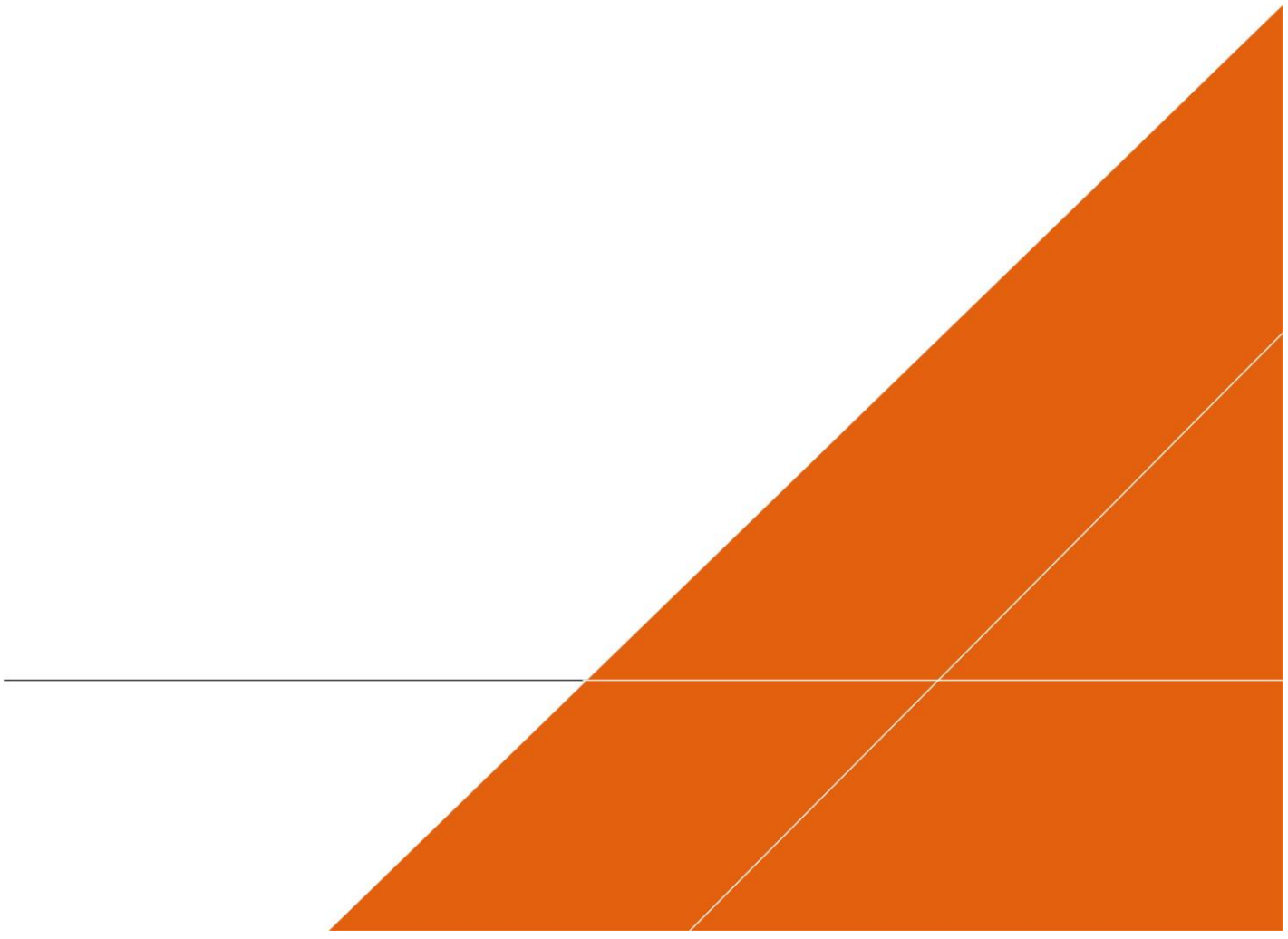
OTTERPOOL PARK ENVIRONMENTAL STATEMENT

Appendix 9.4 Archaeological Appraisal and Fieldwork Strategy

NOVEMBER 2018



Otterpool Park ES - Archaeological Appraisal and Fieldwork Strategy

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VERSION CONTROL

Version	Date	Author	Changes
001	26/07/2017	HW	Draft
002	28/07/2017	EP	Formatting and JW review
003	10/10/2017	KC	Updates and additions
004	21/10/2018	KC	Updates and additions following consultee reviews
005	9/11/2018	KC	Final draft for JW review
D02	20/11/2018	KC	EIA PM Review edits/comments

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Executive Summary

This Archaeological Appraisal and Fieldwork Strategy (AAFS) was carried out in July - October 2017 and then was updated in October - November 2018. It was commissioned by the client – Otterpool Park LLP- to review and expand on information previously to produce an informed framework for archaeological investigation of the site area occupied by the proposed Otterpool Park Development. It was requested (at RIBA Stage 1 of the design) by the statutory consultees in order to expand upon an earlier Otterpool Park Cultural Heritage Desk-Based Assessment (DBA)(Arcadis, 2015) and to ensure that an appropriate evaluation strategy is implemented for the site. It has informed master-planning for the wider Otterpool Park Framework Masterplan Area, as well as decision-making and appropriate mitigation considerations for the proposed Development.

The DBA identified that the site contains a wide range of heritage assets, some of which are of high significance. Recorded archaeological remains occur in a fairly low density across the site however as recorded by the Kent Historic Environment Record (121 non-designated archaeological assets within the site and a 500m search area). This low density is largely due to the fact that the site and its immediate vicinity has been subject to little systematic archaeological investigation and is not necessarily a reflection of what is actually present. The consultees requested that further appraisal of the site's archaeological potential be carried out examining a wider search area than the DBA. This appraisal combines study of known heritage assets with predictive modelling informed by ground conditions, topography, hydrology and geology.

The appraisal divides the landscape into character zones and then extrapolates, models and considers what type of past activity might have occurred within these character zones and to predict on a zone-by-zone basis where further archaeological remains might be present. The report then produces strategies for an overall framework for archaeological fieldwork on a zone-by-zone basis. This fieldwork strategy includes focussed research aims and objectives for the site per zone which will inform appropriate methods are employed in investigation and ensure optimal allocation of resources such as time and cost.

Key areas of high archaeological potential identified within the site are: Palaeolithic deposits; prehistoric barrows, Roman remains and medieval archaeology. Westenhanger Castle and its associated landscape features are of key importance for the medieval and early post-medieval period. This appraisal is mainly concerned with potential below ground archaeological remains, deposits or earthworks rather than built heritage assets and military structures and their settings which are reviewed in detail elsewhere.

As a principal method, geophysical surveying by magnetometer is recommended across the site having been tested during preliminary survey in May 2017. Following this, trial trenching will be implemented to investigate areas of archaeological potential identified by geophysical survey and check archaeologically 'blank' areas to determine where remains are present and the nature and extent of those remains. Environmental sampling and investigation by test-pitting is recommended for areas with alluvium (river clay relating to the East Stour River) and colluvium (and also for certain areas of brickearth deposits). Archaeological remains within these areas have potentially high preservation and may provide useful prehistoric and palaeo-environmental information. Archaeological monitoring is recommended for geotechnical test-pits and boreholes to provide additional information.

Update October 2018

This AAFS was produced between May to October 2017 but updates have been made to it in October- Nobember 2018. Since this report was first produced a programme of pre-application archaeological fieldwork has been implemented meaning that some of the report's conclusions on the archaeological potential of the site have been superseded. This report does not seek to rehearse the results of the pre-planning application fieldwork as these will be reported on elsewhere. Furthermore, other desk-based reports have been written since 2017 which expand on certain topics

such as the prehistoric barrows and the site's geoarchaeological and Palaeolithic potential. Additionally, an addendum to the 2016 DBA has been produced. This AAFS is still relevant for providing information about how the site's archaeological potential was assessed and a pre-application fieldwork strategy devised. It is hoped that it can be built upon to inform the next stage of evaluation and also to aid in the preparation of a mitigation strategy.

1 Introduction

1.1 Background

1.1.1 This Archaeological Appraisal and Fieldwork Strategy (AAFS) aims to produce an informed framework for investigation of the proposed Otterpool Park Development located near Lympne, Kent. The report considers the varied archaeological resources and ground conditions. The AAFS was requested at RIBA Stage 1 of the proposed Otterpool Park scheme design by the statutory heritage consultees and was determined as a necessary requirement in ensuring that an appropriate evaluation strategy is implemented for a site of this scale. The site was originally approx. 700 Ha and is now approx. 765ha when considering the wider Otterpool Park Framework Masterplan (FM) that envisages 10,000 homes. The proposed Development for Otterpool Park occupies 580ha of land within the FM site.

1.2 Proposed Development

1.2.1 The planning application seeks permission for a new garden settlement accommodating up to 8,500 homes (Use Classes C2 and C3) and Use Class E, F, B2, C1, Sui Generis development, including use of retained buildings as existing, with related infrastructure, highway works, green and blue infrastructure, with access, appearance, landscaping, layout and scale matters to be reserved.

1.3 Site Location, Geology, Topography and Land Use

1.3.1 The assessment focuses on a 765ha area centred on NGR 611239, 136507 (**Figure 1**). The site is bounded by Stone Street to the east, Aldington Road to the south and the HS1 line (CTRL) to the north. Its western boundary follows Harringe Lane, then cuts east around the north-eastern boundary of Harringe Brooks Woods and south down to Aldington Road. The site is intersected by A20/Ashford Road and Otterpool Lane. It incorporates agricultural, recreational, residential, industrial and commercial areas of usage.

1.3.2 The site lies at the north-eastern edge of the Weald. The Stour River valley forms the main drainage axis of this area of north-east Kent. The East River Stour, which passes through the site in its northern extent, is a tributary of this river and the topography of the site reflects the river valley nature of this area with the land adjacent to the East River Stour lying at around 68m AOD (Above Ordnance Datum). Land rises to the west reaching 80m west of Barrow Hill, Sellindge and east of Harringe Court. The highest point within the site is at its southern edges between Lympne/Link Industrial Park and the village of Lympne where the land rises to 106m AOD. This gives the landscape a gently undulating nature. There are two small unnamed watercourses which also run south-north through the site from areas of higher ground towards the East Stour River. To the south of the site is the Romney Marsh, a low-lying area of former marshland.

1.3.3 The geology of the site is variable. The western and southern parts of the site are mapped as interbedded sandstone and limestone of the Hythe Formation. Much of the eastern and northern parts of the site are mapped as sandstone, siltstone and mudstone of the Sandgate Formation, and these tend to be overlain by Quaternary Head deposits of clay and silt (**Figure 3**). Alluvial clays, silts, sands and gravels have formed in the valleys of the East Stour River. The north-eastern part of the site is mapped as sandstone of the Folkestone Formation although a borehole (BH105) bored this year by Arcadis east of Hillhurst Farm at the eastern end of the site records Head Deposits overlying Atherfield Clay Formation. All the bedrock geology underlying the site was formed during the Cretaceous period (BGS 2016).

1.3.4 Some areas of the site are also rich in brickearth deposits which are sometimes not differentiated from Head Deposits (**Figure 3**) but are thought to have been laid down during the peak of the latest Glacial Maximum c. 20,000 BP (Before Present) and formed from a wide variety of processes.

1.4 Aims and Objectives

1.4.1 The appraisal scope expands upon the Cultural Heritage Desk-Based Assessment (DBA) for the site (Arcadis 2016) and also discusses a wider Study Area, bringing in discussion of sites along the ridgeway to the north and Romney Marsh to the south as well as sites further afield when appropriate. The overall purpose of this current document is to review the archaeological assets, deposits, historic landscape, geology and topographic context of the site and to recommend methods for the evaluation of the proposed Development and surrounding area. Archaeological methods which would not be suitable for evaluation but would be suitable for mitigation strategies are also considered.

1.4.2 The general aims of this assessment are to:

- To assess and review previous archaeological data in order to establish an archaeological, historical and historic landscape baseline for the site.
- To assess and review previous archaeological investigations such as the Channel Tunnel Rail Link (CTRL/HS1) reports, The Stour Basin Palaeolithic Project, The Southern Rivers and the English Rivers Palaeolithic Projects and the A20 Lorry Area scheme (Highways England), in conjunction with Stage 1 findings.
- To assess and review previous archaeological activities within the site and immediate study area to determine the potential for the survival of buried archaeological remains across the site.
- To establish the need for further intrusive and non-intrusive investigative works, alongside the priorities of the South East Research Framework (SERF) and the draft Shepway Heritage Plan.
- To assess the nature, character, distribution, extent and depth of Quaternary deposits across the site.
- To assess the Palaeolithic and palaeo-environmental potential of the site, and establish its importance and significance in the context of national and regional research priorities.
- To identify priorities for further investigation, and to make recommendations on suitable methods and approaches for possible mitigation work and
- To inform masterplanning and decision-making for the proposed Development.

2 Methodology

2.1 Study Area

2.1.1 The study area comprises the site (Figure 1) and considers nationally designated assets within 1km of the application site boundary and beyond and all non-designated assets within 500m of the site. These are presented on Figure 5 using the Project Identifiers assigned during the Stage 1 DBA (Arcadis 2016) and are listed in the gazetteer (Appendix A). Where appropriate, relevant archaeological assets and investigations located beyond this study area are also included in order to provide comparisons and to understanding the site's potential better. Historic buildings are not discussed in detail in this report as they are discussed in the DBA (Arcadis 2016/17) and the Historic Buildings and Structures Appraisal (Arcadis 2017b).

2.2 Consultation

2.2.1 Consultation, concerning the need for a framework to underpin evaluation, was carried out with the Kent County Council (KCC) heritage advisors (Ben Found and Lis Dyson) by telephone on the 4th of November 2016 and subsequently with Peter Kendall of Historic England (HE), and the KCC heritage advisors at a meeting in Folkestone on the 16th November 2016 and then by telephone during the first half of 2017 and at a second meeting on the 17th of July 2017. Comments on a draft of this report were received by email from the KCC heritage advisors on 14th November 2017 and from Peter Kendall of Historic England on 16th November 2017. The report has been updated to include their comments.

2.2.2 This report also incorporates comments that the heritage consultees made on the DBA (Arcadis 2016). Ben Found and Lis Dyson commented on the DBA by email on the 20th June 2017 and Peter Kendall sent comments by email on the 7th May 2017.

2.3 Criteria For Assessing Archaeological Potential

2.3.1 The likelihood that significant undiscovered heritage assets may be present within the development area is referred to as archaeological potential. Broad levels of potential can be assigned to different landscape Zones, following the criteria in Table 1.

2.3.2 This report reviews the available archaeological material, including past reporting and investigations (see **Appendix B** for full summaries and **Figure 2**). It expands on the DBA and uses the results of the 55 Ha of geophysical survey carried out in May 2017 (Headland 2017) along with an assessment of ground conditions and other determining factors affecting potential (Table 3) to form the basis for dividing the site into eleven Zones (A to K) as presented in Table 2 and represented on **Figure 4**. Within the Zones, Areas of High Archaeological Potential have been identified (A1, B4 etc) and these are presented on Table 4 and also represented on **Figure 4**.

2.3.3 Recommendations for archaeological fieldwork are made based on the conditions within each Zone, forming a framework for further investigation. This fieldwork strategy will focus on research aims, concentrate efforts and reduce overall costs for evaluation.

- Table 1 presents Criteria for Assessing Archaeological potential;
- Table 2 summarises the archaeological potential for each period in individual Zones;
- Table 3 summarises the factors affecting potential survival of archaeological remains Zone by Zone;
- Table 4 uses the information in Tables 2 and 3 to produces Areas of High Archaeological Potential with the Zones

2.3.4 The following factors are considered in assessing archaeological potential:

- The distribution and character of known archaeological remains in the vicinity, based principally on an appraisal of data in the Kent Historic Environment Record (KHER).
- The history of archaeological fieldwork and research in the surrounding area, which may give an indication of the reliability and completeness of existing records.
- Environmental factors such as geology, topography, hydrology and soil quality, which would have influenced land-use in the past and can therefore be used to predict the distribution of archaeological remains and palaeo-environmental deposits.
- Land use factors affecting the survival of archaeological remains, such as ploughing or quarrying.
- Factors affecting the visibility of archaeological remains, which may relate to both environment and land-use, such as soils and geology (which may be more or less conducive to formation of cropmarks), arable cultivation (which has potential to show cropmarks and create surface artefact scatters), vegetation, which can conceal upstanding features, and superficial deposits such as colluvium and alluvium which can mask archaeological features.

Table 1 Criteria for Assessing Archaeological potential

Potential	Definition
High	Undiscovered heritage assets are almost certainly present, and these are likely to include assets of high or medium importance.
Medium	Undiscovered heritage assets are likely to be present, and it is possible, though unlikely, that these may include assets of high or medium importance.
Low	Undiscovered heritage assets may be present, but these are unlikely to be numerous and are highly unlikely to include assets of high or medium importance.
Negligible	The study area is highly unlikely to contain undiscovered heritage assets of any level of importance.

2.3.5 Those areas where there is no possibility of undiscovered heritage assets existing due to complete removal e.g. for quarrying are marked as ‘not suitable for evaluation’ on **Figure 4** along with areas covered by dense housing or large bodies of water.

2.4 Sources

2.4.1 A variety of sources were consulted during the preparation of this report;

- The KHER, for details on non-designated archaeological assets, archaeological events, Conservation Areas and data on findspots recorded with the Portable Antiquities Scheme;
- The National Heritage List for England (NHLE), including the list of Scheduled Monuments, for information on designated assets within the study area and wider area;
- The National Monuments Record (NMR) where this is different to the KHER;

- The Historic England Archive, accessed through the Pastscape website, for additional information on assets within the study area and the wider area. This source included the Air Photo Library;
- The designated series of Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs);
- All Ordnance Survey maps (19th, 20th and 21st century) at 1:10560. 1:10000, 1:2500 and 1:1250 scales, where available;
- All Tithe Maps (and apportionments), estate maps and any other relevant historical maps/documents within the County Record Office, or readily available elsewhere (such as at the National Archives at Kew);
- The British Geological Survey website, for information on the prevailing geological conditions within the vicinity of the site;
- Geotechnical/borehole reports from site investigations and from the British Geological Survey online borehole reviewing resource relating to the study site;
- Geotechnical/borehole logs from Arcadis Ground Investigations across the site in 2017;
- The relevant volumes for the site of the Southern Rivers Palaeolithic Project (Wessex Archaeology 1993) and the English Rivers Palaeolithic Project (Wessex Archaeology 2009); http://archaeologydataservice.ac.uk/archives/view/terps_eh_2009/index.cfm
- Any published and unpublished archaeological and geological works relating to sites in and immediately adjacent to the study area, detailed in **Appendix B**;
- The Folkestone & Hythe District Council website was consulted for updated information on planning policy;
- The Kent Historic Landscape Characterisation final report (Oxford Archaeological Unit, 2001);
- The South-East Research Framework (SERF) Resource Assessment & Research Agenda documents; (held on-line at www.kent.gov.uk/serf)
- The Kent Gardens Compendium and relevant research reports by the Kent Gardens Trust;
- Online Air Photographic Collections including those held by the NMR, KCC, Cambridge University, and satellite imagery from Google Earth. Visits were not made in person to these repositories, only their online catalogues were viewed.

Documentary Sources and Arcadis Reports

- Arcadis 2016. Otterpool Park, Lympne, Kent, Cultural Heritage Desk-Based Assessment;
- Arcadis 2017a. Otterpool Park, Lympne, Kent, Historic Landscape Characterisation and Farmstead Analysis;
- Arcadis 2017b. Otterpool Park, Lympne, Kent, Historic Buildings and Structures Appraisal;
- Arcadis 2017c. Westenhanger Castle, Near Hythe, Kent, Statement of Significance;
- Arcadis 2017d. Westenhanger Castle Near Hythe, Kent, Conservation Management Plan and Use Strategy;
- Arcadis 2018a. Prehistoric Barrows at Otterpool Park, Kent, Statement of Significance;
- Arcadis 2018b. Roman Villa at Otterpool, Kent, Statement of Significance;
- CAP: Conservation Architecture & Planning 2006. Folkestone & Hythe District Council Conservation Area Appraisal: Lympne;

- Chartered Institute for Archaeologists 2014. *Code of Conduct;*
- Chartered Institute for Archaeologists 2014. Standard and guidance for historic environment desk-based assessment;
- Chartered Institute for Archaeologists 2014. Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment;
- English Heritage 2002. Military Aircraft Crash Sites: Archaeological guidance on their significance and future management;
- English Heritage 2008. Conservation principles policies and guidance for the sustainable management of the historic environment;
- English Heritage 2011. Introduction to Heritage Assets: Mills;
- Folkestone & Hythe District Council. Places and Policies Local Plan, Preferred Options (Emerging);
- Folkestone & Hythe District Council. Folkestone & Hythe Core Strategy Local Plan 2013 (Emerging);
- Headland Archaeology 2017. Otterpool Park, Kent Geophysical Survey (OPHK17);
- Headland Archaeology 2018. Westenhanger Castle, Lympne, Kent, Geophysical Survey (WHCK17);
- Her Majesty's Stationery Office 1997 *Hedgerow Regulations;*
- Historic England 2017. Historic Environment Good Practice Advice in Planning 3: The Setting of Heritage Assets;
- KCC: Kent HER (Historic Environment Record) 2016. HER Monuments Report;
- Land Use Consultants 2005. South Downs Integrated Landscape Character Assessment;
- Oxford Archaeological Unit 2001. Kent Historic Landscape Characterisation. Final Report;
- Oxford Archaeology in preparation. Otterpool Park, Sellindge, Kent. Archaeological Evaluation Reports;
- Pope, M, Dinnis, R, Milks, A, Toms, P and Wells, C, 2013. 'A Middle Palaeolithic to Early Upper Palaeolithic Succession from an open-air site at Beedings, West Sussex'. *Quaternary International,* **316**, 14-26;
- Shepway District Council. Shepway District Local Plan Review (2006) Policies Applicable 2013 Onwards;
- SUMO Services 2018. Geophysical Survey Report, Otterpool Kent (Report no 11903);
- SUMO Services 2018. Geophysical Survey Report, Former Lympne Airfield, Otterpool Park, Kent (Report no 12992);
- University of Southampton 2015. Stour Basin Palaeolithic Project;
- Zetica 2017. Otterpool Park, Lympne, Kent - UXO Desk Study & Risk Assessment.

Online Sources

- MOD: Ministry of Defence Estate – Guidance on Aviation Archaeology [https://www.gov.uk/guidance/aviation-archaeology accessed 17/10/2016];
- NKDU: North Kent Downs Unit. Landscape Design Handbook; [http://www.kentdowns.org.uk/guidance-management-and-advice/landscape-design-handbook accessed October 2016]

- NKDU: North Kent Downs Unit. *Kent Downs AONB Farmstead Guidance;* [http://www.kentdowns.org.uk/publications/kent-downs-aonb-farmstead-guidance accessed October 2016]
- Folkestone & Hythe District Council Planning Portal; [https://www.folkestone-hythe.gov.uk/planning-policy accessed 16/10/2016]
- BGS: British Geological Survey - Geology of Britain Viewer; [http://mapapps.bgs.ac.uk/geologyofbritain/home.html accessed 17/10/2016]
- BLO: British Library Online – Ordnance Survey Drawings Collection; [http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/ accessed 10/10/2016]
- NLS: National Library of Scotland – Ordnance Survey Maps; [http://maps.nls.uk/os/ accessed 10/10/2016]
- ADS: Archaeology Data Service; [http://archaeologydataservice.ac.uk/archives/view/romangl/map.html - accessed 10/10/2016]
- ADS: Archaeology Data Service. *Roman rural settlement resource*; [http://archaeologydataservice.ac.uk/archives/view/romangl/map.html - accessed 10/10/2016
- NU: Nottingham University Key to English Place Names; [http://kepn.nottingham.ac.uk/map/place/Kent/Lympne - accessed 12/10/16]
- Google Earth. [https://www.google.com/earth/ accessed October 2016];
- NHLE: National Heritage List for England (Historic England); [https://historicengland.org.uk/listing/the-list/map-search?clearresults=True accessed October 2016]
- Pastscape. [http://www.pastscape.org/ accessed 10/10/2016];
- UoN: University of Nottingham. *Key to English Place Names*; [http://kepn.nottingham.ac.uk/map/place/Kent/Lympne - accessed 12/10/16]
- PSG: Pill Box Study Group*. Pickett-Hamilton Fort* (article) [http://www.pillbox-study-group.org.uk/advanced-pillbox-designs/part-2-o-z/pickett-hamilton-fort/ accessed October 2016]

Personal Communication (Pers comm)

- KCC (Lis Dyson and KCC/FHDC (Ben Found) email 20th June 2017;
- Historic England (Peter Kendall) email 7th May 2017;
- KCC (Lis Dyson) and KCC/FHDC (Ben Found) Pers comm 3rd of November 2016 and 16th of November/17th July 2017 (+ various telecom);
- Historic England (Peter Kendall) Pers Comm 16th of November 2016 and17th July 2017 (+various telecom);
- KCC/FHDC (Ben Found) email 14th November 2017;
- Historic England (Peter Kendall) email 16th November 2017.

3 Regulation, Policy and Guidance

3.1 Regulation and Policy

3.1.1 This assessment has been undertaken in accordance with current legislation, national and local plans and policies. Relevant legislation, policy and guidance are outlined in the Cultural Heritage Desk-Based Assessment (Arcadis 2016) and other Arcadis reports for the site (Arcadis 2017).

3.2 Regional Research Frameworks

South-East Research Framework (SERF)

3.2.1 The SERF aims to identify what is known about the south-east's historic environment and areas where more research and data is needed. The Framework is divided into historic periods and themes. Seminar notes have been compiled on the following areas; Defence, Environment, Historic Landscapes, Maritime, Urban Landscape, the Lower and Middle Palaeolithic, the Middle Bronze Age to Iron Age, the Neolithic and early Bronze Age, the Post-Medieval and Modern, the Anglo-Saxon period, the Medieval period, the Roman period, and the Upper Palaeolithic and Mesolithic.

3.2.2 The following research agenda is put forward by the SERF Research Agenda Conference;

- The priority to collect palaeo-environmental and archaeological data before it is lost.
- The need for accruing a full and balanced dataset for future researchers.
- the recording of remains, threatened or not, by standing building survey, landscape survey, excavation, artefact/environmental analysis.
- a need for a more combined, interdisciplinary and coordinated approach to all periods within the region.
- Site level correlations between particular buildings and sites and documentary evidence of occupiers should be sought, and data already collected reviewed and synthesised in accordance with research questions linking documentary evidence with material culture.
- Further investigation through combined aerial photography, map regression and place-name analysis including elements denoting topographical features and personal names.
- A focus on research and the integrated dissemination of ‘grey’ literature.
- HERs, Portable Antiquities Scheme data and reports of environmental analyses is required, and more environmental analyses are needed generally.
- Agreed regional typologies for artefacts: for example, the region still lacks a unified form and fabric type series for ceramics, for this and other periods.
- Systematic environmental sampling and analyses of waterlogged deposits and organic-rich deposits and sampling of good animal bone assemblages are required in order to produce more comparative data from all site types.
- Improved dating in relation to finds, environmental and zooarchaeological samples in order to fine-tune comparative analyses.

Draft Shepway Heritage Plan

3.2.3 Only three draft chapters of the Shepway Heritage Plan were available at the time of writing this report. These are Chapter 5b Castles, Chapter 6 Vulnerabilities of the Heritage Assets and Chapter 7 Opportunities. Listed below are summaries of each chapter and paragraphs which are applicable to the proposed Development.

Chapter 5b Castles

3.2.4 This chapter considers the theme of the Medieval defences of the Folkestone & Hythe District from 1066 to 1547. Post-1547 alterations to the castle buildings are also identified to demonstrate the changing function of the castle over the centuries. The only sections of this chapter which relate to the site and the proposed Development are those which discuss Westenhanger Castle and its archaeological potential. The potential for surviving buried remains at Westenhanger Castle is described as high and presents an opportunity for future archaeological investigation. Buried remains could reveal further information about the development of the castle, its changing function and use of fortifications within the county.

Chapter 6 Vulnerability of Heritage Assets

3.2.5 This chapter considers the vulnerability of the District's heritage assets to general activities, processes and development proposals. Listed below are summaries of the paragraphs which are applicable to the proposed Development in relation to unknown archaeological remains:

3.2.6 Section 6.18 discusses how all buried archaeological sites in agricultural land are vulnerable to ploughing. Surviving earthworks, like bowl barrows, are especially vulnerable to shallow ploughing.

3.2.7 Section 6.19 highlights how surviving earthworks in woodland are threatened by forestry machinery. Folkestone & Hythe has a notable collection of designated Bronze Age barrows, several which survive in woodland.

3.2.8 Section 6.31 addresses the effect of construction activities on buried archaeological remains through the excavation of new foundations, services, remodelling of land, stripping of sites in advance of development, piling works and from the operation of plant. Section 6.36 discusses the Otterpool Park development directly. It summarises the proposed Development and planning process to date. Section 6.45 assesses the vulnerability of archaeology or potential archaeology on proposed allocation sites. The Otterpool Park site falls within an area assessed as having a strong potential for remains that would warrant further investigation and preservation.

Chapter 7 Opportunities – Making the Most of Shepway's Heritage

3.2.9 This chapter considers the economic value of heritage that can be realised through conservation and use of the District's heritage assets in a number of ways, contributing to a range of agendas. Below are the paragraphs which are applicable to the proposed Development:

3.2.10 The creation of the new Otterpool Garden Settlement provides an opportunity to Folkestone & Hythe District Council to use the natural and built heritage strengths of the area to shape a unique and distinctive place and assist regeneration.

3.3 Guidance

3.3.1 This Archaeological Appraisal and Fieldwork Strategy was undertaken with regard to all relevant industry guidance, principally the 'Code of Conduct', 'Standards and Guidance for Archaeological Desk-Based Assessments' and 'Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment' (Chartered Institute for Archaeologists, 2014) and Historic England's 'Historic Environment Good Practice Advice in Planning 3: The Setting of Heritage Assets' (2017). This document was also guided by KCC Manual of Specifications (see below) and SERF.

Guidance on Military Remains

3.3.2 All military aircraft crash sites in the United Kingdom, its territorial waters, or British aircraft in international waters, are controlled sites under the Protection of Military Remains Act 1986. A licence must be obtained from the Ministry of Defence (MOD) to authorise any disturbance of these sites and a licence to excavate must be issued from the Joint Casualty and Compassionate Centre (JCCC), part of the Defence Business Services (DBS). Prior to a licence being issued the applicant is required to research and supply the JCCC with the location of the crash site, type of aircraft and the fate of the crew. Applications can take at least 3 months and should be processed before any works are commenced. This guidance is being provided in relation to records of two of four crash-sites within the study area that are thought to be located within the site. A licence will not be issued if human remains are likely to be found at the site and also if there are significant amounts of unexploded ordnance at the site.

Kent County Council Manual of Specifications for Archaeological Work in Kent

3.3.3 This manual sets out the requirements (site specific and generic) for archaeological work in Kent and Medway and is intended to promote good practice and assist professional archaeologists, developers and their appointed professional archaeological consultants to achieve appropriately high standards of data collection, analysis and report preparation.

3.3.4 Part A details site specific requirements for projects, including a breakdown of chapters that need to be included in reports and descriptions of content for each chapter.

3.3.5 Part B details generic requirements for specific types of archaeological work. The content of the documents follows the national standards and guidance published by the CIfA on conducting archaeological evaluation, fieldwork and assessment including the Code of Conduct (CIfA) and the Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology (CIfA). When the documents do differ from CIfA guidelines it is to focus on Kent, KCC and the KHER specifically. These documents cover the following topics;

- Evaluation – Trial Trenching Requirements;
- Specification for a standard Desk Based Assessment and Walkover Survey for areas with known Palaeolithic potential;
- Specification for detailed evaluation for Quaternary deposits and Palaeolithic potential.

4 Archaeological, Historical and Historic Landscape Background

4.1 Summary

4.1.1 The following chapter provides a summary of the archaeological, historic and historic landscape background for the site, the study area as well as its wider environs where relevant. It assesses the wide breadth of archaeological data available, including a review of previous reporting and investigation. Those investigations/events that were carried out pre-2017 are represented on **Figure 2**.

4.2 Review of previous reporting

4.2.1 The following summaries of key documents are given below. For details of all past reports and archaeological investigations see **Appendix B** and **Figure 2**.

Cultural Heritage Desk-Based Assessment (2016) and Addendum (2018)

4.2.2 The Cultural Heritage Desk Based Assessment (DBA) for the site, carried out as part of Stage 1, summarised that the archaeological potential within the site. An addendum to this document was produced in September 2018.

UXO Desk Study and Risk Assessment (May 2017)

4.2.3 An UXO Desk Study and Risk Assessment was undertaken by Zetica Ltd for the site in May 2017. The report found several potential sources of UXO hazard. The south of the site, particularly around the former RAF Lympne was assigned as high UXO hazard level. The land immediately to the south of the Ashford Road was assigned a moderate hazard level, and the remainder of the site was low. An abandoned bomb was located on the north-western corner of the site. This part of the site is assigned a high UXO hazard level (Zetica 2017).

Geophysical Survey, Otterpool Park, Kent (May 2017)

4.2.4 Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey at five locations within the proposed site totalling 55 Ha, as part of a baseline assessment of the heritage potential of the site. The survey identified field systems, ditches and pits of likely Roman date within the south of the site; remains which may relate to the barrows recorded by the Kent HER in the north west of the site and remains interpreted as pertaining to a post-medieval brick kiln shown on historic mapping in the north east of the site. It revealed a lower clarity in results from areas where Head Deposits (clay and silt) are present (Headland Archaeology 2017). Further geophysical surveys have taken place on the site since this report was first produced, principally 220Ha of magnetometer survey by SUMO in 2017 and a magnetometer survey of the Airfield in 2018 (SUMO Services 2018).

Reports from the Channel Tunnel Rail Link (CTRL) (1994-2006)

4.2.5 Archaeological reports were produced following a programme of investigations that were conducted in advance of the construction of the Channel Tunnel Rail Link (now known as HS1). Evaluations, excavations, alluvial deposit investigations, geophysical surveys and walkover surveys were conducted between 1994 and 2006. Most of these investigations fall outside the application site boundary but within the wider study area to the north of the site providing useful contextual information regarding archaeological survival and ground conditions. Investigations around the north end of Harringe Lane uncovered evidence of Neolithic, Iron Age, Roman, Medieval and Post-Medieval activity. The land to the north of

Westenhanger Castle revealed evidence of Bronze Age, Iron Age, Early Medieval and Medieval activity (Oxford Archaeology 2004 updated 2009).

Reports from the A20 Lorry Area – Stanford West (2016).

4.2.6 Archaeological investigations took the form of evaluations, geophysical survey and desk-based assessments. Geophysical surveys identified several former field boundaries, field ditches and drains within the area. Magnetic disturbance from scatters of World War II material was also detected (Highways England 2016).

4.3 Chronological Overview

Palaeolithic (500,000 to 10,000 BC)

4.3.1 Previous evidence within the site and study area has been limited to some sporadic, isolated findspots, usually hand axes. This relatively low-density distribution of finds appears to be typical for the majority of Kent, excluding the river valley of northern Kent. Parts of the site have the potential for the survival of prehistoric landscapes and are described below.

4.3.2 The South Eastern Research Frameworks as well as Lis Dyson (pers comm) have highlighted the potential for the Greensand Hythe Beds (located in the western half of the site) to contain geological fissures or 'gulls' formed in the Quaternary under periglacial and interglacial conditions. These act as sediment traps and can contain Palaeolithic land surfaces. Certain such fissures when investigated have been shown to contain Middle and Upper Palaeolithic tools and debitage as well as faunal remains. One such site is Beedings in West Sussex (Pope et al 2013).

4.3.3 Most of the site stands on Lower Greensand Sandgate Bed with large patches of Head Brickearth deposits, Pleistocene gravels and Holocene alluvium deposits, all associated with the East Stour River. An alluvial deposit investigation (1999) between the M20 motorway and the CTRL found that much of the alluvial sequence represented channel fill and/or overbank floodplain alluvium. The river is likely to have been much deeper and wider during this period given the size of the flood plains on either side. Any old courses of the river will appear as infilled palaeochannels, similar to the one palaeochannel **(68)** identified close to Barrow Hill. It is likely that other palaeochannels survive in Zone A.

4.3.4 The Brickearth or 'Head Brickearth' is an area of high Palaeolithic potential. This term includes deposits that can be of widely varying ages and are formed by a wide variety of processes. The Stour Basin Palaeolithic Project (2013-2015) which partly covers the site area states that 'some brickearth deposits filling dry valleys represent colluvial deposition in the Holocene, and thus have potential to bury (or contain) evidence of final Upper Palaeolithic, Mesolithic or other Late Prehistoric remains. However, most brickearth deposits (particularly the major spreads of northeast Kent) are regarded as slopewash deposits comprising a mixture of reworked Solid bedrock (Cretaceous or Tertiary sands, silts and clays) and aeolian sands and silts, and formed in the Last Glacial Maximum of the last Devensian glacial period between c. 24,000 and 18,000 BP (years Before Present). This is a period when Britain was unoccupied so if correct this would make them a deposit of low potential for Palaeolithic remains. However, it was thought possible that north-east Kent could contain unrecognised deposits mapped as brickearth that were un-reworked aeolian loess from earlier in the Devensian. If so, these deposits would be of much higher Palaeolithic potential, dating to a period when Neanderthals were present, and with the potential to contain undisturbed remains of their activity. Some brickearth spreads might also seal, or represent, fluvial deposits. These too would be of higher Palaeolithic potential.

4.3.5 Three test pits were dug to the south-east of Otterpool Manor Farm as part of the Stour Basin Palaeolithic Project in 2013 (Event 13; Figure 2) in order to study the date and origin

of an area of mapped Head Brickearth and to locate any terrace deposits of the River Stour and any Palaeolithic artefacts. Head Brickearth 2-3m thick and slightly gravelly at base was seen to overlie Sandgate Beds. No palaeo-environmental remains or any evidence of Palaeolithic activity was present. There was no evidence of buried fluvial terrace deposits. An OSL (Optically Stimulated Luminescence) sample was taken from the middle part of the brickearth which gave a date of 19,360 BP (before present) ± 2,230 years confirming that this deposit is a slopewash deposit of late Devensian age, formed during the last Glacial Maximum (i.e the latest period in last glacial period when ice sheets were at their greatest extension). The Project report concluded that it remains possible that older plateau brickearth of aeolian origin is present upslope to the south-east, and this might date to earlier in the Devensian, or even older (University of Southampton 2015). This would be in the area of Lympne/Link Park Industrial Park and just to the north and east of it where the land rises to between 100-105m AOD in Zone I.

4.3.6 The nature of the sub-surface topography associated with the floodplain of the East Stour has been discussed by geo-archaeological investigations ahead of the CTRL on the north side of the River (2002). These investigations identified deposits of the East Stour of both probable Pleistocene and Holocene date with relatively low palaeo-environmental potential. Fluvial gravels from the Pleistocene are therefore expected on the northern and eastern sides of the river, in the south of Zone A, in the east and north of Zone B, across Zone D and Zone. H.

4.3.7 Investigations prior to the construction of the CTRL (1994) indicated that surface scatters of prehistoric finds in areas with Brickearth deposits adjacent to the floodplain suggested occupation. Alluvial deposits along the East River Stour have high archaeological potential to contain organic remains within their silts. Palaeo-environmental remains could still remain in further areas of fluvial gravel across the site, for example, in Zones E and I.

4.3.8 Zones with medium to high archaeological potential for this period are;

- The Greensand Hythe Beds, in Areas A, B, I, G and and the western half of Zone H.
- Higher parts of I (I1 and I2), to the north and east of Lympne/Link Industrial Park are areas where it would be desirable to carry out further test pit investigations, supported by sedimentological studies and OSL dating, to verify whether or not there are aeolian or other sediments (such as buried fluvial aggradations) in the un-investigated parts of this brickearth patch.

Mesolithic and Neolithic (10,000-2500 BC)

4.3.9 Flint scatters tend to be the most common type of Mesolithic and Neolithic remains within the Weald, a trend also seen across the site itself. They most likely represent transient activity and are usually identified as flint scatters in the plough soil, rarely in situ. Neolithic occupation sites are often represented by flint scatters and small pits. These are more likely away from prehistoric river courses, on lighter soils more ideal for farming, such as the Brickearth. Burnt flint, flint blades and Neolithic axes have also been found in and around the site.

4.3.10 The only two recorded Mesolithic finds within the site is a Mesolithic blade found at the racecourse, south of Westenhanger Castle (**55**) and a tranchet axe found at the junction of Stone Street and Aldington Road (**50**). The scarcity of known Mesolithic remains may not necessarily indicate a lack of activity in this period. Archaeology relies on an understanding of the deposits, formation processes and the landscape characteristics of a site, for example, Mesolithic remains can lie hidden under colluvium in dry valleys (see section 5.3.5). Therefore, the successful evaluation of the area's Mesolithic potential (as with the Palaeolithic) will need geoarchaeological input.

4.3.11 A Neolithic axehead was found at Otterpool Quarry (**47**). A Neolithic arrowhead was found near Harringe Court (**103**) as part of surface collections for the CTRL investigations in 1994. Further to the east the same investigations found a Neolithic or Early Bronze Age worked flint (**105**) and a buried soil (**24**) north of Westenhanger Castle, to the north of the CTRL. Further away from the application site boundary a Neolithic arrowhead was found west of Harringe Brook Woods (**119**).

4.3.12 Zones with high archaeological potential for this period are;

- Wetland edge locations associated with the East River Stour where Holocene floodplain sequences may have the potential to preserve important paleo-environmental remains.
- Holocene colluvium/ploughwash deposits under which Mesolithic remains could lie buried.

Bronze Age (2500-700 BC)

4.3.13 Settlement activity in the area increases in the Bronze Age as populations grew. The occupation activity within the site comprises a Bronze Age settlement (**26**) and associated Prehistoric ditches **(121)** at Lympne Industrial Park. This area of occupation, in Zone I, lies at a high point within the landscape where the valley of the East Stour River, to the north, meets the Aldington ridge, to the south, which marks the edge of Romney Marsh. An evaluation in 2001, to the south of Link Park identified evidence of Bronze Age field systems in the form of parallel ditches, pits and postholes. Archaeological remains associated with this settlement, within Zone I, are possible. Investigations along the line of the CTRL discovered Bronze Age Ditches north of Westenhanger Castle, on the other side of the railway line (**21**). There has also been Early Bronze Age Pottery found at Sellindge, east of the Sewer Farm (**102**). Several flint finds from across the site have been uncovered and dated to late Neolithic/ Early Bronze Age. To the east of the site, a prehistoric flint scatter was found north-east of Lympne (**11**) and a prehistoric flint was found near Newingreen (**10**). Both locations lie close to the former course of Stone Street Roman Road which could indicate that this routeway was in use in the Bronze Age.

4.3.14 Within Zone D1, approximately 1.2 to 1.4km to the north of the Bronze Age occupation site in Zone I, are two Bronze Age barrows **(44, 46)** which lie close to the East Stour River on slight rises in the ground, and a possible third (**116**) represented by a cropmark. Barrow (**44**) is described as a bowl barrow by the KHER. It was subject to some excavation in 1931 A scrap of red ochre is said to have been found. The barrow is marked on OS maps as 'Tumulus'. The barrow is much spread and reduced by ploughing with a diameter of 41.0m and a maximum height of 0.7m. There are no traces of a ditch.

4.3.15 Geophysical surveys from early 2017, identified two areas of magnetic enhancement, in the form of two circular anomalies in Zone D1. The first corresponds to the possible barrow feature (**44**) already known . The second possible sub-circular anomaly, 440m to the north-west of the first, is likely caused by a soil-filled ditch and may represent a second barrow.

4.3.16 Four ring ditches showing as cropmarks in Area B1 are the likely remains of four further barrows (**58, 113, 114** and **115**). This area of the site was not visited during the walkover in 2016. Presuming they are contemporary, these features in B1 and D1 form a Bronze Age funerary landscape and further analysis will reveal how they were linked to each other. All these barrows and presumed barrows occupy positions on ridges or hill side locations. A predictive modelling approach would suggest that hill top or hillside locations in other parts of the site may be likely locations for further barrows to be found. There may be links visually or culturally between the barrows in the site and the barrows that occupy ridge locations in the North Kent Downs to the north of the site. These, for example at Stowting, Hollingbourne and Tolsford Hill, lie on the Pilgrims Way - an ancient routeway. The barrows and ring ditches

within the site and within its vicinity are discussed in a separate Statement of Significance (Arcadis 2018a).

4.3.17 The presence of these burial features in Zones B and D suggests the area nearby was settled and farmed by Bronze Age communities, most likely drawn there by the presence of the river and proximity to the coast. Ditches and barrows remain the most likely form of archaeological remains for this period.

4.3.18 Not yet on the KHER is the recent find of a Middle Bronze Age urn, just north of the application site boundary in Sellindge, at Richardson's Court (Ben Found pers. comm). This urn was found with charcoal but no cremated bone, however it seems likely that it held a cremation burial.

4.3.19 Zones with high archaeological potential for this period are;

- B1 and D1 where several ring ditches and barrows have already been identified;
- I1 and I2 around Lympne Industrial Estate;
- A1 south of the railway line near near where the Middle Bronze Age bucket urn was found.

Iron Age (700BC-AD43)

4.3.20 Evidence of Iron Age activity within the site is limited to one Iron Age coin found at Springfield Woods, east of Harringe Lane. This find is tempting to associate with the location of the presumed spring which must have given the Wood its name. A second coin cluster was found outside the northwest boundary of the site in Sellindge (**90, 92, 93**). These coin finds are likely evidence of casual loss but the relatively high number of coin finds could indicate actual Iron Age activity within the area.

4.3.21 The area to the north-west of Harringe Bridge, has been identified as a possible late Iron Age/early Romano-British settlement on the south west facing slope, above the East Stour River. An archaeological evaluation (1999), to the north of this area and geophysical survey (1996) identified no structural features, although several surface collection surveys (1994) found significant clusters of five Iron Age flint-tempered pottery sherds, alongside evidence from later periods (**94**, **104**). The nature of the finds indicates a possible settlement which could extend into the north-western part of the site, into Zone A or the northern part of Zone B. However, trial trenching (1999) immediately to the east of Harringe Lane found no archaeological features or artefacts from this period.

4.3.22 Excavations in fields to the north of Westenhanger Castle (2001) found extensive evidence of Iron Age occupation in the form of several enclosures and circular structures (**78**). Features of this date were also recorded north of Hillhurst Farm (**74** and **75**). Settlement activity may extend into the area covered by the site, in the northern parts of Zones D, E and F.

4.3.23 Geophysical Survey carried east of Lympne Industrial Estate in 2017 (in Zone I2) identified clear anomalies of rectilinear enclosures and a possible trackway which appear to be Late Iron Age or Roman in date (Headland 2017). The exact date of these remains can only be tested by evaluation or excavation, or potentially by further geophysics.

4.3.24 Based on evidence and previous reporting, potential Iron Age evidence is likely to consist of coin findspots, pottery sherds, pits and ditches. There is a low potential for Iron Age activity across most of Zones in the site which rises to a medium potential along the north of the East Stour River in Zones A, D, E and F.

4.3.25 Zones with high archaeological potential for this period are;

- Areas to the north of the East Stour River in Zone A1 and F1;

- Zone I2;
- The area of Springfield Woods – Zone B4;
- Other spring locations as these were often the focus of Iron Age ritual activity.

Roman Period (AD 43 – 410)

4.3.26 Activity dating to the Roman period is more widely spread across the site. The proximity of the site to several Roman roads and the coast would have made it favourable to settlement and trade during this period. Stone Street and Aldington Road are the two Roman Roads which run through the site although the original course of Stone Street may lie the east of Lympne. The topographical and geological conditions would have been favourable for farming. The evidence suggests a landscape which was mostly rural in nature with activity focussed along the roads, for example at Newingreen and east of Lympne. As evidence of Roman settlement in the area, it should be considered that other unknown Romano-British settlements may be located along the two Roman roads, within the east and south areas of the site.

4.3.27 An archaeological evaluation of land to the north of Hillhurst Farm (1994) indicated that a possible Romano-British settlement may be situated between the CTRL and the line of Stone Street Roman road. Finds consisted of pottery sherds within a pit, likely to have been an isolated feature. A second evaluation the following year (1995) found that the few features found could not be dated with any certainty. It concluded that there was no strong evidence to indicate a Romano-British settlement, however scattered finds may extend across Zone F1, especially near Stone Street.

4.3.28 The geophysical survey carried out east of Lympne Industrial Park (Headland Archaeology 2017) revealed clear Late Iron Age or Roman enclosures representing fields and possible settlement. This discovery, combined with a Roman field system recently revealed north of the railway line in Sellindge (not yet on the KHER and not represented on **Figure 5**), demonstrate that Roman remains are not just limited to the Roman Road locations.

4.3.29 In the wider area, evidence for Romano-British occupation includes features recorded around Burch's Rough to the west of the site including a scheduled Roman villa (**SM1**). A second villa site is also known of within Harp Wood, to the east of Pedlinge (outside the study area).

4.3.30 The site is close to what was the coast in this period and was thus favourably located for trade with the continent. The 'Saxon' Shore fort, known as Stutfall Castle (**SM4**) lies 620m to the south-east of the site below the escarpment leading down to what is now Romney Marsh. The fort was originally built on what was the shoreline, in the 3rd century AD to repel Saxon invaders and to guard a Roman port (*Portus Lemanis*). It went out of use at around AD350.

4.3.31 The iron industry was active in the Weald during the Roman period, making extensive use of iron ore deposits. As such, there is also potential for activity relating to iron smelting in the vicinity.

4.3.32 Since October 2017 a Roman Villa has been identified through evaluation of the site. This is located east of Otterpool Quarry and south of Ashford Road, within Zone G. It is the subject of a separate Statement of Significance (Arcadis 2018b).

4.3.33 Zones with high archaeological potential for this period are;

- Close to the Roman roads of Stone Street and Aldington Road in Zones F1 and E3 .
- Zone A1
- Zone I2

Early Medieval / Anglo-Saxon Period (AD 410 – 1066)

4.3.34 Evidence from the site suggests that settlement in the area continued from the Roman period through the Anglo-Saxon period. Attempts had been made in the Roman period to repel Germanic invaders from the area (see 5.3.31) in the 3rd and 4th century but after the Roman armies left, the way was clear for settlers to occupy the land. The areas fertile soils, proximity to the woodland of the Weald and the presence of a network of rivers would have made the area favourable for occupation, the pattern in Kent being dispersed hamlet farmsteads. Some Anglo-Saxon settlements will have gone on to develop into surviving farmsteads and villages. The Domesday Survey of 1088 tells us that several present day villages had Anglo-Saxon origins such as Sellindge. Other settlements will have gone out of use, however, as is usual for Kent there is little evidence for these settlements as they can be notoriously difficult to identify, especially through trial trenching.

4.3.35 Scarcity of settlement evidence necessitates a greater reliance on finding objects associated with burials, particularly for the early (pagan) Anglo-Saxon period. The earlier Anglo-Saxons buried their dead fully clothed, and placed objects in the grave. Dress ornaments such as brooches, weapons, pottery and glass often survive in quantity. The evolving styles of brooches and their placement on women's costume have enabled archaeologists to trace immigration patterns and influences from the continent from the fifth to the seventh century. Similarly, weapons in male burials evolved over time, although by the later seventh century weapon burial had largely ceased.

4.3.36 Burials found to the south (**56**) and south-east of the site **(19)** are evidence of occupation within the study area during the Early Medieval period. The first of these (**56**) lies 155m to the south of the site to the south of Aldington Road, opposite Lympne Industrial Park and is recorded as a Frankish inhumation cemetery. The second (**19**) lies 465m south-east of the site at the cross roads of the former course of Stone Street and Aldington Road and is a possible Anglo-Saxon cemetery. Additionally, a mid-6th century brooch (**41**) was found to the south of Otterpool Manor and an early medieval garnet brooch **(80**) was found at Berwick Manor Farm. While no human remains were found with these two brooches, they are indicative of high-status burials.

4.3.37 An important early Anglo-Saxon site is the Saltwood Railway Tunnel which is over 2km to the east of the site and was excavated as part of the CTRL excavations. Anglo-Saxon remains discovered here included sunken-featured buildings and re-use of four Bronze Age burial barrows .The four barrows became the focus of a cemetery of several hundred burials featuring rich gravegoods. There is the potential that this practice of reuse could be replicated within the site with the Bronze Age ring ditches/barrows west and east of Barrow Hill in Zones B1 and D1 being re-used in this way.

4.3.38 There is some potential for an earlier Saxon settlement on the site of Westenhanger Castle (**SM6**). The Westenhanger Charter of AD 1035 includes descriptions of the estate lands and early land boundaries belong to this manor. These extend down to Ashford Road in the south, across Stone Street and to Pedlinge in the east and close to Barrow Hill in the west, including the area of the Folkestone Racecourse (Arcadis 2017c). Although Westenhanger is likely to have had a pre-Medieval precursor and there is mention of the estate being in royal hands in 1035, the evidence for Anglo-Saxon settlement (in the form of a palace or manor) is circumstantial and not verified by archaeological evidence. Cropmarks within Folkestone Racecourse are recorded on the HER (**52**) as evidence for an Anglo-Saxon palace. However, this is unverified, and the cropmarks could quite feasibly relate to recent military use of the racecourse (see below). Any surviving evidence of earlier settlement is likely to take the form of pits, postholes, ditches or pottery finds. Further discussion on the Anglo-Saxon potential around Westenhanger Castle can be found in the Statement of Significance on the Castle (Arcadis 2017c).

4.3.39 There are various other findspots within the site including some Anglo-Saxon coins found in Lympne, north of Aldington Road (**97, 98** and **99**); a gaming piece east of Harringe Court (**117**); a copper alloy weight north of the M20 in Sellindge (**87**) and a copper alloy stirrup (**86**) near Somerfield Court, Sellindge.

4.3.40 Further from the site, at St Botolph's Bridge, West Hythe is a surviving portion of embankment which formed part of the early medieval flood defences. This embankment has been dated to the later Anglo-Saxon period (eighth-ninth centuries AD) and was constructed in order to help protect the fertile agricultural lands of this part of Romney Marsh from inundation by flood water. It is thought to have been in use for a relatively short period before being made redundant by natural coastal changes and reclamation which was achieved by the 11th century. The flood defence originally ran for several kilometres and would have involved a substantial effort to create, demonstrating the value of this fertile land for agriculture and settlement.

4.3.41 The evidence from the site, combined with the fact that Folkestone, Lyminge and Hythe were major centres in this period makes it likely that there was activity on the site in this period. The potential for unknown archaeological remains from this period is therefore considered to be medium to high along the Roman roads of Stone Street and Aldington Road; medium in the area of Westenhanger Castle (Zone E2), in the area south of Otterpool Manor (Zone B3) and in the area of barrows and ring ditches east and west of Barrow Hill (Zones D1 and B1) and low or unknown in all other areas of the site.

Medieval Period including early Tudor (AD 1066 – c1540)

4.3.42 The landscape of the area in the Medieval period was characterised by dispersed settlements and manors (KCC 2016). Now several farms have been encroached upon and some of the manors lost to later development. Those that survive within or next to the site are: the Manors of Otterpool (**LB38**) and Westenhanger **(SM6 and LB1),** the farms of Harringe Court (**59**) and Upper Otterpool **(LB20)** and the moated site and aisled barn of Bellevue (**LB21** and **66**). Earthworks were seen south of Harringe Court next to the historic woodland of Springfield Wood during the walkover survey (**WS1**). These as yet undated raised linear features may be possible wall foundations and a possible buried track or road. The layout of the extant features indicates a possible building plot. A second area of larger and potentially more significant earthwork features **(WS16)** was identified near to Upper Otterpool. These features indicated evidence of landscaping and agriculture across the promontory occupied by Upper Otterpool. It suggests that there is likely potential for further structures and remains associated with possible medieval activity possibly prior to the establishment of the farmsteads. Further investigation would also be required to determine these features.

4.3.43 Vestiges of the medieval period can still be read in the landscape for example in the remnants of ancient woodland and in the rectilinear fields with wavy boundaries that characterise most of the western half of the site and date from the late medieval period or 17th/18th century. Further details of Historic Landscape Character can be found in the Historic Landscape Characterisation and Farmstead Analysis Report for the site (Arcadis 2017a).

4.3.44 The Roman roads of Stone Street and Aldington Road carried on in use from the Roman and Anglo-Saxon periods and it is likely that medieval settlement and commercial activity would have grown up along these thoroughfares. At some point in time Stone Street was diverted from its course at Newingreen to follow its current more south-westerly course through Lympne. Historic maps dating from AD 1595 show that Ashford Road was in use by this time but it was likely in use before this date.

4.3.45 In the 14th century Westenhanger Castle – a pre-existing moated manor – was crenelated i.e. it was surrounded by stone walls and turrets. Many modifications and refurbishments

were made to the Castle in the Tudor period including by Henry VIII who took possession of the Castle in c 1540. He either created or enlarged the deerpark surrounding the castle. Documentary sources state that the park covered 400 acres (161 Ha) however historic mapping shows that it extended for more than 760 acres and covered approximately one third of the Otterpool Park site area. Robert Morden's Map of 1695 shows the park extending both sides of Stone Street to Pedlinge in the east, Newingreen and Ashford Road in the south, to just south of Stanford in the north and nearly to Barrow Hill in the west. Historic maps depict a fenced park pale surrounding the park and a southerly approach to the Castle Ashford Road, along a causeway. It is likely that a park lodge would have been located at this point, at the edge of the park pale. The Westenhanger Castle Statement of Significance (Arcadis 2017c) contains a full discussion of the Castle and its parkland.

4.3.46 Whilst Westenhanger Castle lies outside of the Framework Masterplan area, there is high potential for associated remains within the site. Discussions to date have focussed on a potential Tudor Garden (**166**) shown on late 18th century mapping as a walled enclosure adjoining the Castle on its southern side (where the northern arm of the racecourse now is). This was the subject to a combined programme of radar, resistivity and magnetometry survey (Headland Archaeology 2018) and in the event that potential for remains is identified targeted trenching may be implemented to determine the nature of survival. Other areas of potential associated with Westenhanger will be covered by the main-scheme evaluation geophysics and evaluation.

4.3.47 Archaeological evaluation and excavations in 1988 on land to the north of Westenhanger Castle, between the M20 motorway and the CTRL/HS1 line found evidence of Medieval activity towards the eastern end of the area, close to Stone Street. Finds consisted of a possible corn drying oven of 11-12th century date and several field ditches (**20**). Two ditches were dated to AD1150-1300 and may have therefore formed part of an early Medieval open field system. Five linear cut features were identified which were also likely part of an early Medieval field system. One ditch contained pottery from the period AD1000-1250. Investigations within this area in 1999 found post holes, pits and ditches dated to AD1050-1225 (**76**). These remains are likely to be considered of low to medium significance relating to probable low to regional value.

4.3.48 Zones with high archaeological potential for this period are;

- Zone B2 around Harringe Court;
- Zone B3 around Otterpool Manor;
- Zone B4 to the south of Springfield Wood;
- Zone E1 where the southern causeway to the Castle meets Ashford Road;
- Zone E2 south and north of Westenhanger Castle;
- Zone E3 around Newingreen where Stone Street joins Ashford Road;
- Zone G1 near Upper Otterpool.

Post-Medieval Period (c AD 1540 – 1914)

4.3.49 The Kent HER records only a few post-medieval archaeological assets within the site. These include post-medieval pits and ditches found during evaluations at the Royal Oak in Newingreen (**25**) and east and west of Stone Street (**22**).

4.3.50 Much of the fabric of the present-day landscape dates to the post-medieval period for example pre-enclosure and enclosure field boundaries marked by hedges. Many built heritage assets date to this period for example Mink Farm and Hillhurst Farm date to the late 18th century or earlier and Barrow Hill Farm and Somerfield Court Farm originating in the 19th century. More information on farms and landscape including cartographic analysis can

be found in the Historic Landscape Characterisation and Farmsteads Analysis (Arcadis 2017a), and the DBA (Arcadis 2016). Details of other Historic Buildings can be found in the Historic Buildings and Structures Appraisal (Arcadis 2017b).

4.3.51 Geophysical survey carried out in 2017 (Headland 2017) discovered anomalies east of Stone Street and south of the HS1 which probably belong to a post-Medieval/modern clamp for brick and tile manufacture.

4.3.52 Other industrial processes can be gleaned from looking at field names as shown on Tithe Apportionments of the mid 19th century for example 'Forge Field' south of Newingreen Farm.

4.3.53 Milling is known to have taken place at Westenhanger Castle with a watermill being mentioned in documentary records, and likely located on the river north immediately north of the castle. Little is known of mills in other parts of the site.

4.3.54 Charcoal production is likely to have taken place where there were coppiced woodlands e.g. south east of Harringe Court Farm.

4.3.55 Hops processing is a feature of the area as can be seen from standing buildings designed to dry hops (Oast Houses). One such remains at Barrow Hill Farm which was identified during the walkover survey (**WS10**). Former Oast Houses or oast fields are known at Harringe Court (**BH6**), Belle Vue, Harringe Court, Newingreen Farm and Upper Otterpool from historic mapping and looking at field names on Tithe apportionments.

4.3.56 As described above, Westenhanger Castle was modified and much embellished in the Tudor period and its parkland enlarged. Creation of the parkland would have modified the existing landscape considerably and it may have subsumed existing areas of arable land. Parkland features such as the park pale, animal control features, lodges or look-out points may survive as below-ground remains or earthworks. Part of the park pale may indeed have been identified along Stone Street (**43**) and again by the walkover survey(**WS9**). Further information can be found in the Statement of Significance for the Castle (Arcadis 2017c).

4.3.57 Nearly 1km to the south of the site is the Royal Military Canal - an important post-medieval structure. This canal runs for 45 km between Seabrook near Folkestone and Cliff End near Hastings, following the old cliff line bordering Romney Marsh. It was constructed in the early years of the 19th century as a defence against the possible invasion of England during the Napoleonic Wars. The Canal is a Scheduled Monument (**SM2, SM4** and **SM5**). It was refortified during WW2 and this period of the canal's history is described in the following (Modern) section.

4.3.58 The Folkestone Racecourse was constructed in 1898 to the south of the Castle (**SM6**), in its former grounds. Some of the structures on the racecourse date to this original period of activity but most have now been replaced by more modern structures. There may be remains associated with the first use of the racecourse but if so these may not be of high significance (Peter Kendall email 16th November 2017). The lake at the centre of the existing course was built in the 1970s or 80s by creating banks and not by excavating (Peter Kendall *ibid*) therefore its construction may not have caused total destruction of underlying archaeology. Scraping of the ground to form its banks could well have disturbed underlaying remains however. The use of the racecourse for military purposes in WWII is discussed in the Modern section below. The racecourse closed in 2016.

4.3.59 Features that formed part of the Castle's landscaped grounds and deerpark are discussed in the Medieval section. Such features that may be found e.g. the Tudor Garden (166) could be considered to have regional significance on their own but may be considered nationally significant as they form part of the Scheduled Monument's setting. Outside of Zone E It is not possible to identify areas of high archaeological potential for Post-Medieval remains. Drainage and field boundary ditches and evidence of agricultural activity are likely to form

the majority of surviving archaeological remains and these areof low significance. F1 contains the remains of a post-medieval tile clamp of local or regional value depending on its survival. Areas D, E and F would be expected to contain remains of deerpark features however many of these features will have been severely truncated by ploughing.

Modern Period and Military Remains (AD 1914 – Present)

4.3.60 In the modern period the study area saw a large amount of activity through the growth of settlements and infrastructure **(2)** , notably the M20 motorway and the CTRL/HS1. The largest area of notable activity during this period is in the south of the site around the area of the former Lympne Airfield **(27)** which was operational during the First and Second World Wars and is important to the heritage of both the local area and the region. There are several surviving and buried structures relating to these uses. Lympne Airfield was connected to Westenhanger Station by a narrow gauge railway which is shown on an OS map of 1920.

4.3.61 In common with many racecourses the open land within the race circuit was used for early aviation and there may be some remains surviving of this use.

4.3.62 During the First World War the Canadian Expeditionary Force made use of the racecourse as well as land at Otterpool as a base for some of their training activities. Tents not huts appear to have been the accommodation but there are references to a YMCA hut. A postcard of 1916 entitled 'Otterpool Camp, Sellindge' shows a mass of bell tents along a road in an unknown location, possibly Otterpool Lane or Ashford Road. Further plans and photos are likely to exist in the Canadian National Archives (Peter Kendall email November 16th 2017). WW1 archaeology should be anticipated in these areas as well as on Lympne Airfield and it should be noted that the WWI camps were targeted by Zeppelin bombs. WWI remains were found as part of the CTRL/HS1 investigations at Saltwood Tunnel where the Canadian Expeditionary Force had another training camp - Sandling Camp (Peter Kendall email 16th November 2016).

4.3.63 Between 1940 and 1941 Folkestone Racecourse was used as a dummy airfield to draw attention from the airfield at Lympne (Peter Kendall email 16th November 2017). However, in 1944 'RAF Westenhanger', as it had become known, became an active airfield with the arrival of the 660 squadron. Several huts or bunkers were constructed on the racetrack, the remains of which are likely to still exist, if not removed after the war. Remnants of some of the wartime buildings can still be seen as rubble around the racecourse and one possible hanger survival (**WS19**) can be seen to the south of Westenhanger village (Arcadis, 2016 and Arcadis 2017b). Cropmarks/parchmarks of rows of pits seen at the northern end of the Racecourse (**52**) may represent activities relating to either its WWI or WW2 use.

4.3.64 A row of WWII pillboxes (**BH43-47**) formed a line to the north of the airfield. To west of the airfield much is now underneath the Industrial Park however to the west of Otterpool Lane lies a single Pickett Hamilton Fort (**32**); RAF barrack huts (**35**); bunkers (**31**); slit trenches (presumably WWI-**33** and **34**) and a gas contamination building (**30**). To the north of these in a field lies the Battle HQ (**28**). On the airfield itself and just to the east are: two dispersal pen (**29** and **40**); an overblister hangar and trackway (**36**); a machine gun testing range (**37**) and a bulk fuel installation (**38**). It should be noted that the KHER may not have accurately located all of these features and further walkover may be required to confirm their exact locations.

4.3.65 An archaeological evaluation from 2008, to the east of Link Park Industrial Estate identified the former Lympne Airfield, the disused runway, and several electricity cables and pipes. Some of these ran in parallel with the line of the disused runway whilst others served the World War II airfield and the later commercial airfield. Other finds included modern concrete slabs and gravel filled trenches, which were possible part of surface water drainage systems for the runway. It is likely that these finds and features extend into Zone I.

4.3.66 The Royal Military Canal was refortified during WW2 when a number of defensive features were added along its length and bridge crossings etc were prepared for demolition. Elsewhere along the canal's length there are features associated with this defence-line along the higher ground to the rear of the canal (Ben Found email 20th June 2017). It is therefore possible that some of the WW2 features within the Otterpool site are associated with this wider network of defence and therefore associated with the Royal Military Canal. More detail on the airfield defences can be found in the DBA (Arcadis 2016) and the Historic Buildings and Structures Appraisal (2017b).

4.3.67 The potential for unknown archaeology from this period within the site is considered to be medium due to the potential for unrecorded military assets within the south of the site, and around the racecourse and Otterpool area. Below ground military remains, if found, will need to be incorporated into archaeological recording strategies.

4.3.68 In addition, there are two Military Aircraft Crash sites thought to be located within the site which should be considered as of national importance and be approached as such following the guidance set out by Historic England (HE 2002). It should be noted however that the crash site locations may not be accurate (Ben Found email 20th June 2017).

4.3.69 Military remains and buildings are covered in more detail in the Otterpool Park Historic Buildings and Structures Appraisal (Arcadis 2017b); the Historic Landscape Characterisation and Farmstead Analysis Report (Arcadis 2017a). Unexploded Ordnance is covered in Zetica's desk study and risk assessment of the site (Zetica 2017).

4.3.70 The opportunity for carrying out trial trenching in the airfield and the area immediately surrounding it will be constrained by the presence of unexploded bombs and pipe mines that have been identified in the UXO risk assessment (Zetica 2017). These areas will need to be cleared before any intrusive archaeological investigations can take place.

4.3.71 Zones with high archaeological potential for this period are;

- Zone C, associated with the military buildings already known west of Otterpool Lane;
- Zone I for potential further airfield remains;
- military remains at the western edge of Zone K at the edge of the airfield;
- Battle headquarters remains in southern half of Zone B.

4.4 Scheduled Monuments

Westenhanger Castle (**SM6**)

4.4.1 Westenhanger Castle **(SM6)** lies at the northern edge of the site at the edge of the floodplain of the River East Stour (**Appendix B** and **Figure 5**). The castle is bounded on its northern edge by the CTRL/HS1. An in-depth consideration of the Castle, its history and significance, its likely associated archaeological features (including Saxon and medieval precursors), its setting, historic views and parameters for acceptable development can be found in the Westenhanger Castle Statement of Significance (Arcadis 2017c).

4.4.2 The monument is described as a 14th century fortified house and associated structures and landscaping which remain both above and below ground. It comprises both the earthwork and structural remains of the moated inner court, a 16th century barn and stable, the buried remains of the outer court, the buried remains of the church, Medieval hall, and cemetery as well as water control features and a possible mill.

4.4.3 When Henry VIII owned the castle he commissioned the creation of a deer park around the Castle or alternatively enlarged an existing deer park. As the deer park lies outside the scheduled area it is discussed under the medieval and post-medieval sections.

4.4.4 A walled garden referred to in a survey of 1559 may well have been added to the Castle at this time. This is thought to have been located on the south side of the moat in an area that was depicted as a 'Walled Orchard' on the 19th century tithe map and is largely outside the scheduled area (**Figure 4**). The majority of the potential walled garden currently lies under the northern arm of the Folkestone Racecourse.

4.4.5 The Castle and its associated features fall within Zone E. Although it falls largely outside the scheduled area the Tudor Garden (166) is discussed here as it potentially forms part of the Castle's setting. A priority for evaluation would be to confirm the presence or absence of the Tudor Garden. A possible wall or ditch was picked up by the 2017 geophysics (Headland Archaeology 2018). Three trenches dug as part of the 2018 trial evaluation targeted the area of the Tudor garden (Oxford Archaeology in prep). One of these trenches picked up post-medieval bricks that could have formed a wall. The date of the bricks is consistent in date for a Tudor wall but further trial trenches would need to be dug to verify this and also to investigate the internal arrangement of any walled garden. Trial trenches would also be able to remove layers of disturbance and modern racecourse features that could potentially have obscured garden features and may detect, paths and beds and other features of this presumed ornamental garden. If the trenching (or any further geophysical surveys) extended into the scheduled area (see Figure 5) a Section 42 licence would be required before any trial trenching could take place.

4.5 Historic Landscape Characterisation

4.5.1 Historic Landscape Characterisation (HLC) data was supplied by the Kent HER and analysed in the DBA (Arcadis 2016). The HLC and Farmstead Analysis, produced as part of the Stage 2 appraisals to which this study belongs, provides detailed assessment of the historic landscape (Arcadis 2017a).

4.5.2 Across the site the landscape includes: Post 1810 settlement, small rectilinear enclosures late Medieval to 17th or 18th century, 19th century enclosures with extensive boundary loss (prairie fields), small parliamentary enclosure, medium parliamentary enclosure, gravel works both active and disused, industrial complexes, racecourse, post 1800 scattered settlement, small rectilinear fields with wavy boundaries.

4.5.3 The mixed agricultural use of the landscape, understood from cartographic sources and data from the Kent HER, indicates that the landscape has been in continual use from the earliest times through to the Modern period.

4.5.4 Most of the west of the site is characterised as rectilinear enclosure fields with wavy boundaries, likely dating from the late Medieval to 17th/18th century. Little development has occurred in this half, with scatters of historic woodlands and hedgerows. The east of the site is more mixed in character, with more settlement and development than in the west. The grain of this rectilinear and irregular enclosure pattern should be used to inform the layout in the master-planning of the site.

4.6 Cartographic Analysis

4.6.1 Cartographic analysis, completed as part of the DBA (Arcadis 2016), showed that in general, the landscape of the area has retained its agricultural nature as described on the Tithe maps. However, some fields have now become much larger post-war enclosures and settlement has expanded along the transport routes in the 19th and 20th centuries. Some fields, across the site, have been intensively or continuously ploughed which will have caused damage to archaeological remains .The bases of deeper archaeological features such as ditches are likely to have survived however. Medieval and Post-medieval land management techniques have affected the size and shape of fields. Several field boundaries across the site have

changed or been lost completely. These are covered in detail by the HLC and Farmstead Analysis (Arcadis 2017a).

4.6.2 Changes in field boundaries and access routes surrounding Westenhanger are discussed in the cartographic section of the Statement of Significance for Westenhanger Castle (Arcadis 2017c). Field boundaries which no longer exist may survive as buried archaeological remains.

4.7 Aerial Photography Analysis

4.7.1 Online aerial photograph catalogues of the main repositories have been consulted as well as Google Earth imagery (see Sources Section). AP assets are depicted on **Figure 5.**

4.7.2 Two cropmark features **(AP3, AP4)** were identified in two separate fields from a 1940 AP, both to the east of Barrow Hill. The first **(AP3)**, a very faint circle close to the CTRL, was not confirmed by geophysical survey (2017). The second **(AP4)**, also a circular feature, was only identified from the geophysical survey (2017) as an irregular scatter of magnetic enhancement points. These features are likely to be cropmarks or the result of changes in the underlying geology

4.7.3 Two irregular and roughly circular cropmark features **(AP1, AP2)** were identified from 2006 Google Earth imagery adjacent to Bronze Age barrow (**44**),to the northern edge of Zone D1. Although the Bronze Age barrow is clearly visible on almost all of the aerial photographs, these two features are faint and of unclear origin. One of these features (**AP2**) was identified by the geophysical survey (2017) and may be another barrow. It is likely that it has been damaged from modern ploughing. The other is uncertain.

4.7.4 To the east of Harringe Lane and to the south of the CTRL, several irregular features **(AP5)** can be seen in a 1940 AP and a 2011 AP. These features on closer inspection look to be associated with pylons or telegraph poles which cross this part of the site and may have necessitated a circular ploughing action to avoid them.

4.7.5 A small circular feature **(AP6)** can be seen on a 1940 AP to the west of Otterpool Lane and south of Otterpool Manor. The feature cannot be seen on other APs so has either been removed through modern agricultural activity or relates to the former RAF Lympne. It is not clear whether this feature is archaeological.

4.7.6 On the 2003 AP a rectilinear feature showing as a cropmark can clearly be seen to the east of Stone Street and west of Hillhurst Farm. This was identified in the HER (112) . The feature cannot be seen in early APs. Geophysical survey (2017) did not identify the feature but this may have been due to underlying soil and geology forms. Alternative forms of investigation would be required to determine the nature of this feature.

A series of features can be seen within Folkestone Racecourse, in several APs. In the 1940 photo it is possible to see a group of clear features, in regular lines, in the north-east area of the Racecourse. These could represent possible rows of planting, an orchard or former garden. It is likely that they form part of the Tudor Garden of Westenhanger Castle. These have been previously interpreted by some, likely erroneously, as the remains of an Anglo-Saxon Palace (**52**). They have since been reinterpreted as remains of likely WW1 date relating to Canadian Expeditionary Force's military stationing here (Peter Kendall Pers Comm). Further investigation will be required to determine the nature of these features and how far they extend into the Racecourse.

4.8 Historic Hedgerows and Woodland

4.8.1 Many of the hedgerows, tree-lined field boundaries and woodland copses on site are shown by map regression to be historic (i.e.pre 1850). Some qualify for protection under the

Hedgerow Regulations (HMSO 1997) due to defining historic parish boundaries or pre-1600 estates or manors.

4.8.2 Map regression, Historic Landscape Characterisation (HLC) and the results of on-site survey indicate many of the woodland and copses within the site, as well as the hedgerows, are the result of gradual reduction of earlier woodland relating to deer park and earlier landscape through agricultural management of field systems. These are covered in detail by the HLC and will inform master-planning and design (Arcadis 2017a).

5 Archaeological Fieldwork Strategy

5.1 Summary

5.1.1 The first stage of this report involved the establishment of research aims, a review of archaeological data and the identification of specific archaeological Zones (Table 2) and specific areas of high archaeological potential (Table 4). The research aims of the project will be addressed through a programme of fieldwork as detailed in this section.

5.2 General Aims and Objectives of the Archaeological Work

5.2.1 Whilst there have been many previous archaeological investigations in the study area, investigations across the site itself have been limited. Limited below ground archaeological work has occurred within the centre of the site in the form of evaluation and monitoring at the Lympne Industrial Park. Whilst every historical period is represented to some degree by currently available for the site, data is limited and absence of evidence should not be taken as evidence of absence.

5.2.2 The main aim of the archaeological strategy is to meet the requirement of the NPPF 2012 to provide sufficient information on the archaeological potential of the site to inform decision making on a planning application for the development. In Chapter 12, Paragraph 128 of the NPPF it states that:

'Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.'

5.2.3 The following section of this document details the aims and objectives for archaeological investigations in respect of contemporary knowledge and research. It addresses the recommendations from consultation with HE/KCC/FHDC along with guidance from the KCC Manual of Specification Part B, SERF and CIfA guidance on commissioning archaeological work. Ongoing liaison with Historic England, KCC and FHDC will be needed to agree and evolve the strategy.

5.2.4 The general aims of the detailed evaluation will be to:

- to establish whether there are any significant archaeological deposits at the site that may be affected by the proposed Development;
- ascertain the extent, depth below ground surface, depth of deposit, character, date, significance and condition of any archaeological remains on site;
- establish the extent to which previous development and/or other processes have affected archaeological deposits at the site; and
- establish the likely impact on archaeological deposits of the proposed Development.

5.3 Specific Aims

5.3.1 The evaluation will aim to address the following specific aims. Depending on factors affecting the extent of the evaluation and the nature of the archaeological remains identified in the evaluation it may not be possible to address all of these aims. However, they will be used to set the framework for the evaluation and can also be used as a guide when designing future phases of archaeological investigation and mitigation at the site as the development progresses.

Prehistoric

5.3.2 The site lies not far from the Pilgrims Way -an ancient routeway along the North Kent Downs that connected the area with the west.

5.3.3 Exploration of the association of Bronze Age barrow groups with ridge or hill side locations. Are there further barrows and how are they laid out in the landscape? Are there visual links between them and with other barrows to the north?

5.3.4 The four ring ditches in the centre of Zone B1 (**58, 113, 114, 115**) are of unknown date. Although it is likely that these features date to the Bronze Age, further investigations will be needed to determine a more accurate date. Walkover survey and LiDAR analysis could verify if they have any mound survival or have been entirely ploughed flat.

5.3.5 Several features of unknown origin were identified in Zone D, from geophysical surveys in 2017 (Headland Archaeology 2017). These rectilinear anomalies may represent prehistoric field systems, ditches or field drains. The origin and date of these features is unknown and will require further investigation.

5.3.6 Assessment of past archaeological finds has revealed a problem with the exact dating of prehistoric flints. This has made distinction between the Early, Middle and Late Bronze Ages hard. The lack of differentiation between the Neolithic and Bronze Age, particularly for flint finds also became apparent from previous archaeological reporting. Specialist consideration towards dating flints will need to be made.

5.3.7 What environmental information can riverine locations preserve e.g.pollen that might inform us about the environment that prehistoric populations inhabited and exploited?

5.3.8 Are there other palaeochannels in the site apart from the one known of on the extreme northern limit of the site? Evidence from CTRL shows that the East River Stour was much wider than today.

5.3.9 Evidence for Iron Age activity within the site is very sparse although where investigation has been carried out e.g. for the CTRL Iron Age remains are shown to survive. The area to the north of the East Stour River appears to have been occupied in this period although whether settlement extended into the north of the Otterpool site needs to be investigated.

5.3.10 There are various precedents nationally for Iron Age ritual activity focussing around springs e.g. Springhead in Kent and these areas should therefore be looked at.

5.3.11 The likelihood is that Roman field systems, roads ritual sites and settlements had Late Iron Age antecedents and these, if found, may provide information on the Late Iron Age to Roman transition.

5.3.12 The clear geophysical anomalies east of Lympne Industrial Estate in Zone I2 which appear to be Late Iron Age or Roman enclosures should be investigated.

Roman

5.3.13 The site occupies an area that would have been favourable for farming and settlement and that offered connectivity to Roman towns via its roads and to the sea by its proximity to a port. Rivers and springs would have provided water for industrial processes and areas of woodland provided a ready source of fuel. It seems almost certain that Roman remains will be encountered on the site.

5.3.14 The clear geophysical anomalies east of Lympne Industrial Estate which appear to be Late Iron Age or Roman settlement enclosures should be investigated.

5.3.15 The northern edge of the site may preserve Roman settlement and field systems. Roman settlement remains were found as part of the CTRL investigations and field systems were found recently at Sellindge.

5.3.16 Is geology a determinant for settlement and activity?

5.3.17 Is there Roman ribbon development along the Roman Roads of Stone Street and Aldington Road?

5.3.18 Was the pre-Roman focus on springs continued into the Roman period as it was for example at Springhead, Kent?

5.3.19 Did Romano-British populations respect or reuse pre-existing monuments in the landscape such as Bronze Age barrows?

5.3.20 What is the relationship with the southern part of the site and the port of Portus Lemanis and the shore fort? Were foodstuffs and manufactured items produced within the site and exported?

5.3.21 What contacts did the native tribes have with the Roman world pre and post-conquest?

5.3.22 How did 'Romanisation' of the landscape occur and what can material culture tell us about the 'native' British population and the extent to which they adopted Roman culture?

5.3.23 Is there a drastic change in settlement pattern in the 3rd century AD as is seen at a great many of the Roman sites identified as part of the CTRL investigations? Other Roman occupations sites e.g. Westhawk Farm and Springhead saw marked contraction in this period.

Anglo-Saxon/Early Medieval

5.3.24 Anglo-Saxon (or more accurately Frankish or perhaps Jutish) cemeteries near to Aldington Road may extend into the site or other, as yet undiscovered, cemeteries may exist. Attention should be paid to defining where these may be by using metal detecting survey to supplement geophysics and trial trenching in order to detect metal gravegoods.

5.3.25 The possibility that Bronze Age Burial barrows were reused as Anglo-Saxon cemeteries, such as was the case at Saltwood Railway tunnel site should be investigated.

5.3.26 Bronze Age barrows may also have been used for meeting points in the Anglo-Saxon period as the monuments would have still be conspicuous in the landscape

5.3.27 The cropmarks(**52**) south of Westenhanger Castle in Zone E2 that have been posited as remains of an Anglo-Saxon palace should be investigated.

5.3.28 Suggestions from documentary sources that Westenhnanger Manor was a Late Anglo-Saxon Royal estate needs to be tested.

5.3.29 Was the Weald a bridge or a barrier in this period?

Medieval and Early Tudor up to c 1540

5.3.30 Archaeological and environmental remains have an important role to play in filling in the gaps in the documentary record for this period. Archaeological methods are often the only way of illuminating evidence of everyday life of the large proportion of society that did not participate in the record-making process.

5.3.31 There are several gaps in knowledge for Westenhanger Castle, its early origins and ongoing development into the Tudor period.

5.3.32 Excavation and aerial photo analysis of the outer court of Westenhanger Castle may elucidate what structures it contained (before the barns were built and afterwards) and how it functioned as a fortified manor

5.3.33 The exact location of the Tudor walled garden of the Castle is also unknown although has been approximated from historical mapping. Archaeological investigation should seek to confirm whether the area south of the castle was a walled orchard or actual ornamental garden and seek to establish its internal layout. The Statement of Significance for Westenhanger Castle should be consulted for further detail into this area (Arcadis 2017c).

5.3.34 The park pale of the Castle's deerpark A former track or route (**WS17**) identified adjacent to Stone Street, may be evidence of a hollow-way or alternatively could be part of the park pale ditch. However, since this undated asset offers little certainty of its nature, further investigation is required to determine the character of this feature.

5.3.35 Other elements of the Castle's landscaped grounds and deerpark may survive for example a Lodge House may have been located where the Castle's southern causeway intersected with Ashford Road in Zone E1. Within Zones D and E, lookout points, animal control features, the park pale ditch, orchards and gardens could all be encountered. Archaeological investigation combined with landscape studies will add to our knowledge of these features.

5.3.36 Did the emparking of the area around Westenhanger Castle destroy earlier medieval settlements and arable fields?

5.3.37 Further clarity on the origins of Otterpool Manor, Upper Otterpool and Harringe Court will add to understanding of activity in this period. This could be investigated through archaeological investigation of the surrounding areas combined with study of field and wood names that may reference local medieval topography and economy.

5.3.38 Earthwork features north of Upper Otterpool and south of Springfield Wood should be investigated by earthwork survey or intrusive field investigation.

5.3.39 What was the purpose of moated sites (e.g. Bellevue and Westenhanger?) Why did Kent have fewer moated sites that Surrey and Sussex -were the reasons all down to geology and hydrology?

5.3.40 Are there any as yet unmapped deserted medieval settlements and farmsteads within the site? What can animal bone and environmental remains such as pollen and charred plant remains tell us about local agriculture, environment and diet?

Post-medieval c 1540 onwards

5.3.41 Whilst there are several Post-Medieval buildings within the site, there is little known below-ground archaeological evidence. The majority of evidence that does date from this period relates to agricultural activity in the form of field ditches.

5.3.42 There is potential for post-medieval activity near to the farms of Upper Otterpool (Zone G1), Otterpool Manor (Zone B3), Harringe Court (B2) and Bellevue (Zones C and J).

5.3.43 Tile manufacture is known to have been taking near Hillhurst Farm in Zone F1. What date was this happening and what was the market?

5.3.44 What were the reasons for the decline in importance of Westenhanger Castle in the 17th century and what effect did this have on its landscape?

5.3.45 How widespread was hops production and drying?

5.3.46 Research objectives for farms have not been included here as these are outlined in the HLC and Farmstead Analysis (Arcadis 2017a)

Modern including WWI and WW2

5.3.47 This area of Kent area figured prominently in the defence of Britain due to its closeness to the continent and its vulnerability to raids from sea and air. The site holds much information about WWI and WW2 defences. Archaeological techniques should be deployed in conjunction with photo analysis and documentary research to reveal more information. Much work has already been done for example by KCC's Defence of Kent Project

5.3.48 Metal detecting can produce evidence of sites we did not know existed for example gun emplacements can be found by metal detecting for fall of anti-aircraft fire.

5.3.49 The possibility that WW1 or WW2 crash sites may exist within the site should not be ignored. These sites may have been already cleared but even in these cases some elements may remain

5.3.50 Metal detectorists and non-professional archaeologists and local societies can provide valuable help and information in locating or identifying military sites

5.3.51 LiDAR, geophysics and aerial photos can all be examined to provide more clarity on what military sites exist. In areas of high UXO risk, archaeological monitoring of ground investigations may provide important results where trial trenching is not practical.

5.3.52 Further examination of 9he area of the airfield including Lympne Industrial Estate and the area west of Otterpool Lane would add to understanding of the military remains in this location.

5.3.53 The site of Folkestone Racecourse needs more investigation for evidence of aviation, Canadian Expeditionary Force Training Camps and use as a dummy airfield.

5.3.54 Recording of historic buildings and structures will provide more information about their dates and uses.

5.4 Specific Aims for Palaeo-environmental and Palaeolithic potential

5.4.1 There is little Palaeolithic and palaeo-environmental evidence for large areas of the site. What investigation work that has been done indicates that specific parts of the site have the potential for prehistoric landscapes to survive, for example the possibility of Palaeolithic remains in Head deposits or fissures in the Hythe Beds and Mesolithic remains under colluvium in dry valleys,

5.4.2 Specific research agendas for archaeological mitigation will need to be developed through a Written Scheme of Investigation for individual sites within the archaeological Zones. These will need to consider palaeo-environmental investigations and testing for geological deposits e.g. alluvium. These aims and objectives refer to evaluation work.

5.4.3 Transects of trenches/test pits/boreholes will need to be dug in certain areas for Palaeolithic and palaeoenvironmental purposes. If the intention is to produce a separate WSI to cover these aspects, then the two strands need to be undertaken 'co-operatively' and iteratively. Palaeolithic test pits should not be excavated without taking account of the potential for archaeology of other periods. Conversely boreholes and test-pits may provide useful information on colluvial or alluvial deposits that might mask archaeology or affect the effectiveness of geophysical survey.

5.4.4 There is a need to assess the information from the Soil Investigation/ Ground Investigation work as these investigations extend deeper than most archaeological investigations and could provide valuable data.

5.4.5 More specific objectives, for consideration, are to;

- establish with a high degree of confidence the nature, character, distribution, extent and depth of Quaternary deposits across the site.
- assessment of palaeo-environmental potential associated with documented Hythe beds and Head Deposits from past investigations within the wider area.
- establish a robust model for the site's Palaeolithic archaeological remains, by identifying Historic Environment Areas (HEAs) of different character and potential .
- establish the extent to which previous development and/or other processes have affected Quaternary deposits at the site.
- establish the likely impact on any surviving Quaternary deposits of the proposed Development.
- determine the presence and potential of lithic artefact evidence and faunal remains in the sediments encountered.
- determine the presence and potential of palaeo-environmental evidence in the sediments encountered.
- determine the presence of, or potential for, undisturbed primary context Palaeolithic occupation surfaces in the sediments encountered.
- interpret the depositional and post-depositional history of any artefactual or biological evidence found.
- establish correlations of any Pleistocene deposits found with reference to adjacent and regional sequences and to national frameworks.
- assess in local, regional and national terms, the archaeological and geological significance of any Pleistocene deposits encountered, and their potential to fulfil current research objectives.
- establish the likely impact of the proposed Development upon any Palaeolithic remains, to identify priorities for further investigation, and to make recommendations on suitable methods and approaches for possible mitigation work.

6 General Strategy

6.1 Overview

6.1.1 This section outlines the methodologies to be employed to undertake archaeological investigations in allocated Zones (**Figure 4**). The KCC Manual of Specification contains a detailed methodology for all aspects of fieldwork. Based on the results of previous fieldwork, evaluations, and the development proposal, several areas and methods for investigation are proposed.

6.1.2 Methods which will inform and be appropriate for the assessment (evaluation) are;

- geophysical survey (magnetometry) to determine the presence of absence of anomalies likely to be caused by archaeological features, structures or deposits, as well as areas of modern disturbance
- trial trenching to sample areas of the site to determine whether archaeological remains are present, focussing on the areas of the site with the highest potential, with some trenching to test 'blank' areas

6.1.3 These will be supplemented within areas/zones where magnetometry and/or trenching are inappropriate or will not produce optimal results where alluvial riverine deposits mask archaeology or where paleo-environmental potential is identified which would be best assessed spatially through sampling through test-pitting.

6.1.4 The secondary methods to be implemented in addition to trenching are;

- machine dug test pits for areas with Palaeolithic and palaeo-environmental potential covered by overlying deposits.
- Monitoring of boreholes and test-pits dug forming part of other site investigations e.g. Ground Investigation works.
- Other types of geophysics such as Ground Penetrating Radar or Electro-Magnetic Survey.

6.1.5 Both the geophysical survey and the trenching will be undertaken in two phases in Summer and Autumn of 2017. The first phase will comprise areas of pasture, the racecourse and any other currently available and suitable land. The second phases will comprise areas under crops, which will be completed after the harvest. The trenching would be undertaken in a rolling programme as the geophysics results become available. (Oxford Archaeology 2017).

6.1.6 Once a sufficient understanding of the archaeological resource has been achieved through evaluation it will then remain to secure mitigation and preservation to be implemented prior to development. Methods which are not appropriate for evaluation, but are suitable for post-consent mitigation strategies include;

- Strip/map and sample excavation (machine-stripped and hand-excavated open areas),
- smaller excavation areas for determining the extent of archaeological remains,
- standing building survey for buildings which will experience direct impacts e.g. demolition.
- Archaeologically-led boreholes and test-pits for example across alluvial corridors and areas where submerged or deeply buried deposits may be expected

6.1.7 Due the scale of the site and the fact that development will take place in zones over a long period of time, the mitigation fieldwork will take place on a phase by phase basis.

6.1.8 The fieldwork strategy will evolve as results emerge from ongoing archaeological works and detailed archaeological fieldwork methodologies will need to consider the recommendations of the UXO Desk Study and Risk Assessment (Zetica 2017) towards UXO in relation to archaeological activity.

6.2 Geophysics

6.2.1 It is recommended that geophysical survey (magnetometer) is conducted across the Framework Masterplan area, focussing on areas of impact with contingency for additional areas to provide a sufficient understanding of the archaeological resource. This will include more detailed survey for the potential remains of a Tudor Garden relating to Westenhanger Castle at the north of the racecourse. Ground conditions in some areas may make them unsuitable for geophysical surveying and very few areas have previously been investigated. However, several areas will not require geophysical surveying:

- Areas which are inaccessible or impractical to survey including modern settlement areas, woodland, industrial areas, privately owned gardens, bodies of water and roads.
- Areas where alluvium or colluvium form the underlying soil type, as these deposits are highly heterogeneous and geophysical results can be unreliable. In these areas other forms of geophysics such as Electro-Magnetic Survey may be more appropriate.
- Areas which have been previously surveyed during recent archaeological investigations, including the areas which were surveyed by geophysics by Headland Archaeology in May 2017 (see Illustration 6 in Headland Archaeology 2017). This covered a large part of D, the north-western corner of F, the north-eastern area of I and two areas in the west of E.

6.2.2 Preliminary surveys have demonstrated that magnetometry should perform well across most of the Site and would generally be expected to identify a high percentage of features present. However, the results of both magnetometry and resistivity surveys can be influenced by the underlying geology. In this case, the geology is likely to be a mix of Hythe Formation and Folkestone Formation, with both areas sealed by Head deposits in various locations. Historic England guidelines suggest that the results of the geophysical survey are likely to be moderate at best on such geology, though there can be considerable local variation. Gaining an understanding of these areas will therefore require successful targeted trenching.

6.2.3 The UXO report (2017) recommended conducting geophysics surveys for the areas of the site that fall within the high and moderate hazard level Zones (see UXO Hazard Zone Plan). This recommendation has been incorporated into the fieldwork strategy.

6.3 Trial Trenching

6.3.1 The use of trial trenches is recommended for the impact areas of the Framework Masterplan, with contingency for determining the approximate extent of areas of archaeological features. Additional trenching can then be implemented at a later stage to clearly determine extents in advance of mitigation. As suggested above, this will be supplemented by test-pitting, augering or boreholing where appropriate within areas of Palaeolithic and palaeo-environmental potential, where overlying deposits may mask the archaeological horizon. Trial trenching should include an element of metal detecting trench bases and spoil heaps. In some locations, for example where Anglo-Saxon burials might be expected, a metal detecting survey prior to trial trenching may be productive.

6.3.2 Trial-trenching will be appropriate:

- For features already identified from aerial photography analysis and geophysical surveys, including pits, ditches, walls;

- For areas with known Palaeolithic potential, in combination with test pitting, auguring and boreholing;
- For areas in and around the former RAF Lympne where modern built features are known to survive;
- For testing palaeo-environmental conditions, particularly in areas of Brick-earth Head geology;
- For investigating non-extant field boundaries and ditches which may be revealed through geophysical surveying;
- For identifying potential around medieval activity and settlement;
- For investigating potential alongside the Roman roads of Stone Street and Aldington Road.

6.3.3 Depending on the sample percentage and the depth of the trial trenching it may not detect or may easily miss:

- Burials;
- Anglo-Saxon settlement remains;
- Geological features containing Palaeolithic remains;
- Deeply buried deposits.

6.4 Sampling and Specialist Monitoring

6.4.1 As part of archaeological investigation and assessment, provision for specialist monitoring needs to be made, particularly in relation to UXO in the south of the site. This may require allowance for a UXO engineer to monitor intrusive investigations.

6.4.2 Palaeolithic remains will need a geo-archaeologist and environmental sampling strategy. Oxford Archaeology have already made provision for a geo-archaeologist to review any evaluation findings and proposed an environmental sampling strategy.

6.4.3 Areas with high Palaeolithic potential will require geoarchaeological specialists to work as part of the project team, potentially working on site to evaluate material as it emerges. Palaeo-environmental sampling is recommended in areas of alluvium, colluvium and Brick-earth Head clay deposits where preservation levels may be higher than elsewhere.

6.4.4 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. A programme of site investigation work will be required for the sampling strategy.

6.4.5 Following identification of deep deposit sequences through monitoring of boreholes, trial-trenching or test-pitting evaluation archaeologically led boreholes may then form part of mitigation to characterise those deposits.

6.5 Test Pits

6.5.1 The use of test pitting is recommended for particular areas across the site where alluvium and colluvium deposits are known. This method can be combined with trial trenching, to produce more comprehensive results. The layout and number of test pits will be in accordance with the KCC specification Manual Part A and B. It is generally observed that test pitting should be used:

- For areas where scatters of finds, including lithics, have been collected from topsoil.
- Test pitting for Palaeolithic remains particularly to the north of the East Stour River.

- For investigating soil and stratigraphic sequences, where these are unknown. For instance, investigating the depth of alluvium or colluvium deposits along the East Stour River which may seal earlier archaeological deposits.

6.6 Mitigation methodologies

6.6.1 Strip, map and sample, and other forms of large scale excavation are likely to be required as part of mitigation. Smaller areas of excavation may be required to target discrete areas of archaeological activity

6.6.2 Archaeologically led borehole investigations may be required where trial-trenching and test-pitting identifies deep-deposits. Given the constraints of investigating deeper stratigraphy it is proposed that where identified that these are characterised as part of mitigation. Monitoring of site Investigations comprising boreholes and test-pitting will provide indicative information concerning deeper deposit sequences.

6.6.3 Standing building surveys may also be required for buildings which will experience direct impacts, for instance from demolition. These aspects are not covered in this document but will need to be considered in future mitigation strategies.

7 Recommendations for Zones

7.1.1 The following general recommendations for further archaeological investigations are made for each archaeological Zone, as shown in Figure 4. These recommendations should be considered alongside the KCC Specification Manual. These recommendations refer evaluation work.

7.2 Zone A

7.2.1 Geophysics is recommended across the Zone (magnetometry), apart from the small area to the far west which was previously surveyed in 1996 (see **Appendix B** and **Figure 2**). An overhead cable crosses the east end of the Zone which could affect geophysics results. Trial trenching will be needed to the east of the area previously investigated.

7.2.2 Electro-magnetic survey may be needed in the alluvial areas by the East Stour River

7.2.3 Trial trenching will need to confirm if the Iron Age/Romano British settlement evidence and Middle Bronze Age activity found to the north-west extends into the application site boundary. There could also be further scatters of Iron Age coins.

7.2.4 This may need to be supplemented by boreholes or test pits by the river to check for palaeochannels and buried deposits

7.2.5 Sampling is recommended for areas with alluvial deposits and Brick-earth Head clay deposits, as identified on Figure 3. Boreholes/Geoarchaeological investigation will be needed for deposits along the East Stour River and valley sides.

7.2.6 The abandoned bomb recorded near to Harringe Lane will need specialist monitoring (see H2 on UXO Hazard Zone Plan in Zetica 2017).

7.3 Zone B

7.3.1 Geophysics is recommended across the Zone (magnetometry). An overhead cable crosses north-west corner of this Zone, which could affect geophysics results.

7.3.2 Trial trenching is recommended for the probably barrows identified in the centre of the Zone (B1). Further excavation may be needed if this is found to be a burial site.

7.3.3 Trial trenching is recommended near to Harringe Court (B2) and Otterpool Manor(B3) for evidence of Medieval or earlier activity which may extend into neighbouring fields. This may take the form of scattered finds or in situ features. Any in situ features will need further excavation.

7.3.4 The battle headquarters (**28**) recorded on the KHER, located to the west of Otterpool Lane may need surveying, as levels of preservation and survival are unknown. Trial trenching is recommended to identify the origin of the circular feature identified from AP analysis (**AP6**), which may relate to the battle headquarters.

7.4 Zone C

7.4.1 Geophysics is recommended across the Zone (magnetometry), although avoiding areas where military buildings are known to survive. As several partially buried bunkers are known to exist in this Zone, care should be taken when surveying this area. The specific number and size of these bunkers is unknown and will need to be confirmed by further surveying.

7.4.2 There is a potential need for trial trenching of unknown features which may relate to military activity although this will be dependent on geophysics and/or levels of survival.

7.4.3 The depth of surviving military remains like concrete bases, tank defences etc. will need to be established, either through geophysical surveying, site visits or trial trenching. There is

potential for fallout material in this Zone which relates to military activity. Allowance for specialist monitoring needs to be made when breaking ground (UXO).

7.5 Zone D

7.5.1 Geophysics recommended across the Zone (magnetometry), although not in the areas already surveyed. Electro-magnetic survey may be more appropriate along river corridors.

7.5.2 Trial trenching will be needed for the possible barrows in Zone D1. The possible barrow (44) in the centre has previously been excavated (in the 1930s), but this feature may need reinvestigating as no records exist. The area around this barrow has not been previously been investigated but will need to be, following geophysical survey results. The second possible burial mound (46), also marked on modern OS mapping as a tumulus, will also need geophysical surveying where access is possible. Further trial trenching could potentially be needed, following results. Trial trenching for the additional ring ditch feature identified in this Zone from geophysical surveys in 2017, will also be needed.

7.5.3 Sampling and geoarchaeology is recommended in areas with alluvium deposits. Boreholes/Geoarchaeology for deposits along the East Stour River valley. Palaeo-environmental for course of East River Stour.

7.6 Zone E

7.6.1 Geophysics recommended across the Zone (magnetometry), although not in the two areas already surveyed. There are large parts of this Zone where colluvium and Brick-earth Head deposits are present which could impact of the effectiveness of geophysics and it might be more appropriate to use Electro-Magnetic survey in these areas.

7.6.2 Boreholes/Geoarchaeology recommended for deposits along the East Stour River and its banks. Consideration will need to be made for any archaeological investigations which occur within the Scheduled area in this Zone. Trial trenching will likely be needed to the south of Westenhanger Castle, although the scale of this will be dependent on geophysics. Magnetometry surveying and trial trenching recommended for the north of the Folkestone Racecourse to determine the location of the Tudor Garden and the cropmarks (52).

7.6.3 Trial trenching is recommended for the band of magnetic enhancement identified from geophysics in 2017 in the south-west corner of the Zone.

7.6.4 Trial trenching may be needed to investigate the ditch and pit features (22) recorded on the KHER to the west of Stone Street.

7.6.5 A programme of combined ground penetrating radar, resistivity and magnetometry survey will be implemented to investigate the possible Tudor Garden immediately south of Westenhanger Castle. This has been carried out and the results are forthcoming (Headland Archaeology).

7.6.6 Specialist sampling in the area of alluvial deposits areas will needed.

7.7 Zone F

7.7.1 Geophysics is recommended across the Zone (magnetometry), although not in area already surveyed in the north-west corner.

7.7.2 Trial trenching will be needed for the enclosure feature (112) recorded on the KHER and seen on AP to east of Stone Street. Although this was not identified during geophysics in 2017, the underlying geology may have masked archaeological remains, and further investigation is recommended.

7.7.3 The tile clamp feature identified from geophysical survey in 2017 on the northern edge of this Zone (see feature F76), can be investigated through trial trenching. As this feature

appears to be the remains of a post-Medieval or modern building further excavation of this feature may be required. As there is potential for this building to relate to the brick works to the north, soil sampling may be required for burning and brick making activity in this area.

7.7.4 Consideration of any buried remains relating to the demolished farm 'Little Sandling', along A20 Ashford Road can be made through trial trenching.

7.8 Zone G

7.8.1 Geophysics is recommended across the Zone (magnetometry), although it is not in the area occupied by Otterpool Quarry.

7.8.2 Some trial trenching is recommended around Upper Otterpool (particularly to the north). Medieval or early Medieval activity relating to this site may extend into the surrounding area. Earthwork features have already been identified from Stage 1 walkover survey (WS16) to the north. These may need further investigation, subject to geophysical survey.

7.8.3 No palaeo-environmental sampling will be needed in the south-west of this Zone as this has already been carried out.

7.9 Zone H

7.9.1 Geophysics recommended across the Zone (magnetometry), although this will need to avoid areas of housing development and woodland. there is potential for UXO in this area. Palaeo-environmental sampling is recommended in areas of alluvium.

7.9.2 There are large parts of this Zone where colluvium and Brick-earth head deposits are present which could impact of the effectiveness of geophysics. Trial trenching may be needed near to Stone Street, following geophysics results. Boreholes/Geoarchaeology are recommended to investigate deposits along the East Stour River valley. Need to establish extent and depth of geological deposits in this Zone, particularly in the south and west. Two pillboxes and any below grounds remains of the two demolished out-farms in Zone could disrupt surveying.

7.10 Zone I

7.10.1 Geophysics recommended across the Zone (magnetometry), excepting the central area which has already been surveyed. Trial trenching will be needed in the area near to Otterpool Lane.

7.10.2 Trial trenching for features identified by geophysics in north-east area. Potential trial trenching for military features in south-west (following geophysics). Concrete runways and taxiways should have been removed but may survive in some areas or left depressions. Trial trenching to test depth of surviving military remains like concrete bases etc. High magnetic disturbance could relate to metal finds, shrapnel, concrete or brick. Potential for specialist monitoring needs to be made (UXO).

7.10.3 Trial trenching for possible prehistoric remains in the north-west of the Zone, following geophysics.

7.10.4 Potential for palaeo-environmental and geo-archaeologist will need to be made (particularly to the north and west). Potential that a specialist UXO engineer will be needed to monitor groundworks. Potential Roman quarrying sites identified from geophysics may need specialist or environmental sampling.

8 Written Scheme of Investigation Requirements

8.1.1 Future WSIs will need to consider the requirements stated in the KCC Specification Manual, which gives direction on the following methods and processes together with relevant CIfA and other professional guidance:

- Investigation Strategies (including the treatment of human remains and the treatment of treasure);
- Finds recovery, processing and treatment;
- Sampling Strategies (including archaeological science, environmental sampling and palaeo-environmental sampling);
- Recording, reporting, archiving and deposition;
- Monitoring and Liaison (including allowance for UXO, Palaeolithic, Quaternary and geological specialists) A geoarchaeologist has already been assigned to this project to monitor archaeological investigations;
- Outreach (a programme to inform residents and users, be integrated into archaeological mitigation strategies);
- General requirements (including timetables, staffing, utilities, contaminated land, copyright and data protection);
- Health and Safety (particular attention will need to paid to the identified and unidentified unexploded ordnance (UXO) within the Site, which post a potential hazard to archaeological fieldwork).

Table 2: Summary of archaeological potential by Zone

(note this is based on our state of knowledge in October 2017)

Zone	Early Prehistoric (Palaeolithic to Neolithic)	Bronze Age	Iron Age	Roman	Early Medieval	Medieval	Post-Medieval	Modern including WW1 and WW2	Overall
A	Medium	Medium (higher south of Richardson's Court)	Medium (higher close to Harringe Lane)	Medium (higher close to Harringe Lane and south of Richardson's Court)	Low	Low	Low	Low (higher close to Harringe Lane)	Medium
B	Medium	High in the area of the barrows	Medium	Low (higher near to Harringe Court)	Medium (higher near to Otterpool Manor)	Medium (higher near to Harringe Court and Otterpool Manor)	Low (higher near to Harringe Court and Otterpool Manor)	Low (higher towards southern end)	Medium
C	Low	Low	Low	Low	Low	Low	Low	High for WW2 remains close to Otterpool Lane	Low
D	Medium	High (highest	Medium	Low	Medium (higher nearer to	Medium (higher closer to HS1)	Low	Low	Medium

Zone	Early Prehistoric (Palaeolithic to Neolithic)	Bronze Age	Iron Age	Roman	Early Medieval	Medieval	Post-Medieval	Modern including WW1 and WW2	Overall
		close to Barrow (44))			Westenhanger Castle)				
E	Medium	Low	Medium	Medium (higher near to Stone Street)	Medium (higher close to Westenhanger Castle)	High (highest close to Westenhanger Castle)	High	Medium (high for WW1 around the Racecourse)	High
F	Low/Medium	Medium	Medium	Medium (higher near to Stone Street and south of HS1)	Medium	Low (higher closer to HS1)	Low (apart from south of HS1)	Low	Low/Medium
G	Low/Medium	Medium	Low	Low	Low	Low (higher near to Upper Otterpool)	Low (higher near to Upper Otterpool)	Medium	Low/Medium
H	Medium	Low	Low	Low/Medium (higher near to Stone Street)	Medium	Medium	Low	Medium (high in area of Lympne Airfield)	Low/ Medium
I	High in higher ground around Lympne Industrial Park)	High near to Otterpool Lane	Medium	High	Low	Medium (higher south of Upper Otterpool)	Low	High	High

Table 3: Summary of different factors affecting archaeological remains (note this is based on our state of knowledge in October 2017)

Zone	Distribution and character of known archaeological remains	Past archaeological work/research. Reliability and completeness	Environmental factors (geology, topography, soil) which would have influenced past land use. Prediction of remains distribution	Land use factors affecting the survival of archaeological remains (ploughing, forestry, planting, quarrying)	Factors affecting visibility of archaeological remains (soils, geology, arable cultivation, vegetation, superficial deposits)
A	Some Late Iron Age/early Romano British settlement evidence to north-west, to north of CTRL. Could extend into Zone. Paleochannel of the East River Stour	Limited, small area to the far west which has been surveyed by geophysics and evaluation trenches. Some fieldwalking to west. Data produced mixed results with differing interpretations.	Areas of Brickearth Head and alluvium deposits. Clayey soils, generally fertile, some flooding likely. Part of the north side of East Stour River valley. Prehistoric settlement likely on slightly sloping valley sides.	Arable cultivation – yes, expect any features to be damaged by continual ploughing. Archaeological remains unlikely to survive in topsoil other than artefact scatters. Use of drainage ditches will have cut through any archaeology	Brickearth and alluvium likely to mask archaeological features. Higher levels of preservation below. Arable cultivation yes – some cropmarks seen, dependant on crop growth. Urban settlement to far east (archaeological visibility none) No large areas of woodland, some patches along river banks
B	Prehistoric ring ditches in the centre of this Zone. Archaeological remains relating to settlement activity likely in the vicinity. Medieval Harringe Court – potential for archaeological remains associated with this site	None	Area of Brickearth Head deposits to the east. Area of alluvium to north-west (likely past channel/stream of East Stour River). Majority of superficial deposits unknown. Land rises in the centre of Zone, prehistoric settlement activity more likely on higher ground.	Arable cultivation – yes. Some areas which have been woodland in the past (Harringe Brooks Wood extended east into B, some other small patches seen on historic mapping/AP). Prehistoric to post-Medieval activity unlikely.	Brickearth and alluvium likely to mask archaeological features, higher levels of preservation below Patches of trees could affect visibility

Zone	Distribution and character of known archaeological remains	Past archaeological work/research. Reliability and completeness	Environmental factors (geology, topography, soil) which would have influenced past land use. Prediction of remains distribution	Land use factors affecting the survival of archaeological remains (ploughing, forestry, planting, quarrying)	Factors affecting visibility of archaeological remains (soils, geology, arable cultivation, vegetation, superficial deposits)
C	Aldington Road – Roman Road. Some potential for Roman finds around this feature. Military Buildings – modern remains in vicinity likely	Limited, some of the military remains have had building surveys.	Land gradually slopes upwards towards Aldington Road	Land use – military, linked to RAF Lympne, Some planting around Danehurst (potential anti-tank defences)- will have damaged archaeological remains	Modern bombing and use of concrete will create magnetic disturbance in geophysical surveys. Limited access to remains below concrete surfaces Planting and vegetation around Danehurst will affect visibility
D	Two known barrow sites (probably Bronze Age). Settlement activity could extend into areas around each barrow..	Limited, Bronze Age barrow in centre was excavated in 1930s although no report exists. Evaluation trenches at the Cedars, Barrow Hill. Geophysics across large area in the north.	Large areas of Brick-earth Head and alluvial deposits Clayey soils, fertile, some flooding Part of East Stour River valley. Valley sides would have been good for farming. Prehistoric settlement likely on slightly sloping valley sides.	Area has been ploughed continually- this will have damaged any archaeological remains. Part of an old airstrip extends east into this Zone. This will have damaged archaeological remains in topsoil, possibly lower.	Brickearth and alluvium likely to mask archaeological features, higher levels of preservation below. Waterlogged soils near to East Stour River likely to have preserved archaeological remains (especially organic)
E	Westenhanger Castle: possible Saxon, medieval and post-medieval remains relating to this site and its deerpark including its southern approach from Ashford Road. Roman Road of Stone Street: Some potential	Some, most relate to Westenhanger Castle: several dendrochronology surveys, evaluations and a watching brief. Folkestone Racecourse has had a DBA. Evaluation trenches around Royal Oak Motel, Newingreen. Watching brief at Jesters, Stone	Large areas of Brickearth Head and alluvium deposits Close to East Stour River, Westenhanger settlement, Land is slightly undulating, good for open parkland or farming. Not forested.	Racecourse will have affected survival of archaeology within upper layers. Construction racecourse lake may have removed some archaeology however it may have been constructed by raising banks rather than digging out. Some ploughing to the south will have affected archaeological remains in	Brick-earth and alluvium likely to mask archaeological features, higher levels of preservation below. Waterlogged soils near to East Stour River likely to have preserved organic remains

Zone	Distribution and character of known archaeological remains	Past archaeological work/research. Reliability and completeness	Environmental factors (geology, topography, soil) which would have influenced past land use. Prediction of remains distribution	Land use factors affecting the survival of archaeological remains (ploughing, forestry, planting, quarrying)	Factors affecting visibility of archaeological remains (soils, geology, arable cultivation, vegetation, superficial deposits)
	for isolated Roman finds around this route. Post-Medieval activity in and around Newingreen, could extend into this Zone.	Street. Geophysics in two areas along western edge.		topsoil. Landscaping associated with Westenhanger Castle, will have affected older archaeological remains	Track of racecourse could affect visibility, disturbance in geophysical surveys possible
F	Roman Road of Stone Street: Some potential for isolated Roman finds around this feature	Limited – archaeological evaluation trenches in area of land in the north-west corner of this Zone. Alluvial deposit report does apply to this area. Small sections of geophysics along A20. Geophysics in north-west.	Superficial geology unknown for this area.	Continual arable farming and ploughing will have affected remains	Folkestone beds could affect reliability of some geophysical surveys.
G	Neolithic axe found in centre. Likely to be an isolated find.	Limited – three Palaeolithic test pits dug in south-west corner. No palaeoenvironmental remains found or Palaeolithic artefacts	Most of the superficial geology is unknown, small area of Brick-earth head to the south. Mostly flat/slightly undulating, good for farming	Quarry workings in the north-west corner of the zone will have destroyed any archaeological remains. Modern arable ploughing	Some small wooded areas will be inaccessible
H	Roman Road of Stone Street forms eastern boundary of zone: Some potential for isolated Roman finds around this road	None	Large areas of this Zone are Brick-earth Head and alluvium deposits	Modern arable ploughing likely to have damaged surviving archaeological remains, particularly in upper soils	Brick-earth and alluvium likely to mask archaeological features, higher levels of preservation below. Waterlogged soils near to East Stour River likely to have preserved archaeological remains (especially organic)

Zone	Distribution and character of known archaeological remains	Past archaeological work/research. Reliability and completeness	Environmental factors (geology, topography, soil) which would have influenced past land use. Prediction of remains distribution	Land use factors affecting the survival of archaeological remains (ploughing, forestry, planting, quarrying)	Factors affecting visibility of archaeological remains (soils, geology, arable cultivation, vegetation, superficial deposits)
I	Aldington Road – Roman Road. Some potential for Roman finds around this feature. RAF Lympne: airfields, buildings, UXO.	Some – several watching briefs, evaluations, field walking survey and a desk based assessment. Most relate to Link Park Industrial Estate.	Large area of this Zone has Brick-earth Head deposits. Three test pits dug south of Otterpool Manor Farm in Zone G predicted greater success for Palaeo-enviromental remains and Palaeolithic artefacts on the higher slopes (north and east of industrial park). Land is slightly sloping up to the south. Good for arable farming. Prehistoric settlement likely on higher ground	Modern bombing and use of pipe mine defences will have damaged archaeological remains. Modern RAF Lympne, military and aircraft buildings will have damaged archaeological remains	Modern bombing and use of concrete will create magnetic disturbance in geophysical surveys. Limited access to remains below concrete surfaces Brick-earth and alluvium likely to mask archaeological features, higher levels of preservation below
J	Aldington Road – Roman Road. Some potential for Roman finds around this feature. Medieval Bellevue House in south-west corner. Activity could extend to vicinity.	Limited – evaluation in north-east corner	Superficial geology largely unknown. Slightly sloping land, rising up to the south Prehistoric settlement more likely on areas of higher ground	Modern industrial development likely to have destroyed any archaeological remains.	Modern concrete and industrial buildings will prevent access to below ground remains, if they survive at all.
K	Roman Roads of Stone Street and Aldington Road: Some potential for Roman finds around these features. Remains of military buildings along western side. Could extend into Zone I. Prehistoric axe and several coins found in south-east corner.	None	Superficial geology largely unknown. Slightly sloping land, rising up to the south Prehistoric settlement more likely on areas of higher ground	Modern housing likely to have destroyed any archaeological remains. Private gardens likely to have damaged archaeological remains	Modern housing and private gardens will prevent access to below ground remains, if they survive at all.

Table 4: Areas of High Archaeological Potential Within the Zones
(note this is based on our state of knowledge in October 2017)

Zone	Area of High Archaeological Potential ID	Description
A	A1	Alluvium by East River Stour. Palaeochannels Roman field system Middle Bronze Age bucket urn found north of line of HS1 at Richardson's Court
B	B1	Barrows/ring ditches west of Barrow Hill and possibility of re-use of these in the early medieval period
B	B2	Medieval potential around Harringe Court WW2 Crash site location
B	B3	Medieval potential around Otterpool Manor. Saxon brooch
B	B4	Earthworks seen on walkover south of Harringe Court at Springfield Wood Iron Age Coin Possible Spring
C	C1	Military remains west of Lympne Park Caution – High risk UXO
D	D1	Barrows/ring ditches east of Barrow Hill. Possible re-use in Anglo-Saxon period. Alluvium by East River Stour.
D	D2	Saxo-Norman settlement features north of line of HS1 Field systems and ring ditch found by geophysics in west Brickearth and alluvium Field boundary on the western edge of D2 may be line of park pale
E	E1	Southern edge of park pale according to historic mapping Southern causeway to Castle Obvious location for a lodge building to the deer park where causeway meets Ashford Road Brickearth
E	E2	WH Castle and associated medieval and possible Saxon remains Area of possible Tudor Garden Alluvium by River Brickearth
E	E3	Newingreen – post-medieval features found at Royal Oak Intersection of two major thoroughfares Next to Roman Road Southern edge of park pale according to historic mapping
F	F1	Roman ditches and pit north of line of HS1 Post-medieval brick clamp Brickearth
G	G1	Potential Medieval features by Upper Otterpool Neolithic Axe found in quarry
H	H1	Roman Road Anglo Saxon brooch on opposite side of Stone Street Brickearth and alluvium
I	I1	Bronze Age features Military remains Caution – High risk UXO
I	I2	Brickearth here may contain evidence for Palaeolithic activity Geophysical features – Possible Late Iron Age or Roman settlement Bronze Age remains to west Airfield remains Caution – High risk UXO and pipe mines

FIGURES

609 610 611 612 613 614

139 138 137 136 135 134

N W E S

Legend

Outline Planning Application Boundary (OPA)

0 1:20,000 1 km

Layer Credits: Contains Ordnance Survey data
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REV	Date	Description	Drawn	Check	Approv
Rev1	12 OCT18	FIRST ISSUE	PN	KC	JW

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34 York Way
London
N1 9AB

Folkestone & Hythe District Council

OTTERPOOL PARK

Figure 1
Site Location

scale	original size	datum	grid
1:20,000	A3	Sx	BNG

608 609 610 611 612 613 614 615

140 139 138 137 136 135 134 133

N W E S

0 1:25,000 1 km

Legend

Outline Planning Application Boundary (OPA)

KHER Archaeological Events (Points)

- Building Survey
- Dendrochronological Survey
- Desk Base Assessment
- Environmental Sampling
- Evaluation
- Excavation
- Geotechnical Survey
- Test Pit
- Watching Brief

KHER Archaeological Events (Lines)

- Desk Based Assessment
- Evaluation
- Geophysical Survey
- Watching Brief

KHER Archaeological Events (Areas)

- No Information
- Dendrochronilogical Survey
- Desk Based Assessment
- Evaluation
- Excavation
- Geophysical Survey
- Magnetometry Survey
- Systematic Fieldwalking Survey
- Topographic Survey
- Trial Trench
- Watching Brief

Rev	Date	Description	Drawn	Check	Approv
Rev1	12 OCT18	FIRST ISSUE	PN	KC	JW

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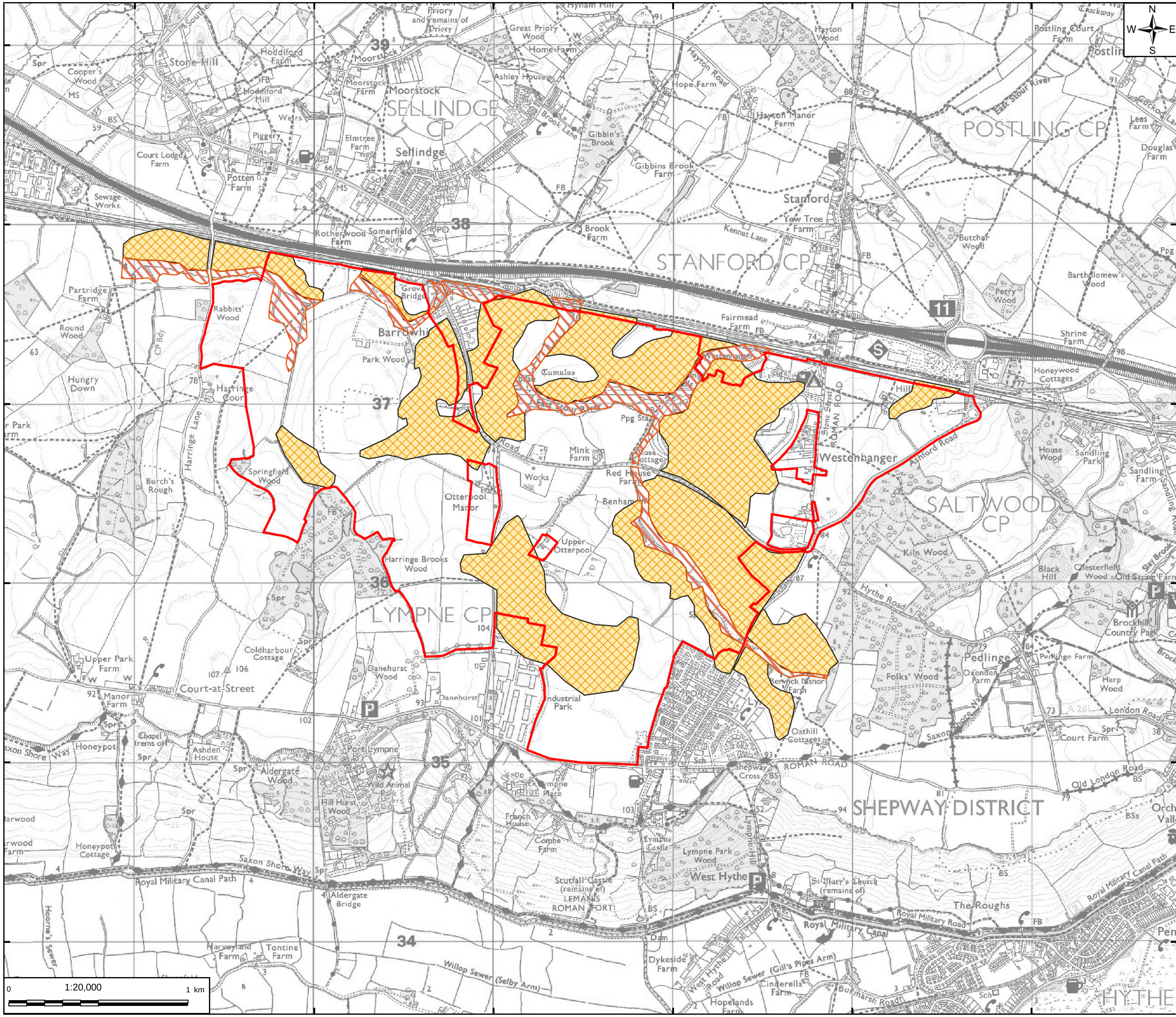
Figure 2
Past archaeological events up to 2016

scale	original size	datum	grid
1:25,000	A3	Sx	BNG



Legend

- Outline Planning Application Boundary (OPA)
- Alluvium
- Brickearth Head

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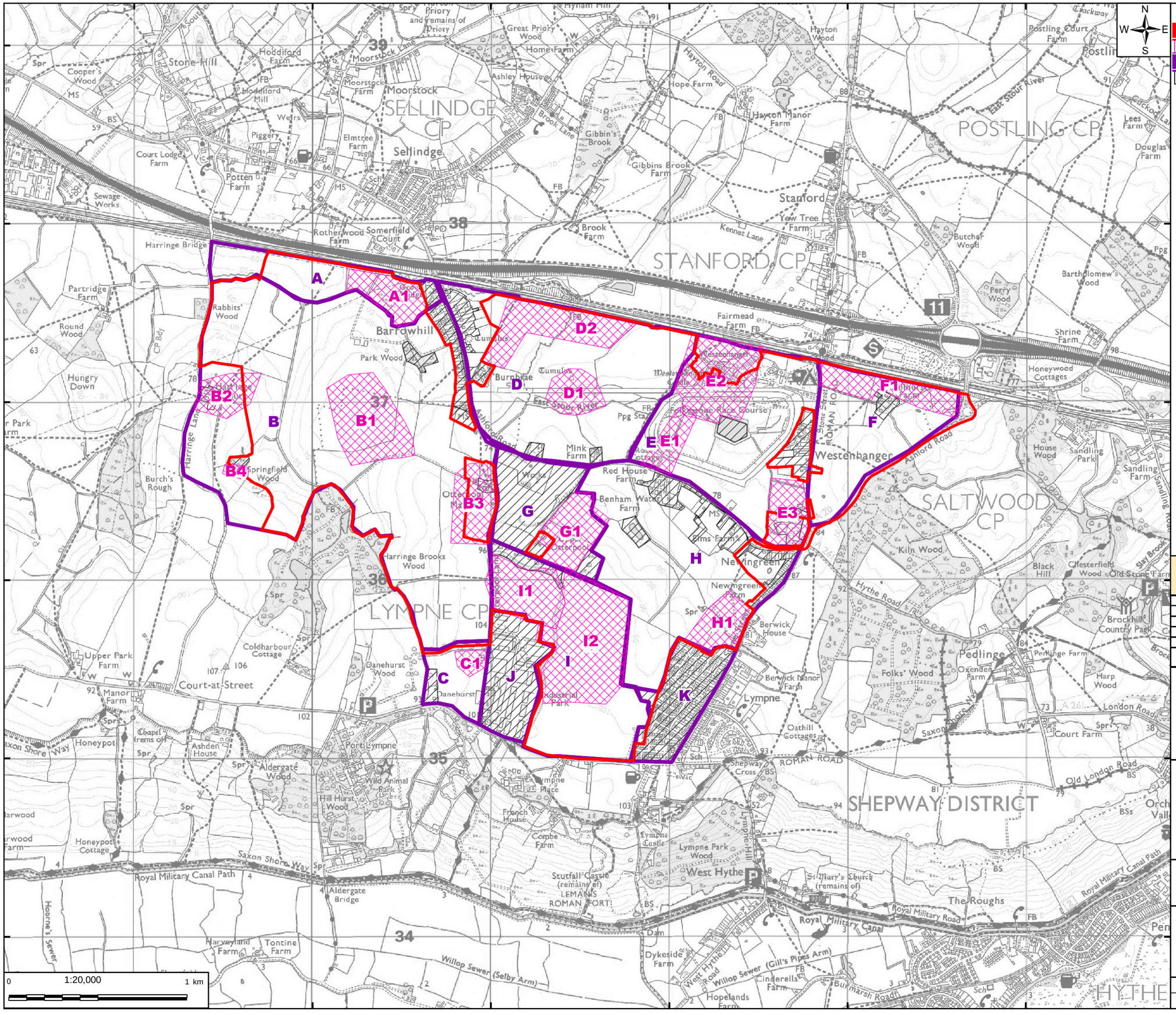
Figure 3
Superficial Geology

scale	original size	datum	grid
1:20,000	A3	Sx	BNG

609 610 611 612 613 614

139 138 137 136 135 134



0 1:20,000 1 km

N W E S

Legend

- Outline planning application boundary (OPA)
- Areas of high archaeological potential
- Archaeology zones
- Areas unsuitable for evaluation

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Figure 4
Archaeological Zones and Areas of High Archaeological Potential

scale	original size	datum	grid
1:20,000	A3	Sx	BNG

609 610 611 612 613 614

139 138 137 136 135 134

N W E S

Legend

- RAF Lympne
- Outline Planning Application Boundary (OPA)
- Study Area 1Km
- Study Area 500m
- Military Remains /crash sites (MR)
- Non-Designated Heritage Assets (Points)
- Non-Designated Heritage Assets (Lines)
- Tudor Garden
- Scheduled Monument (SM)
- Asset identified from Aerial Photography analysis (AP)
- Asset identified from walkover survey Polygone (WS)
- Asset identified from walkover survey Point (WS)

0 1:20,000 1 km

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REV	Date	Description	Drawn	Check	Approv
Rev1	12 OCT18	FIRST ISSUE	PN	KC	JW

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Figure 5
Scheduled Monuments and Non-Designated Heritage Assets

scale	original size	datum	grid
1:20,000	A3	Sx	BNG

Appendix A

Gazetteer of Heritage Assets

The following is a gazetteer of known heritage assets as of October 2017. It does not include historic buildings as they are not discussed in this report. For the full gazetteer of heritage assets please see the DBA (Arcadis 2016) and the DBA Addendum (2018). The AP numbers relate to the assets identified and described under column 2 'Description'.

Assets identified from Aerial Photography analysis

Project ID	Description	Easting	Northing
AP1	Circular cropmark feature identified from the 2006 AP analysis, adjacent to the known barrow site.	611441	137151
AP2	Circular cropmark feature identified from the 2006 AP analysis, adjacent to the known barrow site	611420	137132
AP3	Faint circular cropmark feature identified from the 1940 AP analysis east of Barrow Hill and south of CTRL/HS1	611073	137542
AP4	Faint circular cropmark feature identified from the 1940 AP analysis east of Barrow Hill and NW of known barrow **44**	6111192	137220
AP5	Several irregular features identified from the 1940 and 2011 AP analysis east of Harringe Lane and south of CTRL. Probably action of modern ploughing	609835	137722
AP6	Small circular feature south of Otterpool Manor identified from 1940 AP. May relate to former RAF Lympne	610883	136268

Scheduled Monuments

Project ID	Historic England Unique ID	Easting	Northing	Name
SM1	1004216	608679.4	136118.4	Romano-British building S of Burch's Rough
SM2	1005113	610389.1	134271	Royal Military Canal, Honeypot Cottage to West Hythe Dam
SM3	1005114	613950	134232.7	Royal Military Canal, West Hythe Bridge to Scanlon's Bridge
SM4	1005179	611768.9	134233.3	Roman period Saxon Shore fort now called Stutfall Castle, 468m south-west of St Stephen's Church
SM5	1005492	612211.7	134181	Royal Military Canal, West Hythe Dam to West Hythe Bridge
SM6	1020761	612297.9	137236.5	Westenhanger Castle

Non-designated Archaeological Assets

(note this is based on our state of knowledge in October 2017)

Project ID	R no.	Easting	Northing	Name	Period Range
1	TR 13 NW 34	610380	137950	Iron Age coin	Iron Age
2	TQ 84 SW 1	582138	144136	London and Dover Railway	Early Modern to Modern
3	TR 13 NW 3	612303	137225	Westenhanger Castle	Unknown
4	TR 13 NW 134	610400	136100	AUXILIARY UNIT OPERATIONAL BASE	Modern
5	TR 14 NW 53	613455	144064	Stone Street (Roman Road)	Roman
6	TR 13 SW 145	610500	134807	Port Lympne, associated land	Unknown
7	TR 03 NE 84	609500	136800	Pimple	Modern
8	TR 04 SE 120	605128	137564	Roman road	Roman
9	TR 13 NW 45	613180	137200	Roman site nr Hillhurst Farm	Roman
10	TR 13 NW 46	612850	136100	Prehistoric flint and md pottery, Lympne	Prehistoric
11	TR 13 NW 47	612750	135650	Prehistoric flint artefacts, Lympne	Prehistoric
12	TR 13 NW 48	612700	135300	Roman pottery and tile, Lympne	Roman
13	TR 13 NW 49	613820	136460	Possible ring ditch, Saltwood	Prehistoric
14	TR 13 NW 50	612600	135200	Roman pottery, tile, coins, Lympne	Roman
15	TR 13 NW 51	612750	136150	Roman pottery, Stanford	Roman
16	TR 03 NE 55	608900	136500	Roman tile found near Burch's Rough,	Roman
17	TR 13 SW 36	611600	134600	Iron Age pottery found near Stutfall Castle	Iron Age
18	TR 03 NE 58	609000	136500	WW2 auxiliary unit hide	Modern
19	TR 13 NW 54	612570	135010	Possible Anglo-Saxon Cemetery	Early Medieval
20	TR 13 NW 61	612113	137526	Medieval Features North of Westenhanger	Early Medieval to Medieval

Project ID	R no.	Easting	Northing	Name	Period Range
21	TR 13 NW 156	612194	137425	Bronze Age ditches, north of Westenhanger Castle, Stanford	Middle Bronze Age
22	TR 13 NW 63	612750	137050	Features East and West of Stone Street	Post Medieval
23	TR 13 NW 64	611100	137650	East Stour Diversion	Unknown
24	TR 13 NW 62	612128	137525	Prehistoric buried soil north of Westenhanger Castle, Stanford	Early Neolithic to Late Bronze Age
25	TR 13 NW 67	612659	136291	Post Med Features at Royal Oak Motel, Stanford	Post Medieval
26	TR 13 NW 68	611300	135800	Bronze Age Occupation Site, Lympne Industrial Estate	Bronze Age
27	TR 13 NW 70	611507	135420	Lympne Airfield	Modern
28	TR 13 NW 71	610837	136139	Battle Headquarters, Lympne Airfield	Modern
29	TR 13 NW 73	611289	135080	Aircraft Dispersal Pen (Site of), Lympne Airfield	Modern
30	TR 13 NW 74	610931	135522	Gas Decontamination Building, Lympne Airfield	Modern
31	TR 13 NW 75	610889	135503	Air Raid Shelters, Lympne Airfield	Modern
32	TR 13 NW 76	610900	135573	Pickett Hamilton Fort, Lympne Airfield	Modern
33	TR 13 NW 77	610458	135846	Site of Slit Trenches Near, Lympne Airfield	Modern
34	TR 13 NW 78	610870	135340	Site of Trenches Near, Lympne Airfield	Modern
35	TR 13 NW 79	610837	135553	Former Barracks Huts, Lympne Airfield	Modern
36	TR 13 NW 80	611847	135155	Remains of Overblister Hanger and Trackway, Lympne Airfield	Modern
37	TR 13 NW 81	611821	135131	Remains of Machine Gun Testing Range, Lympne Airfield	Modern
38	TR 13 NW 83	610928	135341	Bulk Fuel Installation, Lympne Airfield	Modern

Project ID	R no.	Easting	Northing	Name	Period Range
39	TR 13 NW 84	611283	135186	Runway, Lympne Airfield	Modern
40	TR 13 NW 72	611369	135227	Aircraft Dispersal Pen, Lympne Airfield	Modern
41	TR 13 NW 85	610900	136400	Early Medieval Brooch	Early Medieval
42	TR 13 NW 163	612186	137330	Cropmarks of a medieval trackway and field system, NW of Westenhanger	Medieval
43	TR 13 NW 174	612793	136782	Post medieval ditch, Stone Street, Westenhanger	Post Medieval
44	TR 13 NW 1	611450	137130	Bronze Age Bowl Barrow (Burial Mound), east of Barrow Hill. Excavated in 1931. Marked as 'tumulus' on OS maps	Bronze Age
45	TR 13 NW 2	612260	137200	Site of St. Mary's Church, Westenhanger	Medieval to Post Medieval
46	TR 13 NW 9	610870	137360	Probable Bronze Age burial mound, nr Barrow Hill	Bronze Age
47	TR 13 NW 12	611300	136400	Neolithic flint axe found at Otterpool Quarry	Neolithic
48	TR 13 NW 13	611260	135900	Cropmark and ring ditch	Unknown
49	TR 13 NW 14	612500	135030	Romano-British pottery; Roman coins	Roman
50	TR 13 NW 17	612000	135000	Tranchet Axe	Prehistoric
51	TR 13 NW 18	611000	135200	Moat site, Bellevue House, Shepway	Medieval
52	TR 13 NW 20	612400	136900	Possible Anglo-Saxon Palace near Westenhanger	Early Medieval
53	TR 13 NW 21	612300	137200	Possible Deserted Medieval Site, Westenhanger	Medieval
54	TR 13 NW 22	612300	137200	Possible Deserted Medieval Site of Eastenhanger	Medieval
55	TR 13 NW 28	612000	137000	Mesolithic Blade Found Near, Westenhanger	Mesolithic
56	TR 13 SW 2	610960	134990	C6th-C7th Frankish Interments found c.1828	Early Medieval

Project ID	R no.	Easting	Northing	Name	Period Range
57	TR 13 SW 25	612500	134900	Anglo-Saxon vases	Early Medieval
58	TR 13 NW 186	610242	137029	Cropmark of a large ring ditch, to the southwest of Barrow Hill	Unknown
59	TR 03 NE 39	609410	137050	Harringe Court	Medieval to Post Medieval
60	TR 13 NW 86	611174	135844	Pickett-Hamilton fort at Lympne Airfield	Modern
61	TR 13 NW 87	611345	136018	Concrete base likely to be of Second World War origin at Link Park, Lympne	Modern
62	TR 13 NW 144	612200	135500	Gun Emplacement	Modern
63	TR 13 NW 142	610593	138132	Nodal Point	Modern
64	TR 13 NW 89	611198	135948	Finds at Link Park, Lympne, Kent	Unknown
65	TR 13 NW 147	610728	137700	Former site of Talbot House, a medieval hall house	Medieval to Modern
66	TR 13 NW 43	610957	135181	Bellevue Aisled Barn	Medieval
67	TR 13 NW 153	613166	137270	Roman field systems at Junction 11, M20	Roman
68	TR 13 NW 173	610745	137611	Possible prehistoric palaeochannel, on land at the Cedars, Barrow Hill, Sellindge	Prehistoric
69	TR 13 NW 82	611835	135130	Remains of Ammunition Store, Lympne Airfield	Modern
70	TR 13 SW 134	611562	134942	Site of a Windmill and smock mill, Mill house, Lympne	Post Medieval
71	TR 13 NW 148	611000	136000	Find spot of an 11th century bronze stirrup strap mount Lympne parish	Early Medieval to Medieval
72	TR 13 NW 196	612000	135000	Find spot of 3 Iron Age coins, Lympne parish	Iron Age
73	TR 13 NW 129	612654	136226	Former site of the Royal Oak Motel	Post Medieval to Modern

Project ID	R no.	Easting	Northing	Name	Period Range
74	TR 13 NW 161	613156	137199	Late Iron Age - Roman pits and ditches, Stanford and Sandling	Late Iron Age to Roman
75	TR 13 NW 162	613157	137197	Medieval ditch, Stanford and Sandling	Medieval
76	TR 13 NW 158	612139	137542	Possible 11th-13th century settlement, north of Westenhanger Castle, Stanford	Medieval
77	TR 13 NW 159	612127	137502	14th-15th century ditches and enclosures, north of Westenhanger Castle, Stanford	Medieval
78	TR 13 NW 157	612115	137511	Late Iron Age rural landscape, north of Westenhanger Castle, Stanford	Late Iron Age
79	TR 13 NW 160	612314	137488	16th century ditches, north of Westenhanger Castle, Stanford	Medieval to Post Medieval
80	MKE64292	612500	135500	Early Medieval garnet brooch	Early Medieval
81	MKE67583	609600	136600	Iron Age copper alloy coin	Late Iron Age
82	MKE67638	610200	136500	Medieval silver coin	Medieval
83	MKE67791	610400	137900	Iron Age gold coin	Late Iron Age to Roman
84	MKE67817	611500	137600	Medieval copper alloy figurine	Medieval
85	MKE67872	610000	136000	Early Medieval silver brooch	Early Medieval
86	MKE67822	610500	137900	Early Medieval copper alloy stirrup	Early Medieval to Medieval
87	MKE67915	610146	137889	Early Medieval copper alloy weight	Early Medieval
88	MKE67991	610390	137600	Roman copper alloy bead	Roman to Early Medieval or Anglo-Saxon
89	MKE69025	609080	136300	Roman copper alloy mount	Roman to Early

Project ID	R no.	Easting	Northing	Name	Period Range
					Medieval or Anglo-Saxon
90	MKE68923	609600	136600	Iron Age copper alloy coin	Iron Age
91	MKE68844	612500	136500	Modern gold personal ornament	Post Medieval
92	MKE69390	610380	137950	Iron Age gold coin	Iron Age
93	MKE69407	610400	137900	Iron Age gold coin	Iron Age
94	MKE69420	609000	138000	Iron Age copper alloy coin	Iron Age
95	MKE69547	611980	134667	Roman copper alloy coin	Roman
96	MKE69434	611500	135500	copper alloy brooch	Medieval
97	TR 13 NW 149	612000	135000	Anglo-Saxon gold shilling ('thrymsa'), near Lympne	Early Medieval
98	TR 13 NW 177	612000	135000	Anglo-Saxon silver penny, near Lympne	Early Medieval
99	TR 13 NW 150	612000	135000	Anglo-Saxon silver penny, near Lympne	Early Medieval
100	TR 13 NW 151	612000	135000	Imitation? Ottonian silver penny, near Lympne	Early Medieval
101	TR 13 NW 152	612000	135000	Anglo-Norman silver penny, near Lympne	Medieval
102	TR 03 NE 217	609263	137998	Early Bronze Age/Iron Age pottery, east of Sellindge Sewage Works	Bronze Age
103	TR 03 NE 222	609579	137822	Neolithic arrowhead, Harringe Court	Early Neolithic
104	TR 03 NE 223	609278	137876	Iron Age/Roman pottery, Harringe Court	Middle Iron Age to Roman
105	TR 13 NW 171	612264	137433	Neolithic/Bronze Age worked flint, Westenhanger	Early Neolithic to Late Bronze Age
106	TR 13 NW 172	612143	137522	Scatter of Medieval pottery, Westenhanger	Medieval
107	TR 13 NW 175	610965	135131	Medieval hollow way, enclosure and buildings, Otterpool Campsite, Aldington Road	Medieval to Post Medieval
108	MKE80001	611649	136886	Gold finger ring	Post Medieval

Project ID	R no.	Easting	Northing	Name	Period Range
109	MKE80019	609400	136400	unidentified object	Unknown
110	MKE80045	611900	137400	gold finger ring	Medieval to Post Medieval
111	TR 03 NE 226	609443	137808	Linear geophysical anomaly, Harringe Court	Unknown
112	TR 13 NW 176	612916	136909	Cropmark of an enclosure to the west of Westenhanger	Unknown
113	TR 13 NW 187	610239	136928	Cropmark of a large ring ditch, to the southwest of Barrow Hill	Unknown
114	TR 13 NW 188	610393	136847	Cropmark of a large double ring ditch, to the southwest of Barrow Hill	Unknown
115	TR 13 NW 189	610249	136768	Cropmark of a ring ditch, to the southwest of Barrow Hill	Unknown
116	TR 13 NW 190	610884	137270	Cropmark of a possible ring ditch, to the south of Barrow Hill, Sellindge	Unknown
117	MKE96595	609670	137110	Early Medieval Lead Alloy gaming piece	Early Medieval
118	MKE96596	609670	137110	Roman Copper alloy steelyard weight	Roman
119	MKE96667	609430	135900	Neolithic Flint leaf arrowhead	Early Neolithic to Middle Bronze Age
120	TR 13 NW 198	610284	137968	Medieval Ditches, Undated Ditch and Undated Cobbled surface, Sellindge	Medieval
121	MKE97538	611130	135914	Prehistoric ditch and post-holes at Enterprise Way.	Prehistoric

Archaeological Events

Project ID	EvUID /Unique ID	Easting	Northing	Name
EV1	EKE10095	610780	137590	Evaluation of land at the Cedars, Barrow Hill, Sellindge.
EV2	EKE10672	589570	15060	Desk-based assessment of the impact of the CTRL/ HS1
EV10	EKE12247	609370	137900	Geophysical survey at Harringe Court
EV3	EKE10762	612260	137140	Watching brief at Westenhanger Castle, Folkestone
EV4	EKE10763	612100	137190	Watching brief at Farm Cottage, Stone Street, Stanford
EV5	EKE10806	611600	135420	Watching brief at Link Park Industrial Estate, Lympne
EV6	EKE10807	611240	135710	Evaluation at the proposed Sico headquarters, Link Park Industrial Estate, Lympne
EV7	EKE11013	612240	137200	Tree-ring analysis of timbers from Westenhanger Manor barn and adjacent stable block
EV8	EKE11611	588700	155220	Surface collection survey for the Channel Tunnel Rail Link: Supplementary Fieldwork
EV9	EKE11965	612790	136770	Watching brief at 'Jesters', Stone Street, Westenhanger
EV11	EKE13952	611150	135900	Plot 20, Link Park, Enterprise Way, Lympne: Evaluation report
EV12	EKE14724	589570	156060	A Geoarchaeological Evaluation of the Thames/Medway Alluvial Corridor of the Channel Tunnel Rail Link
EV13	EKE14828	611090	136230	Palaeolithic test-pits excavated at Otterpool Manor Farm, Lympne, 2013
EV14	EKE14938	611180	136010	Proposed Development of a biomass renewable electrical energy plant at Link Park, Lympne, Kent, Volume 2, Technical Appendix 5, desk-based assessment
EV15	EKE15032	612240	137200	Westenhanger Manor Barn, Stone Street, Stanford, Near Folkestone, Kent: Tree-Ring Analysis of Timbers
EV16	EKE3748	611450	137130	Excavation of Bronze Age Barrow (44), Stanford
EV17	EKE5000	612700	135200	Geophysical survey of the A259 Dymchurch to M20 (Junction 11)

Project ID	EvUID /Unique ID	Easting	Northing	Name
EV18	EKE5089	612759	137280	Evaluation East and West of Stone Street, Westenhanger
EV19	EKE5115	613300	137230	Evaluation of Land adjacent to Hillhurst farm, Westenhanger, Hythe
EV20	EKE5464	612240	137210	Outbuildings at Westhanger Castle, Stanford
EV21	EKE5730	612652	136273	Evaluation at Royal Oak Motel, Ashford Road, Stanford
EV22	EKE5766	605080	130310	Romney Marsh Earthworks Survey 1995
EV23	EKE5876	611326	135826	Evaluation at Link Park, Lympne Industrial Estate
EV24	EKE5877	611331	135800	Watching brief at Link Park, Lympne
EV25	EKE5967	612251	137203	Tree-Ring Analysis of timbers from a Barn at Westenhanger Manor, Stanford
EV26	EKE6050	610920	135550	Survey of Air Raid Shelters and Barracks, Lympne Airfield
EV27	EKE8493	612371	137176	Tree-Ring Analysis of Timbers from Westenhanger Castle
EV28	EKE9232	611524	135754	Desk based assessment and walkover survey carried out at Link Park, Lympne
EV29	EKE9658	611189	135934	Evaluation Report - Link Park, Lympne, Kent

Assets Identified within the Site Visit 2016

Project ID	Name	Easting	Northing	Built or non-Built?
WS1	Features South of Harringe Court	609518	134987	Non-Built
WS2	Cottage, possible Medieval building, on Aldington Road	611393	134987	Built
WS3	Cottage, possible Medieval building, on Aldington Road	611420	134985	Built
WS4	Milestone on A20 at southern end of Barrow Hill	610901	136885	Built
WS5	Group of 1840s/Victorian Cottages/Railway cottages	610747	137498	Built
WS6	Two outbuildings at Bellvue	610954	135226	Built
WS7	Lodge Building at Lympne Park	611026	135114	Built

Project ID	Name	Easting	Northing	Built or non-Built?
WS8	Medieval Barn at Otterpool Manor	610986	136510	Built
WS9	Arts and Crafts Cottages	612789	136408	Built
WS10	Oast House and Barn at Barrow Hill Farm	610937	137130	Built
WS11	'1763' Farm Building	610833	136999	Built
WS12	Rose Cottage - possible site of early cottage	611881	136641	Built
WS13	'Humble Bee Hall' 1st OS	610861	136965	Built
WS14	Buildings associated with Lympne Airfield (multiple)	610932	135546	Built
WS15	Cottage, possible Medieval building, on Aldington Road	611548	134975	Built
WS16	Earthwork features at Upper Otterpool	611311	136284	Non-Built
WS17	Routeway Adjacent to Stone Street	612761	136498	Non-Built
WS18	Harringe Cottages	609343	137208	Built

Appendix B

Summaries of past archaeological events and reporting

(note this is based on our state of knowledge in October 2017)

Cultural Heritage Desk Based Assessment (Arcadis, October 2016)

A Cultural Heritage Desk Based Assessment was carried out in October 2016 as part of Stage 1. It identified a wide range of archaeological and heritage assets. These include forty-one Listed Buildings, two Registered Parks and Gardens and seven Scheduled Monuments within 1km of the site; as well as four Military Crash sites, 47 non-designated Built Heritage assets and 121 non-designated archaeological assets within 500m of the site. The site also features historic hedgerows, which would be protected under the Hedgerow Regulations, including coppiced wood and historic woodland copses.

It highlighted key assets for consideration within the site including Westenhanger Castle and its buildings, other Medieval and post-Medieval buildings within the site and surrounding area, Lympne airfield and two barrows close to the East Stour River.

Additionally, it found several non-designated buildings, assets and several indicators of archaeological potential (not recorded by the Kent HER) which were recommended for further study and investigation. A routeway was identified adjacent to Stone Street, several undated features were identified south of Harringe Court and a series of earthwork features identified at Upper Otterpool.

Overall it summarised that the archaeological potential within the site ranged from medium to low with areas of specific archaeological interest identified.

UXO Desk Study and Risk Assessment (Zetica Ltd., May 2017)

An UXO Desk Study and Risk Assessment was undertaken by Zetica Ltd for the site in May 2017. The report gives a representative view of the UXO hazard for the site and its immediate surrounding in accordance with the Construction Industry Research and Information Association (CIRIA) C681 'Unexploded Ordnance (UXO), a Guide for the Construction Industry'. The report found several potential sources of UXO hazard.

Given the intensity of the bombing, it was considered possible that an Unexploded Bomb (UXB) fell on this part of the site and remained in situ. This part of the site is assigned a high UXO hazard level due to the possibility that UXB are present. The parts of the site bounding the former RAF Lympne are assigned a moderate UXO hazard level to account for the possibility of bombing overspill (M1).

An abandoned bomb is located on the north-western corner of the site. This part of the site is assigned a high UXO hazard level.

During WWII RAF Lympne was underlain with pipe mines to destroy the airfield facilities in the event of an enemy invasion. Pipe mines were discovered on the Site in the 1960s, indicating that they were not all removed at the end of WWII and no records have been found to confirm their removal post-WWII. The part of the Site within the airfield boundary is therefore assigned a high UXO hazard level at shallow depths due to the potential presence of pipe mines.

No records of any significant bombing or other sources of UXO hazard have been identified on the remainder of the site, which is assigned a low UXO hazard level

Multiple aircraft crashes are recorded at RAF Lympne during WWII, some of which will have resulted in debris being scattered across the site.

Geophysical Survey, Otterpool Park, Kent (Headland Archaeology, May 2017)

Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey at five locations within the proposed site, as part of a baseline assessment of the heritage potential of the site (see Illustration 6 Headland Archaeology 2017 for locations).

The survey provided evidence for a probable Roman field system with trackways, small-scale quarrying and possible settlement on land east of Lympne Industrial Park. Broad areas of magnetic disturbance within the same field are thought to be due to demolished infrastructure associated with RAF Lympne. This area is assessed as of high archaeological potential. East of Barrow Hill, a possible field system and a possible ring-ditch are identified whilst only slight magnetic variation has been recorded over a second possible ring-ditch which is recorded on the Kent Historic Environment Record. In the south-west corner of Folkestone Racecourse, a broad linear anomaly may locate a possible causeway which is thought to have provided access to Westenhanger Castle. Thermoremnant anomalies east of Westenhanger probably locate an area of post-Medieval/modern industrial brick and tile manufacture. These anomalies are also considered to be of moderate archaeological potential. No anomalies have been identified to locate an enclosure which is clearly visible on recent satellite imagery east of Westenhanger. As is the case with the ring-ditches, it is likely that there is insufficient magnetic contrast over the prevailing sandstone bedrock for some soil-filled features to manifest as magnetic anomalies. For this reason, the archaeological potential of the areas surveyed to date may be greater than indicated by the survey.

Archaeological Evaluation of land adjacent to Hillhurst Farm, Westenhanger, Hythe, Kent, Phase 1 (South Eastern Archaeological Services, November 1994)

South Eastern Archaeological Services was commissioned by Three Kings Development Limited to undertake an archaeological evaluation of land at Hillhurst farm, Westenhanger, Kent. The site is located between the M20 motorway to the north and the main railway line between London and Dover to the south, and is immediately to the west of Junction 11.

The great majority of the site was found to contain no archaeological remains whatsoever. At the very western end of the site, evidence of Romano-British activity was recorded. This consisted of a Roman-British pit which contained sherds of local pottery, dateable to the 1st to 4th centuries AD. One sherd of Samian ware was also recovered.

The report concluded that the was not likely that significant numbers of associated features were present within the application site boundary. It did however, indicate that a possible Romano-British settlement may be situated between the site and the line of the Roman road.

CTRL Historic and Cultural Effects Final Report volume 1 of 4 (Oxford Archaeological Unit, November 1994)

This document considers the effects of the construction and operation of the Channel Tunnel Rail Link on the historic environmental including the historic landscape features, historic buildings and archaeological remains. A variety of field investigations were conducted. The first event within the study area for the proposed site at Otterpool, was a surface collection survey south of the railway line, either side of Harringe Lane. The area was covered by a general scatter of burnt flints, worked flints, a Neolithic leaf-shaped arrowhead and flint scrapers. Within this area to the west of Harringe Lane there was also a significant cluster of five Iron Age flint-tempered pottery sherds, overlapping with a rather less distinctive Roman scatter and a concentration of Medieval pottery. The report determined that the remains could extend further into the adjacent fields.

An additional surface scatter of prehistoric and Medieval finds suggested occupation of the Brick-earth deposits adjacent to the floodplain. The report also highlighted the Prehistoric worked flint and Roman pottery which has been found at Folkestone racecourse.

Archaeological Evaluation of land adjacent to Hillhurst Farm, Westenhanger, Hythe, Kent, Phase 2 (South Eastern Archaeological Services, January 1995)

South Eastern Archaeological Services was commissioned by Three Kings Development Limited to undertake an archaeological evaluation of land at Hillhurst farm, Westenhanger, Kent. The site was located between the M20 motorway to the north and the main railway line between London and Dover to the south, immediately to the west of Junction 11.

The majority of the site was found to contain no archaeological deposits and was therefore similar to the Phase 1 assessment area. No Roman or other archaeological material was recovered from the trenches and those features encountered could not be dated to any period with certainty. The results of the Phase 2 evaluation suggested that the Roman pit recorded during the Phase 1 evaluation was an isolated feature. The report concluded that consequently there was no strong evidence to indicate a Roman-British settlement within the development area.

Union Railways Limited Channel Tunnel Rail Link Geophysical Surveys Report Volumes 1 and 2 (A. Bartlett & Associates Specialists in Archaeogeophysics, March 1996)

The report describes findings from a series of geophysical surveys carried out to test evidence of possible archaeological sites or features at 13 locations along the route of the proposed Channel Tunnel Rail Link.

Two of the geophysical surveys were within the study area. The first at Harringe Bridge partially falls within the site, and surveyed three fields around Harringe Lane. The first field, to the north of the CTRL, had a strong magnetic disturbance, representing a pipe, along its southern side. Another smaller pipe or conduit, was recorded alongside the pipe. A weak semi-circular feature was identified towards the east end which would be of interest if it represents one side of a large feature partly concealed by interference from the adjoining pipe. Other disturbances were also noted within the field, although the report could not state whether these were modern. The second field contained small anomalies, some of which appeared likely to be pits. The third field, to the east of Harringe Lane and within the application site boundary, had some interference from a pylon and electricity pole. Results identified some possible pits and a faint linear feature running from north to south.

The second site surveyed was the north of Westenhanger Castle. This site is on Brick-earth and therefore gave characteristically low susceptibility values. An area of slight enhancement was detected to the western end of the site. However, overall the scan produced virtually no response except for an isolated possible pit-like anomaly, and a small piece of iron. A flint scatter was recorded from this site but the report suggested that the limited survey findings were due to a former road, which crossed the western end of the site. Some brick fragments were seen in the soil samples from the eastern part of this survey area.

Romney Marsh Earthworks Survey 1995 (A. Reeves, April 1996)

The report found that 8% of the fields in the Romney Marsh Level were identified as old pasture. 5% of the fields in the Romney Marsh Level contained traces of earthworks, including banks, mounds, ditches, hollows and furrows. The report found very few areas of old pasture or earthworks immediately to the south of the Royal Military Canal. No areas of old pasture or earthworks were identified in the fields intersected by the study area.

Channel Tunnel Rail Link Union Railways (South) Ltd., North of Westenhanger Castle (ARC WGC 97) An Archaeological Evaluation (Museum of London Archaeology Service, January 1998)

As part of a programme of archaeological investigations along the route of the Channel Tunnel Rail Link, Union Railways Limited commissioned the Museum of London Archaeology Service to undertake an evaluation comprising seventeen trenches situated in c.5ha. of land 4km to the north-west of the centre of Hythe, Kent. The area of investigation was bounded by the M20 motorway to the north and by the existing London to Folkestone Railway to the south.

Medieval features were located towards the eastern end of the site. Much of the western half of the site was on a shallow west facing slope and contained no archaeology. A probable 11th – 12th century corn-drying oven was located on the eastern side of the site. Field ditches were found in 6 of the trenches. Two ditches were dated to 1150-1300 and may have therefore formed part of an early Medieval open field system.

In the south-east corner of the site five linear cut features were identified which were also likely part of an early Medieval field system. One ditch contained pottery of the period 1000-1250.

Channel Tunnel Rail Link Union Railways Limited Archaeological Evaluation at Harringe Lane, Kent. Final Fieldwork Report (Wessex Archaeology, March 1999)

Wessex Archaeology was commissioned by Union Railways Limited to carry out an archaeological evaluation on a site to the south-west of Sellindge village (centred on URL grid point 89200 38000; NGR grid point TR 09200 38000), known as Harringe Lane. The evaluation took place over three fields, centred around Harringe Bridge.

The field to the north of the CTRL revealed a small number of archaeological features, the majority concentrated towards the north-west corner of the site on a gentle south-west facing slope above the East Stour River. Six shallow ditches or gullies and two shallow pits with evidence for in situ burning, both possibly representing hearths, were identified. An area of high magnetic susceptibility recorded during geophysical prospection also appeared to partly correspond with the area covered by this group of features. Together, this evidence might be interpreted as indicating Late Iron Age/early Romano-British settlement rather than, for example, landscape elements (i.e. field boundaries). Furthermore, the small quantities of charred plant remains recovered from the possible hearths, one perhaps of Late Bronze Age date, suggested that these features did not lie at the centre of major domestic or crop processing areas.

Virtually all of the features in this area have been assigned a certain or probable Late Iron Age/early Romano-British date on the basis of the small assemblage of pottery recovered, although at least one may have been of earlier, Late Bronze Age date.

In the third field, within the application site boundary, a modern field drain was identified, corresponding to the faint curvilinear geophysical anomaly recorded from the magnetometer survey (1996). Four sherds of Late Bronze Age, Late Iron Age/early Romano-British and Medieval pottery were recovered from one of the trenches in this field. None of the remaining geophysical anomalies recorded in this survey were demonstrated to have an archaeological origin.

Environmental analysis demonstrated that little palaeo-environmental material has survived, or was ever present, in the samples examined. However, charcoal was present in substantial quantities in the field to the north of the CTRL. Head Brick-earth deposits were recorded within all of the trenches to the south of the CTRL.

Channel Tunnel Rail Link East Stour Diversion (ARC ESD98) Alluvial Deposit Report (Wessex Archaeology, March 1999)

Wessex Archaeology was commissioned by Union Railways Limited (URL) to investigate alluvial deposits encountered during evaluation work to the north of the East Stour River, between the M20 motorway and the Ashford to Folkestone railway.

The report concluded that the majority of the alluvial sequence represents channel fill and/or overbank floodplain alluvium, with mottling and oxidation becoming more redolent towards the surface deposits where fluctuating water table occurs. The basal material was distinctly coarser, with higher energy material (sands and medium gravel) typical of bed deposits; the same probably being derived from the Folkestone and Sandgate beds upstream. The report assessed that that this deposit originated from the Devensian glaciation (i.e. *c*.18,000 BP), when sea levels were *c*. 100-120m lower than the present day. There was some evidence to suggest that it could have originated from the Late Boreal/Early Atlantic period (i.e. *c*. 11-9,000 BP).

The report noted the preservation of waterlogged plant macrofossils within fluvial gravel in the lower core samples. These represent the organic surface of a stream bed with plant growth which was sealed by high energy, fluvially rolled flint pebbles and nodules. The report assessed that that this organic deposit was unlikely to predate the early Holocene period (i.e. the Mesolithic) and was more likely to date from the Neolithic or Bronze Age. This deposit probably represents the former course for the East Stour River.

Archaeological Evaluation Report. East and West of Stone Street Westenhanger.(Canterbury Archaeological Trust, March 1999)

An archaeological field evaluation of land to the east and west of Stone Street, Westenhanger, Kent, was undertaken by the Canterbury Archaeological Trust, between the 15th February and 19th March 1999. This formed part of a programme of archaeological investigations along the route of the Channel Tunnel Rail Link, and was commissioned by Union Railways (South) Limited.

The area under investigation consisted of two separate fields either side of Stone Street. The eastern area was located to the south of the existing London to Folkestone railway, whilst the western area lay to the north.

Twelve trenches were excavated in total, archaeological features being identified in six of these. These features consisted of a series of pits, two small ditches, and one larger unidentified linear feature possibly a geological anomaly. The evidence available from the limited datable material retrieved from these features indicates that all of them are of a late Post-Medieval or more recent date.

A conclusion was drawn that there were no significant cut archaeological features or remains present within the areas under evaluation. However further investigations of the natural subsoil deposits revealed the presence of a humic layer sealed beneath a sequence of floodplain alluvium associated with the East Stour River. Although this deposit remained undated, it correlated to a similar deposit identified in additional work undertaken for URS by Wessex Archaeology, and interpreted as a ground horizon – possibly dating to the Late Bronze Age or Romano-British periods.

Alluvial Deposit Report, Archaeological Evaluation at West of Stone Street (Wessex Archaeology, May 1999)

Wessex Archaeology was commissioned by Union Railways (South) Limited to investigate alluvial deposits encountered during evaluation work conducted by Canterbury Archaeological Trust at Fairmead Farm, Westenhanger (centred on TR 12750 37350). The site is known as

West of Stone Street (site code ARC SST98). The evaluation was carried out on the 17th February 1999.

The general sequence of alluvium sealing a fluvial gravel was a typical unremarkable sequence of fine-grained alluvial deposits representing channel fill and/or overbank floodplain alluvium, with mottling and oxidation becoming more redolent towards the surface deposits where a fluctuating water table occurs. A dark grey possibly humic layer evident in all trenches is of note, and coupled with its well-defined upper and lower horizons it may be suggested that this represents a stabilisation horizon, perhaps indicating a more rapidly buried, rather than gradually inundated, surface.

The morphology and coarse matrix of the basal mixed fluvial gravel and sand may be considered indicative of high energy water action, scouring and mixing deposits from various parent materials prior to deposition (i.e. stream bed deposits). Higher energy levels are generally associated with glacial retreat and lowered sea levels, and as such it is possible that this deposit either originates following the Devensian glaciation (i.e. c. 18,000 BP), when sea levels were c. 100-120 m lower than present day (WA 1998c, 4), or a result of seasonal (spring) discharge during the Devensian. However, there is also evidence to suggest that the Late Boreal/Early Atlantic period (i.e. c. 11. 9,000 BP) witnessed a significant rise in water tables, associated with a series of cut and fill. phases within alluvial Zones. It is suggested that this may be due to increased rainfall associated with the sea level rises occurring at this time.

The preservation of waterlogged plant macrofossils within a later fluvial gravel is notable, and presumably represents the organic surface of the river bed with plant growth which was sealed (and possibly truncated) by high energy fluvially rolled flint pebbles and nodules. Although undated, the organic deposit is unlikely to predate the early Holocene period (i.e. Mesolithic), and is perhaps more likely to be relatively recent (i.e. Neolithic/ Bronze Age), representing either a former course for the East Stour River, or a principal tributary feeding in from the north-east.

Similar sequences containing two, three or more distinct anaerobic horizons have been recorded elsewhere in Kent, such as Chatham, the North Kent marshes, Motney Hill and Gravesend. Generally, the stabilisation horizons are associated with the Mesolithic, Late Neolithic/Early Bronze Age, Late Bronze Age and Roman periods. At Chatham the prehistoric stabilisation horizons have been radiocarbon dated to c. 5,000 BC, 2820-2710 BC and 1530-600 BC respectively. Within this context, if the marker event at West of Stone Street is related to the sequences recorded elsewhere in Kent, then it is most likely to represent Late Bronze Age, or perhaps Romano-British horizons

Channel Tunnel Rail Link Union Railways (South) Ltd. North of Westenhanger Castle, Kent. Detailed Archaeological Works Interim Report (Canterbury Archaeological Trust, October 1999)

Canterbury Archaeological Trust was commissioned by Union Railways (South) Limited to undertake a detailed archaeological investigation on land to the north of Westenhanger Castle in Kent. This work formed part of a larger programme of archaeological investigations carried out in advance of the construction of the Channel Tunnel Rail Link.

The site is located to the north of the existing London to Folkestone Railway, on the northern side and open farmland lies to the east and west. The site was positioned towards the central northern area of the field just below a slightly higher plateau from which the ground dips down to the south and west.

Archaeological features including post-holes, pit and ditches dating to the Medieval period were recorded. The majority of the excavated features appeared to be of Norman date (AD 1050-1225). These features consisted of a series of large linear ditches forming a possible rectangular enclosure thought to indicate land division. No obvious structures were identified,

but the central area contained a large pit with a high concentration of charred plant/cereal remains that were interpreted as a corn drying oven. The retrieval of flint artefacts, including an Early Bronze Age arrow-head, suggests that there was survival of a prehistoric soil horizon in the south-east corner of the area excavated.

An Archaeological Evaluation at Link Park, Lympne Industrial Estate, Lympne, Kent (Archaeology South East, February 2001)

An archaeological evaluation was undertaken by Archaeology South-East on behalf of Stannifer Consultancy Ltd. at Link, Park, Lympne Industrial Estate. The evaluation involved the machine excavation of five twenty-metre-long trenches. The excavation revealed evidence of a possible Bronze Age field system comprised of a pair of parallel ditches and a single perpendicular ditch.

A pit, a small amount of flint-tempered pottery and worked flint, broadly of Bronze Age date were also uncovered, suggesting some form of occupation during this period.

Small fragments of tile and daub/pottery were discovered, suggesting some limited post-Roman activity on the site, possibly the result of agricultural practices.

The stratigraphy in all trenches indicated that ploughing had caused the truncation of deposits to a depth of 350-400mm below the present ground surface and within the trenches evaluated only negative features survived.

The analysis of the pottery and environmental samples indicated that the soil condition (free draining, deep profiles and probably acidic) had damaged the ceramics and may have dramatically reduced the site's potential for producing good environmental/economic data.

Archaeological Evaluation at Royal Oak Motel, Ashford Road, Stanford, Kent (Archaeology South East, April 2001)

Evaluation trenching conducted by Archaeology South-East in 2001 uncovered three ditches.

One of post-Medieval the other two of probable post-Medieval date, and one undated post-hole along with evidence of modern specialist crop growing (hops).

Channel Tunnel Rail Link, North of Westenhanger Castle Post Excavation Report (Canterbury Archaeological Trust, May 2001)

Canterbury Archaeological Trust (CAT) were commissioned by Union Railways (South) Ltd (URS) to undertake an excavation in fields north of Westenhanger Castle as part of an extensive programme of archaeological work in advance of the Channel Tunnel Rail Link (CTRL).

The report concluded that the earliest occupation dated from the Middle Bronze Age, largely concentrated at the south-east of the site. Evidence of Iron Age occupation across the site was extensive and included several enclosures and circular structures, located in the north-western part of the site. There was no evidence of Roman or Anglo-Saxon occupation but the report did identify early and late Medieval activity in the north-west. The Iron Age and Medieval phases were both reasonably comprehensive and provided coherent images of rural agricultural practices. This was supplemented by palaeo-environmental material for the early Medieval period. Small ceramic assemblages for each period provided good dating frameworks. The lithics assemblage was small but included in-situ deposits, whilst the remaining small finds illustrated a part of the range of implements to be expected from the early Medieval farmstead

Channel Tunnel Rail Link, Stone Street West, near Westenhanger Archaeological Excavation Interim Report (Wessex Archaeology, July 2002)

Wessex Archaeology was commissioned by Union Railways South Limited to investigate alluvial deposits at Farimead Farm, Westenhanger (centred on URL grid point 92750 17350; NGR TR 12747 37351). The site is known as Stone Street West.

No archaeological features were recorded during this investigation although one trench may have been located within a former palaeochannel. Previous work in the area demonstrated a small number of archaeological features predominately located within the Zone either side of Stone Street.

The investigation revealed a 1.3m thick sequence of deposits that were provisionally identified in terms of formation process and provided a typical Holocene alluvial sequence. The majority of the sediments were though to probably represent floodplain or saltmarsh along the East Stour River. The alluviation comprised of stone free silty clays with clear evidence of gleying. A basal gravel and sand layer was identified at the base of the sequence and associated with cold Devensian climates, and generally considered to contain relatively low palaeo-environmental potential.

An Archaeological Evaluation Of Land At The Cedars Barrow Hill Sellindge Kent. (CgMs Consulting, October 2002)

An archaeological evaluation of land to the east of the A20 Ashford Road and to the south of the CTRL. Seven trenches dug. A possible palaeochannel (based on mid-grey blue clay silt) was identified. No other archaeological deposits or structures were found.

Archaeological Desk Based Assessment and Walkover Survey of Land at Link Park, Lympne, Lent (Archaeology South East, August 2005)

The appraisal site comprised part of a former airfield at Lympne, Kent, which is currently under pasture. There is some evidence of modern structures relating to the site's former use as a Royal Flying Corps, Royal Air Force, commercial and civilian airfield between 1916 and the late 20th century. The site lies close to several archaeological sites of Bronze Age, Roman, Anglo-Saxon (including burials, Medieval, post-Medieval and modern date. These suggest that the site has a medium to high potential for containing further archaeological deposits of these periods. There is high potential for sites of Bronze Age date, medium potential for sites of Romano-British and Medieval date and high potential for site of post-Medieval to modern date, low potential for Palaeolithic to Neolithic date.

The former boundaries depicted on cartographic sources within the appraisal site need some consideration as they form part of a historic landscape and some may well contain artefacts of interest.

The Medieval Landscape at Westenhanger, Kent CTRL Integrated Site Report Series (Canterbury Archaeological Trust, 2006)

As part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL), the Canterbury Archaeological Trust was commissioned to undertake an excavation on land to the north of Westenhanger Castle (OS NGR 612200 137500).

Evidence for Bronze Age activity was limited to four features. In the Iron Age, a farming landscape started to emerge including a trackway, a penannular gully and a well-defined

enclosure. This activity may have extended into the early Roman period. The early Medieval period represented the main phase of development of the site (c AD 1050-1175) with the establishment of a possible small farmstead with associated enclosure system. Although the nature, morphology, and chronological development of the farmstead is difficult to define, as no clear building plans survived, four potential structures have been identified along with associated refuse pits, possible latrines and possible livestock enclosures. This occupation appears to have been short-lived and was abandoned by the late 12th century. No direct evidence for settlement activity was apparent from that date onwards and the site seemed to have been subsequently occupied by successive field systems, showing an eastward shift in activity across the site in the 13th century. Late Medieval and post-Medieval evidence are represented by a limited number of features, generally in the eastern part of the site, and related to agricultural activities.

Link Park, Lympne, Kent. Archaeological Evaluation Report (Archaeology South East, November 2007)

Archaeology South-East were commissioned by Somerston Capital Ltd., on behalf of Phides Estates (Overseas) Ltd. undertook an archaeological evaluation on land adjacent to Link Park, Lympne Kent.

The site was bounded to the west by Otterpool Lane, to the south by Link Park Industrial Estate and to the north and east by a large bund.

Eight trenches were excavated along the proposed route of an access road. Artefacts included lithic waste flakes, Late Bronze Age, Iron Age and Medieval pottery fragments and a Mesolithic flint core. No features were found.

There was no evidence of any features associated with the potential Bronze Age field system identified in the earlier evaluation to the east (see 2001 above). However, the fragment of Late Bronze Age pottery and flint tempered sherds indicated some, albeit limited, activity of this date in the vicinity.

An Archaeological Watching Brief at Link Park Industrial Estate, Lympne, Kent. (Archaeology South East, November 2008)

In May 2008, Archaeology South-East maintained a watching brief during groundworks associated with the construction of a new gas main from Aldington Road, linking in with Transco work. The route of the service will extend northwards, westwards and then northwards again towards the access point off Otterpool Lane. This route passed over the former Lympne Airfield, Aldington Lane, Lympne, Kent. The disused runway was crossed twice and several electrical cables and pipes parallel to the line of the disused runway were recorded, along with other cables and pipes which served both the WW2 airfield and the later commercial airfield.

Folkestone Racecourse, Westenhanger Desk Based Assessment (RPS Group, October 2010)

This historic environment desk-based assessment examined a number of baseline sources for the Folkestone Racecourse site, Westenhanger, Kent. The site is situated west of Stone Street Roman road and immediately south, west and east of the Westenhanger House (or Castle) Scheduled Ancient Monument (SAM No. 22777). The assessment confirmed that there is medium potential for survival of archaeological and palaeo-environmental remains from a range of other periods at the Racecourse. Within the racecourse site the Bronze Age and Roman periods are currently only represented by artefacts within the ploughsoil including worked and burnt flint and a single sherd of Roman pottery. However, a general lack of archaeological fieldwork precludes any firm conclusions on the presence/absence of related buried archaeological remains of these periods.

Interim report on archaeological works undertaken at the site of the proposed Otterpool Campsite, Aldington Road, Lympne, Kent (Canterbury Archaeological Trust, July 2012)

An archaeological evaluation followed by excavation was undertaken by the Canterbury Archaeological Trust on land adjacent to Aldington Road, Lympne (NGR 610970 135085, centred) between 20 February and 9 March 2012.

The majority of the identified archaeology was focussed alongside Aldington Road where a hollow-way had developed leading into the site during the Medieval period. The area was initially used for the cutting of pits into which domestic refuse and cess was disposed. Subsequently a building was constructed and the hollow-way went out of use. The building appeared to be agricultural, perhaps a small barn, with environmental sampling suggesting that grain processing may have been taking place in the vicinity. Later an open fronted extension was added to its north-west side. Preliminary spot-dating suggests that that this occupation commenced during the late thirteenth century, perhaps extending through to the mid fifteenth. Both the pits and the building most likely related to the Belle Vue moated manor that is known to have been situated on the opposite side of Aldington Road. Post-Medieval activity appears to have been largely agricultural with the hollow-way re-developing and continuing in use through to the nineteenth century. Remains relating to nineteenth century quarrying were identified in the south of the site.

Cultural Heritage Desk Based Assessment, Land at Ashford Road, Sellindge, Kent (CgMs Consulting, July 2013)

This Cultural Heritage desk-based assessment was prepared by CgMs Consulting, on behalf of Taylor Wimpey. The subject of this assessment was land at Ashford Road, Sellindge, Kent. The site was centred at TR 1037 3800 within Folkestone & Hythe District. Taylor Wimpey commissioned CgMs Consulting to establish the cultural heritage significance of the site, and to provide guidance on ways to accommodate any archaeological constraints identified.

The study found that archaeological potential would not preclude future development. However, it was determined likely that archaeological remains of local importance would be encountered and would require programmes of further archaeological mitigation in advance of construction.

The archaeological potential of the study site for the early Prehistoric periods (Palaeolithic, Mesolithic and Neolithic), was defined as low. The archaeological potential of the study site for the Bronze Age was defined as medium and for the Iron Age as good. Two Iron Age coins were recovered from the site during metal detecting. The site was thought to have a low archaeological potential for the Roman, Anglo Saxon and early Medieval periods. The study site was thought to have a low archaeological potential for the late Medieval and Post-Medieval periods. Evidence for land division and agricultural activity was possibly represented.

Proposed Development of a 45MW combined heat and power renewable energy electrical generation biomass plant, Link Park, Lympne, Kent. Volume 2 Technical Appendix 5 (Mott Macdonald, February 2015)

This report comprised of a desk based assessment of the potential impact on heritage assets of the proposed construction of a new biomass plant at Link Park, Lympne, Kent. The assessment found that the proposed biomass plant site was situated in an area of high potential for Bronze Age remains. There was also a moderate potential for the survival of Medieval and post-Medieval remains associated with agricultural practices, namely field

boundary ditches. A series of archaeological trial trench evaluations recorded archaeological features at depth from 0.7m to 0.9m below ground level.

Project 6637 Stour Basin Palaeolithic Project (University of Southampton, October 2015)

This project, conducted by Kent County Council, found that most of the Brick-earth deposits identified proved to be slopewash deposits dated to the late Devensian. Numerous handaxe finds from a site at Dreal's Farm demonstrated that patches of Head Brick-earth capping high ground can have greater Palaeolithic potential than hitherto realised.

There was the potential for plateau Brick-earth deposits capping high ground to be substantially earlier than the late Devensian, and thus to have high Palaeolithic potential.

Otterpool Manor Farm is one of the rare locations within the Weald basin where a large patch of Brick-earth is mapped. It was suggested that future research should investigate whether this patch might be of loessic origin, and whether it contained fluvial/alluvial elements.

Three machine-dug test pits were excavated. All three test pits showed a thick sequence of Brick-earth, gravelly at its base, overlying Sandgate Beds bedrock, which in this location comprised clayey/silty glauconitic sand.

No sediment samples were taken, nor were any artefacts or faunal remains found. No palaeo-environmental remains were present in the deposits. There was no evidence of Palaeolithic activity found in the fieldwork, nor any records of Palaeolithic finds known from previous discoveries. This result confirms that the phase I Brick-earth is a slopewash deposit of late Devensian age, formed during the Last Glacial Maximum.

The work established that the northern fringe of this mapped patch of Brick-earth is late Devensian slopewash of low Palaeolithic potential, and there was no evidence of buried fluvial terrace deposits.

It would be desirable to carry out further test pit investigations, supported by sedimentological studies and OSL dating, upslope to the southeast to verify whether or not there are aeolian or other sediments (such as buried fluvial aggradations) in the un-investigated parts of this Brick-earth patch.

From a Palaeolithic viewpoint, the plateau spreads of Head Brick-earth at locations such as Quex Park and The Loop (both on Thanet), and at Hundred Acres Field (Dreal's Farm) have been confirmed as of high potential. It would be desirable to carry out further test pit investigations in these areas, targeted at the high points of each Brick-earth spread. It would also be desirable to target the high point of the Brick-earth spread south of the investigated site at Otterpool Manor Farm (site OMF 13), and to investigate further the southern part of the Brick-earth spread at Charing Heath (south of site HF 13, in vicinity of BGS borehole TQ96NW90), where it was thought that buried fluvial terrace deposits of the upper Stour might be present.

Besides topsoil with turf, which capped the sequence in all three test pits, there was only one deposit present, which was a thick body (phase I) of Head Brick-earth 2-3m thick and slightly gravelly at its base, coming down onto Cretaceous bedrock (Sandgate Beds)

M20 Lorry Area- Stanford West: Environmental Assessment Report Volume 1 Chapter 6 (Highways England, August 2016)

This report outlines the impact on heritage assets from the proposed A20 lorry area development.

The proposed Development lies 35m to the north of Westenhanger Castle, and as such it was considered that the Castle would suffer significant effects during construction and operation.

Stanford Windmill and Gibbons Brook Farmhouse Shalom would also be subjected to significant effects on their setting during construction and operation.

A permanent significant effect during construction was predicted on below ground archaeological remains, and a programme of evaluation and investigation was scheduled prior to construction.

M20 Lorry Area- Stanford West: Environmental Assessment Report Appendices 6.1 Cultural Heritage Baseline (Highways England, August 2016)

The report presents the archaeological baseline for all heritage assets in the study area of the project site.

It assessed that there would be a large adverse effect on Westenhanger Castle, Stanford Windmill and Gibbons Brook Farmhouse Shalom. There would be a slight adverse effect on Hayton Manor Barn.

M20 Lorry Area- Stanford West: EAR Appendices 6.2 Geophysical Survey (Highways England, August 2016)

The geophysical survey undertaken for the project identified a complex of enclosures of unknown date in the north-west corner of the Project site. The enclosures were linear, and typical of settlement enclosures from the Iron Age to Medieval periods. No other significant archaeological remains were identified during the geophysics survey.

Former field boundaries were located in several fields. Field drainage complexes were also identified, although it is possible that some were former field divisions. Magnetic disturbance was present in large areas, including scatters of World War II material. Consolidation material or the spreading of green waste were considered as alternative explanations. The survey encountered magnetic disturbance adjacent to the M20, which was due to material from the construction of the motorway; former woodland caused some disturbance in other fields.

Anomalies of natural origin were identified in several fields. Weak trends which were identified throughout the dataset were assessed to probably be of agricultural or natural origin. Several pipes were located, and weak responses due to relatively recent ploughing were detected.

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