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## ARS Ltd Report 2018/117



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#### Contents

E>	ecutive	e Summary	i							
1	Intro	oduction	1							
	1.1	Circumstances of the Project	1							
	1.2	1.2 Site Description and Location								
	1.3	Landform Topography and Soils	2							
	1.4	Archaeological and Historical Background								
	1.5	Aims and Objectives	3							
	Regi	ional Research Aims and Objectives	3							
	Eval	uation Aims and Objectives	3							
2	Met	hod Statements	4							
	2.1	Introduction	4							
	2.2	Coverage	4							
	2.3	Methodological Standards	5							
	2.4	The Evaluation	5							
3	Resu	ults	5							
	3.1	Introduction	5							
	3.2	The Evaluation Trenches	7							
	Trer	nch 1	7							
	Trer	nch 2	7							
	Trer	nch 3	7							
	Trer	nch 4	8							
	Trer	nch 5	8							
	Trer	nch 6	9							
	Trer	nch 7	9							
	Trer	nch 8	9							
	Trer	nch 9	10							
4	The	Assemblages	. 11							
	4.1	The Pottery	11							
	Intro	oduction	11							
	The	pottery	11							
	Discussion									

Recommendations for further work	16					
4.2 Other Artefacts	16					
Introduction	16					
Methodology	16					
Discussion	17					
Recommendations for further work	17					
4.3 Animal Bone	17					
Introduction	17					
Results	17					
5 Discussion and Conclusion	19					
6 Publicity, Confidentiality and Copyright	19					
7 Statement of Indemnity	19					
8 Archive	20					
9 Acknowledgements	20					
10 References	20					
Appendix I: The Figures						
Appendix II: Context Summary Table						
Appendix III: Written Scheme of Investigation						
Appendix IV: Oasis Form						

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# **List of Figures**

Figure 1: Site location.	. 23
Figure 2: Site plan showing the location of the excavated trenches, geophysical survey results a	nd
the PDA	. 24
Figure 3. Site plan – All features post-excavation overlaid on results of geophysical survey	. 25
Figure 4. Plan of Trench 1	. 26
Figure 5 - NE facing section of [103] and [105]	. 26
Figure 6 - SW facing section of [104]	. 26
Figure 7 - Trench 1, looking West. Scales: 2m & 1m in 0.5m graduations	. 28
Figure 8 - Dump of limestone (103), looking south-west. Scale: 1m in 0.5m graduations	. 28
Figure 9 - North-east facing section of [105]. Scale: 2m in 0.5m graduations	. 29
Figure 10 - south-west facing section of [104]. Scale: 1m in 0.5m graduations	. 29
Figure 11 - Post-excavation plan of Trench 2, with north-east facing section of [203]	. 30
Figure 12 - Trench 2, looking south-east. Scales: 1m & 2m in 0.5m graduations	. 31
Figure 13 - [203] post-excavation looking north-east. Scale: 1m in 0.5m graduation	. 31
Figure 14 - North-east facing section of [203]. Scale: 1m in 0.5m graduations	. 34
Figure 15 - Post excavation plan of Trench 3	. 35
Figure 16 - North facing section [303]	. 35
Figure 17 - North facing section of [305]	. 35
Figure 18 - Trench 3 post -excavation, looking north-east. Scales: 1m & 2m in 0.5m graduations	.36
Figure 19 - North facing section [303]. Scales: 1m & 2m in 0.5m graduations	. 36
Figure 20 - Trench 4, looking south-east. Scales: 1m & 2m in 0.5m graduations	. 37
Figure 21 - Post-excavation plan of Trench 5	. 38
Figure 22 - Trench 5, looking east. Scales: 1m & 2m in 0.5m graduations	. 40
Figure 23 - Wall foundation (503), looking north-west. Scale: 1m in 0.5m graduations	. 40
Figure 24 - Wall foundation (506), looking west. Scale: 1m in 0.5m graduations	. 41
Figure 25 - Trench 6, looking north. Scales: 1m & 2m in 0.5m graduations	. 42
Figure 26 - Trench 7, looking east. Scales: 1m & 2m in 0.5m graduations	. 42
Figure 27 - Post-excavation plan of Trench 8.	. 43
Figure 28 - South-west facing section [803].	. 43
Figure 29 - Trench 8, looking north/north-west. Scales: 1m & 2m in 0.5m graduations	. 45
Figure 30 - [803], pre-excavation, looking north/north-east. Scales: 1m & 2m in 0.5m graduatio	ns. 45
Figure 31 - [803], mid excavation, looking north/north-east, Scales: 1m & 2m in 0.5m graduatio	ns.
	. 46
Figure 32 - South/south-west facing section [803]. Scale: 2m in 0.5m graduations	. 46
Figure 33 - Trench 9, looking south-west. Scales: 1m & 2m in 0.5m graduations.	. 47

# List of Tables

Table 1. Trench summary table demonstrating presence absence of archaeology and the	he thickness
of the topsoil in each trench	6
Table 2. Summary table of the feature types/excavated and deposits encountered in the	he evaluation
trenches	6
Table 3. Quantification of the ceramics	15
Table 4. Other finds	16
Table 5 - Ceramic spot dates	16
Table 6: Clay tobacco pipe	16
Table 7-Glass	17

Table 8 - Animal Bone
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# **Executive Summary**

Project Name: Archaeological Evaluation on Land at Milken Lane, Ashover, Derbyshire.
Site Code: MILK'18.
Planning Authority: North East Derbyshire District Council
Location: Milken Lane, Ashover, Derbyshire.
Geology: Mudstone, Siltstone and Sandstone of the Bowland Shale Formation (BGS 2018).
NGR: SK 435063 363352
Date of Fieldwork: 15<sup>th</sup> – 21<sup>st</sup> May 2018
Date of Report Completion: 28<sup>th</sup> June 2018.

Archaeological Research Services Ltd was commissioned by Mr Roger Hollingworth (the client) to undertake an archaeological evaluation in the form of trial trenching on land at Milken Lane, Ashover, Derbyshire. The archaeological evaluation was undertaken in part satisfaction of planning consent (NED/17/00200/OL) for residential development.

The works reported in here were undertaken between the 15<sup>th</sup> and 21<sup>st</sup> May 2018 in accordance with a Written Scheme of Investigation (WSI) approved by Steve Baker, Archaeologist for Derbyshire County Council. The evaluation was undertaken by Tim Cobbold, Project Officer and Dimitris Katsifas Archaeological Officer at Archaeological Research Services Ltd. (ARS Ltd.). The project was managed by Reuben Thorpe MCIfA, FSA Senior Project Manager for ARS Ltd.

Evaluation trenching has confirmed the presence of archaeological features within the development area and has clarified the nature of features identified in a geophysical survey (Durkin 2017b). The presence of a former field boundary, hedgeline or small trackway, the remains of a building associated with lead mining, areas of waste generated by ore processing or extraction and the remains of are what are probably backfilled lead mine shafts.

# 1 Introduction

# **1.1** *Circumstances of the Project*

1.1.1 A planning Application has been approved by North East Derbyshire District Council, (NED/17/00200/OL) for proposed residential development at Milken Lane, Ashover, Derbyshire, SK 435063 363352 (Figure 1).

1.1.2 Archaeology is a material consideration in the planning process. *National Planning Policy Framework (NPPF) (DCLG 2012), Paragraph 141 outlines a requirement to record and enhance understanding of the significance of any heritage assets to be lost during the proposed development in a manner proportionate to their importance, and to make this evidence (and any archive generated) publicly accessible.* 

1.1.3 Planning permission has been granted subject to condition, Condition 22, which requires archaeological work prior to occupancy and development.

22 No development shall take place until a Written Scheme of Investigation for archaeological work has been submitted to and approved by the local planning authority in writing, and until any pre-start element of the approved scheme has been completed to the written satisfaction of the Local Planning Authority. The scheme shall include an assessment of significance and research questions; and

1. The programme and methodology of site investigation and recording

2. The programme for post investigation assessment

3. Provision to be made for analysis of the site investigation and recording

4. Provision to be made for publication and dissemination of the analysis and records of the site investigation

5. Provision to be made for archive deposition of the analysis and records of the site investigation

6. Nomination of a competent person or persons/organization to undertake the works set out within the Written Scheme of Investigation.

1.1.4 This report has been prepared to comply with the requirements of planning consent. It describes the results of the archaeological evaluation and has been approved in its final issued form by the Archaeologist for Derbyshire County Council.

1.1.5 Archaeological works on the site prior to archaeological evaluation comprised Historic Map Regression (Burpoe 2017date) which was followed by geophysical survey (Durkin 2017b).

1.1.6 The evaluation as enacted comprised the opening, by machine, of 9 trial trenches which were subsequently investigated by hand to clarify the nature and sequence of any surviving archaeological features. All trenches were positioned using a Leica Smart rover GPS and were targeted specifically to evaluate anomalies identified from geophysical survey (Durkin 2017b), (Figure 2).

# **1.2** Site Description and Location

1.2.1 The village of Ashover lies just under 6 km to the north-east of Matlock and 7.5km to the south-west of Chesterfield.

1.2.2 The 'red line boundary' of the Proposed Development Area (PDA) is defined in Figure 1. It encompasses an area of 0.98Ha sited to the north-east of Ashover village centre behind the Black Swan Public House.

# **1.3** Landform Topography and Soils

1.3.1 The site itself comprises a roughly rectangular field which slopes from *c*. 195m aOD at the north towards Milken Lane *c*. 190m aOD to the south. The site is bounded on all sides by a mixture of stonewalling, hedgerows, stock-proof fencing and timber fencing and is centred at NGR SK 435063 363352 (Figure 1).

1.3.2 The underlying solid geology consists of Mudstone, Siltstone and Sandstone of the Bowland Shale Formation – a Sedimentary Bedrock formed approximately 313 to 335 million years ago in the Carboniferous Period. This is overlain by superficial Head deposits (BGS 2018).

1.3.3 The underlying solid geology within the southernmost part of the PDA comprises mudstone of the Widmerpool Formation, formed approximately 326 to 335 million years ago in the Carboniferous Period when the local environment was previously dominated by sub-aqueous slopes. This is overlain by superficial head deposits (BGS 2018).

1.3.4 The superficial deposits of the PDA are classified as belonging to the Bardsey Soil Association (713a), which are cambic stagnogley soils (SSEW 1983). These soils form over Carboniferous mudstone with interbedded sandstone, and are characterised as 'Slowly permeable seasonally waterlogged loamy over clayey and fine silty soils over soft rock. Some well drained coarse loamy soils over harder rock (CU 2017).

# 1.4 Archaeological and Historical Background

1.4.1 The site lies adjacent to the medieval core of Ashover. Historic mapping suggests that the lower part of the site, to the south, may have been within smaller enclosures possibly originating as medieval crofts north of the junction of Milken Lane and Moor Road. There was also potential for historic lead mining within the site, the Hirtoric Environment Record (HER) for Derbyshire records a former lead mine to the north of Lime Tree House, off Malthouse Lane (HER 33627). The 1803 map of 'several mines' in Ashover shows the 'Rhodes vein' running through the site, with a building shown towards the site's northern boundary probably associated with mining. There are also findspots for prehistoric and Romano-British material in the village, including a beehive quern around 170m to the south-west and prehistoric rock art 210m to the west (Baker 2017).

1.4.2 Archaeological Research Services Ltd undertook a geophysical survey of land on Narrowleys Lane and Moor Road, between c. 400m to the north-west of the site, (Durkin 2014, 2017a). Here, survey revealed a small number of anomalies of possible archaeological origin as well as evidence of ridge and furrow cultivation, but these have not been tested by field evaluation.

1.4.3 An historic map regression was produced by ARS ltd. (Burpoe 2017), following the submission of the outline planning application. The historic mapping demonstrated that in 1779, at the time of the Ashover Inclusion Award the PDA was still an area of open land. By the time of the 1816 Ashover Poor Rate map the PDA had been enclosed into a system of strip fields. The PDA appeared to remain enclosed in this manner until at least the time of the 1879-1880 County series map, but by the time of the 1898-1899 County Series map

the earlier field boundaries appear to have fallen out of use. Certainly by the time of the 1917 County Series map the field was enclosed in the manner that exists to this day.

1.4.4 A geophysical survey was conducted in the PDA in 2017 (Durkin 2017b). The survey did not reveal any definite evidence of significant buried archaeological remains within the PDA but did reveal a number of anomalies of possible archaeological origin.

1.4.5 Out of the two clearly defined linear anomalies that were revealed by the geophysical survey, one can be interpreted as the remains of the south-eastern field boundary in its former location, as depicted on the previously mentioned 1816 Poor Rate map (Burpoe 2017). The second linear anomaly cannot be interpreted with any certainty based on cartographic evidence contained in the accompanying Historic map regression (Burpoe 2017). This anomaly probably also represents an historic field boundary.

1.4.6 Three notable positive discrete anomalies were recorded towards the north of the PDA, with the characteristics of archaeological cut features, but are located on or close to a lead mining vein and may therefore have been associated with more recent mining activity. Structures within the PDA also seemed to be visible on the 1851 Ashover Poor Rate map and the 1879-1880 County Series map and may also have been associated with lead mining activity.

1.4.7 Further anomalies recorded by the geophysical survey were considered to have only low potential to be archaeologically significant. They were likely to indicate possible ridge and furrow cultivation remains, disturbance associated with mining activity and disturbance and remnants associated with the removal of trees and field boundaries and general agricultural land use.

## 1.5 Aims and Objectives

1.5.1 The Written Scheme of Investigation (WSI) (Lodoen 2018) set out the scope of works and methods of archaeological inquiry (Appendix III) and this was explicitly underpinned by research goals.

#### **Regional Research Aims and Objectives**

1.5.2 There was potential for research topics identified in *East Midlands Heritage*. An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands (Knight *et al.* 2012) to be addressed namely:

- How can we develop further our records of mines and surface features associated with extractive industry and their relationship with markets, settlements and transport? (p. 122)
- How can we elucidate further the development of nucleated villages, and in particular the contribution of the Danelaw to changes in village morphology? (p. 194)
- Can we clarify further the processes of settlement desertion and shrinkage, especially within zones of dispersed settlement? (p. 194)

#### **Evaluation Aims and Objectives**

1.5.3 The aims and objectives of the trial trench evaluation were to:

- Identify the presence/absence of archaeological features and deposits within the site.
- Record all archaeological features and deposits encountered.
- Sample sufficient of the archaeological features and deposits to establish relative sequence, likely dating and quality of preservation.
- Gather sufficient information to establish the character, extent, form, function and likely status of any surviving archaeological deposits with a view to evaluating their significance and potential to inform the aims and objectives outlined in section 1.4.1 of this document.

1.5.4 If survival of archaeological deposits or features was demonstrated in line with that identified within the DBA and covered by the research aims outlined in section 3.1, in outline the aims and objectives of any excavation are to:

- Excavate and record the archaeological features and deposits encountered.
- Establish a relative chronological sequence and if possible a dating framework for excavated deposits and features.
- Establish the character, extent, form, function and likely status of surviving archaeological deposits to inform the research aims outlined in section 1.4.1 of this document.

# 2 Method Statements

#### 2.1 Introduction

2.1.1 The methodology for the evaluation is outlined in detail in the Written Scheme of Investigation (Lodoen 2018, Appendix III) but has been summarised here.

#### 2.2 Coverage

2.2.1 Evaluation trenching consisted of four 20mx2m trenches, two 25mx2m trenches, two 15m x 2m trenches and one 5m x 2m trench (Figure 2).

- Trench 1: (25m x 2m) aligned north-west to south-east to test a geophysical anomaly running south-west to north-east.Trench 2: (20m x 2m) aligned north-west to south-east to test the same geophysical anomaly as Trench 1.
- Trench 3: (20m x 2m) aligned broadly east to west to target another geophysical anomaly running south-west to north-east
- Trench 4: (15m x 2m) aligned north-northwest to south-southeast, to test geophysical anomalies which may relate to historic lead mining activities.
- Trench 5: (15m x 2m) aligned broadly east-west to test geophysical anomalies which may relate to the location of a building associated with lead mining activities. Trench 6: (20m x 2m) aligned north-northeast to south-southwest to test geophysical anomalies which may relate to lead extraction, potentially being filledin mineshafts.
- Trench 7: (25m x 2m) aligned north-west to south-east, to test geophysical anomalies identified running south-west to north-east.

- Trench 8: (20m x 2m) aligned north-west to south-east to test the same geophysical anomaly as Trench 3.
- Trench 9: (5m x 2m) aligned north-northeast to south-southwest to test a geophysical anomaly identified at the northern limit of the PDA.

2.2.2 The location of the trial trenches was agreed with the Archaeologist for Derbyshire County Council as sufficient for the purposes of evaluation with the proviso that if significant remains were identified further excavations may need to follow. The scope of which will be agreed in consultation the with Archaeologist for Derbyshire County Council as appropriate and subject to a separate Written Scheme of Investigation.

# 2.3 Methodological Standards

2.3.1 The archaeological evaluation was undertaken in accordance with the Chartered Institute for Archaeologists (CIfA) *Code of Conduct* (2014a) and *Standards and Guidelines for Archaeological Evaluations* (2014b).

2.3.2 All works were underpinned by the methodological approach encapsulated in the WSI (Lodoen 2018), which is reproduced at the rear of this report in Appendix III.

# 2.4 The Evaluation

2.4.1 Trenches were sited in accordance with a pre-agreed trench plan using a Leica Smartrover GPS to a tolerance of 0.025m. The same GPS was later utilised to locate drawn plans and sections and to take spot heights within the trenches.

2.4.2 Each trench was opened using a mechanical excavator fitted with a toothless ditching bucket under continuous archaeological supervision. Excavation was undertaken in spits to the first archaeological horizon or the level of the geological natural, whichever came first.

2.4.3 Each trench was cleaned by hand. Pre-excavation photographs of exposed archaeology or the cleaned trenches were taken.

2.4.4 All features were at least 50% sample excavated (of their exposed length) before being drawn and recorded at an appropriate scale.

2.4.5 A full drawn and written record was compiled for each trench and all excavated features.

2.4.6 All features and trenches were tied into Ordnance Survey, all deposits were levelled and their spot heights calculated in metres above Ordnance Datum (aOD).

# **3** Results

# 3.1 Introduction

3.1.1 The following section provides a narrative description of the archaeological features and deposits encountered on the site and while thorough, can only account for the archaeological remains encountered within the trenches. This section should be read in conjunction with the figures presented in Appendix I. Detailed descriptions and contextual detail are presented in the Context Summary Tables at the rear of this report in Appendix II.

3.1.2 A total of nine evaluation trenches were excavated (Figures 2, 3) and these examined some  $c.320m^2$ .

3.1.3 Trench summary tables (Table 1 and Table 2) are presented below. These provide a synthesis of the presence/absence of archaeology or potential archaeology in each of the trenches and provide a look up table to the depth of sensitivity below current ground level (BGL) to the upper interface of archaeological sensitivity.

Trench	Archaeology? Y/N	Period	Topsoil thickness
1	Y	Post-medieval/Modern	0.15-0.2m
2	Y	Post-medieval/Modern	0.3–0.5m
3	Y	Post-medieval/Modern	0.2m
4	Y	Post-medieval/Modern	0.2m
5	Y	Post-medieval/Modern	0.2 – 0.3m
6	Y	Post-medieval/Modern	0.2 – 0.3m
7	Y	Modern	0.2 – 0.3m
8	Y	Post-medieval/Modern	0.2m
9	N	Post/Medieval/Modern	0.2 – 0.25m

Table 1. Trench summary table demonstrating presence absence of archaeology and the thickness of the topsoil in each trench.

Trench	Excavated Features	Dating Y/N	Height of top
			m aOD
1	Ditch, Footpath	Y	189.45m
2	Ditch, Footpath	Υ	189.80m
3	Ditch, Footpath	Υ	190.78m
4	None excavated (lead mining	Ν	-
	waste/spoil)		
5	Wall foundations, Bedding layers	Υ	192.54m
	for surfaces, Possible surface		
6	None excavated (mine-shafts)	Ν	-
7	None excavated (field drains)	Ν	-
8	Ditch	Y	193.27m
9	None (mine-shaft)	Ν	194.14m

Table 2. Summary table of the feature types/excavated and deposits encountered in the evaluation trenches.

3.1.4 The topsoil across the site characteristically comprised a greyish-brown clayeysand, *c*. 0.2-0.4m thick. In all trenches a light reddish-yellow subsoil was present, averaging *c*. 0.1m. These overlay the natural deposits of yellow clayey-sand, typically encountered at between 0.3-0.5m BGL.

3.1.5 Geological natural was encountered between 0.25m and 0.45m BGL.

3.1.6 The maximum safe working depth of 1.2m was not exceeded in any of the trenches. Within Trench 6, remains of filled in mineshafts were revealed, one was machine excavated to verify interpretation, followed by a rapid GPS survey and photograph, prior to being fenced off for safety reasons.

3.1.7 This DRAFT report presents the results of the archaeological trial trenching as well as the ceramic spot-dating in lieu and in advance of the completion of the ceramic report and its inclusion in a later draft. The spot dates have been provided by Dr Chris Cumberpatch in advance of his full report and quantification.

# 3.2 The Evaluation Trenches

## Trench 1

(Figures 2, 3, 4-10, see also Table 1, Table 2 and APPENDIX II: CONTEXT SUMMARY TABLE)

3.2.1 Topsoil (100) and subsoil (101) were removed by machine under archaeological supervision to a depth of 0.3m to 0.4mm BGL, the level of the geological natural, which lay at 188.64m aOD. At this level a number of archaeological features were identified. These included; a dump of limestone material (103), a possible footpath [104], boundary ditch [105], together with modern field drains. Upon excavation of ditch [105], a possible small pit [108] was identified cut into the western side of the feature.

3.2.2 A possible footpath [104], was identified towards the centre of the trench on a north-east to south-west alignment. It ran for 2m visibly in the trench, was 0.7m wide and 0.05m deep. With gently sloping sides and a flat base, it contained a single fill (106) of sandy silt which contained pottery dating from the 16<sup>th</sup> to 18<sup>th</sup> century.

3.2.3 Boundary ditch [105], was identified towards the south-eastern end of the trench on a north-east to south-west alignment. It ran for 2m visibly in the trench, was *c*.4m wide and 0.74m deep. With moderately steep sides and a flat base, it contained a single fill (109) of sandy silt.

3.2.4 A pit [108], was identified cut into the northern side of ditch [105]. It was subcircular in shape, 0.5m long, 0.36m wide, and 0.35m deep. With steeply sloping sides and a concave base, it contained a single fill (107) of sandy silt which contained pottery dating from the late 18<sup>th</sup> to 19<sup>th</sup> century.

## Trench 2

(Figures 2,3,11-14, see also Table 1, Table 2 and APPENDIX II: CONTEXT SUMMARY TABLE)

3.2.5 Topsoil (200) and subsoil (201) were removed by machine under archaeological supervision to a depth of 0.3m to 0.43m BGL, the level of the geological natural which lay at 189.69mm aOD. At this level, a possible footpath [203] was identified, as well as a modern field drain.

3.2.6 Footpath [203], was identified towards the south-east end of the trench running on a north-east to south-west alignment. It ran for 2m visibly in the trench, was 1.2m wide, and 0.07m deep. With gently sloping sides and an essentially flat base, it contained a single fill (204) of clayey sand which contained pottery dating from the 18<sup>th</sup> to early 19<sup>th</sup> century..

## Trench 3

(Figures 2, 3, 15-19, see also Table 1 and Table 2 and APPENDIX II: CONTEXT SUMMARY TABLE)

3.2.7 Topsoil (300) and subsoil (301) were removed by machine under archaeological supervision to a depth of 0.15m-0.18m BGL, the level of the geological natural which lay at 190.74m aOD, from which height three archaeological features were identified; a ditch [303], possible footpath [305], and a sub-circular pit [310], together with two modern field drains.

3.2.8 Pit [310] was identified immediately west of ditch [303] and appeared to be cut by the ditch. The pit was sub-circular in shape, 0.94m long, 1.0m wide and 0.24m deep. With

moderately steep, concave sides and a concave base, it contained three fills (304), (311), (312), and (313). A large sandstone boulder was also revealed within the centre of the pit, visibly within the cut, with deposits (311) and (312) visible in section on the east side of the boulder, and deposits (304) and (313) on the west. Due to the separation of cut by boulder (311) and (313) must both be treated as primary, with (312) and (304) treated as secondary deposits. Primary fill (311), was a sandy silt with no artefacts. Secondary fill (312), was a sandy silt with no artefacts. Secondary fill (304) was a sandy silt with glass artefacts dating from the late 19<sup>th</sup> to early 20<sup>th</sup> century.

3.2.9 Ditch [303], was identified towards the eastern end of the trench running on a south-west to north east alignment. It ran for 2m visibly in the trench, was 3.14m wide, and 1.58m deep. With gently sloping sides at the top of the cut, followed by steeper sides with a rounded base, it contained three fills, (307), (308), and (309). Primary fill (309), was a sandy silt with no artefacts. Secondary fill (308), was a sandy-silt with no artefacts. Tertiary fill (307), was a sandy silt with no artefacts.

3.2.10 Footpath [305] was identified towards the western end of the trench running on a north-east to south-west alignment. It ran for 2m visibly in the trench, was 0.58m wide and 0.08m deep. With moderately steep sides and a concave base, it contained a single fill (306) of silty clay with no artefacts.

#### Trench 4

(Figures 2,3,20, see also Table 1 and Table 2 and APPENDIX II: CONTEXT SUMMARY TABLE).

3.2.11 Topsoil (400) and subsoil (401) were removed by machine under archaeological supervision to a depth of 0.2m - 0.3m BGL, the level of geological natural which lay at 192.15m aOD. No significant archaeological features were seen although two dumps of material were identified within the south-west edge of the trench. These potentially represent dumped mining material or waste from the lead production processes.

## Trench 5

(Figures 2,3,21-24, see also Tables 1,2 and 4, and APPENDIX II: CONTEXT SUMMARY TABLE).

3.2.12 Topsoil (500) and subsoil (501) were removed by machine under archaeological supervision to a depth of 0.2- 0.3m BGL, the level of the geological natural which lay at 192.56m aOD, from which height a number of archaeological features were identified, including; two parallel wall foundations (505) and (508) with associated construction contexts [503], (504), [506], (507), made ground contexts (509), (515), (516), (517), (519), (520), bedding layers for removed flooring, and demolition deposits (513) and (518).

3.2.13 Wall foundation (505) was identified towards the western end of the trench running on a north-east to south-west alignment. It ran for 2.6m across the trench and had a width of c.0.4m, and an excavated depth of 0.1m. It was unmortared and had been built from irregularly sized and shaped stones placed within a cut [503], which had been backfilled after construction of the foundation with (504), a sandy silt which contained clay pipe stems dating to the late 17<sup>th</sup> or early 18<sup>th</sup> century.

3.2.14 Wall foundation (508) was identified within the eastern third of the trench running on a north-east to south-west alignment. It ran for 2.2m across the trench, was 0.6m wide,

and had an excavated depth of 0.1m. It was unmortared and built from irregularly sized and shaped stones placed within a cut [506], which had been backfilled after construction of the foundation wall with (507), a compacted reddish-brown sand which contained clay pipe stems dating from the early 19<sup>th</sup> century.

3.2.15 Four deposits, which probably formed bedding layers for since removed floor surfaces, were identified overlying the natural in the space between the walls. These included; deposit (515), a sandy clay with lime mortar inclusions covering an area of 2.1m by 2.05m, deposit (516), a sandy clay with lime mortar inclusions covering an area of 0.86m by 1.3m, deposit (517), a sandy clay with lime mortar inclusions covering an area of 2.1m by 2m, and deposit (520), a silty sand covering an area of 2mx 0.5m.

3.2.16 Two deposits, which probably formed bedding layers for since removed floor surfaces were identified overlying the natural to the east of wall (508). These included; deposit (509), a mixture of sandy-silt and gravel covering an area of 2.58m by 1.1m, and deposit (519), a sandy-clay covering an area of 0.7m x 0.6m.

3.2.17 Two deposits, remnants of demolition rubble, were also identified east of wall (508), these included; deposit (513), a sandy-silt mixed with stone covering an area of 0.32m by 0.3m, and (518), a mix of crushed ceramic building material (CBM) covering an area of 0.34m by 0.27m.

## Trench 6

(Figures 2,3,25, see also Table 1 and Table 2 and APPENDIX II: CONTEXT SUMMARY TABLE).

3.2.18 Topsoil (600) and subsoil (601) were removed by machine under archaeological supervision to a depth of 0.15m-0.35m, the level of the geological natural which lay at 192.84m aOD, at which height the remains of two filled in mineshafts were identified, one in the north-east end of the trench and one in the south-west end of the trench. Due to health and safety concerns surrounding disused mineshafts, a machine-dug slot was immediately placed within the south-western shaft to confirm its nature, whereupon the trench was rapidly GPS surveyed then fenced off.

## Trench 7

(Figures 2,3,26, see also Table 1 and Table 2 and APPENDIX II: CONTEXT SUMMARY TABLE)

3.2.19 Topsoil (700) and subsoil (701) were removed by machine under archaeological supervision to a depth of 0.10m -0.30m BGL, the level of the geological natural which lay at 193.21m aOD, at which height the remains of two modern field drains were identified.

## Trench 8

(Figures 2,3,27-32, see also Tables 1, 2 and 5, and Appendix II: CONTEXT SUMMARY TABLE)

3.2.20 Topsoil (800) and subsoil (801) were removed by machine under archaeological supervision to a depth of between 0.3m and 0.45m BGL, the level of the geological natural which lay at 193.23m aOD, at which height a single ditch [803] was identified.

3.2.21 Ditch [803] was identified in the middle of the trench running on a north-east to south-west alignment. It ran for 2m visibly across the trench, was 2.72m wide, and 0.66m deep. With a moderately steep side to the south east, gently sloping side to the northwest and a near flat base, it contained five fills, (804), (805), (806), (807), and (808).

3.2.22 Primary fill (805), a sandy silt contained pottery dating to the late-18<sup>th</sup> to 19<sup>th</sup> century. Secondary fill (806), a sandy silt, contained pottery dating from the 18<sup>th</sup> to 19<sup>th</sup> century. Tertiary fill (808), a clayey sand contained no artefacts. Tertiary fill (807), a sandy silt contained no artefacts. These deposits appeared to represent the natural silting up of the ditch.

3.2.23 The uppermost fill (804), a black sandy clay, contained large amounts of 19<sup>th</sup> and early 20<sup>th</sup> century pottery, glass and bone. This deposit, composed as it was, of large amounts of clinker, coal and stone in a sandy clay matrix, had the appearance of a deliberate dump of material used to fill the disused ditch.

#### Trench 9

(Figures 2,3,33, see also Table 1 and Table 2 and APPENDIX II: CONTEXT SUMMARY TABLE

3.2.24 Topsoil (900) and subsoil (902) were removed by machine under archaeological supervision to a depth of 0.4m BGL, the level of the geological natural which lay at 194.19m aOD, at which height a disused and backfilled mineshaft and the remnants of a field drain were identified.

# 4 The Assemblages

## 4.1 The Pottery

Chris Cumberpatch

## Introduction

4.1.1 The pottery assemblage from Milken Lane, Ashover, Derbyshire (MILK18) was examined by the author on 17<sup>th</sup> and 18<sup>th</sup> July 2018. It consisted of 83 sherds of pottery weighing 3,814 grams and represented a maximum of 40 vessels. The data are summarised in Table 3. A small quantity of glass and other items were included with the pottery and are listed in Table 4.

## The pottery

4.1.2 The earliest sherd of pottery, the base of a jar in a hard, dense semi-vitrified Midlands Purple type ware fabric came from context (106). This dates to the period between the 16<sup>th</sup> and 18<sup>th</sup> centuries and is similar to wares manufactured in and around Ticknall (Spavold and Brown 2005) and which are found widely in Derbyshire and neighbouring areas.

4.1.3 Contexts (107) and (204) produced sherds of Brown Glazed Coarseware and Yellow Glazed Coarseware respectively. These dated to the later 18<sup>th</sup> or early/mid 19<sup>th</sup> century. The Yellow Glazed Coarseware sherd was distinctive because of its very soft, pale orange fabric, unlike the hard fabrics more commonly used for such wares.

4.1.4 The remainder of the assemblage was of mid/late 19<sup>th</sup> to early 20<sup>th</sup> century date and included a small quantity of traditional utilitarian wares (Brown and Yellow Glazed Coarseware; contexts (304) and (806) with a larger quantity of Brown Salt Glazed Stoneware, Bone China and Whiteware, both plain and transfer printed.

4.1.5 The Brown Salt Glazed Stoneware sherds included the profile of a large kitchen bowl (context 803) and the rims of two further bowls from contexts (304) and (805) and part of an unidentified hollow ware vessel from context (304). Salt glazed stonewares were manufactured in large quantities by firms in Nottinghamshire and north-east Derbyshire throughout the 19<sup>th</sup> century although distinguishing the products of different potteries is, for all practical purposes, impossible. The bowl from context 803 was decorated externally with stamped and rouletted patterns and the grey internal glaze seems to have been intended to emulate popular 19<sup>th</sup> French vessels which were distinguished by their white internal glaze (Walter 1999). Other stonewares were limited to parts of two jam or marmalade jars from context 803.

4.1.6 Bone China was well represented in contexts 304 and 803 with a range of vessels including egg cups, cups/mugs, plates and saucers. Context 803 also included part of a candlestick and two sherds from a decorative moulded vessel, probably a vase or jug. All of these vessels, some of which were decorated with overglaze gold lines and stylised floral motifs, were of later 19<sup>th</sup> or early 20<sup>th</sup> century date.

4.1.7 Whiteware, both plain and transfer printed, was also common in context 803 and included sherds from several large serving vessels (including a large plate and the lid of a tureen) and two large bowls, one possibly part of a jug and bowl set. Transfer printed designs were limited to Asiatic Pheasants and Two Temples, both very popular in the later 19<sup>th</sup> and early 20<sup>th</sup> centuries. One of the plates bore part of a manufacturer's mark on the underside but the surviving section was too small for the maker to be identified.

#### Discussion

4.1.8 On the evidence of the pottery, context 106, the fill of a linear feature, 104, would seem to be the earliest feature on the site with 107, the fill of a pit, (108) and 204, the fill of linear feature 203, somewhat later in date.

4.1.9 Contexts 304 and 803 were, in terms of their contents, of a very similar date and may even have been backfilled with domestic refuse from the same, or very similar, sources. This activity probably dates to the early 20<sup>th</sup> century and clearly involved domestic material, perhaps the outcome of a house clearance. Although the sherds from contexts 805 and 806 were less easily datable than those from 803, they could have been part of the same activity as clearance deposits often include parts of older vessels which had remained in use alongside more recently acquired wares.

Context	SFN	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
106	9	Midlands Purple type ware	1	61	1	Base	Jar	Partial purple glaze int; glaze fuming int & ext	C16 <sup>th</sup> – C18 <sup>th</sup>	Hard, dense, semi-vitrified purple fabric
107	4	Brown Glazed Coarseware	1	30	1	Base	Pancheon	Brown glaze int only, red slip ext	$LC18^{th} - C19^{th}$	Use-ware on underside
204	1	Cane Coloured ware	1	2	1	BS	Hollow ware	Clear (yellow) glaze int & ext	C19 <sup>th</sup>	
204	1	Yellow Glazed Coarseware	1	14	1	Base	Bowl	White slip int under clear (yellow) glaze int; red slip ext	LC18 <sup>th</sup> – C19 <sup>th</sup>	Knife-trimmed ext; very soft pale orange fabric w/ rare rounded red grit
304	16	Bone China	2	21	1	Base	Egg cup	Moulded fluting on base & body	$LC19^{th} - C20^{th}$	
304	16	Bone China	1	7	1	BS & handle	Cup	U/Dec	LC19 <sup>th</sup> – EC20 <sup>th</sup>	
304	16	Bone China	8	28	1	BS	Flatware	U/Dec	$LC19^{th} - EC20^{th}$	Fresh breaks
304	16	Bone China	1	3	1	Rim	Plate	Low relief moulding around rim	$LC19^{th} - EC20^{th}$	
304	16	Brown Salt Glazed Stoneware	1	3	1	BS	Hollow ware	Rouletted pattern ext	C19 <sup>th</sup>	
304	16	Brown Salt Glazed Stoneware	1	18	1	Base	Bowl	U/Dec	C19 <sup>th</sup>	Use-wear on underside
304	16	Yellow Glazed Coarseware type	1	86	1	BS	Bowl	White slip int only; clear glaze int & ext	MC19 <sup>th</sup> – EC20 <sup>th</sup>	Fine red fabric
803	14	Bone China	1	109	1	Base	Candlestick	U/Dec	LC19 <sup>th</sup> – EC20 <sup>th</sup>	
803	14	Bone China	1	33	1	Footring base	Plate	U/Dec	$LC19^{th} - C20^{th}$	Crazed & discoloured
803	14	Bone China	4	56	1	Profile	Egg cup	Overglaze gold line ext	$LC19^{th} - C20^{th}$	
803	14	Bone China	4	42	3	Rim & handle	Mug	Gold line ext & on rim w/ a gold flash on the handle	$LC19^{th} - C20^{th}$	

Context	SFN	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
803	14	Bone China	1	4	1	Rim	Mug	Gold line on rim & body	$LC19^{th} - C20^{th}$	
803	14	Bone China	1	31	1	Ring foot base	Mug	Stylised gold flower int	LC19 <sup>th</sup> – C20 <sup>th</sup>	
803	14	Bone China	1	25	1	Ring foot base	Mug	Stylised gold flower int	LC19 <sup>th</sup> – C20 <sup>th</sup>	
803	14	Bone China	4	60	1	Profile	Plate	Stylised gold flower in centre, gold lines on rim & inside rim	$LC19^{th} - C20^{th}$	
803	14	Bone China	1	14	1	Profile	Saucer/plate	Gold line on rim & inside rim	$LC19^{th} - C20^{th}$	
803	14	Bone China	1	19	1	Footring base	Plate	U/Dec	$LC19^{th} - C20^{th}$	
803	14	Bone China	2	61	2	Base & BS	Vase?	Relief moulded body w/ gold line above base	$LC19^{th} - C20^{th}$	Semi-recessed base
803	14	Brown Salt Glazed Stoneware	8	1820	1	Profile	Bowl	Stamped & rouletted bands ext	MC19 <sup>th</sup> – EC20 <sup>th</sup>	Brown salt glaze ext, grey finely blistered glaze int
803	14	Stoneware	3	110	1	Rim & body	Jam jar	Narrow fluting ext	LC19 <sup>th</sup> – EC20 <sup>th</sup>	
803	14	Stoneware	1	33	1	BS	Jam jar	Narrow fluting ext	LC19 <sup>th</sup> – EC20 <sup>th</sup>	
803	14	TP Whiteware	2	136	2	Rim	Tureen lid	Two Temples	MC19 <sup>th</sup> – EC20 <sup>th</sup>	Part of a domed tureen lid w/ a cut-out for a spoon or fork
803	14	TP Whiteware	3	51	3	Rim & BS	Dish	Blue floral design inside rim	MC19 <sup>th</sup> – EC20 <sup>th</sup>	
803	14	TP Whiteware	4	52	1	Rim	Mug/jug	Two Temples ext; Chinese style frieze inside rim	MC19 <sup>th</sup> – EC20 <sup>th</sup>	
803	14	TP Whiteware	3	114	1	Footring	Large plate	Asiatic Pheasants	MC19 <sup>th</sup> –	Thick base of a large plate

Context	SFN	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
						base			EC20 <sup>th</sup>	or server
803	14	TP Whiteware	11	266	1	Profile	Plate	Asiatic Pheasants	MC19 <sup>th</sup> – EC20 <sup>th</sup>	Part of a maker's mark on the underside; illegible
803	14	Whiteware	1	254	1	Ring foot base	Bowl	U/Dec	MC19 <sup>th</sup> – EC20 <sup>th</sup>	Part of a large bowl
803	14	Whiteware	5	227	1	Rim	Bowl	Gold lines & green sponging int	$LC19^{th} - EC20^{th}$	
805	12	Brown Salt Glazed Stoneware	1	8	1	Rim	Bowl	U/Dec	C19 <sup>th</sup>	Rounded everted rim
806	10	Brown Glazed Coarseware	1	16	1	BS	Pancheon	Dark brown glaze int only; red slip ext	C19 <sup>th</sup>	Use-wear on underside
		Total	83	3814	40					

Table 3. Quantification of the ceramics

Context	SFN	Туре	No	Wt	ENV	Part	Form	Decoration	Date	Notes
									range	
	15	Glass	1	8	1	BS	Bottle	U/Dec	Undated	
304	15	Glass	1	4	1	BS	Vase?	White curvilinear pattern	Undated	
304	16	Stone	1	2	1	Fragment	N/A	N/A	Undated	Abraded soft red stone
803	14	Wall Tile	1	72	1	Fragment	Tile	White tile	LC19th – C20th	

Table 4. Other finds

Context	Date Range
106	C16 <sup>th</sup> – C18 <sup>th</sup>
107	LC18 <sup>th</sup> – C19 <sup>th</sup>
204	C18 <sup>th</sup> – EC19 <sup>th</sup>
804	C19 <sup>th</sup> – EC20 <sup>th</sup>
805	LC18 <sup>th</sup> – C19 <sup>th</sup>
806	C18 <sup>th</sup> – C19 <sup>th</sup>

Table 5 - Ceramic spot dates.

#### **Recommendations for further work**

4.1.10 Once the project is complete, including any mitigation, the assemblage should be considered for deposition in the appropriate local museum or finds depository.

## 4.2 Other Artefacts

Mike Wood

#### Introduction

4.2.1 A mixed assemblage of glass and clay tobacco pipe was submitted for assessment from an archaeological investigation on Milken Lane, Ashover.

#### Methodology

4.2.2 The material was counted and weighed in grams, then examined visually to identify any diagnostic pieces and the overall condition of the assemblage. Reference was made to published guidelines (Higgins & Davey 2004). Where no other identification has been possible for the clay pipe, stems have been dated by established stem bore guidelines (Oswald 1975). It should be noted that dates provided by stem-bore size can have an appreciable margin for error and are intended only as a general guide. A summary of the material is recorded in Tables 6 and 7.

Context	Date range	Stems	Bowls	Mouths	Weight (g)	Stem bore	Comments
504	c.1682-1757	3			7.1	5/64"	Sf.6. Snapped stems
507	c.1682-1757				3.3	5/64"	Sf.7 Snapped stems

Table 6: Clay tobacco pipe

Context	Form	Colour	Date	Shds	Wt (g)	Comments
304	Bottle	clear				
803	Bottle	Clear	20 <sup>th</sup>	3	111.4	Base from a circular bottle
803	Vessel	White	20 <sup>th</sup>	3	20.0	Tableware fragments
			Late 19 <sup>th</sup>			Complete tonic bottle, applied
803	Bottle	Clear	-20 <sup>th</sup>	1	117.4	rim.
			Late 19 <sup>th</sup>			
803	Bottle	Aqua	-20 <sup>th</sup>	4	114.6	Square bottle
803	Bottle	Blue	20 <sup>th</sup>	1	4.2	fragment
803	Unid	Clear	20 <sup>th</sup>	6	35.7	shards
			Late			
803	Bottle	Aqua	19 <sup>th</sup> -20 <sup>th</sup>	1	17.8	Neck from a tonic bottle

Table 7-Glass

#### Discussion

4.2.3 This is a small-sized assemblage of glass and clay tobacco pipe, broadly spanning the 18<sup>th</sup> to 20<sup>th</sup> century.

4.2.4 Clay tobacco pipe is represented by snapped stems, often showing fresh breaks suggesting recent disturbance. The stems are only broadly dateable to the late 17<sup>th</sup> to 18<sup>th</sup> century by stem bore and could conceivably be later in date.

4.2.5 The glass assemblage comprises a mixture of fragments typically from drinks bottles and tonic bottles of late 19<sup>th</sup>-20<sup>th</sup> century date. Also present were fragments of tableware, most likely a saucer or small plate.

#### Recommendations for further work

4.2.6 This is a small assemblage of predominantly late 19<sup>th</sup>-20<sup>th</sup> century date. Given the relatively recent date of the assemblage, there is limited opportunity for further study. All of the finds could be returned to the landowner or be discarded.

## 4.3 Animal Bone

Milena Grzybowska

#### Introduction

4.3.1 The material consisted of hand-collected disarticulated animal bone. The analysis follows *Guidelines for best practice* (Baker and Worley 2013, English Heritage). The bones were identified by species or a broader taxonomic group where possible. Unidentifiable specimens were assigned to a size-class: 'large mammal' (cattle-size), 'medium mammal' (sheep-size) and 'small mammal' (cat-size). The state of surface preservation was scored using a five stage system (poor, bad, moderate, good, and excellent). Measurements of mature specimens were taken following the standards of von den Driesch (1976). Data provided by the Animal Bone Metrical Archive Project (Centre for Human Ecology and Environment 1995) were used for comparison of measurements.

#### Results

A total assemblage of 12 refitted fragments of animal bone was analysed. Overall preservation was good. The animal bone comprised exclusively domesticated species,

including cattle, sheep/goat and domestic fowl. Specimen from ditch fill 109 presented marks related to portioning, whereas animal bone from ditch fill 803 showed hacks and cuts indicative of portioning and filleting. No evidence of burning were identified, whereas some specimens showed gnawing marks. Dimensions of domestic fowl fell within post-medieval/modern range (ABMAP).

Context	Taxon	Element	Side	Preservation	Butchery	Gnawing	Burning	Measurements (mm)
109	cattle	scapula	right	good	cuts and hacks	present	none	-
304	large mammal	indeterminate	-	good	none	none	none	-
803	sheep/goat	scapula	left	good	hack, cuts	none	none	-
803	domestic fowl	femur	right	good	cuts	none	none	-
803	domestic fowl	tibiotarsus	right	good	none	none	none	GL: 128. 8
803	domestic fowl	humerus	left	good	none	none	none	-
803	domestic fowl	coracoid	left	none	none	none	none	-
803	domestic fowl	ulna	left	none	none	none	none	-
803	bird	humerus	right	none	none	none	none	-
803	medium mammal	long bone shaft	-	good	none	present	none	-
803	large mammal	long bone shaft	-	good	none	none	none	-
803	large mammal	scapula	-	good	none	none	none	-

Table 8 - Animal Bone

# 5 Discussion and Conclusion

5.1 Archaeological evaluation of the development area has confirmed the results of the geophysical survey (Durkin 2018) and the results of historic map regressions (Burpoe 2017).

5.2 The archaeological remains present, comprise boundary ditches, a probable footpath, remains of a building most likely related to the lead mining industry, and filled-in disused mineshafts.

5.3 The boundary ditches identified in Trenches 1, 3, and 8 are most likely postmedieval boundary ditches, first seen on the 1816 Ashover Poor Rate map, marking out enclosures within the surrounding agricultural landscape. The shallow feature identified running on the same alignment as the boundary ditches in Trench 1 and 2, while ephemeral in nature, may indicate the presence of a footpath running adjacent to the boundary ditch.

5.4 Tantalising evidence for a potential building was excavated in Trench 5 where evidence for a wall foundations and what may represent the remains of bedding layers for floor surfaces between these walls were identified. The walls and surfaces identified appeared to run both north and south beyond the edges of the trench, suggesting further remains lay beyond the limit of excavation. It is most likely that the structural remains present on site are those of a building, seen on the 1851 Ashover Tithe map, relating to the historic lead extraction which took place at this location.

5.5 A key research topic identified in *East Midlands Heritage*. *An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight et al. 2012) is to *further our records of mines and surface features associated with extractive industry and their relationship with markets, settlements and transport?* (p. 122). The archaeological remains of the building identified begin to address this research topic, namely by identifying the location of a building related to the lead mining taking place at this location. However, useful information regarding the buildings precise function, overall form, date and its relationship to surrounding features, such as the mineshafts, and its relationship to Ashover village itself could not be ascertained with the limited sample excavation afforded through trial trenching.

# 6 Publicity, Confidentiality and Copyright

6.1 Any publicity will be handled by the client.

6.2 ARS Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

# 7 Statement of Indemnity

7.1 All statements and opinions contained within this report are offered in good faith and compiled according to professional standards.

7.2 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.

# 8 Archive

8.1 A digital, paper and artefactual archive has been prepared by ARS Ltd, consisting of all primary written documents, plans, sections, photographs and electronic data. If required the archive will be deposited at Weston Park Museum, Sheffield in line with the CIfA (2014d) Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives, Society of Museum Archaeologists (1993) Selection, Retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland and Museums of Derbyshire (2016) *Procedures for the Transfer of Archaeological Archives* and will be deposited within two months of the completion of this report.

8.2 A full set of annotated, illustrative pictures of the site, excavation, features, layers and selected artefacts will be deposited with the archive as digital images on a CD ROM.

8.3 An OASIS online record http://ads.ahds.ac.uk/project/oasis/ has been completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).

# 9 Acknowledgements

9.1 ARS Ltd would like to thank GeoPlan Ltd. for commissioning this project. We would also like to thank Steve Baker, County Archaeologist for Derbyshire County Council, for his guidance and support.

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# **Appendix I: The Figures**











Figure 7 - Trench 1, looking West. Scales: 2m & 1m in 0.5m graduations.



Figure 8 - Dump of limestone (103), looking south-west. Scale: 1m in 0.5m graduations.



Figure 9 - North-east facing section of [105]. Scale: 2m in 0.5m graduations.



Figure 10 - south-west facing section of [104]. Scale: 1m in 0.5m graduations.






Figure 12 - Trench 2, looking south-east. Scales: 1m & 2m in 0.5m graduations.



Figure 13 - [203] post-excavation looking north-east. Scale: 1m in 0.5m graduation



Figure 14 - North-east facing section of [203]. Scale: 1m in 0.5m graduations.





Figure 18 - Trench 3 post -excavation, looking north-east. Scales: 1m & 2m in 0.5m graduations.



Figure 19 - North facing section [303]. Scales: 1m & 2m in 0.5m graduations.



Figure 20 - Trench 4, looking south-east. Scales: 1m & 2m in 0.5m graduations.





Figure 22 - Trench 5, looking east. Scales: 1m & 2m in 0.5m graduations.



Figure 23 - Wall foundation (503), looking north-west. Scale: 1m in 0.5m graduations.



Figure 24 - Wall foundation (506), looking west. Scale: 1m in 0.5m graduations.



Figure 25 - Trench 6, looking north. Scales: 1m & 2m in 0.5m graduations.



Figure 26 - Trench 7, looking east. Scales: 1m & 2m in 0.5m graduations.







Figure 29 - Trench 8, looking north/north-west. Scales: 1m & 2m in 0.5m graduations.



Figure 30 - [803], pre-excavation, looking north/north-east. Scales: 1m & 2m in 0.5m graduations.



Figure 31 - [803], mid excavation, looking north/north-east. Scales: 1m & 2m in 0.5m graduations.



Figure 32 - South/south-west facing section [803]. Scale: 2m in 0.5m graduations.



Figure 33 - Trench 9, looking south-west. Scales: 1m & 2m in 0.5m graduations.

**Appendix II: Context Summary Table** 

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
1	100	Topsoil	Medium texture mid grey - brown clayey sand topsoil across the extent of Trench 1/ <i>Topsoil</i>	Extent of Trench	189.67m
1	101	Subsoil	Medium textured mid orangey brown clayey sand subsoil across extent of Trench 1/ <i>Subsoil</i>	Extent of Trench	189.35m
1	102	Natural	Medium textured orangey yellow sandy clay with occasional small/medium sub-angular sandstone fragments, covers extent of Trench 1/ <b>Natural</b>	Extent of Trench	188.64m
1	103	Deposit	Coarse man made deposit of sub-angular pieces of limestone / <i>Modern dump of limestone, purpose unknown</i>	1.20m x 0.22m x 0.07m	189.45m
1	104	Cut	Linear cut feature with a gradual break of slope, moderate sloping sides, and flat base, aligned on a NE to SW orientation. Filled by (106). Possibly continues into Trench 2/ <i>Shallow linear feature, possibly remnants of a footpath adjacent to boundary ditch.</i>	10m x 0.70m x 0.05m	189.24m
1	105	Cut	Linear feature with a gradual break of slope, gradual/sharp stepped sides and flat base. Aligned on a North-east to South-west orientation. Filled by (109)/ <i>Boundary ditch.</i>	2m x 4m x 0.74m	189.38m
1	106	Fill	Medium greyish-orange well sorted sandy silt fill with occasional small pebble inclusions. Fill of [104] / <i>Represents backfill of ditch [104]</i>	10m x 0.70m x 0.05m	189.24m
1	107	Fill	A well sorted medium textured, light reddish- grey sandy silt fill / <b>Represents</b> backfill of pit [108]	0.50m x 0.36m x 0.35m	189.37m
1	108	Cut	A sub-circular feature which cuts ditch [105]. The break of slope is sharp with a U-shaped base and concave sides. Filled by (107) / <i>Cut of pit</i>	0.50m x 0.36m x 0.35m	189.37m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
1	109	Fill	Poorly sorted medium textured mid reddish - brown sandy silt fill, with inclusions of animal bones, roots and large irregular stones / <b>Backfill of ditch [105]</b>	2m x 4m x 0.74m	189.38m
2	200	Topsoil	Friable mid greyish - brown clayey sand covering the extent of Trench 2/ <i>Topsoil</i>	Extent of Trench	190.12m
2	201	Subsoil	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 2/ <i>Subsoil</i>	Extent of Trench	189.87m
2	202	Natural	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench 2/ <i>Natural</i>	Extent of Trench	189.69m
2	203	Cut	Linear feature running broadly NE-SW with concave sides and an uneven base, filled by (204)/ <i>Possibly the line of a former footpath adjacent to</i> <i>boundary ditch</i>	1.2m x 2m x 0.07m	189.80m
2	204	Fill	Medium textured greyish -light brown clayey sand fill containing sub- angular pebbles. Similar to sub-soil with no discernible difference/ <i>Fill of</i> [203]	1.2m x 2m x 0.07m	189.80m
3	300	Topsoil	Medium textured mid greyish - brown clayey – sand material, covering extent of Trench 3 / <b>Topsoil</b>	Extent of Trench	190.92m
3	301	Subsoil	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 3/ <i>Subsoil</i>	Extent of Trench	190.73m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
3	302	Natural	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench 3/ <i>Natural</i>	Extent of Trench	190.74m
3	303	Cut	Parallel sided ditch feature with a gradual break of slope, gradual to sharp stepped sides and rounded base. Aligned on a south-west to north-east orientation. Filled by (307), (308) and (309)/ <i>Boundary ditch</i>	3.14m x 10m x 1.58m	190.78m
3	304	Fill	Medium textured light grey - brown sandy silt fill with occasional small rounded pebbles/ <i>fill of cut [310]</i>	0.94m x 1m x 0.24m	190.92m
3	305	Cut	Linear feature with concave sides and a U-shaped base, aligned on a NE to SW orientation. Filled by (306)/ <i>Shallow feature, possibly footpath</i>	0.58m x 2m x 0.08m	190.63m
3	306	Fill	Coarse textured light grey - brown silty clay fill with occasional small rounded pebble inclusions/ <i>fill of shallow footpath [305]</i>	0.58m x 2m x 0.08m	190.63m
3	307	Fill	Medium textured mid reddish – grey/brown sandy silt fill, with inclusions of animal bones, pot and glass/ <i>deliberate backfill of boundary ditch</i> [303]	3.14m x 2.60m x 0.60m	190.78m
3	308	Fill	A well sorted medium textured, mid reddish – grey/ brown sandy silt fill with occasional very small rounded pebble inclusions/ <i>Fill of boundary ditch</i> [303]	0.98m x 1m x 0.5m	190.58m
3	309	Fill	Medium textured dark grey - brown sandy silt fill containing fine gravel inclusions/ <i>primary fill of boundary ditch [303]</i>	0.30m x 0.32m x 0.30m	190.46m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
3	310	Cut	Sub - oval feature with concave sides and a U - shaped base. Aligned on an N to S orientation. Filled by (311), (312) & (313). Cut by ditch [303]/ Represents a cut made in an attempt to retrieve the natural rock below ground, which was then deliberately backfilled	0.94m x 1m x 0.24m	190.92m
3	311	Fill	A medium textured, mid grey sandy silt fill with fine poorly sorted gravel inclusions. Fill of cut [310]/ <i>Possibly silting within ditch [310]</i>	0.94m x 1m x 0.24m	190.71m
3	312	Fill	Well sorted, medium textured, light grey - brown sandy silt fill with occasional small rounded pebble inclusions/ <i>fill of ditch</i> [310]	1.28m x 1m x 0.30m	190.94m
3	313	Fill	Well sorted, medium textured light grey - brown sandy silt fill, with occasional small pebble inclusions/ <i>fill of ditch [310]</i>	0.56m x 1m x 0.28m	190.69m
4	400	Deposit	Medium textured mid greyish - brown clayey – sand material, covering extent of Trench 4 / <i>Topsoil</i>	Extent of Trench	192.31mm
4	401	Deposit	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 4/ <i>Subsoil</i>	Extent of Trench	192.17m
4	402	Deposit	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench 4/ <i>Natural</i>	Extent of Trench	192.02m
4	403	Deposit	Coarse textured, extremely friable spread of material, having appearance of fluorspar or similar mineral. / <i>Waste from lead extraction/processing, likely to have occurred on or near site</i>	2m x 1m x unknown	192.02m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
5	500	Topsoil	Medium textured mid greyish - brown clayey – sand material, covering extent of Trench 5 / <b>Topsoil</b>	Extent of Trench	192.87m
5	501	Subsoil	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 5/ <i>Subsoil</i>	Extent of Trench	192.65m
5	502	Natural	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench 5/ <i>Natural</i>	Extent of Trench	192.88m
5	503	Cut	A linear cut with gradual break of slopes, concave sides and a U-Shaped base. Aligned on a NE to SW orientation. Contained the foundation wall (505)/ <i>Construction cut of wall (505)</i>	2.60m x 0.40m x 0.10m	192.54m
5	504	Fill/Bond	Coarse textured light grey - brown sandy silt fill with worked limestone present (forming wall (505) / <i>Backfill of cut [503]</i>	2.60m x 0.40m	192.54m
5	505	Wall	One course wall facing NW (external face) bonded by (504)/ <i>Wall foundation</i>	2.60m x 0.40m	192.54m
5	506	Cut	A linear cut with gradual break of slopes, concave sides and flat base. Aligned on a NE to SW orientation. Contained the foundation wall (508)/ Construction cut for wall (508)	2.20m x 0.60m	192.92m
5	507	Fill	Coarse textured light orangey red compacted sand, with some areas varying in colour/ <i>Backfill of construction cut [506]</i>	1.38m x 1.36m	192.92m
5	508	Wall	One course wall facing SE (External face) bonded by (507)/ Wall foundation.	0.60m x 2.20m	192.92m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
5	509	Fill	Coarse textured light greyish brown sandy silt containing angular and broken small and medium sized gravel inclusions/ <i>levelling deposit for removed floor level</i>	2.58m x 1.10m	192.88m
5	513	Fill	Coarse textured light grey - brown sandy silt containing large and medium size limestone chunks / <i>demolition rubble, possibly from wall (508)</i>	0.32m x 0.30m	192.88m
5	515	Fill	Coarse textured light grey - brown sandy clay fill with white pockets, fill contains inclusions of fine gravel/ <i>Levelling deposit for removed floor level</i>	2.10m x 2.05m	192.76m
5	516	Fill	Coarse textured medium grey - brown with white patches compacted sand fill containing occasional medium sand stone inclusions/ <i>Levelling deposit</i> for removed floor level	0.86m x 1.30m	192.54m
5	517	Fill	Coarse textured light grey - brown with white pockets sandy clay fill containing fine gravel inclusions/ <i>Levelling deposit for removed floor level</i> )	2.10m x 2m	192.71m
5	518	Fill	Medium textured dark purple - brown building material/ <b>Demolition rubble.</b>	0.34m x 0.27m	192.88m
5	519	Deposit	Coarse textured light grey fill close to wall (508)/ <i>Levelling deposit for</i> <i>removed floor level</i>	0.70m x 0.6m	192.88m
5	520	Deposit	Medium textured white sand/ Levelling deposit for removed floor level	2m x 0.5m	192.92m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
6	600	Deposit	Medium textured mid greyish - brown clayey – sand material, covering extent of Trench 6 / <i>Topsoil</i>	Extent of Trench	193.21m
6	601	Deposit	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 6/ <i>Subsoil</i>	Extent of Trench	192.92mm
6	602	Deposit	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench 6/ <i>Natural</i>	Extent of Trench	192.77m
7	700	Deposit	Medium textured mid greyish - brown clayey – sand material, covering extent of Trench 7 / <b>Topsoil</b>	Extent of Trench	193.61m
7	701	Deposit	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 7/ <i>Subsoil</i>	Extent of Trench	193.32m
7	702	Deposit	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench 7/ <i>Natural</i>	Extent of Trench	193.19m
8	800	Topsoil	Medium textured mid grey - brown clayey sand topsoil covering the extent of Trench 8/ <i>Topsoil</i>	Extent of Trench	193.68m
8	801	Subsoil	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 8/ <i>Subsoil</i>	Extent of Trench	193.35m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
8	802	Natural	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench 8/ <i>Natural</i>	Extent of Trench	193.23m
8	803	Cut	Parallel sided ditch feature with a gradual break of slope, concave sides and V-shaped base. Aligned on a NE to SW orientation. Filled by (805), (806), (808), (804) and (807)/ <i>Cut of boundary ditch.</i>	2.72m x 2m x 0.66m	193.27m
8	804	Fill	Coarse textured dark grey - black sandy clay with inclusions of small stones and frequent ceramic, glass and animal bones belonging to the 19th or early 20th century/ <i>fill of ditch [803]</i>	1.94m x 2m x 0.36m	193.34m
8	805	Fill	Medium textured mid yellow - brown sandy clay fill/ <i>fill of ditch [803]</i>	1.40m x 2m x 0.44m	193.27m
8	806	Fill	Medium textured mid blueish - grey sandy silt fill/ <i>fill of ditch [803]</i>	1.20m x 2m x 0.34m	193.02m
8	807	Fill	Medium textured dark grey sandy silt fill/ <i>fill of ditch [803]</i>	0.90m x 2m x 0.34m	193.31m
8	808	Fill	Medium textured light yellowish brown slightly clayey sand fill with inclusions of large stone and rubble/ <i>fill of ditch [803]</i>	1.24m x 2m x 0.62m	193.34m
9	900	Deposit	Medium textured mid greyish - brown clayey – sand material, covering extent of Trench 9 / <b>Topsoil</b>	Extent of Trench	194.49m

Trench	Context	Туре	Description / Processual Interpretation	Thickness /extent (feature = length x width x depth)	aOD (m)
9	901	Deposit	Medium textured light greyish - brown clayey sand subsoil, with areas of variable colour, covering the extent of Trench 9/ <i>Subsoil</i>	Extent of Trench	194.25m
9	902	Deposit	Medium textured orangey - yellow sandy clay material with occasional sub- angular small/medium fragments of sandstone, covering extent of Trench / <i>Natural</i>	Extent of Trench.	194.14m

**Appendix III: Written Scheme of Investigation** 

# Archaeological Works at land at Milken Lane, Ashover, Derbyshire

# Written Scheme of Investigation for Archaeological Evaluation Trenching and Excavation

February 2018



#### © Archaeological Research Services Ltd 2017

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Site central NGR:	SK 435063 363352

# TABLE OF CONTENTS

1	INTRODUCTION1						
	1.1 Project and Planning Background1						
	1.2	Site description1					
	1.3	Geology2					
2	ARCHAE	OLOGICAL AND HISTORICAL BACKGROUND					
3	AIMS AI	ND OBJECTIVES					
	3.1	Regional Research Aims and Objectives3					
	3.2	Evaluation Objectives					
4	EVALUA	TION METHODOLOGY					
	4.1	Coverage					
	4.2	Professional Standards5					
	4.3	Excavation					
	4.4	Recording					
	4.5	Finds Processing and Storage					
5	MONITO	DRING ARRANGEMENTS					
6	TIMETABLE, STAFFING AND RESOURCES						
7	REPORT						
8	ARCHIV	E DEPOSITION					
9	GENERA	10 NL ITEMS					
	9.1	Health and Safety10					
	9.2	Insurance Cover					
	9.3	Changes to the Written Scheme of Investigation					
	9.4	Publication					
	9.5	Copyright12					
10	0 REFERENCES12						
10	REFERE	NCES					
THE	REFEREI	12					
THE APPE	REFEREI FIGURES . ENDIX I: R	IZ IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII					



Written Scheme of Investigation for Archaeological Works at Milken Lane, Ashover, Derbyshire



# **1** INTRODUCTION

# **1.1 Project and Planning Background**

1.1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Services Ltd (ARS Ltd) on behalf of Mr Roger Hollingworth. It details a scheme of works for Archaeological Evaluation Trenching and if necessary subsequent strip map and sample excavations in satisfaction of planning consent (NED/17/00200/OL) for proposed residential housing development at Milken Lane, Ashover, Derbyshire, SK 435063 363352.

1.1.3 Archaeology is a material consideration in the planning process. *National Planning Policy Framework* (NPPF) (DCLG 2012), Paragraph 141 outlines a requirement to record and enhance understanding of the significance of any heritage assets to be lost during the proposed development in a manner proportionate to their importance, and to make this evidence (and any archive generated) publicly accessible.

1.1.4 Planning permission has been granted for development of the site subject to condition, Condition 22, which requires archaeological work prior to occupancy and development.

22 No development shall take place until a Written Scheme of Investigation for archaeological work has been submitted to and approved by the local planning authority in writing, and until any pre-start element of the approved scheme has been completed to the written satisfaction of the Local Planning Authority. The scheme shall include an assessment of significance and research questions; and

1. The programme and methodology of site investigation and recording

2. The programme for post investigation assessment

*3. Provision to be made for analysis of the site investigation and recording* 

4. Provision to be made for publication and dissemination of the analysis and records of the site investigation

5. Provision to be made for archive deposition of the analysis and records of the site investigation

6. Nomination of a competent person or persons/organization to undertake the works set out within the Written Scheme of Investigation.

1.1.5 This WSI has been prepared to fully comply with the stipulations of planning consent in consultation with Steve Baker, the Archaeologist for Derbyshire County Council. It describes the objectives and the methods to be employed and has been approved in its final issued form by the Archaeologist for Derbyshire County Council.

# **1.2 Site description**



1.2.1 The 'red line boundary' of the PDA is outlined in Figure 1 and encompasses an area of 0.98ha. The site is located northeast of Ashover village centre behind the Black Swan Public House. The site consists of one roughly rectangular shaped field, which slopes from north to south towards Milken Lane, where the site access track leads from. The site is bounded on all sides by a mixture of stonewalling, hedgerows, stock-proof fencing and timber fencing. The site is centred at NGR SK 435063 363352 (Figure 1).

# 1.3 Geology

1.3.1 The underlying solid geology consists of Mudstone, Siltstone and Sandstone of the Bowland Shale Formation – a Sedimentary Bedrock formed approximately 313 to 335 million years ago in the Carboniferous Period. This is overlain by superficial Head deposits (BGS 2018).

1.3.2 The underlying solid geology within the southernmost party of the PDA comprises mudstone of the Widmerpool Formation, formed approximately 326 to 335 million years ago in the Carboniferous Period when the local environment was previously dominated by sub-aqueous slopes. This is overlain by superficial head deposits (BGS 2018).

1.3.3 The soils of the PDA are classified as belonging to the Bardsey Soil Association (713a), which are cambic stagnogley soils (SSEW 1983). These soils form over Carboniferous mudstone with interbedded sandstone, and are characterised as 'Slowly permeable seasonally waterlogged loamy over clayey and fine silty soils over soft rock. Some well drained coarse loamy soils over harder rock (CU 2017).

#### **2** ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 The proposal site is adjacent to the medieval core of Ashover with some potential therefore for medieval village archaeology. Historic mapping suggests that the lower part of the site may have been within smaller enclosures possibly originating as medieval crofts north of the junction of Milken Lane and Moor Road. There is also potential for historic lead mining within the site, with a HER record for a former lead mine to the north of Lime Tree House off Malthouse Lane (HER 33627). The 1803 map of 'several mines' in Ashover shows the 'Rhodes vein' running through the site, with a building shown towards the site's northern boundary probably associated with mining. There are also findspots for prehistoric and Romano-British material in the village, including a beehive quern around 170m to the southwestand prehistoric rock art 210m to the west. The site therefore has potential for archaeological remains of several periods (Baker 2017).

2.2 Archaeological Research Services Ltd have conducted geophysical surveys of land on Narrowleys Lane and Moor Road (350m to 450m to the northwest) (Durkin 2014, 2017a). These surveys revealed a small number of anomalies of possible archaeological origin as well as ridge and furrow cultivation remains but these have not been tested by field evaluation.

2.3 A geophysical survey was conducted in the PDA in 2017 (Durkin 2017b). The survey did not reveal any definite evidence of significant buried archaeological



remains within the PDA but has revealed a number of anomalies of possible archaeological origin.

2.4 Out of the two clearly defined linear anomalies that were revealed by the geophysical survey, one can be interpreted as the remains of the south-eastern field boundary in its former location as depicted on the 1816 Poor Rate map (Burpoe 2017). The second linear anomaly cannot be interpreted with any certainty based on cartographic evidence contained in the accompanying Historic map regression (Burpoe 2017). This anomaly is likely to also represent an historic field boundary.

2.4 Three notable positive discrete anomalies were recorded towards the north of the PDA have the characteristics of archaeological cut features, but are located on or close to a lead mining vein and may therefore be associated with more recent mining activity.

2.5 Further anomalies recorded by the geophysical survey are considered to have only low potential to be archaeologically significant. They are likely to indicate possible ridge and furrow cultivation remains, disturbance associated with mining activity and disturbance and remnants associated with the removal of trees and field boundaries and general agricultural land use.

# **3** AIMS AND OBJECTIVES

# 3.1 Regional Research Aims and Objectives

3.1.1. There is potential for research topics identified in *East Midlands Heritage*. An *Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight *et al.* 2012) to be addressed namely:

- How can we develop further our records of mines and surface features associated with extractive industry and their relationship with markets, settlements and transport? (p. 122)
- How can we elucidate further the development of nucleated villages, and in particular the contribution of the Danelaw to changes in village morphology? (p. 194)
- Can we clarify further the processes of settlement desertion and shrinkage, especially within zones of dispersed settlement? (p. 194)

# **3.2 Evaluation Objectives**

- 3.2.1. The aims and objectives of the trial trench evaluation will be to:
  - Identify the presence/absence of archaeological features and deposits within the site.
  - Record all archaeological features and deposits encountered.
  - Sample sufficient of the archaeological features and deposits to establish relative sequence, likely dating and quality of preservation.
  - Gather sufficient information to establish the character, extent, form, function and likely status of any surviving archaeological deposits with a view



to evaluating their significance and potential to inform the aims and objectives outlined in section 3.1 of this document.

3.2.2 If survival of archaeological deposits or features is demonstrated in line with that identified within the DBA and covered by the research aims outlined in section 3.1, in outline the aims and objectives of any excavation will be to:

- Excavate and record the archaeological features and deposits encountered.
- Establish a relative chronological sequence and if possible a dating framework for excavated deposits and features.
- Establish the character, extent, form, function and likely status of surviving archaeological deposits to inform the research aims outlined in section 3.1.

# **4 EVALUATION METHODOLOGY**

## 4.1 Coverage

4.1.1 Evaluation trenching will consist of four 20mx2m trenches, two 25mx2m trenches, two 15m x 2m trenches and one 5m x 2m trench.

- Trench 1: (25m x 2m) aligned north-west to south-east.
- Trench 2: (20m x 2m) aligned north-west to south-east.
- Trench 3: (20m x 2m) aligned broadly east to west.
- Trench 4: (15m x 2m) aligned north-northwest to south-southeast.
- Trench 5: (15m x 2m) aligned broadly east-west, but which may be extended and thus invoke contingency, to encompass putative structures identified in the historic map regression (Burpoe 2018, Figure 6)
- Trench 6: (20m x 2m) aligned north-northeast to south-southwest.
- Trench 7: (25m x 2m) aligned north-west to south-east.
- Trench 8: (20m x 2m) aligned north-west to south-east.
- Trench 9: (5m x 2m) aligned north-northeast to south-southwest

4.1.2 The location of the trial trenches has been agreed with the Archaeologist for Derbyshire County Council as sufficient to cover the initial phase of archaeological works in the PDA. If significant remains are identified however, further excavations will follow. The scope of which will be agreed in consultation the with Archaeologist for Derbyshire County Council as appropriate and subject to a separate Written Scheme of Investigation.

4.1.3 Additionally, attention is specifically drawn to a requirement for archaeological investigation of the southern frontage to investigate a potential building. This work will, depending on ground conditions and specifications provided on site by the Archaeologist for Derbyshire County Council, be undertaken *as contingency works* at the time of the archaeological evaluation, or as precommencement works prior to development.



## 4.2 Professional Standards

4.2.1. All elements of the archaeological evaluation will be carried out in accordance with the Chartered Institute for Archaeologist (CIfA) *Code of Conduct* (2014a) and will follow the CIfA's *Standards and Guidance for Archaeological Evaluation* (2014b).

4.2.2. All staff employed on the project will be suitably qualified for their respective project roles and have substantial experience of archaeological excavation and recording. All staff will be made aware of the archaeological importance of the area surrounding the site and will be fully briefed on the work required by this specification.

4.3.11 ARS Ltd will ensure that regular contact is maintained between ARS Ltd. and the client/site project manager to ensure that ARS Ltd. is kept up to date with site works.

4.2.3 A risk assessment will be undertaken and completed before commencement of the work. All work will be undertaken in compliance with the health and Safety at Work act (1974) health and safety regulations will be adhered to at all times.

#### 4.3 Excavation

4.3.1 Topsoil will be removed by a tracked or wheeled excavator using a toothless ditching bucket under continuous archaeological supervision. The topsoil and subsoil will be removed down to the first significant archaeological horizon or depth of development, whichever is the higher, in successive level spits.

4.3.2 Topsoil and subsoil will be stored separately if necessary and will in all circumstances be stored at least 1m away from the trench edges.

4.3.3 Machine movements will be strictly controlled so that no machinery will track over areas that have previously been stripped in the evaluation unless these areas have been signed off.

4.3.4 All trenches will be appropriately cleaned by hand to expose the full nature and extent of archaeological features and deposits.

4.3.5 All excavated spoil will be scanned visually to recover small finds. Finds so recovered will be recorded with their location of origin ascribed. Finds will be retained and recorded.

4.3.6 Isolated, discrete features such as non-structural pits or features representing industrial activities will be 50% sampled, if they produce artefacts then provision is made for full excavation.

4.3.7 Representative samples of bricks from brick-built structures and selective products of the brick working process will be retained for specialist analysis where appropriate.



4.3.8 Finds of "treasure" will be reported to the Coroner in accordance with the Treasure Act (DCMS 2008). The Portable Antiquities Liaison Officer will also be notified.

HM Coroner	Finds Liaison Officer
Dr. Robert Hunter	Alastair Willis
St Katherine's House	Museum and Art Gallery
St. Mary's Wharf,	The Strand
Mansfield Road	Derby
Derby	DE1 1BS
DE1 3TQ	Tel: 01332 641 903
Tel: 01332 613014	e-mail: <u>Alastair@derbymuseums.org</u>

4.3.9 In the event of Treasure finds the Archaeologist for Derbyshire County Council will be notified and, if necessary, a site meeting arranged to determine if further investigation in the vicinity of the find spot is required.

4.3.10 Any human remains discovered will initially be left in-situ and, if removal is deemed necessary, this will be undertaken in accordance with the relevant Ministry of Justice regulations and in discussion with the Derbyshire Development Control Archaeologist.

4.3.11 For sealed and stratigraphically secure deposits that have the potential to provide environmental evidence relating to diet and economy, dating evidence or landuse regime, a minimum of 40 litres of sample will be taken, or 100% of the sample if smaller.

4.3.12 In the case of waterlogged or anaerobic deposits a minimum sample size of 20L will be taken.

4.3.13 Should a sequence of superimposed deposits of note be present column sampling may be considered.

4.3.14 In all instances sampling strategies will be in accordance with guidelines issued by Historic Englands *Environmental Archaeology: A Guide to the Theory and Practice Methods, from sampling and recovery to post excavation* (Campbell *et al.* 2011) and will be targeted in order to provide an evaluation of the type of preservation that may be present.

#### 4.4 Recording

4.4.1 The site will be tied into the National Grid and located on a 1:2500 or 1:1250 map of the area. The site will be recorded in accordance with the ARS Ltd. field recording manual.

4.4.2 A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pre-printed record sheets with text descriptions appropriate to the work. Accurate measured scale plans and sections/elevations will be drawn where required at the appropriate and in accordance with best practice. In addition to relevant illustrations, provision for rectified photographic recording shall be made, if deemed necessary.



4.4.3 A stratigraphy of the site will be recorded even where no archaeological deposits have been identified.

4.4.4 The heights above sea level will be recorded for all deposits and features in metres above Ordnance Datum (aOD).

4.4.5 A full photographic record will be compiled using a digital camera, a Fuji XP90 with 16.4 MP resolution, and a register of all photographs will be kept. The photographic record will encompass all encountered archaeological entities. In addition key relationships between entities, where these help demonstrate sequence or form, will also be photographed. A clearly visible, graduated metric scale will be included in all record shots. A supplementary record of working images will be taken to demonstrate how the site was investigated and what the prevailing conditions were like during excavation.

4.4.6 A stratigraphic matrix will be compiled for all trenches where superimposed archaeological deposits, features or structures are encountered.

# 4.5 Finds Processing and Storage

4.5.1 All finds processing, conservation work and storage of finds will be carried out in accordance with the CIFA (2014c) *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* and the UKIC (1990) *Guidelines for the Preparation of Archives for Long-Term Storage.* 

4.5.2 Artefact collection and discard policies will be appropriate for the defined purpose.

4.5.3 Bulk finds which are not discarded will be washed and, with the exception of animal bone, marked. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed and recorded. This process will be carried out no later than two months after the end of the excavation.

4.5.4 All small finds will be recorded as individual items and appropriately packaged (e.g. lithics in self-sealing plastic bags and ceramic in acid-free tissue paper). Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. This process will be carried out within two days of the small find being excavated.

4.5.5 During and after the excavation all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information (including controlled storage, correct packaging, and regular monitoring, immediate selection for conservation of vulnerable material). All storage will have appropriate security provision.

4.5.6 The deposition and disposal of artefacts will be agreed with the legal owner and Weston Park Museum, Sheffield prior to the work taking place. All finds except treasure trove are the property of the landowner.

4.5.7 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the recipient museum.



#### 5 **MONITORING ARRANGEMENTS**

5.1 Archaeological Research Services Ltd. acknowledges that it is the responsibility of the Archaeologist for Derbyshire County Council to monitor the archaeological works. Reasonable notice, no less than 5 working days, shall be provided before the commencement of works and to arrange monitoring visits.

Steve Baker Derby and Derbyshire County Council Shand House **Dale Road South** Matlock Derbyshire DE4 3RY Tel: 01629 539773.

ARS Ltd will liaise with the Archaeologist for Derbyshire County Council at 5.2 regular intervals throughout the course of the work.

5.3 The client will afford reasonable access to the Archaeologist for Derbyshire County Council or their representative, for the purposes of monitoring the archaeological mitigation

#### **TIMETABLE, STAFFING AND RESOURCES** 6

6.1 The Project Manager for the watching brief will be Reuben Thorpe MCIfA, FSA, Senior Project Manager at ARS Ltd. The Fieldwork Project Officer will be an appropriately qualified and experienced archaeologist appointed by ARS Ltd.

Task	Description	Commence	Complete
1	Approval of WSI	Wk 12/02/18	By 23/02/18
2	Gear up and mobilisation	Following 1	
3	Archaeological Trial Trenching (Evaluation)	2 weeks from notification to commence	8 working days from commencement
4	Reporting	On completion of evaluation	Within 5 weeks of completion of evaluation
5	WSI for subsequent work	If necessary TBC	

6.2 Finds analysis will be carried out by appropriately qualified specialists as detailed subject to availability.

Flint and prehistoric pottery: Dr Robin Holgate MCIfA



٠	Romano-British pottery:	Dr Phil Mills
٠	Samian ware:	Dr Gwladys Monteil
•	Medieval and post-medieval pottery:	Dr Chris Cumberpatch/Dr Robin Holgate MCIfA
٠	Clay pipes:	Mike Wood MCIfA
٠	Plant macrofossils and charcoals:	Luke Parker
٠	Human and animal bone:	Milena Grzybowska
٠	Radiocarbon dating:	Prof Gordon Cook (SUERC)
٠	Finds conservation:	Vicky Garlick (Durham University)

# 7 REPORT

7.1 Once the on-site work has been completed a report will be written and accompanying plans, illustrations, photographs and text records incorporated. The report will be produced in accordance with CIFA *Standards and Guidance for Archaeological Excavation* (2014b). It will incorporate the following:

- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections
- An objective summary statement of results
- Conclusions
- Supporting data tabulated or in appendices to include
  - Specialist Reports
  - Structural and Stratigraphic details
- Index to archive and details of archive location
- References
- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the OASIS form


7.2 A copy of the report will be deposited with the Derbyshire Historic Environment Record (HER), an OASIS record completed and an archive produced in order to disseminate the analysis and records of the site investigation.

7.3 If required, a full site archive will be prepared and deposited with an appropriate repository museum, i.e. Weston Park Museum, Sheffield.

# 8 ARCHIVE DEPOSITION

8.1 Should the project produce no archaeologically significant finds, then it is not necessary to deposit an archive with the repository museum, which in this case is the Weston Park Museum, Sheffield. This is in line with the Museums of Derbyshire (2016) *Procedures for the Transfer of Archaeological Archives*.

8.2 If the project produces archaeologically significant finds, then the Archaeologist for Derbyshire County Council and Museum Curator will be notified at the earliest opportunity, and an accession number will be produced for the site. In addition, a digital, paper and artefactual archive will be prepared by ARS Ltd, consisting of all primary written documents, plans, sections, photographs and electronic data (in a format to be agreed by the Weston Park Museum, Sheffield). The archive will be deposited in line with the CIFA (2013c) Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives, Society of Museum Archaeologists (1993) Selection, Retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland and Museums of Derbyshire (2016) Procedures for the Transfer of Archaeological Archives and will be deposited within two months of the completion of the report. The Archaeologist for Derbyshire County Council and Museum Curator will be notified in writing on completion of the fieldwork with projected dates for the completion of the report and deposition of the archive. The date for deposition of the archive will be confirmed in the report and the Archaeologist for Derbyshire County Council informed in writing on final deposition of the archive.

8.3 All artefacts and associated material will be cleaned, recorded, properly stored and deposited in the archive (see 4.13-4.19 above).

8.4 A full set of annotated, illustrative pictures of the site, excavation, features, layers and selected artefacts will be deposited with the archive as digital images on a CD ROM.

8.5 At the start of work (immediately before fieldwork commences) an OASIS online record <u>http://ads.ahds.ac.uk/project/oasis/</u> will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).

# **9 GENERAL ITEMS**

# 9.1 Health and Safety



9.1.1 All work will be carried out in accordance with The Health and Safety at Work Act 1974. Specific health and safety policies exist for all out workplaces and all staff employed will be made aware of the policy and any relevant issues. The particular risks involved with this project will be assessed, recorded and relevant mitigation measures put in place as part of a full risk assessment, which will be compiled in advance of fieldwork. ARS Ltd retains Citation as its expert health and safety consultants.

### 9.2 Insurance Cover

9.2.1 ARS Ltd has full insurance cover for employee liability (£10 million) public liability (£5 million), professional indemnity (£2 million) and all-risks cover.

### 9.3 Changes to the Written Scheme of Investigation

9.3.1 Changes to the approved methodology or programme of works will only be made with prior written approval of the Archaeologist for Derbyshire County Council.



# 9.4 Publication

9.4.1 If significant archaeological remains are recorded, a summary of the project with, if appropriate, selected drawings, illustrations and photographs will be submitted within two years of the completion of the project to Derbyshire Archaeological Journal for publication. ARS Ltd has full insurance cover for employee liability public liability, professional indemnity

# 9.5 Copyright

9.5.1 Any publicity will be handled by the client. ARS Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

### **10 REFERENCES**

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Written Scheme of Investigation for Archaeological Works at Milken Lane, Ashover, Derbyshire

# **THE FIGURES**





**APPENDIX I: REPORT ON GEOPHYSICAL SURVEY** 



View looking north-east

ARS Ltd Report 2017/44 April 2017 Compiled By: Richard Durkin

Archaeological Research Services Ltd Angel House Portland Square Bakewell DE45 1HB

**Checked By:** 

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# Contents

	Page
Executive Summary	2
1.0 Introduction	3
1.1 Background	3
1.2 Location, Topography and Geology	3
2.0 Archaeological Background	4
3.0 Methodology	4
4.0 Geophysical Survey Results	4
4.1 Introduction	4
4.2 Anomalies	5
5 Discussion and Conclusions	6
6 Publicity, Confidentiality and Copyright	7
7 Statement of Indemnity	7
8 Acknowledgements	7
9 References	8
Appendix 1: Figures	9

# List of Figures

Figure 1. Site location.
Figure 2. Location of survey grids.
Figure 3. Greyscale shade plot of processed gradiometer data.
Figure 4. Interpretative plan.
Figure 5. Trace plot.

### **EXECUTIVE SUMMARY**

This report presents the results of a geophysical survey undertaken on land at Milken Lane, Ashover, Derbyshire. A geophysical survey was carried out in March 2017 in a single field which was under pasture. The ground conditions were suitable for geophysical survey and the instrument chosen was a Bartington Grad 601 dual sensor fluxgate gradiometer.

The results of the geophysical survey are considered to be accurate and reliable and only minimal processing of the raw data was necessary. The results have not revealed any definite evidence of significant buried archaeological remains within the PDA but have revealed a number of anomalies of possible archaeological origin and the objectives of the survey have been achieved.

Out of the two clearly defined linear anomalies that were recorded in the results, one can be interpreted as the remains of the south-eastern field boundary in its former location as depicted on the 1816 Poor Rate map (Burpoe 2017). The second linear anomaly cannot be interpreted with any certainty based on cartographic evidence contained in the accompanying Historic map regression (Burpoe 2017). The origin of the anomaly can only be tested by invasive investigation, although it is most likely to also represent an historic field boundary. Three notable positive discrete anomalies which were recorded towards the north of the field should also be tested by field evaluation to determine their origin as they have the characteristics of archaeological cut features, which could be significant, but are located on or close to a lead mining vein and may therefore be associated with more recent mining activity.

Further anomalies recorded by the geophysical survey are considered to have only low potential to be archaeologically significant. They are likely to indicate possible ridge and furrow cultivation remains, disturbance associated with mining activity and disturbance and remnants associated with the removal of trees and field boundaries and general agricultural land use. The status of these features can only be established by field evaluation.

### 1.0 INTRODUCTION

### 1.1 Background

- 1.1.1 Archaeological Research Services Ltd was commissioned by Planning and Design Practice Ltd to undertake a geophysical survey on land at Milken Lane, Ashover, Derbyshire. The geophysical survey has been undertaken to accompany a planning application for a residential housing development NED/17/00200/OL.
- 1.1.2 This report presents the results of the geophysical survey. The objective of the geophysical survey was to identify any anomalies of archaeological origin within the proposed development area (PDA) in order to identify and record the presence/absence, location, nature and extent of any surviving below-ground archaeological remains.

### 1.2 Location, Topography and Geology

- 1.2.1 The proposed development area (hereafter PDA) includes a single field, which narrows towards the south-west, and an access track and in total comprises an area of 0.98ha (Fig. 1). The field rises gently from an elevation of *c*. 189m aOD in the south-west to an elevation of *c*. 195m aOD in the north. The field is bounded by: a farm track along the south-eastern boundary, separated from the field by a hedgerow and post and wire fence; fencing and walls to gardens of the Black Swan public house and residential properties along the south-western and north-western boundaries and is unbounded along the northern boundary.
- 1.2.2 The underlying solid geology consists of Mudstone, Siltstone and Sandstone of the Bowland Shale Formation – a Sedimentary Bedrock formed approximately 313 to 335 million years ago in the Carboniferous Period. This is overlain by superficial Head deposits (British Geological Survey 2017).
- 1.2.3 The underlying solid geology within the southernmost party of the PDA comprises mudstone of the Widmerpool Formation, formed approximately 326 to 335 million years ago in the Carboniferous Period when the local environment was previously dominated by sub-aqueous slopes. This is overlain by superficial deposits of head (British Geological Survey 2017).
- 1.2.4 The soils of the PDA are classified as belonging to the Bardsey Soil Association (713a), which are cambic stagnogley soils (SSEW 1983). These soils form over Carboniferous mudstone with interbedded sandstone, and are characterised as 'Slowly permeable seasonally waterlogged loamy over clayey and fine silty soils over soft rock. Some well drained coarse loamy soils over harder rock (CU 2017).

### 2.0 ARCHAEOLOGICAL BACKGROUND

2.1 The detailed archaeological background is contained within the accompanying Historic Map Regression of land at Milken Lane, Ashover, Derbyshire (Burpoe 2017).

### 3.0 METHODOLOGY

- 3.1 Magnetometry is a non-intrusive scientific prospecting technique that is the preferred geophysical technique used to determine the presence or absence of buried archaeological features when site and geological conditions are favourable. It is an efficient and effective method for locating anomalies corresponding with archaeological features. The instrument chosen for this survey was a Bartington Grad 601 dual sensor fluxgate gradiometer which can detect weak changes in the Earth's magnetic field caused by buried features.
- 3.2 All fieldwork and reporting was undertaken following Historic England and Chartered Institute for Archaeologists (CIfA) standards and guidance (Gaffney *et al.* 2008; CIfA 2013; 2014).
- 3.3 The 30m by 30m survey grids were located to cover the entire field and aligned as shown in Figure 2. In total 13 survey grids, including partial grids, were set out and accurately positioned using a Leica Zeno 10 GNSS field controller with GS05 antenna cap which was connected to Leica Smartnet to receive corrections resulting in an accuracy of typically 0.6m or better. Each grid was then surveyed at 1m traverse intervals with the sampling at 0.25m (4 readings per metre) intervals. The survey was carried out in 'zigzag' mode with each alternate traverse walked in opposite directions. The range of the instrument was set at 100nT (0.01nT resolution).
- 3.4 The geophysical survey was conducted on 20<sup>th</sup> March in heavy rain. At the time of the survey the field was under pasture which was waterlogged in places but suitable for survey. The survey was unobstructed in the available areas but as the PDA narrowed towards the south it became unsuitable for survey and was omitted.
- 3.5 Prior to commencing the survey the gradiometer was balanced and calibrated to the local conditions and this was repeated regularly throughout each day. At the end of each day the data was downloaded into a computer, checked and archived on the ARS Ltd server. The data was downloaded using Bartington Instruments' *Grad 601 Communication Application*.

### 4.0 GEOPHYSICAL SURVEY RESULTS

### 4.1 Introduction

4.1.1 The data was minimally processed using Geoplot software. The data was "clipped" (clipping parameters selected on the mean and standard deviation data values), "de-staggered" and the striping that can often appear in gradiometer data was removed

by utilising the "zero mean traverse" function with thresholds applied. Finally the data was interpolated. To enhance the visibility of subtle features the data was viewed under a number of different clip plotting parameters.

- 4.1.2 Occasionally processing the data to compensate for directional sensitivity or to remove iron spikes caused by miscellaneous ferrous objects can also inadvertently disguise anomalies that may be of archaeological origin, particularly long linear features in the direction of the traverses. To take account of this the data has been analysed in a number of different formats and at each stage of processing.
- 4.1.3 The data analysis is presented graphically in Figures 3 to 5. A greyscale shade plot of the processed gradiometer data is presented in Figure 3 and an interpretative plan in Figure 4. A Trace plot of the processed gradiometer data is presented in Figure 5.

### 4.2 Anomalies

- 4.2.1 The geophysical survey results have revealed two very clear linear anomalies on slightly different alignments. Linear anomaly 1 is predominantly positive in polarity but with an accompanying negative component and is aligned with respect to the extant south-eastern field boundary. The anomaly was detected intermittently, which suggests the feature has suffered a degree of truncation and the anomaly also terminates abruptly at the southern end. The anomaly respects the approximate location of a former field boundary depicted on the 1816 *Poor Rate Survey and Valuation of the Manor of Ashover* (Burpoe 2017, Figs. 3 and 6) and it is therefore most likely that the anomaly indicates the course of, and possible surviving buried remannts of, the former field boundary and disturbance associated with its removal.
- 4.2.2 Linear anomaly 2 is aligned north-north-east/ south-south-west and like anomaly 1 was detected intermittently, although is almost entirely positive in polarity and probably indicates a slightly narrower feature. Anomaly 2 terminates abruptly at the northern end although it is not possible to determine the status of the at the southern end as it continues beyond the edge of the surveyed area. The anomaly does not respect the alignment or location of any features identified on the available mapping as far back as 1779 (Burpoe 2017) and is therefore of unknown origin, although the anomaly could represent an historic field boundary which pre-dates 1779. This anomaly should be tested by field evaluation.
- 4.2.3 Three substantial positive discrete anomalies were recorded in an approximate linear arrangement towards the north of the PDA (3 to 5). The anomalies have the characteristics of archaeological cut features although whether this is of archaeological significance can only be determined if the anomalies are tested by field evaluation. The anomalies are located on or close to the edge of the Rhodes Vein where it is depicted on the 19<sup>th</sup> Century *Mines and Veins of Lead Ore in the Lordship of Ashover* map (Burpoe 2017, Figs. 4 and 6) and therefore it should also be considered that the anomalies could represent features associated with historic lead

mining; possibly shafts. It is considered that there is low potential for these features to be entirely natural in origin.

- 4.2.4 Towards the south of the PDA a series of dipolar anomalies a in a clear linear arrangement respect the location and alignment of a former field boundary as depicted on the 1962 OS map (Burpoe 2017). It can be stated with some confidence that anomaly 6 represents disturbance associated with the removal of the modern field boundary and is not archaeologically significant.
- 4.2.5 In the north/ north-west of the survey area a series of extremely weak linear anomalies were recorded with predominantly positive polarity (7 to 11) but with a single similar anomaly of apparently negative polarity (12). The anomalies are so weak it is almost impossible to delimit them but they may provide a subtle hint of ridge and furrow cultivation. Alternatively anomalies 7 to 10 extend across the full width of the PDA and are on the same alignment as the Rhodes Vein as depicted on the 19<sup>th</sup> Century *Mines and Veins of Lead Ore in the Lordship of Ashover* map (Burpoe 2017, Figs 4 and 6), and so it is possible they are in some way related to lead mining activity.
- 4.2.6 A reasonably large number of fairly substantial dipolar anomalies were recorded across the PDA in an apparently random distribution. It is most likely that the anomalies are a result of disturbance associated with the removal of field boundaries, lead mining and general agricultural activity, tree bowls and ordinary ferrous litter associated with the agricultural land-use. Anomalies of this type are unlikely to be archaeologically significant. Dipolar anomalies 13 and 14 do correspond, in terms of location, to possible structures (Burpoe 2017, Fig 6) which are most likely to be fairly ordinary farm buildings or stock shelters. The anomalies could indicate that some building remains survive, or more likely disturbance associated with their removal, but this is speculative and unlikely to be archaeologically significant and can only be tested by field evaluation.
- 4.2.7 A small number of small positive discrete anomalies were recorded in an apparently random distribution, although there is a suggestion of a small cluster (15) to the north-east of anomaly 14. Anomalies of this type are most likely to be natural or agricultural in origin but the possibility that they represent archaeological cut features such as pits or larger post holes cannot be discounted, and it would be worthwhile sample testing these anomalies as part of a phase of field evaluation. Localised areas of weak magnetic enhancement are of unknown origin, but there is no evidence to suggest that they are likely to be archaeologically significant and are more likely to be natural or a result of agricultural disturbance.

### 5.0 DISCUSSION AND CONCLUSIONS

5.1 The results of the geophysical survey are considered to be accurate and reliable and only minimal processing of the raw data was necessary. The results have not

revealed any definite evidence of significant buried archaeological remains within the PDA but have revealed a number of anomalies of possible archaeological origin and the objectives of the survey have been achieved.

- 5.2 Out of the two clearly defined linear anomalies that were recorded in the results, one can be interpreted as the remains of the south-eastern field boundary in its former location as depicted on the 1816 Poor Rate map (Burpoe 2017). The second linear anomaly cannot be interpreted with any certainty based on cartographic evidence contained in the accompanying Historic map regression (Burpoe 2017). The origin of the anomaly can only be confirmed by invasive investigation, although it is considered most likely to also represent an historic field boundary. Three notable positive discrete anomalies which were recorded towards the north of the field should also be tested by field evaluation to determine their origin as they have the characteristics of archaeological cut features, which could be significant, but are located on or close to a lead mining vein and may therefore be associated with mining activity.
- 5.3 Further anomalies recorded by the geophysical survey are considered to be of low archaeological significance, if indeed they are archaeological, and are likely to indicate traces of possible ridge and furrow cultivation remains, disturbance associated with past mining activity and disturbance and remnants associated with the removal of trees and field boundaries and general agricultural land use.

### 6.0 PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

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

### 7.0 STATEMENT OF INDEMNITY

7.1 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.

### 8.0 ACKNOWLEDGEMENTS

8.1 Archaeological Research Services Ltd would like to thank all those involved in the project for their help and assistance. In particular we would like to thank Scott O'Dell of Planning and Design Practice Ltd for commissioning the survey. We would also like

to thank Steve Baker, Derby and Derbyshire Development Control Archaeologist, for his help and advice.

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Google Earth 2017. Aerial imagery various dates [online] available from <https://www.google.co.uk/intl/en\_uk/earth> [accessed 4<sup>th</sup> April 2017].

Appendix 1: Figures





	40 50m
	40 50m





Archaeological Research Services Ltd Angel House Portland Square Bakewell Derbyshire DE45 1HB Site Code: Ashover Milken Lane Drawing Ref: Figure 5 Date: April 2017 Drawn: RD Scale: As shown	Figure 5 Trace plot	Copyright/Licencing: This drawing © A.R.S. Ltd Ordnance Survey data if applicable © Crown Copyright, all rights reserved reproduced with permission. Licence No. 100022432

**APPENDIX II: REPORT ON HISTORIC MAP REGRESSION** 

# An Historic Map Regression of land at Milken Lane, Ashover, Derbyshire



ARS Ltd Report 2017/45 April 2017

### Compiled By:

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An Historic Map Regression of land at Milken Lane, Ashover, Derbyshire

# An Historic Map Regression of land at Milken Lane, Ashover, Derbyshire

# Archaeological Research Services Ltd Report 2017/45

April 2017



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Prepared on behalf of:	Planning and Design Practice Ltd
Date of compilation:	April 2017
Compiled by:	Michelle Burpoe
Checked by:	Clive Waddington MCIfA
Planning Reference:	17/00200/OL
Local Authority:	North East Derbyshire Council
Site central NGR:	SK 35056, 63345

### **EXECUTIVE SUMMARY**

Archaeological Research Services Ltd was commissioned by Planning and Design Practice Ltd to undertake a historic map regression of land at Milken Lane, Ashover, Derbyshire. This follows the submission of an outline planning application (Application Ref. 17/00200/OL) for the proposed construction of ten bungalows alongside the provision of open space and an improved point of access from Milken Lane. The Derby and Derbyshire Development Control Archaeologist (D&DDCA) has requested a targeted desk-based assessment for the proposed development site, including an historic map regression and documentary research, and also a geophysical survey.

The assessment has concluded that based on the current available data, there may be some potential for the proposed development to affect, as yet unproven, buried archaeological remains relating to the historic mining of the Rhodes Veins that has been carried out within the proposed development area. The development is also considered, at this stage, to have limited potential to impact upon the buried remnants of any medieval and post-medieval remains, such as ridge and furrow and former field boundaries, although any such remains are considered to be of low, or negligible, archaeological significance.

It is recommended that a programme of archaeological field evaluation is carried out across the site to test the anomalies identified by the historic map regression and geophysical survey and to test for the presence of, and to assess the significance of, any other buried archaeological remains that may survive across the site.



# TABLE OF CONTENTS

1	INTROD	UCTION 1
	1.1	Project and Planning Background1
	1.2	Site description1
	1.3	Geology1
2	AIMS AN	ND OBJECTIVES 1
3	METHO	D STATEMENT 2
4	HISTORI	CAL BACKGROUND
5	ASSESSI	VENT OF THE SIGNIFICANCE OF AFFECTED HERITAGE ASSETS 4
6	ASSESSI	/IENT OF POTENTIAL IMPACTS
7	RECOMI	MENDATIONS
8	STATEM	ENTS AND ACKNOWLEDGEMENTS
	8.1	Archive Deposition
	8.2	Publicity, Confidentiality and Copyright5
	8.3	Statement of Indemnity5
	8.4	Acknowledgements
9	REFEREN	NCES 6
	9.1	Primary Sources

#### LIST OF TABLES

Table 1: 1816 Ashover Poor Rate Survey and Valuation	3
Table 2: 1849 Ashover Tithe Apportionment for 1851 Tithe Map	3

### LIST OF APPENDICES

Appendix 1: Figures	.8
Appendix 2: Groundsure Large-Scale Mapping Report	15

### LIST OF FIGURES

Figure 1: Site Location Plan	9
Figure 2: 1779 Ashover Enclosure Award	10
Figure 3: 1816 Ashover Poor Rate Plan	11
Figure 4: 19 <sup>th</sup> Century Lordship of Ashover Map	12
Figure 5: 1851 Ashover Tithe Map	13
Figure 6: Potential Remains within the PDA	14



# **1** INTRODUCTION

# 1.1 Project and Planning Background

Archaeological Research Services Ltd was commissioned by Planning and Design Practice Ltd to undertake a historic map regression of land at Milken Lane, Ashover, Derbyshire. This follows the submission of an outline planning application (Application Ref. 17/00200/OL) for the proposed construction of ten bungalows alongside the provision of open space and an improved point of access from Milken Lane. The Derby and Derbyshire Development Control Archaeologist (D&DDCA) has requested a targeted desk-based assessment for the proposed development site, including an historic map regression and documentary research and also a geophysical survey.

# **1.2 Site description**

The 'red line boundary' of the proposed development area (hereafter 'PDA') is depicted by a red polygon on Figure 1, and is *c*.0.98ha in area. The site is located north east of Ashover village centre behind the Black Swan Public House. The site consists of one roughly rectangular shaped field, which slopes from north to south towards Milken Lane, where the site access track leads from. The site is bounded on all sides by a mixture of stonewalling, hedgerows, stock-proof fencing and timber fencing. The site is centred at NGR SK 35056, 63345 (Figure 1).

# 1.3 Geology

The underlying solid geology consists of mudstone, siltstone and sandstone of the Bowland Shale Formation, a sedimentary bedrock formed approximately 313 to 335 million years ago in the Carboniferous Period when the local environment was dominated by open seas with pelagite deposits. This is overlain by superficial head deposits (BGS 2017).

The underlying solid geology within the southernmost party of the PDA comprises mudstone of the Widmerpool Formation, formed approximately 326 to 335 million years ago in the Carboniferous Period when the local environment was previously dominated by sub-aqueous slopes. This is overlain by superficial head deposits (BGS 2017).

The soils of the PDA are classified as belonging to the Bardsey Soil Association (713a), which are cambic stagnogley soils (SSEW 1983). These soils form over Carboniferous mudstone with interbedded sandstone, and are characterised as 'Slowly permeable seasonally waterlogged loamy over clayey and fine silty soils over soft rock. Some well drained coarse loamy soils over harder rock (CU 2017).

# **2** AIMS AND OBJECTIVES

The principal aims of this assessment are to produce a report detailing any archaeological potential of the PDA, and to assess the potential impacts of the proposed development upon any buried or upstanding archaeological remains and to assess their significance. The following objectives will contribute towards accomplishing this aim:



- To collate and assess existing information about the proposed development area and to determine as fully as possible from the available evidence the nature, survival, quality, extent and importance of any archaeological remains within the PDA.
- To provide an assessment of areas of archaeological potential and survival based on the above research and assess the potential for the use of particular investigative techniques in order to aid the formulation of any necessary mitigation strategy, including further evaluation, excavation, and/or preservation of archaeological remains.
- To assess, where possible from the available sources, the extent of any ground disturbance associated with any previous intrusive development.

# **3** METHOD STATEMENT

The DBA was undertaken in accordance with the guidelines set out in The Chartered Institute for Archaeologists' *Standards and Guidance for Historic Environment Desk Based Assessment* (CIfA 2014). The Derbyshire Record Office and the Peak District Mines Historical Society were consulted to help inform this assessment.

# 4 HISTORICAL BACKGROUND

Lead mining within the Peak District and Derbyshire has been an important industry as early as the Romano-British period, and possibly earlier, with several Latin inscribed lead ingots, known as 'pigs', having been found in areas both locally and as far away as Normandy (Barnatt and Penny 2004, 2.7), Lybia, Syria and Italy amongst other areas of the Roman empire. While evidence for mining in Anglo-Saxon and medieval times is limited, sources indicate significant lead production within several of the royal manors in Derbyshire, including the Manor of Matlock to the south-east of Ashover. Mining in the medieval period was primarily a small-scale operation, with most of the works carried out as either surface opencasts into vein outcrops and/or underground workings of *c*.30-50m deep. It wasn't until the 17<sup>th</sup> century when deeper and much larger mines were developed (Peck 1922).

Within the Manor of Ashover, lead mining was well-established by the late 16<sup>th</sup>/early 17<sup>th</sup> century, with many of the easily accessible veins being actively exploited as opencast workings. It appears as though the majority of mining activity within the area took place to the west of the River Amber, where mines, such as the Gregory mine, were extremely profitable. To the east of the Amber, the Westedge (or Grovelands) Rake near Kelstedge was being worked since at least the early 17<sup>th</sup> century, though it was known even then as being an 'ancient wrought rake.' One of the earliest pieces of documentary evidence for lead mining within the Manor of Ashover comes from a 17<sup>th</sup> century case herd in the Court of the Exchequer concerning the payment of tithe on ore mined at Westedge Rake. Townend (or Townhead) Vein, the eastern continuation of the Westedge Rake, is documented as being worked on the fringes of Ashover village in 1695 (Band 1996, 55-56).

Early county maps of Derbyshire, such as Burdett's 1767 *Survey of Derbyshire* and Greenwood's 1825 *Map of the County of Derby* depict the area of Ashover, although they do



not illustrate the area of the PDA in enough detail to provide any useful information about the state of the site. Likewise, the 1779 Ashover Enclosure Plan (Figure 2) does not depict the area of the PDA, suggesting that the open fields of the site were first enclosed by mutual agreement amongst landowners and later completed by the 18<sup>th</sup> and 19<sup>th</sup> century Enclosure Acts.

The first map to depict the area of the PDA in detail is the 1816 *Poor Rate Survey and Valuation of the Manor of Ashover* (Figure 3). While this map has been damaged, it is still possible to discern that the site is composed of parts of at least three different fields, details of which are listed below in Table 1. The plot number of the field comprising the bottom part of the PDA is unfortunately illegible.

Owner	Occupier	Plot No.	Description	Quantities		
			Description	Α	R	Р
William Bamford	George Allen (Black Swan)	2059	Spout close garden & house	2	1	22
Bower Potter	George Mellor – Carpenter	2071	Little Pasture & Long Close	4	1	6

Table 1: 1816 Ashover Poor Rate Survey and Valuation

A map in the Derbyshire Record Office, labelled simply as *A Plan of the several Mines and Veins of Lead Ore in the Lordship of Ashover* (D6413/1/134), appears to date to the earlymid-19<sup>th</sup> century, and shows an additional field boundary present within the centre of the PDA that was not present on the 1816 Poor Rate Map. This map also shows a number of lead veins within and surrounding the PDA (Figure 4). Running south-west to north-east through the western part of the PDA are two parallel veins known as 'Rhodes Vein', while 'Townhead Vein' approaches the north-western part of the PDA from the west. It may be that these two veins meet within the boundaries of the PDA. Immediately to the south-east of the PDA is a short vein labelled 'Shout Swallow-hole'.

The 1851 Tithe Map of Ashover (Figure 5) is largely similar to that of the 1816 Poor Rate Plan and 19<sup>th</sup> century Lordship Map, though the central field boundary is no longer depicted. The accompanying 1849 Tithe Apportionment (Table 2) lists parts of six different fields within the boundaries of the PDA, although the majority of the PDA largely lies within field no. 1895, known as 'Great Pasture & Building.' The building is likely to be the same structure depicted on the 19<sup>th</sup> century Lordship Map, but this is not certain.

Owner	Occupier I	Plot De No.	Description	State of Cultivation	Quantities		
					А	R	Р
Samuel Mellor	Himself	1892	Malthouse Close	Pasture	2	1	39
Samuel Mellor	Himself	1895	Great Pasture & Building	Meadow	4	1	6

Table 2: 1849 Ashover Tithe Apportionment for 1851 Tithe Map



### An Historic Map Regression of land at Milken Lane, Ashover, Derbyshire

Owner	Occupier Plo No	Plot	Description	State of Cultivation	Quantities		
		No.	Description		Α	R	Р
Ann Eaton	Herself	1896	Spout Close	Pasture	1	3	6
Ann Eaton	John Handbury	1900	The Hole	Pasture	0	1	10
Ann Eaton	John Handbury	1901	Buildings & Stackyard	-	0	0	7
Ann Eaton	John Handbury	1902	Garden	-	0	0	19

The southern part of the PDA is shown as being partly within plot no.1900, known as 'The Hole'. This may indicate the location of some lead workings within the 'Shout Swallow-hole' vein, though this is only postulated.

Historic mapping does not indicate any changes as being carried out within the PDA from the 1851 Tithe Map until the 1898 Ordnance Survey (OS) Map (Appendix 2), with the amalgamation of the majority of the fields within the PDA, and the loss of the small structure previously depicted on the 19<sup>th</sup> century Lordship and 1851 Tithe Maps. A row of trees or shrubs is shown running parallel to the eastern boundary of the PDA, along the line of a former field boundary.

There is a lack of mapping available for this area of Ashover between 1917 and 1962. The 1962 OS Map (Appendix 2) depicts the PDA as being partly separated into two fields by a small boundary running west-east across the southern part of the PDA. All the previously depicted vegetation within the PDA is no longer depicted. To the east of the PDA, a large depressed area, possibly the site of the aforementioned 'The Hole', is depicted. Today, the site looks much as it is represented on the 1962 OS Map.

# **5** ASSESSMENT OF THE SIGNIFICANCE OF AFFECTED HERITAGE ASSETS

There are no known historic assets located within the PDA. However, there is the potential for remains associated with early lead mining to survive below ground within the PDA. The geophysical survey has identified several anomalies along the postulated line of the Rhodes Vein within the PDA, which could potentially relate to lead mining. These anomalies are of as yet unknown status and without further evaluation it is not possible to confidently assign a level of significance. However, should these anomalies prove to be archaeological in origin, then they may possess a degree of archaeological interest due to both their *evidential value* and *illustrative historical value*.

The potential for previously unknown archaeological remains from the medieval and postmedieval periods to survive in areas undisturbed by mining activity within the PDA cannot be discounted and it is not uncommon for areas subjected to ridge and furrow agriculture to mask and protect more deeply buried archaeological remains. Additionally, there is the unknown potential for remnants of former field boundaries to survive within the PDA (Figure 6). Therefore, the possibility that archaeological remains survive in the PDA remains, although the significance of any such assets cannot be quantified or assessed without field evaluation.



# 6 ASSESSMENT OF POTENTIAL IMPACTS

Potential direct physical impacts to heritage assets during the construction phase of the proposed development include the following.

- Removal or truncation of heritage assets during ground works, site clearance and construction (e.g. removal of vegetation, erection of fencing, traffic movement, topsoil stripping).
- Damage to buried archaeological remains due to rutting from construction traffic movement.
- Other groundworks associated with the construction of a new development, such as foundation and service trenches, which have the potential to damage or destroy below ground features or deposits of cultural heritage value should they be present.

Based on the currently available data, there may be some potential for the proposed development to directly affect any unknown buried archaeological remains relating to past mining activities, and also other medieval and post-medieval remains.

# **7 RECOMMENDATIONS**

It is recommended that a programme of archaeological evaluation work is carried out across the site to test the anomalies identified by the geophysical survey and to test for the presence of, and to assess the significance of, any buried archaeological remains that may otherwise survive across the site.

# 8 STATEMENTS AND ACKNOWLEDGEMENTS

# 8.1 Archive Deposition

One bound copy of the final report with an attached digital PDF/A copy on disc will be deposited with the Derbyshire Historic Environment Record (HER). The disc will also include a digital archive, consisting of relevant ArcGIS shapefiles or CAD files, for use of updating the HER database.

# 8.2 Publicity, Confidentiality and Copyright

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

# 8.3 Statement of Indemnity

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.



### 8.4 Acknowledgements

Archaeological Research Services Ltd would like thank Scott O'Dell with Planning and Design Practice Ltd for commissioning this work; Steve Baker, Derby and Derbyshire Development Control Archaeologist, for his advice; and Adam Russell with the Peak District Mines Historical Society.

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**APPENDIX 1: FIGURES** 





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Site name: Milken Lane, Ashover April 2017 Drawn by: MB Scale: 1.7500 @ A4	Figure 2: 1779 Ashover Inclosure Aw	ard	Archaeological Research Services L Angel House Portland Square

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Date: April 2017 Drawn by: MB Scale: 1:2500 @ A4 This drawing: © ARS Ltd Ordnance Survey mapping (if applicable): © Crown Copyright. All rights reserved. Reproduced with permission Licence no. 100045420	Figure 3: 1816 Ashover Poor Rate Map   0 25   Site Boundary 0	50 75 100 m	Angel House Portland Square Bakewell Derbyshire DE45 1HB Tel: 01629 814540 www.archaeologicalresearchservices.com







APPENDIX 2: GROUNDSURE LARGE-SCALE MAPPING REPORT





To view map legend click here <u>Legend</u>



#### Site Details:

435058.7287019044, 363342.54245099303







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**Appendix IV: Oasis Form** 

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#### OASIS ID - archaeol5-321130

Versions						
View	Version	Completed by	Email	Date		
View 1	1	Tim Cobbold	tim@archaeologicalresearchservices.com	28 June 2018		
Completed sections in current version						
Details	Location	Creators	Archive	Publications		
No	No	No	No	0/1		
Validated sections in current version						
Details	Location	Creators	Archive	Publications		
No	No	No	No	0/1		
File submission and form progress						
Grey literature report submitted? No		No	Grey literature report filename/s			
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