

Land North of 32, Snailbeach, Shropshire.

February 2017 V 1.0





Archaeological Watching Brief Project Code: A0104.1 Report no. 0117

Land North of 32, Snalibeach, Shropshire.

February 2017

Report no. 0117 v1.0 Archaeological Watching Brief

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Project Code: A0104.1 Date: 07/03/2017 Client: Mr. Ryan Munslow info@aeonarchaeology.co.uk

Figures

Figure 01: Location of site north of 32, Snalibeach, Shropshire. Scale 1:10,000 at A4.

Figure 02: Location of site north of 32, Snalibeach, Shropshire. Scale 1:1,000 at A4.

Figure 03: Location of trenches at 32, Snailbeach, Shropshire. Scale 1,100 at A4

Figure 04: Plan Drawing showing location of land drains [1004] & [1006] with associated section drawings. Scale 1:50 at A4 (Plan) & 1:10 at A4 (Sections)

Plates

Plate 01: Pre excavation shot from Southeast - scale 1m
Plate 02: Pre excavation shot from Southwest - scale 1m
Plate 03: Section of field drain [1006] from Southwest - scale 0.5m
Plate 04: Plan shot of field drain [1006] from North - scale 1m & 0.5m
Plate 05: Section of field drain [1004] from North - scale 0.5m
Plate 06: Plan shot of field drain [1004] from North - scale 1m & 0.5m
Plate 07: Plan shot of field drains [1004] & [1006] from Northeast - scale 1m
Plate 08: Southern foundation trench showing natural glacial substrata from Northwest - scale 1m
Plate 09: Northern foundation trench showing natural glacial substrata from Northwest - scale 1m
Plate 10: Eastern foundation trench showing natural glacial substrata from Northwest - scale 1m
Plate 11: Section of soakaway trench - scale 1m
Plate 12: Plan Shot of soakaway trench - scale 1m

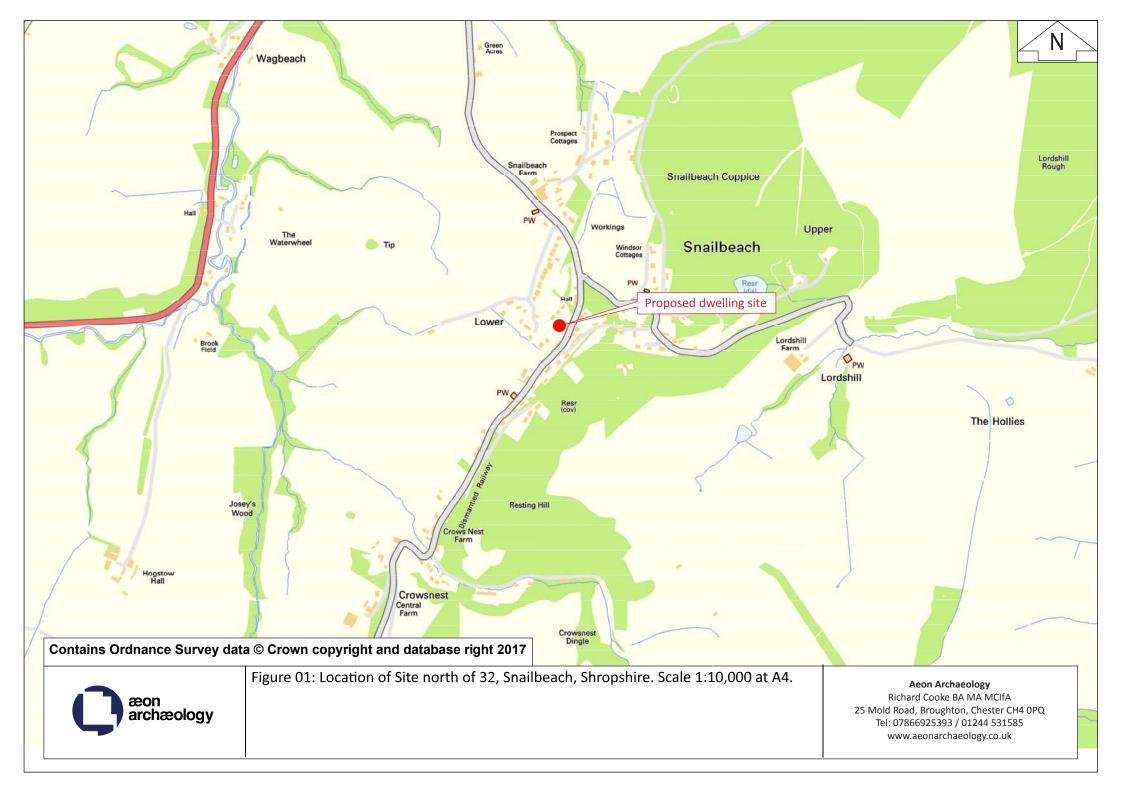
Contents

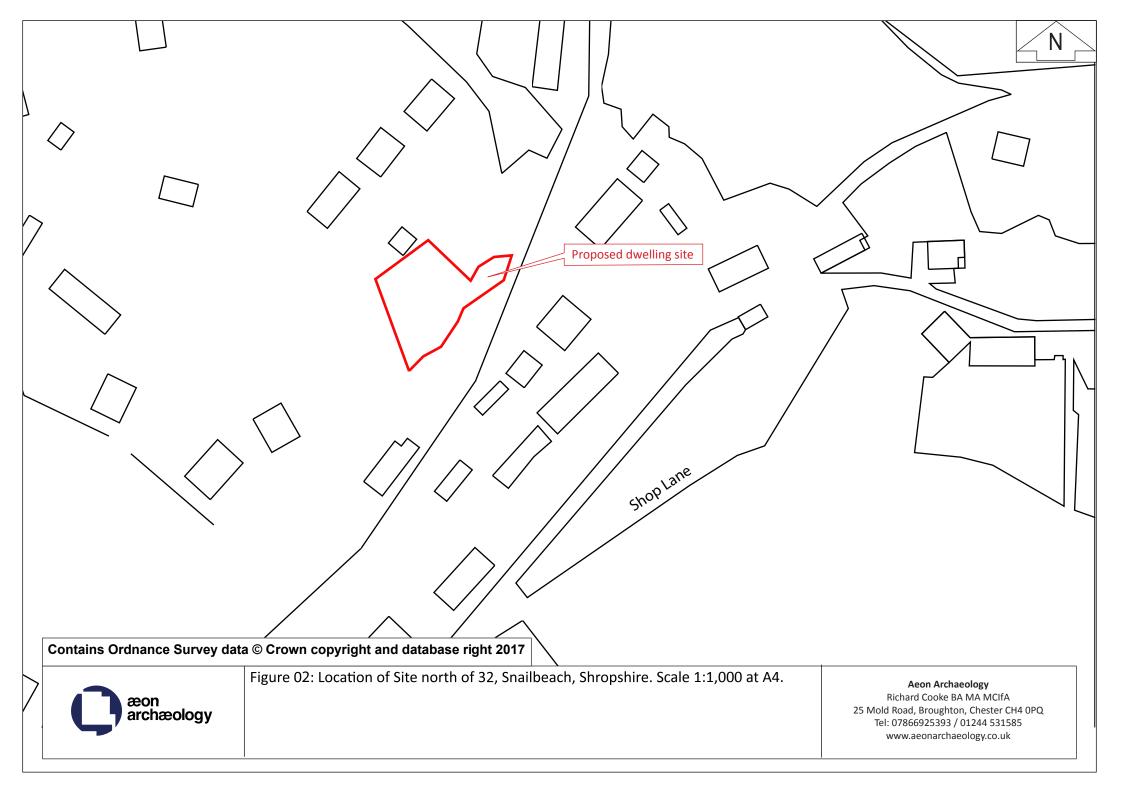
1.0 NON-TECHNICAL SUMMARY	1
2.0 INTRODUCTION	
3.0 SITE LOCATION AND HISTORY	
4.0 METHODOLOGY	
4.1 Archaeological Watching Brief	4
4.2.1 Post-excavation Assessment	
4.2.2 Post-excavation Report	
4.3 Archive	
5.0 QUANTIFICATION OF RESULTS	6
5.1 The Documentary Archive	6
6.0 SPECIALIST ANALYSIS – ARTEFACTS	6
7.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF	
7.1 Dwelling Foundation	
7.2 Soak away	9
8.0 CONCLUSION	10
9.0 SOURCES	11
APPENDIX I – DETAILS OF ARCHAEOLOGICAL CONTEXTS	
APPENDIX II - WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAI	Ĺ
WATCHING BRIEF	13

1.0 NON-TECHNICAL SUMMARY

Aeon Archaeology was commissioned by Mr R Munslow (owner) to undertake an archaeological watching brief as part of the construction of a new detached dwelling with vehicular access to the north of 32, Snailbeach, Shropshire, SY5 0NX (NGR SJ 37274 02160) (Planning Permission: 16/03876/FUL).

The archaeological watching brief at Snailbeach, Shropshire revealed the existence of two postmedieval field drains cut directly into the natural clay substrata. These drains were reminiscent of a basic culvert in their construction and were still carrying water down the hill gradient. Ceramic found within the larger drain dated it to the 19th century.





2.0 INTRODUCTION

Aeon Archaeology was commissioned by Mr R Munslow (owner) to undertake an archaeological watching brief as part of the construction of a new detached dwelling with vehicular access to the north of 32, Snailbeach, Shropshire, SY5 0NX (NGR SJ 37274 02160) (Planning Permission: 16/03876/FUL).

The location for the dwelling was located at the base of a steep gradient to the north of an unnamed road which runs through Snailbeach village. The works required the excavation of a foundation trench and associated soak away by a tracked excavator to the natural glacial substrata in order to provide a firm footing for foundations. Within the area encompassing the foundation trench two field drains of stone construction were encountered running to the north and northwest.

The watching brief was maintained in order to address;

Condition 5

No development approved by this permission shall commence until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation (WSI). This written scheme shall be approved in writing by the Planning Authority prior to the commencement of works.

Reason

The site is known to hold archaeological interest.

The property is within the Snailbeach Conservation Area that is historically linked with the adjacent lead mining area that is a scheduled ancient monument (SAM 21658).

Previous archaeological work in the area has included a Heritage Statement written by CJR Heritage Services in August 2016 (report. 16_03876) which summarized that 'The Snailbeach site had been worked over many centuries since Roman times and many layers of spoil distribution/old workings are probably unrecorded as such it is proposed that an archaeologist be present during the site excavations to record any remains/finds that could be revealed'.

The watching brief was maintained during intrusive groundworks associated with the construction of the new dwelling.

The use of such a condition is in line with the guidance set out in paragraph 141, Section 12 (Conserving and Enhancing the Historic Environment) of the National Planning Policy Framework (2012), published by the Department for Communities and Local Government and Managing Significance in Decision Taking in the Historic Environment, Historic Environment Good Practice Advice in Planning: 2 (Historic England 2015); and Policy MD13 of the SAMDev component of the Shropshire Local Plan.

Reference was made to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014).

3.0 SITE LOCATION AND HISTORY

The village of Snailbeach was built for the workers of the lead mine - Snailbeach Mine, which was the biggest lead mine in Shropshire and it is reputed to have yielded the greatest volume of lead per acre of any mine in Europe. It is reputed to date from Roman times and a Roman lead ingot was found at Snailbeach in 1796, weighing 193lb, with "IMP HADRIANI AVG" on the top. The ingot has the equivalent of 2oz 6dwt of silver per ton. According to reports from the middle of the 19th Century the Roman workings were still clearly visible at Snailbeach and the miners referred to the upper level as the Roman Level. After the Romans left the area, the mine lay abandoned for hundreds of years. It may have been worked in the 12th or 13th Century but the first recorded working was in 1552. when John Clifton held a mine in Hogstow Forest. Some Derbyshire miners took leases in 1676 and 1686 but whether they were successful is not known.

In 1761, the mine was leased by Thomas Powys for 5 years. In 1766 there were a series of shafts along the vein, indicating systematic working. In the same year a new partnership took the mine and worked it until 1772. Between 1768-1772 the mine yielded 505 tons of lead ore. In 1782, Thomas Lovett took a 21 year lease and in the following year he formed the Snailbeach Company with 7 others. In 1784 he leased land along the road between Pontesford and Pontesbury, sinking shafts to start a colliery to provide coal for the boilers at Snailbeach. The colliery continued in production until 1859, and produced 27,622 tons of coal. He also built a smelter in Pontesford to process the lead ore, which continued in use from 1784 until a new smelt mill was opened nearer to the mine in 1862. At the main site, the company sank George's Shaft (which eventually reached a depth of 750ft) and the depths of all subsequent underground workings are measured in yards below this shaft collar, eg the 40 Yard Level is 120ft below this point. Winding would have been by a horse gin, using two ropes so one kibble would be at the bottom of the shaft while the other was at the top (taken from http://shropshirehistory.com).

The mine has some of the best preserved surface buildings of a lead mine left standing in Britain including a Cornish Engine House. It is managed by the Shropshire Mines Trust. Underground mining ceased in Snailbeach in 1955 and since then only some reworking of the spoil heaps for spar, to use as pebble dash on buildings, has occurred. Barytes from here was sent to the Windscale nuclear reactor to smother fuel cells after an accident. Locals carried on working the tips until the 1970s. Although some ore is said to have been left standing in the mine, it does not seem likely that the mine will reopen. Once a mine has been allowed to flood and the machinery removed the cost of reopening the mine increases dramatically and the prospect usually becomes too expensive.

The Shropshire County Council, using government grants, did extensive work in the early 1990s to make some of the shallow workings safe for the villagers. At the same time, they acquired many of the surface buildings and preserved these or restored them from a semi-derelict condition. The white spoil tip on the northern edge of the village, which had been a local landmark, was landscaped and planted with trees as part of the mining reclamation works.

4.0 METHODOLOGY

4.1 Archaeological Watching Brief

The methodology for the watching brief was prepared with reference to the CIfA's document Standards and Guidance for Archaeological Watching Brief (2014) and was kept under constant review during the project, in order to see how far it met the terms of the aims and objectives, and in order to adopt any new questions which should they have arisen.

Curatorial monitoring of the archaeological work was carried out by the Planning Officer (Archaeology) at Shropshire county council.

A suitably qualified and experienced archaeologist from Aeon Archaeology was commissioned for the maintenance of the watching brief. On arrival on site, the archaeologist reported to the site manager and conformed to the arrangements for notification of entering and leaving site. The archaeologist kept a record of the date, time and duration of all attendances at site, the names and numbers of archaeologists deployed and any actions taken. The archaeologist was provided with a Health & Safety Induction by the construction contractor and wore a safety helmet, safety footwear and high visibility jacket/vest at all times.

All of the archaeological deposits, features and structures identified were investigated and recorded under the terms of the watching brief and were excavated manually in a controlled and stratigraphic manner sufficient to address the aims and objectives of the project.

The method of recording followed the normal principles of stratigraphic excavation and the stratigraphy was recorded by written descriptions even where no archaeological deposits were identified. The archaeologist recorded archaeological deposits using proformae recording forms and located them on a large-scale site plan related to the Ordnance Survey National Grid and Datum references.

The groundworks excavations were undertaken using a mechanical excavator fitted with a toothless ditching bucket.

The drawn record comprised of plans at scale 1:20 and sections drawn at scale 1:10; propriety electronic hardware and software to prepare site drawings was used as appropriate.

A photographic record was maintained throughout, using a digital SLR camera (Canon 600D) set to maximum resolution and any subsurface remains were also recorded photographically, with detailed notations and measured drawings being undertaken where required.

The archive produced is held at Aeon Archaeology under the project code A0104.1.

4.2.1 Post-excavation Assessment

This report on the results of the watching brief, in accordance with the recommendations in *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006; 2015), and in the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological watching brief* (2014) has now been produced upon conclusion of the archaeological fieldwork.

4.2.2 Post-excavation Report

This report includes the following:

- A non-technical summary.
- A table of contents.
- An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site.
- A statement of the project aims.
- An account of the project methodology undertaken, with an assessment of the same to include a statement on preservation bias and the means of data collection and sampling strategies.
- A factual summary of the history, development and use of the site.
- A statement setting out the nature, quantity and condition of the material archive
- (artefacts and ecofacts) including commentary on any bias observed due to collection and sampling strategies and commentary on long-term storage requirements.
- A statement setting out the nature and quantity of the documentary archive (notes, photographs, drawings, digital data).
- A general site plan indicating the position and size of the areas subject to watching brief and the locations of archaeological deposits identified and recorded during the works.
- Plans and sections at appropriate scales, augmented with appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the
- National
 - Grid.
- Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate.
- Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits and finds identified during the project.
- A discussion of any research implications arising from the archaeological work.
- Notes on consultations with conservators and the nominated archive repository related to the immediate and long-term conservation and storage requirements for the data held in the site archive and recommendations of retention/discard of artefacts and ecofacts.
- A bibliography of sources consulted.
- Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive and a statement on its location/proposed repository.
- In addition the post-excavation report will summarise and draw together the findings of all of the phases of work.

4.3 Archive

A full archive including plans, photographs, written material and any other material resulting from the project has been prepared. All plans, photographs and descriptions have been labelled, and cross-referenced, and upon approval from the Client copies of the report will be sent to the Shropshire Historic Environment Record, the Planning Officer (Archaeology) at Shropshire County Council, and the OASIS online database.

5.0 QUANTIFICATION OF RESULTS

5.1 The Documentary Archive

The following documentary records were created during the archaeological watching brief:

Watching brief day record sheets	1
Digital photographs	30
Context sheets	07
Drawings	3 on 1 sheet

6.0 SPECIALIST ANALYSIS – ARTEFACTS

Summary

The Snailbeach ceramic finds assemblage comprised the following range of artefacts: 2 sherds of post-medieval pottery and one fragment of ceramic drain pipe. The finds span a period between the mid and late 19th Century.

Artefact	Post-		Other	
Category	Medieval		Ceramic	
	Potter	у		
Context	No.	Wt.	No.	Wt.
(1002)	1	42		
(1006)	1	14	1	130
Total	2	56	1	130

Table 1: Quantification of all finds by category and context

Post-Medieval Pottery

Two ware groups were identified; these were a fragment of alkaline glazed stoneware (probably from a jar) and a yellow glazed bone china (body sherd of a plate).

Wares	Stoneware		Bone China	
Context	No.	Wt.	No.	Wt.
(1002)			1	16
(1006)	1	41		

Table 2: Quantification of post-medieval pottery by ware group and context

Context (1002)

This context produced a single body sherd of a yellow glazed bone china plate; which suggests a date within the end of the 18th century into the first half of the 19th century.

Context (1006)

This context produced a single body sherd of alkaline glazed stoneware probably a jug; the date for this relates to somewhere within the middle part of the 19th century. This fragment was found in conjunction with the sherd of drain pipe within the larger drain.

Other Ceramics

Context (1006)

A single fragment of drainpipe (weighing 130g) was recovered from this context. It was salt glazed over a red slip on the inside but was unglazed on the exterior surface.

Conclusion

The recovered ceramic sherds were all of post-medieval date. The recovery of 19th Century ceramic from within the interior of field drain (1006) provides a date for the construction of this feature.

7.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

The archaeological watching brief was maintained on 8th February 2017 during the excavation of block and beam foundation trenches for the new dwelling, and during the excavation of a soak-away drain at the eastern end of the site. During the excavation archaeological contexts were assigned where relevant and are shown in brackets. Details of contexts are presented in appendix I.

7.1 Dwelling Foundation

Description

The archaeological watching brief was maintained while the foundation trenches were excavated towards the south-western corner of the development area. The foundation excavation consisted of a topsoil strip and then a 0.60m deep trench being excavated down onto the glacial substrata – the base of this trench reached a maximum depth of 0.86m.

A mechanical excavator fitted with toothless ditching bucket was utilised to excavate the foundation footings. The trench was excavated through 0.16m of turf and topsoil (1001) which lay across the entire footprint – this material was a loosely amalgamated dark black-grey silt-clay inundated with root activity and large sub-rounded pebble and charcoal fleck inclusions. This overlaid a 0.47m deep subsoil deposit (1002) of a fairly loose dark black-brown clay-silt characterised by frequent broken brick and mortar inclusions. Beneath this was a bright grey-yellow clay natural (1003) deposit which extended to >0.23m in depth.

At the south-western end of the site a drain (1004) was uncovered which measured >1.60m in length by 0.41m in width and 0.21m deep, orientated southeast to northwest and cut into the natural clay substrata (1003). The drain was linear in plan and consisted of small angular and sub-angular cobbles laid within a cut [1005] with steep, almost vertical sides and a flat base. The cobbles had been laid to form rudimentary sides and capstones to the drain but no clear base was visible within the cut [1005].

Another drain (1006) was uncovered further to the southwest of drain (1004). This drain (1006) was wider than (1004) and measured >4.61m in length by 0.47m in width and 0.26m deep. It was linear in plan and was aligned southeast to northwest. This drain (1006) was constructed from large rounded and sub-rounded cobbles that had been laid within a slightly less steep, concave cut [1007] but the base was also flat. The cobbles had once more been laid to form rudimentary sides and capstones and no clear base was visible within the cut [1007].

Discussion

The subsoil deposit (1002) appears to have been used as a levelling material to create a terrace within the garden area – this material appears to have been imported as it was full of bricks and mortar. The drains had no formal stone bases and exhibited evidence of silting; with fine silts and small rounded pebbles. This approach to construction may have been due to the presence of the clay; as its impermeable nature could have been relied upon to channel the water downslope without the need for a stone base. The drain (1004) appeared to have been "capped off" with similar angular/sub angular cobbles – however there had been substantial areas of collapse within the exposed length of drain.

The drain (1006) was 6.0cm wider and 4.0cm deeper than (1004) and appeared to be carrying a larger amount of water. The drain (1006) appeared more substantial in its construction and was perhaps a later improvement to drainage in the area although no stratigraphic relationship between the two drains was established to support this.

The two drains probably represent an effort at land improvement on the hillside possibly associated with the miner's cottage upslope to the southwest. Furthermore the alignments of the drains differ; the drain (1004) appears to descend the slope sharply whilst (1006) appears to respect the gradient of the

slope and channels its water down the hillside in a more gradual manner. There is an argument for drain (1006) perhaps representing an improvement in drainage compared to the drain (1004) due to the different alignment and higher capacity of the drain (1006) - however no stratigraphic relationship was established between the two drains. Surprisingly both drains appeared to be carrying water although be it at quite a gradual rate, perhaps alluding to collapse or blockage further up along their respective systems.

7.2 Soak away

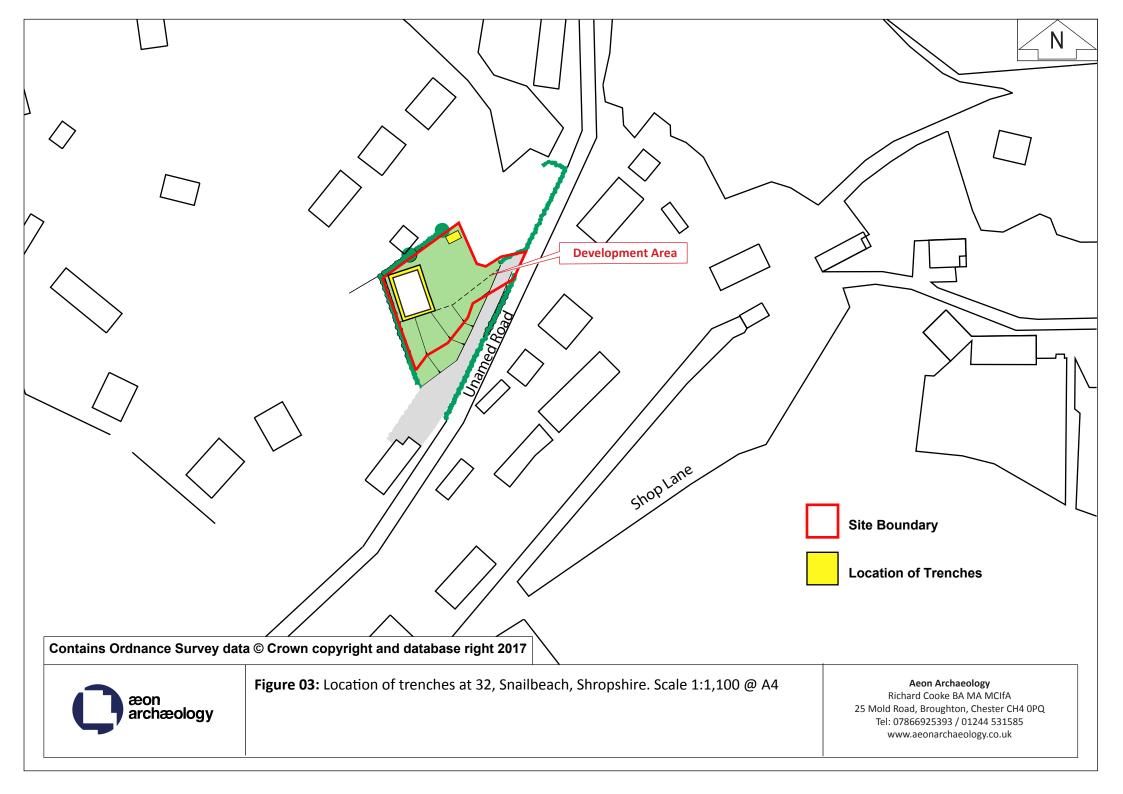
Description

The archaeological watching brief was also maintained while a soak-way was excavated towards the north-eastern corner of the churchyard. The trench was rectangular in plan and was aligned northeast to southwest and measured approximately 2.10m long by 1.20m wide and was excavated to a depth of 1.17m.

The trench was excavated through a 0.14m deep turf and topsoil deposit (1001), consisting of a loose dark black-grey silt-clay material. Beneath this lay a 0.27m deep fairly loose dark black-brown clay-silt subsoil (1002) with frequent broken brick and mortar fragment inclusions. This overlaid a bright grey-yellow clay natural deposit which extended to a depth of >0.76m.

Discussion

The deposits produced no archaeological artefacts or structures apart from the modern ceramic building materials abundant within the subsoil (1002).



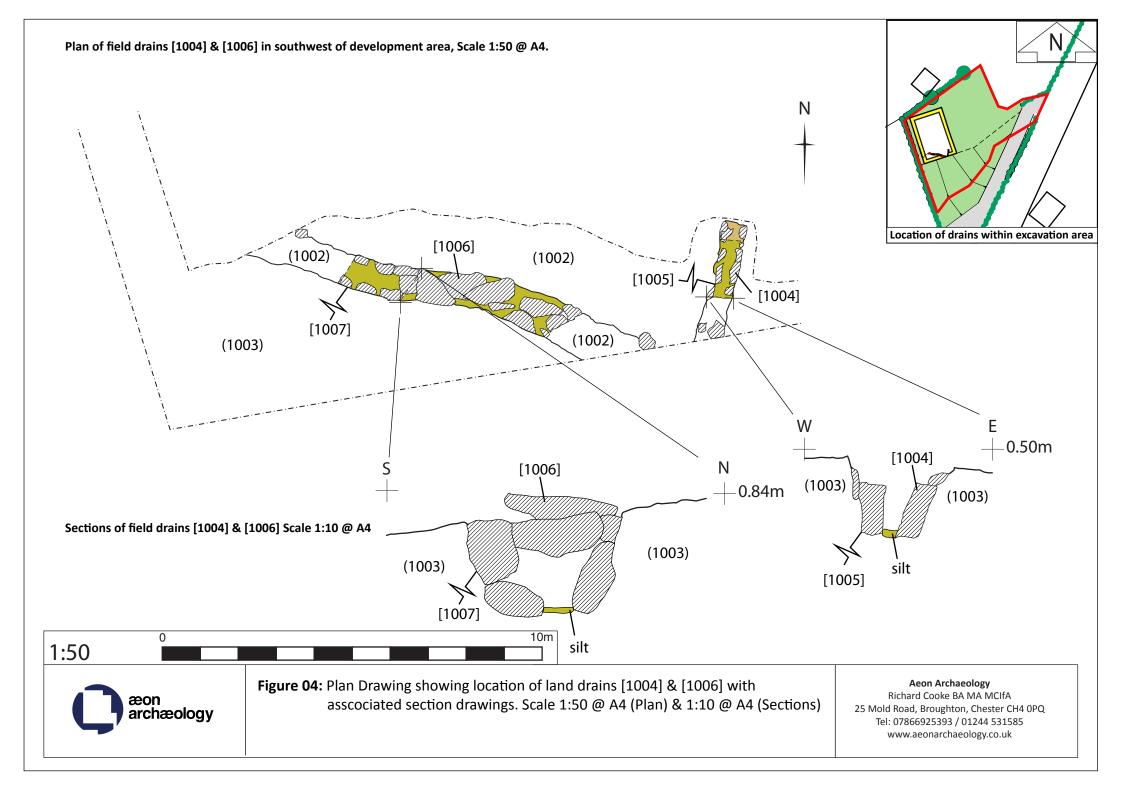




Plate 01: Pre excavation shot from Southeast - scale 1m





Plate 02: Pre excavation shot from Southwest - scale 1m





Plate 03: Section of field drain [1006] from Southwest - scale 0.5m





Plate 04: Plan shot of of field drain [1006] from Southwest - scale 1m & 0.5m





Plate 05: Section of field drain [1004] from North - scale 0.5m





Plate 06: Plan shot of of field drain [1004] from North - scale 1m & 0.5m





Plate 07: Plan shot of field drains [1004] & [1006] from Northeast - scale 1m





Plate 08: Southern foundation trench showing natural glacial substrata from Northwest - scale 1m





Plate 09: Northern foundation trench showing natural glacial substrata from Northwest - scale 1m





Plate 10: Eastern foundation trench showing natural glacial substrata from Northwest - scale 1m





Plate 11: Section of soakaway trench - scale 1m





Plate 12: Plan Shot of soakaway trench - scale 1m



8.0 CONCLUSION

The archaeological watching brief on land to the north of 32, Snailbeach, Shropshire revealed the remains of two post-medieval field drains. These drains appear to have been associated with land improvement on the hillside below the old miner's cottage to the southwest. The larger of the drains was dated by the application of relative dating techniques; using ceramic recovered from a secure context within the stonework of the drain – placing its construction at some time during the 19th century. Furthermore the orientation of the larger drain and its enhanced capacity may represent an effort at the overall improvement of drainage from an earlier system – this however is not supported by stratigraphic or artefactual evidence and therefore remains conjecture. These drains are of a non-typical construction and may allude to industrial processes originating from the mine head on the hillside above or may relate towards an attempt at land improvement; regardless these features offer an interesting commentary on social historic practices at Snailbeach by the workers who lived there.

Apart from this discovery there were no other archaeological remains found and it is the recommendation of this report that the archaeological condition associated with planning permission be discharged.

9.0 SOURCES

OS Maps

OS 1:10 000 Series sheet SJ 30 NE, SJ 30 SE, SJ 30 SW and SJ 30NW.

Published sources

Brown D. H., 2007. Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation. Archaeological Archives Forum

British Geological Survey website. www.bgs.ac.uk

Draper, J., 2001. Post-Medieval Pottery 1650-1800, Shire Archaeology Series, Shire Publications Ltd

English Heritage, 1991. Management of Archaeological Projects (MAP2)

English Heritage, 2006. Management of Research Projects in the Historic Environment (MORPHE)

Laing, L., 2014. Pottery in Britain: 4000BC to AD1900, Greenlight Publishing, Essex

Richards, J. & Robinson, D., 2000. Digital Archives from Excavation and *Fieldwork: Guide to Good Practice* (Second Edition). The Archaeology Data Service Guide to Good Practice: Oxbow Books

The Chartered Institute for Archaeologists, 2014. Code of Conduct

The Chartered Institute for Archaeologists, 2014. Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology

The Chartered Institute for Archaeologists, 2014. *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*

The Chartered Institute for Archaeologists, 2014. Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives

The Chartered Institute for Archaeologists, 2014. *Standard and Guidance for Archaeological Watching Brief*

Website: http://shropshirehistory.com/mining/mines/snailbeach.htm

APPENDIX I – DETAILS OF ARCHAEOLOGICAL CONTEXTS

Context	Description
1001	Topsoil & Turf.
1002	Subsoil
1003	Natural Clay.
1004	Small drain/culvert
1005	Cut of small drain
1006	Large drain/culvert
1007	Cut of large drain

APPENDIX II – WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF



New Dwelling North of 32, Snailbeach, Shropshire.

Written Scheme of Investigation for Archaeological Watching Brief.

January 2017 V 1.0



Project Code: A0104.1 Planning Ref: 16/03876/FUL



1.0 INTRODUCTION	1
2.0 AIMS AND OBJECTIVES	2
3.0 METHODOLOGY	3
3.1 Archaeological Watching Brief	
3.2 Watching brief report	4
3.2.1 Post-excavation Assessment	4
3.2.2 Post-excavation Report	5
3.3 Archive	5
4.0 FURTHER ARCHAEOLOGICAL WORKS	6
5.0 ENVIRONMENTAL SAMPLES	6
6.0 HUMAN REMAINS	6
7.0 SMALL FINDS	7
8.0 UNEXPECTED DISCOVERIES: TREASURE TROVE	7
9.0 STAFF & TIMETABLE	8
9.1 Staff	8
9.2 Timetable	8
10.0 HEALTH AND SAFETY	8
11.0 INSURANCE	8
12.0 GENERAL	9
SPECIALISTS	9

1.0 INTRODUCTION

Planning permission has been secured by Mr R Munslow (owner) for the construction of a detached dwelling with vehicular access to the north of 32, Snailbeach, Shropshire SY5 0NX (NGR SJ 37274 02160) (Planning Permission: 16/03876/FUL).

This Written Scheme of Investigation (WSI) addresses the following:

Condition 5

No development approved by this permission shall commence until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation (WSI). This written scheme shall be approved in writing by the Planning Authority prior to the commencement of works.

Reason

The site is known to hold archaeological interest.

The property is within the Snailbeach Conservation Area that is historically linked with the adjacent lead mining area that is a scheduled ancient monument (SAM 21658).

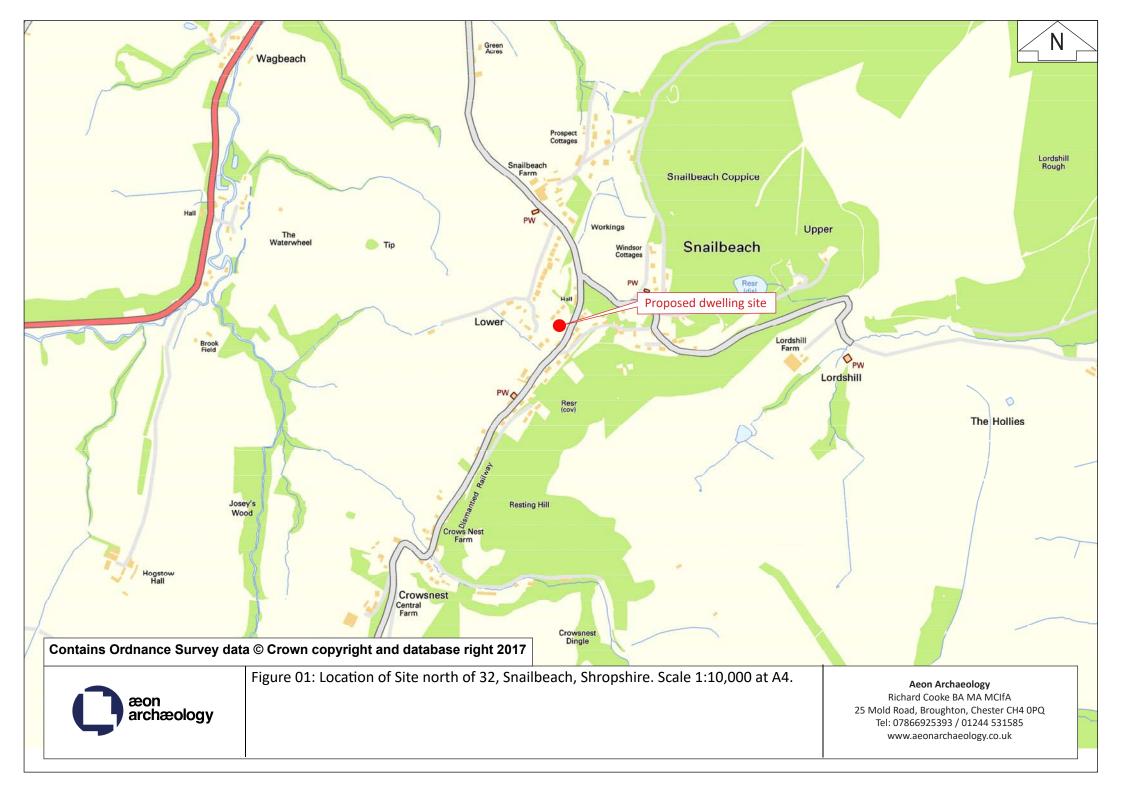
Previous archaeological work in the area has included a Heritage Statement written by CJR Heritage Services in August 2016 (report. 16_03876) which summarized that 'The Snailbeach site had been worked over many centuries since Roman times and many layers of spoil distribution/old workings are probably unrecorded it is proposed that an archaeologist be present during the site excavations to record any remains/finds that could be revealed'.

The watching brief will be maintained during intrusive groundworks, as detailed below.

This WSI states the aims, objectives and methodology for implementing the archaeological watching brief so as to meet the spirit and intent of the archaeological condition.

The use of such a condition is in line with the guidance set out in paragraph 141, Section 12 (Conserving and Enhancing the Historic Environment) of the National Planning Policy Framework (2012), published by the Department for Communities and Local Government and Managing Significance in Decision Taking in the Historic Environment, Historic Environment Good Practice Advice in Planning: 2 (Historic England 2015); and Policy MD13 of the SAMDev component of the Shropshire Local Plan.

Reference will be made to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014).



Contains Ordnance Survey da	Proposed dwelling site Proposed dwelling site Shop Lane	
e archæology	Figure 01: Location of Site north of 32, Snailbeach, Shropshire. Scale 1:1,000 at A4.	Aeon Archaeology Richard Cooke BA MA MCIfA 25 Mold Road, Broughton, Chester CH4 0PQ Tel: 07866925393 / 01244 531585 www.aeonarchaeology.co.uk

2.0 AIMS AND OBJECTIVES

The archaeological watching brief shall be maintained:

1. During any groundworks (including utility trenches) associated with the construction of the new dwelling.

The CIfA maintains a standard for archaeological watching brief which states that:

An archaeological watching brief will record the archaeological resource during development within a specified area using appropriate methods and practices. These will satisfy the stated aims of the project, and comply with the Code of conduct and other relevant by-laws of CIfA.

An archaeological watching brief is defined by the CIfA as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons (CIfA 2014). The watching brief will take place within a specified area within the Site where there is a possibility that archaeological deposits may be disturbed or destroyed.

The CIfA further identifies the purpose of a watching brief as allowing, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established in advance of development or other potentially disruptive works.

It is also important to note that a watching brief provides an opportunity, if needed, for a signal to be made to all interested parties, before the destruction of the archaeological materials, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.

A watching brief is, therefore, not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

The aims of the watching brief are:

- To allow, within the resources available, the opportunity to gain information about and record the presence/absence, nature and date of archaeological remains on the Site affected by excavations and groundworks, the presence and nature of which could not be established with sufficient confidence in advance of works which may disturb them.
- To provide the facility to signal to the relevant authorities, before irreversible impact to remains that an archaeological and/or historic find has been made for which the resources allocated to the watching brief itself are inadequate to support their treatment to an adequate and satisfactory standard.

The specific objectives of the watching brief are:

- To observe and recover any artefacts of archaeological significance.
- To record the location, dimensions and nature of any deposits, features, structures or artefacts of archaeological significance.
- To recover samples of any deposits considered to have potential for analysis for palaeoenvironmental data should the opportunity arise.

3.0 METHODOLOGY

3.1 Archaeological Watching Brief

The methodology for the watching brief has been prepared with reference to the CIfA's document Standards and Guidance for Archaeological Watching Brief (2014) and will be kept under constant review during the project, in order to see how far it is meeting the terms of the aims and objectives, and in order to adopt any new questions which may arise.

Curatorial monitoring of the archaeological work will be carried out by the Shropshire Development Control Archaeologist. To facilitate the curatorial monitoring, the officer shall be provided with a minimum of two weeks' notice of the start of the archaeological work.

A suitably qualified and experienced archaeologist(s) from Aeon Archaeology will be commissioned for the maintenance of the watching brief. On arrival on site, the archaeologist(s) will report to the site manager and conform to the arrangements for notification of entering and leaving site. The archaeologist(s) will keep a record of the date, time and duration of all attendances at site, the names and numbers of archaeologists deployed and any actions taken. The archaeologist will be provided with a Health & Safety Induction by the construction contractor and wear a safety helmet, safety footwear and high visibility jacket/vest at all times.

If deposits and or artefacts are exposed during excavations for the development which require recording and recovery, it may be necessary to delay works whilst the proper investigation and recording takes place. Watching brief recording can often be undertaken without delay to groundworks, depending upon the specific circumstances and flexibility of all the staff on site.

Within the constraints of the terms of the watching brief work, the archaeologist will not cause unreasonable disruption to the maintenance of the work schedules of other contractors on site. In the event of archaeological discoveries the treatment of which (either arising from the volume/quantity of material and/or the complexity/importance of the material) is beyond the resources deployed the Client will be notified and a site meeting/telephone consultation arranged with the Shropshire Development Control Archaeologist. The aim of the meeting will be to confirm that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard and identify measures which would be sufficient to support treatment to a satisfactory and proper standard prior to destruction of the material in question.

Any archaeological deposits, features and structures identified which can be investigated and recorded under the terms of the watching brief will be excavated manually in a controlled and stratigraphic manner sufficient to address the aims and objectives of the project – subject to the limitations on site access.

It may not be necessary to excavate the complete stratigraphic sequence to geologically lain deposits but the inter-relationships between archaeological deposits, features and structures will be investigated sufficient to address the aims and objectives of the project and the complete stratigraphic sequence to geologically lain deposits will be investigated where practicable.

The method of recording will follow the normal principles of stratigraphic excavation and the stratigraphy will be recorded in written descriptions even where no archaeological deposits have been identified. The archaeologist will record archaeological deposits using proformae recording forms and locate them on a large-scale site plan related to the Ordnance Survey National Grid and Datum references.

The groundworks excavations shall be undertaken using a mechanical excavator fitted with a <u>toothless</u> <u>ditching bucket</u>.

The drawn record will comprise plans at scale 1:20 and sections at scale 1:10; propriety electronic hardware and software to prepare site drawings may be used as appropriate.

A photographic record will be maintained throughout, using a digital SLR camera (Canon 600D) set to maximum resolution and any subsurface remains will be recorded photographically, with detailed notations and measured drawings being undertaken if required.

The archive produced will be held at Aeon Archaeology under the project code A0104.1.

3.2 Watching brief report

3.2.1 Post-excavation Assessment

A report on the results of the watching brief, in accordance with the recommendations in *Management* of Research Projects in the Historic Environment Project Manager's Guide (English Heritage 2006; 2015), and in the Chartered Institute for Archaeologists Standard and Guidance for an archaeological watching brief (2014) will be required to be produced upon conclusion of the archaeological fieldwork. The report will be completed within a maximum of two months of completion of work on site and may include examination and quantification leading to the identification of function, form, date, method of manufacture, material/fabric type, source, parallels, attributes and condition of artefacts; of the exploitation of wild or domesticated resources; the reconstruction of environments; and the nature of human populations.

Full analysis of the results of the project, including: dating and interpretation of excavated features; pottery and other finds analysis; analysis of industrial residues by an appropriate specialist or specialists; analysis of samples for environmental data (including pollen, plant macrofossils and beetles) by an appropriate specialist or specialists; radiocarbon dating; discussion of the results in their local, regional and national context, including relating the excavated features and palaeoenvironmental data to evidence from nearby sites, and discussion of the results in their local, regional and national context may be required.

The scope of post-excavation assessment will subject to a specification for approval by the Shropshire Development Control Archaeologist, upon the conclusion of the fieldwork project and preliminary report.

3.2.2 Post-excavation Report

Following completion of the stages outlined above, a report will be produced that will include:

- A non-technical summary.
- A table of contents.
- An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site.
- A statement of the project aims.
- An account of the project methodology undertaken, with an assessment of the same to include a statement on preservation bias and the means of data collection and sampling strategies.
- A factual summary of the history, development and use of the site.
- A statement setting out the nature, quantity and condition of the material archive

(artefacts and ecofacts) including commentary on any bias observed due to collection and sampling strategies and commentary on long-term storage requirements.

- A statement setting out the nature and quantity of the documentary archive (notes, photographs, drawings, digital data).
- A general site plan indicating the position and size of the areas subject to watching brief and the locations of archaeological deposits identified and recorded during the works.
- Plans and sections at appropriate scales, augmented with appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the National Grid.
- Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate.
- Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits and finds identified during the project.
- A discussion of any research implications arising from the archaeological work.
- Notes on consultations with conservators and the nominated archive repository related to the immediate and long-term conservation and storage requirements for the data held in the site archive and recommendations of retention/discard of artefacts and ecofacts.
- A bibliography of sources consulted.
- Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive and a statement on its location/proposed repository.
- In addition the post-excavation report will summarise and draw together the findings of all of the phases of work.

3.3 Archive

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, and archived within a suitable repository to be agreed in advance with the Shropshire Development Control Archaeologist. Copies of the report will be lodged with the Shropshire Historic Environment Record (HER); Shropshire Development Control Archaeologist; and Oasis online database within six months of the completion of the project.

4.0 FURTHER ARCHAEOLOGICAL WORKS

The identification of significant archaeological features during the watching brief stage may necessitate further archaeological works. This will require the submission of new cost estimates to the contractor and may be subject to a separate WSI, to be agreed with the Shropshire Development Control Archaeologist prior to implementation.

This WSI does not include a methodology or cost for examination of, conservation of, or archiving of finds discovered during the watching brief, nor of any radiocarbon dates required, nor of examination of palaeoenvironmental samples associated with any peat deposits. The need for these will be identified in the post-fieldwork programme (if required), and a new WSI will be issued for approval by the Shropshire Development Control Archaeologist prior to implementation.

5.0 ENVIRONMENTAL SAMPLES

If necessary, relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10.0 litres and maximum of 30.0 litres) for flotation of charred plant remains. Bulk samples will be taken from waterlogged deposits for macroscopic plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

Bulk environmental samples will also be taken from any fills, deposits or structures which yield archaeological artefacts, charcoal flecks/ fragments, bone, or any other historic remains.

Advice and guidance regarding environmental samples and their suitability for radiocarbon dating, as well as the analysis of macrofossils (charcoal and wood), pollen, animal bones and molluscs will be obtained from Oxford Archaeology.

For guidance purposes the following volume criteria represent the minimum feature sampling requirements:

- 50% of each discrete feature (e.g. pits and postholes)
- 25% of the exposed areas of each liner feature and all terminals/intersections
- 50% of structural features (e.g. beamslots, ring-ditches)
- 50%-100% of domestic/industrial working features (e.g. hearths and ovens)

6.0 HUMAN REMAINS

Any finds of human remains will be left *in-situ*, covered and protected, and both the coroner and the Shropshire Development Control Archaeologist informed. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. This will be applied for should human remains need to be investigated or moved.

7.0 SMALL FINDS

The vast majority of finds recovered from archaeological excavations comprise pottery fragments, bone, environmental and charcoal samples, and non-valuable metal items such as nails. Often many of these finds become unstable (i.e. they begin to disintegrate) when removed from the ground. All finds are the property of the landowner; however, it is recommended that all finds are donated to an appropriate museum (Neath Port Talbot Museum Service) where they can receive specialist treatment and study. Access to finds must be granted to Aeon Archaeology for a reasonable period to allow for analysis and for study and publication as necessary. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue 1999). Aeon Archaeology staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants.

The recovery policy for archaeological finds will be kept under review throughout the fieldwork phase. Any changes in recovery priorities will be under guidance from an appropriate specialist and agreed with the Shropshire Development Control Archaeologist. There will be a presumption against the disposal of archaeological finds with the exception of unstratified items dating to the twentieth or twenty-first centuries AD which will be recorded by material, type, form, identification and weight, and discarded.

All finds will be collected and processed including those found within spoil tips. Their location will be recorded; finds numbers attributed, bagged and labelled as well any preliminary identification taking place on site. Where specialist advice is required provision will be made to do so at the earliest possible convenience.

After processing, artefacts which are suitable will be cleaned and conserved in-house. Artefacts requiring specialist cleaning and conservation will be sent to the relevant specialist. All finds will then be sent to a specialist for analysis, the results of which will then be assessed to ascertain the potential of the finds assemblage to meet the research aims of the project. The value of the finds will also be assessed in terms of the wider educational and academic contributions.

8.0 UNEXPECTED DISCOVERIES: TREASURE TROVE

Treasure Trove law has been amended by the Treasure Act 1996. The following are Treasure under the Act:

- *Objects other than coins* any object other than a coin provided that it contains at least 10% gold or silver and is at least 300 years old when found.
- *Coins* all coins from the same find provided they are at least 300 years old when found (if the coins contain less than 10% gold or silver there must be at least 10. Any object or coin is part of the same find as another object or coin, if it is found in the same place as, or had previously been left together with, the other object. Finds may have become scattered since they were originally deposited in the ground. Single coin finds of gold or silver are not classed as treasure under the 1996 Treasure Act.
- *Associated objects* any object whatever it is made of, that is found in the same place as, or that had previously been together with, another object that is treasure.
- *Objects that would have been treasure trove* any object that would previously have been treasure trove, but does not fall within the specific categories given above. These objects have to be made substantially of gold or silver, they have to be buried with the intention of recovery and their owner or his heirs cannot be traced.

The following types of finds are not treasure:

- Objects whose owners can be traced.
- Unworked natural objects, including human and animal remains, even if they are found in association with treasure.
- Objects from the foreshore which are not wreck.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown.

The British Museum will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

9.0 STAFF & TIMETABLE

9.1 Staff

The work will be managed and undertaken by Richard Cooke BA MA MCIfA, Archaeological Contractor and Consultant at Aeon Archaeology.

9.2 Timetable

The evaluation work can currently be undertaken from February 2017, although the client is encouraged to give as much notice as possible to Aeon Archaeology as project commitments are currently high.

10.0 HEALTH AND SAFETY

Aeon Archaeology has a Health and Safety Policy Statement which can be supplied upon request. Furthermore, site-specific Risk Assessments and Method Statements are compiled and distributed to every member of staff involved with the project prior to the commencement of works.

11.0 INSURANCE

Liability Insurance – Insignia Underwriting Policy 347002

- Employers' Liability: Limit of Indemnity £10m in any one occurrence
- Public Liability: Limit of Indemnity £2m in any one occurrence
- Legal Defence Costs (Health and Safety at Work Act): £250,000

The current period expires 07/09/17

Professional Indemnity Insurance – Insignia Underwriting Policy 347002

• Limit of Indemnity £500,000 any one claim

The current period expires 07/09/17

12.0 GENERAL

All project staff will adhere to the Code of Conduct of the Chartered Institute for Archaeologists.

The project will follow the requirements set down in the *Standard and Guidance for Archaeological Watching Brief* prepared by the Chartered Institute for Archaeologists.

A Method Statement and Risk Assessment will be prepared prior to the commencement of fieldwork and circulated to all staff concerned.

Please note the following:

Acon Archaeology will not be held responsible for any delays to the work programme resulting from the discovery of archaeological sites or finds.

The cost quoted does not include examination of, conservation of or archiving of finds discovered during the archaeological programme, nor of any radiocarbon dates required, nor of examination of palaeoenvironmental samples.

SPECIALISTS

Specilaist advice required will be sought from the following list if required:

- Bone: Nora Bermingham
- Glass: Hilary Cool, Barbican Research Associates.
- Metal artefacts: Phil Parkes, Cardiff Conservation Services, Cardiff.
- Slag, burnt clay, hammerscale: Dr. Tim Young, Geoarch, Cardiff.
- Stone artefacts: Oxford Archaeology
- Wood artefacts: Jane Foley, Foley Conservation, Builth Wells.
- Leather: Quita Mould, Barbican Research Associates.
- Waterlogged environmental: Dr Mike Allen, Allen Environmental Archaeology.
- Environmental samples: Oxford Archaeology
- Numismatics: Peter Guest, Barbican Research Associates.
- Pottery (all periods): Oxford Archaeology
- Clay pipe: Oxford Archaeology

Depending upon the material of the remains the following experts will be consulted regarding the conservation of waterlogged material:

- Organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)
- Non-organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)

