch was found, but a medieval ditch was recorded (Zant 1996).

4.7 In 1997 a team from the University of Manchester undertook a geophysical survey within a Demesne field adjacent to the main road into the village on the south side (see figure 3). The results of this work included the identification of a possible road and a number of stone wall foundations.

4.8 In 1999 Carlisle Archaeology undertook a watching brief and programme recording for North West Water during a mains replacement exercise (Giecco et al 2000). This work revealed few Roman deposits close to the line of the supposed main road of the fort, beneath the modem roads, with traces of clay and cobble wall foundations and a buried ground surface recorded (Ibid.).

4.9 To the south of the fort, adjacent to the church and Rectory, stratified archaeological deposits up to and in excess of 3m were revealed, including very well preserved organic remains including substantial building timbers, woodworking debris, leatherwork and other artefacts (Giecco 2001). In 2000,

Carlisle Archaeology Ltd maintained an archaeological watching brief of electricity system refurbishment in the village of Bowness on Solway and a small scale field walking exercise. The work provided important information about the condition and depth of archaeological deposits in and around the village, including important environmental remains from waterlogged organic deposits from the southern and eastern sides of the village (Giecco et al 2001).

5 RESULTS

5.1 The evaluation was directed in the field by Frank Giecco, BA, Dip Arch, AIFA, Principal Archaeologist, North Pennines Archaeology Ltd. He was assisted by Chris Jones, Kevin Monsey and Alan James.

5.2 One linear trial trench was excavated by hand, measuring 1.2m x 18m, with a maximum depth of 0.40m, the course of this trench being dictated by the proposed cable route.

5.3 All references to cardinal directions refer to site grid north.

5.4 Trench 1 (figure 5)

5.4.1 Trench 1 was located in the north east corner of Demesne field running from the existing transformer pole to the proposed location of the new transformer pole, a distance of approximately 18m. Archaeological deposits were encountered throughout the trench at depths varying between 0.25m to 0.40m below the present ground surface. The deposits were revealed beneath a post medieval soil build up (100) which contained large quantities of late 19^{th} / 20^{th} material. As the archaeological deposits were left in situ the natural substrate was not observed, so no comments can be made on the overall depth of these archaeological deposits, and any discussion of the stratigraphic sequence is limited.

5.4.2 The earliest recorded phase of activity in the trench relates to a sandy clay loam (101) soil build up located to the south of cobble foundation (122), and a compact sandy gravel deposit (111) recorded beneath the modern pit (123) in the northern end of the trench. Between these two layers a sequence of two probable structures (the earliest of which was undoubtedly of a Roman date) were recorded.

5.4.3 The earliest structure was defined by a wall foundation (context 115) to the north and an area of tumble (context 120), which could represent the robbed out southern wall of this structure. In between these two wall lines were a sequence of demolition layers and a possible floor surface. The width of this tentative building would be approximately 6m, which fits in well with the geophysical anomaly (see figure 3) which has been interpreted as a strip building running off the southern road out of the fort. Working off the geophysical survey results it is possible to give this structure an approximate length of 20m.

5.4.4 The building was constructed out of roughly dressed sandstone, comprising unbonded sandstone blocks surviving for over two courses in height on its northern side (115). The southern wall appears to have been heavily robbed leaving no obvious undisturbed masonry (120). Due to the restrictions on the

excavation neither of the construction cuts were recorded as they were sealed beneath later deposits associated with the occupation and final destruction of the building. The area defined by these two wall lines was covered by a compact charcoal rich silty clay (109) extending for over 3m, this area was clearly internal and totally different in nature to the deposits recorded to the north and south of the building (101 and 111). The most plausible interpretation for this deposit is as an occupation layer within this building.

5.4.5 This floor surface was sealed by an area of sandy silt (104) which contained large quantities of off-white wall plaster, this layer was in turn sealed by an area of wall tumble (120) which could relate to either the initial abandonment of the building or later stone robbing. Context 120 was then sealed beneath a small dump of brick and tile (104), which again had an appearance of a demolition layer, and a small pit (102). This small pit was half sectioned as it was initially thought to be modern in date. Pit 102 measured 0.70m in diameter and 0.30m in depth, it produced no modern material though a small quantity of Roman material was recovered from its fill (103).

5.4.6 To the south of the building a possible crude foundation (122) was recorded to be constructed out of large sub-rounded cobbles (plate 3), this feature measured 0.50m in width and extended for over 5m running on northwest/southeast alignment. The dating of this feature is problematic as the feature produced no dating evidence and could therefore date from anytime between the late Roman and post medieval period. A land drain (113) running parallel to this cobble foundation obviously respected this feature which must have at least been a visible earth work in the mid 19th century when the drain was inserted. Pit 123, a late 19th early 20th century rubbish pit, situated in the northern most limit of the trench represented the only other modern feature recorded within the trench.

5.4.7 The fills of both these features (114 and 112 respectively) were sealed beneath 0.30m of 19th/20th century soil.

PLATE 1: Detail of wall 115 looking west

PLATE 2: Detail of wall tumble (110) to the north of wall 115.

PLATE 3: Foreground, land drain 117
Background, robbed out southern wall of Roman building.

PLATE 4: Cobble foundation 122

6 THE FINDS

6.1 The pottery and other artefactual material has been cleaned, marked and packaged according to standard guidelines, and recorded under the supervision of Frank Giecco. The pottery and finds are quantified in table 1 below. No further work is required on the finds assemblage. Number within brackets relate to total number of fragments from each context.

6.2 The Roman Pottery

6.2.1 Context 103 produced one sherd of Neane Valley ware from a colour coated beaker, of 3rd to 4th century date.

6.2.2 Context 104 produced one body sherd of micaceous grey ware and two rim fragments of a locally produced mortarium in a hard dense pink-brown fabric. Both fabrics are likely to be of 2nd to 3rd century date.

6.2.3 Context 106 produced one body sherd of micaceous grey ware and a single rim sherd of a locally produced mortarium in a hard dense pink-brown fabric. Both fabrics are likely to be of 2nd to 3rd century date.

6.2.4 Context 106 produced one body sherd of south Spanish Amphora.

6.3 The Samian ware

6.3.1 Context 101 produced on sherd of a form 33 conical cup, dating from the Antonine period.

6.3.2 Context 104 produced a single worn fragment of central Gaulish form 37 of a likely Hadrianic/Antonine date.

6.3.3 Context 106 produced two worn fragments of central Gaulish form 37 of a likely Hadrianic/Antonine date.

6.4 The Medieval Pottery

6.4.1 Three sherds of partially reduced green glazed pottery or 13th/14th century date were recovered from contexts 100 (2) and 101 (1).

6.5 Post-Medieval Pottery

6.5.1 Context 100, (the topsoil cleaning level) produced 45 fragments of pottery ranging in date from 18th century tin glazed earthen wares and black wares to 19th century blue and white porcelain.

6.5.2 Context 113 produced 3 sherds of slip trailed decorated earthen ware, 1 fragment of black ware and 1 small body sherd of tin glazed earthen ware. All the pottery ranged in date from the early to late 18th century.

6.6 Copper Alloy

6.6.1 Context 100 produced a fragment of a post medieval buckle, probably from a shoe, measuring 20mm by 0.16mm. A rectangular square sectioned bronze nail measuring 40mm was also recovered from context 100.

6.6.2 Context 106 produced 1 fragment of bronze sheet oval in shaped and had been pierced by a rectangular hole. Maximum length 25mm maximum width 12mm.

6.7 Iron

6.7.1 Context 104 produced one nail measuring 0.35mm in length with a circular cross section.

6.7.2 Context 106 produced 4 small nails/tacks measuring 0.25mm and 0.10mm in length.

6.7.3 32 pieces of iron were recovered from context 100, the majority being machine cut nails and bolts and miscelanious ironmongery all dating from the late 19th/ 20th century.

6.8 Building material

6.8.1 19 fragments of undiagnostic handmade brick and tile were recovered, 16 fragments coming from context 100 with a further 3 unstratified.

6.9 Glass

6.9.1 20 fragments of late 19th / 20th century bottle glass were recovered from contexts 100 (14) and U/S (6).

6.9.2 Context 103 produced 1 body sherd of blue green Roman glass and is likely to have been part of a flask.

6.9.3 Context 104 produced 1 complete base of a conical beaker of colourless glass, dating from the late 3rd through to the end of the 4th century. Diameter of base = 40mm.

6.10 Lead objects

6.10.1 Context 100 produced a small fragment from a possible lead seal with only the rim of the stamp visible on both sides. Measures 5mm by 10mm. Eight further undiagnostic fragments of lead were recovered from context 100 (3) and U/S (5).

6.11 Clay Tobacco Pipe

6.11.1 Context 100 produced a bowl and 4 stem fragments from a 17th century belly bowl pipe. The pipe had no makers marks present and a bowl diameter of 12mm, maximum height from foot to rim of bowl is 30mm.

Context No.	Roman	Amphorae	Samian	Med Pot	Post Med Pot	Glass	Fe	Pb	C.B. M	Plastic	Cu Alloy	Clay Pipe Frags
	Course Ware											
100	3		1	2	45	14	32	4	16	1	4	5
101			1	1								
103	1					1						
104	3					1	1					
106	2	1	2				4				1	
114					5		2					
U/S	1				14	6		5	3			
Total	**10**	**1**	**4**	**3**	**64**	**22**	**40**	**9**	**19**	**1**	**5**	**5**

Table 1: Bowness-on-Solway (BNS-A) The finds assemblage by context number

8 CONCLUSIONS

8.1 Although the evaluation was limited in scope it did reveal significant Roman remains at less than 0.25m below the surface. The remains included a substantial Roman strip building with surviving occupation layers, with at least two courses of masonry surviving on its northern wall. Demolition deposits of probable late Roman date also survived along with evidence of later robbing of probable post medieval date.

8.2 Evidence of a later phase of activity was recorded with a crude cobble foundation aligned at 45 degrees to the strip building, which was itself set at right angles to the south road out of the Roman fort. Medieval activity was limited to residual pottery fragments, with evidence of post medieval rubbish dumping in the northern limits of the trench.

8.3 The evidence from this evaluation added to the earlier field work and geophysical survey point to the well preserved remains of the southern vicus surviving throughout Demesne field. As much of the fort as Bowness has been built over this area has added significance as it is likely to contain the best surviving evidence for the Roman settlement at Bowness.

9 BIBLIOGRAPHY

Austen, P S, 1989 Bowness, in Daniels 1989, 19-20

Bellhouse, R, 1988 Roman sites on the Cumberland Coast: Hadrian's Wall. The fort at Bowness-on Solway, a reappraisal, Transactions of the Cumberland and Westmorland Antiquarian Society, 2nd series, 88, 33-53

Birley, E, 1961 Research on Hadrian's Wall, Kendal

Daniels, J, A, 1978 Handbook to the Roman Wall, 13th Edition, Newcastle Upon Tyne.

Daniels, J, A, 1979, "Fact and theory on Hadrian's Wall", Britannia, 10, 357-64

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

Giecco, F, (2001a) Assessment Report on an Archaeological Investigation at Bowness-on- Solway, Cumbria. Carlisle Archaeology Ltd. Report number 3/01 unpublished.

Giecco, F, (2001b) *Excavation Manual*. North Pennines Archaeology Ltd: Unpublished Document.

Giecco, F, (2004) *Project Design for an archaeological evaluation at Bowness-on-Sol, Cumbria*, North Pennines Heritage Trust Project Designs and Client Reports No 135/04, unpublished

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

Potter, T, 1979 The Roman fort at Bowness-on Solway, in T Potter (ed), Romans in the North west, Transactions of the Cumberland and Westmorland Antiquarian Society, Research Series 5, Kendal

Zant, J, 1996 Report on an Archaeological Investigation at Maia House Bowness-on- Solway, Cumbria. Carlisle Archaeology Ltd. unpublished