

ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
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MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT



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TULIP MEWS
HEDDON-ON-THE-WALL
NORTHUMBERLAND

AUGUST 2020





DATE ISSUED: August 2020

JOB NUMBER: CL12097

SITE CODE: HED/ B

OASIS REFERENCE: wardella2-394155
SCHEDULED MONUMENT CONSENT NO: S00213496001

REPORT VERSION NUMBER: V0.2

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AUGUST 2020

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CONTENTS

SI	JMMA	.RY	1
Α	CKNO	VLEDGEMENTS	2
1	INT	RODUCTION	3
	1.1	Project Background	3
	1.2	Project Documentation	3
2	ME	THODOLOGY	4
	2.1	Standards and Guidance	4
	2.2	Archaeological Watching Brief	4
	2.3	Site Archive	5
3	BA	CKGROUND	6
	3.1	Location and Geological Context	6
	3.2	Historical and Archaeological Background	6
	3.3	Previous Archaeological Work	7
4	AR	CHAEOLOGICAL WATCHING BRIEF RESULTS	9
	4.1	Introduction	9
	4.2	Results	9
5	FIN	DS ASSESSMENT 1	3
	5.1	Introduction	3
	5.2	Animal Bone 1	.3
	5.3	Pottery	3
	5.3	Leather 1	4
	5.4	Finds from Environmental Samples 1	4
	5.5	Statement of Potential 1	4
6	PAI	LAEOENVIRONMENTAL ASSESSMENT 1	6
	6.1	Introduction	6
	6.2	Methodology 1	6
	6.3	Results	6
	6.4	Discussion	7
	6.5	Statement of potential and recommendations 1	8.
7	СО	NCLUSIONS	9
	7.1	Interpretation	9
	7.2	Significance	
8		LIOGRAPHY	
		ICES	



APPENDIX 1: CONTEXT TABLE	26
APPENDIX 2: PLATES	27
APPENDIX 3: TABLES	34
APPENDIX 4: FIGURES	37
APPENDIX 5: ARCHAEOLOGICAL EVALUATION REPORT	45
PLATES (APPENDIX 2)	
Plate 1; Site clearance works showing concrete foundations	27
Plate 2; Site clearance works and levelling of site	27
Plate 3; Foundations of Hadrian's Wall (109)	28
Plate 4; Foundation of Hadrian's Wall (109) with facing stones (114)	28
Plate 5; Hadrian's Wall foundations (109) including base stones (115), 1x 1.0m scale	29
Plate 6; Overview of potential Wall ditch [116] after initial exposure, 1x 1.0m scale	29
Plate 7; East facing section showing foundation cut [$f 132$] through potential Wall ditch [$f 1$.16],
1x 1.0m scale	30
Plate 8; Pre excavation shot of kiln [121], 2x 1.0m scales	30
Plate 9; Part excavated flue of kiln including demolition rubble (125), 1x 1.0m scale	31
Plate 10; Excavated kiln showing flagged floor (129)	31
Plate 11; Excavated kiln showing flagged floor (129)	32
Plate 12; Foundations showing sandstone bedrock (108)	32
Plate 13; Western end of service trench within military road showing bedrock (1002)	33

FIGURES (APPENDIX 4)

- Figure 1: Site Location
- Figure 2: Detailed site location during watching brief
- Figure 3: Overall site plan
- Figure 4: Detailed plan of Hadrian's Wall uncovered during watching brief
- Figure 5: Sections of Hadrian's Wall
- Figure 6: Detailed plan of kiln
- Figure 7: Sections of ditch [116] and kiln



SUMMARY

Wardell Armstrong LLP (WA) was commissioned by the client Mr Les Stephenson and Mr Mark Gray, to undertake an archaeological watching brief at Tulip Mews, Heddon-on-the-Wall, Northumberland, centred at National Grid Reference (NGR): NZ 1353 6694.

The watching brief was required to satisfy a condition of Scheduled Monument Consent (SMC ref: S00213496) and a condition of planning consent (Planning App. No. 18/01897/FUL), following advice provided by Mike Collins, Inspector of Ancient Monuments: Hadrian's Wall, at Historic England and Karen Derham, Assistant County Archaeologist at Northumberland County Council.

The archaeological watching brief was undertaken between November 2018 and February 2020 and followed a previous programme of work undertaken in 2014. The current phase of works revealed the foundations of Hadrian's Wall running across the site on an east-southeast to west-northwest alignment, in line with the extant remains of the Wall located to the east of the development area. The watching brief also revealed the southern edge of a large feature within the northeast corner of the site, believed to represent the remains of the Wall ditch located to the north of Hadrian's Wall. The projected course of the Wall ditch was investigated further during an associated trial-trench evaluation within the Military Road immediately north of the development site. Although the presence of the ditch could not be confirmed within the limited confines of the evaluation trenches, the abrupt termination of the bedrock pavement within one of the trenches and its complete absence within the others was conspicuous against the solid sandstone pavement observed either side of the Military Road.

Further remains revealed during the watching brief, included a stone-lined kiln and the remains of structures associated with the former haulage yard. Although the kiln was located between the Wall ditch and the projected line of Hadrian's Wall, dating evidence retrieved from the feature has highlighted that this was a later addition at the site, constructed during the medieval period.



ACKNOWLEDGEMENTS

Wardell Armstrong LLP extend their thanks to Mr. Les Stephenson and Mr. Mark Gray of Newminster Properties for commissioning the project, and for all their assistance throughout. Thanks, are also due to Mike Collins of Historic England and Karen Derham of Northumberland County Council for their advice throughout the project.

WA also thanks Kapex Construction for their assistance during the project.

The watching brief was undertaken by Sue Thompson, Ron Brown, Charles Rickaby, Ed Johnson, Hayley Graham and Kevin Mounsey. The report was written by Ed Johnson and the figures were produced by Helen Phillips. The finds assessment was written by Megan Stoakley and the paleoenvironmetal report written by Freddie Sissons. He was assisted by Katherine Bostock and Megan Lowrie. The report was edited by David Jackson who managed the project with Ed Johnson. The report was approved by Frank Giecco.



1 INTRODUCTION

1.1 Project Background

- 1.1.1 Between November 2018 and February 2020, Wardell Armstrong LLP (WA) undertook an archaeological watching brief at Tulip Mews, Heddon-on-the-Wall, Northumberland, centred at National Grid Reference (NGR): NZ 1353 6694. It was commissioned by Mr Les Stephenson and Mr Mark Grey of Newminster Properties who intend to construct five dwellings with associated garages and services.
- 1.1.2 The proposed development site is situated within an area of significant archaeological potential, located along the line of the section of Hadrian's Wall and vallum from East Town House, Heddon-on-the-Wall to the A69 trunk road in wall mile 12 (SM 26038; NHLE 1010617). The site is partially scheduled with works requiring both Scheduled Monument Consent (SMC ref: S00213496) and planning permission from Northumberland County Council (Planning App. No. 18/01897/FUL).
- 1.1.3 The proposed housing development is situated within an area of significant archaeological potential. As such, all excavations including the preparation of site, construction of foundations and excavation of service trenches on the site had to be subject to an archaeological watching brief.

1.2 **Project Documentation**

- 1.2.1 The project conforms to a written scheme of investigation (WSI), which was required as a condition of both SMC and planning permission and was prepared in consultation with Mike Collins, Inspector of Ancient Monuments: Hadrian's Wall at Historic England and Karen Derham, Assistant County Archaeologist at Northumberland County Council. Several WSI's (WA 2019a-d) were produced to provide a specific methodology for the archaeological watching brief. This was approved by the archaeological planning advisors prior to the fieldwork taking place. This is in line with government advice as set out in Section 16 of the National Planning Policy Framework 2019 (MHCLG 2019).
- 1.2.2 This report outlines the work undertaken on site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological watching brief.



2 METHODOLOGY

2.1 Standards and Guidance

- 2.1.1 The archaeological watching brief was undertaken following the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological watching brief* (2014a), and in accordance with the WA excavation manual (2017).
- 2.1.2 The watching brief was followed by an assessment of the data as set out in the Standard and guidance for an archaeological watching brief (CIfA 2014a) and the Standard and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b).

2.2 Archaeological Watching Brief

- 2.2.1 The archaeological watching brief was undertaken to monitor all excavations on the site in advance of the construction of five dwellings and associated garages and services. The watching brief was undertaken in accordance with the approved WSI's (Wardell Armstrong 2019a, 2019d).
- 2.2.2 Deposits considered not to be significant were removed by a 360° tracked mechanical excavator with a toothless ditching bucket, under close archaeological supervision. All possible features or deposits were inspected, and selected deposits were excavated by hand to retrieve artefactual material and environmental samples. Once completed all features were recorded according to the WA standard procedure as set out in the Excavation Manual (WA 2017).
- 2.2.3 The identified remains of Hadrian's Wall were fully recorded and located using a Trimble R8 GNSS GPS unit with sub 0.05m 3DQ accuracy, prior to 100% excavation. Following the identification of Hadrian's Wall, a more detailed level of investigation at the site was initiated following advice from the Northumberland County Council Conservation Team and Historic England, and was undertaken in accordance with the updated WSI's (Wardell Armstrong 2019b, 2019c).
- 2.2.4 All finds encountered were retained on site and returned to the Carlisle office where they were identified, quantified and dated to period. A terminus post quem was then produced for each stratified context under the supervision of the WA Finds Officer, and the dates were used to help determine the broad date phases for the site. On completion of this project, the finds were cleaned and packaged according to standard guidelines (Watkinson and Neal 1998). Please note, the following categories of material will be discarded after a period of six months following the submission of this



report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- modern pottery;
- material that has been assessed as having no obvious grounds for retention.

2.3 Site Archive

- 2.3.1 A full professional archive has been compiled in accordance with the project specification, and the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited with the Great North Museum, Newcastle, with copies of the report sent to the County HER, available upon request. The archive can be accessed under the unique project identifier WA19/HED-B/CL12097.
- 2.3.2 Wardell Armstrong LLP supports the Online AccesS to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by WA as a part of this national project. The OASIS reference for the project is: wardella2-394155.



3 BACKGROUND

3.1 Location and Geological Context

- 3.1.1 Heddon-on-the-Wall lies within the undulating farmland of the Tyne Valley, north of the River Tyne and approximately 13km west-north-west of Newcastle-upon-Tyne, and approximately 16km east of Corbridge (Figure 1).
- 3.1.2 The proposed area of works is situated along the former Carlisle to Newcastle turnpike road and is bound to the north by Four Winds house and to the south by the former Tulip's Haulage Yard (Figure 2).
- 3.1.3 The solid geology consists of Pennine Lower Coal measures formation, comprising interbedded grey mudstone, siltstone and pale grey sandstone (BGS 2020). The drift geology consists of Glaciolacustrine Deposits of silt and clay (*ibid*).

3.2 Historical and Archaeological Background

- 3.2.1 **Introduction**: This historical background is compiled from secondary sources and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 Prehistoric: Evidence for prehistoric activity in the vicinity has come from the discovery of Neolithic polished stone axes within the garden of a nearby residential property. To the southwest of the works area a Bronze Age axe head has also been found. Possible evidence for later prehistoric activity comes from the possible site of a hut circle on Heddon Common (Bates 1880).
- 3.2.3 Roman Period: The area lies within a zone of high archaeological sensitivity, located along the line of Hadrian's Wall and vallum between wall mile 11 (NHL 1010616) and wall mile 12 (NHL 1010617). Begun in AD 122, the wall was a composite military barrier, which in its final form comprised a stone wall, fronted by a V-shaped ditch, and a number of purpose-built stone garrison fortifications such as forts, milecastles and turrets. A large earthwork and ditch built parallel with, and, to the south of the wall, known as the Vallum, and a metalled road linking the garrison forts, which is known as the 'Roman Military Way', completed the northern military boundary.
- 3.2.4 **Medieval**: The focus for the early 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-southwest of the development site, incorporating Norman and late Anglo-Saxon work. An 11th century finial cross or grave marker also survives in the chancel. The church mainly dates to the 12th/13th century



- however, indicative of a well-established settlement for it to serve by this time (Peters 2014).
- 3.2.5 An archaeological evaluation, undertaken approximately 1km to the east of the site revealed the upper levels of the Vallum ditch (Rae 2006). Dating of the deposits showed the ditch had been a large open feature in the 10th and 11th centuries and had been used as a dump for both domestic and industrial waste. It is possible that the Wall ditch was also used as a dump for waste during later periods.
- 3.2.6 **Post-medieval**: The military road was constructed after 1745, after General Wade experienced difficulty moving troops westwards from Newcastle to stop Bonnie Prince Charlie's march from Scotland. A milestone survives behind a wire fence on the northern side of the B6528 (Peters 2014). Several buildings situated around the area of works include the Grade II listed buildings of Heddon Banks farmhouse and associated farm buildings and gingang (*ibid*).

3.3 **Previous Archaeological Work**

- 3.3.1 In 2014, Wardell Armstrong carried out a desk-based assessment of the site, which was followed by a trial-trench evaluation. The desk-based assessment highlighted the significant archaeological potential of the site (Peters 2014), however, the subsequent evaluation failed to identify any archaeological remains (Jackson 2014). The evaluation comprised five trenches within the development boundary, four of which were located across the projected line of Hadrian's Wall. Based upon the results of the present investigation, it appears that two of these trenches were located further north than the actual course of the Wall, located between the Wall and the Wall ditch, with a further two located on the actual line of the Wall, but in a part of the site where the feature either did not survive or was so poorly preserved that, within the confines of the trench, the degraded remains of the Wall appeared indistinguishable from the surrounding fragmented bedrock.
- 3.3.2 In August 2019, Wardell Armstrong carried out a trial-trench evaluation in advance of the excavation of a service trench associated with the development at Tulip Mews, which required an amendment to the existing Scheduled Monument Consent (SMC ref: S00222353). The evaluation comprised the excavation of three trenches within the Military Road immediately to the north of the development site, situated across the projected line of the Wall ditch (Figure 3). Two of the trenches revealed silty clay deposits of unknown origin, with the third and westernmost trench, revealing the natural sandstone outcrop which abruptly terminated, giving way to a deposit of



mixed sand and fragmented sandstone within the northern half of the trench (Wardell Armstrong 2019e; Appendix 5). Although the presence of the Wall ditch could not be confirmed, the abrupt termination of the natural bedrock within one of the trenches and its equally abrupt reappearance below an extant boundary wall to the north of that trench was conspicuous. Equally conspicuous was the absence of natural bedrock within the other two trenches, given that the sandstone outcrop was clearly present within an elevated position immediately to the south. Whilst the termination and sudden reappearance of the natural bedrock on either side of the road would certainly indicate something had cut through the outcrop at this point, it is unclear exactly what this was. It is possible that this occurred during the 18th century with the construction of the Military Road, or during some other unknown process. Equally plausible however, is that this disturbance occurred during the creation of the Wall ditch which likely remained as a substantial earthwork visible within the landscape, certainly until the creation of the Military Road.



4 ARCHAEOLOGICAL WATCHING BRIEF RESULTS

4.1 Introduction

4.1.1 The archaeological watching brief was undertaken between November 2018 to February 2020 and included site levelling, the excavation of foundation trenches and drainage trenches. All ground reduction was monitored to the level of natural bedrock.

4.2 Results

- 4.2.1 Excavations on the site began in late 2018 with the clearance of the proposed development area. This included the removal of the standing remains of modern buildings, foundations and concrete surfaces (100/104/106) (Plate 1). Several of the surfaces lay above levelling deposits (103) containing demolition rubble, sand and soil, which covered the yellow clay natural (105). Towards the south of the site, a cast concrete inspection chamber (102) overlaying the natural was also removed. These remains were likely associated with the site's usage as a haulage yard in the 20th century.
- 4.2.2 Work on the site ceased until February 2019 when further ground reduction to the north-west of the site revealed yellow sandstone bedrock (108). This was overlain by a thin layer of dark grey black sandy silt topsoil (107) measuring between 0.05m-0.2m (Plate 2). Further work in the north-west of the site revealed the remains of Hadrian's Wall (109) containing irregular sized worked sandstone blocks (Figures 3-5). These blocks displayed a pressed clay bond with several facing stones remaining on the northern side of the wall. The southern side of the wall had largely been truncated by the later farm buildings and a demolition deposit (113) was situated to the north of the wall, probably associated with the demolition of these later buildings. The wall was sealed by c.0.05m of topsoil (107).
- 4.2.3 The core of the wall (109) (Plate 3) measured over 2.0m in width and was faced by fitted worked sandstone blocks (114) (Plate 4). These stones had an average width of 0.40m and height of 0.30m and were shaped to fit closely together with no bonding material observed. The facing stones overlay a series of sandstone slabs (115) forming a base for the wall (Plate 5). These slabs were mixed with a firm yellow clay and were directly above a soft dark brown sandy clay (112) buried soil. The buried soil measured 0.2m in depth on average and contained small amounts of rounded pebbles and occasional charcoal flecks. Two samples <1> and <2> were taken from the deposit.



This buried soil was located above the sandstone bedrock (108) and was only visible below the remaining sections of the wall.

- 4.2.4 Several sections were excavated across the revealed length of Hadrian's Wall (Figure 5). These sections revealed that the remains of the wall measured 2.9m in width on average and survived to a maximum height of 0.45m. As the wall was removed it was confirmed that the core of the wall (109) was held together with clay whilst the facing stones were worked, providing a regular foundation course (114). As excavations continued within the eastern half of the site, no further remains of Hadrian's Wall survived, with ground reductions for the 20th century haulage yard possibly removing any subsequent remains.
- 4.2.5 Ground reduction work within the north-eastern extent of the site revealed a feature probably representing the remains of the Wall ditch to the north of Hadrian's Wall (Figures 3 & 6). The ditch [116] was aligned north-northwest to south-southeast (Plate 6), although only its southern edge was revealed within the site boundary. The observed section of the ditch measured over 10.5m in length and over 2m in width. The ditch was only excavated to a maximum depth of 0.7m due to safety concerns regarding the stability of an adjacent extant wall. The excavated section of the ditch revealed that it was cut through a natural deposit of mixed sandstone and clay (105) and retained a profile which ranged from gradually sloping to steep, becoming more pronounced towards the excavated limit of the feature. The ditch contained a single fill of dark grey silt with frequent sandstone inclusions (117) (Figure 7; Section 13, Plate 7). A single sample <6> was recovered from the fill, although high amounts of diesel contamination were noticeable. The fill (117) of the Wall ditch had been truncated by the foundation cut [132] for wall (118), which formed the northern extent of a former diesel store and the northern boundary of the site.
- 4.2.6 Following the removal of the diesel store and several deposits forming the entrance to the site, the remains of a stone-lined kiln were revealed (Figure 6). The kiln comprised a bowl-shaped cut [127] which had been packed around the periphery with squared sandstone blocks forming the circular wall of the kiln (121) (Figure 7, Section 19; Plates 8, 10 & 11). The kiln retained a maximum diameter of 2m and measured over 0.95m in height. The base of the kiln comprised a deposit of loosely packed irregular sandstone blocks (131), although it is unclear whether this represented an earlier crude surface of the feature or a foundation deposit for the kiln floor. Deposit



- (131) was sealed by a 0.2m deposit of soft grey/black silt (130), which was directly below the flagged floor (129) of the kiln (Plates 10 & 11).
- 4.2.7 The kiln (121) contained a total of three fills (Figure 7, Section19). The primary fill of the kiln comprised a soft dark grey silt (126) with frequent charcoal inclusions, which possibly relates to the use of the feature. A sample <7> was taken from this deposit. The primary fill was sealed by a rubble deposit of loose silty clay and irregular sandstone blocks (125) (Plate 9). Fragments of medieval pottery and animal bone were recovered from deposit (125), which may represent the partial collapse of the structure. The rubble deposit was sealed by an upper deposit of dark greyish brown silty clay (124).
- 4.2.8 An east to 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, 0.85m in width, leading to a circular fire pit (Figure 6). The fire pit [122] measured c.1.3m in diameter and contained two fills (Figure 7, Section 14). The primary fill consisted of loose mid grey silty clay (128) and contained several medium to large stones throughout. The fill had been heavily contaminated by diesel with rising water showing remnant diesel floating to the surface. A sample of the deposit was taken during the excavation <4>. The primary fill was sealed by a deposit of soft grey black silty clay (123), which included frequent stone inclusions and occasional charcoal flecks. Two samples <3> and <5> were recovered from the upper deposit during excavation, with one of the samples producing a fragment of medieval pottery and a complete annular bead.
- 4.2.9 Also likely associated with the kiln and its associated features was an east to west aligned wall (119) which marked the southernmost extent of the fire pit [122] (Figure 6). The composition of wall (119) differed from the kiln and flue walls, being constructed from larger squared sandstone blocks (Figure 7, Section 12). This initially led to the belief that the structure may represent further remains of Hadrian's Wall. However, the remains were located much further north than the line of Hadrian's Wall and were of much poorer construction. It is possible however, that the structure (119) was constructed with re-used foundation stones from Hadrian's Wall.
- 4.2.10 Additional site works monitored during the watching brief included the excavation of wall foundations (Plate 12), site landscaping and service trenches. A section of trenching for services was undertaken following a programme of evaluation within the Military Road to the north of the site (see Appendix 5). The service trench within this area measured 1.0m in width and reached a depth of approximately 1.2m. Excavations



revealed a yellow sandstone bedrock (1002) below hardcore (1001) and tarmac (1000) within the western and central sections of the service trench (Plate 13). The sandstone bedrock was replaced by a deposit of dark grey silty clay (1004) throughout the eastern section of the trench, which probably corresponds with deposit (105) observed within the easternmost trench of the evaluation. Although this change could suggest that the bedrock had been truncated at this point, no clear cut was observed within the confines of the excavation area.



5 FINDS ASSESSMENT

5.1 **Introduction**

- 5.1.1 A total of 58 bulk artefacts, weighing 565g, were recovered during the archaeological investigation at Heddon-on-the-Wall. A small quantity of finds, weighing 17g, were recovered from two environmental samples.
- 5.1.2 All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists (CIfA) Standard & Guidance for the collection, documentation, conservation and research of archaeological materials (2014b). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011) and EAC (2014). The archive has the unique project identifier WA 20 / CL12097 / HED-B.
- 5.1.1 The material archive has been assessed for its local, regional and national potential and, where necessary, further work has been recommended on the potential for the material archive to contribute to the relevant research frameworks. Quantification of artefacts by material and context is given in Table 5.1 (Appendix 3).

5.2 **Animal Bone**

- 5.2.1 In total, 53 fragments of bone weighing 437g were recovered from three contexts (Table 5.1). Ranging from poor to moderate condition, the fragments represented four individual animals.
- 5.2.2 Fragments recovered from the rubble fill (125) of kiln [121] totalled 228g and include adult 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.
- 5.2.3 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.
- 5.2.4 No further analysis is recommended.

5.3 **Pottery**

5.3.1 Two sherds of pottery were recovered from a single context; the rubble fill (125) of kiln [121]. Both fragments are in good condition with light abrasion recorded. An additional fragment was recovered during environmental sampling and is discussed within section 5.4.



- 5.3.2 The pottery was examined with a x10 hand lens and recorded according to national guidelines (PCRG, SGRP & MPRG 2016).
- 5.3.3 A minimum number of two vessels have been identified, including a reduced greenware cistern body sherd of 13th to 14th century date and a base sherd in a sandy fabric dating between the 14th to 15th century.
- 5.3.4 No further analysis is recommended.

5.3 Leather

- 5.3.1 A single leather object, weighing 16g, was recovered from context (**1003**); the fill of a modern service trench (Table 5.1, Appendix 3). The artefact is in good condition.
- 5.3.2 The artefact comprises the sole of a late post-medieval to modern shoe or boot.
- 5.3.3 No further analysis is recommended.

5.4 Finds from Environmental Samples.

- 5.4.1 A total of 17g of finds were recovered from two environmental samples (Table 5.2, Appendix 3). The finds, although small, are in relatively good condition.
- 5.4.2 A single sherd of 14th to 15th century pottery, weighing 0.5g, was recovered from <**3**> (**123**); the fill of fire pit [**122**]. The sherd has a fully reduced dark grey fabric with a dark green glaze on one surface; no sooting or decoration is evident.
- 5.4.3 A complete annular jet bead, weighing 0.5g, was recovered from sample <3>, also taken from the fill (123) of the fire pit. A broad date of Roman to medieval has been attributed to it, however, its recovery alongside a sherd of 14th to 15th century pottery could indicate that a medieval date is more likely.
- 5.4.4 Two fragments of probable bloomery waste, weighing 16g, were recovered from <4> (130); a deposit of silt below the kiln floor (129). The fragments are of unknown date. The small quantity of the industrial waste recovered is not indicative of any small or large-scale industrial activity taking place either on the site or in its environs.
- 5.4.5 No further analysis is recommended.

5.5 Statement of Potential

5.5.1 The sherds of medieval pottery recovered from the site provides some evidence of medieval activity at the site. The bead likely comprises casual loss; a broad date of Roman to medieval has been attributed to it.



- 5.5.2 The animal bone assemblage demonstrates evidence of occupation within the site or within its environs. No butchery marks were visible on any fragments and are given a broad date but are most likely from the Roman to medieval period.
- 5.5.2 The late post-medieval to modern shoe / boot fragment and the industrial waste are of little archaeological significance.

5.5.3 The finds assemblage is of low archaeological significance overall.



6 PALAEOENVIRONMENTAL ASSESSMENT

6.1 **Introduction**

6.1.1 Ten bulk environmental samples were taken during the archaeological investigation at Heddon-on-the-Wall. This chapter presents the results of the assessment of the environmental samples, zooarchaeological, palaeobotanical and charcoal remains in accordance with Campbell *et al.* (2011) and English Heritage (2008).

6.2 **Methodology**

- 6.2.1 The bulk environmental samples were processed at Wardell Armstrong LLP. The colour, lithology, weight and volume of each sample was recorded using standard Wardell Armstrong pro forma recording sheets. cf. Table 6.1 (Appendix 3). The samples were processed with 500 micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). Once dried, the residues from the retention mesh were sieved to 4mm and the artefacts and ecofacts removed from the larger fraction and forwarded to the finds department. The smaller fraction was scanned with a magnet for microslags such as hammerscales. This fraction was then examined for smaller artefacts such as beads.
- 6.2.2 The flot, plant macrofossils and charcoal were retained and scanned using a stereo microscope (up to x45 magnification). Any non-palaeobotanical finds were noted on the flot pro forma, cf. Table 6.2 (Appendix 3). In samples <3>, <4>, <5> and <7> 50% of the charcoal was identified due to the quantities present.
- 6.2.3 The plant remains and charcoal were identified to species as far as possible, using Hather (2000), Cappers and Neef (2012), Jacomet (2006) and the author's reference collection. Nomenclature for plant taxa followed Stace (2010) and cereals followed Cappers and Neef (2012). Guidelines adhered to for zooarchaeological analysis include 'Animal Bones & Archaeology: recovery to archive (Baker & Worley 2019) plus reference material from Schmid (1972), Serjeantson (1996) and Hillson (1992). The author's in-house skeletal reference collection and technical manual were also used to aid identification of species.

6.3 **Results**

6.3.1 During the processing it was noted that <1> was duplicated within the on-site records, but with different context numbers. Therefore, a new sample number of <10> was assigned to (1003).



- 6.3.2 The only sample to yield any charred plant remains was <3>, from fill (123) of fire pit [122]. 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 level as no floret bases were observed.
- 6.3.3 Charcoal was present in nine of the ten samples (cf. Tables 6.2 and 6.3, Appendix 3) and was in a relatively good state of preservation. Five of the samples yielded less than 3g. The four remaining assemblages were larger; <3> from fill (123) and <4> and <5> both from lower fill (128), all taken from fire pit [122]. Sample <3> yielded 243g, <4> yielded 66g and <5> yielded 20g. Sample <7> from the lower fill of kiln [121] yielded 38g. The charcoal was identified as predominantly oak (*Quercus* sp.) with lesser amounts of rose (Rosaceae) mixed in.
- 6.3.4 Magnetised material was recovered from three samples with a combined weight of 5g; all consisted of naturally occurring magnetic stone.
- 6.3.5 A total of 116g of animal bone was recovered from two environmental samples <**7**> (**126**) and <**4>** (**130**); *cf.* Table 6.4 (Appendix 3). 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. Per context, a minimum of four individuals are present in this small assemblage. No butchery marks, pathological conditions or gnaw-marks were observed.
- 6.3.5 A partial porcine humerus was recorded in <7> (126); miscellaneous limb bones and teeth from a pig / boar, Ovid / Caprid and a canid were recorded in <4> (130).
- 6.3.6 Artefactual material recovered from samples includes examples of industrial waste, pottery and a single jet bead discussed in the finds chapter of this report.

6.4 **Discussion**

- 6.4.1 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.
- 6.4.2 The four larger assemblages of charcoal discussed in 6.3.3 were all recovered from areas of burning and present an insight into the types of trees used for fuel in the past at this site.
- 6.4.3 The animal bone could not be dated visually; the assemblage likely represents domestic food waste and the teeth may have originated on the site through casual loss.



6.5 Statement of potential and recommendations

- 6.5.1 Due to the site being a former haulage yard, diesel was present in the samples and due to the hydrocarbons contaminating the ecofactual material none of it can be submitted for radiocarbon dating. As only 50% of the charcoal was identified, any fragments linked to areas of burning, such as the fire pit, should be retained at this time. Charcoal from other areas is likely to have been deposited through other methods and offers little further potential and can be discarded.
- 6.5.2 All flot material has been 100% sorted during processing. Any material recovered will be retained with the archive.
- 6.5.2 No further analysis on the animal bone is warranted.
- 6.5.3 The magnetised material offers no further potential and may be discarded prior to museum deposition.



7 CONCLUSIONS

7.1 Interpretation

- 7.1.1 During the archaeological watching brief at the site, all groundworks undertaken within the site boundary were monitored during the construction of a housing development. The excavation area revealed sandstone bedrock to the west and a firm clay mixed with sandstone fragments to the east.
- 7.1.2 Archaeological remains were identified with the foundations of Hadrian's Wall located centrally within the site and a medieval stone-lined kiln and the southern edge of the probable Wall ditch identified within the north-eastern corner of the site. Although the development site is located within a partially scheduled area on the projected line of Hadrian's Wall and its associated defensive ditch, the survival of remains associated with these features was somewhat surprising as a preceding evaluation undertaken during 2014 did not reveal any archaeological remains. However, the watching brief phase of work has revealed that the trenches were either located off the actual line of the Wall and Wall ditch, or within areas where the Wall did not survive or was so poorly preserved that the remains were indistinguishable from the surrounding fragmented bedrock. Even so, it does serve to highlight some limitations of trial-trench evaluation.
- 7.1.3 The remains of Hadrian's Wall identified at the site measured *c*.20m in length and comprised facing stones laid on a foundation of flat sandstone slabs, with a core of irregular sized sandstone fragments set in puddled clay. The Wall survived to a maximum height of 0.45m and was 2.9m at its widest surviving point. The width of the surviving remains is consistent with the Broad Wall sections of the monument, which was originally designed to be 2.9m wide (Symonds & Mason 2009, 38; Table 2). It is also consistent with the surviving extant section of the Wall located to the east of the site (NHLE 1010616) which measures between 2.8m and 3m in width.
- 7.1.4 Although a large section of the Wall survived within the central portion of the site, no traces of the monument were identified to the west or east. This may not be surprising however, as it was noted that the bedrock was extremely shallow within the western part of the site, suggesting that significant ground reduction had previously occurred, and that there was a greater level of disturbance associated with the former haulage yard within the eastern part of the site. The Wall had also clearly suffered some truncation during the construction of the farm buildings. Ironically, it appears that the location of these buildings aided the preservation of this section of the monument.



- 7.1.5 The identification of the probable Wall ditch adjacent to the northern boundary of the site is also significant, although there was some uncertainty as to whether the feature actually did represent the remains of the northern defensive ditch or simply the foundation cut for the former diesel store/boundary wall. However, there are several reasons to suspect that the feature identified on site was indeed the southern edge of the Wall ditch, not least because it is was situated on the projected line of the defensive feature. The ditch was clearly not associated with the construction of the diesel store as it continued under both the eastern and western walls of the building without following the line of these return walls and was far more substantial than required for the extant structure. In addition, the fill of the proposed Wall ditch had been cut by a near-vertical sided feature, likely the actual foundation cut for the northern wall of the diesel store/site boundary.
- 7.1.6 Further potential evidence for the presence of the Wall ditch was identified during the associated trial-trench evaluation within the Military Road, immediately north of the site boundary (Appendix 5). One of the evaluation trenches clearly demonstrated that the sandstone bedrock had been cut by a substantial feature, whilst the other two trenches revealed deposits which were clearly not natural, one of the which was very similar to the silty clay fill of the proposed Wall ditch identified within the site boundary. It is likely that the Wall ditch remained a substantial visible earthwork within this part of the landscape, certainly until the creation of the Military Road.
- 7.1.7 Accepting that the linear feature identified within the site boundary was the Wall ditch, this would give a distance of approximately 7.5m between the ditch and the Wall itself. 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 likely accounts for the increased distance between the two features.
- 7.1.8 Apart from the Wall and the Wall ditch, no additional features associated with the Hadrian's Wall system were identified. Although additional defensive features north of the Wall, such as *cippi* pits (e.g. Frain *et al* 2005) and a small bank on the southern lip of the ditch (Symonds & Mason 2009, 45) are well recorded within the area, it is likely that extensive truncation at the site removed any evidence of such features. Similarly, no evidence for Milecastle 12 was identified, which has long been suspected to be located within the immediate vicinity of the site (Peters 2014). However, if the Milecastle was once located towards the western extent of the site, it is likely that any



- evidence of the structure was completely removed during later phases of activity as has previously been noted (Collingwood Bruce 1966, 59).
- 7.1.9 In addition to remains associated with Hadrian's Wall, the watching brief also identified a well preserved stone-lined kiln with associated fire pit and flue. The kiln was initially considered to be associated with the Roman activity at the site, but the recovery of several sherds of medieval pottery from the feature (the only medieval pottery recovered anywhere during the watching brief) and its location on the northern side of the Wall has highlighted that it relates to a later phase of activity, probably the 14th or 15th century. Apart from the recovery of oak charcoal, primarily from the fire pit, no indication of use of the kiln was identified, although it is possible that the feature was used as a corn-drying kiln similar to the medieval kiln built into the extant section of the Wall immediately to the east of the site.
- 7.1.10 It is not entirely clear why the kiln was so well preserved when all traces of Hadrian's Wall had disappeared within that part of the site, unless that section of the Wall had already mostly been removed by the 14th century. Certainly, at least one part of the kiln structure appears to have re-used facing stones from the Wall, possibly utilising the last remnants of the Wall foundations for its construction. It is also possible that the kiln was intentionally constructed at a lower level for functional purposes, leading to its better preservation. Even allowing for the natural eastward slope of the site, the foundations of the kiln were at a much lower level than the remains of the Wall further west.

7.2 Significance

7.2.1 The identification of a previously unknown section of Hadrian's Wall is significant and demonstrates that the well preserved remains of the monument can still survive, even in areas of significant later disturbance. Also of significance was the survival of the proposed Wall ditch, although the interpretation of this feature is slightly more tenuous than the Wall itself, and the remains of a medieval stone-lined kiln at the site. The latter feature in particular adds further evidence of how people interacted with the monument beyond the Roman period. The results of the archaeological watching brief will therefore add to our knowledge regarding this internationally significant monument.



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APPENDICES



APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Demolition
101	Structure	Concrete floor
102	Structure	Cast concrete inspection chamber
103	Deposit	Levelling layer
104	Structure	Stone wall remains (north wall)
105	Natural	Natural substrate
106	Structure	Stone wall remains (south wall)
107	Topsoil	Dark grey/ black sandy silt
108	Natural	Sandstone bedrock
109	Structure	Hadrian's Wall foundation core
110	Surface	Tarmac (north of site)
111	Deposit	Hardcore
112	Layer	Dark brown sandy silt buried soil
113	Deposit	Demolition rubble, north of wall
114	Structure	Hadrian's Wall- facing stones
115	Structure	Hadrian's Wall- base stones
116	Cut	Hadrian's Wall ditch
117	Fill	Upper fill of [116]
118	Structure	Former diesel store
119	Structure	E-W Wall
120	Structure	Wall
121	Structure	Circular wall of kiln
122	Cut	Cut of fire pit
123	Deposit	Fill of fire pit
124	Deposit	Upper fill of kiln
125	Deposit	Rubble fill of kiln
126	Deposit	Lower fill of kiln
127	Cut	Cut of kiln
128	Deposit	Lower fill of fire pit
129	Structure	Flagged floor of kiln
130	Deposit	Silt below kiln
131	Structure	Lower floor of kiln
132	Cut	Construction cut for boundary wall
133	Fill	Fill of [132]
1000	Deposit	Tarmac road surface
1001	Deposit	Hardcore road base
1002	Deposit	Sandstone natural
1003	Deposit	Fill of 1005
1004	Deposit	Dark grey silty clay
1005	Cut	Cut of modern services



APPENDIX 2: PLATES



Plate 1; Site clearance works showing concrete foundations



Plate 2; Site clearance works and levelling of site





Plate 3; Foundations of Hadrian's Wall (109)



Plate 4; Foundation of Hadrian's Wall (109) with facing stones (114)





Plate 5; Hadrian's Wall foundations (109) including base stones (115), 1x 1.0m scale



Plate 6; Overview of potential Wall ditch [116] after initial exposure, 1x 1.0m scale





Plate 7; East facing section showing foundation cut [132] through potential Wall ditch [116], 1x 1.0m scale



Plate 8; Pre excavation shot of kiln [121], 2x 1.0m scales





Plate 9; Part excavated flue of kiln including demolition rubble (125), 1x 1.0m scale



Plate 10; Excavated kiln showing flagged floor (129)





Plate 11; Excavated kiln showing flagged floor (129)



Plate 12; Foundations showing sandstone bedrock (108)





Plate 13; Western end of service trench within military road showing bedrock (1002)



APPENDIX 3: TABLES

Table 5.1: Quantification of Artefacts

Context	Material	Quantity	Wgt (g)	Date	Comments
117	Bone	1	28	Roman-Modern	Adult sheep? Radius, Incomplete
117	Iron	2	43	Roman-PM	Poor condition, tapered tube possible nail
124	Bone	22	181	Roman-Modern	Poor condition, large mammal possible bovine jaw
125	Bone	30	228	Roman-Modern	Large mammal, Ad teeth bovine; unfused metacarpals juv.
125	Pot	2	69	Medieval	1x body sherd C14th-16 th ; 1x base sherd C13th-14th
1003	Leather	1	16	Late PM-Modern	Sole of shoe / boot. Machine-stitched holes evident.

Table 5.2: Finds from Environmental Samples

Context	<e></e>	Material	Wgt	Date	Comments
123	3	Pottery	0.5	Med	Body sherd of fully reduced green-glazed pottery, probably 14th-15th C
123	3	Jet??	0.5	RB-Med??	Complete annular bead, good condition
130	4	Industrial Waste	16	?	Two fragments, probably bloomery waste
TOTAL			17		

Table 6.1 Sample Information

С	<>	Cut	Desc	TQ	PW	PV	SW	SV
112	1		Buried soil layer	4	38	23	11378	7200
112	2		Buried soil layer	4	38	24	11519	6700
123	3	122	Fill of fire pit	4	45	36	12951	9500
128	4	122	Lower fill of fire pit	2	17	13	2957	2700
128	5	122	Lower fill of fire pit	5	54	37	12956	8800
117	6	116	Upper ditch fill	4	42	30	12403	8000
126	7	127	Lower fill of kiln/corn dryer	5	51	33	11372	8400
124	8	127	Upper fill of kiln/ corn dryer	2	27	18	7937	7100
130	9	129	Silt under flagged floor of kiln/corn dryer	3	33	18	9436	6500
1003	10	1005	Possible ditch fill with modern services	2	23	17	5951	3700

Key: C=context; <>=sample number; Cut=cut number of feature; Desc=description of context; TQ=tub quantity processed; PW=processed weight(kg); PV=processed volume(I); SW=sorted weight(g); SV=sorted volume(mI)



Table 6.2 Finds from Samples

С	<>	Ch	IW	Pot	Во	JB	MM
112	1	<1					3
112	2	<1					1
123	3	243		1		1	
128	4	66					
128	5	20					
117	6						<1
126	7	38			72		
124	8						<1
130	9	<1	16		44		
1003	10						1

Key: C=context; <>=sample number; Ch=charcoal(g); IW=industrial waste(g); Pot=count of pottery sherds; Bo=bone(g); JB=count of jet beads; MM=magnetised material(g)

Table 6.3 Flot information

С	<>	WF	VF	Wheat	Oat	Ch	Components
112	1	2.4	5				sand 50%: comminuted charcoal 50%
112	2	2	6				very fine rootlets 95%: sand 10%
123	3	45	165	1	4	2.77	comminuted charcoal 90%: charcoal 10%
128	4	9.7	40				comminuted charcoal 95%: charcoal 5%
128	5	10.6	50				very fine rootlets 95%: comminuted charcoal 5%
117	6	3.7	17				sand 20%: very fine rootlets 70%: comminuted charcoal 10%
126	7	18.8	115				very fine rootlets 100%
124	8	16.7	55			2.91	comminuted charcoal 80%: charcoal 10%: fine rootlets 10%
130	9	3.32	10				very fine rootlets 100%
1003	10	3.6	10				comminuted charcoal 95%: very fine rootlets 5%

Key: C=context; <>=sample number; WF=weight of flot(g); VF=volume of flot(mI); Wheat=count of wheat grains; Oat=count of oat grains; Ch=charcoal(g); Components=make-up of flot

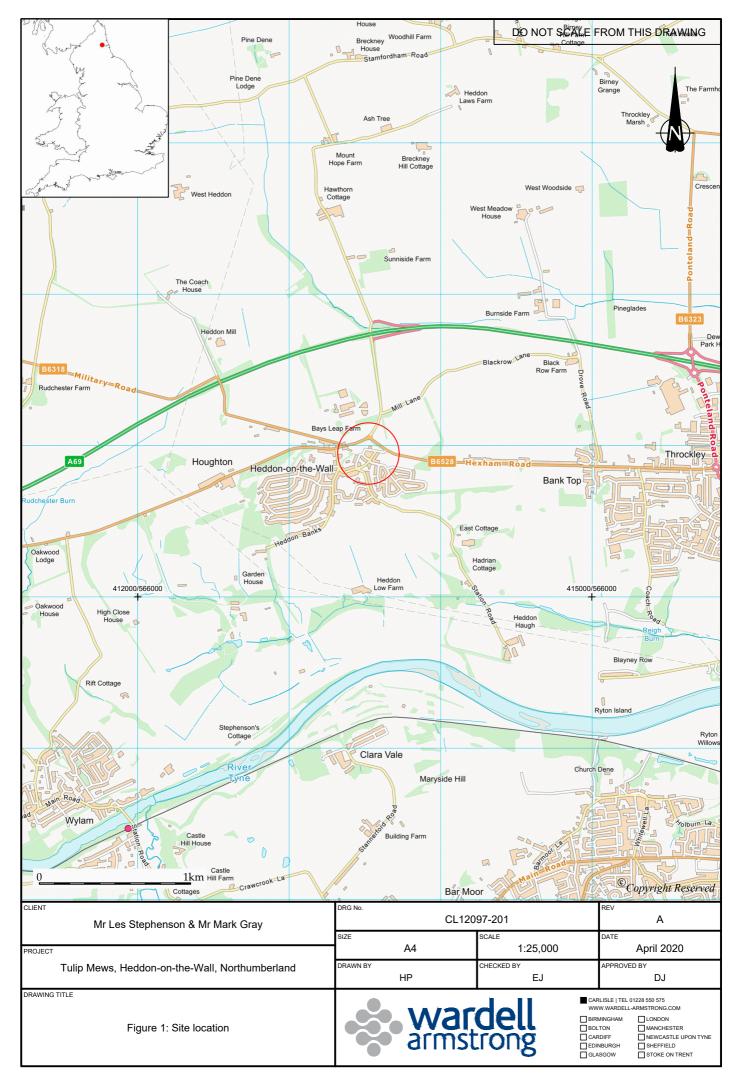


Table 6.4 animal bone

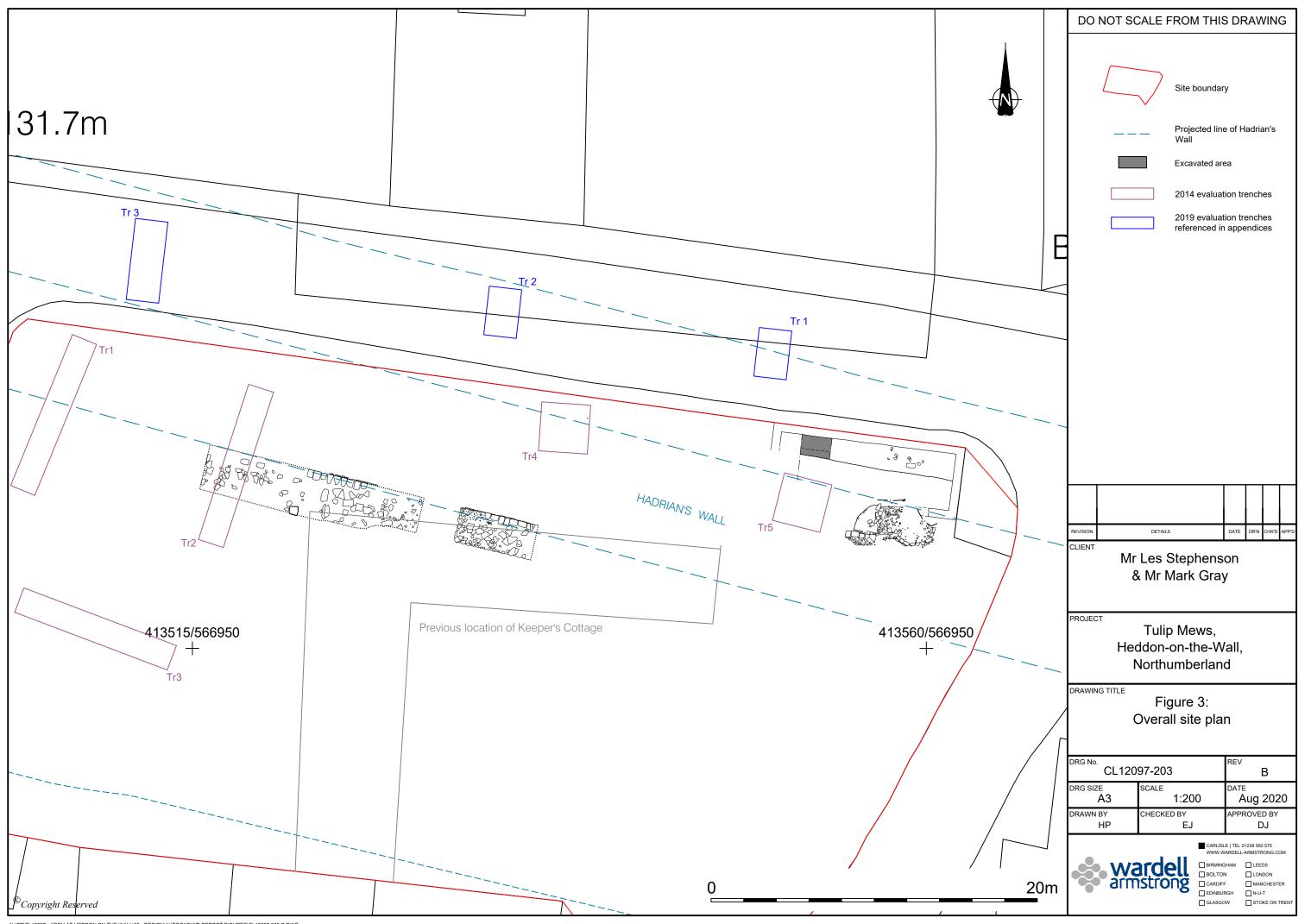
Context	<e></e>	Wgt	Date	Comments
126	7	72	?	Three species present, Sus sp., Canis sp. & Ovid/Caprid sp. Bones include teeth and miscellaneous limb bone portions. Damage to cortical surfaces of limb bones.
130	4	44	?	Probable porcine humerus, shaft and partial distal portion
TOTAL		116		

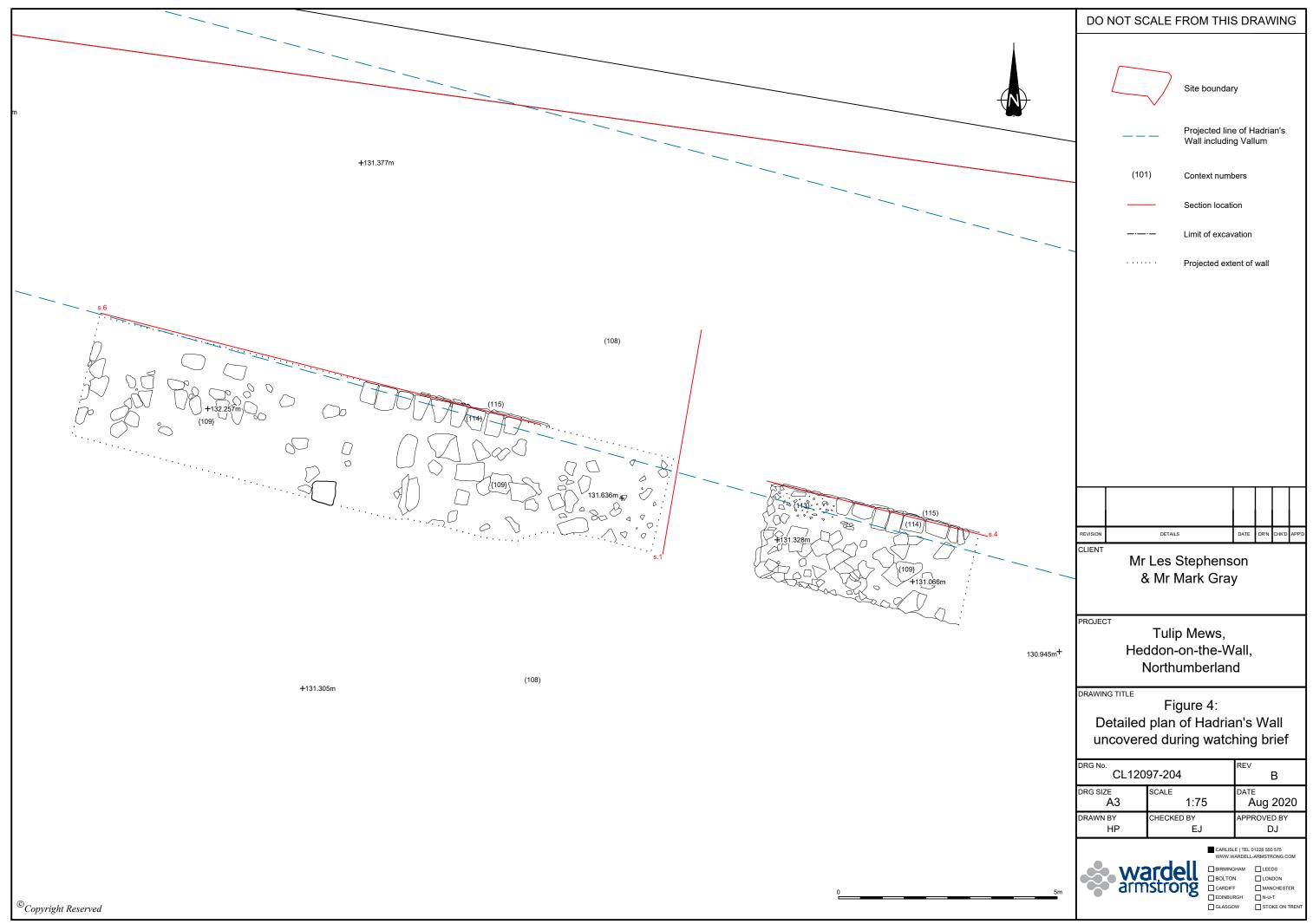


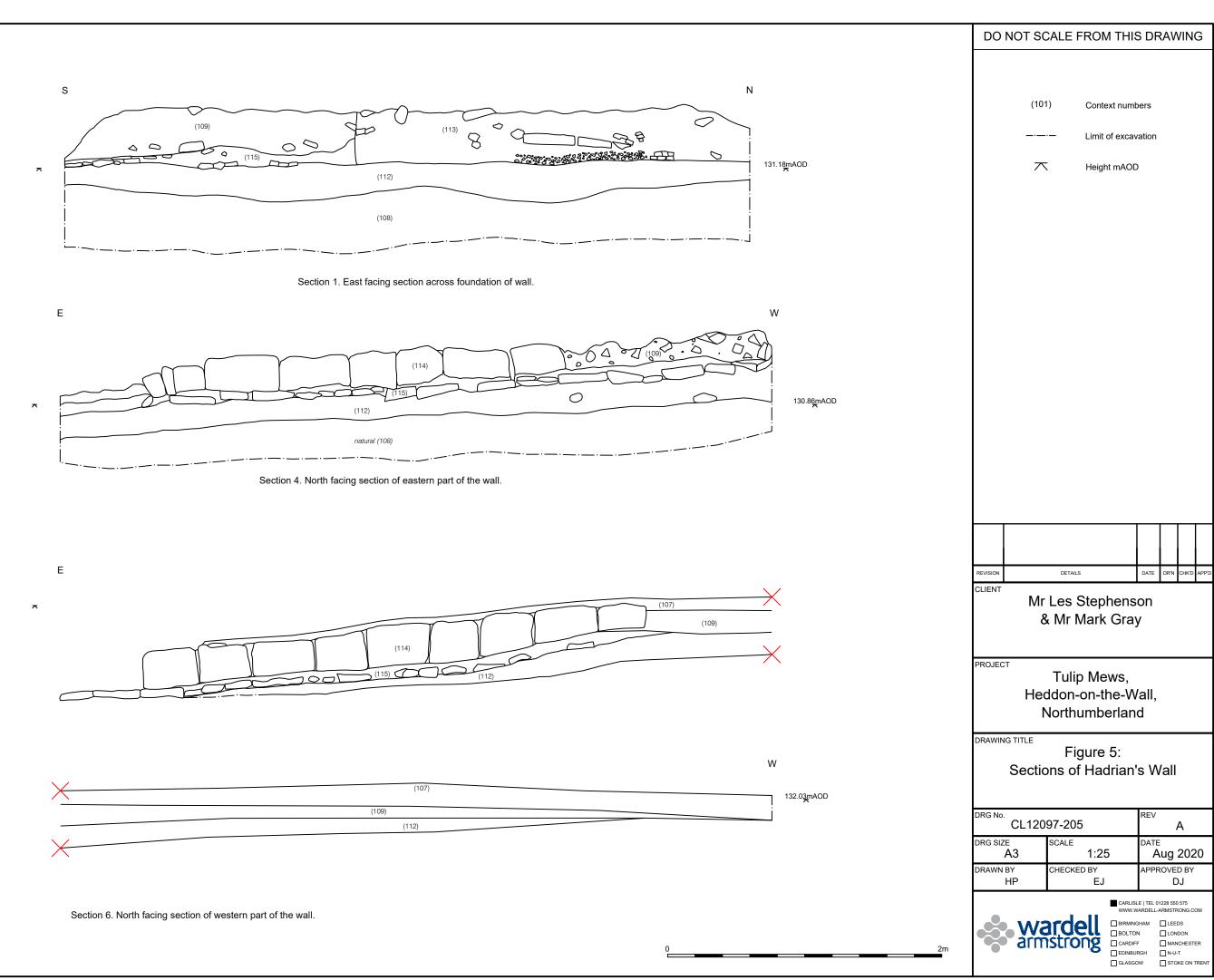
APPENDIX 4: FIGURES



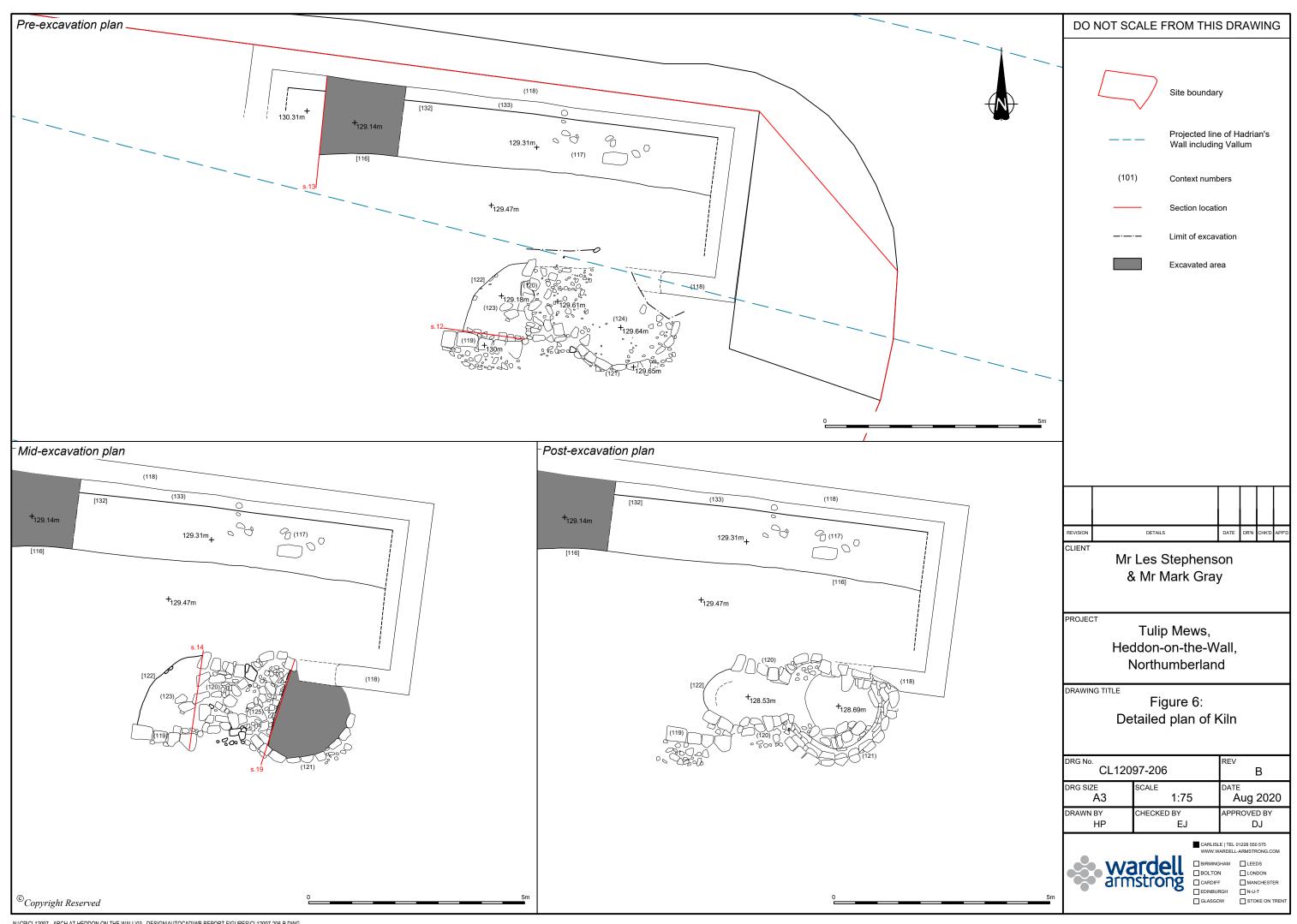








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DO NOT SCALE FROM THIS DRAWING (101) S Ε 130.00mAOD 129.75mAOD Section 13. East facing section across feature [116] and construction cut [132]. Section 12. North facing section across wall. Ν S 129.84mAOD PROJECT DRAWING TITLE Section 14. West facing section across cut [122] Section 19. East facing section across Kiln. DRG No. DRG SIZE Α3

Context numbers

Limit of excavation

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APPENDIX 5: ARCHAEOLOGICAL EVALUATION REPORT

LAND AT TULIP'S HAULAGE YARD, HEDDON-ON-THE-WALL, NORTHUMBERLAND

ARCHAEOLOGICAL EVALUATION REPORT
CL 12097
02/07/2018



archaeology

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DOCUMENT TITLE: Land at Tulip's Haulage Yard, Heddon-on-the-Wall,

Northumberland

DOCUMENT Type: Archaeological Evaluation Report

CLIENT: Mr. Les Stephenson and Mr. Mark Gray

CL NUMBER: CL12097

Oasis Reference: wardella2-197803

PRINT DATE: 02/07/2018

GRID REFERENCE: Centered on NZ 13524 66948

Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Chartered Institute for Archaeologists (CIfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by Wardell Armstrong Archaeology on the preparation of reports.

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Position:	Technical Director	Senior Project Officer				
DATE:	11/12/14	02/07/18				

This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

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CONTENTS

SUMM	//ARY	5
	OWLEDGEMENTS	
1 INTR	ODUCTION	7
1.1	Circumstances of the Project	7
2 METI	HODOLOGY	8
2.1	Introduction	8
2.2	The Field Evaluation	8
2.3	The Archive	8
3 BACK	KGROUND	10
3.1	Location and Geological Context	10
3.2	Historical Context	10
4 ARCH	HAEOLOGICAL EVALUATION RESULTS	13
4.1	Introduction	13
4.2	Results; Area A	13
4.3	Results; Area B	
4.4	Archaeological Finds and Environmental Sampling	16
4.5	Discussion	16
5 CON	CLUSIONS	18
5.1	Conclusions	18
6 BIBLI	IOGRAPHY	19
6.1	Secondary Sources	19
6.2	Websites	19
APPEN	NDIX 1: CONTEXT TABLE	20
APPEN	NDIX 2: FIGURES	21

ILLUSTRATIONS

FIGURES (APPENDIX 2)

FIGURE 1: SITE LOCATION

FIGURE 2: EVALUATION TRENCH LOCATION PLAN

PLATES

PLATE 1: TRENCH 2, FACING SOUTH-SOUTHWEST	. 14
PLATE 2: TRENCH 3, FACING WEST-NORTHWEST	. 14
PLATE 3: TRENCH 5, FACING EAST-SOUTHEAST	. 15
PLATE 4: TRENCH 7 FACING FAST-SOLITHEAST	16

SUMMARY

Wardell Armstrong Archaeology was commissioned by the clients to undertake an archaeological field evaluation on land at Tulip's Haulage Yard, Heddon-on-the-Wall, Northumberland (centred on NZ 13524 66948). This work was undertaken as part of a preplanning assessment prior to a proposed redevelopment programme, which will consist of the demolition of existing buildings and the construction of a new housing development and associated infrastructure. The site is located within area of high archaeological sensitivity, being partially situated within the Frontiers of the Roman Empire World Heritage Site, which includes the Hadrian's Wall Scheduled Monument and Vallum (SM 26086). As a result of the site's location, Scheduled Monument consent had to be obtained and the project had to be carried out under guidance from Mike Collins, Inspector of Ancient Monuments (Hadrian's Wall) for English Heritage.

The archaeological evaluation was undertaken over two days between the 8th and 9th December 2014. The evaluation involved the excavation of seven trenches, five of which measured 10m in length and 1.6m in width, with a further two trenches measuring 3m². Trenches 1, 2 and 4 were located along the northern boundary of Tulip's Haulage Yard, on the proposed line of Hadrian's Wall, whilst Trench 3 was located within the western half of Tulip's Yard, between the proposed routes of Hadrian's Wall and the vallum. Each of the four trenches were excavated to a maximum depth of 0.2m, revealing solid bedrock below topsoil and tarmac. Trench 5 was located towards the northeast corner of Tulip's Yard, on the proposed line of Hadrian's Wall and was excavated to a maximum depth of 0.9m, revealing natural drift geology below several modern levelling deposits. Trenches 6 and 7 were located within a small enclosed field, to the northeast of Tulip's Yard and north of the proposed line of Hadrian's Wall. Both trenches were excavated to a maximum depth of 0.7m, revealing natural drift geology below subsoil and topsoil.

No evidence for Hadrian's Wall or any of its associated features were observed during the archaeological evaluation, suggesting that the wall has been completely destroyed at this point or that the actual route of the wall falls outside of its present projected line.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology thank the clients for commissioning the project and for all their help during the project. Thanks are also due to Mike Collins of English Heritage.

The work was undertaken by David Jackson, Ben Moore and Ed Johnson. The report was written by David Jackson and the figures were produced by Adrian Bailey. The project was edited by Richard Newman, Post-Excavation Manager for Wardell Armstrong LLP and the project was managed by Frank Giecco, Technical Director of Wardell Armstrong LLP.

The document was revised by Lynne Gardiner, Senior Environmental Archaeologist and edited and approved by David Jackson, Senior Project Officer; both for Wardell Armstrong LLP.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Wardell Armstrong Archaeology was commissioned by the clients to undertake an archaeological field evaluation on land at Tulip's Haulage Yard, Heddon-on-the-Wall, Northumberland (centred on NZ 13524 66948; Figure 1).
- 1.1.2 The site is located within area of high archaeological sensitivity, being partially situated within the Frontiers of the Roman Empire World Heritage Site, which includes the Hadrian's Wall Scheduled Monument and Vallum (SM 26086). As a result of the site's location, Scheduled Monument consent had to be obtained and the project had to be carried out under guidance from Mike Collins, Inspector of Ancient Monuments (Hadrian's Wall) for English Heritage. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012) and current policies set out in the Hadrian's Wall Management Plan (Hadrian's Wall Management Plan Committee 2008).
- 1.1.3 This report outlines the evaluation works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 Introduction

2.1.1 A Project Design was submitted by Wardell Armstrong Archaeology (Giecco 2014) in response to a request by the clients, for an archaeological evaluation of the study area. Following acceptance of the Project Design by Mike Collins, Inspector of Ancient Monuments (Hadrian's Wall) for English Heritage, Scheduled Monument Consent was granted and Wardell Armstrong Archaeology was commissioned by the client to undertake the work. The Project Design was adhered to in full and the work was consistent with the relevant standards and procedures of the Chartered Institute for Archaeologists (CIfA), and generally accepted best practice.

2.2 THE FIELD EVALUATION

- 2.2.1 The evaluation consisted of the excavation of seven trenches, five of which measured 10m in length and 1.6m in width, with a further two trenches measuring 3m². The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity, especially those associated with Hadrian's Wall and its associated features. All work was conducted according to the recommendations of the Institute for Archaeologists.
- 2.2.2 In summary, the main objectives of the field evaluation were:
 - to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
 - to establish the character of those features in terms of cuts, soil matrices and interfaces;
 - to recover artefactual material, especially that useful for dating purposes;
 - to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes.
- 2.2.3 Topsoil and subsoil was removed by mechanical excavator to the level of the natural substrate under close archaeological supervision. The trial trenches were subsequently cleaned by hand and were investigated and recording according to the Wardell Armstrong Archaeology standard procedure as set out in the Excavation Manual (Giecco 2012).
- 2.2.4 The fieldwork programme was followed by an assessment of the data as set out in 3.4 3.6 of the ClfA's Standards and Guidance for Archaeological Field Evaluations (November 2013).

2.3 THE ARCHIVE

- 2.3.1 A full professional archive has been compiled in accordance with the specification, and according to the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited within the Woodhorn Archives Centre, with copies of the report sent to the Cumbria Historic Environment Record at Morpeth, available upon request. The archive can be accessed under the unique project identifier WAA14, HED/A, CP11129/14.
- 2.3.2 Wardell Armstrong Archaeology supports the **O**nline **A**cces**S** to the Index of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by Wardell Armstrong LLP, as a part of this national project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Heddon-on-the-Wall is a village lying within the undulating farmland of the Tyne Valley, north of the River Tyne and approximately 13km west-north-west of Newcastle upon Tyne, and approximately 16km east of Corbridge, in south Northumberland, close to the boundary with Tyneside to the south-east. The village lies approximately 4km to the north of the River Tyne (Figure 1).
- 3.1.2 The proposed development site is separated into two areas. The main area is situated within Tulip's Haulage Yard (centered on NGR NZ 13524 66948) and is bound by the former Carlisle to Newcastle turnpike road to the north, roads leading into the village to the east and west and by residential buildings to the south. The additional area of the site is located within a triangular shaped field to the northeast of Tulip's Yard (centered on NGR NZ 13584 66976) and is bound by Hexham Road to the north and east, the residential property of Four Winds to the west and by the former Carlisle to Newcastle turnpike road to the south (Figure 2).
- 3.1.3 The underlying geology is known as Pennine Lower Coal Measures Formation, comprising interbedded grey mudstone, siltstone and pale grey sandstone (British Geological Survey 2014). The drift geology consists of Glaciolacustrine Deposits of silt and clay (*ibid*).

3.2 HISTORICAL CONTEXT

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 *Prehistoric:* the earliest evidence of activity in the study area comes from the discovery of several polished stone axes of Neolithic origin in the back garden of a house on Antonine Walk in the 1960s, to the south-west of the investigation area. An axe head, of the Bronze Age, has also been found in the vicinity of the survey area. Possible evidence for later prehistoric activity comes from the possible site of a hut circle on Heddon Common, cited in 1880 (Bates 1880), though not found by recent surveys.
- 3.2.3 Roman: the site lies within a zone of high archaeological sensitivity, being partly within the Hadrian's Wall and Vallum Scheduled Monument (SM 26086). Hadrian's Wall is probably the most complex and best preserved of the frontiers of the Roman Empire (Austen and Young 2002). Begun in AD 122, the wall was a composite military barrier, which in its final form, comprised a stone wall fronted by a V-shaped ditch, and a number of purpose-built stone garrison fortifications such as forts, milecastles and turrets. A large earthwork and ditch, built parallel with, and to the south of the Wall, known as the Vallum, and a metalled road linking the garrison forts, which is known as the 'Roman Military Way', completed

- the northern military boundary. The northern military boundary was designated as a World Heritage Site in 1987.
- 3.2.4 In the vicinity of the proposed development area, the Wall survives as a buried feature below the course of the modern road. It was recorded during roadworks in November 1926 as being of broad wall type. The route of the Military Way has not been confirmed in this area. Archaeological work in 2002 revealed post pits in the vicinity of Throckley, suggestive of an additional defensive feature fronting the wall, in the form of entanglements where posts or tree branches with sharpened ends interlocked above ground level (Collins 2002). Similar features have been noted at Byker and Wallsend. In the western part of the study area, the Wall survives as a buried feature for the whole of this section of the Scheduled area. Although the locations of Turrets 12a and 12b (counting from the west) have been found from excavations in 1930, the location of Milecastle 12 has not been confirmed. Excavations were undertaken in 1928-9 to try to find Milecastle 12 without success. Measurements suggest it should be at what was Town Farm, just opposite the farmhouse, in the vicinity of Keeper's Cottage "but a later building has entirely destroyed its remains" (de la Bedoyere 2002, 48). If these measurements are correct, this could place Milecastle 12 within the study area.
- 3.2.5 Further evidence for Roman activity in the area comes from Roman Legionary and Centurial inscribed stones noted as built into the coach-house and above the stable door at the vicarage in 1807. These were removed in 1823 and have since been lost. Similarly, two Roman inscriptions have been found from within the study area, as well as a possible Roman architectural fragment, visible in the garden wall of Keeper's Cottage, similar to one known from a villa in Wiltshire, though it may be an altar laid on its side, either unfinished, or with an inscription facing into the wall (Peters 2014).
- 3.2.6 *Medieval:* the focus for the early 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-southwest of the study area, incorporating Norman and late Anglo-Saxon work. An 11th century finial cross or grave-marker also survives in the chancel. The Church mainly dates to the 12th/13th century however, indicative of a well-established settlement for it to serve by this time. Further evidence for medieval activity comes from the find spot of a silver long-cross penny of Edward I in 1958 in a garden, dating from 1305-7 (*ibid*).
- 3.2.7 The upper levels of the vallum ditch were excavated as part of an archaeological evaluation by ASUD in 2006. Analysis and dating of the deposits showed that the ditch had been a large open feature in the 10th and 11th centuries and had been used to dump both domestic and industrial waste. The quantities of grain recovered indicate that the processing must have been carried out on an industrial scale using a large kiln nearby, suggesting that Heddon was a settlement of some importance during the early medieval period. Further evidence for the re-use of Roman structures for medieval industrial purposes comes from a medieval kiln (ibid).

3.2.8 *Post-medieval:* the military road was constructed after 1745, after General Wade experienced difficulty moving troops westwards from Newcastle to stop Bonnie Prince Charlie's march from Scotland. Its construction involved the removal of parts of Hadrian's Wall in places, and runs across the top of where it once stood. Apparently, in "November 1752, the workmen employed in making the military road to Carlisle, found a great number of Roman coins and medals, in the ruins of Hadrian's Wall in this township" (William Whellan & Co 1855). A milestone survives from the Military Road within the study area (Peters 2014). A turnpike road was also established during the Post Medieval period, and a milepost survives behind a wire fence on the northern side of the B6528 (*ibid*). Several buildings in the study area originate in this period, including the Grade II listed buildings of Heddon Banks Farmhouse and associated farmbuildings and gingang (*ibid*).

4 ARCHAEOLOGICAL EVALUATION RESULTS

4.1 Introduction

- 4.1.1 The archaeological evaluation was undertaken over two days between the 8th and 9th December 2014. The evaluation involved the excavation of seven trenches, five of which measured 10m in length and 1.6m in width, with a further two trenches measuring 3m². The proposed development site is separated into two areas. Five of the seven trenches were located within the main area within Tulip's Haulage Yard (Area A), whilst two further trenches were located within a small field to the northeast of Tulip's Yard (Area2; Figure 2).
- 4.1.2 All trenches were excavated to the level of the natural substrate by a mechanical excavator under close archaeological supervision. The trenches were subsequently cleaned by hand and investigated and recorded fully.

4.2 RESULTS; AREA A

- 4.2.1 **Trench 1:** Trench 1 was located within the northwest corner of Area A, on the proposed line of Hadrian's Wall. The north-northeast to south-southwest aligned trench measured 10m in length, 1.6m in width and was excavated to a maximum depth of 0.2m, revealing solid sandstone bedrock **(101)** below *c*.0.1m of dark brown clayey silt topsoil **(100)**.
- 4.2.2 **Trench 2:** Trench 2 was located along the northern boundary of Area A, approximately 10m east of Trench 1 and on the proposed line of Hadrian's Wall. The north-northeast to south-southwest aligned trench measured 10m in length, 1.6m in width and was excavated to a maximum depth of 0.2m, revealing solid sandstone bedrock **(101)** below *c*.0.1m of dark brown clayey silt topsoil and hardstanding **(100)** (Plate 1).
- 4.2.3 **Trench 3:** Trench 3 was located centrally within the western half of Area A, approximately 7m south of Trench 2 and situated between the proposed routes of Hadrian's Wall and the vallum. The east-southeast to west-northwest aligned trench measured 10m in length, 1.6m in width and was excavated to a maximum depth of 0.2m, revealing solid sandstone bedrock **(101)** below *c*.0.1m of dark brown clayey silt topsoil **(100)** (Plate 2).
- 4.2.4 **Trench 4:** Trench 4 was located along the northern boundary of Area A, approximately 16m east of Trench 2 and on the proposed line of Hadrian's Wall. The trench measured 3m² and was excavated to a maximum depth of 0.2m, revealing solid sandstone bedrock **(101)** below *c*.0.1m of dark brown clayey silt topsoil and hardstanding **(100)**.



Plate 1: Trench 2, facing south-southwest



Plate 2: Trench 3, facing west-northwest

4.2.6 **Trench 5:** Trench 5 was located towards the northeast corner of Area A, approximately 12m east of Trench 4 and on the proposed line of Hadrian's Wall. The trench measured 3m² and was excavated to a maximum depth of 0.9m, revealing the natural drift geology **(201)** which was comprised of firm yellow clay. The natural clay was sealed by a 0.15m deposit of dark grey redeposited clay **(104)**, which included modern waste and had probably been used to level out the area. This was further sealed by 0.2m deposit of solid fragments of yellow sandstone **(103)**, many of which appeared to have been worked including a large faced block. It is likely that this deposit of fragmented stone was used to further level out the area following the demolition of a building which is present in the same location on the First, Second and Third Edition OS Maps. The fragmented sandstone deposit was below a *c*.0.35m deposit of ash and modern waste **(102)**, and *c*.0.2m of hardstanding **(100)** (Plate 3).



Plate 3: Trench 5, facing east-southeast

4.3 RESULTS; AREA B

4.3.1 **Trench 6:** Trench 6 was located within the western half of Area B, approximately 20m north of the proposed line of Hadrian's Wall. The north-northeast to south-southwest aligned trench measured 10m in length, 1.6m in width and was excavated to a maximum depth of 0.7m, revealing the natural drift geology **(201)** which was comprised of firm yellow clay with sandstone fragments. This was sealed by *c*.0.3m of mid-brown clayey silt subsoil **(202)** and *c*.0.25m of dark brown clayey silt topsoil **(200)**.

4.3.2 **Trench 7:** Trench 7 was located within the eastern half of Area B, approximately 17m east of Trench 6 and approximately 25m north of the proposed line of Hadrian's Wall. The west-northwest to east-southeast aligned trench measured 10m in length, 1.6m in width and was excavated to a maximum depth of 0.7m, revealing the natural drift geology **(201)**, which was sealed by *c*.0.25m of midbrown clayey silt subsoil **(202)** and *c*.0.15m of dark brown clayey silt topsoil **(200)** (Plate 4).



Plate 4: Trench 7, facing east-southeast

4.4 Archaeological Finds and Environmental Sampling

- 4.4.1 All find were classified as modern and discarded on site.
- 4.4.2 All deposits were deemed unsuitable for environmental sampling.

4.5 DISCUSSION

4.5.1 No evidence for Hadrian's Wall or any of its associated features were observed within the study area. This would indicate that the wall has been completely destroyed at this point. It is also possible however, that the actual route of the wall was further north or south of its present projected line, although it is more likely to have travelled further north as a more southerly route would have brought the wall too close to the vallum ditch. If the wall did take a more northerly route at this point, even by just several metres, then it is likely to have suffered extensive or complete destruction during the construction of the turnpike road immediately to

the north of Tulip's Yard. The severity of impact that the construction of the turnpike road may have had on the wall would have been extensive, as the road and a small side road immediately to the west of Tulip's Yard, was observed to truncate the natural bedrock to depth of up to 2m at this point.

5 CONCLUSIONS

5.1 CONCLUSIONS

- 5.1.1 The archaeological evaluation was undertaken over two days between the 8th and 9th December 2014. The evaluation involved the excavation of seven trenches, five of which measured 10m in length and 1.6m in width, with a further two trenches measuring 3m². Trenches 1, 2 and 4 were located along the northern boundary of Tulip's Haulage Yard, on the proposed line of Hadrian's Wall, whilst Trench 3 was located within the western half of Tulip's Yard, between the proposed routes of Hadrian's Wall and the vallum. Each of the four trenches were excavated to a maximum depth of 0.2m, revealing solid bedrock below topsoil and tarmac. Trench 5 was located towards the northeast corner of Tulip's Yard, on the proposed line of Hadrian's Wall and was excavated to a maximum depth of 0.9m, revealing natural drift geology below several modern levelling deposits. Trenches 6 and 7 were located within a small enclosed field, to the northeast of Tulip's Yard and north of the proposed line of Hadrian's Wall. Both trenches were excavated to a maximum depth of 0.7m, revealing natural drift geology below subsoil and topsoil.
- 5.1.2 No evidence for Hadrian's Wall or any of its associated features were observed within the study area, suggesting that the wall has been completely destroyed at this point or that the actual route of the wall falls outside of its present projected line.

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6.2 WEBSITES

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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Area	Description
100	Deposit	Α	Topsoil/Hardstanding
101	Geological	Α	Bedrock
102	Deposit	Α	Modern Levelling Deposit
103	Deposit	Α	Modern Levelling Deposit
104	Deposit	Α	Modern Levelling Deposit
200	Deposit	В	Topsoil
201	Geological	A/B	Drift Geology
202	Deposit	Α	Subsoil

Table 2: List of Contexts issued during the evaluation

APPENDIX 2: FIGURES

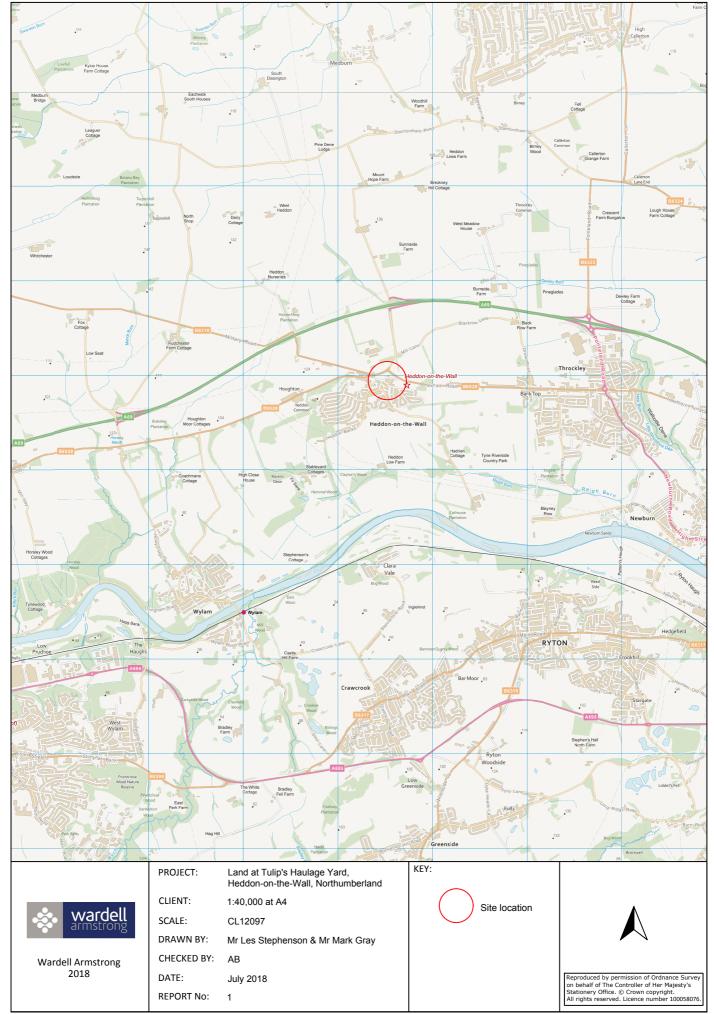


Figure 1: Site location.

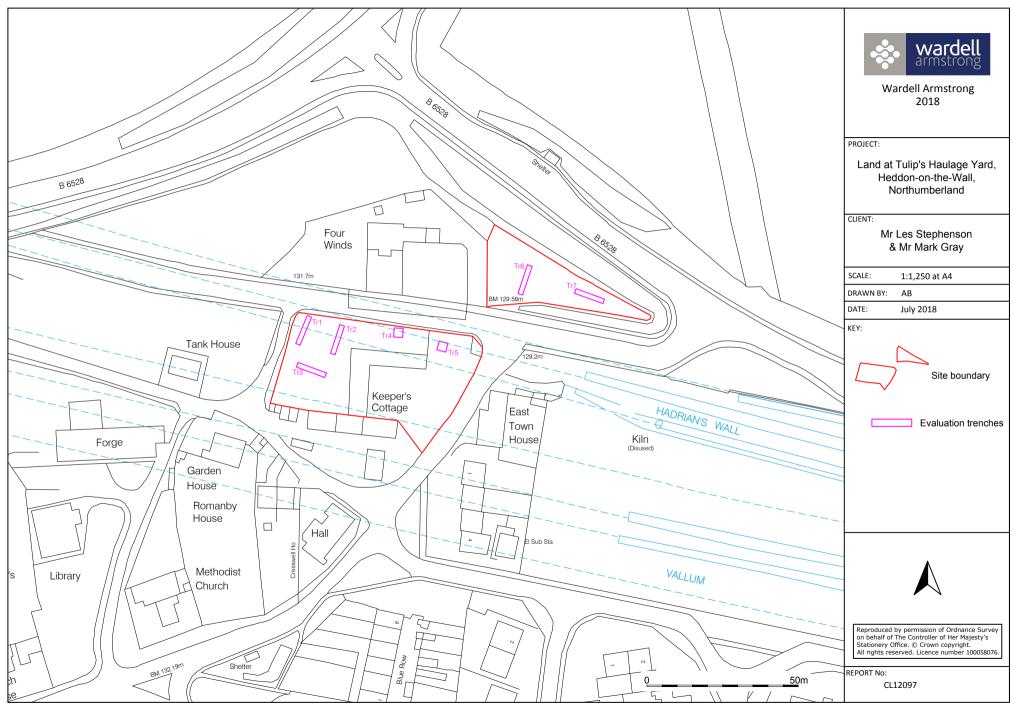


Figure 2: Evaluation trench location plan.

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