



WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION

**Vestbirk (Pound Nursery)
Roundstone Lane
Angmering
West Sussex**

October 2014

Planning • Heritage

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1.0 Introduction

- 1.1 This document represents an archaeological Written Scheme of Investigation to undertake an archaeological evaluation on land at the Vestbirk Site (Pond Nursery) Roundstone Lane, Angmering, West Sussex, hereafter referred to as 'the site'. The site is centred at National Grid Reference (NGR) 535158 124294 and its location is shown on Figure 1.
- 1.2 The site is located to the southeast of Angmering town centre and consists of a field currently laid to pasture. The site is bounded to the north by a residential property of Pound Place, to the south by the sports fields of Worthing Rugby Club and by Roundstone Lane to the west. The site lies at around 14m OD. The underlying geology of the site, according to recent data from the British Geological Survey (BGS 2014) consists of River Terrace Deposits of sand, silt and clay.
- 1.3 Planning permission has been granted for the residential development of the site (Planning reference: A/135/12), consisting of the construction of 36 dwellings with associated access roads, services and landscaping. Due to the archaeological potential of the site, as outlined in a prior Desk Based Assessment (L-P: Archaeology 2012), a programme of archaeological works is required as a condition of consent which states:

Condition 13

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:

- 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.

- 1.4 The first stage of such archaeological works will comprise an archaeological trial trench evaluation of the site. This document represents a Written Scheme of Investigation (WSI) which outlines the scope of a Stage 1 archaeological evaluation and will be submitted to WSCC, in their capacity as archaeological advisors to the Local Planning Authority, for approval prior to the commencement of fieldwork. It has been prepared with reference to the relevant *Standards and Guidance* of the Institute for Archaeologists (IfA). All work will be carried out in accordance with these documents (unless otherwise specified below).

2.0 Historical and Archaeological Background

- 2.1 The following summary is drawn from the Desk Based Assessment of the site (L-P: Archaeology 2012). For a complete background, please refer to that document.

Prehistoric

- 2.2 A series of prehistoric sites and find spots are known in close proximity to the site. A multi period site is recorded to the northeast of the site, including a Bronze Age enclosure, with later Iron Age pottery and activity from the Roman period onwards, while a further area of Bronze Age activity is recorded immediately to the west of the site, including a Middle Bronze Age cremation, postholes and a curvilinear (ASE 2002). Limited prehistoric activity is also recorded to the southwest of the site during the excavation of a Roman and medieval site, while a Bronze Age farmstead is recorded to the north of the site. Find spots in the area include finds of Neolithic and Bronze Age adzes to the southwest, a Neolithic flint scatter to the west, a prehistoric flint scatter to the northeast and Late Bronze Age material to the northwest of the site. Overall, the archaeological potential for the later prehistoric periods (Neolithic, Bronze Age and Iron Age) is considered to be high.

Roman

- 2.3 Iron Age pottery and Roman features and finds are known to the northeast of the site, during the construction of the Angmering bypass (Oxford Archaeology 2002), while Roman activity is recorded to the west of the site, including a cremation, a ditch and postholes (ASE 2002). Roman occupation is also recorded to the southwest of the site and a possible Roman road is known approximately 1km to the south of the site and a short stretch of metalled trackway to the west (ibid.). A variety of find spots of Roman material are also known to the north, west and south of the site, including finds of a quern stone, coins and pottery.

Early medieval and medieval

- 2.4 The first reference to Angmering dates to c. AD880 and the town is recorded in the Domesday Book. Evidence for medieval activity within a 1km radius of the site is limited but includes features of this period recorded to the northeast of the site on the Angmering bypass scheme and a medieval ditch is recorded to the southwest. Find spots of medieval material are also known to the south and northeast. The Desk Based Assessment of the site (L-P: Archaeology 2012) concluded that the archaeological potential of the site for these periods is medium to low.

Post-medieval

- 2.5 The site appears to consist of little more than fields throughout the 19th century, as shown on historic maps. although the Grade II Listed Pound House lies to the northwest of the site and a building, known as Pound cottage, is shown on several 19th century maps to lie on the southwestern boundary of the site. Other listed buildings in the wider vicinity include Eccleden Manor and its associated dovecote, as well as a series of listed buildings within the Angmering Conservation Area. Two post-medieval windmills are recorded to the west and northeast of the site, while scattered post-medieval features area also recorded to the west and southwest. The potential for post-medieval features within the site is considered to be low (L-P: Archaeology 2012).

3.0 Research aims and objectives

- 3.1 The general aims of the evaluation are:

- To establish the presence or absence of archaeological remains and deposits within the site which particular focus on the anomalies identified by the geophysical survey
- To determine the survival, extent and minimum depth below modern ground level of any such remains
- To determine the nature and significance of any archaeological deposits
- To enable Mid Sussex District Council to make an informed decision as to the requirement for any further archaeological work at the site

- 3.2 In addition, specific research aims, based on the findings of the South-East Research Framework (SERF) include the following:

Bronze Age and Iron Age

- Is there any evidence for Later Bronze Age land division on the site and can such evidence inform on the long-term history of Bronze Age land division in Sussex?

- Is there any evidence for Later Iron Age occupation on the site and if so, can this inform on the nature of the Middle Iron Age – Late Iron Age transition?

Roman

Is there any evidence for Roman occupation on the site and can this inform on the character of Roman rural settlement and the Roman agricultural economy in the area?

4.0 Methodology

- 4.1 A total of 17 trenches measuring 30m long and 1.8m wide will be excavated across the site, as shown in Figure 2.
- 4.2 The trenches will be accurately located by means of a Digital Global Positioning System (DGPS) and DGPS Total Station (Leica 1205 R100 Total Station, Leica System 1200 GPS or similar). Site constraints may necessitate minor revisions to trench positions but any major revisions to trench positions will be agreed in advance with CgMs consulting and WSCC.
- 4.3 The trench locations will be scanned prior to excavation using a Cable Avoidance Tool (CAT) operated by accredited ASE personnel.
- 4.4 Trenches will be mechanically excavated using a toothless ditching bucket under archaeological supervision. Machine excavation will continue to the top of archaeological deposits or the surface of geological drift deposits, whichever is uppermost. Machine excavation will proceed with caution and in spits of no more than 200mm depth.
- 4.5 Spoil heaps and trench bases will be scanned with a metal detector as will the spoil derived from excavated features.
- 4.6 Once CgMs and WSCC have authorised it trenches will be backfilled and compacted upon completion but no formal re-instatement (e.g. re-turfing, re-seeding, etc.) will be undertaken.

5.0 Excavation and Recording Techniques

- 5.1 Excavation strategy will be in accordance with *IfA Standards and Guidance*. Archaeological deposits/features will be cleaned, recorded and excavated sufficiently to characterise their nature.
- 5.2 All archaeological features and deposits will be recorded using the standard context record sheets used by Archaeology South-East.

- 5.3 Archaeological structures, features and deposits exposed or excavated will be planned in relation to the trench and the trench planned onto a copy of the Ordnance Survey map not smaller than 1:2500 scale. Sections of each trench, or representative sections where uniform deposits are encountered, will be properly drawn and recorded.
- 5.4 Should human remains be discovered on the site CgMs and WSCC will be informed immediately. All statutory provisions will be followed.
- 5.5 Environmental samples will be processed and assessed in accordance *IfA Standards and Guidance*. If deposits suitable for environmental sampling are encountered (such as dated excavated contexts of buried soils, well-sealed slowly silting features, sealed hearths, sealed features containing evident carbonised remains, peats, water-logged or cess deposits), bulk soil samples (40 litres or 100% of smaller features) will be taken for environmental analysis. Bulk samples will target recovery of plant remains (charcoal and macrobotanicals), fish, bird, small mammal and amphibian bone, and small artefacts. Specialist samples may also be taken from dry or waterlogged contexts. Such samples will target recovery of pollen (using monolith tins), molluscs, foraminifera, parasites and insects. Larger samples (80-100 litres) will be extracted wholesale from deposits rich in marine molluscs and large mammal bones. As a general rule waterlogged wood specimens will be recorded in detail in their original location. In all instances deposits with clear intrusive material shall be avoided.
- 5.6 Reasonable access to the site is to be arranged for representatives of the Local Planning Authority and County Archaeological Officer who may wish to make site inspections to ensure that the archaeological investigations are progressing satisfactorily.
- 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 an appropriate 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 The lithic and ceramic finds will be identified by specialists and preliminary identification of faunal remains may be undertaken if the nature of the deposits justifies such study. All finds in an unstable condition will be stabilised using passive conservation techniques where appropriate before being deposited with the receiving museum.

- 6.3 Bulk samples will be processed using tank flotation unless considered detrimental to the samples or recovery rate (such as for waterlogged samples). 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. If waterlogged wood specimens are 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.

7.0 Post-Excavation Analysis, Reporting and Archive

- 7.1 This will follow the requirements of *IfA Standards and Guidance*.
- 7.2 Within four weeks of completion of the evaluation fieldwork a report will be submitted to CgMs for internal review and onward submission to the County Archaeologist. Copies of the approved report are to be provided to:
- the Developer
 - the County Archaeologist
 - the Local Planning Authority
 - the Local Archaeological Society
- 7.3 Report Format - The evaluation report will include as a minimum:
- 7.4 An Abstract summarising the scope and results of the archaeological evaluation.
- 7.5 An Introduction including:
- the location of the site with a National Grid Reference for the centre sufficient to locate the site to 1m accuracy,
 - an account of the background and circumstances of the work;
 - a description of the development proposals, planning history and planning reference together with the archaeological condition (where appropriate);
 - the nature of potential impacts arising from the proposals;
 - the scope and date of the fieldwork, the personnel involved and who commissioned it;
- 7.6 An account of the Archaeological Background of the development site including:
- geology, soils and topography;
 - any known existing disturbances on the site;

- background archaeological potential of the site. This will include a summary of the known Sites and Monuments Record entries within 500m of the boundaries of the site (or wider where appropriate). The SMR entries will be quoted with their full KSMR identifier (e.g. TR 36 NW 12);
 - summary of any previous phases of archaeological investigation at the development site;
- 7.7 The Methodology employed during the evaluation must be detailed in the report. Any aims and objectives specified in the specification will be included as will any further objectives identified during the course of the evaluation. Constraints on the evaluation will also be described.
- 7.8 The report will include a quantification of the project archive contents, their state and future location.
- 7.9 The Results of the evaluation field work will be described trench by trench. This description must include for each trench:
- the dimensions of the trench;
 - the nature and depth of overburden soils encountered;
 - description of all archaeological features and finds encountered in each trench, their dimensions, states of preservation and interpretation;
 - a description of the geological subsoil encountered in each trench;
 - heights related to Ordnance Datum for a sufficient number of features and deposits. Where the trench results are complex a table showing the dimensions and heights of features and deposits will be included for each trench.
 - for complex stratigraphy a Harris Matrix diagram.
- 7.10 The Finds recovered during the course of the evaluation will be described, quantified and assessed by artefact type within the evaluation report. The report will also provide an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report will describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts will also be set out.
- 7.11 The report will include a table showing, per trench, the contexts, classes and quantity of artefacts recovered, together with their date and interpretation.

- 7.12 The evaluation report will include an assessment of the Environmental potential of the site. Details will be provided of any environmental sampling undertaken in connection with the fieldwork and the results of any processing and assessment of the samples. The report will describe the method of processing, any sub-sampling and assessment. Any potential for future analysis of the samples or environmental remains recovered from the evaluation will be described. Implications for future archive, conservation or discard of environmental samples or remains will be detailed.
- 7.13 The report will include, as appropriate, tables summarising environmental samples taken, together with the results of processing and assessment.
- 7.14 Any results from the application of archaeological scientific techniques e.g. specialist dating will be included in the evaluation report.
- 7.15 An Interpretation of the archaeology of the site will be provided, including its location, extent, date, condition, significance and importance. This will be a synthesis of the stratigraphic, finds and environmental results of the investigation and will include, even if no archaeology is identified as present on the site, description of areas of disturbance, non-archaeological deposits and changes in geological subsoil where appropriate. This section of the report will be supported by a phased interpretative plan of the site, clearly showing the major areas and periods of archaeological activity.
- 7.16 An Impact Assessment will consider the potential effects of the development on the archaeological remains. This will summarise the archaeological results, describe how any identified archaeological potential identified relates to the site and how the development proposals will affect that archaeology. The report will highlight any areas of sensitivity within the site. Particular note will be made of any variations in the depth of overburden covering any archaeological deposits revealed.
- 7.17 The Conclusion will summarise the method, results, interpretation and impact assessment.
- 7.18 The evaluation report will assess the potential for preservation at the site to inform decisions about mitigation strategies. It will not include any recommendations on preservation measures or further work unless otherwise agreed with the County Archaeologist.

- 7.19 The evaluation report will include comments on the effectiveness of the methodology employed and the confidence of the results and interpretation.
- 7.20 Figures / illustrations – The report will include sufficient illustrations to support descriptions and interpretations within the report text. Figures are to be fully cross-referenced within the document text. As a minimum the evaluation report will include the following figures:
- a site location plan tied into the Ordnance Survey at 1:1250. The plan will also include at least two National Grid points to 1m accuracy and show the site boundary;
 - trench location plans at an appropriate scale showing the layout of archaeological features, coloured by phases or period. The plan will show the location of all trenches and features. A copy of the plan will be overlain on the proposed development plan where this is known. Where possible, projection of archaeological features outside of the trench areas will be included on the plan. This plan will also include two National Grid points;
 - plans of the features revealed in each of the trenches at a larger scale e.g. 1:20 or 1:50; such plans are to also illustrate areas of disturbance, change in subsoil and location of sections; The location of significant finds and samples taken will also be indicated;
 - relevant section drawings and trench soil profiles as appropriate;
 - illustrations and/or photographs of significant finds.
- 7.21 All report illustrations will be fully captioned and scale drawings must include a bar scale. Standard archaeological drawing conventions must be used. Plan and section illustrations must include the numbers of all contexts illustrated. North must be included on all plans and will be consistent. Sections must indicate the orientation of the section and the Ordnance Datum height of the section datum.
- 7.22 Black & White or Colour photographs will be included to illustrate key archaeological features, trenches and site operations. All photographs will be appropriately captioned.

8.0 Project Management

- 8.1 This project will be overseen by Matthew Smith MIfA of CgMs and projected managed by an appointed archaeological contractor.

9.0 Health and Safety

- 9.1 Health and Safety must take priority over archaeological requirements. It is essential that all projects be carried out in accordance with safe working practices and under a defined Health and Safety Policy. A Risk Assessment for the project will be prepared prior to the commencement of work and all relevant health and safety regulations will be adhered to.

10.0 Preparation and deposition of the finds and archive

- 10.1 The site archive will be assembled in accordance with the guidelines set out in English Heritage's Management of Archaeological Projects 2 and in accordance with the guidelines published in *Guidelines for the Preparation of Excavation Archives for Long-term Storage* (United Kingdom Institute for Conservation, 1990) and *Standards in the Museum Care of Archaeological Collections* (Museums and Galleries Commission, 1994).
- 10.2 Until such time as there is a repository for site archives the primary and finds records from the site will reside at ASE's Portslade offices.

11.0 Public Communication

- 11.1 The scale of public communication will be dependent on the quality of the results of the archaeology and will be agreed between CgMs and WSCC.

References

ASE 2002. Archaeological Investigations at Roundstone Lane, Angmering, West Sussex. Archaeology South-East, unpublished archive report, project number 1333.

Archaeology South-East, 2007 *Post-Excavation Manual 1: Finds and Environmental Deposition and Processing Guidelines*

BGS 2014 <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> accessed 6th June 2014

English Heritage, 1991 *Management of Archaeological Projects 2*

English Heritage, 2008 *Management of Research Projects in the Historic Environment*

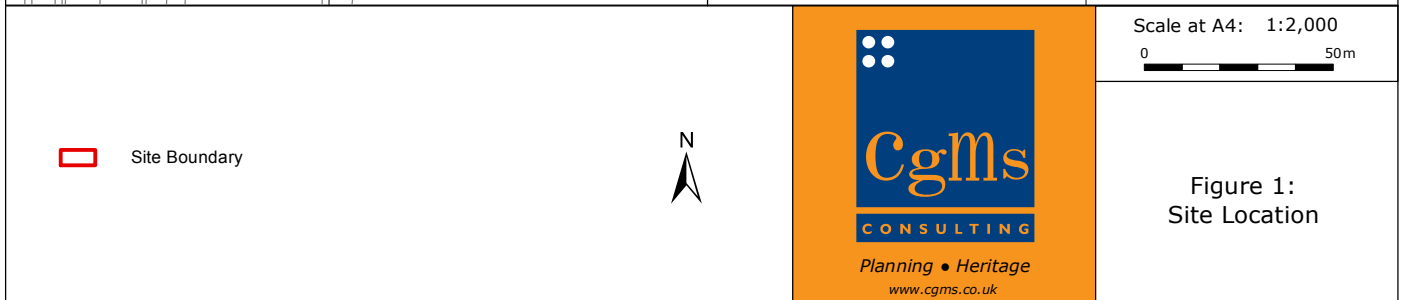
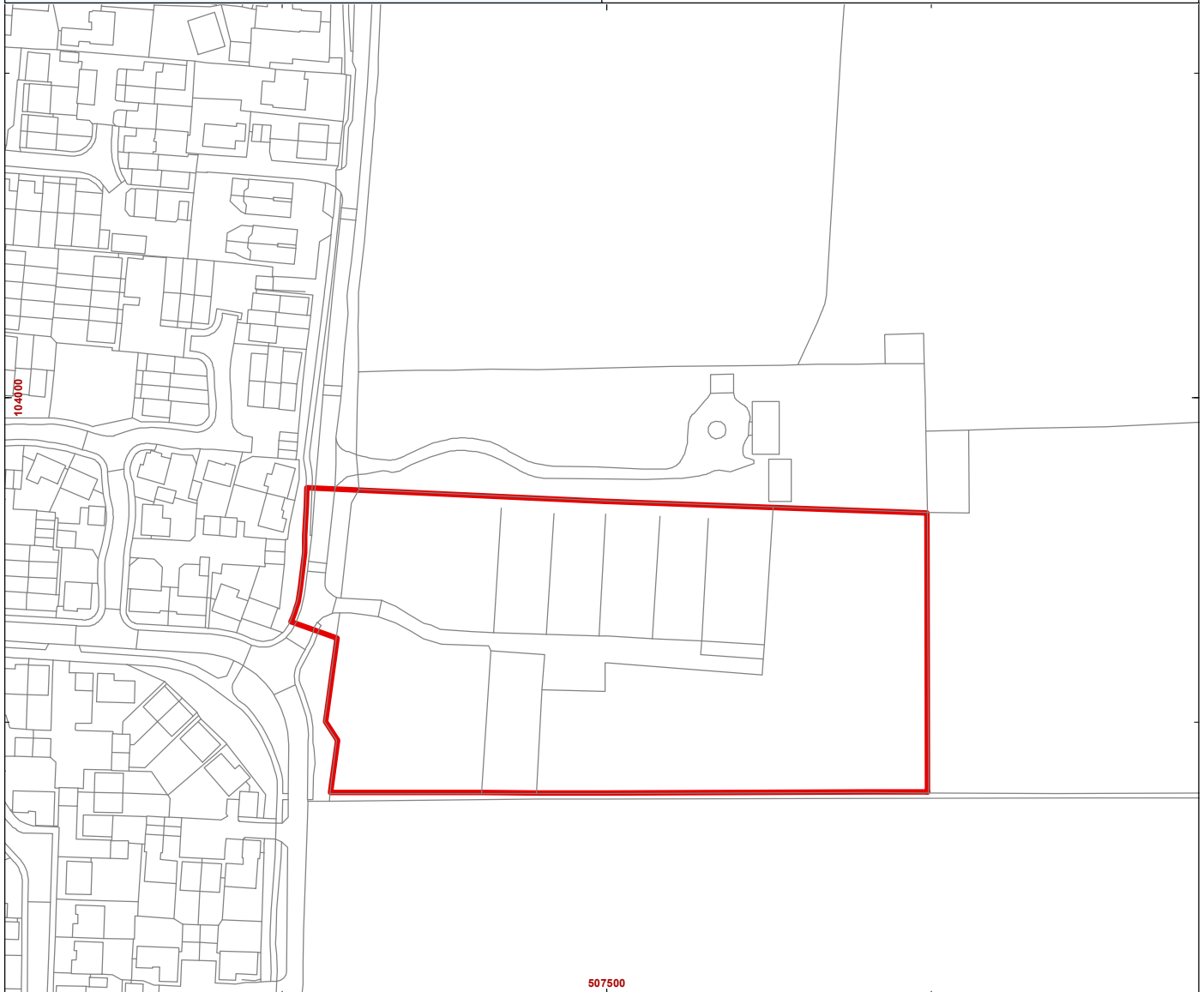
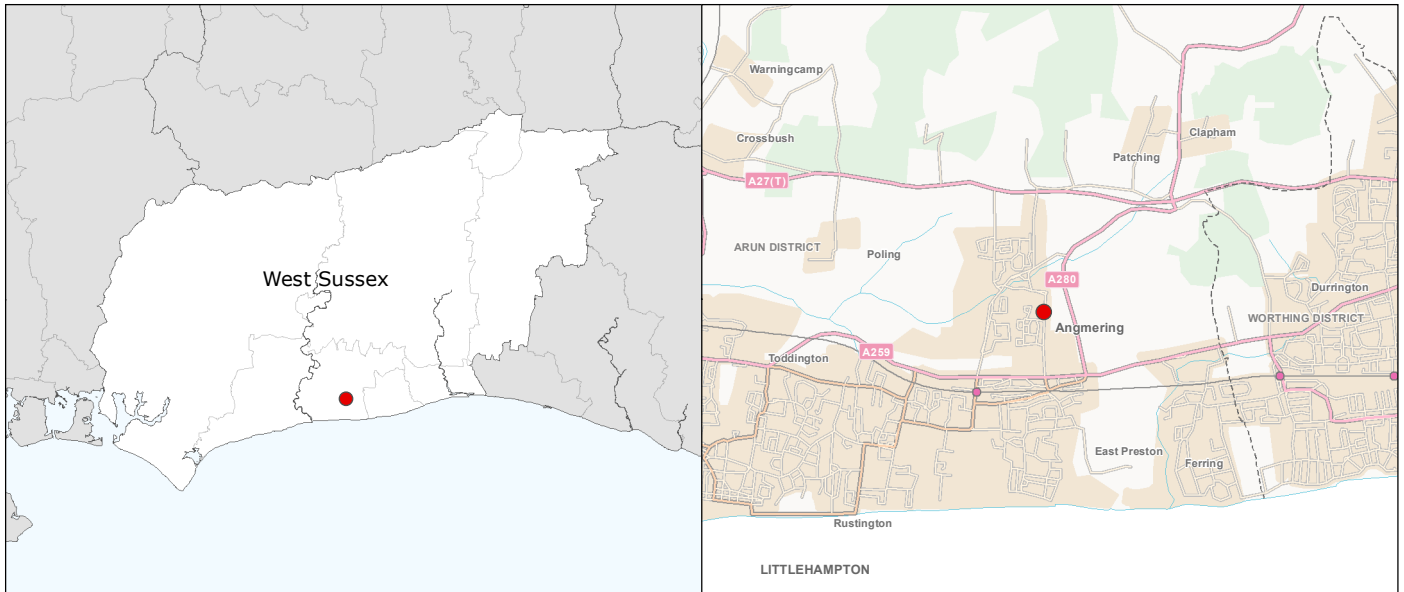
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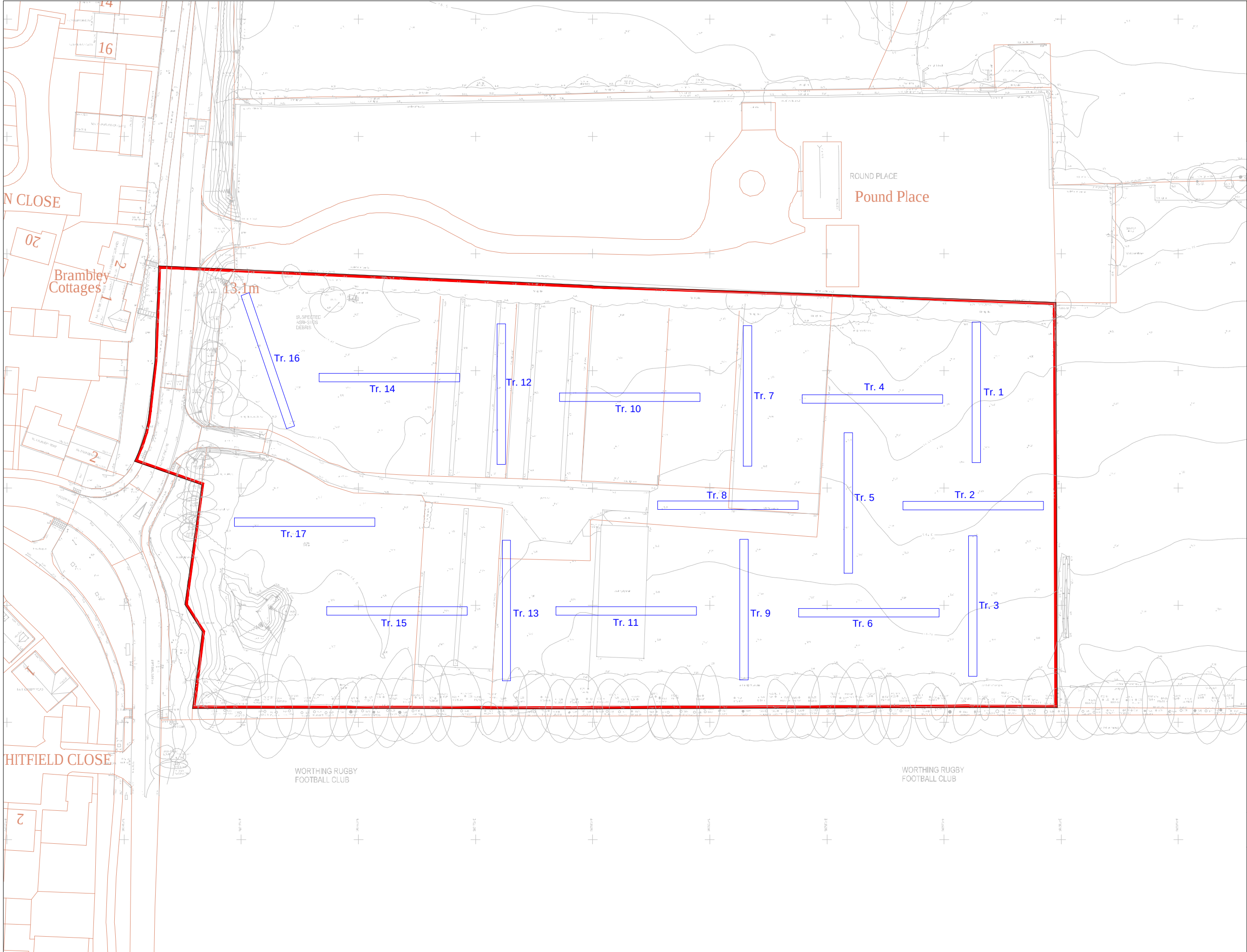
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Society of Museum Archaeologists, 1993 *Selection, Retention and Dispersal of Archaeological Collections, Guidelines for use in England, Wales and Northern Ireland*, (1st ed.)







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Site Boundary

Proposed Trench Location



Scale at A3: 1:750

0 20 m

Proposed Trench
Location Plan

Cgms

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