

**Chris Butler MCIfA
Archaeological Services Ltd**

**Written Scheme of Investigation
for an
Archaeological Evaluation Excavation
at
Manor Nursery, Angmering
West Sussex**

TQ 0765 0425 (centred)

Planning Ref: A38/18/RES

Project No: CBAS1167

By
Chris Butler

May 2020

Chris Butler Archaeological Services Ltd

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1.0 Introduction

- 1.1** Chris Butler Archaeological Services Ltd (CBAS) was commissioned by Roffey Homes (The Client) to undertake an evaluation excavation at Manor Nursery, Angmering, West Sussex (Fig. 1). The purpose of this trial trenching is to establish the likely presence and importance of any archaeological remains that may be affected by the proposed redevelopment of the site (Fig. 2).
- 1.2** The Site is approximately 1ha in size and is located on the east side of Angmering village (centred TQ 0765 0425). The Site is bordered by the A280 on its east side, a new housing development to the south and fields, due for development to the north. The Site lies at a height of c.16m aOD on level ground. The geology of the Site comprises Brick Earth silts overlying Middle Chalk, with the possibility of some alluvial deposits.¹
- 1.3** The site lies immediately to the east of an Archaeological Notification Area (Fig. 3) covering Roman activity, the Site of St Peter's Church, and the Parish Church of St Margaret, Angmering (DWS8503). There are four other Archaeological Notification Areas within 1km of the site. These cover the multi-period features on Highdown Hill to the east of the site (DWS8161), an area of prehistoric and Roman activity to the south of the site (DWS8504), a multi-period settlement site to the south-west of Angmering (DWS8512) and the site of Ecclesden Deserted Medieval Village to the north-east (DWS8160).
- 1.4** An outline planning application for the demolition of the existing Manor Nursery Garden Centre & hard standing & redevelopment for 32No. dwellings with associated access, public open space & landscaping (A/38/18/RES). An Archaeological Desk-based Assessment Report² was prepared for the site, and subsequent advice from Arun District Archaeological Advisor confirmed that a programme of archaeological evaluation comprising trial trenching would be required to identify significant deposits that might be present and to implement appropriate measures for their preservation³.
- 1.5** Condition 12 of the planning consent confirmed the programme of archaeological works required:

Development shall not commence until a programme of archaeological work has been implemented in accordance with a written Archaeological Mitigation Strategy document to be submitted to and approved by the Local Planning Authority. The Mitigation Strategy shall include commitments to:

¹ British Geological Survey

² Pine, et.al. 2014 *Archaeological Desk-based Assessment of Land at Manor Nursery, Angmering*. Development Archaeology Services Ltd

³ J. Kenny 25/7/2018

- *carry out on site archaeological investigation in accordance with an agreed project design;*
- *preserve in situ and intact non-designated archaeological heritage assets that are demonstrably of equivalent significance to scheduled monuments (with reference to Historic Environment guidance in Paragraphs 132, 133 and 139 of the National Planning Policy Framework (March 2012));*
- *fully investigate, record, analyse and report, to a specification to be submitted to and approved by the Local Planning Authority, and to a standard proportionate to their significance, archaeological heritage assets that unavoidably will be affected adversely by development-related ground excavations;*
- *prepare and implement satisfactory procedures to communicate the findings of archaeological investigation to the local community.*

Reason: To ensure the archaeological interests of the site are protected.

- 1.6** This Written Scheme of Investigation (WSI) provides the Archaeological Mitigation Strategy and has been prepared for submission to Arun District Council for formal approval. An addendum to the WSI outlining any additional phase of work at the site (e.g. Strip, Map & Sample) may be required in due course.
- 1.7** The archaeological work will be carried out in accordance with the Chartered Institute for Archaeologists' *Code of Conduct*⁴ and *Standard and Guidance for Archaeological Watching Brief*⁵, *Sussex Archaeological Standards*⁶; and the *Treasure Act*⁷.
- 1.8** The Archaeological Advisor will receive 10 working days notice prior to commencement of fieldwork and that a site meeting/meetings will be agreed. The field officer allocated to the project will be notified to the Archaeological Advisor at least 24 hours in advance of the evaluation excavation commencing. The project timetable is to be agreed with the Client once the WSI has been approved.

⁴ Chartered Institute for Archaeologists 2019. *Code of Conduct*.

⁵ Chartered Institute for Archaeologists 2014. *Standard and guidance for an archaeological watching brief*.

⁶ Chichester District Council, East Sussex County Council & West Sussex County Council 2019. *Sussex Archaeological Standards* 2019.

⁷ UK Parliament 1996. *Treasure Act* 1996.

2.0 Archaeological and Historical Background

2.1 A Desk Based Assessment Report was completed for the site in 2014.⁸ The Desk Based Assessment Report established that the Site had moderate potential to contain archaeological remains, but was written prior to more recent evaluations of adjacent sites (Fig. 4), both of which proved to contain important deposits of archaeological interest, and would no doubt have concluded that the application site has a higher than 'moderate' potential to contain similar deposits. A new HER search has been undertaken (WSHER 2020/075 – Fig. 5). Details of the relevant evaluation excavation are:

2.2 An archaeological evaluation was carried out in 2016 on land at the former West End Nursery, Angmering, in advance of residential development (EWS1724). Ten of the 16 trenches were archaeologically negative. In the remaining trenches, ten archaeological features were identified. The largest number of recorded archaeological features were located in the north-eastern part of the site, which had been subject to less ground reduction than the central area.

2.3 Subsequent excavation identified three phases of activity:

Phase 1: Middle Bronze Age – A pit was identified in the eastern corner of Area B that dated to this period. The pit was sub-circular in plan and measured 0.65m in diameter and 0.30m in depth. The upper fill of the pit contained twenty sherds of middle Bronze Age pottery.

Phase 2: Late Bronze Age / Early Iron Age - A probable gully was identified in the eastern part of Area B running north-eastwards underneath the edge of the excavation area. It was 0.75m wide and 0.40m deep. Its single fill contained six small sherds of late Bronze Age or early Iron Age pottery along with fragments of burnt flint.

Phase 3: Roman - A ditch was recorded in the north-west corner of Area A and the area was extended to reveal more of the feature. Three slots were excavated through the ditch. The feature measured between 1.00m and 1.50m in width and was up to 0.33m deep. Fragments of burnt flint were recovered from its fill, with a concentration towards the terminal end. Sherds of Roman pottery were found in all three slots, along with some residual material dating from the late Bronze Age / early Iron Age and several struck flints.

A gully that had previously been observed during the earlier evaluation, where it had been tentatively dated to the Roman period, was re-excavated. Two further slots were excavated through the feature, but no finds were recovered

⁸ Pine, et.al. 2014 *Archaeological Desk-based Assessment of Land at Manor Nursery, Angmering*. Development Archaeology Services Ltd

- 2.4** An archaeological evaluation was carried out on land south of Water Lane, to the north of the site, and a large number of archaeological features were identified (EWS1934). The evaluation identified the presence of archaeological deposits of later prehistoric date, particularly Late Bronze Age to Iron Age, which appears to have transitioned organically into the early Roman period. The main focus of this activity is centred on a system of rectangular enclosures with associated trackways in the southern and central parts of the site. The evaluation also identified a later phase of high medieval agricultural activity focussed in the western part of the site. The evaluation identified that recent agricultural activity has had a limited impact on sub-surface horizons and it is considered that the potential for deposit survival is strong across the site.

Early Prehistoric: A small assemblage of struck flint was recovered during the evaluation. No large concentration was found, and the material all appeared to be residual in later contexts. The assemblage may indicate transient exploitation of the local environment, as opposed to long term settlement, during these periods.

Middle Bronze Age: Low-level activity for this period was identified by the presence of residual lithic material. However, there is no clear evidence for substantial activity prior to the Late Bronze Age.

Late Bronze Age / Early Iron Age: The earliest cut features identified during the evaluation comprised a northeast to southwest oriented probable ditched trackway; a north-west – south-west aligned ditch, which extended perpendicular from the northern end of the trackway; a broadly east-west aligned ditch; a furnace-type feature and a small pit or isolated posthole. These features were all dated on the basis of diagnostic pottery groups of the Post Deverel-Rimbury tradition (c.1150-600BC) and sherds/groups broadly attributable to the early Iron Age (800-400BC). These features appear to represent the earliest phase of a series of broadly rectangular enclosures, perhaps zones of differing industrial and/or agricultural activity, aligned with at least two northwest oriented trackways. It is thought that salt production accounted for at least some of the industrial activity during this earliest phase of the enclosure system. Possible salt-affected sherds were recovered from an east-west ditch and a furnace-type feature. It may be that the hearth and larger pit which comprised the furnace feature were elements of a saltern, with the large vertical-sided pit serving as an evaporation tank as opposed to a rake-out pit. However, a small quantity of slag and hammer scale was also recovered from the large pit, indicating metalworking was carried out on site and therefore the feature may also be related to metalworking.

Middle / Late Iron Age: Late Iron Age activity is represented by groups of later Middle Iron Age pottery from a pit and from the north-western side of the ditched trackway.

Late Iron Age / Early Roman: Pottery of 1st – 2nd century AD date was recovered from a number of features across the eastern part of the site, including enclosure ditches as well as a number of discrete pit features and extensive deposits of occupation or industrial waste.

Saxon/ Early medieval: a single 6th-7th century residual potsherd was identified during the evaluation within a disturbed deposit within a later medieval ditch or hollow way. This sherd was large and relatively unabraded suggesting that its original context was in close proximity.

High medieval: the evaluation identified a number of ditches which produced ceramic material of generally 13th – 14th century date. These ditches were likely to be part of a medieval field system, associated with a possible east-west aligned hollow way.

- 2.5** Post medieval activity may be associated with Ecclesden Manor, located just to the northeast of the Site (MWS10164). Ecclesden Manor is a 17th century three sided L-Plan loose courtyard farmstead. The farmhouse is detached and set away from the yard.

3.0 Aims and Objectives

3.1 The aims and objectives of the archaeological evaluation excavation are to establish the presence/absence of any archaeological remains on Site and determine their extent, condition, nature, character, quality and date. The results will inform whether archaeological mitigation work is required, which will ensure that any archaeological remains under threat of the proposed development are either excavated and recorded or preserved *in situ* and protected.

3.2 The specific research aims are to identify and record any archaeological remains that may:

1. identify any evidence for the archaeological activity found to the north and south of the site extending onto the site;
2. assist our understanding of the later prehistoric and Roman use of the landscape, especially with regard to settlement and field systems, which may exist on the site;
3. establish any evidence for the Post Roman development of the landscape through to the post medieval period;

4.0 Methodology

- 4.1** The Client shall give CBAS Ltd access to the Site to undertake the evaluation excavation and will provide information about existing services. A CAT scan will be undertaken prior to the excavation of the evaluation trenches and in the event of services being detected, the trenches will be repositioned accordingly.
- 4.2** The 14 evaluation trenches, all measuring 20m long and 2m wide, will be excavated as shown on Fig. 6. The trenches will be excavated under constant archaeological supervision, using a machine fitted with a flat-bladed bucket, in accordance with the *Sussex Archaeological Standards*. In the event of obstructions being encountered, the trenches will be repositioned to avoid them. In the event of any archaeological features being encountered at the edge of the trench which cannot be adequately interpreted, the trench may be extended in any direction in agreement with the Archaeological Advisor.
- 4.3** Excavation will continue until the top of the natural or archaeological deposits are reached, whichever is uppermost. If some trenches need to be excavated throughout to a depth at which the sides of the trench are considered unstable, to reach the natural or archaeological deposits, the sides of the trenches must first be either shored, battered or “stepped back” to allow safe working. Any additional costs of providing a safe working environment is the responsibility of the Client.
- 4.4** A proportion of archaeological features, structures and deposits exposed within the trenches shall be partially excavated by hand. The proportion of features to be sampled within any trench may be increased at the reasonable request of the Archaeological Advisor. In the case of features within a trench, this could be up to a maximum of 100%. Partial excavation will be defined as follows:
- All linear features will be sampled, using a minimum 1 metre wide section;
 - Sampling of linear features to be at 10 metre intervals or totalling 10% of the length of the linear cut feature (whichever is the greater);
 - All discrete features will be excavated, recorded and sampled to sufficiently clarify their date and character;
 - Where three or fewer pits or probable pits, whether or not evidently datable or ancient (excepting evidently modern features - see 4.9), occur in any trench, all those features will be sampled;
 - Priority is to be given to features with more charcoal-rich fills or anticipated dating evidence;
 - Should five or fewer archaeological features of any kind, discrete or linear, be revealed within any one trench, all those features will be sampled; and
 - Where two or fewer buried pottery vessels are present, buried upright or inverted, both should be lifted and removed from site.

- 4.5** The spoil from the excavations will be inspected by archaeologists to recover any artefacts or ecofacts of archaeological interest. A metal detector will be used at regular intervals to scan spoil derived from the excavations. A record will be kept of which deposits/features are detected and the areas in which objects were found. The make and model of the metal detector will be noted in the final report.
- 4.6** Archaeological deposits or features of local, regional or national significance will be reported to the Archaeological Advisor at the earliest opportunity. All finds that fall under the definition of the *Treasure Act 1996* will be reported to the Coroner's Office and to the Sussex Finds Liaison Officer. This includes both precious metals and base metals deemed to be of prehistoric date. Suitable measures will be taken to ensure the security of finds where removal cannot take place (i.e. from within a human burial). The client shall endeavour to preserve any in-situ and intact non-designated archaeological heritage assets that are demonstrably of equivalent significance to scheduled monuments.
- 4.7** Environmental samples will be collected from archaeological contexts deemed to hold potential for environmental analysis i.e. those in which palaeoenvironmental data is potentially preserved and the context is datable. Bulk samples of 40 litres, or the entire context where this cannot be achieved, will be taken from archaeological features for the recovery of macrofossils, including fish and animal bone, plant macrofossils, charcoal and wood, and insects and molluscs. An environmental archaeologist may be consulted to prepare a site-specific sampling strategy in cases where potential for preservation of further palaeoenvironmental data is identified (e.g. microfossils such as pollen and diatoms). The proposed sampling strategy is in accordance with those outlined in the CBAS Environmental Archaeology Manual, which is based on those issued by Historic England and the *Sussex Archaeological Standards*. Advice will be sought from the Historic England Scientific Advisor if necessary.
- 4.8** In the event of human burials (both inhumed and cremated) being discovered, a licence will be required from the Ministry of Justice (in accordance with the Burial Act 1857) before the remains can be lifted. *In situ* inhumations and cremations will, however, only be excavated if they cannot be left undamaged in their place of discovery. Inhumations and cremations requiring lifting / removal from site will be excavated completely. CBAS Ltd will submit details of the procedures for the excavation and recording of burials if these are encountered. The Archaeological Advisor will be notified immediately.
- 4.9** Modern features (i.e. post-1947) will only be recorded cursorily, or not at all, unless of unusual intrinsic significance, or where it is necessary to excavate and record them to indicate their impact on features of archaeological interest. All other revealed features will be cleaned, planned, excavated and recorded in accordance with the *Sussex Archaeological Standards*. Provision has been made for the excavation and recording of any features which are suitable for scientific dating or analysis. The detail and extent of any scientific dating or analysis will be agreed with the Client and Archaeological

Advisor at a site meeting if deposits of this nature are encountered during the works. Advice will be sought from the Historic England Scientific Advisor if necessary.

- 4.10** Ownership of all artefacts recovered during the evaluation excavation will be assigned to CBAS Ltd by the Client until such time as they are deposited in a museum or discarded. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, Conservation Guidelines No 2. On completion of the archaeological post-excavation programme, CBAS Ltd will deposit the site archive and all retained artefacts in a suitable repository, as agreed with the Archaeological Advisor. This deposition will be at the expense of the Client. A site code of MNA20 has been allocated.

5.0 Recording Systems & Scales and Finds Collection Policy

- 5.1** The recording methodology adopted will confirm with industry standards and Section 3, Annexes C and G of the *Sussex Archaeological Standards*. Archaeological features will be recorded at the scale of at least 1:100 in relationship to a fixed point or temporary base lines and related to the Ordnance Survey national grid. Further plans at 1:20 and sections at 1:10 will be drawn as necessary. All plans and sections will be drawn on plastic tracing film.
- 5.2** All relevant trench sections where archaeological deposits and features have been identified and recorded will be drawn, with levels related to the Ordnance Datum. For trenches with only a topsoil/subsoil profile and no archaeological features, a representative section should be recorded with a record of the height of each key horizon at either end of the trench, as well as the ground surface and maximum depths of the trench, and these converted to OD heights.
- 5.3** All features will be photographed in digital format.
- 5.4** The site will be levelled to the Ordnance Datum or from a Temporary Benchmark derived from the Ordnance Survey Benchmark, or by GPS. The position of plans will be located on a copy of the Ordnance Survey base map of 1:2500 scale or greater.
- 5.5** All archaeological features and deposits will be recorded using a standard context record sheet. Soil colours will be recorded by visual inspection and not by reference to a Munsell Colour Chart.
- 5.6** A sample of finds post-dating 1947 will be retained to date deposits and features. Artefacts pre-dating 1947, except as detailed below, will be collected and retained, unless their size and number makes this impracticable. An excavation and on-site retention strategy will be agreed with the relevant specialist. Fire-cracked flint, ceramic building material, burnt clay and iron slag will only be discarded following specialist analysis and on the recommendation of the specialist.
- 5.7** All retained finds will be cleaned, sorted and marked prior to their post-excavation analysis and eventual deposition to the relevant archive or museum. Suitable conservation measures (e.g. packaging with silica gel or with water) will be used to ensure the stabilisation of finds where relevant. Where a higher level of conservation is required, specialist conservator advice will be sought from the relevant specialist.

6.0 Post-excavation Analysis and Report

- 6.1** The post-excavation analysis will follow the requirements of Appendix 1 of the *Sussex Archaeological Standards*. A brief summary report will be prepared on completion of the fieldwork.
- 6.2** The report will be completed within 60 working days of the completion of the monitoring, unless an alternative timetable is agreed with the Archaeological Advisor, and will follow formatting guidelines, as recommended in the Management of *Research Projects in the Historic Environment* (Historic England 2015) and Section 4 and Annex 1 of the *Sussex Archaeological Standards*. A CD containing the report in PDF/A format, a selection of site photographs and GIS shapefiles, when required, will be supplied to the West Sussex Historic Environment Record (HER) and the West Sussex Record Office on approval of the report by the Archaeological Advisor.
- 6.3** All finds analysis is to be carried out by CBAS Ltd in-house specialists or by external specialists. Spot dating of pottery will be employed, where necessary, to inform the onsite methodology. The pottery specialist employed by the CBAS Ltd will be familiar with local pottery types and with a record of publications in the region. The proposed external finds specialists employed include:
- Prehistoric Pottery: Barbara McNee
 - Roman Pottery: Malcolm Lyne.
 - Medieval and Post-Medieval pottery: Luke Barber
 - Ceramic building material: Luke Barber
 - Geological material: Luke Barber
 - Coins: David Rudling.
 - Iron working material: Jeremy Hodgkinson
 - Environmental: Lisa Gray
- 6.4** In the event of complex archaeological features being encountered, a programme of post-excavation analysis will be agreed. If the results are considered sufficiently important, an article will be prepared for submission in the *Sussex Archaeological Collections*, at the expense of the Client.
- 6.5** Agreement will be reached with the Archaeological Advisor to communicate the findings of the archaeological investigation to the local community, which could be through either a contribution to a newsletter or providing a talk, or both where the findings are of sufficient interest.

7.0 Health and Safety

- 7.1** Adherence to standard health and safety requirements, together with any constraints imposed by the Client's health and safety practices, will be paramount. Recording of deep excavations, or which are judged to be unsafe, shall only be undertaken from the ground level, unless the excavations have been stepped or shored, and all necessary health and safety considerations are in place.
- 7.2** In the event of waterlogged deposits being found which have the ability to contain toxins and contaminants, all necessary health and safety measures will be put in place. The risk assessment for the site will contain full details.

8.0 Monitoring and Standards

- 8.1** CBAS Ltd is to allow the Archaeological Advisor, or any designated representative of Arun District Council, to inspect and examine the site's records at any reasonable time, during or after the excavation work.
- 8.2** The project will be managed by Chris Butler who will be responsible for ensuring that the works are implemented correctly in accordance with the following:
1. All statutory provisions and by-laws relating to the work in question, especially the *Health and Safety at Work Act 1974*; and
 2. The Chartered Institute for Archaeologists *Code of Conduct* (2014).

9.0 Insurance

- 9.1** CBAS Ltd is insured for public liability to the sum of £5,000,000 for any one occurrence.

- 9.2** CBAS Ltd is insured for Professional Indemnity to the sum of £500,000 for any one occurrence.





Fig. 2: Proposed development
(adapted from architects drawings)

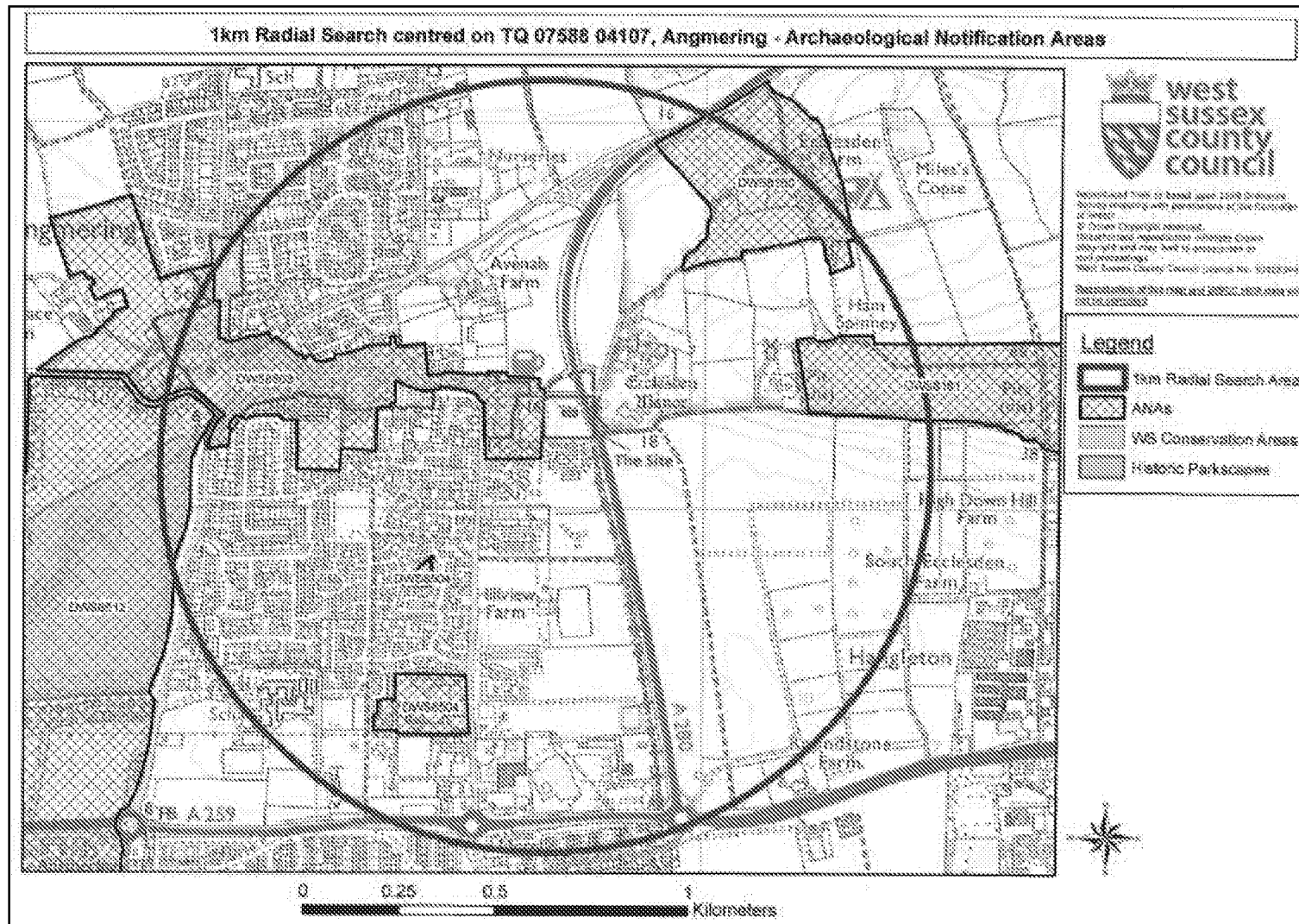
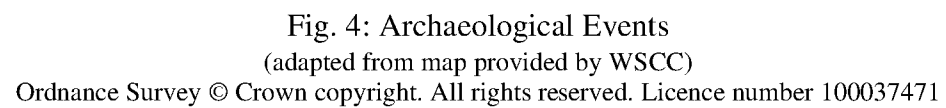


Fig. 3: Archaeological Notification Areas
(adapted from map provided by WSCC)
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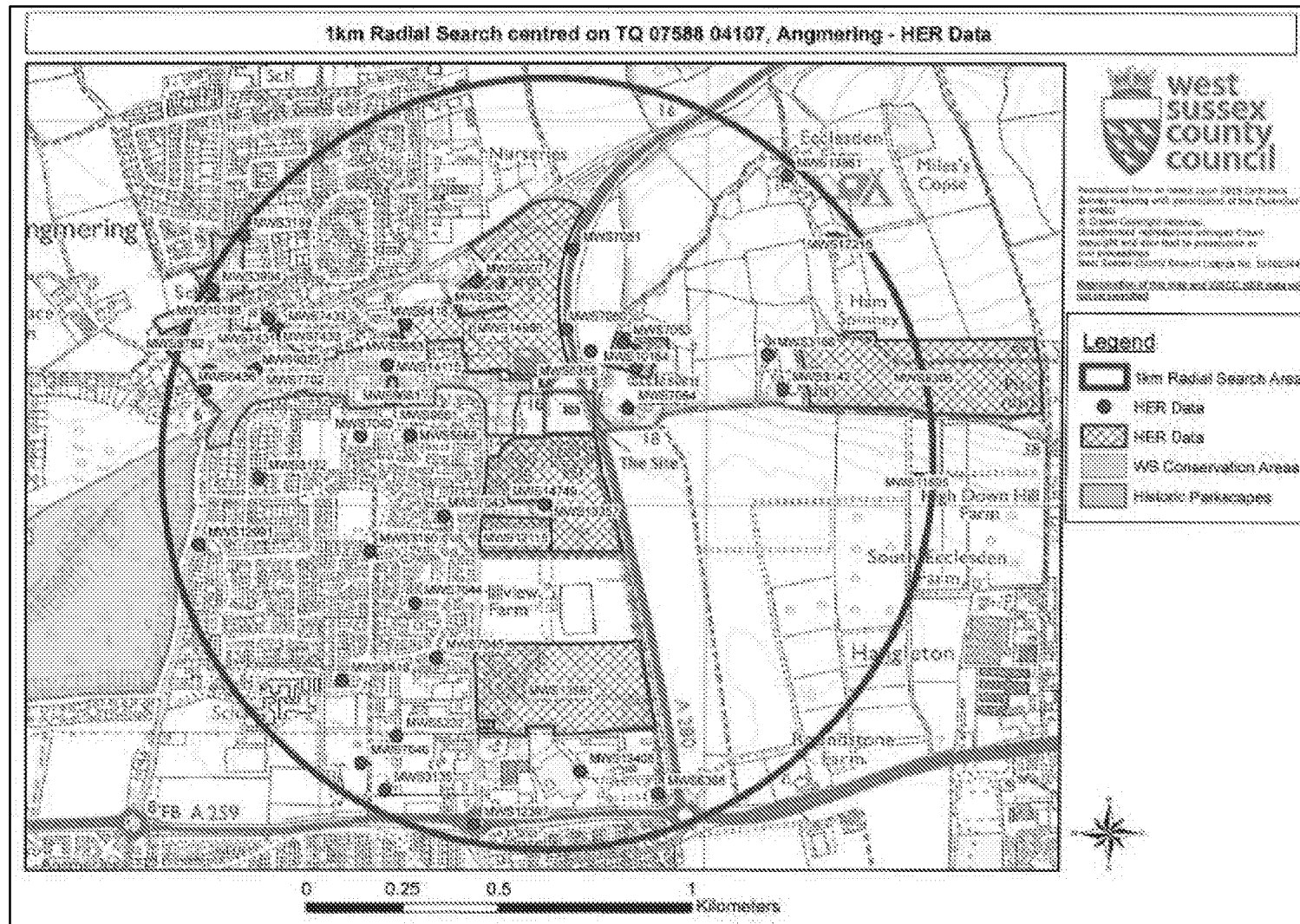


Fig. 5: Sites on the HER
(adapted from map provided by WSCC)
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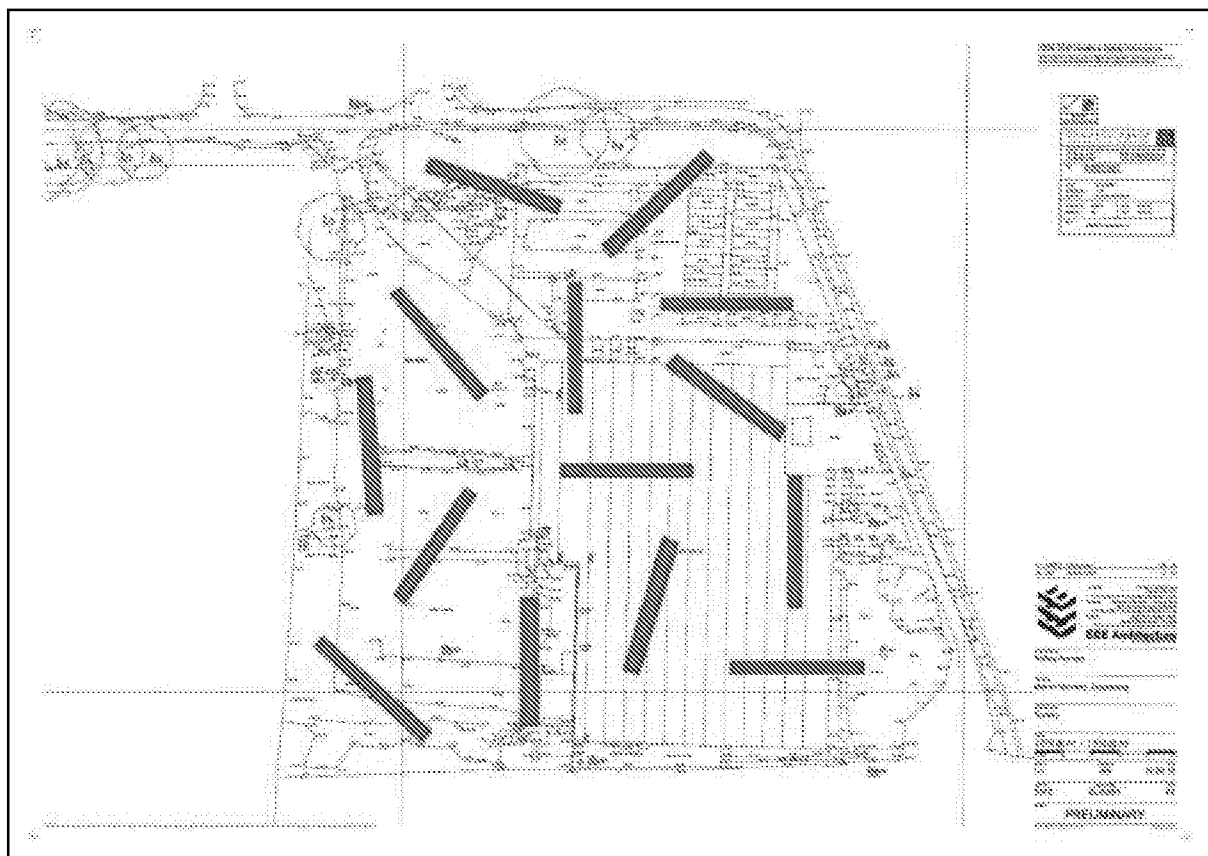


Fig. 6: Proposed trench location plan
(adapted from architects drawings)

Chris Butler Archaeological Services Ltd

Chris Butler has been an archaeologist since 1985 and formed the Mid Sussex Field Archaeological Team in 1987, since when it has carried out numerous fieldwork projects, and was runner up in the Pitt-Rivers Award at the British Archaeological Awards in 1996. Having previously worked as a Pensions Technical Manager and Administration Director in the financial services industry, Chris formed **Chris Butler Archaeological Services** at the beginning of 2002.

Chris is a Member of the Chartered Institute for Archaeologists, and a Fellow of the Society of Antiquaries of London. He was a part time lecturer in Archaeology at the University of Sussex, and taught A-Level Archaeology at Bexhill 6th Form College having qualified (Cert. Ed.) as a teacher in 2006.

Chris specialises in prehistoric flintwork analysis, but has directed excavations, landscape surveys and watching briefs, including the excavation of a Beaker Bowl Barrow, a Saxon cemetery and settlement, Roman pottery kilns, and a Mesolithic hunting camp. He has recently undertaken large landscape surveys of Ashdown Forest and Broadwater Warren and is Co-Director of the Barcombe Roman Villa excavation project.

His publications include *Prehistoric Flintwork*, *East Sussex Under Attack* and *West Sussex Under Attack*, all of which are published by Tempus Publishing Ltd.

Chris Butler Archaeological Services Ltd is available for Flintwork Analysis, Project Management, Military Archaeology, Desktop Assessments, Field Evaluations, Excavation work, Watching Briefs, Building Surveys, Landscape and Woodland Surveys & Fieldwalking, Post Excavation Services and Report Writing.

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