

# An archaeological watching brief at Heddon-on-the-Wall and the probable location of Milecastle 12

Matthew S. Hobson

*With contributions from M. Stoakley and L. Gardiner*

## SUMMARY

Two phases of trenched archaeological evaluation and a watching brief were conducted by Wardell-Armstrong LLP on two nearby plots of land, formerly belonging to Town Farm, and bisected by the projected line of Hadrian's Wall at Heddon-on-the-Wall, Northumberland. The works were deserving of particular scrutiny because the measured location of Milecastle 12, one Roman mile east of the known location of Milecastle 13, falls squarely within the development area. Indeed, a discovery of a pivot stone, probably the northern gate of the milecastle, was recorded close to the west end of an outbuilding of Town Farm in 1926. A number of later investigations at Town Farm have recorded a high degree of truncation on the site and failed to locate traces of either the milecastle or of Hadrian's Wall. This has led to the commonly held belief that the remains of the milecastle were probably destroyed during the construction of farm buildings, or indeed earlier. The comprehensive redevelopment of the site, however, has allowed the collection of sufficient data to revisit this issue once again.

Two surviving sections of the Broad Wall were recorded during the watching brief over a 20-metre stretch, proving that later truncation had not removed the entirety of the Roman archaeology on this site. The southern edge of the Wall Ditch and its upper fills were observed in the north-east of the development area and in evaluation trenches excavated along the lane to the north. The only datable finds came from a medieval kiln of unknown function, situated between Hadrian's Wall and the Wall Ditch. The kiln is similar in form to the one still visible at the western end of the extant stretch of the Wall, 70 metres to the east. This new discovery indicates that there may have been a group of such features in this area in use from approximately the mid-13th to mid-15th century AD. With the exception of the easternmost section of the Broad Wall and the medieval kiln, all of the archaeological discoveries were made within the area of the Scheduled Monument. Each of the significant archaeological deposits, including a buried land surface preserved beneath the Wall, was sampled, but no significant archaeobotanical results were obtained. While no traces of Milecastle 12 were found, the work has led to the realisation that the discovery of 1926 was very probably made farther to the west than originally thought, where the now more accurately projected line of Hadrian's Wall meets the former Carlisle to Newcastle main road.

## INTRODUCTION

This article summarises the results of two phases of archaeological evaluation and a watching brief undertaken by Wardell Armstrong LLP on behalf of Newminster Properties on two nearby plots of land at Heddon-on-the-Wall, Northumberland. The work was required in response to the grant of provisional planning permission (Planning App. No. 18/01897/FUL) by Northumberland County Council for the construction of five residential properties on the site of the former Tulip's Haulage Yard. Prior to the works the

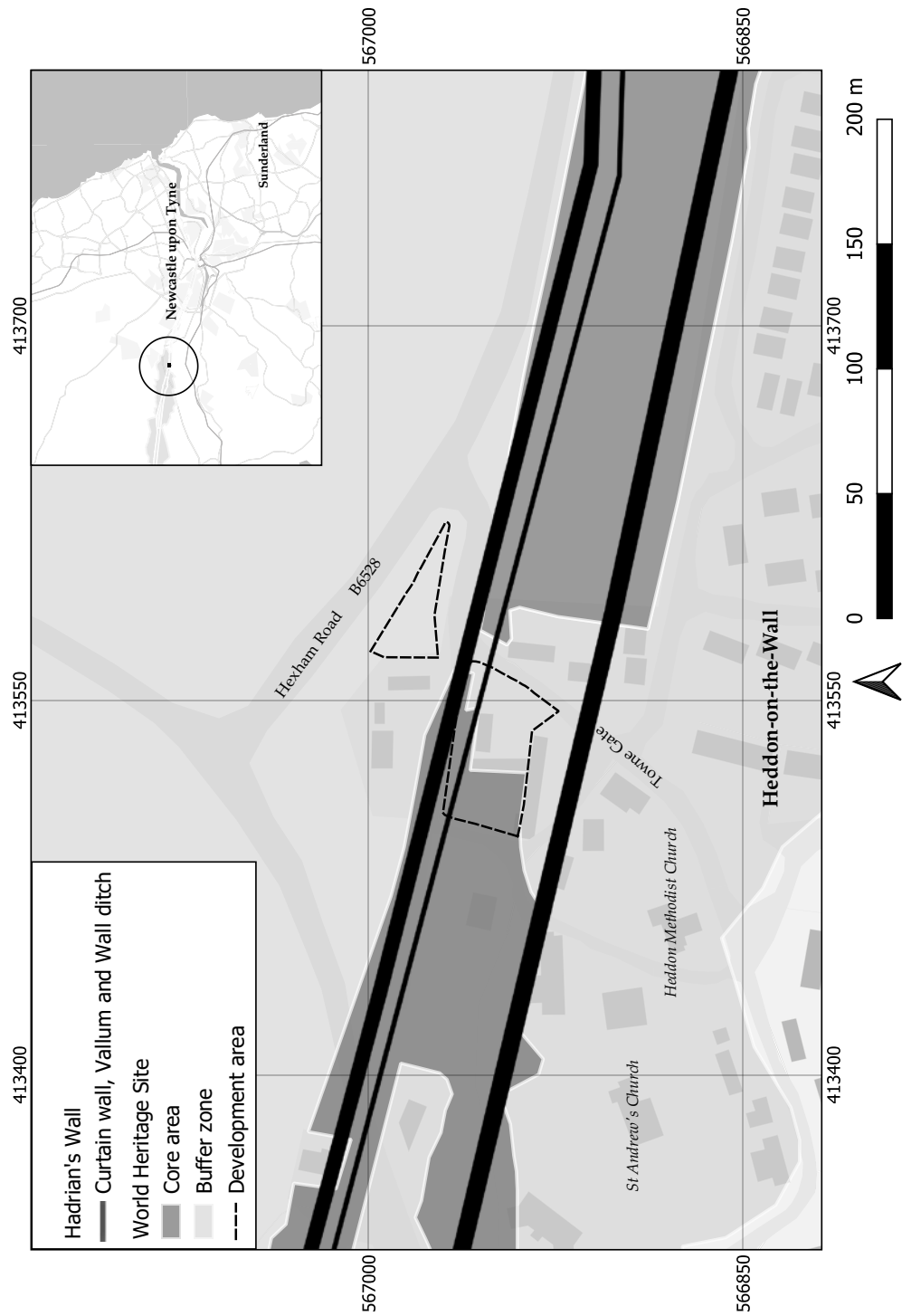


Fig. 1 The location of the development areas in relation to the World Heritage Site.

site was known to be of considerable interest. The western half of the site falls within the core area of the 'Frontiers of the Roman Empire' World Heritage Site, which includes the Hadrian's Wall Scheduled Monument and Vallum (SM 26086); the rest lies within the World Heritage Site's buffer zone (fig. 1). As a result, Scheduled Monument Consent was required for the various phases of the work which were monitored by archaeologists from Historic England and Northumberland County Council.

The site is bisected by the projected line of Hadrian's Wall, with the predicted location of Milecastle 12 falling squarely within its boundary. Indeed, when alterations to the former Carlisle to Newcastle road were being made in 1926, a pivot stone that is likely to have belonged to the north gate of the milecastle was discovered. The stone was reported to have been found 'close to the west end of an outbuilding of Town farm', although later investigations have failed to locate the stone or the milecastle. High levels of truncation within and around the boundary of Town Farm have been noted. As a result, the milecastle has often been assumed to have been completely destroyed by previous construction work. If it was located exactly one Roman mile east of the known location of Milecastle 13, its remains would lie directly beneath the northwest corner of the farm buildings recently demolished to make way for the new development. The line of the Wall Ditch and 18th-century military way runs just to the north of the main development area, beneath the tarmacked lane that was also to be negatively affected during the development works by the excavation of a service trench. As the modern lane and the Wall Ditch are not aligned precisely with one another, there was also the possibility of encountering the Wall Ditch within the north-east corner of the development area (fig. 1). The development works thus allowed the below-surface preservation of Hadrian's Wall and Wall Ditch to be evaluated within the impact area, and, at the same time, provided what was thought perhaps to be the last chance of finding evidence of the location of Milecastle 12.

When the site was earmarked for redevelopment in 2014, Wardell Armstrong produced a desk-based assessment which identified the archaeological sensitivities outlined above, as well as providing further detail on archaeological findings of all periods from the surrounding area (Peters 2014). A brief summary of the results of the desk-based assessment is given in the following section.

## THE ARCHAEOLOGICAL CONTEXT

Investigation of the archaeological remains of the Roman period in Heddon-on-the-Wall are complicated by the existence of a settlement which has straddled the remains of Hadrian's Wall since medieval times. The existence of the modern farm, which became Tulip's Haulage Yard, along the line of Hadrian's Wall is a good example of this. Buildings belonging to the modern village situated around the area of works include the Grade II listed Heddon Banks farmhouse and associated farm buildings and gin gang. As with other stretches of Hadrian's Wall, the military road which began construction in AD 1751 (for long stretches coterminous with the B6318) damaged a significant part of the remains (Lawson 1968). A milestone relating to the military road survives behind a wire fence on the northern side of the B6528.

The focus for the medieval origins of Heddon-on-the-Wall is thought to have been around the site of Milecastle 12, with fragments of the Grade I listed Church of St Andrew just 140m west-south-west of the development site, incorporating Norman and Late Anglo-Saxon architectural elements. An 11th century finial cross, or grave marker, also survives in the chancel. The main body of the church dates to the 12th or 13th century, however, and is indicative of a well-

established contemporary settlement. It was known prior to the commencement of the works, however, that sub-surface remains of Hadrian's Wall and its associated earthworks have survived in certain parts of the village. An archaeological evaluation undertaken approximately 1km to the east of the site at Tulip's Haulage Yard revealed the upper fills of the Vallum ditch (Rae 2006). Dating of the deposits showed that the ditch had remained as a large open feature into the 10th and 11th centuries AD, being used then as a dump for domestic and industrial waste. It is possible that the Wall Ditch was also used as a dump for waste during later periods. Additionally, the 300m extant part of Hadrian's Wall exposed and conserved between 1936–38 by Charles Anderson, on behalf of the Ministry of Works, is truncated at its western end by a medieval kiln, already exposed in 1879 and still visible today (Wilmott 2000, 51).

Numerous important discoveries of the Roman period have been made in the vicinity over the years. A group of eight Latin inscriptions, which were found in Heddon-on-the-Wall, or are likely to have been found there, are listed in the Roman Inscriptions of Britain (RIB 1385, 1387, 1388, 1390, 1391, 1392, 1394 & 1418).<sup>1</sup> Rather unfortunately only two of these can be located today, one on a window-ledge in the south aisle of the Church and the other at Vindolanda. Those recorded in 1807 as being built into the coach-house and above the stable door at the vicarage, for example, have since been removed and their current location is unknown. As a group the inscriptions attest to building works carried out by the tenth cohort of the 6th Legion and the fourth, eighth and tenth cohorts of the 20th Legion. The first and tenth cohorts are also recorded in fragmentary inscriptions, upon which the name of the legion in question does not survive.

The first attempts to relocate the remains of Milecastle 12 discovered during the roadworks in 1926 were undertaken by the North of England Excavation Committee in 1928 and 1929. The investigations identified a high level of truncation within the Town Farm farmyard, but found no traces of either the milecastle or Hadrian's Wall. When evidence of the milecastle could not be located after searching on the higher ground occupied by Tank House, roughly 27m west of the boundary of the farmyard, the conclusion was reached that all archaeological levels had 'apparently been entirely obliterated' (Spain and Simpson 1930, 537).

Later observations have contributed to the received opinion that Milecastle 12 and other features associated with the Wall in this area have been destroyed. A watching brief in 1977 on work extending garages near Town Farm, for example, revealed no evidence of the expected north bank of the Vallum. Another undertaken at Town Farm in 1980 found only topsoil lying on top of limestone bedrock, confirming that significant ground reduction had taken place in the western part of the site (Bennett 1998, 30).

Evidence of pre-Roman activity has also come to light in the area. Two findspots of prehistoric artefacts are listed within 350m of the development site's eastern boundary. The first is the location of a group of Neolithic polished stone axes, found in the back garden of a house on Antonine Walk in the 1960s (HER 10875). The second is that of a Bronze Age axe head found in a copse just south of Hexham Road (HER 10868). Later prehistoric activity may also be indicated by a hut circle on Heddon Common, noted in 1886 but today no longer visible (Bates 1886). Such was the state of knowledge when Wardell Armstrong conducted its desk-based assessment. The results of a site visit were also recorded within the report, which concluded that much of the site would be unsuitable for geophysical survey work to be undertaken.

## TIMELINE OF FIELDWORK

The first phase of fieldwork involved the excavation of seven evaluation trenches in December

2014. Five of these were located on the plot where the new houses were to be built, around the footprint of the then extant farm buildings. A further two trenches were placed on a plot of land on the northern side of the lane, which had been earmarked for possible spoil management during the construction work. The southern of these two areas will be referred to throughout this article as 'the development area'. Due to the extant remains on the site the trenches were not placed in optimal locations and the results of the evaluation were inconclusive. Four years later, following the demolition of the farm buildings, a watching brief on all groundworks began. The first task of the watching brief was to observe the grubbing out of the foundations of the former farm buildings. This took place in November 2018, with the majority of time spent on archaeological observation of the groundworks following later, during February/March and May/June 2019. The major archaeological discoveries detailed below were made during these months.

A second phase of evaluation, aimed at investigating the state of preservation of the Wall Ditch, involved the excavation of three trenches in the lane to the north, along the route of a service trench that would connect to the new properties. The watching brief then immediately resumed in September 2019, with the observation of the cutting of this service trench. A final concerted stint of the watching brief was undertaken from mid-January to late February 2020. With the conclusion of the works, Wardell Armstrong then proceeded to prepare the results for publication in communication with Historic England and Northumberland County Council's Planning Authority.

## RESULTS OF THE EVALUATION AND WATCHING BRIEF

### *Hadrian's Wall*

Work on the watching brief in March 2019 in the centre-north of the site revealed the remains of two sections of the very base of Hadrian's Wall. It appears that these sections of wall had been preserved thanks to the fact that they sat in a slight natural depression, which had protected them from truncation. A distance of 90.4 metres could be measured between the extant portion of Hadrian's Wall exposed by Anderson, just to the east of the development site where it can be seen to be cut by a medieval kiln, and the eastern end of the section discovered during the watching brief (fig. 2). The section to the west measured 13.35m long, the section to the east measured 4.85m, and the two sections were separated by a truncation event 2.40m wide (fig. 3, {109}). In both surviving sections several facing stones remained in position on the northern side of the wall. It appeared that the southern edge had been truncated during the construction of the former farm buildings along most of its length. A single surviving facing stone on the southern edge allowed the total width of the wall to be measured at 2.95m. This width is more or less consistent with other surviving sections of the Broad Wall foundations, some of which have been measured at as much as 3.5m (Breeze 2006, 53; Symonds and Mason 2009, 38, Table 2). The maximum surviving height of the wall, measured from the base of its foundations to the top of its facing stones, was 0.45m.

The core of the wall was formed of worked, irregular sandstone blocks, bonded together with clay (figs 3 and 4). The facing stones were also worked, providing a regular foundation course with no bonding material observed (fig. 6, {114}). The observed facing stones averaged 350mm by 500mm in plan. The long edge was most often positioned at a right angle to the line of the wall (maximum depth into the wall 550mm). In some cases, the stone tapered to a

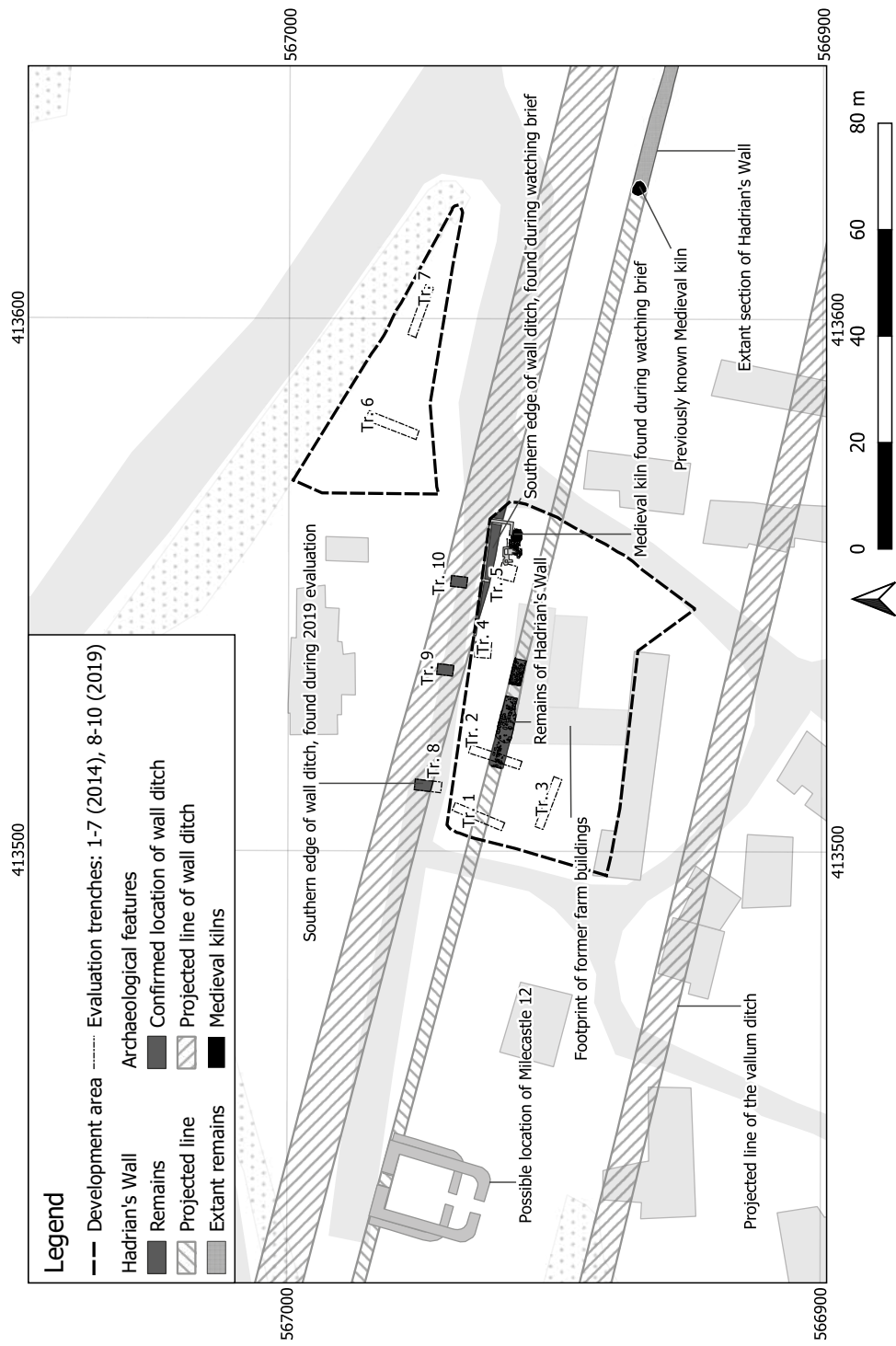


Fig. 2 Plan showing the archaeological features revealed during the evaluation trenches and watching brief.

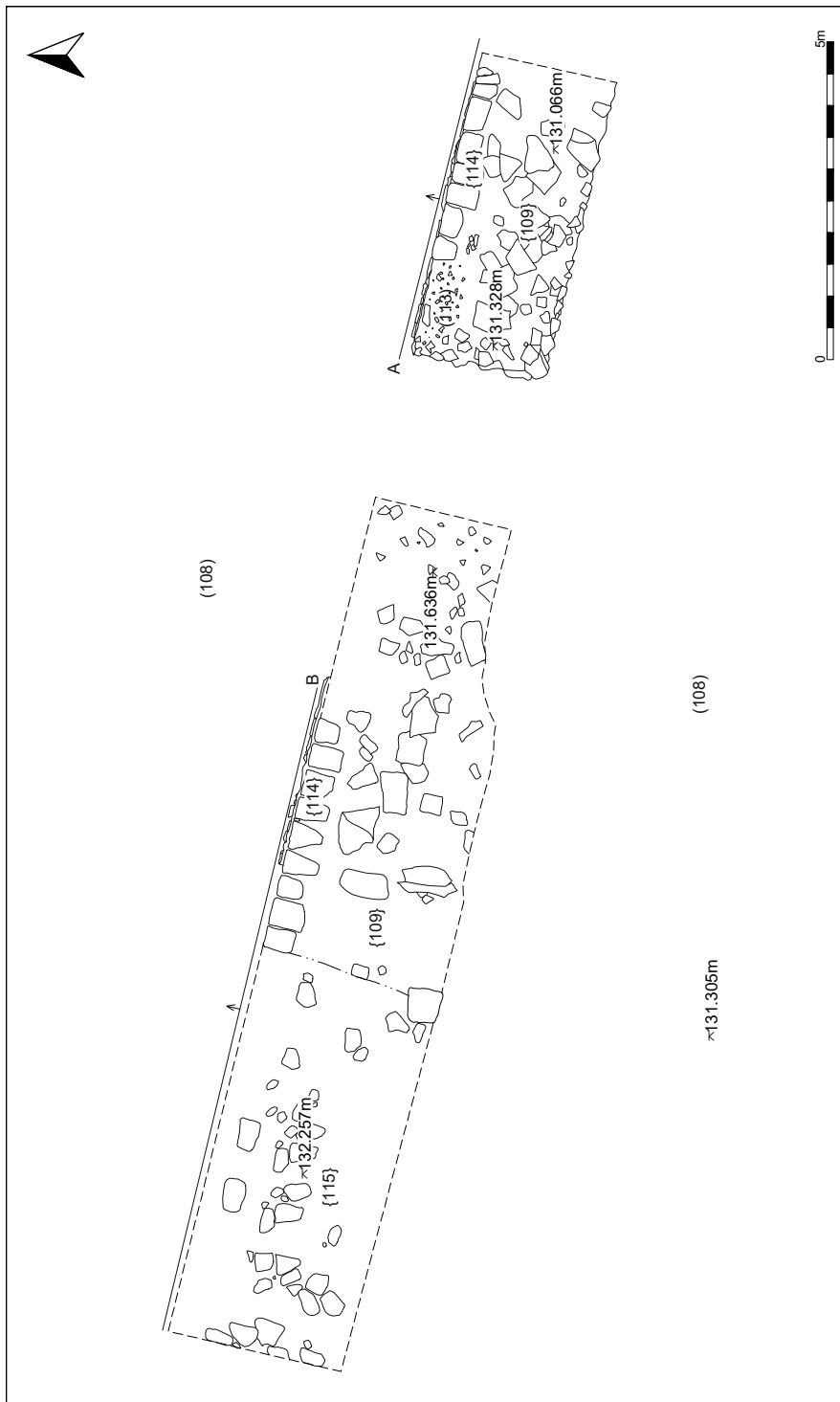


Fig. 3 Plan of Hadrian's Wall showing location of section/elevation drawings.

narrower width along its back edge to aid bonding with the core, but others were more cuboid in shape. Occasionally a facing stone was oriented with its longest edge along the line of the wall, in each case presumably because the long edge possessed the flattest face. The height of the facing stones ranged from 200mm to 300mm, with the average being around 260mm (figs 4 and 5). The facing stones overlaid a series of sandstone slabs which formed a base for the wall (fig. 6, {115}). These slabs were bedded within a firm yellow clay. At the western extent these slabs did not survive. To the east, they had been laid directly upon a soft dark brown sandy clay layer, interpreted as a buried soil. The buried soil measured 0.2m in depth on average and contained small amounts of rounded pebbles and occasional charcoal flecks (fig. 6, 112). This buried soil was located directly above the sandstone bedrock (fig. 6, 108) and only survived directly below the preserved sections of the wall.

The evidence recorded during the watching brief for the methods used in the construction of the Wall fits very well with the previous observation that a single legion was responsible for building the sector from Milecastle 7 (Denton) to Milecastle 12 (Heddon-on-the-Wall). It appears that the legion in question was the only one to place its stones on foundations of flags, and to have used larger stones during the earliest stages of building (Breeze, Hill and Thiel, 2020).

A short section of the westernmost 2.5m of surviving wall should in hindsight have been identifiable within Evaluation Trench 2 when it was excavated in 2014. The location of the trench had been somewhat unfortunate, however, being placed in a part of the farmyard which had been badly affected by modern truncation. As had been observed during the watching brief in 1980, the overburden only comprised a thin layer of topsoil directly above the degraded bedrock. The 2019 watching brief found that to the east the wall had been abruptly truncated, presumably by the construction of the former farm buildings, which the eastern section lay beneath. These buildings were still extant at the time of the 2014 evaluation, making positioning of an evaluation trench in that area impossible. To the west by contrast, the 2019 watching brief found that a truncation event, presumably the excavation of the modern farmyard, had reduced the height of the surviving remains to just a few centimetres. During the 2014 evaluation these thin, exiguous traces of the base of the wall were indistinguishable from the surrounding degraded bedrock in the narrow view provided by the confines of the evaluation trench. The far better-preserved portions of the wall that were encountered during the watching brief made it possible to follow the edge of the remains farther to the west. These were traced about a metre farther west than where the western limit of Evaluation Trench 2 had been excavated. No more remains of the wall could be observed in any other part of the development area, to the west or east. The negative results of the 2014 evaluation provide a salutary lesson on the difficulties of interpreting stratigraphy viewed within thin evaluation trenches and the possibility of better-preserved elements surviving in between evaluated areas.

### *The Wall Ditch*

The southern edge of the Wall Ditch was also located during the watching brief in March 2019 where it was expected, in the north-east corner of development area (figs 7 and 8). The feature was confirmed not to be the construction cut of the former diesel store, as it continued under both the eastern and western surviving walls of that structure and did not deviate at the positions of its return walls. In addition, the upper fill of the Wall Ditch had been cut by a near-vertical sided feature, which was interpreted as foundation cut for the northern wall of





Fig. 4 and 5 Surviving sections of Hadrian's Wall (scale = 1 metre, shots face east and south respectively).

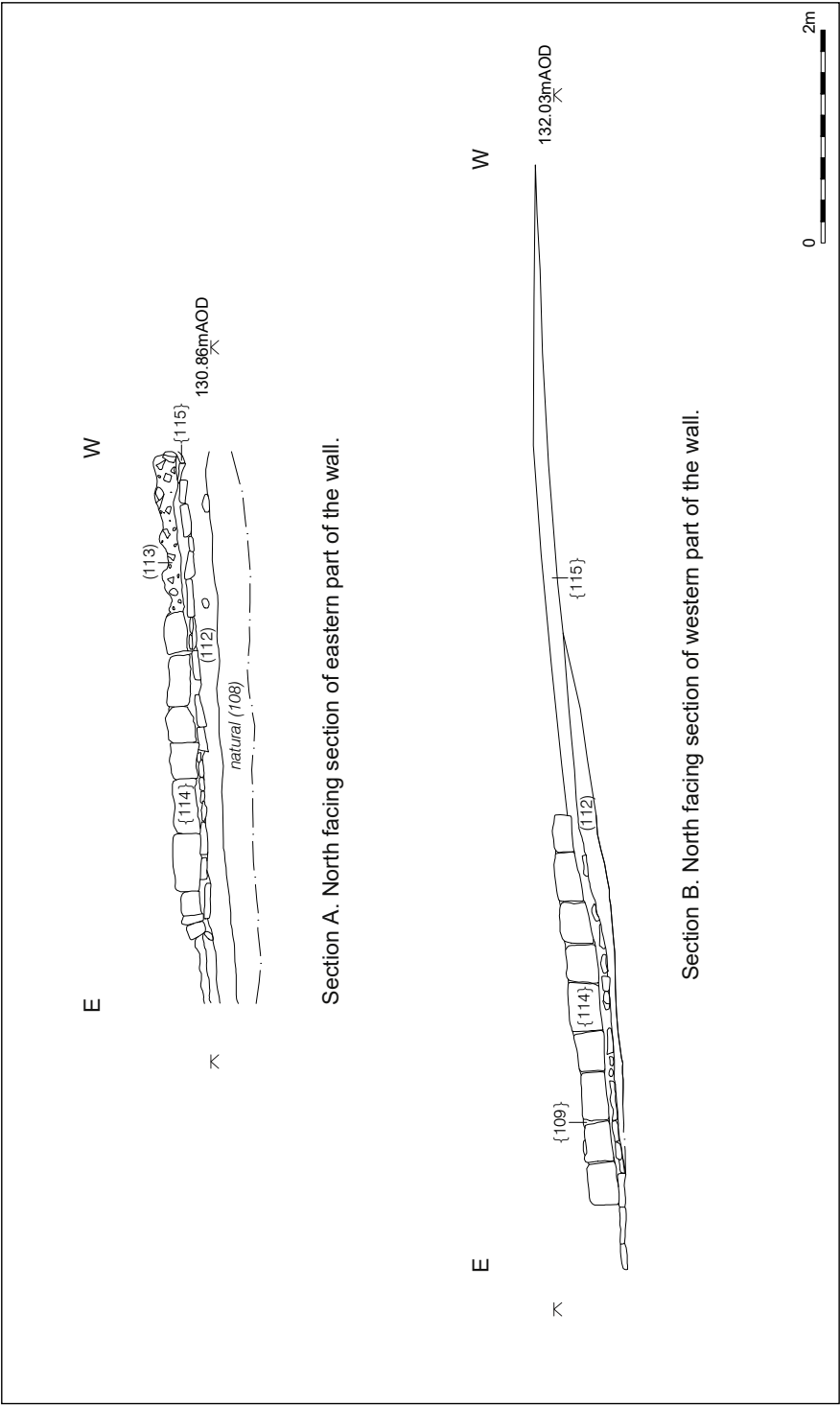


Fig. 6 North-facing sections/elevations of surviving sections of Hadrian's Wall and sealed deposits beneath.

the diesel store / site boundary. The section of the ditch that could be clearly observed measured over 20m in length. Two metres of its width could be observed within the site boundary. The ditch could only be excavated to a maximum depth of 0.7m due to safety concerns regarding the stability of the extant wall running along the site boundary. The excavated section of the ditch revealed that it was cut through a natural deposit of mixed sandstone and clay. A single fill (117) was observed. It was a dark grey, friable silt with frequent sub-angular sandstone inclusions.

In August 2019 the Wall Ditch's southern edge was again found within Evaluation Trench 8, excavated in the lane on the other side of the site's northern boundary, positioned along the line of the proposed service trench. Within Evaluation Trench 8 the Wall Ditch cut directly through sandstone bedrock. Evaluation trenches 9 and 10, also in the lane to the north of the site, were located entirely within the Wall Ditch's upper fills. In each of these three trenches the upper fills of the Wall Ditch were excavated to the maximum proposed depth for the service trench (1 metre), but no finds were retrieved.

The southern edge of the Wall Ditch (fig. 8) was located about 8 metres to the north of the line of Hadrian's Wall (fig. 2). This is slightly more than the standard 6.1m width of the northern berm between the Wall and defensive ditch (Symonds & Mason 2009, 45), although the greater truncation observed within the eastern part of the site could explain the increased distance between the two features. The northern edge of the Wall Ditch was not observed during the investigation. The upper fills of the Wall Ditch that were encountered during these interventions all appeared to have accumulated during the Post-medieval period.

#### *A Medieval Kiln*

Following the removal of most of the structural elements of the old diesel store in the north-east corner of the development area, the remains of a stone-lined medieval kiln were revealed (figs 10 and 11). Unlike the previously known medieval kiln, which was cut into the actual fabric of the broad wall 66m to the east, this feature was located about 3.5m north of the Wall and 1.5m south of the Wall Ditch (fig. 2). The kiln comprised a bowl-shaped cut which had been packed around the periphery with squared sandstone blocks forming a circular kiln wall (fig. 9, {121}). The kiln had a maximum internal diameter of 2m and survived to a height of 0.95m. The base of the kiln comprised a deposit of loosely packed irregular sandstone blocks {129} bedded in a dark grey silt {130}. It is unclear whether this represented a crude surface of the feature or a foundation deposit for a floor.

The kiln contained a total of three post-use fills. The primary fill of the kiln, context (126), was a soft dark grey, charcoal rich silt. Frequent rubble inclusions represented the collapse of the feature's superstructure. This was sealed by context (125), a further rubble deposit of loose silty clay and irregular sandstone blocks. Fragments of medieval pottery and animal bone were recovered from this fill, which was sealed by a final upper deposit of dark greyish brown silty clay, context (124).

An east-west aligned flue adjoined the western edge of the kiln. The flue was formed by two sandstone block walls (120) and measured c.1.1m in length and 0.85m in width, leading to a circular fire pit (fig. 9). The cut of the fire pit [122] measured c.1.3m in diameter and contained two fills (fig. 9, Section A). The primary fill was a loose mid grey silty clay (128) and contained several medium to large stones. The fill had been heavily contaminated by diesel, with rising water showing remnant diesel floating to the surface. The primary fill was sealed by a deposit



Fig. 7 and 8 Surviving sections of Hadrian's Wall (scale = 1 metre, shots face east and south respectively).

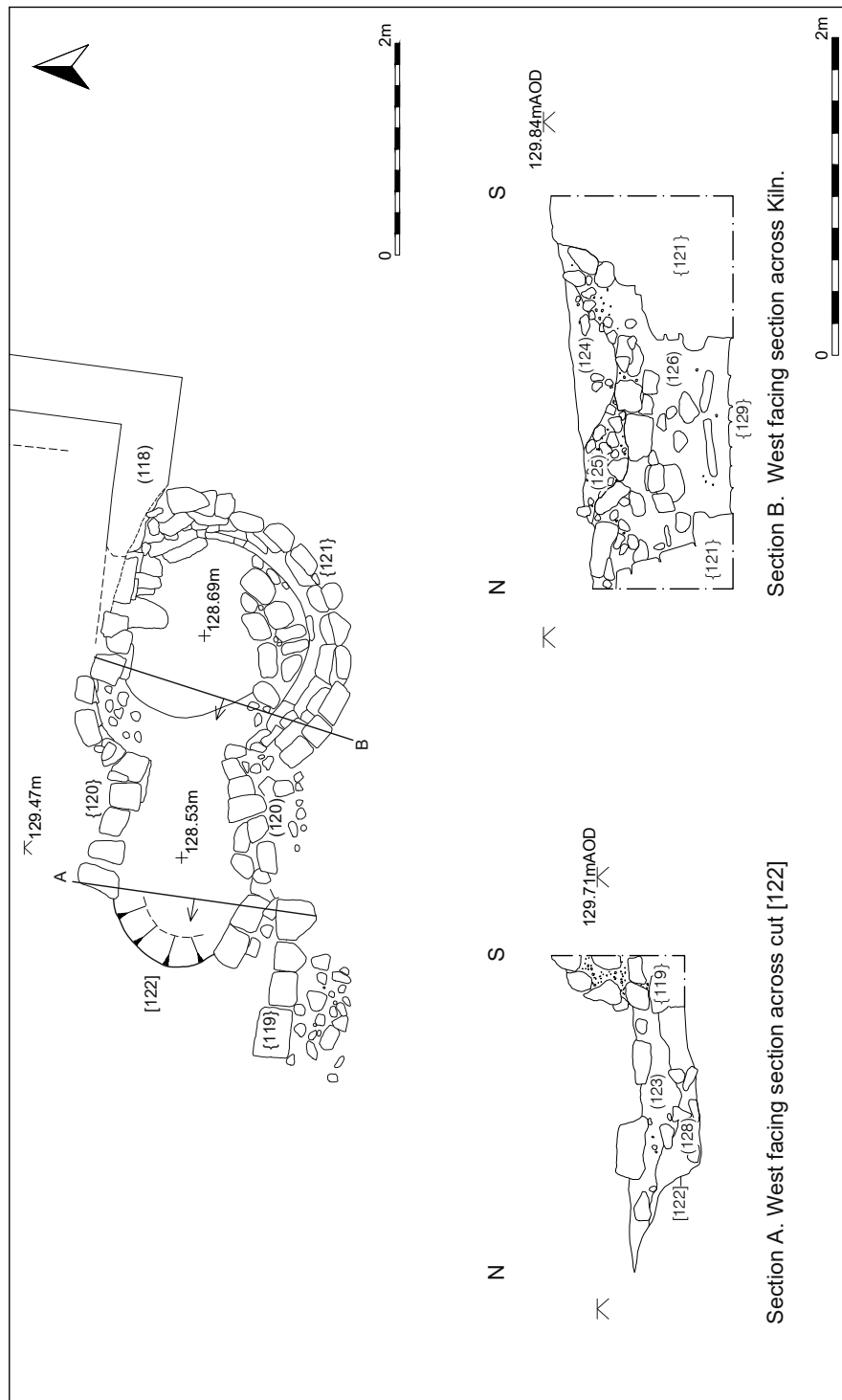


Fig. 9 Plan of, and sections through, medieval kiln.

of soft silty clay (123), which included frequent stone inclusions and occasional charcoal flecks.

Also probably associated with the kiln and its associated features was a short stretch of wall, aligned east to west (119) and truncated away on its western side. It marked the southernmost extent of the fire pit (fig. 9). The composition of the wall differed from the kiln and flue walls, being constructed from larger squared sandstone blocks. It seems highly probable that it was constructed with re-used foundation stones from Hadrian's Wall.

### *The Finds*

A total of 62 bulk artefacts weighing 0.58kg was recovered. Four of these, weighing 17g were recovered from two of the environmental samples. These bulk finds fall into the categories of pottery, animal bone, leather and iron slag, with animal bone constituting by far the greater proportion. The only small find, an annular jet bead, came from environmental sample 3, the upper fill of the medieval kiln's fire pit. Its date of production, whether Roman or medieval, is uncertain.

Apart from the animal bone, the bulk finds can be summarised as three sherds of medieval pottery, two small fragments of iron slag, two unidentified pieces of iron, and the sole of a Post-medieval leather shoe. The three sherds of medieval pottery constitute the only datable artefacts recovered. Two, belonging to two different vessels, were recovered from context (125), the rubble demolition deposit within the medieval kiln. The first is a reduced greenware cistern body sherd of 13th to 14th century date, the second a base sherd in a sandy fabric dating between the 14th to 15th century. Both fragments are in good condition with light abrasion recorded. A final fragment of 14th to 15th century pottery was recovered from environmental sample 3, the upper fill of the medieval kiln's fire pit. The sherd has a fully reduced dark grey fabric, with a dark green glaze on one surface. No sooting or decoration is evident.

The two small fragments of iron slag weighing a total of 16g, were recovered from environmental sample 9, taken from a deposit of silt below the kiln's floor. The Post-medieval leather shoe sole weighs 16g and was recovered from the upper fill of the Wall Ditch during the cutting of the service trench.

The remaining 53 items are all fragments of animal bone weighing a total of 0.44kg. These were recovered from three contexts: the upper fill of the Wall Ditch (117), the upper demolition deposit filling the medieval kiln (124) and fill (125), which was the middle fill excavated from the same feature. Ranging from poor to moderate condition, the fragments represented four individual animals.

Fragments recovered from the rubble fill (125) of kiln [121] weighed a total of 228g and include teeth and jaw fragments from a large adult bovine, along with unfused metacarpals of a juvenile bovine. A further 22 fragments weighing 181g were recovered from the upper fill (124) of the kiln, likely to be from a single adult bovine. These fragments were all in poor to moderate condition.

A single fragment of adult sheep radius weighing 28g was recovered from the fill (117) of ditch [116]. The sample is incomplete and is in moderate condition.

A total of 116g of animal bone was recovered from environmental samples 4 and 7, from the fill of the kiln's fire pit and the lower fill excavated from within the kiln's centre respectively. The condition of the animal bone is varied; the teeth are in good condition whereas the cortical surfaces of the limb bones are damaged and flaky. No butchery marks, pathological conditions or gnaw-marks were observed. Teeth from a pig/boar, ovid/caprid and a canid were recorded in Sample 4. Sample 7 contained a partial porcine humerus and miscellaneous limb bones.

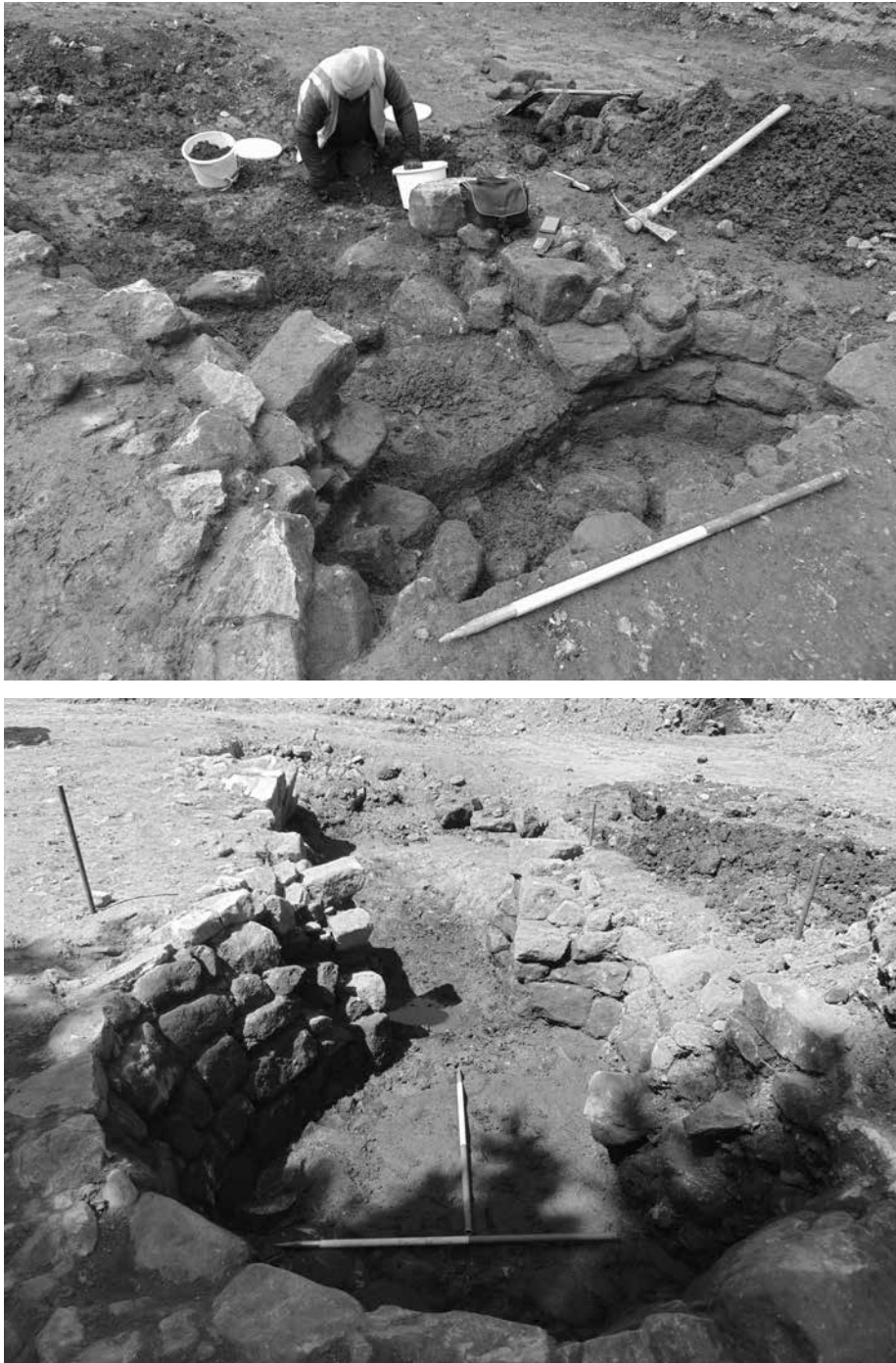


Fig. 10 and 11 Top: Medieval kiln mid-excavation (scale = 1 metre, Shot faces north-west).  
Bottom: Medieval kiln post-excavation (scale = 1 metre, shot faces west).

### *The Environmental Sampling*

Ten bulk environmental samples were taken from eight contexts during the watching brief. This amounted to 35 tubs and 249 litres of soil. Samples 1 and 2, taken from the buried soil found beneath Hadrian's Wall, were found to contain very little that could embellish archaeological interpretation. The same was true of samples 6 and 10 taken from the disturbed upper fills of the Wall Ditch. Samples 3 to 5 and 6 to 9 were taken from the medieval kiln, an area which was contaminated by diesel from the former diesel store. Sample 3 taken from the upper fill of the fire pit was the only one of the ten samples to yield charred plant remains. These were identified as a single naked wheat (*Triticum* cf. *aestivum*) and four oat (*Avena* sp.) grains and were in a relatively good state of preservation. The oat grains could not be identified to species, as no floret bases were observed.

The cereal grains are in such a small quantity that they can provide no meaningful archaeological discussion despite being recovered from an area of in situ burning. Charcoal was present in nine of the ten samples and was in a relatively good state of preservation. The charcoal was identified as being predominantly oak (*Quercus* sp.) with lesser amounts of Rosaceae mixed in. It seems likely that these woods were being used as fuel for the area of kilns during the medieval period. Radiocarbon dating could not be recommended due to the presence of hydrocarbons on site. Magnetised material was recovered from three samples with a combined weight of 5g; all consisted of naturally occurring magnetic stone.

### DISCUSSION: THE PROBABLE LOCATION OF MILECASTLE 12

As noted above, the measured location of Milecastle 12 falls within the development area, more or less precisely at the north-west corner of the former farm buildings. The identification of preserved remains of Hadrian's Wall at this location, in an area which had previously been assumed to have suffered complete truncation, warrants a reassessment of the probable location of this milecastle. The 2019 investigations have confirmed that the line of the Broad Wall was positioned rather too far south to have been disturbed by the widening of the old Carlisle to Newcastle road in 1926 (referred to above). If the pivot stone discovered during the 1926 roadworks was indeed part of the in situ northern gate of Milecastle 12, the clear implication is that its location is likely to have been farther west, close to where the projected line of the curtain wall meets the remains of the old road. In our estimation the discovery of the pivot stone in 1926 is most likely to have been some 90m farther to the west than the measured location of the milecastle, as indicated on fig. 2.

Supporting the idea that the discovery in 1926 was made farther to the west, is the fact that in 1856 the development area and the neighbouring plot of land to the west were both in possession of Messrs. Ord, Collingwood and Dutton Stobbs (2020) has correctly observed that if these two plots of land could both be referred to as Town Farm, it would make sense of the fact that the pivot stone was described as having been found 'close to the western end of an outbuilding of Town Farm'. The idea that the measured location of Milecastle 12 might have fallen west of the current development area, which he also refers to, cannot however be supported. The salient fact, which Stobbs does also note, is that the distance between the so-called 'milecastles' varied depending upon the terrain and the need to communicate with forts on the Stanegate (Breeze 2006, 64–65). A discrepancy of 90m, between a measured hypothetical mile separating two adjacent milecastles and the actual distance, would be slightly more than



the known average, but significantly less than the largest recorded discrepancy of more than 210m. The high level of truncation within the current development area leaves us with a high degree of uncertainty. It is still possible that the pivot stone was found during work linking up the east-west road with the north-south lane which separates these two plots of land. If any remains of the milecastle lay within the western half of the development area they are very likely to have been destroyed. The remaining uncertainty means that in future the location of the milecastle should be sought somewhere between the western boundary of the current development site and the Shell garage to the west that faces onto Hexham Road. Use of Ground-penetrating Radar could perhaps be used successfully to solve this long-standing question.

## CONCLUSIONS

The various phases of work carried out by Wardell Armstrong have confirmed the results of previous investigations and watching briefs carried out on the site i.e. that in parts of the development area all archaeological deposits have been removed by earlier construction work. The opportunity to evaluate a larger area has also demonstrated, however, that preserved areas of stratigraphy do exist within the site's boundary. With the exception of the easternmost section of the Broad Wall, found beneath the footprint of the former farm buildings which were extant at the time of the 2014 evaluation, and the medieval kiln, all of the archaeological discoveries were made within the area of the Scheduled Monument.

While the watching brief demonstrated that the curtain wall had been entirely removed by previous disturbance to the west and east of the footprint of the former farm buildings. Two truncated sections of the Broad Wall did survive, close to and beneath where the north-west corner of the buildings had once stood (fig. 2). No more than 20 metres of the wall's length could be traced with absolute confidence, and no clear evidence of Milecastle 12 was recovered within the development area to the south of this line. A review of the evidence for the 1926 discovery, undertaken as part of Wardell Armstrong's desk-based research, has led to the realisation that the milecastle may well have been positioned as much as 90m farther to the west than its measured position.

The southern edge of the Wall Ditch was accurately planned in two locations, in the north-east corner of the development area, and in the lane within Evaluation Trench 8. Although additional defensive features north of the Wall, such as *cippi* pits and a small bank on the southern edge of the ditch (Symonds and Mason 2009, 45) are well recorded along this stretch of the wall, no additional features associated with the Hadrian's Wall system were identified on this occasion. It is likely that extensive truncation at the site removed any evidence of such features. Finally, the discovery of the remains of a medieval stone-lined kiln at the site indicates that there may have been many more such kilns in operation in this area, and adds to our understanding of how people interacted with the monument beyond the Roman period.

## ACKNOWLEDGEMENTS

The project was managed by David Jackson. The watching brief was undertaken by Sue Thompson, Ron Brown, Charles Rickaby, Ed Johnson, Hayley Graham and Kevin Mounsey. The figures were produced by Helen Phillips and Matthew Hobson. The finds assessment was undertaken by Megan Stoakley and the paleoenvironmental work by Freddie Lowrie-Sisson and Lynne Gardiner, assisted by Katherine Bostock and Megan Lowrie-Sisson.

Wardell Armstrong LLP extends its thanks to Mr. Les Stephenson and Mr. Mark Gray of Newminster Properties for commissioning the project, and for all their assistance throughout. Wardell Armstrong thanks Mike Collins of Historic England and Karen Derham of Northumberland County Council for their advice throughout the project. Thanks are also due to Kapex Construction for their assistance during the project and in particular Michael Coulthard of Silverstone Building Consultancy, for his invaluable assistance during the project.

## NOTE

<sup>1</sup> Recent research has shown that RIB 1389, which attests building work on Hadrian's Wall in AD 158 and therefore provides evidence for the reoccupation of Hadrian's Wall after the abandonment of the Antonine Wall, was found in the Newburn area and not near Heddon (Hodgson 2011).

## BIBLIOGRAPHY

- BATES, C. J. 1886 'Heddon-on-the-Wall: the Church and Parish', *AA*<sup>2</sup>, 11, 240–294.
- BENNETT, J. 1998 'The Roman frontier from Wallsend to Rudchester Burn reviewed', *AA*<sup>5</sup>, 26, 17–37.
- BREEZE, D. J. 2006 *J. Collingwood Bruce's Handbook to the Roman Wall*, 14th ed, Newcastle.
- BREEZE, D. J., HILL, P., and THIEL, A. 2020 'The Stones, the Core and the Offsets on Hadrian's Wall', *AA*<sup>5</sup>, 49, 65–97.
- BREWIS, P. 1927 'Notes on the Roman wall at Denton Bank, Great Hill and Heddon-on-the-Wall, Northumberland', *AA*<sup>4</sup>, 4, 109–120.
- FRAIN, T., MCKELVEY, J., and BIDWELL, P. 2005 'Excavations and Watching Brief along the Berm of Hadrian's Wall at Throckley, Newcastle upon Tyne in 2001–2002', *Arbeia Journal* 8, 29–52.
- HODGSON, N. 2011 'The Provenance of RIB 1389 and the Rebuilding of Hadrian's Wall in AD 158', *Antiquaries Journal* 91, 59–71.
- HOOLEY, J. and BREEZE, D. J. 1968 'The building of Hadrian's Wall: a reconsideration', *AA*<sup>4</sup>, 46, 97–114.
- LAWSON, W. 1968 'The origin of the Military Road from Newcastle to Carlisle', *AA*<sup>4</sup>, 44, 185–207.
- NEEC 1929 *Second Report of The North of England Excavation Committee for the Years 1926–1928*, Privately printed and circulated.
- NEEC 1931 *Third Report of the North of England Excavation Committee for the Years 1929–1930*, Privately printed and circulated.
- PETERS, C. 2014 *Tulip's Haulage Yard, Heddon-on-the-Wall, Northumberland: a desk-based assessment*, Wardell Armstrong Archaeology, unpublished report.
- RAE, A. A. 2006 *Hexham Road, Throckley, Northumberland*, ASUD, unpublished report.
- SPAIN, G. R. B. and SIMPSON, F. G. 1930 'The Roman wall from Wallsend to Rudchester Burn', In M. H. Dodds (ed.), *A History of Northumberland*, Volume 13, Newcastle, 483–564.
- STOBBS, G. 2020 'The probable location of Milecastle 12, Heddon-on-the-Wall', *AA*<sup>5</sup>, 48, 167–170.
- SYMONDS, M. 2020 'Fords and the frontier: waging counter-mobility on Hadrian's Wall', *Antiquity* 94 (373), 92–109.
- SYMONDS, M. and MASON, D. 2009 *Frontiers of Knowledge: a Research Framework for Hadrian's Wall, part of the Frontiers of the Roman Empire World Heritage Site*, 2 Vols, Durham: Durham County Council & Durham University.
- WILMOTT, T. (ed.) 2000 *Hadrian's Wall: Archaeological research by English Heritage 1976–2000*, Swindon.
- WOOLLISCROFT, D. J. 1989 'Signalling and the design of Hadrian's Wall', *AA*<sup>5</sup>, 17, 5–19.

Matthew S. Hobson, Wardell Armstrong LLP, Burgh Road Industrial Estate, Marconi Rd, Carlisle, CA2 7NA.

mhobson@wardell-armstrong.com