

Maryport Promenade, Maryport, Cumbria



Archaeological Evaluation



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SUMMARY

Oxford Archaeology North (OA North) carried out a programme of archaeological evaluation trenching in December 2007, along a 420m section of path to the immediate west of Maryport Roman Fort, *Alauna Carretiorum*, and associated *vicus* (NGR NY 0384 3744, Scheduled Ancient Monument 27746). This was at the request of Capita Symonds, acting on behalf of Cumbria County Council, in support of a planning application to upgrade the existing coastal path, and reroute a section. The proposed works would involve excavating to a depth of 150mm-200mm. Therefore, an archaeological evaluation was required to assess the potential impact on any surviving below-ground remains.

The fort was one of a series from the western end of Hadrian's Wall that extended down the Cumbrian coast. The proposed development site lay immediately to the west of the scheduled area, and due to the sensitive nature of the nearby archaeological remains, the Hadrian's Wall archaeologist for English Heritage requested the excavation of a series of small trenches to assess the potential, nature and extent of any sub-surface remains. Ten trenches were opened by mini-excavator, ranging in size from 3m by 1m, and 2m by 2m, and excavated to an average depth of 300-400mm, providing a buffer zone for the proposed improvements to the existing coastal path, and construction of the new pathway.

Of the ten trenches, eight contained no features or finds of archaeological significance (Trenches 1, 2, 3, 4, 6, 7, 9 and 10). Trenches 1 and 2 comprised redeposited modern demolition rubble (Trench 1, **101**, Trench 2, **103**) to depths of >0.4m below the top of topsoil, and probably resulted from the construction of the Senhouse Roman Museum in the nineteenth century (www.gomaryport.co.uk 2007). This suggests that the area around the museum has been disturbed, to what extent, however, is beyond the scope of this project. The remainder of the trenches comprised topsoil and subsoil, and occasionally natural geology was encountered.

Two trenches did contain archaeological remains: Trenches 5 and 8. Trench 5 contained the northern edge of a north/south bank, **112 - 114**, which comprised various redeposited subsoil and turf layers, and produced burnt bone, and pottery dating to the late second and third centuries AD. The edge of the feature had been truncated to the north by a modern ceramic field drain. It was likely that the bank formed one of a series of banks observed running west from the fort to the cliff edge; part of the seaward defences. Trench 8, located approximately 130m to the north-east of Trench 5 and to the west of the *vicus* site, contained a small ditch, **116**, running north/south across the trench. This produced fragments of spalled pottery also dating to the late second and third centuries AD. The ditch probably formed part of the western boundary of the *vicus*, which was identified to the east by a geophysical survey undertaken in 2000 (News From Hadrian's Wall 2000), while the pottery resulted from the accumulation of material from activities related to the nearby civilian settlement.

It is very likely that the majority of groundworks proposed along the length of the site will have an impact on any sub-surface remains relating to the fort and associated *vicus*. Although archaeology was not encountered in all the trenches excavated, this is probably due to the relatively shallow depth of investigation. The presence of

archaeological features in two of the trenches (Trenches 5 and 8) indicated that there were archaeological remains projecting west from the Roman fort and *vicus*, and that there could be further remains. The area between Trenches 4 and 5 are of particularly high sensitivity, as a series of banks running towards the cliff are clearly visible, and most likely part of the fort defences; even minimal groundworks will have a substantial impact on the features. Between Trenches 5 and 10, the area directly to the west of the *vicus*, there is potential for further archaeology, and any groundworks exceeding 150mm in depth will have an impact on any sub-surface remains that may exist

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The fieldwork was undertaken by Kelly Clapperton, with assistance from Steve Clarke. The finds were assessed by Chris Howard-Davis and the environmental assessment was undertaken by Sandra Bonsall. The drawings were produced by Marie Rowland. The project was managed by Emily Mercer, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Oxford Archaeology North (OA North) was commissioned by Capita Symonds, acting on behalf of Cumbria County Council, to undertake a programme of evaluation trenching to support a planning application to upgrade and improve a coastline path to the north of Maryport, Cumbria (NGR NY 0384 3744, Figs 1 and 2). The development comprises the upgrading and widening of a 320m section of the existing promenade path, with a 100m of new path being constructed to the north. The site lies immediately to the west of the Roman fort, *Alauna Carretorium*, and Senhouse Roman Museum, and within an area that may contain remains of the associated extra-mural settlement, or *vicus*, to the north and west of the fort. The fort forms part of the coastal defensive system extending from the western end of Hadrian's Wall. Although the proposed development lies outside the Scheduled Monument of the fort and *vicus* (SM 27746), it is still within an area of high archaeological potential.
- 1.1.2 Due to the high sensitivity of the area, the Hadrian's Wall archaeologist for English Heritage requested that an archaeological evaluation take place prior to submission of the planning application, to inform further planning decisions. The aim was to establish the presence or absence of any unknown archaeological deposits, and to quantify their date, nature, depth and quality of preservation. This will provide information on the potential and quality of archaeological remains within the development area, and inform further archaeological mitigation. The following report documents and discusses the results of the evaluation trenching, undertaken in December 2007, and assesses the importance of the remains identified.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The proposed upgrading and rerouting of the section of promenade path requiring archaeological evaluation is positioned just to the north of Maryport, and runs northwards from Senhouse Roman Museum, and along the cliff top for approximately 420m (Fig 1). The development is bounded to the west by steep cliffs that drop down to New Promenade, while the Roman Fort and farmland lie to the east.
- 1.2.2 The area consists of intertidal flats, shingle and pebble beaches, and low undulating pasture. Maryport and the surrounding coastal fringe has always been important for regional trade and communications due to its geographical location, and the underlying coal and iron ore deposits have contributed to the region's industrial history. These 'urban' centres, such as Maryport, Workington and Whitehaven, are interspersed with rich farmland. This narrow strip of industry and farmland is bonded to the west by the Irish Sea, and to the east by the Cumbria High Fells (Countryside Commission 1998).

- 1.2.3 Maryport and its hinterland coincides with an outcrop of Coal Measures of the Hensingham Group and Chief Limestone Groups, all dating to the Carboniferous Period. These are overlain with outlying Permo-Triassic, or New Road Sandstone, sedimentary rocks, which are superseded by large quantities of glacial boulder clay, sands and gravels from Scotland and the Lake District (*ibid*). The overlying geology comprises typical stagnogley soils (Ordnance Survey 1983).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 The following section provides a summary of the history and archaeology of Maryport, allowing the results of the evaluation trenching to be put into their historical and archaeological context.
- 1.3.2 ***Prehistoric Period:*** numerous prehistoric finds have been discovered within the town, including several Romano-British carved stones, a Neolithic stone axe (HER 792), and a Bronze Age cup-and-ring marked stone (HER 822) (Cumbria County Council and English Heritage (CCC and EH 2006). However, no actual settlement has been identified. Several significant prehistoric sites have been identified in the surrounding area, including an Iron Age burial at Rise How Tower (HER 4239), and a Neolithic site (HER 840) in the same area, to the south of Maryport (*ibid*).
- 1.3.3 ***Roman Period:*** the ‘core’ of the Roman settlement focuses on the fort and surrounding *vicus*. The fort was constructed in the second century AD, as part of the coastal defence system of forts and mileforts extending south from the western end of Hadrian’s Wall, and may well have been the command base for the Roman fleet in the Solway Firth (*ibid*). However, the presence of the road from Papcastle to just north of the fort would suggest an earlier military installation (Breeze 2006). Epigraphic evidence suggests that it was constructed between AD 122 and 123, for and by the cohorts *I Hispanorum miliaria equitata*, a mixed infantry and cavalry unit of approximately 1000 men. Its early date indicates that it was contemporary, or even earlier, than the forts along the Hadrianic Frontier to the south of Morecambe Bay (CCC and EH 2006). Four inscribed alters have been discovered, naming *M Maenius Agrippa* as the first commanding officer, and dating between AD 123 and 126. Numerous finds have been recovered from in and around the fort, including 17 alters found buried in pits near the second century parade ground (*ibid*). They had been dedicated annually, and their lack of erosion suggests that they were buried not long after erection.
- 1.3.4 In the late sixteenth century, footings of buildings, vaults and other structures were still visible, and numerous statues, alters and inscribed stones had been removed from the ground (Collingwood 1936, quoting Camden). In the late nineteenth century, Robinson undertook excavations in fields to the north of the fort (CCC and EH 2006). He uncovered traces of roads, strip-housing and possible temples. During the 1920s evidence of the Roman wharf was revealed, a massive wall was identified at Ellenborough Place, just to the west of where the Roman road crossed the River Ellen (*ibid*). Camden had also noted in 1600, that remains of the harbour were still visible at the mouth of

the river (Collingwood 1936), and similar walls were identified in 1886 (CCC and EH 2006), and they seemed to enclose a large paved area. The extensive and substantial nature of the Roman remains at Maryport indicates that it was likely one of the main ports on the Cumbrian coast during the period that Hadrian's Wall was being constructed.

- 1.3.5 **Medieval Period:** compared to the Roman period, there is very little evidence for extensive activity in the post-Roman and medieval periods. The town was originally known as *Ellenfort*, or more commonly *Ellenborough*, which is still the name of a small village to the east-south-east, and possibly translates from the Old English, meaning 'stronghold by the river Ellen' (*ibid*). Maryport Castle (HER 32853) comprises a damaged earthwork that possibly dates to the twelfth century, and sits within a loop of the River Ellen. It has been eroded to the west, and the site of the bailey, probably to the north, has been built over. A causeway leading to the site from the north-east may be original (*ibid*). The town was re-named Maryport in 1749 by Humphrey Senhouse II, after his wife, Mary (*ibid*).
- 1.3.6 **Post-Medieval Period:** the town of Maryport was founded between 1748-9, after the establishment of Ellenborough Colliery in 1740 (*ibid*). The town expanded rapidly, gaining the Netherhall Furnace for iron smelting that was established in 1752. The earliest phase was focused around the North Quay, whilst the second phase, from the mid-eighteenth to mid-nineteenth centuries, was the expansion of the town growing up along the ridge parallel to the shore (*ibid*).
- 1.3.7 The initial ship building yard was established in 1765 on the banks of the Ellen, and the first dock, Campbell's Dock, was completed in 1836. Elizabeth Dock, built in the mid-nineteenth century, was the first floating dock in the country and accommodated the transport of goods to Carlisle (*ibid*). Several other industries were established during this period, including the blast furnace and associated coke ovens at Netherhall (HER 3046), as well as glass works, pottery mills, gas works, tanneries and a paper mill (*ibid*). The town experienced a downturn in fortunes at the turn of the nineteenth century, stemming from the wars with France and the American War of Independence, which meant a loss of continental and transatlantic trade, and many of the secondary industries, such as the glassworks, were lost (*ibid*). Nevertheless, by the middle of the century the town's fortunes had turned with the growth of the coal industry. This encouraged the growth of other industries, with the establishment of a steam powered flour mill at the east end of town, and two iron and brass factories in the immediate vicinity. The town soon regained much of its former wealth (*ibid*). In 1885 the Naval Reserve Battery was constructed to the immediate west of the Roman fort, it now houses Senhouse Roman Museum (www.thelakedistrictwalker.com 2008).
- 1.3.8 In 1927, however, the construction of the Prince of Wales Dock in Workington completely destroyed much of the town's trade, and between 1928 and 1931 the unemployment rate rose to two-thirds of the working population (*ibid*). Since World War II some redevelopment has taken place, with the expansion of residential and retail development in the 1980s and 90s.

1.4 PREVIOUS ARCHAEOLOGICAL WORK

- 1.4.1 ***Antiquarian Investigations:*** in 1599, Camden noted that the footings of buildings and vaults relating to the Roman Fort were still visible (Collingwood 1936), while several statues, alters and inscribed stones had been removed from the ground. In 1766 the Senhouse family opened the area of the fort and discovered the arch of a gate, various building footings, which had been burnt down and then rebuilt, a Roman bath, and various artefacts (CCC and EH 2006). In 1880, Robinson undertook excavations in fields to the north of the fort. He identified the remains of road surfaces, strip housing and possible temples (*ibid*).
- 1.4.2 ***Roman Fort Excavations, 1976:*** investigations in 1976 indicated that the fort dated to the early Hadrianic Period, AD c120s, and was occupied until around AD 400 (*ibid*). The fort had been heavily robbed for stone during the construction of Maryport. Some buildings identified included the headquarters, barracks and commandant's house (*ibid*).
- 1.4.3 ***Roman Fort and Vicus Geophysical Survey, 2000:*** a geophysical survey, undertaken in 2000, provided an indication of the size of the settlement around the fort. It has been identified as the largest *vicus* along the defensive system extending south from Hadrian's Wall along the Cumbrian Coast (News From Hadrian's Wall 2000), with some 40-50 densely packed, mainly strip houses, identified in a broad band beyond the north-eastern defences, running alongside the north-east road (Breeze 2006). Ditches of varying purpose were also located; either defining areas of land use, as boundaries to property, or to fields beyond the settlement (*ibid*).

2. METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 A project design (*Appendix 1*) was submitted by OA North in response to a request from Capita Symonds, and in accordance with a verbal brief provided by the Hadrian's Wall archaeologist. The project design was adhered to in full and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 FIELDWORK

- 2.2.1 Ten trenches were excavated along the length of the proposed works. Trenches 1-5 were located immediately beside the existing path, to encompass the area of path expansion. Trenches 1-3 measured 3m x 1m; Trench 4, 2m x 1.5m; and Trench 5, 2m x 2m. The remaining trenches, 6-10, were situated along the proposed new path and measured 2m x 2m (Fig 2). All the trenches were excavated with a rubber-tracked, mini-mechanical excavator, and under constant supervision by an archaeologist. The trenches were excavated to a depth to incorporate the maximum depth of the intrusion of the proposed works, 150mm-120mm, and a 'buffer' zone of 100mm-150mm. However, where the trenches exceeded the agreed maximum depth of 300mm this was considered necessary as they either contained archaeological remains or clarification of the deposits within the trench.
- 2.2.2 All trenches were hand cleaned, and all features and deposits of potential archaeological interest were investigated by hand. Deposits were identified and recorded on *pro forma* sheets provided by OA North. Plans and sections were illustrated where necessary at appropriate scales; 1:10, 1:20 and 1:50. A photographic archive was compiled using monochrome prints, colour slides, and digital shots for presentation; these were also recorded on *pro forma* sheets. All the trenches were located, levelled, and related to the Ordnance Survey datum, using a benchmark located on the Senhouse Roman Museum. Two samples were removed from the site. Sample 1 was taken from a possible buried turf layer, **112**, of a bank (Trench 5), and was 10 litres in volume. Sample 2 was from the ditch fill, **133** (Trench 8), and was 20 litres in volume.

2.3 FINDS

- 2.3.1 All finds were exposed, lifted, cleaned and bagged in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid for Finds*, 1998 (new edition). All identified finds and artefacts were retained for all material classes; these were hand collected from stratified deposits for processing and assessment.

2.4 ENVIRONMENTAL

- 2.4.1 Two environmental bulk samples were taken for assessment; Sample 1 was 10 litres in volume and from a possible turf horizon, **112**, in the bank in Trench 5. Sample 2 was 20 litres in volume and was taken from the fill **132** of ditch **133** in Trench 8 (Sample 2). These were assessed for charred and waterlogged plant remains, which can provide information about the economy and environment of the site and in certain circumstances the function of particular features.
- 2.4.2 Ten litres of each sample was hand floated and the flot collected on a 250 micron mesh and air dried. A representative sample of the flot was examined with a low powered binocular microscope and all easily identifiable plant remains were recorded on a scale of 1-5, where 1 is less than five items and 5 is abundant, i.e. more than 100 items. Plant nomenclature follows Stace (1997). The components of the matrix were also noted. The results are shown in Table 1.

2.5 ARCHIVE

- 2.5.1 A full and professional has been compiled in accordance with the project design and current English Heritage guidelines (1991). The original record archive will be deposited in the Country Record Office (CRO) in Whitehaven, and a copy of the report will be sent to the Historic Environment Record (HER) in Kendal, on completion of the project. The material archive will be submitted to an appropriate museum, in this case Senhouse Roman Museum.

3. RESULTS

3.1 INTRODUCTION

3.1.1 The following section provides a summary description of the deposits and features identified in each of the evaluation trenches. A more detailed description of the contexts referred to in the text can be found in the context register (*Appendix 2*). A summary of the finds has been included below with a more detailed list in *Appendix 3*.

3.2 FIELDWORK

3.2.1 **Trench 1:** was located at the southern end of the proposed development, directly opposite the Senhouse Roman Museum on the seaward side of the existing path, and was aligned north/south. It measured 3m in length, and 1m in width. It was excavated to a maximum depth of 0.47m in order to clarify the deposits within the trench. The trench comprised topsoil, **100**, to a depth of 0.1m, which overlaid a layer of redeposited sandy-clay rubble, **101**, which contained fragments of brick and sandstone masonry of apparent recent date. No features or finds of archaeological significance were observed.

3.2.2 **Trench 2:** was located 40m north-east from Trench 1, following the path on the seaward side, and measured 3m in length, 1m in width and excavated to a maximum depth of 0.4m, in order to analyse the deposits further. It comprised topsoil, **102**, to a depth of 0.15m, which sealed a layer of redeposited sandy-clay rubble, **103**, >0.15m thick, and very similar to **101** identified in Trench 1. This overlaid a redeposited natural layer, **104**, which was exposed in the southern end of the trench. No features or finds of archaeological interest were observed.

3.2.3 **Trench 3:** was located 40m north-east from Trench 2, following the existing path and situated on the seaward side. It was aligned north-east/south-west, and measured 3m in length, 1m in width and was excavated to a maximum depth of 0.5m, to assess the depth of topsoil. It comprised topsoil, **105**, 0.4m thick, which sealed subsoil, **106**, and exceeded 0.1m in thickness, as it was beyond the trench depth prescribed in the project design. No features or finds of archaeological significance were observed.

3.2.4 **Trench 4:** was located 50m to the north-east of Trench 3, on the eastern side of the existing path. It was orientated north-east/south-west, and measured 2.4m in length, 1.4m in width, and was excavated to a maximum depth of 0.35m. The trench comprised topsoil, **107**, 0.1m thick, and subsoil, **108**, which exceeded 0.25m in thickness. No finds or features of archaeological interest were observed.

3.2.5 **Trench 5:** was located 50m north-east of Trench 4, on the eastern side of the existing path. It measured 2m by 2m, and was excavated to a maximum depth of 0.84m due to the archaeological deposits encountered (Fig 3). The trench contained topsoil, **109**, 0.2m thick, which sealed a subsoil, **110 = 111**, 0.19m

thick. The south-western edge of the trench clipped the northern end of a bank running parallel to the cliff. It comprised more than four layers; **112** was a dark grey-brown clay-silt with a high charcoal and organic content, 0.14m thick. This sealed **113**, a mid-grey clay-silt, 0.09m thick, which overlaid **114**, a mid-grey sandy-silt, >0.22m thick. This partially sealed a layer of redeposited natural material, **115**, which was not fully excavated. Deposit **112** may have been a former turf layer, and it produced fragments of Romano-British pottery and bone (see 3.3, below). The bank was sealed by subsoil, **110 = 111**, and truncated to the north by a modern ceramic field drain, **116**.

- 3.2.6 **Trench 6:** was located to the east of the existing path, 50m north-east of Trench 5, and followed the line of the proposed path extension. It measured 2m by 2m, and was excavated to a maximum depth of 0.35m. It comprised topsoil, **118**, 0.1m thick, which sealed subsoil, **119**, 0.2m thick, which in turn overlaid natural geology, **120**. A modern posthole was identified on the east side of the trench, it contained wedging stones and was capped in concrete. No features or finds of archaeological interest were identified.
- 3.2.7 **Trench 7:** was positioned 40m to the north-east of Trench 6, and to the east of the path. It measured 2m by 2m, and was excavated to a maximum depth of 0.33m. It comprised topsoil, **121**, 0.1m thick, which sealed subsoil, **122**, 0.2m thick, which overlaid natural deposit, **123**. No features or finds of archaeological interest were identified.
- 3.2.8 **Trench 8:** was situated 40m north of Trench 7, on the line of the proposed path, and measured 2m by 2m, and was excavated to a maximum depth of 0.72m (Fig 4). The trench comprised topsoil, **130**, 0.21m thick, which overlaid subsoil, **131**, 0.1m thick, which in turn sealed natural geology, **134**. A small ditch, **133**, truncated the natural. It ran north-east/south-west across the trench and measured 1.18m in width and 0.41m in depth. It contained a single fill, **132**, which produced three fragments of Romano-British pottery.
- 3.2.9 **Trench 9:** was located 40m to the north-east of Trench 8, and on the line of the proposed works. It measured 2m by 2m, and was excavated to a maximum depth of 0.37m. The trench was composed of topsoil, **124**, 0.1m thick, subsoil, **125**, 0.27m thick, and natural geology, **126**. The northern edge of a ridge and furrow bank, **127**, was exposed along the southern side. It comprised redeposited subsoil and topsoil, from when the furrows were excavated. No further finds or features of archaeological interest were identified.
- 3.2.10 **Trench 10:** was situated 40m to the north-east of Trench 9, along the line of the proposed path. It measured 2m by 2m, and was excavated to a maximum depth of 0.43m. The trench comprised topsoil, **128**, 0.15m thick, which sealed subsoil, **129**, >0.28m thick. The depths of deposits meant that neither natural geology or archaeological features were encountered. No finds were identified.

3.3 FINDS

- 3.3.1 An extremely small assemblage was recovered during the works, comprising four small fragments of pottery and one of bone. All four of the pottery

fragments were early in date, being small and abraded fragments of Nene Valley colour-coated wares, probably dating to the later second to third centuries AD. All four are too small for the vessel form to be identified with certainty, although one fragment bears barbotine decoration, suggesting that it derives from a beaker, a common Nene Valley tableware form (Tyers 1999, 173). The small fragment of bone, from turf layer **112** (Trench 5), is heavily calcined, as a result of burning, as are the three pottery fragments from ditch **133** (Trench 8). They are probably the result of habitation activities in the general area.

3.4 ENVIRONMENTAL

- 3.4.1 Charred plant remains were recorded in the samples and both had abundant fragments of charcoal in them. A large percentage of the charcoal was heavily engrained with sand but there were also many fragments that were in a good condition. Charcoal was identified from oak (*Quercus*) and diffuse porous taxa, a group which includes hazel (*Corylus avellana*), birch (*Betula* sp), alder (*Alnus glutinosa*) and other trees. The charcoal also included some small twigs.
- 3.4.2 There was quite a rich assemblage of charred plant seeds in Sample 1 from the possible buried turf layer of the bank, **112**. This assemblage included a small number of indeterminate charred cereal grain fragments, which appeared to have been burnt at high temperatures, and a fragment of hazel nut shell. There was also a number of different weed seeds in the sample including some that are arable weeds or are plants of waste ground, for example pale persicaria (*Persicaria lapathifolia*).
- 3.4.3 A few charred weed seeds were recorded in Sample 2 from the ditch fill, **132**, and seeds from a non-cultivated member of the vetch/pea family (Fabaceae) (seeds less than 4mm) and ribwort plantain (*Plantago lanceolata*) were identified.
- 3.4.4 Both samples were contaminated with modern roots and other modern material but the charred plant remains appear not to have resulted from modern contamination.

CONTEXT NUMBER	112	132
Sample Number	1	2
Sample volume (litres)	10	20
Sample volume processed (litres)	10	10
Matrix components:		

Charcoal fragments	5	5
Brick/tile	1	
Modern roots and stems	+	++
Modern seeds	1	
Earthworm cases	1	1
Charred seeds:		
Crops and native plants used for food;		
Indeterminate cereal fragments	1	
<i>Corylus avellana</i> nutshell fragment - hazel	1	
Charred weed seeds;		
<i>Chenopodium</i> sp - goosefoots	1	
Fabaceae (<4 mm) – wild plant of the pea family		1
<i>Juncus</i> stem - rush stem	1	
Poaceae <2mm - small grasses	1	
<i>Persicaria lapathifolia</i> - pale persicaria	1	
<i>Plantago lanceolata</i> - ribwort plantain		1
<i>Rumex</i> –docks	1	
Unknowns	1	
Total charred seeds	3	1
Potential for analysis of charred plant remains	Yes	
Potential for analysis of charcoal	Yes	Yes

Table 1: The assessment of charred plant remains.

The remains are recorded on a scale of 1-5 where 1 is less than 5 items and 5 is abundant more than 100 items. Modern roots are recorded as present (+) or abundant (++).

4. CONCLUSION

4.1 DISCUSSION OF FIELDWORK RESULTS

- 4.1.1 Trenches 1, 2, 3, 4, 6, 7, 9 and 10 contained no features of archaeological significance. Trenches 3, 4 and 10 were not excavated below the depth of the subsoils (Trench 3, **106**; Trench 4, **108**; and Trench 10, **129**), and natural geology was not encountered. Consequently, any potential archaeological remains truncating the natural geology were not exposed. Natural geology was encountered in Trenches 6, 7 and 9, but no archaeological remains were observed. Trenches 1 and 2 did contain layers of relatively modern redeposited rubble (Trench 1, **101**; Trench 2, **103**), which most likely resulted from the construction of Senhouse Roman Museum, formally a Naval Reserve Battery, in the nineteenth century (www.gomaryport.co.uk 2007).
- 4.1.2 Trenches 5 and 8 were the only trenches that produced archaeological deposits. They contained features dating to the Roman period; the pottery recovered dated to the late second and third centuries AD.
- 4.1.3 The bank identified in Trench 5, **112 - 144**, was one of a series observable above ground. It was aligned roughly north/south, and stretched from the Roman fort in the south-east to the cliff edge to the west, and was most likely part of the outer defences. The different layers identified were the result of redeposited subsoils and topsoils, used to create an embankment. The organic nature of **112**, suggests that it was either a turf layer within the bank's fabric, or the remains of a former ground surface, which was sealed by **110 = 111**. The bone recovered from **112** had been heavily calcined, the result of being exposed to high temperatures.
- 4.1.4 Trench 8, to the north-east of Trench 5, contained a small shallow ditch, **133**, which ran north-east/south-west across the trench. The pottery recovered from the feature had been spalled, indicating that it had been exposed to high temperatures, it may have been used as a cooking pot. It was likely that the ditch formed part of the outer, seaward boundary for the *vicus*, which lay immediately to the east, and that the pottery from the ditch, **133**, was the result of accumulation of material from the nearby settlement.

4.2 DISCUSSION OF THE ENVIRONMENTAL RESULTS

- 4.2.1 The assessment of the two environmental samples from the evaluation demonstrate that charred plant remains have been preserved in both the possible buried turf layer of the bank, and the fill of ditch **133**. There were only a few remains from crops or native plants that may be used as food in Sample 1 (**112**), however, the assemblage of weed seeds is of considerable interest as there are few archaeobotanical records dating to this period from this part of Cumbria; which include a 1920 record from Papcastle and an antiquarian record in 1904 from Brewery Field near Cockermouth, both by Irwin (Hall and Huntley 2007, 79); and a more recent record from Papcastle

(AML 76/88, *ibid*). OA North recently assessed samples for charred plant remains from the Roman cemetery at Beckfoot (OA North 2007). The majority of other Roman sites in North and West Cumbria are clustered in and around Carlisle; Annetwell Street (Huntley 1989a); the Carlisle Millennium excavations (OA North forthcoming); the Lanes (Huntley 1989b, Huntley 2000); and Birdoswald (Huntley 1997, 16-17) amongst others.

- 4.2.2 **Potential and recommendations:** Sample 1 (**112**) has a high potential for analysis of the weed flora of the buried turf layer. This analysis would provide information about the plants that were growing on the turf that was used in the construction of the bank. The charcoal from both samples is suitable for analysis but the data from this analysis would only answer the question as to what wood was being burnt and not about the function of either feature. Material for radiocarbon dating could be extracted from both samples if required.

4.3 CONCLUSIONS

- 4.3.1 Despite the restrictive nature of the evaluation, an assessment of the environmental and artefactual evidence gathered from the proposed development site would suggest that the bank, **112** - **114**, and ditch, **116**, identified in Trenches 5 and 8 respectively, relate to activities taking place on the edge of the Roman military and civilian settlement. It was likely that the bank, **112** - **114**, formed part of the western demarcation of the Roman fort or *vicus*, while the ditch, **116**, was most likely one of a series of small ditches demarcating the seaward boundary of the *vicus*. The pottery recovered from both features were likely to have been tablewares, or a similar form of functional ceramic, dating to the late second and third centuries AD, and probably the result of accumulation of material from the nearby settlement.
- 4.3.2 The area between Trenches 1 and 4 is least likely to contain archaeology, due to the ground disturbance created during the construction of the Naval Reserve Battery, now the Senhouse Roman Museum, in the nineteenth century. The area between Trenches 4 and 5 is of particularly high sensitivity, as a series of banks running towards the cliff are clearly visible, and even minimal groundworks will have a substantial impact on the features. Trench 5, to the west of the *vicus*, there is potential for further archaeology in its vicinity, and should any groundworks exceed the proposed 150mm in depth it will have an impact on sub-surface remains.

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6. ILLUSTRATIONS

6.1 FIGURES

Figure 1: Site Location

Figure 2: Trench Location Plan

Figure 3: Plan of Trench 5 with north-west-facing section

Figure 4: Plan of Trench 8 with north-east-facing section

6.2 PLATES

Plate 1: Trench 5 looking south-west

Plate 2: Trench 5, west-facing section through bank, *112 - 114*, and modern ceramic drain, *116*

Plate 3: Trench 8 looking north

Plate 4: Trench 8, south-facing section through ditch, *133*

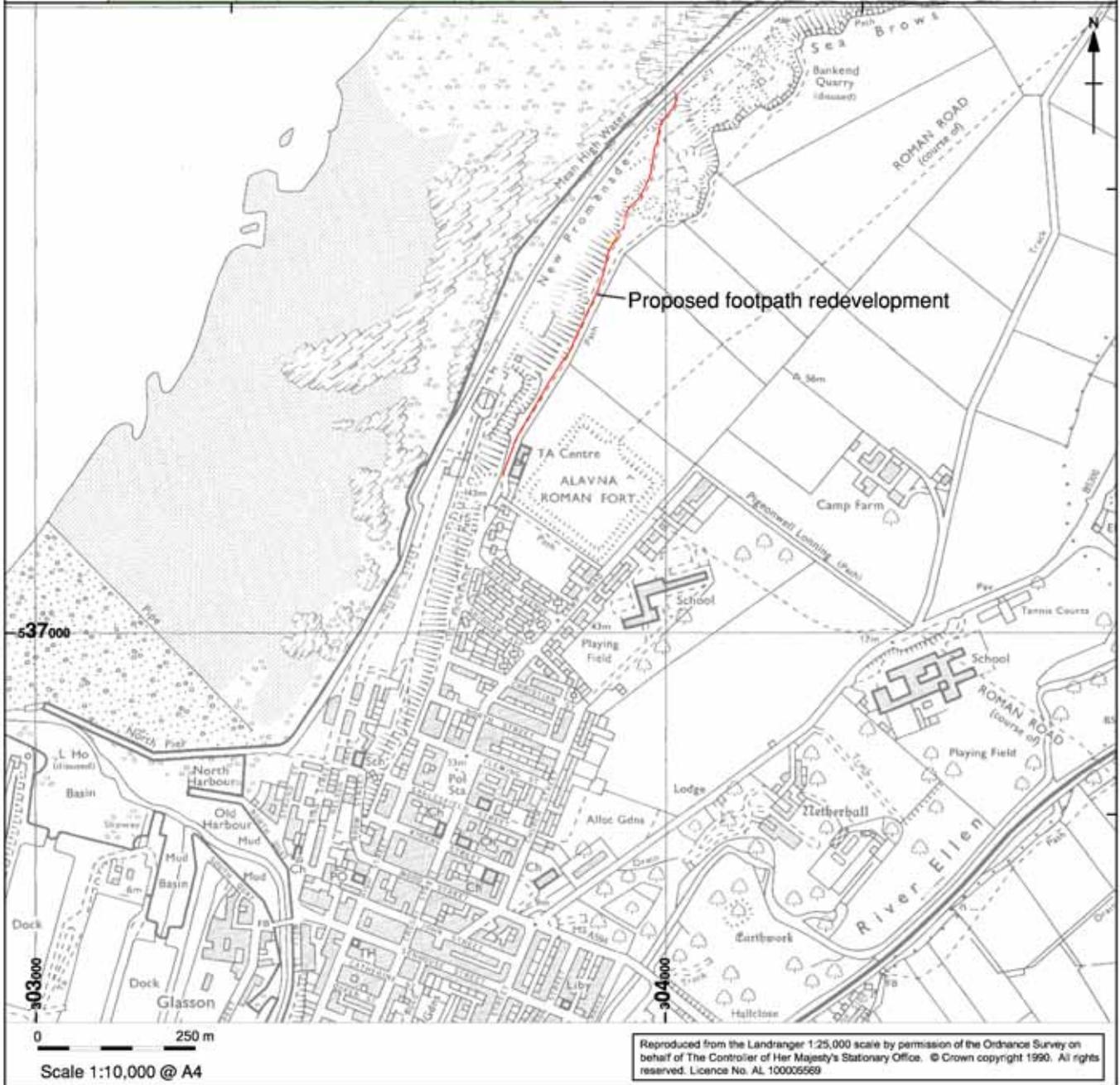
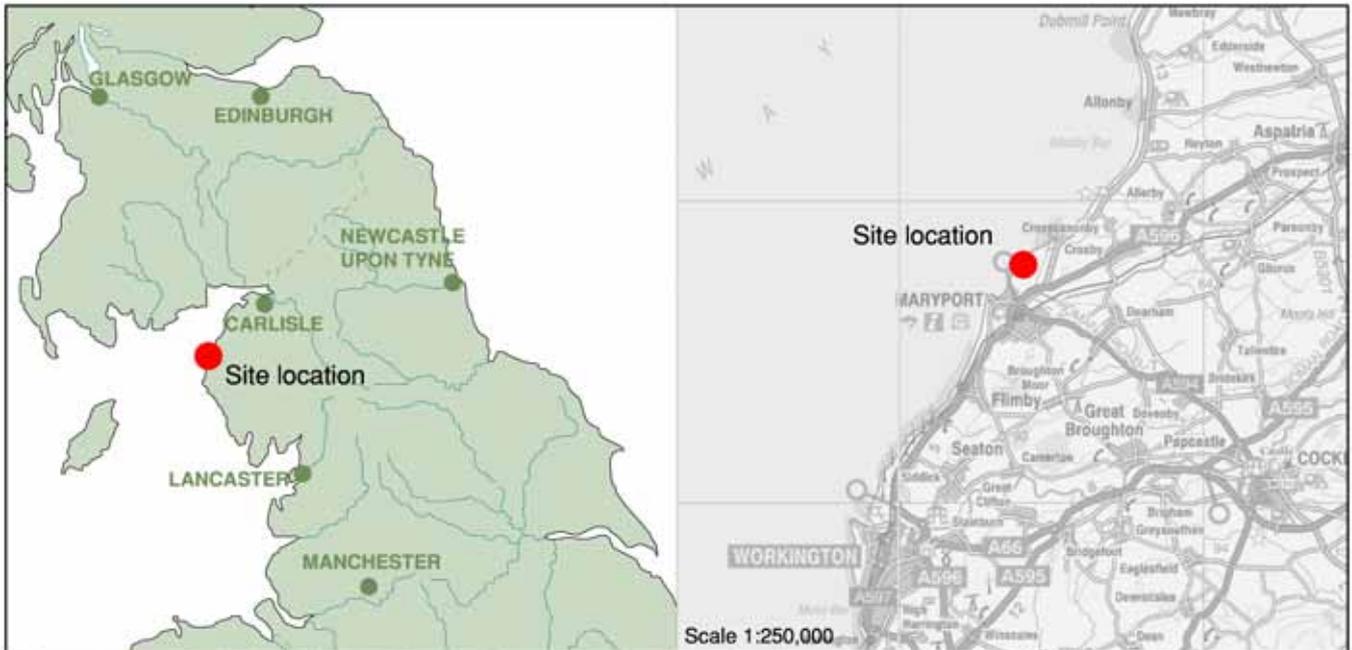


Figure 1: Site Location

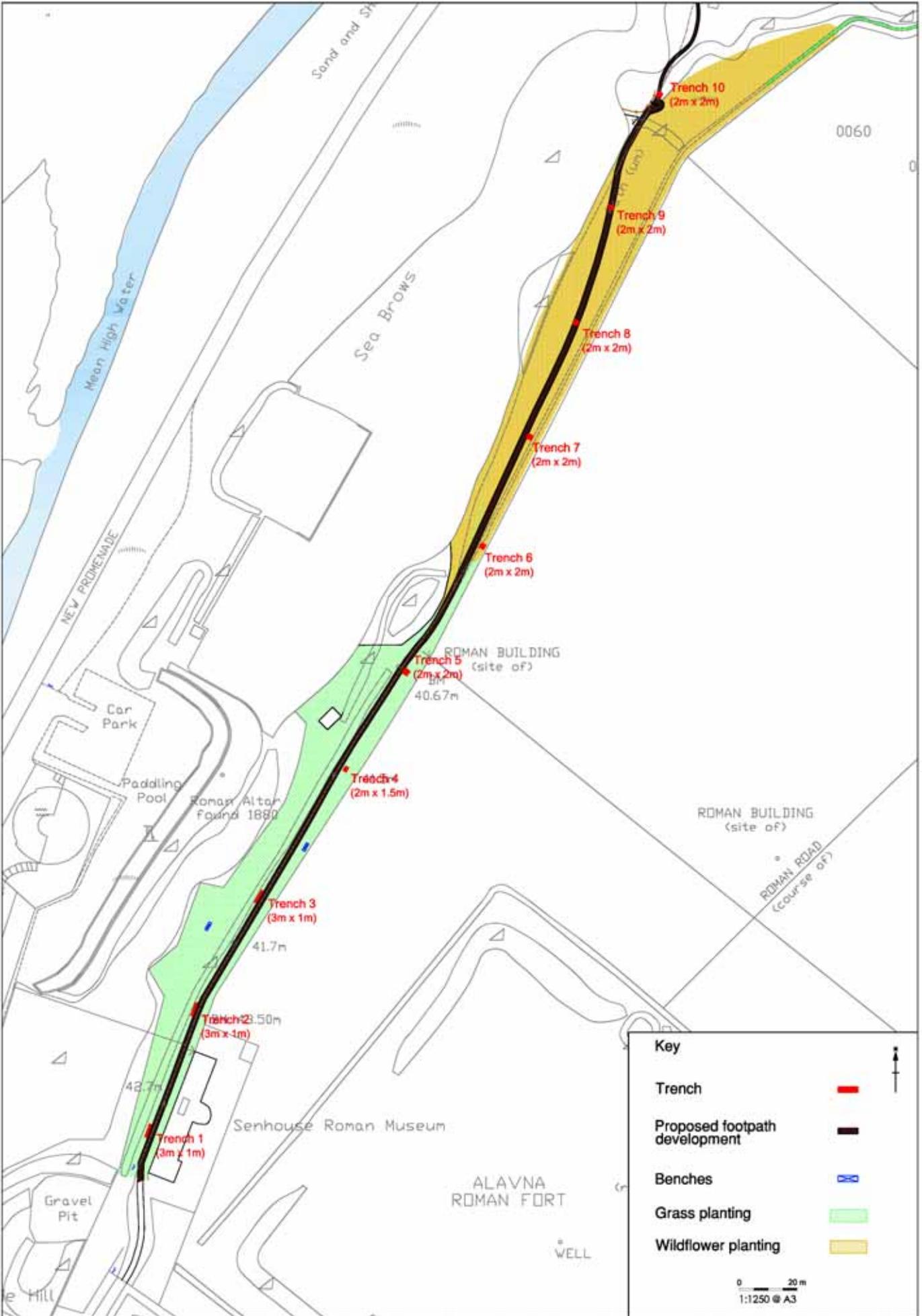


Figure 2: Trench Location Plan

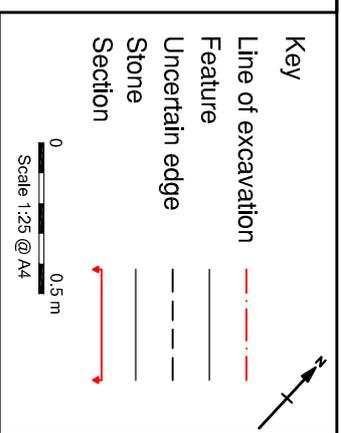
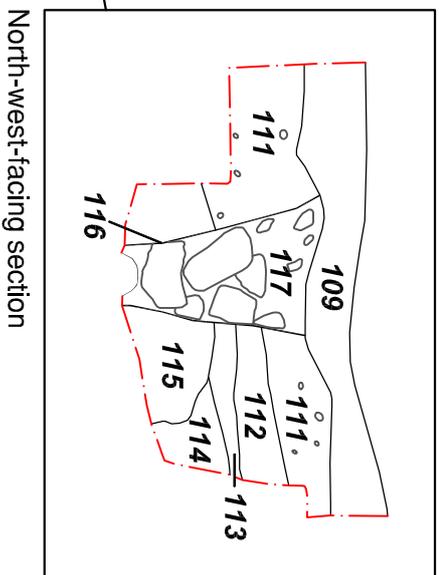
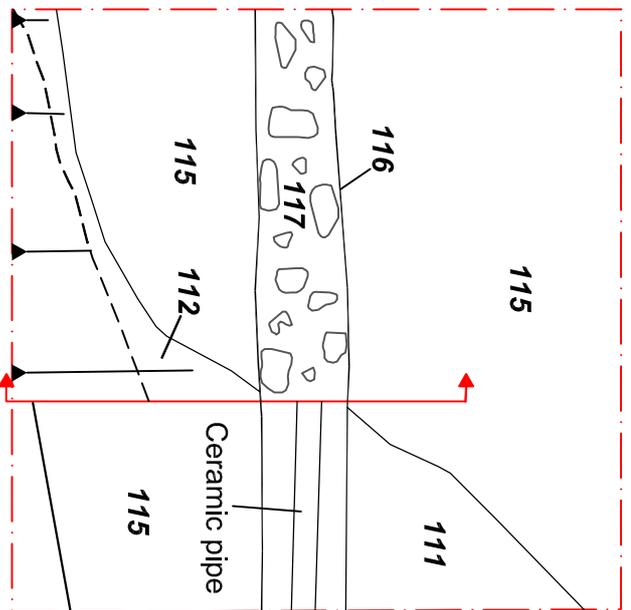


Figure 3: Plan of Trench 5 with north-west-facing section



Plate 1: Trench 5 looking south-west



Plate 2: Trench 5, west-facing section through bank *112 - 114*, and modern drain *116*



Plate 3: Trench 8 looking north



Plate 4: Trench 8, south-facing section through ditch *133*

APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 Capita Symonds (hereafter the client), acting on behalf of Cumbria County Council, has requested that Oxford Archaeology North (OA North) submit proposals to undertake a programme of archaeological work to inform and support a planning application to upgrade and improve a coastline path to the north of Maryport, Cumbria (NGR centred NY 0384 3744). The proposed work includes upgrading and widening of a section of the promenade path running immediately to the west of the Roman Fort and Senhouse Roman Museum for approximately 320m. Continuing on to the north of this, a new footpath will be constructed due to the unstable cliff edge for approximately 100m, before snaking its way northwards. This section may intrude on the remains of the associated *vicus* known to lie to the north and west of the fort (Fig 1). The maximum depth of the proposed works is likely to be 150mm - 250mm, but it is of particularly high archaeological potential, although it lies outwith the Scheduled Monument of the fort.
- 1.1.2 Mike Collins, the Hadrian's Wall archaeologist for English Heritage, has requested that an archaeological evaluation is undertaken prior to the submission of the planning application in order to inform the planning decision and any requirements for any necessary mitigation of the works. The following project design details the work that will be undertaken to meet the requirements of the pre-determination evaluation.

1.2 HISTORICAL BACKGROUND

- 1.2.1 In *c* AD 122, the Roman military established a fort on the high ground to the north of the modern town of Maryport (centred at NGR 3040 5374). Known as *Alauna Carvetiorum*, the fort was the last in a series of military stations, which extended along the coast from the western end of Hadrian's Wall; Bellhouse (1989) traced the Roman fortifications along the coast, and identified Castle Hill in Maryport as being the possible site of one of the two towers placed at regular intervals between milefortlets on the defensive line. Wilson argued that the defensive system was initially laid out, possibly in *c* AD 122, and that at a later date (possibly *c* AD 124) the fort of Maryport was placed upon the line of defences, supplanting the original site of one of the towers around the same time that forts were being placed on Hadrian's Wall. An earlier fort may have been constructed under the present fort, or in the vicinity of the fort or under the modern town, but this has never been identified. The system of watch towers and milefortlets was largely probably given up by the end of the second century AD, although a later coin has been discovered on Castle Hill (Shotton 1995). In addition, it is thought that the fort at Maryport acted as a command and supply base for the coastal defences of Hadrian's Wall, and is likely to have incorporated a harbour.
- 1.2.2 The physical remains of the fort are represented clearly in the modern landscape by the earthworks of the rampart and ditches, which extend over an area of 2.58 hectares. In addition, a large civilian settlement, or *vicus*, lies immediately to the north and west of the fort, which has been demonstrated by recent geophysical survey to extend over an area of some 9.5 ha to the north and west of the fort. The extent to which the margins of the site may have been lost to coastal erosion and / or quarrying is uncertain.

1.3 OXFORD ARCHAEOLOGY NORTH

- 1.3.1 OA North has extensive experience of the evaluation and excavation of sites of all periods in this area, having undertaken a great number of small and large-scale projects. These have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.
- 1.3.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an **Institute of Field Archaeologists (IFA) registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct (1994).

2 OBJECTIVES

2.1 The following programme has been designed to provide an archaeological assessment of the proposed upgrading works and new route of the promenade path and to investigate the archaeological significance of any remains. The aim is to determine the extent, nature, character, survival and date of the remains that may be threatened by the proposed development. This information will inform a planning application. The required stages to achieve these ends are as follows:

2.2 **Archaeological Trenching:** ten evaluation trenches/test pits will be excavated to a maximum depth of 300mm. The dimensions of each trench/pit will vary according to the proposed works and potential impact on any below-ground archaeological remains (Fig 1);

- Trenches 1-3 will be 1m wide and excavated on the seaward side of the current path where the groundworks to widen the path will take place. Due to the restricted width these will be 3m in length;
- Trench 4 will be 1.5m wide and 2m long. Although the groundworks to widen the path is proposed for both sides the trench will be excavated on the inland side to minimise unnecessary disruption to the current path;
- Trenches 5 and 6 will be 2m x 2m and positioned on the inland side of the path where the groundworks are proposed;
- Trenches 7-10 will also be 2m x 2m, and targeting the proposed route of the new pathway along this stretch.

2.3 The aim of this will determine the quality, extent and importance of any archaeological remains on the site (in accordance with the IFA standards (1999b)). The position of these trenches has been plotted in Figure 1.

2.4 **Report and Archive:** the report will be produced for the client within eight weeks following completion of the fieldwork, and will be produced in a similar format to this project design. An archive will be produced to English Heritage guidelines (MAP 2 (1991)).

3 METHOD STATEMENT

3.1 INTRODUCTION

3.1.1 The following work programme is submitted in line with the objectives summarised above.

3.2 ARCHAEOLOGICAL TRENCHING

3.2.1 The programme of trial trenching/test pitting will establish the presence or absence of any previously unsuspected archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. In this way, it will adequately sample and provide information concerning the threatened available area. The trenches will be positioned as per Figure 1, pending any on-site restrictions.

3.2.2 **Trench configuration:** the evaluation will examine ten trenches measuring 1m-2m in width and 2m-3m in length (Section 2.2; Fig 1). Each trench will not exceed a depth of 300mm below the ground surface. This will include the maximum depth of proposed intrusive works and a 'buffer zone' should this be exceeded for any reason.

3.2.3 **Methodology:** excavation of the modern ground surface will be undertaken by a small mini-digger fitted with a toothless ditching bucket. The work will be supervised by a suitably experienced archaeologist. Thereafter, all deposits will be cleaned manually to define their extent, nature, form and, where possible, date. Spoil from the excavation will be stored adjacent to the trench, and will be backfilled upon completion of the archaeological works. All features of archaeological interest will be investigated and recorded unless otherwise agreed by Mike Collins, Hadrian's Wall archaeologist (EH).

3.2.4 All trenches will be excavated in a stratigraphical manner, whether by machine or by hand. Trenches will be located by use of GPS equipment, which is accurate to +/- 0.25m, or Total Station. Altitude information will be established with respect to Ordnance Survey Datum.

- 3.2.5 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.
- 3.2.6 **Recording:** all information identified in the course of the site works will be recorded stratigraphically, regardless of whether any archaeological features have been identified, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, colour slides and monochrome contacts) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.2.7 Plans will include OD spot heights for all principal strata and any features.
- 3.2.8 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.
- 3.2.9 A full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the evaluation will be generated. Photography will be undertaken using 35mm cameras on archiveable monochrome print film as well as colour transparency, and all frames will include a visible, graduated metric scale. Extensive use of digital photography will also be undertaken throughout the course of the fieldwork for presentation purposes. Photograph records will be maintained on special photographic *pro-forma* sheets.
- 3.2.10 In cases where no archaeological deposits have been identified, at least one long section of each trench will be recorded. All sections will contain heights OD.
- 3.2.11 **Environmental Sampling:** where deposits are encountered for both environmental sampling and for dating evidence the English Heritage Advisor in Archaeological Science and the Hadrian's Wall Archaeologist will be contacted to agree the sampling strategy and assessment.
- 3.2.12 Environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits. In general terms, the sampling strategy will be aimed at recovering palaeo-botanical, palaeo-zoological and pedological evidence. All samples will processed at OA North's offices in Lancaster, and will be subject to a rapid preliminary analysis by the in-house palaeo-environmentalist in order to allow an assessment of their potential. This will be undertaken in accordance with English Heritage Guidelines (2002).
- 3.2.13 The costs for the palaeoecological assessment are defined as a contingency and will be called into effect if suitable deposits are identified.
- 3.2.14 **Faunal remains:** if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA north's specialist in faunal remains, and subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.
- 3.2.15 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. The local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations. The cost of removal or treatment will be agreed with the client as a variation.

- 3.2.16 **Treatment of finds:** all identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.
- 3.2.17 All finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines. They will be assessed in terms of the potential for further investigation and preservation needs.
- 3.2.18 Only those finds that are of a quality worthy of display will be fully conserved, but metalwork and coinage from stratified contexts may be X-rayed. Any conservation requirements will be discussed with the client and costed as a variation.
- 3.2.19 **Treasure:** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft, which may require costing as a variation in discussion with the client.
- 3.2.20 **Contingency plan:** a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the Costings document and would be charged in agreement with the client.
- 3.2.21 The evaluation will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, an impact assessment will also be provided.

3.3 REPORT

- 3.3.1 One bound and one unbound copy of a written synthetic report will be submitted to the client within eight weeks following the completion of the fieldwork. A copy of the report will also be forwarded to the Hadrian's Wall archaeologist (EH), and a copy to the HER. The report will include;
- a site location plan related to the national grid
 - a front cover to include the planning application number and the NGR
 - the dates on which the fieldwork was undertaken
 - a concise, non-technical summary of the results
 - an explanation to any agreed variations to the brief, including any justification for any analyses not undertaken
 - a description of the methodology employed, work undertaken and results obtained
 - plans and sections at an appropriate scale showing the location and position of deposits and finds located
 - a list of and dates for any finds recovered and a description and interpretation of the deposits identified. This artefact analysis will include illustration of finds crucial to dating and interpretation
 - a description of any environmental or other specialist work undertaken and the results obtained
 - a copy of this project design, and indications of any agreed departure from the details
 - the report will also include a complete bibliography of sources from which data has been derived.
- 3.3.2 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

3.4 ARCHIVE

- 3.4.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context.
- 3.4.2 The deposition of a properly ordered and indexed project archive in an appropriate repository is essential and archive will be provided in the English Heritage Centre for Archaeology (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the County Record Office.
- 3.4.3 All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists. The deposition and disposal of any artefacts recovered in the evaluation will be agreed with the legal owner and an appropriate recipient museum.

4. HEALTH AND SAFETY

- 4.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.
- 4.2 **Services/underground utilities:** full regard will, of course, be given to all constraints (services etc) during the evaluation as well as to all Health and Safety considerations. As a matter of course the field team will use a Cable Avoidance Tool (CAT) prior to any excavation to test for services. However, this is only an approximate location tool. Any **information regarding services**, i.e. drawings or knowledge of live cables or services, held by the client should be made known to the OA North project manager prior to the commencement of the evaluation to ensure all risks are met and can be dealt with.
- 4.3 **Contamination:** any known contamination issues or any specific health and safety requirements on site should be made known to OA North by the client on site to ensure all procedures can be met, and that the risk is dealt with appropriately.
- 4.4 Should areas of previously unknown contamination be encountered on site the works will be halted and a revision of the risk assessment carried out. Any stand-down time incurred will be charged to the client. Should it be necessary to supply additional PPE or other contamination avoidance equipment this will be costed as a variation.
- 4.5 **Staff provisions:** a portable toilet with hand washing facilities will be required and located on or adjacent to the site unless the client would prefer to arrange alternative facilities. This will be included in the cost of the evaluation.

5. OTHER MATTERS

5.1 ACCESS

- 5.1.1 Liaison for basic site access will be undertaken through the client, but it is assumed that access will be allowed for pedestrian and plant.

5.2 CLEARANCE/OBSTRUCTION

- 5.2.1 Should OA North be requested to clear the site, any time and resources spent above and beyond that of the evaluation will be charged to the client.

5.3 FENCING REQUIREMENTS

- 5.3.1 During excavation, the trenches will be demarcated with barrier tape or similar. No trenches will be left open overnight for health and safety reasons. Should the client require alternative arrangements/requirements for the site to be protected from public access this may incur additional charges.

5.4 REINSTATEMENT

- 5.4.1 It is understood that there will be no requirement for reinstatement of the ground beyond backfilling. The ground will be backfilled so that the topsoil is laid on the top, and the ground will be roughly graded with the machine. The trenches will be backfilled the same day for reasons of public health and safety.

5.5 PROJECT MONITORING

- 5.5.1 Whilst the work is undertaken for the client, the Hadrian's Wall archaeologist (EH) will be kept fully informed of the work and its results and will be notified at least a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with the Hadrian's Wall archaeologist (EH) in consultation with the client.

5.6 WORK TIMETABLE

- 5.6.1 **Evaluation:** the fieldwork is expected to take between two to three days at the most to complete.
- 5.6.2 **Report:** reports are normally issued within eight weeks following completion of all archaeological works.
- 5.6.3 OA North would require a formal written agreement at least one week before commencement in order to schedule the work as above and provide notice to the Hadrian's Wall archaeologist (EH).

5.7 STAFFING

- 5.7.1 The project will be under the direct management of **Emily Mercer BA (Hons) MSc AIFA** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 5.7.2 The evaluation will be supervised by either an OA North project officer or supervisor experienced in this type of project. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.
- 5.7.3 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis** (OA North finds manager). Christine has extensive knowledge of finds from many periods.
- 5.7.4 Assessment of any palaeoenvironmental samples will be undertaken by or under the auspices of **Elizabeth Huckerby MSc** (OA North project officer). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey.

5.8 INSURANCE

- 5.8.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

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APPENDIX 2: CONTEXT INDEX

Context No	Trench No	Description
100	1	Topsoil - 0.1m thick Mid-brown, friable sandy-clay with <2% small sub-rounded pebble inclusions
101	1	Redeposited rubble layer - >0.5m thick Red-brown, compact sandy-clay with >5% fragments of sandstone masonry, modern brick, plastic and modern pottery, which was not retained
102	2	Topsoil - 0.15m thick Same as 100
103	2	Redeposited rubble layer - 0.15m thick Mid-brown, firm sandy-clay with >10% sandstone masonry fragments and redeposited soil. Very similar to 101
104	2	Redeposited natural deposit >0.1m thick Light grey-brown, compact sandy-clay with <10% small-medium sub-angular sandstone fragments. Occupies a band 0.65m wide across the trench at the southern end
105	3	Topsoil - 0.4m thick Same as 100
106	3	Subsoil - >0.1m thick Dark-brown, friable sandy-clay with 5% small-medium sandstone fragments and sub-rounded stones
107	4	Topsoil - 0.2m thick Same as 100
108	4	Subsoil - 0.15m thick Dark-brown, friable sandy-clay with 5% medium-large sandstone fragments and <1% small sub-rounded pebble inclusions. The presence of large fragments of sandstone implies that it has been disturbed
109	5	Topsoil - 0.24m thick Dark-brown, friable sandy-silt with <2% small sub-rounded pebble inclusions
110	5	Subsoil/upper layer of bank - 0.19m thick Dark-brown, firm silt with <5% charcoal flecks, <2% small sub-rounded pebbles and sub-angular sandstone fragments
111	5	Same as 110
112	5	Layer within bank - 0.15m thick Dark grey/near black, firm clay-silt with a high organic component, >10% charcoal flecks and <1% small sub-rounded pebbles. Possible former turf horizon deliberately laid over the bank when first created. Fragments of Romano-British pottery were recovered and small fragments of bone
113	5	Layer in bank - 0.09m thick Mid-grey, fine and firm clay-silt with <10% charcoal fleck inclusions.

		Redeposited subsoil used to create the bank
114	5	Layer in bank - 0.22m thick Mid-dark grey-brown, firm sandy-silt with <2% small sub-rounded pebbles and <5% charcoal flecks
115	5	Redeposited natural deposit - >0.25m thick Mid brown-orange, firm clay-sand with >20% small-medium sub-angular sandstone fragments. Redeposited natural forming the lower layer of bank
116	5	Cut of modern drain Measuring >2m in length, 0.31m in width and >0.67m in depth, the drain was aligned north-west/south-east. It was linear in plan and U-shaped in profile, and filled with 117 , with a modern ceramic field drain running along the base
117	5	Fill of drain 116 - >0.67m thick Mid-brown, soft sandy-silt with >30% large rounded stone inclusions and angular sandstone fragments. A modern ceramic field drain ran along the length of the base
118	6	Topsoil - 0.1m thick Dark-brown, friable sandy-silt with 5% small sub-rounded stone inclusions
119	6	Subsoil - 0.2m thick Dark-brown, fine and firm sandy-silt with <1% small sub-rounded pebble inclusions
120	6	Natural deposit Light orange-brown, firm sandy-clay with 2% small-medium sub-rounded stone inclusions
121	7	Topsoil - 0.1m thick Dark-brown, friable sandy-silt with <5% small sub-rounded pebble inclusions
122	7	Subsoil - 0.2m Dark-brown, firm sandy-clay with 2% small sub-rounded stone inclusions
123	7	Natural deposit Light orange-brown, firm sandy-clay with >1% small-medium sub-angular sandstone fragments
124	9	Topsoil - 0.1m thick Dark grey-brown/near black, friable sandy-silt with <1% small sub-rounded pebble inclusions
125	9	Subsoil - 0.27m thick Mid orange-brown, firm clay-silt with <2% sub-rounded inclusions and <1% small fragments of sandstone. Material silted up against ridge 127
126	9	Natural deposit Mid pink-orange, compact and sticky sandy-clay, with <10% inclusions of small-medium sub-angular sandstone fragments. Glacial till
127	9	Bank of ridge and furrow Aligned east/west, and measuring >2m in length, >0.72m in width and >0.32m in height, the ridge comprised mid-brown, compact clay-silt with inclusions of <1% small sub-rounded pebbles and charcoal flecks.

		Redeposited subsoil used to create bank as part of the ridge and furrow system observed in the area
128	10	Topsoil - 0.15m thick Same as 124
129	10	Subsoil - >0.28m thick Mid orange-brown, soft and tacky sandy-silty-clay, with 1% small sub-rounded inclusions, <1% charcoal flecks and some root disturbance
130	8	Topsoil - 0.22m thick Dark grey-brown/near black, friable sandy-silt-clay with 5% small sub-rounded stone inclusions
131	8	Subsoil - 0.11m thick Dark-brown, firm and fine sandy-clay, no inclusions were identified
132	8	Fill of ditch 133 - 0.41m thick Mid-brown, firm and fine clay-sand with <2% charcoal flecks, <5% fragments of CBM. Three fragments of Romano-British pottery were recovered from the base of the fill
133	8	Cut of ditch Aligned north-east/south-west, the ditch measured >2m in length, 1.18m in width and 0.41m in depth. It was linear in plan and an undulating bowl-shape in profile. The lack of a primary fill suggests that the feature has been re-cut or cleaned during its lifetime
134	8	Natural deposit Pink-brown, compact sandy-clay with 5% small-medium sub-angular sandstone fragments. Glacial till

APPENDIX 3: FINDS SUMMARY

Cxt = context; OR = Object Record number; Cat = category; Qty = quantity

Cxt	OR	Material	Cat	Qty	Description	Date
<i>112</i>	1001	Ceramic	vessel	2	Body fragments, Nene Valley colour-coated ware.	Later second to third century AD
<i>112</i>	1001	Bone		1	Small fragment calcined bone, white.	-
<i>132</i>	1002	Ceramic	vessel	2	Body fragments, Nene Valley colour-coated ware, one with barbotine decoration. Both fragments severely spalled, with entire internal surface destroyed. Some sooting.	Later second to third century AD