



# Deepcar: Area 1

## Archaeological strip, map and record report

ArcHeritage 2018

Manchester Road, Deepcar: Area 1  
Archaeological Strip, Map and Record

**ArchHeritage Campo House, 54 Campo Lane, Sheffield, S1 2EG**

Phone: +44 (0)114 2728884 Fax: +44 (0)114 3279793  
archeritage@yorkat.co.uk [www.archeritage.co.uk](http://www.archeritage.co.uk)



## Key Project Information

Project Name	Manchester Road, Deepcar: Area 1
Report Title	Manchester Road, Deepcar: Area 1. Archaeological Strip, Map and Record
Report status	Draft
ArcHeritage Project No.	1427
Type of Project	Excavation
Client	Bloor Homes
NGR	SK 28944 97953
Planning reference	14/00318/FUL
OASIS Identifier	archerit1-305378
Author	Laura Strafford
Illustrations	Laura Strafford
Editor	Glyn Davies
Report Number and Date	2018/12 May 2018
Version and filename	Version 2: 1427 Deepcar strip report v2.docx

### Copyright Declaration:

ArcHeritage give permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although ArcHeritage retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

### Disclaimer:

This Report has been prepared solely for the person/party which commissioned it and for the specifically titled project or named part thereof referred to in the Report. The Report should not be relied upon or used for any other project by the commissioning person/party without first obtaining independent verification as to its suitability for such other project, and obtaining the prior written approval of York Archaeological Trust for Excavation and Research Limited ("YAT") (trading as ArcHeritage). YAT accepts no responsibility or liability for the consequences of this Report being relied upon or used for any purpose other than the purpose for which it was specifically commissioned. Nobody is entitled to rely upon this Report other than the person/party which commissioned it. YAT accepts no responsibility or liability for any use of or reliance upon this Report by anybody other than the commissioning person/party.

# CONTENTS

Non-technical Summary.....	iii
1. INTRODUCTION.....	4
2. SITE LOCATION & DESCRIPTION .....	4
3. AIMS .....	4
4. ARCHAEOLOGICAL INTEREST .....	5
5. METHODOLOGY.....	5
6. RESULTS.....	6
7. DISCUSSION AND CONCLUSIONS .....	8
8. REFERENCES .....	9
APPENDIX 1: Index to Archive .....	19
APPENDIX 2: Context List .....	20
APPENDIX 3: Flint Assessment .....	21
APPENDIX 4: Pottery Assessment.....	29
APPENDIX 5: Written Scheme of Investigation.....	30

## PLATES

Plate 1: Overall shot of the site. Looking west, scales 1m

Plate 2: Overall shot of the site. Looking north, scales 1m

Plate 3: Area of Evaluation Trench 1, with the red peg marking the north-eastern corner, and the dark patch representing the backfilled slot throughout the potential linear gully. Looking north-east, scale 1m

Plate 4: Area of Evaluation Trench 1, with the red pegs measuring the northern corners of the trench, and the dark patch representing the backfilled slot throughout the potential linear gully. Looking east, scale 1m

Plate 5: Feature [1003]. Scale 0.5m

Plate 6: Feature [1005]. Scale 0.5m

Plate 7: Feature [1007]. Scale 0.5m

Plate 8: Feature [1009]. Scale 0.5m

Plate 9: Feature [1011]. Looking north, scale 1m

Plate 10: Feature [1011]. Looking north, scales 1m and 0.5m

Plate 11: Feature [1013]. Looking south-east, scale 1m

Plate 12: Investigation slot into feature [1013]. Scale 0.5m

Plate 13: Feature [1015]. Scale 0.5m

Plate 14: Feature [1017]. Scale 0.5m

Plate 15: Flints and charcoal in situ in deposit (1019). Looking north, scale 0.5m

Plate 16: Arbitrary section through (1019). Scale 0.5m

## FIGURES

Figure 1: Site location

Figure 2: Location of stripped area

Figure 3: Overall site plan

Figure 4: Detail and finds and features within the stripped area

Figure 5: Plans and sections of features [1003], [1005] and [1007]

Figure 6: Plans and sections of features [1009], [1015] and [1017]

Figure 7: Plan and section of feature [1011]

Figure 8: Plan and section of feature [1013]

## NON-TECHNICAL SUMMARY

This report describes the results of an archaeological strip, map and record at Manchester Road, Deepcar (Area 1). This archaeological mitigation follows on from evaluation by trial trenching, during which a possible prehistoric linear feature was identified, containing a broken flint flake, in Trench 1. This excavation was targeted on the area around Evaluation Trench 1, with the aim of establishing the authenticity, extent and date of the potential feature.

In total, the excavation area measured 0.06 hectares, from which 18 worked flint artefacts were recovered. None of these were observed to be within any clear cut features; some of these were from the subsoil deposit, although the majority of recovered flints were recovered from an isolated spread of deposit at the north-western end of the site. As a result of stripping a larger area around the vicinity of Evaluation Trench 1, it has been determined that the possible prehistoric linear feature tentatively recovered during the evaluation is likely to simply represent natural variation in the subsoil deposit.

## 1. INTRODUCTION

This report describes the results of archaeological excavation at Manchester Road, Deepcar (Area 1). This archaeological mitigation follows on from evaluation by trenching, during which a possible prehistoric linear feature was identified, containing a broken flint flake, in Trench 1. This excavation was targeted on the area around Trench 1, with the aim of determining the authenticity and extent of the feature and establishing a date for it.

All work was undertaken in accordance with a written scheme of investigation (WSI) (Appendix 5) approved by the South Yorkshire Archaeology Service (SYAS), and with reference to relevant CIFA guidance.

## 2. SITE LOCATION & DESCRIPTION

The development site (Area 1) comprises a field of rough grass vegetation located between Manchester Road and the west bank of the River Don (Figure 1). It is 1.5 hectares in extent and is centred on SK 2898 9791. The area of the strip, map and record was located at the northern end of the development site, within the vicinity of the evaluation Trench 1 (ArcHeritage 2018). The stripped area measured 0.06 hectares in total, centred on SK 28944 97953 (Figure 2).

To the east of the River Don are two further areas; Area 2 and Area 3. Area 2 was subject to extensive ground remediation and the remains of former coalmining were identified and a programme of archaeological works were undertaken to record the remains. No remains of mining were recorded in Area 3 and no archaeological recording works were undertaken in this area.

All works to the east of the River Don have been completed as is confirmed in condition 10, final paragraph.

The bedrock geology is Pennine Lower Coal Measures Formation mudstone, siltstone and sandstone, with superficial deposits of clay and silt alluvium across the eastern half of the site (BGS online mapping).

## 3. AIMS

The general aims of the strip, map and record were:

- to determine the extent, condition, character, importance and date of any archaeological remains present
- to provide information that will enable the remains to be placed within their local, regional, and national context and for an assessment of the significance of the archaeology of the proposal area to be made

Specific aims were:

- to date the features recorded in Evaluation Trench 1, and determine the character and extent of the activity represented by the remains
- to identify and preserve by record any archaeological remains that are located within the strip area

## 4. ARCHAEOLOGICAL INTEREST

A desk-based assessment of the site has been carried out by Northamptonshire Archaeology (Walker 2006). This concluded that Area 1 had high potential for the survival of unrecorded buried archaeological remains, since this area was relatively undisturbed by 19<sup>th</sup>- to 20<sup>th</sup>-century activity. No development has been depicted within Area 1 on historic mapping from the 18<sup>th</sup> century onwards.

To the east of the proposal area, a Mesolithic site was excavated in 1962, including the remains of a possible stone structure and a large amount of flint flakes and tools (SMR 0547/0548). Subsequent archaeological evaluation in the vicinity has not revealed any further remains. Also to the east, a quern manufacturing site of late Iron Age and Romano-British date extending across an area of c.72ha has been recorded at Wharncliffe Rocks (SMR 539, Scheduled Monument). Small enclosures recorded in 1958-60 were thought to be associated with Romano-British settlement and the quern manufacturing site (SMR 4217). Further probable Romano-British settlement remains have been recorded further to the northeast at Gosling Spring (SMR 3109) and Finkle Street (SMR 0545). To the west of the site, three cruck buildings have been recorded, of possible medieval to post-medieval date (SMR 1329, 3586, 3639).

The eastern side of the proposal area (Area 2) was closest to known Mesolithic and Romano-British remains, but industrial activity relating to former chemical, ganister and brick works has removed any evidence for earlier activity in these areas. Prior to remediation, there were few surface traces of industrial buildings remaining in Area 2, the site having been levelled. Archaeological monitoring of ground remediation works within Area 2 in 2008-2010 recorded the remains of former pillar and stall mine workings, thought to be associated with later 19<sup>th</sup>- to early 20<sup>th</sup>-century coal and ganister (fire clay) extraction. Mining tools were also recovered (Barnett and Stenton 2010). No recorded mining extends into Area 1 on historic mapping.

Recent investigations at the site include a geophysical survey (SUMO 2017) and subsequent evaluation trenching (ArcHeritage 2018). The majority of the geophysical anomalies were shown through the evaluation trenching to be a series of substantial ceramic drainpipes, a sewer main and anomalous shallow features pertaining to post-medieval agriculture and associated land use. The results from Trench 1 suggested that a small circular feature highlighted during the geophysical survey may be an archaeological feature with possible prehistoric origin. This conclusion was based on the discovery of a worked flint object from the fill of a tentatively recorded linear feature in Trench 1, although the authenticity of the feature was unclear within the confines of the trench.

## 5. METHODOLOGY

Following consultation with Jim McNeil of SYAS, it was agreed that stripping would commence at the southern end of Evaluation Trench 1, and continue around it, to see if it was possible to determine the legitimacy of the potential feature located during the evaluation, and identify any nearby features that may be associated with it. In total, 0.06 hectares was stripped around the trench, down to the top of the subsoil deposit (1002) (Plates 1 and 2). No features were identified within this area. Stripping ceased at this stage due to the sodden ground conditions



which made it impossible for the plant to manoeuvre and strip any further area to the north or east.

All stripping was undertaken with a toothless ditching bucket, under constant archaeological supervision, after which the entire area was hand cleaned. All work was completed with adherence to the WSI (Appendix 5) and relevant CIFA guidance.

## 6. RESULTS

The topsoil (1001) across the site comprised dark brown-grey very wet clay silt, with a varying thickness of 0.25m and 0.35m. This directly overlay very varied subsoil (1002), comprising a mix of orange sub-rounded gravel, light yellow clay and pockets of light orange coarse sand. The components of the subsoil were heavily mixed and randomly dispersed throughout.

The area within and around the footprint of Evaluation Trench 1 was stripped first (Plates 3 and 4; Figure 3), in an attempt to relocate the potential linear feature observed during the evaluation trenching. This revealed the previously dug slot through the potential linear feature; upon cleaning this area and with the benefit of also being able to observe the area beyond the original confines of the trench, it became apparent that what was initially interpreted as a feature was in fact not an anthropogenic feature, but rather a result of the highly variant subsoil (1002). Hence, both of the flints recovered from Evaluation Trench 1 came from the subsoil deposit.

Eighteen worked flints (Appendix 3) and one fragment of pottery were collected from the site as a result of the strip, map and record, although none of these were recovered from any clearly identifiable features. The GPS recorded location of each small find is given in Table 1, below, and detailed in Figure 4. Five flints and the pottery fragment were collected from the subsoil (1002) at the southern end of the site, with the remainder of the flints recovered from a very concentrated area at the north-western end of the site (1019) (Plates 5 and 6). This area was almost indistinguishable from the subsoil (1002), the only difference being the high quantity of flint and the occasional fragments of charcoal. There was no discernible cut, hence it appears that (1019) is simply a spread, rather than a cut feature. The flints lacked any highly diagnostic features (Appendix 3), although based on the presence of blade technology on some of the worked pieces, the assemblage has been tentatively dated to the Mesolithic. The single fragment of pottery was highly abraded, with a date range between the 2<sup>nd</sup> to 4<sup>th</sup> centuries AD.

**Table 1: Small find locations**

SF no.	Context	Item	Easting	Northing	Height (m)
1	1002	Flint	428941.731	397947.780	135.540
2	1002	Pottery	428941.002	397944.651	135.434
3	1002	Flint	428947.772	397954.128	134.978
4	1002	Flint	428949.255	397955.407	134.687
5	1002	flint	428951.755	397955.969	134.524
6	1019	Flint	428934.310	397958.495	136.215
7	1019	Flint	428934.971	397958.542	136.130

8	1019	Flint	428934.909	397958.680	136.152
9	1019	Flint	428934.917	397958.683	136.103
10	1019	Flint	428934.886	397958.605	136.141
11	1019	Flint	428935.121	397958.792	135.618
12	1019	Flint	428934.725	397958.971	136.184
13	1019	Flint	428934.661	397958.881	136.176
14	1019	Flint	428934.856	397958.976	136.142
15	1002	Flint	428941.838	397952.026	135.617
16	1019	Flint	428934.353	397958.426	136.179
17	1019	Flint	428934.766	397958.795	136.013
18	1019	Flint	428934.871	397958.884	136.013
19	1019	Flint	428935.541	397958.721	136.050

Six small sub-circular and sub-rectangular features ([1003], [1005], [1007], [1009], [1015] and [1017]) were identified cut into the subsoil (1002) across the site, along with two larger rectangular features ([1011] and [1013]) (Plates 5-14). These features are detailed in Table 2, below, and represented in Figures 5 to 8.

**Table 2: Table of features recorded within the stripped area**

Cut No.	Fill No.	Description	Max dimensions (m)	Depth (m)	Interpretation
1003	1004	Sub-rectangular, irregular base and sides. Squarish corners. Fill dark grey clay silt	0.45 x 0.40	0.06	Machine stabiliser from JCB
1005	1006	Sub-rectangular, flattish base although a little uneven. Fill dark grey clay silt	0.45 x 0.40	0.05	Machine stabiliser from JCB
1007	1008	Sub-circular with irregular sides and base. Fill dark grey clay silt with occasional sub-angular pebbles	0.45 x 0.45	0.11	Burrow / tree throw
1009	1010	Sub-circular, shallow and irregular. Edges gently sloping and base slightly rounded. Fill dark grey clay-silt with frequent roots	0.55 x 0.50	0.09	Undetermined - tree throw?
1011	1012	Rectangular feature with very square corners and vertical sides - looks to be machine excavated. Fill quite loose and very stony with broad range of stone shapes and sizes. Very similar to [1013]	2.3 x 1	0.55	Modern geotech./ agricultural/ mineral extraction?
1013	1014	Long, narrow linear feature. Vertical sides. Fill quite loose and very stony with broad range of stone shapes and sizes. Very similar to [1011]	4.40 x 1	0.50	Modern geotech./ agricultural/ mineral extraction?
1015	1016	Sub-circular, irregular edges and base. Fill dark grey clay silt with occasional	0.35 x 0.35	0.09	Natural feature? Seems too irregular

		sub-angular stones			to be man-made
1017	1018	Irregular ovoid feature. Shallow. Fill dark grey clay silt	0.40 x 0.30	0.06	Undetermined

The small sub-circular and sub-rectangular features ranged in size between 0.30 to 0.55m in maximum diameter, and all contained a very similar single fill of dark brown-grey clay-silt. None exceeded 0.12m in depth. No finds were recovered from any of these features. All of these features were irregular and it seems likely that many represent bioturbation events such as vegetation growth and animal burrowing. Feature [1003] was located within the footprint of Evaluation Trench 1, and was not recorded and indeed is not visible on any of the Trench 1 photographs; given the sub-rectangular shape of this feature, and its dimensions, it seems likely that this feature is the result of the JCB plant stabiliser pads penetrating through the soft wet topsoil and into the subsoil during the strip activity. Some of the other sub-rectangular features may also be a result of this.

The two larger rectangular features [1011] and [1013] were located within 1.7m of each other and were extremely similar, both with squarish corners and vertical edges. The fills of each (1012) and (1014) were also very similar, both containing a high proportion of stones of varying shapes and sizes. Although no dating evidence was recovered from either feature, the size, character and fills of each suggest they are highly likely to be modern features which were excavated with a machine, creating the vertical edges

## 7. DISCUSSION AND CONCLUSIONS

The high level of bioturbation identified throughout the subsoil, caused by small mammals, worms and vegetation, hindered visibility of potential archaeological features, as did the very mixed and inconsistent nature of the subsoil itself, which contained irregular mixed patches of clay, sand and gravel. As a result of stripping a larger area around Evaluation Trench 1, it became apparent that the tentatively identified linear feature recorded during the evaluation was not archaeological in nature, but was a result of the highly varied subsoil.

None of the cut features recorded across the site could be confidently stated to be archaeological in origin; some of them were likely caused by the plant machinery during the strip exercise, with others seemingly the result of bioturbation. None of the artefacts recovered from the site were from cut features. Five examples of flint and the single abraded pottery fragment were recovered from the subsoil deposit and represent residual finds, with thirteen flints recovered from deposit (1019). This deposit was not contained within an identifiable cut and appeared extremely similar to the subsoil (1002) deposit, with the exception of the inclusion of the worked flints and occasional charcoal flecks. All of the flints and the charcoal was located within the upper 0.10m of this deposit.

Out of the 18 flints recovered across the site, 14 of these were humanly struck (Appendix 3). None of the flint collected from the site, either from deposit (1019) or subsoil (1002) contained diagnostic features that can provide a definitive date for the assemblage. However on technological grounds, namely the use of blade technology it is possible to suggest a likely Mesolithic date.

The potential Mesolithic date of the flints may serve to explain the lack of identified cut features across the site. The flint scatter contained within deposit (1019) may represent the work of an individual from a single nodule of flint, although none of the flint collected could be re-fit. Nonetheless it seems likely the spread (1019) represents an isolated period of activity where flint knapping occurred, perhaps nearby a fire, and attests to the presence of likely Mesolithic groups within the area. Although the flint assemblage from this site is small, it does add to the knowledge of prehistoric activity in the area, particularly when considered in association with the larger Deepcar site (Radley & Mellars 1964). This is located approximately 200m to the east of the site, which produced over 23,000 early Mesolithic flints (Radley & Mellars 1964).

## 8. REFERENCES

ArcHeritage. 2018. Archaeological Evaluation, Manchester Road, Deepcar: Area 1. Unpublished client report. Report no. 2018/2

Barnett, R. and Stenton, M. 2010. Deepcar, Sheffield, South Yorkshire: Archaeological Recording Report. Unpublished ArcHeritage report 2010/95. (Condition 19 discharged from application 03/00020/OUT).

Walker, C. 2006. Archaeological Desk-based Assessment of Land at Manchester Road, Deepcar, South Yorkshire. Unpublished Northamptonshire Archaeology report 06/077.

Radley, J & Mellars, P. 1964. A Mesolithic Structure at Deepcar, Yorkshire, England, and the Affinities of its associated Flint Industries. *Proceedings of the Prehistoric Society* 30.

SUMO. 2017. Geophysical Survey Report: Deepcar - Area 1, Sheffield. Unpublished client report. Report no. 11999.

## PLATES



Plate 1: Overall shot of the site. Looking west, scales 1m



Plate 2: Overall shot of the site. Looking north, scales 1m

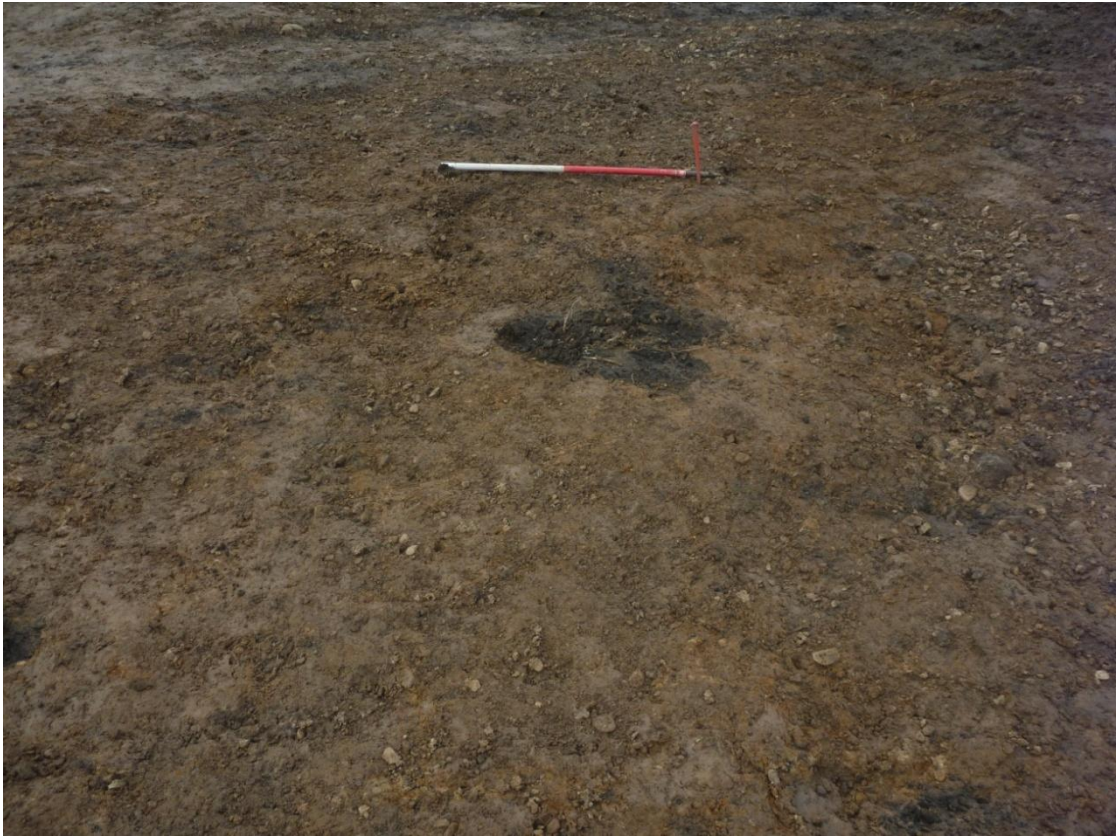


Plate 3: Area of Evaluation Trench 1, with the red peg marking the north-eastern corner of the trench, and the dark patch representing the backfilled slot through the potential linear gully. Looking north-east, scale 1m

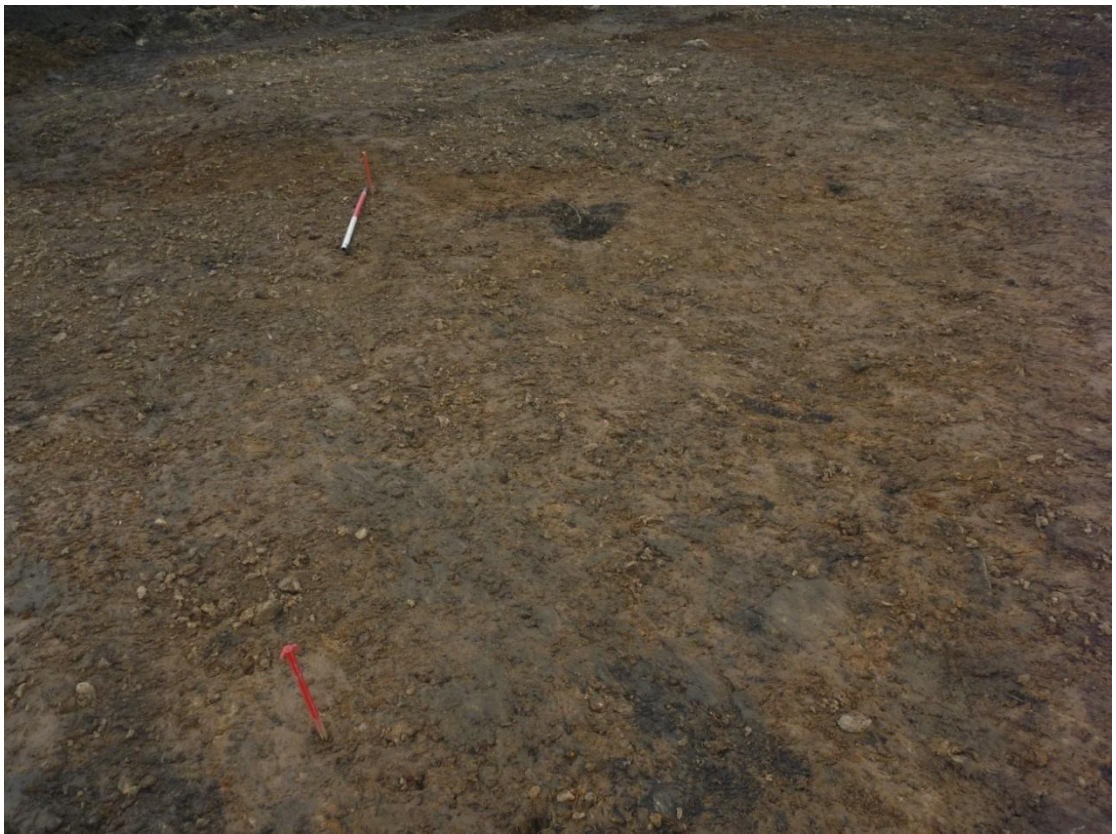


Plate 4: Area of Evaluation Trench 1, with the red pegs measuring the northern corners of the trench, and the dark patch representing the backfilled slot throughout the potential linear gully. Looking east, scale 1m



Plate 5: Flints and charcoal *in situ* in deposit (1019). Looking north, scale 0.5m



Plate 6: Arbitrary section through deposit (1019) and into subsoil (1002). Looking west, scale 1m



Plate 7: Feature [1003]. Scale 0.5m



Plate 8: Feature [1005]. Scale 0.5m





Plate 9: Feature [1007]. Scale 0.5m



Plate 10: Feature [1009]. Scale 0.5m



Plate 11: Feature [1011]. Looking north, scale 1m



Plate 12: Investigation slot into feature [1011]. Looking north, scales 1m and 0.5m



Plate 13: Feature [1013]. Looking south-east, scale 1m



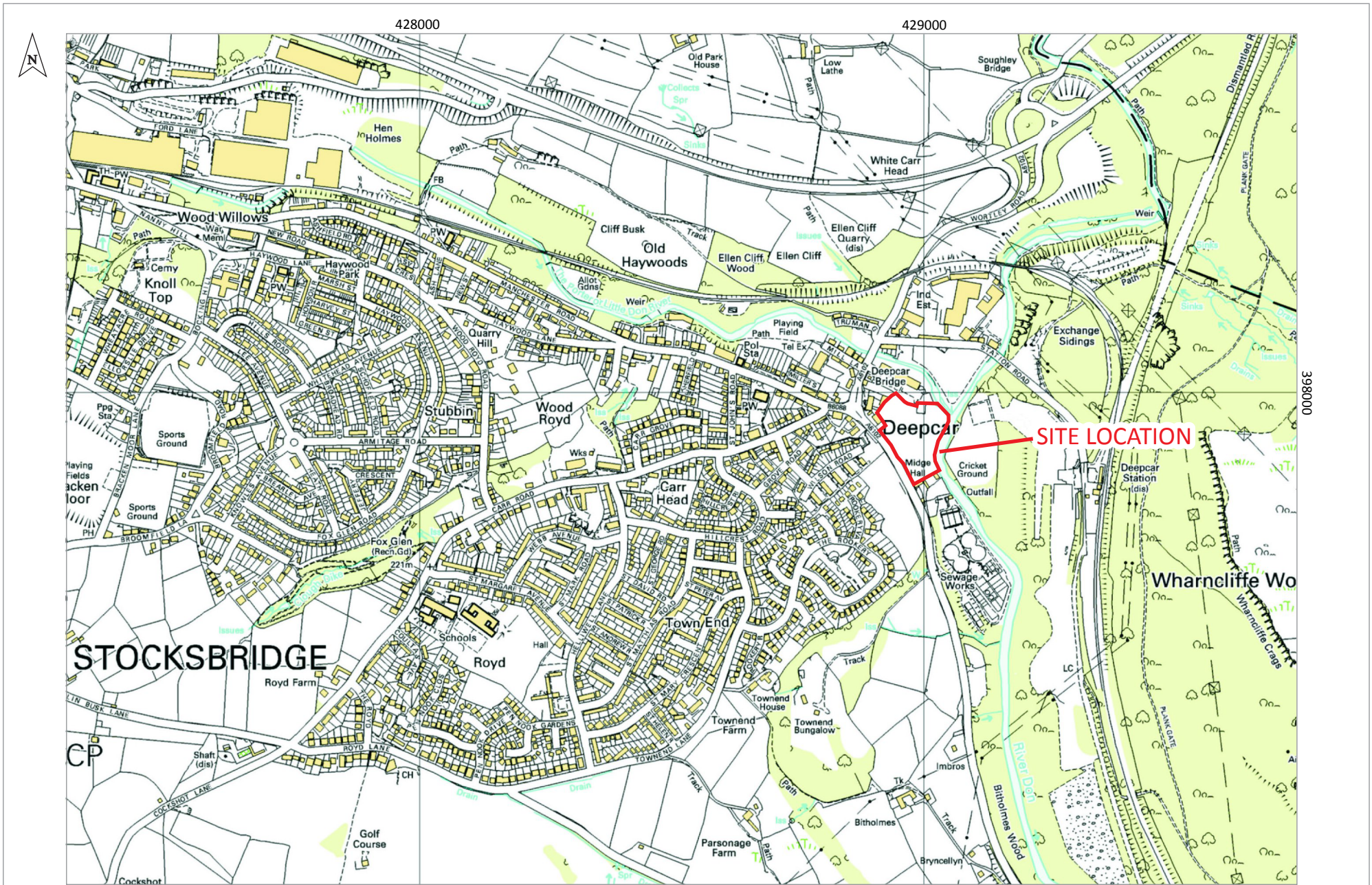
Plate 14: Investigation slot into feature [1013]. Scale 0.5m



Plate 15: Feature [1015]. Scale 0.5m



Plate 16: Feature [1017]. Scale 0.5m

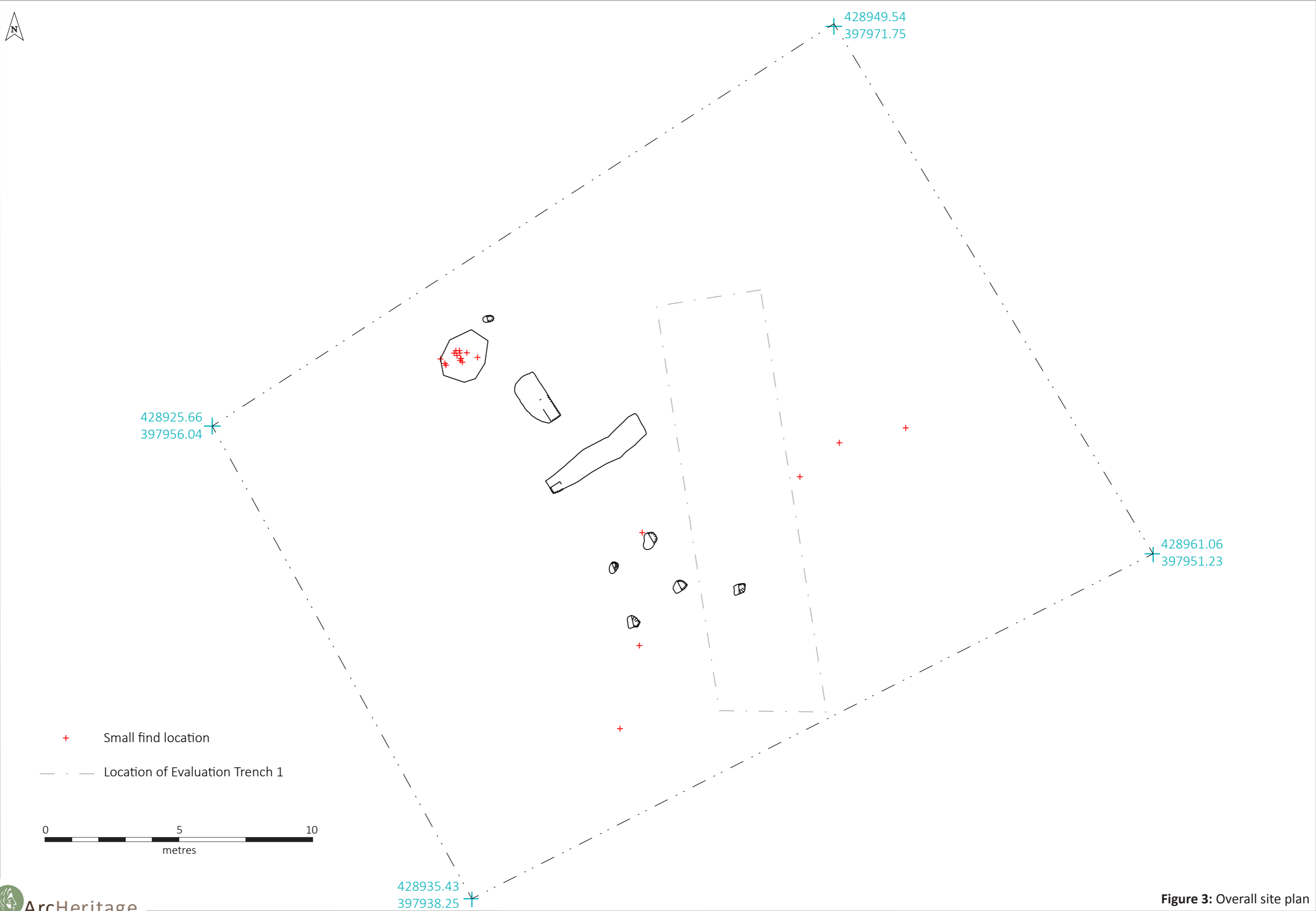


OS 1:10,000 map data © Crown Copyright 2010. All rights reserved. Licence no. 100018343.

Figure 1: Site location map



**Figure 2:** Location of stripped area



+ Small find location  
 - - - Location of Evaluation Trench 1

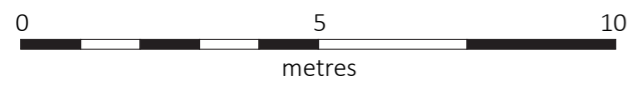
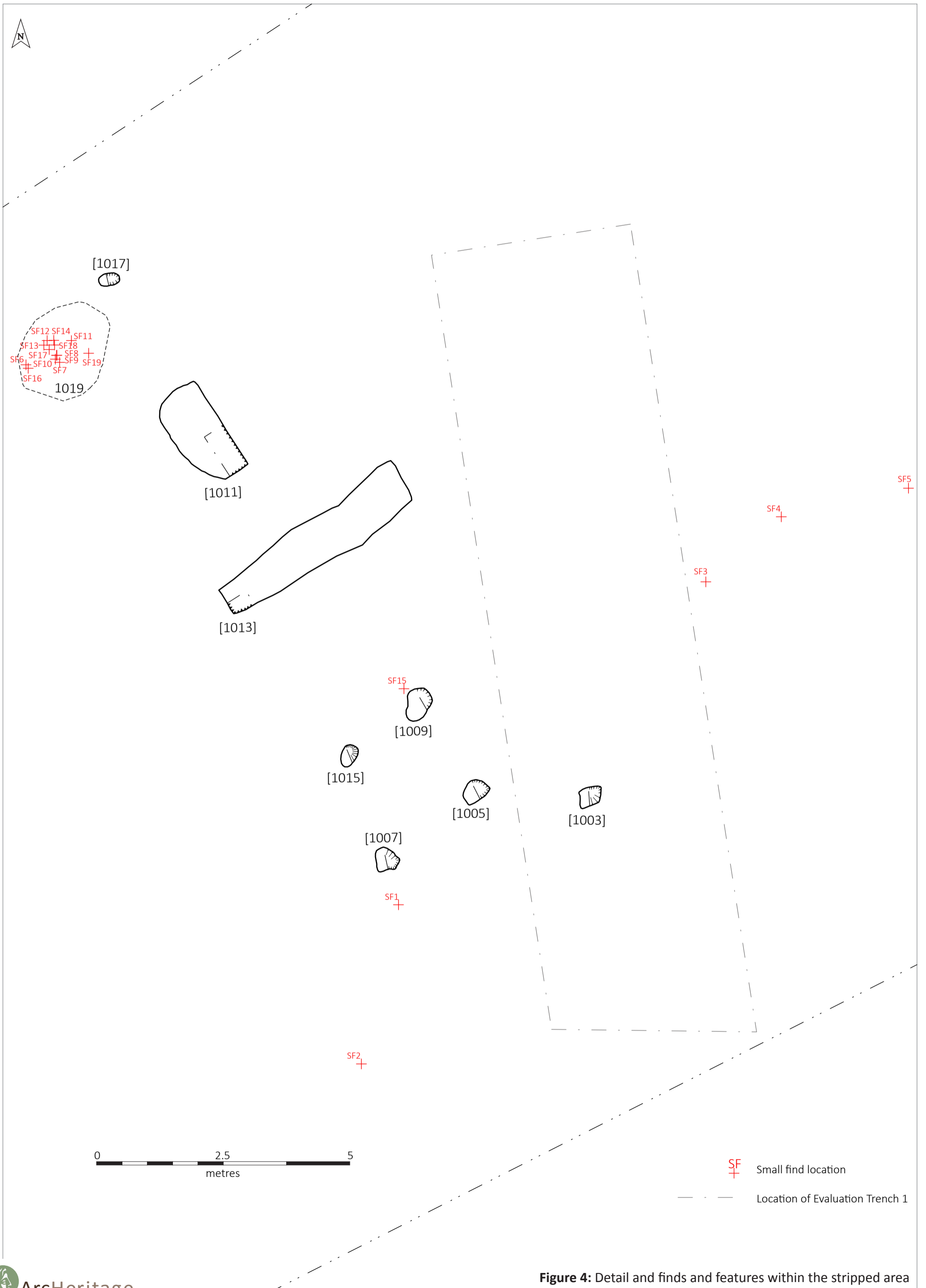
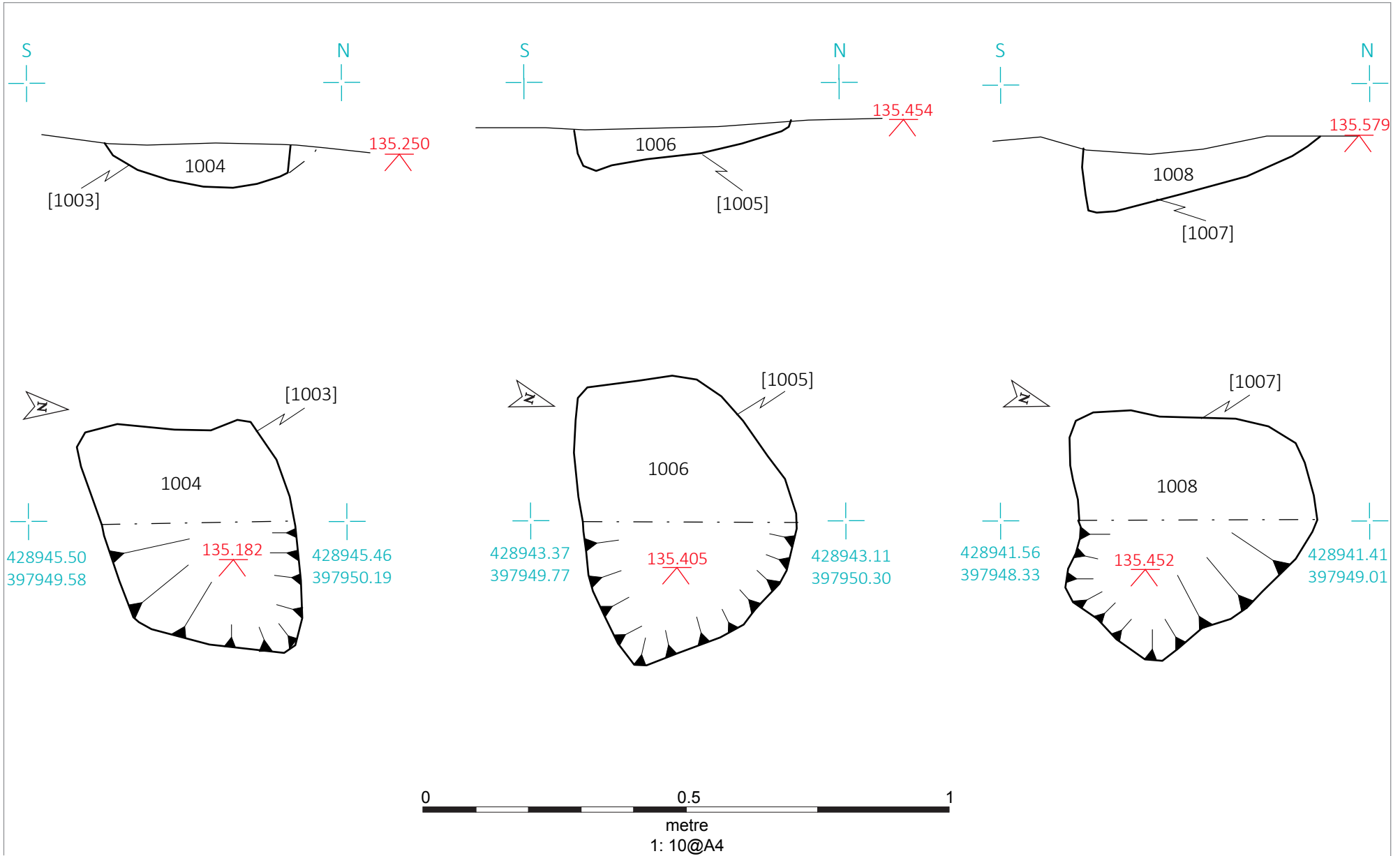


Figure 3: Overall site plan

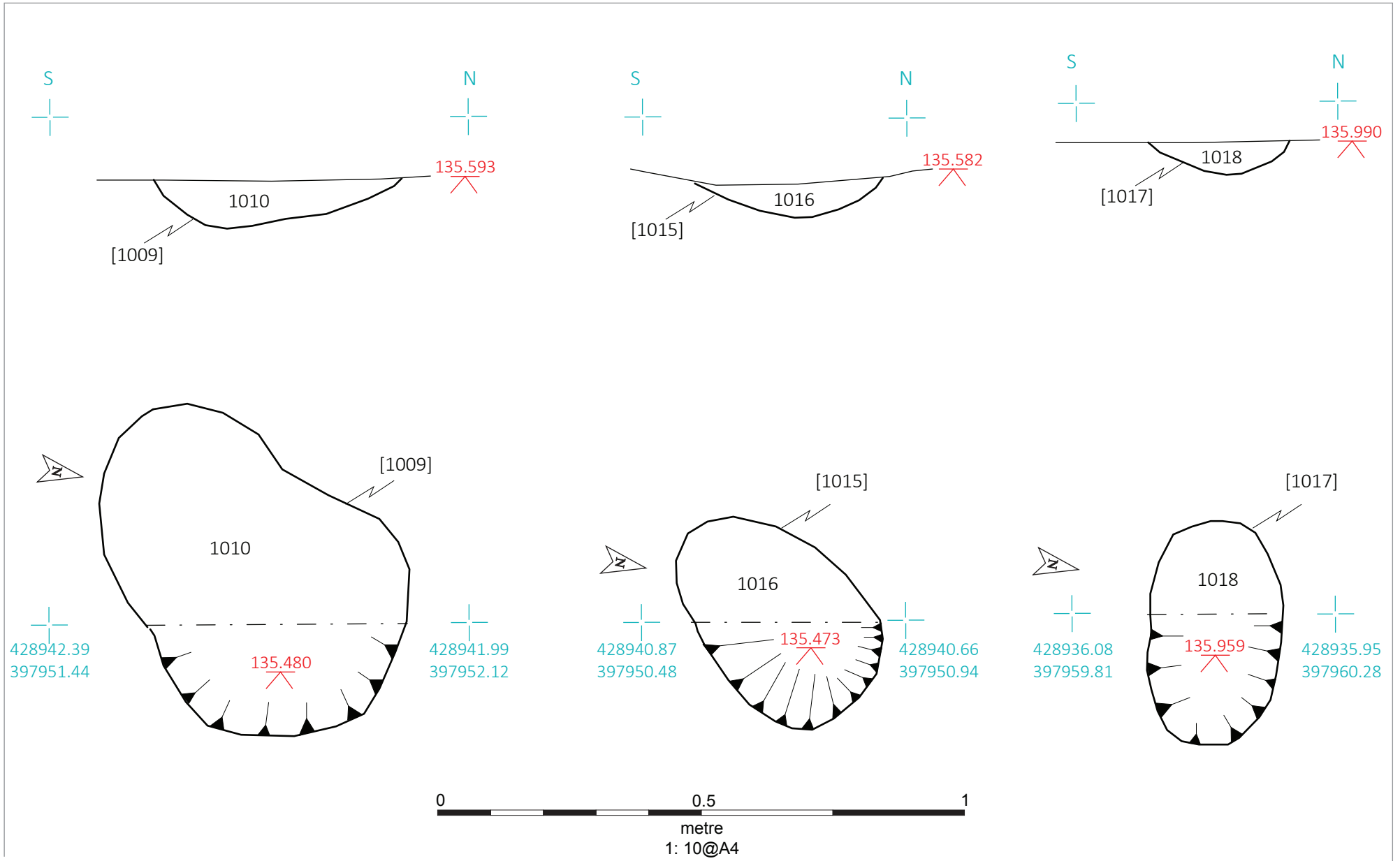


**Figure 4:** Detail and finds and features within the stripped area

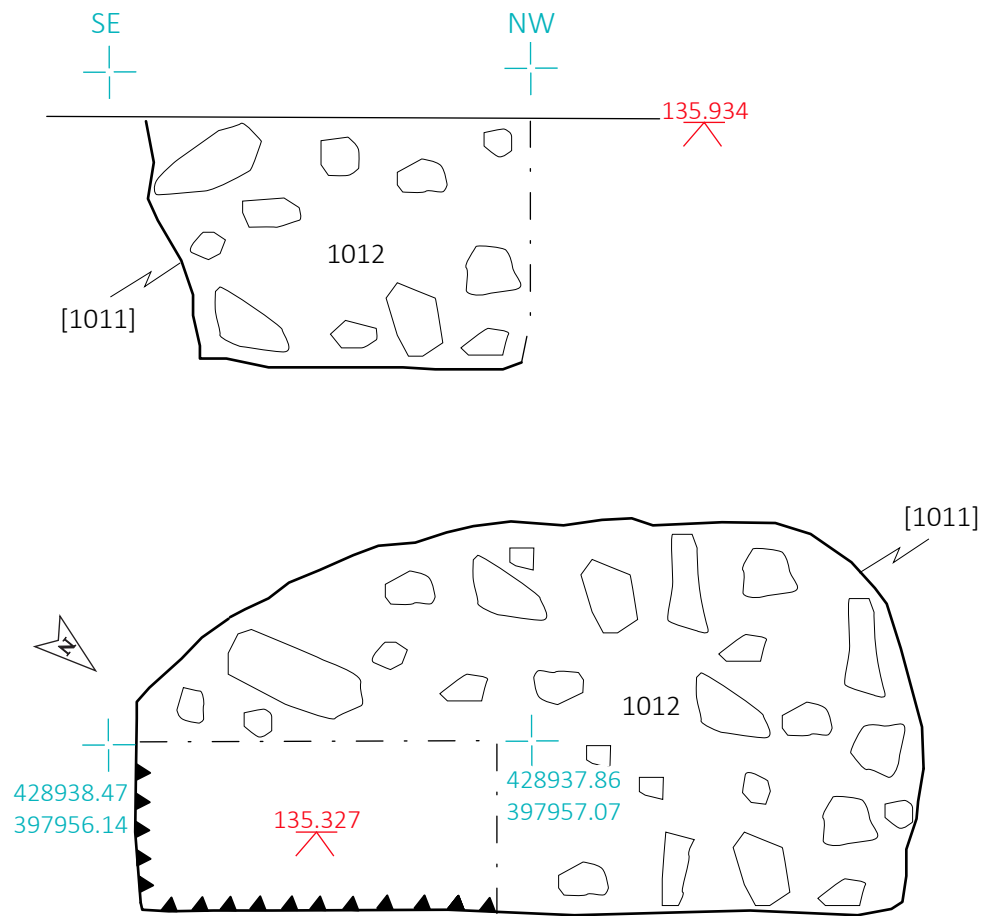




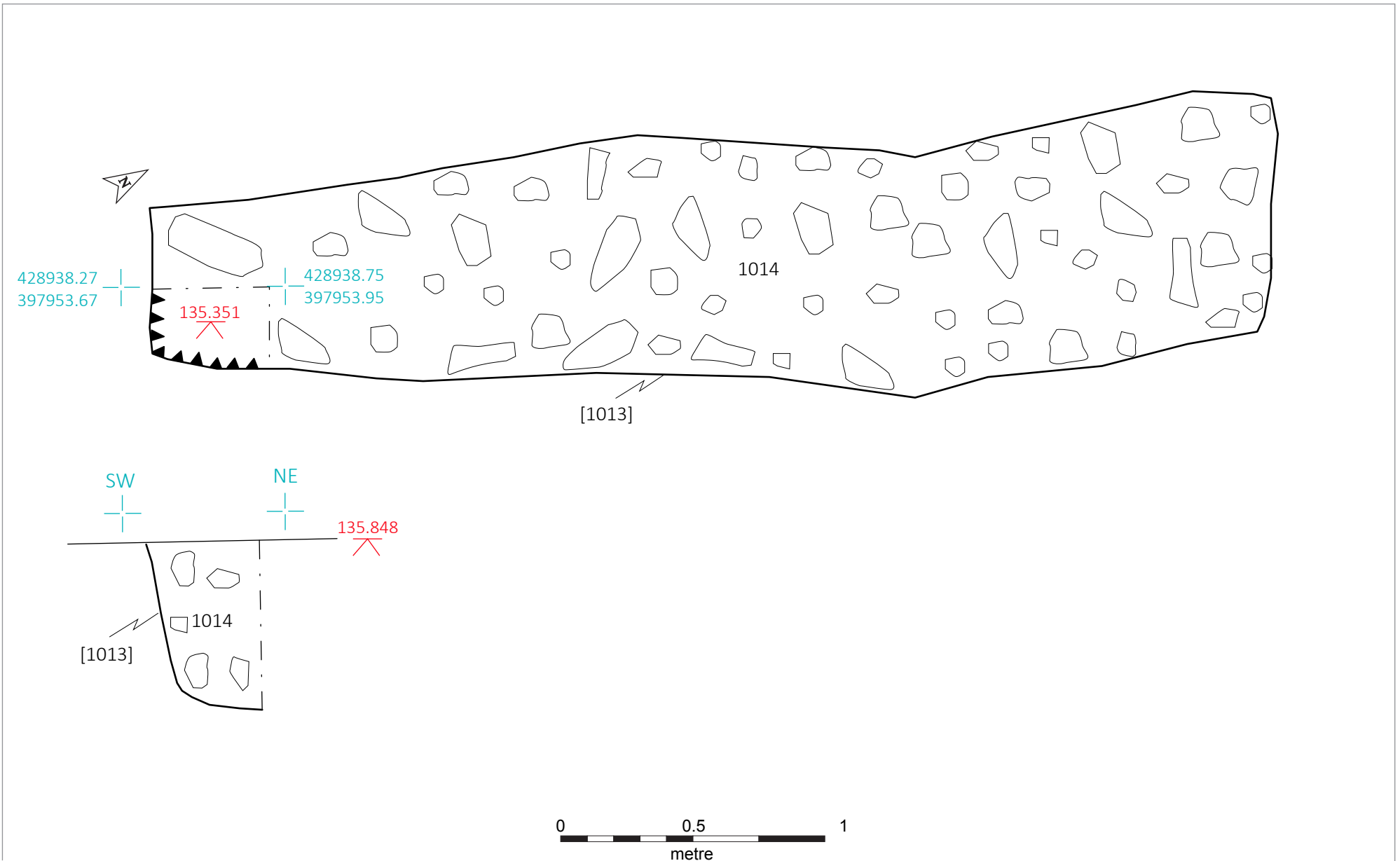
**Figure 5:** Plans and sections of features [1003], [1005] and [1007]



**Figure 6:** Plans and sections of features [1009], [1015] and [1017]



**Figure 7:** Plan and section of feature [1011]



**Figure 8:** Plan and section of feature [1013]

## APPENDIX 1: INDEX TO ARCHIVE

Item	Quantity
Context register	1
Context sheets	11
Digital photo register	1
Digital photos	1 disc
Black and white film photo register	1
Black and white film photos	1 disc
Site drawings	3 sheets
Final report (including WSI)	2

## APPENDIX 2: CONTEXT LIST

Context no.	Description
1001	Topsoil. Very wet clay silt
1002	Subsoil. Very mixed - clay, sand and gravel
1003	Cut of shallow sub-rectangular feature - likely machine support from JCB
1004	Dark grey clay silt fill of [1003]
1005	Cut of shallow, sub-rectangular feature - likely support from JCB
1006	Dark grey clay silt fill of [1005]
1007	Cut of sub-circular feature with irregular sides and base. Tree throw?
1008	Dark grey clay silt fill of [1007]. Occasional sub-angular pebbles
1009	Cut of sub-circular, shallow and irregular feature
1010	Dark grey clay silt fill of [1009]. Frequent roots
1011	Cut of rectangular feature with very square corners and vertical sides - looks to be machine excavated.
1012	Quite loose and very stony fill of [1011] with broad range of stone shapes and sizes. Very similar to [1013]
1013	Cut of long, narrow linear feature. Vertical sides
1014	Quite loose and very stony fill of [1013] with broad range of stone shapes and sizes. Very similar to [1011]
1015	Cut of sub-circular feature, irregular edges and base
1016	Fill of [1015]. Dark grey clay silt with occasional sub-angular stones
1017	Irregular ovoid feature. Shallow.
1018	Dark grey clay silt fill of [1017]
1019	Indistinct deposit containing numerous worked flints and charcoal flecks. VERY similar to subsoil (1002) - only difference is occasional charcoal. Not possible to identify in plan and does not appear contained in a cut, rather appears to be a spread of material.

## APPENDIX 3: FLINT ASSESSMENT

*George Loffman BA MSc*

### 1. Introduction

The excavation produced 18 pieces of flint, 14 of these were humanely struck flint, with 4 natural pieces. The finds were collected from two contexts, a subsoil deposit (1002) and deposit (1019). No archaeological features were found during the course of the excavation. There was however a concentration of 13 lithics found in the north-western area of the site, within deposit (1019). The position of all of the lithics was recorded by GPS.

The assemblage was recorded using standardised methods detailed below. The material was catalogued and is detailed in Table 1, below.

### 2. Methodology

#### 2.1 *Raw material*

For the raw material types I have followed the groups set out by Preston (2012). Raw material attributes were based upon the methodology used by Conneller (1999). For each piece raw material translucency, texture, lustre and inclusions were recorded.

#### 2.2 *Typology*

In analysing the typological and technological characteristics of the lithic material I have followed definitions outlined by Preston (2012) & Butler (2005).

#### 2.3 *Technology*

For each piece information was recorded on blank type, blank integrity, tool type, tool integrity, dimensions, dorsal scar pattern, cortex type, termination type, platform type, hammer type, use wear and raw material attributes

### 3. Results

#### 3.1 *Raw material*

The raw material recovered from this site consists of Drift flint (n=15 82%), White flint (n=1, 6%), non shiny black chert (n=1, 6%), Shiny black chert (n=1, 6%).

#### **Drift flint**

The majority of the lithics were manufactured using Drift flint also known as Till flint (Makey 2006) or speckled flint (Conneller 1999) by some researchers. Light grey is the principal colour (n=13), although two pieces were dark grey and blue grey in colour. The flint was mainly translucent with a fine texture and a shiny lustre.

The flint contained inclusions of speck, spots, dashes and streaks. These were mainly light grey or white, however some have dark grey streaks visible.

The cortex where present is grey to dark brown and usually less than 1mm in thickness on the worked lithics. Two natural pieces had a thicker white “chalky” cortex that appears to be derived from a nodular shaped raw material. This may indicate that this material derives from a different source than that used for the manufacture of worked lithics.

The majority of the raw material used for primary debitage is of the finer quality Drift flint. This is likely to represent the transportation of raw material from non-local sources. Within the material from the concentration of finds in the north-west of the site the majority appears to be from a very similar raw material. This may even represent the reduction of a single nodule of flint.

The source of Drift flint is considered to be the Holderness till of East Yorkshire and Durham, containing flint eroded and transported by glacial action from Cretaceous deposits exposed on the then dry North Sea floor, off the East coast of Northern England. A second possible source has been proposed of the red chalk found just north of Flamborough head. However the glacial action that caused the formation of these deposits may have also scattered nodules as glacial erratics (Conneller 1999).

Henson (1982) has noted that although this flint is formed within chalk, it is not native to Yorkshire and derived from a secondary source, found within the boulder clays and till deposited by glacial action in the Devensian period. The heterogeneous nature of this raw material and its variety of colours and hues is probably due to its secondary source origin.

### **White Flint**

This flint was found to be white in colour, opaque, medium in lustre, with a medium texture. Inclusions included a fossil and dark grey speckles.

White flint is also known as Wolds flint by some researchers (Conneller 1999), and has its origin within the chalk of the Yorkshire and Lincolnshire Wolds. Although the chalk in this area covers north-eastern Lincolnshire and most of the Riding of East Yorkshire, it is covered in many places by superficial deposits of glacial till. The chalk outcrops only in the wolds and at Flamborough head and it is therefore only here that the flint could be procured directly from the chalk.

### **Shiny Black Chert**

The single piece of Shiny black chert is described as dark grey in colour, shiny in lustre and with a medium texture.

### **Non-shiny Black Chert**

A single piece of this raw material was recovered from the site. This was dark grey in colour, opaque, dull in lustre and with a medium texture.

Black chert originates from the limestone areas of Derbyshire, northern and southern Pennines and Flintshire (Hind 1998, Evans et al 2007).

## **3.2 *Typology***

The assemblage consists of n=14 pieces of humanely worked flint, of these n=2 are formal tools and n=12 are debitage. A summary of the assemblage composition is shown in Table 2 & 3.

### **Tools**

There were only two tools found within the assemblage, a combination tool as well as a burin tool.

The combination tool was manufactured on Shiny black chert, and appears to have been a multiple use tool (Find No 5). It consists of a burin spall struck from the distal end which formed



a straight edge on the left lateral margin. The tool appears to have been later modified into an end scraper through application of abrupt retouch at the proximal end. The tool also featured retouch or use wear along the right lateral margin, and may have been used as a knife. Although not a diagnostic piece it is more similar in form and size to Mesolithic tools.

A burin tool was found manufactured from Drift flint raw material (Find No 14). The burin spall was struck from the proximal end.

### **Debitage**

There were a total of n=12 pieces ofdebitage recovered from the site. Thedebitage consist of n= 10 primarydebitage, n=2 angular shatter/chunk.

### **Primarydebitage**

The primarydebitage consisted of complete pieces n=7, with the rest consisting of distal n=2 and proximal n=1 fragments. Thedebitage is made up of flakes n=5, blades n=3, a core dressing piece and a small flake chip.

The core dressing piece is a plunging blade that has removed the base of the core from which it was detached (Find No 7). The original core appears to have been a blade core. This type ofdebitage can indicate core reduction activity. Although not a diagnostic piece this type ofdebitage is more common in Mesolithic assemblages than those of later periods (Butler 2005).

### **Angular shatter/chunk**

There are n=2 pieces of angular shatter/chunks within the assemblage. These pieces are the result of waste formed during the reduction of a core.

## **3.3 Technology**

### **Stage of production**

The amount of cortex present on lithic pieces can indicate the stage at which cores were transported onto site (Andrefsky 2005:103). Within this assemblage none of the material comes from the primary (initial) stages of core preparation, n=7 pieces had no cortex present and n=7 had less than 50% coverage of cortex; the majority with significantly less. This would strongly indicate that cores were transported onto site having already been substantially prepared/reduced.

The presence of a core dressing piece as well as flakes and blades suggests that some core maintenance/reduction activity did take place.

### **Core and tool ratio**

The small size of the assemblage probably makes any meaningful comparison of core/tool ratio problematic. However the lack of cores on the site would be expected in an area where raw material is scarce or of poor quality. Cores would have been curated until completely exhausted, as there was no local source to replenish raw material.

### **Technique**

N=4 of the pieces exhibit characteristics of being struck with a soft hammer. The presence of blades and a plunging blade would suggest that a blade core technology was being used on this site.

A single flake exhibits the attributes of flaking through bipolar reduction. This is where a flint is struck with a hammerstone against a stone anvil. The fact that this flake was of black chert, may have necessitated the use of this technique, as this type is often considered of a poorer quality than Drift flint (Hind 1998).

### 3.4 *Spatial analysis*

There is a concentration of lithics in the north-west of the site that contains the majority of the assemblage. The blades, plunging blade, flakes and burin from this area are made of very similar raw material. This may suggest that this represents the reduction of a single nodule of material, and represents a very short knapping event. Although no refits were found during the analysis suggesting this is not an in situ flint scatter.

## 4. **Discussion**

This assemblage does not contain any diagnostic lithic artefacts that would provide a definitive date.

However on technological grounds it is possible to suggest a probable Mesolithic date for the assemblage, namely the use of blade technology. This is supported by the presence of blades within the assemblage. The overshot/plunging blade also appears to have been detached from a blade core, and both tools were also produced on blade blanks.

The probable Mesolithic date of the assemblage is interesting as approximately 200m to the east of the present site, across the Don River is located the Mesolithic site of Deepcar (Radley & Mellars 1964). This site produced an assemblage of 23,000 pieces attributed to the Early Mesolithic period.

The majority of the raw material used at the site has been imported from a significant distance, with the nearest source of drift flint approximately 80km to the east of the site. The lack of evidence for preparation of cores during the early stage of production is therefore unsurprising. The lack of cores on the site is also similar to the Deepcar site excavated in the 1960's, where a low number of cores were recorded. This is again probably a reflection of the absence of high quality flint sources in the immediate area.

This assemblage differs from the 1960's Deepcar site in the composition of the raw material present. At the 1960's Deepcar site white flint comprised of 95% of the total, with smaller amounts of brown flint and black chert (Radley & Mellars 1964). The brown flint is probably analogous to Drift flint recorded at the present site, which is the majority raw material type.

The assemblage need not represent more than a fleeting visit from a small number of individuals during the Mesolithic. The concentration of flints in the north-west of the site may even represent the work of an individual from a single nodule of flint.

## 5. **Recommendations**

No further work is recommended on this assemblage in its current state.

## 6. **References**

Andrefsky, W. 2005. *Lithics: Macroscopic Approaches to Analysis*. Cambridge.

British Geological Survey <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> - accessed 23/08/17

Butler, C. 2005. *Prehistoric Flintwork*. History Press.

Conneller, C.J. 1999. March Hill Lithics Report West Yorkshire Mesolithic Project <http://www.arch.wyjs.org.uk/mh/graphics/moreinfo.html>.

Evans, A, Wolfram, Y. B, Donahue, R. E, & Lovis, W. A, 2007, A Pilot Study for the Study of 'Black Chert' sourcing and implications for Assessing Hunter-Gatherer Mobility Strategies in Northern England, *Journal of Archaeological Science*, 34(12 ), 2161-2169.

Henson, D. 1982 *Flint as a raw material in prehistory*. M.Phil thesis, University of Sheffield.

Hind, D, 1998, Chert Use in the Mesolithic of Northern England, *Assemblage*, 4, <https://archaeologydataservice.ac.uk/archives/view/assemblage/html/4/4hind.html> - accessed 26/08/17.

Makey, P. 2006. Hungate Flint Assessment. *York Archaeological Trust Report*

Makey, P. 2007. Heslington Flint Assessment. *York Archaeological Trust Report*

Manby, T. G. 1979. Typology, materials and distribution of flint and stone axes in Yorkshire. In T. H. Mclough and W. A. Cummins (eds) *Stone axe studies*. CBA research report 23: 65-82.

Preston, P.R. 2012. *Lithics to Landscapes: Hunter Gatherer tool use, resource exploitation and mobility during the Mesolithic of Northwest England*. D.Phil. Thesis, School of Archaeology, University of Oxford, Oxford UK.

Radley, J & Mellars, P. 1964. A Mesolithic Structure at Deepcar, Yorkshire, England, and the Affinities of its associated Flint Industries. *Proceedings of the Prehistoric Society* 30.

Appendix 3, Table 1: Summary of lithics from Deepcar.

Find No.	Context	Blank Type	Blank Integrity	Tool type	Sub type	L (mm)	W (mm)	D (mm)	Termination Type	Hammer Type	Cortex Group	Raw Material Type
1	1002	flake	complete		flake	47	29	8	feather	soft	4	white flint
3	1002	flake	complete		flake	15	14	2	feather		3	drift flint
4	1002	natural			natural	8	7	2			3	drift flint
5	1002	blade	complete	combination	end scraper, burin	40	18	8			4	shiny black chert
6	1019	blade	proximal fragment		blade	24	12	5	truncated	soft	3	drift flint
7	1019	core dressing	distal fragment		plunging blade/overshot	59	11	16	plunging		3	drift flint
8	1019	flake	complete		flake	33	22	6		hard	4	non shiny black chert
9	1019	flake	complete		flake	30	30	7	feather	hard	4	
10	1019	chunk			chunk	28	19	11			3	drift flint
11	1019	natural			natural	56	24	14			2	drift flint
12	1019	chunk			chunk	31	17	9			3	drift flint
13	1019	blade	complete		blade	38	14	4			3	drift flint
14	1019	blade	complete	burin	break burin	36	16	4	feather	soft	3	drift flint
15	1002	small flake	complete		small flake chip	10	11	2	feather		4	drift flint

Find No.	Context	Blank Type	Blank Integrity	Tool type	Sub type	L (mm)	W (mm)	D (mm)	Termination Type	Hammer Type	Cortex Group	Raw Material Type
		chip										
16	1019	natural			natural	29	12	8			3	drift flint
17	1019	natural			natural	31	11	4			3	drift flint
18	1019	flake	distal fragment		flake	17	14	2	feather		4	drift flint
19	1019	blade	complete		blade	33	11	2	feather	soft	4	drift flint

L = Length, W =Width, D= Depth. Cortex Groups 4 = 0% cortex, 3 = 1-49% cortex, 2 = 50-90% cortex, 1 = 91-100% cortex.



SF1



SF3



SF4



SF5



SF6



SF7



SF8



SF9



SF10



SF11



SF12



SF13



SF14



SF15



SF16



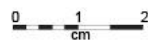
SF17



SF18



SF19



## APPENDIX 4: POTTERY ASSESSMENT

*Anne Jenner*

One fragment of pottery was recovered from the subsoil deposit (1002). This was highly abraded, with a fine, rather soft, pinkish fabric with a whitish core. It may have had a white slipped surface, although it is hard to tell, as the whole sherd is very worn, either due to weather, redeposition, and/or residuality. The fragment appears to be part of the rim of a flanged bowl, perhaps from a mortaria, although there is no evidence of grits as the main body is missing.

The highly abraded nature and small size of the fragment makes it difficult to ascertain a narrow date range, although based on the visible characteristics, a range of 2<sup>nd</sup> - 4<sup>th</sup> century AD could be applied.



## APPENDIX 5: WRITTEN SCHEME OF INVESTIGATION



Manchester Road, Deepcar: Area 1  
WSI for Archaeological Strip, Map and Record

**ArcHeritage Campo House, 54 Campo Lane, Sheffield, S1 2EG**

Phone: +44 (0)114 2728884 Fax: +44 (0)114 3279793  
archeritage@yorkat.co.uk [www.archeritage.co.uk](http://www.archeritage.co.uk)



## Key Project Information

Project name	Manchester Road, Deepcar: Area 1
Report title	Manchester Road, Deepcar: Area 1: Written Scheme of Investigation for Archaeological Strip, Map and Record
Report status	Final
ArcHeritage Project No.	1427
Client	Bloor Homes
NGR	SK 28944 979696
Planning reference	14/00318/FUL
Author	Laura Strafford
Illustrations	Laura Strafford
Editor	Rowan May
Report Number and Date	2018/4 01/02/2018
Version and filename	Version 1: Manchester Rd Deepcar Strip WSI v1.docx

### Copyright Declaration:

ArcHeritage give permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although ArcHeritage retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

### Disclaimer:

This Report has been prepared solely for the person/party which commissioned it and for the specifically titled project or named part thereof referred to in the Report. The Report should not be relied upon or used for any other project by the commissioning person/party without first obtaining independent verification as to its suitability for such other project, and obtaining the prior written approval of York Archaeological Trust for Excavation and Research Limited ("YAT") (trading as ArcHeritage). YAT accepts no responsibility or liability for the consequences of this Report being relied upon or used for any purpose other than the purpose for which it was specifically commissioned. Nobody is entitled to rely upon this Report other than the person/party which commissioned it. YAT accepts no responsibility or liability for any use of or reliance upon this Report by anybody other than the commissioning person/party.

# CONTENTS

1. SUMMARY .....	1
2. SITE LOCATION & DESCRIPTION.....	1
3. DESIGNATIONS & CONSTRAINTS.....	2
4. ARCHAEOLOGICAL INTEREST .....	2
5. AIMS.....	3
6. TECHNIQUES .....	3
7. STRIP, MAP & RECORD .....	3
8. RECORDING METHODOLOGY.....	4
9. SPECIALIST ASSESSMENT .....	6
10. REPORT & ARCHIVE PREPARATION .....	6
11. POST EXCAVATION ANALYSIS & PUBLICATION .....	7
12. HEALTH AND SAFETY .....	7
13. PRE-START REQUIREMENTS.....	8
14. REINSTATEMENT .....	8
15. STAFFING.....	8
16. TIMETABLE .....	9
17. MONITORING OF ARCHAEOLOGICAL FIELDWORK .....	9
18. COPYRIGHT.....	9
19. KEY REFERENCES .....	9
FIGURES .....	11

**Figure 1:** Site location map

**Figure 2:** Plan of the proposed strip area, with archaeological features identified within Evaluation Trench 1 overlaid over the results of the geophysical survey

**Figure 3:** Plan of Evaluation Trench 1 and section of feature [104]

*Cover image: View of Evaluation Trench 1, within the proposed strip area*

## 1. SUMMARY

1.1. Bloor Homes have received full planning permission for the construction of housing and provision of access routes at Manchester Road, Deepcar.

1.2. Condition 10 of the full planning conditions states that:

*No development on that part of the site to the west of the River Don (known as Area 1), including any demolition and groundworks, shall take place until the applicant, or their agent or successor in title, has submitted a Written Scheme of Investigation (WSI) that sets out a strategy for archaeological investigation on that part of the site to the west of the River Don and this has been approved in writing by the Local Planning Authority. The WSI shall include:*

- *The programme and method of site investigation and recording.*
- *The requirement to seek preservation in situ of identified features of importance.*
- *The programme for post-investigation assessment.*
- *The provision to be made for analysis and reporting.*
- *The provision to be made for publication and dissemination of the results.*
- *The provision to be made for deposition of the archive created.*
- *Nomination of a competent person/persons or organisation to undertake the works.*
- *The timetable for completion of all site investigation and post investigation works.*

*Thereafter the development shall only take place in accordance with the WSI and the development shall not be brought into use until the Local Planning Authority has confirmed in writing that the requirements of the WSI have been fulfilled or alternative timescales agreed.*

*For the avoidance of doubt, no further archaeological mitigation is required on that part of the site to the east of the River Don (known as Area 2) as the archive deposition for this area was made on 10.4.2015 (Museum Accession Number SHEFM:2014.16).*

1.3. This Written Scheme of Investigation (WSI) has been prepared in response to a consultation with Jim McNeil of South Yorkshire Archaeology Service (SYAS), following evaluation trenching carried out in December 2017 (ArcHeritage 2018). The evaluation results from Trench 1 determined that a small circular feature, highlighted during a previous geophysical survey (SUMO 2017), may be an archaeological feature with a possible prehistoric origin. This conclusion was based on the discovery of a worked flint flake from the fill of the linear feature in Trench 1.

1.4. The work will be carried out in accordance with this WSI, and according to the principles of the Institute for Archaeology (ClfA) Code of Conduct and all relevant standards and guidance.

## 2. SITE LOCATION & DESCRIPTION

2.1. The development site (Area 1) comprises a field of rough grass vegetation located between Manchester Road and the west bank of the River Don (Figure 1). It is 1.5 hectares in extent and is centred on SK 2898 9791. The area which will be the target of the strip, map and record

exercise is located at the northern end of the development site, within the vicinity of the evaluation Trench 1 (ArcHeritage 2018). The stripped area will measure approximately 0.10 hectares in total, and is centred on SK 28944 979696 (Figure 2).

- 2.2. To the east of the River Don were two further areas; Area 2 and Area 3. Area 2 was subject to extensive ground remediation and the remains of former coalmining were identified and a programme of archaeological works were undertaken to record the remains. No remains of mining were recorded in Area 3 and no archaeological recording works were undertaken in this area.
- 2.3. All works to the east of the River Don have been completed as is confirmed in condition 10, final paragraph.
- 2.4. The bedrock geology is Pennine Lower Coal Measures Formation mudstone, siltstone and sandstone, with superficial deposits of clay and silt alluvium across the eastern half of the site (BGS online mapping).

### **3. DESIGNATIONS & CONSTRAINTS**

- 3.1. There are no known designations or other constraints on this site.

### **4. ARCHAEOLOGICAL INTEREST**

- 4.1. Recent investigations at the site include a geophysical survey (SUMO 2017) and subsequent evaluation trenching (ArcHeritage 2018). The majority of the geophysical anomalies were shown through the evaluation to be a series of substantial ceramic drainpipes, a sewer main and anomalous shallow features pertaining to post-medieval agriculture and associated land use. The results from Trench 1 (Figure 3) suggest that the small circular feature highlighted during the geophysical survey may be an archaeological feature with a possible prehistoric origin. This conclusion is based on the discovery of a worked flint object from the fill of the linear feature in Trench 1.
- 4.2. A desk-based assessment of the site was carried out by Northamptonshire Archaeology (Walker 2006). This concluded that Area 1 had a high potential for the survival of unrecorded buried archaeological remains, since this area was relatively undisturbed by 19<sup>th</sup>- to 20<sup>th</sup>-century activity. No development has been depicted within Area 1 on historic mapping from the 18<sup>th</sup> century onwards.
- 4.3. To the east of the proposal area, a Mesolithic site was excavated in 1962, including the remains of a possible stone structure and a large amount of flint flakes and tools (SMR 0547/0548). Subsequent archaeological evaluation in the vicinity has not revealed any further remains. Also to the east, a quern manufacturing site of late Iron Age and Romano-British date extending across an area of c.72ha has been recorded at Wharncliffe Rocks (SMR 0539, Scheduled Monument). Small enclosures recorded in 1958-60 were thought to be associated with Romano-British settlement and the quern manufacturing site (SMR 4217). Further probable Romano-British settlement remains have been recorded further to the northeast at Gosling Spring (SMR 3109) and Finkle Street (SMR 0545). To the west of the site, three cruck buildings have been recorded, of possible medieval to post-medieval date (SMR 1329, 3586, 3639).
- 4.4. The eastern side of the proposal area (Area 2) was closest to known Mesolithic and Romano-British remains, but industrial activity relating to former chemical, ganister and brick works had removed any evidence for earlier activity in these areas. Prior to remediation, there were few surface traces of industrial buildings remaining in Area 2, the site having been levelled.

Archaeological monitoring of ground remediation works within Area 2 in 2008-2010 recorded the remains of former pillar and stall mine workings, thought to be associated with later 19<sup>th</sup>- to early 20<sup>th</sup>-century coal and ganister (fire clay) extraction. Mining tools were also recovered (Barnett and Stenton 2010). No recorded mining extends into Area 1 on historic mapping.

## 5. AIMS

5.1. The general aims of the strip, map and record are:

- to determine the extent, condition, character, importance and date of any archaeological remains present
- to provide information that will enable the remains to be placed within their local, regional, and national context and for an assessment of the significance of the archaeology of the proposal area to be made

Specific aims are:

- to date the features recorded in Evaluation Trench 1, and understand the character and extent of the activity represented by the remains
- to identify and preserve by record any archaeological remains that are located within the strip area

## 6. TECHNIQUES

6.1. The recording will comprise the following elements:

- Strip, map and record
- Reporting

## 7. STRIP, MAP & RECORD

7.1. The area to be stripped has been determined by SYAS and is based on the archaeological potential of Evaluation Trench 1. The strip area measures approximately 0.10 hectares, although may be extended if archaeological remains are observed to extend out of the area. This will be determined on site, in agreement with SYAS.

7.2. The extent of the strip area will be accurately plotted using a survey grade GPS or an EDM Total station, by measurement to local permanent features shown on published Ordnance Survey maps. All measurements will be accurate to +/-10cm, and the excavation area locatable on a 1:2500 Ordnance Survey map. This is to ensure that the area can be independently relocated in the event of future work.

7.3. Overburden such as turf, topsoil or other superficial fill materials will be removed by a machine fitted with a toothless bucket. Mechanical excavation equipment would be used judiciously, under archaeological supervision down to the top of archaeological deposits, or the natural subsoil, whichever appears first. If archaeology is present, machining will cease and excavation will normally proceed by hand. Where deep homogenous deposits, or deposits such as rubble infills, are encountered, these may be carefully removed by machine, after consultation with SYAS.

- 7.4. The use of mechanical, air-powered, or electrical excavation equipment may also be appropriate for removing deep intrusions (e.g. modern brick and concrete floors or footings) or through deposits to check that they are of natural origin, after consultation with SYAS. The machine will not be used to cut arbitrary sondages down to natural deposits.
- 7.5. The entire strip area will be sufficiently cleaned by hand to enable potential archaeological features to be identified and recorded; areas without archaeological features will be recorded as sterile and no further work will take place in these areas. The stratigraphy of the excavation area will be recorded even where no archaeological features are identified.
- 7.6. A sufficient sample of any archaeological features and deposits revealed will be excavated in an archaeologically controlled and stratigraphic manner in order to establish the aims of the excavation.
- 7.7. Discrete features will be half-sectioned in the first instance.
- 7.8. Linear features will be sample excavated (to a minimum of 20% of their length) with each sample being not less than 1m in length.
- 7.9. Deposits at junctions or interruptions in linear features will be sufficiently excavated to allow relationships to be determined.
- 7.10. Structures will be sample excavated to a degree whereby their extent nature, form, date, function and relationships to other features and deposits can be established.

## **8. RECORDING METHODOLOGY**

- 8.1. All archaeological features will be recorded using standardised pro forma record sheets. Plans, sections and elevations will be drawn as appropriate and a comprehensive photographic record will be made where archaeological features are encountered.
- 8.2. Archaeological deposits will be planned at a basic scale of 1:50, with individual features requiring greater detail being planned at a scale of 1:20. Larger scales will be utilised as appropriate. Cross-section of features will be drawn to a basic scale of 1:10 or 1:20 depending on the size of the feature. All drawings will be related to Ordnance Datum. Where it aids interpretation, structural remains will also be recorded in elevation.
- 8.3. Each context, where assigned, will be described in full on a pro forma context record sheet in accordance with the accepted context record conventions. Each context will be given a unique number. These field records will be checked and indexes compiled.
- 8.4. Photographs of work in progress and post-excavation of individual and groups of features will be taken. This will include general views of entire features and of details such as sections as considered necessary. The photographic record will comprise 35mm black and white film. Digital photography will be used in addition, but will not form any part of the formal site archive. All site photography will adhere to accepted photographic record guidelines.
- 8.5. Areas which do not contain any archaeological deposits will be photographed and recorded as being archaeologically sterile. The natural stratigraphic sequence within these areas will be recorded.
- 8.6. All finds will be collected and handled following the guidance set out in the ClfA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds, and located on plans. Other finds, finds within the topsoil, and dense/discrete deposits of finds will

be collected as Bulk Finds, from discrete contexts, bagged by material type. Any dense/discrete deposits will have their limits defined on the appropriate plan.

- 8.7. All artefacts and ecofacts will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication First Aid for Finds, and recording systems must be compatible with the recipient museum. All finds that fall within the purview of the Treasure Act (1996) will be reported to HM Coroner according to the procedures outlined in the Act, after discussion with the client and the local authority.
- 8.8. An environmental sampling programme will be undertaken for the recovery and identification of charred and waterlogged remains where suitable deposits are identified. The collection and processing of environmental samples will be undertaken in accordance with English Heritage guidelines (English Heritage 2011). Environmental and soil specialists will be consulted during the course of the excavation with regard to the implementation of this sampling programme. The sampling regime will include samples of the four types of deposit sample as appropriate. These are described below:
- **Bulk-sieved Sample (BS).** Sample size will depend upon the context/feature size, but should be up to 40-60 litres in size (if the context size allows). They are taken for the recovery of charcoal, burnt seeds, bone and artefacts. The samples will be processed (flotation) on site where possible with 1mm and 500micron sieves on a rack to collect the carbonised washover. The retents and flots will then be dried, sorted and assessed to advise the potential for further analysis.
  - **General Biological Sample (GBA):** These are only taken if a deposit is waterlogged. A 10 litre sample size will be used (if the context size allows). These samples will be processed in the laboratory, to recover macrofossils and microscopic remains such as pollen and insects.
  - **Column monolith:** Kubiena tin samples may be taken for soils and pollen analysis and to determine soil accumulation processes.
  - **Spot samples:** these samples are taken as required. they may be contexts or material not suited to sieving, such as caches of seeds, pieces of eggshell or any specific finds of organic material. They may also be specialist samples (e.g. charcoal for radiocarbon dating).
- 8.9. Other samples will be taken, as appropriate, in consultation with ArcHeritage specialists and the Historic England Regional Science Advisor, as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc.). Samples will be taken for scientific dating where appropriate. Material removed from site will be stored in appropriate controlled environments.
- 8.10. In the event of human remains being discovered during the evaluation these will be left in-situ, covered and protected, in the first instance. The removal of human remains will only take place in compliance with environmental health regulations and following discussions with, and with the approval of, the Secretary of State.
- 8.11. Where a licence is issued, all human skeletal remains must be properly removed in accordance with the terms of that licence. Where a licence is not issued, the treatment of human remains will be in accordance with the requirements of Civil Law, ClfA Technical Paper 13 (1993) and Historic England guidance.



## 9. SPECIALIST ASSESSMENT

- 9.1. The stratigraphic information, artefacts, soil samples, and residues will be assessed as to their potential and significance for further analysis and study. The material will be quantified (counted and weighted). Specialists will undertake a rapid scan of all excavated material. Ceramic spot dates will be given. Appropriately detailed specialist reports will be included in the report.
- 9.2. Materials considered vulnerable should be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues on or in pottery, and mineral-preserved organic material). Allowance will be made for preliminary conservation and stabilization of all objects and a written assessment of long-term conservation and storage needs will be produced. Once assessed, all material will be packed and stored in optimum conditions, in accordance with Watkinson and Neal (1998), ClfA (2007) and Museums and Galleries (1992).
- 9.3. All finds will be cleaned, marked and labelled as appropriate, prior to assessment. For ceramic assemblages, any recognised local pottery reference collections and relevant fabric Codes will be used.
- 9.4. Allowance will be made for the recovery of material suitable for scientific dating and contingency sums will be made available to undertake such dating, if necessary. This will be decided in consultation with SYAS.

## 10. REPORT & ARCHIVE PREPARATION

- 10.1. Upon completion of the site work, a report will be prepared to include the following:
  - A non-technical summary of the results of the work.
  - An introduction which will include the planning reference number, grid reference and dates when the fieldwork took place.
  - An account of the methodology and detailed results of the operation, describing structural data, archaeological features, associated finds and environmental data, and a conclusion and discussion.
  - A selection of photographs and drawings, including a detailed plan of the site accurately identifying the areas monitored, excavation location, selected feature drawings, and selected artefacts, and phased feature plans where appropriate.
  - Specialist artefact and environmental reports where undertaken, and a context list/index.
  - Details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive.
  - A copy of the key OASIS form details.
  - Copies of the WSI.
  - Additional photographic images may be supplied on a CDROM appended to the report.
- 10.2. Digital copies of the excavation report will be submitted to the commissioning body. Bound and digital copies of the report will be submitted direct to SYAS for planning purposes, and subsequently for inclusion into the SMR.
- 10.3. A field archive will be compiled consisting of all primary written documents, plans, sections and photographs. Catalogues of contexts, finds, soil samples, plans, sections and photographs will

be produced. ArcHeritage have liaised with Weston Park Museum to establish the detailed curatorial requirements; it has been agreed that the archival material from this excavation will form a combined single archive with the archival material from the evaluation trenching. The relevant museum forms will be completed and sent to the museum at each appropriate stage. The Weston Park Museum curator would be afforded access to visit the site and discuss the project results.

- 10.4. The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the Local Authority and the museum accepting the archive to use such documentation for their statutory functions and provide copies to third parties as an incidental to such functions. Under the Environmental Information Regulations (EIR), such documentation is required to be made available to enquirers if it meets the test of public interest. Any information disclosure issues would be resolved between the client and the archaeological contractor before completion of the work. EIR requirements do not affect IPR.
- 10.5. Upon completion of the project an OASIS form will be completed at <http://oasis.ac.uk/form/>.

## **11. POST EXCAVATION ANALYSIS & PUBLICATION**

- 11.1. The information contained in the assessment report will enable decisions to be taken regarding the future treatment of the archaeology of the development site and any material recovered during the strip, map and record exercise.
- 11.2. If further archaeological investigations (mitigation) take place, any further analyses (as recommended by the specialists, and following agreement with SYAS) may be incorporated into the post-excavation stage of the mitigation programme unless such analysis are required to provide information to enable a suitable mitigation strategy to be devised. Such analysis will form a new piece of work to be commissioned.
- 11.3. In the event that no further fieldwork takes place on the site, a full programme of post excavation analysis and publication of artefactual and scientific material from the evaluation may be required by SYAS. Where this is required, this work will be a new piece of work to be commissioned.
- 11.4. If further site works do not take place, allowance will be made for the preparation and publication in a local and/or national journal of a short summary on the results of the evaluation and of the location and material held within the site archive.
- 11.5. The results of the work will be publicised locally e.g. by presenting a paper at the South Yorkshire Archaeology Day and talking to local societies, as appropriate.
- 11.6. A summary report accompanied by illustrations will be presented in digital format for publication in the appropriate volume of Archaeology in South Yorkshire.

## **12. HEALTH AND SAFETY**

- 12.1. Health and safety issues will take priority over archaeological matters and all archaeologists will comply with relevant Health and Safety Legislation.
- 12.2. A Risk Assessment will be prepared prior to the start of site works.

### **13. PRE-START REQUIREMENTS**

- 13.1. The client will be responsible for ensuring site access has been secured prior to the commencement of site works, and that the perimeter of the site is secure.
- 13.2. The client will provide ArcHeritage with up to date service plans and will be responsible for ensuring services have been disconnected, where appropriate.
- 13.3. The client will be responsible for ensuring that any existing reports (e.g. ground investigation, borehole logs, contamination reports) are made available to ArcHeritage prior to the commencement of work on site.
- 13.4. A Project Initiation Form has been completed and submitted to Sheffield Museums. This and other templates relating to the joint deposition policy documentation are available to download from the SYAS website at: <https://www.sheffield.gov.uk/planning-and-city-development/urban-design--conservation/archaeology/tech.html>.

### **14. REINSTATEMENT**

- 14.1. Following excavation and recording, the spoil from the excavation may be backfilled, as confirmed by the client. If backfilling is to commence, the backfill material will be levelled and compressed as far as possible with the mechanical excavator bucket, but will not be compressed to a specification. ArcHeritage are not responsible for reinstating any surfaces, including reseeding, unless specifically commissioned by the client who will provide a suitable specification for the work.

### **15. STAFFING**

- 15.1. Specialist staff available for this project are:
  - Human remains – Malin Holst (York Osteoarchaeology Ltd) & Rebecca Storm (University of Bradford)
  - Palaeoenvironmental remains – Sheffield Archaeobotanical Consultancy
  - Lithics – George Loffman
  - Roman pottery – David Gregory
  - Medieval and post-medieval pottery – Anne Jenner
  - Post-medieval pottery – David Barker
  - Post-medieval glass – Karen Weston
  - Finds Officers – Nienke Van Doorn
  - Archaeometallurgy & industrial residues – Rod Mackenzie
  - Conservation – Ian Panter
  - Worked wood – Steve Allen
- 15.2. Other specialist staff may be commissioned as necessary.

## 16. TIMETABLE

- 16.1. An outline project timetable is provided below:
- 16.2. WSI  
Approval of the WSI by SYAS - up to two weeks
- 16.3. Excavation  
Strip, map and record fieldwork - one week  
Report on the results of the excavation - three weeks  
Comment on and approval of the assessment report by SYAS - up to two weeks
- 16.4. If any further archaeological mitigation works are required these will be subject to a separate timetable.

## 17. MONITORING OF ARCHAEOLOGICAL FIELDWORK

- 17.1. As a minimum requirement, SYAS will be given a minimum of one week's notice of work commencing on site, and will be afforded the opportunity to visit the site during and prior to completion of the on-site works so that the general stratigraphy of the site can be assessed and to discuss the requirement any further phases of archaeological work. ArcHeritage will notify SYAS of any discoveries of archaeological significance so that site visits can be made, as necessary. Any changes to this agreed WSI will only be made in consultation with SYAS.
- 17.2. With the client's agreement illustrated notices will be displayed on site to explain the nature of the works.

## 18. COPYRIGHT

- 18.1. ArcHeritage retain the copyright on this document. It has been prepared expressly for the named client, and may not be passed to third parties for use or for the purpose of gathering quotations.

## 19. KEY REFERENCES

ArcHeritage. 2018. Manchester Road, Deepcar: Area 1. Archaeological Evaluation. Unpublished client report 2018/2

ADS and Digital Antiquity. 2013. *Caring for Digital Data in Archaeology: A Guide to Good Practice*.

Barnett, R. and Stenton, M. 2010. Deepcar, Sheffield, South Yorkshire: Archaeological Recording Report. Unpublished ArcHeritage report 2010/95.

Brown, D. H. 2007. *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation*. ClfA/AAA

Museum and Galleries Commission. 1992. *Standards in the Museum Care of Archaeological Collections*.

Neal, V., and D. Watkinson (eds). 1998. *First Aid for Finds: practical guide for archaeologists*. United Kingdom Institute for Conservation of Historic & Artistic Works, Archaeology Section; 3<sup>rd</sup> Revised Edition.

Standing Conference of Archaeological Unit Managers (SCAUM). 2007. *Health and Safety in Field Archaeology*.

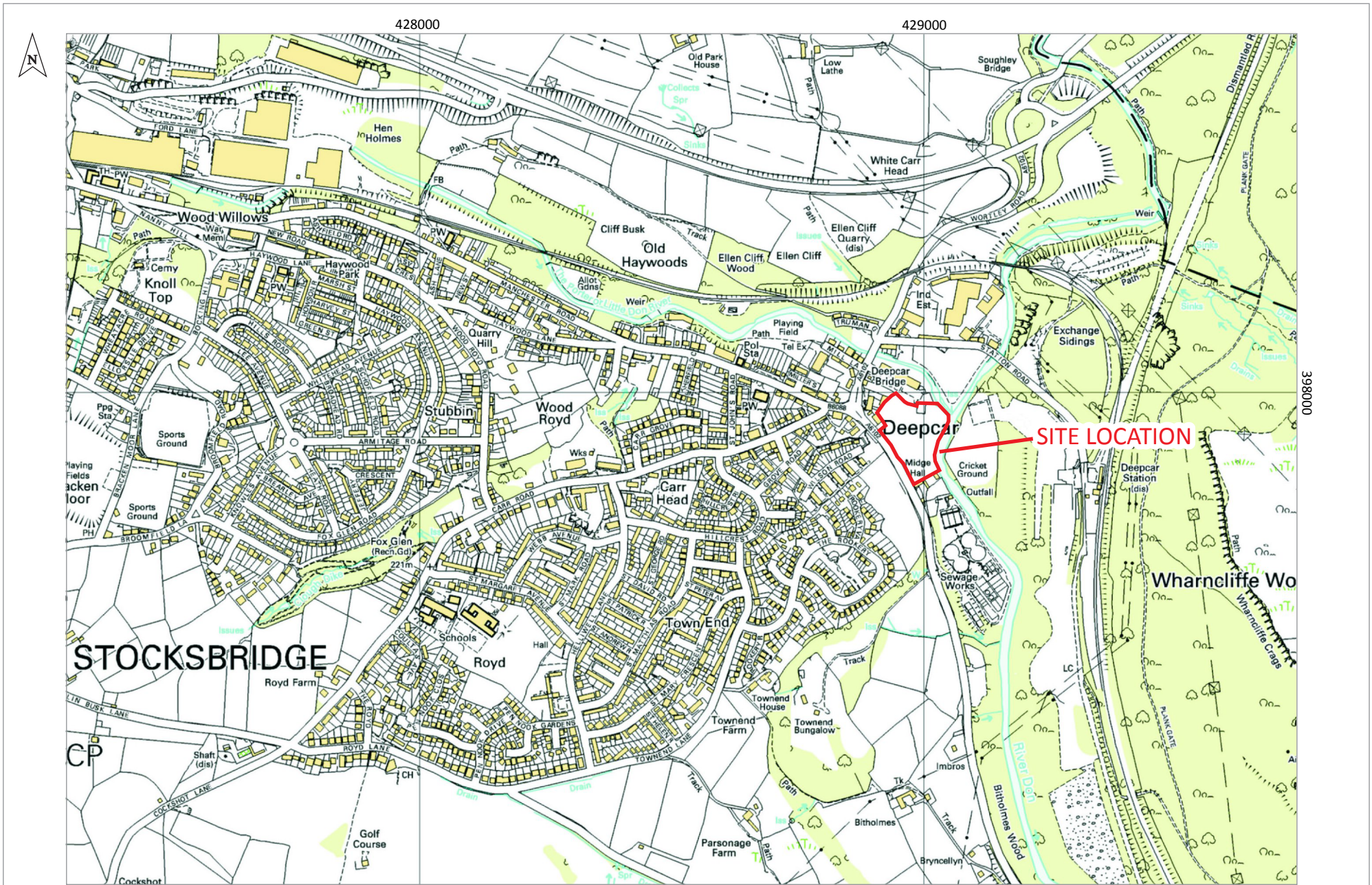
SUMO. 2017. Geophysical Survey Report. Deepcar - Area 1, Sheffield. Unpublished client report.

Walker, C. 2006. Archaeological Desk-based Assessment of Land at Manchester Road, Deepcar, South Yorkshire. Unpublished Northamptonshire Archaeology report 06/077.

See also the website of the ClfA for all Guidance and Standards documentation.  
<http://www.archaeologists.net/codes/ifa>

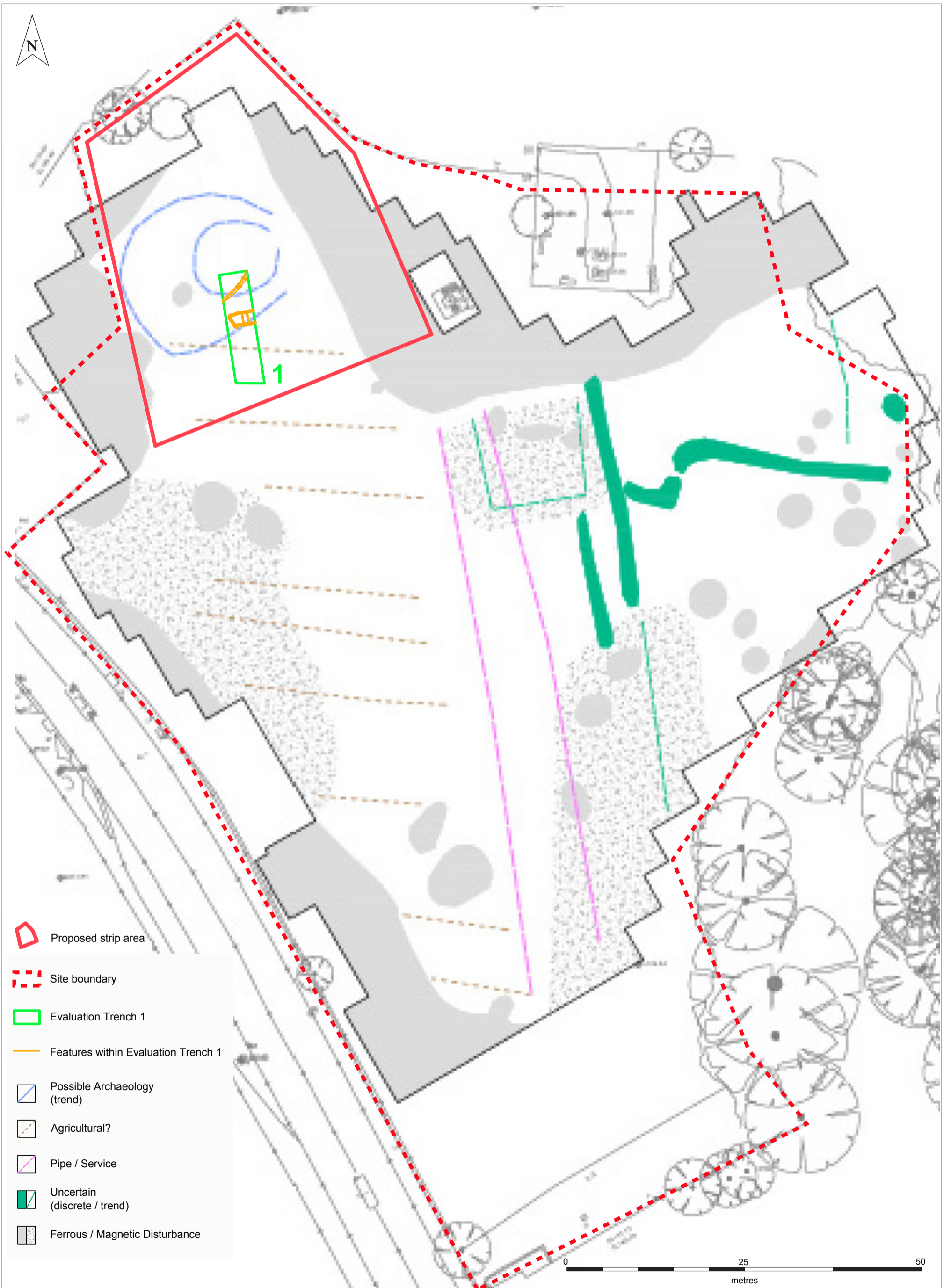
See also the Historic England website for a full list of guidance documents.  
<http://historicengland.org.uk/advice/technical-advice/recording-heritage/>










## FIGURES



OS 1:10,000 map data © Crown Copyright 2010. All rights reserved. Licence no. 100018343.

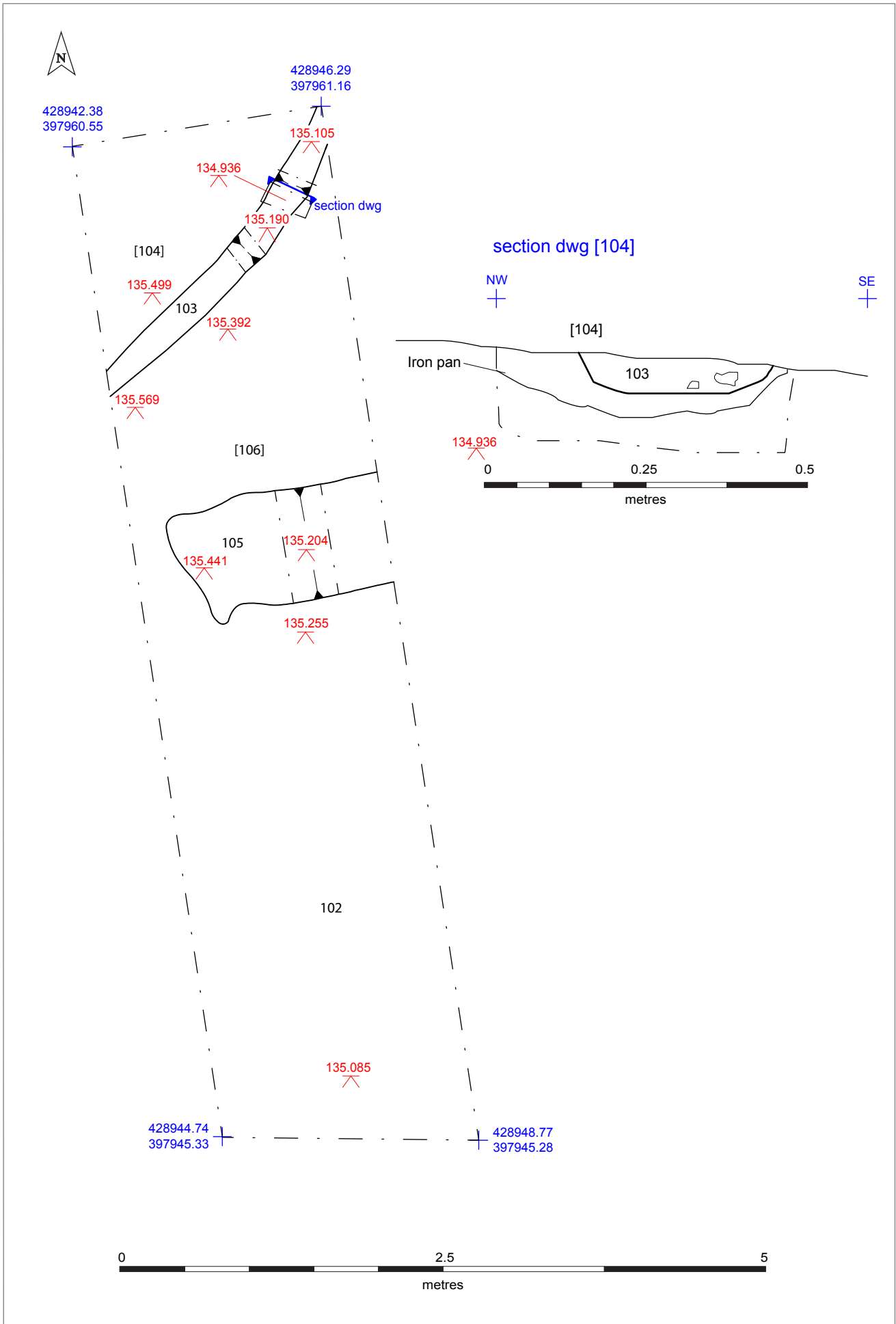
Figure 1: Site location map



-  Proposed strip area
-  Site boundary
-  Evaluation Trench 1
-  Features within Evaluation Trench 1
-  Possible Archaeology (trend)
-  Agricultural?
-  Pipe / Service
-  Uncertain (discrete / trend)
-  Ferrous / Magnetic Disturbance

**Figure 2:** Plan of the proposed strip area, with archaeological features identified within Evaluation Trench 1 overlaid over the results of the geophysical survey





**Figure 3:** Plan of Evaluation Trench 1 and section of feature [104]

# ArcHeritage

54 Campo Lane, Sheffield, S1 2EG

tel: +44 (0)114 2728884

email: [archeritage@yorkat.co.uk](mailto:archeritage@yorkat.co.uk)

[www.archeritage.co.uk](http://www.archeritage.co.uk)

