Land at Upper Heyford, Cherwell, Oxfordshire
Archaeology & Heritage Summary Note
September 2022

Client

David Wilson Homes (Southern) Ltd

Planning Authority

Cherwell District Council

Site Centred At

SP 51932 25852

Prepared By

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Approved By

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Orion Ref

PN3634/SN/1

Introduction

This archaeology and heritage summary note has been prepared to support a planning application for development at Upper Heyford by David Wilson Homes (Southern) Ltd.

This summary note will set out the planning history of the site in relation to archaeology and heritage and will summarise the works completed to date. The baseline information will be reviewed against the proposed development plans (Appendix A) and recommendations for further works in relation to archaeology and built heritage will be made where appropriate.

The Site

The site occupies an irregular parcel of land to the north of Camp Road, Upper Heyford, Cherwell, Oxfordshire (Figure 1). To the east are agricultural fields with Chilgrove Drive beyond and Larsen Road lies to the west.

The bedrock geology of the site is recorded by the British Geological Survey as 'White Limestone Formation – Limestone'. There is no superficial geology noted for the site (BGS, 2022).

Planning History

The site has previously formed part of two planning applications for residential development, both applications have been given resolution to grant pending agreement of S.106.

15/01357/F

The southern parcel of the site is covered by a full planning application for 89 residential units under reference 15/01357/F.

Archaeology

Following the completion of an appropriate scope of works (DBA, geophysical survey and evaluation) the LPA's archaeological advisor provided the following comment on the application:

'We have previously advised that the results of an archaeological evaluation would need to be submitted along with this planning application, letter dated 7th September 2015. This evaluation has been undertaken in October 2015 and has shown that archaeological deposits do not survive on the site.

No further archaeological investigations will be required on this site but the results of this evaluation will need to be submitted along with the planning application as set out in our earlier response.'

Therefore, no further archaeological work has been requested in relation to the southern portion of the site and no formal conditions have been applied.

Built Heritage

Historic England noted that the proposed development would have a minimal impact on the setting of the Flying Field at RAF Heyford and the conservation area. Historic England advised that consultation with the LPA's conservation officer

should be completed, and that Historic England would not require further consultation (Ref. P00474193).

The conservation officer provided input into preferred house types and appearance, noting a preference for design sympathetic to the nearby RAF and American housing. No objections were raised, and no planning conditions were suggested.

21/03523/OUT

The northern portion of the site is covered by an outline planning application for 31 residential units.

Archaeology

There does not appear to be a consultation response from the LPA's archaeological advisor however paragraph eight of the committee report (04.03.2022) states:

'The County Archaeologist has indicated that the proposal does not appear to directly affect any presently known archaeological sites. However, the County Council's records do show the presence of known archaeological finds nearby and this should be borne in mind by the applicant. If archaeological finds do occur during development, the applicant is requested to notify the County Archaeologist in order that he may make a site visit or otherwise advise as necessary. Please contact: County Archaeologist, Department of Leisure and Arts, Oxfordshire County Council, Central Library, Westgate, Oxford, OX1 1DJ (Telephone 01865 815749).'

Therefore, no further archaeological work has been requested in relation to the northern portion of the site and no formal conditions have been applied. The applicant should note the requirement to notify the County Archaeologist should unexpected archaeological remains be discovered through the course of development.

Built Heritage

No comments were raised by the conservation officer; therefore, the development was considered acceptable in terms of built heritage impact and no further work/formal conditions are required.

Previous Investigations within the site

The following previous investigations have been completed within the southern land parcel (15/01357/F):

- A Built Heritage Assessment by West Waddy ADP (July 2015)
- A Geophysical Survey by TVAS (April 2015)
- An archaeological trial trench evaluation by TVAS (October 2015)

The geophysical survey report references an archaeological desk-based assessment prepared by TVAS for the southern site however it has not been possible obtain a copy of the report.

The northern land parcel (21/03523/OUT) has been the subject of a historic environment desk-based assessment (TOR October 2021).

A brief summary of each investigation is provided below, copies of the reports are appended to this summary note.

Built Heritage Assessment by West Waddy ADP (Appendix B)

A built heritage assessment was prepared by West Waddy in 2015 which appraised the RAF Upper Heyford conservation area. The report concluded that development of the site would not result in harm to the conservation area or heritage assets within it.

Geophysical Survey by Thames Valley Archaeological Services (Appendix C)

A geophysical survey of the southern parcel of the site was completed in April 2015 by TVAS. The report notes that the site has been impacted by ploughing and the presence of modern services and trackways may mask archaeological features. The survey noted a number of ephemeral features with a possible archaeological origin; however, none could be securely identified.

Archaeological Trial Trench Evaluation by Thames Valley Archaeological Services (Appendix D)

The geophysical survey results were subsequently tested through archaeological trial trench evaluation by TVAS in October 2015. A total of 21 trenches were opened however none were found to contain archaeological finds or features. The archaeological potential of the site was revised to low for all periods and no further archaeological works were required.

Historic Environment Desk-Based Assessment by Terrence O'Rourke (Appendix E)

The HEDBA reviews available sources and identifies a negligible potential for the site to contain finds and features from all periods. The HEDBA concludes that no further works would be required to inform the planning application.

Summary of the Archaeological and Heritage Baseline

In summary, the archaeological potential of the site is considered low for all periods based upon the results of a desk-based assessment, geophysical survey and trial trench evaluation. Therefore, no further works are anticipated in relation to archaeology to inform the David Wilson Homes application.

A heritage assessment has concluded that development of the site would not result in harm to the conservation area or heritage assets within it, therefore no further works in relation to built heritage are anticipated.

The Proposed Development

The proposed development is for full planning permission for residential development and associated infrastructure. The site layout is included at Appendix A.

The proposed development is for 126 residential units which represents an uplift of six units from the two earlier applications combined. It is not considered that this slight uplift in units would impact upon archaeology and built heritage.

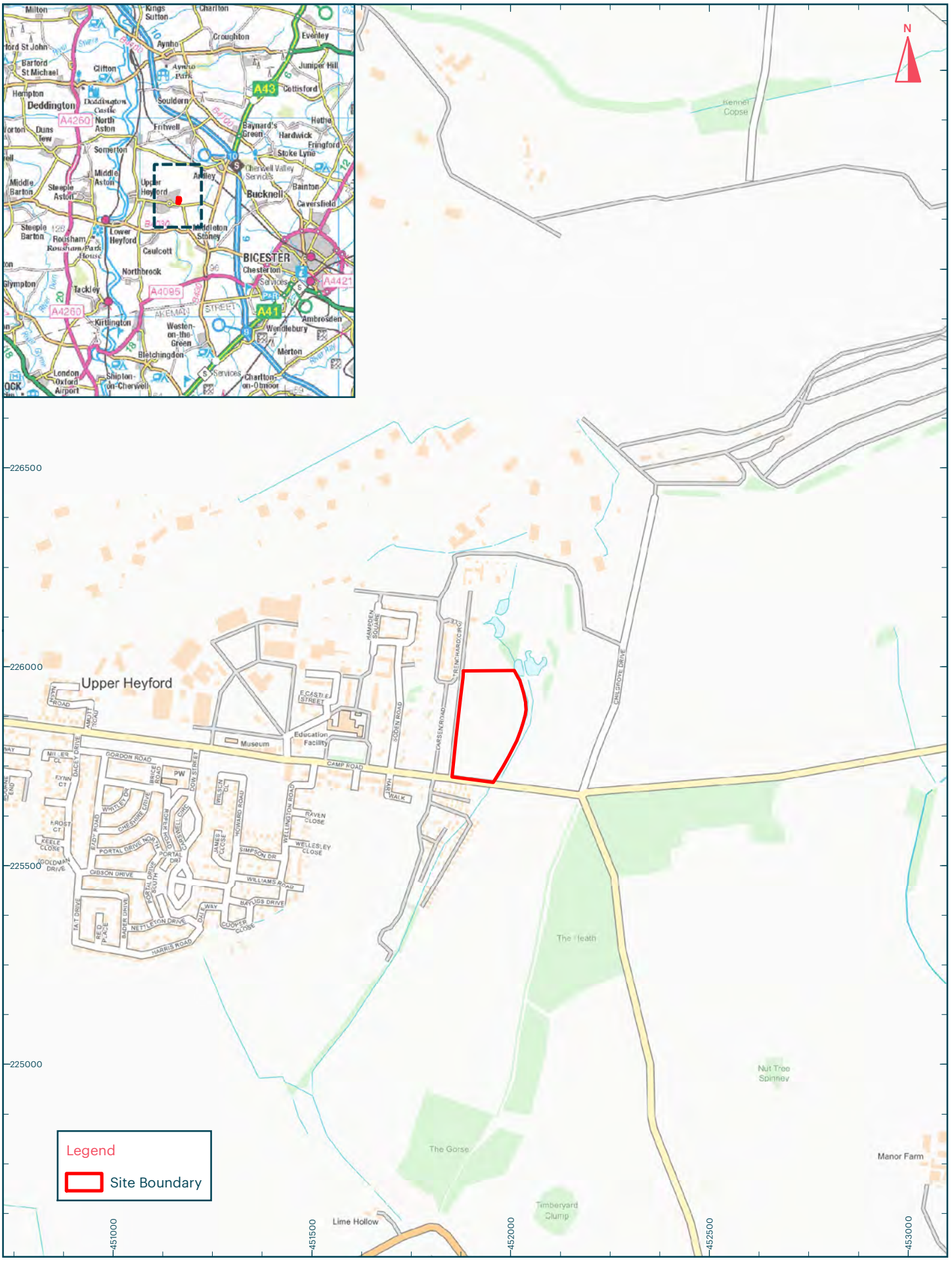
Conclusions

A review of the archaeology and heritage baseline for the site indicates that the site has a low potential to contain archaeological finds and features from all periods. This has been confirmed within the south of the site by geophysical survey and evaluation trial trenching.

A heritage assessment has concluded that development of the site would not result in harm to the conservation area or heritage assets within it, therefore no further works in relation to built heritage are anticipated.

Given the baseline information available for the site, further archaeological and built heritage assessment is not considered necessary to support a new planning application.

The two previous planning applications have been granted resolution to consent planning permission with no archaeological or heritage conditions applied. It is concluded that given the similarity of the David Wilson proposed scheme shown at Appendix A, the same approach could be applied to this application.



Title:
Figure 1: Site Location
Address:
Land at Upper Heyford, Oxfordshire

Scale at A4: 1:12,500
0 400m

Appendix A - Site Layout

LEGEND

SITE BOUNDARIES

- APPLICATION BOUNDARY

EXISTING VEGETATION

- EXISTING TREE TO BE RETAINED
- EXISTING RPA
- EXISTING VEGETATION TO BE REMOVED

EXTERNAL BOUNDARY TREATMENTS

- 1800mm HIGH SCREEN WALL (REFER TO MATERIALS LAYOUT 0321-PHB-108 FOR MATERIALS)
- 1050mm HIGH SCREEN WALL (REFER TO MATERIALS LAYOUT 0321-PHB-108 FOR MATERIALS)
- 1800mm HIGH CLOSE BOARD TIMBER FENCE
- 900mm HIGH METAL ESTATE RAILINGS
- 1200mm HIGH PIER (REFER TO MATERIALS LAYOUT 0321-PHB-108 FOR MATERIALS)
- 1800mm HIGH PLOT DIVISION PANEL FENCE
- 1800mm HIGH TIMBER MATCHBOARD ACCESS GATE
- 1200mm HIGH RAILING GATE

NUMBERING

- 12 — PLOT NUMBERS
- G12 — GARAGE NUMBERS
- P12 — PARKING NUMBERS
- V — VISITOR PARKING
- (h) — ING

MISCELLANEOU

- ESS
- AFFORDABLE HOUSING - INTERMEDIATE
- PERSONNEL ACCESS
- AFFORDABLE HOUSING - RENTED
- BIN HARDSTANDING
- BIN HARDSTANDING WITH 1.5m TURNING CIRCLE
- WATER BUTT
- ROTARY DRYER
- COMPOST BIN
- EXISTING BUILDING
- TIMBER BOLLARDS

GROUND SURFACING

- MARSHALLS KEYBLOK BLOCK PAVING COLOUR: BRINDLE
- RAMP / RUMBLE STRIP TO ENGINEERS DESIGN
- MARSHALLS PRIORA CONCRETE BLOCK PERMEABLE PAVING COLOUR: BRINDLE
- PAVING SLABS
- TARMAC
- MARSHALLS KEYBLOK BLOCK PAVING COLOUR: BUFF
- 450mm x 450mm MARSHALLS SAXON BUFF PATIO SLABS

LANDSCAPING

- PROPOSED NEW TREE (REFER TO SEPARATE LANDSCAPING DRAWINGS FOR EXACT DETAILS)
- PROPOSED HEDGEROW (REFER TO SEPARATE LANDSCAPING DRAWINGS FOR EXACT DETAILS)
- PROPOSED PLANTING BEDS (REFER TO SEPARATE LANDSCAPING DRAWINGS FOR EXACT DETAILS)
- PROPOSED GRASS: MOWN (REFER TO SEPARATE LANDSCAPING DRAWINGS FOR EXACT DETAILS)
- PROPOSED BULBOUS PLANTING (REFER TO SEPARATE LANDSCAPING DRAWINGS FOR EXACT DETAILS)
- PROPOSED GRASS: WILDFLOWER (REFER TO SEPARATE LANDSCAPING DRAWINGS FOR EXACT DETAILS)

LEGEND TO BE UPDATED

Heyford Grange

Ponds

Ponds

TRENCHARD CIRCLE

TRENCHARD CIRCLE

LARSEN ROAD

El Sub Sta

LAP

LEAP

INDICATIVE SWALES

Track

Electricity Distribution Site

Posts

Sewage Works

ETL

ETL

DAVID WILSON HOMES
WHERE QUALITY LIVES

REVISION'S:

DRAFT
ISSUE 01
2022-08-21

	Housetypes	No. Of Storeys	No. Of Beds	No. Of Units	Gross Internal Area ft²	Gross Internal Area m²	Total Gross Internal Area ft²	Total Gross Internal Area m²
OPEN MARKET UNITS - DWH								
	Wilford	2 Storey	2 Bed house	7	620ft²	57.6m²	4340ft²	403.2m²
	Archford	2 Storey	3 Bed house	22	832ft²	77.3m²	18304ft²	1700.5m²
	Hadley	2 Storey	3 Bed house	1	1001ft²	93.0m²	1001ft²	93.0m²
	Ingleby	2 Storey	3 Bed house	13	1081ft²	100.4m²	14053ft²	1305.6m²
	Greenwood	2.5 Storey	3 Bed house	9	1179ft²	109.5m²	10611ft²	985.8m²
	Hollinwood	2 Storey	4 Bed house	12	1220ft²	113.3m²	14640ft²	1360.1m²
	Avondale	2 Storey	4 Bed house	8	1491ft²	138.5m²	11928ft²	1108.1m²
	Holden	2 Storey	4 Bed house	16	1536ft²	142.7m²	24576ft²	2283.2m²
TOTAL OPEN MARKET UNITS				88			99,453ft²	9,239.5m²
AFFORDABLE - RENTED								
	SF58	2 Storey	1 Bed flat	5	538ft²	50.0m²	2690ft²	249.9m²
	SF59	2 Storey	1 Bed flat	5	621ft²	57.7m²	3105ft²	288.5m²
	BELTON	2 Storey	2 Bed bungalow	2	754ft²	70.0m²	1508ft²	140.1m²
	SH51	2 Storey	2 Bed house	4	842ft²	78.2m²	3368ft²	312.9m²
	SH52	2 Storey	3 Bed house	3	1009ft²	93.7m²	3027ft²	281.2m²
	SH54	2 Storey	4 Bed house	1	1104ft²	102.6m²	1104ft²	102.6m²
TOTAL AFFORDABLE UNITS				20			14,802ft²	1,375ft²
AFFORDABLE - SHARED OWNERSHIP								
	SH50	2 Storey	2 Bed house	3	750ft²	69.7m²	2250ft²	209.0m²
	SH52	2 Storey	3 Bed house	6	1009ft²	93.7m²	6054ft²	562.4m²
TOTAL AFFORDABLE UNITS				9			8,304ft²	771ft²
AFFORDABLE - FIRST HOMES								
	PRIMROSE	2 Storey	2 Bed house	9	768ft²	71.3m²	6912ft²	642.1m²
TOTAL AFFORDABLE UNITS				9			6,912ft²	642ft²
OVERALL TOTAL UNITS DWH				126			129,471ft²	12,028.2m²

UPPER HEYFORD

PLANNING LAYOUT

DATE : AUG 2022
DRAWN : JRB/PVA
CHECKED : JRB

DRAWING TITLE : PLANNING LAYOUT
DRAWING NO : 0778-102
SCALE : 1:500 @ A0 (0 5 10 15 [m])

STATUS : DP

The Distillery, The Old Brewery Office Park, 7 - 11 Lodway, Pill, Bristol BS20 0DH
T. 01275 813380 Eadmin@focusdp.com
www.focusdp.com

FOCUS ON DESIGN

Heritage Statement - July 2015

Land at Letchmere Farm, Upper Heyford

West Waddy ADP
The Malthouse
60 East St Helen Street
Abingdon
Oxfordshire
OX14 5EB

t: 01235 523139
f: 01235 521662
e: enquiries@westwaddy-adp.co.uk

Heritage Statement
Upper Heyford
July 2015

Prepared by:
Rebecca Barnett, Graduate Town Planner

[redacted]

Checked by:
Geoff Huntingford, Heritage Planner

[redacted]

CONTENT

1 INTRODUCTION

1.1! This report relates to a proposed residential site to the south east of RAF Upper Heyford. The site neighbours the RAF Upper Heyford Conservation Area, which represents a 'designated heritage asset' as set out in current government guidance. It was therefore necessary to assess and understand the significance of the conservation area and its relationship to the site.

1.2! The conservation area is broken down into a series of character zones. The 2 character zones relating to the site are the 'RAF officer's married residential area' (Officers Housing) and the Southeast Hardened Aircraft Shelter's (HAS's). These and the conservation area as a whole have each been individually assessed on their significance and relationship to the site.

2 LOCATION

2.1! Upper Heyford airbase lies within Cherwell District 6km northwest of Bicester and 11km southeast of Banbury. The site lies within the civil parish of Upper Heyford though the airbase crosses into Ardley and Somerton parishes also. The Cherwell Valley to the west of the airbase is designated as an area of high landscape value and the Rousham Conservation Area abuts the western edge of the airbase.

2.2! Camp Road runs through the south of the airbase, separating the main part of the airbase from the houses and service buildings. This connects to Somerton Road and the B430, which link the airbase to Lower Heyford Train Station, Banbury Road (Banbury, Kidlington and Oxford); and Bicester and the A34.

2.3! The site lies on Letchmere Farm, north of Camp Road on the eastern edge of the airbase, adjacent to the Officer's Housing and RAF Upper Heyford Conservation Area. To the south of the site is a group of bungalows and the Heyford Leys Camping Park.

3 HISTORICAL SUMMARY

3.1! The airfield was originally built in World War 1, opened in late 1918 as a response to the requirement for adequately trained aircrews for the Royal Flying Corps. RAF Upper Heyford was built by Canadian Engineers; the best-equipped airfield of its time, it included a landing field with six hangers and a tarmac hanger apron. The first two squadrons of the infant Canadian Royal Air Force were established at the airbase in 1918 but the war ended before these squadrons became active and the land was reverted back to the previous landowners New College Oxford in 1919 following the end of the 1st World War.

3.2! In 1924 the president of the Air Council repurchased the airbase and funds were allocated to build an airbase to accommodate at least 3 squadrons, 54 aircraft, hangers, dispersals and related stores. Upper Heyford became the model on which airfields of its type were based in the period 1925-1934. The airbase was attached to the RAF's central area when the RAF was further expanded and re-organised following German-rearmament. During 1938 Vickers Wellesleys of the Long Range Development Flight were based

at the airbase where they made crucial progress in developing the navigational and endurance skills necessary to make the operation of a Heavy Long Range Bomber force possible.

3.3! The airfields role changed during the 2nd World War when its operational squadrons were put on a war footing and the airfield was returned to being predominantly a training base. In addition to providing training for all nationalities from the commonwealth and allied nations, the base continued to be involved in the development of military radio and radar technology.

3.4! 'The primary historical and archaeological interest of the airbase is its role during the Cold War.' In 1946 the U.S. Strategic Air Command (SAC) was formed and in the same year there were discussions with the British Government about stationing American bombers in Britain. In 1950 the British Government approved the formation of permanent United States Air Force (USAF) bases in Britain and by 1960 there were 32 'Principal United States Airfields' in England and SAC used 14 of these. The airfield remained RAF property however, and therefore continued to be referred to as RAF Upper Heyford.

3.5! The airfield was remodelled extensively and during this decade it became one of the SAC's principal bases in Britain, providing a base for the rotations of USAF aircraft deployed overseas. Approximately 170 new buildings were erected including new nose dock sheds and further accommodation for base staff. In addition to this, improvements were made to runways, aprons, hard standings and dispersals with further runway improvements between 1957 and 1959 and a new air traffic control centre for the 1268th Airways Communication Service.

3.6! In 1965 the USAF stopped regular SAC rotations in England and Upper Heyford was transferred to United States Air Force Europe as a dispersed operating base of the 7514th Combat Support Group, though the base continued to be used as a forward area for SAC deployments. France withdrew from North Atlantic Treaty Organisation (NATO) in 1966 and therefore U.S. aircraft on French bases had to be redeployed, and in 1966 the 66th Tactical Reconnaissance Wing of the 4th Allied Tactical Force (3rd Air Force) was moved to Upper Heyford. This required a new construction of hangarettes in 1968 and widening of the runway.

3.7! Upper Heyford underwent a further round of building in the early 1970's in order to house the three fighter squadrons of 20th Tactical Fighter Wing including a helipad in 1972, runway improvements in 1976, new engine workshops, fuel and bomb stores and extended aprons and dispersals. From July 1971 Upper Heyford was the largest fighter base in Europe equipped with F111 'Aardvark' whose role was to target key warsaw pact military installations in Eastern Europe. Hardened Aircraft Shelter's were provided between 1977 and 1980 to house the F111's because of their perceived vulnerability on the fixed airfields. Ground crews would often decorate these in the same theme as the attended aircraft.

3.8! The decline of the Soviet Union as a threat from the mid 1980s culminated in the planned withdrawal of the 20th Tactical Fighter Wing from Upper Heyford. With the end of the Cold War the USAF began to reduce the

European limits of its UK bases. The flight line was closed in 1993 and the base was handed back to the Ministry Of Defence (MOD) in 1994.

3.9! After the USAF left, the airbase was declared surplus to requirements by the MOD and in 1995 the Upper Heyford Working Group set up by Cherwell District Council agreed a mission statement for the redevelopment and regeneration of the airbase. The MOD formed a joint venture partnership with NOC (Wimpey Homes, Taywood Homes and Westbury Homes) in 1996 and since has brought houses on the base back into use, reopened the food store, community centre and chapel, provided play facilities whilst agreeing the long term future of the airbase. A planning application was since permitted for 1076 homes in 2010 currently in the process of construction.

4 GOVERNMENT AND LOCAL POLICY FRAMEWORK REGARDING THE HISTORIC ENVIRONMENT

Government policy

4.1! Government policy regarding built heritage is contained in Chapter 12 of the National Planning Policy Framework (March 2012) Under this document, the conservation area is a 'designated heritage asset'. This report in reviewing the development history of the site and the relative significance of the site complies with the requirement of the NPPF that the applicant 'describe the significance of any heritage assets affected, including any contribution made by their setting' (paragraph 128). The level of detail should be proportionate to the asset's importance and no more than is sufficient to understand the potential impact of the proposal on their significance.

4.2! The NPPF retains two concepts: 'heritage asset' and 'significance', introduced by PPS5 (March 2010). Heritage assets are defined in the Framework as:

> *"A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing)". (Annex 2)*

4.3! Significance for heritage policy purposes is defined as:

> *"The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from heritage asset's physical presence, but also from its setting.* (Annex 2)

4.4! Like significance, setting is defined only in terms of heritage policy:

> *"The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative*

contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral. (Annex 2)

4.5! In the exercise of their planning powers, local authorities should avoid or minimize conflict between the heritage asset's conservation and any aspect of the proposal by taking account of the available evidence and any necessary expertise (paragraph 129).

Local Plan policy

4.6! Policy C10 of the adopted Local Plan relates to historic landscapes, parks and gardens and historic battlefields stating that development which would have a detrimental effect upon the character and appearance of historic landscapes, parks and gardens and battlefields and their settings will normally be resisted.

4.7! Policy C11 relates to Rousham Park, south west of the RAF base. The policy protects the vista and setting of Rousham Park by the strict control of new buildings and structures within the conservation area. The site lies outside of the conservation area but proposals for change of use of agricultural land in the area should demonstrate that careful consideration has been given to ensure the visual integrity of the park.

4.8! Policy ESD 16 of the Cherwell Draft Local Plan states that designated and non designated 'heritage assets' (as defined in the NPPF) should be conserved, sustained and enhanced, including buildings, features, archaeology, conservation areas and their settings, and new development should be sensitively sited and integrated in accordance with advice in the NPPF. Proposals for development that affect non-designated heritage assets will be considered taking account of the scale of any harm or loss and the significance of the heritage asset as set out in the NPPF. Regeneration proposals that make sensitive use of heritage assets, particularly where these bring redundant or under used buildings or areas, especially any on English Heritage's At Risk Register, into appropriate use will be encouraged. Proposals should include information on heritage assets sufficient to assess the potential impact of the proposal on their significance. Where archaeological potential is identified this should include an appropriate desk based assessment and, where necessary, a field evaluation.

4.9! The Draft Local Plan recognises the heritage significance of RAF Upper Heyford and includes within the site allocation policy; Policy Villages 5 several points relating specifically to the conservation of the airbase. Those policies relating to the application site include:

'Proposals must demonstrate that the conservation of heritage resources, landscape, restoration, restoration, enhancement of biodiversity and other environmental improvements will be achieved across the whole of the site identified as Policy Villages 5.'

'In order to avoid development on the most historically significant and sensitive parts of the site, new development is to be focused to the south of the flying field and on limited greenfield land to the south of Camp Road (and one greenfield area to the north of Camp Road, east of Larsen Road)'

'The release of greenfield land within the allocated site Policy Villages 5 will not be allowed to compromise the necessary environmental improvements and conservation of heritage interest of the wider site.'

'New development should reflect high quality design that responds to the established character of the district character areas where this would preserve or enhance the appearance of the Former RAF Upper Heyford Conservation Area.'

'New development should also preserve or enhance the character and appearance of the Rousham, Lower Heyford and Upper Heyford Conservation Area, as well as the Oxford Canal Conservation Area, and their settings.'

'A Landscape and Visual Impact Assessment as well as a Heritage Assessment should be undertaken as part of development proposals and inform the design principles for the site.'

5 A CONSERVATION ASSESSMENT

RAF Upper Heyford Conservation Area

5.1! It is the duty of local planning authorities to designate as conservation areas any "areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance" (Planning (Listed Buildings and Conservation Areas) Act 1990, s.69) and to review their boundaries from time to time. They furthermore have a duty, under Section 72 of the Act, to pay special attention to the desirability of preserving or enhancing the character or appearance of a conservation area in the exercise of any of their planning functions. This duty applies equally to the setting of a conservation area, or to views into or out of that area.

5.2! The RAF Upper Heyford Conservation Area was designated in 2006 following the preparation of a conservation plan in 2005. A planning application was turned down at appeal in 2003, the application a result of a comprehensive planning brief for the site, adopted by Cherwell District Council in 1999. In Parallel with this, English Heritage was assessing the Cold War (1945-1989) features of the airbase as part of the National Monuments Protection Programme (MPP); and subsequent to this they recommended a number of buildings in the area to be listed. A revised structure plan following the appeal reduced the protection for heritage assets on the site, which led to the Council, NOC and English Heritage jointly funding the preparation of a conservation plan and giving the site conservation area status.

5.3! The conservation plan focused on the airfield as the most historically significant area but some reference is made to the area south of this within the airbase as context for the airfield and to understand the history and

significance of the airbase as a whole. Cherwell District Council have subsequently produced a Conservation Area Appraisal to cover the entire conservation area including those areas outside of the airfield.

5.4! English heritage define the 'special interest' of 'RAF Upper Heyford as the structures and layout that contributed to its role as a Cold War airbase during the period of hostilities known as 'flexible response.'' The Conservation Area Appraisal describes the base as follows:

5.5! *'RAF Upper Heyford retains many of the features of its operational heyday. The base, though the site is now shabby and the spaces divided up by modern fencing, still exudes 'Cold War character' and engenders a sense of awe and foreboding in the visitor. The prominent hardened aircraft buildings, the enclosure fences around operational areas, the planned layout of the functionally related groups of buildings and the spaces in between, together with 'campus' nature of the site all contribute significantly to the 'Cold War' character of the site.'*

5.6! The heritage significance of the RAF base is evident from its conservation area designation in 2006. The World War structures in the south and residential area are generally of less significance than the airfield and those structures relating to the Cold War history of the airbase.

5.7! The impact of the proposal would be negligible as the site is located away from the Flying Field and the more historically significant and sensitive parts of the conservation area, neighbouring a less significant part of the airbase. The trees to the west of the site contribute to the character of the conservation area and therefore will be retained allowing for only discreet pedestrian routes through to the Officers Housing area. Planting will be used on property boundaries alongside the track to the west of the site to provide a second layer of screening to the airbase. This will maintain the contained views and character of the conservation area whilst still allowing for pedestrian connectivity to other parts of the settlement This mature line of trees makes the site invisible from views within the conservation area.

5.8! Rousham Park and Conservation Area lie to the south west of the airbase and therefore the existing residential area prevents views towards the site. Development of the site will therefore have no impact on the setting of Rousham Park.

<u>RAF officers married residential area (Officers Housing)</u>

5.9! The Officers Housing forms part of the eastern boundary of the conservation area, and the western boundary of the site. The remainder of the airbase cannot be seen from within this zone and therefore it appears as a self-contained unit, visually separated from the surrounding site.

5.10! The housing is set in large, uncluttered and well-tended domestic plots creating a pleasant leafy suburb. The buildings are angled within their plots diagonal to the plot boundaries, mostly consisting of tall planting creating glimpses through to the individual dwellings. This provides large front gardens within a formal grid

of streets. Maps prior to this period show field boundaries following a similar layout, maintaining the southern and eastern boundaries and creating new roads parallel to these.

5.11! The area is one of the earlier parts of the airbase, formed during the first waive of expansion from 1924 when funds were allocated by the Air Council to expand the airbase. Part of this expansion included the residential area of the airbase. Residential areas were often split according to rank and the Officers Housing would have housed the higher rank officers working on the airbase and their families.

5.12! High boundary planting on the eastern, southern and western edges separates the zone from the Technical Area, Camp Road and the proposed site, outside of the airbase. To the north of the zone sparser vegetation separates the area from the later Airmen's Housing and Bungalows, and a public open space. This creates a weaker division and glimpse views between the zones whilst still providing a landscape boundary to the area.

5.13! The houses have an Arts and Crafts inspired character, typified by predominantly detached housing of red brick with simple detailing. These were mostly built in the 1920's in the interwar period between the 1st and 2nd world war. The style of architecture is typical of suburban expansion and Garden City development in this period, a return to traditional forms and materials often inflected by Georgian, and Tudor styles and details. The Officers Housing includes a mixture of styles including Garden City Style and Georgian Revival architecture.

5.14! The junior officers housing in the north of the area was added in the 1950's as infill development. These are of lesser architectural importance but considered as contributory to the groups suburban appearance.

5.15! The proposal is outside of the area and separated from the character area by a mature boundary of trees, which will be retained. There would therefore be no direct impact on the area, landscape or dwellings. A second layer of planting will further strengthen this self containment so that the character area is visually separated from other parts of the airbase and the surrounding countryside. The indirect impact would therefore be negligible. Retaining and enhancing the tree boundaries will continue this self containment and maintain the same relationship of the area to its setting.

5.16! The new scheme is designed to follow the same Arts and Crafts inspired architecture of the Officers Housing forming a high quality extension to the residential area connected by pedestrian routes. These proposals will therefore preserve the character of the conservation area. Existing and new planting will continue the self containment of the 'Officers Housing' character area.

South East Hardened Aircraft Shelter's (HAS's)

5.17! The South East HAS's form part of the Cold War history of the airfield, a group of 7 Hardened Aircraft Shelter's amongst 56 built in that period. The Conservation Plan states that 'area has a distinctive character

because the HAS's and ancillary structures are relatively close together but the visual link with the major part of the landscape of flexible response is poor'

5.18! The South East HAS's are 7 of the 20 HAS's built in 1979 by Richard Costain Ltd as a response to North Atlantic Treaty Organization (NATO) policy in the late 1970's to harden its main facilities against conventional, chemical and biological attack.

5.19! The HAS's were designed to each house a single jet aircraft in a secure blast proof environment. NATO policy worked to harden and dull down the key airfields. 3 of the shelters roofs can be viewed from the site because of their height and massing.

5.20! The majority of the shelters on the airfield are 8.3m high, 36.5m in length and 21.5m wide (internal). This size allowed engines to be started inside the shelters to provide an instant response. The shelters were built to create strong structures to contain aircraft as replacements to the flimsy lightweight steel structures used in previous periods. The HAS's were constructed from corrugated galvanised steel anti-spall plates assembled in deep vertical corrugated arches for additional strength and covered with reinforced concrete.

5.21! The HAS's are a distinctive element of the Cold War landscape and therefore of national significance due to the repetitive design and layout of the structures. A large number of these were constructed in a small period of time and therefore their construction dramatically altered the landscape of the airbase as new taxiways and areas of hard standing were needed to serve the structures.

5.22! Their layout and relationship to each other is a result of the requirement that; for any attack no more than 2 could be hit on a single bombing run. The layout of the group was therefore important for their functioning and a significant part of their history. The South East HAS's group is however a closer group than others on the airfield and the relationship to the airfield is not as strong as in other cases.

5.23! This weaker relationship to the airfield may have been the reason for 2 of these hardened aircraft shelters to be later adapted to function as personnel shelters offering protection from chemical and biological attack.

5.24! The HAS's have survived relatively complete, with the mechanical operations for the main doors and the lower and upper vents still extant. Many of the HAS's still have extractor fans to the rear, a winch system, winch pulley, complex floor markings and an external 'officer commanding' board.

5.25! The architectural and technical details of the HAS's are illustrative of changes in NATO policy during the Cold War and the social and architectural consequences of this. The proposal has no impact on the form, details or layout of the buildings and therefore creates no harm to their significance.

6 ASSESSMENT OF SIGNIFICANCE

6.1! Given the above analysis, it is possible to assess the relative historic significance of the relevant elements of the RAF Upper Heyford Conservation Area, incorporating the criteria listed in 'Conservation Principles, Policies and Guidance' (English Heritage, April 2008), as follows:

	Evidential Potential to yield primary evidence	**Historical** Means of connecting with the past	**Aesthetic** Sensory and intellectual stimulation	**Communal** Meaning for collective experience and memory	**Overall**
Officers Housing	Part of airbase expansion after the First World War	Representative of ranked residential areas, social military history between the First and Second World War	An attractive suburban residential area, showing examples of arts and crafts and Neo-Georgian inspired architecture, visually separated from other parts of the airbase	Private houses and part of early 20th century residential development	
South East HAS's	Relatively unaltered examples of Hardened Aircraft Shelters during the Cold War including original technological details and artwork	Layout, structures, technological features and artwork reflecting NATO policy towards hardened facilities in the Cold War	Distinctive hardened structures contributing to the Cold War character of the airbase	Unattractive to local population but with some meaning for those and their families who lived or worked on the airbase during the airfields operation	
RAF Upper Heyford Conservation Area	Relatively unaltered example of USAF airfields during the Cold War	Part of the move west after threats to the eastern airfields and representative of airfield operation during the Cold War	Airbase relatively unaltered and therefore still maintains its Cold War character and appearance	Meaning for those and their families linked to the airbase during its operation	

	Exceptional significance		Little significance
	Considerable significance		Neutral significance (none)
	Some significance		Intrusive (none)

7 THE CURRENT PROPOSALS

7.1! Finally, it is useful to assess the current proposals for their potential impact against the significance of the various assets (whether designated heritage assets or not) as listed in the table in paragraph 6.1 above. This can be most conveniently set out in another table, as follows:

Asset	Significance	Impact of proposal on significance
Officers Housing	**Some –** Attractive suburban development, self-contained from other parts of the airbase, but forming part of the airbase's expansion in the 1920's-1940's**.**	**Negligible impact-** Proposal will not be visible due to a planted boundary on the eastern edge of the conservation area, maintaining this separation.
South East HAS's	**Considerable –** Group of Hardened Aircraft Shelters built in 1979 to house jet aircraft in the Cold War, significant as part of the airfield layout and function, and architectural and technological examples of war related buildings from the Cold War.	**Negligible Impact** – Proposal will not affect the layout or architecture of the group.
RAF Upper Heyford Conservation Area	**Exceptional –** An airbase originally built in World War 1, but most significant as a base for the USAF during the Cold War, a minimally altered example of airfields from this period.	**Negligible impact –** Proposal will not harm any significant buildings on the airbase, or the layout or architecture of the airfield.

8 CONCLUSION

8.1! RAF Upper Heyford has been a conservation area since 2006 when English Heritage funded the preparation of a conservation plan to protect unlisted structures on the airbase during a planned redevelopment.

8.2! The conservation area covers both the residential and airfield parts of the airbase. The airfield is however considered to be the most significant principally for its use during the Cold War as a base for the United States Air Force.

8.3! The Officers Housing area forms the part of the conservation area closest to the site, built during the first phase of expansion of the airbase prior to the Second World War, it forms an attractive garden suburb, reflective of the ranking of residential areas in the design of airbases during this period. It is a self-contained area due to the substantial boundary planting and open spaces within the area. The proposal does not alter anything within the area and views into the area are limited. The areas self-containment and individual identity is therefore unharmed.

8.4! The South-east Hardened Aircraft Shelter's can be viewed from the site. These are significant as examples of the effects of NATO policy during the Cold War, hardening buildings and increasing security against increasing threats. These maintain their original form, layout and technological detailing of the time. The proposal does not alter the layout, form or detailing of these buildings and therefore their significance is unaltered by the proposal.

8.5! The proposal would create an attractive entrance to the conservation area whilst maintaining its own separate identity and not harming the other character zones within the conservation area. The site is located away from the airfield and the more historically significant and sensitive parts of the airbase. The potential impact is therefore reduced. The design will ensure that the proposal does not impact on the neighbouring zones of the conservation area.

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Cherwell District Council: Cherwell Local Plan 2011-2031

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Cherwell District Council: ‘Former RAF Upper Heyford Revised Comprehensive Planning Brief’ March 2007

English Heritage website: The national heritage list for England

English Heritage: ‘Domestic 4: The modern house and housing’ April 2011

English Heritage: ‘Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment’ April 2008

National Planning Policy Framework (March 2012) ‘Conserving and enhancing the historic environment’

Appendix C - Geophysical Survey by Thames Valley Archaeological Services

THAMES VALLEY

ARCHAEOLOGICAL

SERVICES

Land at Camp Road, Upper Heyford, Oxfordshire

Geophysical Survey (Magnetic)

by Daniel Bray and Tim Dawson

Site Code: CRU14/229

(SP 5194 2582)

Land at Camp Road, Upper Heyford, Oxfordshire

Geophysical Survey (Magnetic) Report

For Pye Homes Group

by Daniel Bray and Tim Dawson

Thames Valley Archaeological Services Ltd

Site Code
CRU14/229

April 2015

Summary

Site name: Land at Camp Road, Upper Heyford, Oxfordshire

Grid reference: SP 5194 2582

Site activity: Magnetometer survey

Date and duration of project: 15th-16th April 2015

Project manager: Steve Ford

Site supervisor: Daniel Bray

Site code: CRU 14/229

Area of site: 3.15ha

Summary of results: A series of magnetic anomalies were identified by the survey. Several of these may represent buried archaeological features although no specific monument types could be recognised. Most of the site has been affected by ploughing and the presence of services and modern trackways, all of which have had an affect on the site's magnetic plot and may mask any underlying archaeological activity.

Location of archive: The archive is presently held at Thames Valley Archaeological Services, Reading in accordance with TVAS digital archiving policies.

Report edited/checked by:	Steve Ford✓ 28.04.15
	Andrew Mundin✓ 28.04.15

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Tel. (0118) 926 0552; Fax (0118) 926 0553; email **tvas@tvas.co.uk;** *website: www.tvas.co.uk*

Land at Camp Road, Upper Heyford, Oxfordshire
A Geophysical Survey (Magnetic)

by Daniel Bray and Tim Dawson

Report 14/229b

Introduction

This report documents the results of a geophysical survey (magnetic) carried out on a plot of land to the north of Camp Road, Upper Heyford, Oxfordshire (SP 5194 2582) (Fig. 1). The project was commissioned by Mr Stuart Wright of Pye Homes Group, Langford Locks, Kidlington, Oxfordshire, OX5 1HZ.

Planning permission is to be sought for the construction of housing on the proposal site. As a consequence of the possibility of archaeological deposits on the site which may be damaged or destroyed by development, a geophysical survey has been requested. The results of the survey will be used to provide targets for any subsequent trenching. This is in accordance with the Department for Communities and Local Government's National Planning Policy Framework (NPPF 2012) and the District's policies on archaeology. The field investigation was carried out to a specification approved by Mr Richard Oram, Planning Archaeologist at Oxfordshire County Archaeological Service, based on a brief prepared by him (Oram 2015). The fieldwork was undertaken by Daniel Bray and Anna Ginger on 15th and 16th April 2015 and the site code is CRU 15/229.

The archive is presently held at Thames Valley Archaeological Services, Reading in accordance with TVAS digital archiving policies.

Location, topography and geology

The site is located on the south-eastern edge of the former RAF Upper Heyford airbase, *c*.2km to the east of the village of Upper Heyford itself and *c*.6km to the north-west of Bicester in north eastern Oxfordshire (Fig. 1). It currently consists of an irregularly shaped field which was planted with a young crop at the time of survey. The field is bordered by a hedgerow and ditch on its eastern edge, a wooden post-and-rail fence to the north, a Tar macadam drive to the west and an earth track to the south. There are fields beyond to the north and east, housing to the west and Camp Road to the south. The site slopes downhill from *c*.119.5m above Ordnance Datum (aOD) in the north-western corner to *c*.115.8m aOD in the south-eastern corner. The underlying geology is recorded as Great Oolite Limestone (BGS 1968) and the topsoil as freely draining lime-rich loamy soils (LandIS 2015).

The conditions during the survey were dry and sunny (Pl. 1-2). The ground was soft, due to recent ploughing and seeding, but dry.

Site history and archaeological background

A desk-based assessment has been prepared for the project (Ford 2015). In summary there are no known archaeology on the proposal site itself, however it lies 200m west of a major Iron Age territorial/tribal boundary (Aves Ditch). Aerial photography of surrounding areas has identified several further probable Iron Age enclosure sites, with a distinctive 'banjo' form, in the surrounding area. Roman occupation is also recorded to the north of the site. A probable Saxon cemetery adjacent to Aves Ditch has also been recorded though its location is poorly recorded being either north or south of the site.

Methodology

Sample interval

Data collection required a temporary grid to be established across the survey area using wooden pegs at 20m intervals with further subdivision where necessary. Readings were taken at 0.25m intervals along traverses 1m apart. This provides 1600 sampling points across a full 20m × 20m grid (English Heritage 2008), providing an appropriate methodology balancing cost and time with resolution. The survey grid was laid out in alignment with the field's long axis. There were no obstructions within the survey area.

The Grad 601-2 has a typical depth of penetration of 0.5m to 1.0m. This would be increased if strongly magnetic objects have been buried in the site. Under normal operating conditions it can be expected to identify buried features >0.5m in diameter. Features which can be detected include disturbed soil, such as the fill of a ditch, structures that have been heated to high temperatures (magnetic thermoremnance) and objects made from ferro-magnetic materials. The strength of the magnetic field is measured in nano Tesla (nT), equivalent to 10^{-9} Tesla, the SI unit of magnetic flux density.

Equipment

The purpose of the survey was to identify geophysical anomalies that may be archaeological in origin in order to inform a targeted archaeological investigation of the site prior to development. The survey and report generally follow the recommendations and standards set out by both English Heritage (2008) and the Chartered Institute *for* Archaeologists (2002, 2011, 2014).

Magnetometry was chosen as a survey method as it offers the most rapid ground coverage and responds to a wide range of anomalies caused by past human activity. These properties make it ideal for the fast yet detailed surveying of an area.

The detailed magnetometry survey was carried out using a dual sensor Bartington Instruments Grad 601-2 fluxgate gradiometer. The instrument consists of two probes mounted 1m vertically apart with a second set positioned at 1m horizontal distance. This enables readings to be taken of both the general background magnetic field and any localised anomalies with the difference being plotted as either positive or negative buried features. All sensors are calibrated to cancel out the local magnetic field and react only to anomalies above or below this base line. On this basis, strong magnetic anomalies such as burnt features (kilns and hearths) will give a high response as will buried ferrous objects. More subtle anomalies such as pits and ditches, can be seen from their infilling soils containing higher proportions of humic material, rich in ferrous oxides, compared to the undisturbed subsoil. This will stand out in relation to the background magnetic readings and appear in plan following the course of a linear feature or within a discrete area.

A Trimble Geo7x handheld GPS system with sub-decimetre real-time accuracy was used to tie the site grid into the Ordnance Survey national grid. This unit offers both real-time correction and post-survey processing; enabling a high level of accuracy to be obtained both in the field and in the final post-processed data.

Data gathered in the field was processed using the TerraSurveyor software package. This allows the survey data to be collated and manipulated to enhance the visibility of anomalies, particularly those likely to be of archaeological origin. The table below lists the processes applied to this survey, full survey and data information is recorded in Appendix 1.

Process	**Effect**
Clip from -1.80 to 2.20 nT	Enhance the contrast of the image to improve the appearance of possible archaeological anomalies.
Interpolate: *y* doubled	Increases the resolution of the readings in the *y* axis, enhancing the shape of anomalies.
De-stripe: median, all sensors	Removes the striping effect caused by differences in sensor calibration, enhancing the visibility of potential archaeological anomalies.
De-spike: threshold 1, window size 3×3	Compresses outlying magnetic points caused by interference of metal objects within the survey area.
Search & Replace: from: ±30 nT to: ±1000 nT with: dummy	Removes extreme values resulting from magnetic interference caused by near-by ferromagnetic objects.
De-stagger: all grids, both by -1 intervals	Cancels out effects of site's topography on irregularities in the traverse speed.

Once processed, the results are presented as a greyscale plot shown in relation to the site (Fig. 4), followed by a second plan to present the abstraction and interpretation of the magnetic anomalies (Fig. 5). Anomalies are

shown as colour-coded lines, points and polygons. The grid layout and georeferencing information (Fig. 2) is prepared in EasyCAD v.7.58.00, producing a .FC7 file format, and printed as a .PDF for inclusion in the final report.

The greyscale plot of the raw (Fig. 3) processed (Fig. 4) data is exported from TerraSurveyor in a georeferenced portable network graphics (.PNG) format, a raster image format chosen for its lossless data compression and support for transparent pixels, enabling it to easily be overlaid onto an existing site plan. The data plot is combined with grid and site plans in QGIS 2.6.1 Brighton and exported again in .PNG format in order to present them in figure templates in Adobe InDesign CS5.5, creating .INDD file formats. Once the figures are finalised they are exported in .PDF format for inclusion within the finished report.

Results

A range of magnetic anomalies were recorded across the entire survey area (Fig. 4). These were primarily caused by modern agricultural activity but there were also some of which are likely to be archaeological in origin and a few which may represent natural features (Fig. 5). The magnetic anomalies of possible archaeological origin are recognisable as both positive and negative variations in the site's general magnetic field. The positive anomalies usually represent buried cut features such as ditches or pits whereas negative anomalies are indicative of earthen banks.

The majority of the positive anomalies of possible archaeological origin appear perpendicular to a line which extends between the south-western corner and northern edge of the field. The south-westernmost are a pair of almost parallel linear shapes *c*.12m long and *c*.14m apart, which are aligned north-west - south-east **[Fig. 5: 1]**. A second pair, one of which has a weaker field strength, were located a further 32m to the north-east **[2]**. The weaker linear anomaly appears to extend further to the north-west after a short break and terminates with a much stronger anomaly, which may represent a buried pit. A short distance to the north-east is another, shorter, length of linear positive anomaly **[3]**, again on the same orientation as those described above. Approximately 30m to the north is another linear strong positive anomaly with a second one at a slight angle to it another 17m to the north-east **[4]**. Some 10m to the north is another set of linear positive anomalies **[5]**. This time they appear to form approximately two thirds of an almost circular enclosure with two short linear anomalies on a similar alignment to those to the south-west extending from its south-eastern sector. Another short linear positive anomaly runs from the south-western end of the enclosure inwards towards the centre of the circle. Further to the north-east, another group of weaker linear positive anomalies appears to form a fragmented line **[6]** which

extends north-eastwards for *c*.20m before turning northwards for *c*.15m. It terminates with a slightly stronger discrete anomaly, possibly representing a buried pit, of which there are others to the north-west and west.

In the centre of the southern end of the field the survey recorded a strong linear positive anomaly **[7]** that appeared much more defined than the surrounding plough marks. It runs northwards for *c*.60m, possibly flanked by two negative anomalies, suggesting buried built features. The positive anomaly appears to end but the negative anomalies continue **[8]**, stretching from the southern end of **[3]** to the northern end of **[4]**. The two sections are divided by an positive anomaly of organic appearance **[9]** which may represent a natural feature within the geology underlying the site.

A series of several linear positive anomalies can be clearly seen running parallel to one another at set intervals from north to south. These are the result of plough furrows. A number of areas of magnetic disturbance were noted along the southern and eastern edges of the survey area and in its north-western corner. These will have been caused by fencing in the east, the close proximity to the track that leads up the site's western side in the west and what appears to be a modern service which runs along the southern edge of the site. There is a scatter of strong positive/negative magnetic spikes across the site. These most likely represent buried ferrous objects, such as plough fragments.

Conclusion

The geophysical survey of the site at Camp Road was successfully undertaken and succeeded in identifying several magnetic anomalies which may represent buried archaeological features. These appear to extend from the site's south-western corner to the centre of its northern edge although their layout does not immediately suggest a specific form of archaeological feature. The magnetic plot of the entire site has been affected by modern agricultural activity with a very clear set of plough marks covering the area. In addition, the signature of a service pipe or cable was detected along the southern edge of the site and, together, these anomalies have the potential to mask others which may indicate the presence of potential archaeological features.

References

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NPPF, 2012, *National Planning Policy Framework*, Dept Communities and Local Government, London

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Appendix 1. Survey and data information

Programme:
Name: TerraSurveyor
Version: 3.0.25.0

Raw data
Instrument Type: Grad 601 (Magnetometer)
Units: nT
Survey corner coordinates (X/Y):
Northwest corner: 451856.19, 225958.46 m
Southeast corner: 452056.19, 225718.46 m
Direction of 1st Traverse: 95.99 deg
Collection Method: ZigZag
Sensors: 2 @ 1.00 m spacing.
Dummy Value: 2047.5

Dimensions
Composite Size (readings): 800 x 240
Survey Size (meters): 200 m x 240 m
Grid Size: 20 m x 20 m
X Interval: 0.25 m
Y Interval: 1 m

Stats
Max: 100.00
Min: -100.00
Std Dev: 9.42
Mean: 0.24
Median: 0.25
Composite Area: 4.8 ha
Surveyed Area: 3.0609 ha

Source Grids: 102
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2 Col:0 Row:2 grids\02.xgd
3 Col:0 Row:3 grids\03.xgd
4 Col:0 Row:4 grids\04.xgd
5 Col:0 Row:5 grids\05.xgd
6 Col:0 Row:6 grids\06.xgd
7 Col:0 Row:7 grids\07.xgd
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16 Col:1 Row:5 grids\16.xgd
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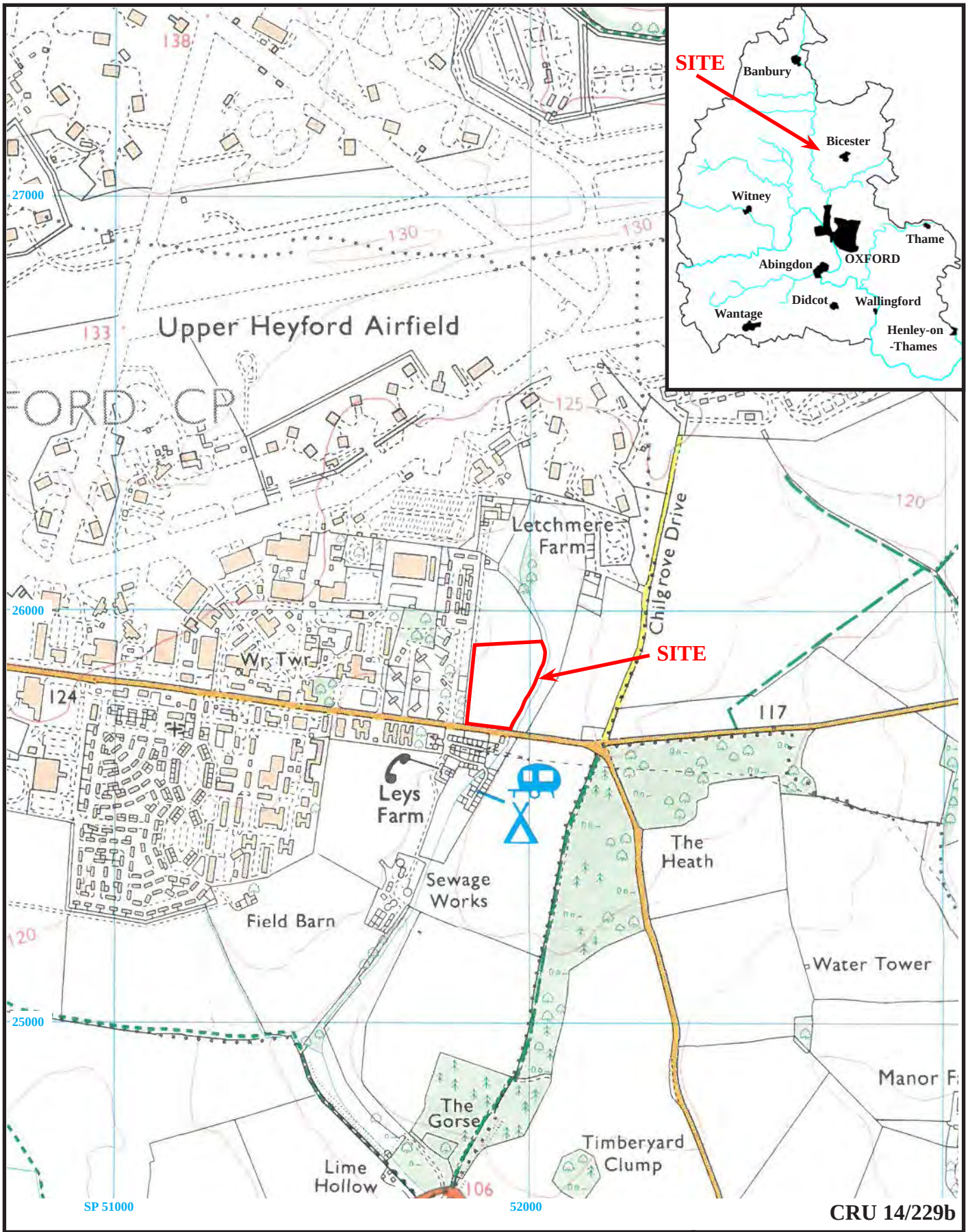
99 Col:9 Row:1 grids\99.xgd
100 Col:9 Row:2 grids\100.xgd
101 Col:9 Row:3 grids\101.xgd
102 Col:9 Row:4 grids\102.xgd

Processed data
Stats
Max: 2.20
Min: -1.80
Std Dev: 0.77
Mean: 0.06
Median: 0.01

Processes: 8
1 Base Layer
2 DeStripe Median Sensors: All

3 Search & Replace From: -1000 To: -30 With: Dummy
4 Search & Replace From: 30 To: 1000 With: Dummy
5 De Stagger: Grids: All Mode: Both By: -2 intervals
6 Despike Threshold: 1 Window size: 3x3
7 Interpolate: Y Doubled.
8 Clip from -1.80 to 2.20 nT



CRU 14/229b

Land at Camp Road, Upper Heyford,
Oxfordshire, 2015
Geophysical Survey (Magnetic)

Figure 1. Location of site within Upper Heyford and Oxfordshire

THAMES VALLEY ARCHAEOLOGICAL SERVICES

Georeferencing:
A. E 451871, N 225916
B. E 451911, N 225912

CRU 14/229b

N

Land at Camp Road, Upper Heyford, Oxfordshire, 2015 Geophysical Survey (Magnetic)

Figure 2. Survey grid layout.

0 100m

THAMES VALLEY ARCHAEOLOGICAL SERVICES

CRU 14/229b

N

Land at Camp Road, Upper Heyford, Oxfordshire, 2015
Geophysical Survey (Magnetic)

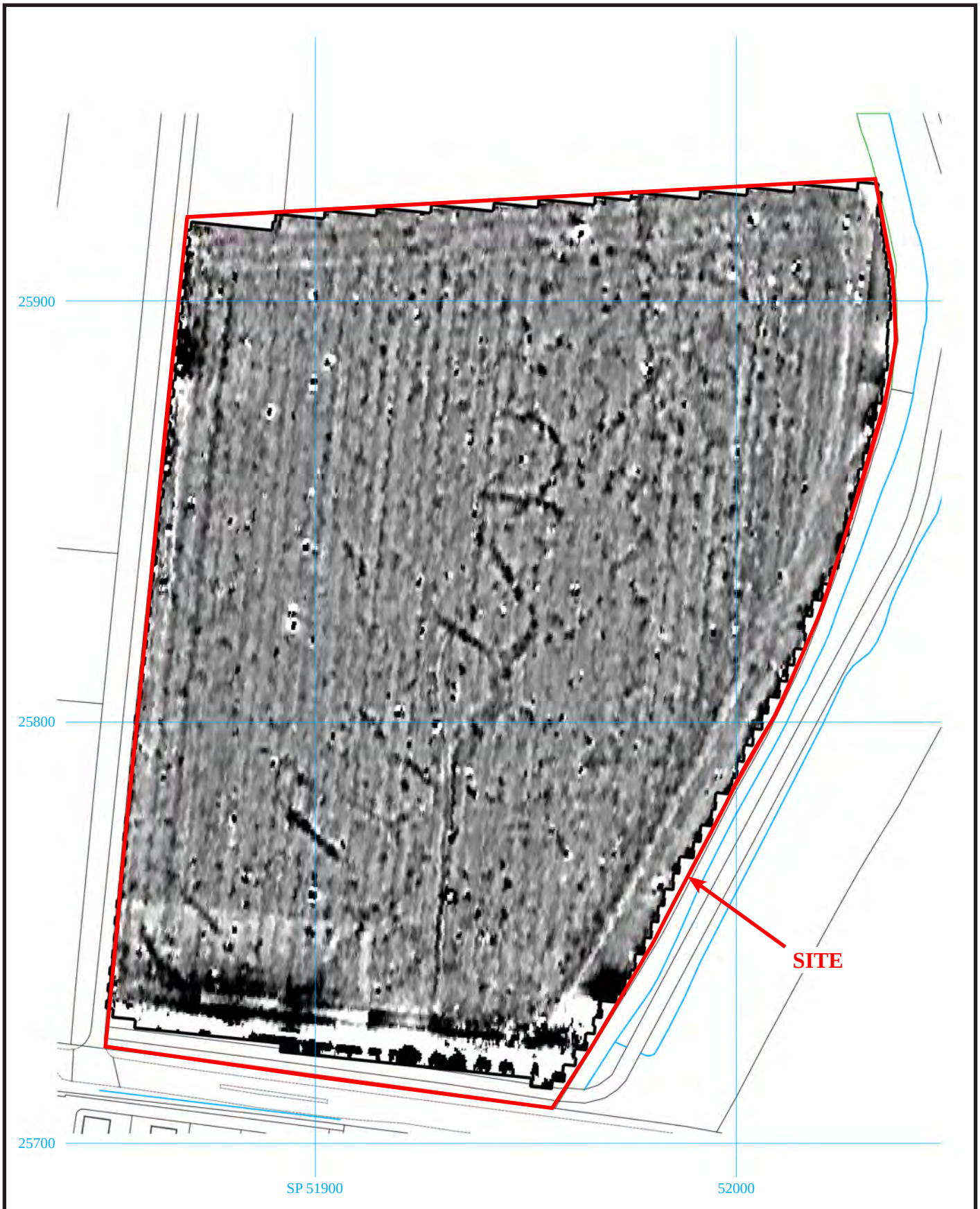
Figure 3. Plot of raw gradiometer data.

0m 100m

+100 nT

-100 nT

THAMES VALLEY ARCHAEOLOGICAL SERVICES



CRU 14/229b

N

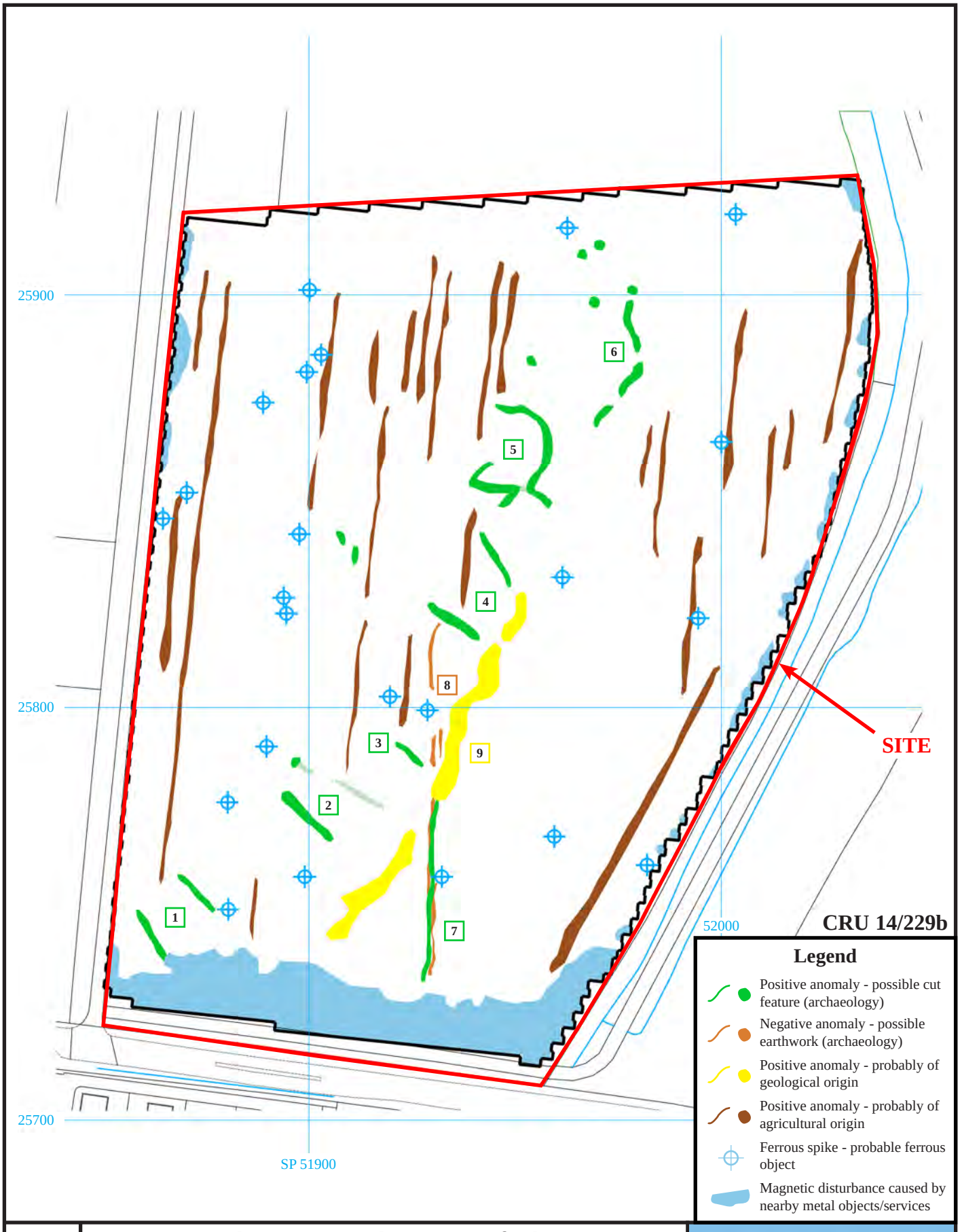
Land at Camp Road, Upper Heyford, Oxfordshire, 2015
Geophysical Survey (Magnetic)

Figure 4. Plot of minimally processed gradiometer data.

0m 100m

+2.2 nT
-1.8 nT

THAMES VALLEY ARCHAEOLOGICAL SERVICES



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Land at Camp Road, Upper Heyford, Oxfordshire, 2015
Geophysical Survey (Magnetic)

Figure 5. Interpretation plot.

0m 100m

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Plate 1. The site, looking south-west from the north-eastern corner.

Plate 2. The site, looking north-east from the south-western corner.

CRU 14/229b

Land at Camp Road, Upper Heyford,
Oxfordshire, 2015
Geophysical Survey (Magnetic)

Plates 1 and 2.

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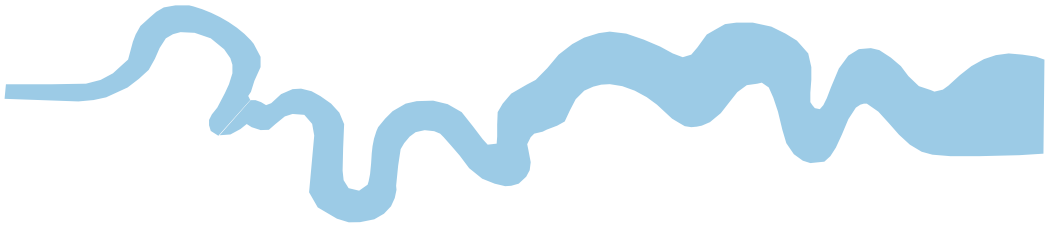
TIME CHART

	Calendar Years
Modern	AD 1901
Victorian	AD 1837
Post Medieval	AD 1500
Medieval	AD 1066
Saxon	AD 410
Roman	AD 43
Iron Age	BC/AD 750 BC
Bronze Age: Late	1300 BC
Bronze Age: Middle	1700 BC
Bronze Age: Early	2100 BC
Neolithic: Late	3300 BC
Neolithic: Early	4300 BC
Mesolithic: Late	6000 BC
Mesolithic: Early	10000 BC
Palaeolithic: Upper	30000 BC
Palaeolithic: Middle	70000 BC
Palaeolithic: Lower	2,000,000 BC



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THAMES VALLEY

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Land at Camp Road, Upper Heyford, Oxfordshire

Archaeological Evaluation

by James McNicoll-Norbury

Site Code: CRU14/229

(SP 5194 2583)

Land at Camp Road, Upper Heyford, Oxfordshire

An Archaeological Evaluation

for Pye Homes Group

by James McNicoll-Norbury

Thames Valley Archaeological Services Ltd

Site Code CRU 14/229

October 2015

Summary

Site name: Land at Camp Road, Upper Heyford, Oxfordshire

Grid reference: SP 5194 2583

Site activity: Evaluation

Date and duration of project: 7th–8th October 2015

Project manager: Steve Ford

Site supervisor: James McNicoll-Norbury

Site code: CRU 14/229

Area of site: 3.1ha

Summary of results: No archaeological finds or deposits were identified.

Location and reference of archive: The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited with Oxfordshire County Museums Service in due course.

Report edited/checked by:	Steve Ford✓ 15.10.15
	Steve Preston✓ 15.10.15

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Land at Camp Road, Upper Heyford, Oxfordshire
An Archaeological Evaluation

by James McNicoll-Norbury

Report 14/229c

Introduction

This report documents the results of an archaeological field evaluation carried out at Camp Road, Upper Heyford, Oxfordshire (SP 5194 2583) (Fig. 1). The project was commissioned by Mr Stuart Wright of Pye Homes Group, Langford Locks, Kidlington, Oxfordshire, OX5 1HZ.

Planning permission is to be sought from Cherwell District Council for the construction of new housing on the plot of land north of Camp Road at Upper Heyford. As a consequence of the possibility of archaeological deposits on the site which may be damaged or destroyed by groundworks, a field evaluation has been requested in order to inform the planning process with regard to potential archaeological implications of development.

This is in accordance with the Department for Communities and Local Government's *National Planning Policy Framework* (NPPF 2012) and the District Council's Local Plan policies. In this instance, the evaluation was to involve two phases of work, a geophysical survey followed by trenching. The initial geophysical survey has already been reported on (Bray and Dawson 2015) and this report deals with the trenching element of the project. The field investigation was carried out to a specification approved by Mr Richard Oram, Planning Archaeologist for Oxfordshire County Council and based on a brief provided by him (Oram 2015). The fieldwork was undertaken by James McNicoll-Norbury and Benedikt Tebbit between 7th and 8th October 2015 and the site code is CRU 14/229. The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited with Oxfordshire County Museum Services in due course.

Location, topography and geology

The site is located to the north of Camp Road on the eastern edge of Upper Heyford, which lies to the northwest of Bicester and to the south of Banbury in Oxfordshire (Fig. 1). The site is comprised of generally flat arable farmland and is bounded by a paddock to the north, fields to the east and housing to the west. The underlying geology is mapped as Great Oolite Limestone (BGS 1968) which was observed in the trenches and the site lies at 118m above Ordnance Datum.

Archaeological background

The archaeological potential of the site has been highlighted in a desk-based assessment for the project (Ford 2015) and a brief prepared by Oxfordshire County Archaeological Service (Oram 2014). In summary there is no known archaeology on the proposal site but it lies 200m west of a major Iron Age territorial/tribal boundary (Aves Ditch). Aerial photography of surrounding areas has identified several further probable Iron Age enclosure sites, with a distinctive 'banjo' form, in the surrounding area. Roman occupation is also recorded to the north of the site. A probable Saxon cemetery adjacent to Aves Ditch has also been recorded though its location is poorly recorded being either north or south of the site. The geophysical survey revealed a few anomalies of possible archaeological interest (Bray and Dawson 2015).

Objectives and methodology

The purpose of the evaluation was to determine the presence/absence, extent, condition, character, quality and date of any archaeological deposits within the area of development.

The specific research aims of this project are:

to determine if archaeological deposits of any period are present;

to determine if any deposits of Iron age or Saxon date are present;

to determine if the unlocated Anglo-Saxon cemetery in the vicinity extends onto the site; and

to determine if any geophysical anomalies are of archaeological origin.

Twenty one trenches, each 25m long and 1.62m wide, targeting previously identified geophysical anomalies, were to be dug using a 360^0 excavator fitted with a toothless ditching bucket, under constant archaeological supervision. Identified features were to be investigated according to an agreed sample fraction.

Results

The trenches were dug as intended and ranged in length from 24.5m to 30.5m and in depth from 0.28m to 0.57m (Fig. 3). All were 1.6m wide. A complete list of trenches giving lengths, breadths, depths and a description of sections and geology is given in Appendix 1. A number of possible linear features were identified during the opening of the trenches that corresponded with geophysical anomalies however upon further investigation these were all revealed to be natural geological variations.

Trench 1 (Pl. 1)
Trench 1 was aligned SW - NE and was 24.5m long and 0.33m deep. The stratigraphy consisted of 0.30m of topsoil overlying limestone and orange brown silt (natural geology) (Pl. 4). No archaeological deposits were identified.

Trench 2
Trench 2 was aligned roughly E - W and was 24.5m long and 0.35m deep. The stratigraphy consisted of 0.22m of topsoil and 0.11m subsoil overlying natural geology (Fig. 4). No archaeological deposits were identified.

Trench 3
Trench 3 was aligned SE - NW and was 24.5m long and 0.36m deep. The stratigraphy consisted of 0.28m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 4
Trench 4 was aligned SW - NE and was 25.0m long and 0.36m deep. The stratigraphy consisted of 0.31m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 5
Trench 5 was aligned SW - NE and was 26.2m long and 0.32m deep. The stratigraphy consisted of 0.25m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 6
Trench 6 was aligned S - N and was 25.0m long and 0.37m deep. The stratigraphy consisted of 0.27m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 7
Trench 7 was aligned SW - NE and was 24.5m long and 0.34m deep. The stratigraphy consisted of 0.27m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 8
Trench 8 was aligned SW - NE and was 25.5m long and 0.28m deep. The stratigraphy consisted of 0.24m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 9
Trench 9 was aligned S - N and was 26.2m long and 0.46m deep. The stratigraphy consisted of 0.32m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 10 (Pl. 2)
Trench 10 was aligned roughly E - W and was 26.3m long and 0.57m deep. The stratigraphy consisted of 0.28m of topsoil and 0.19m subsoil overlying natural geology (Fig. 10). No archaeological deposits were identified.

Trench 11
Trench 11 was aligned SW - NE and was 25.0m long and 0.33m deep. The stratigraphy consisted of 0.23m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 12
Trench 12 was aligned WSW - ENE and was 30.5m long and 0.32m deep. The stratigraphy consisted of 0.25m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 13
Trench 13 was aligned SSE - NNW and was 25.0m long and 0.30m deep. The stratigraphy consisted of 0.23m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 14 (Pl. 3)
Trench 14 was aligned roughly E - W and was 25.0m long and 0.28m deep. The stratigraphy consisted of 0.21m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 15
Trench 15 was aligned SW - NE and was 29.0m long and 0.33m deep. The stratigraphy consisted of 0.27m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 16
Trench 16 was aligned SW - NE and was 27.5m long and 0.30m deep. The stratigraphy consisted of 0.26m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 17
Trench 17 was aligned roughly E - W and was 27.5m long and 0.33m deep. The stratigraphy consisted of 0.28m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 18
Trench 18 was aligned SW - NE and was 25.0m long and 0.37m deep. The stratigraphy consisted of 0.26m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 19
Trench 19 was aligned SE - NW and was 28.5m long and 0.42m deep. The stratigraphy consisted of 0.30m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 20
Trench 20 was aligned S - N and was 24.5m long and 0.37m deep. The stratigraphy consisted of 0.29m of topsoil overlying natural geology. No archaeological deposits were identified.

Trench 21
Trench 21 was aligned SE - NW and was 24.6m long and 0.30m deep. The stratigraphy consisted of 0.23m of topsoil overlying natural geology. No archaeological deposits were identified.

Finds

No finds were recovered from the site.

Conclusion

The evaluation has revealed that the site contained no archaeological features from any period despite the surrounding area of archaeological potential and the geophysical survey revealing anomalies that suggested potential archaeological features. The previously identified geophysical anomalies were revealed to be natural geological changes, and the distinct lack of subsoil apart from in two trenches (which were in slight dips) suggests that the site has been heavily ploughed over the years. Based on this the archaeological potential of the site is to be considered low.

References

BGS, 1968, *British Geological Survey*, 1:50000, Sheet 218, Solid and Drift Edition, Keyworth

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Hey, G and Hind, J, 2014, *Solent-Thames Research Framework for the Historic Environment: Resource Assessments and Research Agendas*, Oxford Wessex Monogr **6**, Oxford

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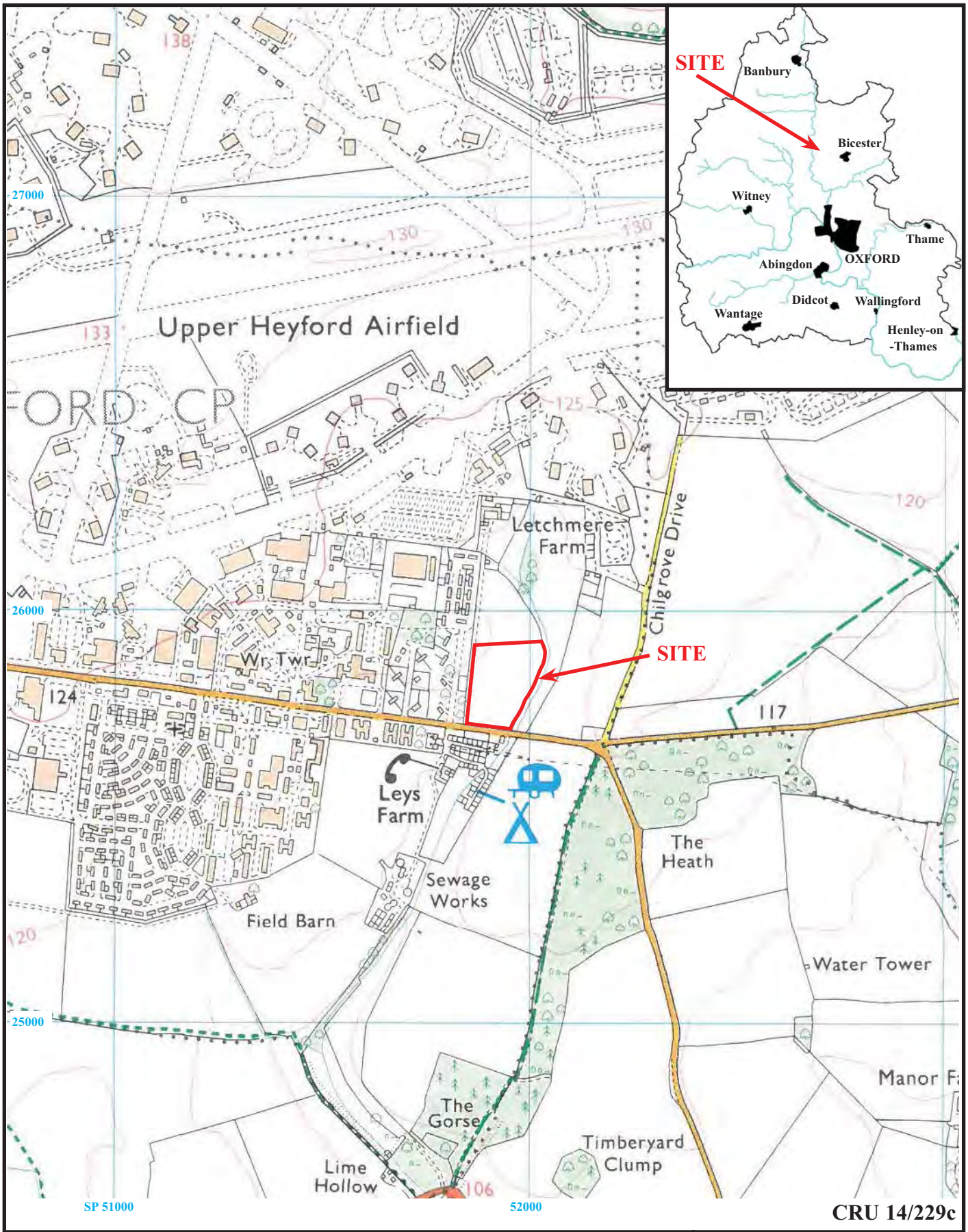
Oram, R, 2015, 'Land East of Larsen Road, Upper Heyford: Design Brief for Archaeological Field Evaluation', Oxfordshire County Council,Oxford

APPENDIX 1: Trench details

0m at S, SW or SE end

Trench	*Length (m)*	*Breadth (m)*	*Depth (m)*	*Comment*
1	24.5	1.6	0.33	0-0.30m topsoil, 0.30m+ limestone and orange brown silty clay (natural geology). No archaeology. **[Pls 1, 4]**
2	24.5	1.6	0.35	0-0.22m topsoil, 0.22-0.31m subsoil, 0.22m+ natural geology. No archaeology
3	24.5	1.6	0.36	0-0.28m topsoil, 0.28m+ natural geology. No archaeology
4	25.0	1.6	0.36	0-0.31m topsoil, 0.31m+ natural geology. No archaeology
5	26.2	1.6	0.32	0-0.25m topsoil, 0.25m+ natural geology. No archaeology
6	25.0	1.6	0.37	0-0.27m topsoil, 0.27m+ natural geology. No archaeology
7	24.5	1.6	0.34	0-0.27m topsoil, 0.27m+ natural geology. No archaeology
8	25.5	1.6	0.28	0-0.24m topsoil, 0.24m+ natural geology. No archaeology
9	26.2	1.6	0.46	0-0.32m topsoil, 0.32m+ natural geology. No archaeology
10	26.3	1.6	0.57	0-0.28m topsoil, 0.28-0.47m subsoil, 0.47m+ natural geology. No archaeology **[Pl. 2]**
11	25.0	1.6	0.33	0-0.23m topsoil, 0.23m+ natural geology. No archaeology
12	30.5	1.6	0.32	0-0.25m topsoil, 0.25m+ natural geology. No archaeology
13	25.0	1.6	0.30	0-0.23m topsoil, 0.23m+ natural geology. No archaeology
14	25.0	1.6	0.28	0-0.21m topsoil, 0.21m+ natural geology. No archaeology **[Pl. 3]**
15	29.0	1.6	0.33	0-0.27m topsoil, 0.27m+ natural geology. No archaeology
16	27.5	1.6	0.30	0-0.26m topsoil, 0.26m+ natural geology. No archaeology
17	27.5	1.6	0.33	0-0.28m topsoil, 0.28m+ natural geology. No archaeology
18	25.0	1.6	0.37	0-0.26m topsoil, 0.26m+ natural geology. No archaeology
19	28.5	1.6	0.42	0-0.30m topsoil, 0.30m+ natural geology. No archaeology
20	24.5	1.6	0.37	0-0.29m topsoil, 0.29m+ natural geology. No archaeology
21	24.6	1.6	0.30	0-0.23m topsoil, 0.23m+ natural geology. No archaeology



CRU 14/229c

Land at Camp Road, Upper Heyford,
Oxfordshire, 2015
Archaeological Evaluation

Figure 1. Location of site within Upper Heyford and Oxfordshire

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Land at Camp Road, Upper Heyford, Oxfordshire, 2015 Archaeological Evaluation

Figure 2. Location of trenches.

0 100m

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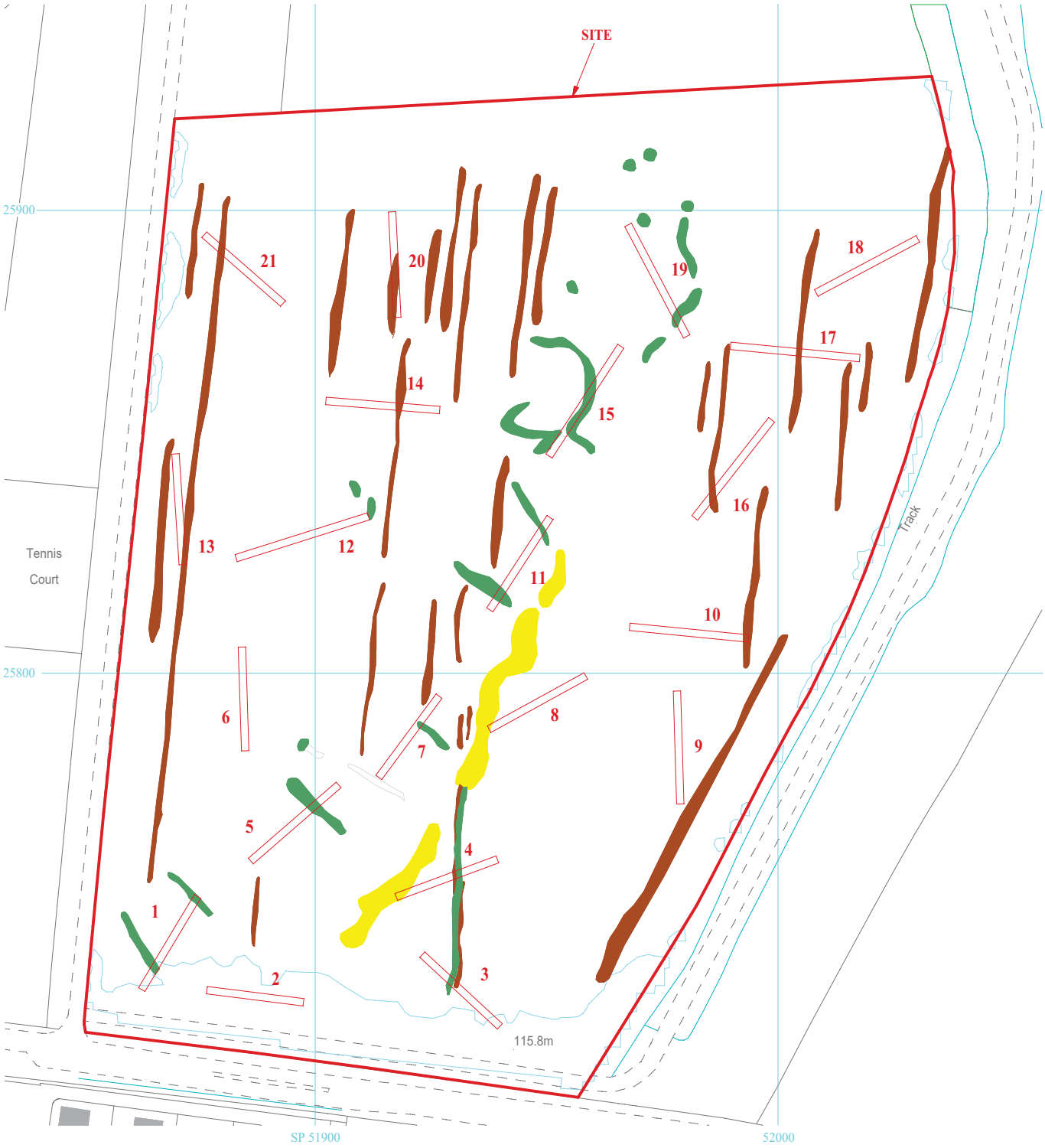

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Land at Camp Road, Upper Heyford, Oxfordshire, 2015 Archaeological Evaluation

Figure 3. Location of trenches in relation to geophysical anomalies.

0 100m

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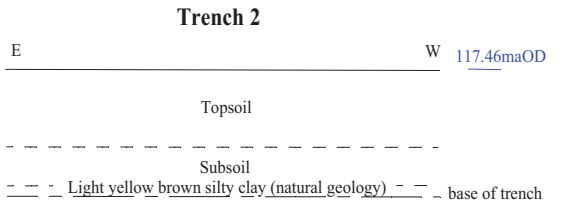

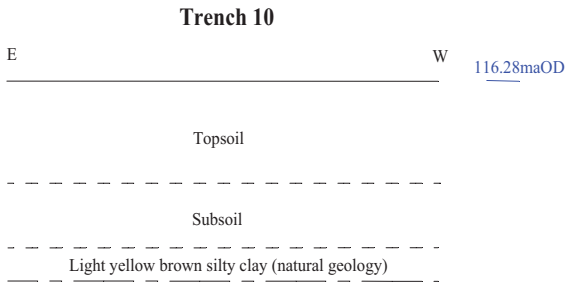

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Land at Camp Road, Upper Heyford, Oxfordshire, 2015 Archaeological Evaluation

Figure 4. Representative sections.

0 1m

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Plate 1. Trench 1, looking north east, Scales: horizontal 2m and 1m, vertical 0.5m.

Plate 2. Trench 10, looking west, Scales: horizontal 2m and 1m, vertical 0.3m.

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Land at Camp Road, Upper Heyford,
Oxfordshire, 2015
Archaeological Evaluation

Plates 1 - 2.

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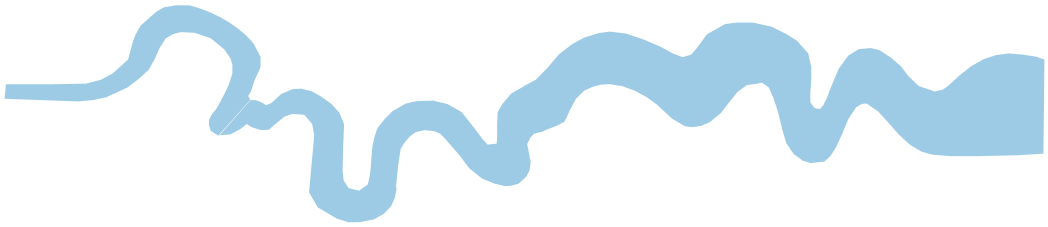
Plate 3. Trench 14, looking east, Scales: horizontal 2m and 1m, vertical 0.3m.

Plate 4. Trench 1 representative section, looking south east, Scales: 2m and 1m.

TIME CHART

	Calendar Years
Modern	AD 1901
Victorian	AD 1837
Post Medieval	AD 1500
Medieval	AD 1066
Saxon	AD 410
Roman	AD 43
Iron Age	BC/AD 750 BC
Bronze Age: Late	1300 BC
Bronze Age: Middle	1700 BC
Bronze Age: Early	2100 BC
Neolithic: Late	3300 BC
Neolithic: Early	4300 BC
Mesolithic: Late	6000 BC
Mesolithic: Early	10000 BC
Palaeolithic: Upper	30000 BC
Palaeolithic: Middle	70000 BC
Palaeolithic: Lower	2,000,000 BC



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Appendix E - Historic Environment Desk-Based Assessment by Terrence O'Rourke

LAND SOUTH OF HEYFORD GRANGE, LETCHMERE FARM, UPPER HEYFORD, OXFORDSHIRE

DESK-BASED ARCHAEOLOGICAL ASSESSMENT & HERITAGE STATEMENT

PYE HOMES

OCTOBER 2021

TERENCE O'ROURKE

LAND SOUTH OF HEYFORD GRANGE, LETCHMERE FARM, UPPER HEYFORD, OXFORDSHIRE

DESK-BASED ARCHAEOLOGICAL ASSESSMENT & HERITAGE STATEMENT

PYE HOMES

OCTOBER 2021

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		Date	11 Oct 2021
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CONTENTS

APPENDICES

FIGURES

1 Introduction

1.1 This report has been produced by Terence O'Rourke on behalf of Pye Homes to provide a desk-based heritage assessment and heritage statement for an outline planning application for development at Land south of Heyford Grange, Letchmere Farm, Upper Heyford, Oxfordshire. The report presents an assessment of the likely potential effects of the development of 31 dwellings, public open space, landscaping associated parking, vehicular access and ancillary works on the heritage value of the site and a 1km study area, principally on the known and suspected archaeological resource and on the adjacent RAF Upper Heyford conservation area.

1.2 The site is the northern part of the fields adjacent to the drive serving the dwellings at Heyford Grange and at Letchmere Farm. On the edge of the conservation area immediately to the west of the site is one of the residential areas of the former airbase, consisting of the contrasting areas of large houses built for RAF officers in the 1920s and 1940s, and the area of airmen's bungalows constructed in the 1960s and 1970s for the United States Air Force (USAF). To the north, beyond the former farm, is a group of hardened aircraft shelters (HAS) constructed on the south side of the flying field as part of the 1970s development of the nuclear deterrent. The land to the south of the site is currently the subject of planning application 15/01357/F for the first phase of the proposed development.

1.3 The site location is shown in the aerial photograph in figure 1, and the designated and non-designated built heritage assets in the 1km study area are illustrated on figures 2 and 3. The relevant entries from the National Heritage List for England and the Oxfordshire Historic Environment Record are provided in the gazetteers in appendix 1. The Historic Landscape Characterisation data is at figure 4. A desk-based heritage assessment checklist is included as appendix 2, and a glossary of specific technical terms as appendix 3.

1.4 The Planning Supporting Statement by Terence O'Rourke and the Design & Access Statement by Coleman Hicks describe the proposed development, and outline the relevant planning policy background, the pre-application consultation undertaken with Cherwell District Council, and the evolution of the scheme in response. The description of development is:

"Outline planning application for the erection of up to 31 dwellings, public open space, landscaping, associated parking, vehicular access and ancillary works [all matters reserved accept means of access]"

1.5 This report is one of a number accompanying the application. It should therefore be read alongside the application drawings and the full set of submission documents.

2 Legislation, policy and planning background

2.1 National and international policy recognises the value and significance of cultural heritage, the public interest in the preservation of particular assets and sets out mechanisms to ensure that it is taken into account in planning decision-making. Sites and features of identified interest are protected under the Ancient

Monuments and Archaeological Areas Act 1979 as amended, and the Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990.

2.2 National planning policy and guidance on conserving and enhancing the historic environment is contained within the National Planning Policy Framework (NPPF), the online National Planning Practice Guidance, the National Design Guide and the Good Practice Advice published by Historic England (GPA1 Local plan making, GPA2 Managing significance in decision-taking in the historic environment and GPA3 The setting of heritage assets). Heritage assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations (NPPF, paragraph 189).

2.3 Paragraph 197 of the NPPF states that in determining planning applications,

"Local planning authorities should take account of:
a) The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation.
b) The positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
c) The desirability of new development making a positive contribution to local character and distinctiveness."

2.4 Local planning authorities are required to take the significance of an asset into account when considering proposals, in order to avoid or mitigate conflict between any aspects of the proposals and the conservation of the asset (paragraph 195, and *"great weight"* should be given to the objective of conserving designated heritage assets (paragraph 199). As heritage assets are irreplaceable, all harm, from demolition to harm through development within the setting, requires *"clear and convincing justification"* (paragraph 200).

2.5 The principal objective is to avoid harm to designated heritage assets, but detailed policies define the justification required in cases of harm, based on public benefits that outweigh the harm, taking account of the weight to be given to conservation, and consideration of whether the conflict between the provision of such public benefits and heritage conservation is necessary (paragraphs 201 and 202).

2.6 The National Design Guide: Planning practice guidance for beautiful, enduring and successful places, states at C2 in relation to context:

"Value heritage, local history and culture
45 When determining how a site may be developed, it is important to understand the history of how the place has evolved. The local sense of place and identity are shaped by local history, culture and heritage, and how these have influenced the built environment and wider landscape.
46 Sensitive re-use or adaptation adds to the richness and variety of a scheme and to its diversity of activities and users. It helps to integrate heritage into proposals in an environmentally sustainable way.
47 Well-designed places and buildings are influenced positively by:
the history and heritage of the site, its surroundings and the wider area, including cultural influences;
the significance and setting of heritage assets and any other specific features that merit conserving and enhancing;

the local vernacular, including historical building typologies such as the terrace, town house, mews, villa or mansion block, the treatment of façades, characteristic materials and details – see Identity."

2.9 The Planning Supporting Statement provides a detailed analysis of the development plan. The relevant local plan is the Cherwell Local Plan 2011-2031, adopted 2015. Policy ESD 15: The Character of the Built and Historic Environment states:

Conserve, sustain and enhance designated and non-designated 'heritage assets' (as defined in the NPPF) including buildings, features, archaeology, conservation areas and their settings, and ensure new development is sensitively sited and integrated in accordance with advice in the NPPF and NPPG. Proposals for development that affect non-designated heritage assets will be considered taking account of the scale of any harm or loss and the significance of the heritage assets as out in the NPPF and NPPG. Regeneration proposals that make sensitive use of heritage assets, particularly where these bring redundant or under used buildings or areas, especially any on English Heritage's at Risk Register, into appropriate use will be encouraged.

2.10 The Planning Policy Guidance (PPG) outlines that, in some cases, local planning authorities may also identify non-designated heritage assets as part of the decision-making process on planning applications, for example, following archaeological investigations. It is helpful if plans note areas with potential for the discovery of non-designated heritage assets with archaeological interest (Paragraph: 040 Reference ID: 18a-040-20190723).

2.11 The RAF Upper Heyford conservation area was designated in 2006, covering the c.505-hectare former airbase. The area was given conservation area status primarily for its role as a Cold War airbase constructed for use by United States Air Force Strategic Air Command, that remained in operation until decommissioning in 1993. The adopted conservation area appraisal was largely based on the conservation management plan produced by the site owners with English Heritage (now Historic England) and Cherwell District Council in 2005.

Assessment guidance

2.11 The approach to identifying those heritage assets likely to be affected by a development proposal is given in the setting guidance published by Historic England, which states that, *"The setting of a heritage asset is 'the surroundings in which a heritage asset is experienced' (NPPF, Annex 2: Glossary). Where that experience is capable of being affected by a proposed development (in any way) then the proposed development can be said to affect the setting of that asset."* (GPA3, paragraph 20). Setting is not a heritage asset or a designation in itself, and its importance lies in what it contributes to the significance of the heritage asset. The guidance aims for a consistent approach to the assessment of setting and the range of historic, visual and functional relationships that can define the contribution of adjoining land to the significance of any single asset or group of assets. These include physical attributes and perceptual values, depending on the nature of an asset and its past and present surroundings. Potentially significant views can be deliberately designed or incidental, or the result of later changes.

2.12 Based on the approach given in the Historic England guidance, the assessment of effects on the setting of heritage assets in this report first considers whether the proposed development site currently forms part of the setting of any of the relevant heritage assets, and whether it is localised (e.g. for a large conservation area consisting of a number of different character areas). A judgement is made of whether the site makes a positive contribution to the significance of the asset because of its historic, functional, visual or aesthetic value; a negative contribution because of detracting characteristics and qualities, or neither enhances nor detracts, so is neutral. A similar judgement is made of any contribution to the ability to appreciate significance (e.g. through particular views, patterns of use or access). This is a qualitative assessment, based on professional judgement, which is expressed in terms such as essential, high, moderate, limited, low or negligible.

2.13 The guidance published jointly by IEMA, IHBC and CIfA in July 2021, Principles of Cultural Heritage Impact Assessment in the UK, is intended to provide an authoritative set of principles to promote good practice in understanding and assessing the consequences of change to cultural significance. The guidance supports the use of scales of importance, magnitude of change and the overall degree of effect, as in the established methodologies used for the cultural heritage assessments in EIA. It is divided into to two sections; one on understanding the assets, which distinguishes between the stages of describing the asset, ascribing cultural significance and attributing importance, and one on evaluating the consequences of change, which includes the stages of understanding the proposed change, assessing the impact on the asset and weighting the effect.

2.14 Case law has confirmed that the categories of harm recognised in the NPPF are no harm, less than substantial harm and substantial harm (James Hall and Company Ltd) v City of Bradford Metropolitan District Council [2019] EWHC 2899 (Admin). However, applying the advice in the NPPG that within these categories *"the extent of the harm may vary and should be clearly articulated."* (Paragraph: 018 Reference ID: 18a-018-20190723) in addition to a narrative description the effects on the significance of an asset are expressed in terms of a spectrum, such as a moderate level of less than substantial harm, or at the lowest end of less than substantial harm.

3. Methodology

3.1 The study area used for this assessment is 1km radius from the site boundary. The Historic Environment Record (HER) maintained by Oxfordshire County Council was consulted[1] for information on known archaeological features and designated assets within the site, and the study area. The data also includes the historic landscape characterisation (HLC) information (2019). A full bibliography and list of the sources consulted is provided at the end of this document.

3.2 The study was undertaken with reference to the Chartered Institute for Archaeologists code of conduct and appropriate standards (2008, updated 2014, revised 2019). The report's conclusions are limited by the extent and quality of existing information and therefore its usefulness in predicting the extent and definitive location of the archaeological resource must be qualified. The

[1] Data received by email 7 September 2021.

archaeological assessment was desk-based only, and no site-specific surveys have been undertaken.

3.3 This report aims to give an overall assessment of the components, qualities and level of importance or value of the heritage assets within the study area, including above and below ground archaeology and built structures and their settings. A judgement is made of the value of known archaeological features or deposits and the probability of discovering currently unknown remains, and their likely importance.

4 Baseline information and significance

4.1 The archaeological evidence is presented in chronological order in broadly accepted chronological periods such as Palaeolithic–Neolithic. The HER data provided by Oxfordshire County Council lists 20 sites or features within the study area, none of which lie within the site boundary. In addition, the HER provides information on nine past archaeological events within the study area. The closest designated assets are two structures covered by the scheduling of several areas of Cold War structures across the airbase (the hardened Telephone Exchange and the Battle Command Centre), and the group of three Nose Dock Hangars on the edge of the technical area (LB2-4).

Geology

4.2 Geology and topography can both provide an indication of suitability for early human settlement and ground levels which might have implications on the potential for archaeological survival.

4.3 The British Geological Survey map (BGS 2021) indicates that the underlaying bedrock geology at Upper Heyford is White Limestone Formation. There are no known boreholes recorded within the site boundary that corroborates this information.

4.4 The site is generally flat arable farmland and is bound by housing to the west, fields to the east and a paddock to the north. The average ordnance datum level across the site is approximately 125m OD.

The known archaeological resource

Prehistoric and Roman periods

4.5 The wider Palaeolithic period (800,000–10 000 BC) saw alternating warm and cold phases and intermittent perhaps seasonal occupation. The HER data does not contain any information from this period within the 1km study area. In the wider area, much of Oxfordshire would have been covered with a forested landscape which was dense in places such as river valleys and lower slopes. Mesolithic hunter-gatherer communities in the postglacial period (10,000-4000 BC) inhabited the landscape and would have utilised woodland and the river corridors during the Mesolithic and Neolithic periods.

4.6 By the Late Bronze Age and into the Early Iron Age (800-600 BC), an increase in permanent settlement led to the greater definition of agricultural and farming zones. Changing environmental conditions and an increasing population may have

been an important factor for agricultural settlements appearing across Britain. Evidence of Iron Age settlement is characterised by monuments such as hillfort and banjo enclosures and by the use of iron in tools, weapons, pottery and personal ornaments.

4.7 The HER contains six entries of Iron Age features identified in the 1km study area. Only one of these entries is definitively of prehistoric date, several others are based on the morphology of undated cropmarks. Aerial photography carried out in the wider area has revealed a series of Iron Age Banjo Enclosures, a class of middle Iron Age settlement found widely across southern Britain.

4.8 To the north west of the site at Upper Heyford airfield, aerial photographs recorded a number of Iron Age features and possible settlement sites. These include a Banjo enclosure with a bottleneck entrance (TOR 6) and conjoined rectilinear enclosures with associated features extending over an area approximately 20m by 10m, possibly indicative of settlement (TOR 7 & 8). To the southeast of the site, a Banjo enclosure with a small curvilinear annexe was visible as a cropmark in National Monument Record (NMR) aerial photographs (TOR 4).These areas of possible settlement are yet to have been subject to any archaeological excavation and there have been no associated finds.

4.9 Running directly through the centre of the study area is Aves Ditch, orientated north – south (TOR 15). Once believed to have been a Roman road or a Saxon boundary, excavation has shown it to be a boundary dyke of Iron Age date and subsequently reused in the Anglo-Saxon period. Excavations at various points along the ditch produced pottery from the fill and ditch banks of Iron Age date. Archaeomagnetic dating from collected samples from the ditch confirmed a Late Iron Age to early Roman (500-325BC) date.

4.10 Documentary evidence from a 'Gothic 1833 map' by Beesley suggests a possible Romano British settlement, west of Ballards Copse (TOR 9). On the same map, Beesley has written '*the site of extensive ancient remains and connected with Portway*' (TOR 2). Outside the study area to the west is a minor Roman road, the Portway (Margary, 1955 route 161a). It is unlikely that Aves Ditch was used as a Roman road, but it probably remained a significant landscape feature during this period.

Early medieval (410-1066AD)

4.11 There is a single HER entry of a possible Anglo-Saxon inhumation or cemetery at a site near Upper Heyford. In 1865 a number of human skeletons were found with 'stirrup irons' and 'pieces of armour', close to the Iron Age Aves Ditch (TOR 3), however it is not certain that these remains are of Saxon date.

Historic development

4.12 There are no entries in the HER for the medieval period. The site area and the future location of the airbase were part of the open fields of Upper Heyford laid out to the east of the village that remained until enclosure in 1842. The site area was part of the band of meadows or pasture at the east edge of the parish named as The Leys. Following enclosure, the road layout was simplified and reduced to the one straightened route to the east, now Camp Road, and new farmsteads were established outside the old village centre, at Leys Farm and North Leys Farm, set within a regular pattern of small rectangular fields. Maps of the area up to the

construction of the airfield show no change to the agricultural landscape. The large courtyard of stone-built farm buildings at North Leys Farm, renamed Letchmere Farm, have been converted to four dwellings.

RAF Upper Heyford

4.13 The complex history and phases of development of the airbase from 1916 to 1993 are outlined in detail in the 2005 conservation plan and the landscape appraisal of the technical area and housing areas on either side of Camp Road, and are summarised in the adopted conservation area appraisal. A brief chronology and a description of the closest areas to the site is given here. The level of detail is proportionate to the site and the scale of the proposed phase 2 development.

4.14 The airfield at Upper Heyford was first established as a training base for the Royal Flying Corps in 1916, becoming operational in 1918. It was provided with the full range of technical buildings, separate camps for male a female personnel, and six hangars in paired general service sheds, on the edge of the flying field. In 1919 the buildings were demolished and the land was returned to agriculture. In 1923 the site was identified for the construction of one of the new network of permanent bases for the RAF, laid out at the same location as the earlier airfield, with a new residential zone to the south of the road. It was the first of the new airfields to receive government approval and became the model for the standard layout based on the dispersal of buildings, the hangars in an arc facing the flying field and the division between the technical and residential areas. The design of the standard range of buildings used a pared down neo-Georgian appearance for some of the office and the mess buildings, and the housing areas showed the influence of the prevalent garden city ideas. The base became operational in 1927. There were few changes during WWII until the construction of the concrete runways in an A' plan configuration and the dispersed fighter pens in 1943/4.

4.15 The base continued in use by the RAF after the war until 1950, and was then leased to the USAF, and remodelled for use by Strategic Air Command (SAC) bombers and refuelling aircraft. The changes between 1951-3 extended the runway to 3.4km, and provided the new control tower, created large areas of "igloo" conventional arms storage, and increased the areas of domestic accommodation. There was a further major phase of changes from 1970 for the shift from the strategy of 'Mutually Assured Destruction' at the beginning of the Cold War, to 'Sustained Deterrence', a strategy of rapid retaliation, and the stationing of four squadrons of F-111 bombers carrying intermediate- range nuclear weapons. This phase saw the development of the range of new "hardened" structures intended to be able to withstand an attack, including the large areas of hardened aircraft shelters (HAS) on either side of the runway.

4.16 The individually designated areas of national importance within the airbase all relate to the Cold War period of operation, particularly from the 1970s onwards. Five distinct areas are protected as a single scheduled monument (TOR 14). These are, outside the study area to the north of the runway, the group of nine HASs in the Quick Reaction Alert (QRA), together with associated components (Buildings 3001-3100) and the Northern Bomb Stores and Special Weapons Area (Buildings 1001-1008, 1011, 1032-1048, 1050, 1060 & 1870); the Avionics Maintenance Facility buildings (Building 299) on the south east edge of the core area, and the Battle Command Centre (Building 126) and Hardened Telephone Exchange (Building 129), both integrated into the inter-war technical area. The

group of three Nose Dock Hangars (Buildings 325, 327 & 328) on the edge of the technical area are listed grade II (LB2-4), as is the 1950 control tower (LB1).

4.17 The sectors of the airbase closest to the site are two contrasting areas of housing at the edge of the technical area, and the south east area of HAS to the north beyond Letchmere Farm.

4.18 Larson Road and Soden Road were laid out as part of the new permanent base in the 1920s, to provide RAF officers' accommodation, separate from the main housing area to the south of Camp Road. There are four large detached houses, and three semi-detached pairs, in Queen Anne revival and neo-Georgian style, and set in spacious plots, with extensive planting of specimen trees along the roads and in the gardens. The area appears as a separate 'suburb' and is secluded from the rest of the base. A further six houses were constructed at the north end for the later post-war occupation by the RAF, following the same plot alignments. Trenchard Close, to the north is one of the areas of "tobacco housing", of prefabricated bungalows constructed in the 1960s and 1970s for the USAF. It is of utilitarian appearance and has very little space for landscaping.

4.19 The group of HAS to the south east of the flying field are detached from the main groups on the north, close to the QRA, and the area has a distinctive character because the HASs and ancillary structures are relatively close together, within a more restricted setting than the open plateau landscape of the main runway, though views to the south and east are noted. To the south west, adjacent to Trenchard Close is an ancillary area of tanker standings.

4.20 The current aerial photograph in figure 1 shows the large complex of former farm buildings at Letchmere Farm on the edge of the airbase, and the contrasting character of the former RAF officers' housing area and the later bungalows. The new housing and ongoing construction are concentrated along Camp Road and on the edge of the technical area, and between the pre-war Type A aeroplane sheds. Extensive areas of car storage are visible across the taxiways, aprons between the hangars and HAS and the tanker standings area close to the site.

Historic Landscape Characterisation

4.21 The historic landscape characterisation (HLC) data shows the time depth of the present landscape (figure 4). The site is categorised as a 19th century farmstead and the former technical area to the west is characterised as commercial business park, without distinguishing the small housing area at the edge. In the northern part of the study area, the landscape is dominated by the military airfield. The site is surrounded on the west and south side by planned enclosures and in the wider landscape, piecemeal enclosures dominate the eastern half of the study area.

Previous archaeological investigations

4.22 The HER contains the information of nine past events in the study area, all related to archaeological investigations including desk-based assessments, geotechnical surveys and watching briefs. A summary of the most relevant to the site is provided below.

4.23 In 2015, ahead of phase 1 at the Land at Lechmere farm, geophysical survey (magnetic) was carried out on a plot of land adjacent to propose site area (EV 6). Magnetic anomalies were recorded across the entire survey area, which were

found to be primarily of modern agricultural origin, with some of possible archaeological origin. Although the geophysics did not extend north into the site area it is likely that results would be the same given the close proximity.

4.24 The findings from the associated desk-based assessment for Upper Heyford and geophysical survey meant that an archaeological evaluation was required and subsequently carried out in 2015 (EV 7). 21 trenches were excavated across the site area to a depth between 0.28m and 0.57m. A number of possible linear features were identified that corresponded with geophysical anomalies however upon further investigation these were revealed to be natural geological variations. Subsequent comments provided by the Oxfordshire County Council Archaeologist concluded that:

"We have previously advised that the results of an archaeological evaluation would need to be submitted along with this planning application, later dated 7th September 2015. This evaluation has been undertaken in October 2015 and has shown that archaeological deposits do not survive on the site. No further archaeological investigations will be required on this site, but the results of this evaluation will need to be submitted along with the planning application as set out in our earlier response"

4.25 Other events identified in the HER include an evaluation at Heyford Leys Camping Park which lies just below the site to the south (EV 9). The 15-trench evaluation was carried out as part of a program of archaeological investigation prior to development. The only feature excavated appeared to be a long stretch of boundary ditch, however it's considered to be the previous edge of the field and modern in date. The site had been extensively disturbed, and no other archaeological features of interest were discovered during excavations.

4.26 A series of archaeological investigations were undertaken at former RAF Upper Heyford, ahead of the demolition of the southern bomb stores and the subsequent project development. A geophysical survey in 2015 (EV 4, EV 5) at the site showed agricultural activity, an area of made ground and indicated ground disturbance caused by the construction of features within the airbase. An archaeological evaluation (EV 3) was later carried out at bomb stores, and despite the archaeological potential of the site, no features or deposits of archaeological interest were recorded and no material pre-dating the modern period was recovered.

Assessment of significance

4.27 The categories of heritage values that may be attached to a place were outlined in the English Heritage document Conservation principles: policies and guidance for the sustainable management of the historic environment, 2008, and the revised draft published by Historic England in 2017. These definitions are included in the NPPG, July 2019:

"The National Planning Policy Framework definition further states that in the planning context heritage interest may be archaeological, architectural, artistic or historic. This can be interpreted as follows:

- *archaeological interest: As defined in the Glossary to the National Planning Policy Framework, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.*
- *architectural and artistic interest: These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skill, like sculpture.*
- *historic interest: An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity."* Paragraph: 006 Reference ID: 18a-006-20190723.

4.28 Some or all of these values can be attributed to the known and recorded heritage resource present within the development site boundary and in the study area.

Archaeology

4.29 The nature and potential of possible archaeological survival in the area of the proposed development is summarised here, taking into account the levels of natural geology and the level and nature of land disturbance.

4.30 Based on the consideration of the available resources contained in the Oxfordshire HER, together with the analysis of the results of previous archaeological investigations, this assessment concludes that overall, there is a low potential for prehistoric remains. Although there a number of entries in the HER with a prehistoric date, these are 'possible' Iron Age features identified through aerial photography and cropmark survey. If any archaeological remains are found on site, they would be of medium significance as they would add to our understanding of Iron Age settlement and activity in the area.

4.31 There is a negligible potential for archaeological remains dating to the prehistoric to post-medieval period likely to be found on site. There is a small amount of HER data in the study area and records are limited to documentary evidence. There are two entries of a possible Roman settlement at Ballard's Copse, identified on a 19th century map, however no archaeological evidence has been found to support this. There is a single entry of a possible Anglo-Saxon inhumation/cemetery at a site in Upper Heyford, however the date is not certain. The lack of HER entries on site and in the study area indicate there was a low amount of activity in the study area pre post-medieval. The significance of any remains, if present on site, would depend on their nature and extent, as well as state of preservation.

4.32 Based on the assessment of the recorded archaeological resource in the study area and the previous excavations on the site, it is unlikely that the archaeological resource would represent a primary risk or constraint to the phase 2 development i.e. in terms of a requirement for preservation in situ of significant remains.

Built heritage

4.33 The primary significance of RAF Upper Heyford is its national and international value as relatively complete Cold War landscape, recognised by the conservation area designation, and a number of structures from the 1950-1970 and the 1970-1993 periods of operation are individually designated for their national importance. The focus of interest is the "landscape of flexible response"; the runway across the open landscape of the plateau, and the groups of structures including the Quick Reaction Alert (QRA) Area and the main areas of HAS and the igloo arms stores. The site area is part of the surrounding farmland and has no functional connection to the base, and is physically and visually detached from the scheduled areas of the airbase and from the individually listed structures. There is no potential for effects as a result of the proposed development and these assets are not considered further in this assessment. The only potential effect relate to the closest sections of the conservation area immediately adjacent to the site.

4.34 The conservation area designation includes both the core area of the runway and flying field and the ancillary areas and the extensive areas of housing provided for service personnel. The reasoning behind the designation of the wide area is explained in the appraisal:

"Therefore although the flying field contains the majority of the buildings and structures [designated for their special interest] *and so it may be argued is the most interesting part of the airbase, alone does not constitute the military site. Without the auxiliary areas, the technical and domestic sites, the flying field could not exist in its present form. The auxiliary areas provide the context to the flying field; all contribute to the functioning of the airbase and to its uniqueness. Therefore for this reason the entire base has been included within the conservation area boundary"*[2]

4.35 The contribution and significance of the areas of the conservation area closest to the site are summarised in the appraisal.

4.36 The area of officers' housing at Larsen Road and Soden Road are identified as non-listed buildings of local significance that make a positive contribution to the conservation area. This relates to the leafy and secluded character as a domestic enclave, and the varied architecture of the 1920s phase. The post-war houses are less distinctive but continued the approach and layout. The bungalows constructed for the USAF to the north are of no individual architectural merit and the area is not identified as making a contribution to the conservation area.

4.37 The HAS are one of the most characteristic structures of the airbase from the 1970s phase, when 56 in total were constructed at Upper Heyford, each designed for a single aircraft. The conservation plan notes of the south east area of HAS that they are *"a distinctive visual unit, but do not read as part of the historic core." and t*hey are considered in the conservation area appraisal to be non-listed buildings of local significance. The ancillary tank area is of low significance. Both of these areas are now part of the wide area across the south of the former airfield that is used for car storage.

[2] RAF Upper Heyford conservation area appriasal, page 73.

4.38 The site area is part of the immediate setting that is visually dominated by the airbase, though despite the proximity there is some physical and visual separation from the adjacent housing area because of the strength of the boundary at Larsen Road and the absence of connections. The site does not relate to the functional aspect of the significance of the airbase structures to the north, and is a minor component of the views southwards from the HAS area. The site is currently a neutral part of the setting of the conservation area.

5. The proposals

5.1 The Design and Access Statement by Coleman Hicks outlines the context of the ongoing development at Heyford Park and how the site relates to the former airbase, and describes the phase 2 proposals. The design and layout principles established through the consideration of application 15/01357/F, are also relevant to the phase 2 site. In their comments in response to that application, Historic England stated that the proposals *"would have a minimal impact on the significance or setting of the Flying Field, which forms the core of the heritage interest at Upper Heyford and is of outstanding importance."* The detailed comments by the Cherwell District Council conservation officer noted the importance of the differentiation between the housing areas to understanding of the phases of history of the airbase, and requested *"greater regimentation"* in the layout of the housing areas to reflect the military history of the site.

5.2 The overall design principles and approach for the phase 2 development therefore continue from the phase 1 site to the south, and the design of the dwellings takes a number of precedents from the military housing areas. The planted boundary and ecology corridor that is a key feature of phase 1 is also extended north as part of this application.

6. Conclusions

6.1 This assessment has outlined the archaeological potential within the site and the study area and examined the effects of any historic or existing impacts upon that potential. The report's conclusions are limited by the extent and quantity of existing information and therefore its usefulness in predicting the actual full extent and definitive location of the archaeological resource must be qualified. Given the absence of HER records on the site and that an evaluation was previously carried out in the area to the south, it is highly likely that similar results would be produced in the phase 2 area.

Archaeology

6.2 The assessment has identified that there is an overall negligible potential for archaeological remains to be present in the site. The evidence from within the study area has shown that the undesignated heritage assets identified in the Oxfordshire HER are limited and predominately are features identified as a result of cropmark survey and aerial photography. Results from previous geophysical survey coupled with the results from an evaluation, carried out as condition for phase 1, clearly present a case for negligible to low potential for archaeological remains to be present on the site. It is considered that the archaeological resource would not represent a primary risk or constraint to the development i.e. in terms of a requirement for preservation in situ of significant archaeological remains.

6.3 The national guidelines outlined in the NPPF paragraph 194 recognise that *"a site on which development is hereby 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"'*. The information presented in both this report and the results from previous archaeological evaluation undertaken by TVAS, satisfy this requirement.

Built heritage

6.5 The development of the site on the edge of the conservation area has no potential to affect the legibility of the functional connections across the base and the relationship of the auxiliary housing areas to the technical area and the core area of the flying field. The site is not visible from within the enclave of RAF officers' housing on Larsen Road and Soden Road, and the introduction of the new development, extending the phase 1 area, will not increase its visibility. The distinctive character, and the enclosure and seclusion, of this domestic area will be maintained, and there will be no change to the positive contribution of this area as part of the conservation area.

6.6 The area of airmen's bungalows at Trenchard Close, although of poor quality and stark appearance, are part of an important phase of the expansion of accommodation provided at the base. The vegetation on the boundaries largely prevents views to the west, and the relationship with the other sectors of the base is varied, with an open and degraded edge to the north. The new development is unlikely to be visible within this area, and any visual change would be experienced in the context of the mixed group of structures at the edge of the former technical area, and the open areas of the tanker storage, in its current use for car storage. The changed to the setting as a result of the proposed development will not change the currently limited contribution of this area to the conservation area.

6.7 The value of the south east HAS area lies in the form and layout of the structures themselves and character as a peripheral part of the core area of the flying field. External views of the land outside the base are incidental and are partially obscured by the vegetation on the boundaries and latterly by the car storage. The proposed development to the south beyond the large courtyard at Letchmere Farm will not alter the relationship of this area to the wider setting beyond the secure boundaries of the base.

6.8 The phase 2 development will not materially change the current overall neutral contribution of the site as part of the setting of the conservation area. No effects on the character or appearance of the RAF Upper Heyford conservation area predicted as a result of the phase 2 development.

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https://archaeologydataservice.ac.uk

Appendix 1: Gazetteers of heritage assets in the 1km study area

Oxfordshire HER entries

TOR ID	MON ID	Description
1	MOX12543	Upper Heyford USAF Airfield
2	MOX12605	Earthworks at Ballard's Copse
3	MOX12823	Possible Anglo Saxon Inhumations/Cemetery near Upper Heyford
4	MOX23326	Banjo enclosure N of Timberyard Clump
5	MOX23327	Partial Rectilinear and curvilinear enclosures S of Upper Heyford Airfield
6	MOX23329	Banjo enclosure at Upper Heyford Airfield
7	MOX23330	Rectilinear possible settlement complex at Upper Heyford Airfield
8	MOX23331	Vague cropmarked enclosure and linear features at Upper Heyford Airfield
9	MOX4813	Possible Romano British Settlement (W of Ballards Copse)
10	MOX4828	Possible Anglo Saxon Inhumations at Upper Heyford
11	MOX4861	Undated Rectangular Enclosure (E of Middleton Stoney Heath)
12	MOX4867	Possible Iron Age Banjo Enclosure (E of Middleton Stone Heath)
13	MOX4996	Iron Age Banjo Enclosure
14	MOX23278	Cold War Structures at the Former RAF Upper Heyford Airbase
15	MOX4830	Also known as Ashbank or Wattlebank. Now interpreted as Iron Age tribal boundary

Oxfordshire HER, archaeology events

TOR ID	EVENT ID	Description
EV1	EOX1762	Archaeology and Cultural Heritage: DBA for Upper Heyford
EV2	EOX1765	Archaeological Evaluation Excavation at the former RAF Upper Heyford, Oxfordshire
EV3	EOX6038	Evaluation at Southern Bomb Store
EV4	EOX6165	Geophysical survey Southern Bomb Store
EV5	EOX6215	Former RAF Upper Heyford Southern Bomb Store
EV6	EOX6216	Geophysical survey Land at Camp Road
EV7	EOX6217	Evaluation at Land at Camp Road, Upper Heyford
EV8	EOX2137	Watching brief at Angelinos Pumping Station to Ardley Reservoir
EV9	EOX6884	Evaluation at Heyford Leys Camping Park

Listed buildings

TOR ref	Description
LB1	Control Tower (Building 340), Upper Heyford Airbase, II Reasons for Designation Upper Heyford's control tower listed primarily for historic reasons, dates from 1950-2 when the former RAF base was remodelled for USAF's Strategic Air Command. Structures erected during the Cold War (1946-89) are among the most potent physical manifestations of the global division between capitalism and communism that shaped the history of the second half of the C20. Upper Heyford was among the key Cold War defence sites in England in the 1970s and 1980s when USAF F-111s based here provided part of NATO's European intermediate range nuclear deterrent. The control tower was central, as its name suggests, to the base's operation and is an integral part of the complex. Also included in the listing are its blast walls and the magnetometer housing and its surrounding square immediately to the north.

TOR ref	Description
	Details Military airfield control tower of 1950-2 with associated blast wall and magnetometer base. Currently identified as Upper Heyford Building 340. EXTERIOR: Built around a steel frame, it comprises a central, red brick, two-storey tower (33ft 6ins by 32 ft 6ins) surmounted with an octagonal steel-framed glazed visual control room which gives a 360 degree view of the complete aerodrome with the main runway to the north. Mounted alongside on the flat roof (which has metal railings around its edge) are two ariels and, at the north-west corner, a small observation penthouse, possibly for signalling. Flanking the tower to east, west and south are single-storey flat-roofed wings housing electrical gear and offices. The east and west flanking wings (each 25ft by 23ft) also have railings around their edges. The tower has small, square-paned Crittall-type metal windows, with a projecting (probably added) oriel-like booth to the central first-floor window on the north side. INTERIOR: The main entrance is at the rear of the right-hand wing. This gives on to a corridor which runs the width of the building. The right-hand wing contains two front rooms, one which housed GPO equipment and one the monitor room. At the rear of the wing was a rest room and female lavatory. The front half of the main tower was the radio equipment room, with officers' lavatory, signals workshop and staircase to the rear. The left wing contained ancillary rooms, including the main medium voltage switchgear room, accessed from external doors. The small wing to the south housed a ventilating plant room and pyro store. In the tower concrete stairs with a metal handrail lead to the first floor, largely occupied by the radar control room. Double doors give access on to the flat roofs of the east and west wings. The other first-floor rooms comprised a rest room and the SATCO's office. A stairwell at the rear contains a steep steel ladder leading up to the rear of the visual control room. This has pull-down, purple-tinted, sun screens to the windows and sound-proof tiles to the walls and ceiling. One ground-floor door has a hand-painted shield recording its occupancy (probably near the end of the station's life) by the Air Weather Service. The greater part of the control tower's telephone and other equipment has been stripped although some switchgear and housings do survive. ASSOCIATED FEATURES: Immediately to the front (north) and west of the building are prefabricated 2m tall sand-filled blast walls. Similarly protected is a fuel tank (itself not of historic interest) between the tower and the gravelled square. Ten metres north of the blast wall is a gravelled square, c.20m across, defined by concrete-kerbs and concrete posts which formerly supported a wire fence. In the centre of the square is the 1.5m high bollard-like metal housing of a magnetometer, an instrument (removed) which detected radar signals coming from the east. HISTORY: A Royal Flying Corps station was established at Upper Heyford in 1915. In the 1920s it became one of the RAF's bomber stations under the Home Defence Expansion Scheme promoted by Lord Trenchard. During WWII it was used as a training station by Bomber Command. In the early 1950s the base was among those which passed to the USAF's Strategic Air Command, one of four which lay well inland from the vulnerable east of England. It then was extensively remodelled: structures erected at this time including new runways and bomb stores, the control tower and four Nose Docking Sheds for aircraft maintenance (q.v.). Between 1953 and 1965 B-47 SAC

TOR ref	Description
	Stratojets operated out of here. The base then passed to USAF Europe and for the remainder of the 1960s it was mainly used by reconnaissance aircraft including U2s, RF101 Voodoos, and later Phantoms. Then in 1970 a new generation of advanced bomber, the F-111, was deployed here. Its all-weather capability and technical sophistication made the aircraft one of the key components of NATO's nuclear deterrent in the 1970s, it being the sole carrier of the USA's intermediate range nuclear deterrent in Europe. Upper Heyford was the only F-111 Wing in Europe until the allocation of F-111s to RAF Lakenheath in 1977. After 1984 and the introduction of Cruise Missiles the F-111s' purpose became the hunting down of the Warsaw Pact's mobile SS20 missiles. In 1986 F-111s from Upper Heyford and Lakenheath attracted worldwide attention for a retaliatory strike on Libya, while in 1990 Upper Heyford's F-111s participated in operation Desert Shield after Iraq's invasion of Kuwait, and Desert Storm to liberate Kuwait. In 1993 in the defence draw-down after the end of the Cold War, and in part due to the obsolescence of the F-111, the aircraft was withdrawn from the base. Shortly afterwards Upper Heyford was returned to the RAF which declared it surplus to military needs. The control tower was one of seven produced c.1950-3 to drawing 5223a/51. Four were at the Very Heavy Bomber bases of Upper Heyford, Brize Norton, Fairford, and Greenham Common; one at Mildenhall tanker aircraft base; and two at the upgraded Biggin Hill and North Weald fighter stations. Upper Heyford's stands centrally within the south half of the flying field, south of and overlooking the main runway. It operated as the weather and radio receiver for the airbase and was central to its operation. SUMMARY OF IMPORTANCE: listed primarily for historic reasons, Upper Heyford's control tower dates from 1950-2 when the former RAF base was remodelled for USAF's Strategic Air Command. Structures erected during the Cold War (1946-89) are among the most potent physical manifestations of the global division between capitalism and communism that shaped the history of the second half of the C20. Upper Heyford was among the key Cold War defence sites in England in the 1970s and 1980s when USAF F-111s based here provided part of NATO's European intermediate range nuclear deterrent. The control tower was central, as its name suggests, to the base's operation and is an integral part of the complex. Also included in the listing are its blast walls and the magnetometer and its surrounding square immediately to the north.
LB2	Nose dock hangar at former RAF Upper Heyford (Building 328), GV II Reasons for Designation One of three hangars built in 1951 to service the first American nuclear-armed bombers deployed here as part of the Cold War. They have historic interest for their rarity, their demonstration of the special relationship between Britain and the United States, and they have technical interest in their early use of aluminium as a building material. They form a group with other structures recommended for scheduling that together make Upper Heyford a unique surviving ensemble. Details Nose dock hangar. 1951 to designs made c.1950-1, almost certainly by the British Ministry of Works as it followed the form of a wartime hangar used to service the Sunderland flying boats, but for the United States Air Force Strategic Air Command. Aluminium cladding on aluminium frame, with corrugated steel roof. Stepped 'T'-shape, with a long cantilevered front to create the long opening needed to accommodate the American B50Ds, KB29Ps, and later the B47 Stratojet that were based here. Folding doors on this long elevation of aluminium. Internal bracing also of aluminium.

TOR ref	Description
	HISTORY: RAF Upper Heyford was established as a bomber station as part of the Home Defence Expansion Scheme of 1923. Following the breakdown of East-West relations with the Berlin Crisis of 1948, it was identified for use by the USAF Strategic Air Command in 1950 as a permanent site for its aircraft. The existing hangars were too small for the massive new bombers, so a specific hangar type was developed, known as a 'nose dock'. As the name suggests, the nose dock hangars sheltered only the front section of the aircraft, so that it was possible to work on its nose and engines under cover. Cover for the rest of the aircraft was not regarded as important. Upper Heyford was served by squadrons of KB-29P refuelling aircraft from the end of 1951 and from June 1953 by the B47 Stratojet. The aircraft were deployed in Britain on 90-day rotations, so that only routine maintenance and emergency repairs had to be undertaken here. By the late 1950s a policy of 'reflex alert' was established, which meant that Upper Heyford was used intensively while other bases saw little action. The base became the centre for the F111-E in 1970, and was the only European airfield for these planes until 1977 when Lakenheath was similarly upgraded. The Upper Heyford trio are not only the most complete survivals of this type of hangar, but are of interest in being built of aluminium, then in its infancy as a building material. In 1956 the American journalist John Peter wrote that 'aluminium has been more widely used for large structural applications in Great Britain than in any other country. British engineers have produced brilliant designs whose ingenuity and precision have brought structural use of this easy-to-erect material to a cost roughly equivalent to that of steel.' The hangars have historic interest as rare built survivals of this era, demonstrating graphically the special relationship between Britain and the United States, and they have technical interest in their early use of aluminium as a building material. The three hangars form a group with other survivals of similar interest, and together demonstrate the phases of the American nuclear deterrent in Britain as is found at no other base.
LB3	Nose dock hangar at former RAF Upper Heyford (Building 327), GV II Reasons for Designation One of three hangars built in 1951 to service the first American nuclear-armed bombers deployed here as part of the Cold War. They have historic interest for their rarity, their demonstration of the special relationship between Britain and the United States, and they have technical interest in their early use of aluminium as a building material. They form a group with other structures recommended for scheduling that together make Upper Heyford a unique surviving ensemble. Details Nose dock hangar. 1951 to designs made c.1950-1, almost certainly by the British Ministry of Works as it followed the form of a wartime hangar used to service the Sunderland flying boats, but for the United States Air Force Strategic Air Command. Aluminium cladding on aluminium frame, with corrugated steel roof. Stepped 'T'-shape, with a long cantilevered front to create the long opening needed to accommodate the American B50Ds, KB29Ps, and later the B47 Stratojets that were based here. Folding doors on this long elevation of aluminium. Internal bracing also of aluminium. HISTORY: RAF Upper Heyford was established as a bomber station as part of the Home Defence Expansion Scheme of 1923. Following the breakdown of East-West relations with the Berlin Crisis of 1948, it was identified for use by the USAF Strategic Air Command in 1950 as a permanent site for its aircraft. The existing hangars were too small for the massive new bombers, so a specific hangar type was developed, known as a 'nose dock'. As the name suggests, the nose dock hangars sheltered only the

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LB4	Nose dock hangar at former RAF Upper Heyford (Building 325), GV II Reasons for Designation One of three hangars built in 1951 to service the first American nuclear-armed bombers deployed here as part of the Cold War. They have historic interest for their rarity, their demonstration of the special relationship between Britain and the United States, and they have technical interest in their early use of aluminium as a building material. They form a group with other structures recommended for scheduling that together make Upper Heyford a unique surviving ensemble. Details Nose dock hangar. 1951 to designs made c.1950-1, almost certainly by the British Ministry of Works as it followed the form of a wartime hangar used to service the Sunderland flying boats, but for the United States Air Force Strategic Air Command. Aluminium cladding on aluminium frame, with corrugated steel roof. Stepped 'T'-shape, with a long cantilevered front to create the long opening needed to accommodate the American B50Ds, KB29Ps, and later the B47 Stratojet that were based here. Folding doors on this long elevation of aluminium. Internal bracing also of aluminium. HISTORY: RAF Upper Heyford was established as a bomber station as part of the Home Defence Expansion Scheme of 1923. Following the breakdown of East-West relations with the Berlin Crisis of 1948, it was identified for use by the USAF Strategic Air Command in 1950 as a permanent site for its aircraft. The existing hangars were too small for the massive new bombers, so a specific hangar type was developed, known

TOR ref	Description
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Schedule entry

Cold War structures at the former Upper Heyford Airbase

Reasons for Designation
The archaeological remains of the Cold War are the physical manifestation of the global division between capitalism and communism that shaped the history of the late 20th century. Of particular resonance are the remains of the Cold War airbases, with their nuclear weapon capability which defined the military strategy of the period. This was based on providing a nuclear deterrent to the perceived threat to Western Europe from the Soviet Union. From the early 1950s, the doctrine of MAD (Mutually Assured Destruction) with its emphasis on the early use of nuclear weapons and massive retaliation led to the creation of ever larger and more advanced stockpiles of weapons and the necessary infrastructure to maintain and deliver them to their targets. Following the Cuban Missile Crisis of 1963 and partly as a result of changing military technology, the potentially apocalyptic policy of MAD, with its reliance on wholesale nuclear retaliation to a Soviet attack, was replaced during the 1960s and 1970s by the more pragmatic doctrine of `flexible response' designed to provide a graduated reaction to any Soviet aggression. Upper Heyford is representative of both the above strategic doctrines. During the 1950s, when it was one of the four main American bases in England used by the USAF Strategic Air Command (SAC), Upper Heyford hosted the long range strategic nuclear bombers, such as the B-47 Stratojet, which were the West's strike force prior to the development of Inter-Continental Ballistic Missiles (ICBM) in the early 1960s. The Northern Bomb Stores at Upper Heyford are illustrative of this period. The introduction of the ICBM and the long range B-52 Stratofortress, as well as the creation of Britain's nuclear armed V-force and US economy drives and involvement in the Vietnam War, meant that there was little development on US airbases during the late 1960s and early 1970s. However, the new tactics developed as a result of the `flexible response' strategy included the basing of the sophisticated F-111 all weather bombers at Upper Heyford. The primary role of these aircraft was to carry NATO's intermediate-range nuclear weapons and to be effective in this role they needed

to be ready for immediate take-off and were therefore permanently armed and located in `quick reaction alert' areas. The 1967 Arab-Israeli Six-Day War highlighted the vulnerability of aircraft in unprotected shelters and from the early 1970s, under the European Defence Improvement Programme, NATO began to build hardened shelters to ensure that sufficient forces would remain in the event of a Soviet pre-emptive strike to mount a counter-attack. This resulted in a range of new structures and security compounds at bases both in Germany and Britain including Hardened Aircraft Shelters (HASs), Hardened Avionics Maintenance buildings, Hardened Telephone Exchanges and Hardened Battle Command Centres, all contributing to the infrastructure required to protect and maintain aircraft capable of rapid launch in the event of a conflict with the Soviet Union. Upper Heyford therefore retains some of the key buildings related to the Cold War policy of deterrents. Within the context of Upper Heyford as a whole, they form an iconic group of related and nationally important Cold War buildings.

Details

A group of Cold War structures at the former Upper Heyford Airbase comprising five distinct areas of protection. These are, firstly, the QRA (quick reaction alert) or Victoria Alert Hardened Aircraft Shelter complex, including aircraft shelters, security fence, watch tower, fuel supply point and hardened crew building; and, secondly, to the north-east, the Northern Bomb Stores and Special Weapons Area contained within a security fence; thirdly, the Avionics Maintenance Facility; the fourth area of protection is the hardened Telephone Exchange; and fifth, the Battle Command Centre. Upper Heyford Airfield has a long history of military aviation activity which spans the 20th century. It retains a number of buildings and elements of its earlier World War II phases but its most important and unusual structures relate to its Cold War phase. The United States Air Force began to operate nuclear bombers at Upper Heyford in the 1950s and it is during this phase that the Northern Bomb Stores were built. These consisted of four individual concrete mounded `Igloo' stores built within a double fenced enclosure, a feature which typifies the protection against ground attack of nuclear facilities in the period. At each corner of this complex stood an octagonal guard tower on a concrete base. All but one of these towers have since been removed but the bases remain. As more specialised nuclear weapons and delivery systems were developed, the storage needs changed and a further double fenced Special Weapons Storage Area was built immediately to the west. This included a guardhouse and pillbox controlled entrance and a set of two rows of a total of twenty one Igloo cells for storing weapons. In addition, a further large Igloo store was also constructed along with a trigger store; built in concrete with no windows but disguised externally to look like a double storey office block. During the 1970s the change in aircraft design and capability led to a new policy of all weather and around-the-clock quick reaction. It was at this time that the key hardened buildings began to be constructed with a view to co-ordinating a NATO counter-attack to any pre-emptive strike by the Warsaw Pact. This included a hardened Battle Command Centre from which aircraft could be controlled and the airfield defence organised, a hardened telephone exchange to provide secure landline links around the field and to other NATO sites, and the Avionics Maintenance Facility. These structures all had decontamination facilities and generators to allow them to function after an attack. The Avionics facility was designed to continue to maintain aircraft, primarily F-111, for as long as possible after an attack, even when the aircraft were contaminated. Its size and construction reflect this. The aircraft themselves were housed, when on alert, in the Victoria Alert Hardened Aircraft Shelter complex, a complex of nine massive hardened aircraft shelters within a double fenced compound. The shelters each measured 21.5 metres wide by 36.6 metres long and stood up to 10 metres above ground level. Each housed a single 'ready to roll' aircraft and the complex also included hardened crew facilities, access to fuel and a steel Brunswick watch tower. In 1986 F-111s from Upper Heyford and Lakenheath attracted worldwide attention for a retaliatory strike on Libya, while in 1990 Upper Heyford's F-111s participated in operations Desert Shield after Iraq's invasion of Kuwait and Desert Storm to liberate Kuwait. In 1993 in the defence draw-down after the end of the Cold War, and in part due to the obsolescence of the F-111, the aircraft was withdrawn from the base. Shortly afterwards Upper Heyford was returned to the RAF which declared it surplus to military needs.

Appendix 2: Desk- based heritage assessment checklist

Cultural heritage information checklist		
Information from client	Site boundary	Yes
	Development description	Yes
Site/study area walkover /visit	Accompanying photographs & description	No
Mapping	Modern OS (ideally 1:10k raster) map data (larger sites with have 1:25/1:50k base mapping)	Yes
	*Historic OS map pack (see possible overlap with acquisition of Envirocheck report below)	No
	Estate maps; tithe maps; other where available and produced – area dependent if available online	N/A
Geological site data	BGS website research (bgs.ac.uk)	Yes
	Previous geotechnical site information, if such exists	Yes
	*Envirocheck/Landmark reports – if purchased for engineering purposes within project team	No
Consultation	Request for HER data for an agreed study area: LPA historic environment dept. & date received	Yes
Basic review of available information that informed the assessment		
Online research	National designation information	Yes
	Search of national and local records of England's historic sites and buildings (heritagegateway.org.uk; pastscape.org.uk)	Yes
	Literature review Archaeology data service (ads.ahds.ac.uk) to review 'grey literature' of previous archaeological site reports	Yes
	Medieval and modern history of British Isles: British history online (british-history.ac.uk) provides Victoria County History series	Yes
Detailed review of primary and secondary source material		
Baseline research - not all elements are required for all sites	Public libraries: local archival research; local relevant publications	No
	National libraries: NMR, Swindon	No
	Local societies – journal review	Yes
	Review of aerial photographs: LPA HER archive; NMR, Swindon & LiDAR/Google Earth	No

Cultural heritage constraints checklist		Yes /no
Scheduled monument	Within the development site boundary	No
	Within 250m of the site	No
	Within the study area and/or zone of visual influence	Yes
Listed building	Within the development site boundary	No
	Within 500m of the site	Yes
	Within the study area and/or zone of visual influence	Yes
World heritage site	Development lies within a world heritage site	No
	Development lies within the defined management plan area/buffer zone	No
Historic England Register of parks and gardens of special historic interest	Development lies within a nationally designated park and garden	No
	Development lies within 500m of a nationally designated park and garden	No
	Development lies within zone of visual influence	No

Historic England Register of Historic Battlefields	Development lies within a registered battlefield	No
	Development lies within 500m of a battlefield	No
Conservation area	Development lies within a conservation area	No
	Development lies within 250m of a conservation area	Yes
	Within the study area and/or zone of visual influence	Yes
Identified non-designated heritage assets		
Local list (where present)	Within the development site boundary	No
	Within 50m of the development site	No
	Within the study area	No
Inventory of local gardens (where present)	Development lies within a locally significant park and garden	No
	Development lies within 500m of a locally significant park and garden (on the HER)	No
Area of high archaeological potential (defined in LPA local plan)	Within the development site boundary	No
	Within 250m of the development site	No
	Within the study area	No
HER sites	Within the development site boundary	No
	Within 250m of the development site	Yes
	Within 500m of the development site	Yes
	Within the study area	Yes
Other	Known aerial photograph anomalies present on site (includes Google Earth & LiDAR)	No
	Study area has been subject of recent archaeological site evaluation/excavation	Yes
	Study area contains non-designated feature listed on Historic England at Risk register	No
	Study area has significant archaeological artefact(s) discovered through the Portable Antiquities Scheme	No

Appendix 3: Glossary of specific technical terms

Alluvium	Sediment laid down by a river. Can range from sands and gravels deposited by fast flowing water and clays that settle out of suspension during overbank flooding. Other deposits found on a valley floor are usually included in the term alluvium (e.g. peat).
Archaeological Priority Area (APA)	Area of archaeological priority, significance, potential or other title, designated by the local authority.
Bronze Age	2,000 – 600 BC
Early medieval	AD 410 – 1066. Also referred to as the Saxon period.
Evaluation (archaeological)	A limited programme of non–intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area.
Excavation (archaeological)	A programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological remains, retrieves artefacts, ecofacts and other remains within a specified area. The records made and objects gathered are studied and the results published in detail appropriate to the project design.
Findspot	Chance find/antiquarian discovery of artefact. The artefact has no known context, is either residual or indicates an area of archaeological activity.
Heritage asset	A building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include designated heritage assets and assets identified by the local planning authority (including local listing).
Historic England Archive	National database of archaeological sites, finds and events. Generally not as comprehensive as the county HER.
Historic Environment Record (HER)	Archaeological and built heritage database held and maintained by the local planning authority. Previously known as the Sites and Monuments Record
Iron Age	600 BC – AD 43
Later medieval	AD 1066 – 1500
Made Ground	Artificial deposit. An archaeologist would differentiate between modern made ground, containing identifiably modern inclusion such as concrete (but not brick or tile), and undated made ground, which may potentially contain deposits of archaeological interest.
Mesolithic	12,000 – 4,000 BC
Neolithic	4,000 – 2,000 BC
Ordnance Datum (OD)	A vertical datum used by Ordnance Survey as the basis for deriving altitudes on maps.
Palaeolithic	700,000–12,000 BC
Post-medieval	AD 1500 – present
Preservation by record	Archaeological mitigation strategy where archaeological remains are fully excavated and recorded archaeologically, and the results published. For remains of lesser significance, preservation by record might comprise an archaeological watching brief.
Roman	AD 43 – 410
Scheduled monument	An ancient monument or archaeological deposits designated by the Secretary of State as a ‘Scheduled Ancient Monument’ and protected under the Ancient Monuments Act.
Study area	Area surrounding a proposed development within which data is collected and analysed in order to set the site into its archaeological and historical context.

Figures

Site boundary

Land south of Heyford Grange, Letchmere Farm, Upper Heyford
PYE Homes

0 250 m

N

Figure 1: Aerial photograph of the site and surrounding area

Dwg no/174113	Revision
Status	11 October 2021
Scale: 1:10,000 @A3	Drawn by: JC / Checked by: SD

TERENCE O'ROURKE

LONDON
23 Heddon Street
London W1B 4BQ

BIRMINGHAM
Enterprise House 115 Edmund Street
Birmingham B3 2HJ

BOURNEMOUTH
Everdene House Deansleigh Road
Bournemouth BH7 7DU

TELEPHONE
020 3664 6755

www.torltd.co.uk

Site boundary

1km study area

Event points

Monument points

Aves Ditch

Event area

Scheduled monuments

Land south of Heyford Grange, Letchmere Farm, Upper Heyford

PYE Homes

0 250 m

N

Figure 2: Designated and non-designated archaeology assets within the 1km study area

Dwg no/174113	Revision
Status	11 October 2021
Scale: 1:10,000 @A3	Drawn by: JC / Checked by: SD

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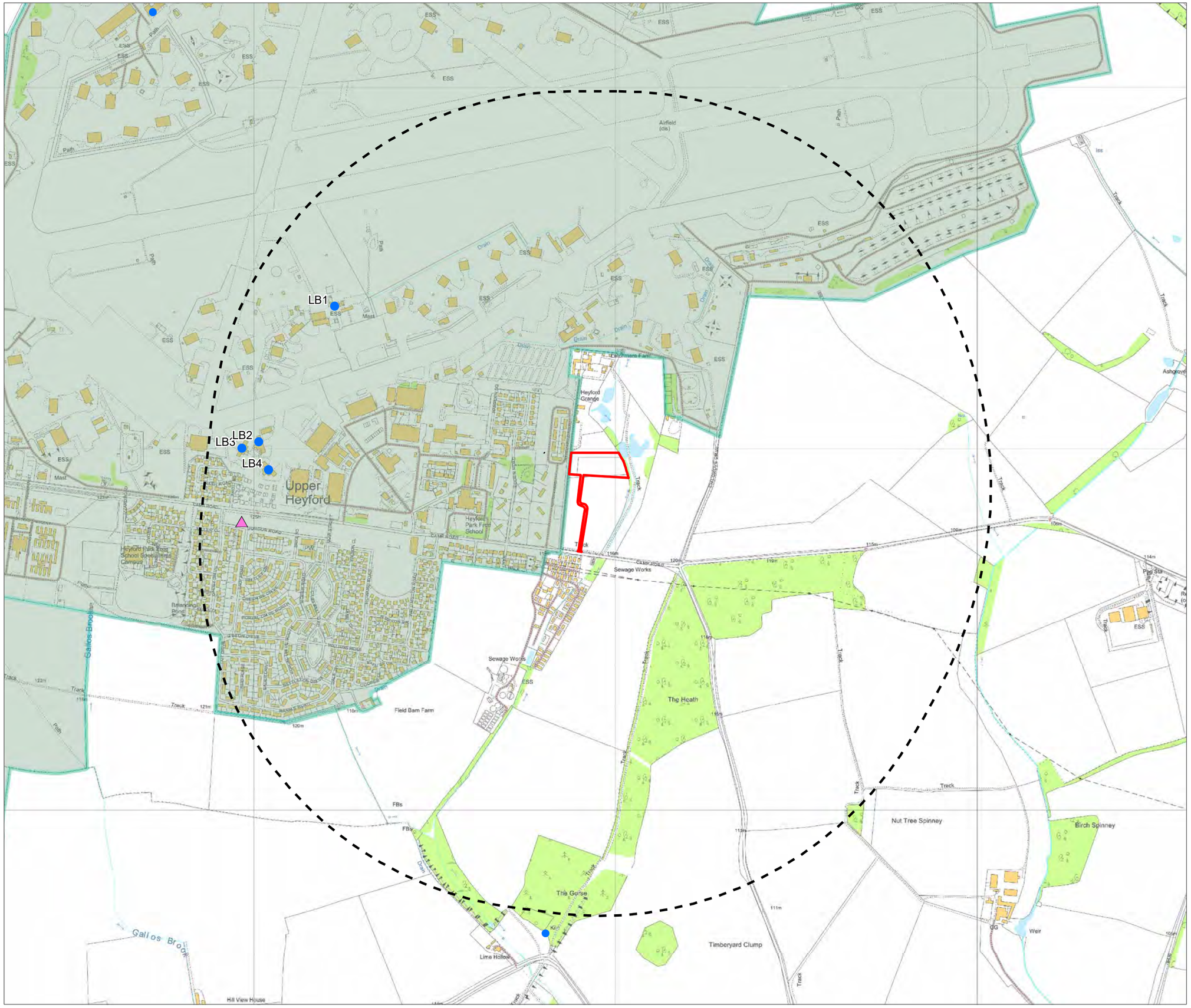

Site boundary

1km study area

Listed buildings

Water Tower, Former Upper Heyford Airbase

Conservation areas

Land south of Heyford Grange, Letchmere Farm, Upper Heyford

PYE Homes

0 250 m

N

Figure 3: Designated and non-designated built heritage assets within the 1km study area

Dwg no/174113	Revision	
Status	11 October 2021	
Scale: 1:10,000 @A3	Drawn by: JC	Checked by: SD

LONDON
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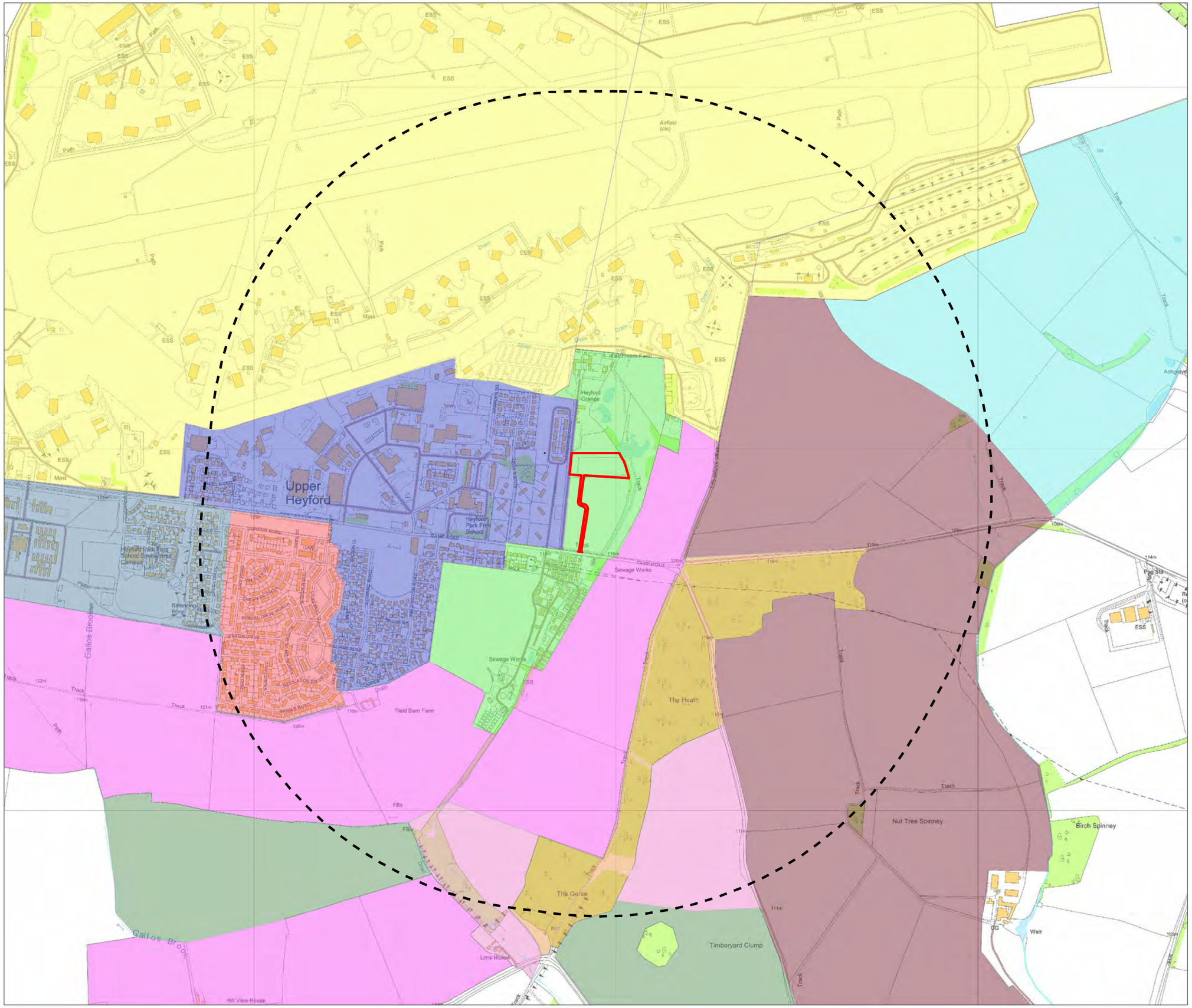

Land south of Heyford Grange, Letchmere Farm, Upper Heyford
PYE Homes

0 250 m

N

Figure 4: Historic Landscape Characterisation

Dwg no/174113	Revision	
Status	11 October 2021	
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