

Leavesden Park Abbots Langley Hertfordshire

Archaeological Strip, Map and Sample Excavation

for **Bellway Homes**

CA Project: 660054 CA Report: 13044

February 2013

Leavesden Park Abbots Langley Hertfordshire

Archaeological Strip, Map and Sample Excavation

CA Project: 660054 CA Report: 13044

prepared by	Simon Carlyle, Project Manager
date	17 January 2013
checked by	Simon Carlyle, Project Manager
date	8 February 2013
approved by	Roland Smith, Regional Manager
signed	
date	15 February 2013
issue	01

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

© Cotswold Archaeology

Cirencester

Building 11 Kemble Enterprise Park Kemble, Cirencester Gloucestershire, GL7 6BQ t. 01285 771022

Milton Keynes

Unit 4
Cromwell Business Centre
Howard Way, Newport Pagnell
MK16 9QS
t. 01908 218320

e. enquiries@cotswoldarchaeology.co.uk

Andover

Office 49
Basepoint Business Centre
Caxton Close, Andover
Hampshire, SP10 3FG
t. 01264 326549

CONTENTS

1.	INTRODUCTION5
2.	FIELDWORK RESULTS
3.	DISCUSSION
4.	CA PROJECT TEAM19
5.	REFERENCES19
APPEN APPEN	IDIX A: SUMMARY OF FEATURES AND DEPOSITS
LIST O	F ILLUSTRATIONS
Fig. 1 Fig. 2	Site location plan, 1:25,000 Trench location plan, showing evaluation trenches and archaeological features.
rig. Z	1:2000
Fig. 3	Area A, section
Fig. 4	Area B/C, plan showing archaeological features
Fig. 5	Area B/C, looking south-west
Fig. 6	Area B/C, ditch 163, looking east
Fig. 7	Area B/C, ditch 174, looking west
Fig. 8	Area B/C, ditch 106, looking west
Fig. 9	Area B/C, section
Fig. 10	Area B/C, pit 89, looking east
Fig. 11	Area E, plan showing archaeological features
Fig. 12	Area E, pit 31, horse burial, looking north
Fig. 13	Area E, ditches 24 and 26, looking north
Fig. 14	Area F, plan showing archaeological features
Fig. 15	Area F, ditches 15 and 17, looking south-west
Fig. 16	Extract from 1883 First Edition Ordnance Survey Map, showing Area B/C

SUMMARY

Project name: Leavesden Park, Abbots Langley
Location: Abbots Langley, Hertfordshire

NGR: TL 0986 0086

Type: Strip, Map and Sample Excavation

Date: February 2013

Site code: LEV 12

Accession no. 02/21/03 (2012)

During October and November 2012, an archaeological strip, map and sample excavation was undertaken by Cotswold Archaeology on the site of the former aerodrome and aircraft works at Leavesden Park, Abbots Langley, Hertfordshire (site centred on NGR: TL 0986 0086; Fig. 1). The work, which was commissioned by Bellway Homes, was carried out prior to the development of the site for housing, with associated parking, access, infrastructure and public open space.

The excavations at Leavesden Park uncovered the remains of the post-medieval and modern agricultural landscape that preceded the development of the airfield and aircraft factories in 1940. These remains comprised field boundaries, gravel pits, the probable remains of orchard planting and a parallel arrangement of two lines of closely-set, sub-rectangular pits of uncertain function that ran parallel to one of the field boundaries. Many of the field boundaries correspond with those shown on 19th-century maps of the area. Evidence for earlier activity, particularly dating to the prehistoric period, was sparse; with the probable exception of a solitary prehistoric posthole, no features could be dated with any certainty to this period.

1. INTRODUCTION

- 1.1 During October and November 2012, an archaeological strip, map and sample excavation was undertaken by Cotswold Archaeology (CA) on the site of the former aerodrome and aircraft works at Leavesden Park, Abbots Langley, Hertfordshire (site centred on NGR: TL 0986 0086; Fig. 1). The work, which was commissioned by Bellway Homes, was carried out prior to the development of the site for housing, with associated parking, access, infrastructure and public open space.
- Outline planning permission for the development has been granted by Three Rivers District Council (planning reference: 10/2230/OUT), conditional on a programme of archaeological investigation being undertaken on the site (Conditions 20 and 21). The scope of the archaeological works was set out in a *Written Scheme of Investigation* (WSI) that was prepared by CA (2012) following consultation with Andy Instone, Hertfordshire County Council's Planning Archaeologist (HCCPA) and archaeological advisor to Three Rivers District Council. This was approved by Andy Instone prior to fieldwork commencing, thereby fulfilling planning Condition 20. The investigation comprised strip, map and sample excavation in four areas (Areas A, B/C, E and F), centred on locations where archaeological remains had previously been identified by trial trench evaluation (CAT 2000b).
- 1.3 The project was undertaken in accordance with the WSI issued by CA (CA 2012), which was prepared following best practice, as set out in the Institute for Archaeologists' Standard and Guidance for Archaeological Excavation (IfA 2008), and the English Heritage procedural documents Management of Archaeological Projects 2 (EH 1991) and the Management of Research Projects in the Historic Environment (MoRPHE): Project Manager's Guide (EH 2006). The fieldwork was monitored by Andy Instone, HCCPA, throughout the project.

The site

1.4 The site covers an area of approximately 13.8ha and comprises the north-eastern part of the former Leavesden Aerodrome, which is located in Abbots Langley, approximately 4km to the north of Watford town centre. It is bounded to the north by South Way, to the east by Langley Lane, to the south by Aerodrome Way and to the west by the Warner Bros. Studios. The site was formerly occupied by a large aircraft factory (now demolished) and other buildings and infrastructure associated with the operation of the aerodrome. The site of the factory is still evident in the

eastern part of the site as an extensive area of concrete hard-standing, tiled floors and wall foundations, surrounded by bunds of soil and large areas of made-ground. The western part of the site is largely open grassland covering extensive areas of made-ground, with several small buildings along the northern perimeter.

1.5 The ground is extremely flat and lies at approximately 100m above Ordnance Datum (aOD). The bedrock comprises Cretaceous Chalk of the Seaford Formation, overlain by drift deposits of Sand and Gravel of the Gerrards Cross Formation (BGS 2013).

Historical and archaeological background

The historical and archaeological background to the site has been presented in detail in the archaeological assessment (CAT 2000a) and cultural heritage assessment (CA 2010) prepared by CA. In brief, they established that the site lay close to areas of known archaeology, predominately dating to the Late Iron Age and Roman periods. Earlier remains dating to the Bronze Age were located nearby during the evaluation carried out by CA (CAT 2000b) and a number of undated features were found within the site during the same phase of evaluation, so there was considered to be a potential for prehistoric and Roman features to occur within the site. The site, occupying part of Leavesden Aerodrome, was also of interest in relation to its more recent history as a centre of aircraft manufacture during World War II.

Bronze Age

1.7 Evidence for Bronze Age settlement and activity in the area is sparse, with the location of the nearest known features, a small group of late Bronze Age pits, lying c. 0.4km to the south-west of the current site, to the south of the film studios (CAT 2000b). A Bronze Age ditch has also been recorded c. 1km to the south of the site, at the southern end of the aerodrome (*ibid*).

Iron Age and Roman

1.8 Archaeological investigations carried out by Oxford Archaeology Unit in 1998, on two large blocks of land between Aerodrome Way and High Road, identified the remains of Iron Age and Roman settlement in the area now occupied by the northern end of Royce Grove, c. 200m to the south of the site. The settlement comprised ditches, pits, post-holes and a corn drier, from which was recovered a large quantity of pottery and metalwork of a similar date (OAU 1998; Brossler et al

- 2010). No archaeological remains were encountered in the evaluated area immediately to the east of the current site, adjacent to Area B/C.
- 1.9 A subsequent evaluation carried out by CA in 2000 identified further Iron Age remains to the west of Aerodrome Way, *c.* 200m to the south of the site (CAT 2000b); these were located immediately to the west of the settlement investigated by OAU and are probably associated peripheral features.
- 1.10 A small quantity of Iron Age and Roman pottery has been recovered as surface finds near Broomfield Rise, *c.* 0.7km to the west of the site.

Early medieval (AD 410 - 1066) and medieval (1066 - 1539)

1.11 There are no known medieval remains within the site and the nearest site potentially of medieval date is that of a possible moated manor at Hunter's Hall, approximately 150m to the east. It is likely that the land now forming the current site was farmland or woodland throughout the medieval period. A small quantity of medieval pottery has been recovered from beneath a hedgerow, some 300m to the south-east of the site.

Post-medieval (1540-1800) and modern (1801-present)

- 1.12 The land continued in agricultural use throughout the post-medieval and early modern periods and map evidence shows that the land remained undeveloped until the mid 20th century. It is first depicted on the 1839 Tithe Map of Abbots Langley, at which time the land now occupied by the current site was divided into seven fields and included part of Hill Farm. Several farm buildings are shown extending into the site, although these are no longer extant and the site of the farmhouse now lies under a road and a modern housing estate. The site remained relatively unchanged until the development of Leavesden Aerodrome in 1940.
- 1.13 There are a number of Listed buildings in the surrounding area that date from the post-medieval period and the site of three 17th-century houses, now demolished, lies 450m to the south-east of the site.

Leavesden Aerodrome

1.14 Leavesden Aerodrome was established in 1940, when the Ministry of Aircraft Production purchased 300ha of land and constructed a *c.* 1000m concrete runway, along with two large aircraft factory complexes. RAF Leavesden was initially

intended for the construction of Halifax bombers and just over 700 bombers were constructed there before the aerodrome was taken over by the de Havilland Company in 1941 (Peerless and Riding 2011). They converted the factories to the production and final assembly of Mosquito fighter-bombers. The remains of Aircraft Factory No. 2 lie within the eastern part of the site, where only the floor slab and foundations survive. Production continued until 1946, by which time over 4000 aircraft had been built. In the post-war years the airfield passed to Hawker Siddeley for a brief period, before being taken over by Rolls Royce as a major centre of aircraft engine production. The factory closed in 1993 and part of the aerodrome was sold off for use as film studios, with the remainder being offered for development.

- 1.15 A large corrugated metal building was located in the northern part of the site, between Areas E and F. This building, which first appears on aerial photographs dating from 1946 so probably dates to the war years, was recently recorded by CA (CA forthcoming) and has since been demolished.
- 1.16 Nineteen evaluation trenches were excavated within the site by CA in 2000. These revealed extensive areas of made-ground and a small number of undated features that were targeted by the current investigation. These comprised: a post-hole and a pit in Area A; three ditches in Area B/C; a gully and ditch in Area E; and two ditches in Area F (CAT 2000b).

Archaeological objectives

- 1.17 The objectives of the strip, map and sample excavation, as outlined in the WSI prepared by CA (2012), were to:
 - ensure the adequate record of any buried archaeological remains that may be exposed within the defined strip, map and sample areas prior to their removal by development; and any additional archaeological mitigation required for additional proposed works impacting on archaeological deposits;
 - produce a plan of all archaeological features exposed within the defined strip, map and sample area;
 - investigate and record exposed archaeological features/deposits in order to clarify both their date, character, and significance and to provide a clear understanding of their chronology;
 - ensure that any artefacts/environmental evidence is recorded, assessed and, if appropriate, analyzed to an acceptable standard;

make publicly available the results of the investigations.

Methodology

- 1.18 The four excavation areas (Areas A, B/C, E and F; Fig. 2) and archaeological features were surveyed using a Leica 1200 series SmartRover GPS and the data has been related to OS National Grid (NGR) co-ordinates.
- 1.19 The topsoil and subsoil were removed, under continuous archaeological supervision, by a tracked mechanical excavator fitted with a toothless ditching bucket. The ground level was reduced to the top of the archaeological horizon or the geological substrate, whichever was encountered first. The generated spoil was scanned in order to maximise the recovery of archaeological artefacts.
- 1.20 The stripped surface was cleaned and the excavation area was planned and recorded in accordance with CA's *Technical Manual 1: Fieldwork Recording Manual* (CA 2007). Each context was recorded on a *pro-forma* context sheet by written and measured description; a hand-drawn plan (scale 1:50) and drawn sections (scale 1:10) were produced. Where detailed feature planning was undertaken using GPS, this was carried out in accordance with *Technical Manual 4: Survey Manual* (CA 2009). Photographs (black and white negative and digital colour) were taken as appropriate.
- 1.21 All finds were bagged separately and related to the context record. All recovered artefacts were processed in accordance with *Technical Manual 3: Treatment of Finds Immediately after Excavation* (CA 2010). Soil samples were taken from archaeological deposits in accordance with *Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites* (CA 2003) and *Environmental Archaeology: a guide to the theory and practice of methods from sampling and recovery to post excavation* (EH 2011).
- 1.22 The stripped surface of the excavation area and the spoil heaps were scanned with a metal detector to maximise the recovery of archaeologically significant metal objects.
- 1.23 The archive from the excavation is currently held by CA at their office in Milton Keynes. This will be deposited with The Three Rivers Museum, accession no. 02/21/03 (2012). A summary of information from this project, as set out in Appendix

C, has been entered onto the OASIS online database of archaeological projects in Britain, reference 'cotswold2-144409'.

2. FIELDWORK RESULTS

Area A

- 2.1 Area A, which covered *c.* 0.2ha, was situated on the western edge of the expanse of open grassland that forms the western part of the site (Fig. 2). It targeted Trench 40 of the evaluation, which had identified an undated pit and posthole and a number of other discrete features, possibly of natural origin (CAT 2000b).
- 2.2 The geological substrate, which was encountered at a depth of *c.* 0.9m below current ground level (bcgl), occurred as mid reddish-brown silty clay with broad patches of sand and gravel, 51. The overlying subsoil, 50, was approximately 0.18m thick and was succeeded by two layers of modern made-ground, 49 and 48, that had a combined thickness of *c.* 0.5m. The composition of the made-ground varied across the site and four other made-ground deposits were recorded within the area (56 to 59). The made-ground was covered with a layer, approximately 0.25m thick, of redeposited topsoil, 47.
- 2.3 Beneath the subsoil and partly exposed at the western edge of the excavation area was a small, discrete feature, possibly a posthole, 52, with a diameter of 0.4m and depth of 0.25m (Fig. 3). The feature contained six flint flakes, suggesting that it may be prehistoric in date. It was not possible to extend the excavation area to the west to fully expose the feature due to the proximity of live services. The pit and posthole previously identified by the evaluation were not located and the irregular patches were confirmed as naturally-formed features, either vegetation hollows or natural variations in the gravel.

Area B/C

2.4 Area B/C bordered the south-eastern perimeter of the site, in the area of open grassland adjacent to Aerodrome Way, and covered an area of *c*. 0.4ha (Figs. 4 and 5). The excavation investigated the features revealed in Trenches 36, 43 and 44 of the evaluation carried out by CA (CAT 2000b). The area to the south-east of the site, on the south side of Aerodrome Way, was evaluated by Oxford Archaeology in 1998; no significant archaeological remains were found in this area.

2.5 The geological substrate, which was encountered at a depth of *c*. 1.0m bcgl, was mid reddish-brown silty clay with extensive patches of gravel and occasional patches of yellow clay, 61. There was virtually no subsoil and the overlying deposits comprised successive layers of modern made-ground, sealed by redeposited topsoil, 60. Remnants of the original land surface were only encountered in the northern part of the site, where subsoil and topsoil, 82 and 81 respectively, were buried beneath almost 1.0m of made-ground.

Post-medieval or earlier

- Although undated, potentially the earliest features were two small, roughly parallel ditches, 163 and 174, which were aligned west-north-west to east-south-east and were spaced *c*. 8m apart. The ditches, which were previously investigated in Trench 36 of the evaluation, measured approximately 1m wide by up to 0.45m deep (Figs. 6 and 7). Pieces of ironworking slag were recovered from ditch 174 and a soil sample from the same ditch contained small quantities of charcoal. There was a small break in the line of ditch 174, which continued westwards as ditch 177; an abraded flint flake was recovered from this ditch.
- 2.7 One of the ditches was cut by a later ditch, 149, that probably forms part of the post-medieval/modern field system, so it is possible that ditches 163 and 174 lay either side of an earlier farm track that predates the establishment of the field boundaries.

Post-medieval and modern

- 2.8 In the northern half of Area B/C, excavation revealed part of a post-medieval/modern field boundary system. The ditches correspond with field boundaries depicted on 19th-century maps of the area.
- 2.9 The easternmost ditch, 98, crossed the northern end of the excavation area on a north to south alignment. It measured approximately 1.15m wide by 0.32m deep and had a broad, concave profile. Close to the south-eastern boundary of the site it formed a junction with ditch 106, which was of a similar size and profile and extended to the west (Fig. 8); the continuation of the ditch to the east could not be determined as it extended beyond the limits of the site. A short length of ditch at the southern end of the excavation area, ditch 149, may form part of the same ditch system, although it is further to the east than the boundary shown on historic maps.

- 2.10 In the south-east corner of the former field formed by ditches 98 and 106 was a large, irregular feature, 143. It measured approximately 12m in diameter and its fill contained fragments of brick and other modern material (not collected). The feature may have been a small gravel pit or a cattle-trampled area in a wet corner of the field, possibly at a gate into the adjacent field. Three smaller features 62, 141 and 145 lay immediately to the east of this feature and are probably associated with gravel extraction; clinker and tile were recovered from the fills of pit 62.
- 2.11 An elongated, somewhat irregular pit-like feature, 83, extended south-eastwards from the north-western edge of the area. The edge of the feature appeared to turn in near the limits of the site, suggesting that it is a pit and not a ditch. It measured approximately 7m long by 2m wide by 0.8m deep and had a steep-sided U-shaped profile that splayed out near the surface. The feature, which is undated, may be associated with gravel extraction (Fig. 9).
- 2.12 Parallel and *c.* 3m to the south of ditch 106 was a line of rectangular to sub-rectangular pits (Pit Alignment A). They measured approximately 2m long by 0.6m wide and varied in depth between 0.2m and 0.5m, although most were less than 0.3m deep (Fig. 10). The fills of the pits contained clinker, brick and tile fragments, pieces of coal, post-medieval pottery and a fragment of clay pipe stem. A similar alignment of pits (Pit Alignment B) extended across the southern corner of the area, parallel and 40m to the south of Pit Alignment A. The pits were rectangular in plan and cut ditch 149.

Area E

- 2.13 Area E, which covered *c*. 0.42ha, was located in the north-eastern corner of the site, bordering South Way (Fig. 11). It targeted three undated ditches that had been identified in Trenches 52 and 53 of the evaluation. With the agreement of HCCPA, the southern part of the area, as shown in the original plan of the excavation areas that accompanied the WSI, was not excavated as it was occupied by 15m high conifers and extended under the road leading westwards from the Langley Lane entrance to the site.
- 2.14 The geological substrate, which occurred as gravel in a mid reddish-brown silty clay matrix with patches of mid reddish-brown sandy clay, 23, was buried beneath redeposited topsoil, 21, and extensive bunds of soil that had been positioned along the northern and eastern edges of the area. There were intermittent patches of

redeposited gravel across the site, 22, suggesting that the site may have been truncated and levelled.

- 2.15 Excavation revealed the three small ditches previously identified in the trial trenches and a pit containing the skeletal remains of a small horse. The horse burial, which had been placed within a sub-rectangular pit, 31, was probably the earliest feature in this area; the date of the burial is unknown but it predates the ditches that cut through it. The pit measured 2.0m long by 1.6m wide by 0.22m deep and the carcass had been positioned on its side with its head to the north and its limbs pointing to the west (Fig. 12).
- 2.16 The animal burial had been extensively truncated by the cutting of two ditches, 41 and 45, which had removed its skull, most of the long bones and part of the upper thorax. The earlier of the two ditches, 45, which measured 0.6m wide by 0.32m deep, extended southwards from the northern edge of the site for a distance of *c*. 20m then curved to the south-south-west before petering out near its southern edge. The date of the ditch is uncertain, although two abraded flint flakes were recovered from its fill. It was cut by ditch 41, which was wider but slightly shallower, measuring 0.8m wide by 0.24m deep and extended across the entire area on a north to south alignment for a distance of *c*. 39m (Fig. 13). Sherds of mid 19th-century pottery, fragments of bottle glass and a large fragment of brick were recovered from the fill of the ditch. The ditches were sampled for environmental material but only produced a small quantity of wind-blown charcoal and commonly occurring plant seeds; small amounts of ironworking slag were recovered from the modern ditch, 41.
- 2.17 Ditch 38, which ran parallel and *c*. 8m to the west of ditch 26 for a distance of *c*. 20m before terminating abruptly, measured 0.45m wide by 0.26m deep. Its rigid linearity and uniformly parallel sides suggest that it is a modern feature and probably machine-cut.

Area F

2.18 This area, a roughly triangular block of land covering *c.* 0.08ha, was located in the north-eastern corner of the site, in an area of scrubby, derelict land to the rear of properties fronting on to Langley Lane (Fig. 14). It targeted two ditches that had previously been identified in Trench 56 of the evaluation (CAT 2000b). The southern edge of the area was not excavated due to the presence of a live electricity cable.

- 2.19 The geological substrate, which was encountered at a depth of *c*. 0.3m bcgl, occurred as gravel in a mid reddish-brown silty clay matrix with patches of mid reddish-brown sandy clay, 5. The surface of the gravel was very clean and level and there was no subsoil, suggesting that the ground level had previously been reduced and that the topsoil, 1, was redeposited. There was a patch of redeposited gravel containing brick fragments beneath the topsoil in the eastern corner of the site.
- 2.20 The two small ditches previously identified in the trial trench were investigated. The earlier of the two, ditch 17, was aligned roughly east to west and measured 0.5m wide by 0.18m deep. It was cut by ditch 15, which was slightly wider, at approximately 0.6m wide, and on a more north-easterly alignment. The ditches remain undated, but they did contain several struck flint flakes; the abraded condition of the flakes suggests that they are residual. Soil samples taken from these ditches contained a small quantity of wind-blown charcoal and a ubiquitous assemblage of common weed seeds, most of which are probably intrusive.
- 2.21 Irregular, shallow vegetation hollows formed by the roots of trees, were evident across the area and one of these, 10, contained an abraded sherd of possible Roman pottery.

Finds and palaeoenvironmental evidence

Finds by Ed McSloy

2.22 Artefactual material was recorded from 23 deposits (Appendix B, Table 1). Most material was hand-recovered with small quantities of ceramic building material and industrial residue from bulk soil samples. The majority of dateable finds, mostly comprising ceramic building material and pottery, relate to the post-medieval and modern periods. In addition there are quantities of prehistoric worked flint and a single sherd of Roman pottery.

Worked (and burnt) flint

2.23 A total of 17 pieces of worked or heat-affected flint was recovered with material relating to ten separate deposits. None among this group featured secondary working and there were few other indications of dating. Raw material consists of grey-coloured flint of indifferent quality, most pieces exhibiting internal flaws. With the exception of a small flake from the fill, 42, of ditch 41, which is lightly patinated,

the flint is unaffected by cortication. The majority of pieces exhibit light to moderate edge damage which is consistent with this being a re-deposited group. The degree of heat damage to the burnt pieces is variable, only that from the fill, 4, of ditch 3 being fully calcined. As a small and dispersed group lacking dateable tools, little further comment can be offered. The majority comprises flake removals lacking evidence for preparation and typically of broader 'squat' proportions. Although such characteristics may in part relate to the qualities of the raw material they are consistent with flaking technologies typical in the later Neolithic and Early to Middle Bronze Age. Most are primary or tertiary flakes with little or no cortex, suggesting that initial reduction has taken place elsewhere.

Pottery: Roman

2.24 A single, moderately abraded sherd from the fill, 14, of vegetation hollow 10 is tentatively ascribed a Roman date. It comprises an unfeatured bodysherd in an oxidised (pale orange-firing) fabric with sparse quartz inclusions.

Post-medieval and modern

2.25 A small sherd in black-glazed, pale-bodied earthenware from the fill, 92, of pit 91 dates no earlier than the 18th century. Material from the fill, 42, of ditch 41 consists of three sherds from the same transfer print-decorated bowl or plate that probably dates to the mid 19th century.

Other finds

- 2.26 A small clay tobacco pipe fragment from deposit 103, the fill of pit 102, features moulded ribs comparing to 19th-century pipes. The quantities of ceramic building material comprise mainly flat tile fragments typical of material produced across the later medieval and post-medieval periods. Most fragments occur in a hard orange or red-firing fabric appropriate for dating in the post-medieval period. A brick fragment from the fill, 35, of ditch 34 is of chamfered form and from its dimensions should date to the 17th or 18th centuries.
- 2.27 Indications for industrial activity were recorded from pit deposits 66 and 103 in the form of clinker (expended fuel). Very small quantities of probable ironworking slag were recorded from soil samples 3 and 6, taken from ditches 41 and 174.

Animal bone by Jonny Geber

- 2.28 A small collection of poor to moderately well-preserved animal bones were recovered from three contexts (Appendix B, Table 2). Deposit 32, the fill of pit 31, contained the highest abundance of animal bone, comprising 107 fragments of a large-sized mammal of which 26 could be identified as horse (Equus caballus). These all derived from the same animal, and included one cervical, twelve thoracic and six lumbar vertebrae, the sacrum, one right rib fragment of the left coxae and the complete ditto from opposite side, and the femora. Two lumbar vertebrae displayed a complete ankylosis, which probably indicate that this animal was of a mature age.
- 2.29 The remaining two contexts, both from pit 62, contained only one bone each; deposit 67 included a poorly preserved cattle (*Bos taurus*) molar tooth and deposit 71 a left mandible of an aged sheep/goat (*Ovis aries/Capra hircus*).
- 2.30 The small size of the assemblage does not allow for any discussion.

Palaeoenvironmental evidence by Sarah Cobain

- 2.31 Six environmental soil samples (120 litres of soil) were retrieved from six deposits with the intention of recovering evidence of agricultural, industrial or domestic activity. The samples were processed by standard flotation procedures (CA Technical Manual No. 2) and the results are presented in Appendix B, Table 3.
- 2.32 The samples were extremely poor in terms of their carbonised plant macrofossil content, with two of the six (Samples 1 and 6) containing no plant macrofossils at all and the remainder only a small selection of modern seeds most likely incorporated through bioturbation.
- 2.33 The charcoal from the ditches was very poorly preserved, highly fragmented and only present in small quantities. Where identifiable, from the samples taken from ditches 36 and 88, a small amount of oak spp., possible cherry spp. and possible hawthorn/rowan/crab apple spp. were identified. The poor preservation and highly fragmented nature of this charcoal means it is most likely residual, wind-blown material from the surrounding environment.

3. DISCUSSION

- 3.1 The excavations at Leavesden Park uncovered the remains of the post-medieval and modern agricultural landscape that preceded the development of the airfield and aircraft factories in 1940. These remains comprised field boundaries, gravel pits, the probable remains of orchard planting and a parallel arrangement of two lines of closely-set, sub-rectangular pits of uncertain function that ran parallel to one of the field boundaries. Evidence for earlier activity, particularly dating to the prehistoric period, was sparse; with the probable exception of a solitary prehistoric posthole, no features could be dated with any certainty to this period.
- 3.2 The excavations broadly confirm the findings of the evaluation conducted by CA in 2000 (CAT 2000b) and characterise it as an area that largely lay within the hinterland of the Iron Age and Roman settlement investigated by Oxford Archaeology in the late 1990s. The evidence suggests that since at least the medieval period until its development as an airfield in 1940 the land forming the current site has predominately been used for agriculture.
- 3.3 The probable prehistoric posthole, which was located close to the northern edge of the site in Area A, adds little to the picture of prehistoric land-use and settlement in the area, although it does indicate activity on the site at this time. The flint flakes recovered from the feature, which were waste flakes displaying no evidence for secondary working, shed no light on the type of activity that may have taken place on the site.
- There were a number of small ditches in Areas B/C, E and F that appeared to predate the post-medieval/modern arrangement of field boundaries; these consist of ditches 163, 174/177 in Area B/C, ditch 45 in Area E and ditches 15 and 17 in Area F. It is possible that they may be prehistoric, Roman or medieval in date, although the evidence for a date much before the post-medieval period is inconclusive. The absence of artefactual material from these ditches, with the exception of several abraded and in all likelihood residual flint flakes, the lack of associated features and the poor environmental assemblages from their fills suggest that they lie at an appreciable distance from areas of settlement and are the remains of field boundaries or are associated with other agricultural activities. It is possible that ditches 163 and 174/177 may border a farm track.

- 3.5 The animal burial in Area E, comprising the relatively well-preserved although extremely truncated skeletal remains of a small horse, is undated although it was cut by two ditches, one of which dates to at least the 18th or 19th century, indicating a date for the burial prior to this period. The apparent isolation of the burial and the absence of other finds suggest that the remains are probably those of a farm horse, buried in a convenient corner of a field, rather than those of an earlier ritual burial.
- 3.6 The antiquity of the field system and the character of the medieval agricultural landscape around Abbots Langley are uncertain as there has been little research into the historic field patterns and former land-use in this corner of the county. In the medieval period most of the land belonged to the Abbey of St Albans and in the Domesday Book of 1086, it was recorded as being '...15 plough lands with meadow for 5 ploughs and 2 mills worth 20s'; the area appears to have been well-wooded, as it was assessed at 300 swine (VCH 1908). How much of this landscape was incorporated into the post-medieval and modern landscapes is unclear, but it seems likely, given the relative uniformity in the shape and size of the fields shown on the 1839 Tithe Map of the area, that most of the field boundaries and the arrangement of fields are relatively recent in date.
- 3.7 Most of the features encountered in the excavation areas relate to this post-medieval and modern landscape of relatively large, rectangular fields and small orchards. In Area B/C, ditches 98 and 106 correspond with the field boundaries shown forming the intersection between three fields on the 1839 Tithe Map of Abbots Langley and 1883 First Edition Ordnance Survey Map (Fig. 16), and ditch 41 in Area E corresponds with the western boundary of the orchard shown to the north-west of Hill Farm. The numerous root boles in Area F, which was located in the area of a former orchard adjacent to Hill Farm, were probably formed by orchard planting.
- 3.8 The pits in Area B/C, which were probably dug to extract gravel, were located at or close to the edges of the former fields and those that were excavated contained clinker and fragments of tile, indicating a late date for their excavation. The large feature in the corner of one of the fields, pit 143, may be a quarry pit, but its irregular shape and location resembles the muddy, trampled hollows formed by cattle at the corner of a field by an entrance; the brick rubble noted in this area may have been dumped here to firm up the ground. The purpose of the post-medieval/modern double pit alignment, which respects the east to west alignment of the field boundary, ditch 106, is unknown.

3.9 Modern made-ground, which was recorded across the entire site, is related to the development of the airfield and runway in 1940. The natural topography of the area is generally very flat, but earth-moving associated with the construction of the aerodrome, particularly the runway, would have required soil to be redeposited within the site.

4. CA PROJECT TEAM

4.1 The fieldwork was directed by Jeremy Mordue, assisted by Vasileios Tsamis and Derek Evans. The excavation team were Mark Patenall, Paolo Clemente, Peter James, Dan Riley and Rob Scott. The report was written by Simon Carlyle, with contributions from Ed McSloy, Sarah Cobain and Jonny Geber, and the illustrations were prepared by Ian Atkins. The project was managed for CA by Simon Carlyle.

5. REFERENCES

Brossler, A, Laws, G and Welsh, K 2010 'An Iron Age and Roman Site at Leavesden Aerodrome, Abbots Langley, Near Watford, Hertfordshire' in *Hertfordshire Archaeology*, **16**

CAT (Cotswold Archaeological Trust) 2000a Leavesden Park, Watford, Hertfordshire: Archaeological Assessment, report **1165**

CAT (Cotswold Archaeological Trust) 2000b Leavesden Park, Watford, Hertfordshire: Archaeological Evaluation, report **1201**

CA (Cotswold Archaeology) 2010a *Leavesden Park, Abbots Langley, Hertfordshire:* Cultural Heritage Assessment, report **10085**

OAU (Oxford Archaeology Unit) 1998 Leavesden Aerodrome, Abbots Langley, Watford, Hertfordshire: Archaeological Evaluation Interim Report

Peerless, G and Riding, R, 2011 Leavesden Aerodrome: From Halifaxes to Hogwarts, Stroud, Amberley Publishing

VCH (Victoria County History) 1908 A History of the County of Hertford, Volume 2, 323-328

APPENDIX A: SUMMARY OF FEATURES AND DEPOSITS

Abbreviations: F flint; P pottery; G glass; T tile, Sg slag, FC fired clay; CP clay pipe; B animal bone; n.e. not excavated

Area A

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
47	Topsoil	Dark brownish-grey silty loam with moderate sub-rounded flint pebbles, redeposited.	-	-	0.24	-	Modern
48	Made- ground	Mid yellowish- brown silty sand with frequent sub-rounded flint, redeposited.	ı	1	0.17	-	Modern
49	Buried soil	Mid greyish-brown sandy silt with occasional large sub-rounded flint pebbles.	-	-	0.03	-	Modern
50	Subsoil	Mid greyish-brown clayey silt with occasional sub-rounded flint pebbles.	-	-	0.18	-	Post- medieval
51	Geology	Mid reddish-brown silty clay with occasional sub-rounded flint pebbles.	-	-	-	-	-
52	Posthole	Sub-circular cut, steep-sided, concave base.	0.38	0.18+	0.25	-	Prehistoric
53	Fill of 52	Light bluish-grey silty sand with frequent sub-rounded flint pebbles.	-	-	0.08	-	-
54	Fill of 52	Dark bluish-grey silty sand with frequent sub-rounded flint pebbles.	-	1	0.08	F	-
55	Fill of 52	Light greyish-brown silty sand with moderate sub-rounded flint pebbles.	-	-	0.25	F	-
56	Made- ground	Mid greyish-brown clayey silt with freq. sub-rounded flint pebbles.	-	1	0.20	-	Modern
57	Made- ground	Mixed mid greyish-brown and brownish-red clay with occasional sub-rounded flint pebbles and flecks of charcoal.	-	-	0.15	-	Modern
58	Made- ground	Mid bluish-grey clayey silt with occasional sub-rounded flint pebbles and iron panning.	-	-	0.08	-	Modern
59	Made- ground	Dark greyish-brown clayey silt with occasional sub-rounded flint pebbles.	-	-	-	F	Modern

Area B/C

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
60	Topsoil	Dark brownish-grey silty loam with moderate sub-rounded gravel flint pebbles, redeposited.	-	-	0.23	-	Modern
61	Geology	Mid reddish-brown silty clay with extensive patches of sub-rounded flint gravel and occ. patches of yellow clay.	-	-	-	-	-
62	Gravel pit	Sub-circular cut, undercut sides, base not attained	5.4	4.2+	1.08+	-	Modern
63	Fill of 62	Mid greyish-brown silty clay with moderate sub-rounded flint	-	-	0.24	-	-

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
		pebbles.					
64	Fill of 62	Light greyish-brown loamy silt with moderate sub-rounded flint pebbles.	-	-	0.32	-	-
65	Fill of 62	Mid greyish-brown silty clay with moderate sub-rounded flint pebbles and occasional flecks of charcoal.	-	-	0.21	-	-
66	Fill of 62	Light greyish-brown sandy clay with frequent sub-rounded flint pebbles and occasional flecks of charcoal and clinker.	-	-	0.25	-	-
67	Fill of 62	Mid greyish-brown clayey silt with abundant sub-rounded flint pebbles and occasional flecks of charcoal.	-	-	0.54	В	-
68	Fill of 62	Mid greyish-brown silty clay with abundant sub-rounded flint (0-pebbles and occasional flecks of charcoal.	-	-	0.47	Т	-
69	Fill of 62	Mid greyish-brown clayey silt with moderate sub-rounded flint pebbles.	-	-	0.42	-	-
70	Fill of 62	Mid yellowish-brown clayey sand with frequent sub-rounded flint and limestone pebbles and occasional flecks of charcoal.	-	-	0.31	-	-
71	Fill of 62	Mid greyish-brown sandy silt with frequent sub-rounded flint pebbles and occasional flecks of charcoal.	-	-	0.20	T, B	-
72	Pit	Shallow, sub-rectangular, steep-sided, flat base.	0.63	0.48	0.09	-	Undated
73	Fill of 72	Mid greyish-brown clayey silt with occasional sub-rounded flint pebbles and frequent flecks of charcoal.	-	-	0.09	-	-
74	Fill of 72	Light greyish-yellow clayey sand with occasional sub-rounded flint pebbles and occasional flecks of charcoal.	-	-	0.01	-	-
75	Pit	Shallow, sub-rounded cut with mod. steep sides, concave base.	0.52	0.36	0.06	-	Undated
76	Fill of 75	Light greyish-brown silty clay with occasional sub-rounded flint pebbles and moderate flecks of charcoal.	-	-	0.06	-	-
77	Pit	Shallow, oval cut with mod. steep sides, concave base.	0.86	0.39	0.03	-	Undated
78	Fill of 77	Mid greyish-yellow sandy silt with moderate sub-rounded flint pebbles and moderate flecks of charcoal.	-	-	0.03	-	-
79	Made- ground	Light yellowish-brown silty sand with frequent sub-angular flint pebbles.	-	-	0.22	-	Modern
80	Made- ground	Light yellowish-brown silty sand with frequent sub-angular flint pebbles.	-	-	0.53	-	Modern
81	Buried topsoil	Dark greyish-brown clayey loam with sub-rounded flint pebbles.	-	-	0.22	-	Modern
82	Subsoil	Mid greyish-brown silty sand with frequent sub-angular flint pebbles.	-	-	0.13	-	Modern
83	Gravel pit	Elongated cut on a NW-SE alignment, edges turn in to NW, rounded terminal to SE, steep sides, concave base.	7.0+	2.10	0.86	-	Undated
84	Fill of 83	Mid greyish-brown sandy clay with	-	-	0.24	-	-

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
		frequent sub-rounded and sub-angular flint pebbles.					
85	Fill of 83	Mid greyish-brown silty sandy clay with occasional sub-rounded flint pebbles.	-	-	0.32	-	-
86	Fill of 83	Mid yellowish-brown sandy clay silt with occasional sub-rounded flint pebbles.	-	-	0.29	-	-
87	Fill of 83	Mid reddish-grey clayey sand with frequent sub-angular flint pebbles.	1	-	0.17	-	-
88	Fill of 83	Mid brownish-grey sandy silt with occasional sub-rounded and subangular flint pebbles.	-	-	0.27	-	-
89	Pit	Elongated, sub-oval, steep-sided, flat base.	2.1	0.58	0.21	-	Post-med/ modern
90	Fill of 89	Mixed mid brownish-grey and reddish-brown silty clay with frequent sub-rounded flint pebbles and flecks of charcoal and fragments of brick/tile.	-	-	0.21	Т	-
91	Pit	Elongated sub-oval, steep-sided, flat base.	2.1	0.57	0.50	-	Post-med/ modern
92	Fill of 91	Mid reddish-brown clay with moderate sub-rounded flint pebbles and flecks of charcoal.	-	-	0.30	Р	-
93	Fill of 91	Mid brownish-grey clayey silt with moderate sub-rounded flint pebbles and flecks of charcoal and fragments of brick/tile.	-	-	0.20	-	-
94	Pit	Elongated sub-oval, steep-sided, flat base.	1.9	0.9	0.20	-	Post-med/ modern
95	Fill of 94	Mixed greyish-brown sandy clay and reddish-brown silty sand with moderate sub-rounded flint pebbles.	-	-	0.20	-	-
96	Gravel pit	SE terminal of elongated cut (see 83)	7.0+	1.35	0.24	-	Undated
97	Fill of 96	Mid yellowish-brown silty sandy clay with occasional sub-angular flint pebbles and flecks of charcoal.	-	-	0.24	-	-
98	Ditch	Linear cut on N-S alignment, mod. steep sides, flat base.	30.0+	1.15	0.32	-	Post-med/ modern
99	Fill of 98	Mid yellowish-brown silty sand with frequent sub-angular and sub-rounded flint pebbles.	-	-	0.20	-	-
100	Fill of 98	Mid greyish-brown sandy silt with moderate sub-rounded and subangular flint pebbles.	-	-	0.15	-	-
101	Made- ground	Mid yellowish-brown sandy silt with occasional sub-rounded flint pebbles.	-	-	0.21	-	Modern
102	Pit	Elongated, sub-oval, steep-sided, concave base.	2.4	0.65	0.30	-	Post-med/ modern
103	Fill of 102	Mid brownish-grey silty clay with frequent sub-rounded flint pebbles, clinker and occasional flecks of charcoal.	-	-	0.30	T, CP	-
104	Pit	Elongated, sub-oval, steep-sided, concave base.	3.0	0.98	0.25	-	Post-med/ modern
105	Fill of 104	Light greyish-brown clayey silt with moderate sub-rounded flint pebbles.	-	-	0.25	-	-
106	Ditch	Linear ditch on E-W alignment, steep-sided, flat base.	48.0+	0.84	0.26	-	Post-med/ modern

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
107	Fill of 106	Mid greyish-brown silty clay with frequent sub-rounded flint pebbles, coal and flecks of charcoal.	-	-	0.26	-	
108	Ditch/pit	Linear cut on N-S alignment, steep-sided, concave base.	5.0+	1.19	0.36	-	Post-med/ modern
109	Fill of 108	Mid brownish-grey silty sandy clay with occasional sub-angular flint pebbles.	-	-	0.35	-	-
110	Fill of 108	Mid brownish-grey silty clay with occasional sub-angular flint pebbles.	-	-	0.36	-	-
111	Pit	Elongated sub-oval cut, steep-sided, flat base.	2.3	0.74	0.32	-	Post-med/ modern
112	Fill of 111	Mid greyish-brown silty sand with abundant sub-rounded flint pebbles and occ. flecks of charcoal.	-	-	0.32	T	-
113	Pit	Elongated sub-oval cut, not excavated.	2.1	0.92	n.e.	-	Post-med/ modern
114	Fill of 113	Dark grey brown sandy silt with frequent sub-angular gravel flint and flecks of charcoal.	-	-	n.e.	-	-
115	Pit	Elongated sub-oval cut. Not fully excavated	2.2	0.82	n.e.	-	Post-med/ modern
116	Fill of 115	Mid grey brown sandy silt with frequent sub-angular gravel flint.	-	-	n.e.	-	-
117	Pit	Elongated sub-oval cut. Not fully excavated.	2.7	0.73	n.e.	-	Post-med/ modern
118	Fill of 117	Dark brownish-grey sandy clayey silt with frequent sub-angular flint pebbles.	-	-	n.e.	-	-
119	Pit	Elongated sub-oval cut. Not fully excavated.	2.0	1.05	n.e.	-	Post-med/ modern
120	Fill of 119	Dark greyish-brown sandy clay silt with frequent sub-angular flint pebbles.	-	-	n.e.	-	-
121	Pit	Elongated sub-oval cut. Not fully excavated.	2.4	0.48	n.e.	-	Post-med/ modern
122	Fill of 121	Mid brown grey sandy clay silt with frequent sub-rounded gravel flint.	-	-	n.e.	-	-
123	Pit	Elongated sub-oval cut. Not fully excavated.	2.7	0.61	n.e.	-	Post-med/ modern
124	Fill of 123	Dark grey brown sandy clay silt with frequent sub-angular gravel flint.	-	-	n.e.	-	-
125	Pit	Elongated sub-oval cut. Not fully excavated.	2.2	0.52	n.e.	-	Post-med/ modern
126	Fill of 125	Mixed grey brown and red brown sandy clay with frequent subangular gravel flint.	-	-	n.e.	-	-
127	Ditch terminal?	Partial cut, truncated by ditch 106, not excavated.	6.5	0.75	n.e.	-	Post-med/ modern
128	Fill of 127	Mid grey brown sandy clay silt with frequent sub-angular gravel flint.	-	-	n.e.	-	-
129	Pit	Elongated sub-oval. Unexcavated.	2.0	0.68	n.e.	-	Post-med/ modern
130	Fill of 129	Dark grey brown sandy clay silt with frequent sub-angular gravel flint.	-	-	n.e.	-	-
131	Pit	Elongated sub-oval. Unexcavated.	2.2	0.70	n.e.	-	Post-med/ modern
132	Fill of 131	Dark grey brown sandy clay silt with frequent	-	-	n.e.	-	-
133	Pit	Elongated sub-oval cut, not excavated.	2.2	0.72	n.e.	-	Post-med/ modern

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
134	Fill of 133	Mixed dark grey brown and Mid yellow brown sandy clay with frequent sub-rounded and subangular gravel flint.	-	-	n.e.	-	-
135	Pit	Elongated sub-oval cut, not excavated.	2.15	0.72	n.e.	-	Post-med/ modern
136	Fill of 135	Mixed dark grey and yellow brown sandy clay silt with frequent subangular gravel flint.	-	-	n.e.	-	-
137	Gravel pit	Sub-circular cut, not excavated.	4.4	2.5	n.e.	-	Post-med/ modern
138	Fill of 137	Mid greyish-brown sandy clayey silt with frequent sub-angular flint pebbles and fragments of brick.	-	-	n.e.	-	-
139	Gravel pit	Sub-circular cut, not excavated.	2.0	1.6	n.e.	-	Post-med/ modern
140	Fill of 139	Mid greyish-brown sandy clayey silt with frequent sub-angular flint pebbles	-	-	n.e.	-	-
141	Gravel pit	Irregular cut, not excavated.	3.4	2.3	n.e.	-	Post-med/ modern
142	Fill of 141	Mid greyish-brown sandy clay with frequent sub-angular flint pebbles.	-	-	n.e.	-	-
143	Pit	Sub-circular cut, not excavated.	12.0	12.0	n.e.	-	Post-med/ modern
144	Fill of 143	Dark black humic sandy silty loam with frequent sub-angular flint pebbles and fragments of brick.	-	-	n.e.	-	-
145	Gravel pit	Sub-circular cut, not excavated	4.4	3.7	n.e.	-	Post-med/ modern
146	Fill of 145	Mid greyish-brown sandy clay with frequent sub-angular flint pebbles.	-	-	n.e.	-	-
147	Ditch	Linear cut on WNW-ESE alignment, steep-sided, concave base. Same as 167, 171 and 174.	35.0+	0.26+	0.21	-	Undated
148	Fill of 147	Mid brownish-grey silty clay with moderate sub-angular flint pebbles.	-	-	0.21	-	-
149	Ditch	Linear ditch on NW-SE alignment, steep-sided, concave base. Same as 179.	18.0	0.35+	0.10	-	Post-med/ modern
150	Fill of 149	Dark brownish-grey silty clay with occasional sub-angular flint pebbles.	-	-	0.10	-	-
151	Ditch terminal	Linear ditch on WNW-ESE alignment, stepped slope, concave base. Same as 163.	16.0+	0.42	0.22	-	Undated
152	Fill of 151	Mid greyish-brown silty sand with frequent sub-rounded flint pebbles and flecks of charcoal.	-	-	0.22	-	-
153	Pit	Sub-rectangular cut, not excavated	2.2	0.60	n.e.	-	Post-med/ modern
154	Fill of 153	Dark greyish-brown sandy loam with frequent sub-angular flint pebbles.	-	-	n.e.	-	-
155	Pit	Sub-rectangular cut, not excavated.	1.6	0.45	n.e.	-	Post-med/ modern
156	Fill of 155	Dark brownish-grey sandy silt with frequent sub-angular flint pebbles.	-	-	n.e.	-	-
157	Pit	Sub-rectangular cut, not excavated	2.3	0.55	n.e.	-	Post-med/ modern
158	Fill of 157	Dark greyish-brown sandy clay with frequent sub-angular flint pebbles.	-	-	n.e.	-	
159	Pit	Sub-rectangular cut, not excavated	2.1	0.55	n.e.	-	Post-med/ modern

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
160	Fill of 159	Mixed greyish-brown and yellowish-brown sandy clay with frequent sub-angular flint pebbles.	-	-	n.e.	-	
161	Pit	Sub-rectangular cut, not excavated.	1.3	0.50	n.e.	-	Post-med/ modern
162	Fill of 161	Mid to dark greyish-brown sandy clay with frequent sub-angular flint pebbles.	-	-	n.e.	-	-
163	Ditch	Linear ditch on WNW-ESE alignment, stepped slope, concave base. Same as 151.	16.0+	0.97	0.45	1	Undated
164	Fill of 163	Mid greyish-brown clayey sand with frequent sub-rounded flint pebbles.	-	-	0.14	-	-
165	Fill of 163	Light greyish-brown clayey silt with moderate sub-rounded flint pebbles and occasional flecks of charcoal.	-	-	0.17	-	-
166	Fill of 163	Light greyish-brown clay with abundant sub-rounded flint pebbles and moderate flecks of charcoal.	1	1	0.30	-	-
167	Ditch	Linear cut on WNW-ESE alignment, steep-sided, concave base. Same as 147, 171 and 174.	35.0+	0.99	0.49	-	Post-med or earlier
168	Fill of 167	Mid reddish-brown silty clay with occasional sub-angular flint pebbles.	-	-	0.37	-	-
169	Fill of 167	Light greyish-brown silty clay with occasional sub-angular flint pebbles.	-	-	0.31	-	-
170	Fill of 167	Mid greyish-brown silty clay with moderate sub-angular flint pebbles.	-	-	0.49	-	-
171	Ditch	Linear cut on WNW-ESE alignment, steep-sided, concave base. Same as 147, 167 and 174.	35.0+	0.53+	0.38	-	Post-med or earlier
172	Fill of 171	Mid brownish-grey sandy silty clay with moderate sub-angular flint pebbles.	-	-	0.27	-	-
173	Fill of 171	Mid greyish-brown silty clay with occasional sub-angular flint pebbles.	-	-	0.38	-	-
174	Ditch	Linear cut on WNW-ESE alignment, steep-sided, concave base. Same as 147, 167 and 171.	35.0+	1.10	0.43	-	Post-med or earlier
175	Fill of 174	Mid greyish-brown sandy silt with frequent sub-angular flint pebbles.	-	-	0.18	Sg	-
176	Fill of 174	Mid yellowish-brown silty sand with frequent sub-angular flint pebbles.	-	-	0.27	-	-
177	Ditch terminal	Linear cut on WNW-ESE alignment, steep-sided, concave base.	4.0+	0.56	0.28	-	Post-med or earlier
178	Fill of 177	Mid greyish-brown silty clay with sub-angular flint pebbles.	-	-	0.28	F	-
179	Ditch	Linear ditch on NW-SE alignment, steep-sided, concave base. Same as 149.	18.0	0.96	0.36	-	Post-med/ modern
180	Fill of 179	Mid greyish-brown sandy silty clay with moderate sub-angular flint pebbles.	-	-	0.36	-	-

Area E

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Date
21	Topsoil	Dark brownish-grey silty loam with moderate sub-rounded flint pebbles, redeposited.	-	-	0.29	-	Modern
22	Made- ground	Redeposited mid yellowish-brown silty clay with frequent sub-rounded flint pebbles and brick fragments.	-	-	0.14	-	Modern
23	Geology	Mid yellowish-brown silty clay with frequent sub-rounded flint pebbles and occ. patches of flint gravel and bands of yellow clay.	-	-	-	-	-
24	Ditch	Linear ditch on NE-SW alignment, steep-sided, flat base, peters out to SW, cut by 41, cuts 33.	46.0+	0.59	0.32	-	Post-med or earlier
25	Fill of 24	Mid yellowish-brown silty sand with occ. sub-rounded flint pebbles.	-	-	0.32	F	-
26	Ditch	Linear ditch on N-S alignment, mod. steep sides, concave base.	39.0+	0.88	0.24	-	Modern
27	Fill of 26	Mid greyish-brown sandy silt with frequent sub-rounded flint pebbles.	-	-	0.24	Т	-
28	Ditch	Linear ditch on NE-SW alignment, steep-sided, flat base, peters out to SW, same as 24.	46.0+	0.44	0.20	-	Post-med or earlier
29	Fill of 28	Light greyish-brown sandy silt with frequent sub-rounded flint pebbles.	-	-	0.20	-	-
30	Fill of 28	Mid greyish-brown clayey silt with frequent sub-rounded flint pebbles.	-	-	0.13	F	-
31	Pit	Sub-rectangular, steep-sided, flat base.	1.98	1.59	0.22	-	Post-med or earlier
32	Animal burial	Partial horse skeleton	-	-	-	В	-
33	Fill of 31	Mid greyish-brown clayey silt with moderate sub-rounded flint pebbles.	-	-	0.22	-	-
34	Ditch	Linear ditch on N-S alignment, mod. steep sides, concave base, same as 26.	39.0+	0.92	0.25	-	Modern
35	Fill of 34	Mid greyish-brown silty clay with frequent sub-rounded flint pebbles and iron panning.	-	-	0.25	G, Br	Modern
36	Ditch	Linear ditch on N-S alignment, mod. steep-sided, concave base, same as 24.	46.00+	0.83	0.38	-	Post-med or earlier
37	Fill of 36	Mid greyish-brown silty clay with frequent sub-rounded flint pebbles.	-	-	0.38	-	-
38	Ditch	Linear ditch on N-S alignment, very straight, parallel edges, steep-sided, flat base.	22.0+	0.44	0.26	-	Modern
39	Fill of 38	Light greyish-brown sandy silt with moderate sub-rounded flint pebbles and flecks of limestone and charcoal.	-	-	0.09	-	-
40	Fill of 38	Mid greyish-brown silty clay with moderate sub-rounded flint pebbles and flecks of limestone and charcoal.	-	-	0.22	F	-
41	Ditch	Linear cut on N-S alignment, steep-sided, flat base.	39.0+	1.18	0.34	-	Modern
42	Fill of 41	Mid greyish-brown clayey silt with frequent sub-rounded flint pebbles and occasional flecks of charcoal.	-	-	0.34	P, T, Sg	-

43	Tree bole	Irregular, sub-circular cut, mod. steep-sided, irregular base, cut by 45.	1.0	0.72	0.42	-	Undated
44	Fill of 43	Mid greyish-brown silty clay with moderate sub-rounded flint pebbles.	ı	1	0.42	-	-
45	Ditch	Linear cut on N-S alignment, steep- sided, flat base, cuts 44.	39.0+	0.72	0.42	-	Modern
46	Fill of 45	Mid greyish-brown clayey silt with moderate sub-rounded flint pebbles and occasional flecks of charcoal.	-	-	0.42	-	-

Area F

Context	Feature/ deposit	Description	Length (m)	Width (m)	Depth (m)	Finds	Spot-date
1	Topsoil	Dark brownish-grey silty loam with moderate sub-rounded flint pebbles, redeposited.	-	-	0.31	-	Modern
2	Made- ground	Redeposited mid yellowish-brown silty clay with frequent sub-rounded flint pebbles and brick fragments.	1	-	0.24	-	Modern
3	Ditch	Linear ditch on a NE-SW alignment, moderately steep sided, concave base.	14.0+	0.46	0.18	-	Undated
4	Fill of 3	Mid greyish-brown silty clay with moderate sub-rounded flint pebbles.	-	-	0.18	F	-
5	Geology	Mid yellowish-brown silty clay with frequent sub-rounded flint pebbles and occ. patches of flint gravel.	-	-	-	-	-
6	Posthole	Sub-circular, steep-sided, concave base.	0.40	0.33	0.29	-	Undated
7	Fill of 6	Mid greyish-brown silty clay with occasional sub-rounded flint pebbles	-	-	0.29	-	-
8	Vegetation hollow/pit	Shallow, irregular cut with poorly defined edges.	2.0+	0.66	0.18	-	Undated
9	Fill of 8	Mid greyish-brown silty clay with frequent sub-rounded flint pebbles.	ı	-	0.18	-	-
10	Vegetation hollow	Oval, vertical/undercutting sides, irregular base.	1.5	1.2	0.59	-	Undated
11	Fill of 10	Light greyish-brown silty clay with abundant sub-rounded flint pebbles.	-	-	0.59	-	-
12	Ditch	Linear ditch on E-W alignment, steep-sided, flat base.	12. 0+	0.72	0.42	-	Undated
13	Fill of 12	Mid greyish-brown silty clay with frequent sub-rounded flint pebbles.	-	-	0.42	F, FC	-
14	Fill of 10	Mid greyish-brown silty clay with occasional sub-rounded flint pebbles.	-	-	0.16	Р	1
15	Ditch	Linear cut on NE-SW alignment, mod steep sides, concave base. Same as 12.	12.0+	0.57	0.20	-	Undated
16	Fill of 15	Mid greyish-brown silty clay with frequent sub-rounded flint pebbles.	-	-	0.20	-	-
17	Ditch	Linear cut on NE-SW alignment, mod steep sides, concave base. Same as 3.	14.0+	0.54	0.22	-	Undated
18	Fill of 17	Mid grey brown silty clay with frequent sub-rounded flint pebbles.	-	-	0.22	-	
19	Ditch	Linear cut on NE-SW alignment,	12.0+	1.0	0.31	-	Undated

		mod steep sides, concave base. Same as 12.					
20	Fill of 19	Mid greyish-brown silty clay with frequent sub-rounded flint pebbles.	1	-	0.31	-	

APPENDIX B: FINDS

Table 1: Quantification of finds

Context	Description	Count	Weight	Spot-date
4	Worked flint: flake	1	(g) 9	_
_	Burnt flint	1	27	
13	Worked flint: flake	<u> </u>	4	_
	Burnt flint	3	21	
13 <6>	Fired clay	2	<1	-
14	Roman? pottery: oxidised fabric	1	5	RB?
25	Worked flint: flake	1	25	-
27	Ceramic building material: flat tile fragment	1	234	Post-med
30	Worked flint: broken flake	2	21	-
35	Post-medieval glass: green wine/spirits bottle glass; blue bottle glass	8	77	C19+
	Ceramic building material: brick fragments	2	292	
40	Worked flint: flakes	2	29	-
42	Modern pottery: transfer-print decorated refined	3	13	C19
	whiteware Worked flint: flake	1	1	
42<3>	Ceramic building material: tile fragments	3	34	_
	Ironworking slag fragments	4	<1	
54	Worked flint: flakes/shatter	5	21	-
55	Worked flint: broken flake	1	4	-
59	Worked flint: flake/chip	1	1	-
66	Clinker	1	3	-
68	Ceramic building material: flat tile fragment	1	13	Post-med
71	Ceramic building material: flat tile fragments	2	28	Post-med
90	Ceramic building material: flat tile fragment	1	12	Post-med
92	Post-medieval: black glazed earthenware	1	4	Post-med
93	Ceramic building material: flat tile fragments	2	18	Post-med
103	Clay tobacco pipe: stem fragment	1	2	C19
	Clinker	1	2	
	Ceramic building material: tile fragment	1	1	
107	Coal	1	3	-
112	Ceramic building material: flat tile fragment	1	35	Post-med
175 <6>	Ironworking slag fragments	2	<1	-
178	Worked flint: flakes	2	21	-

<*> indicates material recovered from soil samples

Table 2: Identified animal species by fragment count (NISP) and context.

Context	BOS	S/G	EQU	LM	Total	Weight (g)
32	-	-	26*	81	107	2,711.67
67	1	-	-	-	1	7.55
71	-	1	-	-	1	35.17
Total:	1	1	26	81	109	2,754.39

BOS=cattle; S/G=caprovine(sheep/goat); EQU=horse; LM=large-sized mammal; *skeleton

Table 3: Quantification of ecofacts by sample

Sample No	Context No	Volume (L)	Percentage of sample processed	Flots	Flot Weight (g)	Material	Weight (g)	Identification (where applicable)
1	37	20	100%	1mm and 0.25mm	0.22	Charcoal	1 plus flot	Oak spp (2) Indeterminate spp (8)
2	40	20	100%	1mm and 0.25mm	0.28	Charcoal	2 plus flot	cf cherry (1) cf hawthorn/rowan/crab apple (1) Oak spp (4) Indeterminate spp (6)
				Plant macrofossils	In flot	Elder (mod) + Fat hen/goosefoot (mod) +		
3	42	20	100%	1mm and 0.25mm	0.41	Plant macrofossils	In flot	Bramble spp (mod) + Elder (mod) + Fat hen/goosefoot (mod) +++
				1mm and		Charcoal	>1 plus flot	Too small to ID
4	13	20	100%	0.25mm	2.5	Plant macrofossils	In flot	Black bindweed (mod) + Elder (mod) + Fat hen/goosefoot (mod) +++
5	18	20	100%	1mm and	0.48	Charcoal	>1 plus flot	Indeterminate spp (2)
			10076	0.25mm	Plant		In flot	Dock spp (mod) + Fat hen/goosefoot spp (mod) +
6	175	20	100%	1mm and 0.25mm	1.03	Charcoal	In flot	Too small to ID

Key + = 1-5 items ++ = 6-20 items

+++ = 21-40 items

++++ = >40 items

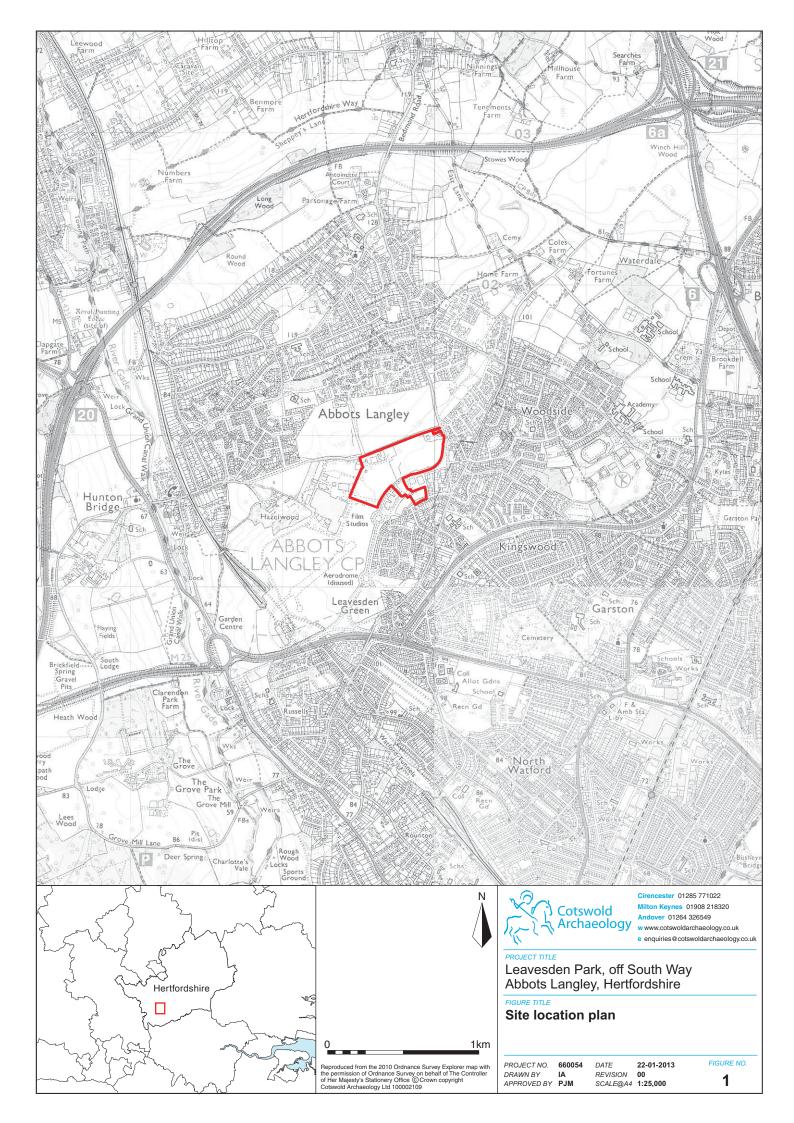
Species list

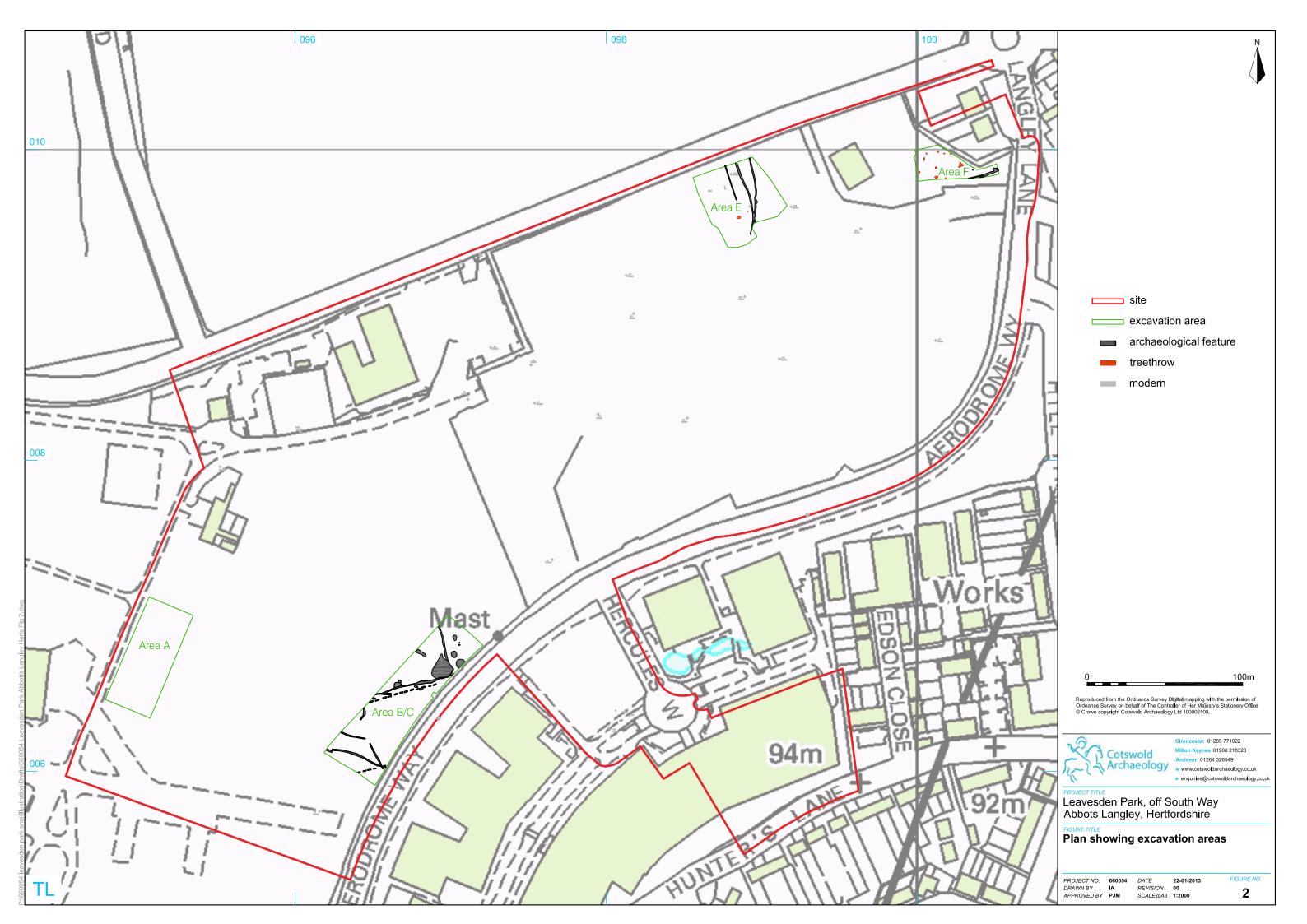
Family	Species	Common Name
Adoxaceae	Sambucus nigra	Elder
Amaranthaceae	Chenopodium spp	Fat hen/goosefoot spp
Fagaceae	Quercus spp	Oak spp
Polygonaceae	Fallopia convolvulus	Black-bindweed
	Rumex spp	Dock spp
Rosaceae	Crataegus monogyna/Sorbus spp/Malus sylvestris	Hawthorn/rowan/crab apple
	Prunus spp	Cherry spp
	Rubus spp	Bramble spp

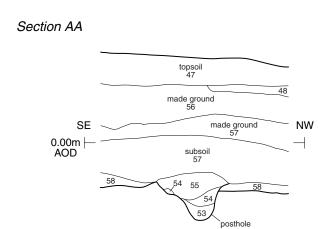
APPENDIX C: OASIS REPORT FORM

PROJECT DETAILS						
Project name	Leavesden Park, Abbots Langley	Leavesden Park, Abbots Langley				
Short description	post-medieval and modern agrithe development of the airfield at remains comprised field bound remains of orchard planting and of closely-set, sub-rectangular parallel to one of the field bound correspond with those shown on Evidence for earlier activity, paperiod, was sparse; with the	The excavations at Leavesden Park uncovered the remains of the post-medieval and modern agricultural landscape that preceded the development of the airfield and aircraft factories in 1940. These remains comprised field boundaries, gravel pits, the probable remains of orchard planting and a parallel arrangement of two lines of closely-set, sub-rectangular pits of uncertain function that ran parallel to one of the field boundaries. Many of the field boundaries correspond with those shown on 19th-century maps of the area. Evidence for earlier activity, particularly dating to the prehistoric period, was sparse; with the probable exception of a solitary prehistoric posthole, no features could be dated with any certainty to this period.				
Project dates	October- November 2012					
Project type	Strip, map and sample excavatio	Strip, map and sample excavation				
Previous work	DBA (CAT 2000a; CA 2010), eva	DBA (CAT 2000a; CA 2010), evaluation (CAT 2000b)				
Future work	None					
Monument type						
Significant finds	None	None				
PROJECT LOCATION						
Site location	South Way, Leavesden Park, Ab	South Way, Leavesden Park, Abbots Langley, Hertfordshire				
Study area	c. 13.8ha	c. 13.8ha				
Site co-ordinates	TL 0986 0086	TL 0986 0086				
PROJECT CREATORS						
Name of organisation	Cotswold Archaeology (CA)	Cotswold Archaeology (CA)				
Project Brief originator	Andy Instone (HCC)					
Project Design (WSI) originator	CA	CA				
Project Manager	Simon Carlyle (CA)	Simon Carlyle (CA)				
Project Supervisor	Jerry Mordue (CA)					
PROJECT ARCHIVE	· · · · · · · · · · · · · · · · · · ·					
	Accession no: 02/21/03 (2012)	Content				
Physical	Three Rivers Museum	Modern pottery, CBM, animal bone				
Paper		Site records				
Digital	Hertfordshire HER	Report, digital photos				
OASIS reference no.	cotswold2-144409	, , , , , ,				
BIBLIOGRAPHY	1					

CA (Cotswold Archaeology) 2013 Leavesden Park, Abbots Langley, Hertfordshire: Archaeological Strip, Map and Sample Excavation. CA typescript report 13044









Cirencester 01285 771022
Milton Keynes 01908 218320
Andover 01264 326549
w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Leavesden Park, off South Way Abbots Langley Hertfordshire

FIGURE TITLE

Area A; section

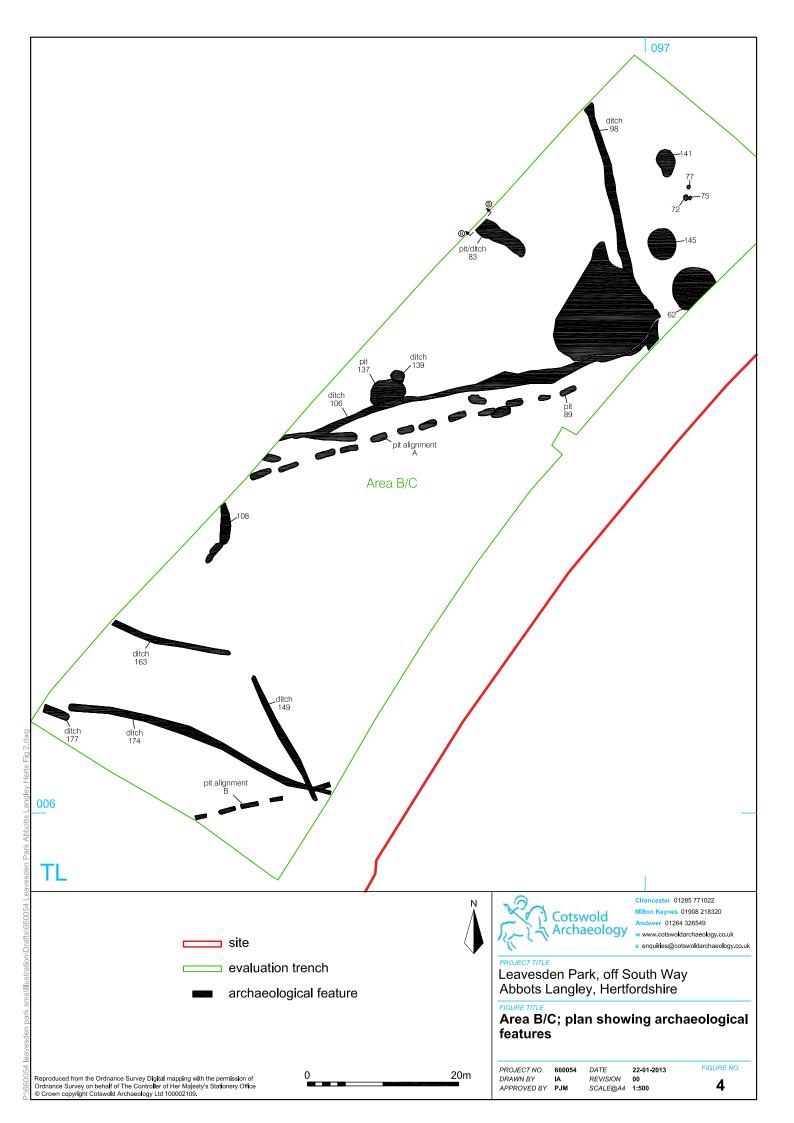
1m PRO

 PROJECT NO.
 660054
 DATE
 22-01-2013

 DRAWN BY
 IA
 REVISION
 00

 APPROVED BY
 PJM
 SCALE@A4
 1:20

FIGURE NO.







- 5 Area B/C, looking south-west
- 6 Area B/C, ditch 163, looking east



Cirencester 01285 771022
Milton Keynes 01908 218320
Andover 01264 326549
w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PPO IECT TITI E

Leavesden Park, off South Way Abbots Langley Hertfordshire

FIGURE TITLE

Photographs

 PROJECT NO.
 660054
 DATE
 23-01-2013

 DRAWN BY
 IA
 REVISION
 00

 APPROVED BY
 PJM
 SCALE@A4
 N/A

FIGURE NO.

5 & 6







- Area B/C, ditch 174, looking west
- Area B/C, ditch 106, looking west



Cirencester 01285 771022 Milton Keynes 01908 218320 ver 01264 326549 w www.cotswoldarchaeology.co.uk

e enquiries@cotswoldarchaeology.co.uk

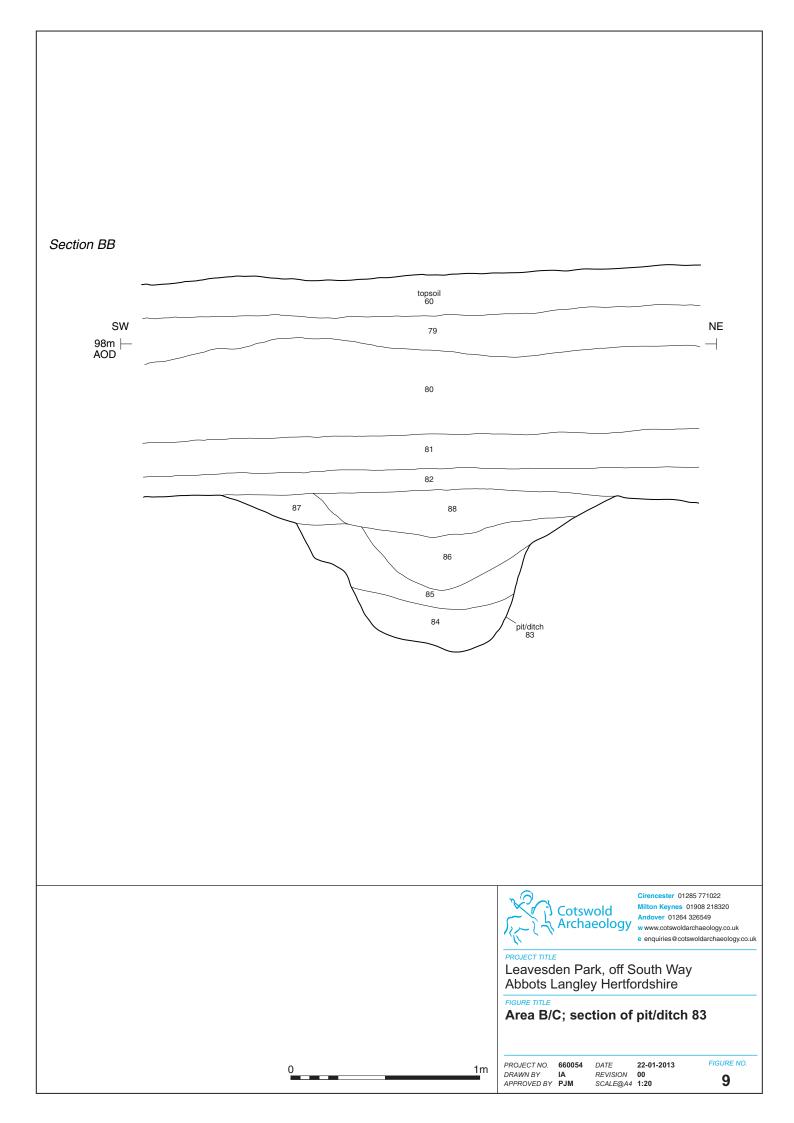
Leavesden Park, off South Way Abbots Langley Hertfordshire

FIGURE TITLE Photographs

DATE 23-01-2013
REVISION 00
SCALE@A4 N/A PROJECT NO. 660054
DRAWN BY IA
APPROVED BY PJM

FIGURE NO.

7 & 8







10 Area B/C, pit 89, looking east



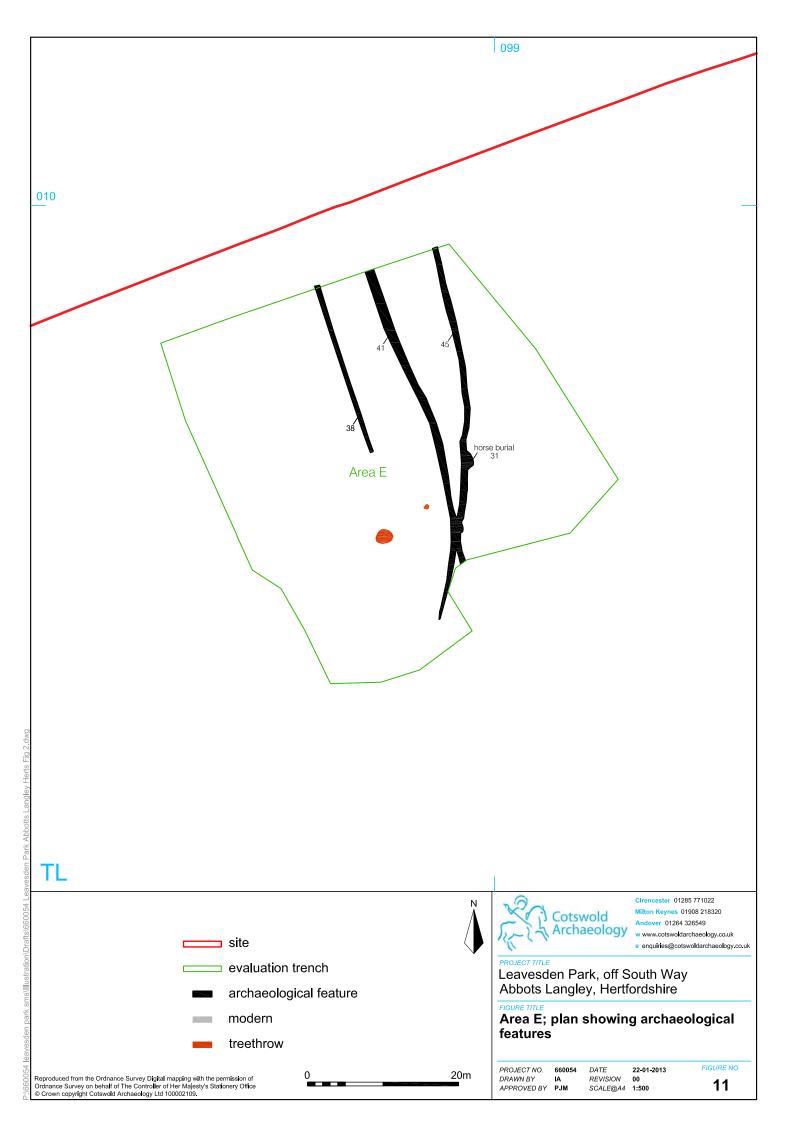
Cirencester 01285 771022 Milton Keynes 01908 218320 ver 01264 326549 w www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.uk

Leavesden Park, off South Way Abbots Langley Hertfordshire

FIGURE TITLE
Photograph

PROJECT NO. 660054
DRAWN BY IA
APPROVED BY PJM DATE 23-01-2013 REVISION 00 SCALE@A4 N/A FIGURE NO.

10







12 Area E, horse burial, pit 31, looking north

13 Area E, ditches 24 and 26, looking north



Cirencester 01285 771022
Milton Keynes 01908 218320
Andover 01264 326549
w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Leavesden Park, off South Way Abbots Langley Hertfordshire

FIGURE TITLE

Photographs

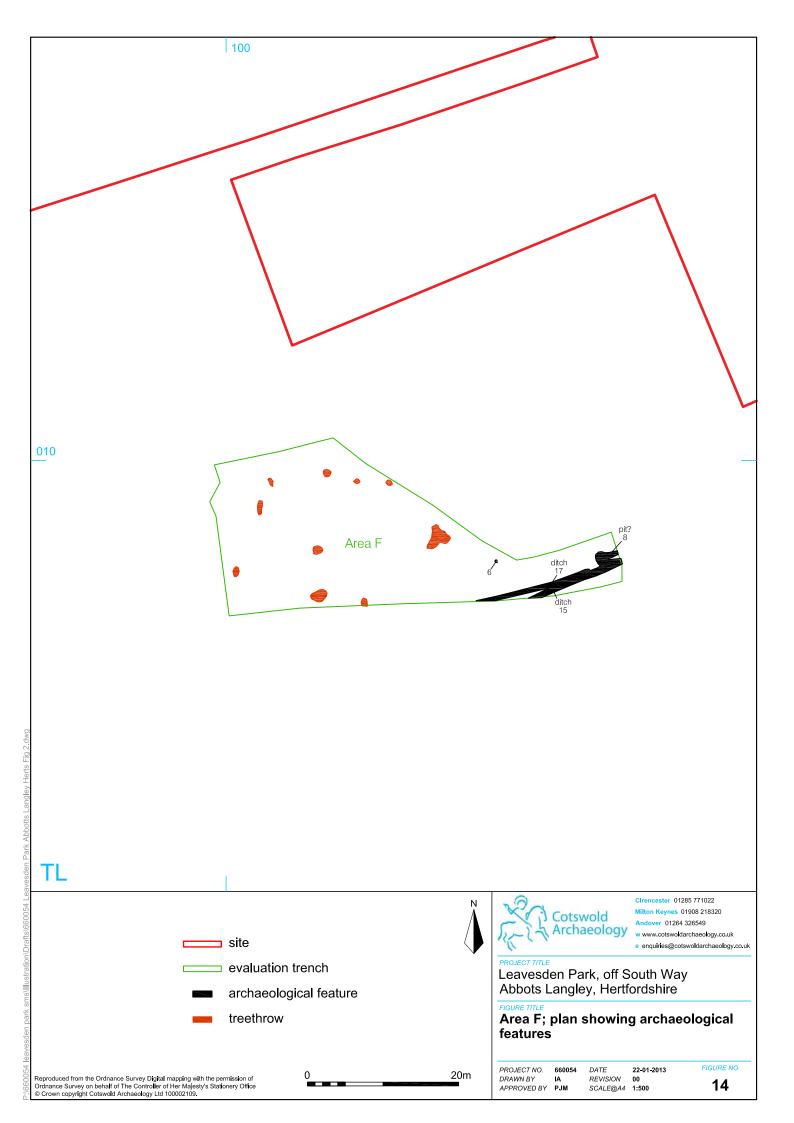
 PROJECT NO.
 660054
 DATE
 23-01-2013

 DRAWN BY
 IA
 REVISION
 00

 APPROVED BY
 PJM
 SCALE@A4
 N/A

FIGURE NO.

12 & 13







15 Area F, ditches 15 and 17, looking south-west



Cirencester 01285 771022 Milton Keynes 01908 218320 ver 01264 326549 w www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.uk

Leavesden Park, off South Way Abbots Langley Hertfordshire

FIGURE TITLE Photographs

DATE 23-01-2013
REVISION 00
SCALE@A4 N/A PROJECT NO. 660054
DRAWN BY IA
APPROVED BY PJM

FIGURE NO. 15

