

**Land East of Tye Lane, Walberton, West
Sussex, BN18 0PF**

**Written Scheme of Investigation for
Archaeological Excavation**

NGR 497321 106228

Arun District Council (WA/44/17/OUT)

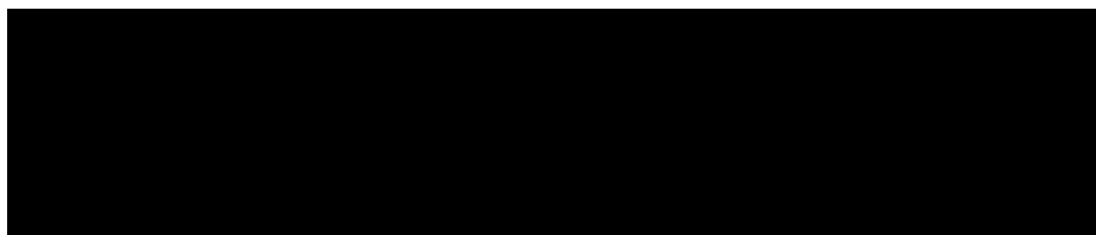
ASE Project no. 190138

Site Code: TYL18

March 2019

Prepared by Paul Mason

**Archaeology South-East
Units 1 & 2
2 Chapel Place
Portslade
East Sussex
BN41 1DR**



Land East of Tye Lane, Walberton, West Sussex, BN18 0PF

Written Scheme of Investigation for Archaeological Excavation

NGR 497321 106228

Arun District Council (WA/44/17/OUT)

ASE Project no. 190138

Site Code: TYL18

March 2019

Prepared by:	Paul Mason	Project Manager	
Reviewed and approved by:	Jon Sygrave	Project Manager	
Date of Issue:	March 2019		
Version:	1		

1.0 INTRODUCTION

- 1.1 Archaeology South-East (ASE) has been commissioned by Linden Homes to produce a Written Scheme of Investigation for an archaeological excavation on land east of Tye Lane, Walberton West Sussex, hereafter 'the site' (centred on NGR 497321 106228; Fig. 1).
- 1.2 The site consists of a large irregular arable field lying directly to the north of Walberton village, and a small parcel of land to the north-east providing access and previously forming part of a golf green. Measuring approximately 11.3ha the site slopes gently down to the south. It is bounded to the west by Tye Lane, to the south by residential properties, Walberton and Binsted C of E Primary School, the cricket pitch and Avisford Park Road. It is bounded to the east by residential properties and the Yapton Road (B2132), and to the north by Avisford Park Golf Club (Figure 2).
- 1.3 According to the latest data available from the British Geological Survey the underlying bedrock geology at the site is London Clay Formation of clay silt and sand with overlying superficial deposits of River Terrace Deposits consisting of sands, silts and clays (BGS 2018).
- 1.4 Outline planning permission has been granted by Arun District Council for the erection of 175 dwellings and associated access, parking and services (planning reference WA/44/17/OUT). The archaeological condition is as follows:

34. No development shall take place within the area indicated until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the local planning authority

Reason: The site is of archaeological significance in accordance with Arun District Local Plan Policy GEN7. It is considered necessary for this to be a pre-commencement condition because archaeology can only be investigated before construction commences.

- 1.5 An archaeological trial trench evaluation of the site revealed archaeological features spanning the Neolithic to post-medieval periods (ASE 2019). Dialogue with the Archaeological Advisor to Arun District Council confirmed that further mitigation works are required.
- 1.6 This document represents a Written Scheme of Investigation (WSI) for the subsequent archaeological mitigation of the site. It has been prepared in accordance with relevant Standards and Guidance of the Chartered Institute for Archaeologists (CIfA 2014a; 2014b; 2014c). All work will be reported upon in line with guidelines set out in Management of Research Projects in the Historic Environment (MoRPHE; Historic England 2015). It will be submitted to all parties for approval prior to the commencement of work at the site.
- 1.7 All work will be carried out in accordance with the *Sussex Archaeological Standards* (WSCC, ESCC, CDC 2015) which outlines the methodology to be used in the field, and in reporting and archiving of the results. The project will

be managed by Paul Mason (Project Manager) and by Jim Stevenson (Post-Excavation Manager).

2.0 ARCHAEOLOGICAL BACKGROUND

- 2.1 The following background is paraphrased from an archaeological desk-based assessment that was previously prepared for the site (ASE 2017), supplemented with the results of the evaluation (ASE 2019).
- 2.2 Prehistoric worked flint has been found in the vicinity of the site including a flint arrowhead, a Neolithic axe and a Mesolithic site has been identified a short way north of the site at Avisford House though the HER does not elaborate on its nature. The HER has not produced evidence of Bronze Age occupation within the study area. There is evidence of Iron Age and Iron Age – Romano-British occupation of the landscape in the form of pottery retrieved to the south and the north-east and Iron Age earthworks to the east of the site.
- 2.3 A Roman corridor villa has been excavated to the south-east of the site, occupied from the mid first to fourth centuries, and a wider agricultural landscape with features such as field boundaries and trackways may extend beyond this. Further significant Roman activity is located to the north of the site at Stonyfield Farm, the area noted for Roman occupation debris and a Roman Cist Burial unearthed in 1817 containing a single cremation and grave goods. A Roman brick has been identified at Walberton Church.
- 2.4 The Manor of Walberton was owned by ‘three free men’ in 1066, the land being valued at £10. The manorial centre was located to the south of the village, in the vicinity of Walberton House. Three early medieval sites area recorded within the study area:
 - Pre-Conquest gable cross – Walberton;
 - Pre-Conquest grave slab – Walberton; and
 - 15 Graves, St Mary's Church.
- 2.5 The medieval settlement at Walberton was a large one, and both St Mary’s Church and the Parish Church of St Mary are of medieval origin. Old Hall Cottage, to the south of the site, is likely the oldest secular building in Walberton, comprising a former two-bayed late medieval hall. The site formed part of an open field system.
- 2.6 In the post-medieval period the village expanded along The Street east and west from its historic core. The site is shown on historic mapping to have been enclosed from an early date, as early as 1630. The field system shown on the mapping suggests how earlier medieval open field strips were enclosed and gradually amalgamated through the post-medieval period, resulting in the existing modern, amalgamated field system. Eighteen post-medieval sites are also recorded – primarily historic structures or farms shown on historic mapping and since lost (refer to DBA).

Recent evaluation

- 2.7 Seventy-one trenches were excavated across the site area in February 2019 (ASE 2019). These revealed archaeological features spanning the Neolithic to post-medieval periods.
- 2.8 Earlier prehistoric activity was represented by a large number of worked flints noted in the plough soil, dating from the Neolithic to early Iron Age period. One early Neolithic pit was present in Trench 6 and two pits and two ditches of Late Neolithic/Early Bronze Age period were also present.
- 2.9 The Middle Bronze Age period was represented by two pits and three ditches, with one pit producing pottery of Deverel-Rimbury tradition. Pottery of the same period was also encountered residually in later Roman features. An urned cremation of probable Bronze Age date was recorded and left in situ in Trench 69.
- 2.10 Middle to Late Iron Age evidence was apparent in the eastern part of the site where two ditches and a cobbled trackway were recorded in Trench 31.
- 2.11 Activity from the Late Iron Age/Early Roman period was noted in the eastern and in the north-western parts of the site. Nine ditches and several cut features, interpreted as pits were recorded. Possible waste pits associated with industrial activity were also recorded. Evidence dating to the Late Roman period was recorded in Trench 2 in the form of one ditch and multiple intercutting pits. The assemblage of ceramic building material recovered from these features, including a box flue tile, suggest the presence of a building in the vicinity, likely outside the limits of the site.
- 2.12 Two medieval ditches were recorded. One ditch matching a post-medieval field boundary was identified. 19th to early 20th century activity was also noted in the form of a pit containing discarded material.
- 2.13 A probable trackway was aligned N-S in the western part of the site through Trenches 2, 10 and 34. It was undated, but Roman features were present in close proximity

3.0 RESEARCH AIMS AND OBJECTIVES

- 3.1 The general aims of the archaeological investigation are as follows:
- To excavate and record all archaeological remains and deposits exposed in the excavation with a view to understanding their character, extent, preservation, significance and date before their loss through development impacts
 - To refine the dating, character and function of the deposits at this site.
 - To make the results of the investigation publicly accessible through publication, the submission of a report to the East Sussex Historic Environment Record and the project archive to the local museum

3.2 Site-specific research aims are proposed below with reference to the South-East Research Framework (SERF):

- The evolution of settlement: despite (or because of) the rapid accumulation of new evidence, there are major problems such as the long-term history of the land divisions laid out in the MBA/LBA; the problem of MIA settlements; the hiatus between earlier sites and those of the LIA.
- The transition to the Late Iron Age: how are we to understand the important changes from MIA to LIA, including the emergence of a southern kingdom centred on West Sussex? What was the role of Kent and Surrey with regard to the emerging political structure of South-East England?
- Evidence for transition from Iron Age to Roman land use and / or settlement
- The relationship of Roman villa and non-villa settlements to each other and to the landscape
- Roman communications: complete the main road network; gather all vehicle evidence
- A consideration of the interaction between town and country in the medieval period
- An understanding of the multifaceted landscape in the post-medieval period

4.0 METHODOLOGY

4.1 Six excavation areas (totalling c.2.88ha) will be set out using differential GPS in the locations shown on Figure 2 to target the principal concentrations of archaeological remains recorded during the evaluation:

- Area A (8790 sq m) targeting Roman features in the north-eastern part of the site and the undated trackway. This area also takes in a Neolithic pit in Trench 6
- Area B (16965 sq m) targeting prehistoric and Roman features along the northern boundary of the site and in its north-eastern corner
- Area C (1570 sq m) targeting probable prehistoric and Roman features in Trenches 24 and 39
- Area D (900 sq m) targeting prehistoric features in Trenches 49 and 50
- Area E (530 sq m) targeting prehistoric and Roman features in Trench 55
- Area F (25 sq m) targeting the cremation urn in Trench 69

4.2 A contingency for expanding the above areas is in place should significant remains extend beyond the initial strip.

4.3 In addition to the above, a strip, map and sample exercise will be undertaken when access into the site is formed from Yapton Road.

4.4 Removal of topsoil and subsoil will be undertaken using a tracked mechanical excavator fitted with a toothless ditching bucket under the direct supervision of an archaeologist. Deposits will be removed in spits no greater than 200mm in thickness. Machine excavation will be carried down on to the top of archaeological deposits or the surface of natural deposits, whichever is

uppermost. Care will be taken not to machine off seemingly homogenous layers that may include the upper parts of archaeological features. A metal detector will be used throughout the programme of topsoil/subsoil removal and a log of its use will be kept. The resultant surfaces will be cleaned as necessary and planned.

- 4.5 Once the machine strip of the area(s) is complete a fixed site grid will be established relative to Ordnance Datum using a Total Station and/or survey grade Global Positioning System (GPS). A full pre-excavation plan will be prepared as the stripping progresses using Global Positioning System (GPS) planning technology in combination with Total Station surveying. This will be available to the Project Manager, the Supervisor and the Archaeological Advisor. This pre-excavation plan will be available in AutoCAD or PDF format and will be printed at a suitable scale (1:20 or 1:50) for on-site use. The plan will be updated by regular visits to site by the Archaeology South-East Surveyor who will plot excavated features and record levels in close consultation with the Supervisor and/or the excavators. Where it is deemed necessary (for example detailed structural features or burials) features will be hand planned at a scale of 1:20 from the grid and then digitised to be included on the overall plan.
- 4.6 After the cleaning and planning of the excavation area a sample excavation strategy will be agreed with the Archaeological Advisor at regular on-site meetings. The following sampling strategy will be employed:
- 50% of intrusive non-structural features (pits, random postholes).
 - 10-25% of each linear feature's exposed area and all terminals & intersections to define relationships.
 - 50-100% of structural features (beamslots, ring ditches,) 50-100% investigation for debris areas, collapsed structures, walls.
 - Structurally associated postholes will be ½ sectioned initially, recorded and then fully excavated.
 - All structures and zones of specialised activity (e.g. funerary, ceremonial, industrial, agricultural processing) will be fully excavated and all relationships recorded as required.
 - The extent of excavation of any layers will be agreed on-site with the Archaeological Advisor. The factors governing the judgement will include the possibility that they mask earlier remains, the need to understand function and depositional processes, and the necessity to recover sufficient artefacts to date the deposit and to meet the project aims.
 - Consideration will be given to employing the single context recording system if remains are sufficiently complicated. The stratigraphy here is unlikely to require this, although this will be kept under review.
 - for other types of feature such as working hollows, quarry pits etc., all relationships, as a minimum, will be ascertained and the level of sample excavation agreed with the Archaeological Advisor in order to establish their extent, date and function.
 - 100% of domestic/industrial working features (hearths, ovens).
 - The above will be subject to review, and specific sample percentages decided at weekly site meetings between the Archaeological Advisor and ASE taking into account results as the work progresses.

- 4.7 All excavation work will be carried out in line with the relevant ClfA guidance documents (ClfA 2014). The site work will be directed by a suitably qualified and experienced field archaeologist.
- 4.8 Should any human burials or remains be encountered the Archaeological Advisor and the Coroner's Office will be immediately informed.
- 4.9 The provisions of the Treasure Act of 1996 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 local Coroner and then deposited with the Coroner's local Archaeological Advisor. Should the removal of such objects be unable to be made during the same working day, suitable and appropriate security arrangement will be made to deposit them with the local Coroner's Office.
- 4.10 The Archaeological Advisor will be informed at the earliest opportunity of any archaeological features or deposits worthy of preservation. They will be free to visit the site at any time during the work in order to view the fieldwork whilst it is in progress.

5.0 RECORDING AND ANALYSIS

- 5.1 All exposed features will be recorded according to current professional standards using the standard context record sheets and masonry sheets used by ASE employing a single context recording system.
- 5.2 All structural and other relationships will be recorded and a structural matrix created.
- 5.3 A full photographic record will be made of all significant archaeological features comprising digital, monochrome prints and colour transparencies. All photographs will include a board that will detail: the site code, date, context number, section number, a scale and a north arrow. All photographs will be fully indexed and cross-referenced on ASE context sheets and photographic registers.
- 5.4 Detailed elevation and/or section drawings will be hand-drawn at 1:10 on plastic draughting film (permatrace).
- 5.5 The pre-excavation plan will be updated by an Archaeology South-East Surveyor who will plot the features and record levels and drawn section and/or elevation locations in close consultation with the archaeological supervisor. Where it is deemed necessary, for example with very detailed structural features, then features, or parts of features will also be hand planned at a scale of 1:20 on permatrace using a planning frame. Any hand planned elements will be located on the site grid and then digitised in AutoCAD to be included onto the overall plan.
- 5.6 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 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.

- 5.7 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. 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. 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 clear intrusive material shall be avoided.
- 5.8 Following discussion with the Archaeological Advisor provision will be made for scientific dating (e.g. C14, archaeomagnetic) of specific contexts should this be deemed appropriate.
- 5.9 The exact level and detail of recording will meet the standards defined above, but will remain flexible and will be reviewed regularly with the ESCC Archaeologist on-site.

6.0 POST-EXCAVATION METHODOLOGY AND REPORTING

- 6.1 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 UKIC 1990). 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 Suitable 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 with the local museum.
- 6.3 The majority of finds will be identified by in-house specialists within Archaeology South-East (as listed below). Any external specialists utilised work regularly with ASE and are regional specialists in their field. All material will be examined with particular attention to datable artefacts, such as lithics, pottery, building material, coins and other metalwork.
- 6.4 The following specialists will be used if necessary and where appropriate:

Prehistoric pottery	Louise Rayner (ASE)
Roman pottery	Anna Doherty (ASE)
Medieval/post medieval pottery	Luke Barber (freelance)
Ceramic Building Material	Sue Pringle (freelance)
Animal bone	Gemma Driver (ASE)
Human remains	Lucy Sibun (ASE)

Environmental samples	Dr. Lucy Allott (ASE))
Metalwork	Trista Clifford (ASE)
Coins	Trista Clifford (ASE)
Conservation	UCL Institute of Archaeology

- 6.5 Upon completion of the fieldwork, the site archive will be assembled in accordance with the guidelines set out in Management of research Projects in the Historic Environment (Historic England 2015). The site archive will contain all the data collected during the excavation including records, finds and environmental samples. It will be quantified, ordered, indexed and internally consistent.
- 6.6 A post-excavation report including plans, digital photographs and drawings for the excavations will be prepared within ten months of completion of the site work, subject to the production of any necessary specialist reports. It will include a record of all materials recovered and all written, drawn and photographic records relating directly to the investigations undertaken. It will be quantified, ordered, indexed and internally consistent. It will also contain a site summary and brief written observations on the artefactual and environmental data.
- 6.7 The report will be in line with guidelines set out in Management of Research Projects in the Historic Environment (Historic England 2015).
- 6.8 An Online Access to the Index of Archaeological Investigations (OASIS) form will be completed at <http://ads.ahds.ac.uk/project/oasis/> following the completion of the Assessment report and included as an appendix.
- 6.9 A draft copy of the report will be sent to the Archaeological Advisor in the first instance for their comments and approval. Once the report has been accepted further copies and one electronic copy in PDF format will be sent to the LPA and the client as appropriate.
- 6.10 A copy of the report will be supplied to the County HER on the understanding that it will become a public document after an appropriate period of time not exceeding six months.
- 6.11 Agreement shall be reached with the Archaeological Advisor regarding the format and destination of any subsequent publication(s) arising from the investigations. Proposals for publication, if appropriate, will be detailed in the post-excavation assessment report and timescales and costs for a publication programme will be agreed at that stage.
- 6.12 Upon completion of the final report for publication, the archive will be prepared for deposition in accordance with the 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).
- 6.13 Permission will be sought for the deposition of the site archive and finds at the local museum. An accession number will be obtained as necessary.

7.0 HEALTH AND SAFETY

- 7.1 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.

8.0 INSURANCE

- 8.1 Archaeology South-East is insured against claims for: employer's liability to the value of £50,000,000 each and every loss, any one occurrence; primary public/products 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 up to £15,000,000 in the aggregate; professional indemnity to the value of £15,000,000 any one occurrence and in the aggregate.

9.0 MONITORING

- 9.1 Provision will be made at all stages of the project for the Archaeological Advisor to monitor progress and standards. Adequate provision will be made available by ASE for the Archaeological Advisor to make site monitoring visits at agreed and specified times.

REFERENCES

ASE 2017 *Land east of Tye Lane, Walberton, Arun District, West Sussex, BN18 0PF, Archaeological Desk-Based Assessment*, ASE Project No. 180302, ASE Report No.2017153

ASE 2019 *Archaeological Evaluation Report Land East of Tye Lane Walberton, West Sussex*, ASE Report No: 2019060

BGS, 2018. British Geological Survey, Geology of Britain Viewer, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

ClfA 2014a. *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*

ClfA 2014b. *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*

ClfA 2014c. *Standard and Guidance for Archaeological Field Evaluation*

Historic England 2011: *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (second ed.)*. English Heritage

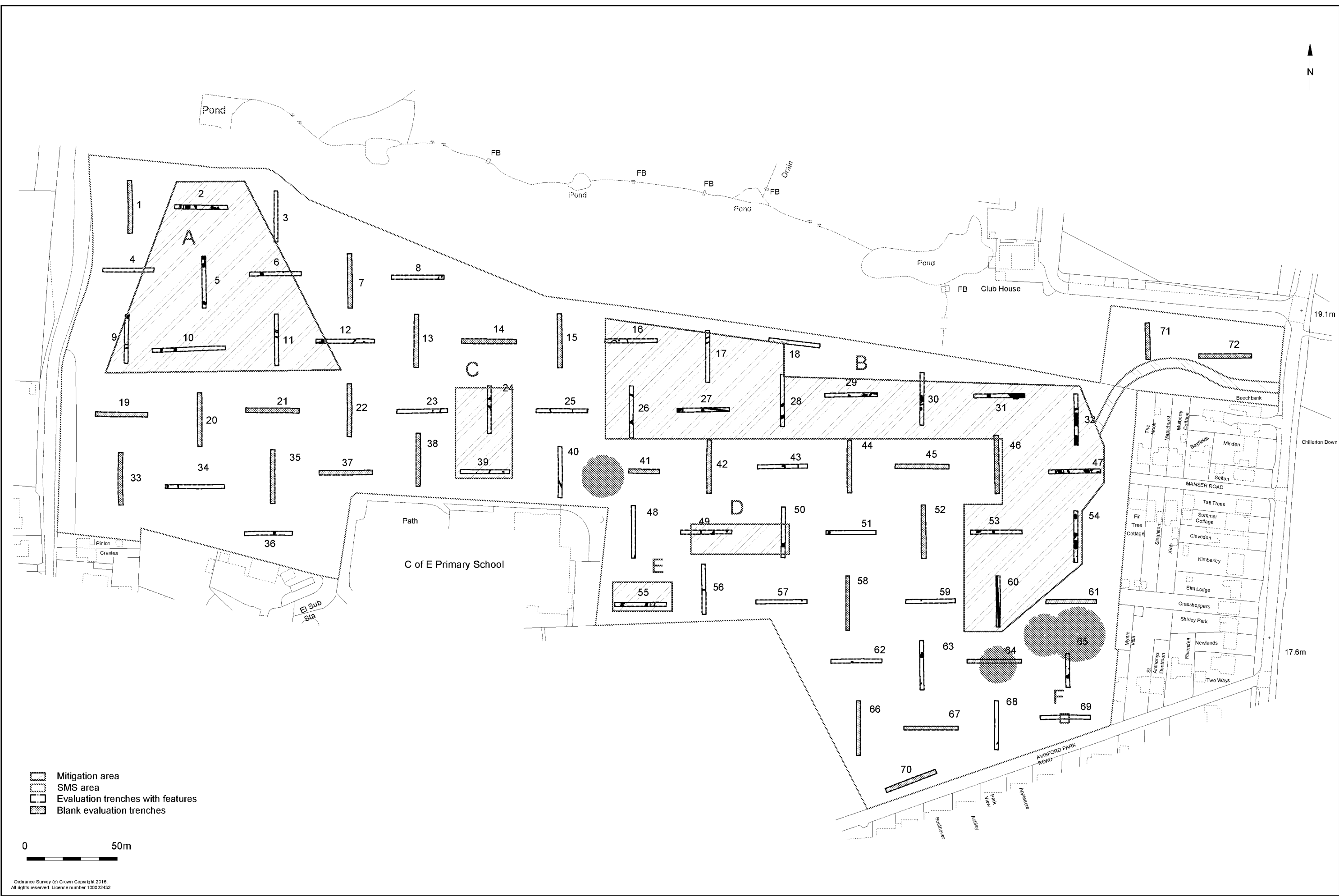
Historic England 2015: *Management of Research Projects in the Historic Environment*

Museums and Galleries Commission 1994, *Standards in the Museum Care of Archaeological Collections*

UKIC 1990. *Guidelines for the Preparation of Excavation Archives for Long-term Storage*

WSCC, ESCC, CDC 2017, *Sussex Archaeological Standards*

Archaeology South-East
March 2019



Ordnance Survey (c) Crown Copyright 2016.
All rights reserved. Licence number 100022432

© Archaeology South-East		Land East of Tye Lane, Walberton, West Sussex	Fig. 2
Project Ref: 190138	March 2019	Proposed mitigation areas	
Report Ref:	Drawn by: NH		



© Archaeology South-East		Land East of Tye Lane, Walberton, West Sussex	Fig. 3
Project Ref: 190138	March 2019	Proposed mitigation areas and proposed development	
Report Ref:	Drawn by: NH		