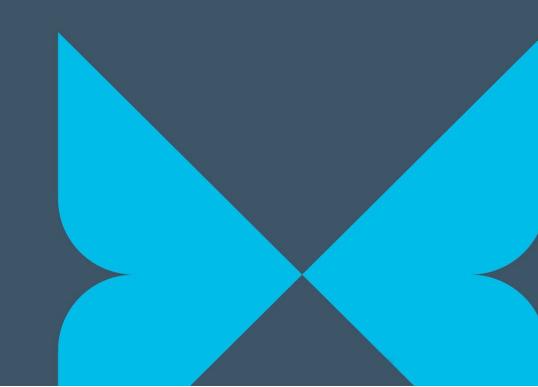
WH202C APRIL 2023

Bull Field, Takeley

Written Scheme of Investigation for Archaeological Evaluation by RPS

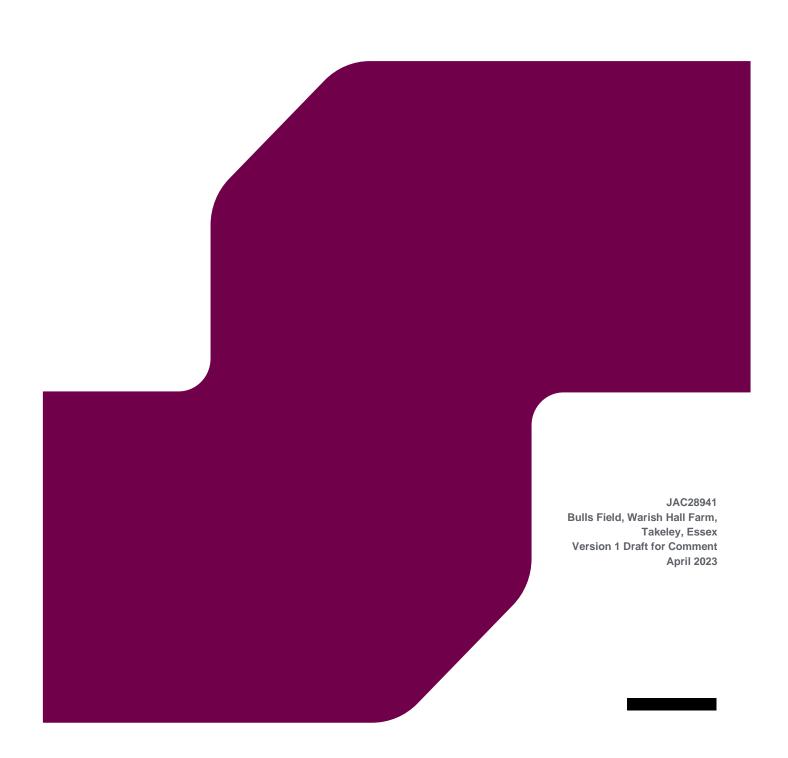
Prepared in support of the Section 62A Planning Application at Bull Field, Takeley.





Written Scheme of Investigation for an Archaeological Evaluation

Bulls Field, Warish Hall Farm, Takeley, Essex



ARCHAEOLOGICAL EVALUATION WRITTEN SCHEME OF INVESTIGATION

Version	Status	Authored by	Date
Version 1	Draft for Comment	James Archer	27/04/2023

This report was prepared by RPS within the terms of RPS' engagement with its client and in direct response to a scope of services. This report is supplied for the sole and specific purpose for use by RPS' client. The report does not account for any changes relating the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. RPS does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report.

Prepared by:	Prepared for:
RPS	Weston Homes PIc
James Archer BA (Hons) ACIfA Associate Director	
20 Farringdon Street London, EC4A 4AB	
T +	

NON-TECHNICAL SUMMARY

It is proposed to excavate 30no. trenches at a 4% site sample on land known as Bulls Field, at Warish
Hall Farm in Takeley, Essex. There is an additional 1% contingency trenching available to use at the
discretion of Place Services should any further clarification of archaeological features be required.
These trenches will determine the date, condition and significance of potential archaeological subsurface remains.

Contents

NO	N-TECHNICAL SUMMARY	
1	INTRODUCTION	3
2	GEOLOGY AND TOPOGRAPHY	4
	Geology	
	Topography	4
3	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	5
	Timescales used in this report	5
	Introduction	
	Previous Archaeological Work	
	Palaeolithic & Mesolithic	
	Neolithic & Bronze Age	
	Iron Age & Roman	
	Saxon/Early Medieval	
	Medieval	
	Post Medieval & Modern (including map regression exercise)	
	Historic Landscape CharacterisationLiDAR Plot	
	Undated Evidence	
	Negative Evidence	
4	AIMS AND OBJECTIVES	11
5	ARCHAEOLOGICAL EVALUATION DETAILED SPECIFICATION	13
	Evaluation Techniques	
	Access and Safety	14
	Recording Systems	15
	Finds and Samples	16
	Reports and Archives	17
	Archives and Published Reports	17
6	OTHER MATTERS	19
	Archaeological Contractor	19
	Standards	
	Insurance and Health and Safety	19

Figures

- Figure 1: Site Location
- Figure 2: HER Plot (Data from Essex HER)
- Figure 3: Proposed Development Masterplan
- Figure 4: Proposed Trench Location Plan with Previous Trenching and Geophysical Survey Shown
- Figure 5: Proposed Trenches overlaid onto Proposed Development

1 INTRODUCTION

- 1.1 This document has been prepared by RPS Heritage, on behalf of their client Weston Homes Plc, as a project design for archaeological trial trenching on land at Bulls Field, Warish Hall Farm, Takeley, Essex. The site currently comprises open land (Fig. 1). It is generally bounded by development to the west and south, woodland to the north, and open fields to the east and north east.
- 1.2 Development proposals are anticipated to comprise residential development alongside associated access and hard and soft landscaping. These proposals are reproduced at Figure 3. Previous consultation with Place Services (Essex County Council), in their role as archaeological advisors to Uttlesford District, has indicated that a programme of archaeological work will be required, as secured by planning condition if a future planning consent is granted. This is anticipated to comprise an additional phase of archaeological evaluation trenching, to ensure a complete coverage across the site and to evaluate negative areas as highlighted in the geophysical survey, followed by mitigation works as appropriate.
- 1.3 Recent geophysical survey has not identified any anomalies of likely archaeological significance within the site, whilst evaluation trenching targeted on the geophysical survey results identified evidence only for Post Medieval activity (Magnitude 2021). This trenching was targeted in the area to the immediate east of the proposed development footprint area (LP 2021). The results of this work are shown on Figure 4.
- 1.4 An archaeological Desk Based Assessment (DBA) has been completed for the site (RPS 2023). The report concluded that the site retains a high archaeological potential for Medieval land division and agricultural activity. A moderate potential was identified for the Bronze Age, Iron Age, Roman and Saxon periods, as well as for evidence of general Medieval settlement activity. A low to moderate potential was considered for the Neolithic period, with a low potential suggested for archaeological remains dating to all other past periods of human activity. It was considered that any remains which may be present would have the potential to contribute towards local and perhaps regional research agendas
- 1.5 This document forms the Written Scheme of Investigation (WSI) for the archaeological trial trenching. It has been prepared in accordance with all relevant guidelines and standards, including those set down by the Chartered Institute for Archaeologists (ClfA) and Historic England (HE). The WSI will be submitted, along with the desk based assessment which summarises the previous fieldwork, as part of a planning application.
- 1.6 In addition, the chosen archaeological contractor will provide a method statement to append to this WSI once they are instructed. The method statement will detail the specific archaeological processes undertaken by that contractor within the framework provided by this WSI.
- 1.7 The trial trenching results will inform whether further archaeological work will be required within the site in order to satisfy the requirements of an anticipated planning condition. If appropriate, a mitigation strategy will be agreed between RPS Heritage and the archaeological advisor on completion of trial trenching works and will be subject to a separate Written Scheme of Investigation.

2 GEOLOGY AND TOPOGRAPHY

Geology

- 2.1 The solid geology of the London area and to the north, including large parts of Essex, is shown by the Institute of Geological Sciences (IGS 1979) as London Clay deposits forming the London Basin. Overlying the London Clay is a series of gravel terraces deposited during periods of glacial and interglacial conditions (Bridgland 1996).
- 2.2 Further detail is provided by the British Geological Survey (BGS Online 2022), which shows the underlying bedrock geology at the study site as London Clay Formation (Clay, Silt & Sand), a deposit formed between 56 and 47.8 million years ago during the Palaeogene period. This is overlain by deposits of Lowestoft Formation (Diamicton) formed between 480 and 423 thousand years ago during the Quaternary period. These superficial Lowestoft deposits are formed from glacial till and are geologically unsorted.
- 2.3 Previous evaluation trenching to the immediate east of the proposed development area (LP 2021) identified natural deposits comprising a soft, mid-yellow brown silty clay with frequent chalk flecks. This was overlain by a subsoil and a topsoil.
- 2.4 No site specific or British Geological Survey borehole data is currently available for the study site.

Topography

2.5 The natural topography of the study site comprises an area of high ground, associated with settlement at Takeley, that overlooks the Pincey Brook watercourse c.800m to the north west, and the River Roding c.1.7km to the east. The site is generally fairly level on the plateau of high ground, located at a height of circa 105-106m Above Ordnance Datum (AOD).

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Timescales used in this report

Prehistoric

Palaeolithic	900,000 -	12,000 BC
Mesolithic	12,000 -	4,000 BC
Neolithic	4,000 -	2,500 BC
Bronze Age (including Chalcolithic)	2,500 -	800 BC
Iron Age	800 -	AD 43

Historic

Roman	AD 43 -	410
Saxon/Early Medieval	AD 410 -	1066
Medieval	AD 1066 -	1485
Post Medieval	AD 1486 -	1799
Modern	AD 1800 -	Present

Introduction

3.1 Previous programmes of geophysical survey (Magnitude 2021) and evaluation trenching (LP 2021) have been completed at the site. These have been summarised with an Archaeological Desk Based Assessment (RPS 2023). These documents provide the detailed archaeological background to the site and are summarised here. The historic environment record data is reproduced at Figure 2.

Previous Archaeological Work

- 3.2 A programme of geophysical survey has previously been undertaken to provide information on the presence/absence of possible archaeological anomalies at the site (Magnitude 2021). The results indicated the agricultural use of the site in the form of mapped land boundaries as well as likely former unmapped field boundaries. A former footpath was detected, as well as Modern plough activity. An area of more enhanced fill was detected to the north east along Smiths Green which corresponds with a former moated site known as Maggots.
- 3.3 Archaeological evaluation trenching targeted on the geophysical survey results followed later in 2021 (LP 2021). The work identified two small pits of prehistoric date, as well as evidence of Medieval features confirming the presence of the moated site at Maggots. There were features identified within the interior of the moat comprising a few pits and ditches. No structural remains were recorded. Post Medieval activity was noted within the upper fills of the boundary ditches that cross the site.

Palaeolithic & Mesolithic

3.4 No archaeological evidence is recorded on the Essex HER within the 1.5km study area that dates to either the Palaeolithic or the Mesolithic periods. The presence of Early Prehistoric material can be notoriously difficult to predict and is typically dependent upon the presence of an appropriate underlying geology sequence (such as terrace gravels or brickearth), as well as suitable topography and access to nearby resources and water. The underlying geological sequence comprises London

Clay overlain by Lowestoft Formation superficial deposits. These Lowestoft deposits are formed of glacial till, which is derived from the erosion of material by the movement of glacial ice, which is then redeposited along the route of the glacier. This sequence is not considered conducive to the survival of in situ Early Prehistoric artefacts.

Neolithic & Bronze Age

- There was a scatter of early Neolithic pits across the northern area of Priors Green Takeley (c.500m to the east of the study site) along with possible structural evidence in the form of stakeholes. The earliest forms of pottery although probably of Mildenhall style were dated to the 18-14th century BC and appear to have pre-dated Essex causewayed enclosures such as St Osyth (Germany et al 2015).
- 3.6 A cluster of Neolithic and Bronze Age pits were identified at the Stansted Mid Term Car Park site c.1.1km to the north west of the site (HER Ref: MEX1032450-2, TL 552 224). Possible late Bronze Age boundary ditches were identified in the same area (HER Ref: MEX1037820, TL 5541 2310).
- 3.7 Late Bronze Age settlement evidence is recorded across a large area of land near to the Pincey Brook to the north of the A120 over 500m from the study site, which included post hole structures, enclosures and evidence for stock pens (HER Ref: MEX1049872, TL 5666 2274). Similarly dated occupation remains were also identified at Waltham Hall c.900m to the north west (HER Ref: MEX1049868, TL 5591 2291).
- A ditch system dating to the late Bronze Age was recorded during archaeological work at the A120 to the north of Warish Hall, c.600m from the study site (HER Ref: MEX1036243, TL 5710 2236). There were early and late Bronze Age waterholes identified at Priors Green c.500m to the east, with the early Bronze Age example containing a preserved log ladder. There was also evidence for a late Bronze Age to early Iron Age occupation site (Germany et al 2015).
- 3.9 Archaeological work in advance of the Prior's Green development c.300m east of the site has identified evidence for prehistoric activity primarily characterised as pits, with a number of ditches and gullies also attributed to the prehistoric periods. On the higher ground to the west towards the site, a small enclosure with probable post holes, potentially surrounded by a large ditch and several pits was identified. Probable water holes or quarry pits were identified on the lower ground to the east (HER Ref: MEX1039500, TL 5741 2170).
- 3.10 Geophysical survey to the west of Station Road c.750m to the south west of the study site has revealed anomalies that appear morphologically to be prehistoric in date (HER Ref: MEX1050089, TL 5588 2086). A series of possible prehistoric ditches were recorded during archaeological work at Dunmow Road c.600m to the south east of the study site (HER Ref: MEX1041202, TL 5721 2115).
- Further Bronze Age artefact finds within the study area comprise a flint axe found east of Old House Farm recorded c.450m north west of the site (HER Ref: MEX16372, TL 5616 2206), residual pottery sherds found at Hamilton Road c.600m to the south east (HER Ref: MEX1041392, TL 5756 2136), two large burnt patches accompanied by urns and an adze found at Warish Hall c.400m north of the study site (HER Ref: MEX16086, TL 568 220), and a further burnt flint patch at Fann's Wood c.700m to the north east (HER Ref: MEX38577, TL 5733 2239).
- 3.12 Extensive evidence for Later Prehistoric settlement is recorded to the north of the study site in association with the Pincey Brook watercourse. The site itself occupies a level area of high ground overlooking this watercourse and also overlooking the River Roding to the east. This is likely to have been an attractive location for Later Prehistoric settlement and previously archaeological remains have been recorded within close proximity to the site, although no anomalies of suggested later Prehistoric date were identified during geophysical survey at the site (Magnitude 2021). Only two unrelated prehistoric pits were identified during a programme of targeted trenching (LP 2021).

Iron Age & Roman

- 3.13 The Stortford Road/Dunmow Road c.250m south of the study site is thought to represent the route of a Roman road known as Stane Street between settlements at Great Dunmow and Standon (HER Refs: 4497, 16440 and Margary 1955). It has been suggested that the route may have been constructed along a pre-existing prehistoric trackway (HER Ref: MEX16441). Typical archaeological features associated with Roman roads can include evidence for settlement and occupation, roadside ditches and associated land division, together with quarry pits, burials and chance losses.
- An early Iron Age field system has been recorded during archaeological work at Prior's Green within c.350m to the east of the site. A possible ring ditch and cremation burial were also recorded further to the east (HER Ref: MEX1038792, TL 5748 2143). A series of middle Iron Age and late Iron Age to early Roman period waterholes were also recorded at Priors Green (Germany et al 2015). Works at Dunmow Road c.200m to the south identified a linear ditched feature dated to the Iron Age (HER Ref: MEX1049191).
- 3.15 A single roundhouse structure dated to the early to middle Iron Age is recorded c.550m north of the site (HER Ref: MEX1036238, TL 5637 2224).
- One ditch and two pits have been identified c.750m south west of the study site which may date to the Iron Age period (HER Ref: MEX1036892, TL 5616 2082).
- 3.17 Three phases of a late Iron Age to Roman enclosed farmstead occupation site were found during work at Dunmow Road c.970m south west of the study site. The farmstead is thought to have only been a short-lived occupation site, perhaps only three generations c.AD10-80 (HER Ref: MEX1041385, TL 5554 2119). Late Iron Age/Roman ditches were identified in the area immediately north of this on the opposite side of Stane Street, which were interpreted as part of a field system (HER Ref: MEX1049163, TL 5557 2134). A further extensive system of late Prehistoric to early Roman ditches and gullies was recorded to the immediate east of the farmstead site (HER Ref: MEX1036189, TL 5582 2117).
- 3.18 Several phases of late Iron Age/Roman settlement activity and field systems was identified at the Stansted Mid Term Car Park site, Thremhall Avenue, and also at Coopers End roundabout substation c.1.4km to the north west of the site (HER Refs: MEX1032453, TL 552 224; MEX1037820, TL 5541 2310; MEX28771, TL 5548 2307). Similarly, across the northern part of the study area, evidence for late Iron Age/Roman settlement has also been identified at Waltham Hall (HER Ref: MEX1049868, TL 5591 2291).
- 3.19 Archaeological work c.240m to the south of the site has revealed evidence for late Iron Age and Roman land use in the form of ditches and gullies (HER Ref: MEX1034196, TL 5644 2124).
- 3.20 Excavations along the route of the A120 to the north of the study site have identified a number of clusters of Roman period activity. These include a series of enclosures and associated droveways identified at Parsonage Lane c.750m to the north west of the site (HER Ref: MEX1036194, TL 5599 2210). Possible Roman period droveway ditches are recorded at the A120 circa 650m north of the site (HER Ref: MEX1036278, TL 5637 2224), and a possible Roman field system is recorded at the A120 to the north of Warish Hall, c.700m from the study site (HER Ref: MEX39523, TL 5710 2236). A clay-lined, possible water storage pit was recorded along the A120 to the north of Takeley Church and c.1.2km to the north west of the site (HER Ref: MEX39519, TL 5535 2183).
- 3.21 Roman tile and brick fragments are recorded within the fabric of the later Medieval church at Takeley c.1.1km west of the site, whilst recent burials to the south of the church have found further Roman brick fragments. Combined with the presence of a nearby high status Roman burial (HER Ref: MEX16180, TL 554 215), it has been suggested that this may indicate the presence of a Roman villa or similar site within the nearby area, as the material may have been reused for the later construction of the church (HER Ref: MEX16171, TL 5552 2163).

- 3.22 Geophysical survey to the west of Station Road c.750m to the south west of the study site has revealed anomalies that may relate to Roman period enclosures (HER Ref: MEX1050089, TL 5588 2086).
- 3.23 A possible Roman ditch was recorded during archaeological work at Dunmow Road c.550m to the south east of the study site (HER Ref: MEX1041202, TL 5721 2115).
- 3.24 Further Roman period HER monuments recorded across the 1.5km study area relate to isolated findspots, including metal detecting finds, coins, a scabbard, and a quern stone (HER Refs: MEX1032016, MEX1036008, MEX16522, MEX35352, MEX35348, MEX35354, MEX1032030). These are not mentioned in detail here as they are generally representative of casual losses which were spread across this settled agricultural landscape during manuring activity.
- 3.25 The study site would have been situated within a settled landscape within close proximity to Stane Street and a possible prehistoric predecessor during the Iron Age and Roman periods. It is possible that archaeological remains dating to these periods could be present within the site, potentially comprising occupation activity and evidence for rural land division and agricultural practice, although no anomalies of suggested Iron Age or Roman date have been identified by geophysical survey or archaeological trenching (Magnitude 2021, LP 2021).

Saxon/Early Medieval

3.26 Evidence for Saxon period activity within the nearby area is limited, comprising a rectangular post-built structure identified during archaeological work on the A120 trunk road within an area c.1.2km to the west of the site. The building was later dated to the Saxon period by C14 dating and was located within the area to the north of Takeley Church (HER Ref: MEX39520, TL 5535 2183). Despite the apparent lack of activity, it is likely that the study site would have been situated within a settled landscape during the Saxon and early Medieval period.

Medieval

- 3.27 The Domesday Survey of 1086 records Takeley as a fairly large estate of 47 households. The lands associated with the estate are listed under three owners by the survey, including the Abbey of Saint-Valery (located at Takeley Priory to the north), Eudo the Steward, and Robert Gernon. The estate lands comprised arable lands, pastoral meadows, and woodland (Open Domesday Online 2022). The church at Takeley is located c.900m west of the site and is set back from Dunmow Road along Church Lane. The church is thought to date from the 12th century and it has been suggested that an associated deserted Medieval village core may have been located within the area around the church (HER Refs: MEX16172, TL 5552 2167; MEX16179, TL 556 216).
- 3.28 Evidence for a possible 13th century farmstead was recorded during archaeological work adjacent to Dunmow Road c.240m south of the site (HER Ref: MEX1034196, TL 5644 2124).
- 3.29 Medieval pits and ditches are recorded at Prior's Green to the east of the site, likely representing an historic field system (HER Ref: MEX1038792, TL 5748 2143). The strip field system comprised multiple parallel ditches in three phases plus small enclosed occupation areas on either side of Jacks Lane (Germany et al 2015). Further evidence for Medieval agricultural activity is recorded at Dunmow Road c.970m south west of the study site (HER Ref: MEX1041385, TL 5554 2119).
- 3.30 The Warish Hall moated site and remains of Takeley Priory Scheduled Monument is located within c.270m to the north of the study site at its closest point (HE Desig. No. 1007834). The site has been identified as St Valery's Priory, Takeley, a Benedictine Priory founded in the 11th century by William the Conqueror. The priory was later dissolved in 1391 and the lands were granted to New College, Oxford and Winchester College. The internal moat is occupied by Warish Hall, a 13th century Grade I listed timber-framed hall house, and this internal moat is surrounded by a wider moat forming an enclosed monument (HER Refs: MEX16073-4, TL 568 220).

- 3.31 Further moated sites are common in the study area, particularly along Smiths Green Lane, which includes:
 - Smith's Green Cottage moated site located adjacent to and west of Smiths Green Lane within c.120m south of the site (HER Ref: MEX16095, TL 565 213);
 - Cheerups Cottage moated site located at south east junction of Smiths Green Lane and Jacks Lane, to the immediate south east of the site (HER Ref: MEX1034283, TL 5681 2141);
 - Jacks Green moated site located c.280m east of the site at the end of Jacks Lane (HER Ref: MEX16326, TL 5713 2153);
 - Possible moated site at Goodwyn's c.280m east of the site, although a small excavation in 2019 yielded no archaeological remains (HER Ref: MEX1032017-8, TL 570 216);
 - Possible moated site at Parkers c.200m north of the site (HER Ref: MEX1032014-5, TL 5708 2192);
 - Possible moated site at the Parsonage c.350m west of the site, adjacent to Parsonage Road (HER Ref: MEX1032023, TL 5606 2143);
 - Moated site at Fann's c.750m to the north along Smiths Green Lane (HER Ref: MEX1034502, TL 5715 2248);
 - Moated site at Warrens Farm c.1.1km to the east along Stane Street (HER Ref: MEX16392, TL 5791 2131);
 - Moated site at Coxtons c.1.1km to the south (HER Ref: MEX16109, TL 571 203);
 - Sheering Hall moated site recorded c.1.3km to the north (HER Ref: MEX16087, TL 575 228).
- An additional possible moated site is identified at Maggots within c.160m to the north east of the site which does not appear to be recorded on the HER. Historic mapping indicates that it was present by at least 1777 (Fig. 4) and the possible former moat is shown within the area of what was then a Post Medieval/Modern farmstead on 19th and early 20th century mapping (Figs. 6-10). The likely infill of this moat has been picked up during recent geophysical survey (Magnitude 2021 and Appendix B) and was confirmed by evaluation trenching (LP 2021 and see Appendix C).
- 3.33 A number of Medieval findspots are recorded within the 1.5km study area which are not discussed in detail here. These include metal detecting find spots, although none are located within close proximity to the study site (HER Refs: MEX35351, MEX35353, MEX35355, MEX16521, MEX39521, MEX39524). It is likely that these represent casual losses which were then spread across the study area during manuring activity.
- The study site would have been situated in a settled landscape during the Medieval period, in close proximity to a number of moated sites along Smiths Green Lane, Jacks Lane, Stane Street, and Parsonage Road. The high density of nearby moated occupation sites would suggest that it is unlikely that further occupation sites would be present within the study site, and it is perhaps more likely that the study site generally comprised areas of arable and pastoral land in association with these nearby sites.

Post Medieval & Modern (including map regression exercise)

3.35 Historic mapping demonstrates that the site has generally remained open land utilised for agricultural activity, as well as areas of woodland, since at least the late 18th century to the present day. Limited changes are shown across a majority of the site on historic mapping, comprising alterations and removal of former field boundaries and a footpath and track across the site. Much of

these former field boundaries and the footpath have been identified during geophysical survey (Magnitude 2021).

Historic Landscape Characterisation

3.36 The available Historic Landscape Characterisation (HLC) data for Essex records the site land parcels within areas of irregular enclosure, and an area of boundary loss. Priors Wood is recorded as ancient woodland.

LiDAR Plot

- 3.37 No clear evidence for archaeological remains is recorded on available Environment Agency LiDAR data across much of the site.
- 3.38 Possible areas of earthworks are recorded in the site which appear to correspond with a former footpath and former field boundaries shown within the site on historic mapping.

Undated Evidence

- 3.39 A single undated cremation burial is recorded along the A120 at Parsonage Lane c.400m north west of the site (HER Ref: MEX1036202, TL 5597 2193).
- 3.40 Cropmarks to the north east of Prior's Wood, between the site and Warish Hall c.500m to the north, have been tentatively suggested as part of a rectangular enclosure and a possible curvilinear enclosure (HER Ref: MEX1031669, TL 5669 2195).

Negative Evidence

A large number of archaeological events are recorded within the nearby area to the site, in particular along Stortford Road/Dunmow Road to the south, along Parsonage Road to the west, and along Smiths Green Lane and Jacks Lane to the east. Many of these record no evidence for archaeological remains, or only record evidence for Post Medieval and Modern field and drainage systems (HER Refs: MEX1050165, MEX1032444; MEX1040554; MEX1049219; MEX1038794; MEX1040758; MEX1042197-8; MEX1040339; MEX1049342; MEX1040132; MEX1041178; MEX1041391; MEX1041176; MEX1042064; MEX1049404).

4 AIMS AND OBJECTIVES

- 4.1 The principal object of the evaluation exercise is to establish whether any archaeological sites exist within the study site, with particular regard to any which are of sufficient importance to require preservation *in situ*.
- 4.2 The evaluation should aim to determine, as far as is reasonably possible, the location, form, extent, date, character, condition, significance and quality of any surviving archaeological remains, irrespective of period, liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied, and attention should be given to sites and remains of all periods (inclusive of evidence of past environments).
- 4.3 The evaluation should also seek to clarify the nature and extent of existing disturbance and intrusions and hence assess the degree of archaeological survival of buried deposits and any surviving structures of archaeological significance.
- 4.4 The general aims of the project are:
 - To determine the existence or absence of any archaeological remains;
 - To determine or confirm the approximate date or date range of the remains, by means of artefactual or other evidence;
 - To determine or confirm the approximate extent of the remains;
 - To determine the condition and state of preservation of the remains;
 - To determine the degree of complexity of the horizontal and/or vertical stratigraphy present;
 - To assess the associations and implications of any remains encountered with reference to the historic landscape;
 - To determine, as far as is possible, the implications of the remains with reference to economy, status, utility and social activity;
 - To determine or confirm the likely range, quality and quantity of the artefactual evidence present; and
 - To determine the potential of the site to provide palaeo-environmental and/or economic evidence and the forms in which such evidence may be present; and
 - To determine the sequence and dating of Made Ground deposits to enable an understanding of the recent history of the site and its impact on archaeological remains.
- 4.5 The relevant research agenda for the site comprises *A Framework for the East of England* prepared initially in 1997 and updated in 2000 and most recently in 2011 (Medlycott 2011).
- 4.6 Within the parameters of the general aims of the project and the relevant research agenda, the evaluation of this site presents an opportunity to address the following objectives:
 - 1. To understand the potential for archaeological remains at the site which may be linked to prehistoric and historic use of the site. The geophysical survey showed no clear archaeological anomalies within the proposed development area, however was this masked by magnetic disturbance? The previous evaluation trenching to the immediate east of the proposed development area identified evidence only for Post Medieval activity, is this a true reflection of the archaeological potential of the proposed development area?
 - 2. Is there any evidence for later Prehistoric activity, such as that recorded at Priors Green to the east?

- 3. Is there a potential for any historic settlement at the site or has the site comprised open land throughout recorded history?
- 4. There are number of moated sites in the nearby vicinity, is there any potential for similar sites within the site boundary?
- 5. Provide sufficient information to enable the formulation of a mitigation strategy (if necessary).
- 4.7 Where physical preservation is likely to be considered as a mitigation option, the primary factors affecting the present state of preservation and the direct and indirect effect of the proposed development should also be considered.

5 ARCHAEOLOGICAL EVALUATION DETAILED SPECIFICATION

- 5.1 The overall objectives of this evaluation are set out in Section 4. This section details the onsite methodologies, report format and other related details.
- A total of 30no. 30m x 1.8m trial trenches will be excavated to evaluate the site (see Fig. 3). This comprises a 4% evaluation of those areas of the site proposed for development, and there is a 1% contingency (8no. trenches) available to be used at the discretion of Place Services. This may be used to clarify particular archaeological features perhaps to inform a mitigation strategy.
- 5.3 The results of the trial trenching will provide the basis for considering mitigation measures, although in the event that evidence is encountered which suggests nationally important remains are present, further evaluation may be required.

Evaluation Techniques

- In the first instance the appointed archaeological fieldwork contractor will fully review all available information regarding the trench locations, in particular service plans and contamination information, and will provide their own trench plan prior to works taking place on site, to be attached to their Health and Safety Risk Assessment (RAMS) documentation. In addition, the appointed archaeological fieldwork contractor will ensure that trench locations will be scanned by appropriately trained archaeologists using appropriate equipment (CAT scanner etc.) prior to relevant works commencing on site.
- The trenches should be opened by mechanical excavator, with removal of all undifferentiated topsoil down to the first significant horizon. The machine should remove a level spit of no more than 0.25m depth moving along the length of the trench. Successive spits may be similarly removed until the first significant archaeological horizon is reached. That level should be cleaned in plan using a wide blade, ditching bucket or similar, with no teeth. If the machine has to re-enter the trench care should be taken to ensure that it does not damage underlying remains, particularly in soft conditions. The machine must not be used to cut arbitrary trial trenches down to natural deposits, without regard to the archaeological stratification and leaving a section record only. All machine work must be under archaeological supervision and should cease immediately if significant evidence is revealed.
- 5.6 The machine used should be powerful enough for a clean job of work and able to mound spoil neatly, a safe distance from trench edges. Mini garden excavators or bulldozers are not suitable.
- 5.7 Initially examination of all archaeological deposits should be by hand with cleaning, examination and recording both in plan and section. The objective is to define remains rather than totally remove them. Full excavation should be confined to the least significant remains (e.g. dumped layers) which may allow underlying stratigraphy and features to be exposed and recorded. Within significant levels partial excavation, half-sectioning, the recovery of dating evidence, sampling and the cleaning and recording of structures is preferable to full excavation. Depending on the stratigraphy revealed sieving and flotation of fills (at the appropriate mesh level) should be undertaken to recover small flint flakes/metalwork (i.e. a control sample of artefacts).
- 5.8 In summary, archaeological recording, where not precluded by Health & Safety considerations, will consist of:
 - Hand cleaning of archaeological features, sections and surfaces, sufficient to establish the stratigraphic sequence exposed.
 - Structures will be cleaned to enable interpretation, recording and phasing.
 - Planning of all exposed archaeological features and horizons (including boundaries of natural) at an appropriate scale.

- Excavated material will be examined in order to retrieve artefacts to assist in the analysis of their spatial distribution.
- A scaled photographic record of representative exposed sections and surfaces, along with sufficient photographs to establish the setting and scale of the groundworks.
- A record of the datum levels of archaeological deposits.
- Archaeological excavation may require work by pick and shovel or occasionally further use of the machine. Such techniques are only appropriate for the removal of homogeneous or low-grade deposits which may give a 'window' into underlying levels. They must not be used on complex stratigraphy and the deposits to be removed must have been properly recorded first. Casual "mattock testing" of features of uncertain archaeological value must not be undertaken without the prior approval of the archaeological advisor. The depth and nature of all colluvial or other masking deposits must be established across the site.
- 5.10 Particular care should be taken not to damage any areas containing significant remains which might merit preservation in situ. Such evidence would normally include deep or complex stratification settlement evidence and structures. Place Services must be informed immediately if remains likely to be of national significance are encountered. Such areas should be protected and not left open to the weather, or other forms of deterioration whilst investigation will not be at the expense of any structures, features or finds which might reasonably be considered to merit preservation, it is important that a sufficient sample is studied.
- Any human remains (if encountered) must also be left in situ, covered and protected. Place Services must be informed immediately. The latest Historic England guidance 'The Role of the Osteologist in an Archaeological Fieldwork Project' (HE 2018) indicates a preference to lift burials encountered at evaluation stage. However, this is specialist guidance which should be read in conjunction with the Advisory Panel on the Archaeology of Burials in England 2017 'Guidance for Best Practice of the Treatment of Human Remains Excavated from Christian Burial Grounds' (Second Edition), which also deals with non-Christian burials, which indicates that retention in situ is the best option. In cases where removal is the only option and absolutely essential, human remains will only be excavated after obtaining the relevant Ministry of Justice Licence, as required by the Burials Act of 1857 (amended 1981). The discovery of human remains will be reported to the local coroner. Other structured or placed deposits will be recorded and retained as "small finds". Should sufficient human bone be exposed to warrant specialist examination in situ, a human bone specialist may be required to attend to examine the remains (subject to Place Services requirements).
- Any remains classified as 'treasure' under the Treasure Act 1996 will be removed to a secure location, and where removal cannot be undertaken on the same day as discovery, suitable security measures will be put in place to protect the finds from theft. Place Services must be informed immediately.
- 5.13 Metal detecting will be undertaken at all stages of the evaluation by a suitably qualified/experienced metal detectorist.
- 5.14 Relevant geological/artificial soil horizons are to be kept separate during the evaluation to allow sequential backfilling.

Access and Safety

- 5.15 Reasonable access to the site is to be arranged for representatives of the Local Planning Authority and archaeological advisor who may wish to make site inspections to ensure that the archaeological investigations are progressing satisfactorily.
- 5.16 All relevant health and safety regulations must be followed. A general health and safety policy must be provided by the Archaeological Contractor and a detailed risk assessment and management

strategy for this site prepared. In particular the machine should be kept away from unsupported trench edges and public access routes should be supervised and controlled. Barriers, hoardings and warning notices should be installed as appropriate. Safety helmets are to be used by all personnel as necessary. The Archaeological Contractor will provide appropriate toilet and washing facilities for site staff.

- 5.17 No personnel are to work in deep unsupported excavations. Trenches deeper than 1.2m will have to be stepped or battered back.
- 5.18 Where there is reason to believe from previous uses that the ground may be contaminated, the Archaeological Contractor must include arrangements for pollution sampling and testing before any site work takes place. A search for public utility or other services will also be undertaken by the Archaeological Contractor prior to commencement.
- 5.19 The archaeological organisation must be satisfied that the applicant or developer has provided all information reasonably obtainable on contamination and the location of live services before any site work takes place.
- 5.20 No archaeological trenches will be backfilled without consultation with the archaeological advisor, following visits if necessary.

Recording Systems

- 5.21 The recording system must be fully compatible with that most widely used elsewhere in Essex. Context sheets should include all relevant stratigraphic relationships and for complex stratigraphy a separate matrix diagram should be employed. This matrix should be fully checked during the course of the works. If there is any doubt over recording techniques the guidance of the archaeological advisor will be sought.
- The site archive will be so organised as to be compatible with other archaeological archives produced in Essex. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used. This requirement for archival compatibility extends to the use of computerised database.
- 5.23 Site location plan required; general plan (e.g. OS 1:1250) showing investigation area and development site in relation to surrounding locality and street pattern.
- 5.24 This will be supplemented by trench plans at 1:500, which will show the location of the areas investigated in relationship to the investigation area, OS grid and site grid (if any). The locations of the OS bench marks used and site TBMs will also be identified.
- 5.25 Archaeological plans; some record of the full extent in plan of all archaeological deposits must be made. All significant deposits that significantly affect the interpretation of the site and relate to the evaluation objectives should be formally planned in relation to the trench and OS grid and be at a scale of 1:10 or 1:20. Single context planning is required on deeply stratified sites.
- 5.26 Sections containing significant deposits, including half sections, should be drawn as appropriate. Upon completion of the works at least one long section is to be drawn, including a profile of the top of natural deposits (extrapolated from cut features etc. if natural deposits are not reached). In addition to the excavation of artificial deposits, some assessment of "naturally deposited" levels will be necessary, especially when these are organically preserved and laid down within archaeological timescales.
- 5.27 All archaeological plans and sections should be on drawing film at a scale of 1:10 or 1:20 and should include context numbers and OD spot heights for all principal strata and features.

- An adequate photographic record of any significant archaeological remains is required, in both plan and section. This will include black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation mounted. The transparencies will be mounted in suitable frames. Where appropriate a photogrammetric record will be made of complex structures, features and horizons liable to be damaged in the course of the evaluation.
- 5.29 A Harris Matrix stratification diagram will be compiled and fully checked during the course of the works.

Finds and Samples

- A high priority should be given to dating any remains and so all pre-Modern artefacts and finds are to be retained. Consideration should also be given to the recovery of specialist samples for scientific analysis, particularly samples for absolute dating, structural materials and cultural/environmental evidence. Different sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Minimum levels of data acquisition should be defined according to the "information recovery levels" summarised by Carver (1987). The default data acquisition level for all pre-modern assemblages is level D. Close attention will be given to sampling for date, structure and environment.
- 5.31 If required, the strategy for sampling archaeological and environmental deposits and structures (which can include soils, timbers, animal bone and human burials) will be developed in consultation with Place Services and the Historic England Scientific Advisor if necessary. Bulk samples will generally be 40l.
- 5.32 If present, a high priority will be given to the sampling of river and other anaerobic deposits (such as peat) where organic materials may be preserved.
- 5.33 Organic samples will be subject to appropriate specialist analysis. There may be a requirement to submit timbers to dendrochronological analysis and to process some samples to provide C14 dating. Other forms of specialist analysis may also be appropriate.
- 5.34 The finds retrieval policies of Place Services will be adopted. All identified pre-Modern finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained. No finds will, however, be discarded without the prior approval of Place Services.
- All finds and samples will be treated in a proper manner and to the standards of the UK Institute of Conservators Guidelines. They will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in the UK Institute for Conservation "Conservation Guideline No 2". Appropriate guidelines set out in the Museums and Galleries Commissions "Standards in the Museum Care of Archaeological Collections (1991)" will also be followed.
- 5.36 The pottery specialist employed by the Archaeological Contractor will be familiar with local pottery types and with a record of publications in the region.
- 5.37 The spot dating of pottery will be employed, where appropriate, to inform the onsite methodology and interpretation.
- 5.38 Within three weeks of completion of the work the archaeological contractor will produce a report, copies of which are to be provided to the client, the Local Planning Authority, and their archaeological advisor.

Reports and Archives

Draft Report

- 5.39 A draft report on the results of the evaluation will be prepared, both in bound paper format with colour images, and also in electronic format a PDF with a minimum file size of 300dpi.
- 5.40 The summary report should include:
 - 1. The archaeological contractor's site/finds code;
 - 2. Museum accession code;
 - Abstract or summary of the results in a format that can be understood by nonarchaeologists;
 - Perceived archaeological potential of the site and vicinity from documentary sources historic, cartographic, archaeological, Essex Historic Environment Record (HER), geographical, topographic and environmental;
 - 5. The aims and methods adopted in the course of the evaluation, and a confidence rating for the methodology employed;
 - 6. Illustrative material including maps, plans, sections, drawings and photographs as necessary: photographs should include images of work in progress together with any significant features revealed:
 - 7. The nature, extent, date, condition and significance of the archaeological finds with specialist opinions and parallels from other sites if required;
 - 8. The perceived degree of survival of archaeological deposits across the site, as affected by its present state and recent past (e.g. extent of quarrying);
 - 9. Relevant details of the site archive;
 - 10. Relevant acknowledgements, including site staff, RPS, the relevant archaeological advisory service, and the local Historic Environment Record;
 - 11. A digital copy of the draft report will be sent to RPS Heritage for onward submission to the archaeological advisor. Once approved a final copy will be submitted to the HER.
- 5.41 The report should not include any judgement or conclusion regarding the need for, or extent of, further archaeological work. The report should remain a factual, technical report only. Any conclusions per the significance of archaeological remains should follow relevant industry standards and guidance in full.

Archives and Published Reports

- The integrity of the site archive should be maintained. The archive of all records and finds must be prepared consistent with the principles set out in the Management of Archaeological Projects (English Heritage 1991), particularly Appendix 3.1 and Appendix 4.1.
- The minimum acceptable standard for the archival report is defined in the "Management of Archaeological Projects" 5.4 and Appendix 3. It will include all materials recovered (or the comprehensive record of such materials) 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 matrix, a site summary and brief written observations on the artefactual and environmental data.
- 5.44 United Kingdom Institute for Conservation guidelines for the preparation of excavation archives for long term storage (1990) will be followed. Arrangements for the curation of the site archive will be

- agreed in writing with the recipient Museum and details of such arrangements will be made by the archaeological contractor.
- In principle, the site archive is to be deposited with the appropriate museum within 3 months of the completion of reporting work. The Archaeological Contractor will need to hold discussions with the museum curator prior to archaeological work commencing regarding the collection and discard policy relevant to the site, and to observe such requirements. If the museum is unable to accept the archive an alternative solution regarding the storage of the archive will be found. The Contractor will obtain the Museum accession number and include that as part of their method statement and resultant reporting.
- A copy of the report will be forwarded to the archaeological advisor for approval as soon as it is available, and prior to finalisation of the report for planning purposes. A provision will also be made for further reporting and publication of the results of the investigation in a suitable local journal should significant remains be encountered, and no other opportunity exists for their dissemination.
- In addition, at the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/projects/oasis/ must be initiated and key fields completed on Details, Location and Creators Forms. Following completion of any further work, all appropriate parts of the OASIS online form must be entered, and the completed form sent to the HER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).
- 5.48 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by the archaeological advisor. Any charges from the archaeological advisor for monitoring visits or briefs or similar should be invoiced to RPS and then these will be passed on by RPS at cost to the client.

6 OTHER MATTERS

Archaeological Contractor

- RPS will oversee the Archaeological Contractor on behalf of their client. This will include the appointment process, management of fieldwork and editorial of reporting documentation. This WSI does not specifically name an Archaeological Contractor at this stage, to enable flexibility in appointing the appropriate contractor for the project at the relevant point in time. A number of key points regarding the suitability of an Archaeological Contractor are made here:
- 6.1.1 The Archaeological Contractor will be on the Register of Archaeological Organisations (RAO) that is kept by the Chartered Institute for Archaeologist (ClfA). This is a peer reviewed list and any organisation on that list should be considered a competent archaeological organisation.
- 6.1.2 In addition, the Archaeological Contractor will be chosen only from the RPS approved suppliers list, which is held centrally by the RPS Heritage team and further ensures the competency of the contractor. All (archaeological) organisations on the RPS approved suppliers list are Registered Archaeological Organisations with CIfA.
- 6.1.3 When appointing an Archaeological Contractor, the competency of the contractor and relevant staff will also be ensured by a proven track record in undertaking archaeological works within Uttlesford District, the wider Essex region, and the relevant underlying geological sequence.
- 6.1.4 The availability of an Archaeological Contractor will also be a consideration, to ensure that site programmes and reporting deadlines are met. The competency or qualifications of a contractor will not be compromised when discussing availability, time will be allowed for in the programme to ensure the appropriate staff are able to attend.
- 6.1.5 The field team deployed by the Archaeological Contractor will include only full time professional archaeological staff. No volunteers, students or similar will be allowed to undertake archaeological work.

Standards

- RPS Heritage endorses the Code of Practise and the Code of Approved Practise for the Regulation of Contractual Arrangements in Field Archaeology of the Chartered Institute for Archaeologists.
- 6.3 All staff supplied by the archaeological contractor should be of a standard approved by RPS Heritage and be employed in line with the Chartered Institute for Archaeologist's Codes of Practise and hold membership of the Chartered Institute for Archaeologists.
- 6.4 Provision should be made for monitoring of all stages of the project by the client and the local planning authority and their representatives.

Insurance and Health and Safety

- 6.5 The archaeological contractor will maintain both public liability (£5,000,000) and professional indemnity insurance (£1,000,000). Full details of insurance cover can be supplied on request.
- The principal contractor will ensure that all work is carried out to within the Health and Safety and Work etc Act 1974 and the Management of Health and Safety Regulations 1999.

Sources Consulted

Chartered Institute for Archaeologists Guidelines

National Guidance

Department of Communities and Local Government *National Planning Policy Framework* 2012 (revised February 2019)

Department of Communities and Local Government/Department of Culture Media and Sport/English Heritage *National Planning Practice Guidance* 2014 (revised 2019)

Guidelines

Historic England (formerly English Heritage) Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment 2008 (new draft 2017)

Historic England Historic Environment Good Practice Advice in Planning: 1 The Historic Environment in Local Plans July 2015 unpublished document

Historic England Historic Environment Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment July 2015 unpublished document

Historic England Historic Environment *Good Practice Advice in Planning: 3 The Setting of Heritage Assets* December 2017 unpublished document

Historic England Understanding Historic Buildings. A Guide to Good Recording Practice. 2016

MAP2 Management of Archaeological Projects (Second Edition) 1991

MoRPHE Management of Research Projects in the Historic Environment The MoRPHE Project Managers' Guide 2009

MoRPHE Management of Research Projects in the Historic Environment PPN 3: Archaeological Excavation January 2008

Museums and Galleries Commissions Standards in the Museum Care of Archaeological Collections 1991

United Kingdom Institute for Conservation (UKIC) Conservation Guideline No 2 (n/d)

United Kingdom Institute for Conservation (UKIC) guidelines for the preparation of excavation archives for long term storage 1990

General

Essex Historic Environment Record

Internet

British Geological Survey –	
British History Online –	
Domesday Online –	
Historic England: The National Heritage List for England	_

Portable Antiquities Scheme –

Site Specific

LP Archaeology, Archaeological Evaluation Report, Land at Warish Hall, Takeley, 2021 Magnitude Surveys Land at Warish Hall, Takeley, Geophysical Survey 2021 RPS, Archaeological Desk Based Assessment, 7 Acres, Takeley, 2023

