

Bicester Eco Town, Oxfordshire

PART 1: The Entire Site

Interpretation of Aerial Photographs for Archaeology

October 2010

Bicester Eco Town, Oxfordshire

PART 1: The Entire Site

Interpretation of Aerial Photographs for Archaeology

Client Name: Hyder Consulting (UK) Ltd

Document Reference: CC210-0802-1-1

Project Number: CC210-0802

Quality Assurance

Issue

DRAFT

Date

5th October 2010

Prepared by

Chris Cox
BA MA MfA

Signed

Director

QA Checked by

Tracy Michaels
BA AlfA

Disclaimer

This report has been prepared by Air Photo Services Ltd with all reasonable skill, care and diligence within the terms of the contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility for the actions and opinions of third parties, to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

Bicester Eco Town, Interpretation of Aerial Photographs for Archaeology PART 1
CC210-0802-1-1

Contents

SUMMARY

1.	INTRODUCTION	1
2.	THE STUDY AREA	2
3.	ARCHAEOLOGY FROM AERIAL PHOTOGRAPHS	3
4.	AERIAL PHOTOGRAPHS: Types and Sources.....	4
5.	INTERPRETATION AND MAPPING METHODOLOGY	5
6.	RESULTS.....	6
7.	CONCLUSION	16
8.	CARTOGRAPHIC SOURCES AND BIBLIOGRAPHY	17

APPENDIX

Appendix 1	Aerial Photographs Consulted at English Heritage National Monuments Record (EH NMR)
-------------------	---

PLANS

Plan 1	Bicester Eco Town PART 1: The Entire Site Location of the Study Area
	0802/01 October 2010 CC
Plan 2	Bicester Eco Town PART 1: The Entire Site Location of sites identified from aerial photographs in the south west Sector
	0802/02 October 2010 CC
Plan 3	Bicester Eco Town PART 1: The Entire Site Location of sites identified from aerial photographs in the north west Sector
	0802/03 October 2010 CC
Plan 4	Bicester Eco Town PART 1: The Entire Site Overview of all sites identified from aerial photographs
	0802/06 October 2010 CC

SUMMARY

- S1 This interpretation of aerial photographs was prepared by Chris Cox at Air Photo Services Ltd on behalf of Hyder Consulting (UK) Ltd in September and October 2010. The work was commissioned to support the assessment of the potential impact of a proposed development on cultural heritage assets within the site.
- S2 The report contains two parts.
- S3 This report, Part 1 (210-0802-1-1) assesses the Entire Site, including the Exemplar Site (**Plan 1** 0802/01). Part 2 (210-0802-2-1) assesses The Exemplar Site only, and may be presented as a separate report if necessary.
- S4 The Entire Site is centred at National Grid Reference (NGR) SP 565 240, to the north-west of Bicester in Oxfordshire, UK. It comprises c. 4.5 km² of land. The study area lies on a limestone substrate which give rise to thin well drained calcareous soils and has been ploughed and used for arable agriculture. Calcareous soils and substrates are free draining and thus conducive to the formation of crop marks, where cereal and other crops grow more vigorously over buried ditches and pits, or less well over banks and metalled surfaces. They also commonly show natural geological features as marks in crops in addition to any archaeological features.
- S5 The object of this aerial photographic interpretation was to provide information on the location and nature of any archaeological features or areas of archaeological potential visible on existing aerial photographs within the site, in comparison to the wider environs.
- S6 Aerial photographs taken between 1930 and the present day were examined in the library of the English Heritage National Monuments Record (EH NMR), the Oxfordshire Heritage Environment Record (OHER) and online at Google Earth (timelines between 1999 and 2010) and Multimap.co.uk (Getmapping, 1999). Photographs were examined by Chris Cox and Rog Palmer. Data supplied by the NMR Monuments Reports the OHER, Ordnance Survey (OS) and mapping and data supplied by the Soil Survey of England and Wales (SSEW 1983).
- S7 Fifteen individual areas of archaeological interest were identified from aerial photographs. These are summarised in Table 1 over the page, illustrated at **Plans 2 - 4** (0802/02, 03 & 06) and discussed below.

AP Site No	NGR	Description	OHER Reference
AP 1	SP 564 253	Upstanding and eroded Medieval fields (ridge and furrow) and buried former boundary ditches.	None
AP 2	SP 569 257	Upstanding Medieval fields (ridge and furrow) and headland.	None
AP 3	SP 573 248	Complex and extensive ditches pits and enclosures which show as marks in crops.	15958
AP 4	SP 573 244	Unusual curvilinear shaped probable cut feature which shows as a crop mark. The origin of this is uncertain.	None
AP 5	SP 573 244	Slightly upstanding ridges in the floodplain of a small watercourse which may be either traces of Post Medieval water meadows or Medieval cultivation or drainage.	None
AP 6	SP 577 253	Buried sub-rectangular ditched enclosure, pits and ditches which show as marks in crops.	None
AP 7	SP 584 255	Upstanding remains of a Deserted Medieval Village (DMV) at Caversfield, outside of the Site.	Outside the study area
AP 8	SP 568 245	Eroded Medieval fields (ridge and furrow) and cut feature.	None
AP 9	SP 565 242	Buried ditches and possible enclosures centred upon Aldershot Farm.	None
AP 10	SP 558 240	Eroded and slightly upstanding Medieval fields (ridge and furrow)	None
AP 11	SP 560 238	Buried ditches, possible enclosures and a ring ditch (possible eroded and buried Bronze Age funerary site).	13907

Bicester Eco Town, Interpretation of Aerial Photographs for Archaeology PART 1
 CC210-0802-1-1

AP 12	SP 551 233	Possible buried sinuous ditches and small possible enclosure which lies just outside the Site boundary.	None
AP 13	SP 565 233	Possible buried ditched enclosure and sinuous ditches.	None
AP 14	SP 564 230	Possible ditches. This site is not easily distinguished from the many complex natural features in the area, but may link with previously recorded sites which now lie beneath houses in the adjacent area to the west.	None
AP 15	SP 562 230	Buried ditches and enclosures.	None

- S8 The natural ground in this area shows very complex evidence for cracking in the underlying limestone and 'patterned ground'. These natural features show as marks in crops and often mask or hinder interpretation and differentiation of the buried archaeological landscape.
- S9 This assessment has added features to the known resource in this area. These new data have been derived from vertical aerial photographs which have not been previously interpreted in detail for archaeological purposes.

1 INTRODUCTION

- 1.1 This interpretation of aerial photographs was prepared by Chris Cox at Air Photo Services Ltd on behalf of Hyder Consulting (UK) Ltd., in September and October 2010.
- 1.2 The work was commissioned to support the assessment of the potential impact of a proposed development on cultural heritage assets within the site.
- 1.3 The object of this aerial photographic interpretation was to provide information on the location and nature of any archaeological features or areas of archaeological potential visible on existing aerial photographs within the study area and its environs.
- 1.4 It is important to note that aerial photographs usually only show part of the horizontal and vertical extent of buried features. Their capacity to reveal features as vegetation marks, soil marks or upstanding features depends upon a number of environmental and agricultural factors prevalent at the time of photographic survey. The appearance of marks in crops over buried features is also governed by a complex interaction of land use, soil type, weather and other factors (Riley 1980, Wilson 1982 and 2000). Natural features also show as detailed marks in crops and soils where differences in the depth and composition of the soils are created by anomalies in the underlying rocks. Limestone areas such as the study area often exhibit very complex evidence for geological cracks and anomalies. This area contains extensive striations, pits, cracks and very dense and complex 'patterned ground' which shows as crop marks (Stephens, 1990, 114 – 124; Wilson 1982, 143 – 155 (and 2000 2nd Ed)).
- 1.5 Air Photo Interpretation (API) data thus acts as a starting point for ground-based investigations, which may reveal further details of the date and nature of the deposits which are initially identified from the air.

2 THE STUDY AREA

Location

- 2.1 The site is located to the north-west of Bicester in Oxfordshire, UK and is centred at NGR SP 565 240. The site boundary contains a separately defined area, which is referred to in this report as 'The Exemplar Site'.
- 2.2 **Plan 1 (0802/01)** shows the location of the Entire Site, which includes the Exemplar Site, its immediate environs, and the archaeological features which were recorded from aerial photographs during this assessment.
- 2.3 The whole site and the Exemplar Site comprise agricultural land with a small proportion of woodland and hedgerows.
- 2.4 The site has been observed on aerial photographs under intense arable cultivation (bare soil, growing crops and ripe crops) with some smaller areas under grass, on aerial photographs taken between the 1940s and the present day.

Geology and Soils

- 2.5 The study area lies on limestone substrates, which are particularly conducive to the formation of marks in crops over more humic, moisture retentive, buried features. These substrates give rise to well drained calcareous soils which are conducive to the formation of marks in vegetation and crops in times of drought over the sites of buried features. These soils are equally suitable for the cultivation of cereals or pasture and were attractive to past settlers due to the well drained soil and fertile environment.
- 2.6 The soil in the site is classified by the Soil Survey of England and Wales (SSEW 1983) as the Aberford type soil association (511a).

Archaeology

- 2.7 The boundary of the whole site contains recorded archaeological assets which comprise a buried eroded ring ditch (OHER 13907) and curvilinear and rectilinear enclosures (OHER 15958). There is also recorded evidence for prehistoric, Iron Age, Romano-British, Medieval, Post-Medieval and Modern military sites in the immediate environs. The Exemplar Site does not contain any previously recorded archaeological features. There are also built heritage assets (OHER 18643) within the site and its environs, and the site lies to the immediate north of Bignall House and its gardens.
- 2.8 This assessment aimed to identify and clarify the nature and extent of features visible on aerial photographs within the site and the Exemplar Site.

3 ARCHAEOLOGY FROM AERIAL PHOTOGRAPHS

The Role of Aerial Photographic Interpretation

- 3.1 Air photo interpretation provides an overview of landscape history and changes in land use. It provides informed guidance for subsequent desk and ground-based investigations and complements cartographic and documentary research.
- 3.2 Some information gained from aerial photographs cannot easily be detected by other means. Aerial photographs provide a chronologically documented and seasonal overview of a landscape and sites and features within it. The interpretation of contemporary and archival aerial photographs is thus an important component of multi-disciplinary archaeological investigation.
- 3.3 Interpretation of aerial photographs allows the accurate mapping of archaeological sites or natural features recorded as crop, grass or vegetation marks (caused by the differential growth of plants over buried features); soil marks (caused by differences in soil colour over ploughed buried features) and shadows cast by upstanding earthworks and features seen in relief.

Limitations of the Data

- 3.4 Aerial photographic evidence is limited by seasonal, agricultural, meteorological and environmental factors which affect the extent to which either buried or upstanding archaeological features can be detected. It is thus advantageous to examine a range of photos taken under a variety of environmental conditions in order to build up a comprehensive interpretation of the archaeological landscape. The visibility of archaeological features may differ from year to year, and be obscured by differential depths of soil or differing types of vegetation. Individual photographs often record only a small percentage of the actual extent of buried or upstanding features.

Relevance in this case

- 3.5 In this case, the range of aerial photographs available for interpretation was comprehensive, both seasonally and chronologically. It is obvious from the range of available aerial images, which date from 1930 to the present day that the area has been surveyed and examined from the air by specialist archaeological surveyors, and also covered in full over many decades by vertical aerial surveys for non-archaeological purposes. In addition to the data already recorded by the EH NMR and the OHER, further sites have been seen and recorded within the site from aerial photographs during this assessment.

4 AERIAL PHOTOGRAPHS: Types and Sources

Types

- 4.1 Two types of aerial photograph are used for archaeological interpretation. Vertical aerial photographs are taken for general-purpose survey using a camera mounted inside a modified aircraft. The aircraft is flown on a pre-planned set of overlapping flight-lines which cover the survey area completely. The camera points straight towards the ground. The vertical viewpoint provides aerial photographic coverage from a fixed scale and constant 180° angles at the centre of each frame. The overlap between the areas covered by each consecutive frame is usually 60%. This overlap between frames enables the photo interpreter to study each pair of vertical photos under a stereoscope.
- 4.2 The stereoscope combines the two images to allow the interpreter to see one three-dimensional image of the ground surface. Vertical aerial photographs carry inherent distortions introduced by variations in perspective and ground height, but are essentially 'map-like' in appearance. They are generally taken for non-archaeological, civil and military purposes and form the basic data from which most modern maps are compiled. Vertical aerial photographs are a very useful source of archaeological data, particularly in areas where features survive as earthworks.
- 4.3 Oblique aerial photographs are taken using a hand held camera by an aerial archaeologist to portray features which have been identified during specialist survey. These photos are extremely useful, but contain inherent perspective distortions, which must be accounted for in rectification and mapping procedures. In this case, both vertical aerial photographs, and specialist obliques which are taken with a hand held camera by an archaeological surveyor, were available for interpretation.

Sources of Data

English Heritage National Monuments Record (EH NMR)

- 4.4 National Monuments Record (NMR) Centre, English Heritage, Kemble Drive, Swindon, Coversearch number 53316. Vertical and oblique photographs dating from 1930 to 2006 provided a primary source of data for the assessment. Photographs held at OHER were also consulted.
- 4.5 The ortho-rectified mosaics of vertical aerial photographs provided by Bluesky, the GeoInformation Group, Getmapping plc and TeleAtlas were consulted online for this assessment in September 2010 and included all available timelines.

5 INTERPRETATION AND MAPPING METHODOLOGY

- 5.1 All photographs were interpreted in accordance with the client's brief for works at this site and Palmer & Cox (1993).
- 5.2 The photographs were closely examined, under 1.5x and 4x magnification and interpreted with the aid of a mirror stereoscope where appropriate, or in detail on screen when consulted as digital files.
- 5.3 Photographs which were selected for mapping were scanned and ortho-rectified using AirPhoto 3.41 software to a 1:2500 scale surveyed OS digital map base. The resulting rectified files were then imported to AutoCad as geo-tiff files and the accurate positions of all visible archaeological features were mapped as a separate digital layer.
- 5.4 All control point mismatch values between the map and the photographs fell below 2.0 m, which lies within the stated accuracy of OS mapping at 1:2500 scale.
- 5.5 Printed maps are presently scaled to fit the appropriate paper size for illustration. They are also provided digitally for accurate scaling as required by the client, for import to a Geographic Information System (GIS) in Drawing Exchange Format release 12 (DXF 12).

6 RESULTS

6.1 Over the entire site, fifteen individual areas were identified which contain archaeological features which are visible on aerial photographs.

6.2 These are illustrated on **Plans 2 - 4** (0802/02, 03 & 06) and summarised in Table 1 below.

AP Site No	NGR	Description	OHER Reference
AP 1	SP 564 253	Upstanding and eroded Medieval fields (ridge and furrow) and buried former boundary ditches.	None
AP 2	SP 569 257	Upstanding Medieval fields (ridge and furrow) and headland.	None
AP 3	SP 573 248	Complex and extensive ditches pits and enclosures which show as marks in crops.	15958
AP 4	SP 573 244	Unusual curvilinear shaped probable cut feature which shows as a crop mark. The origin of this is uncertain.	None
AP 5	SP 573 244	Slightly upstanding ridges in the floodplain of a small watercourse which may be either traces of Post Medieval water meadows or Medieval cultivation or drainage.	None
AP 6	SP 577 253	Buried sub-rectangular ditched enclosure, pits and ditches which show as marks in crops.	None
AP 7	SP 584 255	Upstanding remains of a Deserted Medieval Village (DMV) at Caversfield, outside of the Site.	Outside the study area
AP 8	SP 568 245	Eroded Medieval fields (ridge and furrow) and cut feature.	None

AP 9	SP 565 242	Buried ditches and possible enclosures centred upon Aldershot Farm.	None
AP 10	SP 558 240	Eroded and slightly upstanding Medieval fields (ridge and furrow).	None
AP 11	SP 560 238	Buried ditches, possible enclosures and a ring ditch (possible eroded and buried Bronze Age funerary site).	13907
AP 12	SP 551 233	Possible buried sinuous ditches and small possible enclosure which lies just outside the Site boundary.	None
AP 13	SP 565 233	Possible buried ditched enclosure and sinuous ditches.	None
AP 14	SP 564 230	Possible ditches. This site is not easily distinguished from the many complex natural features in the area, but may link with previously recorded sites which now lie beneath houses in the adjacent area to the west.	None
AP 15	SP 562 230	Buried ditches and enclosures.	None

6.3 These features are detailed in the following gazetteer of sites which concurs the findings of this assessment with the Oxfordshire Heritage Environment Record (OHER) and locates each site to a central National Grid Reference (NGR).

Gazetteer of Sites recorded from aerial photographs

AP Site	AP 1
NGR	SP 564 253
Plan	Plan 2 (0802/02)
Location	Bucknell
Site type	Medieval fields and Post Medieval boundaries
OHER	NA
Photo references	SP5525/4 & 5, 73 252 074 – 075, OS 6642 034 -035

Description

Upstanding and eroded Medieval fields and a visible headland. Some photos show traces of Modern boundaries as crop marked ditches. These features traverse the site boundary at Bucknell.

AP Site	AP 2
NGR	SP 569 257
Plan	Plan 2 (0802/02)
Location	Manor Farm
Site type	Medieval fields and a Post Medieval boundary ditch
OHER	NA
Photo references	73 252 074 – 075, OS 6642 034 -035 & Google Earth (1st October 2010)

Description

Upstanding and eroded Medieval fields and a boundary ditch which traverse the site boundary to the east of Bucknell.

AP Site	AP 3
NGR	SP 573 248
Plan	Plan 2 (0802/02)
Location	Hawkswell Farm
Site type	Probably Prehistoric or Romano-British settlement
OHER	15958
Photo references	SP 5724/1-2, F2 542 RAF 0007

Description

A complex and extensive area of buried ditches, pits, probable tracks and enclosures. These features show as distinctive marks in crops at Hawkswell Farm. They are partially masked, but not confused with, a series of very clear crop marks which, in common with all parts of this Site, show the patterns of jointing in the limestone and other periglacial features.

AP Site	AP 4
NGR	SP 574 244
Plan	Plan 2 (0802/02)
Location	Hawkswell Farm
Site type	Possible agricultural feature
OHER	NA
Photo references	SP5724/5-8 & 9-11

Description

This feature is a rather unusual curvilinear possible cut feature which shows as a mark in growing crops. It was recorded on one occasion only, and its shape is not consistent with any previously recorded archaeological feature. It has therefore been mapped as a possible feature, and is possibly the result of an agricultural process such as accidental release of fertiliser pellets. However, this is a conjectural explanation, and its origin cannot be rigorously proven from the available aerial photographs.

AP Site	AP 5
NGR	SP 573 244
Plan	Plan 2 (0802/02)
Location	Lord's Farm
Site type	Possible water meadows
OHER	NA
Photo references	OS 70 023

Description

Slight ridges on the floodplain of a small watercourse which may be either water meadows or Medieval cultivation or drainage.

AP Site	AP 6
NGR	SP 576 254
Plan	Plan 2 (0802/02)
Location	Partially within Exemplar Site at Caversfield
Site type	Ditches and enclosure
OHER	NA
Photo references	75/312 031, 68/252 017, 94-214 005 – 007, SP 5724/1 & 2

Description

The Exemplar Site, which lies within the Entire Site, contains evidence for fragmentary ditches and possible ditched enclosures at this location. These are heavily masked by natural geological features and show as marks in crops on vertical aerial photographs. The focus of these features is a buried ditched sub rectangular enclosure which lies to the immediate south of the Exemplar Site within the Entire Site. These features are all eroded and buried and are visible only via marks in crops where the plants grow more vigorously over the buried ditches in times of drought.

There is also a sub-rectangular area of deeper soil which may be a place where local quarrying has been undertaken for stone extraction, then filled in when worked out.

AP Site	AP 7
NGR	SP 584 255
Plan	Plan 2 (0802/02)
Location	Caversfield
Site type boundary	Deserted Medieval Village (DMV) which lies to the north of the Site
OHER	NA
Photo references	CPE UK 1897 3153

Description

A partially upstanding area of earthworks at Caversfield DMV which lies outside and to the north of the Site boundary.

AP Site	AP 8
NGR	SP 568 245
Plan	Plan 2 (0802/02)
Location	Aldershot Farm
Site type	Medieval fields and unidentified cut feature
OHER	NA
Photo references	94-214 006 and ridge and furrow on various vertical APs

Description

In common with the site and its environs, this area contains traces of heavily eroded Medieval fields and geological features. There is also an oddly shaped cut feature which is now in filled. Most small quarries in this area are sub-rectangular or square, but this feature has a number of projections. Given the proximity of a local World War 2 airbase, this may possibly have been a bombing decoy which is now in filled, but it is not visible on photographs taken immediately after the War in 1946. Its origin is therefore uncertain.

AP Site	AP 9
NGR	SP 565 242
Plan	Plan 3 (0802/03)
Location	Aldershot Farm
Site type	Ditches and possible enclosures
OHER	NA
Photo references	75 312 031

Description

A series of ditches and enclosures centre upon Aldershot Farm and are visible as crop marks. Their type or origin is uncertain but they are likely to pre-date the modern farm buildings. They are underlain by complex geological features, and are visible on vertical aerial photographs which were taken in July 1975 when the weather was very dry.

AP Site	AP 10
NGR	SP 558 240
Plan	Plan 3 (0802/03)
Location	Crowmarsh Farm
Site type	Medieval fields
OHER	NA
Photo references	Various vertical APs

Description

An area of partially eroded Medieval fields.

AP Site	AP 11
NGR	SP 560238
Plan	Plan 3 (0802/03)
Location	Himley Farm
Site type	Ditches, enclosures and possible Bronze Age funerary site
OHER	13907
Photo references	75 312 072 & 073

Description

This location contains buried ditches and pits which are visible on vertical aerial photographs as marks in crops, in addition to the underlying geological features in the area.

The site also contains a buried ring ditch, indicative of a possible eroded Bronze Age funerary site. The OHER records this feature, but the AP reference on the record cites an unrelated NMR photograph and an Aerial photograph taken by Dr K St Joseph which is held in the Cambridge University Collection. This collection is not presently accessible for consultation, and the photograph could not be located as a copy in any other archive. The position of the ring ditch is therefore derived from the OHER record, as it is not visible on any other photographs.

A circular feature, with some adjacent straight cut features was also visible at this site as a crop mark and its former function is unknown.

AP Site	AP 12
NGR	SP 551 233
Plan	Plan 3 (0802/03)
Location	West of Lovelynch House
Site type	Possible buried ditches
OHER	NA
Photo references	F21 542 RAF 0006

Description

Traces of possible sinuous ditches and a possible enclosure. These lie to the west of the site boundary, and re masked by geological features. Their origin is unknown, but they may extend into the study area to the east of Lovelynch House.

AP Site	AP 13
NGR	SP
Plan	Plan 3 (0802/03)
Location	South of Gowell Farm
Site type	Eroded Medieval fields and possible buried ditches
OHER	NA
Photo references	75 312 071, 072 & 031

Description

This area contains some very well defined crop marked buried features which may either be natural or archaeological. They cannot be well defined as either, therefore have been mapped as possible features which may require further investigation as appropriate. The area also contains some eroded traces of Medieval fields.

AP Site	AP 14
NGR	SP 564 230
Plan	Plan 3 (0802/03)
Location	North of Bignall Belt
Site type	Unknown, possible buried cut feature
OHER	NA
Photo references	75 312 071, 072 & 031

Description

This feature is of unknown origin. It may be part of the complex geological features which show as crop marks in this area. Alternatively, it may be a linking feature from buried settlement sites which now lie beneath houses in Bicester to the east of the Site to some archaeological features in the adjacent field at AP 15.

AP Site	AP 15
NGR	SP 562 230
Plan	Plan 3 (0802/03)
Location	North of Bignall Belt
Site type	Buried enclosures and ditches
OHER	NA
Photo references	75 312 071, 072 & 031

Description

A complex of very clearly defined ditches, possible double ditched boundary, track way and enclosures. These features show as well defined crop marks to the north of Bignall Park within the Site, on vertical aerial photographs which were taken during dry conditions in July 1975.

7 CONCLUSION

- 7.1 At first appraisal, this site contains evidence for only two complexes of crop marked buried archaeological features.
- 7.2 Detailed examination of vertical aerial photographs in conjunction with the evidence provided by specialist obliques has identified extensive areas of buried ditches, pits and ditched enclosures throughout the Site.
- 7.3 These features are in many cases underlain by extensive geological features which also show as crop marks. Where the two types of features cannot be distinguished, features have been mapped as possible archaeological assets.
- 7.4 Buried features which appear on aerial photographs cannot be dated from the AP sources alone, unless very typical morphologies are identified. Medieval fields have been confidently identified, alongside some Modern boundaries. Other sites may date to the Prehistoric and Roman-British periods, but no further dating evidence may be asserted from these sources.
- 7.5 **Plans 2 and 3** (0802/ 2&3) present accurately mapped interpretations of features seen on all the photographs which were used for the assessment. It is likely that the horizontal and vertical extent of all these sites will be greater than represented on the available photographs, and this should be considered when planning any intrusive investigations as appropriate to the requirements of the project.

8 CARTOGRAPHIC SOURCES AND BIBLIOGRAPHY

Soil Survey of England and Wales, **Sheet 4 Eastern England.1:250000 scale change**

Palmer R & Cox C, 1993

Uses of Aerial photography in Archaeological Evaluations IfA Technical Paper 12. IfA Reading

Riley DNR, 1980

Early Landscape from the Air. Sheffield

Stephens N (ed), 1990

Natural Landscapes of Britain from the Air Cambridge

Wilson DR 1982 and 2000

Air Photo Interpretation for Archaeologists London and 2nd Ed 2000, Stroud

APPENDIX 1

Aerial Photographs Consulted at English Heritage National Monuments Record (EH NMR)

ENGLISH HERITAGE : NATIONAL MONUMENTS RECORD
Air Photographs

Customer oblique listing - Obliques, Standard Order
Customer enquiry reference number: 53316

Photo reference (NGR and Index number)	Film and frame number	Original number	Date	Film type		Map Reference (6 figure grid ref)
SP 5525 / 4	NMR 18561 / 21		16 NOV 1999	Colour neg	35 mm	SP 559253
SP 5525 / 5	NMR 18561 / 22		16 NOV 1999	Colour neg	35 mm	SP 559253
SP 5622 / 1	CCC 8975 / 6758	SEE PRINTS	27 MAR 1930	Black& white	Unknown	SP 564229
SP 5623 / 1	CAP 8110 / 67	LN	26 APR 1953	Black& white	Unknown	SP 565235
SP 5623 / 2	CAP 8110 / 68	LN	26 APR 1953	Black& white	Unknown	SP 565235
SP 5625 / 1	NMR 18616 / 08		16 NOV 1999	Black& white	70mm,120,220	SP 561253
SP 5625 / 2	NMR 18616 / 09		16 NOV 1999	Black& white	70mm,120,220	SP 561253
SP 5625 / 3	NMR 18616 / 10		16 NOV 1999	Black& white	70mm,120,220	SP 562253
SP 5625 / 4	NMR 18616 / 11		16 NOV 1999	Black& white	70mm,120,220	SP 561254
SP 5625 / 5	NMR 18616 / 12		16 NOV 1999	Black& white	70mm,120,220	SP 561254
SP 5625 / 6	NMR 18561 / 23		16 NOV 1999	Colour neg	35 mm	SP 560254
SP 5625 / 7	NMR 18561 / 24		16 NOV 1999	Colour neg	35 mm	SP 560254
SP 5625 / 8	NMR 18561 / 25		16 NOV 1999	Colour neg	35 mm	SP 561255
SP 5724 / 1	NMR 4634 / 05		02 JUN 1990	Black& white	70mm,120,220	SP 573248

SP 5724 / 2	NMR 4634	/ 06		02 JUN 1990	Black& white	70mm,120,220	SP 573248
SP 5724 / 3	NMR 18074	/ 28		27 JUL 1998	Colour slide	35 mm	SP 579240
SP 5724 / 4	NMR 18074	/ 31		27 JUL 1998	Colour slide	35 mm	SP 578240
SP 5724 / 5	NMR 24225	/ 08		07 JUN 2006	Black& white	70mm,120,220	SP 574244
SP 5724 / 6	NMR 24225	/ 09		07 JUN 2006	Black& white	70mm,120,220	SP 574244
SP 5724 / 7	NMR 24225	/ 10		07 JUN 2006	Black& white	70mm,120,220	SP 574245
SP 5724 / 8	NMR 24225	/ 11		07 JUN 2006	Black& white	70mm,120,220	SP 574245
SP 5724 / 9	NMR 24266	/ 13		07 JUN 2006	Digital colour	35 mm	SP 573244
SP 5724 / 10	NMR 24266	/ 14		07 JUN 2006	Digital colour	35 mm	SP 573244
SP 5724 / 11	NMR 24266	/ 15		07 JUN 2006	Digital colour	35 mm	SP 574243
SP 5725 / 1	NMR 23077	/ 01		23 APR 2003	Black& white	70mm,120,220	SP 578258
SP 5725 / 2	NMR 23077	/ 02		23 APR 2003	Black& white	70mm,120,220	SP 578259
SP 5725 / 3	NMR 23077	/ 03		23 APR 2003	Black& white	70mm,120,220	SP 578258
SP 5725 / 4	NMR 23077	/ 04		23 APR 2003	Black& white	70mm,120,220	SP 578258
SP 5725 / 5	NMR 23058	/ 01		23 APR 2003	Colour neg	35 mm	SP 578259
SP 5725 / 6	NMR 23058	/ 02		23 APR 2003	Colour neg	35 mm	SP 578259
SP 5725 / 7	NMR 23058	/ 03		23 APR 2003	Colour neg	35 mm	SP 579257
SP 5725 / 8	NMR 23058	/ 04		23 APR 2003	Colour neg	35 mm	SP 579257
SP 5824 / 2	NMR 18074	/ 30		27 JUL 1998	Colour slide	35 mm	SP 580242
SP 5824 / 4	NMR 18955	/ 02		04 OCT 2000	Black& white	70mm,120,220	SP 586245
SP 5825 / 4	NMR 18835	/ 34		04 OCT 2000	Colour slide	35 mm	SP 585252

ENGLISH HERITAGE : NATIONAL MONUMENTS RECORD

Air Photographs

Full single listing - Verticals, Standard order

Customer enquiry reference: 53316

Sortie number	Library number	Camera position	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:	Focal length (in inches)	Film details (in inches)
RAF/106G/UK/620	1	RP	3098	P	SP 558 221	1	10 AUG 1945	A	9000	20	Black and White 8.25 x 7.5
RAF/106G/UK/620	1	RP	3099	P	SP 556 225	1	10 AUG 1945	A	9000	20	Black and White 8.25 x 7.5
RAF/106G/UK/620	1	RP	3151	P	SP 567 228	4	10 AUG 1945	A	9000	20	Black and White 8.25 x 7.5
RAF/106G/UK/620	1	RS	4097	P	SP 567 225	5	10 AUG 1945	A	9000	20	Black and White 8.25 x 7.5
RAF/106G/UK/620	1	RS	4098	P	SP 567 230	5	10 AUG 1945	A	9000	20	Black and White 8.25 x 7.5
RAF/106G/UK/620	1	RS	4099	P	SP 567 234	5	10 AUG 1945	A	9000	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3150	P	SP 549 255	4	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3151	P	SP 557 256	4	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3152	P	SP 566 257	4	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3153	P	SP 574 258	4	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5



AIRPHOTO
SERVICES

Archaeology • Research • Law • Environment • Planning

RAF/CPE/UK/1897	562	RP	3154	P	SP 583 259	4	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3313	P	SP 579 224	6	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3314	P	SP 573 223	6	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3315	P	SP 567 223	6	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3316	P	SP 561 223	6	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3317	P	SP 556 223	6	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3318	P	SP 550 222	6	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RP	3319	P	SP 544 222	6	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4149	P	SP 545 239	10	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4150	P	SP 553 240	10	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4151	P	SP 561 241	10	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4152	P	SP 570 242	10	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4153	P	SP 578 243	10	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4319	P	SP 581 241	12	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4320	P	SP 575 240	12	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4321	P	SP 569 240	12	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4322	P	SP 564 240	12	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4323	P	SP 558 239	12	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4324	P	SP 553 239	12	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
RAF/CPE/UK/1897	562	RS	4325	P	SP 547 239	12	12 DEC 1946	AB	9800	20	Black and White 8.25 x 7.5
FSL/6125	1118A	V	12107	P	SP 548 224	43	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	12108	P	SP 555 224	43	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	12109	P	SP 562 224	43	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	12110	P	SP 569 224	43	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	12111	P	SP 577 224	43	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13020	P	SP 576 239	45	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13021	P	SP 569 239	45	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13022	P	SP 562 239	45	1961	A	8000	6	Black and White 9 x 9

Bicester Eco Town, Interpretation of Aerial Photographs for Archaeology PART 1
CC210-0802-1-1

FSL/6125	1118A	V	13023	P	SP 554 239	45	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13024	P	SP 547 239	45	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13112	P	SP 552 251	46	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13113	P	SP 559 251	46	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13114	P	SP 567 251	46	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13115	P	SP 574 251	46	1961	A	8000	6	Black and White 9 x 9
FSL/6125	1118A	V	13116	P	SP 581 251	46	1961	A	8000	6	Black and White 9 x 9
RAF/58/716	1189	RP	3110	P	SP 563 237	10	04 JUN 1951	A	5000	20	Black and White 8.25 x 7.5
RAF/58/716	1189	RP	3111	P	SP 567 237	10	04 JUN 1951	A	5000	20	Black and White 8.25 x 7.5
RAF/58/716	1189	RP	3112	P	SP 570 236	10	04 JUN 1951	A	5000	20	Black and White 8.25 x 7.5
RAF/58/716	1189	RP	3113	P	SP 574 236	10	04 JUN 1951	A	5000	20	Black and White 8.25 x 7.5
RAF/82/1006	1520	F61	292	P	SP 553 241	56	31 AUG 1954	AB	15000	36	Black and White 8.25 x 7.5
RAF/82/1006	1520	F61	293	P	SP 555 230	56	31 AUG 1954	AB	15000	36	Black and White 8.25 x 7.5
RAF/540/1400	1563	F21	163	P	SP 565 222	7	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/540/1400	1563	F21	164	P	SP 558 222	7	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/540/1400	1563	F21	165	P	SP 552 222	7	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/540/1400	1563	F22	161	P	SP 577 237	15	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/540/1400	1563	F22	162	P	SP 571 238	15	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/540/1400	1563	F22	163	P	SP 564 238	15	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/540/1400	1563	F22	164	P	SP 558 238	15	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/540/1400	1563	F22	165	P	SP 551 238	15	01 SEP 1954	AB	10300	20	Black and White 8.25 x 7.5
RAF/543/673	2114	F41	12	P	SP 562 229	9	24 AUG 1959	AB	11000	36	Black and White 8.25 x 7.5
RAF/543/673	2114	F41	13	P	SP 571 233	9	24 AUG 1959	AB	11000	36	Black and White 8.25 x 7.5
RAF/543/673	2114	F41	14	P	SP 580 236	9	24 AUG 1959	AB	11000	36	Black and White 8.25 x 7.5
RAF/543/673	2114	F41	15	P	SP 589 240	9	24 AUG 1959	AB	11000	36	Black and White 8.25 x 7.5
RAF/58/4627	2195	F43	384	N	SP 582 243	13	16 AUG 1961	AB	11000	24	Black and White 9 x 9
RAF/58/4627	2195	F43	385	N	SP 574 243	13	16 AUG 1961	AB	11000	24	Black and White 9 x 9
RAF/542/1	2577	F21	5	P	SP 547 222	1	04 AUG 1954	A	10000	36	Black and White 8.25 x 7.5



AIRPHOTO
SERVICES

Archaeology • Research • Law • Environment • Planning

RAF/542/1	2577	F21	6	P	SP 545 235	1	04 AUG 1954	A	10000	36	Black and White 8.25 x 7.5
RAF/542/1	2577	F21	7	P	SP 544 248	1	04 AUG 1954	A	10000	36	Black and White 8.25 x 7.5
RAF/542/1	2577	F22	5	P	SP 568 224	2	04 AUG 1954	A	10000	36	Black and White 8.25 x 7.5
RAF/542/1	2577	F22	6	P	SP 566 237	2	04 AUG 1954	A	10000	36	Black and White 8.25 x 7.5
RAF/542/1	2577	F22	7	P	SP 565 250	2	04 AUG 1954	A	10000	36	Black and White 8.25 x 7.5
RAF/541/340	2661	RP	3131	P	SP 567 237	4	26 JUL 1949	AB	10000	36	Black and White 8.25 x 7.5
RAF/541/340	2661	RP	3132	P	SP 574 237	4	26 JUL 1949	AB	10000	36	Black and White 8.25 x 7.5
RAF/541/340	2661	RP	3133	P	SP 582 237	4	26 JUL 1949	AB	10000	36	Black and White 8.25 x 7.5
RAF/16/AC638	6510	V	5024	P	SP 555 225	6	07 NOV 1943	A	10800	20	Black and White 8.25 x 7.5
RAF/16/AC638	6510	V	5025	P	SP 552 232	6	07 NOV 1943	A	10800	20	Black and White 8.25 x 7.5
RAF/16/AC638	6510	V	5026	P	SP 553 239	6	07 NOV 1943	A	10800	20	Black and White 8.25 x 7.5
OS/73251	10418	V	157	N	SP 581 235	4	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73251	10418	V	158	P	SP 574 235	4	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73251	10418	V	159	P	SP 567 235	4	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73251	10418	V	160	P	SP 562 234	4	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73251	10418	V	161	P	SP 556 234	4	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73251	10418	V	162	P	SP 551 234	4	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73252	10419	V	74	P	SP 556 248	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73252	10419	V	75	P	SP 563 248	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73252	10419	V	76	P	SP 569 249	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73252	10419	V	77	P	SP 576 249	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73252	10419	V	78	P	SP 583 249	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73274	10420	V	50	P	SP 581 263	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73274	10420	V	51	P	SP 574 263	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/73274	10420	V	52	P	SP 567 263	1	06 JUN 1973	A	7700	12	Black and White 9 x 9
OS/70023	10537	V	7	N	SP 586 244	2	23 MAR 1970	A	5000	12	Black and White 9 x 9
OS/70023	10537	V	8	N	SP 587 241	2	23 MAR 1970	A	5000	12	Black and White 9 x 9
OS/70023	10537	V	16	N	SP 583 247	3	23 MAR 1970	A	5000	12	Black and White 9 x 9

Bicester Eco Town, Interpretation of Aerial Photographs for Archaeology PART 1
CC210-0802-1-1



AIRPHOTO
SERVICES

Archaeology • Research • Law • Environment • Planning

OS/70023	10537	V	17	N	SP 584 242	3	23 MAR 1970	A	5000	12	Black and White 9 x 9
OS/70023	10537	V	26	P	SP 571 246	4	23 MAR 1970	A	5000	12	Black and White 9 x 9
OS/70023	10537	V	27	P	SP 571 242	4	23 MAR 1970	A	5000	12	Black and White 9 x 9
OS/70023	10537	V	28	P	SP 572 238	4	23 MAR 1970	A	5000	12	Black and White 9 x 9
OS/70023	10537	V	29	P	SP 573 233	4	23 MAR 1970	A	5000	12	Black and White 9 x 9
OS/66042	11626	V	5	P	SP 553 240	4	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	6	P	SP 561 241	4	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	7	P	SP 568 241	4	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	8	P	SP 574 241	4	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	9	P	SP 580 241	4	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	24	P	SP 575 240	1	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	25	P	SP 569 240	1	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	26	P	SP 562 239	1	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	27	P	SP 554 239	1	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	33	P	SP 553 252	5	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	34	P	SP 561 252	5	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	35	P	SP 565 252	5	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	36	P	SP 574 251	5	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	37	P	SP 579 252	5	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	55	P	SP 579 227	6	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	56	P	SP 573 227	6	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	57	P	SP 567 227	6	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	58	P	SP 560 227	6	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	59	P	SP 554 227	6	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/66042	11626	V	60	P	SP 548 227	6	29 APR 1966	A	7500	12	Black and White 9 x 9
OS/68252	11632	V	5	P	SP 581 243	1	05 JUL 1968	A	6400	6	Black and White 9 x 9
OS/68252	11632	V	15	P	SP 565 253	2	05 JUL 1968	A	6400	6	Black and White 9 x 9
OS/68252	11632	V	16	P	SP 568 250	2	05 JUL 1968	A	6400	6	Black and White 9 x 9

Bicester Eco Town, Interpretation of Aerial Photographs for Archaeology PART 1
CC210-0802-1-1



AIRPHOTO
SERVICES

Archaeology • Research • Law • Environment • Planning

OS/68252	11632	V	17	P	SP 572 247	2	05 JUL 1968	A	6400	6	Black and White 9 x 9
OS/68252	11632	V	18	P	SP 576 243	2	05 JUL 1968	A	6400	6	Black and White 9 x 9
OS/68252	11632	V	19	P	SP 580 239	2	05 JUL 1968	A	6400	6	Black and White 9 x 9
OS/75312	12174	V	31	P	SP 576 243	1	05 JUL 1975	A	10600	6	Black and White 9 x 9
OS/75312	12174	V	71	P	SP 580 226	2	05 JUL 1975	A	10600	6	Black and White 9 x 9
OS/75312	12174	V	72	P	SP 572 226	2	05 JUL 1975	A	10600	6	Black and White 9 x 9
OS/84243	12669	V	1004	P	SP 558 259	4	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/84243	12669	V	1005	P	SP 558 250	4	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/84243	12669	V	1006	P	SP 558 240	4	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/84243	12669	V	1007	P	SP 557 231	4	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/84243	12669	V	1022	P	SP 575 232	5	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/84243	12669	V	1023	P	SP 575 241	5	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/84243	12669	V	1024	P	SP 575 249	5	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/84243	12669	V	1025	P	SP 575 258	5	26 NOV 1984	A	10000	6	Black and White 9 x 9
OS/89440	13628	V	9	P	SP 584 241	1	23 SEP 1989	A	8100	12	Black and White 9 x 9
OS/89440	13628	V	10	P	SP 583 248	1	23 SEP 1989	A	8100	12	Black and White 9 x 9
OS/89440	13628	V	11	P	SP 584 255	1	23 SEP 1989	A	8100	12	Black and White 9 x 9
OS/91021	13794	V	125	P	SP 547 243	5	10 APR 1991	A	10400	6	Black and White 9 x 9
OS/91021	13794	V	126	P	SP 547 235	5	10 APR 1991	A	10400	6	Black and White 9 x 9
OS/91021	13794	V	127	P	SP 549 228	5	10 APR 1991	A	10400	6	Black and White 9 x 9
OS/91258	13884	V	12	P	SP 581 238	1	19 SEP 1991	A	8600	6	Black and White 9 x 9
OS/91258	13884	V	13	P	SP 575 238	1	19 SEP 1991	A	8600	6	Black and White 9 x 9
OS/91258	13884	V	14	P	SP 569 238	1	19 SEP 1991	A	8600	6	Black and White 9 x 9
OS/91258	13884	V	15	P	SP 563 238	1	19 SEP 1991	A	8600	6	Black and White 9 x 9
OS/91258	13884	V	16	P	SP 557 238	1	19 SEP 1991	A	8600	6	Black and White 9 x 9
OS/94214	14692	V	5	P	SP 570 256	1	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	6	P	SP 570 250	1	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	7	P	SP 570 245	1	28 JUN 1994	A	6500	12	Black and White 9 x 9

Bicester Eco Town, Interpretation of Aerial Photographs for Archaeology PART 1
CC210-0802-1-1



AIRPHOTO
SERVICES

Archaeology • Research • Law • Environment • Planning

OS/94214	14692	V	8	P	SP 570 240	1	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	9	P	SP 569 235	1	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	26	P	SP 579 236	2	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	27	P	SP 579 241	2	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	28	P	SP 579 247	2	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	29	P	SP 579 252	2	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/94214	14692	V	30	P	SP 579 258	2	28 JUN 1994	A	6500	12	Black and White 9 x 9
OS/96633	15201	V	74	N	SP 555 255	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	75	N	SP 560 255	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	76	P	SP 565 255	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	77	P	SP 570 255	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	78	P	SP 575 255	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	79	P	SP 580 255	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	170	P	SP 579 225	5	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	171	P	SP 574 225	5	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	172	P	SP 569 225	5	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	173	P	SP 564 225	5	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	174	P	SP 559 225	5	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	175	P	SP 554 225	5	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	252	P	SP 580 235	7	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	253	P	SP 575 235	7	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	254	P	SP 570 235	7	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	255	P	SP 565 235	7	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	256	P	SP 560 235	7	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96633	15201	V	257	P	SP 555 235	7	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96634	15202	V	49	P	SP 584 245	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96634	15202	V	50	P	SP 579 245	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96634	15202	V	51	P	SP 574 245	2	15 JUN 1996	A	7900	12	Black and White 9 x 9

Bicester Eco Town, Interpretation of Aerial Photographs for Archaeology PART 1
CC210-0802-1-1



Archaeology • Research • Law • Environment • Planning

OS/96634	15202	V	52	P	SP 569 245	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96634	15202	V	53	P	SP 564 245	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96634	15202	V	54	P	SP 559 244	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96634	15202	V	55	P	SP 554 244	2	15 JUN 1996	A	7900	12	Black and White 9 x 9
OS/96634	15202	V	56	P	SP 549 244	2	15 JUN 1996	A	7900	12	Black and White 9 x 9

Total sorties	25
Total images	183

PLANS

Plan 1 Bicester Eco Town PART 1: The Entire Site
Location of the Study Area

0802/01 October 2010 CC

Plan 2 Bicester Eco Town PART 1: The Entire Site
Location of sites identified from aerial photographs in the southwest Sector

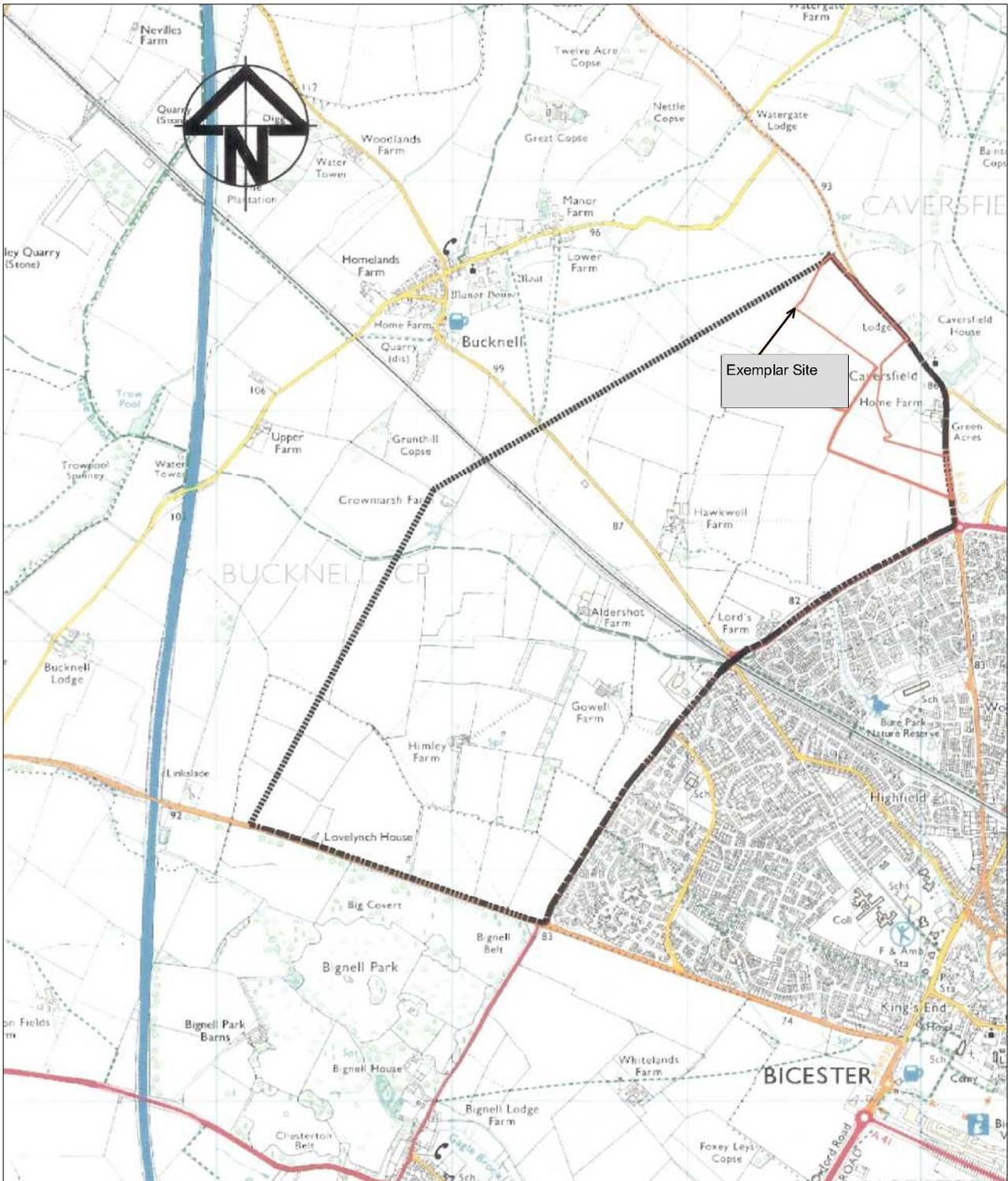
0802/02 October 2010 CC

Plan 3 Bicester Eco Town PART 1: The Entire Site
Location of sites identified from aerial photographs in the northwest Sector

0802/03 October 2010 CC

Plan 4 Bicester Eco Town PART 1: The Entire Site
Overview of all sites identified from aerial photographs

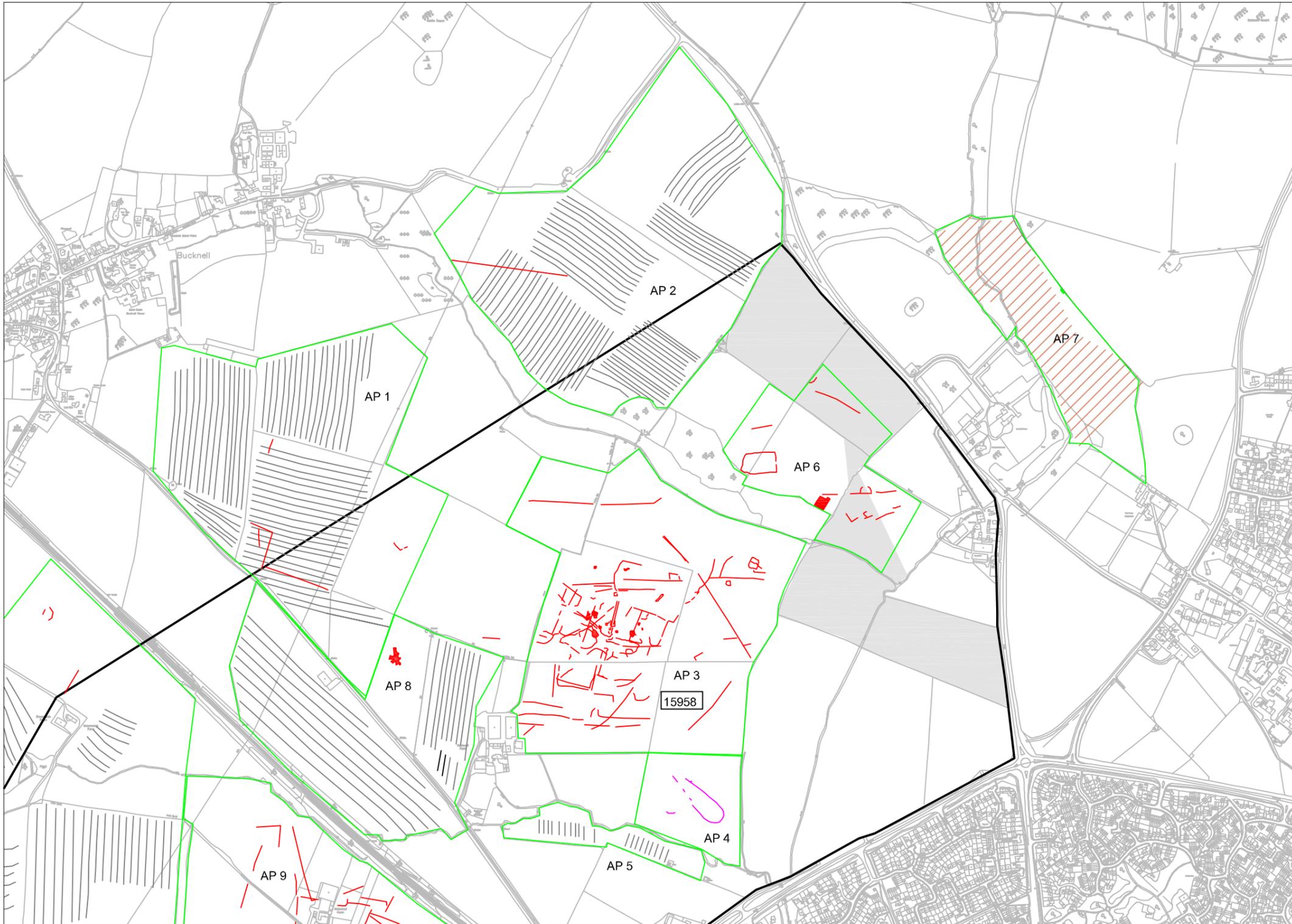
0802/06 October 2010 CC



Drawing Title | PLAN 1 Bicester Eco Town PART 1: The Entire Site
Location of the Study Area

Client | Hyder Consulting (UK) Ltd
 Project | Bicester Eco Town
 Plan no | 0802/01
 Scale | NA
 Date | 10 2010 cc

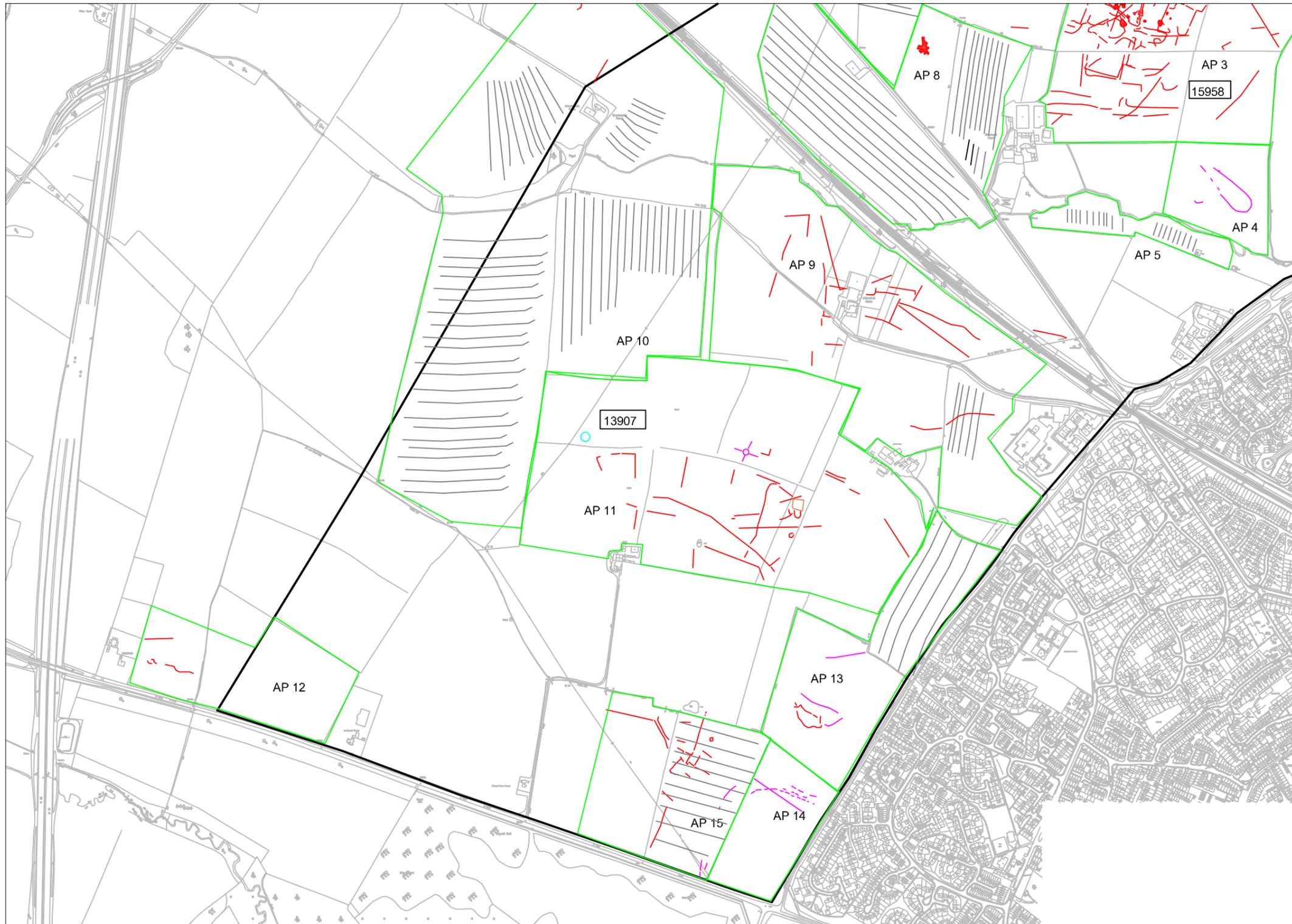
Air Photo Services Ltd www.airphotoservices.co.uk



Drawing Title | PLAN 2 Bicester Eco Town PART 1: The Entire Site
 Sites identified from aerial photographs in the north west sector

Client | Hyder Consulting (UK) Ltd
 Project | Bicester Eco Town PART 1
 Plan no | 0802/02
 Scale | Printed to fit A3, use GIS file for accurate scaling
 Date | 10 2010 cc

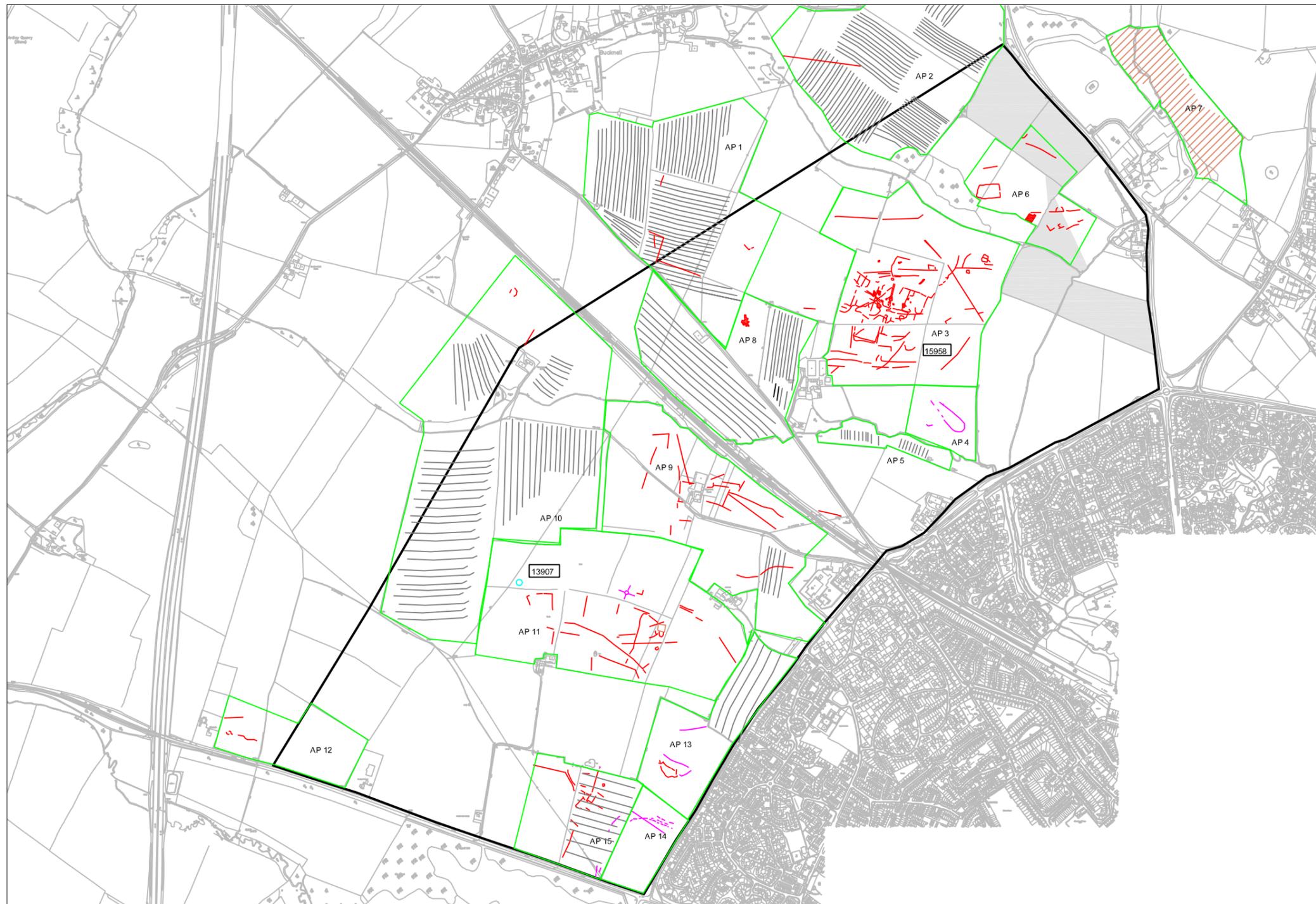
- The site boundary
- The Exemplar Site
- AP site polygons
- AP 5 Sites recorded from aerial photographs
- - Buried features which show as marks in crops
- - Possible archaeological features which show as marks in crops
- - Areas of Medieval ploughing (ridge and furrow)
- /// Deserted Medieval Village (DMV) at Caversfield
- 15958 OHER numbers



Drawing Title | PLAN 3 Bicester Eco Town PART 1: The Entire Site
Sites identified from aerial photographs in the south west sector

Client | Hyder Consulting (UK) Ltd
Project | Bicester Eco Town PART 1
Plan no | 0802/03
Scale | Printed to fit A3, use GIS file for accurate scaling
Date | 10 2010 cc

- The site boundary
- ▭ AP site polygons
- AP 15** Sites recorded from aerial photographs
- - - Buried features which show as marks in crops
- - - Possible archaeological features which show as marks in crops
- Areas of Medieval ploughing (ridge and furrow)
- Position of ring ditch recorded on OHER, photographs unavailable
- ▭ 13907 OHER numbers



Drawing Title | PLAN 4 Bicester Eco Town PART 1: The Entire Site
Overview of all sites identified from aerial photographs

Client | Hyder Consulting (UK) Ltd
Project | Bicester Eco Town PART 1
Plan no | 0802/06
Scale | Printed to fit A3, use GIS file for accurate scaling
Date | 10 2010 cc

- The site boundary
- The Exemplar Site
- AP site polygons
- AP 2** Sites recorded from aerial photographs
- Buried features which show as marks in crops
- Possible archaeological features which show as marks in crops
- Areas of Medieval ploughing (ridge and furrow)
- Position of ring ditch recorded on OHER, photographs unavailable
- 13907 OHER numbers