

STANWIX PRIMARY SCHOOL, STANWIX, CARLISLE, CUMBRIA



Archaeological Watching Brief



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**Swarbrick Associates and
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SUMMARY

In 2008, proposals were made for a small-scale redevelopment at Stanwix Primary School Carlisle, Cumbria (NGR NY 4015 5715). The school stands within the former Stanwix Roman fort, a Scheduled Ancient Monument (SAM 28484) and, accordingly, English Heritage (EH) requested that any intrusive groundworks should be accompanied by a programme of archaeological monitoring and recording. On behalf of the school, Swarbrick Associates commissioned Oxford Archaeology North to undertake an archaeological watching brief in accordance with an EH-approved project design.

The first phase of the watching brief, undertaken between August and September 2008, monitored the excavation of footings for an extension to the computer room and the construction of a toilet block appending the main school block (Area A, at the northern end of the main school building). Two putative features of archaeological interest were observed at the base of development impact within this area; although this meant that they could be left undisturbed and preserved *in situ*, this precluded their intrusive investigation and any greater understanding that might have been gained from such a process. The first feature comprised a north-east/south-west-aligned area of cobbles, 5, which was observed in the central and southern portion of the foundation trench. Without any formal examination, this deposit was difficult to interpret, but similar surfaces have been associated with the fort defences, foundations for buildings, or simply as metalled surfaces. Immediately to the north of the cobbles was a possible east/west-aligned feature, 7, which was interpreted as either a ditch fill, or disturbed natural geology.

During May 2009 a second phase of works (Area B) monitored the ground reduction for a paved waiting area straddling the school entrance on Mulcaster Crescent. The shallow groundworks enacted here revealed nothing but concrete slabs and garden soil, although a single sherd of Roman Rhenish colour-coated pottery was recovered from the latter deposit.

ACKNOWLEDGEMENTS

OA North would like to thank Stanwix Primary School for commissioning the project and David Irwin, of Swarbrick Associates, for his liaison and assistance on site. The fieldwork was undertaken by Anthony Haskins and Jeremy Bradley, who compiled this document. The report was illustrated by Alix Sperr and Marie Rowland, whilst Christine Howard-Davis examined the pottery. Stephen Rowland managed the project and edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In 2008 Stanwix Primary School submitted proposals to extend their existing facilities on Mulcaster Crescent, in the village of Stanwix, just to the north-east of Carlisle, Cumbria (NGR NY 4015 5715; Fig 1). The limited proposals comprise the construction of a toilet block adjoining the computer room at the northern end of the main school building, and the laying of a paved waiting area straddling the rear entrance on Mulcaster Crescent. The school stands within Stanwix Roman fort, a Scheduled Ancient Monument (SAM 28484), an element of Hadrian's Wall and, as such, an area of high archaeological sensitivity. In respect of this, the extension was to use raft foundations that would limit damage to any underlying archaeology, although there was the potential for services associated with the toilet block to impact upon buried archaeological remains. Following the completion of an evaluation to establish the presence of any archaeological deposits within the depth of impact from toilet services and to determine the margins of sensitivity for the foundations (OA North 2008), English Heritage (EH) requested that all further intrusive groundworks should be monitored by an archaeologist. This would ensure that all finds and deposits would be recorded and that works could be halted should significant archaeological remains be identified within the zone of impact. Accordingly, Swarbrick Associates (architects to Stanwix Primary School) made an application to the Department of Culture, Media and Sport (DCMS) for Scheduled Monument Consent (SMC), allowing the groundworks to take place, then commissioned Oxford Archaeology North (OA North), on behalf of Stanwix Primary School, to undertake the archaeological monitoring. The watching brief, enacted in accordance with an EH-approved project design (*Appendix 1*), was undertaken in two phases. The first, between August and September 2008, monitored the excavation of strip footings and drainage for the toilet block in the area of the computer room (Area A; Fig 2), whilst the second, during May 2009, was concentrated on shallow ground reduction at the Mulcaster Crescent entrance.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The school is located to the north of the River Eden and within Stanwix Village, which was within the former county of Cumberland, and has now been amalgamated into the hinterland of Carlisle's urban sprawl. The archaeological watching brief took place to the rear of the school, directly south of the Mulcaster Crescent entrance. The site lies at approximately 35m OD on a natural platform within an undulating glacial landscape, with steep descents on the western and southern sides to the floodplain of the River Eden, and a flat plain to the north. To the east the land slopes away for approximately 450m, reaching a small knoll, known as Wall Knowe (Fig 1).

1.2.2 The solid geology of the area comprises red, grey and green mudstones and siltstones of the Mercia Mudstones Group. These include various mudstones

and the Stanwix Shales, which all date to the Triassic Period (British Geological Society 1982). The overlying drift geology comprises glacial gravels and boulder clays (Countryside Commission 1998), while the soils are of the Clifton Association consisting of typical Stagnogleys (OS 1983), with fluvial deposits located along the margins of the River Eden.

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 **Introduction:** the following section provides a general history of the salient features known to exist within and around the development site, together with a more detailed account of the archaeological interventions within and immediately around the site. Given the close association of the development site with Hadrian's Wall and Stanwix fort, this section concentrates on those remains dating to the Roman period, which have primary potential for preservation within the development area.
- 1.3.2 **Hadrian's Wall:** it is thought that Hadrian's Wall, running along the military way from Cumbria in the west to Northumberland in the east, was constructed between AD 122 and 126, immediately after the Emperor Hadrian (AD 117-138) arrived in Britain (Margary 1973; Collingwood Bruce 1978). The western end of the Wall was initially constructed from turf, and later rebuilt in stone (Stevens 1966). Originally, the Hadrianic defence was to utilise an earlier line of forts (later known as the Stanegate, after the road along which the forts were situated), which lay to the south of, and separate from, the Wall itself, which was to be secured only by milecastles and turrets. However, in AD 124, it was decided that forts should be attached to the Wall, and twelve such installations were constructed for whole auxiliary units. Forts were located roughly every 12km astride the wall (Breeze and Dobson 2000), generally allowing points of egress from each of the salient faces.
- 1.3.3 The Wall within the area of Stanwix School has all but vanished, having been heavily robbed for stone (Smith 1978). However, remnants of Hadrian's Wall were traced into the school grounds during excavations of the 1930s (Simpson and Hogg 1935), which was recorded as being 2.7m wide. Excavations undertaken in the 1960s by Hogg located parts of the Wall, and a ditch terminal in the centre of Scotland Road (cited in Dacre 1985).
- 1.3.4 **Stanwix Roman Fort:** the first fort on the site was likely to have been Hadrianic in date, but was latterly enlarged *c* AD 160 (Caruana 2009). The fort, identified as *Uxelodunum* (Daniels 1989), meaning 'high place', covered an area of 9.79 acres, and was the seat of the senior commanding officer of the Wall (Dacre 1985). It was designed to hold a 1000-strong cavalry unit, and served as the main base for aggressive action against the tribes to the north, a role facilitated by its strategic location on the main western route to and from Scotland, guarding one of the main crossing points over the River Eden (located near the current bridge). Certainly by the late fourth century, the *Notitia Dignitatum* indicates that the fort was garrisoned by the *Ala Petriana* (RomanBritain.org 2005), the only regiment of this size and prestige on the Wall, and probably the senior auxiliary regiment of the Roman army in Britain (Daniels 1989). Although there is no direct epigraphic evidence for this unit,

the tombstone of a cavalryman was discovered in the wall of the old parish church in the late eighteenth century, whilst bronze mountings and brooches for uniforms and horse harnesses were discovered in excavations to the south of the fort in 1934 (*ibid*). These artefacts probably date to the mid-second century AD and are thought to have been washed down slope from a bronze-founders workshop in the fort grounds (*ibid*). The mound of the fort's rampart is the only part still visible as an earthwork in Stanwix Churchyard (Daniels 1989).

- 1.3.5 ***The external defences:*** the first excavations within the area of the fort were undertaken in the 1930s by Hogg, Simpson and Richmond in advance of the widening of Scotland Road, and the creation of a carpark bounded by Church Terrace, Church Street and Scotland Road, to the south-west of the present development site. A trench opened across the area did not reveal any archaeological features, although occupation soils, from which Roman pottery was recovered, and a fragment of inscribed stone, dating to AD 167, was discovered below the floor of a building (Simpson 1932). Further excavation established the positions of the fort's south gate and the south-west angle tower, while the south and east walls were excavated in the 1940s, also by Hogg and Simpson (Daniels 1989).
- 1.3.6 Subsequent excavations did not take place until the 1980s, when Carlisle Archaeological Unit (CAU) undertook excavations in the car-park of the Cumbria Park Hotel, to the immediate north of the school's playground. The excavation located the stone footings of the north-western wall, and an interval tower. Together with a rampart to the south and two ditches, they were likely to be contemporary in date (Frere 1985; Dacre 1985; McCarthy 1999). The discovery of cobbles and gravel layers post-dating the wall, and a possible Roman oven along the back wall of the tower, demonstrated that the fort had been expanded northwards during the Antonine period (AD 138-161). Such an interpretation was at odds with the traditionally held belief that Hadrian's Wall formed the northern limit of the fort throughout its occupation (Dacre 1985; Smith 1978). An earlier large ditch was also identified under the interval tower, and was associated with Hadrian's Wall (Esmonde Cleary 1998; McCarthy 1999).
- 1.3.7 A further evaluation was undertaken at the Cumbria Park Hotel by CAU in 1998. This revealed the existence of the wall of the fort, along with collapse and demolition deposits, which had been truncated by postholes that produced pottery dating to the medieval period (CAU 1998). A subsequent evaluation at the same location was carried out the following year by CAU, which located the north wall of the fort and various associated features, all situated at a depth of 0.3m below the current ground level. The wall had been heavily robbed, although part of the internal rampart survived and extended for a distance of 3m behind the wall. To the rear of the rampart a metallised surface was observed, and may represent an intervallum road, whilst on the opposite side of the rampart, the north-eastern lip of the fort's primary ditch was also located (CAU 1999; Burnham 2000). A watching brief carried out in 2000 by Carlisle Archaeology Limited (CAL), in advance of an expansion of the Cumbria Park Hotel carpark, traced parts of the heavily-disturbed northern

defences, comprising the foundations of the stone curtain wall and a denuded internal rampart. Other findings comprised a cobbled surface observed on the berm between the curtain wall and inner ditch, an outer defensive ditch, and metalled surfaces within the fort (CAL 2001).

- 1.3.8 In 2000 Lancaster University Archaeological Unit (LUAU) undertook an evaluation in the walled garden to the east of the current Cumbria Institute of the Arts. A V-shaped ditch was identified, running north/south parallel to the eastern side of the fort. The ditch appeared to have been in use only for a short period, and produced few diagnostic finds; it has been tentatively suggested that the ditch pre-dated the main fort, perhaps being part of a military temporary camp (LUAU 2000).
- 1.3.9 **Internal Layout:** very little is known about the internal layout of the fort, although it is thought that the headquarters faced east (Daniels 1989). Metalled surfaces were identified in the school grounds, and were dated to the second-century AD (Simpson 1933; Simpson and Hogg 1935). They were superseded by possible barracks and stables that dated between AD 305 and 367 (*ibid*). In 1939 a granary, orientated east/west, was located extending into the school grounds, while the stone foundations for other buildings were observed to the north and south of the granary (Daniels 1989; Esmonde Cleary 1998). Very little work took place in the area until the 1990s, although a watching brief in 1976 demonstrated that the Roman layers had been levelled to the rear of the Crown and Thistle public house (Frere 1977). Excavations undertaken in 1993 by CAU in Barn Close revealed two phases of walls and surfaces that produced pottery and coins dating to the fourth century AD (Esmonde Cleary 1994; McCarthy 1999).
- 1.3.10 In 1997 evaluation work was undertaken by CAU in the grounds of the primary school (CAU 1997; Esmonde Cleary 1998; McCarthy 1999). Although minimal excavation took place and only the uppermost Roman deposits were investigated, the work identified the drains and walls relating to the granary located in the 1930s, together with metalled yard or road surfaces. These surfaces were post-dated by a number of features, including cuts and postholes, together with several clay-floored timber buildings no earlier in date than the mid-fourth century (Esmonde Cleary 1998; McCarthy 1999). In the lower playground a layer of turves, sealed by later Roman deposits, was identified in the section of a nineteenth-century drain cut. They were either the result of an earlier turf-and-timber fort, or the remains of the turf pre-cursor to the stone-built Hadrian's Wall (CAU 1997; Esmonde Cleary 1998; McCarthy 1999). The feature had been overlain by layers of compacted pebbles, and was truncated by several robber trenches associated with the fort (CAU 1997; McCarthy 1999).
- 1.3.11 In 1998 further excavation work was carried out at the school by CAU, in advance of building extensions. Roman fort deposits were uncovered, but the restricted extent of the site meant that interpretation was difficult. Deposits comprised rubble dumps sealed by a metalled surface, which in turn pre-dated a stone wall associated with a building in the western area of the fort (CAU 1998).

- 1.3.12 Excavations undertaken by CAU in 1999 exposed extensive deposits within the central area of the fort, which were left *in situ*, in line with English Heritage policy. Although these deposits had been heavily truncated, an area of cobbled surface was identified, as well as several phases of timber and stone buildings, which cut through various external deposits (CAL 2000). These various phases of construction work culminated in what has been interpreted as a hospital. The area was razed towards the end of the Roman period and a layer of dark soil accumulated over the remains (*ibid*). Significantly, a large post-built timber structure was erected over the site, respecting the basic Roman layout, and dating either to the very late Roman period, or the post-Roman period. It has been compared to the post-Roman building identified at Birdoswald (Burnham 2000; OA North 2004). The site was then sealed by medieval garden soils (CAL 2000).
- 1.3.13 During 1999 and 2000 a series of watching briefs was undertaken at the primary school by CAU. A watching brief in 1999 was carried out during the demolition of the boiler house and the excavation of a foundation trench for a boundary wall. It revealed very few remains, much of the site having been disturbed by the groundworks for the initial establishment of the school. A cobbled surface, and other deposits that were not closely datable, were observed beneath the boiler house, whilst stratigraphy within the foundation trench comprised modern deposits down to natural geology (OA North 2004). Further groundworks undertaken in 2000 necessitated another watching brief by CAU; however, no archaeological deposits were identified (OA North 2004).
- 1.3.14 In 2004 OA North undertook a small evaluation in advance of a classroom extension to the east of the main school building. The remains of a truncated, cobbled surface was observed, which most likely dated to the second century AD, in line with similar remains discovered in the 1930s (OA North 2004). A V-shaped ditch was also located. This proved to be more problematic to date, producing only one sherd of medieval pottery, and fragments of undatable tile and brick. Except for potential early post-Roman remains encountered in 1997 (CAU 1997), there has been little medieval activity recorded in the area. It was suggested that the pottery was intrusive, and the ditch was originally part of the Roman fort complex.
- 1.3.15 In January 2008 OA North excavated two small trial trenches, one on the northern side of the computer block, and the other in a flower bed adjacent to Mulcaster Crescent. No finds or features dating to the Roman period were identified in either trench (OA North 2008).

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 The EH-approved project design (*Appendix 1*) and the DCMS SMC were adhered to as fully as possible, and all works were consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice. The project was overseen by Mike Collins, EH Archaeologist for Hadrian's Wall.

2.2 WATCHING BRIEF

2.2.1 A permanent archaeological presence was maintained during all ground reduction, which the groundwork contractors enacted by hand and, where feasible, a small mechanical excavator fitted with a toothless bucket. In the event, it was possible to curtail groundworks and limit the base of excavation to those points where probable significant archaeological deposits were encountered. During the watching brief, all significant horizons and the base of excavation were hand-cleaned by the archaeologist using a trowel, and all significant deposits were investigated and recorded in an appropriate manner.

2.2.2 All information identified in the course of the site works was recorded stratigraphically, using a system, adapted from that used by the Centre for Archaeology Service of EH, with sufficient pictorial record (plans, sections and photographs) to identify and illustrate individual features. Written notes were made on *pro-forma* recording sheets and accurate plans and sections were produced at an appropriate scale. A full, detailed and indexed photographic record was maintained of individual contexts, features, general views and working shots from standard view points, using 35mm cameras on archivable monochrome print film and colour transparency. All frames included a visible, graduated metric scale and digital photographs were taken for presentation purposes. Primary records were available for inspection at all times.

2.3 FINDS

2.3.1 All finds recovered were 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 deposited at Tullie House Museum, Carlisle.

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and with IFA and EH guidelines (1991). The paper and digital archive will be deposited with the Cumbria Record Office, Carlisle on completion of the project. Copies of this report will be lodged with EH and the Cumbria Historic Environment Record, Kendal.

3. FIELDWORK RESULTS

3.1 RESULTS

- 3.1.1 **Introduction:** the following section presents a brief narrative of the results of the fieldwork. For the sake of brevity and clarity, detailed descriptions of the observed features and deposits can be found in *Appendix 2*.
- 3.1.2 **Area A:** the earliest deposit revealed within the area of the toilet block was natural geology, **6**, observed some 0.5-0.6m below present ground level (bgl). In the central and southern portion of the footings, the natural clay was overlain by a 4m-wide, approximately north-east/south-west-aligned area of cobbles within a clay matrix, **5**, which was interpreted as either a foundation or cobbled surface (Plate 1). Immediately to the north was a possible east/west aligned feature, **7**, interpreted as either ditch fill or disturbed natural geology, but without intrusive examination to determine the presence of any cut, any interpretation remains conjectural. The natural geology and these putative features were then sealed by a layer of subsoil, **8**, which in turn was sealed by various make-up layers (**4, 3, 2, 1**) relating to the construction of the school and later disturbances. The L-shaped trench within the computer room encountered only deposits that seemed analogous to these later layers.
- 3.1.3 **Area B:** excavations through the flower bed to the west of the Mulcaster Crescent entrance reduced garden soil **9** (Plate 2) to a depth of 0.35m bgl, whilst to the east, a 0.2m-thick concrete slab and 0.1m of garden soil was removed, achieving a total depth of 0.3m bgl. No archaeological features or deposits were observed.

3.2 FINDS

- 3.2.1 A single sherd of Roman Rhenish colour-coated pottery was recovered from garden soil **9** within Area B. Although the garden soil was thought to have been imported, the sherd of pottery may have been reworked from lower deposits by over-enthusiastic horticulture. This single find from a disturbed context adds nothing significant to our understanding of Stanwix fort.

4. CONCLUSIONS

4.1 DISCUSSION

4.1.1 Without recourse to further investigative work, it is difficult to interpret the two putative features observed within Area A, comprising linear cobble and clay spread **5**, and ditch **7**. Although these features were not observed within the earlier evaluation trench (OA North 2008), which lay just to the south of the excavated footings, other findings, such as the various overburden layers accord well with the previous investigation.

4.1.2 The position and alignment of cobbly deposit **5** would match that of the approximate line of the forts' northern rampart, but suggesting that this layer and the putative ditch fill, **7**, were part of the defences would be, at best, guesswork. A second interpretation, notwithstanding the location of the features, was that they represented a cobble and clay foundation. Such foundations, for timber buildings, were seen at the fort in Carlisle itself during the Hadrianic period (Zant 2009). Whilst such footings might have been used for the first, Hadrianic, fort at Stanwix, it is uncertain whether they would have been required when the fort was rebuilt in stone *c* AD 160. There are examples of stone buildings with cobble and clay foundations in Carlisle, but these occur in the third century AD (Zant pers comm). The third and most prosaic interpretation would be that layer **5** was simply an undated cobbled surface. No further evidence of these features was seen in Area B, to the north, although the shallow excavations there did not penetrate fully the topsoil. No part of the parade ground observed during the 2004 evaluation were observed (OA North 2004).

4.2 IMPACT ASSESSMENT

4.2.1 The monitoring of the above works indicated that the groundworks were undertaken in a sympathetic manner that minimised impact on the underlying archaeology. In accordance with the methodology outlined in *section 2.2*, any archaeological remains were left preserved *in situ*.

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APPENDIX 1: PROJECT DESIGN

1.1 CONTRACT BACKGROUND

- 1.1.1 Swarbrick Associates, on behalf of Stanwix School, has requested that Oxford Archaeology North submit a project design for an archaeological watching brief in the course of the construction of a toilet block and paved waiting area, which lies in Stanwix, Carlisle, Cumbria (NGR NY 4015 5715). This archaeological investigation follows on from an archaeological evaluation undertaken by OA North (2008) within the footprint of the proposed new structures. The school stands within the former Roman fort of Stanwix, a Scheduled Ancient Monument (SAM 28484), and reputed to be one of the largest forts along Hadrian's Wall.

1.2 Archaeological Background

- 1.2.1 *Stanwix Fort*: excavations of the fort at Stanwix in the 1930s by Simpson, Hogg and Richmond established the positions of the south gate, and the defences on the north-eastern, south-eastern and south-western sides. Internal buildings, including a granary, were located in the playground of Stanwix Primary School (Simpson and Hogg 1935). In the 1980s, an excavation in the car park of the Cumbria Park Hotel, immediately north of the school playground, located the stone footings of the north-western fort wall and an interval tower, together with two ditches beyond (McCarthy 1999). This demonstrated that the fort had been enlarged in the Antonine period, projecting it north of Hadrian's Wall. The other key discovery was that of a ditch underlying the interval tower, which was clearly earlier than the enlargement of the fort and was presumed to be associated with Hadrian's Wall, the foundations of which had been discovered by Simpson and Hogg in 1932-4 (Simpson and Hogg 1935; McCarthy 1999, 163).
- 1.2.2 In 1997, Carlisle Archaeological Unit (CAU) carried out further work in the playground of the Primary School, in advance of the construction of an extension to the school (McCarthy 1999, 164). The earliest identifiable feature consisted of a turf deposit, overlain by a substantial deposit of clay; this turf deposit was either part of a rampart or perhaps evidence of the Turf Wall that predates the stone version of Hadrian's Wall to the west of the River Irthing. There were no obvious front or rear faces to this turf deposit, but it was located some metres south of the stone Hadrian's Wall discovered in the 1930s (Simpson and Hogg 1935). The walls located by Simpson and Hogg were not found, but stone and cobbled surfaces and rubble deposits were identified and were presumed to have belonged with the walls found in the 1930s. Timber buildings erected after the deposition of Huntcliff ware in the fourth century were also discovered (McCarthy 1999).
- 1.2.3 In 1997 and 1998, CAU dug two further trenches in a narrow passage immediately adjacent to the north-western side of the Victorian school, locating the inner ditch and the stone footings of the fort wall (McCarthy 1999). Other work in Stanwix in 1993 revealed two phases of walls and surfaces (CAU 1993).
- 1.2.4 In 1999 CAU undertook a further excavation, in the area of the proposed school extension, which revealed multiple phases of activity on the site within a relatively shallow deposit. The earliest deposits was an area of cobbling (Phase 1), cut by the beam slots of one timber building (Phase 2a), closely followed by those of a succeeding timber structure (Phase 2b). These timber buildings were replaced by one in stone (Phase 3), which were then subsequently remodelled (Phase 4). The site was then abandoned, and the site was stripped down to foundation level, which probably occurred in the late Roman period (Phase 5) and there was a subsequent accumulation of dark soils (Phase 6). Into these soils was set a large two phased timber building with 25 post holes (Phase 7), believed to be of early medieval date. This was then overlain by medieval garden soils (Phase 8) and then the construction of the Victorian Stanwix school (Phase 9) (CAU 2000).
- 1.2.5 In 2004 OA North undertook a small evaluation in advance of a classroom extension to the east of the main school building. The remains of a truncated, cobbled surface was observed, which most likely dated to the second-century AD, in line with similar remains discovered in

the 1930s (OA North 2004). A V-shaped ditch was also located. This proved to be more problematic to date, producing only one sherd of medieval pottery, and fragments of undatable tile and brick. Except for potential early post-Roman remains encountered in 1997 (CAU 1997), there has been little medieval activity recorded in the area. It was suggested that the pottery was intrusive, and the ditch was originally part of the Roman fort complex.

- 1.2.6 **OA North Evaluation 2008:** an evaluation was undertaken within the proposed development by OA North in 2008 and involved the excavation of two trial trenches. Trench 1 was located within the rear yard of the school, just south of the entrance to Mulcaster Crescent, and situated over the proposed toilet block. Trench 1 measured 1.5m square, reduced in size to avoid the modern services and drains identified across the area, and was excavated to 0.7m in depth, until natural geology, **103**, was encountered. The observed stratigraphy comprised tarmac and levelling deposits, **100**, redeposited subsoil, **101**, and disturbed natural, **102**. No finds or features dating to the Roman period were identified, and it was likely that the area had been heavily truncated during the recent construction of the classroom immediately to the south. Two small fragments of clay pipe bowl were recovered from the levelling material **100**, but were likely to have been residual within this recently redeposited material. A modern ceramic drain was identified running north-east/south-west across the trench; it was probably contemporary with the recent extension. It is likely that this part of the schoolyard has been heavily disturbed by recent groundworks, causing the truncation of archaeological deposits within the depth investigated. Thus, the proposed development is likely to have a negligible impact upon the archaeological resource, although potential for the preservation of islands of undisturbed archaeological stratigraphy elsewhere within the schoolyard must remain high.
- 1.2.7 Trench 2 was located within the flowerbeds to the rear of the school, adjacent to Mulcaster Crescent and situated over the proposed location for the paved waiting area. It was 1.3m x 1.5m, and was excavated to a depth of 0.6m to accommodate the 0.4m proposed depth of impact in this area. The stratigraphy solely comprised garden soil **104** and natural geology was not reached; several fragments of modern pottery were observed, but not retained. It is possible, like levelling material **100**, that the garden soil was brought in from elsewhere to raise the flowerbeds. If the proposed groundworks do not exceed the current pavement level they will have a minimal impact on this area.

1.3 OXFORD ARCHAEOLOGY

- 1.3.1 Oxford Archaeology has over 30 years of experience in professional archaeology, and can provide a professional and cost-effective service. We are the largest employer of archaeologists in the country (we currently have more than 200 members of staff) and can thus deploy considerable resources with extensive experience to deal with any archaeological obligations you or your clients may have. We have offices in Lancaster and Oxford, trading as Oxford Archaeology North (OA North), and Oxford Archaeology (OA) respectively, enabling us to provide a truly nationwide service. OA is an Institute of Field Archaeologists Registered Organisation (No 17), and is thus bound by the IFA's Code of Conduct and required to apply the IFA's quality standards.
- 1.3.2 Between our two offices our company has unrivalled experience of working on sites of all periods, and is recognised as one of the leading archaeological units in the country with regard to dealing with large-scale archaeological projects. OA North has considerable experience of the assessment, evaluation and excavation of sites of all periods, and has particular experience of archaeology in the North West having undertaken in recent years excavation, survey, building recording and post-excavation projects in both urban and rural environments. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. In particular OA North has been involved in the archaeological evaluation and investigations at the Cumbria Institute of the Arts, since 2000, and has considerable experience of working on Hadrianic Wall sites.

2. OBJECTIVES

2.2 The following programme has been designed to provide a suitable level of archaeological observation, recording, and response during the excavation works for the proposed extension at Stanwix School and to meet the requirements of the mitigation strategy agreed between English Heritage and the Client for recommendation for SMC to the DCMS. This has been agreed by all parties, and it will be the responsibility of the archaeologist on site to ensure this is adhered to, and if they are unable to do so to inform English Heritage, the County Archaeologist and the Client immediately. The project will be overseen by the Mike Collins, English Heritage. The required stages to achieve these ends are as follows:

2.1 PERMANENT PRESENCE WATCHING BRIEF

2.1.1 To record accurately any surviving archaeological features or deposits by means of detailed observation and recording. To record the presence of buried features by appropriate recovery techniques, where applicable.

2.2 ARCHIVE/REPORT

2.2.1 A full written report will assess the significance of the data generated by the entire programme of work, in a local and regional context, and will be suitable for deposition as a permanent archive of the work undertaken.

3.1 PERMANENT PRESENCE WATCHING BRIEF

3.2.1 **Methodology:** a permanent programme of field observation will accurately record the location, extent, and character of any surviving archaeological features within the excavation for the raft foundations of the school extension. This work will comprise the observation of the process of excavation for these works, the systematic examination of any subsoil horizons exposed during the course of works, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

3.2.2 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid coordinates where appropriate). All archaeological information collected in the course of fieldwork will be recorded in standardised form, and will include accurate national grid references tied into the grid using a total station. Features will be planned accurately at appropriate scales and annotated on to a large scale plan provided by the Client. A photographic record will be undertaken simultaneously. The recording techniques and procedures employed by OA North for such detailed recording represent current best practice.

3.2.3 It is assumed that OA North will have the authority to stop works to enable the recording of important deposits, and to call in additional archaeological support if a find of particular importance is identified. It is assumed for the purposes of this project that a contingency of up to three person days is available in these circumstances. This would only be called into effect in agreement with the Client and English Heritage and will require a variation to costing, although the final decision on whether this contingency needs to be utilized will rest with the DCMS, advised by English Heritage. In normal circumstances, field recording will also include a continual process of analysis, evaluation, and interpretation of the data, in order to establish the necessity for any further more detailed recording that may prove essential.

3.2.4 Bulk samples from the fills of all uncontaminated cut features with the potential to preserve environmental information will be collected with a view to establishing a programme of analytical assessment during the post-excavation work. Indicative costs of palaeo-environmental analysis can be provided if requested. English Heritage's regional Advisor on Archaeological Science will be consulted on the works, and the implementation of her recommendations on evaluation and full analysis will be considered an integral part of this project design.

- 3.2.5 In the event of burials being discovered the archaeologist will procure and comply with all statutory consents under the Burial Act 1857.

3.3 ARCHIVE/REPORT

- 3.3.1 **Archive:** the results of all archaeological work carried out during fieldwork will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork to the appropriate level. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria Sites and Monuments Record (the index to the archive and a copy of the report). OA North practice is to deposit appropriate elements of the original record archive of projects (paper, magnetic and plastic media) with the appropriate County Record Office, and a full copy of the record archive (microform or microfiche) together with the material archive (artefacts, ecofacts, and samples) with an appropriate museum. The actual details of the arrangements for the deposition/loan and long term storage of this material will be agreed with the landowner and the receiving institution. The archive will be compiled in an orderly fashion and submitted to the County SMR within 6 months of the end of the fieldwork. The location of artefacts must be stated in the archive.
- 3.3.2 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the Client within five weeks of completion of fieldwork, and a further copy submitted to the Cumbria Sites and Monuments Record following any comments from the Client. Three copies will be submitted to English Heritage. The report will include a copy of the agreed project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, with an assessment of the overall stratigraphy, together with appropriate illustrations, including detailed plans and sections indicating the locations of archaeological features. Any finds recovered from the watching brief will be assessed with reference to other local material and any particular or unusual features of the assemblage will be highlighted and the potential of the site for palaeoenvironmental analysis will be considered. The report will also include a complete bibliography of sources from which data has been derived.
- 3.3.3 The report will be bound, with each page and paragraph numbered. The report will include as a minimum the following:
- i. A location plan of the site
 - ii. A location plan of the extent of the watching brief within the site. This must be at a suitable scale, and located with reference to the national grid, to allow the results to be accurately plotted on the Sites and Monuments Record.
 - iii. Plans and sections of archaeology located.
 - iv. A summary statement of the results.
 - v. A table summarising the deposits, features, classes and numbers of artefacts encountered and spot dating of significant finds.
- 3.3.4 The report will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the site within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, section drawings, and plans.
- 3.3.5 A short publication on the results of the watching brief will be submitted to a local journal as appropriate.

3.4 Other Matters

- 3.4.1 **Health and Safety:** OA North conforms to all health and safety guidelines as contained in the OA Manual of Health and Safety and the safety manual compiled by the Standing Conference of Archaeological Unit Managers. The work will be in accordance with Health and Safety at Work Act (1974), the Council for British Archaeology Handbook No. 6, *Safety in Archaeological Fieldwork* (1989).
- 3.4.2 Full regard will, of course, be given to all constraints (services etc) during the evaluation, as well as to all Health and Safety considerations. OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. A risk assessment will be completed in advance of the project's commencement.
- 3.4.3 There is only very restricted access to the area of the development, but these will need to be closed off by means of fence panels to prevent school children gaining access to the site.
- 3.4.4 **Insurance:** the insurance in respect of claims for personal injury to or the death of any person under a contract of service with the unit and arising out of an in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. OA North has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.
- 3.4.5 **Working Hours:** normal OA North working hours are between 9.00 am and 5.00 pm, Monday to Friday, though adjustments to hours may be made to maximise daylight working time in winter and to meet travel requirements. It is not normal practice for OA North staff to be asked to work weekends or bank holidays and should the client require such time to be worked during the course of a project a contract variation to cover additional costs will be necessary.
- 3.4.6 **Confidentiality:** the report is designed as a document for the specific use of the Client, for the particular purpose as defined in the project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.
- 3.4.7 **Project Monitoring:** OA North will consult with the client regarding access to the site. Whilst the work is undertaken for the client, the English Heritage Hadrians Wall Archaeologist will be kept fully informed of the work and its results. Any proposed changes to the project design will be agreed with the English Heritage Hadrians Wall Archaeologist in consultation with the Client.

4. WORK TIMETABLE

- 4.1 The phases of work would comprise:
- 4.2 **Permanent Presence Watching Brief:** monitoring of excavation of trenches, and observation and recording of any archaeological features and materials revealed. The timescale of this phase will be dictated by the construction programme.
- 4.3 **Archive/Report:** OA North generally calculates a 1:0.5 ratio of fieldwork: post-fieldwork (archive, analysis, and report preparation).
- 4.4 OA North can execute projects at very short notice once an agreement has been signed with the client. The date for completion of the works would be dictated by the site construction programme. The report will be submitted to the Client within five weeks of the completion of field work.
- 4.5 **Personnel:** the project will be managed by Stephen Rowland BSc, MSc (OA North Project Manager), to whom all correspondence should be addressed. All Unit staff are experienced,

qualified archaeologists, each with several years professional expertise. Assessment of any finds from the excavation will be undertaken by OA North's in-house finds specialist **Chris Howard-Davis**, BA, MIFA.

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APPENDIX 2: CONTEXT INDEX

Context	Area	Interpretation	Description
1	A	Surface	Modern tarmac surface, 0.14m thick.
2	A	Concrete	Modern concrete below tarmac, 0.2m thick
3	A	Levelling layer	Hardcore levelling layer, with coal waste inclusions, 0.14m thick
4	A	Levelling layer	Modern build-up of material, 0.4m thick
5	A	Cobbled surface/foundation course	Mid-reddish-brown clay with 40-60% large to small rounded cobbles
6	A	Natural geology	Mid-brown, soft silty sand
7	A	Possible ditch fill or disturbed subsoil	Brownish-grey silty sand, containing small unsorted angular and sub-angular stone fragments
8	A	Subsoil	Mid-greyish-brown silty sand, 0.26m thick
9	B	Garden soil	Dark grey/brown, friable sandy silt with <5% small-medium sub-rounded pebble inclusions. Fragments of modern pottery were observed but not retained. Garden soil within the garden to the rear of the school. It is likely that it has been brought in from elsewhere to raise the beds, and extends beyond the pavement level.

ILLUSTRATIONS

FIGURES

Figure 1: Site location plan

Figure 2: Trench location plan

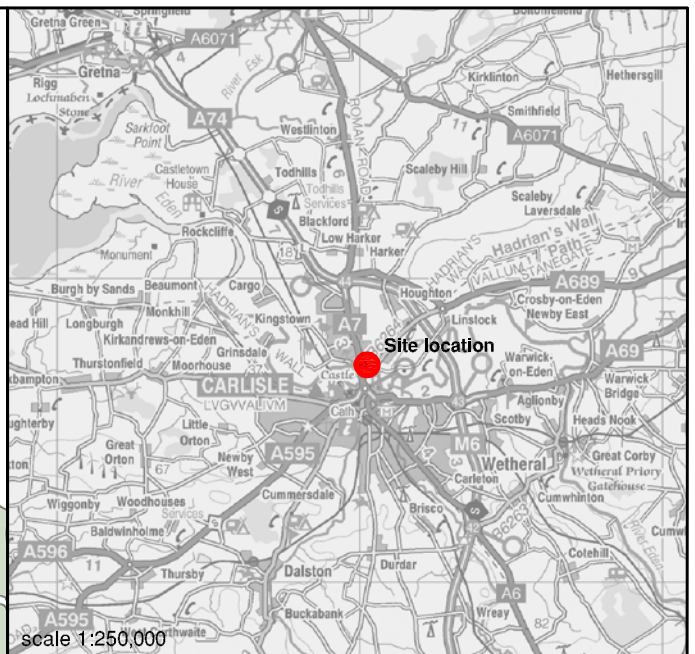
Figure 3: Features observed within Area A

PLATES

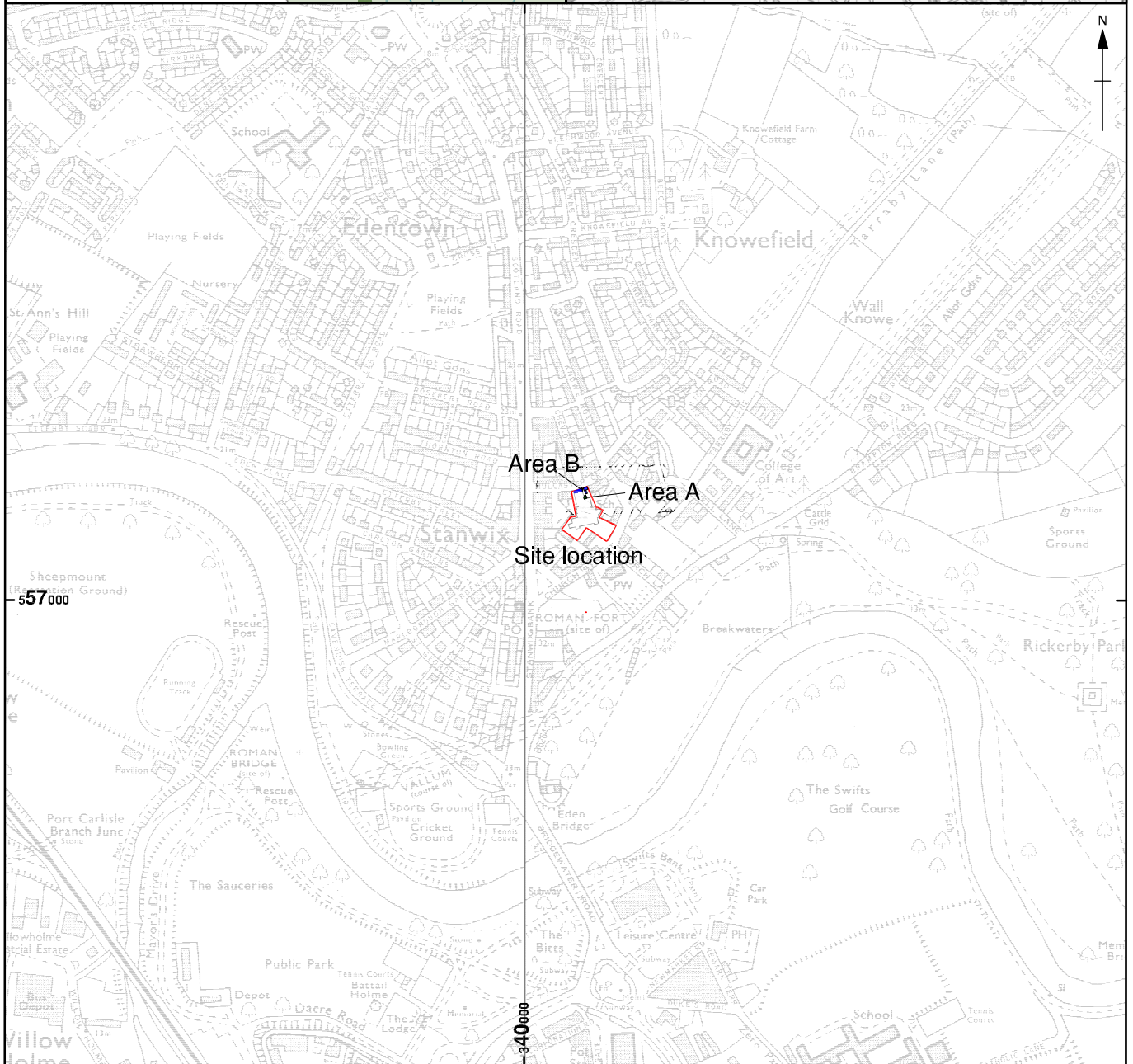
Plate 1: Area A viewed toward the north, showing the cobbled deposit, **5**; 1m scale

Plate 2: Working shot of Area B viewed from the north-west during the removal of the garden soil **9**

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scale 1:250,000



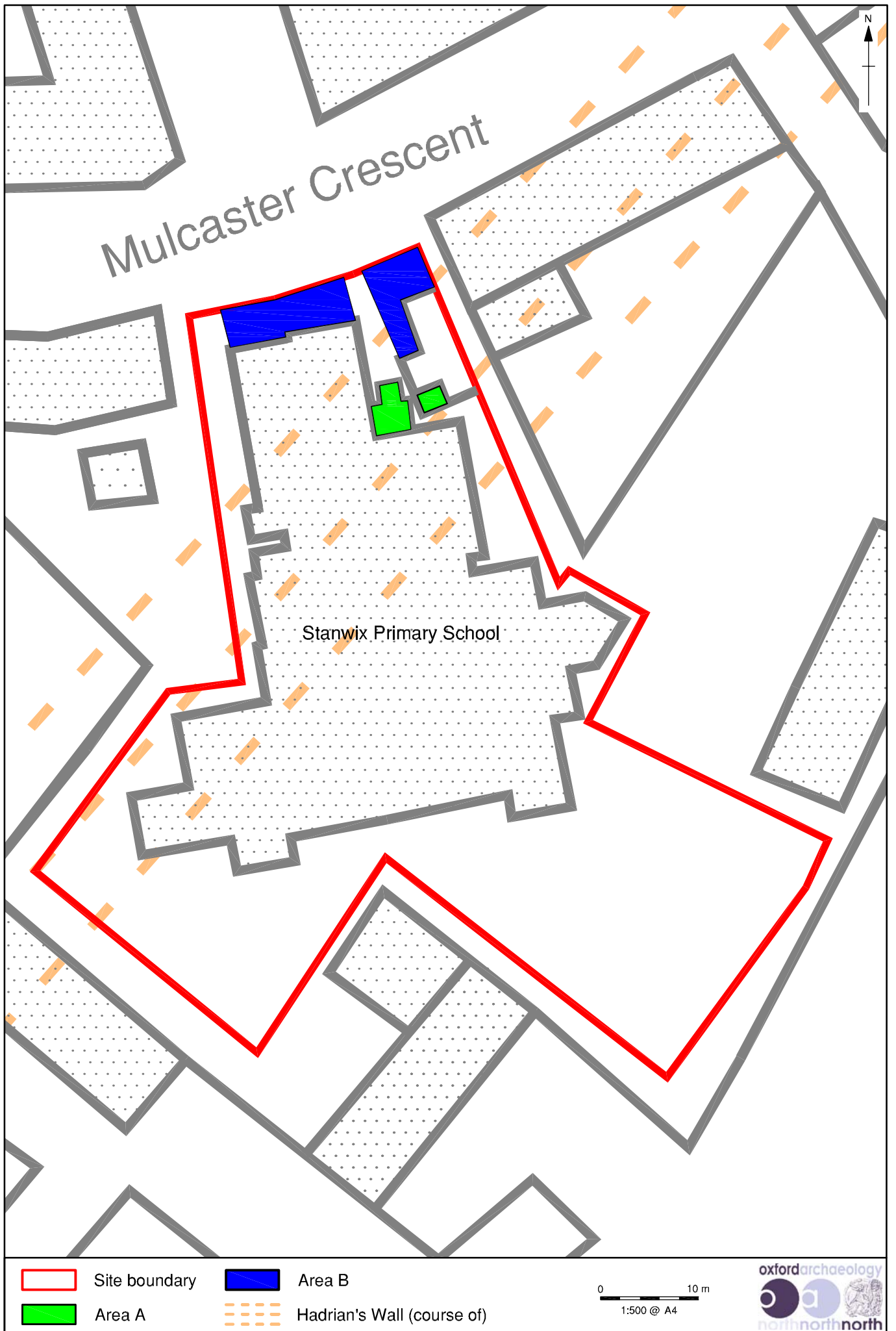
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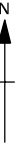


Figure 1: Site location



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Figure 2: Location of Watching Brief Areas A and B



LOE



Stones



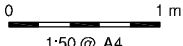
Cut



Drain



Deposit



1:50 @ A4



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Figure 3: Plan of features observed in Area A footings



Plate 1: Area A viewed toward the north showing the cobbled deposit, 5; 1m scale



Plate 2: Working shot of Area B viewed from the north-west during the removal of garden soil 9