An Archaeological Excavation on land adjacent to West Street, Norham, Northumberland.



Overall shot of trench, facing south

ARS Ltd Report No. 2009/66 Oasis No: 66818 September 2009

Compiled By:

Philippa Cockburn and Dan Amat Archaeological Research Services Ltd Suite 27, Baltic Business Centre Saltmeadows Road Newcastle-Gateshead NE8 3DA

Checked By:

Dr. Richard Chatterton Tel: 0191 477 5111 Fax: 0191 477 7687 admin@archaeologicalresearchservices.com www.archaeologicalresearchservices.com

An Archaeological Evaluation on Land at West Street, Norham, Northumberland.

ARS Ltd Report 2009/66

September 2009

Archaeological Research Services Ltd

Contents

List of Illustrations	
Executive Summary	2
Introduction	3
Location and Geology	3
Background	4
Previous Archaeological Work	4
Aims and Objectives	5
Methodology	5
Evaluation Results	5
Discussion	8
Conclusions	8
Publicity, Confidentiality and Copyright	8
Statement of Indemnity	8
Acknowledgments	9
References	10
Appendix I: Context, Levels and Finds Registers	11
Appendix II: Figures	13
Appendix III: Photographic Register	35
Appendix IV: Harris Matrix	37
Appendix V: Specialist Reports	38
Appendix VI: Specification	
	Executive Summary Introduction Location and Geology Background Previous Archaeological Work Aims and Objectives Methodology Evaluation Results Discussion Conclusions Publicity, Confidentiality and Copyright Statement of Indemnity Acknowledgments References Appendix I: Context, Levels and Finds Registers Appendix II: Figures Appendix II: Photographic Register Appendix IV: Harris Matrix Appendix V: Specialist Reports

© ARS Ltd 2009

·

List of Illustrations

Fig No.	Detail	Page
1.	Location map showing the development site	3
2.	Development site showing location of trench	13
3.	Plan of trench	14
4.	Wall sections (lengthways)	15
5.	Wall sections (widthways)	16
6.	Sections of features	17
7.	Sections of features	18
8.	Overall shot, looking north east	19
9.	Overall shot, looking north	19
10.	Overall shot, looking south	20
11.	Overall shot, looking south	20
12.	Overall shot, looking south west	21
13.	Well (013)	21
14.	Hearth (006)	22
15.	Hearth (006)	22
16.	Wall (004)	23
17.	Wall (008)	23
18.	Wall (007)	24
19.	Wall (010)	24
20.	Wall (009)	25
21.	Wall (011)	25
22.	Wall (012)	26
23.	Linear (018)	26
24.	Wall (005)	27
25.	Wall (004)	27
26.	Circular feature (014)	28
27.	Shallow pit feature (020)	28
28.	Small pit (016) after ¹ / ₂ sectioning	29
29.	Hearth (006) after removal of stones	29
30.	Detail of hearth (006)	30
31.	Detail of hearth (006)	30
32.	Detail of hearth (006)	31
33.	Shallow pit feature (020) after ¹ / ₂ sectioning	31
34.	Circular feature (014) after 1/2 sectioning	32
35.	Linear (018) after ¹ / ₂ sectioning	32
36.	Well (013) after removal of stones	33
37.	Metal loom weight found on the banks of the River Tweed, side 1	33
38.	Metal loom weight found on the banks of the River Tweed, side 2	34
39.	Box Section of Well	35

Executive Summary

In April 2009, Archaeological Research Services Ltd were commissioned by Scott Wilson Ltd to undertake an archaeological evaluation of land adjacent to West Street in Norham, Northumberland. Two sections of stone wall with a height of one course were discovered in Trench 1 and a total of three pits and two linear features were found across three other trenches. The discovery of the walls in Trench 1 prompted the opening of two more $5m \times 2m$ trenches to establish the full extent of the structure. Some sherds of Medieval green-glazed pottery were found within trench 1 although no material culture was retrieved from in-situ contexts.

In August 2009 an open area excavation was carried out on the site to establish the extent and date of the features that had been previously discovered. A trench measuring 360m² was opened in the south-western area of the site to include the areas formerly covered by trenches 1 and 9 from the evaluation phase.

A number of sections of stone wall were revealed including those that had been uncovered in April. As well as the wall sections, the excavation uncovered a small area of stone flooring, a hearth and a well. A large circular feature was found in the southern area of the trench and a linear feature that ran from north to south was found in the western area of the trench. A number of sherds of green glazed pottery were recovered from the trench, some of which came from in-situ contexts. A number of environmental samples were taken including some burnt material from the hearth. The samples obtained for study gave a strong indication that the site was domestic rather than industrial. The excavation and this report represent the final stages of the archaeological work for this site. A publication is in preparation for Archaeologia Aeliana.

1. Introduction

1.1 This document reports the findings of an archaeological excavation undertaken by Archaeological Research Services Ltd, commissioned by Scott Wilson Ltd, on land adjacent to West Street, Norham, Northumberland. The excavation represents the final stage of the archaeological work to be carried out on the site prior to development.

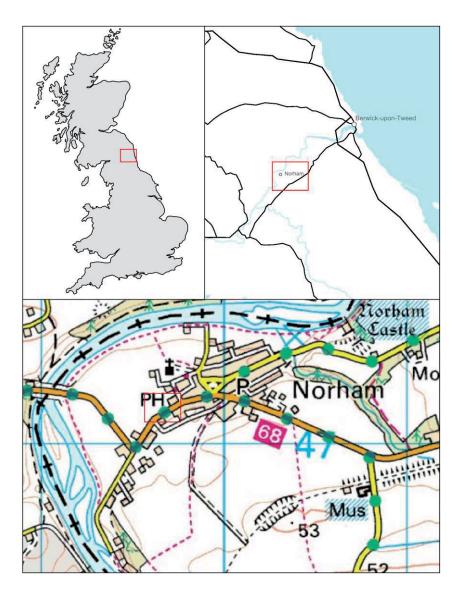


Fig. 1 Location map of the development site.

2. Location and Geology

2.1 The area is situated on the western edge of Norham Village centred at NT 897 472, approximately eleven kilometres south-west of Berwick and approximately nine kilometres north-east of Coldstream. The village is situated on a terrace on the south bank of the River Tweed. The geology of the area is Carboniferous Red Sandstone overlain by sub-glacial undifferentiated drift, fluvio-glacial gravels and Holocene alluvium (British Geological Survey, 1978).

3. Background

3.1 Prehistoric

- 3.1.1. Numerous crop marks have been identified from studying aerial photographs in the vicinity of Norham. Approximately 400m south-west of the site, crop marks of a settlement have been noted at Bridge Farm. Fieldwalking in the fields around the study area also yielded prehistoric finds, including an assemblage of Mesolithic flint tools.
- 3.1.2. During survey work at Norham Castle in 2002 it was suggested that the castle may be situated above an earlier Iron Age fortification. A Bronze Age bell beaker was also discovered on this site.

3.2 Romano-British

3.2.1 There has been no evidence of Roman activity discovered within the study area.

3.3 Medieval

- 3.3.1 Lands were granted for the construction of a monastery in Norham in AD655 and a declaration by King Oswy established Norham as a monastic centre in the seventh century. Norham fell under the jurisdiction of the Bishops of Durham after the Norman Conquest. The first castle was built here around 1121 for Bishop Ranulph Flambard, but by 1157, when Henry II regained control of Northumberland, construction of a second castle began. Norham is mentioned in the Boldon Book (1183) as "The borough of Norham".
- 3.3.2 In the fields to the west of the study area, crop marks indicative of a Medieval settlement have been identified through aerial photography. This is thought to be the original location of the Medieval village. Medieval pottery sherds have been discovered in the area possibly representing domestic debris.
- 3.3.3 To the north of the study area is the Church of St Cuthbert. Originally built in the 12th century it was restored in the early 19th century.
- 3.3.4 A resident of Norham, Mr Steve Hadston, found a loom weight, thought to be from the Medieval period, on the south bank of the River Tweed (fig.37 and fig.38). The weight is made from metal and has a pattern on both sides. There appear to be the remnants of a blue/purple glaze across the surface.

3.4 Post-Medieval

3.4.1. Since the 19th century Norham has retained its typical Medieval shape with few alterations. Housing has expanded along West Street (abutting the study area).

4. **Previous Archaeological work**

4.1 In April 2009 Archaeological Research Services Ltd carried out an evaluation on the site adjacent to West Street that included the opening of 7 trenches. Two sections of stone wall with a height of one course were discovered in Trench 1 and a total of three pits and

two linear features were found across three other trenches. The discovery of the walls in Trench 1 prompted the opening of two more 5m x 2m trenches to establish the full extent of the structure. Some sherds of Medieval green-glazed pottery were found within trench 1 although no material culture was retrieved from *in-situ* contexts.

5. Aims and Objectives

5.1 The objectives of the archaeological excavation were to establish the date and extent of the features that had been discovered during the evaluation, and to determine the chronological relationships between them and other features and deposits within the Norham area. These objectives were set in the hope that more could be known about the structure and what its purpose may have been.

6. Methodology

- 6.1 The archaeological excavation took the form of a single open area trench measuring 360m² (fig.2). The positioning of the trench was chosen in order to target the stone walls that had been uncovered during previous archaeological work and was agreed with by the County Archaeologist. All work was undertaken in accordance with the Specification for Archaeological Excavation, approved by Northumberland CC (SW 2009).
- 6.2 The trench was opened by machine using a toothless ditching bucket in level spits until the natural was reached, at which point the trench was examined and cleaned by hand. All machine excavation was carried out under careful archaeological supervision.
- 6.3 The deposits were recorded according to the normal principles of stratigraphic excavation. Each context was recorded on pro-forma records which included the following: character and contextual relationships; detailed description (dimensions and shape; soil components, colour, texture and consistency); interpretation and phasing as well as cross-references to the drawn, photographic and finds registers.
- 6.4 The trench was planned at a scale of 1:20. Trench sides were also drawn in section at a scale of 1:20. Each wall section was drawn in section at a scale of 1:20 and plans were included in the overall trench plan. All deposits and the base of the trench were levelled and heights are expressed in metres above Ordnance Datum.
- 6.5 A photographic record was maintained including overall photographs of the trench. All images were taken in black and white print, colour print and digital format, and contain a graduated photographic scale.
- 6.6 Environmental samples where sent for paleoenvironmental assessment to Archaeological Services at Durham University (appendix V)

7. Excavation Results

7.1 The basic stratigraphy of the trench consisted of topsoil (001), subsoil (002) and natural (003). The topsoil (001) was a very dark brown/black (10yr 2/1) silty clay which contained small and large stones and varied in depth between 0.2 and 0.5m. The subsoil (002) was a very thin layer of orange/brown (10yr 4/4) clay/silt with small stone inclusions that had a

diffuse contact with the topsoil. The natural (003) was orange/brown (10yr 4/6) sand and gravel that covered the entirety of the site and continued beyond the limit of the excavation.

- 7.2 During the evaluation a section of stone wall (004) was uncovered that ran from east to west (fig.14 and fig.23). The subsequent excavation revealed that the wall measured 9.4m from east to west and continued at its western end to run from south to north for a distance of 4.4m thereby forming an 'L' shape. The wall had an average width of 0.9m and was constructed from large, roughly cut, sub-rectangular sandstone blocks that measured between 0.7 by 0.4m and 0.3 by 0.2m. These dimensions suggest that it would have been an external wall. The stones had been packed using smaller stones. A coarse compacted clay (027) had been used to bond the wall. Towards the western end the wall survived to two courses but only survived to one course elsewhere. The wall section had been built directly onto the natural and continued into the trench edge at the eastern end. No evidence of any foundation trench was discovered.
- 7.3 In the western area of the trench a small solitary section of stone wall (005) was uncovered surviving to one course in height (fig.22). The wall ran from east to west to a length of 3.9m and continued into the trench edge at the western end. There was a small protrusion of wall at the eastern end that appeared to run from south to north but had been partially demolished prior to excavation. The wall had an average width of 0.3m and was constructed from roughly cut sandstone blocks that measured on average 0.2 by 0.4m. No bonding material had been used in the construction of this wall. The wall was only one stone wide when excavated but it is not clear whether or not it would have originally been wider.
- 7.4 A very well preserved hearth (006) measuring 1 by 1.5m was discovered in the south eastern corner of the trench (fig.12 and fig.27). The hearth was lined with four long sandstone blocks and was constructed of rectangular sandstone blocks with a flat hexagonal stone in the centre. The hearth had been constructed directly onto the natural and there was no bonding between the stones. The stones in the centre of the hearth showed evidence of in situ burning and a sample was taken of the hearth. Analysis of the sample confirmed the presence of bread wheat and rye as well as tiny fragments of calcined bone which is typical of the medieval period (appendix V). This also suggests that the fill accumulated as a result of the disposal of domestic waste. It is believed that some tumbled stones to the immediate west of the hearth may have formed either the surround of the hearth or part of a chimney. The jumbled nature of the stones suggests that they had been disturbed due to plough damage.
- 7.5 Further to the west of the hearth was a small section of wall (007) that measured 2m in length and ran from north to south and connected to another section of wall (004) at its southern end (fig.16). This section of wall also appeared to have been damaged by plough action and, as a result, dimensions and construction were not entirely clear, although it is thought to have been an internal wall due to its narrow width. The wall appeared to have been originally two courses in width, although some larger stones lay to the western side. It is possible that these stones may have originally formed another course on top of the wall. There was no bonding between the stones.
- 7.6 Another small, partially demolished internal wall section (008) was discovered towards the south of the trench in the centre (fig.15). The wall was 'L' shaped and was connected to another wall section (004) at its southern end. The wall measured approximately 0.45m in

width and was 4.1m long from north to south and 1.3m long from east to west. The wall was constructed from sandstone blocks, some of which were rectangular although many were of irregular sizes and shapes. Extensive damage to the wall, caused by plough action, had dislodged many of the stones and it only survived to one course. The wall had been constructed directly onto the natural.

- 7.7 Towards the centre of the trench was a small section of sandstone wall (009) running from north to south that was not connected to any other part of the structure (fig.18). The wall measured 1.4m in length and was 0.6m wide. The remaining stones were roughly cut and varied in shape and size, the larger stones being more rectangular in shape. There was no mortar or bonding between the stones. This wall only survived to one course and had been built directly onto the natural. Beside this wall section, slightly to the east was an isolated area of *in situ* burning of the natural (022). A bulk environmental sample was taken from this deposit and the analysis of this sample confirmed that it contained barley and oats which again suggests domestic activity on the site (see appendix 5).
- 7.8 To the west of wall section (009) were numerous stones that appeared to have once been a wall (010) (fig.17). All that remained were eight stones of various shapes and sizes that covered an area measuring approximately 1 by 1m. The wall appeared to have been damaged and may have been robbed for the stones. There was no mortar or bonding material apparent on any of the stones and no evidence of any cut into which the wall had originally been constructed.
- 7.9 Towards the northern end of the trench was an area of stones that may have been flooring due to its reasonably flat level (011) (fig.19). It was 4m in length and between 1.5m and 1.1m in width and was constructed from roughly cut sandstone blocks as well as smaller stones. There was no mortar or bonding and the stones had been laid directly onto the natural.
- 7.10 Another small section of stone wall (012) was discovered in the northern end of the trench although not very much remained (fig.20). The remaining section measured 1.1 by 1.08m and was constructed from roughly cut sandstone blocks. The wall may have been damaged by plough action or may have been robbed for the stones as it only survived to one course. The stones were laid directly onto the natural and had not been bonded with mortar or any other material.
- 7.11 A well (013) was uncovered in the north eastern corner of the trench (figs. 11, 34 & 39). The well was constructed of sandstone blocks that had been cut to form a circular shape. The blocks were relatively uniform in size and were bonded with what appeared to be clay (028). The blocks surrounding the well were approximately 0.3m wide and 0.4m in length. The interior diameter of the well was 0.85m and the exterior diameter including the construction cut was approximately 1.45m. The well was filled with topsoil and backfill which consisted of soil and stones. The well was excavated to a depth of 0.9m and the stones were removed to a depth of 0.5m. To the immediate south of the well were a number of stones that presumably had been originally part of the surround. A box section was excavated at the western edge of the well (Fig. 39) which revealed that the sandstone construction directly abutted the natural sand and gravel (003).
- 7.12 In the southern end of the trench, a large circular feature (014) was uncovered (fig.24). Within this feature was a smaller pit feature (016) (fig.26). The large feature (014) was cut directly into the natural and measured 3m in diameter and was 0.4m deep. The fill was a

yellow/orange (10yr 5/8) clay which contained small stone inclusions. The base of the pit was relatively flat. The smaller pit (016) had been cut through the centre of the larger feature (014) and continued to the north west. It measured $1.7 \times 3m$ and was 0.7m in depth. The fill was a brown (10yr 4/2) silty sand containing gravel. No dating evidence was recovered from either feature although a flat stone (024) lay on the base of the pit (014).

- 7.13 In the western area of the trench a linear feature (018) was found that ran south from the northern section of the trench and terminated approximately 1.8m to the north of wall (005) (fig.21). The feature measured 15.5m in length and was 1m in width. Once excavated it was found to have a depth of 0.45m with relatively steep sides. The fill was a dark brown (10yr 3/2) silty clay with small stone inclusions.
- 7.14 The Phase 1 evaluation of the site (Amat & Cockburn 2009) discovered a linear (028 of first report) running east west to the south of wall (004). The full excavation of the site confirmed that this linear terminated 0.8m to the east of the circular feature (014).
- 7.15 In the eastern section of the trench a large circular feature was found (020). Once excavated, however, the feature was very shallow and is presumed to be natural.
- 7.16 Four fine gritty fragments of pot were recovered from contexts 105, 108, 118 and 130. The specialist report (appendix V) suggests that these fragment may be earlier than the green glazed shards (mid to late medieval) found elsewhere on the site, and date to around the 12th century.

8. Discussion

- 8.1 Given the historical and archaeological background of the village of Norham and its surrounding area, it was likely that the study area would contain features of archaeological interest. The seven trenches excavated as part of an archaeological evaluation at the prospective housing development on West Street, Norham revealed a number of archaeological features which have been outlined above. The excavation that has been the subject of this report was intended to further investigate and increase our knowledge of those features. The full extent and function of the structure which those features represent are still not completely known. However, as a result of this excavation we now have a much clearer idea of its scale and likely extent.
- 8.2 The excavations at Norham have revealed evidence of the foundations of a substantial stone built structure with internal stone wall divisions and an internal stone built hearth. It is possible that this structure was associated with the deserted medieval village known from aerial photographs to have been located to the west of the development area. However, given that the building is closely aligned with the course of the present road through Norham it is thought more probable that it is a medieval structure associated with this street frontage. Ascribing a function to the building is difficult as the walls only survive to a height of two courses, and there were no intact internal floor surfaces, but the information gained from the specialists both in the pottery and soil samples, would suggest a domestic use of this site. There was also no evidence uncovered to suggest that there was any type of industrial activity on the site.

- 8.3 The well identified to the north of the structure appears, from its location, to have been associated with this burgage plot although no material culture was recovered from within the feature.
- 8.4 The wall section in the west of the trench may have been part of a garden wall. If this was the case it would explain why it was not connected to the main structure and why it seemed to be isolated from the other walls.

9. Conclusions

- 9.1 The excavation at Norham revealed a series of wall foundations, stone hearth, well and associated cut features. The recovered material culture comprising of green glazed and gritty pottery and macrobotanical fossils of oats, wheat, barley and bone fragments indicate the walls formed a domestic dwelling dating from the 12th to the 14th century ad. The well was not excavated below 0.80m as the impact depth of development will not disturb the feature. Sampling using a narrow chambered auger was attempted on the well deposits, however the presence of large angular cobbles within the backfill prevented significant penetration below the excavated depth. The well was then covered in a geotextile membrane and preserved *in-situ*.
- 9.2 All the archaeology in the trench has been sampled to ascertain the full extent of the features and to provide a dating context and fully recorded by photograph, plan, section and written record. A full Oasis record for this site has been completed and the material archive is to be deposited with the Northumberland SMR. The program of works at West Street Norham has fully assessed and evaluated the surviving archaeological remains and no further work is considered necessary.

10. Publicity, Confidentiality and Copyright

- 10.1 Any publicity will be handled by the client.
- 10.2 Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

11. Statement of Indemnity

11.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

12. Acknowledgements

12.1 Archaeological Research Services Ltd would like to thank all those involved with this work, in particular Chris Burgess, Northumberland County Archaeological Officer, Annie Bingham, Scott Wilson Ltd. and Keith the machine driver for their help and support.

13. References

Amat, D. & Cockburn, P. 2009. An Archaeological Evaluation on Land at West Street, Norham, Northumberland

British Geological Survey, 1978, Sunderland – Solid and Drift Edition, 1:50 000 Series, Sheet 21

Scott Wilson, 2009, Specification for Archaeological Evaluation

Websites:

www.keystothepast.info

APPENDIX I – CONTEXT & LEVELS REGISTERS

Context Register

Context No.	Trench	Description	
001	-	Very dark brown silty-sandy Topsoil	
002	-	Orange/brown clay/silt subsoil	
003	-	Sand and gravel natural	
004	-	'L' shaped wall section	
005	-	Solitary wall section	
006	-	Hearth	
007	-	Small wall section	
008	-	Small interior wall section	
009	-	Small wall section	
010	-	Small wall section	
011	-	Possible flooring	
012	-	Small wall section	
013	-	Well	
014	-	Large circular feature	
015	-	Cut of (014)	
016	-	Small black circular feature	
017	-	Cut of (016)	
018	-	Linear in W of trench	
019	-	Cut of (018)	
020	-	Shallow feature	
021	-	Cut of (020)	
022	-	Area of burning	
023	-	Context deleted	
024	-	Context deleted	
025	-	Context deleted	
026	-	Cut of well	
027	-	Clay bonding of wall (004)	
028	-	Clay bonding of well	

Levels Register

Level No.	Bench mark	Backsight	Foresight	Level aOD
1	14.3	1.66	2.85	13.11
2	14.3	1.66	2.03	13.93
3	14.3	1.66	1.92	14.04
4	14.3	1.66	2.17	13.79
5	14.3	1.66	2.06	13.9
6	14.3	1.66	2.17	13.79
7	14.3	1.66	2.37	13.59
8	14.3	1.66	3.24	12.72
9	14.3	1.66	2.75	13.21
10	14.3	1.66	2.75	13.21
11	14.3	1.66	3.0	12.96
12	14.3	1.66	2.76	13.2
13	14.3	1.66	2.23	13.73
14	14.3	1.66	2.58	13.38
15	14.3	1.66	2.79	13.17
16	14.3	1.66	2.49	13.47
17	14.3	1.66	2.38	13.58

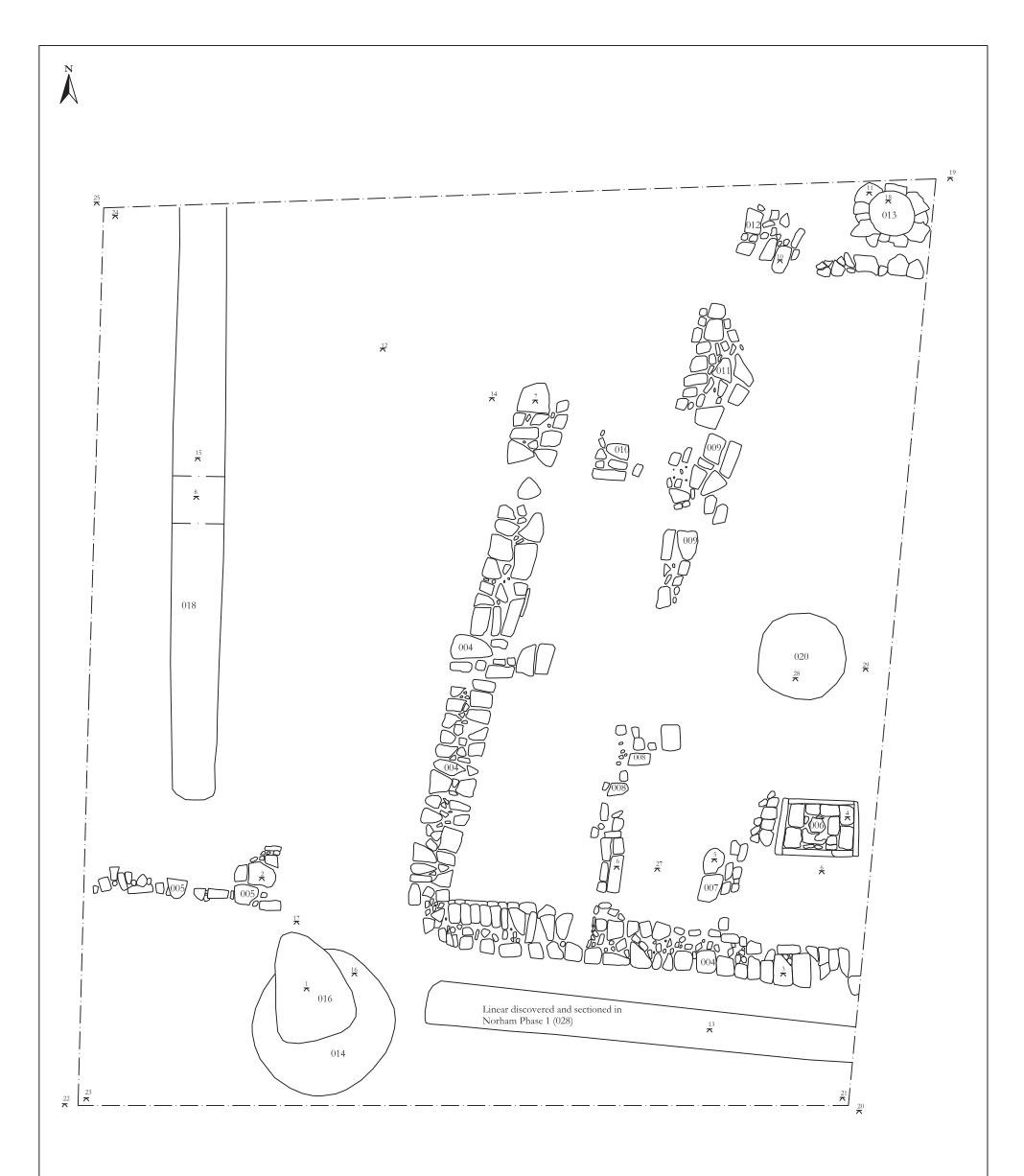
18	14.3	1.66	3.44	12.52
19	14.3	1.66	2.49	13.47
20	14.3	1.66	1.82	14.14
21	14.3	1.66	2.25	13.71
22	14.3	1.66	2.35	13.61
23	14.3	1.66	2.29	13.67
24	14.3	1.66	3.11	12.85
25	14.3	1.66	2.43	13.53
26	14.3	1.66	2.45	13.51
27	14.3	1.66	2.49	13.47
28	14.3	1.66	2.75	13.21
29	14.3	1.66	2.67	13.29

Finds Register

Find No.	Context No.	Find Type	Provisional Date
1	004	Green glazed pottery	14 th /15 th century
2	004	Green glazed pottery	14th/15th century
3	004	Green glazed pottery	14 th /15 th century
4	004	Green glazed pottery	14 th /15 th century
5	004	Metal nail	14th/15th century
6	005	Pottery	14 th /15 th century
7	006	Green glazed pottery	14 th /15 th century
8	006	Green glazed pottery	14th/15th century
9	006	Green glazed pottery	14 th /15 th century
10	006	Green glazed pottery	14 th /15 th century
11	006	Green glazed pottery	14th/15th century
12	006	Green glazed pottery	14 th /15 th century
13	008	Pottery	14 th /15 th century
14	008	Pottery	14 th /15 th century
15	008	Pottery	14 th /15 th century
16	018	Pottery	14th/15th century
17	Unstratified	Clay pipe	17th/18th century
18	Unstratified	Pottery	14 th /15 th century

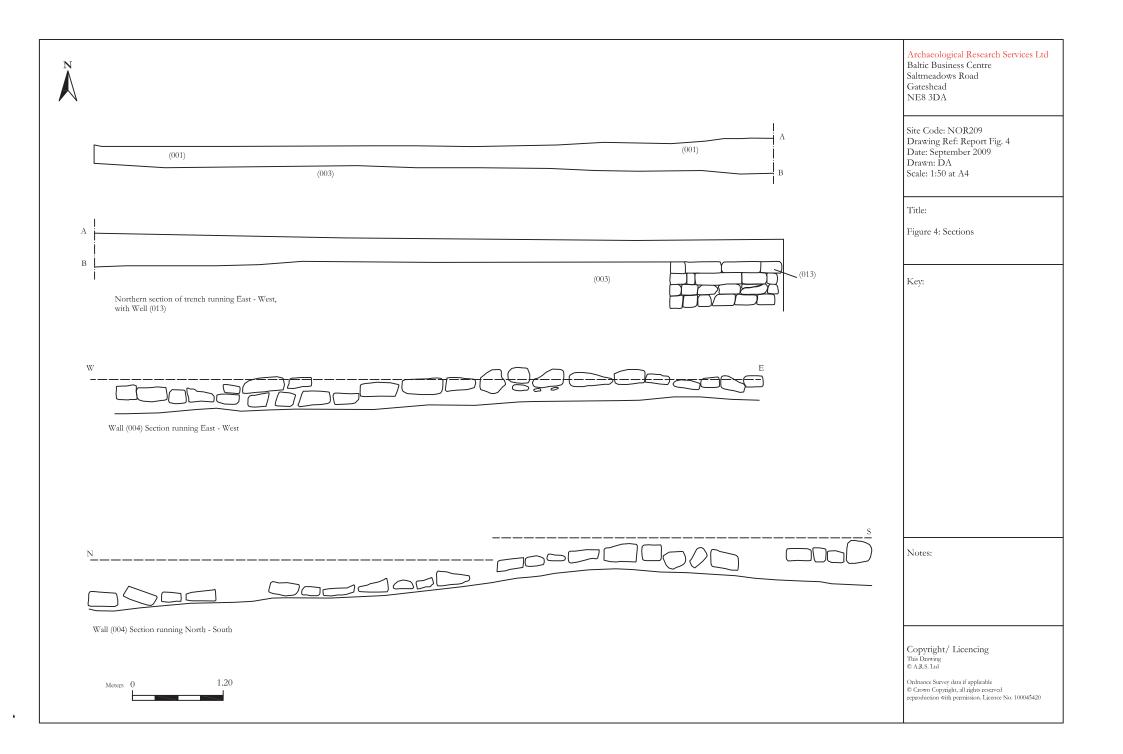


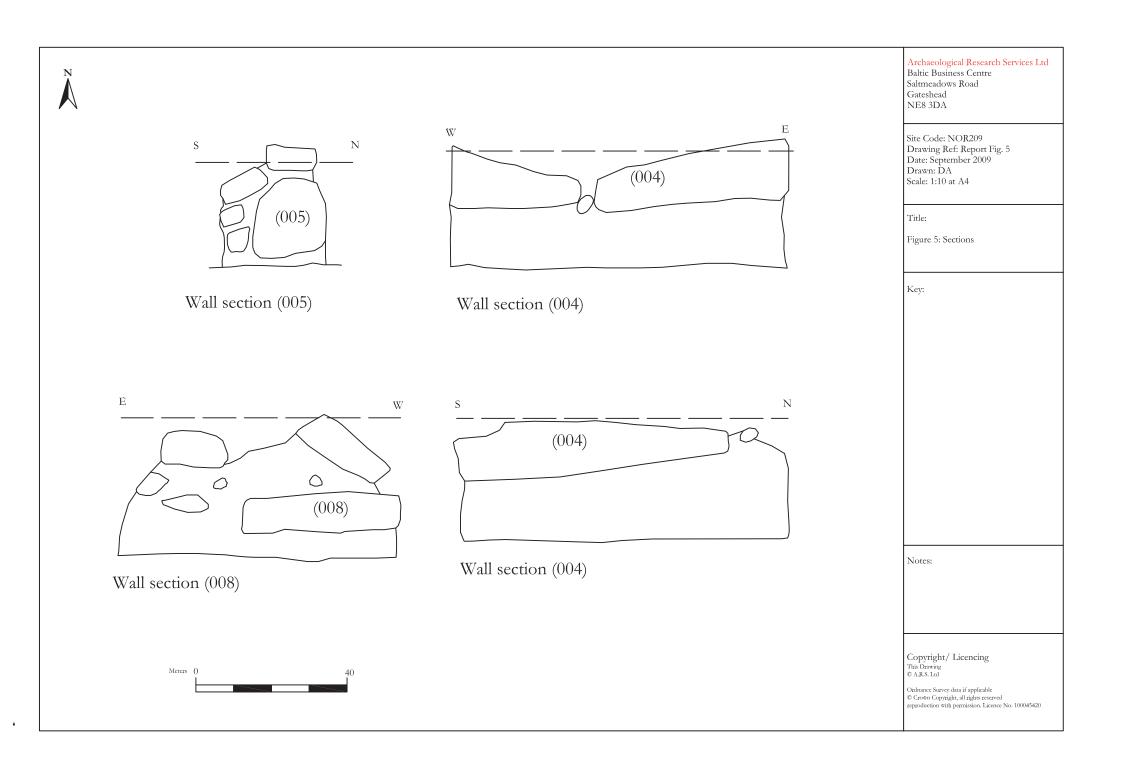
Copyright/ Licencing This Drawing © A.K.S. Lud Ordnane: Surcey data if applicable © Coven Copyright, all aghts reserved © Coven Copyright, all aghts reserved reproduction with permission. Licence No. 100045420	Notes:	Date: September 2009 Drawn: DA Scale: 1:200 at A3 Figure 2: Trench location Evaluation Trench locations Evaluation Trench Number Setting Out Point Excavation trench location	Archaeological Research Services Ltd Baltic Business Centre Saltmeadows Road Gateshead NE8 3DA NE8 3DA

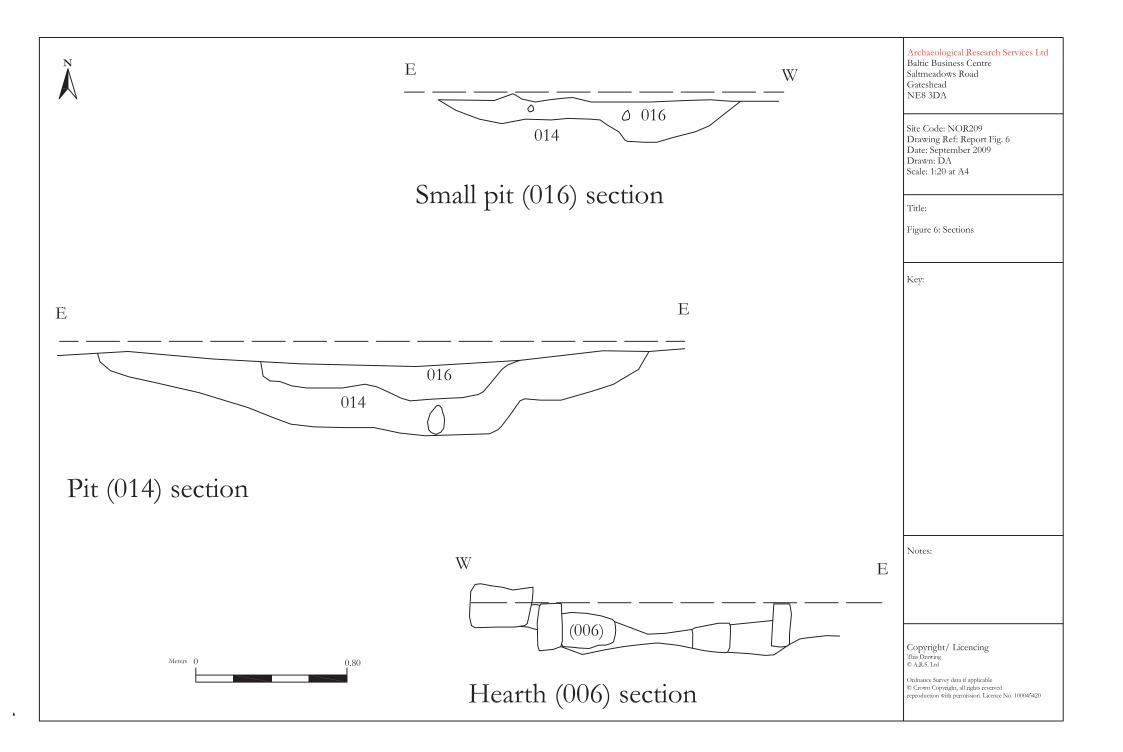


Meters ()		1

Archaeological Research Services Ltd Baltic Business Centre Saltmeadows Road Gateshead NE8 3DA	Title: Figure 3: Plan of trench	Key:	
Site Code: NOR209 Drawing Ref: Report Fig. 3 Date: 23 September 2009 Drawn: DA Scale: 1:80 at A3	Notes:		Copyright/ Licencing This Drawing © A.R.S. Ltd Ordnance Survey data if applicable © Crown Copyright, all rights reserved reproduction with permission. Licence No. 100045420







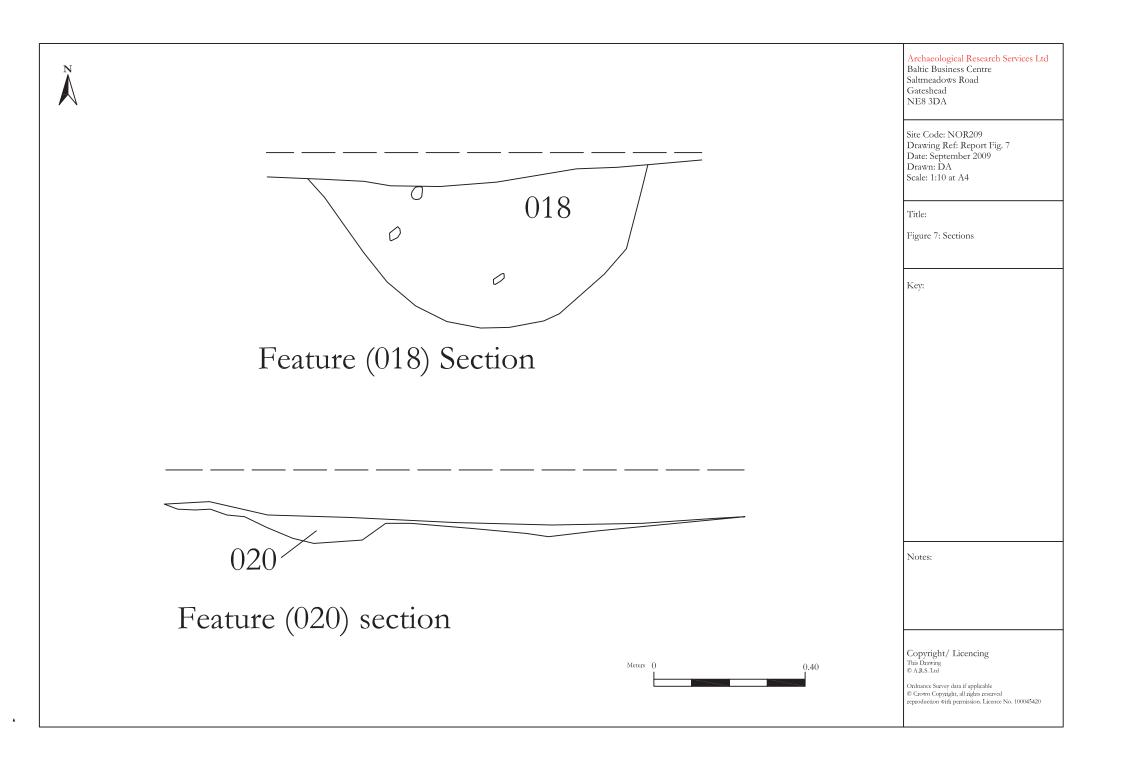




Fig.8 Overall shot, looking north-east (scale = $2 \times 2m$)



Fig.9 Overall shot, looking north (scale = 2m)



Fig.10 Overall shot, looking south (scale = $2 \times 2m$)



Fig.11 Overall shot, looking south (scale = $2 \times 2m$)



Fig.12 Overall shot, looking south-west (scale = 2m)



Fig.13 Well (013) looking north (scale = 2m)



Fig.14 Hearth (006), looking north (scale = 2m)



Fig.15 Hearth (006), looking north (scale = 2m)



Fig.16 Wall section (004), looking east (scale = 2m)



Fig.17 Wall section (008), looking north-east (scale = 2m)



Fig.18 Wall section (007), looking east (scale = 2m)



Fig.19 Wall section (010), looking north (scale = 2m)



Fig.20 Wall section (009), looking east (scale = 2m)



Fig.21 Flooring (011), looking south-east (scale = 2m)



Fig.22 Wall section (012), looking north (scale = 2m)

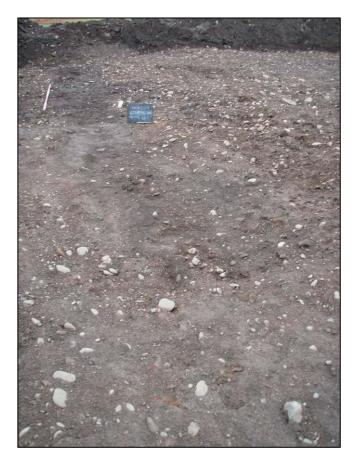


Fig.23 Linear feature (018), looking north (scale = 2m)



Fig.24 Wall section (005), looking south (scale = 2m)



Fig.25 Wall section (004), looking north (scale = 2m)



Fig.26 Feature (014), looking west (scale = 2m)



Fig.27 Pit (020) before $\frac{1}{2}$ sectioning, looking north (scale = 2m)



Fig.28 Pit feature (016), looking south (scale = 2m)



Fig.29 Hearth (006), after removal of stones, looking north (scale = 1m)



Fig.30 Detail of hearth interior (scale = 0.5m)



Fig.31 Detail of hearth interior (scale = 0.5m)



Fig.32 Detail of hearth interior



Fig.33 Shallow pit feature (020) after $\frac{1}{2}$ sectioning, looking south-east (scale = 1m)



Fig.34 Large feature (014), looking south-east (scale = 2m)



Fig.35 Linear feature (018) after $^{1\!/_2}$ sectioning, looking north-west (scale = 1m)



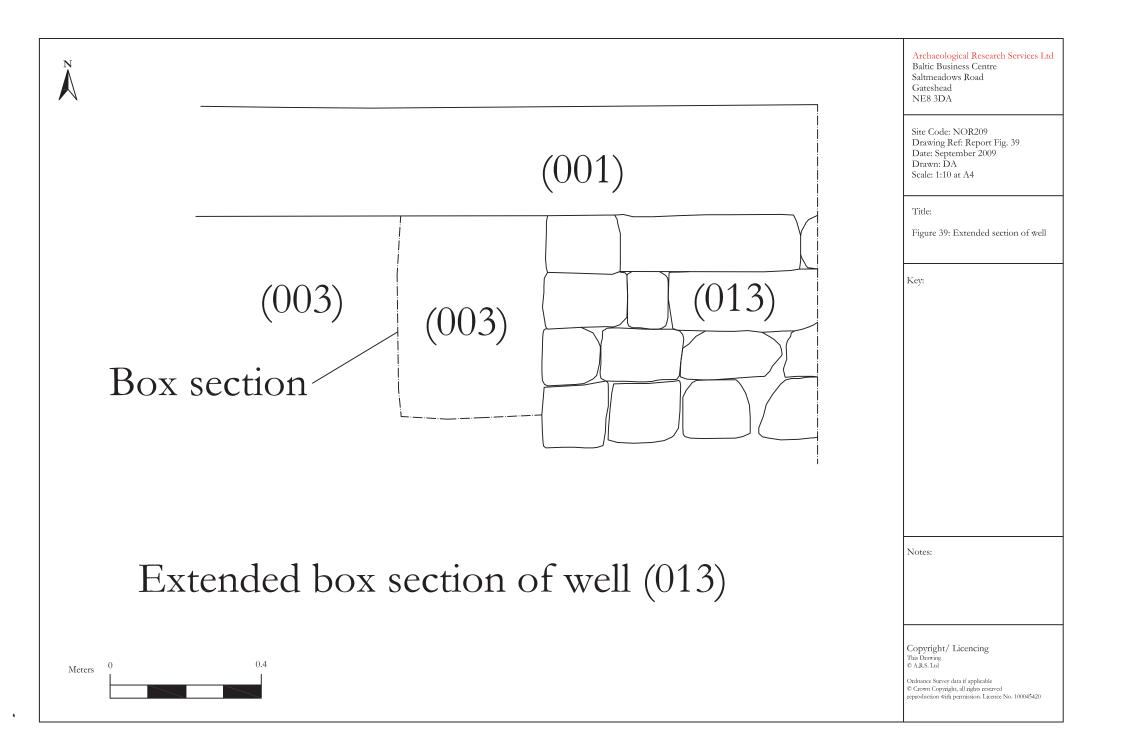
Fig.36 Well (013) after removal of stones, looking north (scale = 1m)



Fig.37 Metal loom weight found on the banks of the River Tweed, side 1 (scale = 0.15m)



Fig.38 Metal loom weight found on the banks of the River Tweed, side 2 (scale = 0.15m)



APPENDIX III - PHOTOGRAPHIC REGISTER

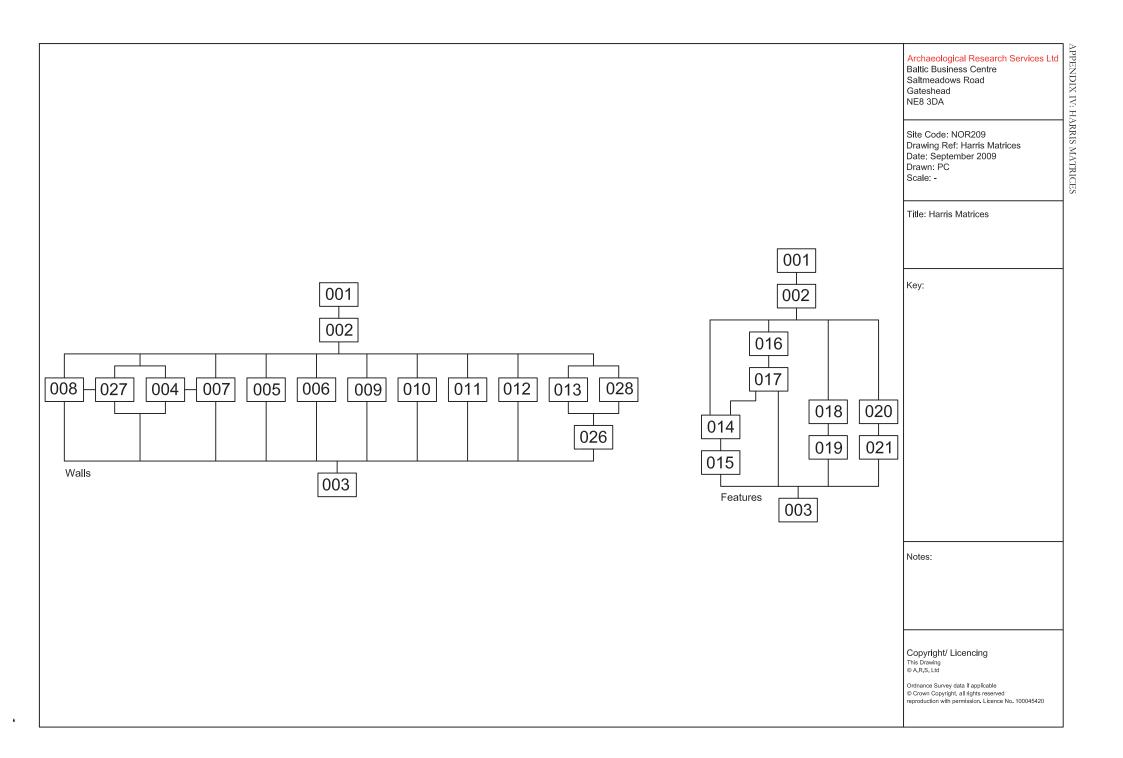
FILM ONE: BLACK & WHITE PRINT

Shot No.	Description	Scale	Date	Name
1	Overall shot	2 x 2m	18.8.09	DA
2	Overall shot	2 x 2m	18.8.09	DA
3	Overall shot	2 x 2m	18.8.09	DA
4	Overall shot	2 x 2m	18.8.09	DA
5	Overall shot	2 x 2m	18.8.09	DA
6	Overall shot	2 x 2m	18.8.09	DA
7	Well (013)	2m	18.8.09	DA
8	Hearth (006)	2m	18.8.09	DA
9	Wall (004)	2m	18.8.09	DA
10	Wall (004)	2m	18.8.09	DA
11	Wall (004)	2m	18.8.09	DA
12			18.8.09	DA
13 Wall (007) 14 Wall (010) 15 Wall (009)		2m	18.8.09	DA
		2m	18.8.09	DA
		2m	18.8.09	DA
16	16 Wall (011)		18.8.09	DA
17	Wall (012)	2m	18.8.09	DA
18	Linear (018)	2m	18.8.09	DA
19	Wall (005)	2m	18.8.09	DA
20	Circular feature (014)	2m	18.8.09	DA
21	Shallow pit feature (020)	2m	18.8.09	DA
22	Small pit (016) after ¹ / ₂ sectioning	2m	18.8.09	DA
23	· · · · · · · · · · · · · · · · · · ·		18.8.09	DA
24			18.8.09	DA
25	· · · · · · · · · · · · · · · · · · ·		18.8.09	DA
26 Linear (018) after ¹ / ₂ sectioning		1m	18.8.09	DA
27	Well (013) after removal of stones	1m	18.8.09	DA

FILM TWO: COLOUR PRINT

	Description	Scale	Date	Name
Shot No.	^			
1	Overall shot	2 x 2m	18.8.09	DA
2	Overall shot	2 x 2m	18.8.09	DA
3	Overall shot	2 x 2m	18.8.09	DA
4	Overall shot	2 x 2m	18.8.09	DA
5	Overall shot	2 x 2m	18.8.09	DA
6	Overall shot	2 x 2m	18.8.09	DA
7	Well (013)	2m	18.8.09	DA
8	Hearth (006)	2m	18.8.09	DA
9	Wall (004)	2m	18.8.09	DA
10	Wall (004)	2m	18.8.09	DA
11	Wall (004)	2m	18.8.09	DA
12	Wall (008)	2m	18.8.09	DA
13	Wall (007)	2m	18.8.09	DA
14	Wall (010)	2m	18.8.09	DA
15	Wall (009)	2m	18.8.09	DA
16	Wall (011)	2m	18.8.09	DA
17	Wall (012)	2m	18.8.09	DA
18	Linear (018)	2m	18.8.09	DA
19	Wall (005)	2m	18.8.09	DA
20	Circular feature (014)	2m	18.8.09	DA

21	Shallow pit feature (020)	2m	18.8.09	DA
22	Small pit (016) after 1/2 sectioning	2m	18.8.09	DA
23	Hearth (006) after removal of stones	1m	18.8.09	DA
24	Shallow pit feature (020) after 1/2 sectioning	1m	18.8.09	DA
25	Circular feature (014) after 1/2 sectioning	2m	18.8.09	DA
26	Linear (018) after ¹ / ₂ sectioning	1m	18.8.09	DA
27	Well (013) after removal of stones	1m	18.8.09	DA



APPENDIX V – SPECIALIST REPORTS

Norham 2009 By Jenny Vaughan, NCAS

Introduction

A small assemblage of 20 sherds of medieval pottery weighing 478 grams was recovered from the two phases of work. There were some possible 12^{th} century sherds but the majority were probably late medieval $(14^{th}/15^{th} \text{ century})$.

Types present

Most numerous were sherds of dark grey reduced green glazed type. The fabric was quite fine and sandy. There were no very diagnostics sherds but two joining pieces were from the shoulder of a hollow vessel with horizontal incised lines. There were four light firing gritty sherds (see catalogue), that from [105] being rather finer than the others. These may be 12th century. See catalogue for other fragments.

Discussion

The dating of pottery assemblages, in the absence of coins or other specific date indicators, depends to a great extent on the proportions of different types present. This is a very small group containing no very diagnostic material and the dating given above should therefore be treated with some caution. Reduced green glazed pottery persists into the early post medieval period in Scotland and North Northumberland. Light firing gritty wares are also found on later medieval sites in Scotland, so, although the sherds here have similarities with 12th century wares, they may also be later than suggested. It was noted that several sherds were large and most, with the exception of a grey gritty sherd from NOR09, were relatively fresh, suggesting that they had not moved far from the original place of deposition.

NOR09				
context	type	count	weight	comments
130	reduced green glazed	2	44	Find nos. 1 and 3 - join. Fine sandy fabric
130	reduced green glazed	1	95	Base - similar fabric to 1 and 3.
130	grey gritty	1	5	Dark grey gritty fabric with pink surface
		4	144	
NOR209				
104	reduced green glazed	4	122	Find nos. 1-4. 1 joins 3, 2 joins 4. Possibly same vessel - ?jug with incised lines round shoulder.
105	buff gritty (fine)	1	8	Sooted sherd in gritty fabric - medium to large (up to .75mm) quartz inclusions. Find no. 6
106	reduced green glazed	5	58	1
106	part oxidised iron rich	1	7	Dark grey with oxidised exterior margin/surface. Sandy/gritty fabric coarser than the green glazed sherds. Find no. 12
108	orange	1	9	Base sherd with patch of glaze. Fairly fine fabric. Find no. 13
108	reduced green glazed	1	6	Find no. 14
108	white gritty	1	21	Hard white fabric with moderately frequent inclusions, medium to large with some ferrous grits. Find no. 15
118	buff gritty	1	30	Sooted. Hard fabric with moderate ill-sorted fine to large inclusions. Find no. 16
unstrat	buff gritty	1	73	Similar to sherd from [118]. Find no. 18.



Norham, Northumberland

palaeoenvironmental assessment

on behalf of Archaeological Research Services Ltd

Report 2303

November 2009

Archaeological Services

Durham University South Road

Durham DH1 3LE Tel: 0191 334 1121 Fax: 0191 334 1126

archaeological.services@durham.ac.uk

www.durham.ac.uk/archaeologicalservices

Norham, Northumberland

palaeoenvironmental assessment

Report 2303 November 2009

Archaeological Services Durham University

on behalf of

Archaeological Research Services Ltd Suite 7 Angel House, Portland Square, Bakewell, Derbyshire, DE45 1HB

Contents

1.	Summary	•	•	•		1
2.	Project backgro	ound			2	
3.	Method					2
4.	Results					2
5.	Discussion					4
6.	Recommendat	ions				4
7.	Sources					4

© Archaeological Services 2009

1. Summary

The project

1.1 This report presents the results of palaeoenvironmental assessment of three bulk samples taken during an excavation by Archaeological Research Services Ltd at Norham, Northumberland.

Results

1.2 The results suggest all three contexts comprised accumulations of domestic waste. The charred plant macrofossil assemblages indicate bread wheat, rye, barley and oats were used at the site, typical crops of the medieval period. The presence of chaff in two of the contexts and a charred pod of wild radish, which is an arable weed, suggests crop processing took place at or near the site. The poor condition of the barley grains and chaff prevent further identification for this species.

Recommendations

1.3 No further analysis is required for these samples, but the preservation of charred plant remains (albeit limited) indicates that other features on the site may have the potential to provide further information about diet and crop husbandry practices. If additional works are undertaken on the site, the results from this assessment should be added to any further environmental data produced.

2. Project background

Location and background

2.1 An excavation was undertaken by Archaeological Research Services Ltd at Norham, Northumberland. Three bulk samples were taken for palaeoenvironmental assessment from context (6) a hearth fill, context (18) a linear and context (22) an area of burning. This report presents the results of the assessment.

Objective

2.2 The objective was to assess the potential of the environmental remains in the samples to provide information about the diet, economy, agricultural practices and palaeoenvironment at the site, and to select material suitable for radiocarbon dating.

Dates

2.3 Samples were received by Archaeological Services Durham University on 14th October 2009. Assessment and report preparation were conducted between 30th October – 3rd November 2009.

Personnel

2.4 Palaeoenvironmental assessment and report preparation were by Mr Lorne Elliott, and sample processing was undertaken by Dr Charlotte Henderson.

Archive

2.5 The site code is **NOR209**. The flots and radiocarbon material are in the Environmental Laboratory at Archaeological Services Durham University, awaiting collection or return. The small finds have been returned to ARS Ltd on 3rd November 2009.

3. Method

3.1 The bulk samples were manually floated and sieved through a 500µm mesh. The residues were described and scanned using a magnet for ferrous fragments. The flots were dried slowly and examined at ×60 magnifications using a Leica MZ7.5 stereomicroscope. Identification of the plant remains was undertaken by comparison with modern reference material held in the Environmental Laboratory at Archaeological Services Durham University. Plant taxonomic nomenclature follows Stace (1997).

4. **Results**

- 4.1 All three bulk samples produced relatively small flots comprising varying amounts of charcoal, coal, fuel ash, uncharred seeds and modern roots. A few charred rhizomes and heather twigs were also recorded in context (6). The well-drained nature of the sediments and the presence of roots, suggest the uncharred seeds are recent introductions.
- 4.2 Charred plant remains occurred in all three contexts, though generally they were in very poor condition with many having a degraded or pitted form. Grains and chaff of bread wheat and rye were recorded in context (6), along with grains of oat and indeterminate cereals, and a weed seed each of heath-grass and cinquefoil. Contexts (18) and (22) contained grains of oat, barley, cf. bread wheat and indeterminate cereals, with larger amounts occurring in context (22). A barley rachis fragment, a wild radish pod and a weed seed of the goosefoot family also occurred in context (18), and a culm node of the grass family was recorded in context (22).
- 4.3 The residues of contexts (6) and (22) comprised burnt clay and stones, with tiny fragments of calcined bone also occurring in context (6). A small sherd of pottery was recorded in context (18). The results are presented in Table 1.

Table 1: Results from the environmental assessment of the bulk samples

Context	6	18	22
Feature	Hearth	Linear	Burnt Layer

Material available for radiocarbon dating		\checkmark	\checkmark	\checkmark
Volume processed (l)		3.2	6.5	1.2
Volume of flot (ml)		50	20	8
Volume of flot assessed (ml)		50	20	8
Residue contents (relative abundance)			1	
Bone (calcined)	flecks	1	-	-
Burnt clay		-	-	1
Burnt clay (hearth base)		3	-	-
Burnt stones		-	-	1
Charcoal		-	1	-
Coal		-	1	-
Pot	sherd	-	1	-
Flot matrix (relative abundance)				
Charcoal		2	1	1
Coal		-	1	-
Fuel ash		2	2	1
Heather twigs (charred)		1	-	-
Roots (modern)		1	-	1
Rhizome/rootlets (charred)		1	-	-
Uncharred seeds		3	3	2
Uncharred remains (relative abundance)				
(a) Raphanus raphanistrum (Wild Radish)	pod	-	1	-
(c) Avena spp (Oat species)	grain	1	2	2
(c) Cerealia indeterminate	grain	2	1	3
(c) Hordeum spp (Barley species)	grain	-	1	3
(c) Hordeum spp (Barley species)	rachis fragment	-	1	-
(c) Secale cereale (Rye)	grain	2	-	-
(c) Secale cereale (Rye)	rachis fragment	1	-	-
(c) Triticum aestivum (Bread Wheat)	rachis fragment	1	-	-
(c) Triticum cf. aestivum (cf. Bread Wheat)	grain	2	1	1
(h) Danthonia decumbens (Heath-grass)	caryopsis	1	-	-
(x) Chenopodium spp (Goosefoot)	achene	-	1	-
(x) Poaceae undiff. (Grass family)	culm node	-	-	1
(x) Potentilla spp (Cinquefoils)	achene	1	-	-

[a-arable; c-cultivated; h-heath; x-wide niche] Relative abundance is based on a scale from 1 (lowest) to 5 (highest)

5. Discussion

- 5.1 A combination of oats, barley, bread wheat and rye were recorded at the site, although many grains in all three contexts were unidentifiable, due to poor preservation. This charred plant macrofossil assemblage is typical of the medieval period (Greig 1991). Bread wheat and rye were the more abundant species in context (6), whilst barley and oats were greater in number in contexts (18) and (22). These differing assemblages, though small, may reflect periods of cultivation, with wheat and rye representing winter crops and barley and oats representing spring crops.
- 5.2 The poor condition of the barley grains and rachis fragment prevent further identification for this species, and due to the absence of diagnostic chaff, it cannot be ruled out that the oat grains are from the wild variety.
- 5.3 The occurrence of chaff in contexts (6) and (18) and a charred pod of wild radish, which is an arable weed, in context (18), suggests crop processing was taking place at or near the site.
- 5.4 The presence of fuel ash, charcoal, charred plant remains, pottery and fragments of calcined bone, suggests that the fills accumulated as a result of the disposal of domestic waste.

6. **Recommendations**

6.1 No further analysis is required for these samples, but the preservation of charred plant remains (albeit limited) indicates that other features on the site may have the potential to provide further information about diet and crop husbandry practices. If additional works are undertaken on the site, the results from this assessment should be added to any further environmental data produced.

7. Sources

Greig J R A, 1991 The British Isles, in W Van Zeist, K Wasylikowa & K-E Behre (eds) *Progress in Old World Palaeoethnobotany*, Rotterdam

Stace, C, 1997 New Flora of the British Isles, 2nd Edition, Cambridge



Revision Schedule

Archaeological Written Scheme of Investigation

July 2009

Rev	Date	Details	Prepared by	Reviewed by	Approved by
01	02.06.09	Draft1	Annie Bingham Senior Archaeological Consultant	Neil Macnab Principal Archaeological Consultant	Annette Roe Technical Director
02	06.07.09	Final	Annie Bingham Senior Archaeological Consultant	Neil Macnab Principal Archaeological Consultant	Annette Roe Technical Director

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Scott Wilson being obtained. Scott Wilson accepts no responsibility or liability for the consequence of this document being used for a purpose other than the purposes for which it was commissioned. Any person using or relying on the document for such other purpose agrees, and will by such use or reliance be taken to confirm his agreement to indemnify Scott Wilson for all loss or damage resulting there from. Scott Wilson accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.

Scott Wilson

Earl Grey House 75 - 85 Grey Street Newcastle upon Tyne NE1 6EF

Tel. 0191 255 8080 Fax. 0191 255 8081

www.scottwilson.com