



Land at Cherry Green Lane, Westmill, Hertfordshire SG9 9LF

NGR: TL 36442 26991

Written Scheme of Investigation for Archaeological Monitoring

WSH Ref: J004020

November 2023



Contents

1.0 Introduction 3

2.0 Archaeological Background..... 4

3.0 Research aims and objectives 6

4.0 Method 7

5.0 Excavation and Recording Techniques 7

6.0 Processing and identification of material recovered from excavation..... 9

7.0 Reporting..... 10

8.0 Preparation and deposition of the finds and archive..... 11

9.0 Project Management 11

10.0 Monitoring 11

11.0 Health and Safety..... 11

12.0 Insurance..... 11

Appendices..... 14

Figure 1 Site Location Plan 14

Figure 2: Site Plan as existing 15

Figure 3: Site Plan as proposed 16

1.0 Introduction

1.1 WS Heritage has been commissioned by the site owner, Mr. McInerny, to prepare a WSI for watching monitoring during groundworks at Land at Cherry Green Lane Westmill Hertfordshire, SG9 9LF. The site is centred on National Grid Reference (NGR) TL36442 2699, the location and site boundaries are shown on Figure 1.

1.2 Planning permission (application ref: 3/21/2509/FUL) has been sought at the site (in part retrospectively) for:

- Change of use of land to residential
- formation of hardstanding (in accordance with proposed plan, barring areas of excess hardstanding proposed to be removed, some of which was pre-existing
- Installation of drainage systems
- Fencing along northern boundary and gates at access
- Post & rail fence + laurel planting along eastern boundary

1.3 Having considered the application Hertfordshire County Council's Historic Environment Team (HET) recommended that a condition be attached to planning consent for a programme of archaeological work. Following a consultation with Alison Tinniswood from HET on 20/9/2023 it was agreed that the WSI should be prepared to detail methodology for a programme of archaeological monitoring of intrusive groundworks.

1.4 The minutes of this meeting are summarised here:

1. As the planning application has yet to go to committee (this will probably be included on the October/November planning meeting agenda) the WSI should be drafted to cover the eventuality of approval with a condition for archaeological monitoring and that of refusal with required enforcement for remediation, also under archaeological monitoring. AT agreed to review the draft WSI, this review and subsequent provision of additional comments to be carried out free of charge in this instance.

A suitably worded condition has been provided by the planner covering this case:

"The details within the written scheme of investigation, shall be implemented in accordance with the approved document (document ref: Written Scheme of Investigation – Land at Cherry Green Lane, Westmill, Hertfordshire SG9 9LF NGR: TL 36442 26991L, submitted on 23/11/2023 and prepared by Huw Sherlock MCI(A)). The development shall then be implemented in accordance with the (Written Scheme of Investigation) and retained as such". The archaeological condition shall not be discharged until the programme of archaeological work as set out in the approved Written Scheme of Investigation has been completed, and the required archaeological reports have been submitted to and approved in writing by the Local Planning Authority".

The WSI has been prepared by WS Heritage who will seek to approve a ClfA registered organisation to carry out the fieldwork and subsequent reporting. HCC no longer issue briefs for archaeological work.

2. The WSI should indicate that the approved contractor will provide an updated copy of the approved WSI ahead of work commencing to include a list of all staff members responsible for overseeing or carrying out the work, A data management plan and a list of specialists.

3. The details of the museum that archive will be deposited with was discussed. HS has consulted the latest Hertfordshire Archaeological Archive Standards (issued April 2023) and this indicates that Westmill is covered by Hertford Museum, the relevant curator being named as Sara Taylor. The retained contractor will issue a Fieldwork Notification Form to the museum curator in advance of the fieldwork commencing. The site archive will be prepared to meet the deposition standards as identified in the HERTFORDSHIRE ARCHAEOLOGICAL ARCHIVE STANDARDS document (April 2023).
4. To date the following works have been completed:
 - Formation of hardstanding, mostly in accordance with proposed plan, barring areas of excess hardstanding proposed to be removed, some of which was pre-existing. The hardstanding formed is mostly the southern part of the site.
 - Installation of drainage systems (includes septic tank installation and associated soakaways)
 - Fencing along northern boundary, and gates at access,
 - Post & rail fence + laurel planting along eastern boundary.
7. It was discussed that the WSI should include details of specific methodology to be employed i.e. areas of existing hardstanding to be removed may involve limited use of a breaker/toothed bucket to remove areas of concrete but that further excavation to formation level in areas of open ground or where only rubble/hardcore is present should use a smooth ditching bucket. Archaeological monitoring should also be carried out in areas where new trees are to be planted, depending on the depth and nature of the planting (i.e., if only whips are planted this will not require monitoring but if more mature standard trees are to be planted requiring a substantial hole to be excavated then these will need to be monitored. The area to be stripped to form the road splay will also require archaeological monitoring.

1.5 This document is a Written Scheme of Investigation for the archaeological monitoring which has been submitted to East Hertfordshire Council and Hertfordshire County Council's Historic Environment Team for approval. All works will be carried out in accordance with the current ClfA standards and guidance (ClfA). Any variations to the scope of work will be agreed with the client and HCC's Historic Environment Team prior to implementation.

2.0 Archaeological Background

Geology and Topography

2.1 The following information is drawn from the Hertfordshire HER and the key diagnostic information is summarised for context here.

The Site lies within an Area of Archaeological Significance as defined in the Local plan (Policy HA3, EH 220). No archaeological structures, deposits or finds are known to be directly associated with the site and the archaeological potential is therefore derived from its location. It lies within an area known to preserve sites from the prehistoric to the post medieval periods.

Prehistoric

Cropmarks of an unknown date (HER 2916) but which may relate to Iron Age settlement in the area are known from aerial photography (Aerial Photograph: HCC (General/Archaeology). 1969. Cropmarks of enclosures and linear ditches, Westmill. PNO 3642; Aerial Photograph: CUCAP. Cropmark of rectangular enclosure, Westmill. PNO 3867). This site is situated approximately 800m to the north east. The HER entry reads '*Cropmark of a sub-rectangular enclosure, three sides of which are visible. Dimensions approx. 55m x 30m (incomplete). A small ring ditch abuts the inside of the ditch circuit. To the east is a rectilinear ditch system [224]*'.

Roman

Ermine Street Roman Road runs approximately 900m to the north east and crop marks possibly showing the location of a roman villa are recorded in the Hertfordshire Historic Environment Record (HER 16684) 700m to the north east near Whatbarn Farm (Aerial Photograph: Hertfordshire County Council. HCC vertical photomapping, 2010). The entry in the HER reads: '*Marks in crops show buried cut features which form a pattern of enclosures which may be a Roman settlement or possible villa-like site. These features lie adjacent to two linear features, to their north and south, which may be access ways or boundaries. Tesserae and tiles [1583] have been found in the same field*'.

Given the relative proximity to a major roman road and the existence of roman settlement sites within 1km the site is considered to have a low to moderate potential to preserve roman finds or structures.

Medieval

The Site lies 500m to the west of St Mary the Virgin Church (HER 4262) and the centre of the medieval settlement of Westmill (HER 2568). Westmill Bury, a grade 11* Listed building and the central point of the manor (HER 15955; NHLE 1347548) is known to have Saxon origins. Westmill is listed as a settlement in the Domesday Book, recorded as being in the hundred of Braughing and the county of Hertfordshire. It had a recorded population of 80 households in 1086, putting it in the largest 20% of settlements recorded in Domesday, and is listed under 2 owners in Domesday Book (Domesday Online, accessed 2023).

The site is considered to have a moderate potential to preserve finds and evidence of medieval settlement.

Post Medieval

There are 28 designated heritage assets listed on the National Heritage List England (NHLE) within 500m of the site. Of these 25 are grade 11 listed buildings and 3 are Grade 11*, the majority being vernacular buildings dating from the 16th-19th Centuries.

John Marius Wilson's Imperial Gazetteer of England and Wales 1870-72, gives the following description of Westmill:

'WESTMILL, a parish, with a village, in Royston district, Herts; on the Buntingford railway, 1½ mile S by E of Buntingford. It has a post-office under Buntingford, and a r. station. Acres, 2,137. Real property, £3,190. Pop., 353. Houses, 76. Coles Park and Knights Hill are chief residences. Two Roman cups were found in 1728. The living is a rectory in the diocese of Rochester. Value, £474. Patron, the Countess of Mexborough. The church is plain but good; and has a tower and spire. There is an endowed school with £29 a year'.

Modern

The Site is associated with a farm and has modern concrete hard standing, drainage and hardcore covering most of the area. This will have had a direct impact on the preservation of underlying archaeology. The degree to which these modern intrusions may have truncated the archaeology is unknown.

Previous archaeological investigations

The National Monuments record Excavation Index records 3 previous archaeological interventions within 500m of the site:

- A building recording project was carried out at Westmill Bury cottage: NMR 3501192 (Collins, T & Prosser, L 2013)
- The Sword in Hand Public House, Westmill; Site code: AS868. NMR: 1817674. Monitoring of extension groundworks recorded no significant archaeological activity (Williams, J 2004)
- An archaeological evaluation at Land to the rear of Pilgrims row (Site code: HN1300, HER: EHT8215 NMR: 3513913 revealed: *'a large degree of disturbance in the form of post-medieval and modern activity. Layers of overburden lay directly over the natural and a modern drain and soakaway had impacted into the natural. Two parallel ditches running across the trench at right angles and aligned north-west to south-east were revealed cutting into the natural. Their fills contained charcoal flecks but no finds were discovered. The investigation demonstrated that the area for the proposed development has seen a degree of disturbance from at least the post-medieval period onward. Whilst the ditches were undatable, a study of the existing housing plot layout in Westmill combined with the results of the evaluation suggests that these may relate to property boundaries. On the basis of the results of the evaluation, the risks that the proposed development might disturb archaeological remains of any local significance may be considered to be Low-Moderate for the medieval period and Low for all other periods'* (Phillips, D 2016).

Geology

2.2 The underlying geology of the site is Lewes Nodular Chalk Formation and Seaford

Chalk Formation. Superficial deposits comprise Diamicton of the Lowestoft Formation (BGS 2023).

2.3 The site covers an area of approximately 0.5 hectares and is generally level, averaging at a height of 108 OD.

3.0 Research aims and objectives

3.1 The general aims of the archaeological investigation are as follows:

- To make a record of the presence (or absence) and location, extent, date, character, condition, significance and quality of any surviving archaeological remains.
- To prepare a grey literature report on the site work suitable to meet the requirements of HCC's Historic Environment Team and achieve discharge of the planning condition.
- Subject to the results of the work, to publish the results of the work in a suitable journal.
- To submit the site archive to Hertford Museum and report the details of the project and any findings to the Archaeological Data Service (OASIS).

3.2 Specific research aims of the archaeological work include the following:

- Is there any evidence for Prehistoric activity on the site?
- Is there any evidence for Iron Age or Roman activity on the site?
- Is there any evidence for early medieval, medieval or post medieval activity on the site?

3.3 With reference to Medlycott 2011, the potential of the site to contribute to the following regional research agendas should be addressed in the assessment of the results of the fieldwork:

- Rural settlement in the roman period
- Roman-Anglo Saxon Transition
- Rural settlement in the medieval period

4.0 Method

4.1 A Risk Assessment and Method Statement (RAMS) that is fully compliant with all relevant Health and Safety legislation and ClfA guidance will be prepared prior to commencement of the work.

The Health and Safety site management plan will be circulated to WS Heritage for approval prior to the groundwork commencing and a copy will be held on site for inspection. All members of the archaeological team attending the site will have read the plan and signed a register to demonstrate that they are fully aware of its contents.

4.2 The watching brief work will comprise the monitoring of all groundworks on site, including but not limited to: any ground reduction, landscaping and excavations for foundations and drainage etc. (Figure 2).

4.3 All machine excavation will be undertaken using a suitable back-acting mechanical excavator provided by the client or their contractor and fitted with a wide flat-bladed ditching bucket. The machine excavation will be excavated through undifferentiated topsoil and modern made ground in spits of no more than 0.25m until archaeological deposits are encountered or the top of the underlying natural sediments reached. Care will be taken that archaeological deposits are not damaged due to over machining. All machining will stop if significant archaeological deposits are encountered.

4.4 While a watching brief is designed to cause minimal disruption to a development, the client/contractor will ensure that sufficient time will be granted to the Archaeologist(s) on site to properly excavate and record any archaeological features and/or deposits if they arise.

4.5 Any exposed archaeological features/deposits will then be cleaned by hand and recorded in plan and section.

5.0 Excavation and Recording Techniques

5.1 All hand excavation will be carefully undertaken and will follow the stratigraphy of any encountered archaeological layers, features and/or deposits.

5.2 In certain appropriate situations and should dry site conditions prevail, water will be used to aid the identification of exposed archaeological features and/or deposits to be hand excavated.

5.3 A sufficient sampling of archaeological features and/or deposits will be undertaken in order to determine their nature, date, condition, character and extent. This will comprise at least 10% of the length of linear features such as ditches in sections of up to 2 metres in length and at least 50% (or by half section) of the fills of other discrete archaeological features such as pits, postholes etc. Other specific features such as burials may require 100% sampling if necessary.

5.4 Should any human burials or remains be encountered the client and HCC's Historic Environment Team will be immediately informed. If removal of human remains is unavoidable this will only be done with the appropriate exhumation licence from the Ministry of Justice (<https://www.gov.uk/government/publications/apply-to-exhume-human-remains>).

5.5 HCC's Historic Environment Team and the client will be informed at the earliest opportunity of any archaeological features or deposits potentially worthy of preservation *in-situ*.

5.6 All excavated archaeological features; layers and/or deposits will be planned, photographed and recorded utilising the assigned site code. All excavated contexts; structures, features and deposits will be drawn on plastic film at a scale of 1:20. Additional plans at a scale of 1:10 will be made of specific features where appropriate, such as human inhumations or cremation burials. Sections of all excavated archaeological contexts will generally be drawn at a scale of 1:10, and where appropriate at a larger scale of 1:20. All site drawings will be digitised.

5.7 Bulk soil samples will be collected from datable excavated contexts of buried soils, well-sealed slowly silting features, sealed hearths, sealed features containing evident carbonised remains, peats, well-sealed closed features and water-logged deposits. Soil samples will be taken in accordance with English Heritage Guidelines and be a minimum of 40-60 litres (where possible), or 100% of the context where this is smaller.

A 20 to 30% sub-sample of each will be wet-sieved using 0.5mm meshes. Recovered material will be assessed in order to establish its potential for providing information relating to past environment and human activity. Additional guidance will be sought from the English Heritage Regional Science Advisor as appropriate.

5.8 A metal detector will be used on the site to check all archaeological horizons, fills and spoil heaps.

5.9 A full, digital photographic record will be made of all archaeological features. All photographs, except working shots, will include a board that will detail: the site code, date and context number, a scale and a north arrow.

5.10 All archaeological remains will be recorded and levelled relative to Ordnance Datum by an archaeological surveyor, using DGPS (Differential Global Positioning System) technology. All archaeological features and deposits will be recorded using numbered standard context record sheets and a log will be kept of all context numbers issued. Soil colours are recorded using visual inspection and not by reference to the Munsell Colour chart.

5.11 An ongoing site matrix will be compiled during the fieldwork stage, which will be fully phased during the subsequent post excavation stage.

6.0 Processing and identification of material recovered from excavation

6.1 All pottery, bone and worked flint recovered from the excavations will be washed and marked with the appropriate site code to identify the site and context. Most ceramic and other building material and burnt flint will be identified, counted, weighed and discarded. Samples will be retained as appropriate. Finds will be bagged in polythene bags according to type and context.

6.2 Any unstratified finds from topsoil or other deposits will be collected and recorded in the same way as all other archaeological finds.

6.3 Bulk samples collected from site will be processed using tank flotation unless considered detrimental to the samples or recovery rate (such as for waterlogged samples). Bulk samples will target recovery of plant remains (charcoal and macrobotanicals), fish, bird, small mammal and amphibian bone, and small artefacts. Waterlogged samples will be wet sieved through nested sieves and stored in wet, cool conditions or dried if considered an appropriate form of conservation for the remains. As a general rule waterlogged wood specimens will be recorded in detail in their original location. If removed they will be cleaned, photographed and a thin section sample will be taken for identification. Specimens will either be stored in wet cool conditions or dried if considered appropriate for the material. In all instances deposits with clearly intrusive material shall be avoided.

6.4 All finds will be cleaned, labelled, sorted and analysed in accordance with the practices and standards outlined in the United Kingdom Institute for Conservation's Conservation Guidelines No.2: Guidelines for the Preparation of Excavation Archives for Long Term Storage.

6.5 Adequate arrangements will be made for the conservation of artefacts where appropriate in consultation and with the agreement of the recipient museum. All finds in an unstable condition will be stabilised using passive conservation techniques where appropriate before being deposited.

6.6 The provisions of the Treasure Act of 1996, amended 2003 will be observed. Should finds of precious metals such as gold and silver and other finds as defined under the Act be made, they will be reported to the client with a view to deposition with the Coroner's local Archaeological Advisor.

6.7 The site archive comprising paper, photographic and drawn records as well as finds will be kept in a secure location at all stages of the project.

6.8 The lithic and ceramic finds will be identified by suitably qualified specialists to be identified in an updated version of this WSI by the archaeological contractor commissioned to conduct the work.

6.9 The specialists in the identification and study of the following classes of materials will be identified by the archaeological contractor if necessary and where appropriate:

Prehistoric and Roman pottery

Post-Roman pottery

CBM

Fired Clay

Clay Tobacco Pipe

Glass

Slag

Metalwork

Worked Flint

Geological material and worked stone

Human bone (including cremated bone)

Animal bone (including fish bone)

Marine shell

Coins

Treasure administration

Conservation

Geoarchaeology

Macro-plant remains

Charcoal & Waterlogged wood

Other specialists (e.g. regional, environmental, and scientific dating) as required.

7.0 Reporting

7.1 In the event that no significant archaeological remains are encountered a watching brief report will be prepared within six weeks of completion of the site works.

7.2 The report will contain the following information:

- **SUMMARY:** A concise non-technical summary
- **INTRODUCTION:** General introduction to project including reasons for work and funding, planning background.
- **BACKGROUND:** to include geology, topography, current site usage/description, and what is known of the history and archaeology of the surrounding area.
- **AIMS AND OBJECTIVES:** Summary of aims and objectives of the project
- **METHOD:** Methodology used to carry out the work.
- **FIELDWORK RESULTS:** Detailed description of results. In addition to archaeological results, the depth of the archaeological horizon and/or subsoil across the site will be described. The nature, location, extent, date, significance and quality of any archaeological remains will be described and mapped.
- **SPECIALIST REPORTS:** Summary descriptions of artefactual and ecofactual remains recovered. Brief discussion of intrinsic value of assemblages and their more specific value to the understanding of the site.
- **DISCUSSION AND CONCLUSIONS:** Overview to include assessment of value and significance of the archaeological deposits and artefacts, and consideration of the site in its wider context.
- **APPENDICES:** Context descriptions, finds catalogues, contents of archive and deposition details, HER summary sheet.

- FIGURES: to include a location plan of the archaeological works in relation to the proposed development (at an Ordnance Survey scale), specific plans of areas of archaeological interest (at 1:50), a section drawing to show present ground level and depth of deposits, section drawings of relevant features (at 1:20). Colour photographs of the more significant archaeological features and general views of the site will be included where appropriate.

7.3 A digital copy of the report will be supplied to Hertfordshire County Council's Historic Environment Team for planning purposes.

7.4 Copies of the report will also be submitted to the receiving museum as part of the project archive.

7.5 Immediately before fieldwork commences a record will be initiated for the Online Access to Index of Archaeological Investigations (OASIS) at <http://ads.ahds.ac.uk/project/oasis/UTH> in accordance with the guidelines provided by Historic England and the Archaeological Data Service. This will include the completion of key fields on Details, location and Creators. When the project is complete all parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded pdf version of the entire report.

8.0 Preparation and deposition of the finds and archive

8.1 Permission will be sought from the landowner to deposit the finds and paper archive in an appropriate local museum. All necessary arrangements will be made and all procedures and requirements for the acceptance of finds and archive by the museum will be followed prior to their deposition. The site archive will be quantified, indexed and cross-referenced and checked prior to deposition.

8.2 The full site archive (including finds) will be prepared in accordance with the Hertford Museum guidelines.

9.0 Project Management

9.1 The names of the project managers and all staff attending the site will be included in an updated version of the WSI to be prepared by the archaeological contractor.

10.0 Monitoring

10.1 Provision will be made at all stages of the project for the client and HCC's Historic Environment Team to monitor progress and standards. Adequate provision will be made available for the HCC's Historic Environment Team to make site monitoring visits at agreed and specified times.

11.0 Health and Safety

11.1 A risk assessment for the project will be prepared prior to the commencement of work. All relevant health and safety regulations will be adhered to.

12.0 Insurance

12.1 The archaeological contractor will be insured against claims for:

Employer's liability to the value of £50,000,000; public liability to the value of £50,000,000 any one occurrence and in the aggregate for products liability, with an extension for no fault compensation

WSI for Archaeological Monitoring

up to £50,000,000 in the aggregate; professional indemnity to the value of £10,000,000 any one occurrence.

References

Brown, N. & Glazebrook, J. 2000, Research and Archaeology: A framework for the Eastern Counties 2. Research agenda and strategy. East Anglian Archaeol. Occ. Pap. 8

CIfA, 2020 a Standard and Guidance for the collection, documentation, conservation and research of archaeological materials

CIfA, 2020 b Standard and Guidance for archaeological excavation (revised).

Chartered Institute for Archaeologists

CIfA, 2020c Standard and Guidance for archaeological watching brief (revised).

Chartered Institute for Archaeologists

CIfA, 2020d Code of Conduct (revised). Chartered Institute for Archaeologists

Collins T & Prosser L/2013/Westmill Bury Cottage, Westmill, Buntingford, Hertfordshire: historic building recording/Report No 4425. Archaeological Solutions Ltd [assessment & evaluation reports].

Gurney, D. 2003, Standards for Field Archaeology in the East of England. East Anglian. Archaeol. Occ. Pap. 14

Historic England, 1991 Management of Archaeological Projects 2

Historic England, 2008 Management of Research Projects in the Historic Environment

Historic England, 2011 Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation

Medlycott, M. 2011. Research and Archaeology Revisited: A Revised Framework for the East of England. East Anglian. Archaeol. Occ. Pap.24

Phillips D/2016/Land r/o 3 Pilgrims Row, Westmill, Buntingford, Hertfordshire: archaeological evaluation/Report No 1035. The Heritage Network [assessment & evaluation reports].

Society of Museum Archaeologists, 1993 Selection, Retention and Dispersal of Archaeological Collections, Guidelines for use in England, Wales and Northern Ireland, (1st ed)

Williams J/2004/The Sword in Hand, Westmill, Hertfordshire: archaeological monitoring & recording/Report No 1628. Archaeological Solutions Ltd [assessment & evaluation reports].

Appendices



Figure 1 Site Location Plan





Figure 3: Site Plan as proposed